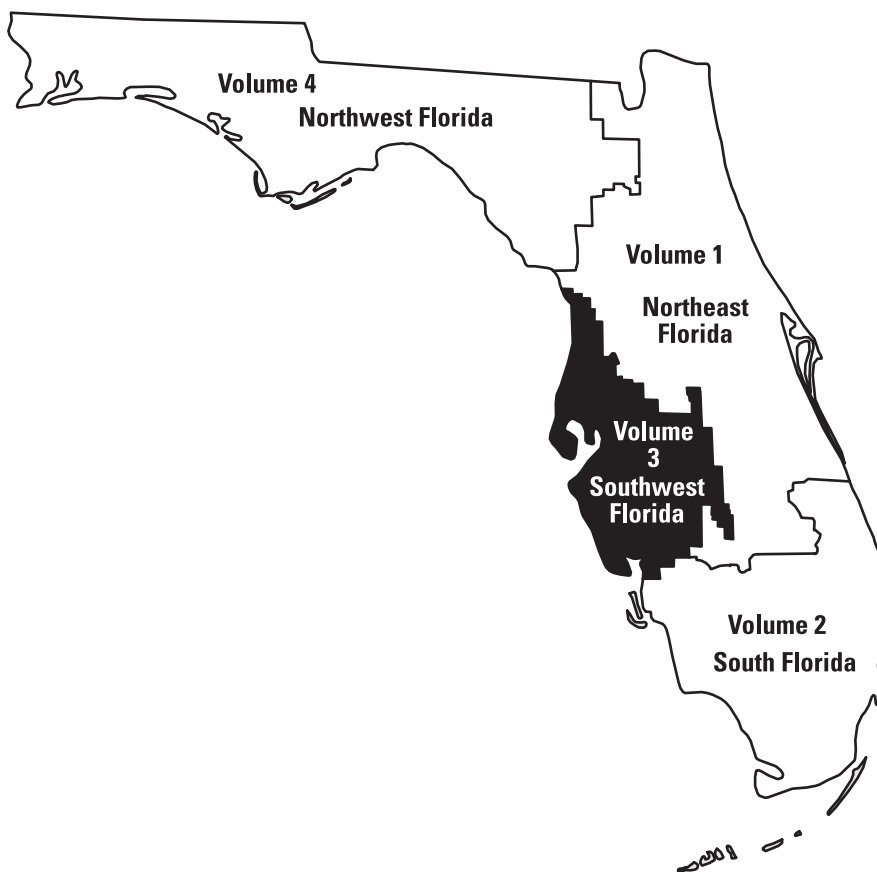


U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Florida Water Year 2001

Volume 3B. Southwest Florida Ground Water

Water-Data Report FL-01-3B



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



UNITED STATES DEPARTMENT OF THE INTERIOR

Gale A. Norton, Secretary

U. S. GEOLOGICAL SURVEY

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Prepared in cooperation with the
State of Florida
and with other agencies as listed
under cooperation

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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, Y. E. Stoker, and W. L. Fletcher. The following individuals contributed significantly to the collection, processing, and tabulation of the data:

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE May 30, 2002	3. REPORT TYPE AND DATES COVERED Annual- October 1, 2000 to September 30, 2001	
4. TITLE AND SUBTITLE Water Resources Data - Florida, Water year 2001 Volume 3B: Southwest Florida Ground Water			5. FUNDING NUMBERS	
6. AUTHOR(S) Y. E. Stoker, R. L. Kane, and W. L. Fletcher				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey Water Resources Division 10500 University Center Dr., Suite 215 Tampa, Fl 33612			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-FL-01-3B	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey Water Resources Division 227 North Bronough Street, Suite 3015 Tallahassee, Fl 32301			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WDR-FL-01-3B	
11. SUPPLEMENTARY NOTES Prepared in cooperation with the state of Florida and other agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from: National Technical Information Center Springfield, Va 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water resources data for the 2001 water year in Florida consist of continuous or daily discharges for 406 streams, periodic discharge for 12 streams, continuous daily stage for 142 streams, periodic stage for 12 streams, peak stage and discharge for 37 streams, continuous or daily elevations for 11 lakes, periodic elevations for 30 lakes; continuous ground-water levels for 424 wells, periodic ground-water levels for 1,426 wells, and quality-of-water data for 80 surface-water sites and 245 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 33 wells; miscellaneous ground-water elevations at 347 wells; and water quality at 25 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.			15. NUMBER OF PAGES 240	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT UNCLASSIFIED	

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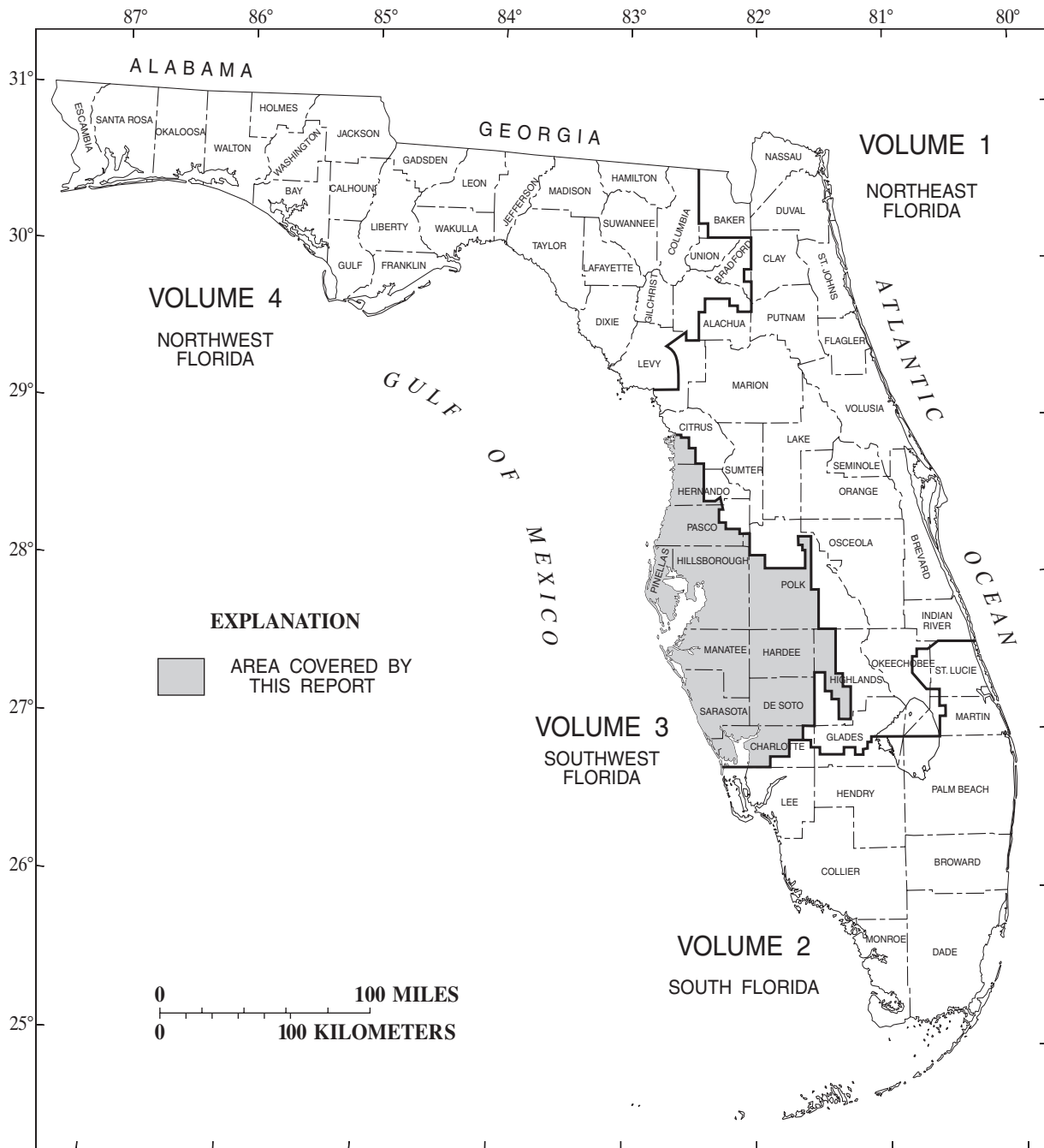


Figure 1.--Geographic area covered by this report.

INTRODUCTION

The Water Resources Division of 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 33 wells; miscellaneous ground-water elevations at 347 wells; and water-quality at 25 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 1975 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-01-3B." For archiving and general distribution, the reports for 1971-74 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 District Office at the address given on the back of the title page or by telephone (850) 942-9500.

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

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SUMMARY OF HYDROLOGIC CONDITIONS

During the 2001 water year, rainfall at 12 National Oceanic and Atmospheric Administration (NOAA) sites in southwest Florida (fig. 2) ranged from 45.84 inches at Punta Gorda in Charlotte County (site 18) to 61.40 inches at Parrish in Manatee County (site 13). The 2001 water year total rainfall was lower at 5 long-term sites and higher at 7 long-term sites than the 1961-90 normal rainfall. Total rainfall at the 12 sites ranged from 8.19 inches below normal at St. Leo in Pasco County (site 9) to 9.26 inches above normal at Parrish (site 13).

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 2001 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.

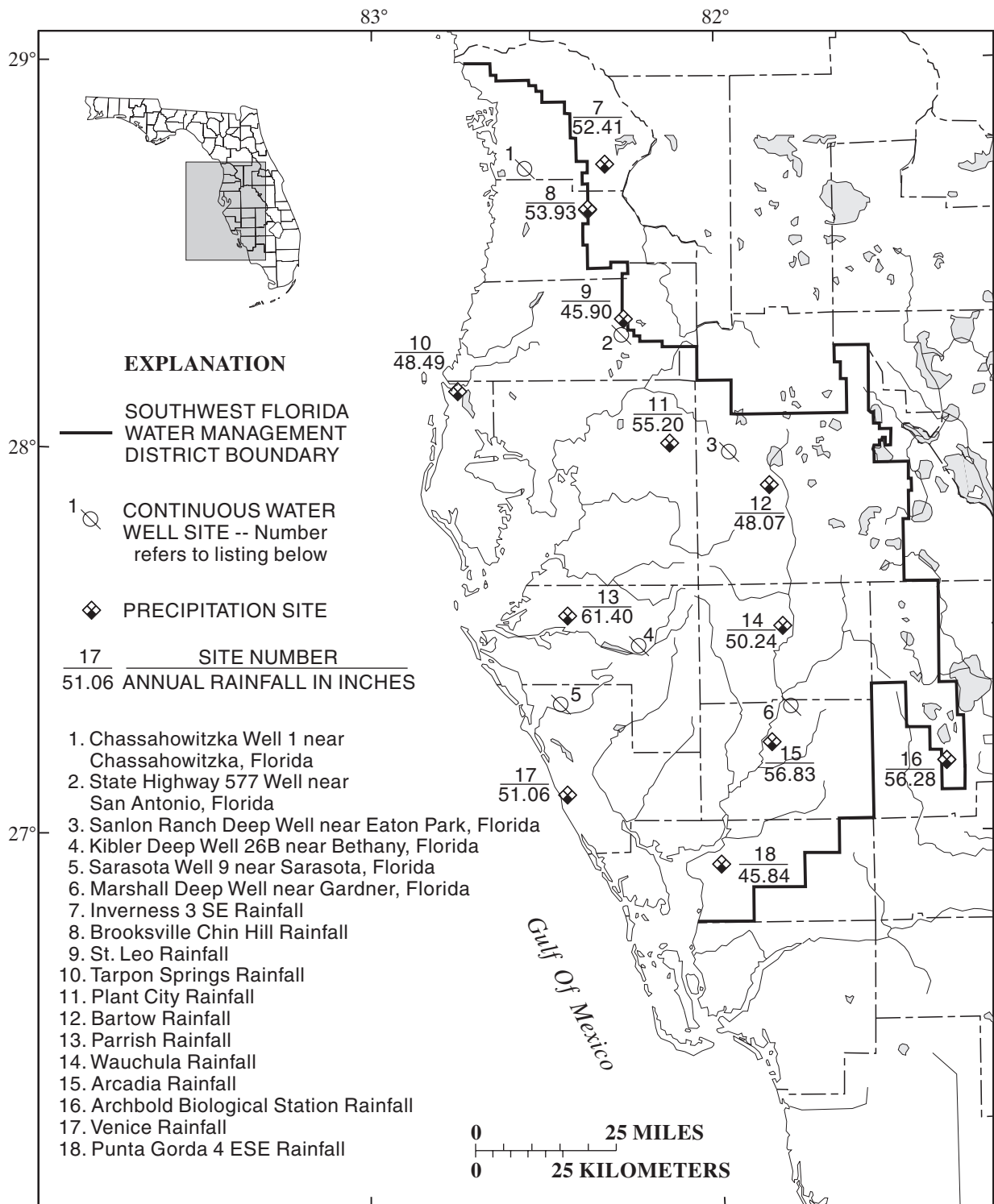


Figure 2.--Hydrologic conditions index map.

CHASSAHOWITZKA WELL 1 NEAR CHASSAHOWITZKA, FLORIDA
 STATION 284317082330601

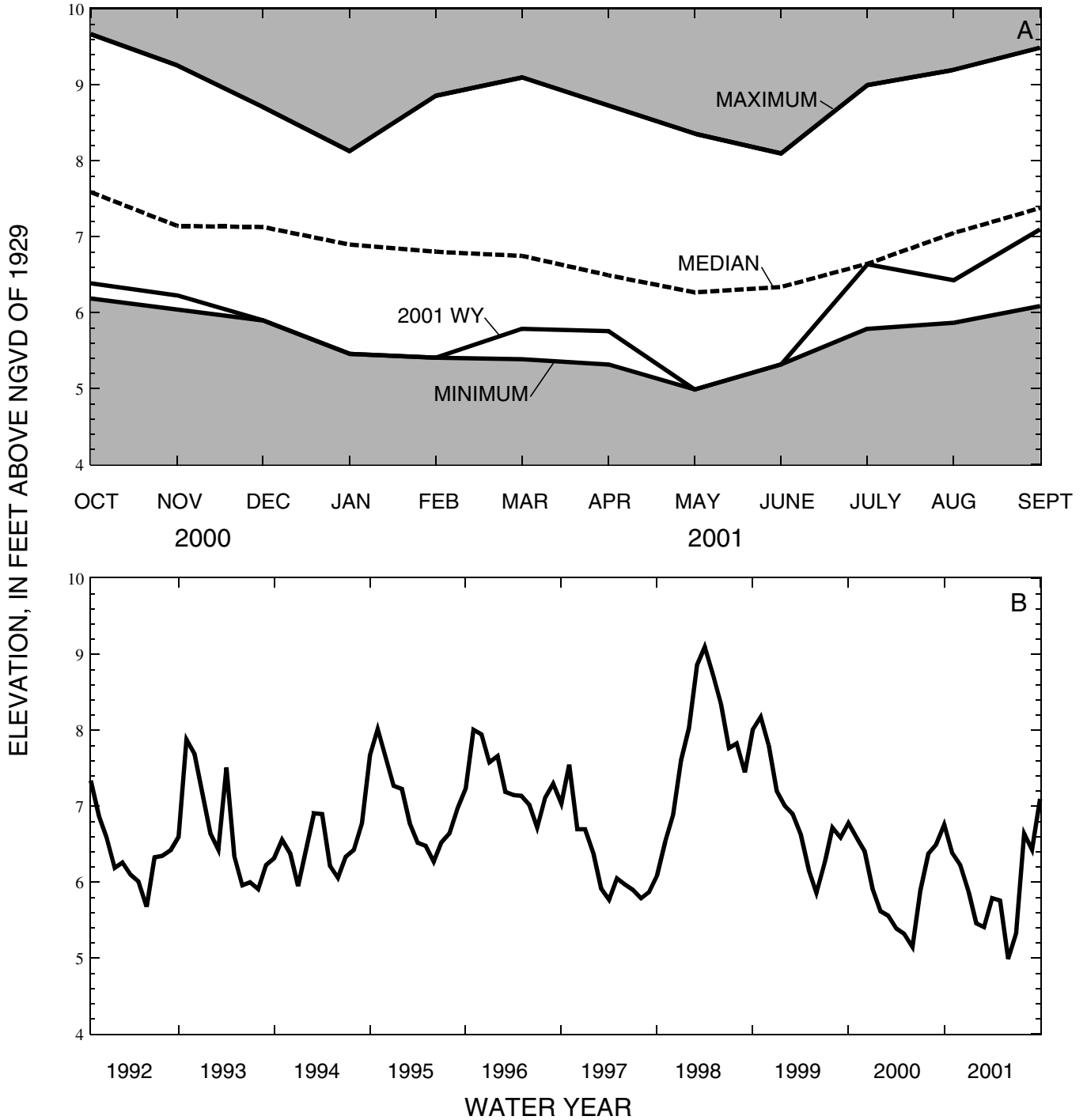


Figure 3.--Chassahowitzka well 1 near Chassahowitzka, Upper Floridan aquifer, (A) 2001 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1992-2001.

STATE HIGHWAY 577 WELL NEAR SAN ANTONIO, FLORIDA
STATION 281715082164401

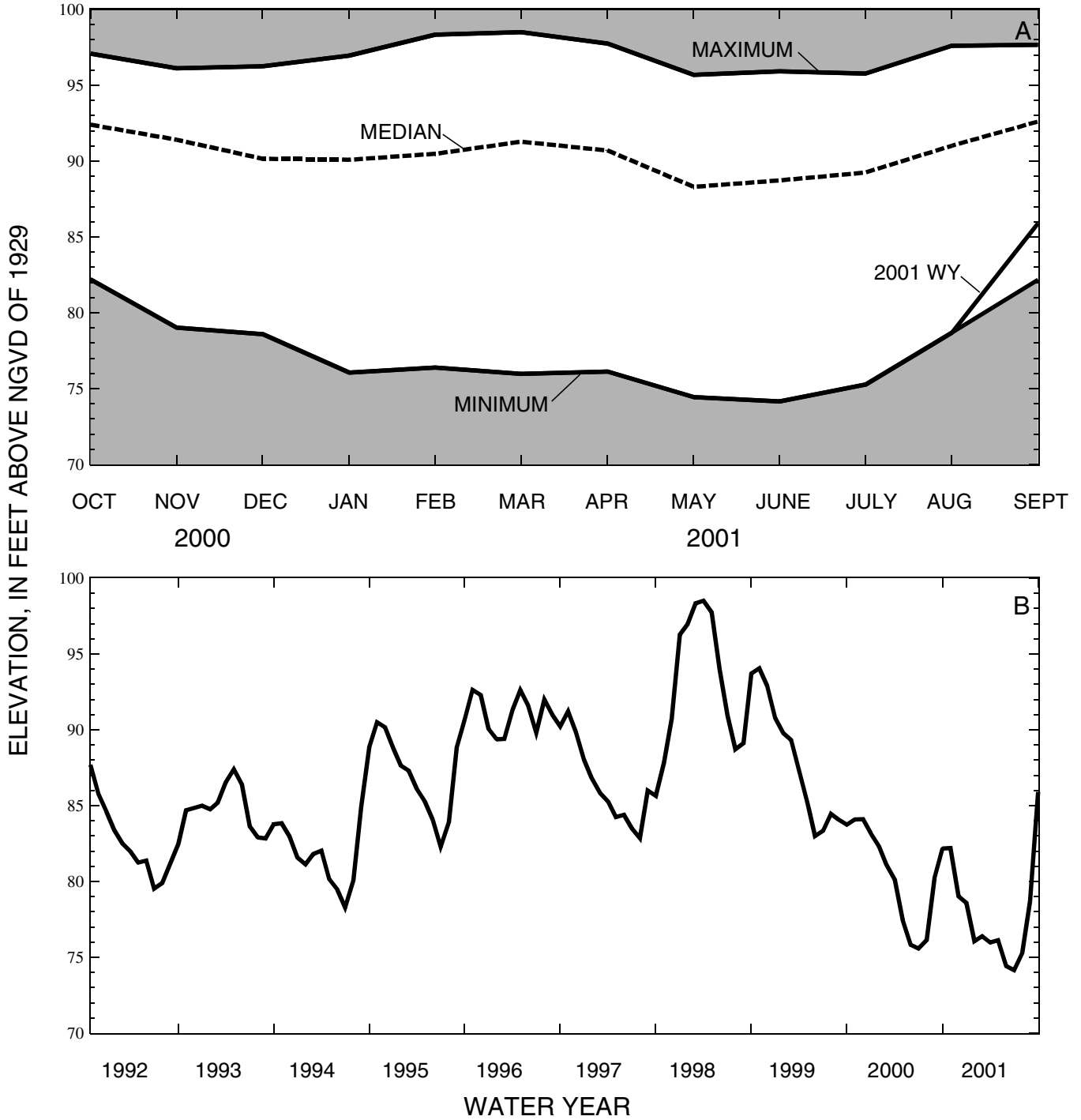


Figure 4.--State Highway 577 well near San Antonio, Upper Floridan aquifer, (A) 2001 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1992-2001.

SANLON RANCH DEEP WELL NEAR EATON PARK, FLORIDA
 STATION 275959081552501

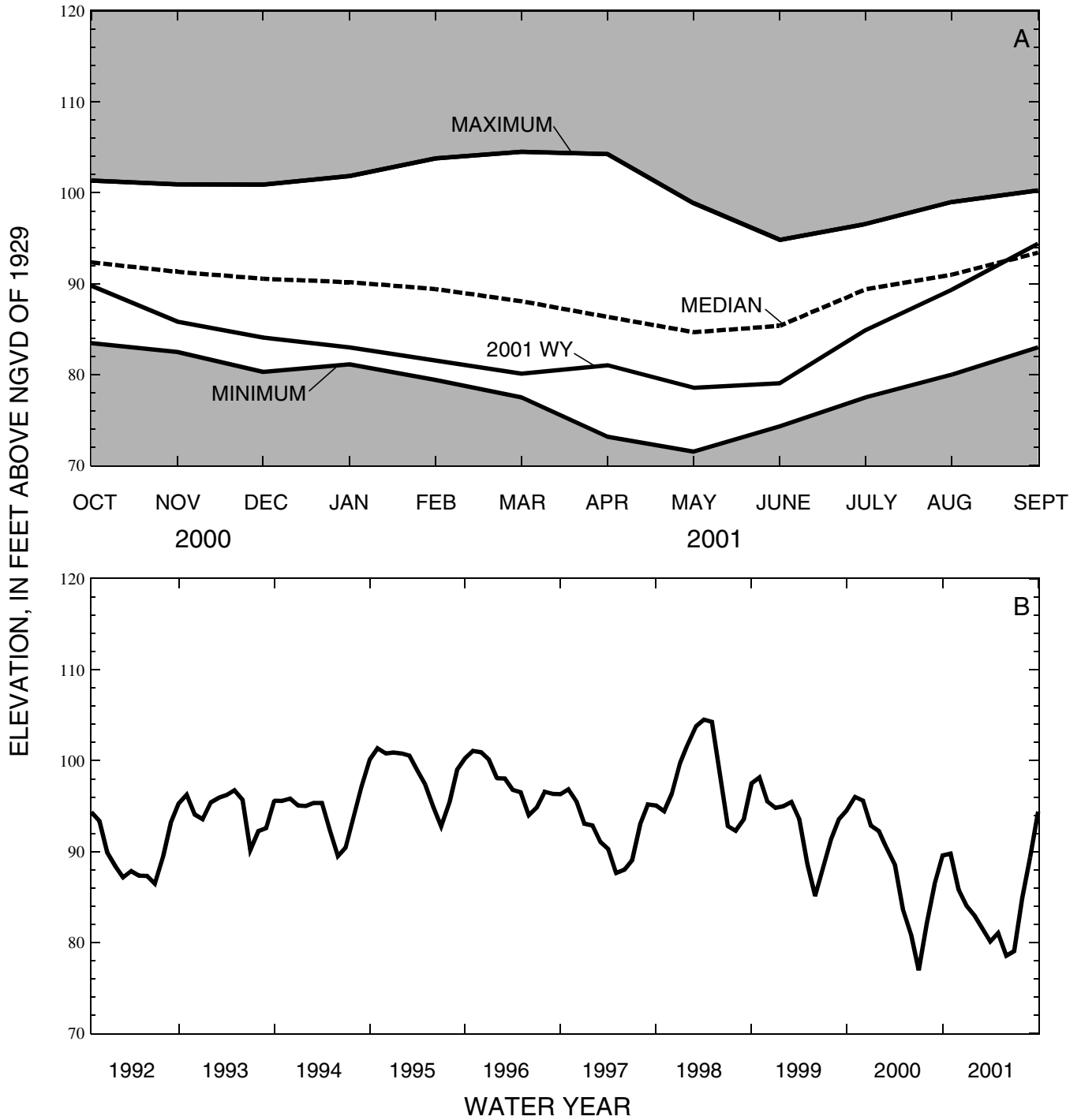


Figure 5.--Sanlon Ranch deep well near Eaton Park, Upper Floridan aquifer, (A) 2001 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1992-2001.

KIBLER DEEP WELL 26B NEAR BETHANY, FLORIDA

STATION 272838082142201

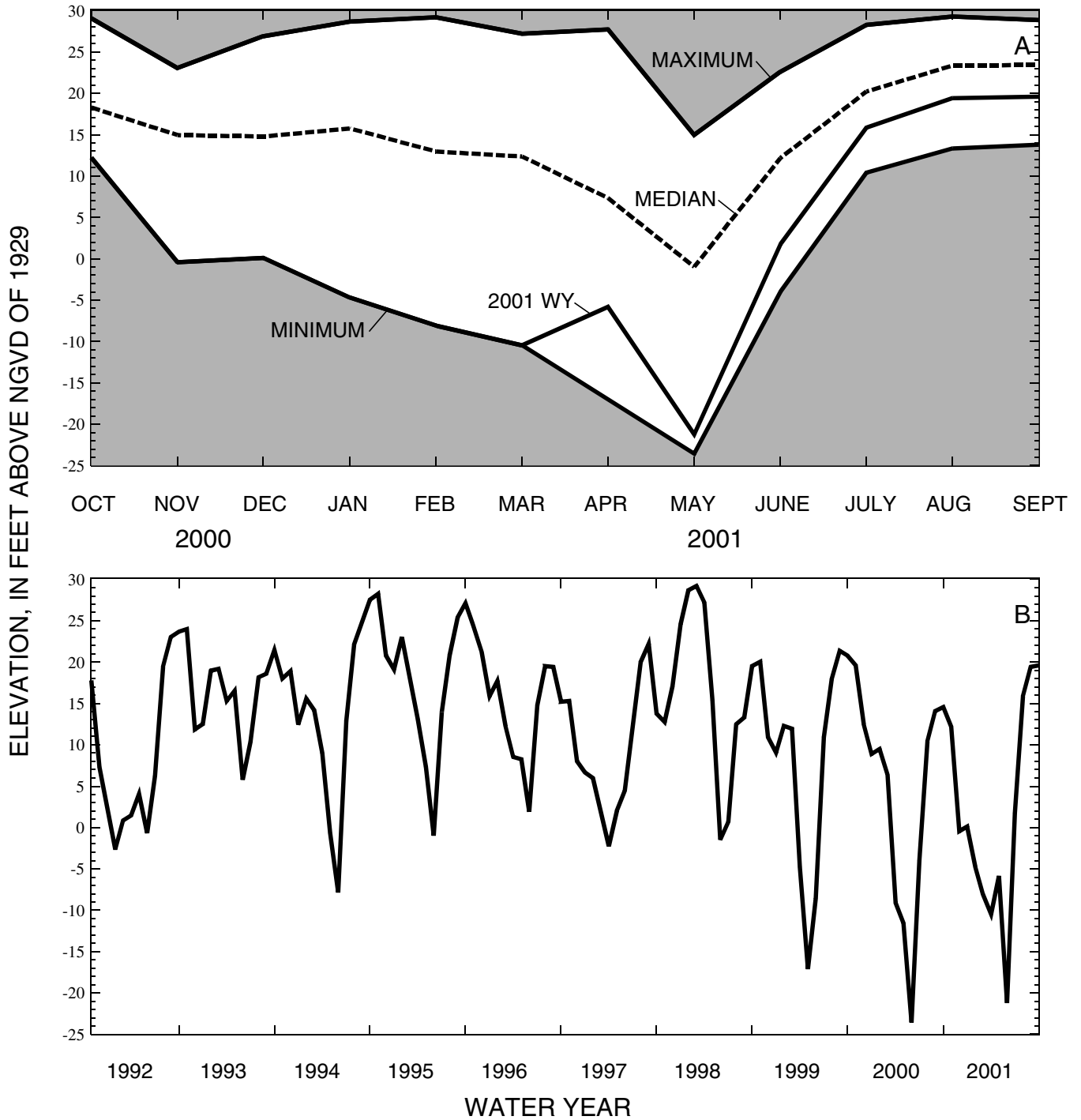


Figure 6.--Kibler deep well 26B near Bethany, Upper Floridan aquifer, (A) 2001 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1992-2001.

SARASOTA WELL 9 NEAR SARASOTA, FLORIDA
 STATION 271938082251801

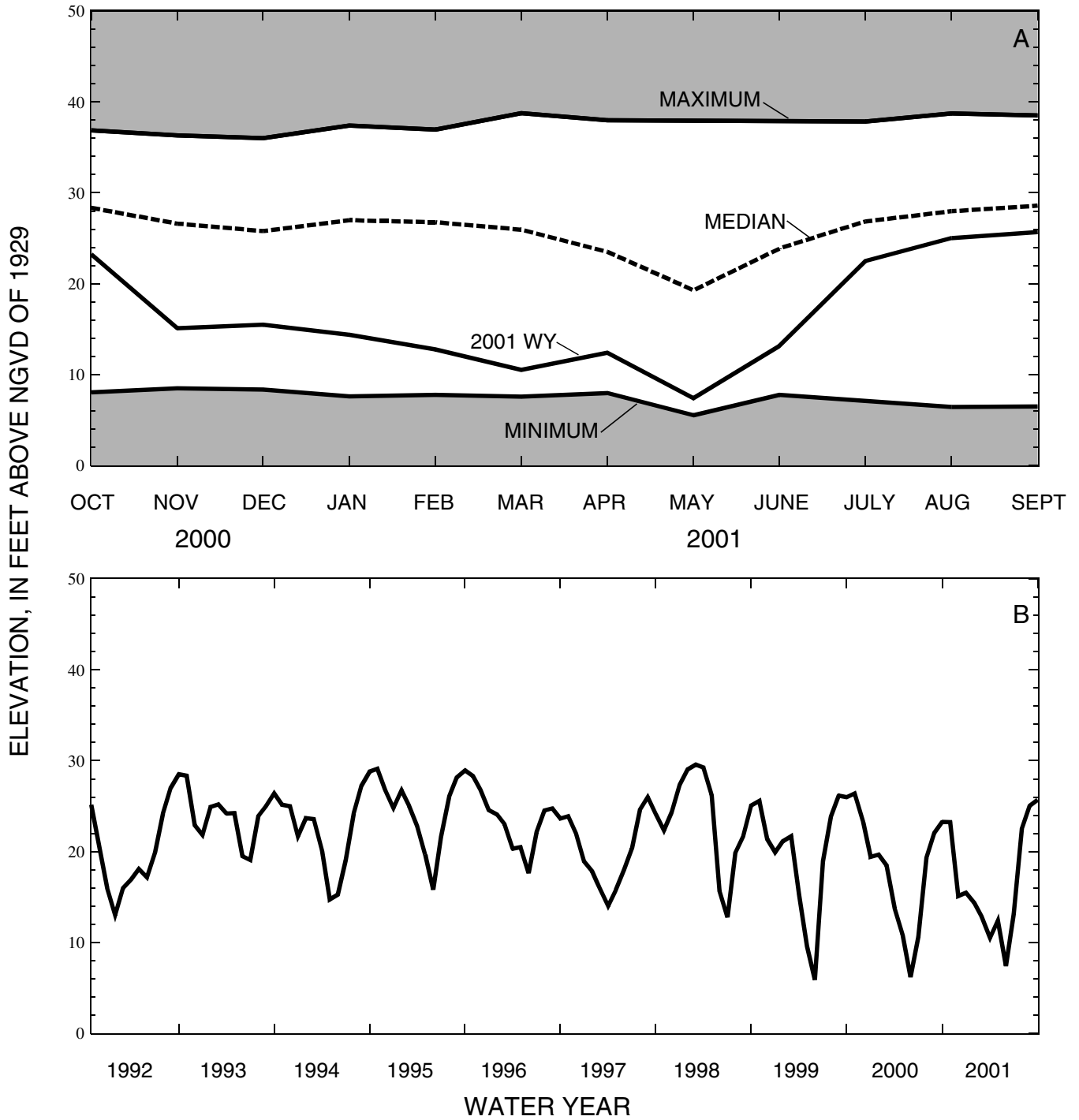


Figure 7.--Sarasota well 9 near Sarasota, Upper Floridan aquifer, (A) 2001 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1992-2001.

MARSHALL DEEP WELL NEAR GARDNER, FLORIDA
STATION 272012081482501

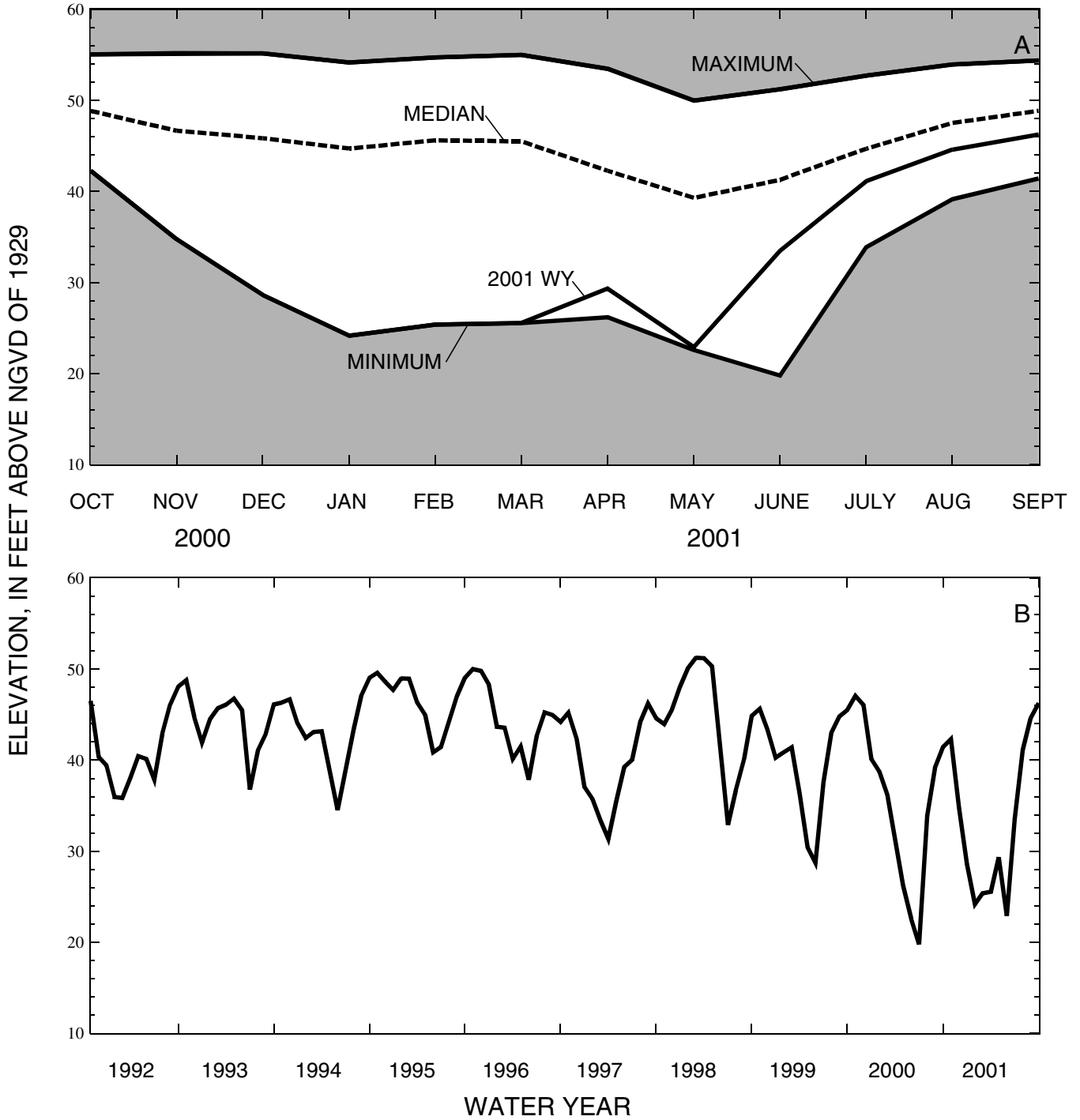


Figure 8.--Marshall deep well near Gardner, Upper Floridan aquifer, (A) 2001 monthly mean elevation compared to the maximum, median, and minimum monthly mean elevation for the period of record, and (B) the monthly mean elevation for the period 1992-2001.

EXPLANATION OF THE RECORDS

The ground-water records published in this report are for the 2001 water year that began October 1, 2000 and ended September 30, 2001. 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.)

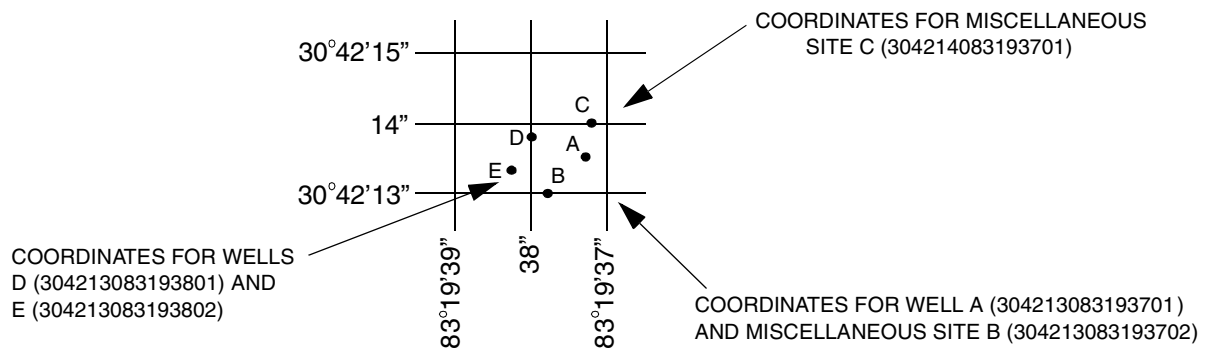


Figure 9.--System for numbering wells and miscellaneous sites.
(latitude and longitude)

A second well-numbering system used in Florida utilizes 7 1/2-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

Ground-water level data from a national network of observation wells are given in this report. The records include data from wells equipped with electronic data loggers and data from wells where water levels are measured periodically.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the manuscript. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape, pressure gage, or electronic data logger. The water-level measurements in this report are given in feet above National Geodetic Vertical Datum of 1929 or in some tables as feet below 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 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 electronic data loggers 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 to water of several hundred feet, the error of 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 to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The following comments clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other 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 periodic or continuous record.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), 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 (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); 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. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted. Periods for which datum corrections need to be applied are described in this entry.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with reference to National Geodetic Vertical Datum of 1929 and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet above National Geodetic Datum of 1929 and all taped measurements of water level are listed. For wells equipped with electronic data loggers, only abbreviated tables are published; generally, maximums are listed for every fifth day and at the end of the month (EOM). The highest water level of the calendar and water year for complete record is shown on a line below the abbreviated table. Because all values are not published for wells with electronic data loggers, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure 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 comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-

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Volume 3B: Southwest Florida Ground Water

water-level records for each county. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

Remarks Codes

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

PRINT OUTPUT	REMARK
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.

Dissolved Trace-Element Concentrations

*NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

*NOTE.--Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Rounding Clarification

Values for some constituents analyzed by routine methods are tabulated with extraneous trailing zeros that are not significant digits. Extraneous zeros result because data obtained from low-level methods that have better (lower) detection limits are stored under the same parameter code as data obtained by routine analytical methods.

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 at

<http://water.usgs.gov/nwis/>

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

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, 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 on the inside of the back cover.

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.

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.

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 to 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 polychlorinated 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 weight percent of the hydrogen substituted chlorine.

Artificial substrate is a device that is purposely 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 taken. 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 the 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”)

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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.

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 peaks per year will be published.

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.

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

Bedload discharge (tons per day) is 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" and "Sediment")

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

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 which are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

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 are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used 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 on 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:

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

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159...

From cell volume, total algal biomass expressed as biovolume ($\mu\text{m}^3/\text{mL}$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

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

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 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 waters 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 boundaries. 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 downstream from a gaging station that physically influences 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, ft³/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-feet” sometimes is used synonymously with “cubic feet per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/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 are numerically 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, (ft³/s)/mi²] 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 concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Daily mean suspended-sediment concentration,” “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 periodic sample or 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 are usually 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 UTM coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

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 sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., 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 chemical constituents, 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 CaCO₃) 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:

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

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")

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded 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 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 are generally considered pollution sensitive, the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded 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. 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 qualitatively identified 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 (<).

Euglenoids (Euglenophyta) are a group of algae that are usually 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 semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. 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 sediments.

Fecal coliform bacteria are present in the intestine or feces of warm-blooded animals. They are often 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 intestine of warm-blooded 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 (Pyrrophyta) 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 larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is 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 is often 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. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating “moss” in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

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 is commonly 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 which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

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

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 benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations referred to in this report are four 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.), 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 uniformly distributed on it. (See also “Annual runoff”)

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

Laboratory Reporting Level (LRL) is generally 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 non-detection 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 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 based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.]

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

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 are usually 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.

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.

Methylene blue active substances (MBAS) are apparent detergents. 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, $\mu\text{g/g}$) 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, $\mu\text{g/kg}$) 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, $\mu\text{g/L}$) 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, $\mu\text{S/cm}$) 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 mg/L 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 (Timme, 1995).

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 of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly 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 Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. 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 sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of the 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 (m²), 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 utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal 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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. 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 to 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 determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

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. While 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 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually 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 are commonly 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.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic 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 [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. 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 in unenriched waters. 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 [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. 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 an element 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.

