

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

# Water Resources Data Florida Water Year 2003

Volume 2B South Florida Ground Water



Water-Data Report FL-03-2B



# **CALENDAR FOR WATER YEAR 2003**

# 2002

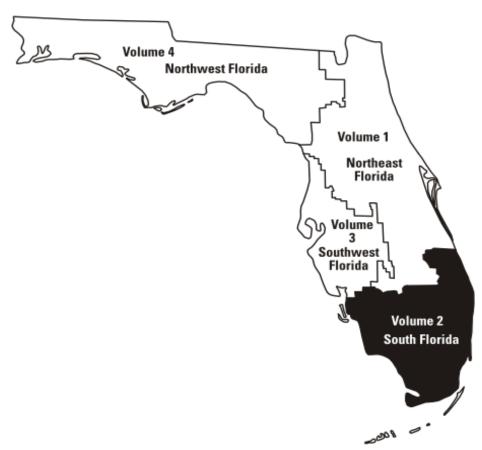
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# Water Resources Data Florida Water Year 2003

# Volume 2B. South Florida Ground Water

By S. Prinos, R. Irvin, M. Byrne

Water-Data Report FL-03-2B



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



# **U.S. Department of the Interior**

Gale A. Norton, Secretary

# **U.S. Geological Survey**

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2004

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Information about the USGS, Florida Integrated Science Center, is available on the Internet at http://fl.water.usgs.gov

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

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#### PREFACE

This volume of the annual hydrologic data report of Florida is one of a series of annual reports that document hydrologic data gathered from 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. Figure 1 shows the area covered by Volume 2B.

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

#### ACKNOWLEDGEMENT

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 the Hydrologic Records Section under the supervision of M. H. Murray, J. Woolverton, E. C. Price, and S. Prinos. Carolyn Price, Eleanor Seymore, Jose Agis, R.B. Irvin, were the primary persons responsible for the compilation of the data report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data

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This report was prepared in cooperation with the State of Florida and with other agencies listed under COOPERATION on page 2.

Hydrologic data for south Florida are contained in two volumes

Volume 2A: Surface Water Volume 2B: Ground Water

# Form Approved OMB No. 0704-0188 REPORT DOCUMENTATION PAGE 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 1. AGENCY USE ONLY (Leave blank) 2. REPORT DATE 3. REPORT TYPE AND DATES COVERED April 28, 2004 **Annual Report** 4. TITLE AND SUBTITLE 5 FUNDING NUMBERS Water Resources Data Florida, Water Year 2003 Volume 2B: South Florida - Ground Water S. Prinos, R. Irvin, M. Byrne, 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 8. PERFORMING ORGANIZATION REPORT NUMBER **U.S. Geological Survey** 9100 N.W. 36th Street, Suite #107 USGS-WDR-FL-03-2B Miami, Florida 33178 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) 10. SPONSORING / MONITORING AGENCY REPORT NUMBER U.S. Geological Survey 9100 N.W. 36th Street, Suite #107 USGS-WDR-FL-03-2B Miami, Florida 33178 11. SUPPLEMENTARY NOTES Prepared in cooperation with the State of Florida and other agencies. 12a. DISTRIBUTION / AVAILABILITY STATEMENT 12b. DISTRIBUTION CODE No restrictions on distribution: This report may be purchased from: National Technical Information Center, Springfield, VA 22161 13. ABSTRACT (Maximum 200 words) Water resources data for 2003 water year in Florida consists of continuous or daily discharge for 385 streams, periodic discharge for 13 streams, continuous or daily stage for 255 streams, periodic stage for 13 stream, peak disthe charge for 36 streams, and peak stage for 36 streams, continuous or daily elevations for 13 lakes, periodic elevations for 46 lakes, continuous ground-water levels for 441 wells, periodic ground-water levels for 1227 wells, quality of water data for 133 surface-water sites, and 308 wells. The data for South Florida included continuous or daily discharge for 72 streams, continuous or daily stage for 50 streams, no peak stage discharge for streams, 1 continuous elevation for lake, continuous ground-water levels for 237 wells, periodic ground-water levels for 248 wells, water quality for 25 surface-water sites, and 161 wells. 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 15. NUMBER OF PAGES \*Florida, \*Hydrologic data, \*Surface Water, \*Ground Water, \*Water Quality, Flow rate, 640 Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells. 16. PRICE CODE SECURITY CLASSIFICATION 19. SECURITY CLASSIFICATION 20. LIMITATION OF ABSTRACT OF THIS PAGE 20. LIMITATION OF ABSTRACT 17. SECURITY CLASSIFICATION Unclassified Unclassified Unclassified

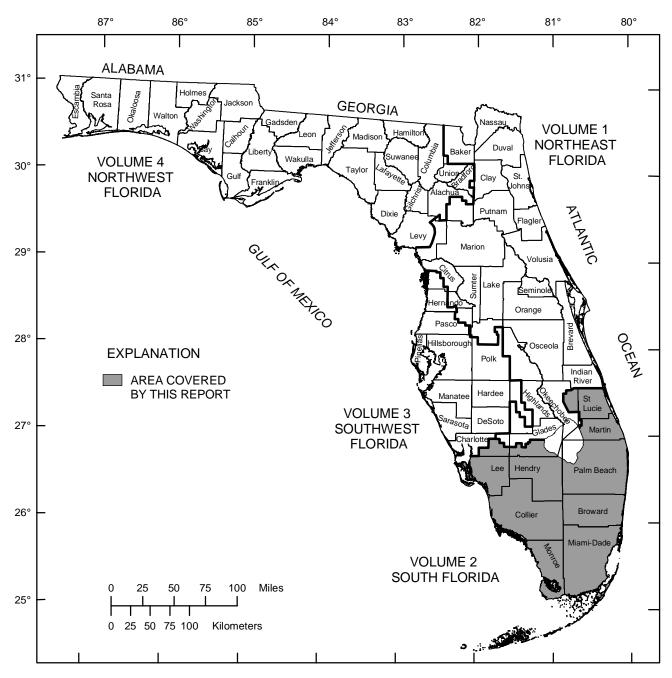


Figure 1. Geographic area covered by this report.

# WATER RESOURCES DATA - FLORIDA, 2003 VOLUME 2B: SOUTH FLORIDA

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### **VOLUME 2B: SOUTH FLORIDA**

#### INTRODUCTION

The U.S. Geological Survey (USGS), in cooperation with State, County, and other 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 USGS, the data are published annually in this report series entitled "Water Resources Data - Florida, Volume 2A: South Florida Surface Water and Volume 2B: South Florida Ground Water".

This report series includes records of stage, discharge, and water quality for streams; stage, contents, and water quality for lakes; and ground-water levels, contents, and water quality of ground-water wells. The data for South Florida include continuous or daily discharge for 72 streams, continuous or daily stage for 50 streams (including stage published at discharge and stage only sites), continuous elevations for 1 lake, continuous ground-water levels for 237 wells, periodic ground-water levels for 248 wells, and quality-of-water data for 25 surface-water sites and 161 wells.

Publication of 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. For the 1975 water year, the report format was modified to one volume presenting data on quantities of surface water, quality of surface and ground water, and ground-water levels. For the 1977 water year, the report format was modified to a two volume set: one volume presenting data on quantity as well as quality of surface water and one volume presenting data on water levels along with quality of ground water.

Prior to introduction of this series and for several concurrent water years, water-resources data for Florida were published in USGS 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 aforementioned Water-Supply Papers may be consulted in the federal repository libraries of the principal cities of the United States and may be purchased from the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, CO 80115 (telephone: 888-ASK-USGS).

Similar reports are published annually by the USGS for all of the United States. These official USGS 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-xx-2B," where xx represents the current water year. For archiving and general distribution, reports for the 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (305) 717-5800.

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### COOPERATION

The USGS and various Federal, State, and local organizations have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data presented in this report through cooperative agreement with the USGS are:

Broward County
City of Boca Raton
City of Cape Coral
City of Ft. Lauderdale
City of Hallandale Beach
City of Hollywood
Everglades National Park
Florida Keys Aqueduct Authority

Lee County
Miami-Dade County Department of Environmental
Resource Management
Seminole Tribe of Florida
South Florida Water Management District
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service

Organizations that provided data are acknowledged in station manuscripts.

# SUMMARY OF HYDROLOGIC CONDITIONS

This section summarizes important hydrologic events that occurred during the 2003 water year (October 1, 2002 to September 30, 2003) as well as significant natural and water-management responses to these events. Figure 2 provides a frame of reference for some of the major land areas of hydrologic significance mentioned in the summary.

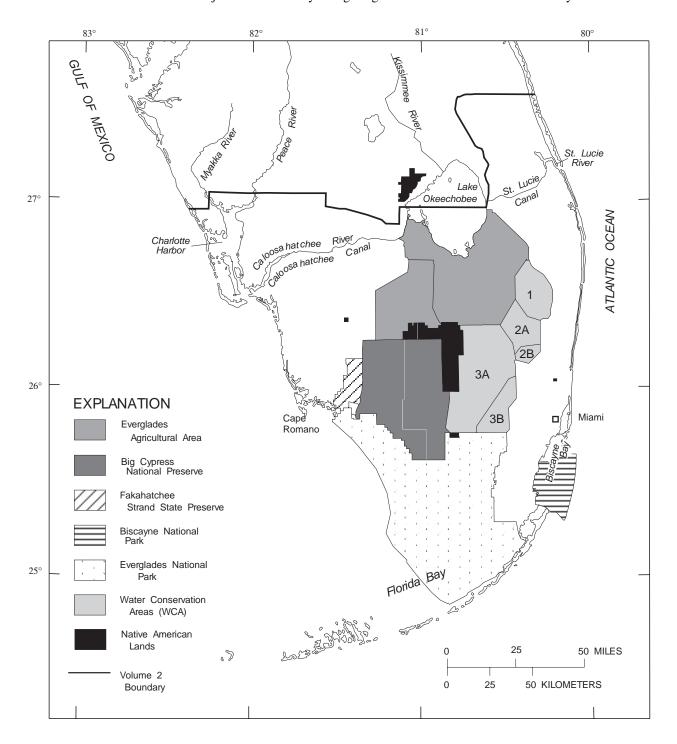


Figure 2. South Florida areas of hydrologic significance.

#### SUMMARY OF HYDROLOGIC CONDITIONS (continued)

#### GROUND-WATER MONITORING NETWORK

During the 2003 water year (October 1, 2002 to September 30, 2003), the Florida Integrated Science Center - Water and Restoration Studies (FISC-WRS) monitored 506 wells in southern Florida to assess regional ground-water conditions. In southeastern Florida, the principal aquifers monitored are the Biscayne aquifer in Miami-Dade and Broward Counties (225 wells) and the surficial aquifer system in Palm Beach, St. Lucie, and Martin Counties (54 wells). In southwestern Florida, the principal aquifers are the water-table aquifer (76 wells), lower Tamiami aquifer (42 wells), sandstone aquifer (40 wells), mid-Hawthorn aquifer (37 wells), lower Hawthorn aquifer (or lower Hawthorn producing zone) (25 wells), and the Floridan aquifer system (7 wells). The stratigraphic units included in these aquifers are shown in figure 3.

#### DATA FROM SELECTED WELLS

The most extensive data are provided by 237 monitoring wells equipped with data recorders that measure hourly water levels. The daily maximum water-level elevations presented in this report are derived from these hourly measurements.

Seven recorder-equipped wells have been selected as index stations to depict ground-water conditions for the 2003 water year. These wells were selected to show changes in ground-water levels that occurred in seven municipal water supply aquifers used in southern Florida. Relations shown for these index wells can only indicate changes occurring in the aquifers in the vicinity of each well. A detailed assessment of hydrologic conditions throughout each aquifer, would require similar statistical evaluations of data from many additional wells. For detailed assessment of aquifer conditions, the USGS has performed similar analyses of data from additional network wells. These results are available at the USGS Current Water-level Conditions website <a href="http://www.sflorida.er.usgs.gov/ddn\_data/index.html">http://www.sflorida.er.usgs.gov/ddn\_data/index.html</a>.

Two plots are shown for each of the seven selected stations (figs. 4-10). The first plot compares the water levels for the 2003 water year to the historical water-level data. Daily maximum water levels from the 2003 water year are compared to: (1) normal monthly means of the daily maximum water levels, computed using all data available for each month for the period October 1978 to September 2003, (2) highest and lowest daily maximum water levels for the period of record, and (3) The monthly standard deviation of water levels above and below the normal monthly mean. Relations depicted in this first plot could be skewed by long-term water level trends.

The second plot shows the annual mean of daily maximum water levels and statistical data obtained from the Seasonal Kendall Trend Test (SKTT), depicting long-term trends. The SKTT is a nonparametric test for a monotonic trend in daily values. Two results of this test are the p-value and the Seasonal Kendall Slope Estimator (SKSE). The p-value indicates if a trend determined by the SKTT is statistically significant. The null hypothesis for this test assumes that the random variable (water level) has not changed over time. The test makes pairwise comparisons of data values from the same seasons to eliminate seasonal variability. If the null hypothesis is disproven (p-values less than 0.05), there is a statistically significant trend in the data. The SKSE is a positive or negative slope representing a trend in water levels that is either increasing or decreasing. The SKSE is expressed as the change in water level in feet per year (ft/yr). The SKTT is determined using monthly mean values.

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# SUMMARY OF HYDROLOGIC CONDITIONS (continued)

Southeastern Geological Society		This report						
in Florida Bureau of Geology Special Publication 28	Southwestern Florida (Lee, Collier, and Hendry Counties)			Southeastern Florida ami-Dade and Broward Counties)	Southeastern Florida (Martin, Palm Beach, and St. Lucie Counties)			
	system	Water-table aquifer	l aquifer system	Biscayne aquifer				
Surficial aquifer system	Surficial aquifer system	Confining beds		Semiconfining unit Gray limestone aquifer	Surficial aquifer system			
		Lower Tamiami aquifer	Surficial	Semiconfining unit				
	Intermediate aquifer system	Confining unit						
		Sandstone aquifer						
Intermediate aguifer system	aquife	Confining unit	In	termediate confining	Intermediate			
momentus aquilor oyatam	mediate	Mid-Hawthorn aquifer	unit		confining unit			
	Interi	Confining unit						
	aquifer system	Lower Hawthorn producing zone						
Floridan aquifer system	Floridan aquifer	Remaining portion of the Floridan aquifer system	Flo	oridan aquifer system	Floridan aquifer system			

**Figure 3.** Generalized geology and hydrogeology of southern Florida (Prinos and others, 2002)

#### SUMMARY OF HYDROLOGIC CONDITIONS (continued)

The statistical analyses used to evaluate the water-level data can be affected by missing data. Almost all of the index stations selected have periods of missing data. Cooperative support for ground-water monitoring at some locations has fluctuated. As a result monitoring at some of the wells was terminated, but later resumed. Additionally, some stations experienced mechanical problems with the float system or water-level recorder. One example is L-2434 (fig. 10), which is one of the only recorder-equipped monitoring stations in the lower Hawthorn aquifer in southwestern Florida. Because water levels at this station fluctuate rapidly and extensively; the mechanical systems used to monitor the well frequently slipped or became entangled. This necessitated the deletion of some segments of erroneous data until a submersible pressure transducer was installed during the 1997 water year. Pressure transducers at stations with rapidly fluctuating water levels provide much more complete record than previously possible.

The data analyzed were not censored for missing record. This is because certain stations, such as L-2434, would have insufficient data for analysis if all partial monthly or annual records were removed. Despite the missing data from well L-2434 there is clearly a significant trend toward decreased water levels that is apparent the record available. This trend must be considered in order to understand why the current water-level data remain below the normal monthly mean water levels from this well.

Dashed lines are used to indicate periods for which the annual means computed included one or more months that were missing more than 15 days. The SKSE provided for these trends should also be considered approximate. Within the applicable graphs, the word "approximately" is used to indicate uncertainty for those stations that have excessive periods of missing record.

#### LONG-TERM TRENDS

Before current ground-water conditions can be reasonably evaluated, the potential effect of long-term trends must be considered. Plots of ground-water levels, means, and SKTT results (figs. 4-10) show that water-level data from all of the selected wells indicate statistically significant (p-value less than 0.05) long-term trends.

Wells completed in the Biscayne aquifer in Miami-Dade County (fig. 4, S-196A), surficial aquifer system in Palm Beach County (fig. 5, PB-561), and water-table aquifer in Collier County (fig. 6, C-496) all indicate water-level increases of 0.02 ft/yr since water year 1979.

Wells completed in the lower Tamiami aquifer (fig. 7, L-2194), sandstone aquifer (fig. 8, L-729), mid-Hawthorn aquifer (fig. 9; L-1993), and lower Hawthorn aquifer (fig. 10, L-2434) in Lee County, all indicate long-term water-level declines. A 0.09 ft/yr downward trend in water-level data from well L-2194 was determined. This represents an approximate 2-ft decrease in average water levels for this period (fig. 7, 1979 to 2003 water years). Water-level data from well L-729 indicated a 0.25 ft/yr downward trend that represents an approximate 6-ft decline in average water levels (fig. 8, 1979 to 2003 water years). Water level data from well L-1993 indicated a 0.70 ft/yr downward trend that represents an approximate 18-ft decline in average water levels (fig. 9, 1979 to 2003 water years). Water level data from well L-2434 indicated an overall downward trend of 1.40 ft/yr, representing an approximate 32-ft decline in water levels (fig. 10, 1981 to 2003 water years). The trend in water levels in well L-2434 has resulted in period-of-record extreme minimum water levels that are progressively lower each year (1999 to 2003 water years). Wells L-729, L-1993, and L-2194 are all completed in confined aquifers and located in areas affected by municipal water-supply withdrawals.

Because of the effect of substantial long-term downward trends in water levels at wells L-729 (fig. 8, sandstone aquifer), L-1993 (fig. 9, mid-Hawthorn aquifer), and L-2434 (fig. 10, lower Hawthorn aquifer), recent water levels are, on average below normal monthly mean water levels (figs. 7-10). These means are affected by water-level data that had been much higher in the past. The effect of the downward trend is most obvious in the plot of the 2003 water year data for L-1993 (fig. 9). Therefore, comparison of recent and historical water levels must be made with a comprehensive understanding of long-term water-level trends.

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# SUMMARY OF HYDROLOGIC CONDITIONS (continued)

#### RAINFALL

Water levels in the aquifers of south Florida respond to changes in rainfall. The relation between rainfall and water levels is most evident in the unconfined or shallow confined aquifers (including the Biscayne, lower Tamiami, and sandstone aquifers, the surfical aquifer system, and the water table in southwestern Florida). The response of the deeper confined aquifers (for example the mid and lower Hawthorn aquifers) to short-term changes in rainfall is not as apparent.

Rainfall data collected and evaluated by the South Florida Water Management District (SFWMD) during the 2003 water year, provide a framework for understanding water-levels variations. The rainfall data provided by the SFWMD are subdivided into 16 geographic areas. Monthly rainfall totals from individual stations within these areas are averaged, and compared to the historical total monthly rainfall averages for that area. Daily rainfall averages for each area are also provided (SFWMD, 2003)

#### GROUND-WATER CONDITIONS DURING THE 2003 WATER YEAR

Well C-496 water levels (fig. 6, water-table aquifer) during the 2003 water year were above normal monthly mean water levels for almost the entire year. This may be explained in part by the +0.02 ft/yr long-term trend observed in this well. Water levels in wells PB-561 (fig. 5, surficial aquifer), L-1993 (fig. 9, mid-Hawthorn aquifer), and L-2434 (fig. 10, lower Hawthorn aquifer) were below normal monthly mean water levels for almost the entire year. This is consistent with the -0.70 ft/yr and -1.40 ft/yr water-level trends observed, respectively, in wells L-1993 (fig. 9, mid-Hawthorn aquifer) and L-2434 (fig. 10, lower Hawthorn aquifer), but inconsistent with the +0.02 ft/yr long-term water-level trend observed in well PB-561 (fig. 5, surficial aquifer system). Water-level data from PB-561 (fig. 5, surficial aquifer system) collected during the 2003 water year is lower than would be expected based on the observed long-term trend.

During October, rainfall was slightly below normal in southwestern Florida (69 to 83 percent of average) and much lower than normal (below 30 percent of average) in Martin, Miami-Dade, and St. Lucie Counties. Water levels in wells S-196A (fig. 4, Biscayne aquifer), PB-561 (fig. 5, surficial aquifer system), and L-729 (fig. 8, sandstone aquifer) declined to levels equivalent to about one standard deviation below the normal monthly mean. Water levels in well L-2194 (fig. 7, lower Tamiami aquifer) generally paralleled about the normal rate of decline during this month.

Although November rainfall in southwestern Florida was 153 to 197 percent of average, rainfall in southeastern Florida remained lower than normal (71 to 89 percent of average). Water levels in wells S-196A (fig. 4, Biscayne aquifer, Miami-Dade County) and PB-561 (fig. 5, surficial aquifer system, Palm Beach County) declined to levels near, and slightly below one standard deviation below the normal monthly mean, respectively, during this period. Despite rainfall amounts that were considerably above the average in southwestern Florida, water levels in well L-729 (fig. 8, sandstone aquifer) declined to below one standard deviation below the mean.

December 2002, rainfall was considerably greater than normal in most of southern Florida. Rainfall varied spatially from 97 (eastern Palm Beach) to 532 (upper Kissimmee) percent of average. During the month water levels in wells S-196A (fig. 4, Biscayne aquifer), C-496 (fig. 6, water-table aquifer), and L-2194 (fig. 7, lower Tamiami aquifer) increased to levels greater than one standard deviation above the normal monthly mean.

Water levels in most index wells declined during January, but generally not below one standard deviation below the normal monthly mean even though January rainfall was considerably less than normal (less than 35 percent of normal monthly rainfall totals throughout southern Florida). Exceptions are the monitoring wells in Lee County; L-729 (fig. 8, sandstone aquifer) where water levels reached one standard deviation below the mean near the end of January, and L-1993 (fig. 9, mid-Hawthorn aquifer) and L-2434 (fig. 10, lower Hawthorn aquifer), where as previously indicated, long-term trends have led to water levels that are considerably below normal monthly means most of the year.

#### SUMMARY OF HYDROLOGIC CONDITIONS (continued)

Drier than normal conditions persisted throughout most of southern Florida during February 2003. Rainfall varied from 32 to 86 percent of average in southern Florida, except in the upper Kissimmee and Everglades geographic areas where rainfall was about average. Water levels in most of the index wells continued to decline. Water levels in well PB-561 (fig. 5, surficial aquifer system) in Palm Beach reached one standard deviation below the mean. Water levels in well L-729 (fig. 8, sandstone aquifer) generally were below one standard deviation below the normal monthly mean.

From March through May, rainfall was generally above average throughout southern Florida. Rainfall exceeding 200 percent of the normal monthly total occurred in one or more geographic areas during each month of this period. Geographic areas where rainfall was less than 90 percent of average rainfall during this period were Water Conservation Areas 1 and 2 (April) and the upper and lower Kissimmee (May). Water levels in well S-196A (fig. 4, Biscayne aquifer) in Miami-Dade County exceeded one standard deviation above the normal monthly mean for brief periods during these months. Despite above average rainfall along the southwestern coast of Florida (134 to 166 percent of average), water levels in well L-729 (fig. 8, sandstone aquifer) in Lee County declined below one standard deviation below the mean several times during this period. Water levels in well L-2434 (fig. 10, lower Hawthorn aquifer) declined to a new period-of-record lowest daily maximum water level on March 7. Water levels in well L-1993 (fig. 9, mid-Hawthorn aquifer) remained below one standard deviation below the mean for the entire period.

June rainfall was above average in southwestern Florida and about average in southeastern Florida. However, rainfall was lower than average (67 to 85 percent of normal rainfall totals) in the geographic areas; eastern Palm Beach County, eastern Broward County, and Water Conservation Areas 1, 2, and 3. Water levels in well PB-561 (fig. 5, surficial aquifer system), where rainfall was lower than average increased only slightly. Water levels in wells S-196A (fig. 4, Biscayne aquifer), C-496 (fig. 6, water-table aquifer), L-2194 (fig. 7, lower Tamiami aquifer), and L-729 (fig. 8, sandstone aquifer) increased to, or remained at, about one standard deviation above the mean.

July rainfall was generally slightly lower than average in southern Florida. Rainfall generally varied spatially from 47 to 88 percent of average. Geographic areas that received more than 90 percent of the average rainfall were the east Caloosahatchee, west Everglades Agricultural Area (EAA), and the upper and lower Kissimmee. During July, water levels in most index wells declined slightly. Water levels in S-196A (fig. 4, Biscayne aquifer) and PB-561 (fig. 5, surficial aquifer system) declined to about one standard deviation below the mean.

August rainfall varied spatially from slightly below to well above average (96 to 166 percent). In eastern Miami-Dade County where rainfall was 115 percent of average, water levels in well S-196A (fig. 4, Biscayne aquifer) were greater than or near one standard deviation above the normal monthly mean. Water levels in well PB-561 (fig. 5, surficial aquifer system) in eastern Palm Beach County where rainfall was 122 percent of normal, increased from one standard deviation below to slightly below the mean. Water levels in wells C-496 (fig. 6, water-table aquifer), L-2194 (fig. 7, lower Tamiami aquifer), and L-729 (fig. 8, sandstone aquifer) in southwestern Florida where rainfall was 133 percent of normal, increased to near or greater than one standard deviation above the mean.

Rainfall during September varied spatially from above average (181 percent, southwestern coast) to below average (65 percent, eastern Palm Beach County). Water levels in areas where rainfall was above average increased abruptly near the end of September. Water levels in wells S-196A (fig. 4, Biscayne aquifer), and C-496 (fig. 6, water-table aquifer), increased to more than one standard deviation above the mean. Water levels in L-2194 (fig. 7, lower Tamiami aquifer) increased from below the mean to about one standard deviation above the mean. Water levels in well L-729 (fig. 8, sandstone aquifer) remained near one standard above the mean throughout the month. Water levels in well PB-561 (fig. 5, surficial aquifer system), where rainfall was lower than normal declined, from near the mean to about one standard deviation below the mean.

### SUMMARY OF HYDROLOGIC CONDITIONS (continued))

# EXPLANATION FOR PLOTS (FIGURES 4 TO 10) OF SUMMARY STATISTICS AND 2003 WATER YEAR DAILY MAXIMUM WATER LEVELS



Daily maximum water level, recorded during 2003 water year



Monthly mean curve of daily maximum water levels collected, during the month displayed, for the October 1977 to September 2003 period.



One standard deviation (above or below) the monthly mean of daily maximum water levels collected, during the month displayed, for the October 1978 to September 2003 period.

# EXPLANATION FOR PLOTS (FIGURES 4 TO 10) OF DAILY MAXIMUM WATER LEVELS, ANNUAL MEANS OF DAILY MAXIMUM WATER LEVELS, AND RESULTS OF THE SEASONAL KENDALL TREND TEST



Annual mean of daily maximum water levels collected, during the year displayed, for the October 1978 to September 2003 period, wherein no one month is missing more than 15 days of water level record



Annual mean of daily maximum water levels collected, during the year displayed, for the October 1978 to September 2003 period, wherein one or more months is missing 15 or more days of water level record.



Daily maximum water level. Breaks in line represent missing measurements, or measurements that failed quality assurance review.

SKSE

The Seasonal Kendall Slope Estimator (SKSE) represents the median slope of the set of slopes obtained by computing the slope, in feet per year, of all unique pairs of monthly mean daily maximum water levels computed for the site shown.

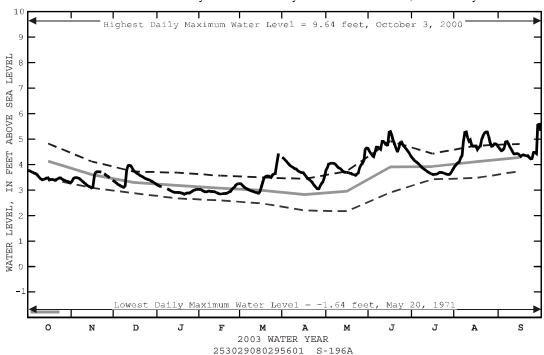
p-value

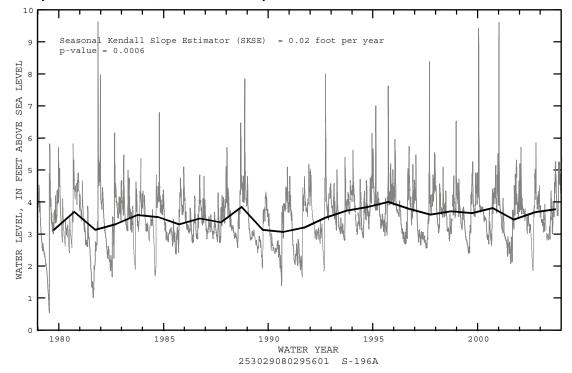
The p-value represents a measure of the significance level of the Seasonal Kendall Trend Test statistic, computed concurrently with the SKSE, used to determine if there is a trend in the data examined. A p-value less than 0.05 indicates a statistically significant trend.

# SUMMARY OF HYDROLOGIC CONDITIONS (continued)

# LOWER EAST COAST - BISCAYNE AQUIFER

Historical water-level summary and observed daily maximum water levels, 2003 water year

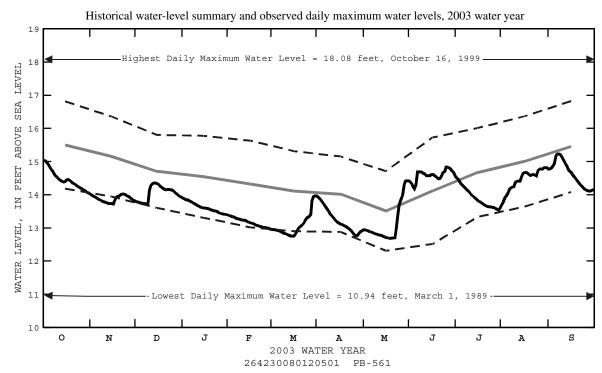




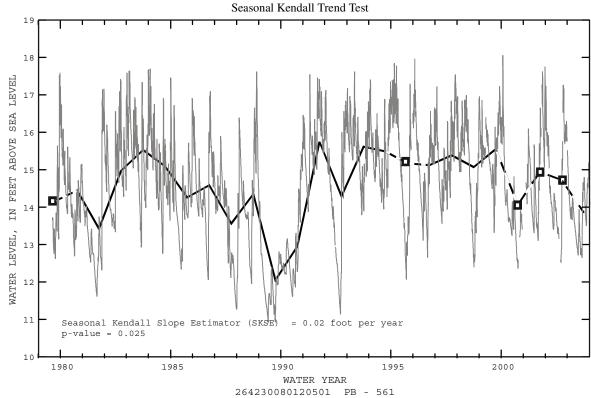
**Figure 4.** Historical water-level summary curves and annual mean of daily maximum water levels at well S-196A penetrating the Biscayne aquifer in Miami-Dade County. Explanation of symbols and lines precedes figure 4.

# SUMMARY OF HYDROLOGIC CONDITIONS (continued)

# UPPER EAST COAST - SURFICIAL AQUIFER SYSTEM



Historical daily maximum water levels, annual means of daily maximum water levels, and results of the

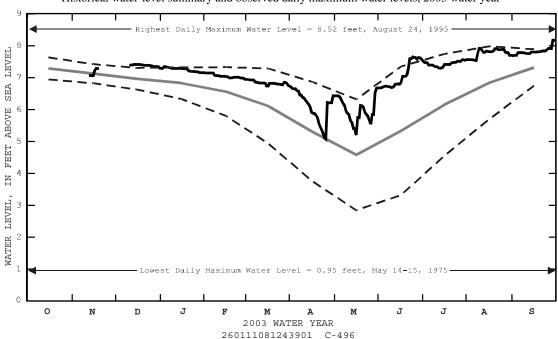


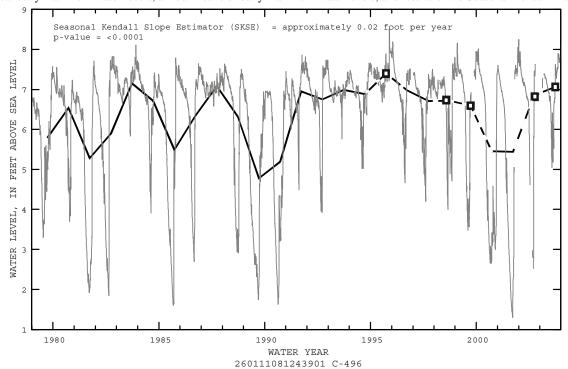
**Figure 5.** Historical water-level summary curves and annual mean of daily maximum water levels at well PB-561 penetrating the surficial aquifer system in Palm Beach County. Explanation of symbols and lines precedes figure 4.

# SUMMARY OF HYDROLOGIC CONDITIONS (continued)

# LOWER WEST COAST - SURFICIAL AQUIFER

Historical water-level summary and observed daily maximum water levels, 2003 water year



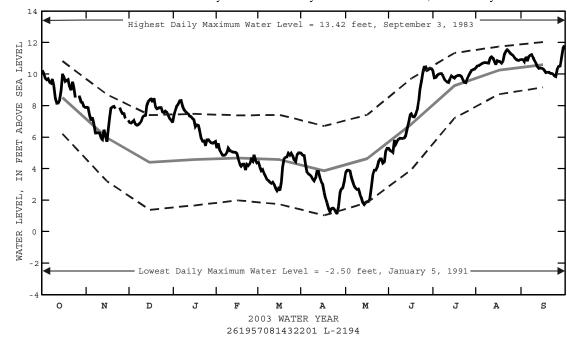


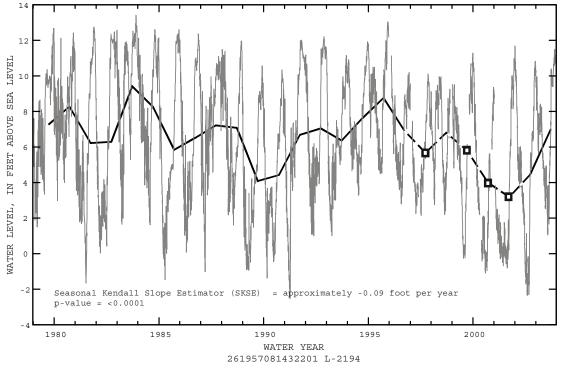
**Figure 6**. Historical water-level summary curves and annual mean of daily maximum water levels at well C-496 penetrating the surficial aquifer system (water-table aquifer) in Collier County. Explanation of symbols and lines precedes figure 4.

### SUMMARY OF HYDROLOGIC CONDITIONS (continued)

# LOWER WEST COAST - LOWER TAMIAMI AQUIFER

Historical water-level summary and observed daily maximum water levels, 2003 water year

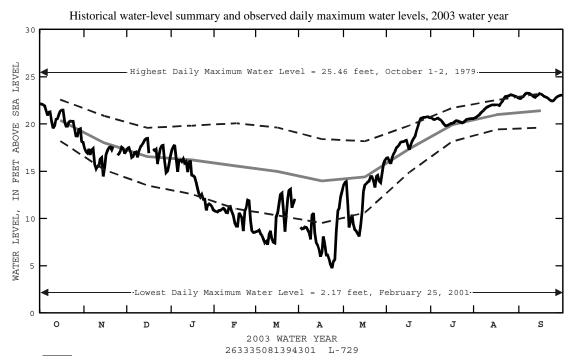


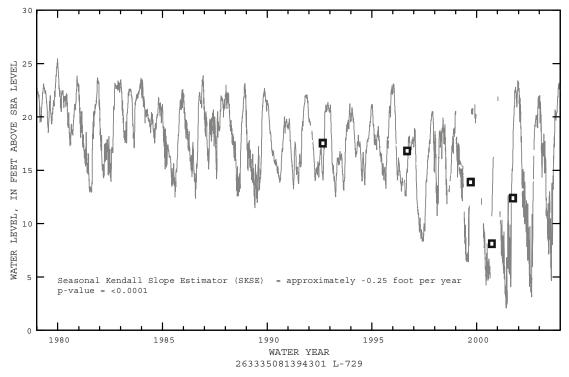


**Figure 7.** Historical water-level summary curves and annual mean of daily maximum water levels at well L-2194 penetrating the lower Tamiami aquifer in Collier County. Explanation of symbols and lines precedes figure 4.

# SUMMARY OF HYDROLOGIC CONDITIONS (continued)

# LOWER WEST COAST - SANDSTONE AQUIFER

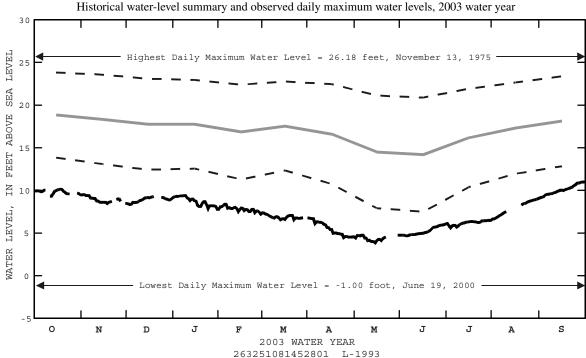




**Figure 8.** Historical water-level summary curves and annual mean of daily maximum water levels at well L-729 penetrating the sandstone aquifer in Lee County. Explanation of symbols and lines precedes figure 4.

### SUMMARY OF HYDROLOGIC CONDITIONS (continued)

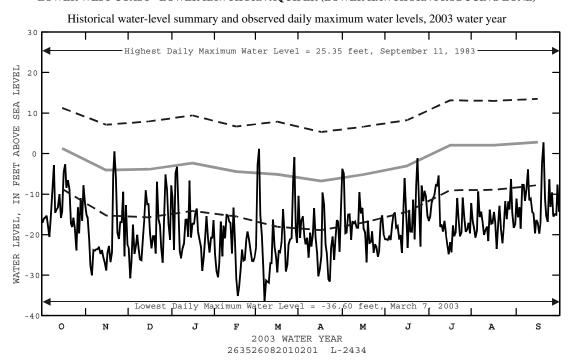
# LOWER WEST COAST - MID-HAWTHORN AQUIFER

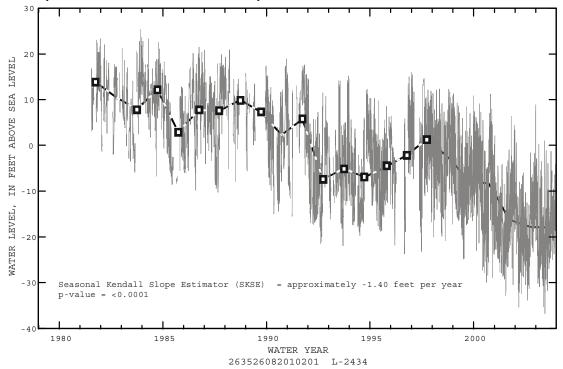


263251081452801 L-1993 **Figure 9.** Historical water-level summary curves and annual mean of daily maximum water levels at well L-1993 penetrating the mid-Hawthorn aquifer in Lee County. Explanation of symbols and lines precedes figure 4.

### SUMMARY OF HYDROLOGIC CONDITIONS (continued)

# LOWER WEST COAST - LOWER HAWTHORN AQUIFER (LOWER HAWTHORN PRODUCING ZONE)





**Figure 10.** Historical water-level summary curves and annual mean of daily maximum water levels at well L-2434 penetrating the lower Hawthorn producing zone in Lee County. Explanation of symbols and lines precedes figure.

#### SPECIAL NETWORKS AND PROGRAMS

**Hydrologic Benchmark Network** is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <a href="http://water.usgs.gov/hbn/">http://water.usgs.gov/hbn/</a>.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from <a href="http://water.usgs.gov/nasqan/">http://water.usgs.gov/nasqan/</a>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provide continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <a href="http://bgs.usgs.gov/acidrain/">http://bgs.usgs.gov/acidrain/</a>.

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from <a href="http://water.usgs.gov/nawqa/">http://water.usgs.gov/nawqa/</a>.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <a href="http://water.usgs.gov/nsip/">http://water.usgs.gov/nsip/</a>.

### EXPLANATION OF THE RECORDS

A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-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, whether streamsite or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and for surface-water stations where only miscellaneous observations are made.

#### **Downstream Order and Station Number**

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indention in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list composed of both types of stations. Gaps are consecutive. The complete eight-digit (or 10-digit) number for each station, such as 02228500, which appears just to the left of the station name, includes the 2-digit part number "02" plus the 6- to 12-digit downstream-order number "228500." The part number designates the major river basin; for example, part "02" is the South Atlantic Slope and eastern Gulf of Mexico basins. In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

# Numbering System for Wells and Miscellaneous Sites

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 11). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

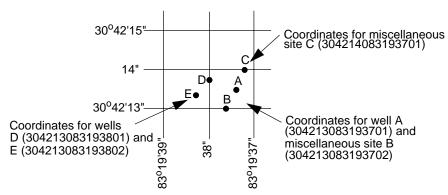


Figure 11. System for numbering wells and miscellaneous sites. (latitude and longitude)

### EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake elevation, similarly, are those for which stage may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a stage-recording device or daily or weekly observations, but need not be. Because daily mean discharges and lake elevations commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Location of all complete-record and partial-record stations for which data are given in this report are shown in figures preceding each sub-basin.

# **Data Collection and Computation**

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

#### **Data Presentation**

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

### **Station Manuscript**

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.—All periods of estimated daily discharge either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<a href="http://water.usgs.gov/nwis/nwis">http://water.usgs.gov/nwis/nwis</a>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the REMARKS and in the inclusion of a stage-capacity table when daily volumes are given.

## Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

### **Data Table of Daily Mean Values**

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is expressed in cubic feet per second per square mile (line headed CFSM); or in inches (line headed IN); or in acre-feet (line headed AC-FT). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

# **Statistics of Monthly Mean Data**

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS \_\_-\_\_, BY WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

# **Summary Statistics**

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS \_\_-\_, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station.

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The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). 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.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per square mile (CFSM) 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.

Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a special reason are called measurements at miscellaneous sites.

### **Identifying Estimated Daily Discharge**

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified. This identification is shown either by flagging individual daily values with the letter "e" and noting in a table footnote, "e–Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

#### **Accuracy of Field Data and Computed Results**

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. "Excellent" indicates that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair," within 15 percent. "Poor" indicates that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft<sup>3</sup>/s; to the nearest tenths between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures above 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, values of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

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#### Other Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the Florida Integrated Science Center - Water and Restoration Studies (FISC-WRS). Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the FISC-WRS. (see address that is shown on the back of the title page of this report).

#### EXPLANATION OF PRECIPITATION RECORDS

#### **Data Collection and Computation**

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

#### **Data Presentation**

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is not published, but is available in the files of the U.S. Geological Survey.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of records.

## EXPLANATION OF WATER-QUALITY RECORDS

#### **Collection and Examination of Data**

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

## Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs. A list of TWRIs is provided in this report.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross-section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

## SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data is useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

#### **Classification of Records**

Water-quality data for surface-water sites are grouped into one of three classifications. A *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A *partial-record station* is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A *miscellaneous sampling site* is a location other than a continuous- or partial-record station, where samples are collected to give better areal coverage to define water-quality conditions in the river basin.

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A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

## Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[ $\leq$ , less than or equal to;  $\pm$ , plus or minus value shown;  $^{\circ}$ C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical	Rating			
property	Excellent	Good	Fair	Poor
Water temperature	≤±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	>±0.8 °C
Specific conductance	≤±3%	$> \pm 3$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$
Dissolved oxygen	$\leq$ $\pm$ 0.3 mg/L	$> \pm 0.3$ to 0.5 mg/L	$> \pm 0.5$ to 0.8 mg/L	$> \pm 0.8$ mg/L
pH	$\leq \pm 0.2$ unit	$> \pm 0.2$ to 0.5 unit	$> \pm 0.5$ to 0.8 unit	$> \pm 0.8$ unit
Turbidity	≤±5%	$> \pm 5$ to 10%	$> \pm 10$ to 15%	> ±15%

## **Arrangement of Records**

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

### **On-Site Measurements and Sample Collection**

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. These TWRIs are listed in this report. Also, detailed information on collecting, treating, and shipping samples can be obtained from the FISC-WRS (see address that is shown on the back of title page in this report).

### **Water Temperature**

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the FISC-WRS office. (see address that is shown on the back of title page in this report).

#### Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

## **Laboratory Measurements**

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These methods are consistent with ASTM standards and generally follow ISO standards.

#### **Data Presentation**

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<a href="http://waterdata.usgs.gov/nwis">http://waterdata.usgs.gov/nwis</a>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

#### **Remark Codes**

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

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

#### **Water-Quality Control Data**

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

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

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

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

# **Blank Samples**

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

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

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

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

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

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

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

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

## **Reference Samples**

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

#### **Replicate Samples**

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

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

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

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

## **Spike Samples**

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

#### EXPLANATION OF GROUND-WATER LEVEL RECORDS

Generally, only ground-water level data from selected wells with continuous record from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

#### **Site Identification Numbers**

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation).

## **Data Collection and Computation**

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

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. Most of the wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings. Wells that have very long open intervals (generally 20 ft or greater), were sampled using a down hole sampling device that collects a water sample from the bottom of the well.

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

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

# **Accuracy of Ground-Water Level Data**

A number of factors affect the accuracy of the ground-water level data published in this report. These factors can be logically separated into those that are related to ground-water level measurement methods (Method-Related Factors) and those that are independent of the methods.

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### **Method-Independent Factors**

Water levels are determined using a specific measuring point (MP) at each well. The elevation of this point for most wells published in this report was determined relative to the National Geodetic Vertical Datum of 1929 (NGVD of 1929). Scientific advances in determining vertical elevations have caused the development of the North American Vertical Datum of 1988 (NAVD of 88). The National Geodetic Survey (NGS) has completed an extensive releveling effort that provides elevations referenced to NAVD of 1988. Comparisons at specific benchmarks in Florida have indicated differences between NAVD of 88 and NGVD of 1929 of 0.50 ft or greater (Zilkoske, 1990). The U.S. Geological Survey is currently considering how best to utilize the newer NAVD of 1988 and yet maintain the continuity of data in south Florida.

Water levels in wells open to highly transmissive aquifers may be affected by barometric pressure. The extent of this effect in a given well is called the barometric efficiency (BE). The BE is calculated by comparing the changes in water level at a well to the change in the ambient barometric pressure expressed as a column of water (Kruseman and Ridder, 1991). The water-level data in this publication have not been adjusted for barometric pressure effects.

## **Method-Related Factors**

Water-level data are collected using a number of different methods. Each method has inherent factors that affect the accuracy of measured water levels.

STEEL TAPE AND CHALK -- This generally is the most accurate method of measuring the elevation difference between a reference point and the water level in a ground-water well. When the water level is measured using this method, at least two separate measurements are performed. These measurements must agree to within 0.02 ft before the average value is recorded. The precision of this method, is  $\pm 0.02$  ft.

PRESSURE GAGE -- Wells under artesian pressure are monitored using a mechanical pressure gage. These pressure gages are graduated to 0.2 ft. Gages are periodically checked using a pressure manifold to compare gage readings over a range of known pressures. Corrections are applied to the gage readings based on these checks. The reported value is estimated to the nearest tenth of a foot. The precision of this method should be considered to be about  $\pm 0.1$  ft.

FLOAT AND RECORDER -- The accuracy of data recorded using this method is affected by friction within the recorder system as well as friction between the float and the well casing. In large-diameter wells (6 in. or greater), where large floats are used, these effects are minimal; however in small-diameter wells (2 to 6 in.) these effects can be substantial. Friction might significantly affect the data where water-surface fluctuations are very small. Every effort has been made to reduce frictional effects to a minimum.

The accuracy of this method may also be affected by slippage of the float tape or wire, leaks in the float, or biological factors (for example, amphibians crawling on the float). The accuracy of the recorder reading is periodically verified using steel tape and chalk measurements. When the difference between these tape measurements and the recorded value is 0.05 ft or greater, the recorder is reset and a gage-height correction is applied to the data. Uncertainty in water levels for wells verified by steel tape measurements is generally no greater than  $\pm 0.05$  ft.

PRESSURE TRANSDUCER AND RECORDER -- In wells where artesian pressure, frictional effects, or an extensive range in water levels have made float and recorder systems infeasible, pressure transducers have been installed. Transducers are selected that meet or exceed the float and recorder system accuracy. Water levels may be verified using either steel tape or pressure gage measurements. Uncertainty in those verified by steel-tape measurements is generally considered to be no greater than  $\pm 0.05$  ft and uncertainty for those verified using pressure gage readings is generally considered to be about  $\pm 0.1$  ft.

The type of method used to collect water-level data is identified in the INSTRUMENTATION section of each station manuscript.

#### **Data Presentation**

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figures for each county, each well is identified on the map by an index number that is cross-referenced to its identification number in a location key preceding the map.

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

The following comments clarify information presented in these various headings.

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

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

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

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

DATUM.—This entry describes the measuring point . The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth).

LAND-SURFACE DATUM.—This is a new section started for water year 2003, to document land-surface datum. The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

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

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

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

#### Water-Level Tables

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

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

### **Hydrographs**

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

#### RECORDS OF BULK ELECTRICAL CONDUCTIVITY

Bulk conductivity is the combined electrical conductivity of all material (including pore water) within an approximately 8- to 40-inch doughnut-shaped area surrounding an induction probe (McNeill and others, 1990). Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids concentration of the pore water, and the lithology and porosity of the rock. Polyvinyl chloride (PVC) casings do not interfere with these measurements; however, for those wells where a steel or galvanized iron casing extends part way down the well, the probe cannot sense the materials outside of the casing. As the probe is lowered down the well and out of the influence of a metallic casing, a spike is usually created in the data. As the probe passes through different layers of rock, the different physical properties will cause variation in the recorded conductivity values. A clean sand or sandstone will generally produce lower conductivity values than clay or mudstone. Although the properties of the rocks or well construction will remain constant from year to year, those of the pore water may change due to saltwater intrusion. Conductivity values from freshwater-saturated rocks typically are less than 25 mS/m, whereas conductivity values from saltwater-saturated rocks are typically greater than 67 mS/m (Hittle, 1999). Therefore, induction logging can be used to assess increases or decreases in the conductivity of pore waters caused by movement of the saltwater interface.

## **Data Collection and Computation**

Measurements generally are made during the period of lowest aquifer water levels, in April of each year. However, some wells may have additional logs. During periods of decreased water levels, saltwater intrusion into a freshwater aquifer is likely to be at a maximum. In wells where saltwater is detectable, the graphic representation of data from successive years will show any vertical movement of the saltwater-freshwater interface. Measuring this vertical movement of the interface is the primary use of the bulk conductivity logs published in this report. Upward movement of the interface between freshwater and saltwater in a monitoring well indicates that saltwater intrusion is increasing in that area. Downward movement of the interface indicates recession of the saltwater front near the monitoring well.

In the conductivity plots of some of the wells logged for this report, the interface position can be seen as the point where low values of conductivity increase suddenly to values generally above 67 mS/m (usually near the bottom of the well). However, the interface position is not as apparent in other wells, and in some, there is no interface.

In wells selected for induction logging, a water sample may be collected and analyzed as a check on the level of salinity. Because bulk conductivity is a function of fluid conductivity, lithology, and porosity, the relationship between the induction logs and the chloride samples may not be as obvious as is the general relationship between fluid conductivity and chloride concentrations. If the rock is not very porous, then the change in bulk conductivity caused by changes in the salinity of the pore water may be smaller than might be expected. Nonetheless, the long-term changes in the bulk conductivity logs are sufficient to assess upward or downward movement of the interface. To aid in interpretation of the bulk conductivity logs, the chloride concentration is shown on the plot of bulk conductivity if water samples have been collected.

The instrument used to collect data for this report is calibrated prior to each field session. The calibration procedure establishes a mathematical constant (calibration factor) that is used to convert raw instrument readings in counts per second (cps) into values of bulk conductivity in millisiemens per meter (mS/m). When data were graphed for the 2000 annual water resources data report, offsets and amplitude differentials occurred in the calibrated values of bulk conductivity for each well between successive years. Investigation revealed that some of the observed offsets and amplitude differentials were caused by differing calibration factors between years. Most calibration factors differed because of temperature and humidity differences during calibration. The calibration procedures adopted during the 2000 water year were designed to minimize the influence of variable temperature and humidity. Before calibrating, the induction probe was lowered into a well and allowed to equilibrate in the water column. The probe was then removed from the well and the instrument immediately calibrated.

Factors other than variable temperature and humidity also have caused offsets and amplitude differentials. One such example occurred with data collected for the 2000 water year. Prior to logging for the 2000 water year, the instrument firmware and software was updated. After logging, it was found that the data had been truncated at the decimal point. Errors in calibration have also been identified and corrected (see Accuracy of Bulk Conductivity).

## **Accuracy of Bulk Electrical Conductivity**

There are two components that affect the quality of the induction logs published in this report: (1) vertical or depth accuracy, and (2) accuracy and precision of measured bulk conductivity. Vertical accuracy, which affects the determined interface position, is the most critical factor in this monitoring effort. A quality control program sets the velocity of the probe at 12 ft/min (feet per minute) while logging. Before logging begins, a spot on the probe, 3.32 feet above the sensing head, is aligned with the measuring point of the well. Where possible, the data recorded as the probe was moved up the well were used to produce the plots for this report. Depth values from successive water years were adjusted, if needed, to coincide at one or more specific conductivity peak recorded from an upper part of the well. Depth values were interpolated to the nearest tenth of a foot. The precision of depth determinations using this reporting method should be considered to be about +0.1 foot.

The accuracy and precision of measured bulk conductivity are a function of both the inherent accuracy of the induction probe and its calibration. The inherent precision of the probe is considered by the manufacturer to be  $\pm 5$  percent of the full scale. For the logs collected, the induction probe was set to a full scale of 1,000 mS/m. This translates into a precision of  $\pm 50$  mS/m at full scale. Analysis indicated that the offsets caused by the effects of temperature and humidity on calibration were generally within this range.

In the 1998 water year and for all water years after 2001, the induction probe was calibrated using standards of 0 and 345 mS/m. There are a number of monitoring wells where the measured bulk conductivity exceeds 345 mS/m. For these wells, a calibration standard of 345 mS/m was still used. This is because the probe would have to be set to a full scale of 10,000 mS/m in order to be calibrated using the next available standard (1,301 mS/m). This value would greatly exceed the normal range in bulk conductivity expected. The 345 mS/m calibration constant was also considered to be acceptable because within the range 0 to 1,000 mS/m, the response of the probe is considered to be linear; therefore calibrating the probe to this standard should not significantly reduce accuracy.

In the water years prior to 2002 (excluding 1998), the induction probe generally was calibrated using a 1,301 mS/m standard even though the full scale of the probe was 1,000 mS/m. This caused a calibration error in the data collected. To correct this error, a multiplier of 0.7686 was applied to all of the affected data.

Accuracy of data collected during the 2000 water year may have been affected by the firmware or software update in December 1999. The data collected using this new software and firmware was considerably offset relative to previous induction logs. In addition, the final values were truncated at the decimal point, whereas those collected prior to the update were recorded to the thousandths decimal place. These final values are the result of a multiplication of the raw data from the instrument and a calibration factor. It is unknown whether or not the raw values were truncated at the decimal point. If so, the resulting error could be on the order of 5 mS/m too low. Because the offset data from the 2000 water year are often 5 mS/m lower than the data from other years, truncation of the raw data probably is the explanation.

# **Data Presentation**

Records of conductivity are published individually on the page immediately following the well manuscript. Data for conductivity are identified by well number. Each record consists of a single graph representing conductivity, a lithologic log, and a brief explanation.

## RECORDS OF GROUND-WATER QUALITY

Records of ground-water quality in this report differ from other types of records in that, for the salinity network sites, they consist of a limited set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes, a small number of samples except for a few samples taken seasonally 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 saltwater intrusion. 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 ground-water-quality data in this report were obtained mostly as a part of the Florida Integrated Science Center, Center for Water and Restoration Studies salinity network or as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality in the report area. 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 National Field Manual for the collection of Water-Quality Data and the "Laboratory Measurements" sections in this data report and are also described in the TWRIs. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the FISC-WRS office. (See address that is shown on the back of the title page of this report.)

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, possibly metal, comprising the casings.

## **Laboratory Measurements**

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

## **Data Presentation**

The records of ground-water quality are published immediately following the ground-water level records of each county. Data for quality of ground water are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. The Remark Codes listed for surface-water-quality records are also applicable to ground-water-quality records.