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 non-exceedance 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 non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. 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")

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 used to denote location along a river.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin in 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. See conversion of units page (inside back cover) for identification of the datum used in this report.

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 influenced by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

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-run 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 "Recurrence interval" and "Annual 7-day minimum")

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.

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/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 waters, to evaluate mixing of different waters, 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 (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

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

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 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is operationally defined 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 material collected on the filter or, more commonly, by difference, based on 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 ft 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/day) 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 (ft³/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, 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, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

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.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic 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 richness is the total number of distinct species or groups and usually decreases with pollution. (See also “Percent Shading”)

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

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 tons 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 warm-blooded 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 mL 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 “Sediment,” “Suspended sediment,” “Suspended-Sediment Concentration,” “Bedload,” and “Bedload discharge”)

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”)

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore – diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to 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 EPA 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. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the “REMARKS” column of the Annual Data Report.

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 pathlength of UV light through a sample.

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 are often 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 (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

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, 2001, is called the “2001 water year.”

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 are often 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 U.S.G.S. publishes a series of manuals 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.

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

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-A10. *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.

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. A5, 1996. 125 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 Gibbs, 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 Gibbs, 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 Gibbs, 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 Gibbs, 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 Gibbs, 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. Variousy paginated.
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- 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.

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WELL DESCRIPTIONS AND GROUND-WATER DATA

WATER RESOURCES DATA FOR FLORIDA, 2001
Volume 3B: Southwest Florida Ground Water

KEY TO SITE LOCATIONS ON FIGURE 10

CHARLOTTE COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	265138082002201	34

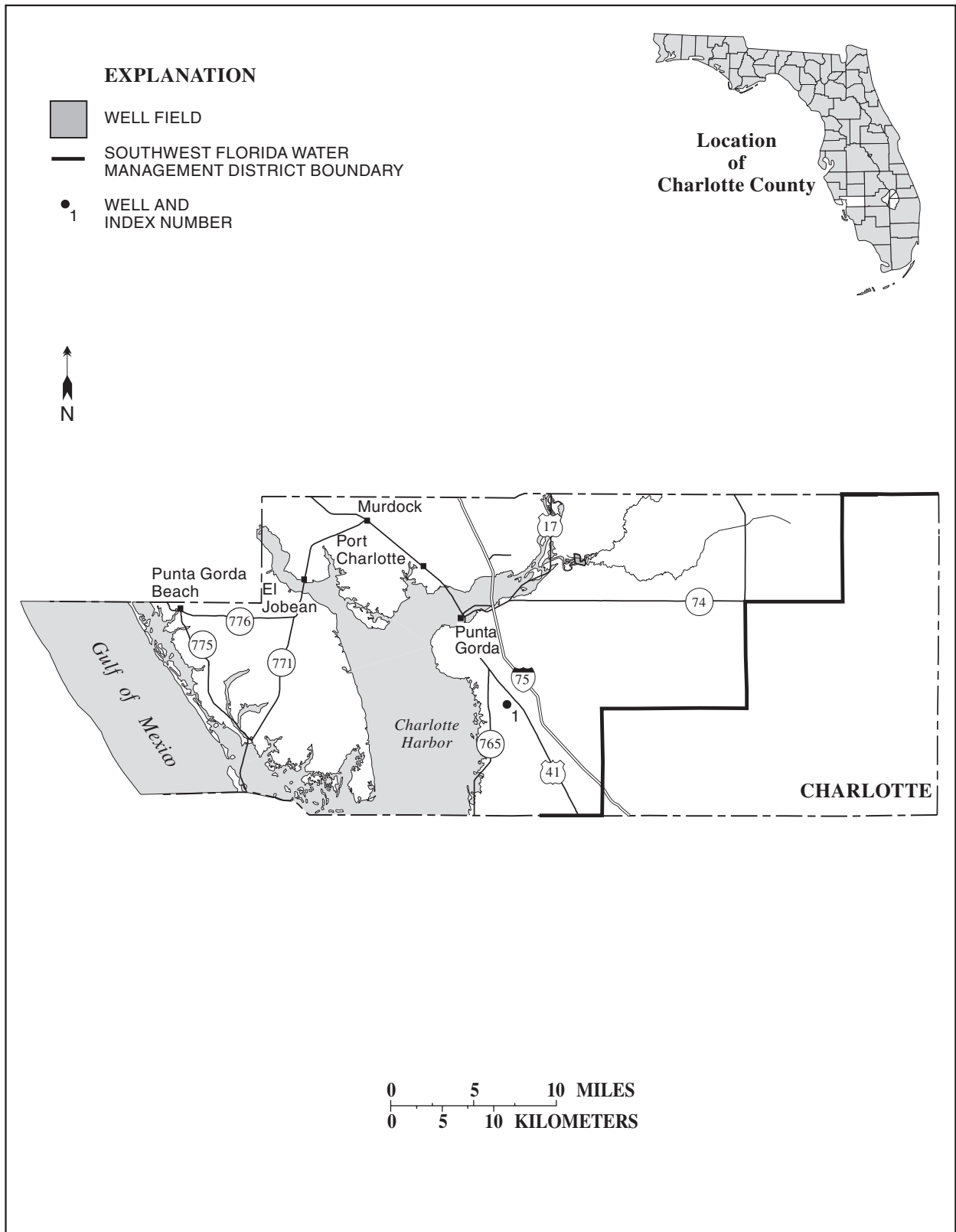


Figure 10.-- Location of wells in Charlotte County.

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

35

CHARLOTTE COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
265004081581901	42S23E12 HERRIN NVR 1 FL	20010515 20010925	22.93 26.35
265017082153701	42S20E12 65021501241 FL	20010514 20010924	15.10 18.30
265257081444101	BABCOCK 5 NEAR PUNTA GORDA FL	20010515 20010925	32.59 37.70
265504082000601	41S23E10 USGS C3 343 FL	20010515 20010925	7.13 12.96
265531082194803	ROMP TR3-3 SUWANNEE WELL NEAR ENGLEWOOD FL	20010515 20010924	17.63 21.16
265633082015201	BROWNS DEEP WELL AT PUNTA GORDA FL	20010515 20010925	39.80 43.40
265638082130702	ROMP TR 3-1 TAMIAMI MONITOR NEAR EL JOBEAN FL	20010925	6.06
265638082130703	ROMP TR 3-1 UPPER HAWTHORN MONITOR NR EL JOBEAN FL	20010514	10.27
265638082130705	ROMP TR 3-1 LOWER HTRN MON WELL NR EL JOBEAN FL	20010514 20010924	27.40 31.30
265638082130706	ROMP TR 3-1 SUWANNEE MONITOR NEAR EL JOBEAN FL	20010514 20010924	29.21 33.12
265644081483303	ROMP 5-MW3 WELL NEAR BERMONT FL	20010925	52.18
265644081483304	ROMP 5-MW2 WELL NEAR BERMONT FL	20010925	34.87
265646081554501	ST HWY 74 DEEP NEAR PUNTA GORDA FL	20010515 20010925	22.69 23.42
265837081561101	ROMP 11 HAWTHORN WELL NEAR PUNTA GORDA FL	20010515 20010925	20.82 25.32
270152082002806	ROMP 10 TAMPA WELL NEAR PORT CHARLOTTE FL	20010515 20010927	42.44 47.95
270152082002807	ROMP 10 ARCADIA WELL NEAR PORT CHARLOTTE FL	20010515 20010927	15.35 22.68

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 11

CITRUS COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	284317082330601	38
2	284752082362501	38
3	284759082344101	39

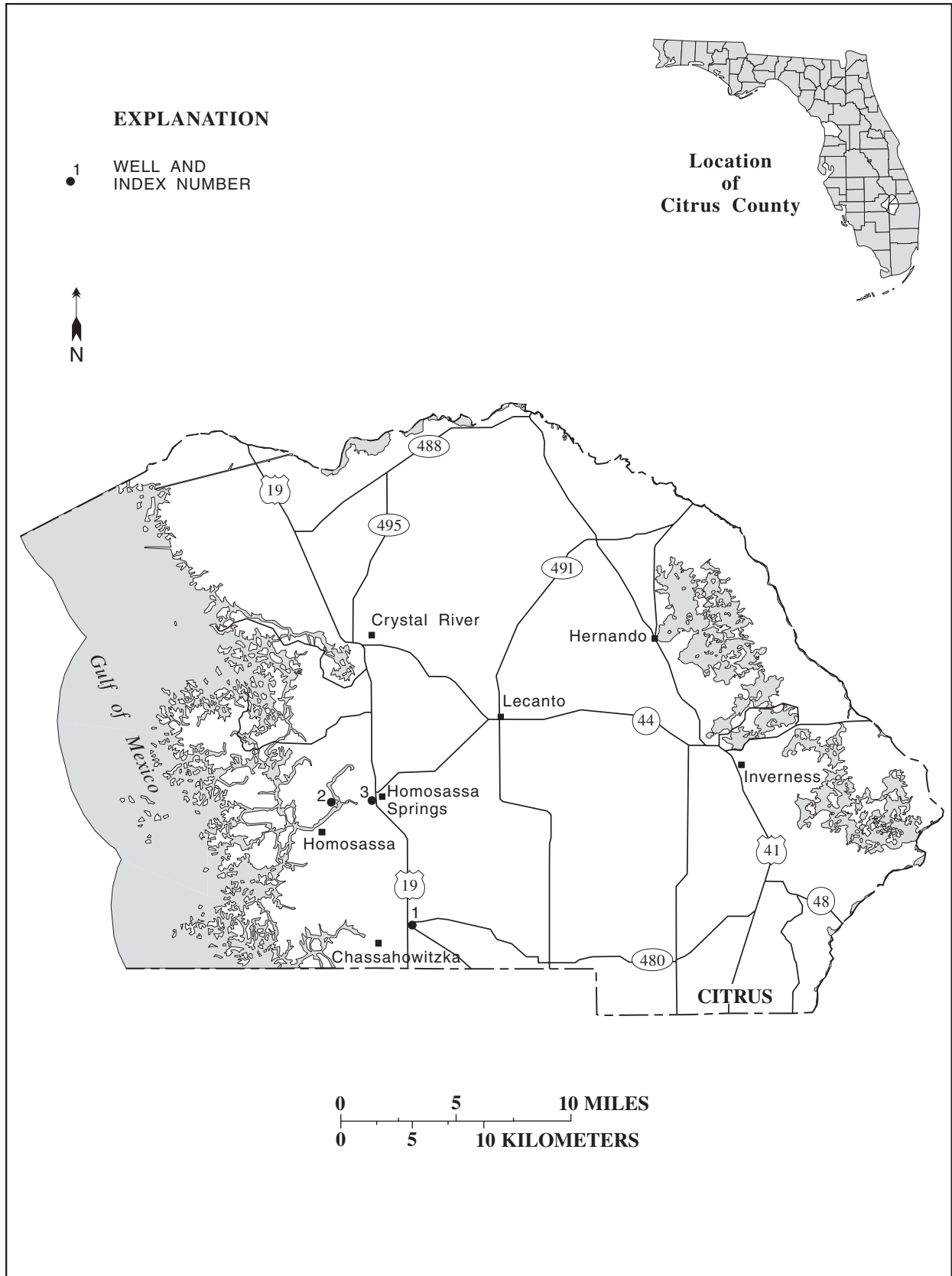


Figure 11.-- Location of wells in Citrus County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

CITRUS COUNTY

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

LOCATION.--Lat 28°43'17", long 82°33'06", in NE ¼ NE ¼ 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 120 FLRD.

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.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.35	6.05	5.69	5.31	5.38	5.43	5.66	4.82	5.00	5.45	6.43	6.07
10	6.11	6.23	5.79	5.33	5.30	5.32	5.46	4.93	4.99	5.51	6.31	6.36
15	6.18	6.08	5.80	5.21	5.10	5.31	5.41	4.84	4.88	6.08	6.33	6.73
20	6.18	5.95	5.72	5.19	5.05	5.62	5.13	4.88	4.80	6.12	6.34	6.96
25	6.03	5.99	5.40	5.22	5.07	5.49	5.11	4.98	5.31	6.49	6.22	7.10
EOM	6.10	5.95	5.40	5.41	5.06	5.79	4.93	4.90	5.28	6.37	6.10	7.00
MAX	6.39	6.23	5.90	5.46	5.41	5.79	5.76	4.99	5.32	6.64	6.43	7.10
CAL YR 2000	MAX 6.76											
WTR YR 2001	MAX 7.10											

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

LOCATION.--Lat 28°47'52", long 82°36'25", in SW ¼ NE ¼ 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 120 FLRD.

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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.28 ft NGVD, Oct. 1, 1998; lowest daily maximum, 0.15 ft NGVD, Jan. 15, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.57	1.59	---	---	---	2.50	1.65	.83	1.55	1.82	2.23	1.74
10	.20	2.50	1.74	---	---	1.70	1.52	1.48	1.56	2.01	1.65	1.83
15	1.49	1.80	1.79	---	.91	1.85	1.70	1.36	1.37	1.51	2.28	1.59
20	1.60	1.45	1.58	1.62	.91	2.02	.97	1.41	---	2.34	2.14	2.09
25	1.06	2.06	---	---	1.11	1.40	1.41	1.77	1.66	2.41	1.75	2.25
EOM	1.68	1.53	---	1.52	1.25	1.99	.81	1.49	1.89	1.58	1.76	---
MAX	1.89	2.50	2.36	1.62	1.50	2.50	1.77	1.84	2.18	2.93	2.28	2.25
CAL YR 2000	MAX 2.75											
WTR YR 2001	MAX 2.93											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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CITRUS COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
284339082270401	LECANTO WELL 1 NEAR LECANTO FL	20010515	6.00
		20010924	8.86
284532082371001	HOMOSASSA WELL 1 AT HOMOSASSA FL	20010515	1.14
		20010924	2.05
284803082351701	NORRIS CATTLE CO WELL AT HOMOSASSA SPRINGS FL	20010515	1.39
		20010924	2.15
285020082365301	OZELLO WELL 3 NEAR CRYSTAL RIVER FL	20010515	.63
		20010924	1.72
285102082361001	OZELLO WELL 4 NEAR CRYSTAL RIVER FL	20010515	1.52
		20010924	2.78
285112082354401	ROMP TR 21-2 DEEP WELL NR HOMOSASSA SPRINGS FL	20010514	.67
		20010926	1.97
285234082341901	ROMP TR 21-3 DEEP WELL NR HOMOSASSA SPRINGS FL	20010514	1.95
		20010926	3.30
285254082323001	LECANTO WELL 7 NEAR LECANTO FL	20010515	2.76
		20010924	4.45
285421082361602	CRYSTAL RIVER DEEP WELL AT CRYSTAL RIVER FL	20010515	.93
		20010924	2.13
285737082400601	FPC (FLORIDA POWER CORP) CR3 NEAR CRYSTAL RIVER FL	20010515	1.46
		20010924	3.89

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 12

DE SOTO COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	270410081565201	44
2	270414081584701	44
3	271308081522601	45
4	271538082002301	45
5	271757081493001	46
5	271757081493002	46
5	271757081493003	47
5	271757081493004	47
6	272012081482501	48

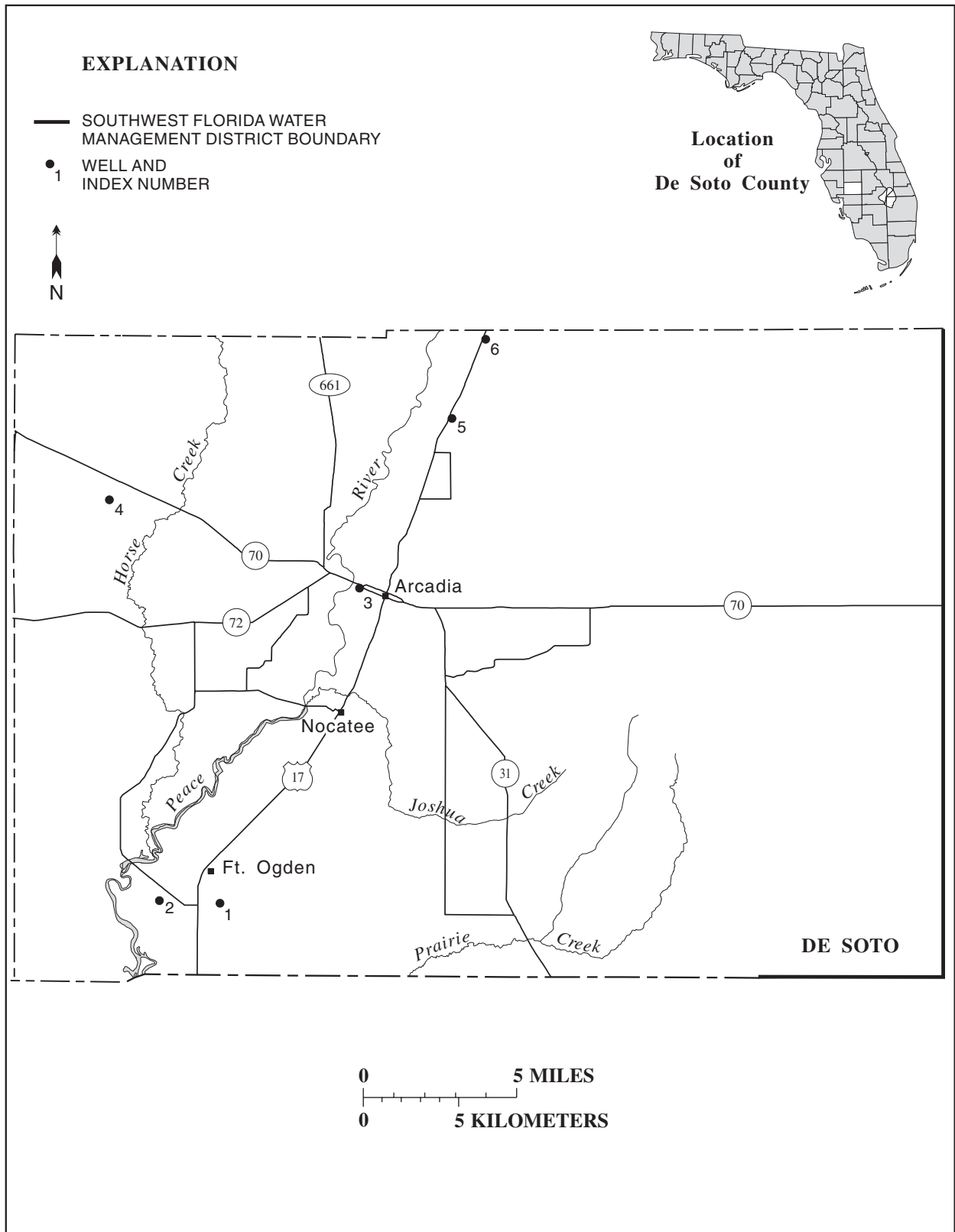


Figure 12.-- Location of wells in De Soto County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

DE SOTO COUNTY

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

LOCATION.--Lat 27°04'10", long 81°56'52", in NW ¼ SE ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 02...	1617	47.33	MAY 07...	1320	34.71
NOV 27...	1510	43.48	JUL 09...	1608	46.13
JAN 22...	1513	40.60	AUG 21...	1504	47.38
APR 02...	1420	41.78			

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

LOCATION.--Lat 27°04'14", long 81°58'47", in NW ¼ SE ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 02...	1633	48.22	MAY 07...	1343	39.80
NOV 27...	1520	44.00	JUL 09...	1625	46.75
JAN 22...	1528	42.45	21...	1515	48.70
APR 02...	1413	43.90			

DE SOTO COUNTY--Continued

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

LOCATION.--Lat 27°13'08", long 81°52'26", in NW ¼ NW ¼ 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 122 HTRN.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
03...	1423	43.43	09...	1508	35.53
NOV			17...	1202	32.94
29...	1225	40.63	JUL		
JAN			19...	1111	41.03
23...	1524	39.13	AUG		
APR			23...	1715	47.43
06...	0926	34.83	SEP		
			26...	1235	47.35

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

LOCATION.--Lat 27°15'38", long 82°00'23", in SW ¼ NW ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.64	33.77	30.99	24.86	30.58	27.50	32.56	26.88	29.65	36.96	41.50	41.38
10	40.95	32.57	30.76	24.99	29.28	28.56	32.61	25.96	31.50	---	41.83	41.87
15	40.02	32.26	30.15	27.86	28.89	28.52	31.71	25.13	32.45	38.94	42.22	42.80
20	38.39	32.38	29.44	29.27	27.74	29.87	28.48	24.64	33.61	39.54	42.37	42.88
25	36.53	---	29.18	30.57	27.56	30.70	28.25	25.05	35.00	40.38	---	43.03
EOM	35.48	32.31	28.83	30.00	26.66	30.76	28.36	27.49	36.06	40.92	40.75	43.36
MAX	41.00	34.80	32.30	30.57	30.58	30.76	33.35	28.01	36.06	40.92	42.38	43.36
CAL YR 2000	MAX 41.00											
WTR YR 2001	MAX 43.36											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

DE SOTO COUNTY--Continued

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

LOCATION.--Lat 27°17'57", long 81°49'30", in SW ¼ SW ¼ 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 112 NRSD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.47	67.79	67.20	66.98	66.82	66.68	67.61	66.91	67.12	---	71.05	70.08
10	68.68	67.68	67.11	66.93	66.77	66.73	67.66	66.92	67.05	---	71.17	71.88
15	68.49	67.56	67.06	66.91	66.72	66.71	67.49	67.01	---	69.48	70.99	73.66
20	68.24	67.43	67.03	66.88	66.67	66.64	67.31	67.09	---	69.93	70.72	72.32
25	68.17	67.34	66.97	66.88	66.65	---	67.17	67.00	---	71.13	70.52	72.31
EOM	67.90	67.28	67.00	66.86	66.66	---	67.04	67.09	---	71.01	70.16	72.42
MAX	68.85	67.88	67.26	67.00	66.85	66.73	67.67	67.11	67.13	71.64	71.34	73.66
CAL YR 2000	MAX 68.91											
WTR YR 2001	MAX 73.66											

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

LOCATION.--Lat 27°17'57", long 81°49'30", in SW ¼ SW ¼ 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 124 AVPK.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.27	37.42	34.68	19.62	34.43	31.67	37.64	30.39	34.84	41.90	46.46	46.36
10	45.97	35.07	34.11	21.90	32.56	32.08	37.90	27.89	37.16	42.83	46.54	47.27
15	44.81	34.59	32.14	29.76	31.85	32.23	36.07	27.41	37.79	44.03	46.92	48.16
20	42.29	35.40	27.03	32.09	31.39	33.46	30.92	27.79	39.19	44.73	47.13	48.00
25	40.45	34.47	---	33.95	31.17	---	31.51	30.63	40.53	45.49	46.94	48.14
EOM	38.59	34.59	---	33.70	29.85	---	32.01	32.76	41.44	45.95	45.59	48.42
MAX	46.04	37.83	35.30	33.95	34.43	33.46	38.49	32.91	41.44	45.95	47.18	48.45
CAL YR 2000	MAX 46.57											
WTR YR 2001	MAX 48.45											

DE SOTO COUNTY--Continued

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

LOCATION.--Lat 27°17'57", long 81°49'30", in SW ¼ SW ¼ 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 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.63	---	33.59	17.65	33.55	30.34	35.65	---	33.90	40.90	46.22	46.10
10	44.15	---	32.72	18.65	31.85	30.68	36.04	26.52	33.72	42.33	46.29	46.88
15	43.39	32.82	30.66	28.09	31.11	30.89	33.64	25.43	36.97	43.63	46.59	48.03
20	40.10	33.11	26.17	30.26	30.22	31.76	28.35	24.14	38.61	44.42	46.41	47.93
25	39.14	32.45	30.66	32.37	29.62	---	28.43	29.05	39.98	45.17	46.41	47.69
EOM	---	33.45	21.12	32.77	28.75	---	29.01	---	40.79	45.72	45.21	47.44
MAX	45.92	34.55	33.92	32.77	33.55	32.34	36.84	29.05	40.79	45.72	46.59	48.03
CAL YR 2000	MAX 45.92											
WTR YR 2001	MAX 48.03											

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

LOCATION.--Lat 27°17'57", long 81°49'30", in SW ¼ SW ¼ 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 122 HTRN.

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 September 2001.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 48.19 ft NGVD, Sept. 29, 2001; lowest, 24.30 ft NGVD, May 16, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	36.29	33.63	---	33.22	30.46	36.36	28.50	34.01	41.21	46.23	46.10
10	---	34.16	32.97	---	31.53	30.94	36.78	---	35.81	42.40	46.37	47.02
15	---	33.71	31.09	---	30.80	31.14	34.54	---	37.01	43.72	46.67	48.03
20	39.23	34.08	25.91	---	30.20	32.19	30.08	26.06	38.59	44.48	46.69	47.91
25	39.25	33.25	---	32.66	29.81	---	30.17	29.52	39.97	45.27	46.46	47.93
EOM	37.46	33.52	---	32.42	28.68	---	30.69	31.67	40.92	45.72	45.34	47.97
MAX	41.10	36.30	33.90	32.66	33.22	32.19	37.29	31.74	40.92	45.72	46.69	48.19
WTR YR 2001	MAX 48.19											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

DE SOTO COUNTY--Continued

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

LOCATION.--Lat 27°20'12", long 81°48'25", in NW ¼ NW ¼ 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 120 FLRD.

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

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.80	31.92	28.14	16.36	25.20	20.89	27.81	21.96	24.41	34.66	42.06	44.13
10	42.28	31.29	26.82	14.21	22.56	22.01	29.31	21.34	26.82	35.91	42.89	44.57
15	40.48	29.98	26.82	18.69	24.66	23.21	27.79	20.01	28.33	37.42	43.58	45.51
20	40.25	28.70	25.99	21.57	24.17	24.09	26.36	17.95	30.20	38.77	44.08	45.73
25	37.39	26.72	22.51	23.80	22.17	23.99	24.24	19.97	31.82	39.99	44.43	45.93
EOM	34.88	28.67	22.70	24.17	21.63	25.55	22.49	22.57	33.50	41.13	44.32	46.26
MAX	42.30	34.75	28.63	24.17	25.39	25.55	29.31	22.90	33.50	41.13	44.62	46.26
CAL YR 2000	MAX 42.30											
WTR YR 2001	MAX 46.26											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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DE SOTO COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
270225081443303	ROMP 12 NOCATEE WELL NEAR ARCADIA FL	20010515	42.44
		20010925	50.00
270225081443304	ROMP 12 LOWER INTERMEDIATE WELL NEAR ARCADIA FL	20010515	42.52
		20010925	49.94
270225081443305	ROMP 12 UPPER INTERMEDIATE WELL NEAR ARCADIA FL	20010515	34.39
		20010925	42.88
270325081484701	NAT WOLF CORP IRRIGATION WELL NEAR ARCADIA FL	20010515	41.61
		20010925	48.52
270417081575601	ROB LANE DESOTO 36 WELL (RUSSELL) NEAR ARCADIA FL	20010925	45.65
270418081365802	ROMP 13-MW4 WELL NEAR ARCADIA FL	20010517	41.34
		20010925	50.00
270418081365804	ROMP 13-MW2 WELL NEAR ARCADIA FL	20010517	41.58
		20010925	50.09
270540082001101	GDU WELL M-2 NEAR FORT OGDEN FL	20010516	37.20
		20010926	50.50
270540082001102	GDU WELL T-2 NEAR FORT OGDEN FL	20010516	28.68
		20010926	49.27
270737082025101	ROMP 9.5 SUWANNEE WELL (MW1) NEAR FT OGDEN FL	20010515	37.69
		20010927	46.58
270737082025102	ROMP 9.5 LOWER ARCADIA WELL (MW2) NEAR FT OGDEN FL	20010515	31.59
		20010927	44.38
270858081582201	NUNEZ REDHAWK RANCH WELL NEAR NOCATEE FL	20010516	34.20
		20010926	45.50
271026081583601	ROMP 17 AVON PARK WELL NEAR NOCATEE FL	20010519	34.32
		20010926	48.14
271026081583604	ROMP 17 TAMPA WELL NEAR NOCATEE FL	20010519	29.86
		20010926	44.31
271115081462701	ROMP 16 OCALA WELL NEAR ARCADIA FL	20010516	37.19
		20010926	49.46
271115081462702	ROMP 16 HAWTHORN WELL NEAR ARCADIA FL	20010516	35.72
		20010926	49.57
271228081482801	TOWNSEN RIVER HAWTHORN WELL NEAR ARCADIA FL	20010926	51.07
271405081453201	BEVIS DEEP IRRIGATION WELL NEAR ARCADIA FL	20010516	35.66
		20010927	49.81
271610081565401	CUNNINGHAM WELL NEAR ARCADIA FL	20010517	28.49
		20010926	46.32
271623081520101	CAMP CHANYATAH WELL 49 NEAR ARCADIA FL	20010517	25.25

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

DE SOTO COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
271720081521501	SORRELLS BROS WELL 8 NEAR ARCADIA FL	20010517	21.73
		20010927	45.74
271746081404301	SOUTH TOMATO GROWERS WELL NEAR ARCADIA FL	20010516	31.60
		20010926	49.23
271746081453501	FLA POWER & LIGHT WELL NEAR ARCADIA FL	20010927	48.02
271748081345101	TRG WELL J36 NEAR ARCADIA FL	20010516	34.77
		20010926	48.38
272014081595701	HOLLINGSWORTH WELL 751 NEAR ARCADIA FL	20010517	-1.19
		20010928	36.98
272015081392701	AMOCO 2 OIL TEST WELL NEAR ARCADIA FL	20010515	42.21
		20010926	56.83

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 13

HARDEE COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	272714081545901	54
1	272714081545902	54
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2	272728081474701	55
2	272728081474702	56
2	272728081474703	56
2	272728081474704	57
3	273156081451401	57

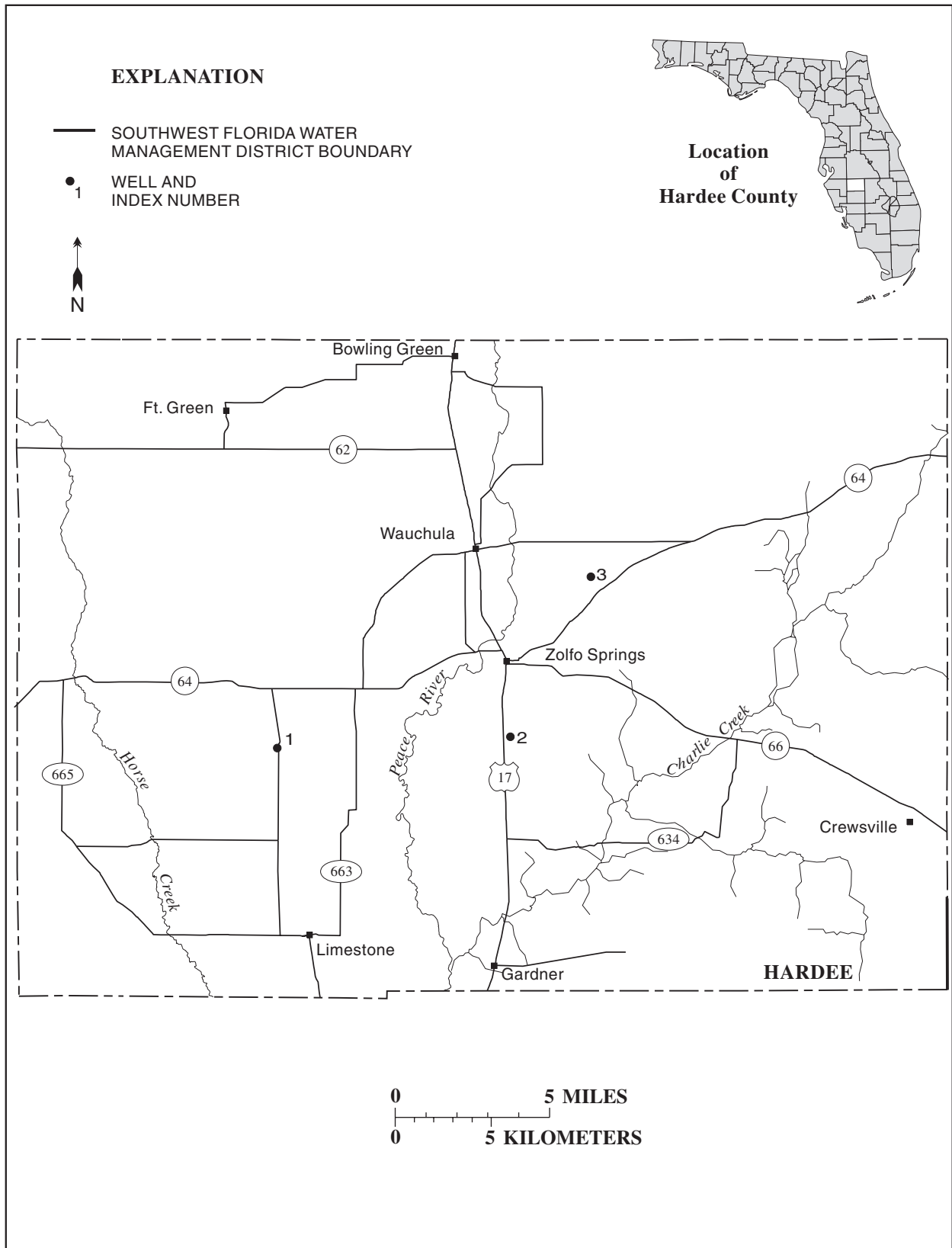


Figure 13.-- Location of wells in Hardee County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HARDEE COUNTY

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

LOCATION.--Lat 27°27'14", long 81°54'59", 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 120 FLRD.

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 September 1992; 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.27	23.30	19.85	10.11	13.54	7.46	16.33	7.79	8.91	24.33	38.83	41.67
10	37.71	20.91	19.31	9.47	13.09	7.48	16.49	---	11.92	27.19	40.33	42.88
15	36.09	20.04	19.57	9.86	11.87	9.86	14.20	---	13.35	29.91	---	44.09
20	33.14	20.34	18.18	11.73	9.31	12.17	10.69	---	16.63	32.33	42.44	44.79
25	30.67	19.64	15.62	14.09	8.12	11.88	10.52	4.19	19.48	34.65	41.30	45.57
EOM	26.75	20.73	17.21	13.33	6.19	13.48	9.13	6.01	21.84	36.91	39.54	46.74
MAX	38.51	26.41	20.75	14.09	13.77	13.48	17.95	9.54	21.84	36.91	42.66	46.74
CAL YR 2000	MAX 38.51											
WTR YR 2001	MAX 46.74											

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

LOCATION.--Lat 27°27'14", long 81°54'59", 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.--Hawthorn formation of Miocene Age, Geologic Unit 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.62	26.75	22.69	14.47	14.87	9.70	18.04	10.31	11.24	25.52	39.64	42.68
10	39.48	24.66	22.85	12.89	14.01	8.97	17.12	7.37	13.77	28.21	41.16	43.92
15	38.29	22.98	22.80	12.90	14.11	11.72	15.01	4.10	15.19	30.81	---	45.11
20	36.02	22.83	22.00	14.58	11.29	14.02	11.49	2.33	18.03	33.18	43.26	45.89
25	33.35	21.88	19.16	16.40	9.32	12.79	12.74	6.65	20.87	35.52	42.62	46.75
EOM	30.25	23.62	20.62	14.39	7.83	15.36	11.52	8.77	23.07	37.76	40.83	47.84
MAX	39.78	29.71	23.45	17.36	15.74	15.36	19.58	11.81	23.07	37.76	43.48	47.84
CAL YR 2000	MAX 39.82											
WTR YR 2001	MAX 47.84											

HARDEE COUNTY--Continued

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

LOCATION.--Lat 27°27'14", long 81°54'59", 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.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112 NRSD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.30	69.35	68.08	67.43	67.06	67.63	69.91	68.59	67.48	69.81	74.95	77.14
10	71.33	69.02	67.84	67.35	67.12	68.06	69.89	68.28	67.70	69.98	75.48	77.60
15	70.87	68.80	67.76	67.27	67.32	68.29	69.72	67.88	67.36	74.24	---	78.40
20	70.43	68.43	67.71	67.22	67.39	68.36	69.28	67.59	67.91	---	75.69	76.52
25	70.12	68.22	67.54	67.20	67.36	68.11	68.94	67.57	69.63	---	74.94	75.78
EOM	69.68	68.28	67.59	67.11	67.35	69.54	68.68	67.29	70.13	74.66	75.17	75.84
MAX	71.45	69.61	68.19	67.59	67.40	69.54	69.94	68.66	70.13	75.25	75.69	78.40
CAL YR 2000	MAX 72.52											
WTR YR 2001	MAX 78.40											

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

LOCATION.--Lat 27°27'28", long 81°47'47", in SW ¼ SE ¼ 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.--Avon Park formation of Eocene Age, Geologic Unit 124 AVPK.

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.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	43.71	30.75	26.10	12.70	21.70	14.82	23.49	16.14	18.41	32.09	44.27	46.20
10	44.14	27.78	25.98	11.13	21.02	16.60	25.20	15.93	21.10	34.04	45.63	47.46
15	43.35	26.76	25.41	14.56	20.80	17.44	22.64	13.23	22.94	36.43	46.61	48.84
20	---	26.29	24.30	17.08	19.19	19.56	19.92	11.36	25.44	38.48	47.22	49.41
25	38.76	24.77	20.97	19.42	16.71	20.89	17.19	13.64	27.96	40.58	47.19	50.17
EOM	34.09	26.74	20.92	20.19	15.48	20.48	16.71	16.23	30.07	42.60	45.37	51.19
MAX	44.27	33.56	26.81	20.19	21.70	20.97	25.20	17.38	30.07	42.60	47.45	51.19
CAL YR 2000	MAX 44.27											
WTR YR 2001	MAX 51.19											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HARDEE COUNTY--Continued

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

LOCATION.--Lat 27°27'28", long 81°47'47", in SW ¼ SE ¼ 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.--Tampa limestone formation of Miocene Age, Geologic Unit 122 TAMP.

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.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.88	35.33	31.96	22.91	26.15	---	27.71	---	24.25	35.16	46.07	47.98
10	45.66	34.33	31.57	20.91	26.71	---	29.30	22.16	26.05	36.72	47.38	49.20
15	45.44	32.63	30.27	21.28	26.63	23.47	27.90	20.64	27.51	38.72	48.32	50.77
20	44.03	31.73	30.46	22.21	24.47	24.66	26.09	17.77	29.64	40.80	48.74	51.38
25	42.34	30.14	27.35	25.13	---	25.93	23.59	19.57	31.87	42.66	---	51.86
EOM	38.58	30.54	28.81	25.49	---	25.01	---	22.47	33.55	44.55	47.89	52.41
MAX	45.69	37.84	32.01	27.00	26.91	25.99	29.30	22.47	33.55	44.55	49.06	52.41
CAL YR 2000	MAX 46.39											
WTR YR 2001	MAX 52.41											

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

LOCATION.--Lat 27°27'28", long 81°47'47", in SW ¼ SE ¼ 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 111 NRSB.

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.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	63.77	62.67	62.25	62.87	62.68	62.20	63.54	62.20	63.31	64.47	66.34	64.24
10	63.99	62.61	62.14	62.95	62.62	62.08	63.23	61.91	64.36	65.60	65.58	66.04
15	63.47	62.48	62.16	62.83	62.44	61.92	62.92	61.72	64.49	---	64.78	---
20	63.29	62.33	62.05	62.96	62.24	61.90	62.63	61.53	65.47	---	64.72	---
25	63.09	---	62.13	62.94	62.12	61.74	62.40	63.75	65.58	---	---	---
EOM	62.89	62.35	---	62.86	62.05	63.83	62.24	63.31	64.67	66.34	64.06	---
MAX	64.53	62.83	62.27	63.08	62.79	63.83	63.92	63.85	65.74	66.34	66.59	66.74
CAL YR 2000	MAX 64.93											
WTR YR 2001	MAX 66.74											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HARDEE COUNTY--Continued

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

LOCATION.--Lat 27°27'28", long 81°47'47", in SW ¼ SE ¼ 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 122 HTRN.

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.