## ACCESS TO USGS WATER DATA

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

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

#### **DEFINITION OF TERMS**

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

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

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

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

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

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

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

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

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

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

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

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²). (See also "Biomass" and "Dry mass")

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

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

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

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

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

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

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

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

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

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

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

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

**Blue-green algae** (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm³/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter (μm³/cm²). (See also "Phytoplankton"and "Periphyton")

**Bottom material** (See "Bed material")

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

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

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (µm³) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere  $4/3 \pi r^3$  cone  $1/3 \pi r^2 h$  cylinder  $\pi r^2 h$ .

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Cubic foot per second-day** (CFS-DAY, Cfs-day, [(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 numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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

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

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

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

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

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

Diatoms (Bacillariophyta) are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm³/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter (μm³/cm²). (See also "Phytoplankton" and "Periphyton")

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

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

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

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

**Dissolved solids concentration** in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO<sub>3</sub>) 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")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Green algae** (*Chlorophyta*) are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm³/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter (μm³/cm²). (See also "Phytoplankton" and "Periphyton")

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

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

**Hardness** of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO<sub>3</sub>).

**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.noaa.gov/tideglos.html

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

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

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

Horizontal datum (See "Datum")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Micrograms per liter** (UG/L,  $\mu$ 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,  $\mu$ 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 milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Particle size** is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-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
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

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

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

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

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

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

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

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

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

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

**Picocurie** (PC, pCi) is one-trillionth (1 x 10<sup>-12</sup>) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7 x 10<sup>10</sup> radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

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

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

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

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

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

**Primary productivity (carbon method)** is expressed as milligrams of carbon per area per unit time [mg C/(m²/time)] for periphyton and macrophytes or per volume [mg C/(m³/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

**Primary productivity (oxygen method)** is expressed as milligrams of oxygen per area per unit time [mg O/(m²/time)] for periphyton and macrophytes or per volume [mg O/(m³/time)] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

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

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

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

**Recurrence interval,** also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ( $7Q_{10}$ ) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the  $7Q_{10}$  occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the  $7Q_{10}$ .

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

Return period (See "Recurrence interval")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Stage (See "Gage height")

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

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

**Substrate** is the physical surface upon which an organism lives.

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

 0
 no gravel or larger substrate
 3
 26-50 percent

 1
 > 75 percent
 4
 5-25 percent

 2
 51-75 percent
 5
 < 5 percent</td>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Kingdom: Animal
Phylum: Arthropeda
Class: Insecta

Order: Ephemeroptera Family: Ephemeridae Genus: *Hexagenia* 

Species: Hexagenia limbata

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Vertical datum (See "Datum")

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

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

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

**Water year** in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

Watershed (See "Drainage basin")

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

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

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

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

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

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

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

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

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

## Book 1. Collection of Water Data by Direct Measurement

## Section D. Water Quality

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

#### Book 2. Collection of Environmental Data

## Section D. Surface Geophysical Methods

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

# Section E. Subsurface Geophysical Methods

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

## Section F. Drilling and Sampling Methods

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

## **Book 3. Applications of Hydraulics**

### Section A. Surface-Water Techniques

- 3–A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3–A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

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- 3–A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.
- 3–A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.
- 3–A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3–A7. Stage measurement at gaging stations, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3–A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
- 3–A9. Measurement of time of travel in streams by dye tracing, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
- 3-Al0. Discharge ratings at gaging stations, by E.J. Kennedy: USGS-TWRI book 3, chap. Al0. 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.
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- 3–A13. Computation of continuous records of streamflow, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
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- 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-A21Stream-gaging cableways, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 p.

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- 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.
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3–B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

## Section C. Sedimentation and Erosion Techniques

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

## Book 4. Hydrologic Analysis and Interpretation

# Section A. Statistical Analysis

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

## Section B. Surface Water

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

#### Section D. Interrelated Phases of the Hydrologic Cycle

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

### **Book 5. Laboratory Analysis**

# Section A. Water Analysis

- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI book 5, chap. A1. 1989. 545 p.
- 5–A2. Determination of minor elements in water by emission spectroscopy, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. Methods for the determination of organic substances in water and fluvial sediments, edited by R.L. Wershaw,
- M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS-TWRI book 5, chap. A4. 1989. 363 p.
- 5–A5. Methods for determination of radioactive substances in water and fluvial sediments, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
- 5–A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

### Section C. Sediment Analysis

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

# **Book 6. Modeling Techniques**

# Section A. Ground Water

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

# Book 7. Automated Data Processing and Computations

# Section C. Computer Programs

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

# Book 8. Instrumentation

# Section A. Instruments for Measurement of Water Level

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

# Section B. Instruments for Measurement of Discharge

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

# Book 9. Handbooks for Water-Resources Investigations

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

9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9–A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9–A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9–A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9-A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI book 9, chap. A6. 1998. Variously paginated.

9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9–A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

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# **Broward County**

# WATER RESOURCES DATA FOR FLORIDA, 2003 VOLUME 2B: SOUTH FLORIDA

Key to site locations on figure # 12

# BROWARD COUNTY

Index	Site	Well	Page	Index	Site	Well	Page
Number	Number	Name	Number	Number	Number	Name	Number
1	260010080085001	F 291	1	42	261501080060701	G 2147	42
2	260545080082001	G 561	2	43	261403080070801	G 2149	43
3	260515080202101	G 617	3	44	260111080101402	G 2176	44
4	261434080071901	G 853	4	45	261018080091101	G 2170	45
5	260535080104301	G 854	5	46	260342080115902	G 2264	46
6	260658080132001	G 1089	6	47	255910080085802	G 2294	47
7	261100080140401	G 1009 G 1212	7	48	260547080105801	G 2352	48
8	261100080140401	G 1212 G 1212A	8	49	261232080141401	G 2359	49
9	261734080111301	G 1212A G 1213	9	50	261147080114501	G 2395	50
10	260752080084701	G 1213 G 1220	10	51	255919080091202	G 2409	51
11	260458080134801	G 1220 G 1221	11	52	255919080091202	G 2410	52
12	260219080141101	G 1221 G 1223	12	53	260041080093101	G 2425	53
13	260252080085301	G 1223 G 1224	13	54	260041080093101	G 2426	54
14	260032080135701	G 1225	14	55	261207080103701	G 2433	55
15	260053080105701	G 1226	15	56	260120080093401	G 2441	56
16	261122080083401	G 1232	16	57	261446080062801	G 2445	57
17	255948080090901	G 1232 G 1241	17	58	255936080091701	G 2477	58
18	261903080065601	G 1241 G 1260	18	59	255936080091701	G 2478	59
19	261708080090801	G 1200 G 1315	19	60	261258080112901	G 2482	60
20	261441080111301	G 1316	20	61	260155080092002	G 2612	61
21	261143080082901	G 1340	21	62	261724080054603	G 2694	62
22	260753080113901	G 1343	22	63	261831080151301	G 2739	63
23	261026080100701	G 1347	23	64	261643080055901	G 2752	64
24	255916080090401	G 1435	24	65	260241080112701	G 2785	65
25	255918080091801	G 1473	25	66	260012080100001	G 2807	66
26	260035080101501	G 1597	26	67	261938080101001	G 2852	67
27	255807080224301	G 1636	27	68	261641080064801	G 2866	68
28	261534080165801	G 2031	28	69	261740080054101	G 2893	69
29	260821080185101	G 2032	29	70	261304080072501	G 2896	70
30	261141080163401	G 2032	30	70 71	261030080083301	G 2897	70 71
31	260653080184901	G 2034	31	72	260920080092201	G 2898	72
32	260040080104401	G 2035	32	73	260804080092701	G 2899	73
33	261045080093501	G 2090	33	74	260325080113901	G 2900	74
34	261026080100201	G 2091	34	75	260737080103301	G 2901	75
35	261112080121401	G 2108	35	76	260737080103301	G 2901 G 2901R	<b>76</b>
36	260533080123701	G 2122	36	77	260638080104801	G 2902	70 77
37	260528080122301	G 2123	37	78	255843080090901	G 2902 G 2903	78
38	260521080122401	G 2125	38	79 79	260534080110801	G 2904	79
39	260534080112101	G 2129	39	80	260101080091501	G 2906	80
40	260530080112101	G 2130	40	81	260326080120301	G 2921	81
41	260638080095801	G 2131	41	82	260657080122301	S 329	82
••	200000000000000000000000000000000000000	0 2101	••	<b>52</b>		5.027	<b>02</b>

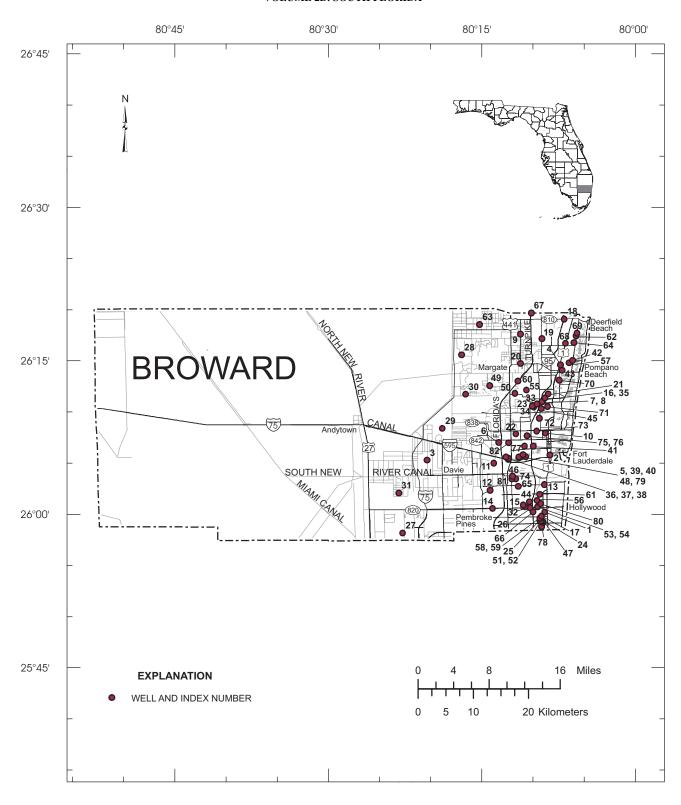


Figure 12: Location of wells on Broward County

## BROWARD COUNTY

WELL NUMBER.--255807080224301. Local Number G 1636. USGS Observation Well in Miramar, FL.

LOCATION.--Lat 25°58'07", long 80°22'43", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.31, T.51 S., R.40 E., Hydrologic Unit 03090202, at radio towers west of SW 172nd Avenue, 3 mi south of State Road 820, 4 mi west of Flamingo Road, and 5.8 mi northwest of Carol City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 24 ft, cased to 24 ft.

REVISED RECORDS .-- WDR FL-85-2B:1979.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.17 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

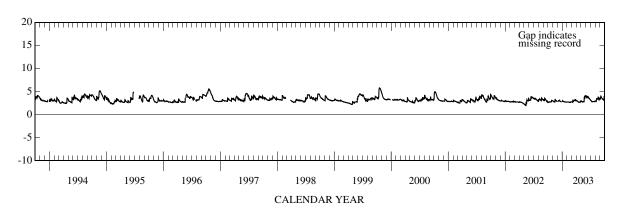
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.77 ft NGVD, Oct. 18, 1999; lowest, 1.79 ft NGVD, May 23, 1985 and June 2, 1992.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	2.63 2.66 2.72 2.71 3.05	2.88 2.74 2.71 3.04 2.92	3.09 2.84 2.78	2.90 2.82 2.73 2.71 2.69	2.70 2.71 2.63 2.63 2.70	2.71 2.97 2.79 3.11 2.97	2.94 2.89 2.66 2.71 2.61	2.83 2.73 2.75 2.79 3.96	4.00 3.86 4.03 3.59 3.44	3.01 2.78 2.78 2.81 2.78	2.87 3.45 3.41 3.69 3.47	3.85 3.66 3.40 3.27 3.32
EOM	2.96	2.83	2.79	2.71	2.74	3.08	2.95	3.99	3.20	2.81	3.49	3.92
MAX	3.05	3.26		2.99	2.74	3.31	3.00	4.09	4.12	3.13	3.69	3.98



WELL NUMBER.--255843080090901. Local Number G 2903. USGS Observation Well near Hallandale, FL.

LOCATION.--Lat 25°58'44", long 80°09'09", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.28, T.51 S., R.42 E., Hydrologic Unit 03090202, 44 ft south of transmit lift station on the east side of SW 4th Avenue and north of SE 7th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 155.5 ft, cased to 145.5 ft, screened 145.5 to 155.5 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 5.06 ft above National Geodetic Vertical Datum of 1929.

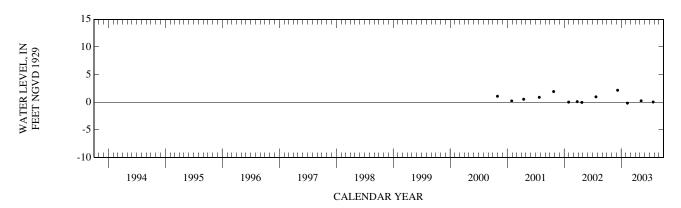
LAND-SURFACE DATUM.--Land surface is approximately 5.1 ft above NGVD.

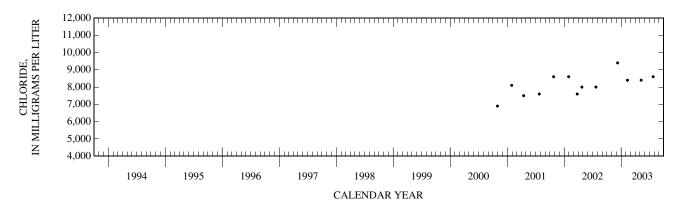
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Quarterly water-level measurements began in October 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.17 ft NGVD, Dec. 9, 2002; lowest, 0.16 ft below NGVD, Feb. 10, 2003.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC					MAY				
09	0844	2.17	22,900	9,400	09	0920	0.25	22,700	8,400
FEB					JUL				
10	1310	-0.16	23,500	8,400	25	1110	0.04	23,100	8,600





WELL NUMBER.--255910080085802. Local Number G 2294. USGS Observation Well near Hallandale, FL.

LOCATION.--Lat 25°59'11", long 80°08'59", in SW  $^{1}$ / $_{4}$  NW  $^{1}$ / $_{4}$  SW  $^{1}$ / $_{4}$  sec.27, T.51 S., R.42 E., Hydrologic Unit 03090202, at intersection, 19 ft north of NW 1st Street and 10 ft west of NW 1st Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 139 ft, cased to 135 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 9.95 ft above National Geodetic Vertical Datum of 1929.

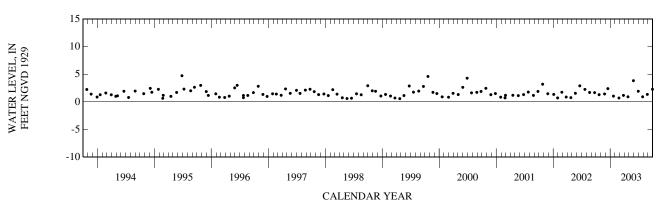
LAND-SURFACE DATUM .-- Land surface is approximately 9.4 ft above NGVD.

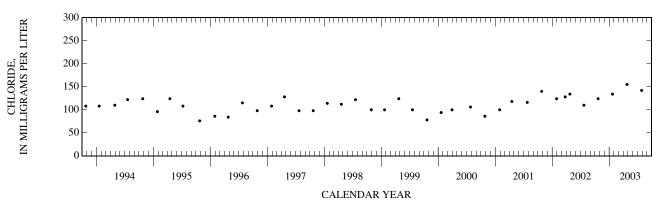
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD .-- July 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.74 ft NGVD, June 27, 1995; lowest, 0.54 ft below NGVD, Feb. 24, 1992.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
22	0910	1.31	751	124	25	0945	0.92	901	155
NOV					MAY				
26	0913	1.44			30	1009	3.84		
DEC					JUN				
17	0922	2.40			30	0936	1.93		
JAN					JUL				
22	1029	1.05	776	134	28	1024	0.92	753	142
FEB					AUG				
26	0921	0.71			27	1012	1.36		
MAR					SEP				
27	1003	1.18			29	1001	2.29		





WELL NUMBER.--255916080090401. Local Number G 1435. USGS Observation Well near Hallandale, FL.

LOCATION.--Lat 25°59'16", long 80°09'04", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.28, T.51 S., R.42 E., Hydrologic Unit 03090202, 14.5 ft north of NW 2nd Street centerline and 55 ft east of NW 3rd Avenue centerline.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 204 ft, cased to 196 ft.

REVISED RECORDS .-- WDR FL-99-2B-1998.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.-- Measuring point: Top of casing, 11.68 ft above National Geodetic Vertical Datum of 1929.

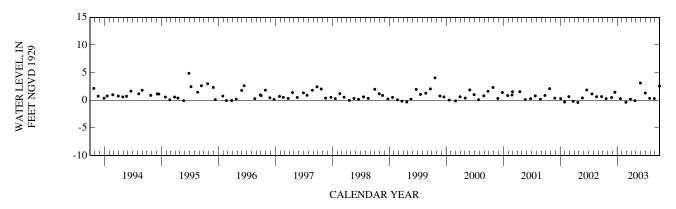
LAND-SURFACE DATUM .-- Land surface is approximately 11.8 ft above NGVD.

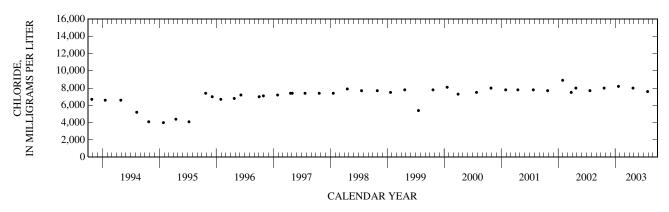
REMARKS.--Well also used since 1969 for salinity monitoring. Previously published figures of water level elevation, as feet NGVD for the 1998 water year are incorrect. Corrected records are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- October 1979, July 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.80 ft NGVD, Oct. 4, 1979; lowest, 0.40 ft below NGVD, Apr. 24, 2002.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
22	0848	0.28	22,700	8,000	25	0917	-0.08	25,800	8,000
NOV					MAY				
26	0858	0.49			30	1019	3.11		
DEC					JUN				
17	0913	1.43			30	0925	1.31		
JAN					JUL				
22	1007	0.28	24,000	8,200	28	1002	0.35	23,000	7,600
FEB					AUG				
26	0906	-0.37			27	0959	0.31		
MAR					SEP				
27	0958	0.19			29	0943	2.57		





WELL NUMBER.--255918080091801. Local Number G 1473. USGS Observation Well in Hallandale, FL.

LOCATION.--Lat 25°59'18", long 80°09'18", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 28, T.51 S., R.42 E., Hydrologic Unit 03090202, at NW 6th Avenue and 2nd Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 132 ft cased to 126 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 14.58 ft above National Geodetic Vertical Datum of 1929. From October 1977 to October 1980, measuring point was considered to be 14.85 ft above NGVD. Prior to October 1977, measuring point was considered to be 13.63 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 10.95 ft above National Geodetic Vertical Datum of 1929.

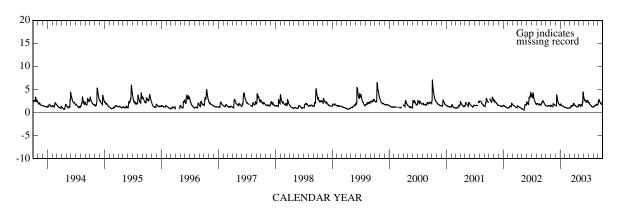
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in April 25, 1980. The figures of water level as elevation, in feet NGVD, prior to October 1, 1980, are in error. Corrected records are in files of the U.S. Geological Survey. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--November 1969 to current year.

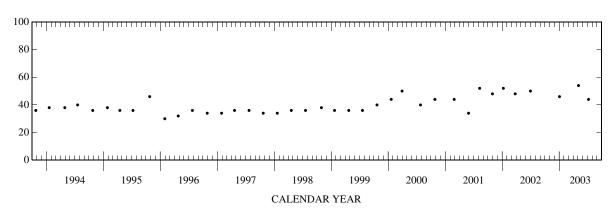
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.02 ft NGVD, Oct. 3, 4, 2000; lowest, 0.21 ft NGVD, Apr. 19, 21, 22, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.41	1.46	1.43	1.79	1.08	1.01	1.59	1.63	2.64	2.20	1.24	2.71
10 15	1.35 1.44	1.32 1.25	3.74 2.70	1.55 1.43	1.03 0.92	1.29 1.40	1.38 1.25	1.40 1.73	2.59 2.43	1.81 1.59	1.38 1.58	2.51 2.10
20 25	1.49 1.45	1.80 1.68	2.08 1.75	1.30 1.20	0.93 0.96	1.52 1.57	1.24 1.17	1.53 2.28	2.38 2.65	1.40 1.25	1.75 1.67	1.88 1.70
EOM	1.34	1.53	1.55	1.13	0.97	1.90	1.65	3.68	2.14	1.12	1.79	2.94
MAX	1.49	1.89	3.74	1.84	1.13	1.98	1.83	4.51	3.41	2.22	1.79	2.94







WELL NUMBER.--255919080091202. Local Number G 2409. USGS Observation Well in Hallandale, FL.

LOCATION.—Lat 25°59'19", long 80°09'12", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 28, T.51 S., R.42 E., Hydrologic Unit 03090202, 1 ft east of G-2408, 11 ft east of northwest corner of building on southeast corner of NW 3rd Street and NW 5th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 84 ft, cased to 83 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.58 ft above National Geodetic Vertical Datum of 1929. Prior to October 1996, measuring point was incorrectly considered to be 10.64 ft above NGVD. See REMARKS.

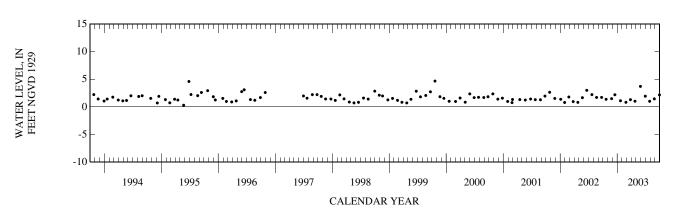
LAND-SURFACE DATUM .-- Land surface is approximately 10.9 ft above NGVD.

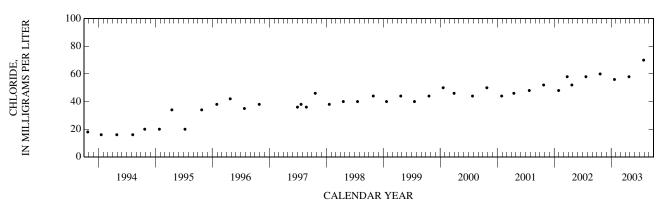
REMARKS.--Well also used for salinity monitoring. The figures of water levels as elevation, in feet NGVD, prior to October 1996 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--September 1985 to February 1986 (weekly), March 1986 to September 1990 (intermittent), October 1990 to October 1996, June 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.68 ft NGVD, Oct. 21, 1999; lowest, 0.31 ft NGVD, May 24, 1995.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	0800	1.38	582	60.0	25	0831	1.03	650	58.0
NOV					MAY				
26	0821	1.49			30	1029	3.71		
DEC					JUN				
17	0844	2.20			30	0853	1.94		
JAN					JUL				
22	0902	1.11	593	56.0	28	0917	1.02	584	70.0
FEB					AUG				
26	0842	0.84			27	0932	1.45		
MAR					SEP				
27	0926	1.31			29	0912	2.17		





WELL NUMBER.--255919080091203. Local Number G 2410. USGS Observation Well near Hallandale, FL.

LOCATION.--Lat 25°59'19", long 80°09'13", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 28, T.51 S., R.42 E., Hydrologic Unit 03090202, 2 ft north of sidewalk and 1 ft west of G-2408, 9 ft east of northwest corner of building on southeast corner of NW 3rd Street and NW 5th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.25 in., depth 206 ft, cased to 205 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.55 ft above National Geodetic Vertical Datum of 1929.

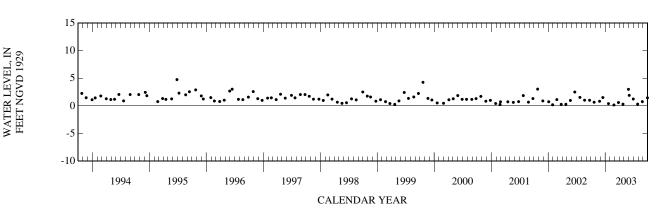
LAND-SURFACE DATUM .-- Land surface is approximately 10.8 ft above NGVD.

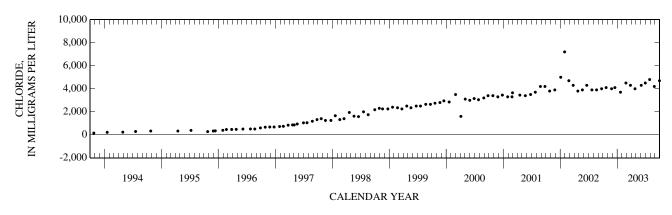
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in June 1985.

PERIOD OF RECORD.--September 1985 to February 1986 (weekly), March 1986 to November 1986 (intermittent), December 1986 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.76 ft NGVD, June 27, 1995; lowest, 0.17 ft NGVD, Feb. 26, 2003.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
22	0807	0.66	11,200	4,100	30	1032	3.00		
NOV			,	.,	JUN				
26	0822	0.84	11,300	4,000	04	0900	1.91	11,400	4,300
DEC					30	0857	1.25	11,400	4,500
17	0840	1.51	11,400	4,100	JUL				
JAN					28	0921	0.32	11,500	4,800
22	0905	0.41	11,800	3,700	AUG				
FEB					27	0930	0.77	11,700	4,200
26	0843	0.17	12,300	4,500	SEP				
MAR					29	0916	1.46	11,800	4,700
27	0928	0.61	11,300	4,300					
APR									
25	0837	0.32	12,800	4,000					





WELL NUMBER.--255936080091701. Local Number G 2477. USGS Observation Well near Hallandale, FL.

LOCATION.--Lat 25°59'36", long 80°09'19", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 21, T.51 S., R.42 E., Hydrologic Unit 03090202, at northwest corner of intersection of NW 6th Avenue and NW 8th Street, 82 ft west of NW 6th Avenue and 11 ft north of NW 8th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 80 ft, cased to 75 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.69 ft above National Geodetic Vertical Datum of 1929.

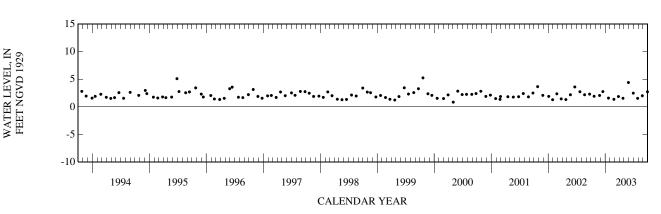
LAND-SURFACE DATUM.--Land surface is approximately 12.9 ft above NGVD.

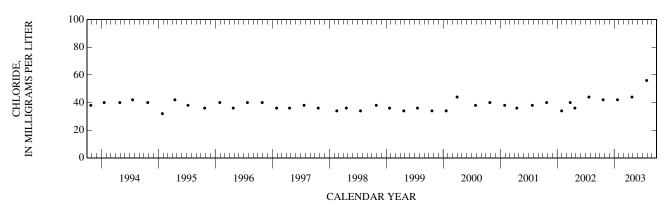
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD .-- July 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.26 ft NGVD, Oct. 21, 1999; lowest, 0.86 ft NGVD, May 2, 2000.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
22	0930	1.92	527	42.0	25	1020	1.56	592	44.0
NOV					MAY				
26	0925	2.07			30	0909	4.41		
DEC					JUN				
17	0944	2.77			30	0953	2.49		
JAN					JUL				
22	1052	1.60	536	42.0	28	1049	1.55	531	56.0
FEB					AUG				
26	0947	1.37			27	1033	2.02		
MAR					SEP				
27	1015	1.88			29	1017	2.73		





WATER LEVEL, IN

## BROWARD COUNTY—Continued

WELL NUMBER.--255936080091702. Local Number G 2478. USGS Observation Well near Hallandale, FL.

LOCATION.--Lat 25°59'36", long 80°09'19", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.21, T.51 S., R.42 E., Hydrologic Unit 03090202, at northwest corner of intersection of NW 6th Avenue and NW 8th Street, 60 ft west of NW 6th Avenue and 11 ft north of NW 8th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 200 ft, cased to 195 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.48 ft above National Geodetic Vertical Datum of 1929.

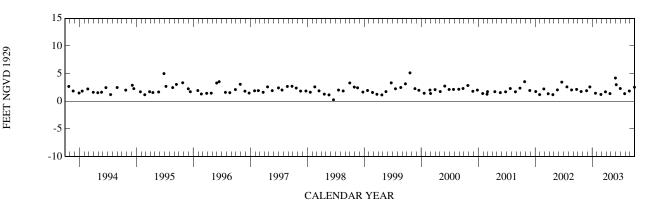
LAND-SURFACE DATUM .-- Land surface is approximately 12.8 ft above NGVD.

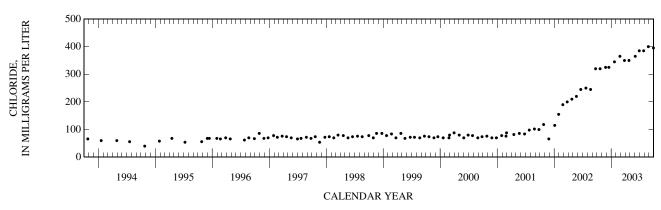
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD .-- August 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.14 ft NGVD, Oct. 21, 1999; lowest, 0.26 ft NGVD, June 18, 1998.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
22	0933	1.75	1,330	320	30	0912	4.20		
NOV			-,		JUN				
26	0927	1.90	1,340	325	04	0929	3.00	1,650	365
DEC					30	0956	2.30	1,410	385
17	0942	2.59	1,350	325	JUL				
JAN					28	1051	1.37	1,450	385
22	1056	1.45	1,440	345	AUG				
FEB					27	1031	1.85	1,490	400
26	0953	1.23	1,480	365	SEP				
MAR					29	1018	2.54	1,530	395
27	1020	1.70	1,430	350					
APR									
25	1024	1.38	1,520	350					





WELL NUMBER.--255948080090901. Local Number G 1241. USGS Observation Well near Hollywood, FL.

 $LOCATION.--Lat~25^{\circ}59'48'', long~80^{\circ}09'08'', in~SE~\frac{1}{4}~NE~\frac{1}{4}~NE~\frac{1}{4}~Sec.~21, T.51~S., R.42~E., Hydrologic~Unit~03090202, 80~ft~west~of~the~intersection~of~22nd~Court~and~Fletcher~Street,~7~ft~north~of~Fletcher~Street.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 216 ft, cased to 215 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 9.02 ft above National Geodetic Vertical Datum of 1929.

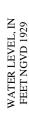
LAND-SURFACE DATUM .-- Land surface is approximately 9.0 ft above NGVD.

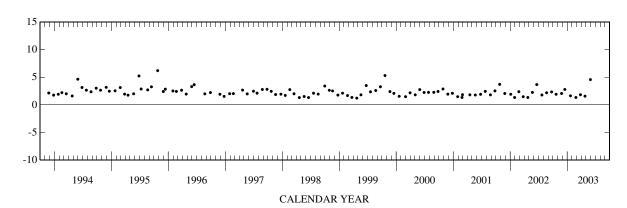
REMARKS.--Well is also used for salinity monitoring. The chloride concentration data published for the period May 30, 1996 through July 23, 2002, has been reviewed and rejected. Damage to the well allowed dilution of these samples by fresh water from shallower portions of the aquifer, which significantly lowered the chloride concentration values reported for this period. Because of this damage to the well, it has been discontinued. See PERIOD OF RECORD.

PERIOD OF RECORD.--March 1993 to September 1993 (intermittent), November 1993 to April 2003. Discontinued. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.20 ft NGVD, Oct. 25, 1995, lowest, 1.22 ft NGVD, May 19, 1993.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			FEB		
22	1009	1.92	26	1023	1.35
NOV			MAR		
26	0943	2.07	27	1039	1.84
DEC			APR		
17	1009	2.79	25	1111	1.58
JAN			MAY		
22	1133	1.64	30	0832	4.58





WELL NUMBER.--260010080085001. Local Number F 291. USGS Observation Well in Hollywood, FL.

LOCATION.--Lat 26°00'10", long 80°08'50", in NW  $^{1}$ / $_{4}$  NW  $^{1}$ / $_{4}$  sec.22, T.51 S., R.42 E., Hydrologic Unit 03090202, at South 20th Avenue and Dewey Street, 1.1 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, water-table well, diameter 6 in., depth 107 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of screw, 11.10 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 9.2 ft above NGVD.

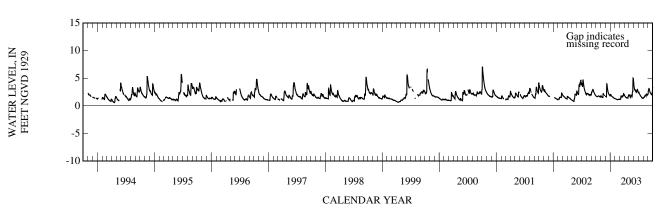
REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.26 ft NGVD, Oct. 5, 1948; lowest, 0.16 ft NGVD, July 2, 1952.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	1.74 1.68 1.76 1.81 1.68 1.61	1.70 1.57 1.50 2.08 1.92 1.78	1.67 3.99 3.00 2.37 2.05 1.81	2.03 1.77 1.66 1.52 1.40 1.33	1.27 1.21 1.13 1.16 1.17 1.19	1.24 1.54 1.64 1.78 1.84 2.17	1.80 1.59 1.47 1.48 1.40 1.97	1.89 1.61 1.99 1.75 2.62 4.34	3.05 2.89 2.72 2.75 2.95 2.37	2.42 2.05 1.83 1.61 1.46 1.33	1.55 1.69 1.95 2.10 2.02 2.12	2.99 2.81 2.39 2.16 2.00 3.53
MAX	1.83		3.99	2.09	1.32		2.07	5.01	4.00	2.50	2.14	3.53



WELL NUMBER.--260012080100001. Local Number G 2807. USGS Observation Well in Hollywood, FL.

LOCATION.--Lat 26°00'12", long 80°10'00" in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.16, T.51 S., R.42 E., Hydrologic Unit 03090202, 30 ft east of west end of Washington Street, 5 ft east of G-2808.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, water-table well, diameter 2 in., depth 200 ft, cased to 196 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.63 ft above National Geodetic Vertical Datum of 1929.

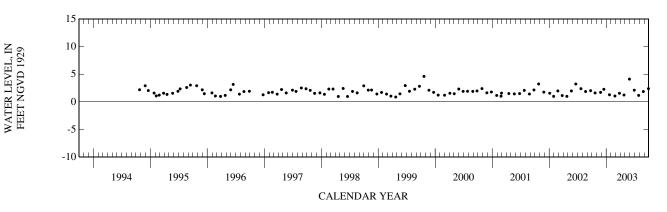
LAND-SURFACE DATUM.--Land surface is approximately 8.6 ft above NGVD.

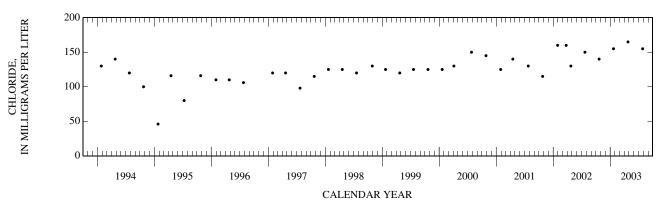
REMARKS.--Well is also used for salinity monitoring.

PERIOD OF RECORD.--January 1994 to July 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.62 ft NGVD, Oct. 21, 1999; lowest, 0.89 ft NGVD, Apr. 23, 1999.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
22	1029	1.62	868	140	25	1146	1.25	958	165
NOV					MAY				
26	1003	1.73			30	1203	4.12		
DEC					JUN				
17	1027	2.28			30	1027	2.12		
JAN					JUL				
22	1229	1.29	910	155	28	1124	1.18	876	155
FEB					AUG				
26	1038	1.07			27	1110	1.87		
MAR					SEP				
27	1051	1.56			29	1050	2.40		





WELL NUMBER.--260032080135701. Local Number G 1225. USGS Observation Well in Hollywood, FL.

LOCATION.--Lat 26°00'32", long 80°13'57", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.51 S., R.41 E., Hydrologic Unit 03090202, at corner of Hollywood Boulevard and SW 72nd Avenue in Hollywood.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 20 ft, cased to 11 ft.

REVISED RECORDS .-- WDR FL-81-2B:1980.

INSTRUMENTATION.--Electronic data logger.

DATUM.--Measuring point: Top of base, 11.21 ft above National Geodetic Vertical Datum of 1929. From June 1982 to October 1992, measuring point was top of base, 11.16 ft above NGVD. From May 1981 to December 1981 measuring point was top of base, 11.70 ft above NGVD. Prior to May 1981, measuring point was top of casing, 11.03 ft above NGVD. (Corrected). See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.5 ft above NGVD.

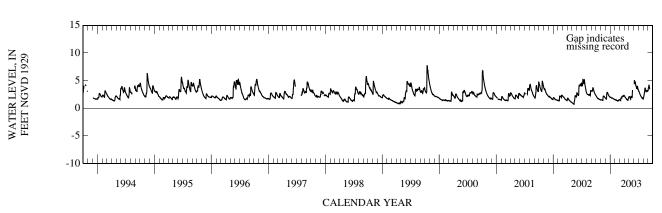
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. In 1982, G-1225 was re-drilled in a location close to the original site. The current well has the same station identifiers as the original and all data are stored as one set of elevations. (Corrected).

PERIOD OF RECORD.--January 1962 to December 1981, (original well), June 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.75 ft NGVD, Oct. 15, 1999; lowest, 0.70 ft NGVD, Apr. 30 and May 1, 1971

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	2.15 1.87 1.71 1.68 1.60	1.53 1.49 1.44 2.19 2.06	1.69 2.71 2.81 2.46 2.21	1.99 1.83 1.85 1.74 1.65	1.48 1.42 1.38 1.36 1.42	1.46 1.70 1.87 2.18 2.17	2.09 1.87 1.65 1.53 1.41	2.08 1.76 2.15 1.95 3.21	4.99 4.74 4.06 3.63 3.93	3.02 2.64 2.28 2.03 1.83	2.27 3.07 3.44 3.11 3.06	3.92 3.65 
EOM	1.50	1.87	1.98	1.55	1.56	2.34	1.96		3.31	1.91	3.18	
MAX	2.33	2.19	2.87	2.00	1.56	2.34	2.31			3.21	3.64	



WELL NUMBER.--260035080101501. Local Number G 1597. USGS Observation Well near Hollywood, FL

LOCATION.--Lat 26°00'35", long 80°10'17", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.17, T.51 S., R.42 E., Hydrologic Unit 03090202, 6.4 ft west from edge of Calle Grande Street at northwest corner of intersection with Harrison Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 163 ft, cased to 155 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.13 ft above National Geodetic Vertical Datum of 1929.

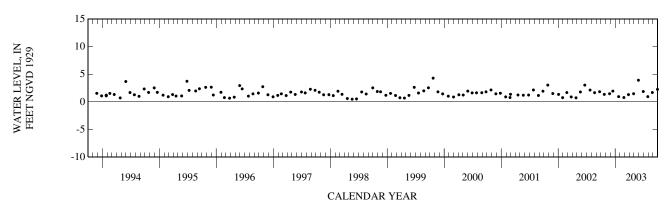
LAND-SURFACE DATUM.--Land surface is approximately 5.6 ft above NGVD.

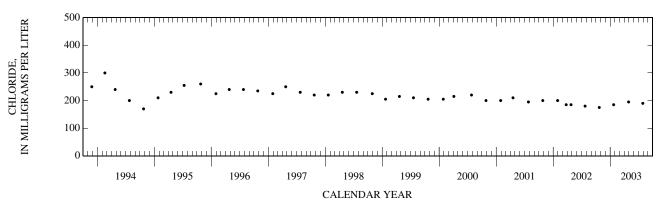
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in May 1971.

PERIOD OF RECORD.--January 1987 to May 1990 (intermittent), July 1990 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.30 ft NGVD, Oct. 22, 1999; lowest, 0.48 ft NGVD, Apr. 4, 1988.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
23	0815	1.36	992	175	29	0832	1.48	1,070	195
NOV					MAY			*	
26	1052	1.48			30	1232	3.92		
DEC					JUN				
17	1057	1.95			30	1059	1.88		
JAN					JUL				
23	0836	0.95	985	185	29	0858	0.95	964	190
FEB					AUG				
26	1101	0.79			27	1138	1.70		
MAR					SEP				
27	1116	1.32			29	1128	2.27		





WELL NUMBER.--260040080104401. Local Number G 2035. USGS Observation Well in Hollywood, FL.

 $LOCATION.--Lat\ 26^{\circ}00'40", long\ 80^{\circ}10'44", in\ SW\ {}^{1}\!\!/_{\!\!4}\ SE\ {}^{1}\!\!/_{\!\!4}\ NW\ {}^{1}\!\!/_{\!\!4}\ sec.17, T.51\ S., R.42\ E., Hydrologic\ Unit\ 03090202, at\ northeast\ corner\ of\ 35th\ Avenue\ and\ Hollywood\ Boulevard,\ 0.7\ mi\ west\ of\ U.S.\ Interstate\ 95.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Driven, observation, water-table well, diameter 4 in., depth 52 ft, cased to 50 ft.

REVISED RECORDS .-- WDR FL-85-2B:1976.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 16.02 ft above National Geodetic Vertical Datum of 1929. From July 1984 to April 2002, measuring point was 16.24 ft above NGVD. From October 1994 to September 1999, measuring point was incorrectly considered to be 16.26 ft above NGVD. From July 1984 to September 1994, measuring point may have incorrectly been considered to be 16.26 ft above NGVD. Prior to July 5, 1984, measuring point was 16.26 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 13.2 ft above NGVD.

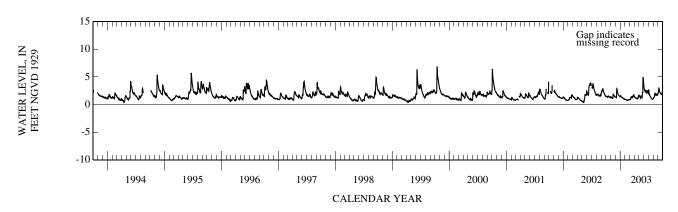
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Unpublished records of water levels for September 1999 are available in files of the U.S. Geological Survey. Records of water levels as elevation for the period July 1984 to September 1994 may be in error and may require a correction of -0.02 ft. Records of water levels as elevation for the period October 1994 to September 1999 are in error and require a correction of -0.02 ft. Water level records for these period have not been corrected. Station rebuilt April 10, 2002. See DATUM.

PERIOD OF RECORD .-- February 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.88 ft NGVD, Oct. 15, 1999; lowest, 0.22 ft NGVD, Apr. 25, 1981.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	1.48 1.37	1.36 1.21	1.31 2.88	1.58 1.37	0.92 0.83	0.95 1.22	1.36 1.20	1.52 1.20	2.70 2.64	2.14 1.64	1.27 1.89	2.85 2.47
15	1.48	1.14	2.26	1.27	0.76	1.24	1.09	1.58	2.35	1.41	1.93	2.08
20 25	1.52 1.32	1.66 1.51	1.82 1.60	1.13 1.02	0.82 0.82	1.49 1.46	1.13 1.06	1.33 2.18	2.48 2.45	1.13 1.02	1.87 1.78	1.87 1.86
EOM	1.23	1.37	1.40	0.96	0.86	1.65	1.65	3.98	1.95	0.99	1.94	3.26
MAX	1.54	1.84	2.88	1.61	0.96	1.78	1.65	4.98	3.65	2.64	2.05	3.26



WELL NUMBER.--260041080093101. Local Number G 2425. USGS Observation Well near Hollywood, FL.

 $LOCATION.--Lat\ 26^{\circ}00'40'', long\ 80^{\circ}09'32'', in\ SW\ {}^{1}\!\!{}^{\prime}_{4}\ SW\ {}^{1}\!\!{}^{\prime}_{4}\ NE\ {}^{1}\!\!{}^{\prime}_{4}\ sec. 16,\ T.51\ S.,\ R.42\ E.,\ Hydrologic\ Unit\ 03090202,\ 8\ ft\ south\ of\ G-2426,\ in\ grassy\ area\ 60\ ft\ east\ of\ parking\ space\ 10\ in\ the\ northeast\ parking\ lot\ on\ City\ Hall\ Circle,\ at\ Hollywood\ Boulevard\ and\ South\ 26th\ Avenue.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 203 ft, cased to 198 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.88 ft above National Geodetic Vertical Datum of 1929.

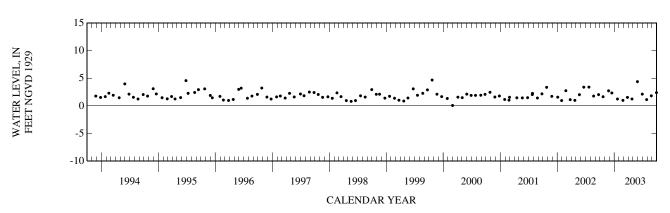
LAND-SURFACE DATUM.--Land surface is approximately 13.2 ft above NGVD.

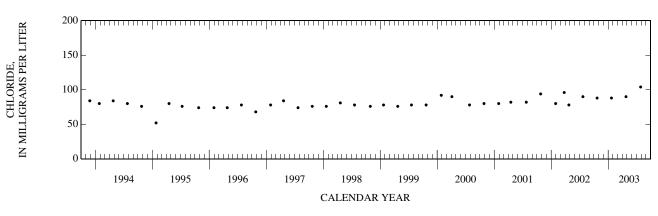
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in March 1986.

PERIOD OF RECORD.--January 1987 to December 1989 (intermittent), December 1989 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.68 ft NGVD, Oct. 22, 1999; lowest, 0.08 ft NGVD, Mar. 1, 2000.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
22	1049	1.66	709	88.0	25	1246	1.25	774	90.0
NOV					MAY				
26	1028	2.73			30	1214	4.39		
DEC					JUN				
17	1041	2.34			30	1043	2.13		
JAN					JUL				
22	1307	1.25	743	88.0	28	1158	1.14	712	104
FEB					AUG				
26	1048	1.00			27	1125	1.83		
MAR					SEP				
27	1101	1.54			29	1110	2.40		





WELL NUMBER.--260041080093102. Local Number G 2426. USGS Observation Well near Hollywood, FL.

 $LOCATION.--Lat\ 26^{\circ}00'40", long\ 80^{\circ}09'32", in\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ NE\ {}^{1}\!\!/_{4}\ sec. 16, T.51\ S., R.42\ E., Hydrologic\ Unit\ 03090202,\ 8\ ft\ north\ of\ G-2425,\ 60\ ft\ east\ of\ parking\ space\ 10\ in\ the\ northeast\ parking\ lot\ on\ City\ Hall\ Circle,\ Hollywood\ Boulevard\ and\ South\ 26th\ Avenue.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 91 ft, cased to 86 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.78 ft above National Geodetic Vertical Datum of 1929.

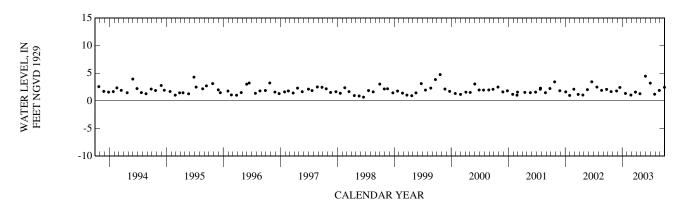
LAND-SURFACE DATUM.--Land surface is approximately 12.8 ft above NGVD.

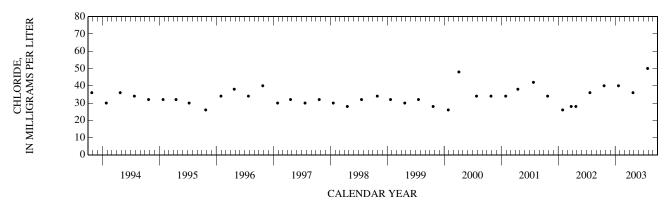
REMARKS.--Well is also used for salinity monitoring. Salinity monitoring began in October 1986.

PERIOD OF RECORD.--January 1987 to May 1993 (intermittent), October 1993 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.76 ft NGVD, Oct. 22, 1999; lowest, 0.65 ft NGVD, Apr. 4, 1988.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	1052	1.68	456	40.0	25	1249	1.30	510	36.0
NOV					MAY				
26	1032	1.80			30	1221	4.47		
DEC					JUN				
17	1044	2.43			30	1046	3.21		
JAN					JUL				
22	1308	1.35	520	40.0	28	1201	1.21	487	50.0
FEB					AUG				
26	1050	1.06			27	1125	1.89		
MAR					SEP				
27	1104	1.60			29	1113	2.45		





WELL NUMBER.--260053080105701. Local Number G 1226. USGS Observation Well in Hollywood, FL.

 $LOCATION.--Lat\ 26^{\circ}00'53", long\ 80^{\circ}10'57", in\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ sec.17, T.51\ S., R.42\ E., Hydrologic\ Unit\ 03090202, in\ the\ center\ of\ the\ median\ of\ North\ Rainbow\ Drive,\ 1,500\ ft\ southwest\ of\ Johnson\ Street\ in\ Hollywood,\ 0.3\ mi\ north\ of\ Hollywood\ Boulevard,\ and\ 1.7\ mi\ east\ of\ U.S.\ Highway\ 441.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 20 ft, cased to 14 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.08 ft above National Geodetic Vertical Datum of 1929. Prior to April 1998, measuring point was considered to be top of base, 9.26 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 9.1 ft above NGVD.

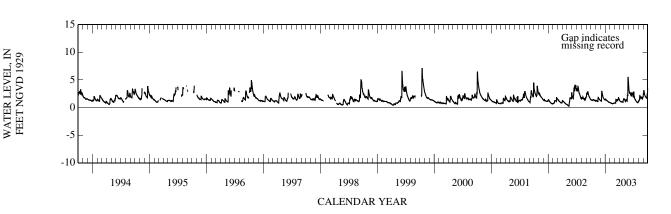
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.10 ft NGVD, Oct. 8, 1991; lowest, 0.28 ft NGVD, May 14, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.37	1.29	1.23	1.51	0.85	0.85	1.24	1.46	2.71	2.17	1.19	2.95
10	1.28	1.13	3.01	1.30	0.78	1.26	1.09	1.14	2.71	1.56	2.14	2.45
15	1.38	1.09	2.29	1.21	0.71	1.18	0.99	1.46	2.47	1.35	1.92	2.02
20	1.44	1.63	1.77	1.09	0.73	1.41	1.04	1.24	2.62	1.09	1.92	1.83
25	1.26	1.46	1.55	0.96	0.76	1.45	0.95	2.19	2.45	0.96	1.72	1.79
EOM	1.17	1.32	1.35	0.90	0.80	1.58	1.52	4.06	1.91	0.94	1.86	3.43
MAX	1.47	1.85	3.01	1.54	0.89	1.81	1.52	5.55	3.67	2.89	2.18	3.43

ELEVATION ABOVE NGVD 1929, FEET



WELL NUMBER.--260101080091501. Local Number G 2906. USGS Observation Well near Hollywood, FL.

LOCATION.--Lat 26°01'01", long 80°09'15", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec. 16, T.51 S., R.42 E., Hydrologic Unit 03090202, in the parking lot of Lincoln Park, about 180 ft south of Lincoln Street, 0.3 mi west of North Dixie Highway.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 158 ft, cased to 148 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.89 ft above National Geodetic Vertical Datum of 1929.

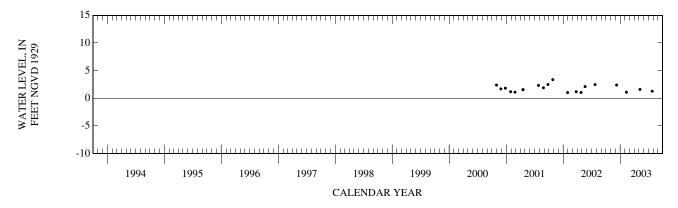
LAND-SURFACE DATUM .-- Land surface is approximately 13.9 ft above NGVD.

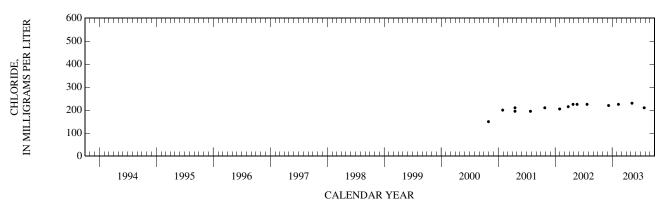
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Induction logging began in April 2001.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.37 ft NGVD, Oct. 26, 2001; lowest, 1.02 ft NGVD, Jan. 29, 2002.

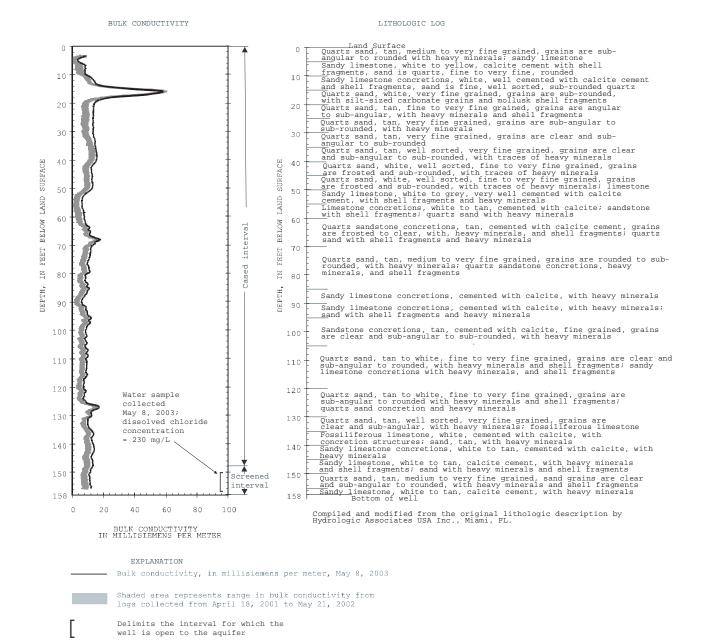
Date	Time	Elev- ation, feet above NGVD	Specif. conduc- tance, wat unf uS/cm 25 degC	Chloride, water, fltrd, mg/L	Date	Time	Elevation, feet above	Specif. conduc- tance, wat unf uS/cm 25 degC	Chloride, water, fltrd, mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
DEC					MAY				
09	0932	2.39	1,100	220	08	0858	1.59	1,080	230
FEB	1240	1.00	1.020	225	JUL	1150	1.07	1.040	210
10	1240	1.09	1,030	225	25	1152	1.27	1,040	210





WELL NUMBER.--260101080091501. Local Number G 2906. USGS Observation Well near Hollywood, FL.

260101080091501 G-2906



WELL NUMBER.--260111080101402. Local Number G 2176. USGS Observation Well near Hollywood, FL.

LOCATION.--Lat 26°01'11", long 80°10'20", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.8, T.51 S., R.42 E., Hydrologic Unit 03090202, at the southeast corner of intersection of North 31st Road and Hayes Street, 11 ft east of North 31st Road, 1 ft south of G 2176A.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 171 ft, cased to 171 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.81 ft above National Geodetic Vertical Datum of 1929.

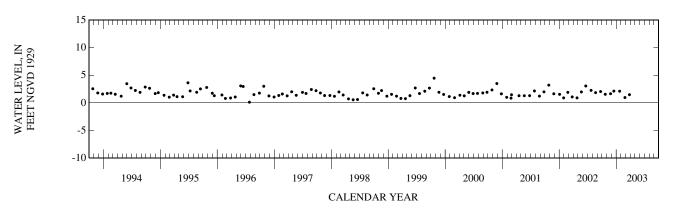
LAND-SURFACE DATUM .-- Land surface is approximately 6.8 ft above NGVD.

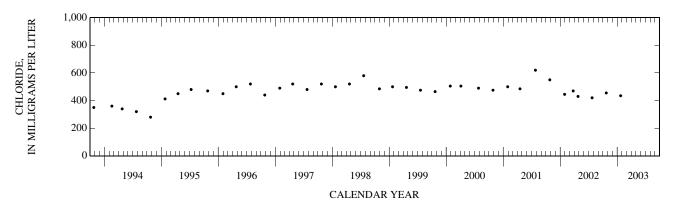
REMARKS.--Well is also used for salinity monitoring. Well was found concreted over on April 29.