PERIOD OF RECORD.--October 2000 to September 2001.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 54.38 ft NGVD, Sept. 30, 2001; lowest, 16.71 ft NGVD, Dec. 21, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.34	27.31	22.77	27.00	32.98	29.19	34.44	29.87	32.60	41.71	---	49.98
10	48.15	24.46	23.43	25.08	32.39	30.40	36.00	30.28	34.36	42.69	---	51.08
15	48.06	24.30	22.75	28.47	33.00	31.16	34.47	28.86	35.86	44.23	---	52.47
20	---	23.95	22.98	29.88	32.05	31.49	32.43	26.96	37.47	45.85	---	53.05
25	---	22.95	---	31.67	30.25	32.61	31.83	28.56	39.27	47.46	---	53.57
EOM	28.38	23.97	---	31.66	30.10	33.03	30.27	31.00	40.69	---	49.33	54.38
MAX	48.30	28.48	24.23	32.29	33.24	33.03	36.03	31.00	40.69	47.85	51.61	54.38
WTR YR 2001	MAX 54.38											

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

LOCATION.--Lat 27°31'56", long 81°45'14", in SE ¼ SW ¼ 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 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.86	41.65	38.73	19.87	34.25	29.26	36.31	30.16	32.17	43.30	54.36	55.11
10	54.39	39.53	37.66	20.89	32.79	29.83	36.95	29.33	34.41	45.33	55.34	56.84
15	52.18	38.23	38.03	27.34	31.40	31.61	35.20	26.44	35.81	47.35	56.02	---
20	49.64	37.97	33.64	30.98	30.79	33.53	31.97	25.70	37.76	49.26	56.66	---
25	47.77	35.65	34.28	32.49	28.56	32.67	29.87	27.86	39.75	51.09	56.71	---
EOM	44.93	38.47	26.74	33.06	28.71	33.88	30.05	29.97	41.74	52.74	54.81	---
MAX	54.39	43.55	39.32	33.06	34.25	34.29	37.52	30.89	41.74	52.74	56.86	57.09
CAL YR 2000	MAX 54.81											
WTR YR 2001	MAX 57.09											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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HARDEE COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
272038081530701	LIMESTONE LAND 622 WELL NEAR LIMESTONE FL	20010515	15.10
		20010926	44.60
272108081582601	HOLLINGSWORTH WELL 620 NEAR LIMESTONE FL	20010515	-3.45
		20010926	32.43
272442082015201	STEPHENS DEEP WELL NO 724201132344 NEAR ONA FL	20010515	-6.77
		20010926	35.08
272509081410401	MARRLS DEEP WELL NO 411 NEAR GARDNER FL	20010515	22.10
		20010926	55.82
272620081394901	CARLTON WELL HA-59 NEAR ZOLFO SPRINGS FL	20010515	51.31
272715081401601	WILBUR ROBERTSON WELL NO 124 NR ZOLFO SPRINGS FL	20010515	33.41
		20010926	63.05
272855081400701	PEACE RIVER RANCH NO 231 NR CREWSVILLE FL	20010515	40.53
		20010926	67.43
272917081453901	ANDERSON WELL (HARDEE 601) NO 442 ZOLFO SPRINGS FL	20010516	28.78
		20010926	62.39
272944081474001	CITY ZOLFO SPGS DEEP WELL NO 242 ZOLFO SPRINGS FL	20010516	21.60
		20010926	57.33
273108081461301	W.D. BOND WELL HA-89 NO. 323 NEAR WAUCHULA FL	20010516	26.00
		20010927	60.34
273423081582901	CF INDUSTRIES UF-3 WELL NEAR WAUCHULA FL	20010514	84.67
		20010927	94.08
273424081582501	CF INDUSTRIES DEEP WELL LF1 NEAR FORT GREEN FL	20010514	19.37
		20010927	54.54
273426081513401	CF INDUSTRIES DEEP WELL LF6 NEAR FORT GREEN FL	20010514	35.28
		20010927	65.50
273427081513401	CF INDUSTRIES WELL UF-6 NEAR WAUCHULA FL	20010514	55.61
		20010927	80.34
273435081444001	W.B. GEIGER WELL NEAR WAUCHULA FL	20010516	35.67
		20010926	69.35
273555081403001	JOHN WHITE WELL 627 NEAR WAUCHULA FL	20010516	78.22
		20010927	95.57
273714081483101	ST OF FLORIDA PAYNES CREEK HISTORIC SITE FL	20010516	36.71
		20010926	63.03
273813081491201	BRYAN HAWTHORN WELL AT BOWLING GREEN FL	20010516	64.00
273834081464701	WHITEHURST DP 73814613422 WELL NR BOWLING GREEN FL	20010516	37.22

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 14

HERNANDO COUNTY

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2	282613082381703	63
3	282636082221401	64
4	282659082391101	64
5	282742082375901	65
6	283104082341801	65
7	283201082315601	66
8	283650082313301	66

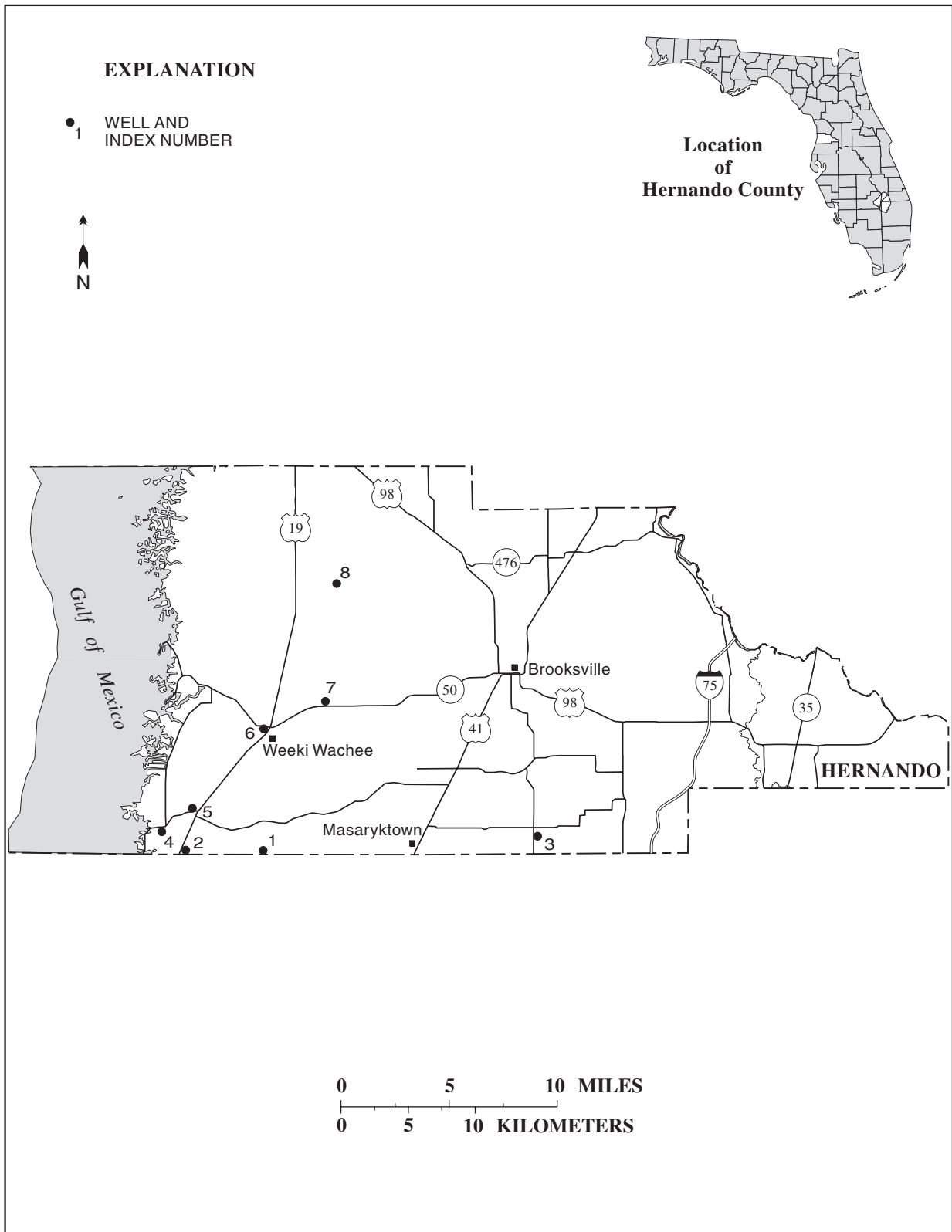


Figure 14.-- Location of wells in Hernando County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HERNANDO COUNTY

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

LOCATION.--Lat 28°26'05", long 82°34'58", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ 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 124 AVPK.

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 casing, 3.65 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.77 ft NGVD, Aug. 27, 1984; lowest, 11.88 ft NGVD, June 21, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.62	14.83	14.47	13.93	13.94	13.33	13.29	12.73	12.06	12.33	14.81	15.10
10	15.54	14.75	14.41	13.86	13.89	13.25	13.28	12.60	12.10	12.38	15.05	15.19
15	15.45	14.68	14.30	13.80	13.69	13.15	13.21	12.46	11.93	13.29	15.23	15.58
20	15.23	14.65	14.24	---	13.56	13.24	13.06	12.39	11.90	13.61	15.32	16.08
25	15.12	14.57	14.14	---	13.46	13.24	12.98	12.23	12.08	13.96	15.28	16.37
EOM	14.94	14.53	14.05	---	13.34	13.31	12.87	12.10	12.25	14.41	15.18	16.55
MAX	15.66	14.92	14.52	14.01	13.94	13.33	13.31	12.82	12.25	14.41	15.32	16.55
CAL YR 2000	MAX 15.66											
WTR YR 2001	MAX 16.55											

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

LOCATION.--Lat 28°26'13", long 82°38'17", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ 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 120 FLRD.

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, 15.36 ft NGVD, Sept. 10, 15, 1988; lowest, 9.20 ft NGVD, June 9, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.59	11.08	10.60	10.40	10.70	10.44	10.67	10.03	9.55	10.15	11.55	11.12
10	11.40	11.13	10.82	10.30	10.67	10.39	10.69	10.01	9.50	10.19	11.49	11.19
15	11.45	11.03	10.73	10.27	10.50	10.26	10.57	9.74	9.32	10.82	11.53	11.71
20	11.30	10.90	10.63	10.24	10.48	10.54	10.36	9.76	9.38	11.06	11.53	11.94
25	11.24	---	10.46	10.18	10.41	10.43	10.31	9.77	9.66	11.23	11.31	11.99
EOM	11.20	10.87	10.34	10.50	10.30	10.64	10.04	9.49	9.98	11.33	11.22	11.88
MAX	11.68	11.18	10.87	10.50	10.72	10.67	10.73	10.05	9.98	11.36	11.58	11.99
CAL YR 2000	MAX 11.97											
WTR YR 2001	MAX 11.99											

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", in SW ¼ SE ¼ 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 124 AVPK.

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, 15.32 ft NGVD, May 24, 1999; lowest measured, 9.00 ft NGVD, June 7, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
NOV 06...	1023	10.68	APR 20...	1035	9.67
DEC 12...	1539	10.42	JUN 06...	1500	9.37
FEB 13...	0940	9.45	AUG 15...	1140	11.10

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

LOCATION.--Lat 28°26'13", long 82°38'17", in SW ¼ SE ¼ 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 112 NRSD.

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 male adaptor, 2.80 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.46 ft NGVD, Sept. 9, 1988; well dry at times most years.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.19	11.43	11.13	---	11.40	---	11.51	---	---	---	12.20	11.55
10	12.03	11.45	---	---	11.31	---	11.52	---	---	---	12.19	11.80
15	11.90	11.34	---	---	11.24	---	11.40	---	---	11.75	12.09	12.75
20	11.78	11.25	---	---	---	11.30	11.25	---	---	11.75	11.99	12.45
25	11.65	11.19	---	---	---	---	---	---	---	12.17	11.83	12.50
EOM	11.53	11.21	---	---	---	11.51	---	---	---	12.16	11.66	12.40
MAX	12.32	11.50	11.18	---	11.64	11.51	11.73	---	---	12.23	12.32	12.75
CAL YR 2000	MAX 12.73											
WTR YR 2001	MAX 12.75											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HERNANDO COUNTY--Continued

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

LOCATION.--Lat 28°26'36", long 82°22'14", in SW ¼ NW ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.21	37.49	36.81	36.36	35.84	35.44	---	34.42	33.79	33.31	33.89	33.89
10	38.12	---	---	36.27	35.77	---	---	34.34	33.66	33.25	34.08	33.98
15	38.00	---	---	36.18	35.70	---	34.76	34.25	---	33.18	34.23	34.58
20	37.87	---	36.65	36.12	35.64	---	34.68	34.15	---	33.13	34.19	35.00
25	37.59	37.08	36.53	36.03	35.55	---	34.60	34.06	33.46	33.46	34.13	35.22
EOM	37.55	36.91	36.46	35.90	35.52	---	34.51	33.90	33.37	33.73	34.00	35.64
MAX	38.27	37.55	36.90	36.44	35.89	35.49	34.81	34.50	33.88	33.73	34.24	35.64
CAL YR 2000	MAX 43.17											
WTR YR 2001	MAX 38.27											

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

LOCATION.--Lat 28°26'59", long 82°39'11", in SE ¼ SE ¼ 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 120 FLRD.

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 current year (periodic). Prior to October 1988, published as ROMP TR 18-2 Avon Park Well near Aripeka.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.54 ft below NGVD, Mar. 30, 1998; lowest measured, 5.08 ft below NGVD, June 6, 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
NOV			APR		
06...	1030	-4.05	20...	1002	-4.66
DEC			JUN		
12...	1603	-4.27	06...	1400	-5.08
FEB			AUG		
12...	1421	-4.53	15...	1100	-3.92

HERNANDO COUNTY--Continued

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

LOCATION.--Lat 28°27'42", long 82°37'59", in NW ¼ NW ¼ 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 124 AVPK.

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, 17.52 ft NGVD, Sept. 11, 1988; lowest, 10.96 ft NGVD, June 18, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.49	12.89	12.55	12.26	12.78	12.33	12.67	11.81	11.16	11.71	13.31	12.86
10	13.34	12.92	12.60	12.18	12.68	12.21	12.66	11.68	11.25	11.79	13.31	13.02
15	13.31	12.81	12.57	12.31	12.48	12.08	12.46	11.49	11.00	12.57	13.36	13.74
20	13.20	12.70	12.52	12.25	12.37	12.49	12.23	11.44	11.03	12.68	13.35	13.82
25	13.09	12.71	12.33	12.11	12.29	12.41	12.12	11.36	11.24	13.04	13.15	13.84
EOM	12.97	12.70	12.24	12.56	12.20	12.74	11.91	11.14	11.65	13.13	13.03	13.75
MAX	13.61	12.94	12.63	12.56	12.78	12.74	12.77	11.88	11.65	13.13	13.46	13.87
CAL YR 2000	MAX 13.85											
WTR YR 2001	MAX 13.87											

WELL NUMBER.--283104082341801. Weeki Wachee Springs Well at Weeki Wachee, FL.

LOCATION.--Lat 28°31'04", long 82°34'18", in NW ¼ SE ¼ sec.2, T.23 S., R.17 E., Hydrologic Unit 03100207, 200 ft east of U. S. Highway 19, and 800 ft south of State Highway 50 in Weeki Wachee.

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

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in.

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

DATUM.--Land-surface datum is 23.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 2.70 ft above land-surface datum.

PERIOD OF RECORD.--January 1997 to September 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.24 ft NGVD, Mar. 20, 1998; lowest, 9.28 ft NGVD, June 18, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.10	10.64	10.35	10.03	10.00	9.91	10.01	9.61	9.45	9.48	11.22	11.06
10	10.98	10.61	10.34	9.99	9.95	9.82	10.00	9.54	9.43	9.59	11.23	11.13
15	10.93	10.58	10.27	9.94	9.92	9.77	9.93	9.49	9.29	10.42	11.28	11.35
20	10.82	10.53	10.25	9.92	9.88	9.90	9.81	9.47	9.34	10.55	11.26	11.49
25	10.75	10.48	10.15	9.85	9.87	9.86	9.76	9.43	9.41	10.88	11.19	11.57
EOM	10.68	10.44	10.10	9.92	9.85	10.01	9.65	9.34	9.43	11.02	11.12	11.54
MAX	11.15	10.67	10.40	10.07	10.00	10.01	10.02	9.64	9.48	11.02	11.29	11.57
CAL YR 2000	MAX 11.19											
WTR YR 2001	MAX 11.57											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HERNANDO COUNTY--Continued

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

LOCATION.--Lat 28°32'01", long 82°31'56", in SW ¼ SW ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.78	14.26	13.78	13.24	12.86	12.53	12.60	12.06	11.67	11.61	15.16	15.34
10	14.68	14.10	13.69	13.15	12.78	12.44	12.62	11.99	11.69	11.75	15.33	15.37
15	14.53	14.06	13.58	13.07	12.76	12.39	12.52	11.95	11.57	12.86	15.45	15.58
20	14.41	13.99	13.50	12.94	12.69	12.41	12.38	11.83	11.51	13.32	15.54	16.05
25	14.35	13.89	13.43	12.84	12.60	12.44	12.26	11.72	11.58	14.03	15.46	16.23
EOM	14.30	13.85	13.35	12.75	12.57	12.53	12.18	11.65	11.57	14.73	15.36	16.40
MAX	14.83	14.30	13.83	13.32	12.86	12.53	12.63	12.15	11.71	14.73	15.54	16.40
CAL YR 2000	MAX 14.89											
WTR YR 2001	MAX 16.40											

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

LOCATION.--Lat 28°36'50", long 82°31'33", 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 120 FLRD.

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, 18.38 ft NGVD, Sept. 22, 1988; lowest, 7.42 ft NGVD, June 23, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	9.94	9.27	8.90	8.41	8.64	8.06	7.58	7.79	10.70	11.19
10	---	10.47	9.82	9.19	8.87	8.38	8.62	7.94	7.58	7.82	11.02	11.08
15	---	10.35	9.71	9.12	8.74	8.31	8.54	7.85	7.54	---	11.20	11.23
20	---	10.23	9.60	9.04	8.65	8.33	8.41	7.76	7.44	9.27	11.33	11.75
25	---	10.12	9.50	8.95	8.56	8.51	8.28	7.70	7.50	9.75	11.36	12.13
EOM	---	10.06	9.36	8.82	8.53	8.58	8.17	7.61	7.62	10.30	11.30	12.40
MAX	---	10.50	10.05	9.33	8.90	8.58	8.64	8.14	7.62	10.30	11.36	12.40
CAL YR 2000	MAX 11.12											
WTR YR 2001	MAX 12.40											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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HERNANDO COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
282659082391104	ROMP TR 18-2 8IN UPPR AVON PARK WELL NR ARIPEKA FL	20010515 20010924	6.78 7.98
283243082365701	ROMP TR 19-2 DEEP WELL NEAR BAYPORT FL	20010515 20010924	5.85 5.59
283313082350101	ROMP TR 19-3 DEEP WELL NEAR WEEKI WACHEE FL	20010514 20010926	7.22 9.04
283321082241601	ROMP DEEP 105 AT BROOKSVILLE FL	20010515 20010925	29.47 31.94
283924082272301	ROMP DEEP WELL 107 NEAR BROOKSVILLE FL	20010515 20010924	8.80 11.56

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 15

HIGHLANDS COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	272745081232601	70

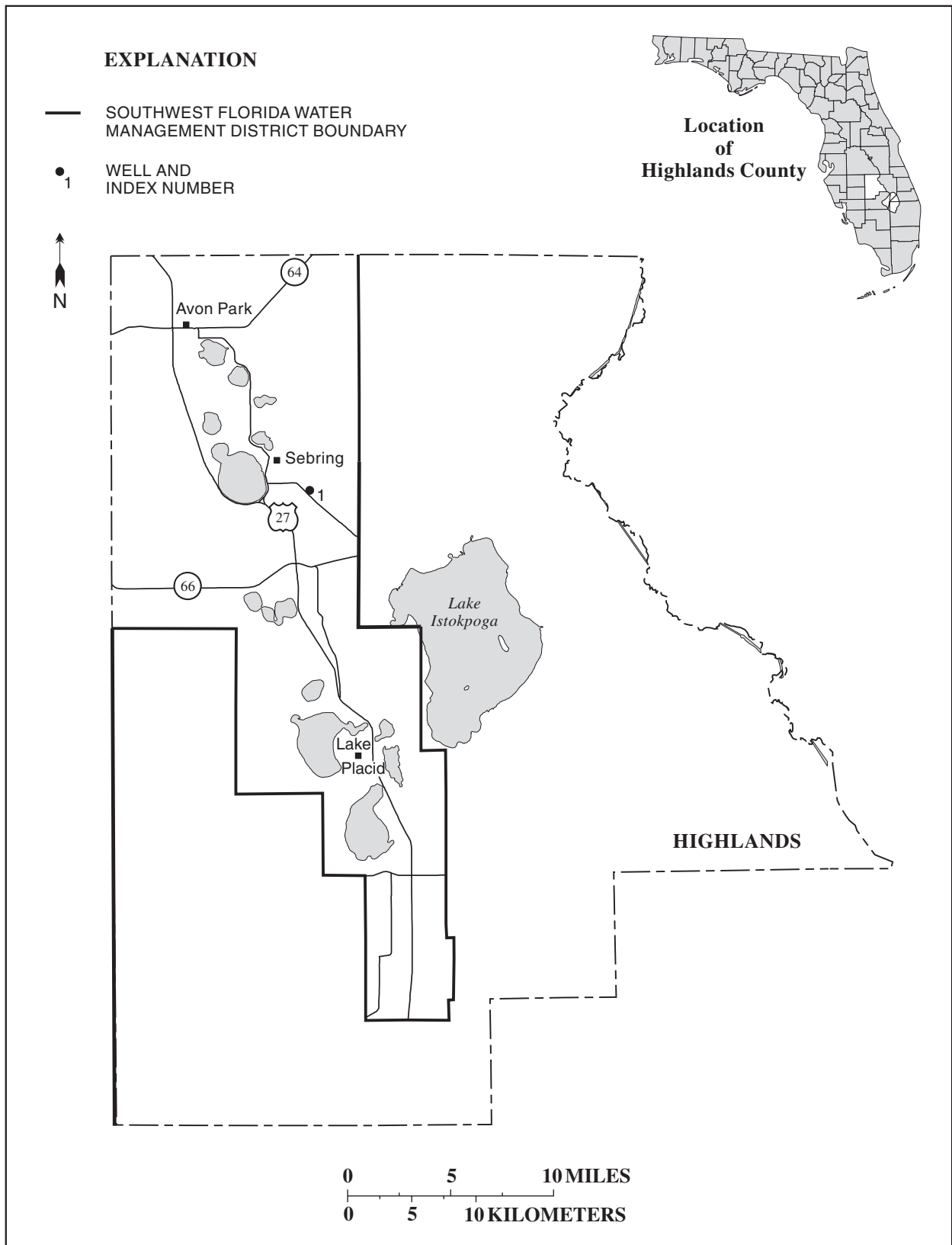


Figure 15.-- Location of wells in Highlands County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENT

HIGHLANDS COUNTY

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

LOCATION.--Lat 27°27'45", long 81°23'26", in NW ¼ SE ¼ 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 112 NRSD.

WELL CHARACTERISTICS.--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, 3.80 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	88.29	87.58	87.17	86.60	85.96	85.35	85.28	85.22	85.06	85.74	88.58	88.93
10	88.31	87.92	87.02	86.51	85.85	85.26	85.48	85.36	85.03	85.84	88.72	89.14
15	88.17	88.01	86.85	86.41	85.73	85.18	85.51	85.33	85.11	85.98	88.80	90.18
20	88.00	87.74	86.71	86.33	85.61	85.08	85.40	85.19	85.30	87.35	88.83	91.96
25	87.85	87.54	86.57	86.21	85.50	84.98	85.31	85.14	85.50	88.17	88.96	---
EOM	87.69	87.34	86.43	86.08	85.44	84.95	85.25	85.10	85.65	88.51	89.03	---
MAX	88.32	88.09	87.31	86.60	86.05	85.42	85.51	85.38	85.65	88.51	89.03	92.01
CAL YR 2000	MAX 89.06											
WTR YR 2001	MAX 92.01											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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HIGHLANDS COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
270858081211101	ROMP 14 AVON PARK WELL NEAR LAKE PLACID FL	20010514 20010925	43.03 49.80
271223081202601	LAKE PLACID GROVES DEEP SOUTH OF LAKE PLACID FL	20010514 20010925	42.52 49.18
271559081202301	ROMP 28 FLORIDAN WELL NR LAKE PLACID FL	20010514 20010925	62.34 70.20
272835081251701	728125--34S29E16 NARANATHA VILLAGE NR SEBRING FL	20010514 20010925	75.91 86.75
273054081234701	JOHN MCCULLOCH WELL 11 NEAR SEBRING FL	20010514 20010925	70.16 78.36
273252081264101	BONNET LAKE DEEP NEAR SEBRING FL	20010514 20010925	74.60 83.61
273353081294201	FLOYD DEVANE WELL 18 NEAR AVON PARK FL	20010514 20010925	71.60 87.27
273615081284901	ROMP 43 FLORIDAN WELL NEAR AVON PARK FL	20010514 20010925	78.08 88.81
273704081245501	ROBERT RICHARDS WELL 25 NEAR AVON PARK FL	20010514 20010925	72.19 74.20
273845081321901	CLENNY DEEP NW/O AVON PK FL	20010925	85.32

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KEY TO SITE LOCATIONS ON FIGURE 16

HILLSBOROUGH COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	274240082212701	74
1	274240082212702	74
1	274240082212703	75
2	275215082201901	75
3	275627082150801	76
4	275724082221001	76
5	275802082044701	77
6	280005082324201	77
7	280022082210501	78
8	280038082340201	78
9	280053082350202	79
10	280058082202201	79
10	280058082202202	80
11	280145082132501	80
12	280209082280301	81
13	280320082203801	81
14	280503082143701	82
15	280548082355701	82
16	280740082271001	83
17	280944082380501	83

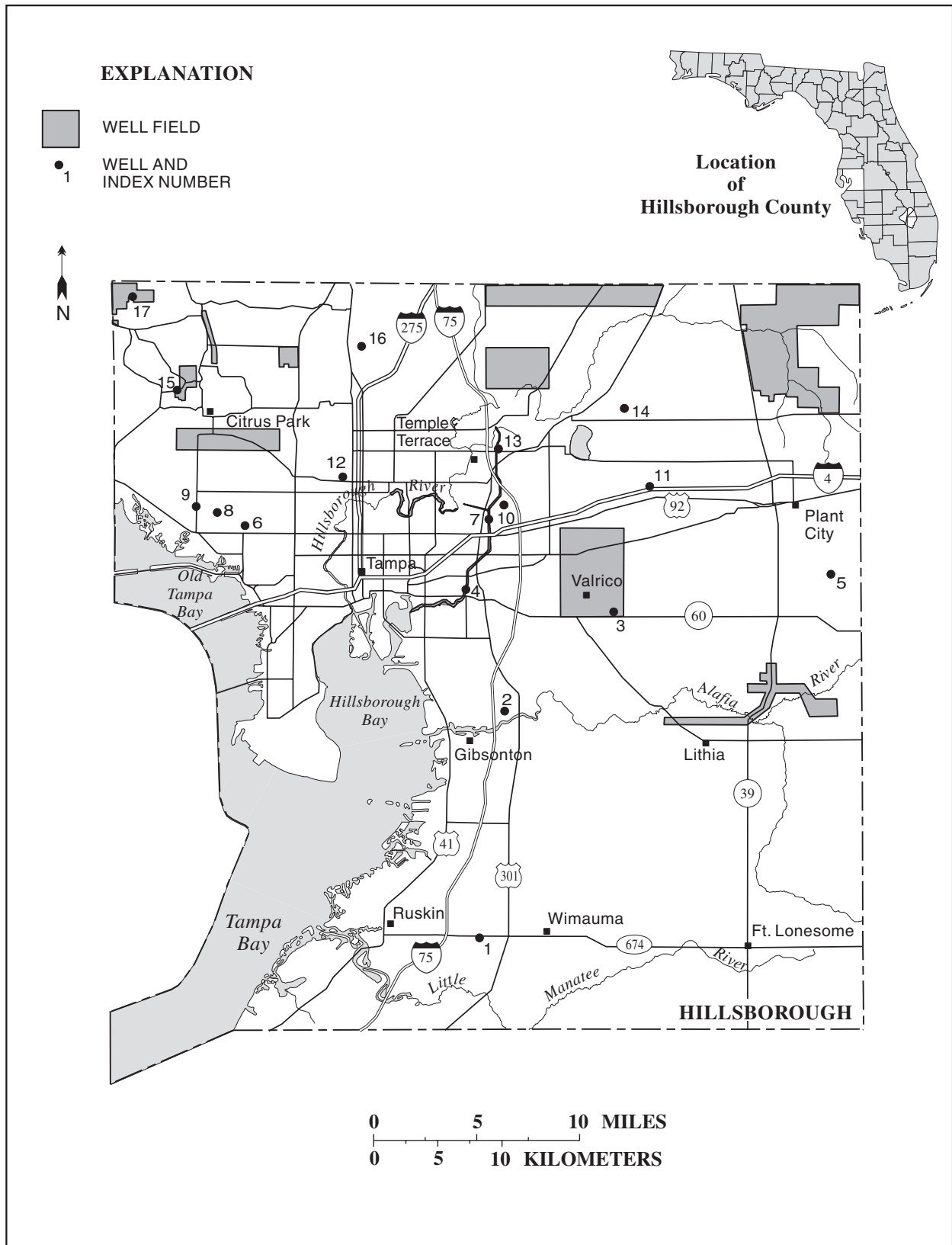


Figure 16.-- Location of wells in Hillsborough County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HILLSBOROUGH COUNTY

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

LOCATION.--Lat 27°42'40", long 82°21'27", in NW ¼ SE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.66	-4.11	1.96	-3.53	-2.34	-9.23	---	-8.84	-7.77	7.88	17.19	13.04
10	8.35	-3.50	-.70	-2.92	-5.76	-7.30	-2.19	-11.91	-3.76	9.58	18.08	15.30
15	3.55	-1.84	.60	-1.45	-8.24	-5.78	-4.95	-13.16	-4.03	11.74	18.22	17.63
20	2.36	-.97	1.50	-.39	-8.78	-3.63	-7.86	-14.26	-1.53	13.21	18.01	18.27
25	.32	-1.39	.15	-1.87	-11.79	-6.18	-10.20	-14.48	2.42	15.01	15.74	17.32
EOM	-.88	3.14	1.22	-3.18	-11.96	---	-10.99	-11.82	5.13	15.84	12.09	18.61
MAX	12.20	3.14	3.29	-.39	-2.34	-2.82	-.99	-8.84	5.13	15.90	18.41	18.61
CAL YR 2000	MAX 15.34											
WTR YR 2001	MAX 18.61											

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

LOCATION.--Lat 27°42'40", long 82°21'27", in NW ¼ SE ¼ 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 112 NRSD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.67	41.19	41.64	41.47	41.29	41.57	41.91	41.44	41.20	42.80	42.40	41.93
10	41.50	41.20	41.56	41.51	41.20	41.30	41.61	41.09	41.06	42.24	42.36	42.68
15	41.37	41.43	41.52	41.42	41.17	41.22	41.44	41.00	40.81	42.38	41.83	43.84
20	41.31	41.44	41.67	41.42	41.08	41.55	41.29	40.91	41.20	42.16	42.30	42.26
25	41.28	41.66	41.48	41.34	41.03	41.18	41.22	40.82	42.13	42.51	41.73	42.00
EOM	41.24	41.76	41.60	41.31	41.03	42.95	41.10	40.87	42.34	42.39	41.58	42.44
MAX	41.71	41.94	41.74	41.57	41.31	43.28	42.52	41.52	42.34	42.90	42.62	44.05
CAL YR 2000	MAX 43.22											
WTR YR 2001	MAX 44.05											

HILLSBOROUGH COUNTY--Continued

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

LOCATION.--Lat 27°42'40", long 82°21'27", in NW ¼ SE ¼ 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 124 AVPK.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.29	-1.65	---	-3.88	-4.77	-8.31	---	-9.92	-11.15	-6.57	-.63	1.67
10	1.82	-2.10	---	-4.32	-5.25	-7.70	-7.27	-10.00	-10.14	-5.59	.26	2.58
15	.89	-2.10	-2.68	-4.00	-5.99	-7.41	-7.83	-10.74	-9.89	-4.54	1.07	3.79
20	.30	-1.97	-2.43	-3.82	-6.81	-7.33	-8.59	-11.45	-9.76	-3.66	1.58	4.49
25	-.39	-2.60	-2.86	-3.93	-7.48	---	-9.46	-11.75	-8.72	-2.60	1.89	4.65
EOM	-.96	---	-2.66	-4.65	-7.90	---	-10.02	-11.81	-7.61	-1.56	1.53	5.21
MAX	2.48	-1.00	-2.43	-2.76	-4.66	-7.26	-7.27	-9.78	-7.61	-1.56	1.89	5.21
CAL YR 2000	MAX 3.65											
WTR YR 2001	MAX 5.21											

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

LOCATION.--Lat 27°52'15", long 82°20'19", 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 120 FLRD.

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 public supply 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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
06...	1030	11.14	15...	1130	4.88
NOV			25...	1348	4.23
30...	1345	8.46	JUL		
JAN			18...	1200	10.67
23...	0800	7.32	SEP		
MAR			10...	1310	12.29
22...	1500	6.84	25...	1710	14.44

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HILLSBOROUGH COUNTY--Continued

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

LOCATION.--Lat 27°56'27", long 82°15'08", 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 120 FLRD.

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

INSTRUMENTATION.--Water-stage recorder--60-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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.60	14.72	14.39	12.93	13.53	12.65	13.73	12.73	12.02	13.60	18.39	19.65
10	16.35	14.45	14.33	13.04	13.38	12.78	13.69	12.49	12.42	13.87	19.22	19.93
15	16.03	14.40	14.29	13.37	13.26	12.89	13.63	12.37	12.34	14.87	19.63	21.73
20	15.53	14.44	14.16	13.49	12.97	12.98	13.25	12.23	12.35	15.59	19.80	22.97
25	15.13	14.38	13.99	13.36	12.78	13.03	13.11	11.87	12.71	16.85	19.95	23.37
EOM	14.80	14.49	13.70	13.40	12.63	13.61	12.96	11.70	13.14	17.49	19.75	23.61
MAX	16.87	14.75	14.49	13.49	13.53	13.61	13.76	12.90	13.14	17.49	19.95	23.62
CAL YR 2000	MAX 17.35											
WTR YR 2001	MAX 23.62											

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

LOCATION.--Lat 27°57'24", long 82°22'10", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ 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 122 TAMP.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	12.09	12.03	11.77	12.70	11.40	10.58	12.58	14.91	14.92
10	---	---	---	11.93	12.07	11.82	12.47	11.16	11.23	12.72	15.09	15.35
15	---	11.19	12.41	12.09	11.98	11.86	12.48	11.04	10.90	13.18	15.15	15.86
20	---	11.75	12.28	12.17	11.73	11.68	11.81	11.03	10.98	13.38	15.33	16.52
25	---	12.33	12.27	---	11.80	11.93	11.64	10.66	11.42	14.05	15.22	16.58
EOM	---	11.83	12.29	11.99	11.63	12.55	11.48	10.50	12.13	14.24	15.00	16.68
MAX	13.93	12.38	12.55	12.20	12.07	12.55	12.74	11.40	12.13	14.38	15.38	16.85
CAL YR 2000	MAX 14.60											
WTR YR 2001	MAX 16.85											

HILLSBOROUGH COUNTY--Continued

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

LOCATION.--Lat 27°58'02", long 82°04'47", in SW ¼ SE ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
30...	0910	54.64	15...	0942	61.54
DEC			JUN		
18...	0824	57.63	04...	0802	46.81
FEB			AUG		
12...	0824	54.61	06...	0821	65.52
APR			SEP		
09...	0755	55.83	24...	0805	83.60

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

LOCATION.--Lat 28°00'05", long 82°32'42", in NW ¼ SE ¼ 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 120 UFAQ.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.62	11.05	10.55	10.45	10.44	10.90	11.19	10.09	9.88	11.38	12.13	11.50
10	10.66	11.15	11.01	10.26	10.51	10.96	10.88	10.13	10.33	11.42	11.72	11.97
15	11.26	10.59	11.00	10.46	10.57	10.91	10.95	9.84	10.12	11.65	11.67	12.31
20	11.21	10.72	10.55	10.84	10.67	10.91	10.39	9.87	10.22	11.71	11.79	12.53
25	10.80	11.14	10.28	10.15	10.81	10.72	10.36	9.97	10.76	12.11	11.45	12.61
EOM	10.88	10.78	10.52	10.46	10.60	11.42	10.19	9.59	11.14	11.58	11.55	12.23
MAX	11.68	11.27	11.22	10.84	10.81	11.42	11.42	10.18	11.14	12.55	12.25	12.66
CAL YR 2000	MAX 12.56											
WTR YR 2001	MAX 12.66											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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", in NW ¼ SE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.37	12.75	12.52	12.21	12.25	12.05	13.64	11.99	11.37	12.61	15.13	---
10	15.27	12.71	12.45	12.18	12.15	12.06	13.38	11.88	11.49	12.29	15.40	15.66
15	14.73	12.87	12.41	12.26	12.15	12.06	13.09	11.80	11.36	12.61	15.47	15.61
20	14.19	12.75	12.42	12.26	12.09	12.17	12.78	11.70	11.49	12.88	15.55	16.53
25	13.71	12.45	12.50	12.24	12.06	12.12	12.40	11.63	11.52	14.12	15.63	16.50
EOM	13.23	12.58	12.33	12.20	12.03	13.21	12.05	11.57	12.47	14.97	15.64	16.47
MAX	15.40	13.15	12.57	12.26	12.26	13.21	13.71	12.08	12.47	14.97	15.73	16.72
CAL YR 2000	MAX 15.42											
WTR YR 2001	MAX 16.72											

WELL NUMBER.--280038082340201. Channel G BM Deep Well near Tampa, FL.

LOCATION.--Lat 28°00'38", long 82°34'02", in NE ¼ NW ¼ 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 120 FLRD.

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, 8.07 ft NGVD, Sept. 22, 1979; lowest, 4.56 ft NGVD, Apr. 3, 1976.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
04...	0950	7.08	09...	1105	5.45
NOV			16...	1041	5.40
29...	1105	6.29	JUL		
JAN			10...	1325	7.01
26...	1400	5.63	AUG		
APR			22...	1145	6.81
04...	1400	6.64	SEP		
			26...	0922	7.45

HILLSBOROUGH COUNTY--Continued

WELL NUMBER.--280053082350202. Sheldon Road Deep Well near Citrus Park, FL.

LOCATION.--Lat 28°00'53", long 82°35'02", in NE ¼ SE ¼ 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 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 330 ft, cased to 315 ft.

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

DATUM.--Land-surface datum is 9.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 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). 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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
14...	1140	7.88	09...	1217	5.80
18...	1222	7.12	16...	1051	5.84
NOV			JUL		
27...	1008	7.04	10...	1337	7.65
JAN			AUG		
24...	1205	6.11	22...	0957	7.59
APR			SEP		
04...	1410	7.18	25...	1302	8.37

WELL NUMBER.--280058082202201. Eureka Springs Deep Well near Temple Terrace, FL.

LOCATION.--Lat 28°00'58", long 82°20'22", in NE ¼ SE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.36	15.54	15.18	14.43	14.48	14.06	15.11	14.10	---	14.23	17.08	18.22
10	17.22	15.39	15.10	14.37	14.31	14.07	15.08	13.89	---	14.27	17.54	18.38
15	16.91	15.30	15.05	14.50	14.26	14.08	14.98	13.75	---	14.61	17.82	18.67
20	16.55	15.20	14.93	14.50	14.21	14.19	14.71	13.63	---	15.00	18.03	19.65
25	16.17	15.16	14.88	14.42	14.15	14.23	14.46	13.37	---	15.86	18.19	19.89
EOM	15.77	15.23	14.73	14.41	14.07	14.77	14.18	---	13.88	16.58	18.22	20.06
MAX	17.38	15.71	15.22	14.56	14.48	14.77	15.14	14.19	13.88	16.58	18.22	20.08
CAL YR 2000	MAX 17.41											
WTR YR 2001	MAX 20.08											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HILLSBOROUGH COUNTY--Continued

WELL NUMBER.--28005808220202. Eureka Springs Shallow Well near Temple Terrace, FL.

LOCATION.--Lat 28°00'58", long 82°20'22", in NE ¼ SE ¼ 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 112 NRSD.

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, 21.55 ft NGVD, Aug. 25, 1995; lowest, 14.58 ft NGVD, June 16, 17, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	16.66	16.93	16.68	19.52	16.65	15.01	19.28	20.72	18.61
10	18.30	---	---	16.69	17.03	16.78	18.48	16.37	14.98	19.17	20.88	19.05
15	---	---	---	16.74	16.93	16.68	17.92	16.08	14.81	19.81	20.76	20.99
20	---	---	---	16.73	16.74	18.88	17.45	15.80	15.02	19.75	20.71	20.58
25	---	---	---	16.63	16.56	17.70	17.16	15.51	17.34	20.73	20.63	20.65
EOM	---	---	---	16.53	16.48	20.73	16.84	15.20	20.58	20.71	20.00	20.53
MAX	18.30	---	17.06	16.74	17.03	20.73	20.69	16.82	20.58	20.77	20.92	21.07
CAL YR 2000	MAX 20.81											
WTR YR 2001	MAX 21.07											

WELL NUMBER.--280145082132501. Tampa Deep Well 15 near Dover, FL.

LOCATION.--Lat 28°01'50", long 82°13'25", 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.28	46.77	52.42	42.30	51.93	50.05	53.02	49.66	47.89	52.81	58.19	58.03
10	50.77	47.90	52.34	45.61	52.04	50.69	52.38	48.84	49.55	53.46	59.01	59.45
15	48.20	49.19	52.53	48.28	51.37	50.96	51.89	48.31	49.74	54.29	59.68	61.04
20	47.55	50.13	52.89	49.84	50.74	51.62	50.87	47.73	50.68	55.06	60.06	62.06
25	46.82	50.78	50.54	50.47	50.15	51.88	50.05	47.12	51.70	55.77	59.92	62.55
EOM	46.04	52.11	49.97	50.71	49.87	52.56	50.01	46.78	52.28	56.42	59.04	62.99
MAX	56.34	52.11	52.90	50.71	52.05	52.56	53.08	49.88	52.28	56.42	60.19	63.06
CAL YR 2000	MAX 57.88											
WTR YR 2001	MAX 63.06											

HILLSBOROUGH COUNTY--Continued

WELL NUMBER.--280209082280301. ROMP 66 Deep Well at Sulphur Springs, FL.

LOCATION.--Lat 28°02'09", long 82°28'03", in SW ¼ NW ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.29	16.09	15.60	15.51	15.33	15.00	15.66	14.58	13.54	14.97	17.72	17.86
10	17.71	15.87	15.60	15.49	15.23	15.08	15.61	14.38	14.27	15.45	18.25	18.16
15	17.33	15.59	15.60	15.45	15.25	15.03	15.49	14.22	14.14	15.81	18.45	19.27
20	16.93	15.48	15.60	15.49	15.16	15.07	15.17	14.07	14.00	16.07	18.49	20.35
25	16.26	15.57	15.56	15.42	15.10	15.01	14.94	13.89	14.03	16.38	18.26	20.41
EOM	16.15	15.66	15.50	15.35	15.08	15.40	14.82	13.66	14.45	17.01	17.96	20.25
MAX	18.50	16.12	15.66	15.53	15.33	15.40	15.66	14.82	14.45	17.01	18.51	20.43
CAL YR 2000	MAX 18.52											
WTR YR 2001	MAX 20.43											

WELL NUMBER.--280320082203801. ROMP 67 Avon Park Well near Temple Terrace, FL.