PERIOD OF RECORD.--October 1993 to March 2003. Well destroyed. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.47 ft NGVD, Oct. 22, 1999; lowest, 0.13 ft NGVD, July 25, 1996. (Corrected).

		Elev- ation,	Specif. conduc- tance,	Chlor- ide,			Elev- ation,	Specif. conduc- tance,	Chlor- ide,
Date	Time	feet above NGVD (72020)	wat unf uS/cm 25 degC (00095)	water, fltrd, mg/L (00940)	Date	Time	feet above NGVD (72020)	wat unf uS/cm 25 degC (00095)	water, fltrd, mg/L (00940)
OCT					JAN				
23	0934	1.56	1,820	455	23	0908	2.12	1,660	435
NOV					FEB				
26	1106	1.66			26	1113	0.97		
DEC	1101	2.14			MAR	1124	1 10		
17	1121	2.14			27	1134	1.49		





WELL NUMBER.--260120080093401. Local Number G 2441. USGS Observation Well near Hollywood, FL.

LOCATION.--Lat 26°01'19", long 80°09'35" in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.9, T.51 S., R.42 E., Hydrologic Unit 03090202, 16.7 ft from the sidewalk of Arthur Street and 36 ft east of North 26th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.5 in., depth 181 ft, cased to 180 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.72 ft above National Geodetic Vertical Datum of 1929.

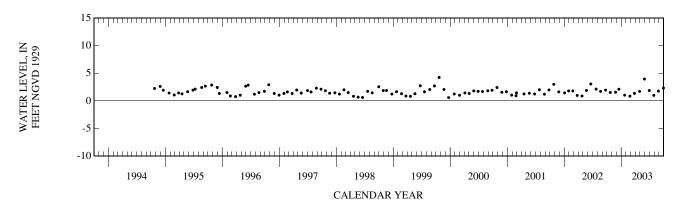
LAND-SURFACE DATUM .-- Land surface is approximately 10.7 ft above NGVD.

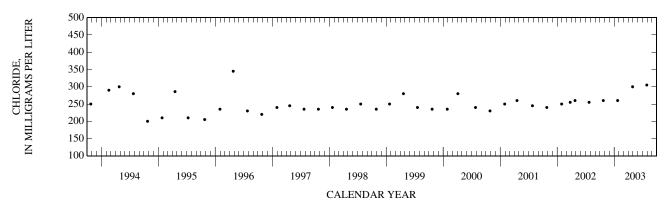
REMARKS.--Well is also used for salinity monitoring. Prior to October 1994 only chloride data was published. See PERIOD OF RECORD.

PERIOD OF RECORD.--September 1986 to July 1994 (intermittent), October 1994 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.25 ft NGVD, Oct. 22, 1999; lowest, 0.60 ft NGVD, Dec. 22, 1999.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
23	1009	1.52	1,220	260	29	0951	1.73	1,330	300
NOV					MAY				
26	1114	1.57			30	1247	3.96		
DEC					JUN				
17	1128	2.11			30	1117	1.87		
JAN					JUL				
23	0950	1.04	1,200	260	29	0958	1.00	1,200	305
FEB					AUG				
26	1129	0.86			27	1157	1.77		
MAR					SEP				
27	1146	1.36			29	1154	2.32		





WATER LEVEL, IN

## BROWARD COUNTY—Continued

WELL NUMBER.--260155080092002. Local Number G 2612. USGS Observation Well in Hollywood, FL.

LOCATION.--Lat 26°01'54", long 80°09'21" in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.8, T.51 S., R.42 E., Hydrologic Unit 03090202, 6 ft from the southwest corner of Boggs Field Park, south of Sheridan Street, 30 ft from NW 24th Avenue, at a ninety degree turn to the west.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 273 ft, cased to 273 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.00 ft above National Geodetic Vertical Datum of 1929.

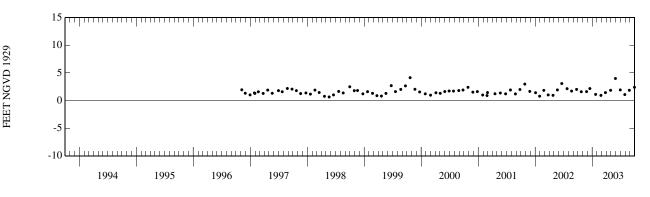
LAND-SURFACE DATUM .-- Land surface is approximately 7.0 ft above NGVD.

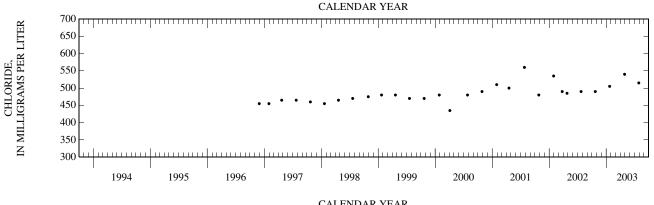
REMARKS.--Well is also used for salinity monitoring. No data for water year 1996. Because of an error on a site photograph, G-2612 was confused with another well. As a result, published records for the 1995 and 1996 water years are in error and have been removed.

PERIOD OF RECORD .-- November 1996 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.14 ft NGVD, Oct. 22, 1999; lowest, 0.65 ft NGVD, May 21, 1998.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
23	1046	1.60	1,950	490	29	1034	1.86	2,100	540
NOV					MAY				
26	1131	1.62			30	1307	4.00		
DEC					JUN				
17	1137	2.17			30	1134	1.93		
JAN					JUL				
23	1043	1.12	1,970	505	29	1028	1.09	1,960	515
FEB					AUG				
26	1144	0.94			27	1215	1.86		
MAR					SEP				
27	1209	1.44			29	1212	2.40		





CALENDAR YEAR

WELL NUMBER.--260219080141101. Local Number G 1223. USGS Observation Well in Hollywood, FL.

LOCATION.--Lat 26°02'19", long 80°14'11", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.3, T.51 S., R.41 E., Hydrologic Unit 03090202, north of NW 33rd Street on Davie Road Extension, and 2.0 mi south of Griffin Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 20 ft, cased to 12 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.44 ft above National Geodetic Vertical Datum of 1929. From October 1980 to April 2001, measuring point was 8.33 ft above NGVD. Prior to October 1980, measuring point was incorrectly considered to be 7.80 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.31 ft above NGVD.

REMARKS.--Revised measuring point elevation April 2001, is the result of reconstruction at this station. The figures of water level as elevation, in feet NGVD, prior to October 1, 1980, are in error. Corrected records are in files of the U.S. Geological Survey. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. See DATUM.

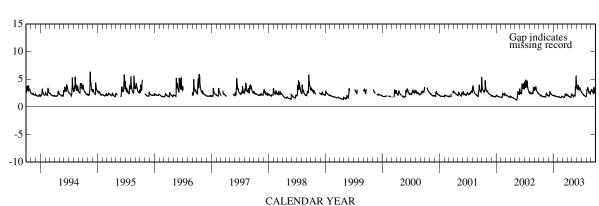
PERIOD OF RECORD .-- December 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.45 ft NGVD, Oct. 8, 1991; lowest, 1.18 ft NGVD, Nov. 11, 1968.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	2.25 2.10	1.88 1.81	2.10 2.76	2.08 1.99	1.80 1.78	1.80 1.73	2.03 2.01	2.14 1.90	3.37 3.89	2.50 2.32	3.24 3.48	2.94 2.80
15	2.05	1.84	2.54	2.00	1.69	1.76	1.83	2.11	3.43	2.18	2.95	2.45
20 25	1.97 1.89	2.35 2.12	2.27 2.15	1.90 1.85	1.77 1.85	2.26 2.12	1.78 1.69	2.00 3.27	3.49 3.14	2.02 1.94	2.70 2.45	2.74 2.52
EOM	1.84	2.01	2.02	1.83	1.90	2.22	2.24	4.05	2.73	1.85	2.67	3.87
MAX	2.38	2.51	2.76	2.11	1.93	2.34	2.24	5.58	3.89	2.67	3.48	3.87





WATER LEVEL, IN

#### BROWARD COUNTY—Continued

WELL NUMBER.--260241080112701 Local Number G 2785. USGS Observation Well near Dania, FL.

LOCATION.--Lat 26°02'41", long 80°11'27", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.6, T.51 S., R.42 E., Hydrologic Unit 03090202, 33 ft east of BellSouth structure, on the east side of North 46th Avenue and 200 ft south of Stirling Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 197 ft, cased to 192 ft, screened 192 to 197 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 6.63 ft above National Geodetic Vertical Datum of 1929. Between March 2, 2001 and June 5, 2002, measuring point was top of base, 10.34 ft above NGVD. See REMARKS.

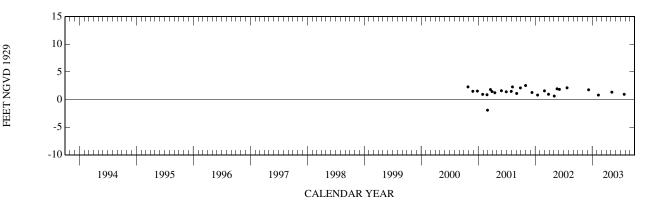
LAND-SURFACE DATUM.--Land surface is approximately 6.6 ft above NGVD.

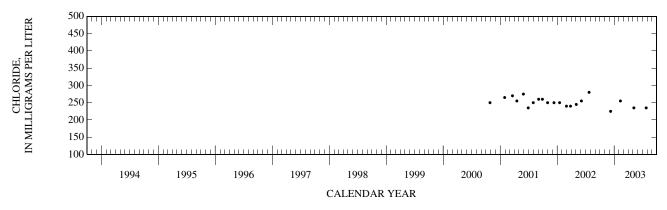
REMARKS.--Well is also used for salinity sampling, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Quarterly water-level measurements began in October, 2000. Between March 2, 2001 and June 5, 2002 the station was temporarily reconstructed for continuous water-level and conductivity data collection. These data are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--April 2000 to September 2000 (Intermittent), October 2000 to February 2001 (monthly), March 2001 to June 2002 (daily), June 2002 to current year. See REMARKS.

EXTREMES FOR THE PERIOD OF RECORD.--Highest daily maximum water level, 3.97 ft NGVD, Sept. 29, 2001; lowest water level measured, 1.92 ft below NGVD, Mar. 1, 2001.

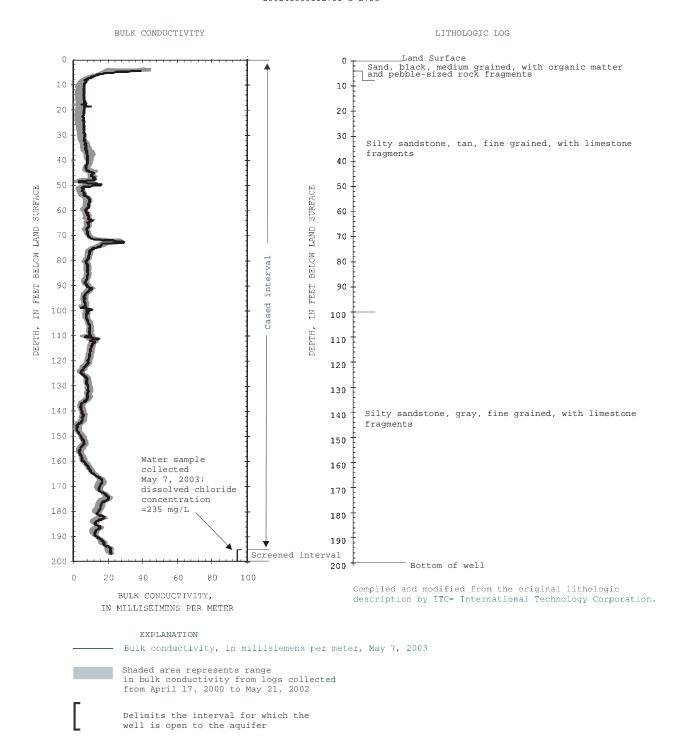
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC					MAY				
09	1010	1.77	1,300	225	07	1420	1.34	1,210	235
FEB		0.04	4.420	277	JUL	1000	0.05	4.200	225
10	1211	0.81	1,130	255	25	1230	0.95	1,300	235





WELL NUMBER.--260241080112701 Local Number G 2785. USGS Observation Well near Dania, FL.

## 260241080112701 G-2785



WELL NUMBER.--260252080085301. Local Number G 1224. USGS Observation Well in Dania, FL.

 $LOCATION.--Lat\ 26^{\circ}02'52'', long\ 80^{\circ}08'53'', in\ NE\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec.3, T.51\ S., R.42\ E., Hydrologic\ Unit\ 03090202, on\ SW\ 2nd\ Terrace\ east\ of\ Phippen\ Road,\ 100\ ft\ west\ of\ Florida\ East\ Coast\ Railroad\ near\ Dania\ and\ 400\ ft\ south\ of\ Stirling\ Road.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 20 ft, cased to 12 ft.

INSTRUMENTATION .-- Electronic data logger.

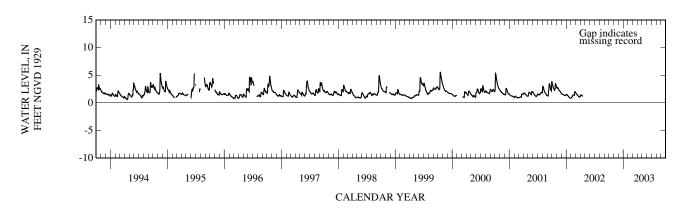
DATUM.--Measuring point: Top of casing 11.10 ft above National Geodetic Vertical Datum of 1929. Prior to March 7, 2003, measuring point was top of base, 11.13 ft above NGVD. Prior to October 1980, measuring point was incorrectly considered to be 11.35 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 8.1 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1, 1980, are in error. Corrected records from October 1973 to September 1980, are in the files of the U.S. Geological Survey. See DATUM. However, it is uncertain whether these records have been corrected. The well was found to be obstructed and an attempt to clear this obstruction was made on April 18, 2002. This effort did not succeed in restoring the well. The water level data from the well for the period April 18, 2002 to March 7, 2003 were not representative of aquifer water levels and have been deleted. The well was discontinued on March 7, 2003. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1962 to March 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.67 ft NGVD (current datum), Nov. 2, 1965; lowest, 0.12 ft below NGVD, Aug. 19, 1979.



DATA FOR APRIL 18, 2002 TO MARCH 7, 2003 HAS BEEN DETERMINED AS UNRELIABLE. SEE REMARKS.

WELL NUMBER.--260325080113901. Local Number G 2900. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°03'25", long 80°11'39", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.31, T.50 S., R.42 E., Hydrologic Unit 03090202, 29 ft south of a storm drain on the east side of SW 35th Terrace, 0.45 mi south of Griffin Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 114.5 ft, cased to 104.5 ft, screened 104.5 to 114.5 ft. (Corrected).

INSTRUMENTATION.--Satellite data collection platform with pressure transducer and conductivity probe.

DATUM.--Measuring point: Top of base, 9.44 ft above National Geodetic Vertical Datum of 1929. Prior to February 15, 2001, measuring point was top of casing 5.98 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above NGVD.

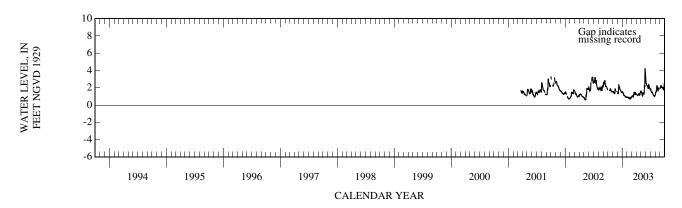
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Station was reconstructed in February 2001, for the collection of continuous water-level, temperature and conductivity data. Specific conductance record rated excellent for the entire year. Temperature records are available in the files of the U.S, Geological Survey. (Corrected).

PERIOD OF RECORD.--Water Level Measurements: October 2000 to March 2001 (quarterly), March 2001 to current year. Induction Logging: April 2000 to current year (annually). Specific Conductance: March 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.20 ft NGVD, May 27, 28, 2003; lowest, 0.62 ft NGVD, May 8, 10, 11, 2002. Highest mean daily specific conductance, 9417 microsiemens, Aug. 3, 2003, but may have been higher during periods of missing record; lowest, 7718 microsiemens, Oct. 27, 2001, but may have been lower during periods of missing record.

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

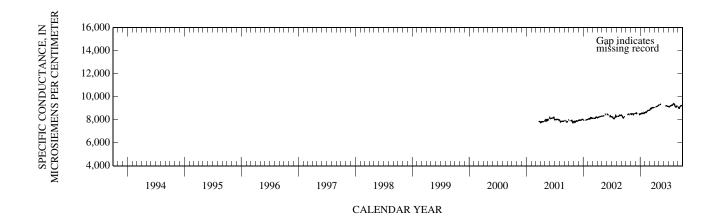
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		1.57	1.48	1.47	0.90	1.03	1.22	1.49	2.45	1.66	1.54	2.18
10	1.75	1.41	2.33	1.18	0.83	0.96	1.11	1.10		1.49	2.14	2.13
15	1.80	1.37	2.02	1.13	0.71	1.06	1.18	1.42	2.04	1.40	2.01	2.02
20	1.78	1.66	1.77	0.97	0.83	1.47	1.24	1.28	2.37	1.11	1.98	1.89
25	1.56	1.57	1.58	0.86	0.75	1.25	1.19	2.16	2.07	1.03	1.84	1.92
EOM	1.50	1.39	1.45	0.91	0.85	1.33	1.61	3.23	1.76	1.12	1.90	2.59
MAX			2.33	1.52	0.92		1.61	4.20		1.81		2.59



WELL NUMBER.--260325080113901. Local Number G 2900. USGS Observation Well near Fort Lauderdale, FL.

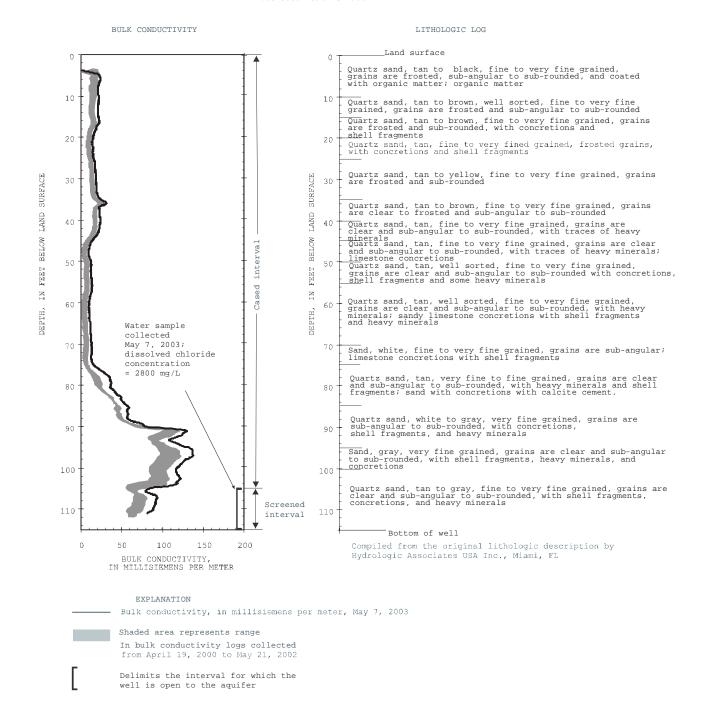
# SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		8,508	8,574	8,516	8,651	8,870	9,081	9,293		9,101	9,384	9,031
10		8,534	8,543	8,573	8,677	8,995	9,109	9,334		9,158	9,344	9,014
15	8,492			8,570	8,754	9,009	9,145		9,211	9,209	9,117	9,186
20	8,463	8,500		8,521	8,812	9,067	9,173		9,209	9,226	9,151	9,198
25	8,458	8,531	8,552	8,548	8,802	9,040	9,213		9,170	9,263	9,179	9,249
EOM	8,508	8,543	8,511	8,607	8,829		9,272		9,162	9,349	9,123	9,158
MAX				8,622	8,831					9,349		9,264



WELL NUMBER.--260325080113901. Local Number G 2900. USGS Observation Well near Fort Lauderdale, FL.

260325080113901 G-2900



WELL NUMBER.--260326080120301. Local Number G 2921. USGS Observation Well near Davie, FL.

LOCATION.--Lat 26°03'26", long 80°12'03", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 36, T.50 S., R.41 E., Hydrologic Unit 03090202, at the northwest corner of the intersection of SW 40th Avenue and 52nd Street, 0.40 mi south of Griffin Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 207 ft.

INSTRUMENTATION .-- Annual profile by induction logger.

DATUM.--Measuring point: Top of casing, 4.01 ft above National Geodetic vertical Datum of 1929. Prior to January 23, 2004, Measuring point was estimated to be 5.0 ft from a topographic map. See REMARKS.

LAND-SURFACE DATUM.-- Land surface is approximately 4.0 ft above NGVD.

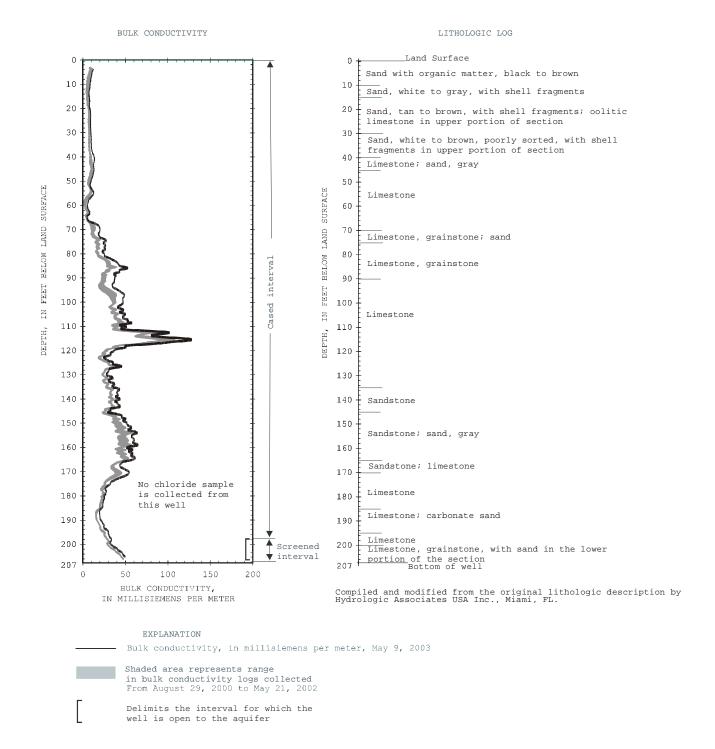
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. The estimated measuring point published prior to January 23, 2004, was not used to compute water-level elevations. All water-level elevation data collected prior to January 23, 2004, were computed using the 4.01 ft measuring point.

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

NO WATER-LEVEL OR CHLORIDE DATA COLLECTED DURING THE 2003 WATER YEAR, STARTS IN 2004 WATER YEAR.

WELL NUMBER.--260326080120301. Local Number G 2921. USGS Observation Well near Davie, FL.

260326080120301 G-2921



WELL NUMBER.--260342080115902. Local Number G 2264. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°03'42", long 80°11'59", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 31, T.50 S., R.42 E., Hydrologic Unit 03090202, 34 ft east of center of SW 40th Avenue and south of Griffin Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 203 ft, cased to 196 ft. Open hole 196 to 203 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.70 ft above National Geodetic Vertical Datum of 1929. Prior to December 2000, the measuring point was considered to be 3.88 ft above NGVD. SEE REMARKS.

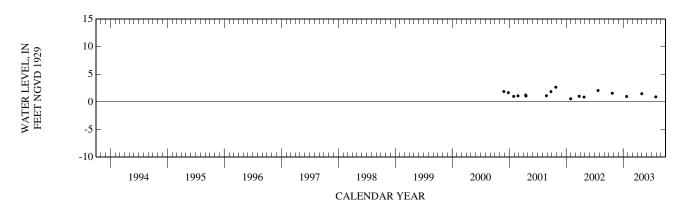
LAND-SURFACE DATUM.--Land surface is approximately 4.7 ft above NGVD.

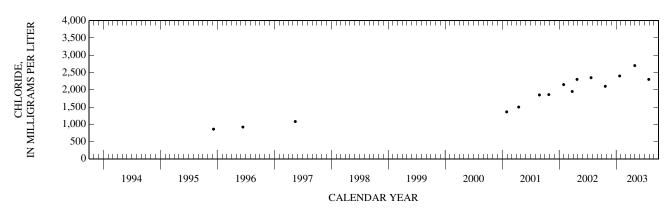
REMARKS.--Well is also used for salinity monitoring. Quarterly water level measurements began in November 2000. Prior to that, well was only monitored for salinity. In December 2000, construction activities altered the land-surface datum and the casing was reconstructed.

PERIOD OF RECORD.--July 1976 to April 2000 (intermittent), October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.66 ft NGVD, Oct. 26, 2001; lowest, 0.57 ft NGVD, Jan. 29, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
23	1310	1.56	6,730	2,100	30	0956	1.48	7,560	2,700
JAN					JUL				
23	1303	0.98	6,880	2,400	29	1242	0.91	7,160	2,300





WELL NUMBER.--260458080134801. Local Number G 1221. USGS Observation Well in Davie, FL.

LOCATION.--Lat 26°04'58", long 80°13'48", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.23, T.50 S., R.41 E., Hydrologic Unit 03090202, at southwest corner of Nova Drive and Davie Road Extension, 0.75 mi south of State Road 84, and 1.6 mi west of the Florida Turnpike.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 20 ft, cased to 12 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.58 above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 6.1 ft above NGVD.

REMARKS.--Records of water levels prior to October, 1973 are available in files of the U.S. Geological Survey.

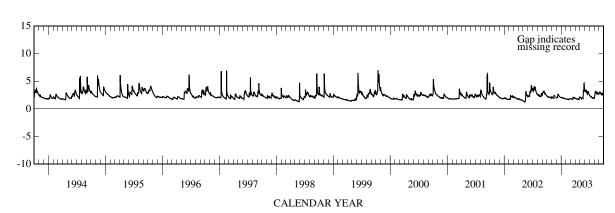
PERIOD OF RECORD.--December 1962 to February 1979, October 1982 to November 1983, March 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.02 ft NGVD, June 22, 1992; lowest, 0.67 ft NGVD, Apr. 30, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	2.26 2.12	2.10 1.94	2.08 2.63	2.06 1.95	1.78 1.74	1.81 1.77	1.87 1.82	2.06 1.87	3.14 3.40	2.34 2.21	2.49 3.20	2.90 2.87
15	2.19	1.96	2.51	2.01	1.67	1.69	1.75	2.01	2.84	2.14	2.98	2.69
20 25	2.08 2.01	2.33 2.14	2.27 2.14	1.90 1.84	1.80 1.83	2.07 1.97	1.76 1.68	1.95 3.21	3.12 3.00	1.98 1.94	3.01 2.74	2.70 2.70
EOM	1.94	2.03	2.05	1.81	1.83	2.04	2.12	3.62	2.57	2.06	2.71	3.29
MAX	2.35		2.63	2.06	1.85		2.12	4.66	3.45	2.52	3.20	3.29





WELL NUMBER.--260515080202101. Local Number G 617. USGS Observation Well in Davie, FL.

 $LOCATION.--Lat\ 26^{\circ}05'15",\ long\ 80^{\circ}20'21",\ in\ SE\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ sec.15,\ T.50\ S.,\ R.40\ E.,\ Hydrologic\ Unit\ 03090202,\ on\ SW\ 26th\ Street,\ west\ of\ SW\ 142nd\ Avenue,\ 1.8\ mi\ north\ of\ South\ New\ River\ Canal,\ 6.5\ mi\ west\ of\ Davie\ and\ 14.2\ mi\ west\ of\ Fort\ Lauderdale.$ 

AQUIFER.--Biscayne aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 29 ft, cased to 28 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.59 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 6.0 ft above NGVD.

REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

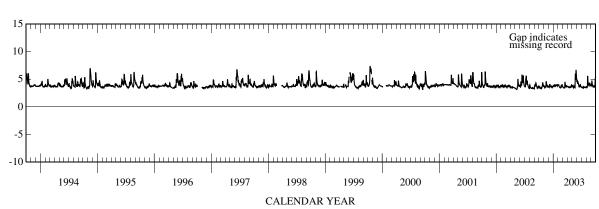
PERIOD OF RECORD .-- January 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.40 ft NGVD, Oct. 15, 1999; lowest, 2.46 ft NGVD, June 7, 1962.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	3.46 3.36	3.64 3.53	3.64 4.14	3.91 3.75	4.02 3.62	3.60 3.43	3.68 3.55	3.72 3.51	4.54 4.23	3.58 3.49	3.61 5.53	4.17 3.93
15 20	3.39 3.44	3.50 4.05	3.72 3.61	3.84 3.90	3.49 3.82	3.37 3.98	3.49 3.51	3.78 3.52	3.70 3.89	3.70 3.51	3.98 4.28	3.58 3.75
25 EOM	4.36	3.86 3.69	3.53 3.79	3.83	3.98 3.96	3.67 3.67	3.55	5.19 5.13	3.93	3.50	4.11 3.76	3.71 5.31
MAX	3.76 4.36	4.62	3.79 4.14	3.92 3.99	4.03	4.53	3.85 3.99	6.61	3.58 4.81	3.54 3.70	5.53	5.51





WELL NUMBER.--260521080122401. Local Number G 2125. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat  $26^{\circ}05'21''$ , long  $80^{\circ}12'25''$ , in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.24, T.50 S., R.41 E., Hydrologic Unit 03090202, at the intersection of SW 26th Street and SW 42nd Terrace, 2 ft east of centerline of SW 42nd Terrace and 5 ft south of centerline of SW 26th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 58 ft, cased to 57 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.90 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 5.9 ft above NGVD.

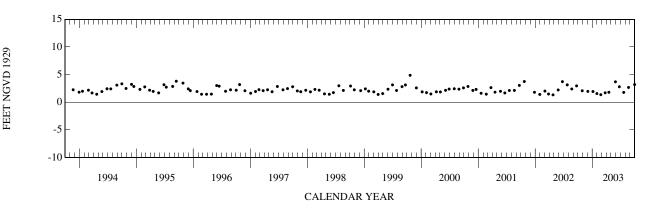
REMARKS .-- Well is also used for salinity monitoring.

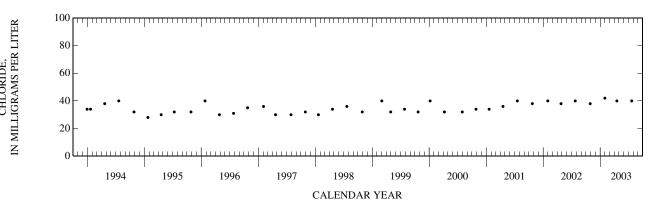
WATER LEVEL, IN

PERIOD OF RECORD.--October 1975 to October 1977 (semiannual), February 1979 to September 1993 (intermittent), November 1993 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.88 ft NGVD, Oct. 22, 1999; lowest, 0.65 ft NGVD, June 14, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
29	1315	2.08	565	38.0	30	1354	3.70		
DEC					JUN				
04	1310	1.96			24	1356	2.80		
JAN					JUL				
06	1415	1.94			22	1328	1.78	552	40.0
31	1325	1.57	581	42.0	AUG				
FEB					22	1345	2.68		
25	1345	1.37			SEP				
MAR					30	1340	3.20		
25	1352	1.71							
APR									
18	1329	1.80	577	40.0					





WELL NUMBER.--260528080122301. Local Number G 2123. USGS Observation Well near Fort Lauderdale, FL

LOCATION.--Lat 26°05'27", long 80°12'23" in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.13, T.50 S., R.41 E., Hydrologic Unit 03090202, at dead end of SW 42 Terrace, on western side of street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.5 in., depth 182 ft, cased to 181 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.46 ft above National Geodetic Vertical Datum of 1929.

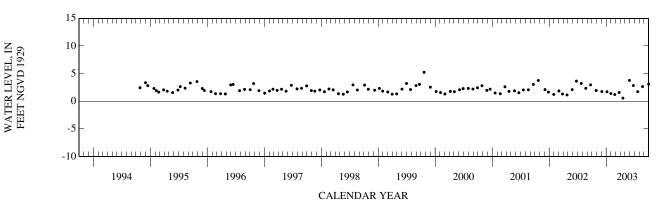
LAND-SURFACE DATUM.--Land surface is approximately 7.5 ft above NGVD.

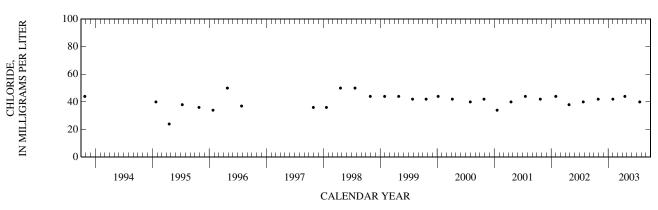
REMARKS.--Well also used for salinity monitoring. Measured well depth at 121.6 ft from top of casing on May 30, 2003. Well is filling with sand, but because the well is cased to 181 ft the samples collected are considered to be representative of the aquifer at this depth.

PERIOD OF RECORD.--October 1975 to October 1993 (intermittent), October 1994 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.24 ft NGVD, Oct. 22, 1999; lowest, 0.28 ft NGVD, May 2, 1977.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
29	1245	1.94	522	42.0	30	1342	3.77		
DEC					JUN				
04	1358	1.75			24	1340	2.84		
JAN					JUL				
06	1401	1.72			22	1230	1.72	502	40.0
31	1303	1.39	505	42.0	AUG				
FEB					22	1332	2.65		
25	1330	1.21			SEP				
MAR					30	1330	3.08		
25	1339	1.58							
APR									
18	1259	0.56	506	44.0					





WELL NUMBER.--260530080112101. Local Number G 2130. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°05'30", long 80°11'22", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.18, T.50 S., R.42 E., Hydrologic Unit 03090202, 11.6 ft west of edge of SW 33rd Terrace and 6.0 ft north of stop sign at southwest corner of intersection of Riverland Road and SW 33rd Terrace.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 60 ft, cased to 59 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.16 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.1 ft above NGVD.

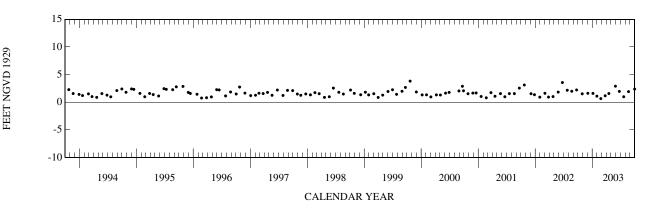
REMARKS .-- Well also used for salinity monitoring.

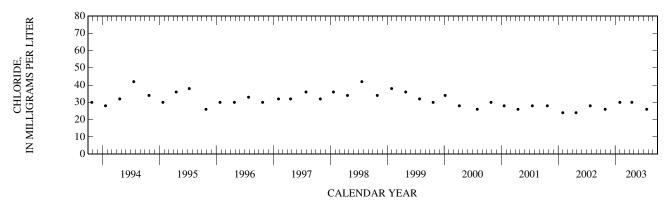
WATER LEVEL, IN

PERIOD OF RECORD.--October 1975 to August 1990 (intermittent), October 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.15 ft NGVD, June 18, 1993; lowest, 0.54 ft above NGVD, Apr. 26, 1988 and Dec. 15, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
29	1116	1.53	451	26.0	30	1235	2.90		
DEC					JUN				
04	1255	1.62			24	1240	1.96		
JAN					JUL				
06	1330	1.60			22	1147	0.99	442	26.0
31	1136	1.10	444	30.0	AUG				
FEB					22	1233	1.92		
25	1255	0.66			SEP				
MAR					30	1235	2.38		
25	1301	1.17							
APR									
18	1130	1.58	442	30.0					





WATER LEVEL, IN

IN MILLIGRAMS PER LITER

### BROWARD COUNTY—Continued

WELL NUMBER.--260533080123701. Local Number G 2122. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°05'33", long 80°12'37", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.13, T.50 S., R.41 E., Hydrologic Unit 03090202, 8.4 ft west of edge of SW 44th Terrace and 12.4 ft northeast of street sign at southwest corner of intersection of SW 24th Street and SW 44th Terrace.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 135 ft, cased to 134 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.85 ft above National Geodetic Vertical Datum of 1929.

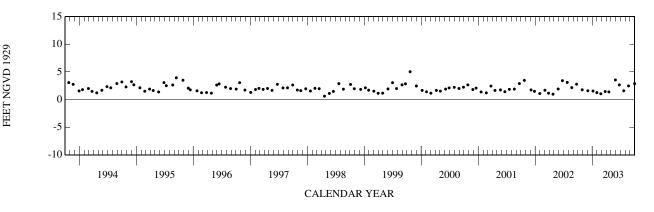
LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

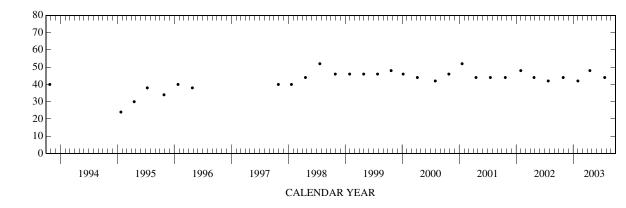
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD.--October 1975 to September 1990 (intermittent), October 1990 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.11 ft NGVD, June 10, 1993; lowest, 0.24 ft NGVD, May 2, 1977.

		Specif.					Specif.	
		conduc-					conduc-	Chlor-
		tance,	ide,				tance,	ide,
								water,
								fltrd,
Time				Date	Time			mg/L
	(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
				MAY				
1215	1.77	565	44.0	30	1324	3.55		
				JUN				
1345	1.59			24	1327	2.66		
				JUL				
1344	1.55			22	1258	1.59	544	44.0
1229	1.26	562	42.0	AUG				
				22	1320	2.47		
1315	1.05			SEP				
				30	1317	2.88		
1326	1.45							
1228	1.39	570	48.0					
	1345 1344 1229 1315 1326	(72020)  1215 1.77  1345 1.59  1344 1.55 1229 1.26  1315 1.05  1326 1.45	Elevation, feet wat unful above US/cm NGVD 25 degC (72020) (00095)  1215 1.77 565 1345 1.59 1344 1.55 1229 1.26 562 1315 1.05 1326 1.45	Elevation, feet wat unfabove uS/cm fltrd, mg/L (72020) (00095) (00940)  1215 1.77 565 44.0  1345 1.59 1344 1.55 1229 1.26 562 42.0  1315 1.05 1326 1.45 1326	Elevation, tance, feet wat unfabove uS/cm fltrd, mGVD 25 degC mg/L (72020) (00095) (00940)  1215 1.77 565 44.0 MAY 1345 1.59 24 1344 1.55 1229 1.26 562 42.0 AUG 1315 1.05 SEP 1326 1.45 30	Elevation, feet wat unfabove uS/cm fltrd, mg/L Date Time  Time NGVD 25 degC mg/L Date Time  1215 1.77 565 44.0 30 1324  1345 1.59 24 1327  1344 1.55 122 1258  1229 1.26 562 42.0 AUG  1315 1.05 SEP  1326 1.45 30 1317	Elevation, feet above 200 (72020)         conductance, ide, wat unful above us/cm         Chloride, water, feet above us/cm         Elevation, feet above ation, feet above us/cm         MGVD (72020)         Date Time NGVD (72020)         NGVD (72020)           1215         1.77         565         44.0         30 1324 3.55         3.55           1345         1.59           24 1327 2.66         2.66           1344         1.55           22 1258 1.59           1229         1.26         562         42.0         AUG           1315         1.05           SEP           1326         1.45           30 1317 2.88	Elevation, tance, ide, wat unfabove uS/cm fltrd, representation, above uS/cm fltrd, representation, representation, feet above uS/cm fltrd, representation, representation, feet above uS/cm fltrd, representation uS/cm fltrd, representation uS/cm representation





WELL NUMBER.--260534080110801. Local Number G 2904. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat  $26^{\circ}05^{\circ}36^{\circ}$ , long  $80^{\circ}11^{\circ}09^{\circ}$ , in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 17, T.50 S., R.42 E., Hydrologic Unit 03090202, at St. Ambrose Church, 16 ft east of SW 31st Avenue, northeast of the intersection of SW 31st Avenue and SW 23rd Court. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 126 ft, cased to 116 ft, screened 116 to 126 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.04 ft above National Geodetic Vertical Datum of 1929.

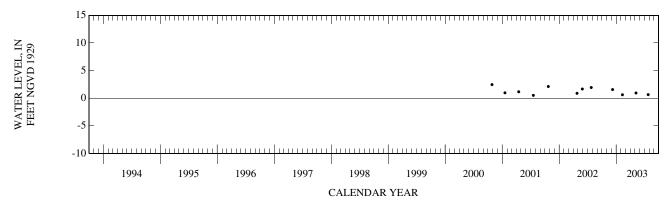
LAND-SURFACE DATUM.--Land surface is approximately 5.0 ft above NGVD.

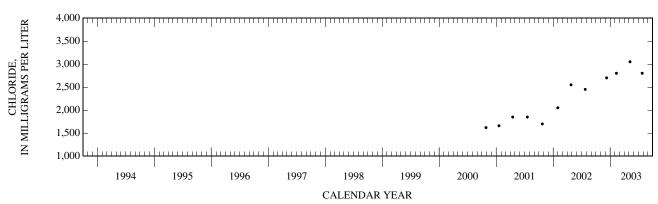
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Quarterly water-level measurements began in October 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level measured, 2.47 ft NGVD, Oct. 27, 2000; lowest, 0.52 ft NGVD, July 19, 2001.

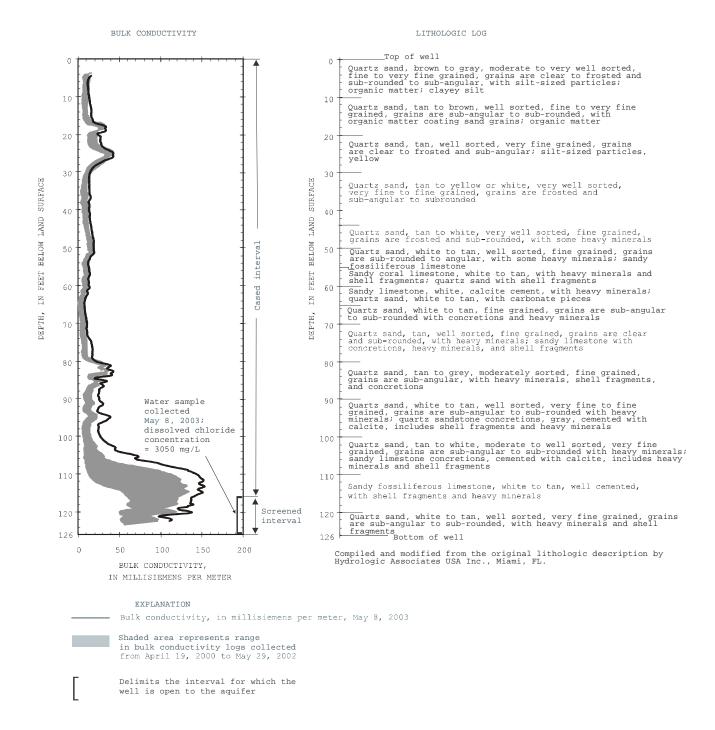
Date	Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC	1100	1.57	0.060	2.700	MAY	1121	0.05	0.570	2.050
09 FEB	1102	1.57	8,060	2,700	08 JUL	1131	0.95	9,570	3,050
10	1130	0.63	8,780	2,800	25	1303	0.65	8,770	2,800





WELL NUMBER.--260534080110801. Local Number G 2904. USGS Observation Well near Fort Lauderdale, FL.

260534080110801 G-2904



WELL NUMBER.--260534080112101. Local Number G 2129. USGS Observation Well near Fort Lauderdale, FL.

 $LOCATION.--Lat\ 26^{\circ}05^{\circ}33^{\circ},\ long\ 80^{\circ}11^{\circ}22^{\circ}\ in\ SW\ {}^{1}\!{}^{\prime}_{4}\ SE\ {}^{1}\!{}^{\prime}_{4}\ sec.\ 18,\ T.50\ S.,\ R.42\ E.,\ Hydrologic\ Unit\ 03090202,\ on\ western\ side\ of\ SW\ 33rd\ Terrace,\ 100\ ft\ north\ of\ intersection\ between\ SW\ 33rd\ Terrace\ and\ Riverland\ Road.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 180 ft, cased to 179 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

WATER LEVEL, IN FEET NGVD 1929

IN MILLIGRAMS PER LITER

DATUM.--Measuring point: Top of casing, 4.69 ft above National Geodetic Vertical Datum of 1929.

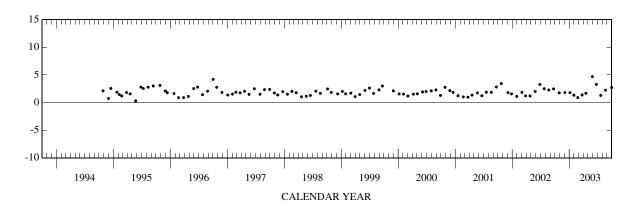
LAND-SURFACE DATUM .-- Land surface is approximately 4.7 ft above NGVD.

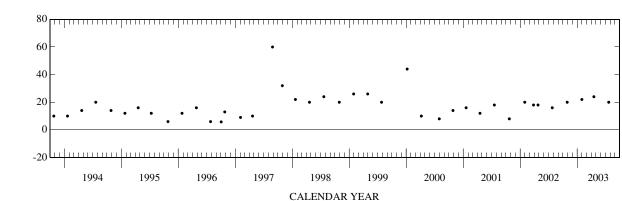
REMARKS.--Well also used for salinity monitoring. Measured well depth at 143.2 ft from top of casing on June 24, 2003. Well is filling with sand from the aquifer, but because the well is cased to 179 ft the samples collected are considered to be representative of the aquifer at this depth. On May 30, 2003, wide-spread flooding caused water levels around this well to be above the top of casing.

PERIOD OF RECORD.--January 1976 to July 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, greater than 4.69 ft NGVD, May 30, 2003 (See REMARKS); lowest, 0.32 ft NGVD, May 24, 1995.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
29	1046	1.77	376	20.0	30	1230	>4.69		
DEC					JUN				
04	1249	1.81			24	1226	3.29		
JAN					JUL				
06	1322	1.80			22	1115	1.29	335	20.0
31	1058	1.33	374	22.0	AUG				
FEB					22	1224	2.23		
25	1246	0.90			SEP				
MAR					30	1217	2.71		
25	1253	1.37							
APR									
18	1053	1.68	378	24.0					





WELL NUMBER.--260535080104301. Local Number G 854. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.—Lat 26°05'35", long 80°10'42", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec. 17, T.50 S., R.42 E., Hydrologic Unit 03090202, in meter box in grassy area 5.5 ft south of edge of Riverland Road, north of River Lanes Canal west of SW 27th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 206 ft, cased to 195 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring Point: Top of casing, 3.71 ft above National Geodetic Vertical Datum of 1929. Between May 1985 and September 1997, measuring point was incorrectly considered to be 5.66 ft above NGVD. See REMARKS.

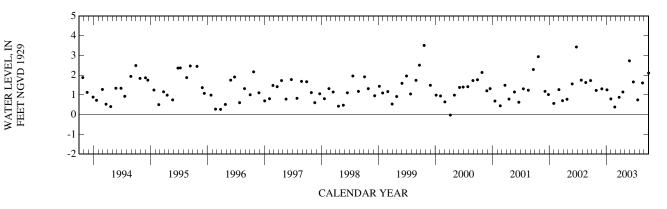
LAND-SURFACE DATUM.--Land surface is approximately 3.9 ft above National Geodetic Vertical Datum of 1929.

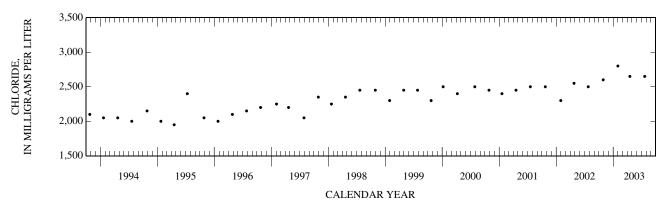
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in December 1965. The figures of water levels as elevation, in feet NGVD, from May 1985 and September 1997 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--October 1975 to October 1979 (intermittent), May 1985 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.51 ft NGVD, Oct. 22, 1999; lowest, 0.02 ft below NGVD, Apr. 7, 2000.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
29	0934	1.23	8,090	2,600	30	1212	2.73		
DEC					JUN				
04	1226	1.31			24	1156	1.66		
JAN					JUL				
06	1230	1.26			22	0936	0.75	8,040	2,650
31	0940	0.80	8,070	2,800	AUG				
FEB					22	1147	1.61		
25	1141	0.39			SEP				
MAR					30	1150	2.11		
25	1149	0.88							
APR									
18	0937	1.15	8,200	2.650					





WELL NUMBER.--260545080082001. Local Number G 561. USGS Observation Well at Fort Lauderdale, FL.

LOCATION.--Lat 26°05'45", long 80°08'20", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 15, T.50 S., R.42 E., Hydrologic Unit 03090202, at SE 4th Avenue and 20th Street in Fort Lauderdale, 0.2 mi west of U.S. Highway 1, and 0.3 mi north of State Road 84.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 20 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.40 ft above National Geodetic Vertical Datum of 1929. Prior to October 2003, measuring point was considered to be top of base, 10.11 ft above NGVD. From October 1991 to October 1998, measuring point was incorrectly considered to be 10.12 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.0 ft above NGVD.

REMARKS.--On May 2003, it was noted that the casing of the well at land surface had corroded through and the well casing above land surface was unstable. The station was reconstructed in October 2003 to stabilize the well casing. A check of the measuring point elevation conducted prior to reconstruction indicated that the measuring point elevation was 10.13 ft above NGVD. Water-level data collected prior to October 2003 may be in error by -0.02 ft. An incorrect measuring point elevation was used from October 1991 to October 1998. Published records of water level as elevation from this period are in error by +0.01 ft. Because these changes in the measuring point are minor, historical water level elevation data have not been corrected. Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey. See DATUM and PERIOD OF RECORD.

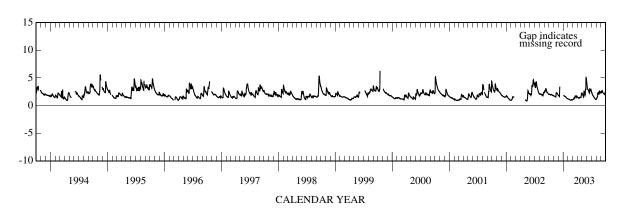
PERIOD OF RECORD .-- January 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.40 ft NGVD, Oct. 5, 1948; lowest, 0.05 ft NGVD, July 2, 1952.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.03	1.73	1.75	1.85	1.18	1.13	1.46	2.05	3.21	2.19	1.46	2.56
10	1.95	1.62	3.44	1.69	1.10	1.15	1.43	1.67	2.87	1.83	2.21	2.51
15	1.97	1.56		1.63	0.99	1.33	1.38	2.59	2.47	1.65	2.34	2.26
20	2.01	2.10		1.47	1.01	1.76	1.50	1.95	3.02	1.39	2.57	2.10
25	1.84	2.08		1.30	1.04	1.55	1.46	2.95	2.73	1.21	2.32	1.98
EOM	1.76	1.89		1.23	1.00	1.67	2.24	4.38	2.55	1.11	2.38	3.08
MAX	2.06	2.31			1.22	1.76	2.24	5.04	4.10	2.41	2.62	3.08





WELL NUMBER.--260547080105801. Local Number G 2352. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°05'46", long 80°10'58" in SE  $^{1}/_{4}$  NW  $^{1}/_{4}$  SW  $^{1}/_{4}$  sec.17, T.50 S., R.42 E., Hydrologic Unit 03090202, 200 ft south of intersection of SW 29th Avenue and SW 19th Court, on western side of SW 29th Avenue, 20 ft from street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.5 in., depth 171 ft, cased to 171 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.91 ft above National Geodetic Vertical Datum of 1929.

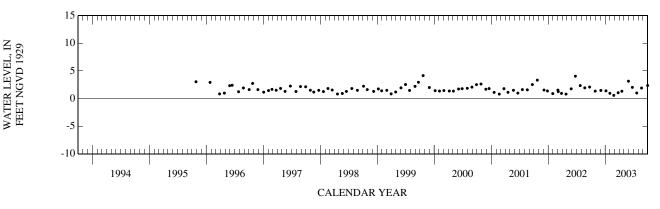
LAND-SURFACE DATUM .-- Land surface is approximately 4.9 ft above NGVD.

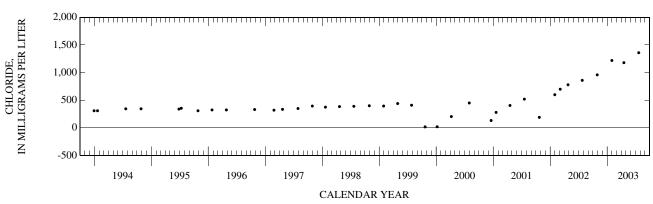
REMARKS.--Well also used for salinity monitoring since June 1981. Water level monitoring began in October 1995. See PERIOD OF RECORD.

PERIOD OF RECORD.--June 1981 to September 1995 (intermittent) (Corrected), October 1995 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.16 ft NGVD, Oct. 22, 1999; lowest, 0.59 ft NGVD, Feb. 25, 2003.

Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
				MAY				
1015	1.35	3,370	960	30	1217	3.14		
				JUN				
1236	1.47			24	1207	2.03		
				JUL				
1244	1.40			22	1015	1.01	4,300	1,360
1023	0.95	3,860	1,220	AUG				
				22	1205	1.91		
1158	0.59			SEP				
				30	1202	2.36		
1203	1.06							
1020	1.33	4,100	1,180					
	1015 1236 1244 1023 1158 1203	Time ation, feet above NGVD (72020)  1015 1.35 1236 1.47 1244 1.40 1023 0.95 1158 0.59 1203 1.06	Time Representation ation, feet wat unface, wat unface	Elevation, feet wat unf above NGVD (72020) (00095) (00940)  Time NGVD 25 degC mg/L (00940)  1015 1.35 3,370 960  1236 1.47 1244 1.40 1023 0.95 3,860 1,220  1158 0.59 1203 1.06	Elevation, feet above above 1015         conductance, wat unf above 25 degC (72020)         Chloratide, water, water, fltrd, mg/L (72020)         Date           1015         1.35         3,370         960         30           1236         1.47           JUN 24           1244         1.40           22           1023         0.95         3,860         1,220         AUG 22           1158         0.59           SEP 30           1203         1.06           30	Elevation, feet wat unf water, above uS/cm flirtd, mg/D 25 degC mg/L   Date Time   MAY	Elevation, feet ation, above UNS/Cm         Chloride, water, feet above UNS/Cm         Chloride, water, feet above UNS/Cm         Elevation, feet above ation, feet above UNS/Cm         Elevation, feet above ation, feet above uNS/Cm         MAY         NGVD (72020)           1015         1.35         3,370         960         30 1217         3.14           1236         1.47           24 1207         2.03           1244         1.40           22 1015         1.01           1023         0.95         3,860         1,220         AUG         22 1205         1.91           1158         0.59           SEP         30 1202         2.36           1203         1.06            30 1202         2.36	Elevation, feet wat unfabove uS/cm fltrd,   Date   Time   NGVD   25 degC mg/L   Date   Time   NGVD   25 degC (72020)   (00095)   (00940)





WELL NUMBER.--260638080095801. Local Number G 2131. USGS Observation Well at Fort Lauderdale, FL.

LOCATION.--Lat 26°06'38", long 80°09'58", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.9 T.50 S., R.42 E., Hydrologic Unit 03090202, near southwest corner of Stranahan High School at northeast corner of SW 20th Avenue and SW 9th street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 69 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

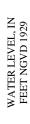
DATUM.--Measuring point: Top of casing, 5.98 ft above NGVD, from topographic map.