LOCATION.--Lat 28°03'20", long 82°20'38", in NW ¼ SE ¼ 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 124 AVPK.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.87	20.48	20.02	18.19	17.85	17.10	18.85	17.44	16.06	16.15	20.59	22.93
10	21.70	20.26	19.73	18.10	17.76	17.37	18.74	17.17	16.04	16.42	21.40	24.32
15	21.49	20.14	19.30	18.10	17.52	17.39	18.51	17.01	16.00	16.82	22.20	25.67
20	21.25	20.04	19.00	18.02	17.40	17.67	18.07	16.94	16.00	17.77	22.70	26.11
25	20.97	20.13	18.73	17.91	17.43	17.80	17.70	16.41	16.06	18.61	23.06	26.44
EOM	20.63	20.07	18.40	17.80	17.16	18.24	17.43	16.07	16.03	19.48	23.14	26.37
MAX	21.90	20.60	20.08	18.36	17.90	18.24	19.01	17.50	16.24	19.48	23.14	26.53
CAL YR 2000	MAX 21.90											
WTR YR 2001	MAX 26.53											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

HILLSBOROUGH COUNTY--Continued

WELL NUMBER.--280503082143701. ROMP 68 Avon Park Well near Antioch, FL.

LOCATION.--Lat 28°05'03", long 82°14'37", 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 124 AVPK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 500 ft, cased to 480 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.23	40.99	41.62	38.92	40.72	39.84	40.93	39.30	38.27	41.36	---	45.61
10	43.03	40.94	41.55	39.24	40.53	39.93	40.67	38.68	39.19	41.69	---	46.22
15	42.30	41.37	41.43	40.11	40.26	40.12	40.66	38.51	39.46	42.62	---	47.59
20	41.54	41.40	41.29	40.40	39.98	40.23	39.96	38.57	40.03	43.28	---	48.39
25	40.81	41.41	40.99	40.10	39.56	40.08	39.76	37.60	40.45	---	46.47	48.91
EOM	40.73	41.85	40.56	40.30	39.54	40.62	39.62	37.99	40.86	---	45.79	49.18
MAX	44.74	41.85	41.83	40.43	40.72	40.62	41.22	39.74	40.86	43.32	46.75	49.20
CAL YR 2000	MAX 45.00											
WTR YR 2001	MAX 49.20											

WELL NUMBER.--280548082355701. St. Petersburg Deep Well E-100 near Citrus Park, FL.

LOCATION.--Lat 28°05'48", long 82°35'55", in NW ¼ NW ¼ 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 120 FLRD.

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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.83	20.99	20.90	18.35	20.50	19.51	20.24	18.42	17.86	20.96	23.61	20.87
10	22.15	20.13	20.06	18.38	20.07	20.30	19.86	16.25	17.97	20.69	22.46	21.79
15	21.90	19.58	19.94	20.74	19.86	20.26	18.82	15.78	16.04	21.69	---	22.62
20	20.80	20.85	20.04	20.06	19.57	20.05	18.20	16.37	17.82	21.25	---	22.99
25	21.64	20.29	19.90	19.11	19.79	20.60	19.56	16.16	19.09	21.48	20.98	24.07
EOM	19.94	20.17	20.33	19.81	19.29	20.20	18.36	14.93	21.11	22.32	21.27	23.58
MAX	23.95	21.09	21.50	20.77	20.75	20.90	20.91	18.52	21.11	22.79	23.61	24.47
CAL YR 2000	MAX 24.18											
WTR YR 2001	MAX 24.47											

HILLSBOROUGH COUNTY--Continued

WELL NUMBER.--280740082271001. Debuell Road Deep Well near Lutz, FL.

LOCATION.--Lat 28°07'40", long 82°27'10", in SE ¼ SE ¼ sec.13, T.27 S., R.18 E., Hydrologic Unit 03100205, 0.7 mi east of intersection U. S. Highway 41 and Debuell Road, and 1.8 mi south of Lutz.

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

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, 46.67 ft NGVD, June 17, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.31	50.89	50.46	49.60	49.97	49.15	49.69	48.34	47.27	47.49	49.41	49.12
10	52.15	50.80	50.34	49.59	49.69	49.30	49.48	47.81	47.22	47.08	49.60	50.03
15	---	50.87	50.32	49.84	49.50	49.01	49.27	47.67	46.84	47.71	49.61	51.66
20	---	50.66	50.21	49.84	49.24	49.32	48.92	47.63	47.03	48.08	49.91	52.60
25	51.27	50.73	50.12	49.71	48.86	49.03	48.66	47.26	47.33	48.55	49.54	52.62
EOM	50.97	50.72	49.84	49.57	48.78	49.70	48.51	47.21	47.49	49.20	48.99	52.70
MAX	52.74	50.99	50.65	49.90	49.97	49.70	49.82	48.39	47.49	49.20	50.11	52.71
CAL YR 2000	MAX 53.75											
WTR YR 2001	MAX 52.74											

WELL NUMBER.--280944082380501. Eldridge-Wilde Deep Well N-4 near Tarpon Springs, FL.

LOCATION.--Lat 28°09'44", long 82°38'05", in NE ¼ SE ¼ 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 120 FLRD.

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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.37	20.89	22.77	22.71	23.03	20.94	22.60	18.73	17.10	21.78	24.55	---
10	23.71	22.85	22.28	21.84	22.38	20.20	21.07	18.28	17.24	20.87	26.19	---
15	23.75	22.43	24.09	21.48	21.42	20.68	21.00	18.34	18.61	21.86	24.27	---
20	23.68	22.28	23.11	23.71	19.97	21.31	20.29	17.52	18.30	22.39	22.17	---
25	23.72	22.55	21.35	20.71	19.80	21.56	20.15	16.96	19.18	23.08	---	---
EOM	22.77	24.21	23.00	20.71	20.26	21.85	19.49	15.25	20.67	23.12	---	---
MAX	25.52	24.21	24.27	23.71	23.23	21.85	22.60	19.10	20.67	24.40	26.19	---
CAL YR 2000	MAX 25.64											
WTR YR 2001	MAX 26.19											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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HILLSBOROUGH COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
274031082150401	ROMP 123 FLORIDAN WELL NEAR WIMAUMA FL	20010514	-20.36
		20010925	21.99
274044082205101	SRD WELL ON US 301 NEAR WIMAUMA FL	20010514	5.66
		20010925	22.64
274214082084401	FT LONESOME WELL 88 AT FORT LONESOME FL	20010514	102.16
		20010925	110.94
274218082035701	BARBER WELL 422 NEAR FORT LONESOME FL	20010514	112.09
		20010925	119.96
274303082280901	SW HILLS CO WELL 71 NEAR RUSKIN FL	20010514	6.04
		20010925	14.94
274421082275401	ROMP TR 9-1 FLORIDAN WELL NEAR RUSKIN FL	20010514	6.96
		20010925	14.54
274427082083701	ROMP 48 FLORIDAN WELL NEAR FORT LONESOME FL	20010514	-1.91
		20010926	38.54
274427082083702	ROMP 48 HAWTHORN WELL NEAR FORT LONESOME FL	20010514	88.06
		20010926	94.87
274428082251503	ROMP TR 9-3 AVON PARK WELL NEAR RUSKIN FL	20010515	-10.26
		20010927	4.93
274546082151403	ROMP 49 AVON PARK WELL AT BALM FL	20010515	-8.38
		20010925	28.80
274546082151405	ROMP 49 HAWTHORN WELL AT BALM FL	20010515	-2.15
		20010925	33.67
274554082233801	ROMP TR9-2 AVON PARK WELL AT APOLLO BEACH FL	20010515	-3.80
		20010927	11.06
274554082233804	ROMP TR9-2 TAMPA WELL AT APOLLO BEACH FL	20010515	-2.15
		20010927	11.85
274748082130201	SIMMONS FISH FARM NEAR LITHIA FL	20010515	-12.37
		20010925	24.75
274925082084301	WCRWSA SCHM-6 UPPER FLORIDAN WELL NEAR LITHIA FL	20010516	4.06
		20010919	37.71
274925082084302	WCRWSA SCHM-6 INTERMEDIATE WELL NEAR LITHIA FL	20010516	59.45
		20010919	74.26
274928082225501	SW HILLSBOROUGH COUNTY 220 AT ADAMSVILLE FL	20010514	.87
		20010925	8.35
274941082115701	WCRWSA SCHM-7 FLORIDAN WELL NEAR LITHIA FL	20010516	.41
		20010919	30.74
274947082145401	749 214 113 CAMP DOROTHY THOMAS NEAR BOYETTE FL	20010515	1.83
		20010925	24.18

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

HILLSBOROUGH COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
275034082134001	WCRWSA SCHM-1 UPPER FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	4.04 27.68
275100082042001	WCRWSA SCHM-5 UPPER FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	20.44 49.49
275100082042002	WCRWSA SCHM-5 INTERMEDIATE WELL NEAR LITHIA FL	20010516 20010919	51.86 63.04
275130082194501	RIVERCREST WELL NEAR BLOOMINGDALE FL	20010515 20010925	5.53 16.30
275146082084301	WCRWSA SC-4 UPPER FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	4.53 32.22
275147082083903	WCRWSA SC-4 UPPER INTERMEDIATE WELL NEAR LITHIA FL	20010516 20010919	24.24 40.09
275152082035801	EDISON JCT FLORIDAN WELL NEAR KEYSVILLE FL	20010516 20010919	24.10 54.02
275152082121401	WCRWSA SC-1 FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	6.56 26.95
275158082085101	WCRWSA GRASSY GULCH FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	5.15 33.03
275210082171001	MCMULLEN CAMPGROUND SO E RIVERVIEW FL	20010515	5.70
275227082310101	ROBINSON HIGH SCHOOL STADIUM DEEP WELL AT TAMPA FL	20010516 20010925	1.08 3.12
275232082052603	WCRWSA SC-15 UPPER INTERMEDIATE WELL NR LITHIA FL	20010516 20010919	15.88 45.09
275235082033601	WCRWSA SCGM-4 FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	24.13 52.41
275316082285901	TAMPA YACHT AND RIDING STABLES AT BALLAST POINT FL	20010516 20010925	1.82 3.86
275323082080601	WCRWSA SCHM-11 FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	12.76 37.97
275336082125401	WCRWSA SCHM-8 FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	9.45 19.53
275336082125402	WCRWSA SCHM-8 INTERMEDIATE WELL NEAR LITHIA FL	20010516 20010919	9.42 19.37
275402082222701	ROMP TR10-2 DEEP WELL NEAR TAMPA FL	20010515 20010925	6.62 13.59
275429082093901	ROMP 61 FLORIDAN WELL NEAR PLEASANT GROVE FL	20010515 20010926	21.22 44.27
275429082093902	WCRWSA SCHM-9 INTERMEDIATE WELL NEAR LITHIA FL	20010516 20010919	27.04 46.89

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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HILLSBOROUGH COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
275438082162301	OAKMONT DEEP NEAR BRANDON FL	20010516 20010919	9.88 20.45
275458082310301	M.MURPHY,4317 SAN LUIS AT TAMPA FL	20010516 20010925	4.19 6.26
275526082301301	PLANT HIGH SCHOOL STADIUM DEEP WELL AT TAMPA FL	20010516 20010925	8.74 11.72
275547082044801	WCRWSA SCHM-3 FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	36.66 61.89
275547082044802	WCRWSA SCHM-3 INTERMEDIATE WELL NEAR LITHIA FL	20010516 20010919	49.68 68.07
275609082191401	HILLSBOROUGH MEM CEM DEEP NEAR BRANDON FL	20010515 20010926	10.17 20.39
275613082094401	WCRWSA SCHM-2 FLORIDAN WELL NEAR LITHIA FL	20010516 20010919	31.39 55.40
275613082094402	WCRWSA SCHM-2 INTERMEDIATE WELL NEAR LITHIA FL	20010516 20010919	55.99 67.70
275630082275201	NCNB NAT'L BANK,249 SO HYDE PARK AT TAMPA,FL	20010516 20010925	6.58 9.49
275631082293801	A.MESSINA,305 SO. MACDILL AVE AT TAMPA FL	20010516 20010925	9.46 12.33
275634082305701	CLEVELAND AND HUBERT DEEP WELL AT TAMPA FL	20010516 20010925	.60 3.00
275705082222001	ROMP TR 11-2 SUWANNEE WELL NEAR TAMPA FL	20010515 20010925	11.03 16.90
275759082085402	ROMP DV-2 LOWER HAWTHORN WELL AT DOVER FL	20010516 20010926	43.62 69.21
275820082324602	ROMP TR 12-1 NRSR RPLC. WELL NEAR TAMPA, FL	20010516 20010925	4.48 6.67
275843082222201	W.D.FUSSELL 618 WELL NEAR TAMPA FL	20010515 20010924	12.10 18.82
275905082292901	THE WOODLANDS APTS,4714 NO HABANA AT TAMPA FL	20010516 20010926	12.32 17.88
275926082123404	ROMP DV-1 AVON PARK WELL AT DOVER FL	20010516 20010924	39.98 59.36
280012082204901	USCE WELL TBC-05 NEAR TEMPLE TERRACE FL	20010515 20010924	13.25 19.05
280042082142301	GRIFFIN 2 DEEP WELL NEAR DOVER FL	20010515 20010924	36.61 49.88

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

HILLSBOROUGH COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
280055082222701	USCE TBC-09 NEAR TEMPLE TERRACE FL	20010924	22.02
280243082203701	USCE TESTTBC-01 802-220-411 NEAR THONOTOSASSA FL	20010515 20010924	15.39 24.99
280305082185101	J. W. MORRIS WELL NEAR TEMPLE TERRACE FL	20010517 20010924	19.51 27.05
280350082104401	FISHER FL	20010516 20010924	70.80 84.58
280354082335501	WELL 803 233 5455 FL	20010514 20010925	13.98 20.14
280354082381901	ROMP TR 13-3 FLRD WELL NEAR CITRUS PARK FL	20010514 20010925	11.12 14.42
280413082061401	MA QUAGLIANI WELL NEAR PLANT CITY FL	20010516 20010924	78.37 90.84
280420082285501	USGS DEEP WELL 402 NEAR LUTZ FL	20010514 20010924	32.85 37.82
280438082075301	MARTIN M GRIFFIN ROAD WELL NEAR KNIGHTS FL	20010516 20010924	82.02 95.57
280503082143702	ROMP 68 SUWANNEE WELL NEAR ANTIOCH FL	20010516 20010924	39.25 49.06
280504082365501	ST PETE DEEP WELL E 102 NEAR CITRUS PARK FL	20010514 20010925	14.03 20.04
280510082043801	T-2 DEEP FLRD WELL ON CONE RANCH NR ZEPHYRHILLS FL	20010523 20010926	87.51 98.56
280550082202901	MORRIS BRIDGE DEEP 10 NEAR BRANCHTON FL	20010516 20010924	17.99 27.03
280603082385401	ST PETE E-103 DEEP NEAR OLDSMAR FL	20010515 20010918	13.75 18.67
280605082184101	MORRIS BRIDGE DEEP WELL 12 NEAR BRANCHTON FL	20010521 20010924	17.79 26.28
280655082193001	MORRIS BRIDGE DEEP WELL 3A NEAR BRANCHTON FL	20010521 20010924	21.64 30.13
280659082175201	MORRIS BRIDGE DEEP 13 NEAR BRANCHTON FL	20010521 20010924	20.69 30.06
280659082294302	BERGER DEEP WELL NEAR LUTZ FL	20010514 20010924	34.13 40.37
280702082302801	HILLSBOROUGH DEEP WELL 13 NEAR CITRUS PARK FL	20010514 20010924	26.67 31.47
280734082313301	SEC 21 GOODWIN WELL NEAR LUTZ FL	20010514 20010924	28.32 33.83

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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HILLSBOROUGH COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
280738082282701	BRANT LAKE DEEP WELL 472 NEAR LUTZ FL	20010514 20010924	43.62 49.93
280852082135601	HILLSBOROUGH RD STATE PARK DP NEAR ZEPHYRHILLS FL	20010515 20010927	35.78 44.40
280901082310401	ROMP-01 DEEP WELL NEAR CITRUS PARK FL	20010515 20010918	34.53 42.06
280920082322101	LUTZ-LAKE FERN DEEP NEAR LUTZ FL	20010514 20010925	32.72 39.61
280926082162101	MORRIS BRIDGE DEEP WELL 532 NEAR BRANCHTON FL	20010515 20010924	37.81 46.15

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

HILLSBOROUGH COUNTY

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SILICA, DIS- SOLVED (MG/L) AS SI02 (00955)	
280055082222701 USCE TBC-09 NEAR TEMPLE TERRACE FL (LAT 28 00 55N LONG 082 22 27W)														
SEP 2001 24...	1133	22.02	479	24.5	<5	72.0	7.60	11.0	.80	56.0	23.0	.2	13.0	
280058082202201 EUREKA SPRINGS DEEP WELL NEAR TEMPLE TERRACE FL (LAT 28 00 58N LONG 082 20 22W)														
SEP 2001 24...	0950	19.77	395	24.0	60	65.0	3.70	4.8	7.80	74.0	4.5	.2	10.0	
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L) AS N (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L) AS AL (01105)	ARSENIC TOTAL (UG/L) AS AS (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)
280055082222701 USCE TBC-09 NEAR TEMPLE TERRACE FL (LAT 28 00 55N LONG 082 22 27W)														
SEP 2001 24...	286	<.01	<.02	.04	<.20	.100	.030	301	2	<1.00	<1	2.1	1190	
280058082202201 EUREKA SPRINGS DEEP WELL NEAR TEMPLE TERRACE FL (LAT 28 00 58N LONG 082 20 22W)														
SEP 2001 24...	265	.02	.9	.04	1.2	.260	.130	1580	16	<1.00	17	99.0	660	
DATE	TIME	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	STRON- TIUM, DIS- SOLVED (UG/L) AS SR (01080)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)								
280055082222701 USCE TBC-09 NEAR TEMPLE TERRACE FL (LAT 28 00 55N LONG 082 22 27W)														
SEP 2001 24...		3	<.10	1	1060	5								
280058082202201 EUREKA SPRINGS DEEP WELL NEAR TEMPLE TERRACE FL (LAT 28 00 58N LONG 082 20 22W)														
SEP 2001 24...		27	<.10	3	780	300								

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

HILLSBOROUGH COUNTY

The following data were collected as part of a study to characterize water quality in the surface and ground water, and to assess the interaction between the surface and ground water systems in the Upper Hillsborough river watershed.

DATE	TIME	ELEVATION ABOVE NGVD (FEET) (72020)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
280622082061701 ROMP 86.5 CONE RANCH FLRD WELL CM-8 NR KNIGHTS FL (LAT 28 06 22N LONG 082 06 17W)													
JUN 04... 2001	1435	--	515	7.3	23.8	<5	91.0	4.10	8.4	.50	<.2	15.0	.2
AUG 23... 2001	1010	--	514	7.4	22.8	<5	92.0	4.50	8.7	.40	<.2	15.0	.2
280837082063101 BLACKWATER CREEK TRANSECT DP WELL 6 NR KNIGHTS FL (LAT 28 08 37N LONG 082 06 31W)													
JAN 18... 2001	1220	83.29	--	--	--	--	--	--	--	--	--	--	--
MAR 05... 2001	1445	82.98	298	8.0	22.9	<5	46.0	6.30	5.5	.70	2.1	6.7	.2
APR 03... 2001	1310	84.84	--	--	--	--	--	--	--	--	--	--	--
MAY 02... 2001	1410	82.84	--	--	--	--	--	--	--	--	--	--	--
JUN 04... 2001	1135	81.46	305	7.9	23.7	<5	47.0	6.40	5.4	1.00	2.1	7.1	.2
JUL 17... 2001	1343	82.93	--	--	--	--	--	--	--	--	--	--	--
AUG 09... 2001	1330	86.21	307	8.0	23.7	5	48.0	6.50	5.5	.80	1.2	6.9	.2
DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
280622082061701 ROMP 86.5 CONE RANCH FLRD WELL CM-8 NR KNIGHTS FL (LAT 28 06 22N LONG 082 06 17W)													
JUN 04... 2001	15.0	301	<.01	<.02	.08	.30	.030	<.010	M	.8	<.05	2.0	<.2
AUG 23... 2001	15.0	297	<.01	<.02	.10	.20	.050	<.010	M	.6	<.05	<.5	<.2
280837082063101 BLACKWATER CREEK TRANSECT DP WELL 6 NR KNIGHTS FL (LAT 28 08 37N LONG 082 06 31W)													
JAN 18... 2001	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 05... 2001	16.0	172	<.01	<.02	.07	.24	.080	.030	6	<.1	<.05	1.0	<.2
APR 03... 2001	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 02... 2001	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 04... 2001	16.0	176	<.01	<.02	.08	.23	.030	.030	4	<.1	<.05	1.0	<.2
JUL 17... 2001	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09... 2001	16.0	176	<.01	<.02	.08	<.20	.030	.020	4	<.1	<.05	<.5	.2

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

HILLSBOROUGH COUNTY

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
280622082061701 ROMP 86.5 CONE RANCH FLRD WELL CM-8 NR KNIGHTS FL (LAT 28 06 22N LONG 082 06 17W)								
JUN 2001								
04...	1700	<.05	<.10	2.70	100	1	2.9	2.5
AUG								
23...	1780	<.05	<.10	3.00	100	<.5	2.8	2.9
280837082063101 BLACKWATER CREEK TRANSECT DP WELL 6 NR KNIGHTS FL (LAT 28 08 37N LONG 082 06 31W)								
JAN 2001								
18...	--	--	--	--	--	--	--	--
MAR								
05...	M	<.05	<.10	<.20	210	<.5	3.3	2.6
APR								
03...	--	--	--	--	--	--	--	--
MAY								
02...	--	--	--	--	--	--	--	--
JUN								
04...	M	<.05	<.10	1.20	220	M	1.1	1.9
JUL								
17...	--	--	--	--	--	--	--	--
AUG								
09...	M	<.05	<.10	1.40	220	<.5	1.4	1.1

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 17

MANATEE COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	271832082064801	98
1	271832082064802	98
2	272058082143701	99
3	272356082181302	99
4	272404082161701	100
5	272539082292001	100
5	272539082292002	101
5	272539082292003	101
5	272539082292004	102
5	272539082292005	102
6	272838082142201	103
7	273718082315501	103

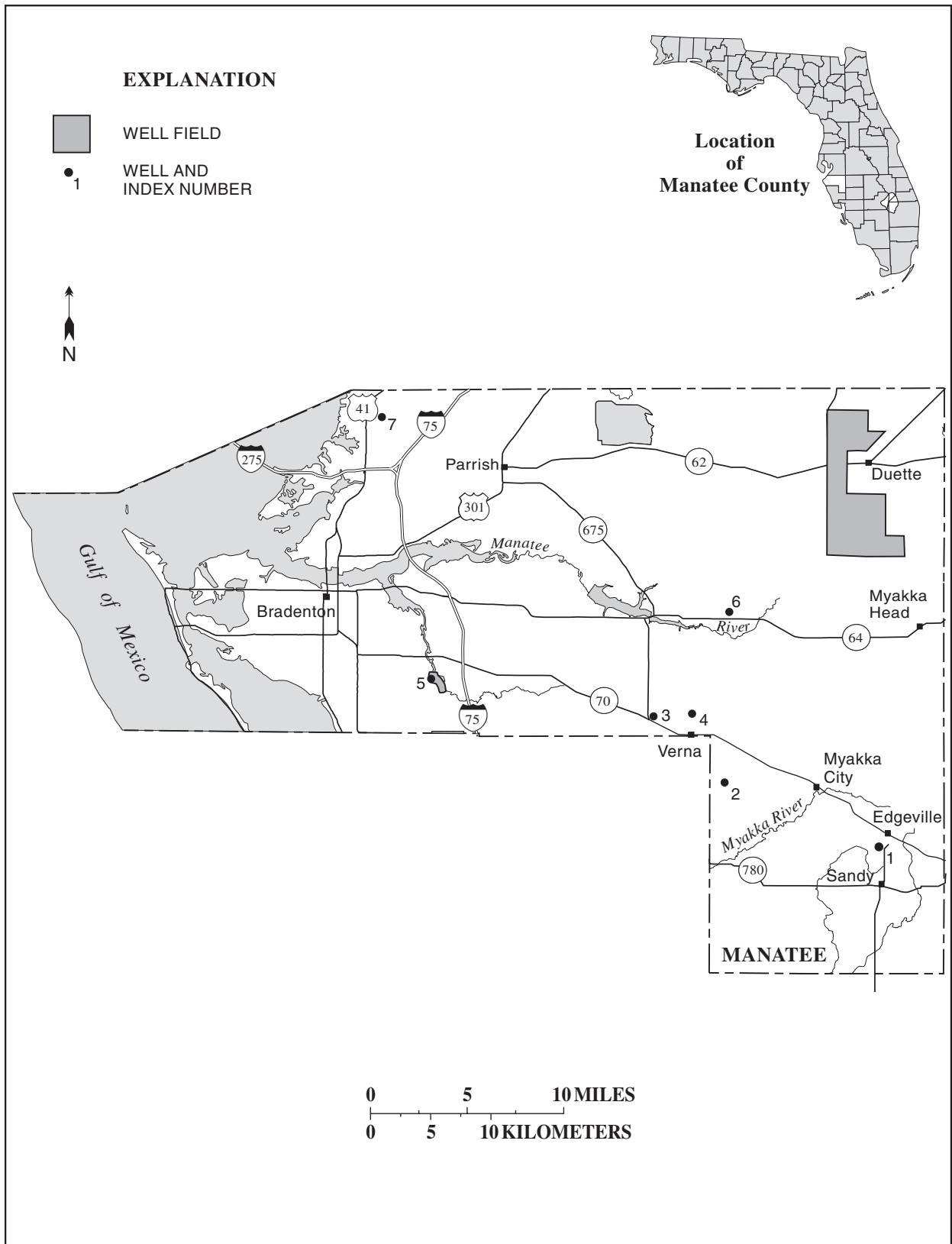


Figure 17.-- Location of wells in Manatee County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

MANATEE COUNTY

WELL NUMBER.--271832082064801. Edgeville Deep Well 3 at Edgeville, FL.

LOCATION.--Lat 27°18'32", long 82°06'48", in NE ¼ NW ¼ 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 123 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 600 ft, cased to 487 ft.

INSTRUMENTATION.--Water-stage recorder--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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.78	18.89	13.00	12.80	13.80	7.33	14.46	7.10	7.69	21.82	31.35	28.11
10	29.41	17.73	---	11.41	11.45	9.13	15.10	5.55	11.22	23.80	31.92	31.15
15	26.70	18.03	---	11.67	10.59	9.64	12.87	3.36	13.10	25.76	31.62	32.76
20	24.85	17.43	16.94	13.56	8.91	12.07	10.62	2.84	15.17	27.30	32.98	33.27
25	22.99	15.99	12.57	14.04	7.42	10.83	9.02	3.45	17.68	28.65	28.92	31.86
EOM	20.35	16.17	15.80	11.09	6.46	12.39	8.12	5.39	19.84	30.32	28.57	34.07
MAX	29.89	20.06	16.94	15.72	13.80	12.39	15.10	8.33	19.84	30.32	32.98	34.07
CAL YR 2000	MAX 30.18											
WTR YR 2001	MAX 34.07											

WELL NUMBER.--271832082064802. Edgeville Well 4 at Edgeville, FL.

LOCATION.--Lat 27°18'32", long 82°06'48", in NE ¼ NW ¼ 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 120 NRSD.

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 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, 69.93 ft NGVD, Sept. 16, 1971; lowest measured, 63.85 ft NGVD, May 14, 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 25...	1357	66.87	APR 10...	1019	67.86
DEC 08...	1523	67.38	JUN 07...	1218	67.23
FEB 14...	1313	67.18	AUG 02...	1208	69.09

MANATEE COUNTY--Continued

WELL NUMBER.--272058082143701. Verna T Well 0-2 near Verna, FL.

LOCATION.--Lat 27°20'58", long 82°14'37", in SW ¼ NE ¼ 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 122 TAMP.

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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.43	9.39	8.91	4.90	4.70	-2.41	4.53	-4.29	-5.53	11.59	22.01	20.90
10	19.53	8.00	8.45	3.99	3.49	-1.18	4.73	-6.95	-1.03	14.22	23.28	21.67
15	17.26	7.58	7.97	4.82	1.58	-.39	.59	-8.19	.13	16.10	23.99	23.74
20	15.00	7.97	8.74	4.56	.15	1.67	.66	-8.68	2.50	17.52	24.05	23.92
25	13.37	7.52	7.03	5.78	-1.66	1.62	-1.62	-10.63	6.29	19.32	23.47	24.16
EOM	10.76	8.23	7.00	4.58	-3.26	1.82	-2.75	-7.18	9.34	20.88	20.69	---
MAX	20.60	10.49	9.22	6.57	4.83	2.45	5.13	-3.18	9.34	20.88	24.12	24.44
CAL YR 2000	MAX 20.89											
WTR YR 2001	MAX 24.44											

WELL NUMBER.--272356082181302. Verna Deep Well 1A near Verna, FL.

LOCATION.--Lat 27°23'56", long 82°18'13", in NW ¼ NW ¼ 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 123 SWNN.

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 and public supply 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, 4.23 ft below NGVD, May 24, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.74	12.78	12.38	9.99	9.09	---	5.71	.06	-3.06	8.42	17.45	18.05
10	20.42	11.59	11.91	9.02	8.40	3.52	6.21	-1.16	-.51	9.99	18.34	18.51
15	18.70	10.99	11.70	9.50	6.96	3.65	4.86	-2.04	1.09	11.46	19.17	19.91
20	16.94	10.94	11.65	9.62	5.38	4.48	3.49	-3.59	2.31	12.96	19.26	20.65
25	15.48	11.26	10.72	10.01	4.32	4.82	1.50	-4.10	4.58	14.75	19.92	21.00
EOM	13.72	12.19	11.10	9.37	---	4.42	.52	-3.90	6.41	16.24	18.97	21.85
MAX	21.18	13.56	12.45	10.75	9.19	5.09	6.26	.54	6.41	16.24	19.94	21.85
CAL YR 2000	MAX 21.18											
WTR YR 2001	MAX 21.85											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

MANATEE COUNTY--Continued

WELL NUMBER.--272404082161701. Verna T Well 0-1 near Verna, FL.

LOCATION.--Lat 27°24'04", long 82°16'17", in SE ¼ SE ¼ 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 120 FLRD.

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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.06	5.41	7.82	3.21	1.83	-6.07	1.70	-9.02	-9.88	9.48	20.79	18.56
10	16.84	4.28	6.64	1.99	.76	-4.19	.94	-10.63	-4.29	11.94	21.84	19.98
15	13.79	4.21	7.00	2.90	-1.42	-3.49	-2.47	-12.41	-2.31	13.87	22.69	21.73
20	11.43	5.28	6.78	3.04	-3.47	-1.36	-5.21	-14.09	.26	15.96	22.93	22.48
25	8.58	4.96	5.64	3.91	-4.96	-1.79	-7.70	-13.71	3.82	17.88	22.45	22.59
EOM	6.89	7.01	5.89	2.47	-5.77	-1.35	-8.34	-12.19	6.84	19.20	18.82	23.66
MAX	18.73	7.01	7.91	4.39	2.31	-.95	1.97	-8.10	6.84	19.20	22.97	23.66
CAL YR 2000	MAX 19.60											
WTR YR 2001	MAX 23.66											

WELL NUMBER.--272539082292001. ROMP TR 7-4 Avon Park Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20", in SW ¼ NE ¼ 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 120 UFAQ.

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 water level measured, 22.51 ft NGVD, Oct. 4, 1994; lowest daily maximum, 3.80 ft below NGVD, May 27, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.08	8.28	10.00	8.06	6.89	1.97	6.93	1.47	-.29	11.06	17.86	14.94
10	15.46	7.55	9.50	6.94	6.33	3.10	7.37	.91	1.95	12.27	18.47	16.05
15	13.79	8.01	8.88	7.18	5.09	3.69	6.24	-.19	3.00	13.74	18.71	17.66
20	11.96	8.18	9.29	7.55	4.05	5.00	4.47	-1.31	4.14	14.86	18.45	18.29
25	10.30	8.41	8.55	7.75	3.03	5.05	2.83	-1.83	7.07	16.08	17.80	18.42
EOM	9.14	9.74	8.88	7.18	2.48	5.22	---	-1.76	9.14	17.01	16.22	18.99
MAX	16.73	9.74	10.00	8.62	7.08	5.22	7.42	1.58	9.14	17.01	18.73	19.00
CAL YR 2000	MAX 17.01											
WTR YR 2001	MAX 19.00											

MANATEE COUNTY--Continued

WELL NUMBER.--272539082292002. ROMP TR 7-4 Suwannee Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20", in SW ¼ NE ¼ 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 120 UFAQ.

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; lowest, 3.55 ft below NGVD, May 27, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.87	9.13	10.31	8.35	7.29	2.35	7.60	2.29	.51	11.87	18.67	15.69
10	16.26	---	9.90	7.43	6.55	3.49	8.06	1.47	2.67	13.07	19.29	16.84
15	14.58	---	9.34	7.60	5.35	4.08	6.79	.40	3.72	14.54	19.53	18.53
20	12.55	---	9.76	7.95	4.40	5.70	5.25	-.71	4.86	15.67	19.19	19.23
25	10.99	---	8.99	8.19	3.44	5.45	3.37	-1.07	7.88	16.88	18.53	19.33
EOM	9.85	---	9.27	7.50	2.84	5.94	2.03	-1.00	9.93	17.82	17.06	19.88
MAX	17.28	9.74	10.33	9.18	7.53	5.94	8.16	2.29	9.93	17.82	19.55	19.89
CAL YR 2000	MAX 17.57											
WTR YR 2001	MAX 19.89											

WELL NUMBER.--272539082292003. ROMP TR 7-4 Tampa Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20", in SW ¼ NE ¼ 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 120 UFAQ.

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, 23.40 ft NGVD, Feb. 3, 4, 1998; lowest, 3.54 ft below NGVD, May 27, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.04	9.25	10.42	8.39	7.28	2.43	7.69	2.35	.58	11.96	18.78	15.82
10	16.45	8.51	9.98	7.51	6.63	3.54	8.14	1.54	2.74	13.17	19.41	16.97
15	14.84	8.91	9.42	7.66	5.43	4.15	6.88	.47	3.79	14.65	19.64	18.62
20	12.82	9.12	9.81	8.02	4.58	5.79	5.35	-.63	4.95	15.78	19.32	19.35
25	11.22	9.30	9.04	8.21	3.53	5.53	3.48	-.99	7.94	17.00	18.64	19.45
EOM	9.97	10.63	9.38	7.57	2.93	6.03	2.14	-.91	10.01	17.94	17.19	19.99
MAX	17.72	10.63	10.63	9.27	7.60	6.03	8.20	2.35	10.01	17.94	19.66	19.99
CAL YR 2000	MAX 18.04											
WTR YR 2001	MAX 19.99											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

MANATEE COUNTY--Continued

WELL NUMBER.--272539082292004. ROMP TR 7-4 Hawthorn Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20", in SW ¼ NE ¼ 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 121 IAQS.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.73	8.77	7.76	6.93	6.06	3.83	4.79	3.04	.71	4.04	8.59	10.47
10	10.72	8.34	7.65	6.60	5.84	3.65	5.00	2.68	.95	4.71	9.30	10.70
15	10.56	8.02	7.41	6.39	5.46	3.62	4.93	2.19	1.11	5.50	9.83	11.30
20	10.23	7.85	7.37	6.46	4.98	3.71	4.46	1.67	1.48	6.20	10.29	11.52
25	9.75	7.74	7.21	6.40	4.50	3.70	4.00	1.14	2.53	7.10	10.51	11.86
EOM	9.15	7.75	7.17	6.27	4.26	4.79	3.41	.61	3.23	7.86	10.57	12.22
MAX	10.76	9.09	7.79	7.11	6.21	4.79	5.00	3.05	3.23	7.86	10.60	12.22
CAL YR 2000	MAX 11.54											
WTR YR 2001	MAX 12.22											

WELL NUMBER.--272539082292005. ROMP TR 7-4 NRSD Well near Bradenton, FL.

LOCATION.--Lat 27°25'39", long 82°29'20", in SW ¼ NE ¼ 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 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 21.3 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.16	6.40	5.95	5.85	5.44	5.29	6.90	6.01	5.69	7.64	8.95	7.25
10	7.00	6.33	5.87	5.65	5.38	5.11	6.74	5.84	5.78	7.30	9.46	7.19
15	6.89	6.21	5.83	5.65	5.31	5.09	6.54	5.71	5.71	7.33	8.50	9.80
20	6.76	6.12	5.79	5.57	5.23	5.10	6.32	5.58	5.89	7.46	8.06	8.70
25	6.65	6.08	5.73	5.53	5.18	5.00	6.15	5.47	6.53	9.56	7.70	8.19
EOM	6.51	6.01	5.69	5.47	5.14	6.57	6.01	5.33	7.12	8.72	7.39	7.91
MAX	7.30	6.49	5.99	6.36	5.46	6.57	6.90	6.07	7.12	9.72	9.46	9.80
CAL YR 2000	MAX 9.29											
WTR YR 2001	MAX 9.80											

MANATEE COUNTY--Continued

WELL NUMBER.--272838082142201. Kibler Deep Well 26B near Bethany, FL.

LOCATION.--Lat 27°28'38", long 82°14'22", 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.82	-6.13	-2.21	-8.46	-8.22	-16.68	-5.82	-21.60	-18.64	4.92	17.51	13.48
10	9.17	-6.50	-2.19	-8.59	-11.54	-14.61	-8.18	-24.36	-11.65	7.44	18.35	15.77
15	5.11	-5.34	-1.75	-6.55	-12.91	-13.90	-13.65	-25.18	-9.99	10.18	19.10	17.97
20	1.07	-4.04	-2.94	-5.73	-16.32	-10.56	-18.43	-26.60	-6.09	12.33	19.39	18.96
25	-1.36	-4.52	-3.14	-5.44	-17.60	-13.67	-19.66	---	-1.82	14.57	17.28	18.58
EOM	-3.26	-.41	-4.46	-7.83	-19.12	---	-21.76	-24.13	1.75	15.85	12.76	19.62
MAX	12.24	-.41	.11	-4.66	-8.08	-10.44	-5.82	-21.21	1.75	15.85	19.44	19.62
CAL YR 2000	MAX 14.57											
WTR YR 2001	MAX 19.62											

WELL NUMBER.--273718082315501. Florida Power and Light Well at Piney Point, FL.

LOCATION.--Lat 27°37'18", long 82°31'55", in NE ¼ SE ¼ 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 120 FLRD.

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 12.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 13.48 ft above land-surface datum.

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, 20.99 ft NGVD, Jan. 27, 1998; lowest, 4.84 ft below NGVD, May 26, 1989.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.98	9.09	10.94	7.96	10.04	6.44	---	5.98	---	---	---	14.73
10	15.52	8.70	9.73	8.94	7.84	7.74	---	4.81	---	---	---	16.08
15	13.72	9.75	10.96	10.18	6.74	8.22	---	---	---	---	---	17.55
20	11.44	10.94	10.70	10.26	---	9.20	6.85	---	---	---	---	17.98
25	10.44	10.79	11.13	9.54	---	9.27	5.96	---	---	---	---	17.44
EOM	9.41	11.91	9.57	8.96	---	9.46	5.64	---	---	---	---	18.19
MAX	17.77	11.91	12.03	10.71	10.04	9.58	10.88	6.24	---	---	---	18.21
CAL YR 2000	MAX 17.79											
WTR YR 2001	MAX 18.21											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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MANATEE COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
271906082112401	ROMP 23 DEEP NEAR MYAKKA CITY FL	20010514	-1.17
		20010924	28.69
271906082112402	ROMP 23-2 (NORTH WELL) 48B NEAR MYAKKA CITY FL	20010514	.99
		20010924	27.69
272051082094601	MYAKKA CITY COMM CNTR WELL NEAR MYAKKA CITY FL	20010514	14.37
		20010924	32.84
272510082345701	ROMP TR 7-1 DEEP WELL NEAR BRADENTON FL	20010515	12.45
		20010925	20.71
272537082033301	GOUGH FLORIDAN NEAR MYAKKA HEAD FL	20010516	-13.30
		20010924	31.48
272612082330101	ROMP TR 7-1 DEEP UPPER FLORIDAN WELL NEAR ONECO FL	20010514	9.75
		20010924	20.40
272612082330103	ROMP TR 7-2 LOWER INTERMEDIATE WELL NEAR ONECO FL	20010514	10.41
		20010924	18.06
272612082330104	ROMP TR 7-2 UPPER INTERMEDIATE WELL NEAR ONECO FL	20010514	11.54
		20010924	16.62
272728082153002	ROMP 33 SUWANNEE WELL NEAR BETHANY FL	20010515	-21.60
		20010924	20.56
272728082153003	ROMP 33 HAWTHORN WELL NEAR BETHANY FL	20010515	20.03
		20010924	33.05
272735082083401	USGS DEEP WELL NEAR MYAKKA HEAD FL	20010516	-15.15
		20010924	28.65
272814082034802	ROMP 32 SUWANNEE WELL NEAR MYAKKA HEAD FL	20010516	-11.13
		20010924	33.42
272855082362001	MEADOWCROFT FLORIDAN WELL AT BRADENTON FL	20010515	8.16
		20010925	15.41
272940082360801	MILLER ELEMENTARY SCH HAWTHORN WELL BRADENTON FL	20010515	10.48
		20010925	17.67
273253082072801	ESTECH HAWTHORN 44 NEAR DUETTE FL	20010516	104.23
		20010926	106.62
273255082072601	SWIFT-AVON PARK ON DUETTE ROAD NEAR DUETTE FL	20010516	-9.66
		20010926	35.77
273354082352401	GEORGE STEVENS WELL 27A NEAR TERRA CEIA FL	20010516	5.85
		20010924	11.48
273458082324704	ROMP TR 8-1 HAWTHORN REPLACE WELL AT RUBONIA FL	20010515	9.72
		20010927	14.74
273458082324705	ROMP TR 8-1 SUWANNEE WELL AT RUBONIA FL	20010515	9.50
		20010927	20.45

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

MANATEE COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
273506082253701	ELLEN MATHESON WELL AT PARRISH FL	20010514	4.94
		20010925	22.72
273521082150501	ROMP 39 AVON PARK FLORIDAN WELL NEAR PARRISH FL	20010514	-22.70
		20010925	21.24
273521082150503	ROMP 39 INTERMEDIATE WELL NEAR PARRISH FL	20010514	82.72
		20010925	83.45
273605082071101	BUSBY DEEP WELL ON DUETTE ROAD AT DUETTE FL	20010514	-5.89
		20010925	40.09

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KEY TO SITE LOCATIONS ON FIGURE 18

PASCO COUNTY

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1	281023082075701	110
2	281025082384601	110
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4	281101082292502	111
5	281124082353001	112
6	281424082192701	112
7	281448082301801	113
8	281558082264601	113
9	281622082241301	114
10	281636082372001	114
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11	281715082164401	115
11	281715082164402	116
12	281918082264601	116
13	281926082212901	117
14	281949082332001	117
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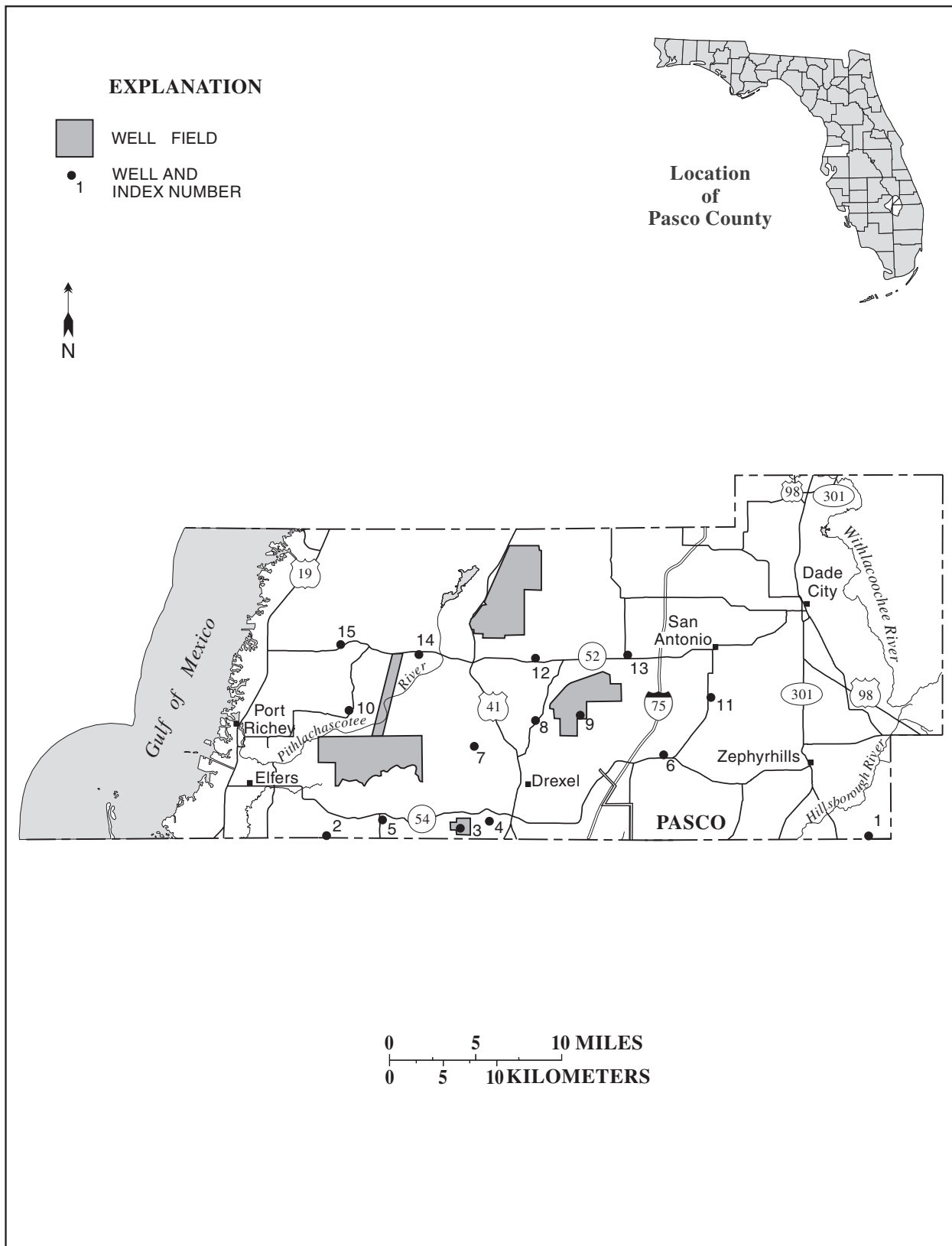


Figure 18.-- Location of wells in Pasco County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PASCO COUNTY

WELL NUMBER.--281023082075701. Weicht Deep Well near Crystal Springs, FL.

LOCATION.--Lat 28°10'23", long 82°07'57", in SE ¼ SW ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
NOV 03...	1010	76.35	APR 16...	1557	76.02
DEC 07...	1107	75.62	JUN 05...	1009	74.48
FEB 15...	0925	75.23	AUG 22...	1559	81.39

WELL NUMBER.--281025082384601. Eldridge-Wilde Mitchell Well near Tarpon Springs, FL.

LOCATION.--Lat 28°10'25", long 82°38'46", in SW ¼ SW ¼ 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 120 FLRD.

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 public supply wells.

PERIOD OF RECORD.--November 1972 to July 1974; December 1974 to June 1977 (periodic); July 1977 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, 26.39 ft NGVD, Oct. 2, 1998; lowest, 0.27 ft below NGVD, June 7, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.56	---	14.23	---	16.19	12.21	11.67	9.38	9.46	12.15	15.83	18.03
10	---	---	13.61	---	13.89	11.68	10.43	9.72	8.83	12.52	19.56	14.71
15	---	---	18.20	---	10.94	10.03	10.77	7.74	11.01	10.71	17.90	20.01
20	13.14	---	---	---	9.62	9.74	9.20	9.92	11.65	13.49	13.76	21.55
25	17.94	---	---	12.51	9.29	11.14	10.31	10.57	11.69	14.73	17.43	20.55
EOM	---	15.54	---	11.62	9.79	10.90	11.23	7.58	11.55	15.43	21.58	20.32
MAX	19.21	15.54	18.36	12.51	16.28	12.43	13.68	10.72	12.79	18.17	21.58	21.82
CAL YR 2000	MAX 19.21											
WTR YR 2001	MAX 21.82											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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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", in SW ¼ NW ¼ 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 111 NRSD.

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, 50.12 ft NGVD, June 13, 14, 15, 16, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.73	55.13	54.72	53.69	53.71	52.94	53.44	51.90	50.78	53.18	56.05	54.36
10	56.43	55.24	54.52	53.52	53.45	52.78	53.12	51.67	50.71	52.86	55.45	54.36
15	56.15	55.62	54.37	53.48	53.20	52.54	52.88	51.49	50.48	53.86	54.93	57.37
20	55.82	55.34	54.23	53.38	52.91	52.72	52.60	51.33	50.68	53.45	54.65	55.94
25	55.62	55.00	54.03	53.22	52.83	52.69	52.27	51.10	52.28	55.59	54.18	55.78
EOM	55.30	54.98	53.87	53.17	52.72	53.80	52.13	50.91	53.44	55.44	54.50	55.48
MAX	56.96	55.62	54.90	53.84	53.71	53.80	53.79	52.12	53.44	55.98	56.60	57.37
CAL YR 2000	MAX 57.67											
WTR YR 2001	MAX 57.37											

WELL NUMBER.--281101082292502. Harry Matts Shallow Well near Land O'Lakes, FL.

LOCATION.--Lat 28°11'01", long 82°29'25", in NW ¼ NE ¼ 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 112 NRSD.

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 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, 65.45 ft NGVD, Sept. 19, 1979; well observed dry at times some years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 04...	0930	DRY	APR 06...	0915	DRY
NOV 29...	1400	DRY	MAY 07...	1400	DRY
JAN 23...	0900	DRY	AUG 22...	0815	DRY

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PASCO COUNTY--Continued

WELL NUMBER.--281124082353001. Swains Well at Odessa, FL.

LOCATION.--Lat 28°11'24", long 82°35'30", in SW ¼ SE ¼ 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 120 FLRD.

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 flange, 3.65 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby public supply 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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
30...	1112	35.31	14...	1309	31.52
DEC			JUN		
18...	1349	34.62	04...	0757	30.80
FEB			SEP		
12...	0905	33.97	04...	1350	36.25
APR			26...	1422	38.33
10...	1349	33.49			

WELL NUMBER.--281424082192701. ROMP 85 Avon Park Well near Zephyrhills, FL.

LOCATION.--Lat 28°14'24", long 82°19'27", in SE ¼ NE ¼ 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 124 AVPK.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.59	71.18	71.32	69.73	70.29	68.99	69.88	68.38	67.59	69.37	74.26	75.61
10	74.10	71.45	71.34	69.62	69.96	69.03	69.75	67.93	68.35	70.14	75.41	76.37
15	73.12	71.76	71.32	69.74	69.74	69.07	69.28	67.56	67.80	70.70	75.91	77.35
20	72.55	71.97	71.14	70.07	69.33	69.45	69.09	67.82	67.53	71.52	76.08	78.56
25	72.69	71.74	70.70	69.79	69.32	69.48	68.65	67.42	68.42	72.35	75.70	78.83
EOM	71.99	71.73	70.62	70.02	69.22	69.61	68.48	67.49	68.87	73.12	74.90	79.06
MAX	74.82	72.18	71.70	70.07	70.29	69.61	69.90	68.62	68.87	73.12	76.08	79.10
CAL YR 2000	MAX 75.25											
WTR YR 2001	MAX 79.10											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PASCO COUNTY--Continued

WELL NUMBER.--281622082241301. Cypress Creek Deep Well 3 near Ehren, FL.

LOCATION.--Lat 28°16'22", long 82°24'13", in NE ¼ NE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.05	---	---	41.92	40.93	41.46	43.60	46.88	44.50	45.45	48.42	51.42
10	51.49	---	---	41.84	41.89	42.39	44.64	46.67	44.14	44.70	49.62	52.18
15	50.82	---	---	41.34	43.95	42.40	45.13	44.77	43.13	45.55	49.73	53.85
20	49.99	---	42.33	41.21	41.88	42.10	45.46	45.25	43.20	46.12	51.47	54.82
25	48.10	---	42.44	41.00	41.31	41.52	45.45	45.01	43.92	47.09	51.90	54.40
EOM	47.07	---	41.72	40.84	40.97	42.87	46.42	44.51	44.59	47.62	50.32	55.49
MAX	53.15	46.72	43.19	41.92	44.31	42.87	46.42	46.88	44.94	47.62	51.90	55.94
CAL YR 2000	MAX 53.15											
WTR YR 2001	MAX 55.94											

WELL NUMBER.--281636082372001. Moon Lake Deep Well near New Port Richey, FL.

LOCATION.--Lat 28°16'36", long 82°37'20", 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.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.04	29.03	28.60	28.30	28.83	28.35	28.66	27.71	26.87	27.99	30.23	29.13
10	29.83	28.89	28.52	28.28	28.78	28.25	28.56	27.54	26.80	28.01	30.13	29.58
15	29.67	28.80	28.49	28.20	28.70	28.17	28.41	27.39	26.65	28.33	29.82	31.16
20	29.48	28.70	28.43	28.14	28.57	28.28	28.12	27.28	26.55	28.38	29.63	31.05
25	29.31	28.64	28.37	28.08	28.43	28.21	27.95	27.10	26.81	29.12	29.40	31.07
EOM	29.14	28.68	28.31	28.43	28.35	28.64	27.81	26.95	27.72	29.76	29.23	30.92
MAX	30.20	29.12	28.67	28.43	28.83	28.64	28.68	27.80	27.72	29.76	30.24	31.22
CAL YR 2000	MAX 30.63											
WTR YR 2001	MAX 31.22											

PASCO COUNTY--Continued

WELL NUMBER.--281636082372002. Moon Lake Shallow Well near New Port Richey, FL.

LOCATION.--Lat 28°16'36", long 82°37'20", 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 112 NRSD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.39	30.28	29.46	28.96	28.91	28.99	28.94	28.72	28.09	28.37	30.40	30.35
10	31.23	30.13	29.37	28.89	29.10	28.89	29.07	28.62	27.99	28.63	30.84	30.25
15	31.03	29.98	29.29	28.84	29.16	28.81	29.10	28.52	27.90	28.78	30.92	30.77
20	30.84	29.83	29.22	28.79	29.17	28.74	29.06	28.42	27.80	28.92	30.86	31.96
25	30.66	29.70	29.13	28.76	29.13	28.69	28.95	28.32	27.71	29.07	30.72	32.03
EOM	30.44	29.57	29.04	28.69	29.08	28.67	28.83	28.20	27.86	29.91	30.51	32.09
MAX	31.47	30.41	29.55	29.02	29.17	29.07	29.10	28.81	28.17	29.91	30.92	32.09
CAL YR 2000	MAX 31.47											
WTR YR 2001	MAX 32.09											

WELL NUMBER.--281715082164401. State Highway 577 Well near San Antonio, FL.

LOCATION.--Lat 28°17'15", long 82°16'44", in NE ¼ NW ¼ 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 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 150 ft, cased to 57 ft.

INSTRUMENTATION.--Water-stage recorder--60-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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	82.16	79.00	78.60	73.46	76.31	75.43	75.97	74.18	73.88	74.14	75.94	79.21
10	81.86	77.58	78.32	74.16	76.40	75.66	76.02	73.90	74.12	74.29	76.89	80.23
15	81.40	78.02	78.22	75.27	76.31	75.72	75.62	73.65	73.92	74.41	77.74	81.87
20	80.72	78.23	77.53	75.70	76.14	75.85	75.08	73.62	73.66	74.34	78.31	84.06
25	79.76	78.50	76.47	75.73	75.86	75.75	74.59	73.19	74.00	74.69	78.65	85.17
EOM	79.42	78.35	76.44	76.07	75.57	75.98	74.58	73.62	74.00	75.28	78.70	85.92
MAX	82.21	79.03	78.60	76.07	76.40	75.98	76.13	74.44	74.16	75.28	78.70	85.92
CAL YR 2000	MAX 82.35											
WTR YR 2001	MAX 85.92											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PASCO COUNTY--Continued

WELL NUMBER.--281715082164402. State Highway 577 Shallow Well near San Antonio, FL.

LOCATION.--Lat 28°17'15", long 82°16'44", in NE ¼ NW ¼ 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 112 SAND.

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, 126.78 ft NGVD, Apr. 7, 1998; well observed dry Jan. 8, Mar. 5, May 1, 1991, Apr. 19, May 30, 1994, Mar. 1, 2000.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
NOV 01...	1341	121.50	MAY 15...	0805	120.06
DEC 20...	0927	121.62	JUN 05...	0930	119.51
FEB 15...	0840	120.84	AUG 22...	1649	121.87
APR 09...	1455	122.23			

WELL NUMBER.--281918082264601. State Highway 52 Well near Gowers Corner, FL.

LOCATION.--Lat 28°19'18", long 82°26'46", in NE ¼ SW ¼ 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 120 FLRD.

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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.34	66.96	66.36	65.65	65.15	64.65	64.36	63.87	63.21	63.81	67.15	67.08
10	68.08	66.87	66.21	65.48	65.09	64.58	64.30	63.73	63.09	64.03	67.69	66.97
15	67.82	66.70	66.05	65.38	64.97	64.49	64.21	63.62	62.98	64.15	67.71	67.53
20	67.62	66.55	65.99	65.26	64.88	64.43	64.12	63.54	62.94	64.58	67.70	68.27
25	67.43	66.47	65.88	65.13	64.78	64.33	64.05	63.42	62.93	65.43	67.52	68.50
EOM	67.19	66.51	65.71	65.06	64.69	64.36	63.95	63.27	63.30	66.45	67.24	68.56
MAX	68.49	67.16	66.49	65.70	65.17	64.69	64.37	63.95	63.30	66.45	67.77	68.61
CAL YR 2000	MAX 70.92											
WTR YR 2001	MAX 68.61											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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", 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	63.74	61.96	60.61	59.66	58.79	58.25	57.80	57.93	57.22	57.28	60.97	63.13
10	63.46	61.68	60.44	59.47	58.69	58.17	57.88	57.85	57.17	57.54	61.98	63.35
15	63.16	61.38	60.28	59.32	58.66	58.08	57.88	57.75	57.06	57.72	62.50	64.04
20	62.84	61.16	60.16	59.20	58.56	58.01	57.94	57.67	56.99	58.16	63.11	65.51
25	62.55	61.02	60.01	59.04	58.45	57.90	57.94	57.56	57.02	59.11	63.12	66.31
EOM	62.17	60.82	59.79	58.89	58.38	57.82	57.93	57.33	57.17	60.13	62.99	67.02
MAX	63.85	62.12	60.79	59.75	58.86	58.36	57.95	57.95	57.34	60.13	63.14	67.02
CAL YR 2000	MAX 68.49											
WTR YR 2001	MAX 67.02											

WELL NUMBER.--281949082332001. State Highway 52 Deep Well near Fivay Junction, FL.

LOCATION.--Lat 28°19'49", long 82°33'20", in NW ¼ NE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.81	51.64	51.01	50.68	51.57	50.96	51.46	50.12	49.20	51.23	52.32	52.43
10	52.57	51.49	50.94	50.72	51.46	50.80	51.24	49.93	49.12	51.13	52.21	52.25
15	52.36	51.36	51.06	50.62	51.35	50.69	50.96	49.75	48.94	51.34	52.08	53.77
20	52.16	51.23	50.92	50.57	51.13	50.95	50.70	49.59	48.92	51.45	52.00	53.40
25	52.00	51.13	50.82	50.47	50.96	50.85	50.50	49.40	49.15	51.77	51.79	53.46
EOM	51.78	51.19	50.73	51.13	50.89	51.50	50.30	49.21	50.81	52.13	51.82	53.20
MAX	53.01	51.75	51.14	51.13	51.57	51.50	51.51	50.28	50.81	52.16	52.35	53.77
CAL YR 2000	MAX 54.14											
WTR YR 2001	MAX 53.77											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PASCO COUNTY--Continued

WELL NUMBER.--282009082373801. State Highway 52 Deep Well near Hudson, FL.

LOCATION.--Lat 28°20'09", long 82°37'38", in NE ¼ SW ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
31...	1110	24.19	14...	1043	21.99
DEC			JUN		
20...	1212	23.14	04...	1221	21.31
FEB			SEP		
12...	0935	23.06	04...	1427	23.11
APR			26...	1349	24.85
11...	1658	23.16			

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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PASCO COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
281023082450701	COASTAL PASCO DEEP WELL 13 NEAR NEW PORT RICHEY FL	20010514	3.66
		20010926	4.96
281035082305701	ST PETE WELL 42 NEAR LAND O LAKES FL	20010515	33.13
		20010928	40.83
281037082071801	J O ALSTON WELL NEAR CRYSTAL SPRINGS FL	20010515	80.33
		20010925	89.91
281046082470801	FPC WELL NO 1 NEAR TARPON SPRINGS FL	20010514	.92
		20010926	1.64
281124082274101	WINTER QUARTERS ROAD WELL NEAR CITRUS PARK FL	20010514	56.00
		20010926	61.01
281143082304702	STATE HWY 54 DEEP WELL NEAR LAND O LAKES FL	20010515	36.68
		20010928	44.22
281321082294201	BEXLEY DEEP WELL 225 NEAR DREXEL FL	20010514	55.65
		20010926	61.11
281424082192702	ROMP 85 FLORIDAN WELL NEAR ZEPHYRHILLS FL	20010515	68.05
		20010925	79.50
281437082271401	NININGER DEEP WELL 857 AT DREXEL FL	20010515	66.80
		20010926	71.81
281446082354101	STARKEY WELL MW-1 NEAR NEW PORT RICHEY FL	20010517	19.30
		20010920	27.09
281451082380701	STARKEY DEEP 10 NEAR ODESSA FL	20010517	23.70
		20010920	28.97
281504082104801	ROMP 86 AVON PARK DEEP WELL NEAR ZEPHYRHILLS FL	20010515	62.08
		20010925	61.49
281535082241301	CYPRESS CREEK DEEP TMR-5 NEAR SAN ANTONIO FL	20010514	47.12
		20010917	56.01
281548082220601	815 222 FL	20010515	53.54
		20010925	63.48
281631082261601	CATCHING'S D. WELL 849 NR DREXEL FL	20010515	62.42
		20010926	66.75
281642082440201	COASTAL PASCO DEEP WELL 04 AT PORT RICHEY FL	20010514	12
		20010926	.80
281650082244501	CYPRESS CREEK DEEP WELL TMR-4 NEAR SAN ANTONIO FL	20010514	46.20
		20010917	53.88
281654082201601	CARR DEEP WELL 846 NEAR SAN ANTONIO FL	20010515	66.27
		20010925	75.81
281917082420901	ROMP TR 17-1 DEEP WELL AT BAYONET POINT FL	20010514	3.43
		20010926	4.66

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

PASCO COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
281922082403901	ROMP TR 17-3 DEEP WELL NEAR BAYONET POINT FL	20010514	2.57
		20010926	3.26
281923082252201	ROMP 93 DEEP NEAR DARBY FL	20010515	59.76
		20010925	66.34
281948082415301	WITHLACOCHEE ELEC 01 AT BAYONET POINT FL	20010514	1.04
		20010926	2.56
281954082413401	PONDEROSADEV DEEP WELL AT BAYONET POINT FL	20010514	1.89
		20010926	2.98
282044082312401	H. KENT GROVE WELL NEAR GOWERS CORNER FL	20010515	55.30
		20010925	59.68
282148082281801	CROSSBAR A-1 DEEP NEAR LOYCE FL	20010514	46.88
		20010917	53.19
282229082405801	COASTAL PASCO DEEP WELL 02 AT HUDSON FL	20010514	1.42
		20010926	.30
282238082362101	JUSTICE DEEP NEAR HUDSON FL	20010514	19.56
		20010926	23.11
282434082200301	AIRSTREAM TRL PARK DEEP WELL 833 NEAR DARBY FL	20010515	57.52
		20010925	62.07
282434082283601	D. A. SUTYAK WELL NEAR MASARYKTOWN FL	20010515	25.16
		20010923	23.61
282534082222802	BARTHLE RANCH FLORIDAN WELL NEAR MASARYKTOWN FL	20010515	39.26
		20010924	39.44
282540082275701	MASARYKTOWN DEEP WELL NEAR MASARYKTOWN FL	20010515	23.05
		20010925	25.31

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

PASCO COUNTY

The following data were collected as part of a study to characterize water quality in the surface and ground water, and to assess the interaction between the surface and ground water systems in the Upper Hillsborough river watershed.

DATE	TIME	ELEVATION ABOVE NGVD (FEET) (72020)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD ARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM DIS-SOLVED (MG/L AS MG) (00925)	SODIUM DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE DIS-SOLVED (MG/L AS F) (00950)
281031082071801 ALSTON FLRD WELL NEAR ZEPHYRHILLS FL (LAT 28 10 31N LONG 082 07 18W)													
MAY 2001													
31...	1345	--	515	7.2	23.5	<5	98.0	2.70	7.7	.30	<.2	14.0	.1
AUG													
21...	1435	--	523	7.2	23.5	<5	97.0	2.70	8.2	.20	<.2	14.0	.1
281138082120201 ZEPHYRHILLS PRISON DEEP FLRD NR ZEPHYRHILLS FL (LAT 28 11 38N LONG 082 12 02W)													
MAY 2001													
30...	1445	--	343	7.4	23.6	<5	68.0	.900	3.1	.40	3.7	6.4	<.1
AUG													
22...	1100	--	361	7.5	23.8	<5	64.0	.900	3.4	.50	3.1	5.9	<.1
281144082100402 ROMP 86A SWANNEE WELL AT CRYSTAL SPRINGS FL (LAT 28 11 44N LONG 082 10 04W)													
NOV 2000													
27...	1520	55.64	--	--	--	--	--	--	--	--	--	--	--
DEC													
15...	1410	55.59	--	--	--	--	--	--	--	--	--	--	--
JAN 2001													
18...	1450	55.25	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	1150	54.96	404	7.4	23.2	60	75.0	2.10	4.8	.40	1.1	6.9	.1
APR													
03...	1455	55.81	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	1540	54.73	--	--	--	--	--	--	--	--	--	--	--
31...	1025	53.99	405	7.3	23.3	<5	77.0	2.10	4.7	.40	1.0	7.2	.1
JUL													
10...	0915	55.00	--	--	--	--	--	--	--	--	--	--	--
AUG													
10...	1040	58.46	406	7.2	23.3	5	75.0	2.10	4.9	.40	1.2	7.2	.1
281247082074101 UPPER HILLS TRACT WELL UHRT 1 DP NR ZEPHYRHILLS FL (LAT 28 12 47N LONG 082 07 41W)													
MAR 2001													
06...	1250	--	428	7.6	21.8	<5	66.0	9.10	8.3	.90	4.5	9.8	.2
JUN													
05...	1325	--	420	7.6	22.3	<5	65.0	8.90	7.9	1.70	.3	.3	.2
AUG													
10...	1325	--	572	7.2	22.3	5	106	2.30	7.6	.30	1.2	14.0	.1
281322082084501 CHANCEY ROAD SWNN WELL NEAR ZEPHYRHILLS FL (LAT 28 13 22N LONG 082 08 45W)													
JUN 2001													
05...	1135	--	347	7.6	23.0	<5	67.0	.900	3.1	.90	.8	5.5	.1
AUG													
21...	1305	--	339	7.7	23.1	<5	66.0	.870	3.3	.40	.9	5.0	.1
281353082110401 ZEPHYRHILLS PARK FLRD WELL AT ZEPHYRHILLS FL (LAT 28 13 53N LONG 082 11 04W)													
JUN 2001													
07...	1140	--	323	7.7	25.4	<5	56.0	1.50	5.4	.60	4.9	9.6	<.1
AUG													
22...	1250	--	319	7.6	25.9	<5	57.0	1.60	6.1	.70	5.0	10.0	<.1
281532082065001 54-EAST FLRD WELL NEAR BRANCHBOROUGH FL (LAT 28 15 32N LONG 082 06 50W)													
JUN 2001													
06...	1135	--	556	7.2	22.8	5	110	1.50	6.4	.30	<.2	13.0	<.1

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

PASCO COUNTY

DATE	SILICA, DIS- SOLVED (MG/L SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS TOTAL (MG/L AS P) (70507)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
281031082071801 ALSTON FLRD WELL NEAR ZEPHYRHILLS FL (LAT 28 10 31N LONG 082 07 18W)													
MAY 2001 31...	13.0	306	<.01	<.02	.16	.82	.120	.030	1	.3	.10	5.0	.5
AUG 21...	13.0	310	<.01	<.02	.14	.30	.140	<.010	M	.1	<.05	<.5	<.2
281138082120201 ZEPHYRHILLS PRISON DEEP FLRD NR ZEPHYRHILLS FL (LAT 28 11 38N LONG 082 12 02W)													
MAY 2001 30...	8.4	200	<.01	<.02	.05	<.20	.040	.020	3	1.0	<.05	1.0	<.2
AUG 22...	8.7	208	<.01	<.02	.05	<.20	.030	<.010	3	.8	<.05	<.5	<.2
281144082100402 ROMP 86A SWUANNEE WELL AT CRYSTAL SPRINGS FL (LAT 28 11 44N LONG 082 10 04W)													
NOV 2000 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 2001 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 01...	11.0	204	<.01	<.02	.19	.24	<.050	.010	6	1.2	<.05	1.0	<.2
APR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	11.0	230	<.01	<.02	.18	.36	.030	<.010	7	2.1	<.05	4.0	.4
JUL 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	11.0	232	<.01	<.02	.17	.30	.030	<.010	5	1.9	<.05	1.4	1.6
281247082074101 UPPER HILLS TRACT WELL UHRT 1 DP NR ZEPHYRHILLS FL (LAT 28 12 47N LONG 082 07 41W)													
MAR 2001 06...	19.0	246	<.01	<.02	.08	.26	.080	.020	3	<.1	<.05	1.0	<.2
JUN 05...	19.0	243	<.01	<.02	.07	<.20	.060	.040	4	.3	<.05	2.0	<.2
AUG 10...	12.0	337	<.01	<.02	.36	.60	.060	<.010	M	.8	<.05	<.5	<.2
281322082084501 CHANCEY ROAD SWNN WELL NEAR ZEPHYRHILLS FL (LAT 28 13 22N LONG 082 08 45W)													
JUN 2001 05...	9.0	197	<.01	<.02	.04	<.20	.050	.030	14	.8	<.05	1.0	<.2
AUG 21...	9.2	192	<.01	<.02	.04	<.20	.040	<.010	13	.7	<.05	<.5	<.2
281353082110401 ZEPHYRHILLS PARK FLRD WELL AT ZEPHYRHILLS FL (LAT 28 13 53N LONG 082 11 04W)													
JUN 2001 07...	9.6	193	<.01	2.2	<.01	<.20	.060	.040	6	.3	.70	3.0	.7
AUG 22...	10.0	190	<.01	2.1	<.01	<.20	.050	.050	12	.2	<.05	2.1	.3
281532082065001 54-EAST FLRD WELL NEAR BRANCHBOROUGH FL (LAT 28 15 32N LONG 082 06 50W)													
JUN 2001 06...	11.0	329	<.01	<.02	.16	.50	.110	<.010	1	3.1	<.05	4.0	<.2

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

PASCO COUNTY

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
281031082071801 ALSTON FLRD WELL NEAR ZEPHYRHILLS FL (LAT 28 10 31N LONG 082 07 18W)								
MAY 2001								
31...	1300	<.05	<.10	2.70	90.0	4	4.0	6.6
AUG								
21...	1340	<.05	<.10	3.00	92.0	<.5	5.1	5.8
281138082120201 ZEPHYRHILLS PRISON DEEP FLRD NR ZEPHYRHILLS FL (LAT 28 11 38N LONG 082 12 02W)								
MAY 2001								
30...	950	<.05	<.10	1.60	99.0	M	1.9	3.6
AUG								
22...	890	<.05	<.10	2.10	96.0	<.5	2.4	2.6
281144082100402 ROMP 86A SWUANNEE WELL AT CRYSTAL SPRINGS FL (LAT 28 11 44N LONG 082 10 04W)								
NOV 2000								
27...	--	--	--	--	--	--	--	--
DEC								
15...	--	--	--	--	--	--	--	--
JAN 2001								
18...	--	--	--	--	--	--	--	--
MAR								
01...	1900	<.05	<.10	<.20	160	<.5	2.4	1.8
APR								
03...	--	--	--	--	--	--	--	--
MAY								
02...	--	--	--	--	--	--	--	--
31...	2300	<.05	<.10	1.90	160	2	1.5	2.2
JUL								
10...	--	--	--	--	--	--	--	--
AUG								
10...	2280	<.05	<.10	2.10	160	1	1.6	2.0
281247082074101 UPPER HILLS TRACT WELL UHRT 1 DP NR ZEPHYRHILLS FL (LAT 28 12 47N LONG 082 07 41W)								
MAR 2001								
06...	310	<.05	<.10	.80	460	12	2.9	2.6
JUN								
05...	240	<.05	<.10	1.60	510	M	1.6	2.1
AUG								
10...	5190	<.05	<.10	2.80	100	1	5.4	5.8
281322082084501 CHANCEY ROAD SWNN WELL NEAR ZEPHYRHILLS FL (LAT 28 13 22N LONG 082 08 45W)								
JUN 2001								
05...	960	<.05	<.10	1.70	70.0	<.5	1.4	1.9
AUG								
21...	890	<.05	<.10	2.00	66.0	<.5	1.8	2.1
281353082110401 ZEPHYRHILLS PARK FLRD WELL AT ZEPHYRHILLS FL (LAT 28 13 53N LONG 082 11 04W)								
JUN 2001								
07...	M	1.00	<.10	1.70	100	9	1.7	2.5
AUG								
22...	M	<.05	<.10	2.20	100	<.5	.60	.80
281532082065001 54-EAST FLRD WELL NEAR BRANCHBOROUGH FL (LAT 28 15 32N LONG 082 06 50W)								
JUN 2001								
06...	3800	<.05	<.10	4.10	84.0	M	7.8	8.0

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

PASCO COUNTY

DATE	TIME	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	
281532082065001 54-EAST FLRD WELL NEAR BRANCHBOROUGH FL (LAT 28 15 32N LONG 082 06 50W)														
AUG 2001	21...	1130	559	7.3	22.8	<5	108	1.50	7.2	.30	<.2	12.0	<.1	12.0
281533082130601 AUSTIN SMITH FLRD WELL NEAR ZEPHYRHILLS FL (LAT 28 15 33N LONG 082 13 06W)														
JUN 2001	08...	1125	500	7.5	23.2	<5	85.0	3.80	8.5	1.90	17.0	21.0	.1	9.4
AUG 2001	23...	1205	501	7.5	23.2	<5	89.0	3.80	8.7	1.70	16.0	20.0	.1	9.8
281938082141501 ROMP BR-3 LAKE PASADENA FLRD WELL NR DADE CITY FL (LAT 28 19 38N LONG 082 14 15W)														
JUN 2001	12...	1145	371	7.6	22.0	5	63.0	5.50	5.7	.40	1.6	10.0	.1	12.0
AUG 2001	23...	1415	369	7.6	22.3	<5	61.0	7.10	5.6	.40	.7	9.1	.1	12.0
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
281532082065001 54-EAST FLRD WELL NEAR BRANCHBOROUGH FL (LAT 28 15 32N LONG 082 06 50W)														
AUG 2001	21...	335	<.01	<.02	.19	.40	.120	<.010	1	2.9	<.05	<.5	<.2	3840
281533082130601 AUSTIN SMITH FLRD WELL NEAR ZEPHYRHILLS FL (LAT 28 15 33N LONG 082 13 06W)														
JUN 2001	08...	291	<.01	.6	.02	<.20	.040	.020	<.5	.5	.20	1.0	.8	120
AUG 2001	23...	301	<.01	.3	.05	<.20	.040	<.010	<.5	.8	.07	.9	<.2	580
281938082141501 ROMP BR-3 LAKE PASADENA FLRD WELL NR DADE CITY FL (LAT 28 19 38N LONG 082 14 15W)														
JUN 2001	12...	214	<.01	<.02	.10	.23	.070	.010	<.5	1.3	<.05	4.0	1.3	1500
AUG 2001	23...	203	<.01	<.02	.12	<.20	.080	.030	M	.1	<.05	.7	<.2	700
DATE		LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)						
281532082065001 54-EAST FLRD WELL NEAR BRANCHBOROUGH FL (LAT 28 15 32N LONG 082 06 50W)														
AUG 2001	21...	<.05	<.10	4.90	88.0	1	6.8	6.8						
281533082130601 AUSTIN SMITH FLRD WELL NEAR ZEPHYRHILLS FL (LAT 28 15 33N LONG 082 13 06W)														
JUN 2001	08...	<.05	<.10	3.60	78.0	2	2.0	1.5						
AUG 2001	23...	<.05	<.10	3.80	84.0	M	1.8	1.9						
281938082141501 ROMP BR-3 LAKE PASADENA FLRD WELL NR DADE CITY FL (LAT 28 19 38N LONG 082 14 15W)														
JUN 2001	12...	<.05	<.10	1.60	84.0	2	2.2	2.1						
AUG 2001	23...	<.05	<.10	1.80	99.0	M	2.0	2.2						

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 19

PINELLAS COUNTY

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12	280859082405301	149
13	280902082400601	163
14	280907082424801	175
14	280907082424802	175
15	281022082400201	176

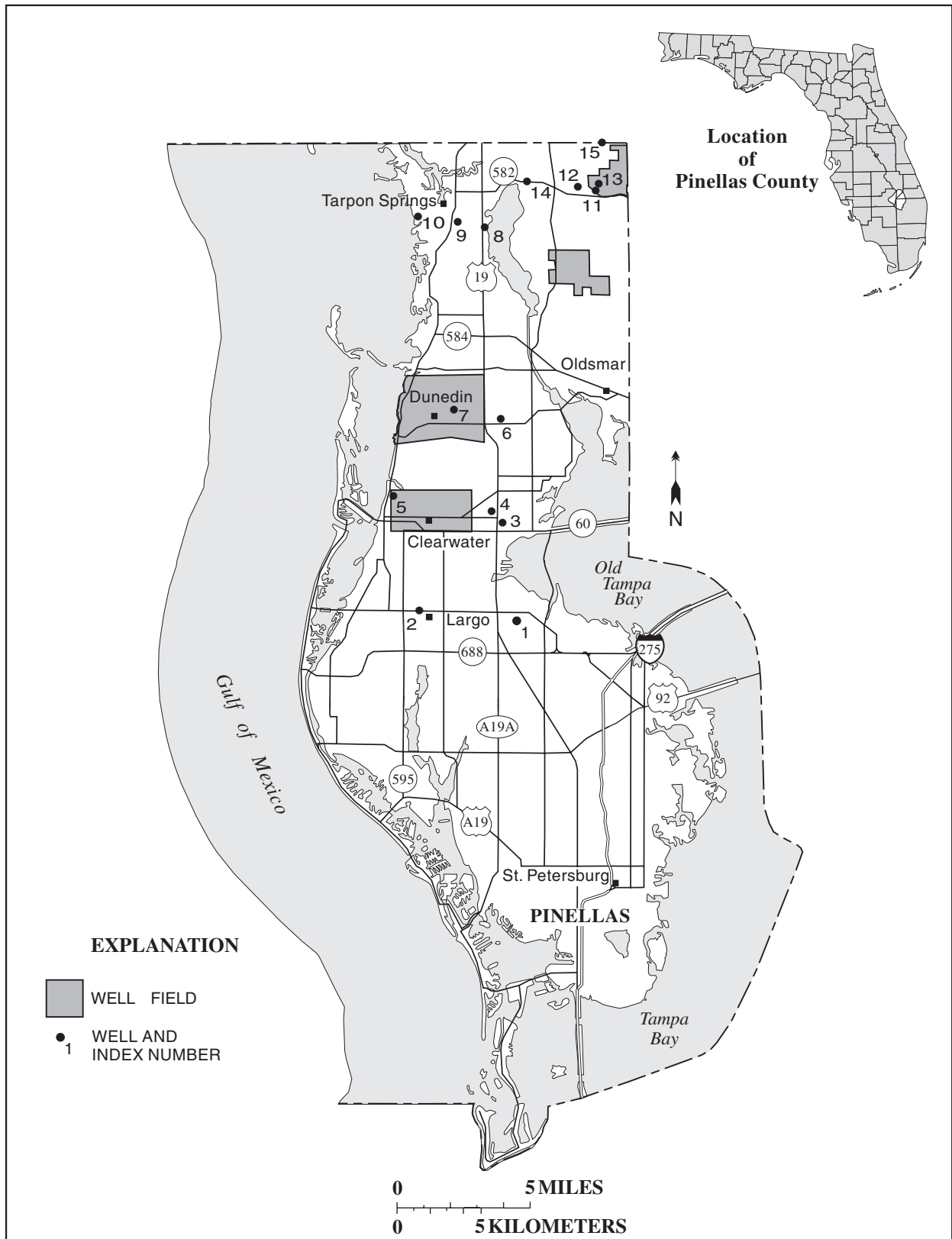


Figure 19.-- Location of wells in Pinellas County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY

WELL NUMBER.--275430082431401. ROMP TR 13-2A Lower Suwannee Well near Largo, FL.

LOCATION.--Lat 27°54'30", long 82°43'14", 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 4.4 mi east of Largo. Owner: Southwest Florida Water Management District.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1405	-0.03	MAY 14...	1615	-1.82
NOV 01...	1530	-1.17	JUN 05...	1640	-1.81
DEC 20...	1200	-1.65	AUG 15...	1545	.03
FEB 15...	1345	-1.58	SEP 24...	1449	.27
APR 17...	1045	-1.48			

WELL NUMBER.--275430082431402. ROMP TR 13-2A Upper Suwannee Well near Largo, FL.

LOCATION.--Lat 27°54'30", long 82°43'14", 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 4.4 mi east of Largo. Owner: Southwest Florida Water Management District.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1410	5.94	MAY 14...	1608	4.04
NOV 01...	1515	4.72	JUN 05...	1635	4.04
DEC 20...	0920	4.27	AUG 15...	1600	5.98
FEB 15...	1330	4.14	SEP 24...	1454	6.26
APR 17...	1030	4.45			

PINELLAS COUNTY--Continued

WELL NUMBER.--275430082431403. ROMP TR 13-2 NRSD Well near Largo, FL.

LOCATION.--Lat 27°54'30", long 82°43'14", 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. Owner: Southwest Florida Water Management District.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 16 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.86	12.64	12.48	12.52	13.62	13.76	14.35	12.72	11.97	14.95	15.28	15.44
10	13.53	12.61	12.36	13.58	13.34	13.39	13.88	12.51	11.93	15.32	14.79	16.20
15	13.32	12.73	12.47	13.40	13.11	13.27	13.58	12.36	11.76	15.40	14.39	16.67
20	13.11	12.49	12.86	13.26	12.89	14.00	13.32	12.24	12.40	14.33	13.89	15.17
25	12.95	12.68	12.67	13.05	12.75	13.54	13.10	12.08	13.41	15.57	13.59	15.44
EOM	12.76	12.71	12.69	12.89	12.67	15.37	12.88	11.92	15.63	14.98	14.09	14.49
MAX	14.09	12.80	12.90	13.62	13.62	15.37	15.30	12.85	15.81	16.12	16.13	16.79
CAL YR 2000	MAX 16.45											
WTR YR 2001	MAX 16.79											

WELL NUMBER.--275458082464002. ROMP TR 13-1A Suwannee Well at Largo, FL.

LOCATION.--Lat 27°54'58", long 82°46'40", in NW ¼ SW ¼ 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. Owner: Southwest Florida Water Management District.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
06...	1345	7.54	14...	1326	5.41
NOV			JUN		
02...	1230	6.44	05...	1615	5.27
DEC			AUG		
20...	0954	5.88	15...	1615	7.35
FEB			SEP		
15...	1405	5.92	24...	1358	7.69
APR					
18...	0850	5.65			

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

WELL NUMBER.--275458082464003. ROMP TR 13-1A Tampa Well at Largo, FL.