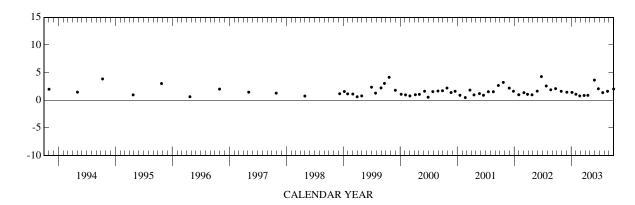
LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--October 1975 to April 1998 (semiannual), December 1998 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.22 ft NGVD, Apr. 24, 1990; lowest, 0.48 ft NGVD, Feb. 21, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
29	0919	1.62	30	1156	3.65
DEC			JUN		
04	1155	1.46	24	1148	2.08
JAN			JUL		
06	1205	1.42	22	0914	1.38
31	0916	1.08	AUG		
FEB			22	1142	1.62
25	1131	0.78	SEP		
MAR			30	1140	2.03
25	1137	0.86			
APR					
18	0921	0.89			





WELL NUMBER.--260638080104801. Local Number G 2902. USGS Observation Well near Melrose Park, FL.

LOCATION.--Lat 26°06′38", long 80°10′48", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 8, T.50 S., R.42 E., Hydrologic Unit 03090202, at Triangle Park near the southwest corner of SW 8th Street and SW 28th Avenue, 0.75 mi south of Broward Boulevard.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 190 ft, cased to 180 ft, screened 180 to 190 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.03 ft above National Geodetic Vertical Datum of 1929.

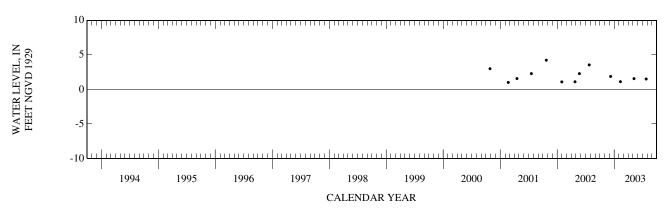
LAND-SURFACE DATUM.--Land surface is approximately 7.0 ft above NGVD.

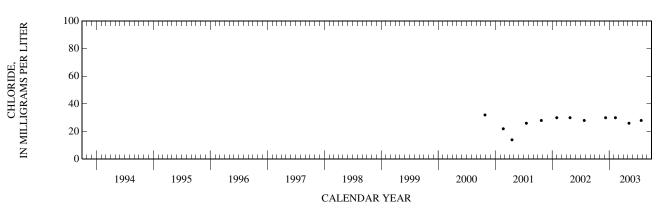
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Induction logging began in April 2001.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.23 ft NGVD, Oct. 23, 2001; lowest, 1.01 ft NGVD, Feb. 21, 2001.

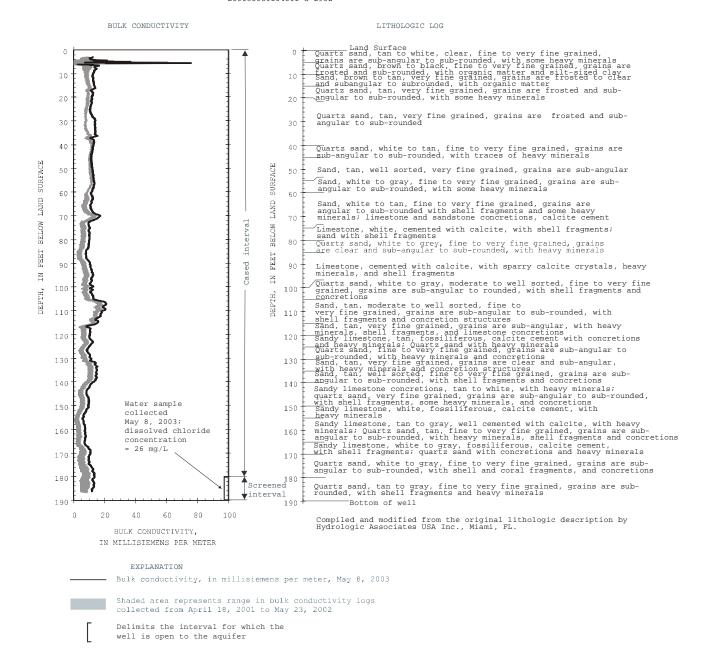
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC 09	1135	1.88	524	30.0	MAY 08	1310	1.56	487	26.0
FEB 10	1112	1.12	530	30.0	JUL 25	1325	1.51	497	28.0





WELL NUMBER.--260638080104801. Local Number G 2902. USGS Observation Well near Melrose Park, FL.

#### 260638080104801 G-2902



WELL NUMBER.--260653080184901. Local Number G 2034. USGS Observation Well near Davie, FL.

LOCATION.--Lat 26°02'02", long 80°23'07", in NE  $^{1}\!/_{4}$  SE  $^{1}\!/_{4}$  sec.6, T.51 S., R.40 E., Hydrologic Unit 03090202, at SW 178th Avenue (Rolling Oaks Road) and SW 68th Court, 1.9 mi south of Griffin Road and east of Mathus Drive, 7.8 mi west of Davie.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 22 ft, cased to 21 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.44 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.4 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

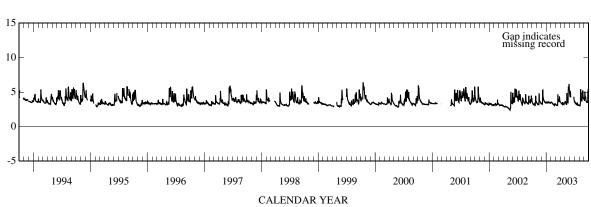
PERIOD OF RECORD .-- January 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.40 ft NGVD, Oct. 15, 1999; lowest, 1.49 ft NGVD, May 6, 1975.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	3.42 3.21	3.31 3.16	3.30 5.27	3.54 3.43	3.54 3.36	3.18 3.08	3.47 3.32	3.45 3.24	5.03	3.58 3.34	3.07 5.35	4.57 4.29
15	3.22	3.13	3.90	3.50	3.23	3.02	3.17	3.97		3.19	3.95	3.63
20 25	3.12 4.46	3.74 3.53	3.66 3.49	3.49 3.45	3.27 3.22	3.79 3.59	3.28 3.16	3.44 5.62		3.40 3.12	4.95 4.54	3.57 5.07
EOM	3.48	3.37	3.50	3.47	3.31	3.63	3.44	4.82	3.71	3.07	3.98	5.23
MAX	4.46	4.81	5.27	3.56	3.54	4.67	3.58	6.12		3.64	5.35	5.45





WELL NUMBER.--260657080122301. Local Number S 329. USGS Observation Well in Fort Lauderdale, FL.

 $LOCATION.--Lat\ 26^{\circ}06'57", long\ 80^{\circ}12'23", in\ SW\ {}^{1}\!\!/_{4}\ NE\ {}^{1}\!\!/_{4}\ sec. 12, T.50\ S., R.41\ E., Hydrologic\ Unit\ 03090202, 200\ ft\ south\ of\ NW\ 4th\ Street\ on\ west\ side\ of\ Country\ Club\ Circle,\ and\ 0.3\ mi\ west\ of\ U.S.\ Highway\ 441.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, water-table well, diameter 4 in., depth 68 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 12.44 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 9.2 ft above NGVD.

REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

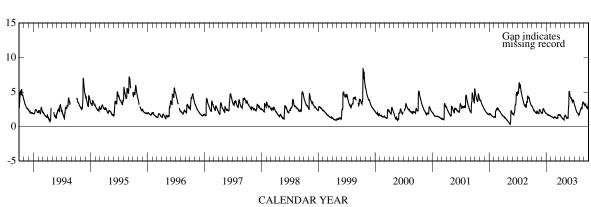
PERIOD OF RECORD .-- January 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.76 ft NGVD, Oct. 17, 1947; lowest, 1.26 ft below NGVD, May 2, 1975.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	2.82 2.56 2.34 2.19 2.05 1.84	2.17 1.96 1.81 2.45 2.28 2.04	2.00 2.46 2.58 2.29 2.10 1.94	1.87 1.72 1.72 1.63 1.58 1.50	1.46 1.38 1.28 1.34 1.42 1.38	1.26 1.21 1.20 1.74 1.64 1.72	1.51 1.38 1.18 1.10 1.01 1.54	1.60 1.36 1.34 1.20 3.04 4.91	4.31 4.17 3.80 3.85 3.84 3.25	2.92 2.52 2.18 1.97 1.90 1.76	2.12 2.54 2.74 3.11 3.57 3.32	3.12 3.25 2.87 2.78 2.68 3.63
MAX	2.99	2.45	2.59	1.91	1.49	1.75	1.65	5.10	4.72	3.17	3.57	3.63





WELL NUMBER.--260658080132001. Local Number G 1089 USGS Observation Well near Plantation, FL.

LOCATION.--Lat 26°06′58", long 80°13′20", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.11 T.50., R.41 E., Hydrologic Unit 03090202, at the northwest corner of SW 3rd Court and SW 54th Avenue, 0.3 mi south of Broward Boulevard and 0.2 mi west of the Florida Turnpike.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1.25 in., depth 16 ft, cased to 14 ft, screened 14 to 16 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.18 ft above National Geodetic Vertical Datum of 1929.

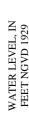
LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

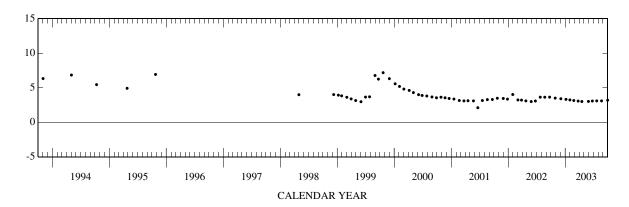
REMARKS.--Water-level measurements published for the period April 23, 1996 to October 27, 1997, have been reviewed and rejected because the well is believed to have been clogged during this period.

PERIOD OF RECORD.--October 1975 to April 1998 (semiannual), December 1998 to September 2003. Discontinued. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.18 ft NGVD, Oct. 22, 1999; lowest, 1.78 ft NGVD, May 13, 1981. (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
29	0846	3.50	30	1130	3.02
DEC			JUN		
04	1127	3.41	24	1123	3.08
JAN			JUL		
06	1140	3.32	22	0845	3.10
31	0850	3.24	AUG		
FEB			22	1113	3.10
25	1106	3.16	SEP		
MAR			30	1120	3.20
25	1115	3.07			
APR					
18	0901	3.01			





WELL NUMBER.--260737080103301. Local Number G 2901. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°07'37", long 80°10'33", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.5, T.50 S., R.42 E., Hydrologic Unit 03090202, 101 ft east-southeast of west parking lot in Reverend Samuel Delevoe Park, southeast of the intersection of Sistrunk Boulevard and NW 27th Avenue. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 205 ft, cased to 195 ft, screened 195 to 205 ft.

INSTRUMENTATION .-- Quarterly measurement by chalked tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 6.69 ft above National Geodetic Vertical Datum of 1929.

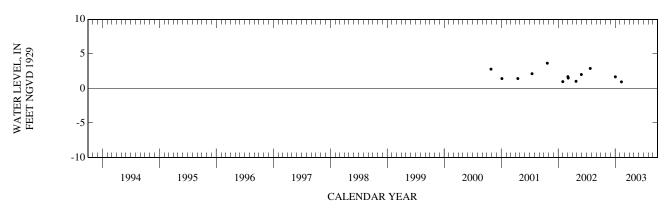
LAND-SURFACE DATUM.--Land surface is approximately 6.7 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. A separation of the casing was found using a bore-hole camera. The chloride-concentration measurements are likely to reflect dilution from leakage at the separation. Quarterly water-level measurements began in October 2000. G-2901 has been discontinued because of a separated casing. A replacement well, G-2901R, has been constructed to replace G-2901. G-2901R is located 110 ft north-northeast of G-2901.

PERIOD OF RECORD.--August 2000 to February 2003. Discontinued. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.65 ft NGVD, Oct. 23, 2001; lowest, 0.95 ft NGVD, Feb. 10, 2003.





WELL NUMBER.--260737080103302. Local Number G 2901R. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°07'38", long 80°10'33", in NW  $^{1}\!\!/_{4}$  SE  $^{1}\!\!/_{4}$  sec.5, T.50 S., R.42 E., Hydrologic Unit 03090202, 110 ft east of the west parking lot in Reverend Samuel Delevoe Park, southeast of the intersection of Sistrunk Boulevard and NW 27th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 205 ft, cased to 195 ft, screened 195 to 205 ft.

INSTRUMENTATION .-- Quarterly measurement by chalked tape.

DATUM.--Measuring point: Top of casing, 4.45 ft above National Geodetic Vertical Datum of 1929.

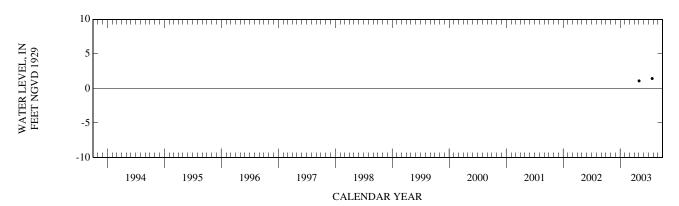
LAND-SURFACE DATUM.--Land surface is approximately 4.4 ft above NGVD.

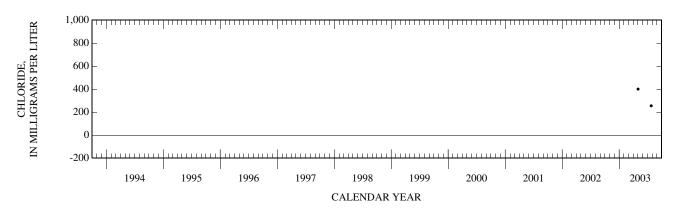
REMARKS.--G-2901R replaces G-2901, which had a separated casing and was 110 ft south-southwest of G-2901R. G-2901R can not be purged sufficiently for chloride-concentration sampling. Sampling was discontinued in January 2004. Induction logs are collected annually. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book.

PERIOD OF RECORD .-- May 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.43 ft NGVD, July 25, 2003; lowest, 1.09 ft NGVD, May 2, 2003.

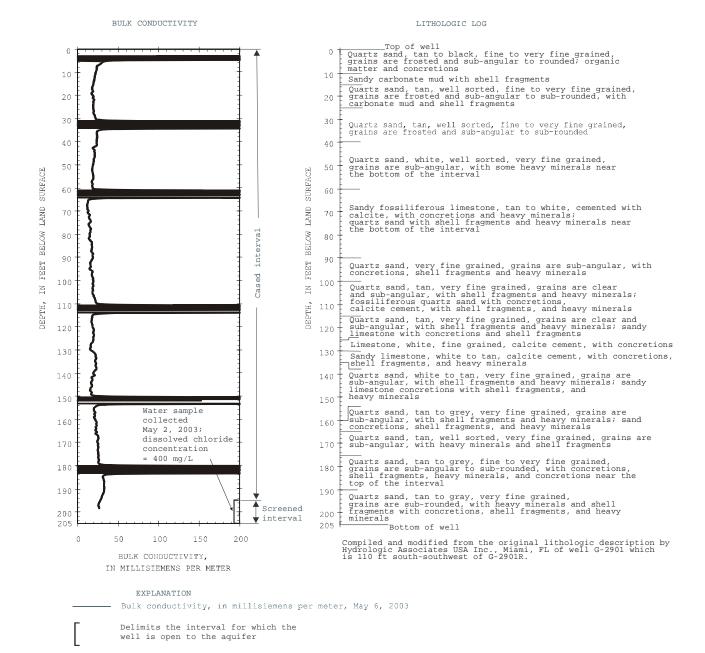
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
MAY					JUL				
02	1336	1.09	1,710	400	25	0953	1.43	1,270	255





WELL NUMBER.--260737080103302. Local Number G 2901R. USGS Observation Well near Fort Lauderdale, FL.

260737080103301 G-2901R



WELL NUMBER.--260752080084701. Local Number G 1220. USGS Observation Well in Fort Lauderdale, FL.

LOCATION.--Lat 26°07'52", long 80°08'47", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.3, T.50 S., R.42 E., Hydrologic Unit 03090202. At corner of NW 2nd Avenue and NW 7th Street in Fort Lauderdale, and 0.8 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 5 in., depth 20 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 7.75 ft above National Geodetic Vertical Datum of 1929. From April 17, 2002 to September 30, 2002, top of base was incorrectly considered to be 7.78 ft above NGVD. From October 2000 to April 16, 2002, top of base was 7.77 ft above NGVD. From October 1997 to September 2000, top of base was incorrectly considered to be 7.78 ft above NGVD. From January 1989 to September 1997, top of base was incorrectly considered to be 7.76 ft above NGVD. From October 1980 to January 1989, measuring point was top of casing, 7.76 ft above NGVD. Prior to October 1980, top of casing was considered to be 8.76 ft above NGVD. The figures of water level as elevation, in feet NGVD, from January 1989 to October 2000 and from April 17, 2002 to September 30, 2002, are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 4.8 ft above NGVD.

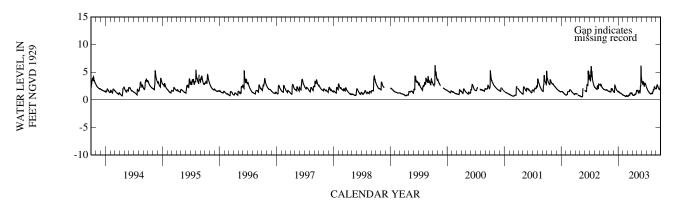
REMARKS.--Because of the 0.01 ft magnitude of error, the published figures of water levels as elevation, in feet NGVD, for January 1989 to September 2000 have been retained. The figures of water level as elevation, in feet NGVD, prior to October 1, 1980 are in error. A -1.00 ft correction has been applied to correct these water-level data. The figures of water level as elevation, in feet NGVD, from April 17, 2002 to September 30, 2002, are in error. A -0.03 ft correction has been applied to correct the data. Corrected records are in files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.37 ft NGVD, Mar. 27, 1986; lowest, 0.40 ft NGVD, May 30, 1965.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	1.87 1.79	1.57 1.46	1.41 2.68	1.54 1.27	0.83 0.79	0.70 0.77	0.85 0.85	1.70 1.33	3.03 3.30	2.04 1.71	1.23 1.41	2.44 2.67
15	1.77	1.43	2.30	1.24	0.66	0.88	0.88	1.71	2.71	1.51	1.88	2.21
20 25	1.83 1.68	1.92 1.91	1.90 1.66	1.19 1.03	0.67 0.79	1.27 1.20	1.09 1.04	1.45 2.51	3.05 2.92	1.28 1.12	2.31 2.23	1.93 1.94
EOM	1.58	1.61	1.47	0.90	0.62	1.20	1.71	3.75	2.40	1.07	2.04	2.82
MAX	1.90	2.06	2.68	1.56	0.89	1.27	1.71	6.10	3.53	2.32	2.37	2.82



WELL NUMBER.--260753080113901. Local Number G 1343. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.—Lat 26°07'48", long 80°11'39", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.6, T.50 S., R.42 E., Hydrologic Unit 03090202, between road and sidewalk in southeast corner of intersection of NW 7th Street and NW 34th Terrace.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 210 ft, cased to 199 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.48 ft above National Geodetic Vertical Datum of 1929.

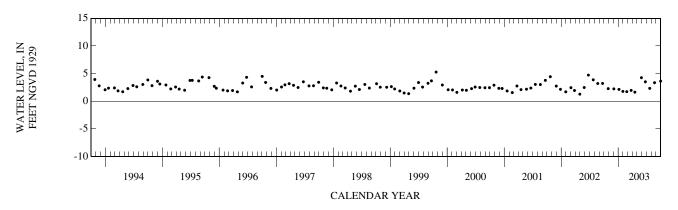
LAND-SURFACE DATUM .-- Land surface is approximately 6.5 ft above NGVD.

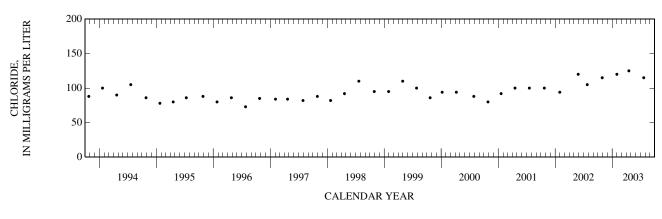
REMARKS.--Well is also used for salinity monitoring. Salinity monitoring began in March 1968.

PERIOD OF RECORD.--October 1975 to October 1977 (semiannual), March 1979 to April 1992 (intermittent), October 1993 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.28 ft NGVD, Oct. 22, 1999; lowest, 0.00 ft NGVD, Mar. 9, 1979.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
29	0811	2.28	828	115	30	1112	4.26		
DEC					JUN				
04	1112	2.24			24	1054	3.52		
JAN					JUL				
06	1126	2.14			22	0805	2.33	813	115
31	0813	1.78	820	120	AUG				
FEB					22	1057	3.36		
25	1056	1.73			SEP				
MAR					30	1058	3.64		
25	1103	1.96							
APR									
18	0830	1.64	831	125					





WATER LEVEL, IN

#### BROWARD COUNTY—Continued

WELL NUMBER.--260804080092701. Local Number G 2899. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°08'05", long 80°09'38", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.4, T.50 S., R.42 E., Hydrologic Unit 03090202, at southeast corner of Joseph Carter Center, 705 ft south of Sunrise Boulevard and 0.5 mi east of U.S. Interstate 95.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 125 ft, cased to 115 ft, screened 115 to 125 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 5.92 ft above National Geodetic Vertical Datum of 1929.

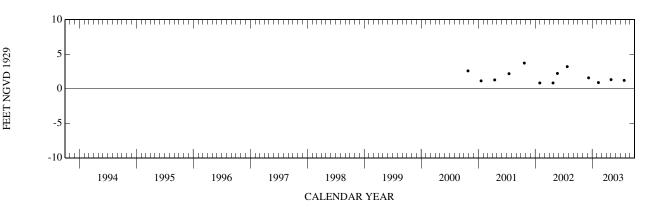
LAND-SURFACE DATUM .-- Land surface is approximately 5.9 ft above NGVD.

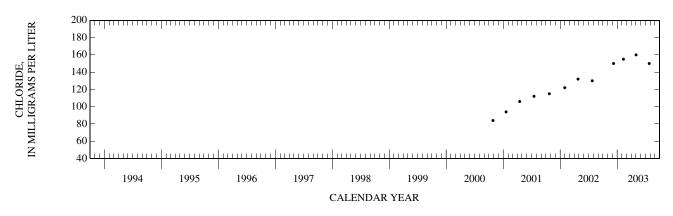
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Annual induction logging began in April 2000. Quarterly water-level measurements began in October 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.72 ft NGVD, Oct. 23, 2001; lowest, 0.84 ft NGVD, Jan. 30, 2002 and Apr. 25, 2002.

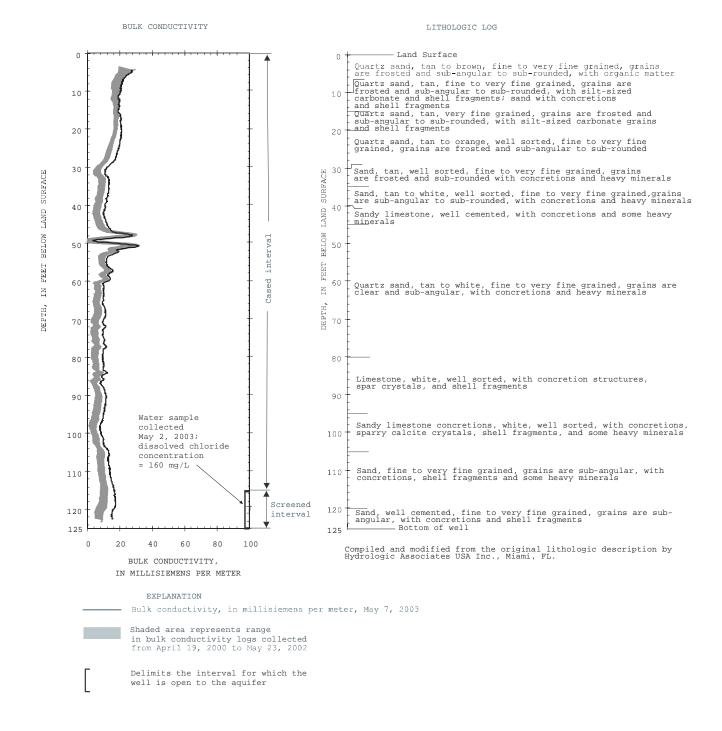
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC					MAY				
09	1145	1.58	879	150	02	1150	1.32	908	160
FEB					JUL				
10	1017	0.89	941	155	25	0905	1.21	807	150





WELL NUMBER.--260804080092701. Local Number G 2899. USGS Observation Well near Fort Lauderdale, FL.

260804080092701 G-2899



WELL NUMBER.--260821080185101. Local Number G 2032. USGS Observation Well in Plantation, FL.

LOCATION.--Lat 26°08'21", long 80°18'51", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.36, T.49 S., R.40 E., Hydrologic Unit 03090202, at northeast corner of NW 12th Street and Flamingo Road, 1.6 mi north of North New River Canal.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 22 ft, cased to 21 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.79 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 5.8 ft above NGVD.

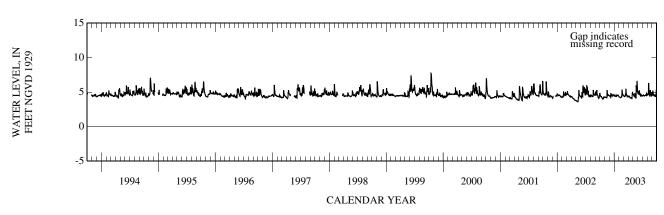
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- October 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.71 ft NGVD, Oct. 15, 1999; lowest, 2.85 ft NGVD, May 7, 1974.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	4.47 4.33 4.18 3.98 4.29 4.28	4.27 4.19 4.21 4.60 4.57 4.48	4.41 4.79 4.55 4.48 4.64 4.45	4.49 4.38 4.50 4.51 4.55 4.36	4.28 4.19 4.25 5.35 4.67 4.48	4.42 4.38 4.54 4.66 4.38 4.29	4.42 4.32 4.15 4.21 4.00 4.69	4.61 4.42 4.59 4.11 5.27 5.24	5.09 4.71 4.64 4.74 4.45 4.48	4.52 4.48 4.49 4.51 4.51 4.54	4.64 6.25 4.72 5.28 4.71 4.51	4.95 4.63 4.44 4.42 4.38 5.39
MAX	4.88	5.24	4.79	4.62	5.35	5.48	5.03	6.53	5.25	4.83	6.26	5.47



WELL NUMBER.--260920080092201. Local Number G 2898. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.—Lat 26°09'19", long 80°09'21", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 28, T.49 S., R.42 E., Hydrologic Unit 03090202, 0.55 mi south of Oakland Park Boulevard (State Road 816), 0.01 mi west of Powerline Road (State Road 845) at entrance to Mills Pond Park, 27 ft east of parking lot. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 119.5 ft cased to 109.5 ft. (Corrected). See REMARKS.

INSTRUMENTATION .-- Monthly measurement with chalk tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 5.21 ft above National Geodetic Vertical Datum of 1929. Between February 21, 2001 and June 4, 2002, measuring point was top of base, 8.35 ft above NGVD. During this period, measuring point was incorrectly considered to be 8.43 ft above NGVD (also incorrectly reported as 8.44 ft above NGVD in the 2002 Water Resources Data Report). From July 24, 2002 to January 30, 2003, and prior to February 21, 2001, measuring point was incorrectly considered to be 5.20 ft NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 5.2 ft above NGVD.

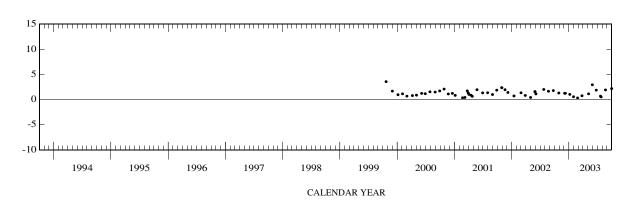
WATER LEVEL, IN FEET NGVD 1929

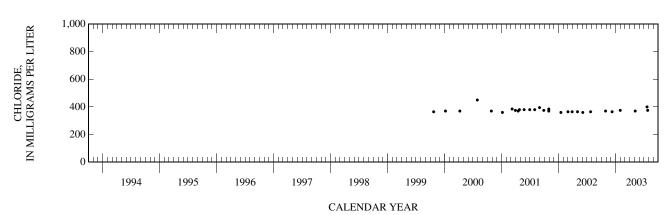
REMARKS--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. The station was temporarily reconstructed between February 21, 2001 and June 4, 2002, to facilitate continuous water-level and conductivity monitoring. The figures of water level as elevation, in feet NGVD, from October 1999 to January 2003 are in error. Corrected records are in the files of the U.S. Geological Survey. Well depth corrected based on reevaluation of construction records and on the depth sounding collected May 6, 2003. See DATUM and WELL CHARACTERISTICS.

PERIOD OF RECORD.--October 1999 to January 2001 (monthly), February 2001 to June 2002 (monthly and daily), July 2002 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.—Highest daily maximum water level, 4.25 ft NGVD, Sept. 29, 2001; lowest daily maximum water level, 0.30 ft NGVD, May 8, 2002, and lowest measured, Feb. 25, 2003.

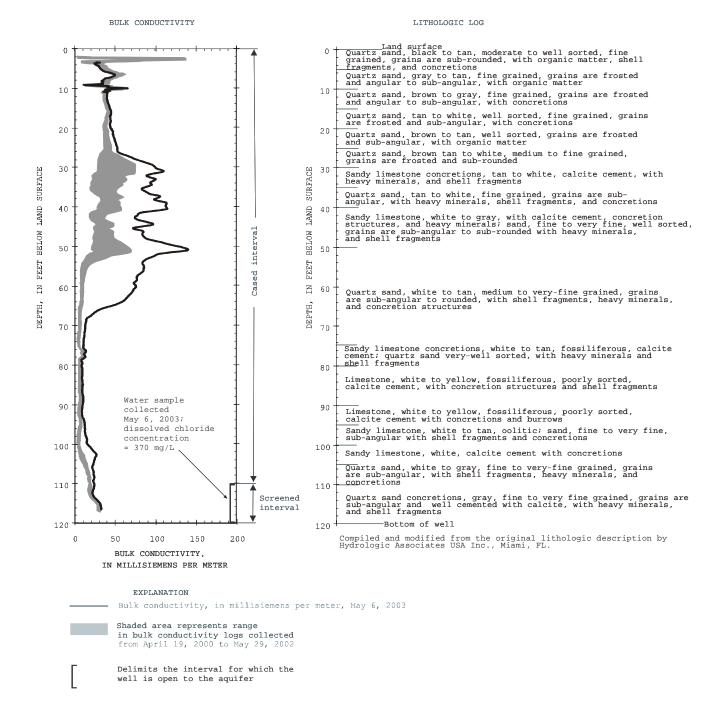
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	1410	1.29	1,720	370	06	1425	1.12	1,610	370
DEC			, ,		30	1039	2.92		
04	1050	1.23			JUN				
09	1328	1.22	1,580	365	24	1033	1.85		
JAN			,		JUL				
06	1100	1.01			21	1358	0.65	1,620	400
30	1357	0.54	1,570	375	25	1402	0.51	1,620	375
FEB			,		AUG			,-	
25	1032	0.30			22	1030	1.89		
MAR					SEP				
25	1040	0.73			30	1043	2.15		





WELL NUMBER.--260920080092201. Local Number G 2898. USGS Observation Well near Fort Lauderdale, FL.

#### 260920080092201 G-2898



WELL NUMBER.--261018080091101. Local Number G 2180. USGS Observation Well in Oakland Park, FL.

LOCATION.--Lat 26°10'18", long 80°09'11", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.22, T.49 S., R.42 E., Hydrologic Unit 03090202, on the northeast corner of Lloyd Street and NW 36th Street in a lawn, 6 in. south of white fence.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 106 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 3.42 ft above National Geodetic Vertical Datum of 1929.

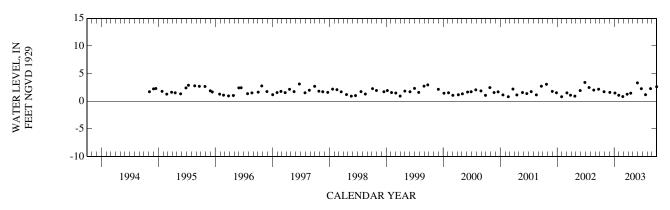
LAND-SURFACE DATUM .-- Land surface is approximately 3.4 ft above NGVD.

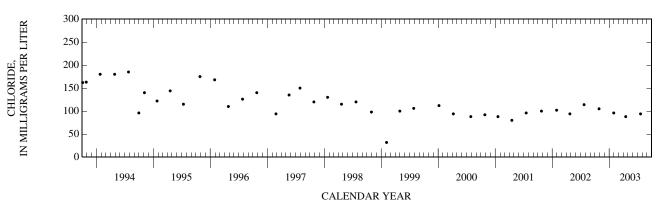
REMARKS.--Well is also used for salinity monitoring. Water level measurements began in November 1994.

PERIOD OF RECORD.--November 1974 to September 1994 (intermittent), November 1994 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.40 ft NGVD, June 27, 2002; lowest, 0.82 ft NGVD, Feb. 21, 2001, and Jan. 29, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	1254	1.72	840	105	30	1025	3.32		
DEC					JUN				
04	1040	1.60			24	1020	2.27		
JAN					JUL				
06	1045	1.48			21	1232	1.18	714	94.0
30	1250	1.08	728	96.0	AUG				
FEB					22	1019	2.28		
25	1022	0.85			SEP				
MAR					30	1027	2.62		
25	1025	1.27							
APR									
17	1300	1.46	721	88.0					





WATER LEVEL, IN FEET NGVD 1929

### BROWARD COUNTY—Continued

WELL NUMBER.--261026080100201. Local Number G 2091. USGS Observation Well in Oakland Park, FL.

LOCATION.--Lat 26°10'26", long 80°09'55", in SE  $^{1}\sqrt{_{4}}$  SW  $^{1}\sqrt{_{4}}$  NW  $^{1}\sqrt{_{4}}$  sec.21, T.49 S., R.42 E., Hydrologic Unit 03090202, at the southwest corner of NW 17th Avenue and NW 39th Street, 6.5 ft from edge of NW 39th Street.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 124 ft, cased to 124 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.16 ft above National Geodetic Vertical Datum of 1929.

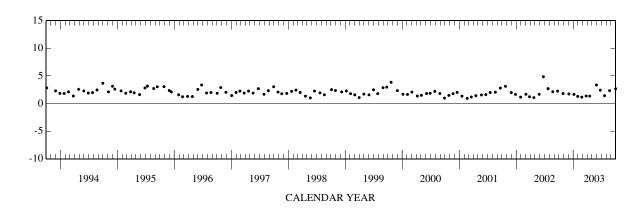
LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

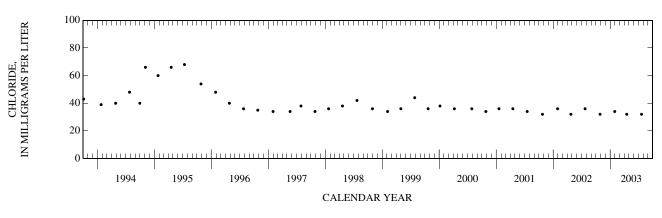
REMARKS.--Well is also used for salinity monitoring.

PERIOD OF RECORD.--January 1986 to August 1993 (intermittent), October 1993 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.86 ft NGVD, June 24, 2002; lowest, 0.34 ft NGVD, Dec. 29, 1988.

Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
				MAY				
1146	1.82	578	32.0	30	0954	3.36		
				JUN				
1017	1.74			24	0952	2.42		
				JUL				
1024	1.66			21	1125	1.42	520	32.0
1140	1.30	531	34.0	AUG				
				22	0956	2.34		
0903	1.17			SEP				
				30	1005	2.68		
1005	1.38							
1146	1.34	535	32.0					
	1146 1017 1024 1140 0903 1005	Time ation, feet above NGVD (72020)  1146 1.82 1017 1.74 1024 1.66 1140 1.30 0903 1.17 1005 1.38	ation, feet above         tance, wat unf uS/cm uS/cm           NGVD (72020)         25 degC (00095)           1146         1.82         578           1017         1.74            1024         1.66            1140         1.30         531           0903         1.17            1005         1.38	Elevation, feet wat unfabove uS/cm fltrd, mg/L (72020) (00095) (00940)  1146 1.82 578 32.0  1017 1.74 1024 1.66 1140 1.30 531 34.0  0903 1.17 1005 1.38 1005	Elevation, feet wat unf water, above uS/cm fltrd, mg/L   Date	Elevation, feet wat unf water, above uS/cm flirtd, mg/L   Date   Time	Elevation, feet ation, above UNGVD (72020)         Conduction, feet wat un above UNGVD (72020)         Chloration, feet above under, feet above UNGVD (72020)         Elevation, feet above ation, feet above under, feet above UNGVD (72020)         Date Time NGVD (72020)         NGVD (72020)           1146         1.82         578         32.0         30 0954         3.36           1017         1.74           24 0952         2.42           1024         1.66           21 1125         1.42           1140         1.30         531         34.0         AUG         22 0956         2.34           0903         1.17           SEP         30 1005         2.68           1005         1.38	Elevation, feet wat unfabove uS/cm fltrd,   Date   Time   NGVD   25 degC (72020) (00095) (00940)   Date   Time   NGVD   25 degC (72020) (00095)   O00940)   O00950   O00950





WELL NUMBER .-- 261026080100701. Local Number G 1347. USGS Observation Well in Oakland Park, FL.

LOCATION.--Lat 26°10'32", long 80°10'04", in NW  $^{1}\!\!/_{4}$  SW  $^{1}\!\!/_{4}$  SE  $^{1}\!\!/_{4}$  sec.21, T.49 S., R.42 E., Hydrologic Unit 03090202, in cul-de-sac in driveway of corner of Northwest 18th Avenue and Northwest 39th Place.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.0 in., depth 200 ft, cased to 177 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.55 ft above National Geodetic Vertical Datum of 1929.

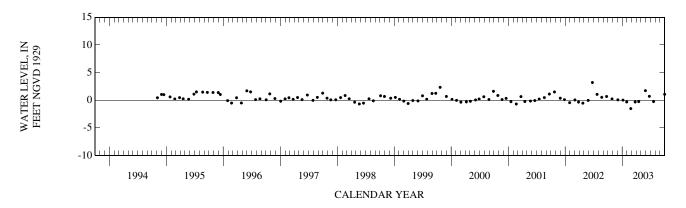
LAND-SURFACE DATUM.--Land surface is approximately 4.6 ft above NGVD.

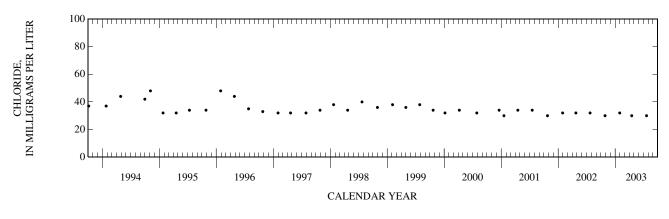
REMARKS.--Well is also used for salinity monitoring. Salinity monitoring began in April 1968.

PERIOD OF RECORD.--February 1983 to September 1994 (intermittent), November 1994 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.21 ft NGVD, June 24, 2002; lowest, 1.51 ft below NGVD, Feb. 25, 2003. See REMARKS.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	1154	0.24	622	30.0	30	1006	1.73		
DEC					JUN				
04	1029	0.07			24	1003	0.71		
JAN					JUL				
06	1033	0.02			21	1150	-0.25	559	30.0
30	1200	-0.31	569	32.0	AUG				
FEB					22	1005			
25	1009	-1.51			SEP				
MAR					30	1011	1.07		
25	1010	-0.31							
APR									
17	1210	-0.25	565	30.0					





WELL NUMBER.--261030080083301. Local Number G 2897. USGS Observation Well near Oakland Park, FL.

LOCATION.--Lat 26°10'30", long 80°08'33", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.22, T.49 S., R.42 E., Hydrologic Unit 03090202, 16 ft from edge of NE 3rd Avenue parking lot at Collins Community Center.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 135.5 ft, cased to 125.5 ft, screened 125.5 to 135.5 ft.

INSTRUMENTATION .-- Quarterly measurements with chalked tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 6.42 ft above National Geodetic Vertical Datum of 1929. Prior to February 2001, measuring point was 6.31 ft NGVD. See REMARKS.

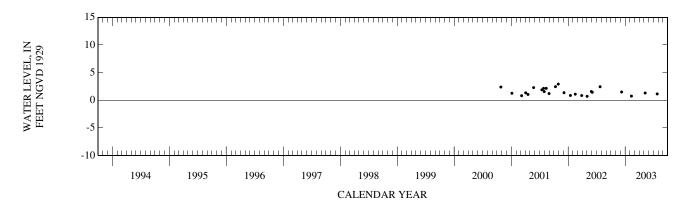
LAND-SURFACE DATUM.--Land surface is approximately 6.4 ft above NGVD.

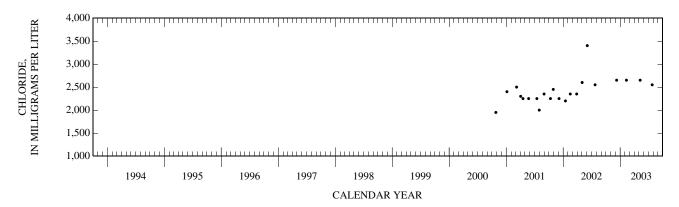
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Station was reconstructed in February 2001, for a salt water intrusion modeling project. Quarterly water-level measurements began in October, 2000. Continuous water-level and conductivity data were collected from March, 2001 through June 2002, as part of an investigative project. Data are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.81 ft NGVD, Sept. 14, 2001; lowest, 0.53 ft NGVD, May 6-11, 2002.

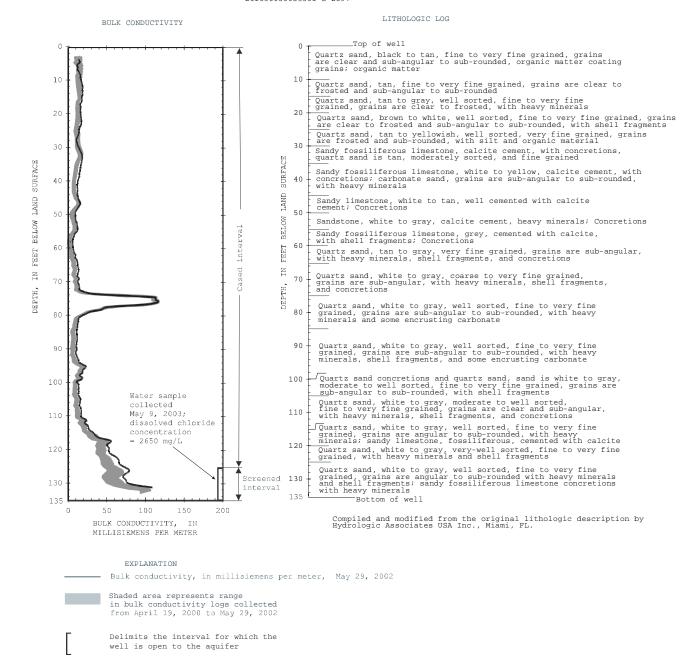
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC					MAY				
09	1420	1.50	7,870	2,650	09	1150	1.30	8,140	2,650
FEB 10	0945	0.75	8.140	2.650	JUL 25	1435	1.14	7.860	2.550





#### WELL NUMBER.--261030080083301. Local Number G 2897. USGS Observation Well near Oakland Park, FL.

261030080083301 G-2897



WATER LEVEL, IN

FEET NGVD 1929

#### BROWARD COUNTY—Continued

WELL NUMBER .-- 261045080093501. Local Number G 2090. USGS Observation Well in Oakland Park, FL.

 $LOCATION.--Lat\ 26^{\circ}10'45", long\ 80^{\circ}09'36", in\ SE\ {}^{1}\!/_{4}\ SW\ {}^{1}\!/_{4}\ sec. 21, T.49\ S., R.42\ E., Hydrologic\ Unit\ 03090202, at\ the\ southeast\ corner\ of\ intersection\ of\ NW\ 42nd\ Court\ and\ NW\ 12th\ Avenue,\ in\ Royal\ Palm\ Isles.$ 

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3.0 in., depth 101 ft, cased to 101 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.93 ft above National Geodetic Vertical Datum of 1929.

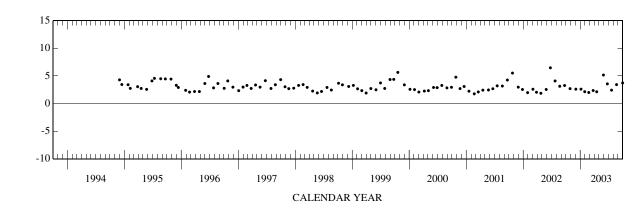
LAND-SURFACE DATUM.--Land surface is approximately 7.9 ft above NGVD.

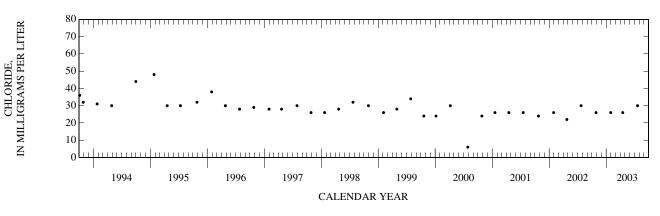
REMARKS.--Well is also used for salinity monitoring. Water level monitoring began in December 1994.

PERIOD OF RECORD.--October 1974 to September 1994 (intermittent), December 1994 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.47 ft NGVD, June 24, 2002; lowest, 1.76 ft NGVD, Feb. 21, 2001.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
28	1105	2.70	547	26.0	30	0945	5.16		
DEC					JUN				
04	1008	2.61			24	0943	3.56		
JAN					JUL				
06	1015	2.61			21	1058	2.43	499	30.0
30	1107	2.15	495	26.0	AUG				
FEB					22	0946	3.43		
25	0955	2.01			SEP				
MAR					30	0951	3.73		
25	0958	2.36							
APR									
17	1115	2.14	503	26.0					





WELL NUMBER.--261100080140401. Local Number G 1212. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°10'59", long 80°09'04", in SW  $^{1}$ / $_{4}$  SE  $^{1}$ / $_{4}$  NW  $^{1}$ / $_{4}$  sec.15, T.49 S., R.42 E., Hydrologic Unit 03090202, at the northeast intersection of NW 46th Street and NW 5th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3.0 in., depth 223 ft, cased to 221 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

WATER LEVEL, IN FEET NGVD 1929

DATUM.--Measuring point: Top of casing, 7.32 ft above National Geodetic Vertical Datum of 1929.

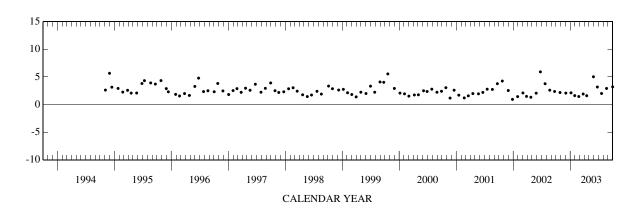
LAND-SURFACE DATUM.--Land surface is approximately 7.8 ft above NGVD.

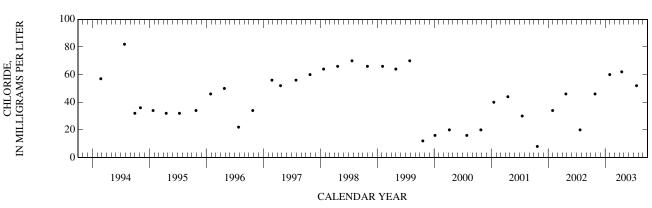
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in April 1967. Water-level monitoring began in October 1979.

PERIOD OF RECORD.--October 1979 (intermittent), November 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.66 ft NGVD, Dec. 1, 1994; lowest, 0.94 ft NGVD, Dec. 27, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	1007	2.18	439	46.0	30	0924	5.03		
DEC					JUN				
04	0954	2.08			24	0922	3.18		
JAN					JUL				
06	0956	2.12			21	0958	2.01	409	52.0
30	1011	1.62	462	60.0	AUG				
FEB					22	0923	2.92		
25	0941	1.46			SEP				
MAR					30	0928	3.20		
25	0943	1.91							
APR									
17	1018	1.60	485	62.0					





WATER LEVEL, IN FEET NGVD 1929

#### BROWARD COUNTY—Continued

WELL NUMBER.--261100080140402. Local Number G 1212A. USGS Observation Well near Fort Lauderdale, FL.

LOCATION.--Lat 26°10′59", long 80°09′04", in SW  $^{1}$ / $_{4}$  SE  $^{1}$ / $_{4}$  NW  $^{1}$ / $_{4}$  sec.15, T.49 S., R.42 E., Hydrologic Unit 03090202, at the northeast intersection of NW 46th Street and NW 5th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 84 ft, cased to 83 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.08 ft above National Geodetic Vertical Datum of 1929.

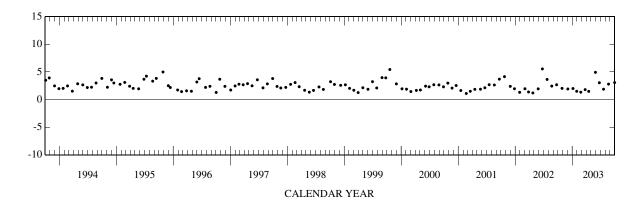
LAND-SURFACE DATUM.--Land surface is approximately 7.4 ft above NGVD.

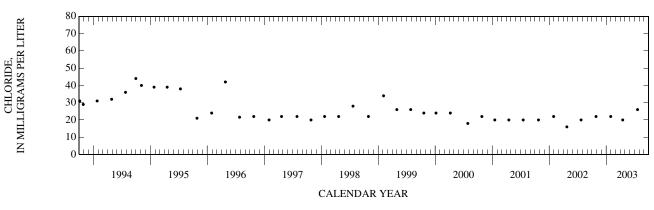
REMARKS.--Well is also used for salinity monitoring.

PERIOD OF RECORD.--October 1985 to August 1993 (intermittent), October 1993 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.55 ft NGVD, June 24, 2002; lowest, 1.10 ft NGVD, Feb. 21, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	1021	2.03	542	22.0	30	0930	4.93		
DEC					JUN				
04	0958	1.92			24	0928	3.04		
JAN					JUL				
06	1002	2.00			21	1030	1.88	473	26.0
30	1040	1.50	498	22.0	AUG				
FEB					22	0927	2.80		
25	0946	1.34			SEP				
MAR					30	0934	3.07		
25	0947	1.80							
APR									
17	1042	1.48	493	20.0					





WELL NUMBER.--261112080121401. Local Number G 2108. USGS Observation Well Near Fort Lauderdale, FL.

LOCATION.--Lat 26°11'22", long 80°09'03", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.15, T.49 S., R.42 E., Hydrologic Unit 03090202, 12.4 ft north of centerline of NW 51st Court and approximately 1,200 ft west of North Andrews Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 55 ft, cased to 55 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.24 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

REMARKS.--Measured well depth at 29.4 ft top of casing on June 24, 2003. Water levels in the immediate vicinity of the well are occasionally above the top of the well, therefore the period of record highest water level measured is greater than the top of the casing (7.24 ft above NGVD). Water-level data for the period October 24, 2001 to August 22, 2003, has been reviewed and rejected because it is believed that sediment washed into the well during periods of high water, clogging the well. This well was discontinued at the end of the water year and consequently capped permanently. See EXTREMES FOR PERIOD OF RECORD and PERIOD OF RECORD.

PERIOD OF RECORD.--October 1975 to April 1998 (semiannual), December 1998 to August 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, estimated to be greater than 7.24 ft NGVD, March 25, May 30, August 22, and September 30, 2003 (See REMARKS); lowest, 1.86 ft NGVD, May 16, 1985.

NO DATA AVAILABLE FOR THE 2003 WATER YEAR. DISCONTINUED. SEE REMARKS.

WELL NUMBER.--261122080083401. Local Number G 1232. USGS Observation Well in Fort Lauderdale, FL.

LOCATION.--Lat 26°11'21", long 80°08'49", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.15, T.49 S., R.42 E., Hydrologic Unit 03090202, 30 ft northwest from intersection at NE 1st Avenue and NE 51st Street in Brentwood Estates.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation water-table well, diameter 2 in., depth 205 ft, cased to 203 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.31 ft above National Geodetic Vertical Datum of 1929.

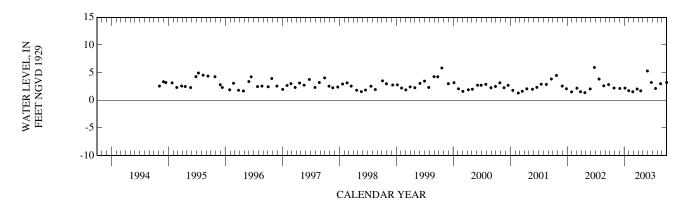
LAND-SURFACE DATUM .-- Land surface is approximately 8.3 ft above NGVD.

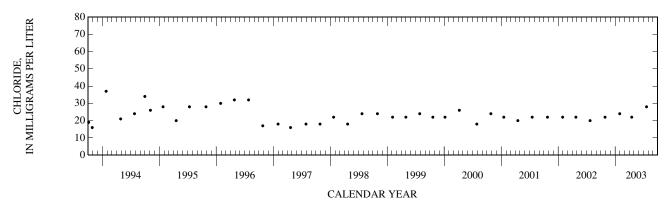
REMARKS.--Well also used for salinity monitoring. Salinity monitoring began in April 1964. Water-level monitoring began in November 1994. See PERIOD OF RECORD.

PERIOD OF RECORD.--April 1964 to September 1994 (intermittent), November 1994 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.93 ft NGVD, June 24, 2002; lowest, 1.30 ft NGVD, Feb. 21, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	0943	2.21	415	22.0	30	0911	5.29		
DEC					JUN				
04	0948	2.13			24	0914	3.22		
JAN					JUL				
06	0952	2.20			21	0930	2.13	373	28.0
30	0948	1.73	373	24.0	AUG				
FEB					22	0913	2.99		
25	0944	1.55			SEP				
MAR					30	0920	3.21		
25	0932	2.03							
APR									
17	0955	1.71	383	22.0					





WELL NUMBER.--261141080163401. Local Number G 2033. USGS Observation Well in Tamarac, FL.

 $LOCATION.-Lat\ 26^{\circ}11'41'', long\ 80^{\circ}16'34'', in\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ SE\ {}^{1}\!\!/_{4}\ sec.8, T.49\ S., R.41\ E., Hydrologic\ Unit\ 03090202, on\ east\ side\ of\ NW\ 94th\ Avenue, 0.1\ mi\ north\ of\ Commercial\ Boulevard, 5.0\ mi\ west\ of\ U.S.\ Highway\ 441,\ and\ 11.0\ mi\ west\ of\ Pompano\ Beach.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 23 ft, cased to 21 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 13.06 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 1986, top of base was considered to be 14.29 ft above NGVD. See REMARKS.

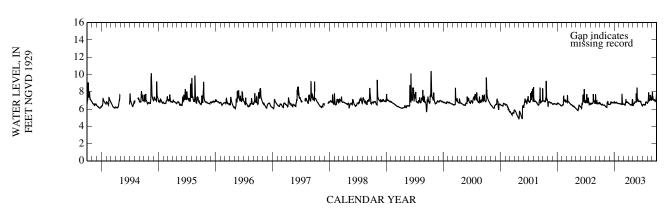
LAND-SURFACE DATUM.--Land surface is approximately 11.0 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1, 1986 are in error. Corrected records are in the files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The well was originally open to the aquifer from 21 to 23 ft. The well casing has collapsed or become obstructed at a depth of 8 ft. The well is still in hydrologic communication with the aquifer.

PERIOD OF RECORD.--January 1972 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.41 ft NGVD, Oct. 15, 1999; lowest, 4.85 ft NGVD, May 22, 2001.

	ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5	6.64	6.34	6.53	6.74	6.62	6.56	6.64	6.60	6.87	6.52	6.82	7.28	
10	6.50	6.24	6.85	6.71	6.61	6.49	6.59	6.66	6.88	6.50	7.88	7.08	
15	6.53	6.19	6.69	6.78	6.54	6.68	6.47	6.81	6.88	6.49	7.11	7.02	
20	6.49	6.84	6.73	6.70	7.76	6.77	6.51	6.79	6.88	6.48	7.63	6.96	
25	6.46	6.55	6.79	6.64	6.53	6.80	6.42	6.82	6.57	6.82	7.25	7.02	
EOM	6.41	6.51	6.72	6.64	6.56	6.73	6.85	7.00	6.40	6.69	7.13	7.71	
MAX	6.71	6.89	6.85	6.80	7.76	7.15	7.14	8.48	7.10	6.83	7.88	7.98	



WELL NUMBER.--261143080082901. Local Number G 1340. USGS Observation Well in Fort Lauderdale, FL.