LOCATION.--Lat 27°54'58", long 82°46'40", in NW ¼ SW ¼ 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. Owner: Southwest Florida Water Management District.

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

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1350	7.76	MAY 14...	1523	5.60
NOV 02...	1245	6.64	JUN 05...	1610	5.45
DEC 20...	0956	6.10	AUG 15...	1630	7.60
FEB 15...	1400	6.14	SEP 24...	1403	7.88
APR 18...	0855	5.85			

WELL NUMBER.--275458082464004. ROMP TR 13-1A NRSD Well at Largo, FL.

LOCATION.--Lat 27°54'58", long 82°46'40", in NW ¼ SW ¼ 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. Owner: Southwest Florida Water Management District.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.11	2.88	2.88	3.00	3.20	3.38	3.53	3.03	2.89	4.25	3.60	3.14
10	3.07	2.95	2.87	3.08	3.13	3.21	3.36	2.96	2.87	3.47	3.35	3.83
15	3.02	2.89	2.89	3.10	3.11	3.17	3.26	2.96	2.85	3.30	3.25	5.75
20	3.03	2.85	2.96	3.11	3.06	3.50	3.16	2.94	2.94	3.15	3.11	3.72
25	2.93	2.97	2.93	3.08	3.05	3.23	3.11	2.92	3.00	3.45	3.08	3.61
EOM	2.90	2.89	2.97	3.11	3.03	4.16	3.29	2.90	4.26	3.29	3.32	3.37
MAX	3.21	3.05	3.21	3.33	3.28	4.16	3.97	3.25	5.02	4.38	4.23	6.75
CAL YR 2000	MAX 6.34											
WTR YR 2001	MAX 6.75											

PINELLAS COUNTY--Continued

WELL NUMBER.--275753082433701. Clearwater-Dunedin Deep Well 27 near Clearwater, FL.

LOCATION.--Lat 27°57'53", long 82°43'37", 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. Owner: U.S. Geological Survey.

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

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, 5.41 ft NGVD, July 13, 2001; well observed dry June 5, July 2, 1998; May 12, July 6, 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1310	2.67	MAY 14...	1215	3.91
DEC 01...	1330	2.94	JUL 13...	1310	5.41
JAN 26...	1320	3.31	AUG 24...	1200	5.35
APR 06...	1500	4.74			

WELL NUMBER.--275815082440401. Pinellas Well 665 near Clearwater, FL.

LOCATION.--Lat 27°58'15", long 82°44'04", in SW ¼ SE ¼ 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. Owner: Pinellas County.

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

WELL CHARACTERISTICS.--Drilled, unused public supply, 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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.11	9.06	8.79	8.69	8.75	8.81	9.37	8.49	8.11	9.81	10.59	10.04
10	9.46	9.37	8.97	8.55	8.85	8.92	9.17	8.26	8.42	9.85	10.48	10.23
15	9.54	9.04	9.06	8.72	8.71	9.05	9.11	8.13	8.37	10.09	10.40	10.75
20	9.51	8.98	8.86	8.99	8.46	9.08	8.78	8.11	8.20	10.16	10.15	11.22
25	9.27	9.29	8.59	8.55	8.61	9.05	8.61	8.31	8.90	10.63	10.07	10.84
EOM	9.13	9.08	8.71	8.77	8.67	9.44	8.38	8.06	9.49	10.35	10.10	10.91
MAX	10.27	9.37	9.12	9.03	8.86	9.44	9.43	8.49	9.49	10.68	10.67	11.26
CAL YR 2000	MAX 10.94											
WTR YR 2001	MAX 11.26											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

WELL NUMBER.--275843082474201. Garden Street Triangle Well at Clearwater, FL.

LOCATION.--Lat 27°58'43", long 82°47'42", in NE ¼ NE ¼ 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. Owner: City of Clearwater.

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

WELL CHARACTERISTICS.--Drilled, unused public supply, 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.18	5.67	5.11	5.23	5.05	5.40	5.71	4.97	4.65	5.89	6.52	5.82
10	5.32	6.00	5.55	5.00	5.24	5.65	5.57	5.00	4.82	5.78	6.28	6.10
15	6.03	5.57	5.59	5.03	5.03	5.70	5.50	4.71	4.77	6.03	6.09	6.38
20	5.82	5.45	5.04	5.40	5.00	5.50	5.12	4.88	4.63	6.10	6.16	6.86
25	5.60	5.96	4.80	4.85	5.31	5.48	5.02	5.00	5.25	6.46	6.03	6.70
EOM	5.71	5.40	5.07	5.18	5.10	5.89	4.84	4.68	5.69	5.99	5.96	6.32
MAX	6.30	6.01	5.82	5.49	5.39	5.89	5.72	5.08	5.69	6.71	6.65	7.00
CAL YR 2000	MAX 7.03											
WTR YR 2001	MAX 7.00											

WELL NUMBER.--280118082434501. ROMP TR 14-3 Suwannee Well near Dunedin, FL.

LOCATION.--Lat 28°01'18", long 82°43'45", in SW ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

AQUIFER.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
06...	1210	8.54	11...	1400	6.97
DEC			JUL		
01...	1024	7.42	13...	1000	8.46
JAN			AUG		
26...	1151	6.81	24...	1241	8.37
APR					
06...	1540	7.88			

PINELLAS COUNTY--Continued

WELL NUMBER.--280118082434502. ROMP TR 14-3 Tampa Well near Dunedin, FL.

LOCATION.--Lat 28°01'18", long 82°43'45", in SW ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

AQUIFER.--Tampa limestone of Miocene Age, Geologic Unit 112 TAMP.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1212	8.49	MAY 14...	1405	6.95
DEC 01...	1030	7.38	JUL 13...	1010	8.43
JAN 26...	1155	6.79	AUG 24...	1245	8.33
APR 06...	1545	7.85	SEP 24...	0847	8.37

WELL NUMBER.--280118082434503. ROMP TR 14-3 NRSW Well near Dunedin, FL.

LOCATION.--Lat 28°01'18", long 82°43'45", in SW ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	91.79	90.55	90.08	89.65	89.60	89.47	90.37	89.56	89.02	90.75	91.17	90.61
10	---	90.43	89.97	89.61	89.63	89.51	90.30	89.45	89.65	90.65	90.96	90.55
15	91.18	90.40	89.89	89.56	89.60	89.41	90.13	89.33	89.58	90.94	90.77	92.89
20	91.05	90.27	89.84	89.52	89.51	89.66	89.94	89.25	89.41	90.93	90.58	92.17
25	90.88	90.21	89.77	89.48	89.40	89.80	89.79	89.16	89.82	91.61	90.86	91.85
EOM	90.68	90.21	89.72	89.40	89.38	90.33	89.67	89.07	90.68	91.25	90.63	91.63
MAX	92.02	90.67	90.16	89.70	89.64	90.33	90.40	89.65	90.68	91.61	91.20	92.89
CAL YR 2000	MAX 93.85											
WTR YR 2001	MAX 92.89											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

WELL NUMBER.--280132082452801. ROMP TR 14-2 Ocala Well near Dunedin, FL.

LOCATION.--Lat 28°01'32", long 82°45'28", in SE ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

AQUIFER.--Ocala limestone of Eocene Age, Geologic Unit 124 OCAL.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1145	2.83	MAY 14...	1015	1.29
DEC 01...	1110	1.89	JUL 13...	1100	2.71
JAN 26...	1115	1.10	AUG 24...	1037	2.60
APR 06...	1340	2.13	SEP 24...	1320	3.08

WELL NUMBER.--280132082452802. ROMP TR 14-2 Tampa Well near Dunedin, FL.

LOCATION.--Lat 28°01'32", long 82°45'28", in SE ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

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

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1150	5.58	MAY 14...	1020	3.76
DEC 01...	1104	4.74	JUL 13...	1105	5.27
JAN 26...	1112	3.69	AUG 24...	1040	5.22
APR 06...	1345	4.68	SEP 24...	1315	5.74

PINELLAS COUNTY--Continued

WELL NUMBER.--280132082452803. ROMP TR 14-2 NRSD Well near Dunedin, FL.

LOCATION.--Lat 28°01'32", long 82°45'28", in SE ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.74	47.76	47.48	47.24	47.41	47.68	48.25	47.34	46.50	47.56	48.23	47.27
10	48.52	47.66	47.42	47.21	47.79	47.67	48.32	47.15	46.68	47.64	48.17	47.24
15	48.32	47.61	47.40	47.21	47.91	47.59	48.12	47.00	46.46	47.75	47.89	49.28
20	48.16	47.56	47.36	47.18	47.85	47.67	47.87	46.88	46.34	47.72	47.68	49.03
25	48.00	47.53	47.31	47.15	47.72	47.72	47.67	46.73	46.73	47.99	47.60	48.83
EOM	47.86	47.54	47.26	47.10	47.63	48.26	47.51	46.58	47.22	48.13	47.44	48.71
MAX	48.93	47.83	47.52	47.26	47.93	48.26	48.33	47.49	47.22	48.14	48.24	49.28
CAL YR 2000	MAX 49.64											
WTR YR 2001	MAX 49.28											

WELL NUMBER.--280734082442101. ROMP TR 15-3 Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°07'34", long 82°44'21", in NW ¼ NE ¼ 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. Owner: Southwest Florida Water Management District.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.09	4.74	4.40	4.55	4.07	4.44	4.51	4.20	4.27	4.96	---	5.19
10	4.60	5.35	5.17	4.46	4.29	5.07	4.52	4.61	4.05	5.04	---	5.29
15	5.03	5.12	4.91	4.13	3.91	4.72	4.35	3.91	3.75	5.04	---	5.53
20	4.87	4.81	4.41	4.25	4.36	4.48	4.34	4.11	4.26	5.17	---	5.59
25	4.88	5.74	4.32	4.29	4.39	4.44	4.43	4.62	4.32	---	4.93	5.64
EOM	4.90	4.82	3.95	4.25	4.20	4.52	4.05	4.01	4.64	---	4.96	5.09
MAX	5.16	5.74	5.38	4.96	4.54	5.07	4.70	4.62	4.64	5.90	4.96	5.69
CAL YR 2000	MAX 5.95											
WTR YR 2001	MAX 5.90											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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", in NE ¼ NW ¼ 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. Owner: Southwest Florida Water Management District.

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

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 current year (periodic).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.69 ft NGVD, Aug. 15, 2000; lowest measured, 1.96 ft NGVD, Jan. 26, 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1100	3.76	MAY 14...	0905	2.33
NOV 30...	1450	2.94	JUL 12...	1500	4.00
JAN 26...	1017	1.96	AUG 24...	0950	3.24
APR 06...	1230	3.09	SEP 25...	1458	3.91

WELL NUMBER.--280753082465201. ROMP TR 15-1 Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°07'53", long 82°46'52", in NW ¼ SW ¼ 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. Owner: Southwest Florida Water Management District.

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

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 current year (periodic).

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 06...	1115	3.04	MAY 14...	0920	1.79
NOV 30...	1510	2.27	JUL 12...	1510	3.28
JAN 26...	1030	1.32	AUG 24...	1002	2.63
APR 06...	1253	2.48	SEP 25...	1434	2.93

PINELLAS COUNTY--Continued

WELL NUMBER.--280851082401301. Eldridge-Wilde Well 2A near Tarpon Springs, FL.

LOCATION.--Lat 28°08'51", long 82°40'13", in NE ¼ SE ¼ sec.11, 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 120 FLRD.

ELEVATION RECORDS

WELL CHARACTERISTICS.--Drilled, abandoned artesian production well, diameter 12 in., depth 450 ft, cased to 85 ft.

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

DATUM.--Land-surface datum is 26.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby public supply wells. Extremes for period of record are comprised of elevations that occurred during period of daily record.

PERIOD OF RECORD.--May 1971 to September 1991 (periodic); January 2000 to September 2001 (incomplete), discontinued. Records of water levels prior to January 2000 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum water level, 18.33 ft NGVD, Aug. 31, 2001; minimum, 1.69 ft NGVD, June 22, 2000.

ELEVATION (FEET NGVD), PERIOD JANUARY TO SEPTEMBER 2000

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	9.15	8.14	5.93	4.65
2	---	---	---	---	---	---	---	---	9.55	7.13	6.14	5.53
3	---	---	---	---	---	---	---	---	9.86	8.76	6.93	5.57
4	---	---	---	---	---	---	---	---	10.03	9.63	6.94	5.88
5	---	---	---	---	---	---	---	---	10.21	10.01	6.37	5.59
6	---	---	---	---	---	---	---	---	10.39	10.11	7.45	6.37
7	---	---	---	---	---	---	---	---	10.21	10.02	6.91	4.81
8	---	---	---	---	---	---	---	---	10.11	8.21	5.13	4.50
9	---	---	---	---	---	---	---	---	9.10	8.45	6.45	5.13
10	---	---	---	---	---	---	---	---	8.74	8.36	6.69	6.23
11	---	---	---	---	---	---	---	---	8.52	8.14	6.68	5.88
12	---	---	---	---	---	---	---	---	8.41	7.21	6.63	6.19
13	---	---	---	---	---	---	---	---	7.31	6.72	---	---
14	---	---	---	---	---	---	---	---	8.49	6.97	---	---
15	---	---	---	---	---	---	---	---	8.57	7.44	---	---
16	---	---	---	---	---	---	---	---	7.97	7.39	---	---
17	---	---	---	---	---	---	---	---	9.08	7.79	---	---
18	---	---	---	---	---	---	---	---	9.36	8.73	---	---
19	---	---	---	---	---	---	---	---	8.99	7.36	---	---
20	---	---	---	---	---	---	---	---	7.36	6.88	---	---
21	---	---	---	---	---	---	---	---	8.16	6.90	---	---
22	---	---	---	---	---	---	---	---	7.14	5.77	---	---
23	---	---	---	---	---	---	---	---	5.94	5.17	6.62	5.04
24	---	---	---	---	---	---	---	---	7.44	5.17	8.06	6.56
25	---	---	---	---	---	---	---	---	7.17	6.46	8.13	7.13
26	---	---	---	---	---	---	9.02	8.80	6.87	5.62	7.13	5.41
27	---	---	---	---	---	---	9.17	8.71	5.62	4.93	6.29	5.13
28	---	---	---	---	---	---	9.72	8.78	5.24	4.85	6.49	3.96
29	---	---	---	---	---	---	9.86	9.54	5.31	4.34	6.76	5.81
30	---	---	---	---	---	---	9.54	8.48	---	---	7.01	5.94
31	---	---	---	---	---	---	9.05	8.65	---	---	7.09	6.27
MONTH	---	---	---	---	---	---	9.86	8.48	10.39	4.34	8.13	3.96

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

280851082401301 Eldridge-Wilde Well 2A near Tarpon Springs, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2000 to September 2001 (incomplete), discontinued.

INSTRUMENTATION.--Water-quality monitor consisting of specific conductance and temperature sensor located 200 ft and 340 ft below land-surface.

REMARKS.--Interruptions in record were due to malfunctions of the equipment. Water-quality parameters affected by pumping of nearby public-supply wells.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE.--Top sensor maximum, 884 microsiemens, Apr. 25, 2000; bottom sensor maximum, 825 microsiemens, June 23, 24, 2001; top sensor minimum, 504 microsiemens, Sept. 28, 2000; bottom sensor minimum, 506 microsiemens, Oct. 12, 2000.
 TEMPERATURE.--Top sensor maximum, 24.7°C, many days 2001; bottom sensor maximum, 24.7°C, many days 2000; top sensor minimum, 23.9°C, many days 2000, 2001; bottom sensor minimum, 24.4°C, Aug. 23, 2000, many days 2001.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 2000
 (200 FT BELOW LAND-SURFACE)

DAY	MAX OCTOBER	MIN OCTOBER	MAX NOVEMBER	MIN NOVEMBER	MAX DECEMBER	MIN DECEMBER	MAX JANUARY	MIN JANUARY	MAX FEBRUARY	MIN FEBRUARY	MAX MARCH	MIN MARCH
1	---	---	---	---	---	---	---	---	556	552	553	550
2	---	---	---	---	---	---	---	---	555	549	553	550
3	---	---	---	---	---	---	---	---	556	554	552	546
4	---	---	---	---	---	---	---	---	555	554	552	548
5	---	---	---	---	---	---	---	---	554	553	554	544
6	---	---	---	---	---	---	---	---	555	554	544	526
7	---	---	---	---	---	---	---	---	556	555	680	540
8	---	---	---	---	---	---	---	---	556	554	640	540
9	---	---	---	---	---	---	---	---	554	549	548	542
10	---	---	---	---	---	---	---	---	554	552	548	545
11	---	---	---	---	---	---	---	---	556	552	545	532
12	---	---	---	---	---	---	---	---	556	553	542	532
13	---	---	---	---	---	---	---	---	556	550	---	---
14	---	---	---	---	---	---	---	---	554	550	---	---
15	---	---	---	---	---	---	---	---	554	550	---	---
16	---	---	---	---	---	---	---	---	552	541	---	---
17	---	---	---	---	---	---	---	---	553	549	---	---
18	---	---	---	---	---	---	---	---	554	552	---	---
19	---	---	---	---	---	---	---	---	553	549	---	---
20	---	---	---	---	---	---	---	---	553	549	---	---
21	---	---	---	---	---	---	---	---	553	546	---	---
22	---	---	---	---	---	---	---	---	552	550	---	---
23	---	---	---	---	---	---	---	---	552	547	548	543
24	---	---	---	---	---	---	---	---	552	529	550	542
25	---	---	---	---	---	---	---	---	550	537	542	528
26	---	---	---	---	---	---	549	541	553	550	541	528
27	---	---	---	---	---	---	552	548	553	551	542	535
28	---	---	---	---	---	---	553	550	553	551	540	526
29	---	---	---	---	---	---	553	551	554	550	732	526
30	---	---	---	---	---	---	554	550	---	---	795	728
31	---	---	---	---	---	---	556	552	---	---	728	539
MONTH	---	---	---	---	---	---	556	541	556	529	795	526

PINELLAS COUNTY--Continued

WELL NUMBER.--280859082405301. Eldridge-Wilde Well 201M near Tarpon Springs, FL.

LOCATION.--Lat 28°08'59", long 82°40'53", in SW ¼ NW ¼ sec.11, 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 120 FLRD.

ELEVATION RECORDS

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 705 ft, cased to 147 ft.

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

DATUM.--Land-surface datum is 22.58 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.20 ft above land-surface datum.

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

PERIOD OF RECORD.--January 2000 to September 2001 (incomplete), discontinued.

EXTREMES FOR PERIOD OF RECORD.--Maximum water level, 17.64 ft NGVD, Sept. 24, 2001; minimum, 5.48 ft NGVD, June 6, 7, 2000.

ELEVATION (FEET NGVD), PERIOD JANUARY TO SEPTEMBER 2000

DAY	MAX OCTOBER	MIN	MAX NOVEMBER	MIN	MAX DECEMBER	MIN	MAX JANUARY	MIN	MAX FEBRUARY	MIN	MAX MARCH	MIN
1	---	---	---	---	---	---	---	---	12.39	12.23	9.93	9.65
2	---	---	---	---	---	---	---	---	12.51	12.38	10.07	9.91
3	---	---	---	---	---	---	---	---	12.67	11.22	10.40	10.05
4	---	---	---	---	---	---	---	---	12.82	12.67	10.44	10.17
5	---	---	---	---	---	---	---	---	12.88	12.77	10.17	9.85
6	---	---	---	---	---	---	---	---	12.87	12.78	10.51	9.94
7	---	---	---	---	---	---	---	---	12.85	12.75	10.43	9.71
8	---	---	---	---	---	---	---	---	12.75	12.26	9.71	9.54
9	---	---	---	---	---	---	---	---	12.31	12.20	---	---
10	---	---	---	---	---	---	---	---	12.27	12.19	10.60	10.36
11	---	---	---	---	---	---	---	---	12.19	11.99	10.49	10.00
12	---	---	---	---	---	---	---	---	12.07	11.74	10.08	9.89
13	---	---	---	---	---	---	---	---	11.74	11.25	9.97	9.89
14	---	---	---	---	---	---	---	---	11.92	11.29	---	---
15	---	---	---	---	---	---	---	---	12.02	11.89	---	---
16	---	---	---	---	---	---	---	---	12.05	11.87	---	---
17	---	---	---	---	---	---	---	---	12.13	11.83	---	---
18	---	---	---	---	---	---	---	---	12.32	12.11	---	---
19	---	---	---	---	---	---	---	---	12.45	11.69	---	---
20	---	---	---	---	---	---	---	---	11.69	10.98	---	---
21	---	---	---	---	---	---	---	---	11.48	10.95	---	---
22	---	---	---	---	---	---	---	---	11.22	10.53	---	---
23	---	---	---	---	---	---	---	---	10.53	10.12	9.99	9.29
24	---	---	---	---	---	---	---	---	10.91	10.11	10.59	9.99
25	---	---	---	---	---	---	---	---	11.23	10.91	10.67	10.43
26	---	---	---	---	---	---	12.55	12.35	11.17	10.65	10.43	9.67
27	---	---	---	---	---	---	12.42	12.25	10.65	10.17	9.83	9.58
28	---	---	---	---	---	---	12.46	12.21	10.23	10.03	9.97	9.60
29	---	---	---	---	---	---	12.55	12.39	10.11	9.76	9.94	9.70
30	---	---	---	---	---	---	12.39	12.00	---	---	10.15	9.78
31	---	---	---	---	---	---	12.27	11.95	---	---	10.25	10.09
MONTH	---	---	---	---	---	---	12.55	11.95	12.88	9.76	10.67	9.29

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

280859082405301 Eldridge-Wilde Well 201M near Tarpon Springs, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2000 to September 2001 (incomplete), discontinued.

INSTRUMENTATION.--Water-quality monitor consisting of specific conductance and temperature sensors located 200 ft, 500 ft, and 600 ft below land-surface.

REMARKS.--Interruptions in record were due to malfunctions of the equipment. Water-quality parameters affected by pumping of nearby public-supply wells.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE.--Top sensor maximum, 654 microsiemens, July 17, 2000; middle sensor maximum, 748 microsiemens, May 20, 2001; bottom sensor maximum, 676 microsiemens, July 13, 14, 2000; top sensor minimum, 386 microsiemens, Aug. 12, 2001; middle sensor minimum, 418 microsiemens, Aug. 10, 2001; bottom sensor minimum, 590 microsiemens, Mar. 5, 2000.

TEMPERATURE.--Top sensor maximum, 25.4°C, many days 2000; middle sensor maximum, 25.7°C, many days 2000, 2001; bottom sensor maximum, 24.1°C, May 11, 14, June 9, 2000; top sensor minimum, 24.6°C, Feb. 11, 2001; middle sensor minimum, 24.9°C, Jan. 13, 14, Sept. 23-25, 2001; bottom sensor minimum, 23.4°C, June 6, 2000.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 2000
(200 FT BELOW LAND-SURFACE)

DAY	MAX OCTOBER	MIN OCTOBER	MAX NOVEMBER	MIN NOVEMBER	MAX DECEMBER	MIN DECEMBER	MAX JANUARY	MIN JANUARY	MAX FEBRUARY	MIN FEBRUARY	MAX MARCH	MIN MARCH
1	---	---	---	---	---	---	---	---	---	---	617	614
2	---	---	---	---	---	---	---	---	---	---	617	613
3	---	---	---	---	---	---	---	---	---	---	619	613
4	---	---	---	---	---	---	---	---	591	583	622	618
5	---	---	---	---	---	---	---	---	602	591	620	618
6	---	---	---	---	---	---	---	---	609	602	623	617
7	---	---	---	---	---	---	---	---	612	609	624	618
8	---	---	---	---	---	---	---	---	614	611	627	621
9	---	---	---	---	---	---	---	---	621	613	---	---
10	---	---	---	---	---	---	---	---	622	617	624	616
11	---	---	---	---	---	---	---	---	620	619	626	622
12	---	---	---	---	---	---	---	---	621	618	626	623
13	---	---	---	---	---	---	---	---	621	612	625	622
14	---	---	---	---	---	---	---	---	616	609	---	---
15	---	---	---	---	---	---	---	---	613	609	---	---
16	---	---	---	---	---	---	---	---	623	613	---	---
17	---	---	---	---	---	---	---	---	622	618	---	---
18	---	---	---	---	---	---	---	---	619	618	---	---
19	---	---	---	---	---	---	---	---	628	617	---	---
20	---	---	---	---	---	---	---	---	631	618	---	---
21	---	---	---	---	---	---	---	---	622	617	---	---
22	---	---	---	---	---	---	---	---	622	615	---	---
23	---	---	---	---	---	---	---	---	620	614	575	565
24	---	---	---	---	---	---	---	---	614	610	587	575
25	---	---	---	---	---	---	---	---	616	610	600	587
26	---	---	---	---	---	---	---	---	626	616	606	599
27	---	---	---	---	---	---	---	---	632	623	608	605
28	---	---	---	---	---	---	---	---	628	620	607	605
29	---	---	---	---	---	---	---	---	620	616	607	603
30	---	---	---	---	---	---	---	---	---	---	608	602
31	---	---	---	---	---	---	---	---	---	---	611	607
MONTH	---	---	---	---	---	---	---	---	632	583	627	565

PINELLAS COUNTY--Continued

WELL NUMBER.--280902082400601. Eldridge-Wilde Well 3B near Tarpon Springs, FL.

LOCATION.--Lat 28°09'02", long 82°40'06", in SE ¼ NE ¼ sec.11, 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 120 FLRD.

ELEVATION RECORDS

WELL CHARACTERISTICS.--Drilled, abandoned artesian production well, diameter 12 in., depth 410 ft, cased to 78 ft.

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

DATUM.--Land-surface datum is 27.23 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter floor, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby public supply wells. Extremes for period of record are comprised of elevations that occurred during period of daily record.

PERIOD OF RECORD.--May 1971 to September 1991 (periodic); December 1999 to September 2001 (incomplete), discontinued. Records of water levels prior to December 1999 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum water level, 18.65 ft NGVD, Aug. 31, 2001; minimum, 0.59 ft NGVD, Apr. 26, 2000.

ELEVATION (FEET NGVD), PERIOD DECEMBER 1999 TO SEPTEMBER 2000

DAY	MAX OCTOBER	MIN OCTOBER	MAX NOVEMBER	MIN NOVEMBER	MAX DECEMBER	MIN DECEMBER	MAX JANUARY	MIN JANUARY	MAX FEBRUARY	MIN FEBRUARY	MAX MARCH	MIN MARCH
1	---	---	---	---	---	---	10.70	9.89	9.25	7.13	5.36	2.73
2	---	---	---	---	---	---	10.05	9.63	9.29	5.48	5.44	4.30
3	---	---	---	---	---	---	10.13	9.97	9.70	8.67	5.65	4.33
4	---	---	---	---	---	---	10.17	9.21	9.70	8.95	5.72	5.00
5	---	---	---	---	---	---	9.56	9.02	9.75	9.42	5.00	4.46
6	---	---	---	---	---	---	10.79	7.71	9.94	9.60	6.03	4.86
7	---	---	---	---	---	---	11.55	10.25	9.72	9.43	5.34	3.25
8	---	---	---	---	---	---	10.57	9.85	9.62	6.72	4.10	2.62
9	---	---	---	---	---	---	10.11	9.22	8.29	7.11	5.28	4.10
10	---	---	---	---	13.02	11.64	10.53	10.07	8.21	7.32	5.43	4.43
11	---	---	---	---	12.15	10.43	10.41	7.62	7.94	7.46	5.10	4.04
12	---	---	---	---	10.43	9.99	---	---	7.86	6.50	5.40	4.58
13	---	---	---	---	10.89	10.08	---	---	6.70	5.99	---	---
14	---	---	---	---	10.94	9.89	9.48	8.87	7.94	6.36	---	---
15	---	---	---	---	10.73	9.38	8.95	8.29	8.03	5.58	---	---
16	---	---	---	---	11.07	10.11	8.29	7.98	7.37	5.77	---	---
17	---	---	---	---	11.34	10.84	9.03	8.11	8.56	7.20	---	---
18	---	---	---	---	11.53	10.73	9.13	8.55	8.86	8.30	---	---
19	---	---	---	---	11.60	11.29	8.75	6.63	8.65	7.00	---	---
20	---	---	---	---	11.87	11.04	7.87	7.48	7.00	5.75	---	---
21	---	---	---	---	12.22	10.29	9.34	7.81	7.54	5.96	---	---
22	---	---	---	---	12.73	12.22	9.43	8.66	6.00	3.50	---	---
23	---	---	---	---	---	---	8.66	7.90	4.43	2.96	6.22	4.17
24	---	---	---	---	---	---	8.61	7.94	5.70	3.86	7.01	5.80
25	---	---	---	---	10.30	9.79	8.65	7.09	6.08	5.16	6.92	5.66
26	---	---	---	---	10.65	9.43	8.63	8.31	5.79	4.38	5.73	3.72
27	---	---	---	---	11.55	10.63	8.97	8.13	4.38	3.30	4.92	3.48
28	---	---	---	---	11.62	9.04	8.97	8.35	4.23	3.20	5.14	1.84
29	---	---	---	---	11.45	10.97	9.02	8.65	4.32	2.30	4.87	3.22
30	---	---	---	---	11.89	10.97	8.78	8.29	---	---	6.01	3.86
31	---	---	---	---	11.38	10.70	9.15	8.71	---	---	7.05	5.50
MONTH	---	---	---	---	13.02	9.04	11.55	6.63	9.94	2.30	7.05	1.84

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

280902082400601 Eldridge-Wilde Well 3B near Tarpon Springs, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2000 to September 2001 (incomplete), discontinued.

INSTRUMENTATION.--Water-quality monitor consisting of specific conductance and temperature sensor located 100 ft and 400 ft below land-surface.

REMARKS.--Interruptions in record were due to malfunctions of the equipment. Water-quality parameters affected by pumping of nearby public-supply wells.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE.--Top sensor maximum, 798 microsiemens, June 13, Oct. 3, 2000; bottom sensor maximum, 866 microsiemens, Apr. 2, 2001; top sensor minimum, 387 microsiemens, Oct. 19, 2000; bottom sensor minimum, 792 microsiemens, Feb. 20, 2001.

TEMPERATURE.--Top sensor maximum, 25.5°C, many days 2000, 2001; bottom sensor maximum, 25.7°C, many days 2000, 2001; top sensor minimum, 24.3°C, June 24, 2000; bottom sensor minimum, 25.6°C, many days 2000, 2001.

 SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 2000
 (100 FT BELOW LAND-SURFACE)

DAY	MAX OCTOBER	MIN OCTOBER	MAX NOVEMBER	MIN NOVEMBER	MAX DECEMBER	MIN DECEMBER	MAX JANUARY	MIN JANUARY	MAX FEBRUARY	MIN FEBRUARY	MAX MARCH	MIN MARCH
1	---	---	---	---	---	---	---	---	749	469	770	768
2	---	---	---	---	---	---	---	---	---	---	772	770
3	---	---	---	---	---	---	---	---	746	706	773	771
4	---	---	---	---	---	---	---	---	758	745	772	769
5	---	---	---	---	---	---	---	---	758	752	773	771
6	---	---	---	---	---	---	---	---	752	748	773	771
7	---	---	---	---	---	---	---	---	752	750	776	773
8	---	---	---	---	---	---	---	---	756	749	775	773
9	---	---	---	---	---	---	---	---	756	747	773	772
10	---	---	---	---	---	---	---	---	752	747	772	770
11	---	---	---	---	---	---	---	---	753	750	775	771
12	---	---	---	---	---	---	---	---	754	751	776	771
13	---	---	---	---	---	---	---	---	759	753	---	---
14	---	---	---	---	---	---	---	---	758	754	---	---
15	---	---	---	---	---	---	---	---	761	754	---	---
16	---	---	---	---	---	---	---	---	757	755	---	---
17	---	---	---	---	---	---	---	---	757	754	---	---
18	---	---	---	---	---	---	---	---	760	756	---	---
19	---	---	---	---	---	---	---	---	760	745	---	---
20	---	---	---	---	---	---	---	---	767	750	---	---
21	---	---	---	---	---	---	---	---	764	762	---	---
22	---	---	---	---	---	---	---	---	766	763	---	---
23	---	---	---	---	---	---	---	---	768	766	773	769
24	---	---	---	---	---	---	---	---	768	765	769	766
25	---	---	---	---	---	---	---	---	766	763	771	766
26	---	---	---	---	---	---	742	735	768	764	772	769
27	---	---	---	---	---	---	739	736	768	767	771	770
28	---	---	---	---	---	---	739	739	769	767	772	770
29	---	---	---	---	---	---	754	739	770	767	772	771
30	---	---	---	---	---	---	755	637	---	---	773	772
31	---	---	---	---	---	---	637	495	---	---	772	737
MONTH	---	---	---	---	---	---	755	495	770	469	776	737

PINELLAS COUNTY--Continued

WELL NUMBER.--280907082424801. Tarpon Road Deep Well near Tarpon Springs, FL.

LOCATION.--Lat 28°09'07", long 82°42'48", in SW ¼ NW ¼ 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. Owner: U. S. Geological Survey.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.41	9.57	9.53	9.39	9.42	9.36	9.61	8.86	8.33	10.13	11.25	10.29
10	10.09	9.84	9.57	9.13	9.29	9.41	9.38	8.79	8.26	10.12	10.97	10.50
15	10.03	9.65	9.61	9.30	9.07	9.16	9.37	8.56	8.19	10.50	10.63	11.27
20	10.01	9.66	9.27	9.50	9.03	9.43	9.10	8.38	8.33	10.55	10.65	11.21
25	9.82	9.98	9.17	8.90	8.93	9.20	9.04	8.57	9.26	11.05	10.43	11.15
EOM	9.68	9.71	9.14	9.25	9.00	9.81	8.79	8.29	9.84	10.87	10.68	10.95
MAX	10.46	10.00	9.76	9.50	9.44	9.81	9.75	8.86	9.84	11.15	11.36	11.35
CAL YR 2000	MAX 11.12											
WTR YR 2001	MAX 11.36											

WELL NUMBER.--280907082424802. Tarpon Road Shallow Well near Tarpon Springs, FL.

LOCATION.--Lat 28°09'07", long 82°42'48", in SW ¼ NW ¼ 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. Owner: U.S. Geological Survey.

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

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 05...	1305	10.59	MAY 14...	0825	DRY
NOV 30...	1410	10.49	JUL 12...	1420	10.21
JAN 26...	0908	DRY	AUG 24...	0912	10.51
APR 06...	1136	10.30			

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

PINELLAS COUNTY--Continued

WELL NUMBER.--281022082400201. Eldridge-Wilde Deep Well N3 near Tarpon Springs, FL.

LOCATION.--Lat 28°10'22", long 82°40'02", in NW ¼ NW ¼ 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. Owner: Pinellas County.

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

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 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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.67	14.52	14.75	16.50	14.93	11.45	12.40	11.55	9.76	12.73	15.81	15.99
10	16.01	14.64	14.09	15.26	13.55	12.51	11.84	11.23	10.33	13.45	17.25	15.24
15	14.85	14.18	15.91	14.52	12.68	12.07	12.72	10.96	10.58	13.35	15.98	17.51
20	15.15	14.29	14.36	15.38	11.92	12.07	11.28	10.32	9.98	13.09	15.02	18.53
25	14.81	15.21	14.41	13.75	11.88	12.86	10.49	11.14	10.97	14.51	16.58	18.44
EOM	14.57	15.29	15.57	13.74	11.44	12.93	10.67	9.53	12.49	15.28	19.00	17.22
MAX	16.53	15.32	16.01	16.50	15.72	13.03	13.28	11.55	12.49	15.85	19.00	19.25
CAL YR 2000	MAX 16.53											
WTR YR 2001	MAX 19.25											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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PINELLAS COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
273655082440901	FT DESOTO PARK NEAR PASS-A-GRILLE BEACH FL	20010516	9.67
		20010925	12.83
274614082425205	BEAR CREEK B5 INJECTION MON 300 WELL NR ST PETE FL	20010516	8.42
		20010925	11.89
274624082383701	7462382437 MIRROR LAKE CTY WELL NEAR GULFPORT FL	20010515	7.97
		20010925	11.65
274848082461201	WAR VETS MEM PK DEEP WELL 1 NEAR MEDEIRA BEACH FL	20010515	5.20
		20010925	7.47
274859082390701	ROBERTS COMM CTR DEEP NEAR LEALMAN FL	20010516	5.29
		20010925	8.83
274904082423601	NO 749242344114 NEAR LEALMAN FL	20010925	11.92
274937082480801	TIDES GOLF DEEP WELL NEAR PINELLAS PARK FL	20010515	4.45
		20010925	7.15
275121082412601	TAMERAK DEEP WELL NEAR PINELLAS PARK FL	20010518	5.13
		20010925	8.32
275241082503901	MK C1 NEAR INDIAN ROCKS BEACH FL	20010515	5.02
		20010925	7.82
275521082444301	ST CATHERINE DEEP WELL NEAR HIGH POINT FL	20010514	4.04
		20010924	6.52
275604082431701	COVE CAY DEEP WELL NEAR HIGH POINT FL	20010515	4.21
		20010924	6.38
275753082435301	CLE-DUN DEEP WELL 31 NEAR CLEARWATER FL	20010514	2.81
		20010924	5.60
275842082430301	MISSION HILLS NEAR SAFETY HARBOR FL	20010514	9.71
		20010924	12.44
280002082412602	ROMP TR 14-1 TAMPA WELL NEAR SAFETY HARBOR FL	20010514	6.70
		20010924	9.63
280129082445501	SWFWMD 6 IN TEST WELL 1 AT DUNEDIN FL	20010514	3.94
		20010924	4.96
280134082454801	DUNEDIN 10A AT DUNEDIN FL	20010514	3.55
		20010924	5.51
280446082390701	EAST LAKE DEEP WELL 17 NEAR TARPOPN SPRINGS FL	20010516	10.28
		20010926	14.46
280546082390701	EAST LAKE DEEP 14 NEAR OLDSMAR FL	20010516	12.46
		20010926	17.47
280632082455001	NW PINELLAS MTR DEEP NEAR TARPON SPRINGS FL	20010514	1.78
		20010925	3.14
280852082414301	NORTH LAKE TARPON NEAR TARPON SPRINGS FL	20010514	8.90
		20010925	13.53

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

PINELLAS COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
280856082401201	ELDRIDGE-WILDE 2S NEAR TARPON SPRINGS FL	20010514	9.16
		20010924	16.82

WATER RESOURCES DATA FOR FLORIDA, 2001
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KEY TO SITE LOCATIONS ON FIGURE 20

POLK COUNTY

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5	275815081444201	186
6	275959081552501	187
7	280229081325201	187
8	281532081345001	188
8	281532081345002	188

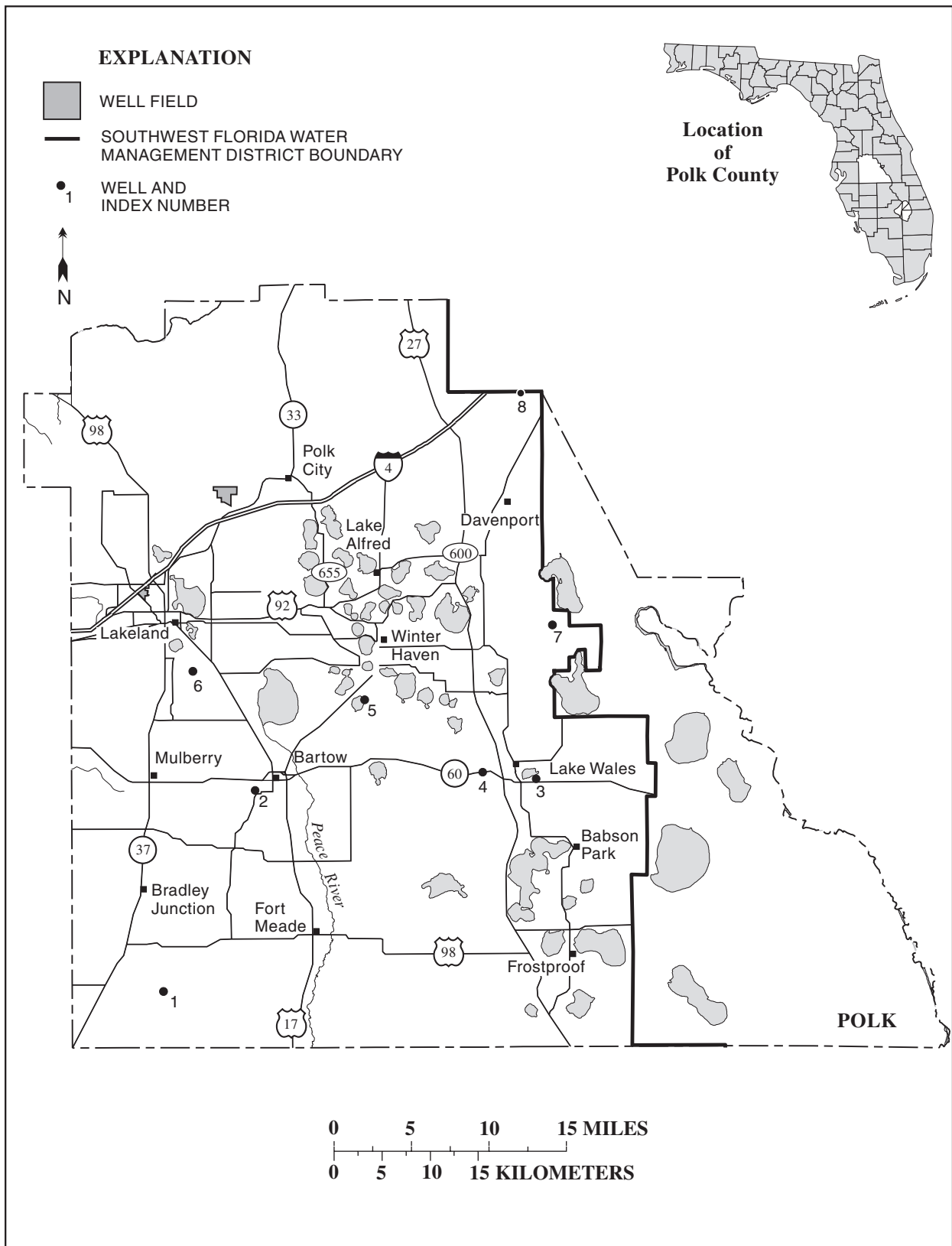


Figure 20.-- Location of wells in Polk County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENT

POLK COUNTY

WELL NUMBER.--274155081573201. Fort Green Springs Road Well near Bradley Junction, FL.

LOCATION.--Lat 27°41'55", long 81°57'32", in SE ¼ SE ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
NOV 01...	1744	53.10	MAY 14...	1726	38.68
DEC 19...	1335	48.64	JUN 05...	1730	38.14
FEB 13...	1705	44.41	AUG 08...	1440	59.20
APR 09...	0916	46.05	SEP 25...	1246	67.19

WELL NUMBER.--275314081514201. ROMP 59 Avon Park Well at Bartow, FL.

LOCATION.--Lat 27°53'14", long 81°51'42", in SE ¼ NE ¼ 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 124 AVPK.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	63.86	56.12	53.23	45.83	49.12	45.30	49.59	44.46	43.03	50.87	61.18	64.53
10	63.62	53.95	53.02	44.93	48.93	45.99	49.67	44.32	44.37	52.88	62.72	65.93
15	62.40	52.87	52.67	45.86	48.58	45.81	48.65	43.08	44.32	54.77	63.87	67.65
20	60.47	52.50	52.65	46.80	47.65	46.98	46.67	41.71	45.65	56.40	64.67	69.13
25	59.39	52.02	51.29	48.25	46.37	47.66	45.46	41.57	47.37	57.99	64.86	70.42
EOM	57.56	53.15	51.09	48.72	45.56	47.98	44.87	42.20	48.99	59.75	63.97	71.59
MAX	63.92	57.17	53.55	48.72	49.16	47.98	50.12	44.78	48.99	59.75	65.03	71.59
CAL YR 2000	MAX 66.29											
WTR YR 2001	MAX 71.59											

POLK COUNTY--Continued

WELL NUMBER.--275314081514202. ROMP 59 Hawthorn Well at Bartow, FL.

LOCATION.--Lat 27°53'14", long 81°51'42", in SE ¼ NE ¼ sec.12, T.30 S., R.24 E., Hydrologic Unit 03100101, 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 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	77.52	77.71	76.81	76.20	75.25	74.70	74.01	73.63	72.94	72.79	73.59	75.64
10	77.71	77.58	76.72	76.03	75.14	74.53	73.94	73.54	72.90	72.85	73.91	75.95
15	77.85	77.40	76.63	75.82	75.08	74.39	73.90	73.43	72.83	72.94	74.26	76.35
20	77.92	77.22	76.56	75.65	75.00	74.25	73.83	73.31	72.77	73.06	74.61	76.87
25	77.90	77.03	76.45	75.49	74.89	74.13	73.76	73.16	72.74	73.21	74.93	77.50
EOM	77.83	76.92	76.36	75.34	74.82	74.04	73.69	73.02	72.74	73.36	75.32	78.16
MAX	77.92	77.81	76.90	76.32	75.33	74.80	74.04	73.68	72.99	73.36	75.32	78.16
CAL YR 2000	MAX 82.35											
WTR YR 2001	MAX 78.16											

WELL NUMBER.--275314081514203. ROMP 59 Upper Hawthorn Well at Bartow, FL.

LOCATION.--Lat 27°53'14", long 81°51'42", in SE ¼ NE ¼ 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 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	80.80	79.67	78.96	78.05	77.55	77.13	76.90	76.30	76.54	77.67	80.10
10	---	80.53	79.62	78.56	77.96	77.44	77.19	76.79	76.28	76.60	78.21	80.45
15	---	80.21	79.50	78.37	77.92	77.36	77.15	76.74	76.26	76.73	78.56	80.98
20	81.41	80.02	79.40	78.31	77.85	77.27	76.97	76.59	76.30	76.93	79.05	81.81
25	81.27	79.92	79.25	78.15	77.74	77.13	77.06	76.44	76.32	77.07	79.37	82.49
EOM	80.97	79.74	79.11	78.17	77.69	77.16	76.93	76.28	76.40	77.31	79.85	83.26
MAX	81.50	80.94	79.73	79.07	78.14	77.66	77.19	76.94	76.40	77.31	79.85	83.26
CAL YR 2000	MAX 84.94											
WTR YR 2001	MAX 83.26											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENT

POLK COUNTY--Continued

WELL NUMBER.--275348081335701. ROMP 57A Ocala Well near Lake Wales, FL.

LOCATION.--Lat 27°53'48", long 81°33'55", in SE ¼ SE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.91	96.08	95.94	94.46	95.56	94.89	94.73	93.89	93.03	94.09	94.84	94.40
10	97.14	95.38	95.92	95.03	94.72	94.55	93.78	92.93	93.97	94.41	94.78	95.77
15	97.05	95.27	95.65	95.27	94.27	94.11	94.07	92.54	92.72	94.33	94.67	96.57
20	96.09	95.96	95.66	95.48	94.30	94.58	92.98	92.75	93.33	94.24	94.81	96.63
25	95.88	96.39	96.02	95.73	94.40	94.39	92.21	92.21	94.07	94.24	94.81	97.12
EOM	95.81	95.93	95.31	95.48	93.50	94.89	94.04	93.02	94.16	94.21	93.81	97.48
MAX	98.35	96.65	96.52	95.76	95.56	95.00	95.09	94.01	94.16	94.44	94.95	97.51
CAL YR 2000	MAX 99.92											
WTR YR 2001	MAX 98.35											

WELL NUMBER.--275348081335703. ROMP 57A NRSD Well near Lake Wales, FL.

LOCATION.--Lat 27°53'48", long 81°33'57", in SE ¼ SE ¼ 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 112 NRSD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
30...	1753	100.87	15...	1535	98.19
DEC			JUN		
18...	1332	100.27	04...	1618	97.82
FEB			AUG		
12...	1810	99.49	06...	1618	97.58
APR			SEP		
10...	0708	98.76	24...	1540	98.72

POLK COUNTY--Continued

WELL NUMBER.--275411081372001. ROMP 57 Floridan Well near Lake Wales, FL.

LOCATION.--Lat 27°54'11", long 81°37'20", in NE ¼ NE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	103.93	97.80	99.60	88.55	98.14	95.97	97.82	95.64	97.04	99.46	101.48	100.76
10	103.48	96.56	98.80	91.41	97.60	97.42	97.11	95.24	97.56	99.16	101.59	102.81
15	101.81	95.97	98.29	95.68	95.21	96.50	96.15	94.80	95.22	99.54	101.93	105.13
20	99.06	97.14	97.27	96.95	95.12	97.37	93.67	92.23	96.20	99.80	101.42	105.61
25	99.36	---	97.16	98.06	94.69	96.86	91.66	93.70	97.77	100.19	101.71	106.06
EOM	97.43	99.30	95.61	98.17	93.80	96.58	94.85	95.88	98.63	100.07	99.45	106.64
MAX	105.01	99.30	99.75	98.17	98.14	97.77	97.91	96.42	98.63	100.51	102.04	106.64
CAL YR 2000	MAX 105.01											
WTR YR 2001	MAX 106.64											

WELL NUMBER.--275411081372002. ROMP 57 Hawthorn Well near Lake Wales, FL.

LOCATION.--Lat 27°54'11", long 81°37'20", in NE ¼ NE ¼ 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 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	115.64	112.72	112.68	109.45	110.55	109.03	110.81	109.60	109.55	110.91	112.63	113.30
10	115.40	112.54	112.37	109.38	110.38	109.34	110.66	109.60	109.65	110.94	113.47	116.26
15	114.82	112.03	112.12	110.36	109.67	109.19	110.06	109.21	108.82	111.14	113.43	117.44
20	113.82	112.30	112.00	110.54	109.66	109.23	109.39	108.26	109.26	111.41	113.01	117.14
25	113.74	---	111.28	110.66	108.72	109.89	108.74	108.78	110.13	111.70	113.42	117.00
EOM	113.14	112.68	111.28	110.66	108.76	110.22	109.24	109.42	110.66	111.81	112.56	116.97
MAX	116.16	112.85	112.75	110.73	110.62	110.22	110.81	109.80	110.66	111.87	113.50	117.44
CAL YR 2000	MAX 116.44											
WTR YR 2001	MAX 117.44											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENT

POLK COUNTY--Continued

WELL NUMBER.--275411081372003. ROMP 57 NRSD Well near Lake Wales, FL.

LOCATION.--Lat 27°54'11", long 81°37'20", in NE ¼ NE ¼ 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 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 15 ft.

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

DATUM.--Land-surface datum is 128.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1.25 in. coupling, 2.66 ft above land-surface datum.

PERIOD OF RECORD.--August 1981 to current year (periodic). Prior to October 1990, published as ROMP 57-3 Shallow Well near Lake Wales.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 123.59 ft NGVD, Aug. 4, 1982; lowest measured, 114.62 ft NGVD, June 5, 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 31...	0640	119.46	MAY 15...	1441	114.96
NOV 28...	1216	118.22	JUN 05...	0713	114.62
DEC 18...	1413	117.68	AUG 07...	0656	118.28
FEB 12...	1842	116.30	SEP 24...	1604	122.11
APR 10...	0740	115.95			

WELL NUMBER.--275815081444201. Lake McLeod Shallow Well near Eagle Lake, FL.

LOCATION.--Lat 27°58'15", long 81°44'42", in SE ¼ SE ¼ sec.7, T.29 S., R.26 E., Hydrologic Unit 03100101, 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 111 NRSD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT 30...	1252	131.57	APR 10...	1645	130.19
DEC 18...	1017	130.01	JUN 04...	1135	128.49
FEB 12...	1453	129.16	AUG 06...	1255	133.28

POLK COUNTY--Continued

WELL NUMBER.--275959081552501. Sanlon Ranch Deep Well near Eaton Park, FL.

LOCATION.--Lat 27°59'59", long 81°55'25", in SW ¼ SW ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	89.76	85.20	84.04	81.65	81.44	79.38	80.56	78.18	76.46	79.88	86.09	89.13
10	89.35	84.39	83.94	80.29	81.50	79.48	80.95	77.69	76.87	80.82	87.28	90.05
15	88.82	83.93	83.78	80.23	81.16	79.66	80.45	77.36	77.06	81.82	88.20	91.39
20	87.77	83.50	83.93	80.31	80.71	79.76	79.50	76.55	77.09	82.72	89.08	92.27
25	86.88	83.67	83.02	80.71	80.24	79.90	79.08	76.05	78.13	83.81	89.35	93.40
EOM	86.00	83.81	83.24	81.05	79.83	80.10	78.52	76.04	79.05	84.92	89.04	94.41
MAX	89.76	85.81	84.06	82.99	81.55	80.10	81.02	78.55	79.05	84.92	89.37	94.41
CAL YR 2000	MAX 92.25											
WTR YR 2001	MAX 94.41											

WELL NUMBER.--280229081325201. Lake Hatchineha Road Well near Lake Hamilton, FL.

LOCATION.--Lat 28°02'29", long 81°32'52", in SE ¼ SE ¼ 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 120 FLRD.

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-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT			MAY		
30...	1704	77.34	15...	1630	75.91
DEC			JUN		
18...	1248	78.56	04...	1525	76.26
FEB			AUG		
12...	1734	77.12	06...	1538	78.79
APR			SEP		
10...	1353	76.30	24...	1428	82.75

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENT

POLK COUNTY--Continued

WELL NUMBER.--281532081345001. Loughman Deep Well near Loughman, FL.

LOCATION.--Lat 28°15'32", long 81°34'50", in NW ¼ NE ¼ 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	88.68	87.90	87.72	87.29	87.44	87.22	87.32	86.76	86.01	86.33	88.59	89.73
10	88.55	87.71	87.63	87.22	87.43	86.76	87.21	86.39	86.20	86.97	89.15	90.28
15	88.38	87.70	87.63	87.45	86.88	86.65	87.02	86.19	86.63	87.60	89.34	91.16
20	88.25	87.50	87.34	87.40	86.82	86.70	86.81	86.16	86.23	87.91	88.92	91.49
25	88.03	87.64	87.53	87.05	87.14	87.04	86.67	85.94	86.22	87.87	89.54	91.56
EOM	87.93	87.79	87.26	87.08	86.69	87.11	86.50	86.00	86.06	87.97	89.01	91.42
MAX	88.69	87.96	87.78	87.50	87.44	87.33	87.64	86.76	86.87	88.10	89.64	91.60
CAL YR 2000	MAX 89.34											
WTR YR 2001	MAX 91.60											

WELL NUMBER.--281532081345002. Loughman Shallow Well near Loughman, FL.

LOCATION.--Lat 28°15'32", long 81°34'50", in NW ¼ NE ¼ 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 Unit 112 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	89.97	89.65	89.33	89.05	88.90	88.79	88.90	88.71	88.46	88.42	89.54	91.34
10	89.99	89.58	89.28	89.01	88.86	88.76	88.95	88.67	88.43	88.45	90.12	92.12
15	89.97	89.52	89.24	88.98	88.84	88.74	88.94	88.64	88.41	88.69	90.63	94.13
20	89.90	89.46	89.18	88.94	88.82	88.73	88.90	88.60	88.48	88.99	90.83	94.66
25	89.82	89.40	89.14	88.90	88.81	88.70	88.86	88.55	88.52	89.17	91.07	94.34
EOM	89.71	89.37	89.09	88.89	88.78	88.77	88.78	88.49	88.46	89.35	91.16	94.04
MAX	89.99	89.70	89.36	89.08	88.90	88.79	88.95	88.76	88.52	89.35	91.16	94.78
CAL YR 2000	MAX 91.33											
WTR YR 2001	MAX 94.78											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
273851082031501	ROMP 40 AVON PARK WELL NEAR DUETTE FL	20010514	-0.08
		20010925	43.13
273851082031502	ROMP 40 HAWTHORN WELL NEAR DUETTE FL	20010514	124.08
		20010925	126.56
273913081331801	NEUMAN WEGUAR WELL 29 NEAR BEREAH FL	20010516	62.06
		20010925	83.96
274009081452202	MOBIL WELL UF5 HAWTHORN WELL NEAR BOWLING GREEN FL	20010514	52.52
		20010925	75.75
274108081474601	MOBILE WELL UF9 NORTH WELL NEAR FORT MEADE FL	20010514	41.73
		20010925	69.48
274134081401801	LASTINGER ROAD NEAR FORT MEADE FL	20010516	110.91
		20010925	122.96
274151081513201	GARDINIER WELL NEAR BOWLING GREEN FL	20010514	40.62
		20010925	68.97
274238081415801	MOBIL WELL UF 1 NORTH WELL NEAR FORT MEADE FL	20010516	62.34
		20010925	86.33
274432081493401	J.C.BARNETTE NEAR FORT MEADE FL	20010514	39.64
		20010925	67.07
274440081314801	COLEY WELL AT FROSTPROOF FL	20010521	67.22
		20010924	85.98
274522081303901	ROMP CL-2 FLORIDAN WELL NEAR FROSTPROOF FL	20010516	72.94
		20010925	82.88
274522081303902	ROMP CL-2 HAWTHORN WELL AT FROSTPROOF FL	20010516	74.06
		20010925	81.97
274545081342501	ROMP CL-3 FLORIDAN WELL NEAR FROSTPROOF FL	20010516	67.74
		20010925	85.94
274545081342502	CL-3 HAWTHORN WELL NEAR FROSTPROOF FL	20010516	67.50
		20010925	85.64
274547081470901	ROMP 45 HAWTHORN WELL AT FORT MEADE FL	20010514	46.46
		20010926	71.94
274547081470902	ROMP 45 SUWANNEE WELL AT FORT MEADE FL	20010514	40.99
		20010926	69.41
274730081333801	ROMP 55 FLORIDAN WELL NEAR BABSON PARK FL	20010516	69.77
		20010924	88.06
274841081480901	V. C. CORP OFFICE WELL AT HOMELAND FL	20010514	41.02
		20010926	69.38
274847081414501	140 FL	20010516	116.91
		20010925	128.61

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
274910081452201	LAKE GARFIELD NURSERIES IRRIGATION WELL FL	20010514	43.44
274926081355301	ROMP 44 FLORIDAN WELL NEAR BABSON PARK FL	20010516 20010924	76.22 91.89
275023081321501	CL-1 FLORIDAN WELL NEAR BABSON PARK FL	20010516 20010924	84.39 91.23
275040081493001	IMC TEST WELL ON HWY 98 NEAR BARTOW FL	20010514 20010926	59.14 83.64
275059081562201	164 FL	20010514 20010926	66.85 84.27
275301081495701	L.B. BARNES WELL 54 AT BARTOW FL	20010514	53.83
275326081585801	ROMP 60 FLORIDAN WELL AT MULBERRY FL	20010514 20010926	42.34 68.69
275403081391301	SR 60 DEEP WELL NEAR LAKE WALES FL	20010515 20010924	84.44 102.00
275433081460501	210 FL	20010515 20010926	76.34 87.79
275440081493701	CNTRL FL TRUSS HTRNN AT BARTOW FL	20010515 20010924	71.58 93.19
275507081353701	ROMP 58 OCALA WELL NEAR LAKE WALES FL	20010515 20010924	87.90 98.61
275538082031901	KNOX DEEP WELL NEAR MULBERRY FL	20010514 20010926	37.82 63.26
275545081362701	222 FL	20010515 20010924	94.22 106.90
275615082022001	WARREN HAWTHORN NEAR MULBERRY FL	20010514 20010926	80.09 92.01
275628081541201	TILLERY ROAD DEEP NEAR LAKELAND FL	20010515 20010924	43.72 69.95
275723081465701	FOODTWN DEEP NEAR EAGLE LAKE FL	20010515 20010924	76.65 94.17
275728081570001	ROMP 60X FLORIDAN WELL NEAR LAKELAND FL	20010515 20010924	48.21 72.81
275800081523001	CNTL HAWTHORN AT HIGHLAND CITY FL	20010515 20010924	59.85 80.34
275824081363201	FREEMAN HAWTHORN NEAR DUNDEE FL	20010515 20010924	90.46 102.35
280045081504001	POLK COUNTY LANDFILL NEAR LAKELAND FL	20010515 20010924	84.91 95.50

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
280053081572301	ORLEANS ST DEEP AT LAKE LAND FL	20010515	60.20
		20010924	79.60
280113081435301	ROMP 73 FLORIDAN WELL AT WINTER HAVEN FL	20010515	107.20
		20010924	117.06
280247082015301	PRECISION TRUSS NEAR LAKE LAND FL	20010515	72.12
		20010924	87.69
280338081572901	N FLORIDA AVE D AT LAKE LAND FL	20010515	72.67
		20010924	87.71
280420081570101	LAKE LAND STADIUM WELL AT LAKE LAND FL	20010515	81.56
		20010924	95.74
280455082021501	PLANT CITY QUAD FL	20010515	85.20
		20010924	93.91
280520081575201	CRESENT DR DEEP AT LAKE LND FL	20010515	82.64
		20010924	96.71

POLK COUNTY

The following data were collected from October 2000 to September 2001 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.

STATION NUMBER	STATION NAME	DATE	ELEVATION ABOVE NGVD (FEET) (72020)		
275654081350601	NELSON FLORIDAN WELL NEAR LAKE WALES FL	20001013	87.86		
		20001117	88.46		
		20001214	88.37		
		20010118	88.30		
		20010216	86.66		
		20010314	86.04		
		20010410	84.68		
		20010521	83.89		
		20010613	86.96		
		20010716	88.59		
		20010816	88.37		
		20010917	90.80		
		275659081351201	LAKE STARR WTS-26 NRSD WELL NEAR LAKE WALES FL	20001013	96.57
				20001117	95.97
20001214	95.87				
20010118	95.53				
20010216	95.25				
20010314	95.25				
20010410	94.83				
20010917	95.75				
275659081353501	LAKE STARR WTS-22 NRSD WELL NEAR LAKE WALES FL	20001013	100.67		
		20001214	100.47		
		20010118	100.17		
		20010216	100.00		
		20010410	99.47		
		20010521	99.07		
		20010613	98.97		
		20010716	99.02		
		20010816	99.06		
		20010917	99.42		
275704081351901	LAKE STARR STUS NRSD WELL NEAR LAKE WALES FL	20001013	98.12		
		20001117	97.34		
		20001214	97.20		
		20010118	96.81		
		20010216	96.62		
		20010314	96.34		
		20010410	96.17		
		20010521	95.57		
		20010613	95.39		
		20010716	95.52		
		20010816	95.94		
20010917	97.44				

SPECIAL STUDY MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
275707081351901	HART FLORIDAN WELL NEAR LAKE WALES FL	20001013	89.71
		20001117	90.05
		20001214	90.37
		20010118	90.15
		20010216	88.71
		20010314	88.54
		20010410	87.21
		20010521	87.42
		20010613	89.00
		20010716	90.26
		20010816	90.12
		20010917	92.63
		275708081352001	LAKE STARR STLS NRSD WELL NEAR LAKE WALES FL
20001117	98.05		
20001214	97.83		
20010118	97.39		
20010216	97.26		
20010314	96.96		
20010410	96.86		
20010521	96.16		
20010613	95.98		
20010716	96.20		
20010816	96.70		
20010917	98.49		
275708081354501	ESTEVE FLORIDAN WELL NEAR LAKE WALES FL		
		20001117	94.10
		20001214	94.68
		20010118	95.91
		20010216	93.91
		20010314	93.85
		20010410	94.13
		20010521	93.15
		20010613	95.05
		20010716	96.71
		20010816	97.23
		20010917	101.51
		275709081352002	LAKE STARR 2PNS-27 NRSD WELL NEAR LAKE WALES FL
20001117	98.15		
20001214	97.95		
20010118	97.51		
20010216	97.36		
20010314	97.04		
20010410	96.93		
20010521	96.23		
20010613	96.06		
20010716	96.30		
20010816	96.78		
20010917	98.47		

SPECIAL STUDY MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)		
275709081352003	LAKE STARR 2PNS-51 NRSD WELL NEAR LAKE WALES FL	20001013	98.82		
		20001117	98.10		
		20001214	97.89		
		20010118	97.43		
		20010216	97.27		
		20010314	96.97		
		20010410	96.83		
		20010521	96.16		
		20010613	96.00		
		20010716	96.20		
		20010816	96.70		
		20010917	98.40		
		275709081352005	LAKE STARR 2PNS-156 NRSD WELL NEAR LAKE WALES FL	20001013	98.26
20001117	97.46				
20001214	97.29				
20010118	96.89				
20010216	96.60				
20010314	96.34				
20010410	96.10				
20010521	95.50				
20010613	95.46				
20010716	95.74				
20010816	96.21				
20010917	97.98				
275712081354601	LAKE STARR WTS-23 NRSD WELL NEAR LAKE WALES FL			20001013	102.60
		20001117	101.78		
		20001214	101.56		
		20010118	101.09		
		20010216	100.92		
		20010314	100.60		
		20010410	100.41		
		20010521	99.82		
		20010613	99.55		
		20010716	99.52		
		20010816	99.99		
		20010917	100.99		
		275719081353401	LAKE STARR STLW NRSD WELL NEAR LAKE WALES FL	20001013	99.73
20001117	98.88				
20001214	98.68				
20010118	98.23				
20010216	98.11				
20010314	97.80				
20010410	97.78				
20010816	97.69				
20010917	99.53				
275721081350301	LAKE STARR STLSE NRSD WELL NEAR LAKE WALES FL			20001013	99.04
				20001117	98.44
				20001214	98.20
				20010118	97.77
		20010216	97.62		
		20010314	97.35		
		20010410	97.27		
		20010917	98.39		

SPECIAL STUDY MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
275729081353701	LAKE STARR STLNW NRSD WELL NEAR LAKE WALES FL	20001013	100.47
		20001117	99.68
		20001214	99.47
		20010118	99.04
		20010216	98.85
		20010314	98.56
		20010410	98.53
		20010816	98.48
		20010917	100.62
275732081352402	LAKE STARR 1PNS-25 NRSD WELL NEAR LAKE WALES FL	20001013	99.99
		20001117	99.39
		20001214	99.14
		20010118	98.72
		20010216	98.57
		20010314	98.23
		20010410	98.12
		20010521	97.46
		20010613	97.20
		20010716	97.53
		20010816	97.89
20010917	99.69		
275732081352403	LAKE STARR 1PNS-50 NRSD WELL NEAR LAKE WALES FL	20001013	99.99
		20001117	99.42
		20001214	99.16
		20010118	98.72
		20010216	98.57
		20010314	98.23
		20010410	98.13
		20010521	97.49
		20010613	97.29
		20010716	97.52
		20010816	97.91
20010917	99.49		
275732081352404	LAKE STARR 1PNS-75 NRSD WELL NEAR LAKE WALES FL	20001013	99.98
		20001117	99.41
		20001214	99.15
		20010118	98.72
		20010216	98.56
		20010314	98.26
		20010410	98.12
		20010521	97.50
		20010613	97.22
		20010716	97.52
		20010816	97.92
20010917	99.77		

SPECIAL STUDY MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)		
275732081352405	LAKE STARR 1PNS-100 ICU WELL NEAR LAKE WALES FL	20001013	100.02		
		20001117	99.39		
		20001214	99.13		
		20010118	98.72		
		20010216	98.54		
		20010314	98.26		
		20010410	98.15		
		20010521	97.49		
		20010613	97.20		
		20010716	97.45		
		20010816	97.97		
		20010917	99.77		
		275732081352406	LAKE STARR 1PNS-125 FLORIDAN WELL NR LAKE WALES FL	20001013	91.99
20001117	94.49				
20001214	95.63				
20010118	96.68				
20010216	94.29				
20010314	95.53				
20010410	94.52				
20010521	93.27				
20010613	93.53				
20010716	96.54				
20010816	96.74				
20010917	99.61				
275734081345502	LAKE STARR 3PNS-40 NRSD WELL NEAR LAKE WALES FL			20001013	99.31
		20001117	98.74		
		20001214	98.49		
		20010118	98.10		
		20010216	97.91		
		20010314	97.58		
		20010410	97.46		
		20010521	96.81		
		20010716	96.75		
		20010816	97.13		
		20010917	98.45		
		275736081352301	LAKE STARR STUN NRSD WELL NEAR LAKE WALES FL	20001013	100.60
				20001117	99.97
20001214	99.67				
20010118	99.23				
20010216	99.05				
20010314	98.73				
20010410	98.57				
20010521	98.02				
20010613	97.65				
20010716	97.77				
20010816	98.36				
20010917	100.32				

SPECIAL STUDY MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

POLK COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)		
275737081344401	PERRY FLORIDAN WELL NEAR LAKE WALES FL	20001013	87.04		
		20001117	88.66		
		20001214	88.76		
		20010118	89.12		
		20010216	87.06		
		20010314	86.93		
		20010410	84.05		
		20010521	84.77		
		20010613	87.11		
		20010716	89.23		
		20010816	89.00		
		20010917	91.46		
		275737081345101	LAKE STARR STUE NRSD WELL NEAR LAKE WALES FL	20001013	99.75
20001117	99.39				
20001214	99.20				
20010118	98.91				
20010216	98.62				
20010314	98.33				
20010410	98.09				
20010521	97.59				
20010613	97.22				
20010716	97.00				
20010816	97.19				
20010917	97.89				
275739081350401	LAKE STARR STLNE NRSD WELL NEAR LAKE WALES FL			20001013	99.36
		20001117	98.78		
		20001214	98.56		
		20010118	98.15		
		20010216	97.92		
		20010314	97.63		
		20010410	97.52		
		20010521	96.79		
		20010613	96.58		
		20010716	96.83		
		20010816	97.18		
		20010917	98.54		
		275749081354001	LAKE STARR WTS-4 NRSD WELL NEAR LAKE WALES FL	20001013	103.82
20001117	103.63				
20001214	103.36				
20010118	102.93				
20010216	102.63				
20010314	102.20				
20010410	101.79				
20010521	101.16				
20010613	100.72				
20010917	101.53				
275753081350201	LAKE STARR WTS-7 NRSD WELL NEAR LAKE WALES FL			20001013	101.40
				20001117	100.83
				20001214	100.62
		20010118	100.15		
		20010216	100.00		

WATER RESOURCES DATA FOR FLORIDA, 2001
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LOCATION TO SITES ON FIGURE 21

SARASOTA COUNTY

INDEX NUMBER	SITE NUMBER	PAGE NUMBER	INDEX NUMBER	SITE NUMBER	PAGE NUMBER
1	270137082235301	202	13	270959082203002	212
2	270240082235701	202	13	270959082203003	213
3	270808082152601	203	14	271001082190701	213
3	270808082152603	203	15	271017082123101	214
3	270808082152604	204	15	271017082123102	214
4	270816082192601	204	15	271017082123103	215
4	270816082192602	205	16	271100082172701	215
4	270816082192603	205	16	271100082172702	216
5	270835082194101	206	16	271100082172703	216
6	270852082164801	206	17	271134082092201	217
7	270901082193101	207	17	271134082092202	217
7	270901082193102	207	18	271207082154301	218
7	270901082193103	208	19	271227082084801	218
7	270901082193104	208	20	271601082330501	219
8	270926082155101	209	21	271619082240201	219
8	270926082155103	209	22	271938082251801	220
9	270928082172601	210	23	272020082194801	220
10	270932082195201	210	24	272127082323801	221
11	270933082203601	211	25	272129082330202	221
12	270952082095901	211	26	272316082302601	222
13	270959082203001	212	27	272317082290502	222

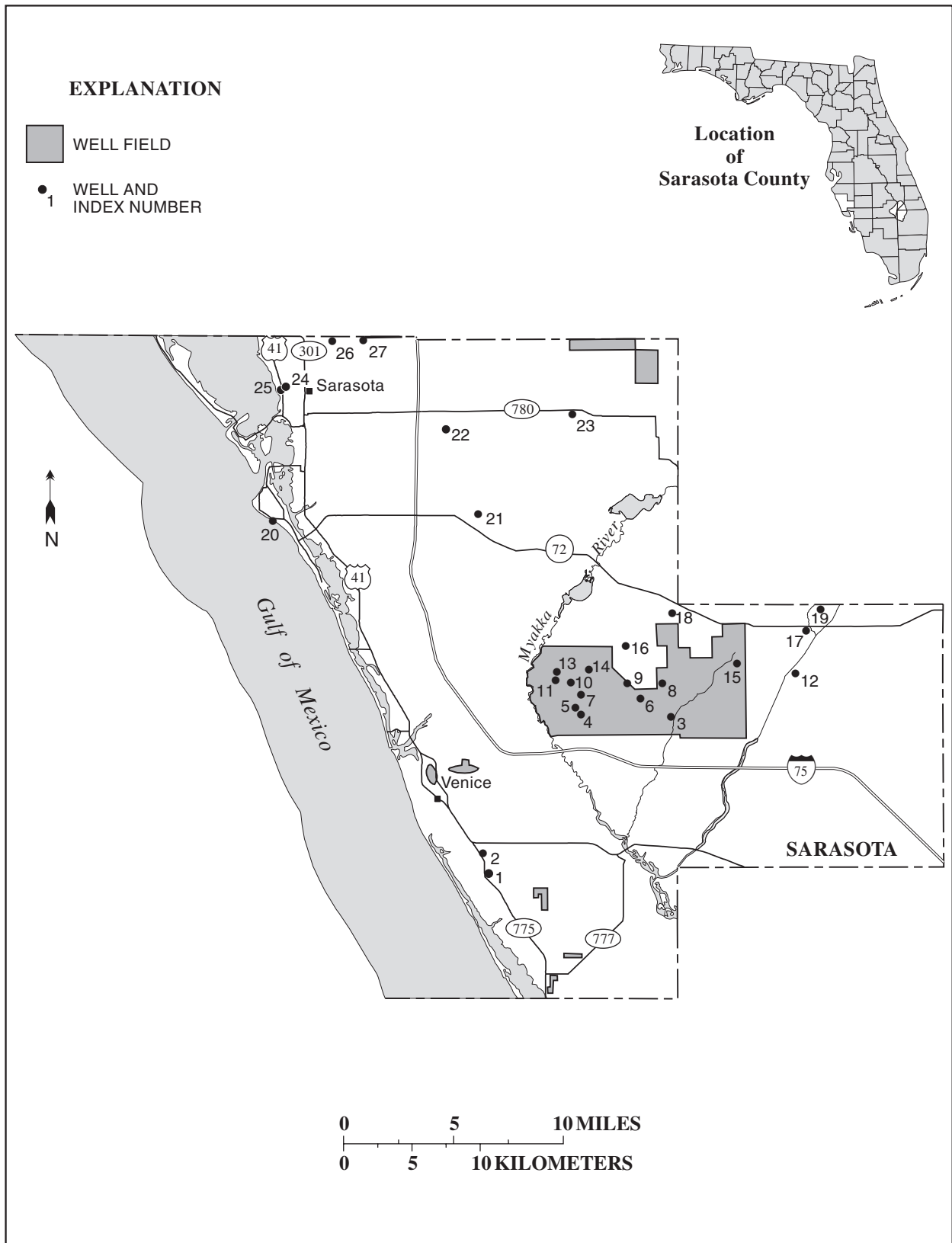


Figure 21.-- Location of wells in Sarasota County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY

WELL NUMBER.--270137082235301. Manasota Deep Well 14 near Englewood, FL.

LOCATION.--Lat 27°01'37", long 82°23'53", in NW¹/₄SW¹/₄ 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 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.09	19.31	18.67	18.42	18.30	17.81	18.38	18.30	17.88	19.01	20.38	20.08
10	19.93	19.22	18.79	18.21	18.24	17.86	18.61	18.09	17.91	19.40	20.34	20.23
15	19.95	18.95	18.70	18.19	18.03	18.02	18.62	18.09	17.90	19.65	20.35	20.57
20	19.82	18.84	18.63	18.38	17.82	18.13	18.36	18.08	17.97	19.73	20.34	20.50
25	19.66	18.76	18.39	18.12	17.79	18.07	18.40	17.98	18.29	20.11	20.29	20.58
EOM	19.43	18.78	18.50	18.37	17.78	18.43	18.22	17.88	18.70	20.08	20.23	20.62
MAX	20.14	19.38	18.79	18.45	18.38	18.43	18.65	18.30	18.70	20.11	20.39	20.88
CAL YR 2000	MAX 20.37											
WTR YR 2001	MAX 20.88											

WELL NUMBER.--270240082235701. ROMP TR 4-2 Suwannee Well near Venice, FL.

LOCATION.--Lat 27°02'40", long 82°23'57", in SW¹/₄NW¹/₄ sec.34, T.39 S., R.19 E., Hydrologic Unit 03100201, 0.2 mi east of State Highway 775, and 4.7 mi south of Venice.

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

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 475 ft, cased to 460 ft.

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

DATUM.--Land-surface datum is 15.69 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District). Measuring point: Top of recorder shelter floor, 11.60 ft above land-surface datum.

PERIOD OF RECORD.--September 1980 to September 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.33 ft NGVD, Mar. 17, 1983; lowest, 19.43 ft NGVD, May 26, June 8, 9, 2000.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.55	21.93	21.15	20.85	20.98	20.64	21.06	20.82	20.27	21.82	22.99	22.54
10	22.36	21.78	21.34	20.46	20.81	20.66	21.38	20.62	20.28	22.09	22.88	22.66
15	22.67	21.52	21.21	20.70	20.45	20.70	21.40	20.53	20.32	22.27	22.84	23.19
20	22.35	21.40	21.07	21.03	20.45	20.91	20.96	20.38	20.43	22.36	22.96	23.17
25	22.26	21.48	20.70	20.72	20.55	20.85	21.08	20.38	20.90	22.70	22.82	23.05
EOM	22.03	21.07	20.94	21.15	20.42	21.18	20.71	20.14	21.37	22.57	22.73	23.10
MAX	22.70	21.93	21.43	21.23	21.10	21.19	21.40	20.82	21.37	22.81	23.03	23.49
CAL YR 2000	MAX 23.14											
WTR YR 2001	MAX 23.49											

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", 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.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.32	31.07	29.44	28.36	28.43	26.25	28.26	27.06	25.61	30.68	34.39	34.31
10	34.03	30.43	29.21	27.76	28.09	26.50	28.92	26.50	26.33	31.58	34.77	34.50
15	33.75	29.92	29.11	27.82	27.51	26.61	29.08	25.76	26.98	32.36	35.14	35.17
20	33.31	29.55	29.21	28.21	27.31	27.02	28.23	25.43	27.59	32.65	35.23	35.08
25	32.61	29.42	28.67	28.45	26.59	27.60	28.02	24.90	28.71	33.39	35.34	35.29
EOM	31.74	29.47	28.71	28.20	26.29	27.95	27.27	25.21	29.76	33.87	34.91	---
MAX	34.35	31.57	29.47	28.69	28.46	27.96	29.11	27.26	29.76	33.87	35.34	35.49
CAL YR 2000	MAX 34.40											
WTR YR 2001	MAX 35.49											

WELL NUMBER.--270808082152603. Mabry Carlton CW-6 (14-ES) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°08'08", long 82°15'26", 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.--Hawthorn formation of Miocene Age, Geologic Unit 122 HTRN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.91	23.84	22.77	22.53	21.93	21.47	22.65	21.62	20.92	24.73	26.71	26.38
10	25.36	23.59	22.63	22.36	21.82	21.34	22.51	21.34	21.36	25.30	26.70	26.62
15	25.04	23.39	22.52	22.24	21.81	20.98	22.40	21.31	21.48	25.82	26.52	27.43
20	24.69	23.24	22.44	22.16	21.66	21.08	22.14	21.20	21.81	26.06	26.60	26.83
25	24.42	23.06	22.33	22.04	21.49	21.20	21.99	21.08	22.37	26.40	26.61	26.71
EOM	24.06	22.90	22.61	21.98	21.44	22.79	21.79	20.88	23.68	26.31	26.14	---
MAX	26.06	23.98	22.88	22.59	21.96	22.79	22.82	21.75	23.68	26.45	26.73	27.48
CAL YR 2000	MAX 26.59											
WTR YR 2001	MAX 27.48											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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", 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 112 NRSD.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.76	22.09	21.47	21.66	21.03	20.86	22.40	20.83	20.37	25.17	25.99	25.07
10	23.73	21.97	21.37	21.56	20.95	20.72	22.08	20.63	20.90	25.40	25.74	25.49
15	23.30	21.85	21.30	21.40	20.93	19.37	21.75	20.45	21.04	25.71	25.09	---
20	22.91	21.79	21.26	21.29	20.80	19.65	21.44	20.34	21.37	25.86	25.43	26.08
25	22.61	21.61	21.17	21.18	20.69	20.48	21.21	20.28	22.00	26.15	25.41	25.64
EOM	22.31	21.60	21.79	21.09	20.65	22.85	21.00	20.15	24.13	25.57	24.38	---
MAX	25.23	22.26	21.80	21.77	21.08	22.85	22.88	20.98	24.13	26.21	26.01	26.52
CAL YR 2000	MAX 25.89											
WTR YR 2001	MAX 26.52											

WELL NUMBER.--270816082192601. Mabry Carlton CW-1 (3F) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°08'16", long 82°19'26", 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.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 554 ft, cased to 500 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, 18.92 ft above land-surface datum.

PERIOD OF RECORD.--May 1990 to September 1993 (periodic); November 1993 to current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.93	---	22.56	22.58	23.34	19.22	22.76	20.52	18.84	24.59	28.45	28.44
10	27.51	---	22.48	21.77	22.27	19.31	22.43	20.03	19.46	---	29.63	29.82
15	27.86	---	23.04	21.81	21.68	20.88	22.58	20.16	20.04	27.21	30.15	29.55
20	26.52	23.28	23.21	22.61	21.13	21.44	22.01	19.14	22.00	26.42	30.52	28.53
25	26.36	23.17	22.82	22.60	19.69	22.04	21.58	18.71	23.51	27.22	30.33	29.24
EOM	---	23.03	23.01	22.43	19.45	21.70	20.85	18.58	24.07	28.93	30.19	29.59
MAX	29.98	24.07	24.07	24.18	23.55	22.97	22.76	20.82	24.07	28.93	30.52	30.68
CAL YR 2000	MAX 30.14											
WTR YR 2001	MAX 30.68											

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", 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 112 HTRN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.94	16.93	15.74	15.24	14.58	13.49	13.90	13.77	12.51	14.32	17.01	17.75
10	17.82	16.66	15.64	14.86	14.51	13.39	14.02	13.49	12.64	14.81	17.22	18.08
15	17.76	16.24	15.51	14.85	14.25	13.37	14.05	13.25	12.65	15.32	17.43	18.58
20	17.55	16.13	15.46	14.91	14.10	13.50	13.97	13.11	12.66	15.74	17.61	18.72
25	17.45	15.99	15.23	14.78	13.85	13.36	14.01	12.86	13.19	16.30	17.73	18.70
EOM	17.17	15.86	15.17	14.61	13.77	13.72	13.83	12.72	13.75	16.67	17.79	18.70
MAX	17.96	17.01	15.85	15.26	14.61	13.76	14.05	13.87	13.75	16.67	17.79	18.81
CAL YR 2000	MAX 17.98											
WTR YR 2001	MAX 18.81											

WELL NUMBER.--270816082192603. Mabry Carlton CW-1 (3G) NRS D Well near Sarasota, FL.

LOCATION.--Lat 27°08'16", long 82°19'26", 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.--Nonartesian sand aquifer of Pleistocene/Pliocene Age, Geologic Unit 112 NRS D.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.84	18.12	17.39	17.11	16.60	16.07	17.92	16.44	15.44	20.45	20.93	19.89
10	19.31	17.98	17.27	17.03	16.48	15.94	17.69	16.20	16.21	20.65	20.31	21.04
15	19.04	17.87	17.19	16.87	16.38	15.84	17.40	15.98	16.28	20.73	19.72	21.29
20	18.77	17.73	17.12	16.87	16.24	15.86	17.09	15.78	16.44	20.27	20.72	20.43
25	18.56	17.58	17.01	16.77	16.12	15.72	16.83	15.63	18.44	20.89	20.74	20.77
EOM	18.31	17.52	17.24	16.67	16.05	17.97	16.62	15.43	19.44	20.48	19.83	20.75
MAX	20.00	18.27	17.48	17.23	16.65	17.97	18.09	16.60	19.44	21.00	20.95	21.42
CAL YR 2000	MAX 21.05											
WTR YR 2001	MAX 21.42											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY--Continued

WELL NUMBER.--270835082194101. Mabry Carlton (STM-24A) Tampa Well near Sarasota, FL.