LOCATION.--Lat 26°11'43", long 80°08'29", NE  $^1\!\!/_4$  NE  $^1\!\!/_4$  NE  $^1\!\!/_4$  NE 1/4 sec.15, T.49 S., R.42 E., Hydrologic Unit 03090902, on northwest corner of NE 55th Street and NE 4th Avenue in Brentwood Estates.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 217 ft, cased to 214 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.-- Measuring point: Top of casing, 6.63 ft above National Geodetic Vertical Datum of 1929.

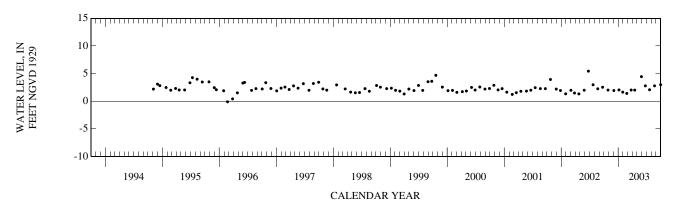
LAND-SURFACE DATUM.--Land surface is approximately 6.6 ft above NGVD.

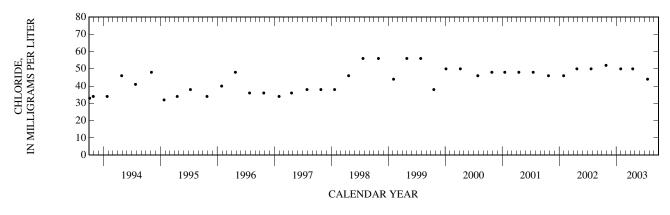
REMARKS.--Well was also used for salinity monitoring since 1968. Water level monitoring began in November 1994. The casing of the well has been found to have separated at a depth of 12.8 ft therefore salinity monitoring at this well was discontinued in February 2004.

PERIOD OF RECORD.--February 1968 to July 1994 (intermittent), November 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.44 ft NGVD, June 24, 2002; lowest, 0.10 ft below NGVD, Feb. 23, 1996.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
28	0910	2.02	594	52.0	30	0857	4.45		
DEC					JUN				
04	0924	1.94			24	0854	2.79		
JAN					JUL				
06	0927	2.05			21	0859	2.08	522	44.0
30	0917	1.65	529	50.0	AUG				
FEB					22	0857	2.79		
25	0904	1.42			SEP				
MAR					30	0903	2.99		
25	0909	2.03							
APR									
17	0923	2.01	542	50.0					





WELL NUMBER.--261147080114501. Local Number G 2395. USGS Observation Well near Lauderdale Lakes, FL.

LOCATION.—Lat 26°11'47", long 80°11'45", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.7, T.49 S., R.42 E., Hydrologic Unit 03090202, on the west side of Hawkins Road, 0.25 mi north of Prospect Road and 0.75 mi east of U.S. Highway 441.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.5 in., depth 73.0 ft, cased to 71 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of shelter base, 12.47 ft above National Geodetic Vertical Datum of 1929. Prior to November 23, 1990, top of base was 12.05 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 9.5 ft above NGVD.

REMARKS.--The well was originally open to the aquifer from 71 to 73 ft. The casing has become obstructed or collapsed at a depth of 64 ft. Well was damaged and reconstructed November 23, 1990.

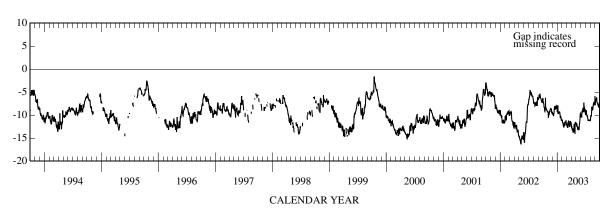
PERIOD OF RECORD .-- February 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 0.82 ft below NGVD, Sept. 20, 1985; lowest, 16.25 ft below NGVD, May 14, 2002. (Corrected).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-7.37	-10.57	-9.67	-7.87	-11.56	-12.38	-12.54	-12.00	-10.49	-9.08	-10.09	-6.91
10	-8.34	-9.88	-9.70	-9.28	-12.36	-12.78	-12.88	-12.46	-9.42	-10.13	-8.38	-6.58
15	-8.97	-9.12	-8.33	-9.28	-11.80	-11.35	-13.39	-12.67	-8.50	-10.58	-8.46	-7.32
20	-8.65	-8.57	-8.61	-10.19	-11.67	-12.45	-12.03	-13.20	-9.20	-11.17	-7.81	-7.91
25	-8.85	-8.83	-8.19	-10.53	-11.25	-11.37	-14.07	-11.63	-8.72	-11.13	-7.80	-7.99
EOM	-9.18	-9.35	-8.64	-11.15	-12.00	-11.67	-11.90	-10.05	-9.30	-10.98	-5.88	-7.03
MAX	-6.26	-8.53	-7.98	-7.87	-11.02	-11.29	-11.47	-9.65	-7.32	-9.03	-5.88	-6.16





WELL NUMBER.--261207080103701. Local Number G 2433. USGS Observation Well near Lauderdale Lakes, FL.

 $LOCATION. --26^{\circ}12'07'', long~80^{\circ}10'37'', in~NE~\frac{1}{4}~NE~\frac{1}{4}~SW~\frac{1}{4}~sec. 8~T. 49~S., R. 42~E., Hydrologic~Unit~03090202, on north side of Fort Lauderdale Executive~Airport, 40~ft south of sidewalk on south side of NW 62nd Street, and 0.7 mi east of NW 31st Avenue.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 59 ft, cased to 39 ft, open hole 39 to 59 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

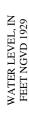
DATUM.--Measuring point: Top of casing, 13.22 ft above National Geodetic Vertical Datum of 1929.

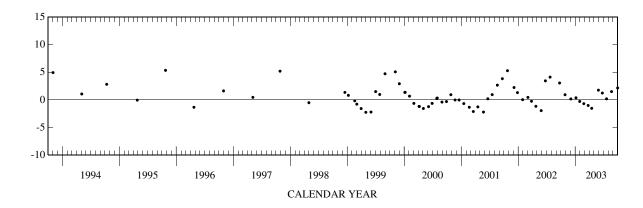
LAND-SURFACE DATUM .-- Land surface is approximately 13.2 ft above NGVD.

PERIOD OF RECORD.--May 1986 to April 1998 (semiannual), December 1998 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.35 ft NGVD, Oct. 24, 1995; lowest, 2.25 ft below NGVD, Apr. 30, 1999. (Corrected).

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
28	0845	0.94	30	0830	1.76
DEC			JUN		
04	0903	0.18	24	0832	1.24
JAN			JUL		
06	0855	0.38	21	0828	0.20
30	0840	-0.28	AUG		
FEB			22	0833	1.50
25	0843	-0.68	SEP		
MAR			30	0849	2.16
25	0854	-1.01			
APR					
17	0852	-1.52			





WELL NUMBER.--261232080141401. Local Number G 2359. USGS Observation Well near Tamarac, FL.

LOCATION.--Lat 26°12'32", long 80°14'14", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.10 T.49 S., R.41 E., Hydrologic Unit 03090202, near northwest corner of McNab Road and SW 81st Avenue and west of Hampton Park.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1.5 in., depth 100 ft, cased to 97.4 ft, screened 97.4 to 100 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.94 ft above National Geodetic Vertical Datum of 1929. Prior to August 9, 1989, top of casing was considered to be 8.37 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 10.9 ft above NGVD.

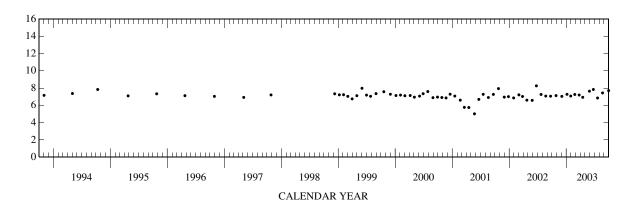
REMARKS.--The figures of water levels as elevation, in feet NGVD, published prior to August 9, 1989, are in error. Corrected records for the period April 28, 1988 to August 9, 1989, are available in the files of the U.S. Geological Survey. Records for the period October 17, 1983 to May 3, 1989, have not been corrected and require an addition of 2.57 ft.

PERIOD OF RECORD.--October 1983 to October 1997 (semiannual), December 1998 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.26 ft NGVD, June 24, 2002; lowest, 5.02 ft NGVD, May 23, 2001, (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
28	0747	7.13	30	0740	7.64
DEC			JUN		
04	0759	7.04	24	0742	7.84
JAN			JUL		
06	0805	7.28	21	0740	6.85
30	0745	7.08	AUG		
FEB			22	0756	7.44
25	0743	7.26	SEP		
MAR			30	0759	7.70
25	0801	7.20			
APR					
17	0803	6.93			





WELL NUMBER.--261258080112901. Local Number G 2482. USGS Observation Well near North Lauderdale, FL.

LOCATION.--Lat 26°12′58", long 80°11′29", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.6, T.49 S., R.42 E., Hydrologic Unit 03090202, in Fern Forest Nature Center, 0.15 mi northwest of NW 31st Avenue and Florida Turnpike underpass.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 20 ft, cased to 15 ft, screened 15 to 20 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

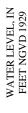
DATUM.--Measuring point: Top of casing, 13.25 ft above National Geodetic Vertical Datum of 1929.

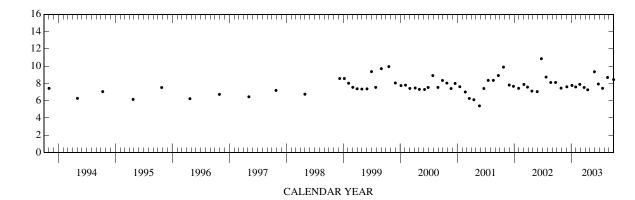
LAND-SURFACE DATUM.--Land surface is approximately 13.3 ft above NGVD.

PERIOD OF RECORD.--February 1988 to April 1998 (semiannual), December 1998 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.86 ft NGVD, June 24, 2002; lowest, 5.15 ft NGVD, Oct. 17, 1989.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
28	0829	7.45	30	0815	9.35
DEC			JUN		
04	0836	7.61	24	0817	7.93
JAN			JUL		
06	0840	7.77	21	0813	7.43
30	0817	7.59	AUG		
FEB			22	0818	8.69
25	0820	7.89	SEP		
MAR			30	0835	8.44
25	0835	7.53			
APR					
17	0838	7.26			





WELL NUMBER.--261304080072501. Local Number G 2896. USGS Observation Well near Pompano Beach, FL.

LOCATION.--Lat 26°13'04", long  $80^{\circ}07'26$ ", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 2, T.49 S., R.42 E., Hydrologic Unit 03090202, at southwest corner of intersection of Cypress Road South and SW 9th Street, 56.5 ft southwest of the fire hydrant. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 100.5 ft, cased to 90.5 ft, screened 90.5 to 100.5 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape. See REMARKS.

DATUM.--Measuring point: Top of casing, 6.79 ft above National Geodetic Vertical Datum of 1929.

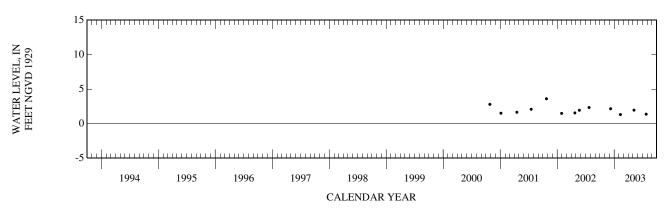
LAND-SURFACE DATUM .-- Land surface is approximately 6.8 ft above NGVD.

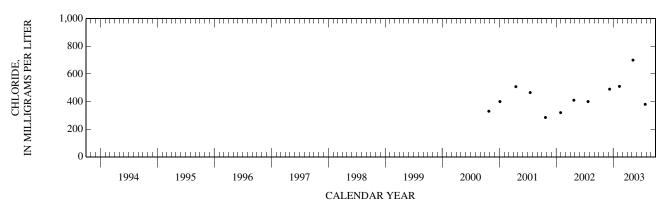
REMARKS.--Well is also monitored for salinity, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs collected by an induction logger. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Induction logging began in April 2000. Quarterly water-level measurements and salinity monitoring began in October 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.60 ft NGVD, Oct. 24, 2001; lowest, 1.31 ft NGVD, Feb. 10, 2003.

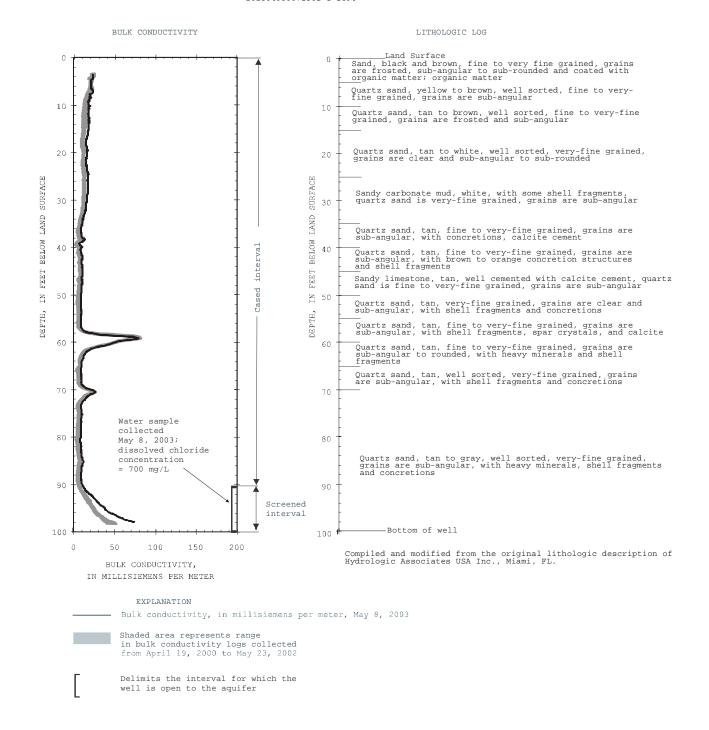
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
DEC					MAY				
09	1457	2.16	1,920	490	08	1435	1.95	2,510	700
FEB					JUL				
10	0910	1.31	1,900	510	25	1510	1.37	1,590	380





WELL NUMBER.--261304080072501. Local Number G 2896. USGS Observation Well near Pompano Beach, FL.

261304080072501 G-2896



WELL NUMBER.--261403080070801. Local Number G 2149. USGS Observation Well in Pompano Beach, FL.

LOCATION.--Lat 26°14'02", long 80°07'09", in NE  $^{1}$ / $_{4}$  SE  $^{1}$ / $_{4}$  SE  $^{1}$ / $_{4}$  sec. 35, T.48 S., R.42 E., Hydrologic Unit 03090202, at the NW corner of NE 3rd Street and NE 5th Avenue, 8.8 ft from edge of street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 137 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.39 ft above National Geodetic Vertical Datum of 1929.

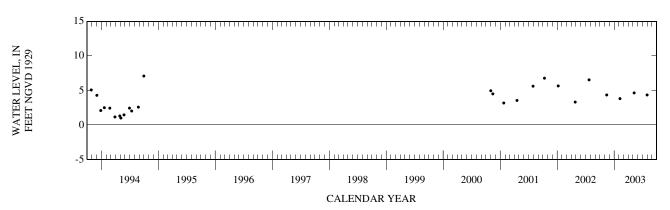
LAND-SURFACE DATUM .-- Land surface is approximately 17.4 ft above NGVD.

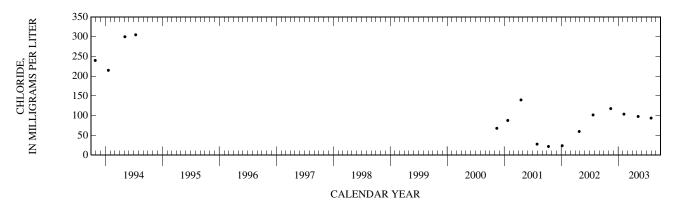
REMARKS.--Well is also used for salinity monitoring. Water-level monitoring began in April 1986, prior to that only salinity was monitored.

PERIOD OF RECORD.--October 1974 to April 1975 (quarterly), October 1975 to September 1977 (monthly), October 1977 to August 1993 (bimonthly), October 1993 to September 1994 (monthly), November 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.08 ft NGVD, Sept. 30, 1994; lowest, 0.51 ft NGVD, June 13, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					MAY				
14	1148	4.34	641	118	09	1320	4.64	612	98.0
FEB 07	1120	3.81	619	104	JUL 31	1116	4.34	593	94.0





WATER LEVEL, IN FEET NGVD 1929

#### BROWARD COUNTY

WELL NUMBER.--261434080071901. Local Number G 853. USGS Observation Well in Pompano Beach, FL.

LOCATION.--Lat 26°14'34", long 80°07'19", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.35, T.48 S., R.42 E., Hydrologic Unit 03090202, on north side of NE 12th Street, 200 ft west of NE 3rd Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 27 ft, cased to 27 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 22.25 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 1999, top of base was periodically considered to be 22.14 ft above NGVD. Prior to October 1996, measuring point was top of casing, 22.14 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 19.7 ft above NGVD.

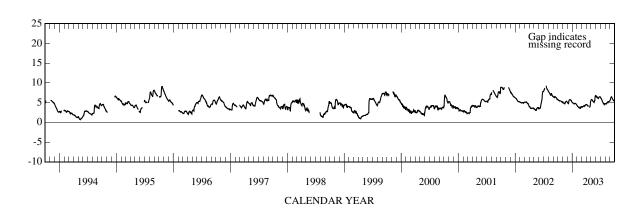
REMARKS.--The figures of water levels as elevation in feet NGVD, prior to October 1, 1998 are in error. Corrected records for the 1997-1999 water years are available in the files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- May 1958 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.49 ft NGVD (Corrected), Oct. 31, 1964; lowest, 6.62 ft below NGVD, May 2, 1981.

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	DAILY FEB	MAXIMUM MAR	I VALUES APR	MAY	JUN	JUL	AUG	SEP
5	5.59	4.94	4.84	4.91	4.04	3.98	4.49	5.80	6.58	6.06	4.75	6.07
10	5.48	4.89	5.44	4.76	3.83	3.95	4.17	5.61	6.47	5.68	4.91	6.47
15	5.43	4.69	5.74	4.69	3.63	4.15	4.12	5.27	6.09	5.21	5.15	6.05
20	5.43	5.17	5.72	4.76	3.93	4.29		5.07	6.25	4.78	5.27	5.66
25	5.29	5.37	5.60	4.72	3.64	4.28	3.99	5.44	6.49	4.58	5.16	5.52
EOM	4.97	5.12	5.11	4.36	3.93	4.45	5.46	6.78	6.39	4.70	5.44	5.61
MAX	5.79	5.37	5.77	5.07	4.29	4.46		6.78	6.78	6.31	5.44	6.47



WELL NUMBER.--261441080111301. Local Number G 1316. USGS Observation Well near Margate, FL.

LOCATION.--Lat 26°14'41", long 80°11'13", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.30, T.48 S., R.42 E., Hydrologic Unit 03090202, at the northwest corner of Lyons Road and Coconut Creek Parkway, 1.0 mi east of Margate.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 15.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 17.07 ft above National Geodetic Vertical Datum of 1929. Prior to November 1997, top of base was 17.08 ft above NGVD. Prior to September 19, 1991, measuring point was top of casing 17.10 ft above NGVD. Prior to September 25, 1985, top of casing was 17.62 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 15.2 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Station was reconstructed on September 30, 1985, September 19, 1991, November 5, 1997.

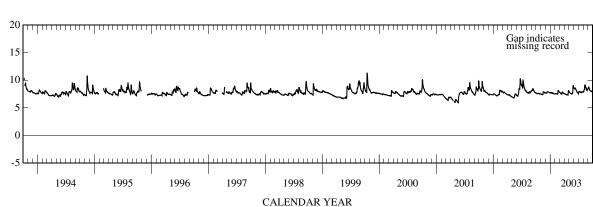
PERIOD OF RECORD.--April 1969 to October 1979 (daily), October 1979 to October 1983 (intermittent), February 1984 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.35 ft NGVD, Oct. 15, 1999; lowest, 5.93 ft NGVD, May 22, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	7.64 7.56	7.48 7.44	7.67 7.82	7.72 7.73	7.57 7.58	7.76 7.59	7.55 7.46	7.83 7.65	8.56 8.59	7.98 7.91	8.17 9.13	8.70 8.40
15	7.63	7.40	7.89	7.75	7.50	7.58	7.37	7.55	8.31	7.79	8.92	8.12
20	7.59	7.90	7.87	7.65	8.12	7.86	7.40	7.51	8.04	7.83	8.61	8.00
25	7.55	7.75	7.80	7.56	8.03	7.70	7.31	7.71	7.79	7.92	8.22	7.98
EOM	7.52	7.70	7.74	7.55	7.87	7.60	8.13	8.67	7.63	7.85	8.33	8.14
MAX	7.70	7.91	7.93	7.77	8.15	7.86	8.13	9.03	8.61	8.01	9.15	8.77





WELL NUMBER.--261446080062801. Local Number G 2445. USGS Observation Well in Pompano Beach, FL.

LOCATION.--Lat 26°14'46", long 80°06'28", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 36, T.48 S., R.42 E., Hydrologic Unit 03090202, in the southeast corner of the Pompano Beach Airport, 0.3 mi north of NE 10th Street, 0.4 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 138 ft, cased to 123 ft. (Corrected).

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.54 ft above National Geodetic Vertical Datum of 1929.

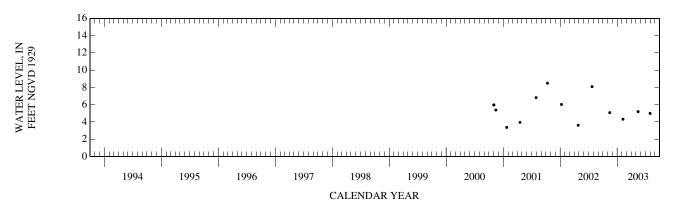
LAND-SURFACE DATUM.--Land surface is approximately 13.4 ft above NGVD. (Corrected).

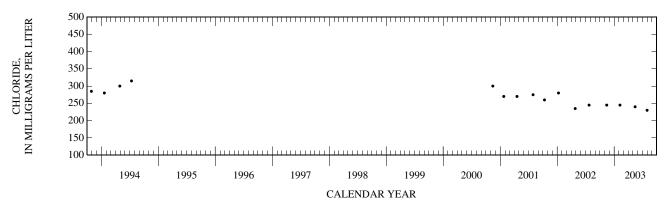
REMARKS.--Well is also used for salinity monitoring. Prior to November 2000 only chloride data published. Well depth and cased depth corrected based on borehole video log of November 28, 1995. Land-surface datum corrected based on field measurement in February 2003.

PERIOD OF RECORD.--November 1986 to July 1994 (intermittent), November 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.49 ft NGVD, Oct. 11, 2001; lowest, 3.37 ft NGVD, Jan. 23, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV 14	1230	5.08	1,280	245	MAY 15	0950	5.20	1,310	240
FEB 07	1045	4.32	1,320	245	JUL 31	1251	4.99	1,300	230





WELL NUMBER.--261501080060701. Local Number G 2147. USGS Observation Well in Pompano Beach, FL.

 $LOCATION.--Lat~26^{\circ}15'01", long~80^{\circ}06'07", in~NW~^{1}\!\!/_{4}~SW~^{1}\!\!/_{4}~SW~^{1}\!\!/_{4}~sec. 30, T.48~S., R.43~E., \\ Hydrologic~Unit~03090202, 200~ft~west~of~U.S.~Highway~1, and~300~ft~north~of~NE~14th~Street, in~golf~course.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 46 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 11.62 ft above National Geodetic Vertical Datum of 1929. Prior to September 1990, measuring point was top of casing 11.57 ft above NGVD.

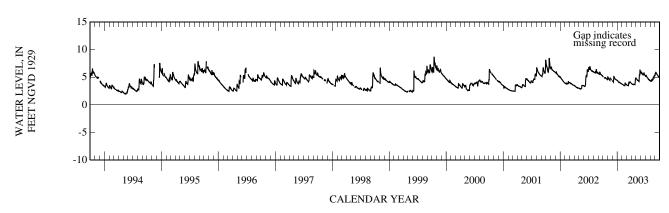
LAND-SURFACE DATUM.--Land surface is approximately 9.1 ft above NGVD.

PERIOD OF RECORD .-- October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.63 ft NGVD, Oct. 15, 1999; lowest, 1.02 ft below NGVD, May 5, 1981.

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	5.06 4.92	4.87 4.61	4.25 5.14	4.33 4.14	3.69 3.58	3.58 3.50	3.80 3.72	4.69 4.48	5.87 5.72	5.34 5.07	4.38 4.57	5.87 5.66
15 20	4.91 4.85	4.45 4.73	4.90 4.65	4.12 4.00	3.48 3.92	3.87 4.12	3.67 3.72	4.43 4.24	5.44 5.74	4.87 4.65	4.65 5.01	5.45 5.22
25	4.68	4.59	4.58	3.87	3.81	4.10	3.66	5.42	5.54	4.49	4.88	5.00
EOM	4.57	4.41	4.43	3.79	3.70	4.01	4.83	5.93	5.23	4.36	5.20	5.47
MAX			5.14	4.43	3.95		4.85	6.31	5.87	5.36	5.34	5.90



WELL NUMBER.--261534080165801. Local Number G 2031. USGS Observation Well in Coral Springs, FL.

LOCATION.--Lat 26°15'34", long 80°16'58", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 19, T.48 S., R.41 E., Hydrologic Unit 03090202, on west side of Coral Springs Drive, 150 ft north of Royal Palm Boulevard and 4.0 mi west of U.S. Highway 441.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 22 ft, cased to 21 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 13.67 ft above National Geodetic Vertical Datum of 1929. Prior to October 1995, measuring point was top of casing, 13.57 ft above NGVD.

LAND-SURFACE DATUM .-- Land surface is approximately 12.6 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The well was originally open to the aquifer from 21 to 22 ft. The well has become obstructed at a depth of 8.7 ft, but is in hydrologic communication with the aquifer.

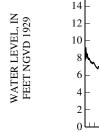
PERIOD OF RECORD .-- January 1972 to current year.

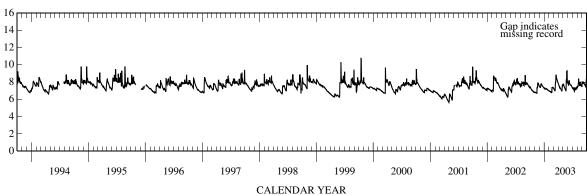
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.96 ft NGVD, Apr. 25, 1979; lowest, 4.75 ft NGVD, estimated, Sept. 5, 1979.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
C	JAN	FEB	MAR	APR	MAY	JUN	JUL					
0	7.31	6.93	7.19	7.65	7.73	7.65	7.33					

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.36	6.80	7.40	7.31	6.93	7.19	7.65	7.73	7.65	7.33	7.56	7.77
10 15	7.17 7.05	6.74 6.72	7.69 7.76	7.19 7.24	6.88 6.82	7.01 7.94	7.40 7.28	7.44 7.20	7.98 7.79	7.19 7.38	8.25 7.64	7.94 7.82
20	6.97	7.78	7.57	7.16	7.42	8.53	7.12	6.99	7.64	7.17	8.03	7.62
25 EOM	6.89 6.79	7.79 7.56	7.45 7.29	7.08 6.99	7.38 7.33	8.21 7.92	6.94 7.58	9.24 7.95	7.57 7.35	7.17 7.35	7.65 7.52	7.63 8.01
MAX	7.47	7.91	7.81	7.37	7.42	8.81	7.85	9.29	8.23	7.47	8.41	8.37





WELL NUMBER.--261641080064801. Local Number G 2866. USGS Observation Well in Pompano Beach, FL.

LOCATION.--Lat 26°16'41", long 80°06'48", in NE  $^1\!\!/_4$  SE  $^1\!\!/_4$  SW  $^1\!\!/_4$  sec.13, T.48 N., R.42 E., Hydrologic Unit 03090202, on the southwest corner of North Dixie Highway and NE 38th Court.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 15 ft, screened 15 to 20 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 20.21 ft above National Geodetic Vertical Datum of 1929. Prior to May 31, 2000, measuring point was 20.11 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 17.2 ft above NGVD.

6.61

5.91

PERIOD OF RECORD .-- July 1996 to current year.

6.45

7.15

MAX

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.40 ft NGVD, Oct. 22, 2001; lowest, 2.55 ft NGVD, May 29, 1999.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5	7.00	6.26	5.59	5.78	4.95	4.71	5.03	5.59	7.09	6.70	5.47	6.56	
10	6.78	5.91	6.33	5.62	4.77	4.51	4.79	5.25	7.28	6.46	5.57	6.75	
15	6.66	5.70	6.61	5.50	4.57	4.79	4.61	5.02	7.12	6.15	5.76	6.73	
20	6.42	6.19	6.43	5.38	5.01	5.20	4.47	4.82	7.29	5.95	5.85	6.38	
25	6.22	6.07	6.19	5.26	5.07	5.32	4.33	5.67	7.35	5.77	6.01	6.20	
EOM	5.94	5.78	5.94	5.12	4.99	5.29	5.45	7.11	6.99	5.58	6.22	7.64	

5.33

5.45

5.09

7.11

7.36

6.91

6.22

7.64

16 Gap indicates missing record 14 WATER LEVEL, IN FEET NGVD 1929 12 10 8 6 4 2 0 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 CALENDAR YEAR

WELL NUMBER.--261643080055901. Local Number G 2752. USGS Observation Well near Hillsboro Beach, FL.

LOCATION.--Lat 26°16'43", long 80°05'59", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 18, T.48 S., R.43 E., Hydrologic Unit 03090202, on southeastern corner of NE 39th Street and NE 18th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 253 ft, cased to 248 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.35 ft above National Geodetic Vertical Datum of 1929.

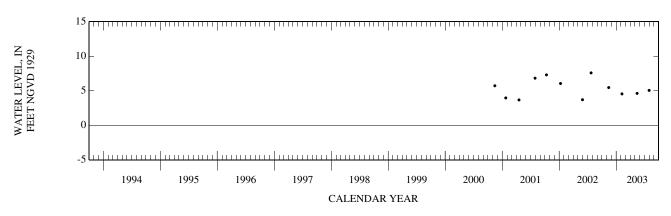
LAND-SURFACE DATUM .-- Land surface is approximately 11.4 ft above NGVD.

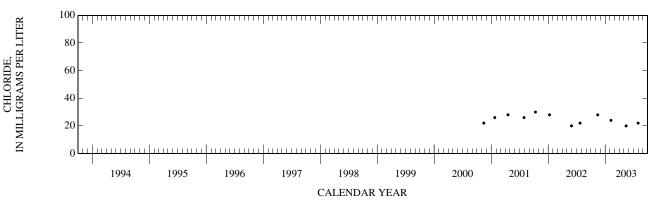
REMARKS .-- Well is also monitored for salinity.

PERIOD OF RECORD.--November 2000 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.59 ft NGVD, July 24, 2002; lowest, 3.67 ft NGVD, Apr. 18, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					MAY				
14	1340	5.46	433	28.0	15	1100	4.62	428	20.0
FEB 07	1155	4.55	440	24.0	JUL 31	1340	5.05	419	22.0
07	1133	7.55	770	27.0	J1	1340	5.05	717	22.0





WELL NUMBER.--261708080090801. Local Number G 1315. USGS Observation Well near Pompano Beach, FL.

LOCATION.--Lat 26°17'08", long 80°09'08", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.15, T.48 S., R.42 E., Hydrologic Unit 03090202, 50 ft east of Powerline Road, 0.8 mi north of Sample Road, and 2.3 mi northeast of Coconut Creek.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 14 ft.

REVISED RECORDS .-- WDR FL-85-2B:1982.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of casing, 17.59 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 15.4 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

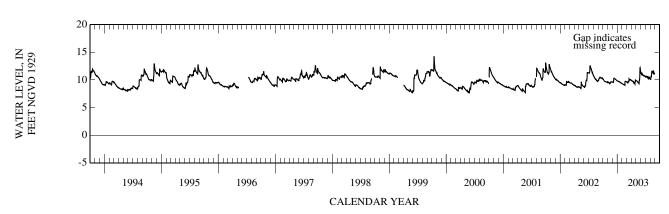
PERIOD OF RECORD .-- January 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.27 ft NGVD, Oct. 15, 1999; lowest, 6.26 ft NGVD, Mar. 30, 1990.

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES											
DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL				

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.06	9.57	9.57	9.81	9.26	9.58	9.86	9.83	11.16	10.68	10.59	
10	9.82	9.45	10.29	9.71	9.19	9.47	9.76	9.73	11.14	10.56	11.40	
15	9.71	9.23	10.28	9.70	9.10	9.62	9.58	9.51	10.94	10.71	11.48	
20	9.69	9.55	10.12	9.57	9.70	9.97	9.47	9.38	10.80	10.31	11.72	
25	9.64	9.65	10.03	9.47	9.72	10.07	9.25	10.38	10.69	10.28	11.26	
EOM	9.51	9.63	9.82	9.36	9.70	10.01	9.87	11.48	10.56	10.15		
MAX	10.25	9.70	10.30	9.83	9.74	10.20	10.08	12.21	11.31	10.71		



WELL NUMBER.--261724080054603. Local Number G 2694. USGS Observation Well near Pompano Beach, FL.

LOCATION.--Lat 26°17'24", long 80°05'46", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 7, T.48 S., R.43 E., Hydrologic Unit 03090202, on southwestern corner of NE 49 Street and U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 229 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.78 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 8.8 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. Data published for well G-2694 for the 2000 to 2002 water years was in error. These samples and the samples for the 2003 water year were mistakenly collected from well G-2693 because of an error on a site map. This data has been corrected and moved to the files of the U.S. Geological Survey for well G-2693.

PERIOD OF RECORD .-- See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--See REMARKS.

NO DATA TO BE PUBLISHED FOR 2003 WATER YEAR, SEE REMARKS.

WELL NUMBER.--261734080111301. Local Number G 1213. USGS Observation Well near Pompano Beach, FL.

LOCATION.--Lat 26°17'34", long 80°11'13", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.7, T.48 S., R.42 E., Hydrologic Unit 03090202, at southwest corner of Wilburn Road and Lyons Road, 1.0 mi east of U.S. Highway 441, and 7.5 mi northwest of Pompano Beach.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 15 ft, cased to 12 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of casing, 20.22 ft above National Geodetic Vertical Datum of 1929. Prior to December 2, 1997, measuring point was top of shelf, 20.60 ft above NGVD. Prior to October 12, 1990, top of shelf was 20.48 ft above NGVD. Prior to July 20, 1987, (previous Well) measuring point was top of casing 17.89 ft above NGVD. Prior to September 1980, top of casing was 17.95 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 18.3 ft above NGVD.

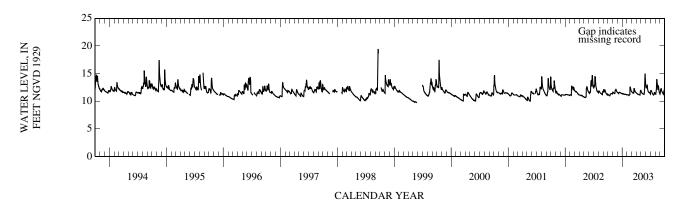
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. This well replaces a 20 ft deep well in the vicinity that was abandoned in 1987. The well name and number were retained for the replacement well. This well was originally open to the aquifer from 12 to 15 ft. The well is collapsed or obstructed at a depth at 9.7 ft. The well remains in communication with the aquifer. The well was damaged and repaired December 1997, January 9, 2002.

PERIOD OF RECORD.--January 1963 to July 1987, (previous well); current well, July 1987 to current year. (Corrected). See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.38 ft NGVD, Sept. 19, 20, 1998; lowest, 9.39 ft NGVD, June 29, 1989.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	11.15 11.01	11.58 11.46	11.50 11.58	11.41 11.31	11.18 11.12	11.64 11.49	11.41 11.30	11.63 11.39	12.64 12.88	11.91 11.71	11.53 13.92	12.14 12.07
15	11.16	11.40	11.62	11.26	11.10	11.54	11.21	11.31	11.93	11.31	12.91	11.63
20 25	11.33 11.37	11.95 11.91	11.51 11.49	11.25 11.19	12.56 12.13	12.19 11.76	11.17 11.13	11.25 13.22	11.61 11.59	11.16 11.28	12.76 11.89	11.33 11.71
EOM	11.34	11.64	11.34	11.18	11.87	11.55	11.98	13.29	11.33	11.40	11.30	12.56
MAX	11.40	12.16	11.62	11.41	12.57	12.31	11.98	14.99	12.90	11.93	13.92	12.56



WELL NUMBER.--261740080054101. Local Number G 2893. USGS Observation Well near Deerfield Beach, FL.

LOCATION.—Lat 26°17'40", long 80°05'41", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.7, T.48 S., R.43 E., Hydrologic Unit 03090202, on NE 52nd Street, 200 ft east of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 176 ft, cased to 166 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.77 ft above National Geodetic Vertical Datum of 1929.

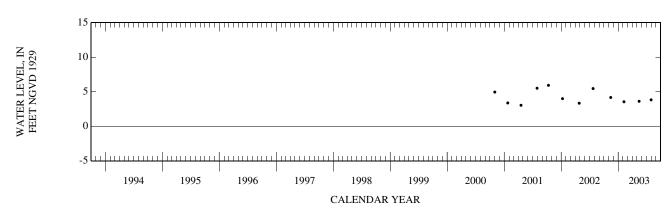
LAND-SURFACE DATUM .-- Land surface is approximately 7.8 ft above NGVD.

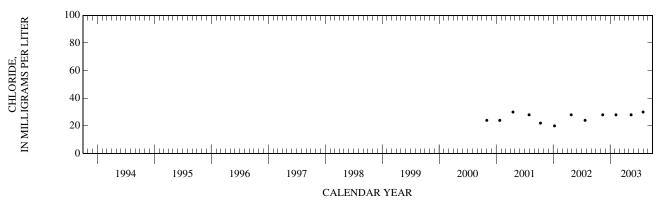
REMARKS.--Well is also used for salinity monitoring.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.93 ft NGVD, Oct. 11, 2001; lowest, 3.04 ft NGVD, Apr. 18, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					MAY				
14	1020	4.17	330	28.0	15	0811	3.62	348	28.0
FEB 07	0855	3.55	338	28.0	JUL 31	0950	3.83	346	30.0
07	0033	5.55	550	20.0	J1	0/30	5.05	5-10	50.0





WELL NUMBER.--261831080151301. Local Number G 2739. USGS Observation Well in Parkland, FL.

 $LOCATION.--Lat\ 26^{\circ}18'31'', long\ 80^{\circ}15'13'', in\ NE\ \frac{1}{4}\ SE\ \frac{1}{4}\ sec.4, T.48\ S., R.41\ E., Hydrologic\ Unit\ 03090202, east\ of\ University\ Drive\ and\ north\ of\ fenced\ area\ across\ from\ The\ Landings,\ 0.5\ mi\ north\ of\ Sawgrass\ Expressway\ and\ 0.1\ mi\ south\ of\ Holmberg\ Road.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 21 ft, cased to 21 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 15.06 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 12.3 ft above NGVD.

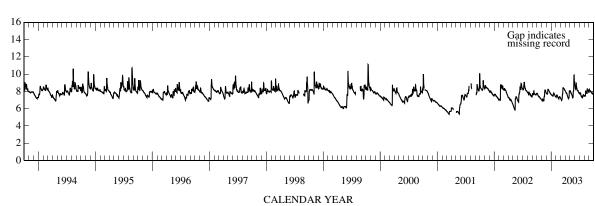
PERIOD OF RECORD.--December 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.11 ft NGVD, Oct. 15, 1999; lowest, 5.34 ft NGVD, Mar. 18, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	7.73 7.48 7.39 7.29 7.20 7.02	7.00 7.06 6.87 7.86 8.09 7.82	7.70 8.22 8.18 7.99 7.83 7.64	7.60 7.48 7.70 7.72 7.51 7.36	7.56 7.47 7.25 7.31 7.38 7.29	7.10 7.06 7.67 8.43 8.30 8.10	7.90 7.81 7.50 7.24 7.30 8.03	7.99 7.78 7.51 7.31 8.41 8.86	8.30 8.98 8.32 8.08 7.90 7.76	7.84 7.60 7.45 7.32 7.48 7.51	7.50 8.06 7.88 8.29 8.06 7.83	8.11 8.00 7.90 7.74 7.80 8.08
MAX	7.79	8.18	8.25	7.82	7.58	8.43	8.07	9.90	9.00	7.85	8.29	8.22





WELL NUMBER.--261903080065601. Local Number G 1260. USGS Observation Well in Deerfield Beach, FL.

LOCATION.--Lat 26°19'03", long 80°06'56", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 1, T.48 S., R.42 E., Hydrologic Unit 03090202, on southeast side of the intersection of State Road 810 and U.S. Interstate 95 at Deerfield Beach, 0.9 mi west of Florida East Coast Railroad.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

 $WELL\ CHARACTERISTICS.\text{--}Drilled, observation, water-table\ well,\ diameter\ 6\ in.,\ depth\ 90\ ft.$ 

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of casing, 12.21 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 10.9 ft above NGVD.

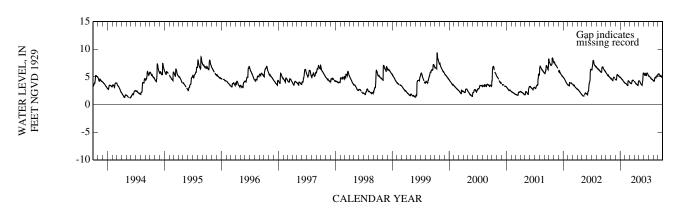
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured (from high-water mark), 13.02 ft NGVD, Oct. 31, 1965; lowest daily maximum water level, 0.71 ft below NGVD, June 20, 23, 1989. (Corrected).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.67	4.67	4.46	4.86	3.83	3.95	4.07	4.28	5.38	5.12	4.23	5.56
10	5.42	4.48	5.23	4.66	3.71	3.81	3.85	3.93	5.66	5.04	4.75	5.41
15	5.32	4.32	5.39	4.51	3.49	3.83	3.66	3.70	5.31	4.81	4.93	5.19
20	5.14	4.87	5.22	4.29	4.20	4.38	3.59	3.50	5.61	4.65	5.04	5.11
25	4.97	4.86	5.12	4.09	4.25	4.39	3.45	4.31	5.63	4.54	5.12	5.08
EOM	4.73	4.62	4.91	3.93	4.12	4.23	4.28	5.71	5.29	4.40	5.35	5.98
MAX	5.82		5.43	4.93	4.31		4.28	5.71	5.73	5.21	5.40	5.98



- WELL NUMBER.--261938080101001. Local Number G 2852. USGS Observation Well near Boca Raton, FL.
- LOCATION.--Lat 26°19'38", long 80°10'10", in NW ½ NW ½ SW ¼ sec.33, T.47 S., R.42 E., Hydrologic Unit 03090202, approximately 12 ft south of Hillsboro Canal, 50 yards east of Florida Turnpike, 0.8 mi west of County Road 845 (Powerline Road), and 1.0 mi south of Camino Real Road, approximately 3.0 mi southwest of Boca Raton.
- AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.
- WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 140 ft, cased to 130 ft, screened 130 to 140 ft.
- INSTRUMENTATION.--Satellite data collection platform with pressure transducer.
- DATUM.--Measuring point: Top of casing, 18.79 ft above National Geodetic Vertical Datum of 1929. Prior to August 2000, top of casing was considered to be 18.74 ft above NGVD. Prior to November 1995, top of casing was 16.14 ft above NGVD. See REMARKS.
- LAND-SURFACE DATUM.--Land surface is approximately 17.0 ft above NGVD.
- REMARKS.--Well was designated PB 1105 until September 1992 and published under the current station number. Well was also used for salinity monitoring until October 1993. Published figures of water levels as elevation, in ft NGVD, are in error for November 1995 to September 1999. Corrected figures are available in the files of the U.S. Geological Survey. See DATUM.
- PERIOD OF RECORD.--October 1988 to May 1990 (semiannual), September 1990 to October 1991 (intermittent), November 1991 to October 1995 (monthly), November 1995 to current year.
- EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.27 ft NGVD, July 13, 2002; lowest, 3.10 ft NGVD, Dec. 15, 1996.

DATA FOR THE 2003 WATER YEAR WAS UNAVAILABLE AT THE TIME OF PUBLICATION

# WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

# BROWARD COUNTY—Continued

## MISCELLANEOUS WATER-LEVEL MEASUREMENTS

Station number	Local ident- i- fier	Lat- i- tude	Long- i- tude	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
260242080101101 G -26	97	26 02 42 N 26 02 42 N	080 10 11 W 080 10 11 W	10-23-02 01-23-03	1207 1209	1.47	4570 4690	1380 1480
		26 02 42 N 26 02 42 N	080 10 11 W 080 10 11 W	04-29-03 07-29-03	1204 1140	1.54 .81	5000 4740	1480 1480

# Charlotte County

# WATER RESOURCES DATA FOR FLORIDA, 2003

# **VOLUME 2B: SOUTH FLORIDA**

# **Key to site locations on figure #13**

# CHARLOTTE COUNTY

Index	Site	Well	Page
Number	Number	Name	Number
1	265004081581901	CH 311	168
2	264755081460801	CH 323	166
3	264755081460802	CH 324	167

# WATER RESOURCES DATA FOR FLORIDA, 2003

## **VOLUME 2B: SOUTH FLORIDA**

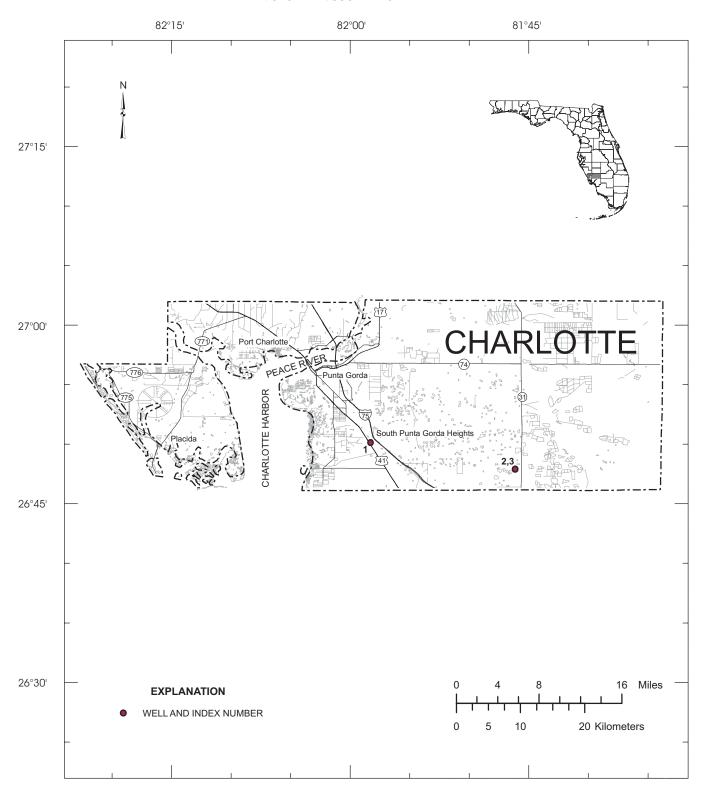


Figure 13: Location of wells in Charlotte County

#### CHARLOTTE COUNTY

WELL NUMBER.--264755081460801. Local Number CH 323. USGS Observation Well near Alva, FL.

LOCATION.--Lat 26°47'54", long 81°46'09", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.25, T.42 S., R.25 E., Hydrologic Unit 03090205, 10 ft north of Coral Rock Quarry Road, 75 ft south of Cook Brown Road, 0.6 mi west of State Road 31, 2.0 mi north of Lee/Charlotte County line. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 33 ft, cased to 19 ft, screened from 19 to 33 ft with 0.02 screen.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 34.17 ft above National Geodetic Vertical Datum of 1929.

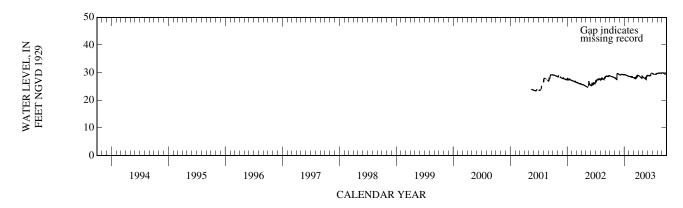
LAND-SURFACE DATUM.--Land surface is approximately 30.7 ft above NGVD.

PERIOD OF RECORD .-- May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 29.94 ft NGVD, Sept. 6, 2003; lowest, 23.37 ft NGVD, June 15, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.71	27.92	29.17	29.25	28.59	28.06	28.84	28.28	28.93	29.57	29.65	29.93
10	28.54	27.71	29.28	29.15	28.52	28.22	28.65	28.04	28.85	29.38	29.83	29.79
15	28.61	27.45	29.34	29.04	28.39	27.79	28.38	27.75	28.81	29.41	29.81	29.63
20	28.42	29.68	29.36	28.91	28.34	28.18	28.15	28.01	29.06		29.85	29.49
25	28.30	29.49	29.29	28.78	28.27	28.50	27.90	28.53	29.89	29.58	29.83	29.65
EOM	28.11	29.31	29.19	28.67	28.20	29.03	28.44	28.95	29.70	29.70	29.76	29.87
MAX	28.82	29.69	29.37	29.30	28.65	29.06	29.00	29.00			29.89	



#### CHARLOTTE COUNTY—Continued

WELL NUMBER.--264755081460802. Local Number CH 324. USGS Observation Well near Alva, FL.

LOCATION.--Lat 26°47'54", long 81°46'09", in NE  $^{1}\!\!/_{4}$  NE  $^{1}\!\!/_{4}$  NW  $^{1}\!\!/_{4}$  sec.25, T.42 S., R.25 E., Hydrologic Unit 03090205, 10 ft north of Coral Rock Quarry Road, 75 ft south of Cook Brown Road, 0.6 mi west of State Road 31, 2.0 mi north of Lee/Charlotte County line. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 112 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 192 ft, cased to 179 ft, screened from 179 to 188 ft with 0.02 screen, open hole 188 to 192 ft. (Corrected).

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 33.69 ft above National Geodetic Vertical Datum of 1929.

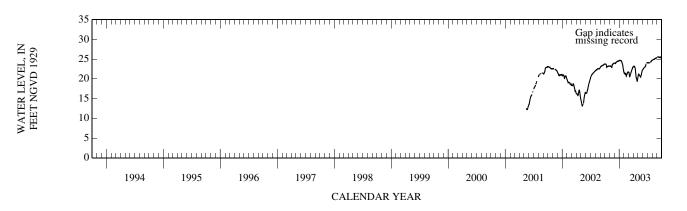
LAND-SURFACE DATUM .-- Land surface is approximately 31.1 ft above NGVD.

PERIOD OF RECORD .-- May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.64 ft NGVD, Sept. 28, 29, 2003; lowest, 12.22 ft NGVD, May 21, 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.77	23.28	23.98	24.68	21.40	21.46	23.21	21.18	22.58	24.10	24.79	25.57
10	23.58	23.12	24.10	24.67	21.43	20.61	23.09	20.98	22.86	24.10	24.95	25.55
15	23.08	22.90	24.27	24.51	20.77	21.19	22.19	20.67	23.02		25.03	25.51
20	23.18	23.70	24.43	24.00	21.19	21.94	20.30	20.65	23.30	24.28	25.15	25.36
25	23.23	23.87	24.56	23.02	21.74	22.43	19.61	21.50	24.01	24.48	25.23	25.44
EOM	23.24	23.99	24.55	21.72	21.70	22.94	20.19	22.27	24.04	24.72	25.33	25.62
MAX	23.78	23.99	24.56	24.69	21.78	22.98	23.21	22.27			25.35	



#### CHARLOTTE COUNTY—Continued

WELL NUMBER.--265004081581901. Local Number CH 311. USGS Observation Well near Punta Gorda, FL.

LOCATION.--Lat 26°50'06", long 81°58'18", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.12, T.42 S., R.23 E., Hydrologic Unit 03100103, 30 ft south of fence, 0.1 mi east of U.S. Highway 41, at the Division of Forestry Fire Control Headquarters, 2.8 mi north of Zemel Road.

AQUIFER .-- Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 220 ft, cased to 180 ft, open hole 180 to 200 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. casing, 26.78 ft above National Geodetic Vertical Datum of 1929. Prior to August 2001, measuring point was 26.92 ft above NGVD. See REMARKS.

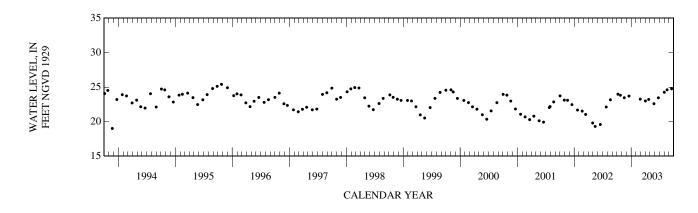
LAND-SURFACE DATUM.--Land surface is approximately 24.8 ft above NGVD.

REMARKS.--Well also used for salinity monitoring from September 1975 to July 2000. Conductivity and chloride profiles are available in the files of the U.S. Geological Survey. Records of water levels prior to October 1991 are available in the files of the U.S. Geological Survey. In August 2001, site was rebuilt due to vehicle accident.

PERIOD OF RECORD.--January 1973 to October 1976 (daily), November 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 32.89 ft NGVD, Mar. 5, 1973; lowest measured, 19.01 ft NGVD, Nov. 23, 1993.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1532	23.97	27	1508	22.60
24	1618	23.82	JUN		
NOV			24	0922	23.45
18	1653	23.46	AUG		
DEC			01	1245	24.25
18	1058	23.70	19	1417	24.60
FEB			SEP		
28	1353	23.25	17	1110	24.75
APR					
02	1313	22.99			
23	1516	23.21			



# **Collier County**

## **VOLUME 2B: SOUTH FLORIDA**

## Key to site locations on figure # 14

## COLLIER COUNTY

Index	Site	Well	Page	Index	Site	Well	Page
Number	Number	Name	Number	Number	Number	Name	Number
1	261000080520001	C 54	195	46	262121081355503	C 979	240
2	260902081480401	C 130	189	47	261343081384801	C 980	208
3	262521081161901	C 131	252	48	262158081283401	C 981	243
4	262505081245301	C 258	249	49	262158081283403	C 982	245
5	260640081204301	C 296	185	50	262158081283402	C 983	244
6	262507081235201	C 298	250	51	261733081285501	C 984	226
7	261621081412302	C 303	224	52	261733081285503	C 985	228
8	261630081360001	C 304	225	53	261200081204901	C 986	202
9	255430081221001	C 311	172	54	261444081284901	C 988	216
10	262555081242501	C 363	254	55	261733081285502	C 989	227
11	261124081470301	C 391	199	56	255703081213801	C 995	175
12	261124081470101	C 392	198	57	261530081412001	C 997	218
13	261405081465501	C 460	213	58	261620081450201	C 998	222
14	262724081260701	C 462	256	59	261508081484902	C 999	217
15	261302081473901	C 489	206	60	261620081464402	C 1004R	223
16	261243081480301	C 490	205	61	260919081460501	C 1052	192
17	262228081361901	C 492	247	62	261127081461001	C 1054	200
18	255748081181801	C 495	176	63	261211081441301	C 1055	204
19	260111081243901	C 496	177	64	261537081461201	C 1057	219
20	261741081235401	C 503	232	65	261537081461202	C 1058	220
21	261156081475801	C 516	201	66	261604081480901	C 1059	221
22	261018081484101	C 526	196	67	261311081480101	C 1061	207
23	261200081483001	C 528	203	68	260925081475101	C 1062	193
24	262859081273002	C 532	260	69	260137081375901	C 1063	178
25	261438081481001	C 575	215	70	260137081375902	C 1064	179
26	260549081441901	C 600	183	71	255637081281401	C 1065	173
27	261740081235401	C 684	229	72	255637081281402	C 1066	174
28	262554081283801	C 687	253	73	260813081214302	C 1070	186
29	261802081354801	C 688	233	74	261823081171901	C 1071	236
30	261740081235402	C 689	230	75	261823081171902	C 1072	237
31	260632081324702	C 690	184	76	261740081235403	C 1073	231
32	261347081351701	C 948	212	77	262519081162102	C 1074	251
33	261347081351202	C 951	211	78	262822081213201	C 1075	257
34	261347081351201	C 953	210	79	262822081213202	C 1076	258
35	261343081384802	C 956	209	80	262822081213203	C 1077	259
36	262121081355502	C 963	239	81	262558081270501	C 1078	255
37	262136081204202	C 965	242	82	262158081283404	C 1079	246
38	262136081204201	C 966	241	83	262228081361902	C 1080	248
39	260334081391601	C 968	182	84	261805081473302	C 1083	235
40	260843081324202	C 972	188	85	260251081412801	C 1092	181
41	260843081324201	C 973	187	86	261435081472701	C 1094	214
42	260941081324201	C 974	194	87	261802081354802	C 1097	234
43	260915081385901	C 976	190	88	261023081463702	C 1100	197
44	260915081385902	C 977	191	89	260224081394301	C 1186	180
45	262121081355501	C 978	238				

## **VOLUME 2B: SOUTH FLORIDA**

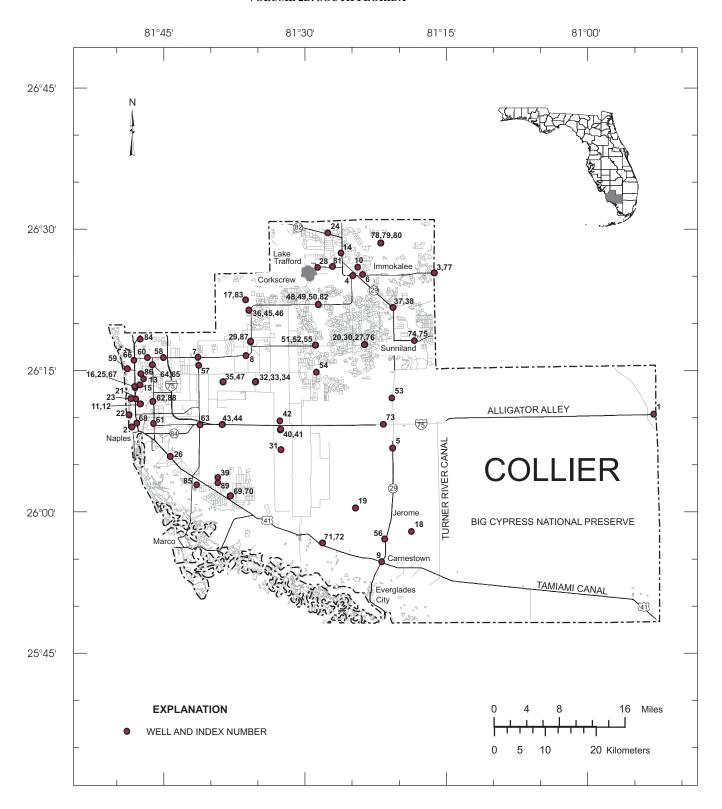


Figure 14: Location of wells in Collier County

#### COLLIER COUNTY

WELL NUMBER.--255430081221001. Local Number C 311.

LOCATION.--Lat 25°54'40", long 81°21'53", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.25, T.52 S., R.29 E., Hydrologic Unit 03090204, 20 ft south of U.S. Highway 41, and 53 ft west of State Road 29, 3 mi south of Copeland and 4 mi west of Ochopee.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 450 ft, cased to 430 ft, open hole 430 to 450 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of gate valve, 6.99 ft above National Geodetic Vertical Datum of 1929. From August 1994 to September 1997, measuring point was considered to be 4.99 ft above NGVD. See REMARKS.

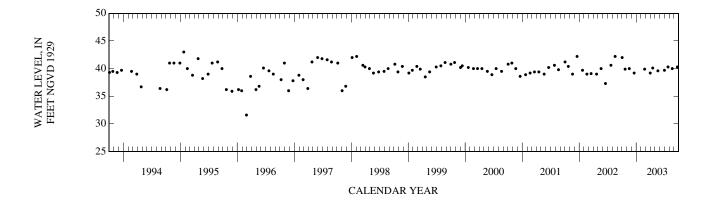
LAND-SURFACE DATUM.--Land surface is approximately 4.94 ft above NGVD.

REMARKS.--Records of water levels prior to October 1982 are available in files of the U.S. Geological Survey. The figures of water levels as elevation, in feet NGVD, for the period August 1994 to September 1997 are in error. A correction of +2.00 ft has been applied to correct water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--December 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.0 ft NGVD, Jan. 23, 1995; lowest, 17.2 ft NGVD, May 17, 1978.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1115	42.0	20	1131	39.6
22	1229	39.9	JUL		
NOV			01	1033	39.7
18	1344	40.0	24	1411	40.3
DEC			AUG		
19	1127	39.2	20	1152	40.0
FEB			SEP		
24	1131	39.9	22	1245	40.3
APR					
01	1015	39.2			
17	1124	40.1			



WELL NUMBER.--255637081281401. Local Number C 1065.

LOCATION.--Lat 25°56′40″, long 81°28′09″, in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.13, T.52 S., R.28 E., Hydrologic Unit 03090204, 1,000 ft north of U.S. Highway 41 at Big Cypress Bend Indian Reservation, 6.7 mi northwest of State Road 29 on U.S. Highway 41, 24 mi southeast of Naples on U.S. Highway 41.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 50 ft, cased to 27 ft, open hole from 27 to 50 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of casing, 6.42 ft above National Geodetic Vertical Datum of 1929. From October 4. 1993 to June 6, 1994, top of casing was 6.92 ft above NGVD. From October 1991 to September 1993, top of casing was 6.95 ft above NGVD. Prior to October 1991, top of casing was 7.07 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 3.4 ft above NGVD.

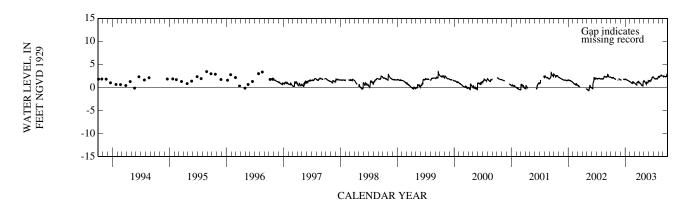
REMARKS.--Well is also used for salinity monitoring. Well damaged September 1993, repaired June 1994. See DATUM. Well has collapsed or become obstructed at a depth of 37 ft. This depth is within the open interval of the well. Water-level data from this well is considered to be unaffected by the collapse/obstruction

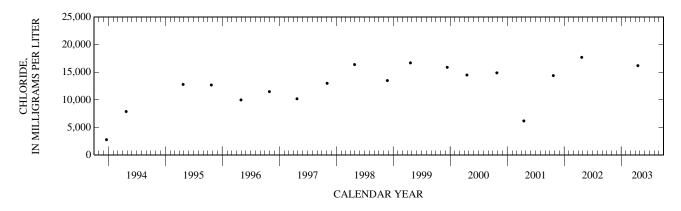
PERIOD OF RECORD .-- April 1986 to October 1996 (monthly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.44 ft NGVD, Aug. 28, 1995; lowest daily maximum water level, 0.71 ft below NGVD, May 12, 13, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	2.10 2.07		1.61	1.76 1.65	1.15 1.00	0.86 0.67	0.92 0.83	1.32 1.08	1.47 1.30	2.04 1.84	2.27 2.47	2.39 2.37
15 20 25	2.17 2.00 1.91	1.58 1.85 1.79	1.80 1.79	1.57 1.47 1.35	0.83 1.12 1.07	0.55 1.09 1.15	0.54 0.50 0.29	0.79 1.09 0.95	1.50 1.83 2.22	1.82 1.92 1.82	2.47 2.71 2.52	2.34 2.35 2.74
EOM MAX	1.75	1.65	1.68	1.26 1.80	0.99	1.19 1.33	1.42 1.42	1.41 1.47	2.28	2.10 2.20	2.51	3.18 3.18





WELL NUMBER.--255637081281402. Local Number C 1066.

 $LOCATION.--Lat~25^{\circ}56'40", long~81^{\circ}28'09", in~NE~\frac{1}{4}~SW~\frac{1}{4}~NW~\frac{1}{4}~sec.13, T.52~S., R.28~E., Hydrologic~Unit~03090204, 1,000~ft~north~of~U.S.~Highway~41~at~Big~Cypress~Bend~Indian~Reservation, 6.7~mi~northwest~of~State~Road~29~on~U.S.~Highway~41, 24~mi~southeast~of~Naples~on~U.S.~Highway~41.$ 

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 180 ft, cased to 102 ft, 102 ft to 180 ft open hole.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.29 ft above National Geodetic Vertical Datum of 1929.

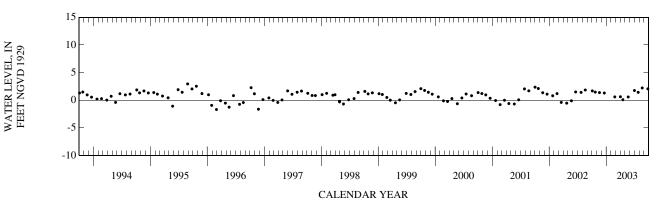
LAND-SURFACE DATUM .-- Land surface is approximately 3.4 ft above NGVD.

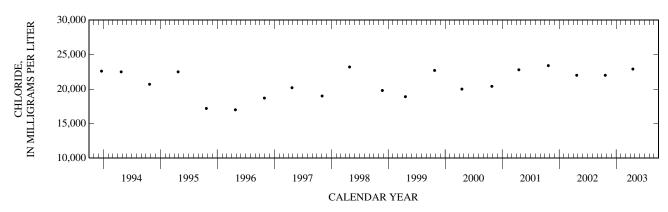
REMARKS.--Well is also used for salinity monitoring. The well was originally open to the aquifer from 102 to 180 ft. The well has become obstructed at a depth of 79 ft. Chloride samples are being collected using a pump. The exact depth from which the chloride-containing water is emanating cannot be further delineated.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.95 ft NGVD, Aug. 28, 1995; lowest, 1.82 ft below NGVD, Apr. 24, 1986.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	1134	1.69			22	1110	0.59		
23	1112	1.47	60,300	22,000	JUL				
NOV			,	,	01	1004	1.76		
19	1111	1.38			25	1201	1.43		
DEC					AUG				
20	1119	1.30			20	1431	2.22		
FEB					SEP				
25	1049	0.61			25	1201	2.06		
APR									
02	1011	0.63							
18	1148	0.09	60.700	22.900					





WELL NUMBER .-- 255703081213801. Local Number C 995.

LOCATION.--Lat 25°57'05", long 81°21'34", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.12, T.52 S., R.29 E., Hydrologic Unit 03090204, in Department of Natural Resources building, 200 ft east of Janes Scenic Drive and 0.4 mi north of Copeland.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 37 ft, cased to 28 ft, open hole 28 to 37 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.22 ft above National Geodetic Vertical Datum of 1929. From March 1985 to September 1993, top of casing was incorrectly considered to be 8.20 ft above NGVD. From October 1988 to September 1991, top of casing was incorrectly reported to be 10.75 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 1993 are in error. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 6.9 ft above NGVD.

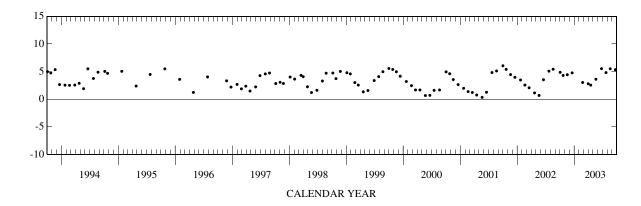
REMARKS.--The figures of water level, as elevation in feet NGVD, prior to October 1993 are in error. A -0.98 ft correction has been applied to correct water-level data from March 1985 to September 1993. Corrected records are in the files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--March 1985 to September 1994 (monthly), October 1995 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.06 ft NGVD, Oct. 1, 2001; lowest, 0.25 ft NGVD, May 28, 1985.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1048	4.87	20	1123	3.62
22	1219	4.31	JUN		
NOV			25	1238	5.54
18	1335	4.44	JUL		
DEC			24	1349	4.82
19	1109	4.77	AUG		
FEB			20	1143	5.51
24	1121	3.03	SEP		
APR			22	1230	5.35
01	1006	2.80			
17	1116	2.55			





WELL NUMBER.--255748081181801. Local Number C 495.

LOCATION.--Lat 25°57'53", long 81°18'42", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 9, T.52 S., R.30 E., Hydrologic Unit 03090204, 25 ft south of County Road 837, 50 ft west of County Road 841, 2.6 mi east of State Road 29, and 4.4 mi north of Ochopee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 70 ft, cased to 8 ft, open hole 8 to 70 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.08 ft above National Geodetic Vertical Datum of 1929. Prior to October 1984, measuring point was top of base, 10.08 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 7.6 ft above NGVD.

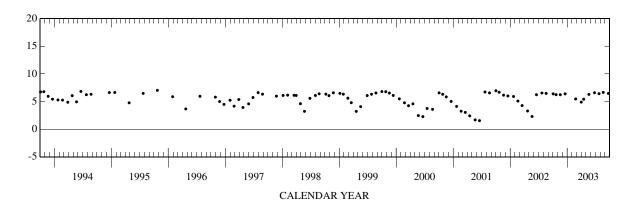
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1971 to September 1984 (daily), October 1984 to September 1995 (monthly), October 1995 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.34 ft NGVD, Sept. 4, 1983; lowest measured, 0.98 ft NGVD, June 14, 1985.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1059	6.40	20	1145	6.30
22	1250	6.25	JUN		
NOV			25	1250	6.60
18	1400	6.24	JUL		
DEC			24	1359	6.43
19	1145	6.40	AUG		
FEB			20	1202	6.66
24	1154	5.47	SEP		
APR			22	1256	6.48
01	1026	4.90			
17	1154	5 42			





WELL NUMBER.--260111081243901. Local Number C 496.

LOCATION.--Lat 26°00'23", long 81°24'39", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.28, T.51 S., R.29 E., Hydrologic Unit 03090204, 36 ft east of Janes Scenic Drive, 7.1 mi northwest of Copeland and 6.4 mi northwest of fire lookout tower.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 57 ft, cased to 12 ft, open hole 12 to 57 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 11.85 ft above National Geodetic Vertical Datum of 1929. From October 1981 to September 1982, top of shelf was incorrectly considered to be 14.62 ft above NGVD. Prior to October 1981, top of shelf was 14.62 ft above NGVD. The figures of water level as elevation, in feet NGVD, from October 1981 to September 1982 are in error. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 10.8 ft above NGVD.

REMARKS.--The figures of water level as elevation, in feet NGVD, from October 1981 to September 1982 are in error. A correction of -2.77 ft has been applied to correct water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. The well was originally open to the aquifer from 12 to 57 ft. The open interval of the well has collapsed at a depth of 36 ft. Water-level data from this well are not considered to be affected by the collapsed interval.

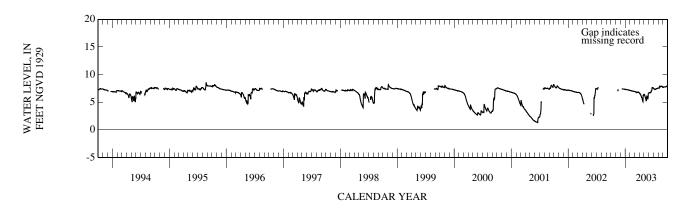
PERIOD OF RECORD.--January 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.52 ft NGVD, Aug. 24, 1995; lowest, 0.95 ft NGVD, May 14, 15, 1975.

ELLVATION ABOVE NOVB 1727, TELT	
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003	
DAILY MAXIMUM VALUES	

ELEVATION ABOVE NOVD 1020 FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5				7.33	7.14	6.93	6.59	6.37	6.73	7.39	7.55	7.78
10			7.39	7.29	7.06	6.83	6.36	5.88	6.69	7.34	7.92	7.77
15		7.06	7.41	7.29	7.03	6.73	5.91	5.40	6.79	7.33	7.82	7.80
20			7.39	7.21	7.01	6.82	5.58	6.12	7.08	7.41	7.91	7.81
25			7.37	7.18	6.99	6.78	5.07	5.68	7.63	7.51	7.89	7.88
EOM			7.30	7.15	6.95	6.73	6.43	6.68	7.59	7.56	7.70	8.17
MAX				7.34	7.14	6.95	6.70	6.68	7.65	7.56	7.92	8.17



WELL NUMBER.--260137081375901. Local Number C 1063.

LOCATION.--Lat 26°01'40", long 81°37'52", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 17, T.51 S., R.27 E., Hydrologic Unit 03090204, 50 ft northwest of the end of Hamilton Road 0.45 mi north of U.S. Highway 41, 4.95 mi southeast of State Road 951, 9.0 mi southeast of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 55 ft, cased to 30 ft, open hole from 30 to 55 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of casing, 9.58 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.3 ft above NGVD.

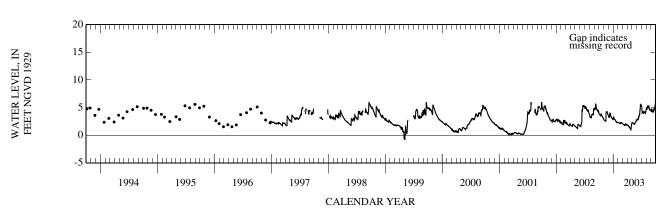
REMARKS.--Well is also used for salinity monitoring. Most of the open-hole portion of this well has collapsed or become obstructed. Chloride samples are being collected from a depth of 37 ft. Data from this well are considered to be unaffected by the collapse/obstruction.

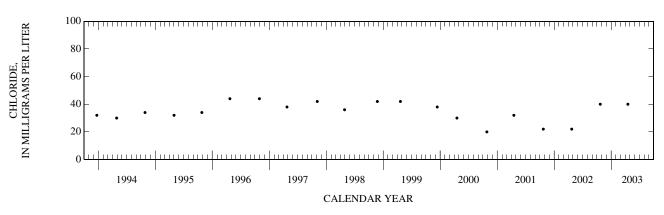
PERIOD OF RECORD.--April 1986 to December 1996 (monthly), December 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.41 ft NGVD, Sept. 29, 2003; lowest, 0.88 ft below NGVD, May 06, 1999.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	3.77 3.57 3.86 3.54 3.33 2.98	2.73 2.59 2.46 4.17 3.97 3.64	3.23 3.89 3.78 3.23 3.09 2.84	3.19 2.89 2.69 2.47 2.33 2.31	2.26 2.20 2.08 2.20 2.27 2.15	2.02 1.90 1.79 1.94 1.83 1.94	1.79 1.57 1.47 1.23 0.88 2.15	2.25 2.12 2.04 2.20 2.39 2.74	2.96 2.85 3.49 3.77 5.44 5.23	4.33 4.19 3.98 4.17 4.09 4.61	4.83 5.25 5.22 4.83 4.64 4.53	4.74 4.28 4.28 4.81 4.87 6.37
MAX	4.05	4.34	3.93	3.30	2.31	2.10	2.15	2.75	5.59	5.25	5.38	6.41





WELL NUMBER.--260137081375902. Local Number C 1064.

LOCATION.—Lat 26°01'40", long 81°37'58", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.17, T.51 S., R.27 E., Hydrologic Unit 03090204, 50 ft northwest of the end of Hamilton Road, 0.45 mi north of U.S. Highway 41, 4.95 mi southeast of State Road 951, 9.0 mi southeast of Collier County Government Center. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 120 ft, cased to 84 ft, open hole 84 to 120 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.—Measuring point: Top of casing, 9.98 ft above National Geodetic Vertical Datum of 1929. From October 1996 to September 1997, measuring point was incorrectly considered to be top of shelf, 10.07 ft above NGVD. Prior to October 1996, measuring point was top of shelf 10.07 ft above NGVD. The figures of water level as elevation, in feet NGVD, from October 1996 to September 1997 are in error. See REMARKS.

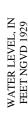
LAND-SURFACE DATUM.--Land surface is approximately 6.1 ft above NGVD.

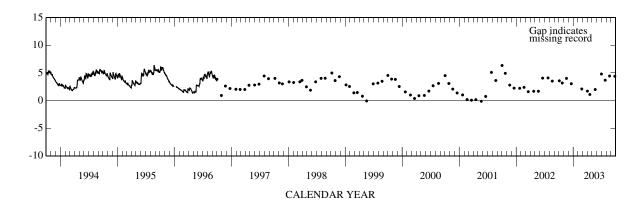
REMARKS.--The figures of water levels as elevation, in feet NGVD, for the period October 1996 to September 1997 are in error. Elevations had been computed based on the top of shelf measuring point after the shelf had been removed. A -0.09 ft correction has been applied to correct water level data from October 1996 to September 1997. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--November 1986 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level 6.35 ft NGVD, Aug. 24, 25, 1995 and highest water level measured, 6.35 ft NGVD, Oct. 2, 2001; lowest water level measured, 0.12 ft below NGVD, May 22, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1213	3.58	22	1040	2.00
23	1029	3.18	JUL		
NOV			01	0937	4.81
19	1046	4.01	25	1125	3.68
DEC			AUG		
20	1046	3.05	22	0939	4.45
FEB			SEP		
25	1017	2.11	25	1245	4.40
APR					
02	0947	1.71			
18	1053	1.10			





WELL NUMBER.--260224081394301. Local Number C 1186.

LOCATION.--Lat 26°03'03", long 81°39'16", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.6, T.51 S., R.27 E., Hydrologic Unit 03090204, 30 ft east of Greenway Road, 1.15 mi north of U.S. Highway 41 and 11 mi southeast of Naples. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 122 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 32.5 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.10 ft above National Geodetic Vertical Datum of 1929. From June 1989 to September 1998, top of casing was incorrectly considered to be 10.10 ft above NGVD. Prior to June 1989, top of casing was 10.10 ft above NGVD. See REMARKS.

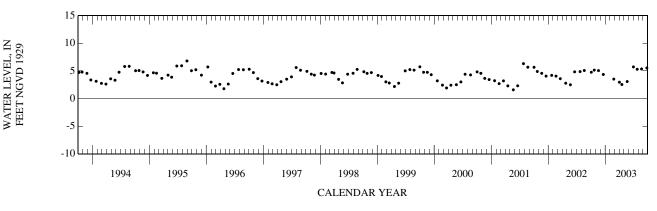
LAND-SURFACE DATUM.--Land surface is approximately 6.8 ft above NGVD. (Corrected).

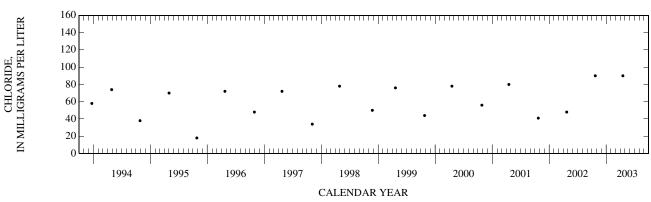
REMARKS.--Well is also used for salinity monitoring. Prior to October 1998, the well was incorrectly considered to be C-975. All of the data published under C-975 is available under C-1186. The figures of water level as elevation, in feet NGVD from June 1989 to September 1998, are in error. A -3.00 ft correction has been applied to correct water-level data from June 1989 to September 1998. Corrected records are available in files of the U.S. Geological Survey. See DATUM

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.81 ft NGVD, Aug. 30, 1995; lowest, 0.65 ft below NGVD, Mar. 28, 1985.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	1233	4.77			22	0958	3.08		
23	0933	5.15	750	90.0	JUL				
NOV					01	0911	5.73		
19	0919	5.06			25	1057	5.30		
DEC					AUG				
20	0948	4.36			22	0958	5.36		
FEB					SEP				
25	0939	3.53			25	1303	5.54		
APR									
02	0914	2.96							
18	1015	2.54	801	90.0					





WELL NUMBER.--260251081412801. Local Number C 1092.

LOCATION.—Lat  $26^{\circ}02'51$ ", long  $81^{\circ}41'29$ ", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 10, T.51 S., R.26 E., Hydrologic Unit 03090204, 25 ft north of Manatee Road, 0.5 mi east of State Road 951, 1.1 mi south of Tamiami Trail (U.S. Highway 41). (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 19 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. PVC casing, 7.73 ft above National Geodetic Vertical Datum of 1929.

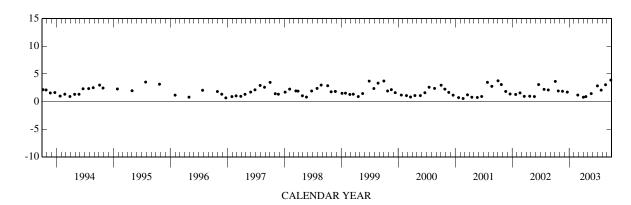
LAND-SURFACE DATUM .-- Land surface is approximately 5.0 ft above NGVD.

PERIOD OF RECORD.--July 1993 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.89 ft NGVD, Sept. 25, 2003; lowest, 0.55 ft NGVD, Feb. 20, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1351	3.65	22	0950	1.44
23	0913	1.92	JUL		
NOV			01	0903	2.84
19	0908	1.87	25	1047	2.07
DEC			AUG		
20	0937	1.71	22	1034	3.04
FEB			SEP		
25	0937	1.18	25	1328	3.89
APR					
02	0906	0.78			
18	0944	0.90			





WELL NUMBER.--260334081391601. Local Number C 968.

LOCATION.--Lat 26°03'37", long 81°39'15", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 1, T.51 S., R.26 E., Hydrologic Unit 03090204, 150 ft west of Greenway Road, in drainage divide 1.75 mi north of U.S. Highway 41 and 11 mi southeast of Naples.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 23 ft, cased to 8 ft, open hole 8 to 23 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of flange, 9.91 ft above National Geodetic Vertical Datum of 1929. Prior to October 2001, measuring point was incorrectly considered to be top of shelf, 9.35 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 2001 are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

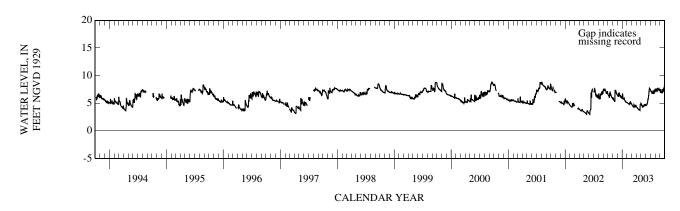
REMARKS.--The figures of water level as elevations, in feet NGVD, prior to October 2001 are in error. A +0.56 ft correction has been applied to correct water level data. Corrected records are in the files of the U.S. Geological Survey. See DATUM. The well was originally open to the aquifer from 8 to 23 ft. The open interval of the well has collapsed or become obstructed at a depth of 9.3 ft. Water-level data from this well are not considered to be affected by the collapsed interval. Corrected records are in the files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.82 ft NGVD (present datum), Sept. 17, 18, 2000; lowest, 2.56 ft NGVD (present datum), June 2, 1989 (estimated).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	6.41 6.06	5.69 5.53	6.30 6.89	6.32 5.79	5.05 4.93	4.69 4.47	4.25 4.13	4.74 4.38	4.68 4.87	7.10 6.83	7.09 7.54	7.55 7.08
15	7.13	5.26	6.40	5.83	4.76	4.31	3.91	4.61	5.68	6.74	7.43	6.98
20 25	6.41 6.20	7.12 6.81	6.50 6.09	5.36 5.16	4.89 5.08	4.59 4.33	3.84 3.70	4.54 4.73	6.37 7.58	6.83 7.35	7.53 7.47	7.41 7.78
EOM	5.85	6.52	5.82	5.12	4.92	4.60	4.90	4.72	7.46	7.51	7.25	8.44
MAX	7.13	7.41	6.90	6.68	5.28	4.90	4.90	4.99	7.64	7.60	7.71	8.44



WELL NUMBER.--260549081441901. Local Number C 600.

LOCATION.--Lat 26°05′52″, long 81°44′19″, in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.19, T.50 S., R.26 E., Hydrologic Unit 03090204, at northeast corner of the intersection of Saint Andrews Boulevard and U.S. Highway 41, 4.2 mi northwest of Belle Meade and 5.0 mi southeast of Naples.

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 52 ft, cased to 48 ft, slotted 48 to 52 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. PVC coupling, 8.65 ft above National Geodetic Vertical Datum of 1929.

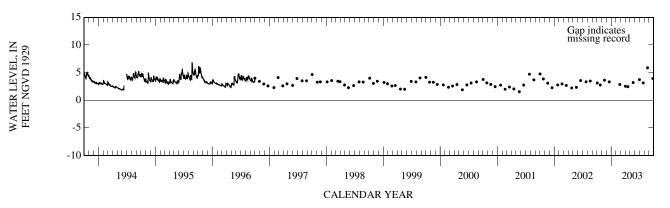
LAND-SURFACE DATUM .-- Land surface is approximately 5.4 ft above NGVD.

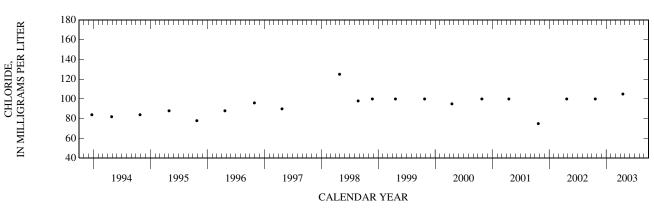
REMARKS.--Well is also used for salinity monitoring. The minimum for period of record in 1988 is a measured water level, not the recorded daily maximum water level.

PERIOD OF RECORD.--October 1980 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.77 ft NGVD, Aug. 24, 1995; lowest water level measured, 0.99 ft NGVD, Aug. 29, 1988.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	1410	3.13			22	1154	3.19		
23	1311	2.76	899	100	JUL				
NOV					01	1106	3.71		
19	1147	3.63			25	1241	3.14		
DEC					AUG				
20	1226	3.33			22	1044	5.88		
FEB					SEP				
25	1215	2.85			25	1338	3.94		
APR									
02	1049	2.53							
18	1304	2.45	892	105					





WELL NUMBER.--260632081324702. Local Number C 690.

LOCATION.--Lat 26°06'34", long 81°32'35", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 12, T.50 S., R.28 E., Hydrologic Unit 03090204, 30 ft southeast of the intersection of 70th Street and Everglades Boulevard, 3.1 mi south of U.S. Interstate 75, 8.5 mi northeast of Royal Palm Hammock and 15.7 mi east of Naples.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 48 ft, cased to 43 ft, screened 43 to 48 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 11.84 ft above National Geodetic Vertical Datum of 1929. From February 1994 to August 25, 1998, top of shelf was 11.87 ft above NGVD. From October 1989 to February 1994, measuring point was top of casing, 13.10 ft above NGVD. From October 1980 to September 1989, measuring point was top of shelf, 11.46 ft above NGVD.

LAND-SURFACE DATUM .-- Land surface is approximately 9.1 ft above NGVD.

REMARKS.--The station was repaired August 25, 1998. See DATUM.

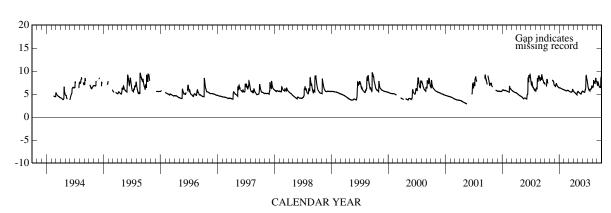
PERIOD OF RECORD.--October 1980 to June 1992 (daily), July 1992 to January 1994 (monthly), February 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.07 ft NGVD, July 24, 25, 1985; lowest, 2.50 ft NGVD, June 22, 1989, May 15, 20, 21, 1990.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			6.76	6.37	5.86	5.65	5.53	5.48	5.54	6.61	6.50	7.66
10 15	8.19		7.00 7.22	6.29 6.19	5.79 5.69	5.54 5.44	5.36 5.20	5.29 5.12	5.41 5.68	5.90 5.89	7.92 7.66	7.17 6.64
20	7.40	7.98	6.79	6.10	5.70	5.44	5.01	5.06	6.35	5.99	7.71	6.54
25 EOM		7.65 7.02	6.59 6.35	6.02 5.94	5.82 5.78	5.60 5.83	4.82 5.41	5.43 5.66	8.78 7.74	6.18 6.68	8.09 7.59	8.24 9.68
MAX			7.30	6.37	5.94	6.03	5.74	5.66	9.02	7.45	8.52	9.76





WELL NUMBER.--260640081204301. Local Number C 296.

LOCATION.--Lat 26°06'45", long 81°20'42", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.18, T.50 S., R.30 E., Hydrologic Unit 03090204, west of State Road 29, 3 mi south of U.S. Interstate 75, and 10.8 mi north of Copeland.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 45 ft, cased to 8 ft, open hole 8 to 45 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of casing, 18.16 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 14.3 ft above NGVD.

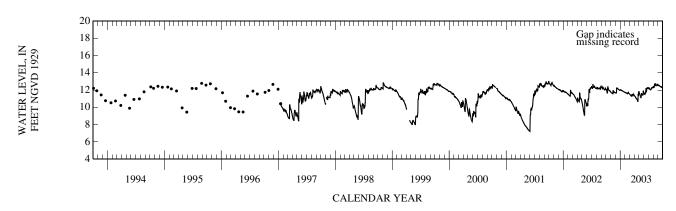
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--June 1959 to November 1984 (daily), November 1984 to December 1996 (monthly), January 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.06 ft NGVD, Sept. 12, 1960; lowest, 6.19 ft NGVD, June 4, 1974.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	12.00 11.62	11.70 11.63	11.67 12.24	12.04 11.96	11.70 11.65	11.48 11.36	11.28 11.17	11.57 11.29	11.55 11.58	12.25 12.09	12.35 12.61	12.55 12.50
15	12.31	11.57	12.21	11.92	11.58	11.33	10.94	11.14	12.21	12.04	12.57	12.43
20 25	12.00 11.96	11.80 11.74	12.09 12.04	11.86 11.81	11.63 11.61	11.38 11.48	10.89 10.64	11.53 11.43	12.06 12.26	12.31 12.30	12.59 12.58	12.34 12.45
EOM	11.82	11.68	11.97	11.74	11.58	11.44	11.77	11.77	12.21	12.33	12.60	12.84
MAX	12.31	11.94	12.28	12.04	11.74	11.56	11.77	11.94	12.28		12.72	



WELL NUMBER.--260813081214302. Local Number C 1070.

LOCATION.--Lat  $26^{\circ}09^{\circ}15^{\circ}$ , long  $81^{\circ}21^{\circ}43^{\circ}$ , in NE  $\frac{1}{4}$  sec. 1, T.50 S., R.29 E., Hydrologic Unit 03090204, 45 ft south of Alligator Alley (U.S. Interstate 75), 1.0 mi west of State Road 29 on U.S. Interstate 75, 7.9 mi southwest of Sunniland.

AQUIFER.--Lower Tamiami aquifer of Miocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 205 ft, cased to 100 ft, 100 to 205 ft of open hole.

INSTRUMENTATION.--Monthly measurement with chalked tape.

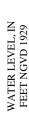
DATUM.--Measuring point: Top of casing, 17.40 ft above National Geodetic Vertical Datum of 1929.

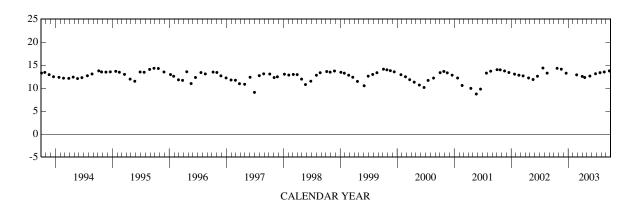
LAND-SURFACE DATUM .-- Land surface is approximately 14.6 ft above NGVD.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.35 ft NGVD, Aug. 19, 2002; lowest, 7.10 ft NGVD, June 26, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
22	1422	14.29	20	1313	12.61
NOV			JUN		
18	1511	14.11	25	1328	13.12
DEC			JUL		
19	1304	13.23	24	1508	13.35
FEB			AUG		
24	1325	12.88	20	1258	13.50
APR			SEP		
01	1206	12.54	22	1342	13.73
17	1320	12.30			





WELL NUMBER.--260843081324201. Local Number C 973.

LOCATION.--Lat  $26^{\circ}08^{\circ}43^{\circ}$ , long  $81^{\circ}32^{\circ}38^{\circ}$ , in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.6, T.50 S., R.28 E., Hydrologic Unit 03090204, at the northwest corner of 50th Avenue SE and Everglades Boulevard, 0.5 mi south of U.S. Interstate 75 and 15.75 mi east of Naples. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 150 ft, cased to 90 ft, open hole 90 to 150 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 14.48 ft above National Geodetic Vertical Datum of 1929.

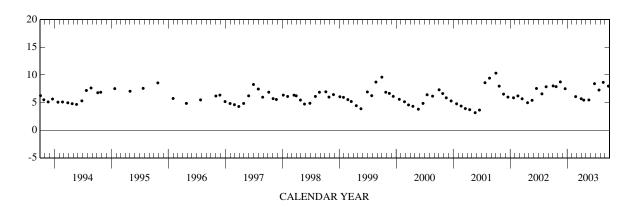
LAND-SURFACE DATUM.--Land surface is approximately 11.2 ft above NGVD.

PERIOD OF RECORD.--November 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.15 ft NGVD, Sept. 25, 1985; lowest, 3.06 ft NGVD, May 25, 1990.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	0920	8.01	20	1006	5.47
22	1055	7.88	JUN		
NOV			25	1118	8.42
18	1116	8.74	JUL		
DEC			24	1158	7.27
19	0949	7.51	AUG		
FEB			20	1028	8.66
24	0944	6.08	SEP		
APR			22	1115	7.98
01	0857	5.69			
17	1011	5.44			





WELL NUMBER.--260843081324202. Local Number C 972.

LOCATION.--Lat  $26^{\circ}08^{\circ}43^{\circ}$ , long  $81^{\circ}32^{\circ}38^{\circ}$ , in SW  ${}^{1}\!\!/_{4}$  NE  ${}^{1}\!\!/_{4}$  sec.6, T.50 S., R.28 E., Hydrologic Unit 03090204, at the northwest corner of 50th Avenue SE and Everglades Boulevard, 0.5 mi south of U.S. Interstate 75 and 15.75 mi east of Naples. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 25 ft, open hole 25 to 40 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.59 ft above National Geodetic Vertical Datum of 1929. Prior to March 28, 1994, top of casing was 15.58 ft above NGVD. See REMARKS.

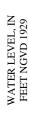
LAND-SURFACE DATUM.--Land surface is approximately 11.2 ft above NGVD.

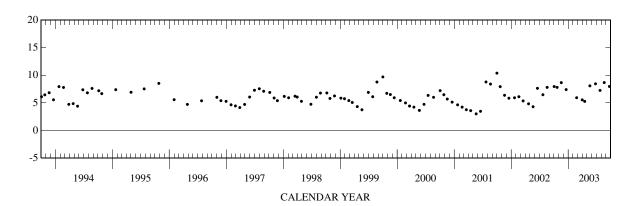
REMARKS.--Station damaged March 28, 1994, reconstructed June 8, 1994. See DATUM.

PERIOD OF RECORD.--October 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.90 ft NGVD, Aug. 29, 1985; lowest, 2.99 ft NGVD, May 25, 1990.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	0918	7.96	20	1004	8.09
22	1054	7.81	JUN		
NOV			25	1111	8.46
18	1113	8.67	JUL		
DEC			24	1156	7.26
19	0947	7.41	AUG		
FEB			20	1030	8.68
24	0943	5.94	SEP		
APR			22	1112	7.98
01	0855	5.55			
17	1008	5.27			





WELL NUMBER.--260902081480401. Local Number C 130.

LOCATION.--Lat 26°09'01", long 81°48'23", in NE \(^1/\_4\) NW \(^1/\_4\) sec.4, T.50 S., R.25 E., Hydrologic Unit 03090204, on the north side of 4th Avenue, 300 ft east of Gulf Shore Boulevard N, in Naples.

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 71 ft, cased to 69 ft, open hole 69 to 71 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of flange, 7.82 ft above National Geodetic Vertical Datum of 1929. From October 1986 to October 2000, the measuring point was incorrectly considered to be top of shelf, 7.96 ft above NGVD. See REMARKS. From 1978 to September 1986, the measuring point was top of casing 7.89 ft above NGVD. From 1955 to 1958, top of casing was 7.94 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 5.9 ft above NGVD.

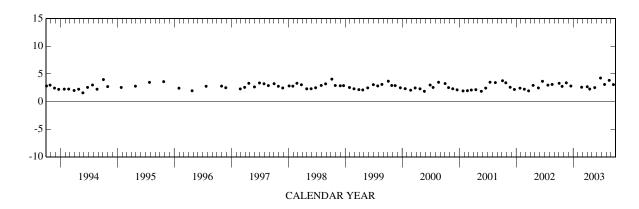
REMARKS.--The figures of water levels as elevation, in ft NGVD, are in error for water years 1986 to 2000. A correction of -0.14 ft is required to correct water-level data. Records of water levels prior to October 1983 are in the files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--July 1952 to June 1958 (daily), June 1958 to September 1982 (semiannual), September 1982 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level recorded, 5.44 ft NGVD, Sept. 5, 1957; lowest water level measured, 0.03 ft NGVD, May 7, 1974.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1108	3.30	19	1148	2.53
22	1000	2.75	JUN		
NOV			25	1054	4.26
18	0956	3.39	JUL		
DEC			21	1057	3.10
17	1144	2.81	AUG		
FEB			20	1130	3.84
24	1131	2.59	SEP		
APR			16	1049	3.07
01	1050	2.68			
17	1020	2.27			





WELL NUMBER.--260915081385901. Local Number C 976.

LOCATION.--Lat 26°09'16", long 81°38'47", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.31, T.49 S., R.27 E., Hydrologic Unit 03090204, 32 ft south of U.S. Interstate 75, 1.20 mi east of Naples.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

 $WELL\ CHARACTERISTICS. -- Drilled, observation, water-table\ well,\ diameter\ 6\ in.,\ depth\ 40\ ft,\ cased\ to\ 10\ ft,\ open\ hole\ 10\ to\ 40\ ft.$ 

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.25 ft above National Geodetic Vertical Datum of 1929.

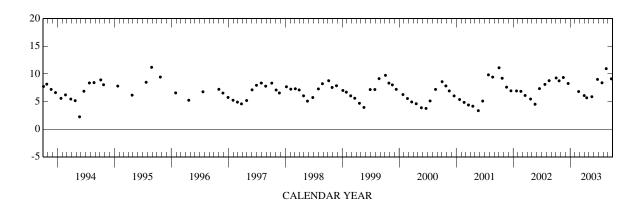
LAND-SURFACE DATUM.--Land surface is approximately 11.7 ft above NGVD.

PERIOD OF RECORD.--October 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.20 ft NGVD, Aug. 28, 1995; lowest, 2.24 ft NGVD, May 23, 1994.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1157	9.27	20	1255	5.88
22	1346	8.75	JUN		
NOV			25	1359	9.01
18	1450	9.36	JUL		
DEC			24	1527	8.40
19	1246	8.27	AUG		
FEB			20	1319	10.95
24	1306	6.81	SEP		
APR			22	1400	9.12
01	1145	6.09			
17	1252	5.68			





WELL NUMBER.--260915081385902. Local Number C 977.

LOCATION.--Lat 26°09'15", long 81°38'48", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.31, T.49 S., R.27 E., Hydrologic Unit 03090204, 32 ft south of U.S. Interstate 75 and 9 mi east of Naples. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 140 ft, cased to 75 ft, open hole 75 to 140 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.94 ft above National Geodetic Vertical Datum of 1929.

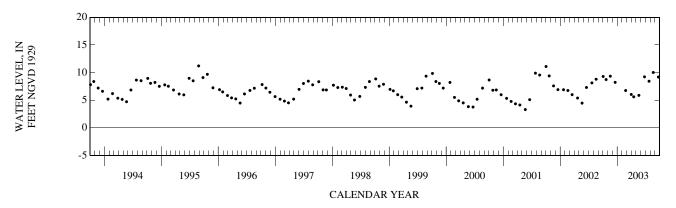
LAND-SURFACE DATUM.--Land surface is approximately 11.3 ft above NGVD.

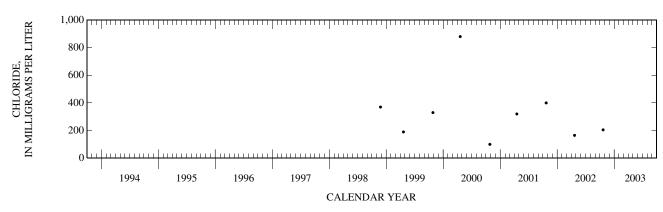
REMARKS.--Well is also used for salinity monitoring. This well is obstructed at a depth of 128 ft making it impossible to collect a sample from the bottom of the well. Samples are collected from a depth of 128 ft. Sampling procedures for this well were reassessed in the 2001 water year. Data collected prior to 2001 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.21 ft NGVD, Aug. 28, 1995; lowest, 3.31 ft NGVD, May 22, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	1158	9.30			20	1256	5.88		
22	1347	8.74	1,500	205	JUN				
NOV					25	1357	9.24		
18	1451	9.35			JUL				
DEC					24	1528	8.44		
19	1248	8.24			AUG				
FEB					20	1324	10.02		
24	1309	6.76			SEP				
APR					22	1402	9.20		
01	1146	6.05							
17	1253	5.62							





WELL NUMBER.--260919081460501. Local Number C 1052.

LOCATION.--Lat 26°09'22", long 81°46'05", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.35, T.49 S., R.25 E., Hydrologic Unit 03090204, 250 ft west and 1,100 ft north of Junction of County Road 31 and State Road 856, 1.5 mi east of Naples Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 10 ft, screened 10 to 25 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.12 ft above National Geodetic Vertical Datum of 1929. From January 1995 to October 2000, top of casing was incorrectly considered to be 8.05 ft above NGVD. Prior to November 1994, top of casing was 10.76 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 8.5 ft above NGVD.

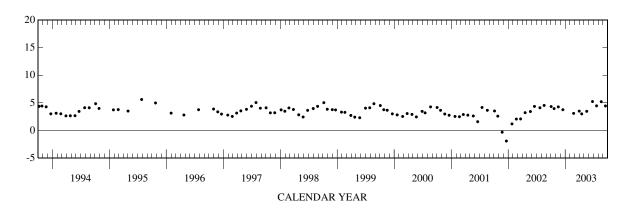
REMARKS.--The figures of water level as elevation, in feet NGVD, from January 1995 to October 2000 are in error. A +0.07 ft correction has been applied to correct water-level data from January 1995 to October 2000. Corrected records are in the files of the U.S. Geological Survay. The well was damaged November 1994, repaired February 1995. See DATUM.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.62 ft NGVD, July 27, 1995 (current datum); lowest, 1.90 ft below NGVD, December 20, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1048	4.34	19	1128	3.48
22	0937	3.97	JUN		
NOV			25	1030	5.25
18	0919	4.28	JUL		
DEC			21	1035	4.47
17	1116	3.77	AUG		
FEB			20	1053	5.22
24	1110	3.11	SEP		
APR			16	1024	4.45
01	1027	3.51			
17	0955	3.01			





WELL NUMBER.--260925081475101. Local Number C 1062.

LOCATION.--Lat 26°09'25", long 81°47'52", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.34, T.49 S., R.25 E., Hydrologic Unit 03090204, 15 ft south of Golf Drive and 100 ft west of U.S. Highway 41, 2.8 mi northwest of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 24 ft, cased to 10 ft, screened 10 to 24 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.97 ft above National Geodetic Vertical Datum of 1929.

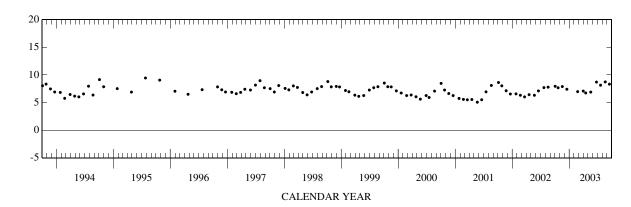
LAND-SURFACE DATUM .-- Land surface is approximately 10.8 ft NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.45 ft NGVD, July 26, 1995; lowest, 4.31 ft NGVD, May 26, 1987.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1118	7.95	19	1209	6.90
22	1007	7.68	JUN		
NOV			25	1114	8.71
18	1001	7.90	JUL		
DEC			21	1104	8.14
17	1154	7.41	AUG		
FEB			20	1136	8.74
24	1152	6.98	SEP		
APR			16	1058	8.33
01	1101	7.08			
17	1029	6.74			





WELL NUMBER.--260941081324201. Local Number C 974.

LOCATION.--Lat 26°09'40", long 81°32'40", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.31, T.49 S., R.28 E., Hydrologic Unit 03090204, 30 ft south of 38th Avenue SE, 100 ft west of Everglades Boulevard, 0.5 mi north of U.S. Interstate 75 and 15.75 mi east of Naples. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 460 ft, cased to 400 ft, open hole 400 to 460 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

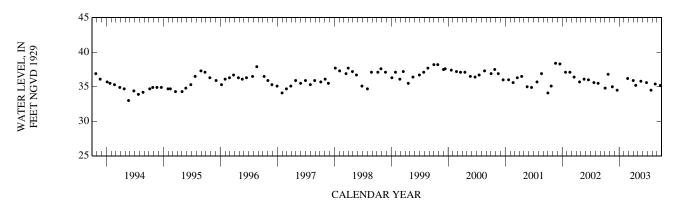
DATUM.--Measuring point: Top of casing, 10.10 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 10.0 ft above NGVD.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.7 ft NGVD, Jan. 28, 1991; lowest, 29.1 ft NGVD, June 17, 1991.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	0910	34.8	20	0955	35.8
22	1049	36.8	JUN		
NOV			25	1106	35.6
18	1107	35.0	JUL		
DEC			24	1149	34.5
19	0942	34.5	AUG		
FEB			20	1022	35.4
24	0935	36.2	SEP		
APR			22	1106	35.2
01	0848	35.9			
17	1002	35.2			



WELL NUMBER.--261000080520001. Local Number C 54.

LOCATION.--Lat 26°10'21", long 80°53'00", in SW  ${}^{1}\!\!/_{4}$  SE  ${}^{1}\!\!/_{4}$  sec.36, T.49 S., R.34 E., Hydrologic Unit 03090204, on the south side of U.S. Interstate 75, 0.3 mi west of Broward/Collier Line, 2.4 mi west of pump station 140 and 6.0 mi south of Big Cypress Indian Reservation.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 8.5 ft, cased to 7.2 ft, gravel-packed 7.2 to 8.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of flange, 15.70 ft above National Geodetic Vertical Datum of 1929. Prior to June 2002, measuring point was 15.74 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 12.8 ft above NGVD.

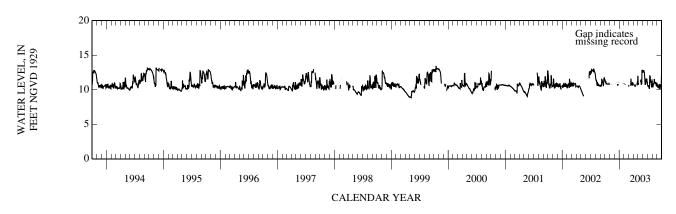
REMARKS.--Station was damaged on May 21, 2002, and was reconstructed on June 21, 2002.

PERIOD OF RECORD.--February 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.81 ft NGVD, Oct. 9, 1953; lowest, 7.81 ft NGVD, June 13, 1962.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.10	10.81				10.69		10.86	12.79	10.45	10.36	10.45
10	10.95		10.95		10.78		10.66		12.63	10.43	10.87	10.33
15	10.86					10.58	10.67		11.19	11.63	11.39	10.70
20			10.69			10.93		11.47	10.82	11.38	10.97	10.11
25			10.64			10.75	10.69	10.89	11.23	10.89	10.93	10.54
EOM			11.06			10.65	11.86	12.55	11.08	11.39	10.87	12.33
MAX									12.79	12.04	11.55	12.33



WELL NUMBER.--261018081484101. Local Number C 526.

 $LOCATION.--Lat\ 26^{\circ}10'18'', long\ 81^{\circ}48'42'', in\ NW\ {}^{1}\!\!{}^{\prime}_{4}\ SW\ {}^{1}\!\!{}^{\prime}_{4}\ SE\ {}^{1}\!\!{}^{\prime}_{4}\ sec. 28, T.49\ S., R.25\ E., Hydrologic\ Unit\ 03090204, at\ the\ southeast\ corner\ of\ Gulf\ Shore\ Boulevard\ and\ Mooring\ Line\ Drive,\ 1.3\ mi\ northwest\ of\ the\ Naples\ Post\ Office.$ 

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 68 ft, cased to 63 ft, open hole 63 to 68 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.71 ft above National Geodetic Vertical Datum of 1929.

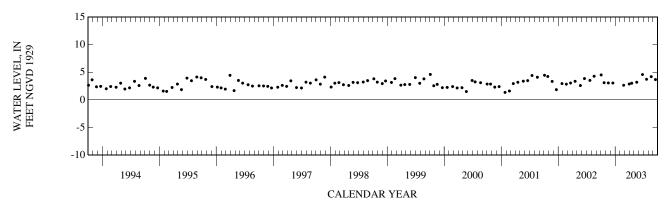
LAND-SURFACE DATUM .-- Land surface is approximately 6.2 ft above NGVD.

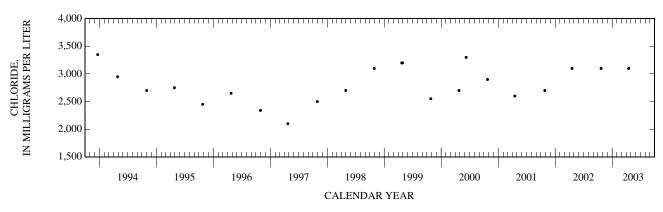
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.61 ft NGVD, Oct. 4, 1999; lowest, 0.47 ft below NGVD, May 7, 1974.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
03	1126	4.52			19	1216	3.20		
22	1033	3.11	10,700	3,100	JUN				
NOV					25	1123	4.59		
18	1011	3.07			JUL				
DEC					21	1111	3.73		
17	1201	3.05			AUG				
FEB					20	1143	4.21		
24	1200	2.65			SEP				
APR					16	1104	3.68		
01	1108	2.88							
17	1055	3.02	10,800	3,100					





WELL NUMBER.--261023081463702. Local Number C 1100.

LOCATION.--Lat 26°10'23", long 81°46'37", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.26, T.49 S., R.25 E., Hydrologic Unit 03090204, 7.5 ft south of Golden Gate Parkway, (County Road 886), and 0.75 mi west of County Road 31, 3.2 mi north of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 16 ft, screened 11 to 16 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. PVC casing, 6.33 ft above National Geodetic Vertical Datum of 1929.

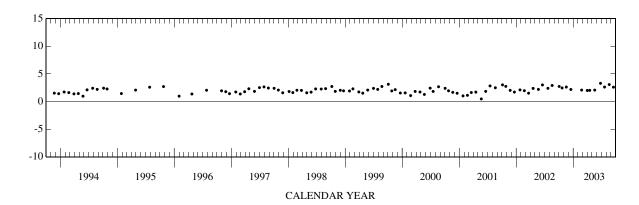
LAND-SURFACE DATUM .-- Land surface is approximately 6.8 ft above NGVD.

PERIOD OF RECORD.--September 1993 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.30 ft NGVD, June 25, 2003; lowest, 0.48 ft NGVD, May 22, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1021	2.74	19	1108	2.08
22	0841	2.46	JUN		
NOV			25	0939	3.30
18	0843	2.63	JUL		
DEC			21	0951	2.63
17	1028	2.19	AUG		
FEB			20	1009	3.08
24	0946	2.08	SEP		
APR			16	0939	2.61
01	1005	2.01			
17	0919	2.03			





MAX

8.23

#### COLLIER COUNTY—Continued

WELL NUMBER .-- 261124081470101. Local Number C 392.

LOCATION.--Lat 26°11'24", long 81°47'29", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.22, T.49 S., R.25 E., Hydrologic Unit 03090204, 30 ft east of County Road 851, 1.4 mi south of County Road 896, and 4.7 mi northeast of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 30 ft, casing 28 ft, open hole 28 to 30 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 10.10 ft above National Geodetic Vertical Datum of 1929. Prior to October 2000, measuring point was 9.98 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 9.7 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Station was reconstructed in October 2000. See DATUM.