LOCATION.--Lat 27°08'35", long 82°19'41", in NE ¼ SW ¼ 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 122 TAMP.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.30	19.29	14.36	17.01	19.45	10.25	19.04	14.49	12.78	21.08	23.16	25.02
10	22.45	22.01	14.56	16.08	16.38	10.18	16.57	14.09	13.52	21.14	26.61	27.23
15	22.95	14.98	17.65	16.00	15.87	15.12	16.69	14.57	14.00	24.30	27.23	---
20	21.15	17.69	17.87	17.19	14.96	16.08	16.21	13.33	18.47	20.99	27.84	---
25	21.38	17.70	17.39	16.88	10.74	15.70	15.66	12.84	20.32	21.97	27.72	---
EOM	20.64	17.38	17.61	16.43	12.27	16.05	14.93	12.90	20.89	25.58	26.59	24.25
MAX	27.42	22.01	19.86	21.14	19.84	19.16	19.23	14.89	21.11	25.88	28.16	27.75
CAL YR 2000	MAX 27.67											
WTR YR 2001	MAX 28.16											

WELL NUMBER.--270852082164801. Mabry Carlton 8-B NRS D Well near Sarasota, FL.

LOCATION.--Lat 27°08'52", long 82°16'48", 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 112 NRS D.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.03	24.15	23.62	23.48	22.92	22.61	24.06	22.48	21.59	26.24	26.91	25.69
10	25.43	24.10	23.52	23.45	22.81	22.43	23.72	22.20	22.45	26.35	26.50	26.67
15	25.07	24.05	23.48	23.27	22.69	22.29	23.43	21.98	22.45	26.68	26.24	27.32
20	24.78	23.90	23.40	23.27	22.57	22.57	23.13	21.76	22.53	26.58	26.55	26.50
25	24.57	23.80	23.24	23.09	22.45	22.44	22.88	21.75	23.73	26.84	26.66	26.73
EOM	24.34	23.76	23.68	23.00	22.37	24.53	22.64	21.46	25.42	26.47	25.95	26.53
MAX	26.17	24.29	23.77	23.64	22.97	24.53	24.59	22.64	25.42	26.97	26.91	27.43
CAL YR 2000	MAX 26.87											
WTR YR 2001	MAX 27.43											

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", 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 124 OCAL.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.90	24.15	23.66	24.35	---	---	21.42	11.79	10.48	23.03	29.15	---
10	29.16	25.28	23.82	14.73	---	11.12	14.21	19.69	11.28	18.03	29.31	---
15	27.02	24.57	22.40	14.87	---	21.13	14.33	19.82	12.11	26.16	29.33	---
20	27.35	25.01	24.84	15.37	---	21.67	13.39	10.00	20.62	26.93	---	---
25	26.12	22.48	24.80	24.37	---	---	12.92	9.05	22.09	27.77	---	29.10
EOM	26.95	24.89	25.20	15.56	---	13.28	12.14	15.80	22.49	28.46	---	29.25
MAX	30.87	27.73	25.46	25.14	24.09	22.12	21.57	20.06	23.21	28.46	29.75	29.36
CAL YR 2000	MAX 31.32											
WTR YR 2001	MAX 30.87											

WELL NUMBER.--270901082193102. Mabry Carlton CW-2 (SM 21A) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°09'01", long 82°19'31", 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.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.09	20.21	19.14	20.75	19.01	---	19.97	11.57	10.25	21.75	27.64	25.75
10	25.05	22.15	19.46	13.41	---	10.24	13.96	18.00	10.91	17.83	28.48	28.44
15	23.25	20.68	18.64	13.45	---	19.31	14.03	18.48	11.58	25.41	28.63	19.40
20	22.90	21.58	21.28	14.20	---	19.93	13.38	10.43	19.81	25.45	29.13	18.41
25	22.46	18.82	21.26	20.70	---	---	12.83	9.43	21.49	26.34	28.72	28.29
EOM	23.45	20.73	21.65	13.96	---	13.38	12.02	13.96	21.38	27.47	24.27	28.65
MAX	27.73	24.26	21.96	21.59	21.08	20.83	20.30	18.70	22.61	27.57	29.41	29.64
CAL YR 2000	MAX 28.80											
WTR YR 2001	MAX 29.64											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.22	17.55	16.26	15.74	---	---	14.28	14.22	13.11	14.44	17.06	18.06
10	18.14	17.31	16.17	15.50	---	---	14.41	13.98	13.11	14.93	17.30	18.34
15	18.13	16.99	16.01	15.40	---	---	14.45	13.81	13.07	15.35	17.55	18.77
20	18.00	16.81	15.94	15.43	---	---	14.31	13.69	13.02	15.75	17.77	18.86
25	17.95	16.67	15.79	15.26	---	---	14.39	13.44	13.42	16.28	17.93	18.96
EOM	17.71	16.43	15.66	15.22	---	14.19	14.25	13.24	13.90	16.69	18.06	19.03
MAX	18.25	17.62	16.40	15.75	15.16	14.19	14.46	14.30	13.90	16.69	18.06	19.09
CAL YR 2000	MAX 18.25											
WTR YR 2001	MAX 19.09											

WELL NUMBER.--270901082193104. Mabry Carlton CW-2 (N5) NRS D Well near Sarasota, FL.

LOCATION.--Lat 27°09'01", long 82°19'31", 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 112 NRS D.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.19	21.49	20.96	20.69	20.07	---	21.64	19.66	18.89	23.69	23.94	23.06
10	22.68	21.55	20.83	20.59	---	---	21.20	19.38	19.72	23.73	23.60	24.12
15	22.40	21.41	20.77	20.43	---	---	20.82	19.13	19.61	23.72	23.21	24.14
20	22.13	21.27	20.71	20.48	---	---	20.45	18.94	19.82	23.42	23.79	23.70
25	21.94	21.10	20.57	20.28	---	---	20.16	18.89	21.86	23.89	23.82	23.69
EOM	21.69	21.17	20.95	20.16	---	22.30	19.90	18.67	23.31	23.57	23.36	23.75
MAX	23.19	21.64	21.08	20.90	20.15	22.30	22.34	19.88	23.31	24.03	23.97	24.36
CAL YR 2000	MAX 24.14											
WTR YR 2001	MAX 24.36											

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", in NE ¼ SW ¼ 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 123 SWNN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.97	---	27.18	26.03	26.19	23.49	25.90	24.28	22.65	---	---	33.08
10	32.68	---	26.91	25.44	25.75	23.73	26.58	23.64	23.54	---	33.74	33.43
15	32.26	27.74	26.87	25.25	25.12	24.11	26.69	23.07	24.32	---	34.19	33.85
20	31.67	27.09	27.09	25.70	24.59	24.70	25.96	22.34	25.28	---	34.38	33.91
25	30.77	---	26.50	26.10	23.94	25.41	25.45	22.07	26.46	---	34.28	34.07
EOM	---	27.15	26.46	25.88	23.55	25.41	24.60	22.19	27.73	---	33.81	34.04
MAX	33.12	29.51	27.27	26.43	26.19	25.55	26.72	24.59	27.73	28.43	34.38	34.43
CAL YR 2000	MAX 33.16											
WTR YR 2001	MAX 34.43											

WELL NUMBER.--270926082155103. Mabry Carlton CW-5 (14-GN) NRSW Well near Sarasota, FL.

LOCATION.--Lat 27°09'26", long 82°15'51", in NE ¼ SW ¼ 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 112 NRSW.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.00	---	25.53	25.30	24.67	24.27	26.21	24.26	23.66	---	---	27.95
10	27.39	---	25.40	25.27	24.52	24.10	25.82	23.96	24.46	---	28.49	28.80
15	27.06	25.95	25.35	25.07	24.41	23.94	25.44	23.71	24.27	---	28.24	29.25
20	26.76	25.82	25.25	25.06	24.23	24.21	25.07	23.49	24.13	---	28.62	28.76
25	26.53	---	25.11	24.86	24.11	24.05	24.75	23.70	25.56	---	28.70	28.78
EOM	26.29	25.70	25.53	24.75	24.03	27.03	24.48	23.65	27.09	---	28.17	28.69
MAX	28.16	26.20	25.62	25.49	24.74	27.03	27.08	24.46	27.09	27.69	28.70	29.37
CAL YR 2000	MAX 28.94											
WTR YR 2001	MAX 29.37											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY--Continued

WELL NUMBER.--270928082172601. Mabry Carlton OM-41 SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°09'28", long 82°17'26", in NE ¼ SE ¼ 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 123 SWNN.

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 public supply wells.

PERIOD OF RECORD.--January 1994 to current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.89	26.30	24.91	23.93	24.38	21.46	24.08	22.23	20.49	26.96	31.26	31.22
10	30.25	25.37	24.68	23.76	23.69	21.74	24.48	21.81	21.26	27.93	31.93	---
15	29.66	25.34	24.80	23.03	23.16	---	24.59	20.97	22.06	29.12	32.37	32.11
20	29.45	24.57	25.08	23.68	22.35	---	24.18	20.34	23.37	29.14	32.64	32.17
25	28.27	24.69	24.40	24.32	21.87	---	23.52	20.20	---	30.13	32.65	32.01
EOM	27.38	24.65	24.63	23.85	21.65	23.56	22.73	20.14	25.89	31.01	32.04	---
MAX	31.47	27.46	25.33	24.58	24.58	23.60	24.63	22.79	25.89	31.01	32.65	32.36
CAL YR 2000	MAX 31.58											
WTR YR 2001	MAX 32.65											

WELL NUMBER.--270932082195201. Mabry Carlton 26 NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°09'32", long 82°19'52", in NE ¼ SW ¼ 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 112 NRSD.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.26	20.86	20.34	19.97	---	19.15	21.33	19.68	18.80	23.59	23.77	22.70
10	22.11	20.82	20.23	19.89	---	19.04	20.88	19.44	19.67	23.67	23.65	23.98
15	21.76	20.73	20.18	19.81	---	18.96	20.55	19.25	19.42	23.65	23.56	24.02
20	21.45	20.56	20.11	19.87	19.22	19.02	20.19	18.99	19.20	23.24	23.73	23.80
25	21.27	20.42	20.00	19.71	19.15	18.93	20.01	19.07	20.85	23.78	23.71	23.72
EOM	21.03	20.55	20.16	---	19.13	22.24	19.80	18.82	23.00	23.55	23.22	23.72
MAX	23.45	21.00	20.46	20.12	19.23	22.24	22.22	19.84	23.00	23.85	23.78	24.36
CAL YR 2000	MAX 24.02											
WTR YR 2001	MAX 24.36											

SARASOTA COUNTY--Continued

WELL NUMBER.--270933082203601. Mabry Carlton 27 NRSD Well near Sarasota, FL.

LOCATION.--Lat 27°09'33", long 82°20'36", in SW ¼ NE ¼ 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 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 13 ft, cased to 8 ft.

INSTRUMENTATION.--Water-stage recorder--60-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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.28	15.59	15.06	14.60	14.19	13.83	16.04	14.77	14.63	18.29	18.44	16.05
10	16.67	15.47	14.95	14.55	14.10	13.69	15.73	14.61	15.07	18.40	18.07	16.23
15	16.38	15.40	14.87	14.46	14.01	13.61	15.44	14.46	14.79	18.37	17.76	---
20	16.14	15.27	14.80	14.45	13.91	13.68	15.22	14.32	15.36	17.70	18.37	---
25	15.95	15.15	14.70	14.35	13.82	13.56	15.07	14.57	16.38	18.47	17.65	---
EOM	15.75	15.25	14.76	14.25	13.76	16.53	14.91	14.31	17.75	17.79	16.13	---
MAX	17.56	15.72	15.20	14.73	14.23	16.53	16.53	14.88	17.75	18.62	18.44	16.47
CAL YR 2000	MAX 18.71											
WTR YR 2001	MAX 18.62											

WELL NUMBER.--270952082095901. Mabry Carlton Well 13 near Myakka City, FL.

LOCATION.--Lat 27°09'52", long 82°09'59", in SE ¼ SW ¼ 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 122 TAMP.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	35.79	33.94	32.84	32.61	31.48	33.00	32.14	30.98	34.90	38.34	38.27
10	---	35.31	33.65	32.36	32.58	31.62	33.55	31.63	31.75	35.65	38.55	38.35
15	37.93	34.83	33.45	32.23	32.43	31.78	33.60	31.14	32.27	36.55	38.67	39.07
20	37.51	34.58	33.42	32.44	32.13	31.91	33.19	30.62	32.83	37.10	38.58	39.04
25	37.00	34.34	33.11	32.55	31.85	32.09	32.89	30.37	33.39	37.67	38.65	39.04
EOM	36.28	34.16	33.08	32.57	31.74	32.46	32.40	30.59	34.12	37.95	38.31	39.16
MAX	38.14	36.17	34.14	33.02	32.62	32.46	33.62	32.42	34.12	37.95	38.67	39.28
CAL YR 2000	MAX 38.28											
WTR YR 2001	MAX 39.28											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY--Continued

WELL NUMBER.--270959082203001. ROMP 19 WLAM Well near Sarasota, FL.

LOCATION.--Lat 27°09'59", long 82°20'30", 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.--Suwannee limestone of Oligocene Age, Geologic Unit 123 SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 425 ft, cased to 410 ft.

INSTRUMENTATION.--Water-stage recorder--60-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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.71	21.11	18.52	18.80	18.76	14.40	18.15	16.22	14.23	20.26	25.14	24.72
10	24.31	20.74	18.65	18.16	18.19	14.52	18.44	15.65	14.91	21.47	25.76	25.59
15	24.47	18.90	19.28	18.07	17.70	16.41	18.61	15.57	15.57	22.77	26.19	26.00
20	22.92	19.50	19.55	18.80	17.12	17.13	18.05	14.51	16.86	22.57	26.48	25.43
25	22.89	19.47	19.23	18.62	14.98	16.54	17.51	14.13	18.42	23.76	26.45	26.00
EOM	22.10	19.33	19.33	18.59	14.80	17.62	16.65	13.95	19.41	24.82	26.41	26.44
MAX	25.89	21.85	19.55	19.30	18.83	17.65	18.61	16.61	19.41	24.82	26.48	26.70
CAL YR 2000	MAX 25.97											
WTR YR 2001	MAX 26.70											

WELL NUMBER.--270959082203002. ROMP 19 WUAM Well near Sarasota, FL.

LOCATION.--Lat 27°09'59", long 82°20'30", 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.--Hawthorn formation of Miocene Age, Geologic Unit 122 HTRN.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.33	14.02	12.98	12.47	11.62	11.14	10.78	10.70	9.39	10.27	12.76	14.01
10	14.45	13.90	12.98	12.21	11.58	10.83	10.95	10.46	9.27	10.72	13.09	14.37
15	14.46	13.59	12.86	11.84	11.62	10.71	10.98	10.24	9.21	11.18	13.32	14.74
20	14.45	13.32	12.80	11.91	11.52	10.74	10.72	10.04	9.10	11.55	13.56	15.00
25	14.43	13.21	12.50	11.87	11.44	10.62	10.86	9.76	9.39	12.01	13.75	15.18
EOM	14.31	13.00	12.41	11.79	11.38	10.75	10.71	9.60	9.82	12.45	13.93	15.27
MAX	14.47	14.17	13.01	12.52	11.69	11.40	11.00	10.76	9.82	12.45	13.93	15.30
CAL YR 2000	MAX 15.07											
WTR YR 2001	MAX 15.30											

SARASOTA COUNTY--Continued

WELL NUMBER.--270959082203003. ROMP 19 WS Well near Sarasota, FL.

LOCATION.--Lat 27°09'59", long 82°20'30", 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 112 NRSB.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.94	16.06	15.45	14.94	14.51	14.01	16.37	14.79	13.59	16.32	17.82	18.01
10	17.33	15.94	15.33	14.87	14.40	13.92	16.03	14.57	13.85	16.53	19.13	19.49
15	17.02	15.84	15.26	14.79	14.31	13.87	15.72	14.37	13.69	17.61	19.04	19.50
20	16.72	15.69	15.19	14.75	14.20	13.89	15.42	14.19	13.57	16.77	19.27	18.65
25	16.51	15.56	15.08	14.66	14.09	13.79	15.18	13.89	15.22	17.80	19.01	18.58
EOM	16.26	15.68	15.10	14.57	14.03	16.56	14.97	13.70	14.97	17.22	17.89	18.93
MAX	18.08	16.22	15.60	15.07	14.55	16.56	16.67	14.95	15.29	17.95	19.27	19.69
CAL YR 2000	MAX 19.45											
WTR YR 2001	MAX 19.69											

WELL NUMBER.--271001082190701. Mabry Carlton 4-B NRSB Well near Sarasota, FL.

LOCATION.--Lat 27°10'01", long 82°19'07", 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 112 NRSB.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.02	23.35	22.58	21.92	21.42	21.14	23.25	21.14	20.53	25.32	25.61	24.55
10	24.54	23.32	22.42	21.87	21.29	20.90	22.77	20.88	21.47	25.46	25.59	25.66
15	24.32	23.23	22.35	21.74	21.19	20.77	22.35	20.66	21.18	25.56	25.45	26.20
20	24.03	23.05	22.30	21.91	21.06	21.02	21.92	20.48	20.98	25.39	25.56	25.50
25	23.83	23.00	22.07	21.62	20.93	20.77	21.60	20.67	22.53	25.68	25.47	25.41
EOM	23.58	22.86	22.26	21.50	20.86	24.02	21.35	20.36	24.64	25.39	24.90	25.44
MAX	25.21	23.52	22.73	22.16	21.48	24.02	24.03	21.32	24.64	25.76	25.63	26.20
CAL YR 2000	MAX 25.80											
WTR YR 2001	MAX 26.20											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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", in NW ¼ SE ¼ 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 123 SWNN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.44	---	30.61	29.11	29.33	26.99	29.48	27.81	27.12	32.89	36.43	---
10	36.32	---	30.14	28.33	29.17	27.46	30.36	27.20	28.11	---	36.84	---
15	36.01	31.35	30.03	28.30	28.80	27.79	30.36	26.87	29.00	34.07	37.24	37.40
20	---	31.07	30.19	28.83	28.20	28.18	29.59	26.27	29.72	34.65	37.38	37.40
25	---	30.78	---	29.31	27.65	28.73	28.91	26.04	30.78	35.29	37.45	37.70
EOM	33.39	30.84	---	29.20	27.44	28.97	28.09	26.50	31.88	35.89	---	37.88
MAX	36.51	33.22	30.85	29.35	29.36	29.00	30.36	28.11	31.88	35.89	37.46	37.92
CAL YR 2000	MAX 36.51											
WTR YR 2001	MAX 37.92											

WELL NUMBER.--271017082123102. Mabry Carlton CW-7 (20E) HTRN Well near Sarasota, FL.

LOCATION.--Lat 27°10'17", long 82°12'31", in NW ¼ SE ¼ 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 122 HTRN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.68	---	29.05	27.90	27.60	25.50	27.32	26.21	24.51	30.01	34.55	35.04
10	34.62	---	28.74	27.20	27.54	25.61	28.10	25.66	25.35	31.01	34.92	34.91
15	34.34	29.87	28.46	26.88	27.18	25.88	28.37	24.96	26.14	31.93	35.35	35.73
20	33.87	29.56	28.56	27.15	26.69	26.22	27.95	24.39	26.87	32.53	35.58	35.62
25	33.15	29.24	28.38	27.54	26.19	26.73	27.36	23.99	27.83	33.21	35.71	35.92
EOM	32.05	29.13	28.14	27.59	25.91	27.16	26.62	24.08	28.92	33.93	35.47	36.10
MAX	34.77	31.90	29.16	28.11	27.62	27.19	28.37	26.53	28.92	33.93	35.71	36.12
CAL YR 2000	MAX 34.77											
WTR YR 2001	MAX 36.12											

SARASOTA COUNTY--Continued

WELL NUMBER.--271017082123103. Mabry Carlton CW-7 (20) NRSW Well near Sarasota, FL.

LOCATION.--Lat 27°10'17", long 82°12'31", in NW ¼ SE ¼ 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 112 NRSW.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.36	---	---	26.36	25.68	25.23	27.15	25.07	24.06	28.45	30.52	28.59
10	28.97	---	---	26.27	25.52	25.09	26.83	24.72	24.94	29.00	30.36	28.77
15	28.49	27.06	---	26.10	25.39	24.94	26.43	24.43	24.66	30.32	29.68	30.75
20	28.11	26.91	26.27	26.02	25.22	24.99	26.02	24.17	24.37	30.20	30.02	30.23
25	27.82	26.77	26.13	25.88	25.07	24.71	25.67	24.42	24.91	30.47	29.80	30.24
EOM	27.55	26.78	26.55	25.75	24.99	27.53	25.36	24.31	25.55	30.26	28.76	30.18
MAX	29.49	27.52	26.73	26.53	25.73	27.53	27.62	25.34	25.55	30.56	30.52	30.75
CAL YR 2000	MAX 30.53											
WTR YR 2001	MAX 30.75											

WELL NUMBER.--271100082172701. Mabry Carlton CW-3 (6F) SWNN Well near Sarasota, FL.

LOCATION.--Lat 27°11'00", long 82°17'27", in SW ¼ SE ¼ 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 123 SWNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 551 ft, cased to 500 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, 12.51 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to September 1993 (periodic); January 1994 to current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.92	24.86	23.17	22.19	22.58	19.10	22.00	19.82	18.00	25.41	30.34	30.37
10	29.45	23.90	22.87	21.92	21.78	19.48	22.58	19.31	18.96	26.53	31.15	30.84
15	28.74	23.79	23.00	21.15	21.22	20.16	22.63	18.46	19.99	27.79	31.64	31.22
20	28.36	23.07	23.36	21.74	20.25	20.71	22.16	17.80	21.37	27.98	31.94	31.30
25	27.07	23.10	22.65	22.46	19.80	21.66	21.29	17.69	22.74	29.07	31.97	31.14
EOM	26.03	23.07	22.84	22.20	19.37	21.42	20.43	17.48	24.18	30.04	31.19	31.35
MAX	30.42	25.95	23.44	22.81	22.73	21.93	22.66	20.48	24.18	30.04	31.97	31.98
CAL YR 2000	MAX 30.46											
WTR YR 2001	MAX 31.98											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

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", in SW ¼ SE ¼ 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 122 HTRN.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.29	24.70	23.76	22.67	22.30	20.84	22.52	21.27	20.24	---	27.14	27.88
10	26.91	24.31	23.52	22.45	22.02	20.88	22.71	20.90	20.84	---	27.42	28.12
15	26.46	24.06	23.35	22.15	22.10	20.91	22.62	20.50	20.98	25.57	27.61	28.38
20	26.17	23.74	23.27	22.26	21.76	21.08	22.31	20.15	21.09	25.82	27.77	28.18
25	25.68	23.62	22.92	22.39	21.42	21.25	21.99	19.96	22.03	26.37	27.83	28.12
EOM	25.16	23.86	22.87	22.28	21.16	22.09	21.57	20.22	23.06	26.80	28.36	28.15
MAX	27.45	25.10	23.91	22.85	22.36	22.09	22.71	21.58	23.06	26.80	28.50	28.71
CAL YR 2000	MAX 27.65											
WTR YR 2001	MAX 28.71											

WELL NUMBER.--271100082172703. Mabry Carlton CW-3 (6G) NRS D Well near Sarasota, FL.

LOCATION.--Lat 27°11'00", long 82°17'27", in SW ¼ SE ¼ 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 112 NRS D.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.41	26.80	26.05	25.50	25.16	24.62	27.05	25.24	24.13	29.28	30.31	29.34
10	28.72	26.62	25.91	25.41	25.05	24.53	26.54	25.01	25.61	29.49	30.23	30.22
15	28.21	26.51	25.86	25.33	24.98	24.46	26.18	24.80	25.29	30.13	30.09	30.36
20	27.74	26.35	25.74	25.40	24.82	24.47	25.87	24.58	---	29.99	30.16	30.02
25	27.40	26.20	25.63	25.35	24.70	24.37	25.64	24.47	---	---	30.16	30.17
EOM	27.04	26.27	25.61	25.23	24.63	27.54	25.41	24.24	28.83	30.09	29.78	30.14
MAX	29.57	26.99	26.19	25.59	25.22	27.54	27.60	25.40	28.83	30.14	30.36	30.63
CAL YR 2000	MAX 30.12											
WTR YR 2001	MAX 30.63											

SARASOTA COUNTY--Continued

WELL NUMBER.--271134082092201. Big Slough Deep Well near Arcadia, FL.

LOCATION.--Lat 27°11'34", long 82°09'22", in NE ¼ NE ¼ 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 122 HTRN.

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.

REMARKS.--Well also sampled for water quality.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.10	32.80	31.15	30.23	29.65	29.23	29.59	29.53	28.63	30.95	34.14	34.20
10	34.22	32.44	30.97	30.07	29.59	29.11	29.88	29.29	28.96	31.60	34.33	34.43
15	34.17	32.08	30.76	29.95	29.58	29.06	30.04	29.02	29.02	32.61	34.52	35.48
20	33.92	31.80	30.64	29.84	29.49	29.04	29.97	28.72	29.39	32.95	34.41	34.80
25	33.52	31.58	30.44	29.75	29.38	28.96	29.92	28.49	29.82	33.61	34.39	34.83
EOM	33.11	31.35	30.31	29.74	29.31	29.34	29.69	28.51	30.36	33.78	34.18	35.06
MAX	34.24	33.06	31.30	30.27	29.73	29.34	30.06	29.68	30.36	33.78	34.52	35.55
CAL YR 2000	MAX 34.69											
WTR YR 2001	MAX 35.55											

WELL NUMBER.--271134082092202. Big Slough Shallow Well near Arcadia, FL.

LOCATION.--Lat 27°11'34", long 82°09'22", in NE ¼ NE ¼ 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 112 NRSD.

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.

REMARKS.--Well also sampled for water quality.

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, 1989.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.98	29.04	28.32	28.11	27.73	27.47	29.06	27.24	27.23	30.05	33.03	31.11
10	31.31	28.88	28.20	28.00	27.57	27.54	28.83	26.94	28.09	30.14	32.44	31.58
15	30.41	28.73	28.24	27.92	27.54	27.48	28.44	26.69	28.12	33.03	31.96	34.27
20	29.95	28.62	28.18	27.89	27.48	27.42	28.04	26.46	28.01	32.61	30.80	32.99
25	29.63	28.45	28.06	27.85	27.40	27.28	27.75	26.40	28.32	33.49	30.73	31.97
EOM	29.30	28.41	28.16	27.75	27.48	28.70	27.49	27.03	29.09	31.96	30.21	31.86
MAX	31.58	29.25	28.37	28.19	27.73	28.70	29.17	27.46	29.09	33.65	33.03	34.27
CAL YR 2000	MAX 33.87											
WTR YR 2001	MAX 34.27											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY--Continued

WELL NUMBER.--271207082154301. Mabry Carlton NRSD Well 46 near Sarasota, FL.

LOCATION.--Lat 27°12'11", long 82°15'43", in SE ¼ NW ¼ 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 112 NRSD.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.68	28.90	28.55	27.93	27.51	27.13	29.66	27.47	26.48	31.40	31.98	30.76
10	30.16	28.76	28.33	27.86	27.37	27.11	29.19	27.13	26.89	31.58	31.51	31.71
15	29.87	28.78	28.28	27.77	27.26	26.98	28.76	26.86	26.53	31.91	30.98	32.17
20	29.59	28.71	28.19	27.88	27.12	27.06	28.34	26.62	26.51	31.60	31.50	31.54
25	29.37	28.62	28.04	27.72	27.00	26.89	27.99	26.78	28.52	31.79	31.00	31.67
EOM	29.12	28.88	28.13	27.58	26.93	30.51	27.69	26.56	30.86	31.78	30.51	31.56
MAX	30.87	29.07	28.77	28.10	27.56	30.51	30.51	27.66	30.86	31.96	32.04	32.42
CAL YR 2000	MAX 31.96											
WTR YR 2001	MAX 32.42											

WELL NUMBER.--271227082084801. Mabry Carlton Well No. 6 near Myakka City, FL.

LOCATION.--Lat 27°12'27", long 82°08'48", in NW ¼ NE ¼ 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 122 TAMP.

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 current year.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.03	30.61	27.36	25.50	26.58	23.63	---	---	---	---	---	36.19
10	36.03	29.59	26.49	24.64	25.94	24.47	---	---	---	---	---	36.46
15	35.23	29.22	26.95	24.76	25.25	24.92	---	---	---	---	37.19	37.45
20	34.35	28.96	27.29	25.67	24.65	---	---	---	---	---	37.28	37.61
25	33.15	28.11	26.35	26.44	24.06	---	---	---	---	---	37.18	37.78
EOM	31.41	28.43	26.94	25.94	23.92	---	---	---	---	---	35.96	38.07
MAX	36.11	31.28	28.43	26.44	26.58	24.92	---	---	---	---	37.33	38.07
CAL YR 2000	MAX 36.11											
WTR YR 2001	MAX 38.07											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY--Continued

WELL NUMBER.--271938082251801. Sarasota Well 9 near Sarasota, FL.

LOCATION.--Lat 27°19'38", long 82°25'18", 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 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused irrigation, artesian well, diameter 8 in., depth 730 ft, cased to 101 ft.

INSTRUMENTATION.--Water-stage recorder--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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.80	14.55	15.35	13.75	12.75	7.77	11.65	6.74	3.56	15.24	23.63	22.24
10	22.05	13.89	14.87	12.76	12.07	8.46	12.41	5.95	5.81	16.76	24.49	22.78
15	20.86	13.75	14.92	12.92	11.18	9.12	11.84	4.89	7.35	18.50	24.76	24.40
20	19.02	13.83	14.92	13.57	9.97	9.78	10.13	3.42	8.32	19.83	25.01	24.75
25	17.18	14.14	14.44	13.74	9.03	10.47	8.37	3.07	11.05	21.47	24.92	25.08
EOM	15.44	14.85	14.76	12.88	7.98	---	7.38	2.21	13.16	22.48	23.58	25.57
MAX	23.24	15.11	15.48	14.38	12.76	10.51	12.41	7.41	13.16	22.48	25.01	25.69
CAL YR 2000	MAX 23.27											
WTR YR 2001	MAX 25.69											

WELL NUMBER.--272020082194801. Verna T Well 0-4 near Verna, FL.

LOCATION.--Lat 27°20'20", long 82°19'48", in NE ¼ NW ¼ 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 122 TAMP.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.01	9.62	9.72	6.84	5.89	---	4.17	-2.12	-4.57	10.09	19.87	18.54
10	18.41	8.38	9.40	5.66	5.35	.39	5.34	-3.13	-1.40	12.18	20.84	19.21
15	16.82	7.94	8.87	5.68	3.76	1.15	---	---	.98	13.87	21.61	20.61
20	14.90	8.07	9.02	5.94	---	2.25	2.33	-5.61	2.68	15.47	21.52	21.28
25	12.90	8.07	8.15	6.85	---	3.12	.36	-6.23	5.23	17.19	21.34	21.76
EOM	10.66	8.86	8.32	6.25	---	2.40	-1.06	-5.59	7.77	18.73	19.66	22.46
MAX	19.42	10.43	9.80	8.16	6.15	3.13	5.35	-1.16	7.77	18.73	21.71	22.46
CAL YR 2000	MAX 19.46											
WTR YR 2001	MAX 22.46											

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" in NW ¼ NW ¼ 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 120 FLRD.

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 public supply 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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.99	-1.39	-.45	-1.13	-2.77	-5.50	-3.59	-5.65	-7.51	-2.20	6.08	4.24
10	2.18	1.97	-.40	-2.22	-2.70	-4.85	1.10	-6.37	-6.98	-1.46	5.80	4.61
15	1.51	10.44	1.44	-2.07	-3.34	-4.81	-3.59	-6.79	-6.29	3.77	5.75	10.26
20	3.18	-1.10	-.54	-1.68	-3.80	-4.52	-4.18	-7.41	-5.59	4.08	5.59	6.11
25	-.24	-.78	---	---	-2.01	-4.29	-4.88	-7.51	---	5.23	5.48	6.37
EOM	-1.18	-.59	-1.13	.08	-2.74	-4.11	-6.04	-7.88	-3.09	4.95	4.98	6.36
MAX	4.28	10.44	1.44	1.04	-1.01	-1.06	1.10	-2.93	.18	11.39	7.36	10.26
CAL YR 2000	MAX 10.44											
WTR YR 2001	MAX 11.39											

WELL NUMBER.--272129082330202. City of Sarasota Hickory Avenue Well near Sarasota, FL.

LOCATION.--Lat 27°21'29", long 82°33'02", 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 120 FLRD.

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.51	-4.66	-3.13	-4.52	-7.59	-15.98	-13.39	-15.78	-18.71	-13.49	15.43	13.89
10	-.81	2.36	-3.12	-5.65	-6.95	-14.66	-1.20	-17.27	-18.53	-13.03	15.45	14.37
15	-1.72	---	-1.62	-5.81	-7.79	-15.29	-14.52	-18.00	-17.78	---	15.43	18.71
20	3.59	-3.71	-3.11	-5.50	-7.74	-15.19	-14.07	-18.51	-16.87	13.58	15.39	15.67
25	-3.18	-3.22	-3.46	-1.00	-4.07	-15.19	-15.37	-18.24	-15.82	14.49	15.19	15.81
EOM	-4.35	-3.19	-3.85	-.28	-6.52	-13.95	-17.01	-18.60	-14.87	14.58	14.67	16.03
MAX	4.12	3.42	-1.62	.94	-3.46	-3.57	-1.20	-6.50	-3.83	14.76	16.01	18.71
CAL YR 2000	MAX 11.18											
WTR YR 2001	MAX 18.71											

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

SARASOTA COUNTY--Continued

WELL NUMBER.--272316082302601. Sarasota County Test Well No. 1 near Sarasota, FL.

LOCATION.--Lat 27°23'16", long 82°30'26", in NE ¼ NW ¼ 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 120°FLRD.

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 public supply wells.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.67	12.33	13.16	11.61	10.75	4.13	6.64	3.59	1.15	12.88	16.44	16.86
10	17.50	11.84	13.07	11.01	10.40	4.16	7.24	2.88	2.76	14.00	16.83	17.66
15	14.07	11.97	12.10	11.28	9.54	4.56	7.43	2.08	6.29	14.96	16.94	19.13
20	12.57	11.95	9.30	11.58	8.60	5.24	5.98	1.27	7.26	16.22	16.72	19.68
25	11.28	12.19	8.79	11.65	5.22	5.59	7.25	.71	9.50	17.31	16.33	20.04
EOM	12.08	12.78	8.81	11.02	4.87	5.53	3.85	.29	11.26	18.08	14.98	20.59
MAX	18.14	12.78	13.30	11.84	10.94	8.86	9.85	5.54	11.26	18.09	18.94	20.63
CAL YR 2000	MAX 18.26											
WTR YR 2001	MAX 20.63											

WELL NUMBER.--272317082290502. Sarasota County Test Well 6A near Sarasota, FL.

LOCATION.--Lat 27°23'17", long 82°29'05", in NE ¼ NE ¼ 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 120°FLRD.

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 public supply wells.

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

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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.71	7.79	9.31	7.26	.06	-5.85	2.87	-7.60	-3.35	7.51	10.98	11.00
10	---	7.21	9.02	6.73	-.55	---	3.35	-2.48	-2.36	8.55	11.35	12.23
15	7.09	7.39	8.08	6.89	-1.71	---	-2.67	-3.64	-.25	11.46	11.60	14.97
20	4.97	7.40	8.31	7.31	-3.09	---	-4.23	-4.60	2.14	11.25	11.14	15.51
25	3.60	7.87	7.83	7.33	---	2.69	.76	-5.38	3.54	12.21	10.69	17.00
EOM	6.68	8.79	7.96	.32	---	1.50	-5.87	-5.71	5.46	12.40	8.95	17.75
MAX	12.57	8.79	9.38	7.70	.37	3.74	3.81	-1.77	5.46	13.09	15.28	17.78
CAL YR 2000	MAX 14.02											
WTR YR 2001	MAX 17.78											

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

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SARASOTA COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
265652082185801	ENGLEWOOD WELL 150 NEAR ENGLEWOOD FL	20010515	5.79
		20010925	9.56
265712082205701	ENGLEWOOD WATER DT R-2 NEAR ENGLEWOOD FL	20010515	2.12
		20010925	8.75
270036082213401	ENGLEWOOD TEST C10 NR ENGLEWOOD FL	20010515	5.83
270058082152502	N PORT ON SITE MON WELL NEAR NORTH PORT FL	20010516	23.80
		20010925	28.40
270106082214101	ENGLEWOOD DEEP ZONE 3 NEAR ENGLEWOOD FL	20010515	9.65
		20010926	13.91
270420082230502	VENICE GARDENS SUWANNEE WELL NEAR VENICE FL	20010516	21.71
		20010926	25.71
270420082230503	VENICE GARDENS HAWTHORN WELL NEAR VENICE FL	20010516	-0.53
		20010926	21.21
270432082085706	ROMP 9 NRSD WELL NEAR NORTHPORT FL	20010518	18.52
		20010925	22.81
270542082261801	VENICE WELL 35 NEAR VENICE FL	20010515	2.61
		20010926	6.67
270808082270502	ROMP TR5-1 SUWANNEE WELL AT LAUREL FL	20010515	15.37
		20010925	20.44
270808082270503	ROMP TR5-1 HAWTHORN WELL AT LAUREL FL	20010515	3.72
		20010925	9.76
270840082225101	HENRY RANCH WELL 3 NEAR VENICE FL	20010515	5.37
		20010925	11.45
270919082234202	ROMP TR5-2 UPPER HAWTHORN MONITOR NEAR LAUREL FL	20010514	6.43
		20010927	11.68
270919082234203	ROMP TR5-2 LOWER HAWTHORN MONITOR NEAR LAUREL FL	20010514	15.90
		20010927	25.35
270919082234205	ROMP TR5-2 SUWANNEE MONITOR NEAR LAUREL FL	20010514	17.56
		20010927	27.56
271021082151603	ROMP 19 ES WELL NEAR SARASOTA FL	20010927	31.27
271035082285901	SOUTHBAY UTILITIES DEEP WELL NEAR OSPREY FL	20010927	15.87
271137082074801	SWFWMD R-18-1 FL	20010514	26.89
		20010924	40.65
271137082284501	ROMP 20 SUWANNEE OB-3 WELL NEAR OSPREY FL	20010514	14.39
		20010926	22.07
271137082284502	ROMP 20 HAWTHORN AT OSPREY FL	20010514	10.77
		20010926	18.68

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

SARASOTA COUNTY

STATION NUMBER	STATION NAME	DATE	ELEV- ATION ABOVE NGVD (FEET) (72020)
271137082284503	ROMP TR-20 UPPER HAWTHORN WELL AT OSPREY FL	20010514	-5.99
		20010926	3.10
271757082241301	BEE RIDGE WELL 15 NEAR SARASOTA FL	20010514	2.66
		20010924	22.30
271813082201301	ROMP 22 AVON PARK WELL NEAR UTOPIA FL	20010514	-1.82
		20010926	22.16
271813082201303	ROMP 22 LOW INTERMEDIATE WELL NEAR FRUITVILLE FL	20010514	.26
		20010924	23.81
271813082201304	ROMP 22 UPPER INTERMEDIATE WELL NEAR FRUITVILLE FL	20010514	8.60
		20010924	23.74
272049082324502	ROMP TR SA-1 SUWANNEE WELL NEAR SARASOTA FL	20010514	5.28
		20010514	-0.44
272053082320202	STA INJ DEEP MTR 2 NEAR SARASOTA FL	20010516	2.97
		20010927	14.69
272119082325101	WHITAKER BAY WELL NEAR SARASOTA FL	20010514	-0.47
		20010926	8.24
272127082295301	KENSINGTON PARK WELL 1 NEAR SARASOTA FL	20010514	1.94
		20010927	16.82
272133082324701	CITY SARASOTA 27TH ST WELL NEAR SARASOTA FL	20010514	-1.98
		20010927	9.95
272317082302402	COUNTY PUMP STATION 1 3 INCH WELL NEAR SARASOTA FL	20010516	2.48
		20010927	10.91

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SARASOTA COUNTY

DATE	TIME	ELEVATION ABOVE NGVD (FEET) (72020)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	
271134082092201 BIG SLOUGH DEEP WELL NR ARCADIA FL (LAT 27 11 34N LONG 082 09 22W)														
FEB 2001	15...	0940	29.54	963	23.0	--	--	--	--	--	100	--	--	
MAY	14...	1150	29.04	--	--	--	--	--	--	--	--	--	--	
SEP	24...	1333	34.80	--	--	--	--	--	--	--	--	--	--	
	27...	0858	34.86	959	26.0	--	--	--	--	--	100	--	--	
271134082092202 BIG SLOUGH SHALLOW WELL NEAR ARCADIA FL (LAT 27 11 34N LONG 082 09 22W)														
FEB 2001	15...	0945	27.56	610	23.0	--	--	--	--	--	50.0	--	--	
SEP	27...	0904	31.88	558	26.0	--	--	--	--	--	43.0	--	--	
271021082151603 ROMP 19 ES WELL NEAR SARASOTA FL (LAT 27 10 21N LONG 082 15 16W)														
FEB 2001	15...	0845	27.10	938	20.5	20	110	25.0	54.0	.50	100	60.0	.3	18.0
SEP	27...	1030	31.27	928	25.0	20	104	26.0	56.0	.70	110	65.0	.3	18.0
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (70507)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM, WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
271021082151603 ROMP 19 ES WELL NEAR SARASOTA FL (LAT 27 10 21N LONG 082 15 16W)														
FEB 2001	15...	588	<.01	<.02	.40	1.0	.030	.020	<3	6	<1.00	<1	1.0	3600
SEP	27...	588	<.01	.3	.02	.70	.050	<.010	<3	8	<1.00	<1	<1.0	2640
DATE	TIME	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)								
271021082151603 ROMP 19 ES WELL NEAR SARASOTA FL (LAT 27 10 21N LONG 082 15 16W)														
FEB 2001	15...		2	<.10	<1	520	3							
SEP	27...		4	<.10	5	450	6							

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