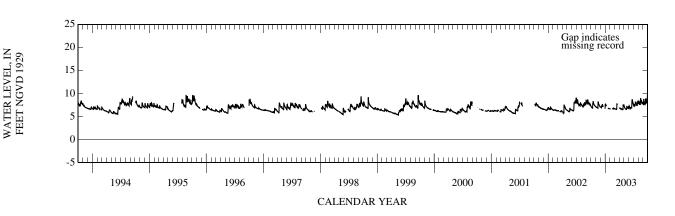
PERIOD OF RECORD .-- January 1965 to current year.

8.22

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.09 ft NGVD, Sept. 29, 2003; lowest, 3.00 ft NGVD, May 24, 1974.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT DAY NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 6.98 6.98 6.99 7.52 7.06 7.54 6.66 6.75 7.21 8.01 8.78 10 6.83 6.90 7.33 ---6.60 6.73 6.67 6.67 7.42 8.11 7.80 15 8.23 6.81 7.49 6.52 6.56 6.55 6.87 7.85 7.99 7.71 20 7.68 7.76 7.12 6.76 6.62 7.49 6.57 7.19 6.95 7.60 8.55 8.18 25 8.51 7.43 7.33 6.69 6.77 6.52 6.88 7.38 7.69 8.27 EOM 7.18 7.06 6.67 6.66 6.70 7.51 6.85 7.59 7.99 7.85



7.52

8.70

8.26

8.95

WELL NUMBER .-- 261124081470301. Local Number C 391.

LOCATION.--Lat 26°11'24", long 81°47'32", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 22, T.49 S., R.25 E., Hydrologic Unit 03090204, 10 ft east of North 14th Street, 1.4 mi south of County Road 896, and 4.7 mi northeast of Collier County Government Center. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 75 ft, cased to 70 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 11.16 ft above National Geodetic Vertical Datum of 1929. Prior to April 11, 1997, top of base was 11.13 ft above NGVD. See REMARKS.

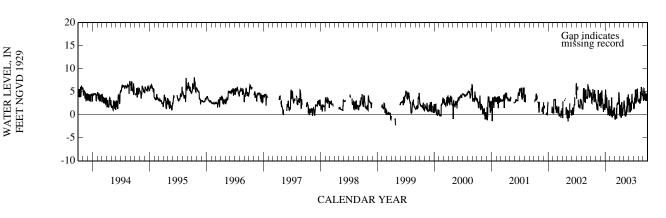
LAND-SURFACE DATUM.--Land surface is approximately 9.7 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Station reconstructed April 1997.

PERIOD OF RECORD .-- January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.70 ft NGVD, May 24, 1991; lowest, 6.21 ft below NGVD, May 5, 1975.

					YEAR OCT	ABOVE NO OBER 2002 MAXIMUM	TO SEPTE	FEET MBER 2003	i			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.55	2.56	1.49	4.29	0.16	-0.94	-0.03	2.06	3.40	1.48	2.78	5.10
10	3.65	1.21	5.20	3.39	-0.32	-0.68	2.00	-0.33	1.23	3.39	3.17	4.07
15	4.86	1.04	3.33	1.23	0.08	-0.85	-0.34	0.99	2.60	3.81	4.98	3.16
20	3.91	3.05	1.42	0.13	0.83	2.28	0.74	1.80	2.83	3.48	5.93	4.30
25	5.34	2.68	1.12	3.09	0.69	2.46	0.73	2.12	2.94	4.56	5.28	3.52
EOM	2.87	2.46	2.12	1.80	1.51	4.72	2.57	2.12	2.51	2.98	4.24	5.85
MAX	5.58	5.37	5.21	5.45	3.76	4.76	3.57	4.31	4.41	5.57	5.93	5.85



WELL NUMBER.--261127081461001. Local Number C 1054.

LOCATION.--Lat 26°11'41", long 81°46'10", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.23, T.49 S., R.25 E., Hydrologic Unit 03090204, 500 ft west of County Road 31 and 10 ft south of Bailey Lane and 1.4 mi south of Pine Ridge Road (County Road 896), 4.4 mi north of Collier County Government Center.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 10 ft, screened 10 to 25 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.03 ft above National Geodetic Vertical Datum of 1929.

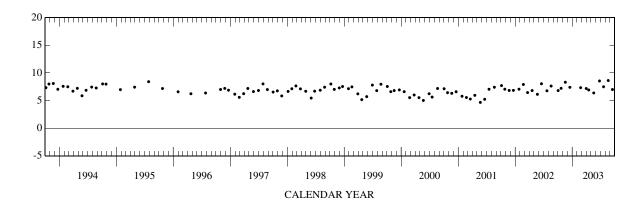
LAND-SURFACE DATUM .-- Land surface is approximately 9.3 ft above NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.15 ft NGVD, June 28, 1989; lowest, 4.67 ft NGVD, May 22, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1014	6.81	19	1059	6.38
22	0829	7.22	JUN		
NOV			25	0932	8.55
18	0835	8.32	JUL		
DEC			21	0943	7.50
17	1020	7.40	AUG		
FEB			20	1001	8.62
24	0933	7.33	SEP		
APR			16	0931	7.00
01	0958	7.18			
17	0909	6.91			





WELL NUMBER.--261156081475801. Local Number C 516.

LOCATION.--Lat 26°11'56", long 81°47'58", in SW ½ SW ½ sec.15, T.49 S., R.25 E., Hydrologic Unit 03090204, 18 ft south of Morningside Drive, 300 ft east of U.S. Highway 41 in Naples.

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 63 ft, cased to 46 ft, open hole 46 to 63 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.41 ft above National Geodetic Vertical Datum of 1929. From October 1992 to September 2000, top of casing was incorrectly considered to be 10.38 ft above NGVD. From October 1988 to September 1992, top of casing was considered to be 8.78 ft above NGVD. Prior to September 1988, top of casing was considered to be 11.93 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 2000 are considered to be in error. See REMARKS.

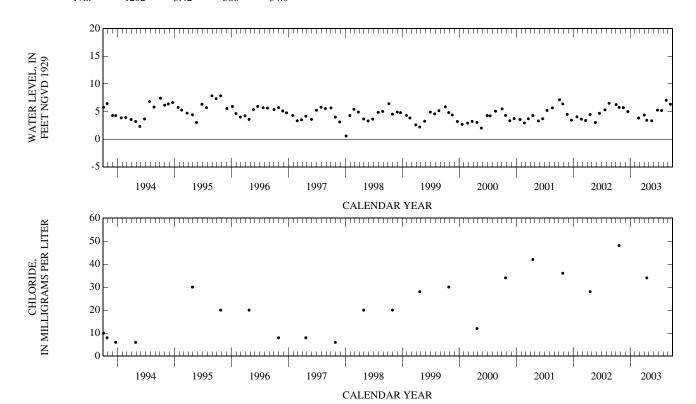
LAND-SURFACE DATUM.--Land surface is approximately 10.7 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. The figures of water level as elevation, in feet NGVD, published prior to October 2000 are considered to be in error, based on a re-survey of the well in December 2001. A correction of +0.03 ft has been applied to water-level data from October 1979 to September 2000. Corrected records are in the files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1984 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- October 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.84 ft NGVD, Aug. 30, Oct. 25, 1995 (current datum); lowest, 3.88 ft below NGVD, May 7, 1974 (current datum).

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	1140	6.26			19	1230	3.33		
22	1125	5.74	648	48.0	JUN				
NOV					25	1138	5.27		
18	1028	5.71			JUL				
DEC					21	1125	5.18		
17	1218	4.99			AUG				
FEB					20	1200	7.06		
24	1218	3.83			SEP				
APR					16	1122	6.33		
01	1123	4.37							
17	1202	3.42	586	34.0					



WELL NUMBER.--261200081204901. Local Number C 986.

LOCATION.--Lat 26°12'03", long 81°20'48", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.18, T.49 S., R.30 E., Hydrologic Unit 03090204, 30 ft south of Fakahatchee Conservancy Club Road, 71 ft west of State Road 29, 3.4 mi north of U.S. Interstate 75 and 15.5 mi south of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 28 ft, open hole 28 to 40 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 20.39 ft above National Geodetic Vertical Datum of 1929.

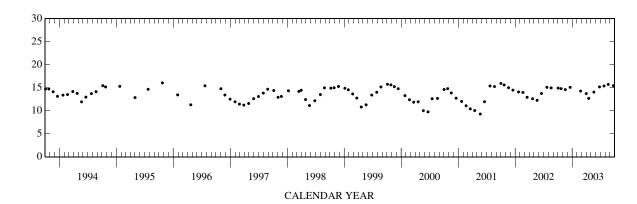
LAND-SURFACE DATUM .-- Land surface is approximately 16.4 ft above NGVD.

PERIOD OF RECORD.--October 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.06 ft NGVD, Oct. 23, 1995; lowest, 8.16 ft NGVD, June 26, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1134	14.92	20	1230	14.05
22	1320	14.81	JUN		
NOV			25	1323	15.19
18	1427	14.60	JUL		
DEC			24	1456	15.39
19	1219	15.09	AUG		
FEB			20	1245	15.72
24	1244	14.28	SEP		
APR			22	1328	15.46
01	1118	13.73			
17	1233	12.70			





WELL NUMBER.--261200081483001. Local Number C 528.

LOCATION.--Lat 26°11'59", long 81°48'30", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 16, T.49 S., R.25 E., Hydrologic Unit 03090204, 15 ft east and 15 ft north of the intersection of Crayton Road and Turtle Hatch Road and 2.25 mi northwest of the Naples Post Office.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 80 ft, cased to 63 ft, open hole 63 to 80 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.39 ft above National Geodetic Vertical Datum of 1929.

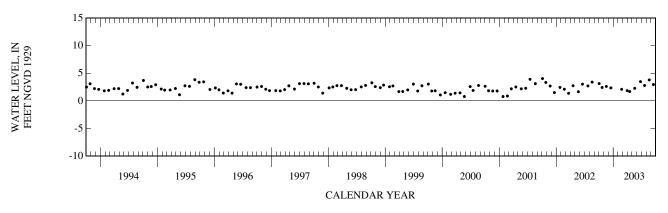
LAND-SURFACE DATUM .-- Land surface is approximately 4.9 ft above NGVD.

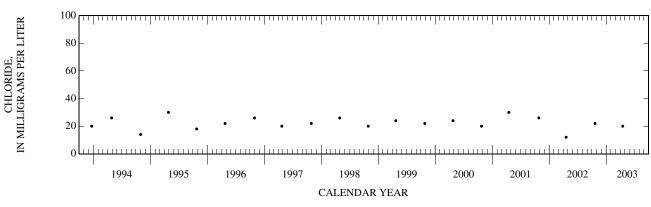
REMARKS.--Well is also used for salinity monitoring. The well was originally open to the aquifer from 63 to 80 ft. The open interval collapsed or became obstructed at a depth of 66 ft. During the 2001 water year chloride samples were collected using a pump. The exact depth from which the chloride-containing water emanated could not be further delineated.

PERIOD OF RECORD.--September 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, well flowing above 4.39 ft NGVD, July 29, 1985; lowest, 0.26 ft NGVD, June 12, 1989.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	1133	3.14			19	1224	2.28		
22	1100	2.43	423	22.0	JUN				
NOV					25	1131	3.49		
18	1020	2.62			JUL				
DEC					21	1119	2.79		
17	1210	2.36			AUG				
FEB					20	1153	3.80		
24	1211	2.10			SEP				
APR					16	1113	2.96		
01	1118	1.86							
17	1113	1.69	420	20.0					





WELL NUMBER.--261211081441301. Local Number C 1055.

LOCATION.--Lat 26°09'12", long 81°41'09", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.18, T.49 S., R.26 E., Hydrologic Unit 03090204, 200 ft west of U.S. Interstate 75 and 50 ft south of Pine Ridge Road (County Road 896), 6 mi northeast of Collier County Government Center.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 10 ft, screened 10 to 25 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

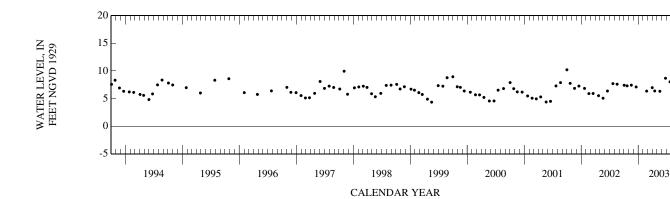
DATUM.--Measuring point: Top of casing, 13.37 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 10.9 ft above NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.21 ft NGVD, Oct. 1, 2001; lowest, 4.35 ft NGVD, May 18, 1999.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	0805	7.41	20	0810	6.32
22	0921	7.30	JUN		
NOV			25	0840	8.68
18	1008	7.43	JUL		
DEC			24	1017	8.03
19	0837	7.10	AUG		
FEB			20	0902	9.13
24	0808	6.35	SEP		
APR			22	0926	8.11
01	0738	6.97			
17	0822	6.38			



WELL NUMBER.--261243081480301. Local Number C 490.

LOCATION.--Lat 26°13'14", long 81°48'01", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.10, T.49 S., R.25 E., Hydrologic Unit 03090204, 1.5 ft west of Trail Boulevard, 10 ft north of Center Street, 100 ft east of U.S. Highway 41 and northwest of the Naples Post Office. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 71 ft, cased to 70 ft, open hole 70 to 71 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 16.55 ft above National Geodetic Vertical Datum of 1929.

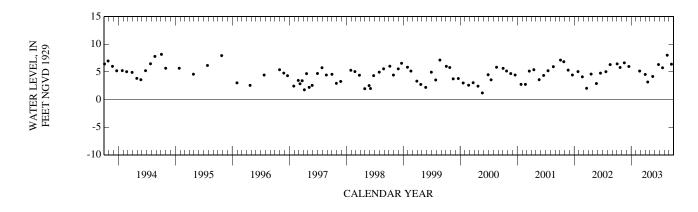
LAND-SURFACE DATUM .-- Land surface is approximately 16.6 ft above NGVD.

REMARKS.--Well was also used for salinity monitoring from October 1975 to April 1999. Chloride and conductivity profiles are available in the files of the U.S. Geological Survey. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1975 to April 1982 (semiannual), October 1982 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.18 ft NGVD, Oct. 4, 1994; lowest, 0.32 ft below NGVD, May 13, 1976.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1338	6.46	19	1505	4.18
22	1422	5.81	JUN		
NOV			25	1341	6.34
18	1206	6.65	JUL		
DEC			21	1351	5.75
17	1353	5.99	AUG		
FEB			20	1442	8.03
24	1404	5.16	SEP		
APR			16	1228	6.40
01	1347	4.55			
17	1357	3.18			



WATER LEVEL, IN

WELL NUMBER.--261302081473901. Local Number C 489.

LOCATION.--Lat 26°13'25", long 81°47'32", in NE  $^1\!\!/_4$  NE  $^1\!\!/_4$  NE  $^1\!\!/_4$  sec. 10, T.49 S., R.25 E., Hydrologic Unit 03090204, 15 ft west of Ridge Drive, 300 ft south of North Street in Naples. (Corrected).

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 83 ft, cased to 63 ft, open hole 63 to 83 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

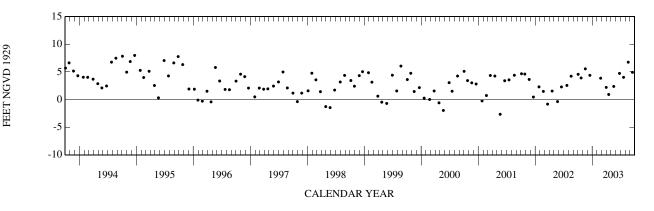
DATUM.--Measuring point: Top of casing, 18.66 ft above National Geodetic Vertical Datum of 1929. Prior to December 1986, measuring point was top of base, 18.70 ft above NGVD.

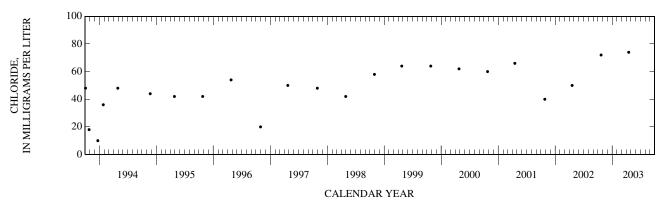
LAND-SURFACE DATUM.--Land surface is approximately 15.7 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. PERIOD OF RECORD.--May 1970 to November 1986 (daily), December 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.20 ft NGVD, Sept. 24, 1970; lowest, 4.47 ft below NGVD, Apr. 30, 1976.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	1331	4.57			19	1500	2.38		
22	1405	3.91	587	72.0	JUN				
NOV					25	1333	4.74		
18	1200	5.56			JUL				
DEC					21	1339	4.03		
17	1347	4.39			AUG				
FEB					20	1436	6.76		
24	1357	3.87			SEP				
APR					16	1223	4.93		
01	1342	2.20							
17	1349	0.92	598	74.0					





WELL NUMBER.--261311081480101. Local Number C 1061.

LOCATION.--Lat 26°13'11", long 81°48'01", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.10, T.49 S., R.25 E., Hydrologic Unit 03090204, 150 ft south of Center Street and 200 ft east of U.S. Highway 41, 6.6 mi northwest of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 10 ft, screened 10 to 25 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.78 ft above National Geodetic Vertical Datum of 1929.

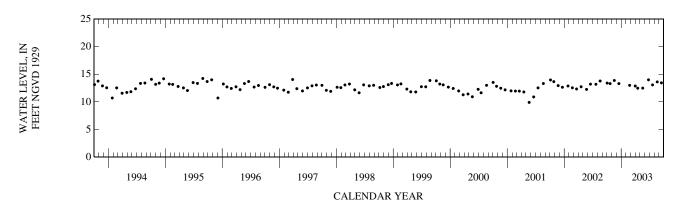
LAND-SURFACE DATUM.--Land surface is approximately 14.9 ft above NGVD.

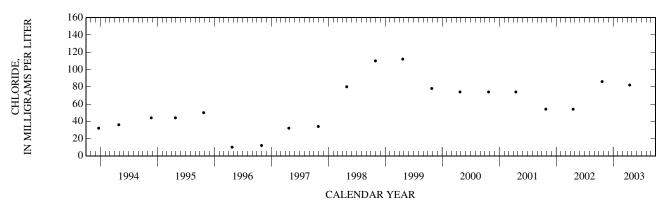
REMARKS .-- Well is also used for salinity monitoring.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.95 ft NGVD, July 23, 1992; lowest, 9.91 ft NGVD, May 21, 2001.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
03	1326	13.41			19	1453	12.50		
22	1343	13.31	478	86.0	JUN				
NOV					25	1328	14.00		
18	1153	13.88			JUL				
DEC					21	1329	13.08		
17	1341	13.31			AUG				
FEB					20	1430	13.62		
24	1350	13.00			SEP				
APR					16	1218	13.45		
01	1336	12.88							
17	1338	12.48	642	82.0					





WELL NUMBER.--261343081384801. Local Number C 980.

LOCATION.--Lat 26°13'46", long 81°38'44", landnet not available, Hydrologic Unit 03090204, at southwest corner of Golden Gate Parkway and 19th Street SW, 2.5 mi east of County Road 951 and 10.5 mi northeast of Naples Post Office. (Corrected). See REMARKS.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 30 ft, cased to 15 ft, open hole 15 to 30 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.27 ft above National Geodetic Vertical Datum of 1929. Prior to May 31, 2001, top of casing was 17.77 ft above NGVD. See REMARKS.

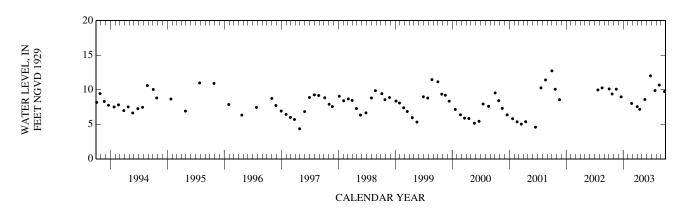
LAND-SURFACE DATUM.--Land surface is approximately 15.0 ft above NGVD.

REMARKS.--Recent U.S. Geological Survey topographic maps do not provide landnet information for this area because it cannot be determined accurately. See LOCATION. Casing cut for new road construction in May 2001. See DATUM.

PERIOD OF RECORD.--October 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.74 ft NGVD, Oct. 1, 2001; lowest, 4.35 ft NGVD, Apr. 28, 1997.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	0822	10.12	20	0831	8.59
22	0943	9.40	JUN		
NOV			25	0857	12.02
18	1023	10.08	JUL		
DEC			24	1040	9.89
19	0852	8.97	AUG		
FEB			20	0922	10.67
24	0823	8.02	SEP		
APR			22	0945	9.74
01	0752	7.55			
17	0853	7.17			



WELL NUMBER.--261343081384802. Local Number C 956.

LOCATION.--Lat 26°13'46", long 81°38'44", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.7, T.49 S., R.27 E., Hydrologic Unit 03090204, at southwest corner of Golden Gate Parkway and 19th Street SW, 2.5 mi east of County Road 951 and 10.5 mi northeast of Naples Post Office.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 260 ft, cased to 60 ft, open hole 60 to 260 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.14 ft above National Geodetic Vertical Datum of 1929. Prior to May 30, 2001, measuring point was 17.42 ft above NGVD.

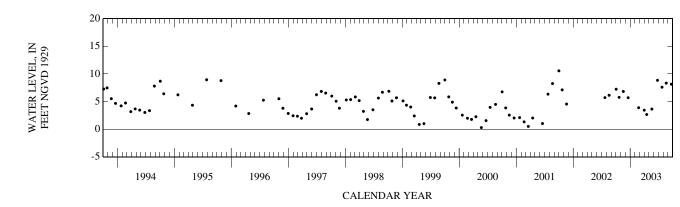
LAND-SURFACE DATUM.--Land surface is approximately 14.9 ft above NGVD.

REMARKS.--In the 2001 water year, the well was reconstructed because of road construction. The well was damaged again in October 2003 and discontinued.

PERIOD OF RECORD.--October 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to September 2003. Discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.22 ft NGVD, Aug. 29, 1985; lowest, 0.29 ft NGVD, May 22, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	0824	7.24	20	0825	3.64
22	0924	5.76	JUN		
NOV			25	0859	8.85
18	1025	6.83	JUL		
DEC			24	1046	7.60
19	0857	5.70	AUG		
FEB			20	0928	8.34
24	0825	3.89	SEP		
APR			22	0950	8.15
01	0757	3.44			
17	0856	2.66			



WELL NUMBER.--261347081351201. Local Number C 953.

LOCATION.--Lat 26°13'48", long 81°35'13", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.11, T.49 S., R.27 E., Hydrologic Unit 03090204, at southwest corner of 10th Street SE and Golden Gate Boulevard, 2.3 mi west of Everglades Boulevard and 12.9 mi northeast of the Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 12 ft, open hole 12 to 40 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of recorder shelf, 16.34 ft above National Geodetic Vertical Datum of 1929. Prior to October 1995, measuring point was 16.69 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 12.4 ft above NGVD.

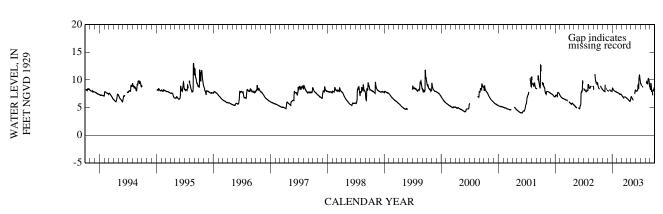
REMARKS.--Well is also used for salinity monitoring. Station damaged, repaired January 1995. See DATUM.

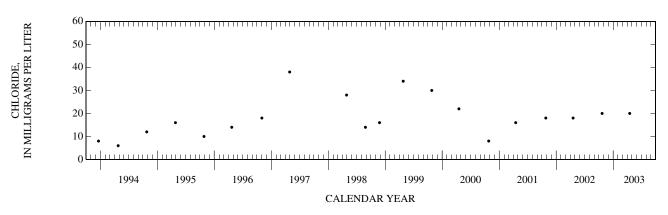
PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.05 ft NGVD, Aug. 27, 1995; lowest, 4.03 ft NGVD, June 2, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.70	8.09	8.03	8.48	7.70	7.15	6.67	6.96	7.98	9.29		9.18
10	8.41	7.97		8.18	7.65	6.94	6.57	6.63	8.04		9.66	8.39
15		7.89	8.24	8.02	7.50	6.75	6.40	6.40	9.00	8.76	9.40	7.99
20	8.80		8.08	7.93	7.40	7.01	6.26		8.41		10.25	
25	8.54	8.42	8.02	7.84	7.43	6.96	6.10	7.65	10.89		9.87	7.93
EOM	8.28	8.16	7.90	7.77	7.36	6.87	6.64	8.11	9.77		8.70	
MAX				8.52	7.75		6.83		10.89			





WELL NUMBER.--261347081351202. Local Number C 951.

LOCATION.--Lat 26°13'48", long 81°35'13", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.11, T.49 S., R.27 E., Hydrologic Unit 03090204, at southwest corner of 10th Street SE and Golden Gate Boulevard, 2.3 mi west of Everglades Boulevard and 12.9 mi northeast of the Collier County Government Center. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 170 ft, cased to 120 ft, open hole 120 to 170 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of recorder shelf, 16.27 ft above National Geodetic Vertical Datum of 1929.

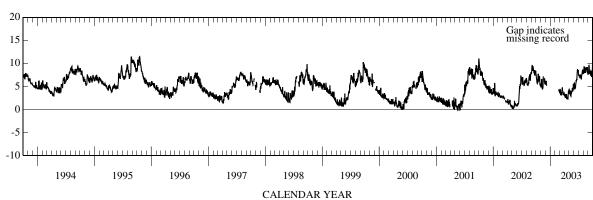
LAND-SURFACE DATUM.--Land surface is approximately 12.4 ft above NGVD.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 12.21 ft NGVD, Sept. 6, 1985; lowest, 0.25 ft below NGVD, May 20, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.91	4.95	5.40			4.46	3.26	3.44	5.74	7.19	9.06	9.02
10	5.64	4.89				3.12	3.09	3.75	4.51	7.06	8.52	8.17
15	7.53	4.57				3.21	2.98	3.37	5.71	7.04	8.57	8.35
20	6.22					4.71	2.44	3.83	6.36	6.76	9.02	
25	7.15	6.13			4.19	3.54	2.14	4.24	8.79	7.95	9.17	7.37
EOM	5.32	6.12			3.97	3.63	3.65	4.86	8.44	7.78	7.81	10.52
MAX	7.78						4.10	5.41	8.79	8.44	9.23	





WELL NUMBER.--261347081351701. Local Number C 948.

 $LOCATION.-Lat\ 26^{\circ}13'47'', long\ 81^{\circ}35'17'', in\ NW\ {}^{1}\!\!{}^{\prime}_{4}\ NW\ {}^{1}\!\!{}^{\prime}_{4}\ sec. 11,\ T.49\ S.,\ R.27\ E.,\ Hydrologic\ Unit\ 03090204,\ 30\ ft\ east\ of\ canal,\ 500\ ft\ west\ of\ 10th\ Street\ SE,\ 100\ ft\ south\ of\ Golden\ Gate\ Boulevard,\ 12.9\ mi\ northwest\ of\ Collier\ County\ Government\ Center.\ (Corrected).$ 

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 420 ft, cased to 370 ft, open hole 370 to 420 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

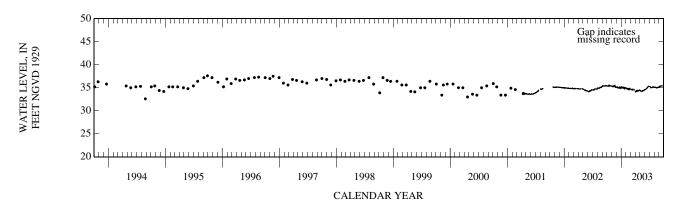
DATUM.--Measuring point: Top of 4 in. plug, 15.20 ft above National Geodetic Vertical Datum of 1929. Prior to May 2001, measuring point was top of gate valve, 12.35 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 12.4 ft above NGVD.

PERIOD OF RECORD.--October 1984 to April 2001 (Monthly), May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.6 ft NGVD, Nov. 25, 1987, Jan. 28, 1988 and Sept. 28, 1995; lowest, 32.6 ft NGVD, Aug. 26, 1994.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15	35.36 35.37 35.61	35.33 35.32 35.28	35.14 35.12 34.94	35.06 35.11 34.96	34.83 34.79 34.82	34.66 34.59 34.56	34.28 34.16 34.36	34.34 34.27 34.30	34.62 34.74 34.98	35.25 35.07 35.04	35.08 35.08 34.97	35.33 35.29 35.39
20 25 EOM	35.43 35.41 35.38	35.47 35.24 35.14	35.00 35.12 35.14	34.92 34.90 34.97	34.68 34.73 34.73	34.58 34.49 34.22	34.30 34.41 34.45	34.29 34.42 34.56	35.03 35.34 35.25	35.07 35.15 35.05	35.01 35.10 35.12	35.38 35.56
MAX	35.61			35.18	34.91		34.47	34.56	35.35	35.28	35.13	



WELL NUMBER.--261405081465501. Local Number C 460.

LOCATION.--Lat 26°14'05", long 81°47'06", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.2, T.49 S., R.25 E., Hydrologic Unit 03090204, at 6855 Satin Leaf Road South, 75 ft north of Orange Blossom Drive, 0.40 mi east of Goodlette-Frank Road, 0.50 mi east of U.S. Highway 41 at Naples. (Corrected).

AQUIFER.--Lower Tamiami aquifer of Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 66 ft, cased to 64 ft, open hole 64 to 66 ft.

INSTRUMENTATION.--Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of casing, 13.46 ft above National Geodetic Vertical Datum of 1929. From May 1989 to September 1990, top of casing was 13.44 ft above NGVD. Prior to May 1989, top of casing was 12.39 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 10.4 ft above NGVD.

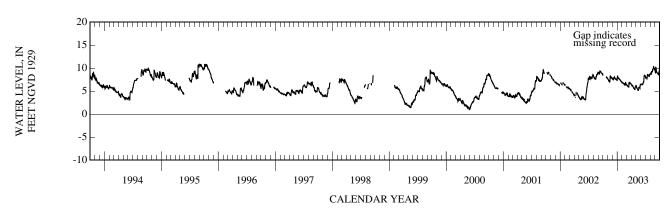
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey. The figures of water levels as elevation, in ft NGVD, since October 1990 may be in error by up to -0.02 ft. Because the -0.02 ft correction that would be applied is close to the limit of accuracy for the recording equipment, no records have been corrected. See DATUM.

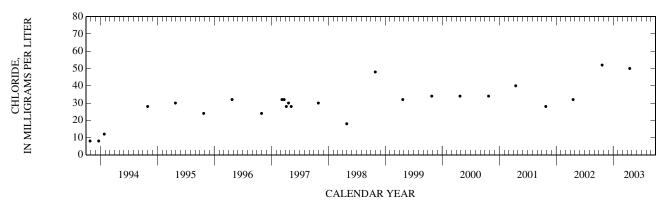
PERIOD OF RECORD.--August 1973 to April 1987 (semiannual), October 1982 to September 1984 (monthly), September 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.83 ft NGVD, Sept. 2, 1995; lowest, 1.32 ft below NGVD, May 1, 1986.

# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES JAN FEB MAR APR MAY JUN

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		7.46	7.61	8.01	6.81	6.23	6.25	5.97	6.46	7.97	8.80	10.18
10		7.22	7.87	7.79	6.75	6.02	6.25	5.51	6.48	7.76	9.23	9.30
15		7.03	7.95	7.57	6.42	5.93	5.74	5.15	6.57	8.56	9.30	8.89
20		8.09	7.73	7.39	6.46	6.88	5.56	5.84	6.91	8.41	9.98	8.77
25	8.16	7.90	7.57	7.20	6.64	6.71	5.35	5.78	8.45	8.15	9.92	8.65
EOM	7.75	7.78	7.20	6.98	6.51	6.60	5.98	6.48	8.27	8.58	9.50	10.71
MAX		8.28	8.06	8.22	6.89	6.92	6.42	6.50	8.45	8.64	10.30	10.76





WELL NUMBER.--261435081472701. Local Number C 1094.

LOCATION.--Lat 26°14'38", long 81°47'26", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.34, T.48 S., R.25 E., Hydrologic Unit 03090204, 15 ft east of Hickory Road, 870 ft south of Carica Road in Naples.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 21 ft, cased to 19 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. PVC casing, 10.82 ft above National Geodetic Vertical Datum of 1929. Prior to April 2003, top of casing was 12.56 ft above NGVD. See REMARKS.

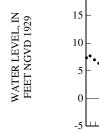
LAND-SURFACE DATUM.--Land surface is approximately 10.4 ft above NGVD.

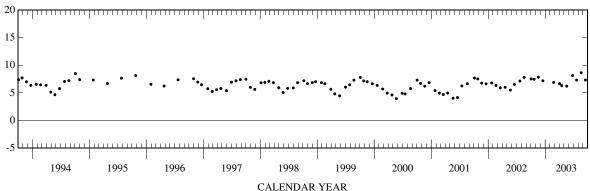
REMARKS.--Well was found damaged, repaired April 2003. See DATUM.

PERIOD OF RECORD.--September 1993 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.65 ft NGVD, Aug. 20, 2003; lowest, 3.96 ft NGVD, May 22, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1317	7.54	19	1443	6.23
22	1330	7.48	JUN		
NOV			25	1251	8.14
18	1135	7.84	JUL		
DEC			21	1312	7.32
17	1330	7.18	AUG		
FEB			20	1404	8.65
24	1336	6.91	SEP		
APR			16	1211	7.33
03	1259	6.67			
17	1326	6.31			





WELL NUMBER.--261438081481001. Local Number C 575.

LOCATION.--Lat 26°13'17", long 81°48'04", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.9, T.49 S., R.25 E., Hydrologic Unit 03090204, 112 ft west of U.S. Highway 41, 0.75 mi north of Pine Ridge Road and 7 mi north of Naples. (Corrected).

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 652 ft, cased to 352 ft, open hole 352 to 652 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 4 in. PVC elbow, 17.51 ft above National Geodetic Vertical Datum of 1929. From March 16, 1987 to April 2003, measuring point was top of 3 in. by 1.5 in. reducer pipe, 15.52 ft above NGVD. Prior to March 16, 1987, measuring point was 15.74 ft above NGVD. See REMARKS.

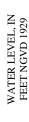
LAND-SURFACE DATUM.--Land surface is approximately 15.5 ft above NGVD.

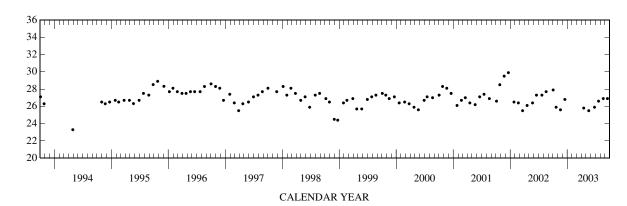
REMARKS.--The well was reconstructed after being damaged: March 1987, April 2003. See DATUM. Records of water levels prior to October 1981 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--March 1979 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.2 ft NGVD, Sept. 27, 1982; lowest, 23.3 ft NGVD, Apr. 29, 1994.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			JUN		
03	1342	27.9	25	1348	25.9
22	1430	25.9	JUL		
NOV			21	1356	26.6
19	1120	25.6	AUG		
DEC			20	1448	26.9
17	1357	26.8	SEP		
APR			16	1238	26.9
17	1408	25.8			
MAY					
19	1510	25.5			





WELL NUMBER.--261444081284901. Local Number C 988.

LOCATION.--Lat 26°14'47", long 81°28'49", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 2, T.49 S., R.28 E., Hydrologic Unit 03090204, 100 ft west of farm road, 3.6 mi south of intersection of County Road 858 and Oil Grade Road and 12.7 mi south of Immokalee.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 160 ft, cased to 95 ft, open hole 95 to 160 ft.

INSTRUMENTATION .-- Electronic data logger.

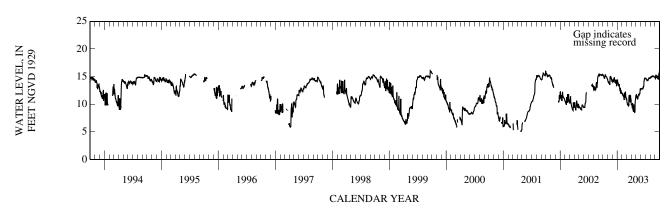
DATUM.--Measuring point: Top of recorder shelf, 20.41 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 15.7 ft above NGVD.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.16 ft NGVD, Sept. 30, 2003; lowest, 3.87 ft NGVD, Apr. 3, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	15.13 14.78 15.28 15.09 14.93 14.54	14.08 13.76 13.49 14.87 14.64 14.02	14.04 14.59 14.23 14.34 14.46 13.60	13.84 13.41 13.14 12.81 12.41 12.05	11.66 11.53 10.76 11.33 11.25 11.08	10.31 10.12 10.10 10.76 10.69 10.90	9.86 10.09 8.64 8.98 8.60 11.42	11.18 11.34 11.45 11.84 11.90 12.68	12.78 12.84 12.85 13.16 14.59 14.69	14.66 14.34 14.24 14.59 14.74 14.71	14.95 15.02 15.12 15.08 15.05 14.90	15.23 14.83 15.08 14.75 15.49 16.16
MAX	15.36	14.99	14.80	14.47	12.30	11.71	11.42	12.78	14.77	14.78	15.13	16.16



WELL NUMBER.--261508081484902. Local Number C 999.

 $LOCATION.--Lat~26^{\circ}15'09", long~81^{\circ}48'52", in~SW~^{1}\!\!/_{4}~NW~^{1}\!\!/_{4}~sec.33, T.48~S., R.25~E., Hydrologic~Unit~03090204, 30~ft~north~of~Vanderbilt~Beach~Road,~0.85~mi~west~of~U.S.~Highway~41~and~6.5~mi~north~of~Naples.$ 

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 23 ft, cased to 13 ft, screened 13 to 23 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.43 ft above National Geodetic Vertical Datum of 1929. From September 1998 to August 2002, top of casing was 8.00 ft above NGVD. Prior to August 1998, top of casing was 10.70 ft above NGVD. See REMARKS.

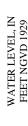
LAND-SURFACE DATUM.--Land surface is approximately 8.7 ft above NGVD.

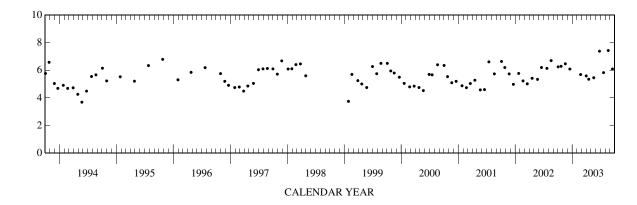
REMARKS.--Well also used for salinity monitoring, 1985 to 1993. Well damaged and repaired in September 1998, September 2002. See DATUM.

PERIOD OF RECORD.--April 1985 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.00 ft NGVD, Aug. 19, 1992; lowest, 1.56 ft NGVD, July 28, 1986.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1353	6.25	19	1520	5.46
22	1440	6.29	JUN		
NOV			25	1510	7.38
18	1222	6.47	JUL		
DEC			21	1411	5.83
17	1415	6.09	AUG		
FEB			20	1500	7.43
24	1451	5.69	SEP		
APR			16	1334	6.09
01	1403	5.59			
17	1421	5.35			





WELL NUMBER.--261530081412001. Local Number C 997.

LOCATION.--Lat 26°15'31", long 81°41'18", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.27, T.48 S., R.26 E., Hydrologic Unit 03090204, 75 ft east of County Road 951, 1.0 mi south of County Road 846 and 9.5 mi northeast of Naples.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 22 ft, cased to 12 ft, screened 12 to 22 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 16.92 ft above National Geodetic Vertical Datum of 1929. Prior to April 11, 2003, top of base was 16.76 ft above NGVD. See REMARKS.

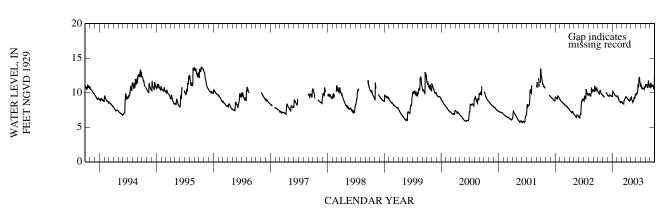
LAND-SURFACE DATUM.--Land surface is approximately 14.3 ft above NGVD.

REMARKS.--Well damaged during nearby construction activities, repaired April 2003.

PERIOD OF RECORD.--March 1985 to September 1985 (monthly), October 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.67 ft NGVD, Oct. 19, 1995; lowest, 5.53 ft NGVD, June 18, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.02	9.54	9.66	10.17	9.52	8.61	9.29	9.08	9.72	11.19	11.20	11.39
10 15	9.86 10.34	9.44 	9.53 9.55	9.97 9.81	9.27 8.86	8.48 8.37	9.16 8.96	8.82 8.77	9.84 11.19	10.68 10.67	11.19 10.96	10.85 11.05
20	10.06		9.63	9.63	8.72	8.87	8.90	9.23	10.90	10.57	11.58	10.96
25	9.83	10.00	9.56	9.55	8.69	9.21	8.86	9.26	12.23	10.64	11.15	10.62
EOM	9.70	9.72	9.48	9.49	8.80	9.43	9.11	9.80	11.26	10.76	10.75	12.52
MAX	10.35		9.69	10.23	9.55	9.43	9.41	9.80	12.23	11.32	11.71	12.57



WELL NUMBER.--261537081461201. Local Number C 1057.

LOCATION.—Lat 26°15'36", long 81°46'12", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.26, T.48 S., R.25 E., Hydrologic Unit 03090204, 0.9 mi south of County Road 846 and 43 ft west of County Road 31, 9.1 mi north of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 10.5 ft, cased to 8 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

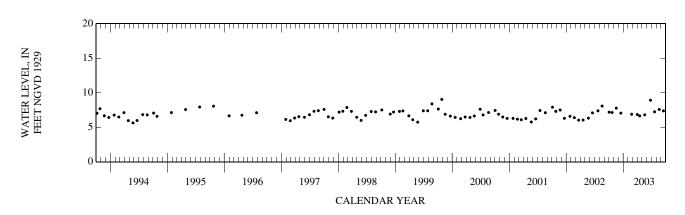
DATUM.--Measuring point: Top of casing, 10.89 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 10.9 ft above NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.04 ft NGVD, Oct. 26, 1999; lowest, 4.82 ft NGVD, Nov. 29, 1988.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	0946	7.19	19	1041	6.81
22	0806	7.14	JUN		
NOV			25	0916	8.92
18	0817	7.77	JUL		
DEC			21	0930	7.24
17	1001	7.06	AUG		
FEB			20	0944	7.58
24	0919	6.89	SEP		
APR			16	0919	7.38
01	0942	6.85			
17	0854	6.65			



WELL NUMBER.--261537081461202. Local Number C 1058.

LOCATION.--Lat 26°15'36", long 81°46'12", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.26, T.48 S., R.25 E., Hydrologic Unit 03090204, 0.90 mi south of County Road 846 and 43 ft west of County Road 31, 9.1 mi north of Collier County Government Center. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 80 ft, cased to 62 ft, 62 to 80 ft of open hole.

INSTRUMENTATION.--Monthly measurement with chalked tape.

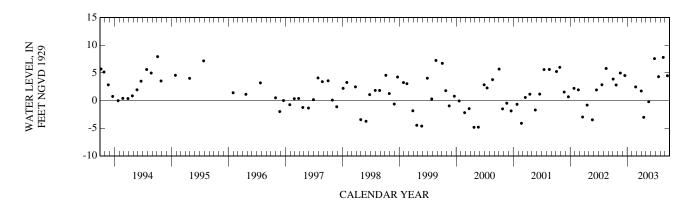
DATUM.--Measuring point: Top of casing, 13.39 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 12.1 ft above NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.24 ft NGVD, Oct. 24, 1995; lowest, 5.78 ft below NGVD, Mar. 29, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	0949	3.89	19	1043	-0.20
22	0808	2.82	JUN		
NOV			25	0919	7.59
18	0819	4.98	JUL		
DEC			21	0933	4.32
17	0959	4.53	AUG		
FEB			20	0946	7.81
24	0916	2.47	SEP		
APR			16	0920	4.49
01	0944	1.73			
17	0856	-3.03			



WELL NUMBER.--261604081480901. Local Number C 1059.

LOCATION.--Lat 26°16′04″, long 81°48′09″, in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.28, T.48 S., R.25 E., Hydrologic Unit 03090204, 20 ft behind Fire House on 106th Avenue and 300 ft west of U.S. Highway 41, 9.7 mi northwest of Collier County Government Center. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 10 ft, screened 10 to 25 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.82 ft above National Geodetic Vertical Datum of 1929.

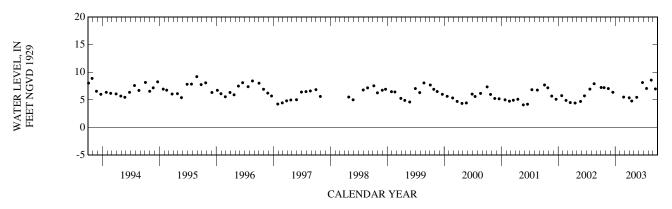
LAND-SURFACE DATUM .-- Land surface is approximately 9.3 ft above NGVD.

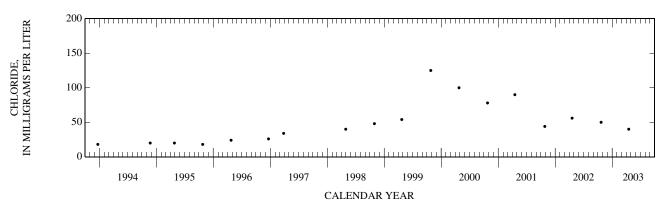
REMARKS .-- Well is also used for salinity monitoring.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.21 ft NGVD, Aug. 29, 1995; lowest, 3.17 ft NGVD, Apr. 23, 1987.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
03	1406	7.24			19	1529	5.47		
22	1450	7.22	566	50.0	JUN				
NOV					25	1519	8.14		
18	1231	7.05			JUL				
DEC					21	1418	7.07		
17	1423	6.38			AUG				
FEB					20	1512	8.58		
24	1500	5.51			SEP				
APR					16	1342	6.99		
01	1413	5.38							
17	1432	4.80	580	40.0					





WELL NUMBER.--261620081450201. Local Number C 998.

 $LOCATION.--Lat~26^{\circ}16'22'', long~81^{\circ}45'02'', in~SE~\frac{1}{4}~SW~\frac{1}{4}~sec.19, T.48~S., R.26~E., Hydrologic~Unit~03090204, 30~ft~north~of~County~Road~846, 0.75~mi~west~of~U.S.~Interstate~75~and~8.5~mi~northeast~of~Naples.~(Corrected).$ 

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 62 ft, cased to 52 ft, screened 52 to 62 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of base, 17.84 ft above National Geodetic Vertical Datum of 1929. Prior to July 1990, measuring point was top of casing, 18.89 ft above NGVD.

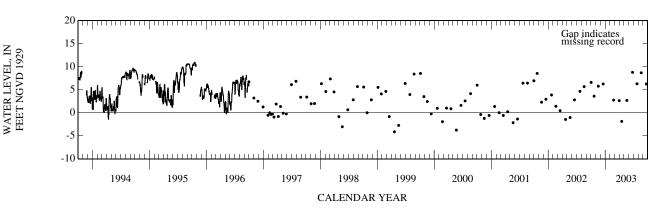
LAND-SURFACE DATUM.--Land surface is approximately 16.7 ft above NGVD.

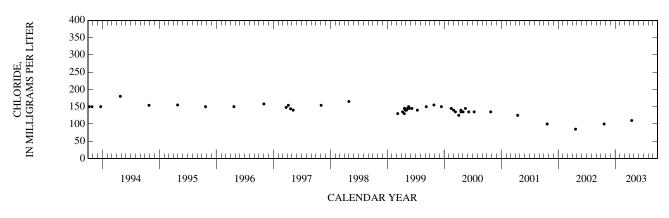
REMARKS.--Well is also used for salinity monitoring. Conductivity and chloride profiles are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--March 1985 to June 1990 (monthly), July 1990 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.98 ft NGVD, Oct. 20, 1995; lowest, 4.89 ft below NGVD, Dec. 21, 1990.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	0754	6.60			20	0750	2.68		
22	0859	3.60	1,100	100	JUN				
NOV					25	0830	8.79		
18	0958	5.77			JUL				
DEC					24	1008	6.29		
19	0828	6.26			AUG				
FEB					20	0851	8.68		
24	0755	2.75			SEP				
APR					22	0915	6.27		
01	0727	2.63							
17	0750	-1.87	1,000	110					





WELL NUMBER.--261620081464402. Local Number C 1004R.

LOCATION.--Lat 26°16'22", long 81°46'44", in SW  ${}^{1}\!\!/_{4}$  SE  ${}^{1}\!\!/_{4}$  sec. 23, T.48 S., R.25 E., Hydrologic Unit 03090204, 20 ft east of Palm River Boulevard, 40 ft south of Piper Boulevard, 200 ft north of Immokalee Road (County Road 846), and 7.8 mi north of Naples. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 60 ft, cased to 52 ft, open hole 52 to 60 ft.

INSTRUMENTATION .-- Satellite data collection platform, with pressure transducer.

DATUM.--Measuring point: Top of base, 12.38 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 10.5 ft above NGVD.

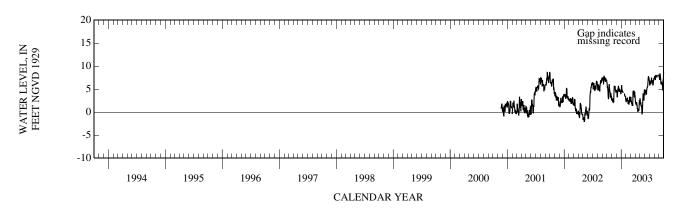
REMARKS.--Replacement well for C-1004. Well is also used for salinity monitoring.

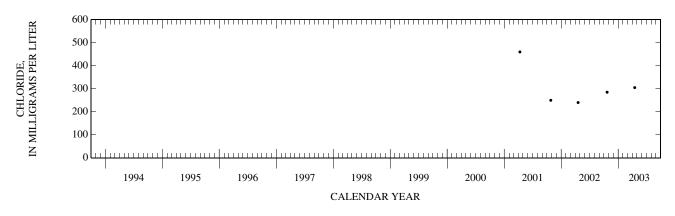
PERIOD OF RECORD.--November 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.62 ft NGVD, Sept. 30, 2003; lowest, 2.14 ft below NGVD, May 9, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	5.49 3.09	2.87 2.81	4.15 4.96	5.04 4.55	2.55 3.05	2.59 1.90	2.13 2.07	1.85 1.41	4.39 4.43	6.50 6.10	7.59 7.98	8.18 7.49
15	5.97	3.10	5.46	4.24	1.80	1.57	0.84	-0.39	5.09	7.38	7.79	6.54
20 25	4.67 4.01	5.19 4.84	5.01 4.72	3.49	1.62 2.75	4.49 3.85	0.37 0.60	3.25 3.50	5.70 7.72	6.53 6.05	8.10	6.35 4.70
EOM	2.71	4.47	4.03	2.49	2.36	3.49	1.64	4.73	6.94	7.26	7.97	8.62
MAX	6.42	5.58	5.58		3.25	4.57	3.01	4.92	7.72	7.39		8.62





WELL NUMBER.--261621081412302. Local Number C 303.

LOCATION.--Lat  $26^{\circ}16^{\circ}23^{\circ}$ ,  $\log 81^{\circ}41^{\circ}23^{\circ}$ , in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 27, T.48 S., R.26 E., Hydrologic Unit 03090204, 30 ft west and 15 ft south of the intersection of Collier Boulevard (County Road 951) and County Road 846, 9 mi northeast of the Naples Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 300 ft, cased to 232 ft, open hole 232 to 300 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.08 ft above National Geodetic Vertical Datum of 1929. Prior to May 2001 measuring point was 17.91 ft above NGVD. See REMARKS.

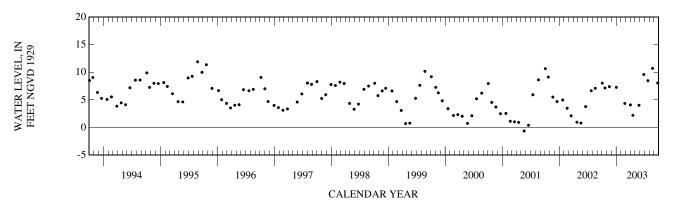
LAND-SURFACE DATUM.--Land surface is approximately 18.1 ft above NGVD.

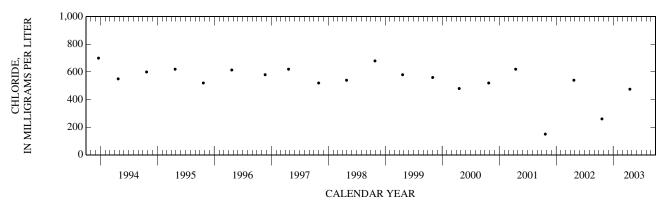
REMARKS.--Well is also used for salinity monitoring. The open-hole portion of this well is collapsed or obstructed. Chloride samples are being collected from a depth of 230 ft. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey. In May 2001, the station was reconstructed because of road construction in the area. See DATUM.

PERIOD OF RECORD.--August 1959 to October 1981 (intermittent), October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.90 ft NGVD, Aug. 28, 1995; lowest, 0.62 ft below NGVD, May 21, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	0910	8.03			27	0925	4.03		
21	0855	7.16	1,120	260	JUN				
NOV					27	0947	9.60		
18	1005	7.39			JUL				
JAN					23	1515	8.48		
02	1040	7.27			AUG				
FEB					22	1219	10.71		
25	0947	4.36			SEP				
APR					24	0912	8.07		
02	1122	4.09							
18	0935	2.20	1,890	475					





WELL NUMBER.--261630081360001. Local Number C 304.

LOCATION.--Lat 26°16'36", long 81°36'15", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.27, T.48 S., R.27 E., Hydrologic Unit 03090204, 20 ft south of County Road 846, 0.25 mi west of Randall Boulevard and 12 mi northeast of the Naples Post Office. (Corrected).

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 130 ft, cased to 125 ft, open hole 125 to 130 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of coupling, 17.59 ft above National Geodetic Vertical Datum of 1929.

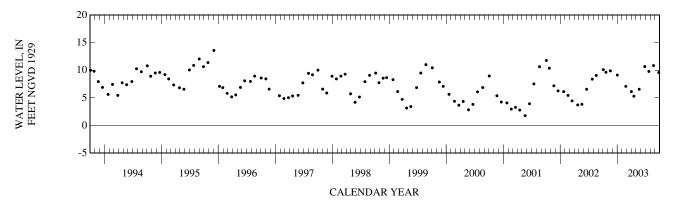
LAND-SURFACE DATUM.--Land surface is approximately 15.6 ft above NGVD.

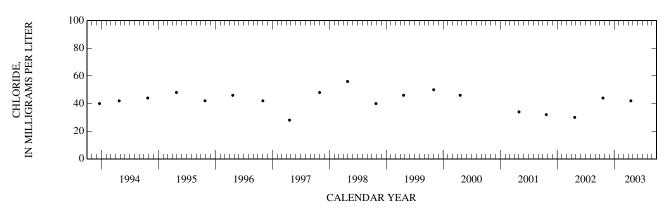
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--August 1959 to October 1981 (intermittent), October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.59 ft NGVD, Dec. 4, 1995; lowest, 1.79 ft NGVD, May 21, 2001.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
04	0956	10.11			22	1059	6.56		
21	1009	9.63	642	44.0	JUN				
NOV					27	1055	10.67		
18	1042	9.90			JUL				
JAN					23	1446	9.79		
02	1058	9.13			AUG				
FEB					22	1159	10.85		
25	1043	7.09			SEP				
APR					24	0939	9.59		
02	1153	6.14							
18	1009	5.30	642	42.0					





WELL NUMBER.--261733081285501. Local Number C 984.

LOCATION.--Lat 26°17'38", long 81°28'54", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 23, T.48 S., R.28 E., Hydrologic Unit 03090204, at southeast corner of Oil Grade Road and County Road 858, 7 mi east of County Road 846 and 9.4 mi south of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 30 ft, open hole 30 to 40 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 23.38 ft above National Geodetic Vertical Datum of 1929. Prior to February 1995, top of casing was 23.50 ft above NGVD. See REMARKS.

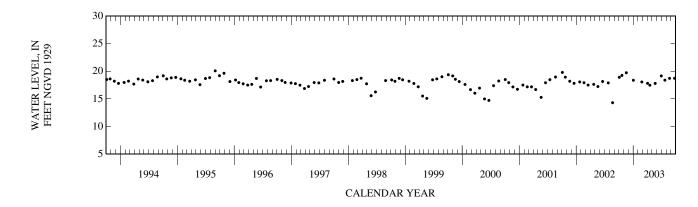
LAND-SURFACE DATUM.--Land surface is approximately 20.3 ft above NGVD.

REMARKS.--Station damaged, repaired February 3, 1995. See DATUM.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.08 ft NGVD, Sept. 1, 1995; lowest, 14.04 ft NGVD, May 28, 1986.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1451	18.91	22	1428	17.80
21	1420	19.25	JUN		
NOV			30	1230	19.16
18	1300	19.73	JUL		
JAN			23	1039	18.39
02	1437	18.37	AUG		
FEB			22	1412	18.72
25	1457	18.07	SEP		
APR			23	1044	18.73
03	1431	17.83			
18	1430	17.47			



WELL NUMBER.--261733081285502. Local Number C 989.

LOCATION.--Lat 26°17'38", long 81°28'54", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.23, T.48 S., R.28 E., Hydrologic Unit 03090204, at southeast corner of Oil Grade Road and County Road 858, 7 mi east of County Road 846 and 9.4 mi south of Immokalee.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 270 ft, cased to 240 ft, open hole 240 to 270 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 24.30 ft above National Geodetic Vertical Datum of 1929. From October 1996 to September 1999, measuring point was incorrectly considered to be top of flange, 24.44 ft above NGVD. Prior to October 1996, measuring point was top of flange, 24.44 ft above NGVD. See REMARKS.

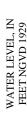
LAND-SURFACE DATUM .-- Land surface is approximately 20.3 ft above NGVD.

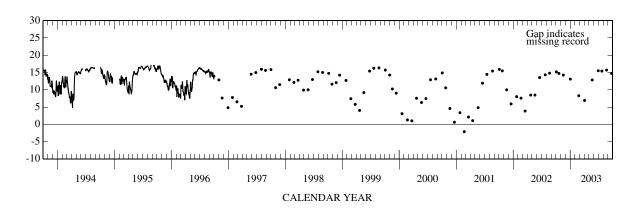
REMARKS.--The figures of water level as elevation, in feet NGVD, from October 1996 to September 1999 are in error. A -0.14 ft correction has been applied to correct water-level data from October 1996 to September 1999. Corrected records are in the files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--October 1984 to September 1996 (daily), November 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 17.30 ft NGVD, July 24, 1991; lowest, 3.96 ft below NGVD, Apr. 3, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
04	1459	15.18	22	1431	12.84
21	1423	14.73	JUN		
NOV			30	1232	15.50
18	1303	14.25	JUL		
JAN			23	1027	15.40
02	1439	13.08	AUG		
FEB			22	1414	15.70
25	1508	8.27	SEP		
APR			23	1057	14.73
03	1434	6.90			





WELL NUMBER.--261733081285503. Local Number C 985.

LOCATION.--Lat 26°17'38", long 81°28'54", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.23, T.48 S., R.28 E., Hydrologic Unit 03090204, at southeast corner of Oil Grade Road and County Road 858, 7 mi east of County Road 846 and 9.4 mi south of Immokalee.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 160 ft, cased to 80 ft, open hole 80 to 160 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 6 in. coupling, 24.63 ft above National Geodetic Vertical Datum of 1929. From August 2002 to May 2003, top of coupling was 24.66 ft above NGVD. From October 5, 1993 to July 2002, top of coupling was 24.63 ft above NGVD. Prior to October 1993, measuring point was top of casing, 24.88 ft above NGVD. See REMARKS.

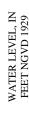
LAND-SURFACE DATUM .-- Land surface is approximately 20.3 ft above NGVD.

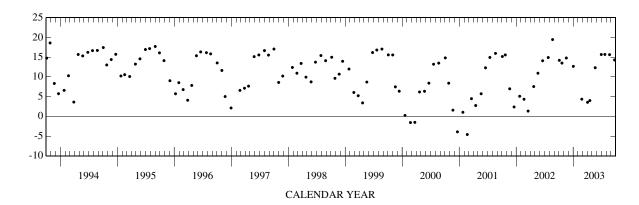
REMARKS.--Station repaired October 5, 1993, August 2002, May 2003. See DATUM.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.46 ft NGVD, Aug. 20, 2002; lowest, 7.11 ft below NGVD, Mar. 29, 1990.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
04	1455	14.20	22	1425	12.32
21	1417	13.50	JUN		
NOV			30	1226	15.67
18	1302	14.79	JUL		
JAN			23	1032	15.69
02	1432	12.67	AUG		
FEB			22	1409	15.64
25	1500	4.36	SEP		
APR			23	1051	14.29
03	1428	3.56			
18	1429	4.00			





WELL NUMBER .-- 261740081235401. Local Number C 684.

LOCATION.--Lat 26°17'42", long 81°23'43", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.23, T.48 S., R.29 E., Hydrologic Unit 03090204, 25 ft south of County Road 858, 3.4 mi west of State Road 29, and 4.0 mi northwest of Sunniland.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 490 ft, cased to 440 ft, open hole 440 to 490 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of PVC casing, 22.37 ft above National Geodetic Vertical Datum of 1929. Prior to October 1982, measuring point was incorrectly considered to be 21.02 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 1982 are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 19.5 ft above NGVD.

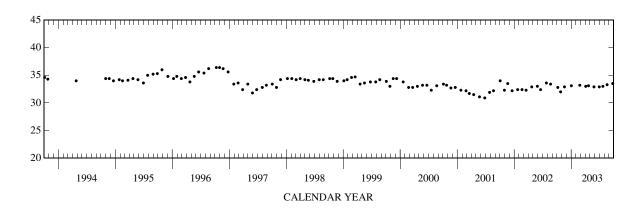
REMARKS.--The figures of water level as elevation, in feet NGVD, prior to October 1982 are in error. A correction of +1.4 ft has been applied to correct water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1981 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--November 1980 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.4 ft NGVD, Oct. 9, 30, 1996; lowest, 30.9 ft NGVD, June 26, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
07	1610	32.8	27	1015	32.9
25	1023	32.0	JUN		
NOV			30	1250	32.9
19	1336	32.9	JUL		
JAN			23	1014	33.0
02	1343	33.1	AUG		
FEB			19	1417	33.3
25	1201	33.2	SEP		
APR			24	1029	33.5
04	1046	33.0			
22	0900	33.1			





WELL NUMBER.--261740081235402. Local Number C 689.

 $LOCATION.--Lat\ 26^{\circ}17'42'',\ long\ 81^{\circ}23'43'',\ in\ NW\ {}^{1}\!\!/_{\!\!4}\ sec.23,\ T.\ 48\ S.,\ R.29\ E.,\ Hydrologic\ Unit\ 03090204,\ 25\ ft\ south\ of\ County\ Road\ 858,\ 3.4\ mi\ west\ of\ State\ Road\ 29,\ and\ 4.5\ mi\ northwest\ of\ Sunniland.$ 

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 265 ft, cased to 230 ft, open hole 230 to 265 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 23.37 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 19.3 ft above NGVD.

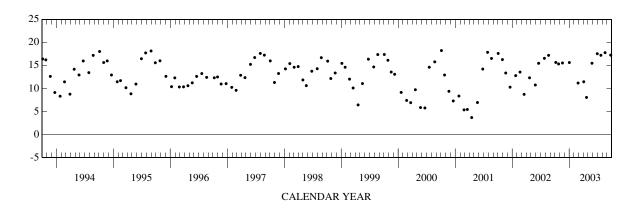
REMARKS.--Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1981 (intermittent), October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.83 ft NGVD, Aug. 29, 1983; lowest, 0.38 ft below NGVD, Mar. 30, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1612	15.64	27	1014	15.47
25	1007	15.31	JUN		
NOV			30	1253	17.54
19	1330	15.53	JUL		
JAN			23	1016	17.20
02	1338	15.62	AUG		
FEB			19	1419	17.76
27	1205	11.17	SEP		
APR			24	1037	17.23
04	1048	11.45			
22	0902	8.04			





#### WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

#### COLLIER COUNTY—Continued

WELL NUMBER.--261740081235403. Local Number C 1073.

LOCATION.--Lat 26°17'42", long 81°23'43", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.23, T.48 S., R.29 E., Hydrologic Unit 03090204, 20 ft south of County Road 858, 3.4 mi west of State Road 29, 4.0 mi northwest of Sunniland.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 160 ft, cased to 100 ft, screened 100 to 160 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 23.48 ft above National Geodetic Vertical Datum of 1929.

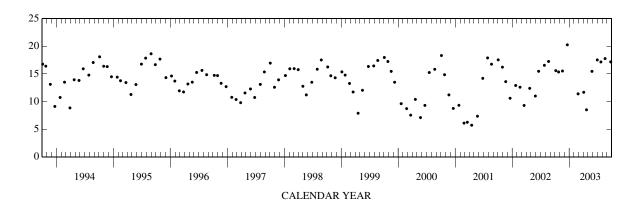
LAND-SURFACE DATUM.--Land surface is approximately 19.4 ft above NGVD.

PERIOD OF RECORD .-- October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.27 ft NGVD, Dec. 20, 2002; lowest, 0.55 ft NGVD, Mar. 30, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1614	15.60	27	1009	15.47
25	1010	15.36	JUN		
NOV			30	1254	17.54
19	1330	15.53	JUL		
DEC			23	1011	17.17
20	1108	20.27	AUG		
FEB			19	1413	17.78
27	1208	11.40	SEP		
APR			24	1034	17.18
04	1050	11.68			
22	0853	8 51			





WELL NUMBER.--261741081235401. Local Number C 503.

LOCATION.--Lat 26°17'42", long 81°23'43", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.23, T.48 S., R.29 E., Hydrologic Unit 03090204, 25 ft south of County Road 858, 3.4 mi west of State Road 29 and 4.0 mi northwest of Sunniland.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20.4 ft, cased to 8 ft, open hole 8 to 20.4 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of flange, 22.30 ft above National Geodetic Vertical Datum of 1929. From October 1979 to September 1982, measuring point was incorrectly considered to be 20.97 ft above NGVD.

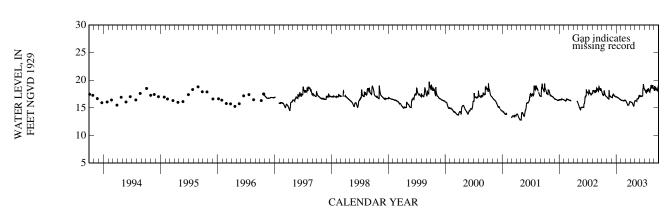
LAND-SURFACE DATUM.--Land surface is approximately 19.2 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The figures of water level as elevation, in feet NGVD, between October 1979 and September 1982 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM. Prior to October 1975, station record was reported under well number 261744081235401.

PERIOD OF RECORD.--January 1972 to October 1984 (daily), October 1984 to September 1996 (monthly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.67 ft NGVD, Sept. 20, 21, 1999; lowest, 12.78 ft NGVD, May 2, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	17.58 17.24	16.89 16.71	16.91 17.24	16.97 16.87	16.38 16.38	16.23 15.94	16.06 15.98	16.31 16.28	17.09 17.12	18.27 17.89	17.94 18.67	18.95 18.33
15	18.15	16.59	17.44	16.80	16.30	15.55	15.84	16.62	17.15	18.06	18.73	18.47
20 25	17.61 17.18	17.10 17.04	17.16 17.11	16.70 16.55	16.29 16.40	15.53 15.80	15.46 15.37	16.67 16.84	17.21 19.10	18.18 18.19	18.96 18.73	18.48 18.27
EOM	17.02	16.94	16.96	16.43	16.39	16.13	16.19	17.12	18.43	18.12	18.39	19.25
MAX	18.15	18.22	17.50	17.02	16.40	16.35	16.19	17.35	19.28	18.55	19.14	19.35



WELL NUMBER.--261802081354801. Local Number C 688.

LOCATION.--Lat 26°18'03", long 81°35'47", in SE ½ NE ½ sec.15, T.48 S., R.27 E., Hydrologic Unit 03090204, 50 ft south and 200 ft west of the intersection of 37th Avenue NW and County Road 846, 0.65 mi north of the intersection of County Road 858 and County Road 846, 14 mi southwest of the Immokalee Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 242 ft, cased to 220 ft, open hole 220 to 242 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of coupling, 18.48 ft above National Geodetic Vertical Datum of 1929.

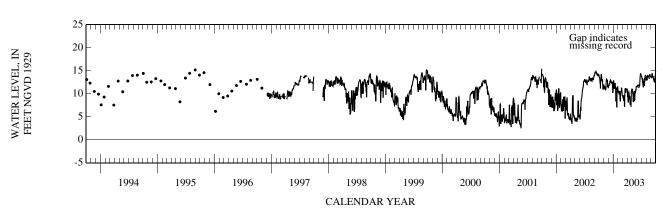
LAND-SURFACE DATUM.--Land surface is approximately 15.6 ft above NGVD.

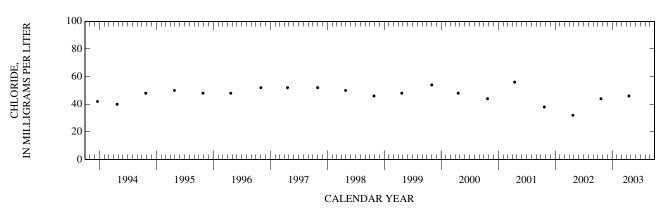
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1981 (intermittent), December 1982 to November 1996 (monthly), December 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.81 ft NGVD, June 29, 1982; lowest, 1.95 ft NGVD, Mar. 29, 1990.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.52	11.12	11.88	11.96	10.31	9.10	9.36	10.86	11.69	13.23	13.02	13.84
10	12.37	10.88	12.57	12.25	10.46	9.32	10.30	8.21	11.80	12.55	13.97	14.00
15	13.97	10.97	13.03	11.49	9.56	7.18	8.95	10.23	11.24	12.61	13.81	13.68
20	13.08	13.19	12.36	10.77	10.29	11.12	7.63	10.30	11.99	11.71	13.66	12.66
25	12.84	12.91	12.43	9.69	10.93	11.06	7.15	10.84	14.38	13.87	14.08	12.68
EOM	11.50	11.23	10.62	11.38	9.65	11.04	10.78	11.61	13.97	12.99	13.73	14.96
MAX	14.19	13.19	13.03	12.92	11.25	11.12	11.04	11.62	14.38	14.00	14.19	14.96





WELL NUMBER.--261802081354802. Local Number C 1097.

LOCATION.--Lat 26°18'03", long 81°35'47", in SE ½ SE ½ SE.15, T.48 S., R.27 E., Hydrologic Unit 03090204, 50 ft south and 200 ft west of the intersection of 37th Avenue NW and County Road 846, 0.65 mi north of the intersection of County Road 858 and County Road 846, 14 mi southwest of the Immokalee Post Office. (Corrected).

AQUIFER .-- Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 18 ft, screened 15 to 18 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

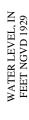
DATUM.--Measuring point: Top of 4 in. PVC casing, 18.44 ft above National Geodetic Vertical Datum of 1929.

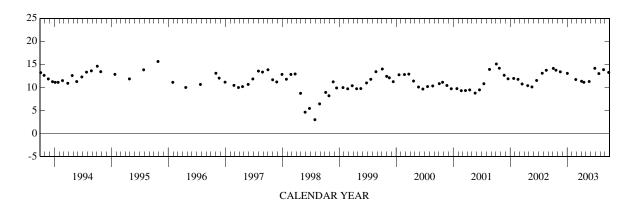
LAND-SURFACE DATUM.--Land surface is approximately 15.7 ft above NGVD.

PERIOD OF RECORD.--September 1993 to September 1994 (monthly), October 1994 to July 1996 (quarterly), November 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.63 ft NGVD, Oct. 27, 1995; lowest, 2.99 ft NGVD, July 29, 1998.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1007	14.13	22	1122	11.28
21	1052	13.74	JUN		
NOV			27	1103	14.15
18	1105	13.39	JUL		
JAN			23	1425	13.00
02	1128	13.05	AUG		
FEB			22	1232	13.86
25	1101	11.72	SEP		
APR			24	0947	13.25
03	1200	11.34			
18	1047	11.12			





WELL NUMBER.--261805081473302. Local Number C 1083.

LOCATION.--Lat 26°18′56", long 81°47′19", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec. 10, T.48 S., R.25 E., Hydrologic Unit 03090204, 10 ft north of Sun Century Road, 230 ft east of old U.S. Highway 41 (State Road 887) and 2.5 mi south of Bonita Springs. (Corrected).

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 74 ft, cased to 58 ft, open hole 58 to 74 ft.

INSTRUMENTATION.--Electronic data logger, with pressure transducer.

DATUM.--Measuring point: Top of base, 15.78 ft above National Geodetic Vertical Datum of 1929. From April 1992 to October 2002, top of base was considered to be 15.81 ft above NGVD. Prior to April 1992, measuring point was top of casing, 15.68 ft NGVD. See REMARKS.

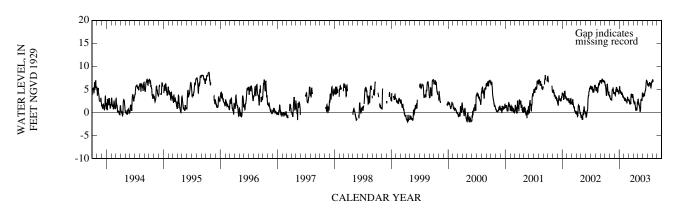
LAND-SURFACE DATUM.--Land surface is approximately 13.8 ft above NGVD.

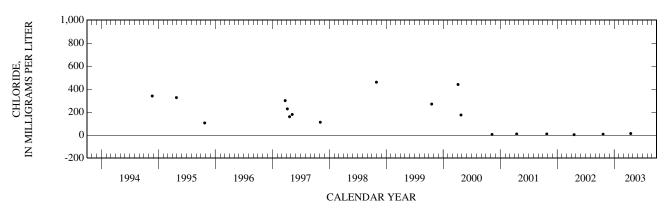
REMARKS.--Well is also used for salinity monitoring. Most of the open-hole portion of this well has collapsed or become obstructed. Chloride samples are being collected from a depth of 62 ft. The figures of water level as elevation, in feet NGVD, from April 1992 to September 2002 are considered to be in error, based on resurvey to benchmark in December 2002. A -0.03 ft correction is required to correct water level data from April 1992 to September 2002. Well was damaged in August 2003, reconstructed January 2004.

PERIOD OF RECORD.--June 1987 to March 1991 (intermittent), April 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.72 ft NGVD, Oct. 20, 21, 1995; lowest water level measured, 4.27 ft below NGVD, Apr. 13, 1989.

SEP	AUG	JUL	JUN	MAY	APR	MAR	FEB	JAN	DEC	NOV	OCT	DAY
	7.06	6.24	3.61	2.10	2.53	2.62	2.80	5.03	3.88	3.06	5.89	5
		5.77	3.70	1.55	2.21	2.15	2.88	4.58	4.89	2.89	3.86	10
		6.50	4.35	0.14	1.04	2.00	2.46	4.20	5.46	3.38	6.10	15
		6.15	5.19	2.61	0.60	3.95	1.98	4.06	5.01	4.86	4.91	20
		5.78	6.98	2.83	0.70	3.49	3.09	3.62	4.68	4.54	4.36	25
		6.63	6.49	4.24	1.83	3.47	2.80	3.23	4.16	4.17	3.34	EOM
		6.71	6.98	4.24	3.02	3.95	3.29	5.59	5.46	5.33	6.37	MAX





WELL NUMBER.--261823081171901. Local Number C 1071.

LOCATION.—Lat 26°18'11", long 81°18'24", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.48 S., R.30 E., Hydrologic Unit 03090204, 15 ft south of County Road 858, 2.2 mi east of State Road 29, 11.0 mi southeast of Immokalee. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 35 ft, cased to 20 ft, screened 20 to 35 ft.

INSTRUMENTATION .-- Electronic data logger.

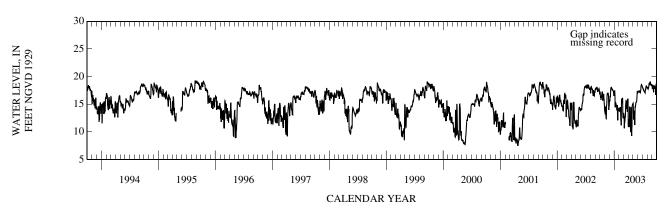
DATUM.--Measuring point: Top of base, 22.98 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 19.6 ft above NGVD.

PERIOD OF RECORD .-- November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.21 ft NGVD, Aug. 24, 25, 27, 1995; lowest, 6.83 ft NGVD, Apr. 12, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	16.31 16.21 17.21 15.64 16.81 13.98	13.17 12.44 15.44 16.85 16.69 14.65	16.34 17.90 17.95 17.67 17.49 17.07	16.89 15.12 14.79 14.55 14.03 14.08	14.12 14.32 11.18 15.14 13.49 12.62	13.03 11.91 14.81 14.15 15.52 15.80	11.00 14.55 10.79 12.77 10.94 14.92	12.41 13.07 14.47 15.29 15.60 17.21	17.22 17.46 17.04 17.42 18.59 18.16	17.82 17.50 17.28 17.73 18.12 18.02	17.81 18.10 18.76 19.02 18.53 18.37	18.42 17.17 18.33 18.00 18.11 18.99
MAX	17.27	17.01	18.06	17.43	16.08	15.98	14.93	17.34	18.59	18.30	19.02	18.99



WELL NUMBER.--261823081171902. Local Number C 1072.

LOCATION.--Lat 26°18'11", Long 81°18'24", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.48 S., R.30 E., Hydrologic Unit 03090204, 15 ft south of County Road 858, 2.2 mi east of State Road 29, 11.0 mi southeast of Immokalee. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 260 ft, cased to 140 ft, screened from 140 to 220 ft with 0.02 screen.

INSTRUMENTATION.-- Electronic data logger with pressure transducer.

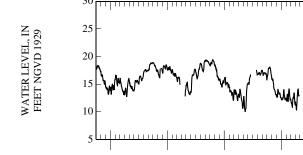
DATUM.--Measuring point: Top of base, 23.03 ft above National Geodetic Vertical Datum of 1929.

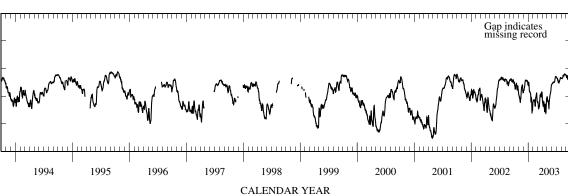
LAND-SURFACE DATUM .-- Land surface is approximately 19.2 ft above NGVD.

PERIOD OF RECORD .-- November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 20.41 ft NGVD, Nov. 27, 1987; lowest, 7.40 ft NGVD, Apr. 28, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	17.35 16.39	14.81 14.25	16.08 17.10	17.43 15.88	14.22 14.43	13.68 12.76	13.63 14.01	14.29 13.96	17.33 17.56	18.27 17.89	18.23 18.37	18.45 18.39
15	17.18	14.66	17.90	15.60	13.14	13.80	12.54	13.50	17.48	17.59	18.82	18.68
20	16.60	16.63	17.75	14.24	14.76	15.19	13.56	14.99	17.66	17.66	18.99	18.34
25 EOM	16.86 15.71	17.02 15.68	17.85 17.02	11.91 13.80	15.14 14.10	15.46 15.68	12.03 14.38	15.79 17.11	18.52 18.48	18.17 18.25	18.97 18.84	18.15 19.05
MAX	17.56	17.03	17.93	17.49	15.64	15.74	15.22	17.11	18.58	18.44	19.03	19.05





DAY

OCT

#### COLLIER COUNTY—Continued

WELL NUMBER.--262121081355501. Local Number C 978.

LOCATION.--Lat 26°21'23", long 81°35'59", in NW \(^1/\_4\) SE \(^1/\_4\) sec.27, T.47 S., R.27 E., Hydrologic Unit 03090204, 300 ft south of C 3rd Avenue South (Platt Road), 0.25 mi west of County Road 846 and 12 mi southwest of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

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

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of flange, 22.92 ft above National Geodetic Vertical Datum of 1929. Prior to October 24, 1996, measuring point was top of casing, 22.86 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 19.1 ft above NGVD.

REMARKS.--Shelter for data logger installed October 24, 1996. See DATUM.

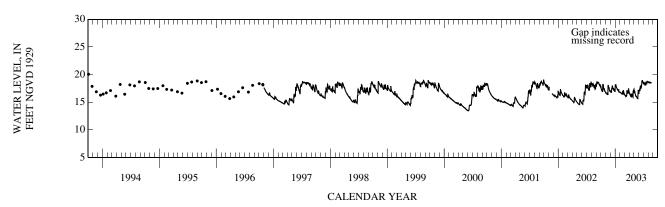
PERIOD OF RECORD.--October 1984 to October 1996 (monthly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.07 ft NGVD, Oct. 4, 1993; lowest daily maximum water level, 13.45 ft NGVD, June 3, 2000.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 16.79 16.71 16.26 17.00 17.09 16.58 18.16 16.44 18.56 18.62 17.53 17.79 16.44 17.64 16.59 16.24 16.33 16.42 17.80 18.14 18.64 16.32 17.35 16.46 16.13 15.89 16.02 17.97 18.04 18.53

17.31 10 16.99 15 18.06 20 17.40 17.66 17.55 17.10 16.51 16.82 16.34 15.88 18.25 18.39 18.55 25 17.07 17.24 17.27 16.93 16.79 16.75 15.89 15.71 18.89 18.78 EOM 16.79 16.87 16.95 16.83 16.52 16.97 17.28 16.79 18.49 18.60 MAX 18.21 18.02 17.93 18.17 17.11 17.43 17.28 17.34 18.97 18.81



WELL NUMBER.--262121081355502. Local Number C 963.

LOCATION.--Lat 26°21'23", long 81°35'59", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.27, T.47 S., R.27 E., Hydrologic Unit 03090204, 300 ft south of C 3rd Avenue South (Platt Rd.), 0.25 mi west of County Road 846 and 12 mi southwest of Immokalee.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 340 ft, cased to 310 ft, open hole 310 to 340 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 4 in. coupling, 19.57 ft above National Geodetic Vertical Datum of 1929. Prior to August 2000, measuring point was top of gate valve, 20.97 ft above NGVD. Prior to October 1992, top of gate valve was incorrectly considered to be 24.96 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 1992 are in error. See REMARKS.

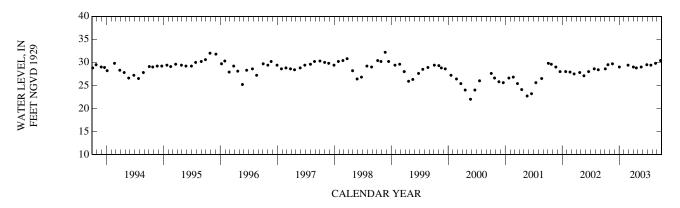
LAND-SURFACE DATUM.--Land surface is approximately 19.1 ft above NGVD.

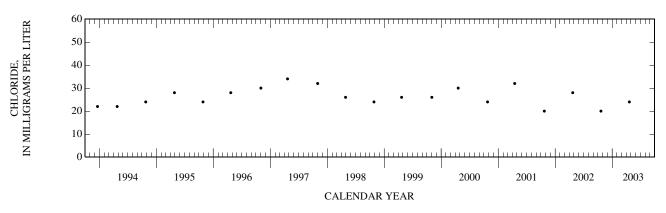
REMARKS.--Well is also used for salinity monitoring. This well is open to the aquifer for 30 ft. The exact depth from which the chloride-containing water is emanating cannot be further delineated. The figures of water level as elevation, in feet NGVD, prior to October 1992 are in error. A +4.00 ft correction has been applied to correct water-level data. Corrected records are in the files of the U.S. Geological Survey. Well was damaged in August 2000 and repaired September 2000. See DATUM.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.2 ft NGVD, Nov. 23, 1998; lowest, 15.28 ft NGVD, Feb. 22, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	1104	28.6			22	1157	29.0		
21	1151	29.5	408	20	JUN				
NOV					27	1137	29.5		
19	1500	29.7			JUL				
JAN					23	1403	29.4		
02	1205	29.0			AUG				
FEB					22	1305	29.8		
27	0924	29.4			SEP				
APR					23	1540	30.4		
02	1216	29.0							
2.1	1055	28.8	406	24					





WELL NUMBER.--262121081355503. Local Number C 979.

LOCATION.--Lat  $26^{\circ}21^{\circ}23^{\circ}$ , long  $81^{\circ}35^{\circ}59^{\circ}$ , in NW  $\frac{1}{4}$  sec.27, T.47 S., R.27 E., Hydrologic Unit 03090204, 300 ft south of C 3rd Avenue South (Platt Road), 0.25 mi west of County Road 846 and 12 mi southwest of Immokalee.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 113 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 18.59 ft above National Geodetic Vertical Datum of 1929. Prior to March 16, 2000, top of casing was 22.30 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 19.1 ft above NGVD.

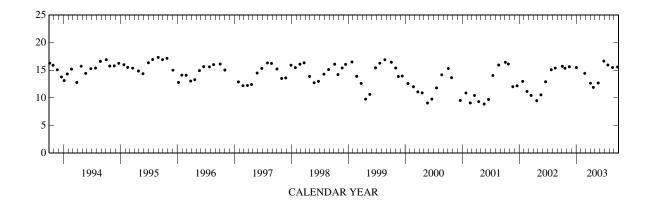
REMARKS.--Casing cut for meter box installation in March 2000. See DATUM. Well also used for salinity monitoring October 1984 to April 1993.

PERIOD OF RECORD.--October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.79 ft NGVD, July 26, 1988; lowest, 6.93 ft NGVD, Mar. 29, 1990.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
04	1111	15.72	22	1202	12.70
21	1627	15.37	JUN		
NOV			27	1152	16.66
18	1128	15.64	JUL		
JAN			23	1412	15.95
02	1208	15.50	AUG		
FEB			22	1307	15.49
25	1155	14.44	SEP		
APR			23	1536	15.59
02	1230	12.65			
21	1200	11.90			





WELL NUMBER.--262136081204201. Local Number C 966.

LOCATION.--Lat 26°21'38", long 81°20'41", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.29, T.47 S., R.30 E., Hydrologic Unit 03090204, 98 ft north of Motorola Road, 55 ft west of State Road 29, 4.0 mi north of County Road 858, 5.7 mi south of State Road 29A and 6.5 mi south of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 40 ft, cased to 30 ft, open hole 30 to 40 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 22.31 ft above National Geodetic Vertical Datum of 1929. Prior to April 1998, top of casing was 27.55 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 21.3 ft above NGVD.

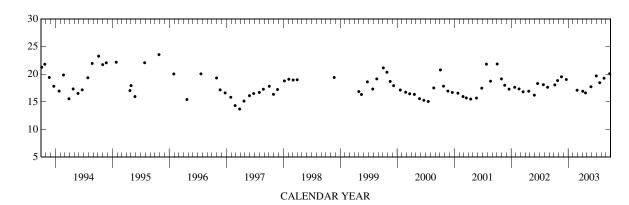
REMARKS.--Station reconstructed on April 30, 1999. See DATUM.

PERIOD OF RECORD.--October 1984 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.56 ft NGVD, Oct. 27, 1995; lowest, 13.71 ft NGVD, Mar. 27, 1997.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1300	18.08	27	1029	17.74
25	1036	18.86	JUN		
NOV			30	1307	19.70
19	1247	19.54	JUL		
DEC			22	1440	18.47
20	1447	19.06	AUG		
FEB			19	1346	19.28
27	1548	17.11	SEP		
APR			24	1053	20.10
04	1106	16.93			
22	0921	16.63			





WELL NUMBER.--262136081204202. Local Number C 965.

LOCATION.--Lat 26°21'38", long 81°20'41", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.29, T.47 S., R.30 E., Hydrologic Unit 03090204, 98 ft north of Motorola Road, 55 ft west of State Road 29, 4.0 mi north of County Road 858, 5.7 mi south of State Road 29A and 6.5 mi south of Immokalee.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 460 ft, cased to 438 ft, open hole 438 to 460 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 6 in. casing, 23.41 ft above National Geodetic Vertical Datum of 1929. Prior to April 30, 1999, top of casing was 26.96 ft above NGVD. See REMARKS.

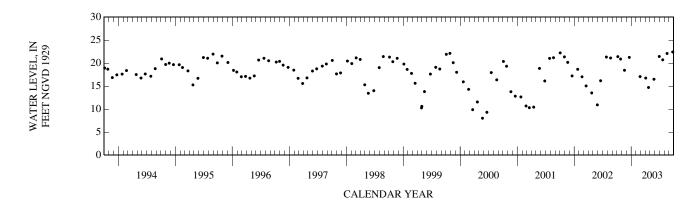
LAND-SURFACE DATUM.--Land surface is approximately 21.4 ft above NGVD.

REMARKS.--Station reconstructed because of road construction on April 30, 1999. See DATUM.

PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.41 ft NGVD, Sept. 24, 2003; lowest, 8.03 ft NGVD, May 23, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
07	1255	21.40	27	1027	16.49
25	1038	20.87	JUN		
NOV			30	1306	21.43
19	1250	18.43	JUL		
DEC			22	1438	20.70
20	1440	21.23	AUG		
FEB			19	1347	22.08
27	1545	17.06	SEP		
APR			24	1052	22.41
04	1103	16.74			
22	0930	14.70			



WELL NUMBER .-- 262158081283401. Local Number C 981.

MAX

21.17

20.93

LOCATION.—Lat 26°22'00", long 81°28'36", in SE  $\frac{1}{4}$  Sw  $\frac{1}{4}$  sec.24, T.47 S., R.28 E., Hydrologic Unit 03090204, 30 ft north of County Road 846, 2.8 mi east of Oil Grade Road and 4.5 mi southwest of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 60 ft, cased to 40 ft, open hole 40 to 60 ft.

INSTRUMENTATION.--Satellite data collection platform. Electronic data logger prior to August 2003.

DATUM.--Measuring point: Top of shelf, 24.84 ft above National Geodetic Vertical Datum of 1929. From October 1, 2001 to September 30, 2002, top of shelf was incorrectly considered to be 24.87 ft above NGVD. From October 24, 1996 to October 2001, top of shelf was incorrectly considered to be 18.79 ft above NGVD. From October 1994 to October 24, 1996, measuring point was top of casing, incorrectly considered to be 20.24 ft above NGVD. Prior to October 1994, top of casing was incorrectly considered to be 20.34 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 2002 are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 21.3 ft above NGVD.

20.84

REMARKS.--The figures of water level as elevation, in feet NGVD, prior to October 2001, are in error. A +6.05 ft correction has been applied to correct water-level data prior to October 2001. A correction of -0.03 ft has been applied to water-level data from October 2001 to September 2002. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--October 1984 to September 1996 (monthly), October 1996 to current year.

20.86

20.21

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.66 ft NGVD, Sept. 29, 2001; lowest, 14.54 ft NGVD, May 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT DAY NOV SEP DEC JAN FEB MAR APR MAY JUN ш. AUG 21.03 20.48 20.45 20.70 19.77 19.42 19.09 18.90 20.27 20.89 20.60 21.12 10 20.81 20.33 20.56 20.31 19.71 19.47 19.25 18.53 19.98 20.47 20.82 15 21.17 20.08 20.73 20.21 19.51 19.39 18.66 19.23 20.13 20.57 20.95 20 21.05 20.77 20.56 20.18 19.84 19.51 18.44 19.30 20.03 21.05 20.86 25 20.94 20.70 20.48 19.96 19.69 19.44 18.35 19.45 21.07 20.85 20.85 **EOM** 20.72 20.41 20.31 19.93 19.68 19.57 19.21 20.06 20.91 20.83 20.78 21.37

20.10

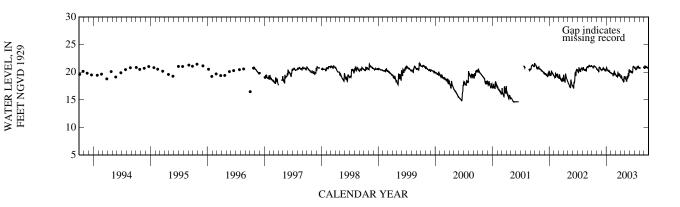
19.32

20.52

21.08

21.09

21.39



WELL NUMBER.--262158081283402. Local Number C 983.

LOCATION.--Lat  $26^{\circ}22^{\circ}00^{\circ}$ , long  $81^{\circ}28^{\circ}36^{\circ}$ , in SE  $\frac{1}{4}$  Sec. 24, T.47 S., R.28 E., Hydrologic Unit 03090204, 30 ft north of County Road 846, 2.8 mi east of Oil Grade Road and 4.5 mi southwest of Immokalee.

AQUIFER.--Mid-hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 520 ft, cased to 480 ft, open hole 480 to 520 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Monthly measurement with pressure gage prior to August 2003.

DATUM.--Measuring point: "X" on top of carriage bolt, 24.61 ft above National Geodetic Vertical Datum of 1929. From October 1984 to September 18, 2002, measuring point was "X" on top of 2 in. reducer, 21.04 ft above NGVD. From October 1, 1986 to October 2001, top of reducer was incorrectly considered to be 16.70 ft above NGVD. Prior to October 1, 1986, top of reducer was considered to be 20.68 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 21.0 ft above NGVD.

REMARKS.--The figures of water level as elevation, in feet NGVD, prior to October 2001 are in error. A +4.34 ft correction has been applied to correct water-level data from October 1986 to September 2001. A +0.36 ft correction has been applied to correct water-level data prior to October 1986. Corrected records are in files of the U.S. Geological Survey. Extremes for the period of record have been adjusted to present datum. See DATUM.

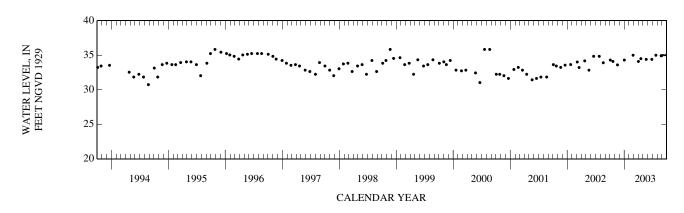
PERIOD OF RECORD.--October 1984 to August 2003 (monthly), September 2003 to current.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.1 ft (present datum) NGVD, Nov. 25, 1987; lowest, 20.56 ft (present datum) NGVD, May 28, 1985.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			APR		
04	1242	34.3	02	1309	34.1
21	1304	34.1	18	1312	34.5
NOV			MAY		
19	1400	33.6	22	1320	34.4
JAN			JUN		
02	1247	34.3	27	1311	34.4
FEB			JUL		
27	1117	35.0	23	1139	35.0

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5												35.04
10												35.02
15												35.04
20												34.96
25												35.00
EOM											34.87	35.08
MAX												35.09



WELL NUMBER .-- 262158081283403. Local Number C 982.

**EOM** 

MAX

17.52

20.09

14.70

17.62

LOCATION.—Lat 26°22'00", long 81°28'36", in SE  $\frac{1}{4}$  Sw  $\frac{1}{4}$  sec.24, T.47 S., R.28 E., Hydrologic Unit 03090204, 30 ft north of County Road 846, 2.8 mi east of Oil Grade Road and 4.5 mi southwest of Immokalee.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 160 ft, cased to 150 ft, open hole 150 to 160 ft.

INSTRUMENTATION.--Satellite data collection platform. Electronic data logger prior to August 8, 2003. Monthly measurement with chalked tape, prior to September 2002.

DATUM.--Measuring point: Top of flange, 25.41 ft above National Geodetic Vertical Datum of 1929. From October 2001 to September 18, 2002, measuring point was top of casing, 26.32 ft above NGVD. From March 1987 to October 2001, top of casing was incorrectly considered to be 20.25 ft above NGVD. Prior to March 1987, top of casing was 26.64 ft above NGVD, but incorrectly considered to be 20.57 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 2001 are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 21.6 ft above NGVD.

14.63

18.44

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1, 2001, are in error. A +6.07 ft correction has been applied to correct water-level data prior to October 2001. Corrected records are in the files of the U.S. Geological Survey. Extremes for period of record have been adjusted to present datum. See DATUM.

PERIOD OF RECORD.--October 1984 to August 2002 (monthly), September 2002 to current year.

12.16

17.52

14.10

14.78

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.27 ft (present datum) NGVD, July 24, 1991; lowest, 0.84 ft (present datum) below NGVD, Mar. 31, 1989.

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

#### DAILY MAXIMUM VALUES DAY OCT NOV DEC JUN JUL AUG SEP FEB APR MAY JAN MAR 19.82 15.01 14.22 17.52 12.46 13.03 14.03 15.70 18.56 20.08 20.25 10 18.93 14.39 15.90 15.93 12.17 12.00 13.48 15.64 18.84 20.12 19.92 18.47 13.61 18.44 15.08 11.44 11.97 13.56 15.51 18.97 20.05 19.82 15 20 18.94 17.62 16.97 13.88 12.93 14.56 13.42 16.12 19.05 20.02 19.69 13.29 18.30 17.38 15.98 12.86 14.77 14.50 16.71 19.55 20.13 19.26

14.42

14.58

14.57

14.57

17.97

17.97

19.93

19.93

20.24

20.24

19.72

Gap indicates missing record 25 WATER LEVEL, IN FEET NGVD 1929 20 WATER LEVEL. 15 10 5 0 -5 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 CALENDAR YEAR

WELL NUMBER.--262158081283404. Local Number C 1079.

LOCATION.--Lat 26°22'00", long 81°28'36", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.24, T.47 S., R.28 E., Hydrologic Unit 03090204, 30 ft north of County Road 846, 2.8 mi east of Oil Grade Road and 4.5 mi southwest of Immokalee.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 390 ft, cased to 298 ft, 92 ft of open hole.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 22.74 ft above National Geodetic Vertical Datum of 1929. From December 1986 to September 2001, top of base was incorrectly considered to be 16.67 ft above NGVD. Prior to December 1986, measuring point was top of casing, 21.41 ft above NGVD, but incorrectly considered to be 15.34 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 2001 are in error. See REMARKS.

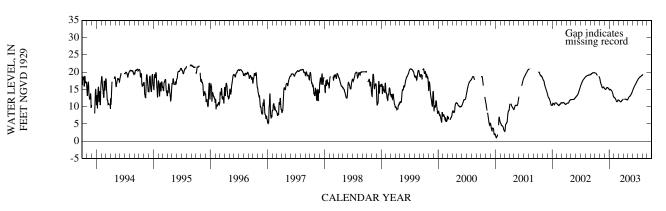
LAND-SURFACE DATUM.--Land surface is approximately 21.1 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 2001, are in error. A +6.07 ft correction has been applied to correct water level data from October 1985 to September 2001. Corrected records are available in the files of the U.S. Geological Survey. See DATUM. Records of water levels prior to December 1986 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--April 1985 to September 1986 (semiannual), December 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 22.05 ft (present datum) NGVD, Aug. 28-31, 1995; lowest, 0.77 ft (present datum) below NGVD, Apr. 26, 1990.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.78	17.35	15.09	14.98	12.62	11.86		12.58	15.20	17.94	19.27	
10	19.55	16.57	15.04	14.94	12.26	11.59	12.16	12.89	15.74	18.26		
15	19.10	15.82	15.44	14.72	11.75	11.44	12.18	13.10	16.19	18.49		
20	19.10	15.53	15.55	14.31	11.46	11.62	12.11	13.47	16.60	18.68		
25		15.70	15.36	13.63	11.87	11.89	12.02	13.90	17.06	18.85		
EOM	18.39	15.42	15.03	12.80	11.92	12.14	12.08	14.60	17.54	19.11		
MAX		18.28	15.56	15.03	12.75	12.14		14.60	17.54	19.11		



WELL NUMBER .-- 262228081361901. Local Number C 492.

LOCATION.—Lat  $26^{\circ}22'28''$ , long  $81^{\circ}36'19''$ , in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.22, T.47 S., R.27 E., Hydrologic Unit 03090204, Corkscrew Swamp Sanctuary, north of service road, 0.01 mi west of parking lot, 1 mi west and 0.55 mi north of County Road 846 on County Road 849 and 12 mi north of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD. See REMARKS

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 64 ft, cased 60 ft, open hole 60 to 64 ft. See REMARKS.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of shelf, 21.46 ft above National Geodetic Vertical Datum of 1929.

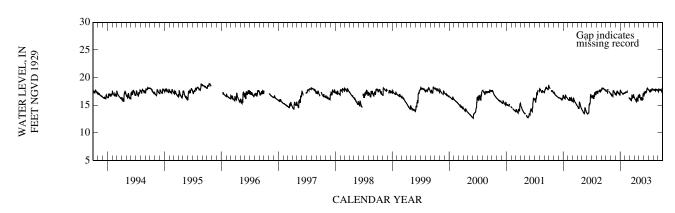
LAND-SURFACE DATUM.--Land surface is approximately 18.4 ft above NGVD.

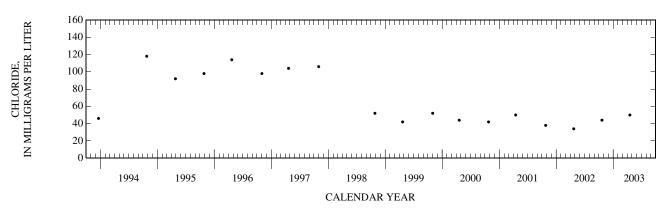
REMARKS.--Well is also used for salinity monitoring. Borehole camera inspection indicates that this well is open to the aquifer at a depth of 19 ft and is currently 21 ft deep. It is unknown whether or not the cased depth and well depth that were initially reported for this well were incorrect. It is possible that the casing has separated and the well has filled in with rock from the formation. See WELL CHARACTERISTICS.

PERIOD OF RECORD.--October 1973 to September 1984 (daily), October 1984 to October 1986 (intermittent), November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.88 ft NGVD, Oct. 19, 1995; lowest, 12.35 ft NGVD, May 6, 1990.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.55	16.84	16.99	17.55	17.29	16.12	16.16	16.88	17.09	17.74	17.79	17.94
10	17.23	16.75	17.35	17.29	17.35	16.15	15.94	16.32	17.44	17.40	17.81	17.76
15	17.83	16.59	17.46	17.14	17.31	16.10	15.63	16.29	17.48	17.57	17.67	17.85
20	17.52	17.44	17.29	17.13		16.58	16.14	16.13	17.60	17.67	17.84	17.70
25	17.35	17.28	17.13	17.12		16.39	15.66	16.17	18.10	17.84	17.85	17.74
EOM	17.12	16.99	16.93	17.20	16.30	16.53	16.78	16.84	17.83	17.79	17.71	18.27
MAX		17.62	17.55	17.71		16.91	16.78	17.16	18.11	17.93	17.87	18.28





WELL NUMBER.--262228081361902. Local Number C 1080.

LOCATION.--Lat 26°22'28", long 81°36'19", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.22, T.47 S., R.27 E., Hydrologic Unit 03090204, at Corkscrew Swamp Sanctuary, next to C-492 north of service road, 0.1 mi west of parking lot, 1 mi west and 0.55 mi north of County Road 846 on County Road 849 and 12 mi southwest of Immokalee and 15 mi northeast of East Naples.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 309 ft, cased to 238 ft, open hole 238 to 309 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage or chalked tape.

DATUM.--Measuring point: Top of 2 3/4 in. bushing, 23.46 ft above National Geodetic Vertical Datum of 1929. Prior to October 1992, measuring point was top of casing, 21.86 ft above NGVD.

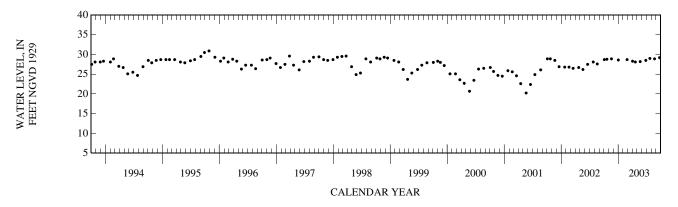
LAND-SURFACE DATUM.--Land surface is approximately 18.9 ft above NGVD.

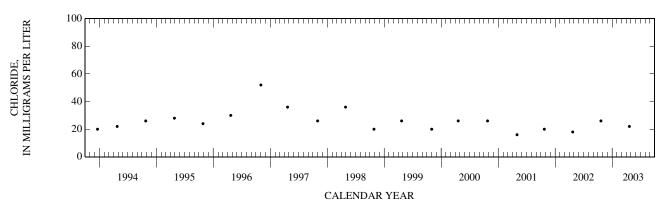
REMARKS.--Well is also used for salinity monitoring. This well is open to the aquifer for 71 ft. The exact depth from which the chloride-containing water is emanating cannot be further delineated.

PERIOD OF RECORD .-- October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.90 ft NGVD, Oct. 27, 1995; lowest, 11.76 ft NGVD, Feb. 22, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	1130	28.7			22	1217	28.2		
21	1214	28.8	439	26	JUN				
NOV					27	1208	28.5		
19	1444	28.9			JUL				
JAN					23	1319	29.0		
02	1226	28.6			AUG				
FEB					22	1322	28.9		
27	0933	28.7			SEP				
APR					23	1423	29.2		
03	1245	28.3							
21	1030	28.1	440	22					





2003

2002

#### COLLIER COUNTY—Continued

WELL NUMBER.--262505081245301. Local Number C 258.

LOCATION.--Lat 26°25'03", long 81°24'58", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.3, T.47 S., R.29 E., Hydrologic Unit 03090204, 100 ft south of County Road 29, 500 ft east of State Road 846 and 0.10 mi east southeast of the Immokalee Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS .-- Drilled, observation, artesian well, diameter 4 in., depth 783 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 4 in. steel cap, 36.46 ft above National Geodetic Vertical Datum of 1929. Prior to September 1991, measuring point was incorrectly considered to be 37.06 ft above NGVD. See REMARKS.

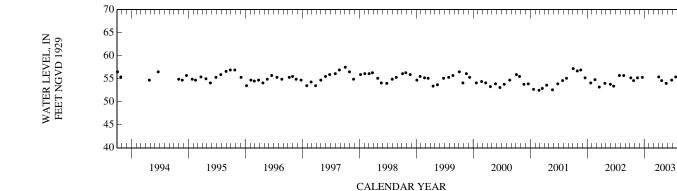
LAND-SURFACE DATUM.--Land surface is approximately 34.3 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to September 1991 are in error. A correction of -0.60 ft has been applied to correct water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--April 1981 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.50 ft NGVD, Oct. 03, 1997; lowest, 51.50 ft NGVD, May 29, 1984 and June 24, 1987.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	0851	55.2	22	1503	54.0
25	1427	54.6	JUN		
NOV			26	1138	54.7
19	1004	55.2	JUL		
DEC			22	1118	55.4
20	1236	55.3	AUG		
APR			19	1039	55.0
04	1516	55.4	SEP		
23	1100	54.6	24	1348	54.9



WELL NUMBER.--262507081235201. Local Number C 298.

LOCATION.--Lat 26°25'09", long 81°23'54", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.2, T.47 S., R.29 E., Hydrologic Unit 03090204, 30 ft north of County Road 846, 0.75 mi east of State Road 29, and 1.4 mi east of the Immokalee Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 303 ft, cased to 254 ft, open hole 254 to 303 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 33.38 ft above National Geodetic Vertical Datum of 1929. Prior to October 25, 2002, measuring point was 33.41 ft above NGVD. See DATUM.

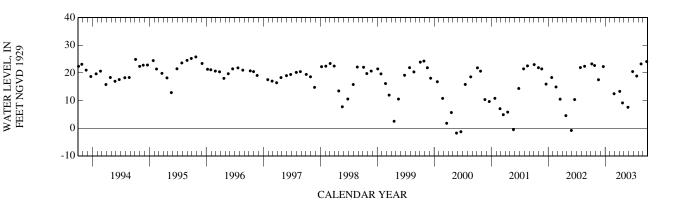
LAND-SURFACE DATUM.--Land surface is approximately 31.9 ft above NGVD.

REMARKS.--Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey. The well was damaged on October 25, 2002, and was repaired on November 25, 2003. See DATUM.

PERIOD OF RECORD.--October 1981 (annual), October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.80 ft NGVD, Oct. 26, 1995; lowest, 1.76 ft below NGVD, May 23, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
07	1127	23.28	27	1127	7.59
25	1200	22.69	JUN		
NOV			26	1426	20.50
19	1106	17.55	JUL		
DEC			22	1325	18.88
20	1201	22.30	AUG		
FEB			19	1245	23.26
27	1324	12.48	SEP		
APR			24	1205	24.12
04	1212	13.33			
22	1149	9.15			



WELL NUMBER.--262519081162102. Local Number C 1074.

LOCATION.—Lat 26°25'20", long 81°16'19", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 1, T.47 S., R.30 E., Hydrologic Unit 03090204, 50 ft south of County Road 846 at the Collier/Hendry County line southwest corner of County Road 846 and County Road 858, 9 mi east of Immokalee.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 130 ft, cased to 100 ft, open hole 100 to 130 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 29.71 ft above National Geodetic Vertical Datum of 1929. Prior to November 25, 1997, measuring point was top of base, 29.94 ft NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 26.2 ft above NGVD.

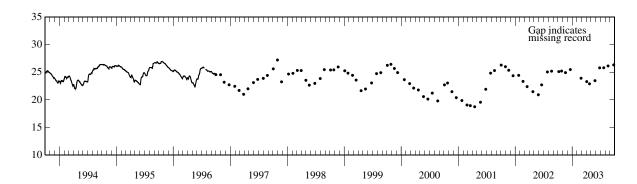
REMARKS.--Data logger enclosure and shelf removed, site re-surveyed April 30, 1998. See DATUM.

PERIOD OF RECORD.--November 1986 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 27.22 ft NGVD, Oct. 30, 1997; lowest, 18.76 ft NGVD, Apr. 16, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1153	25.12	27	1113	23.48
25	1134	25.22	JUN		
NOV			26	1437	25.80
19	1127	24.94	JUL		
DEC			22	1336	25.82
20	1310	25.49	AUG		
FEB			19	1254	26.14
27	1308	23.92	SEP		
APR			24	1142	26.34
04	1156	23.31			
22	1120	22.91			





WELL NUMBER .-- 262521081161901. Local Number C 131.

LOCATION.--Lat 26°25′20″, long 81°16′19″, in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.1, T.47 S., R.30 E., Hydrologic Unit 03090204, 50 ft northeast of the intersection of County Road 846 and County Road 858, at the Collier/Hendry County line and 9 mi east of Immokalee. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 54 ft, cased to 22 ft, open hole 22 to 54 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of recorder shelf, 29.65 ft above National Geodetic Vertical Datum of 1929. From October 1975 to September 1980, measuring point was incorrectly reported to be top of casing, 29.71 ft above NGVD. Prior to October 1975, measuring point was considered to be top of casing, 29.60 ft above NGVD. The figures of water level as elevation, in feet NGVD, prior to October 1975 are considered to be in error. The figures of water level as elevation, in feet NGVD, from October 1975 to September 1980 may also be in error. See REMARKS.

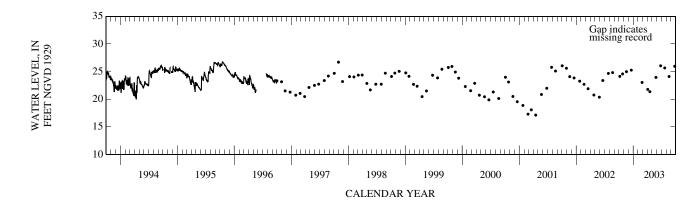
LAND-SURFACE DATUM.--Land surface is approximately 28.4 ft above NGVD.

REMARKS.--Water levels affected by nearby irrigation. The figures of water level as elevation, in feet NGVD, prior to October 1975 are considered to be in error. A correction of +0.05 ft may be required to correct water-level data. See DATUM. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--June 1952 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.83 ft NGVD, present datum, Oct. 9, 1953; lowest, 15.73 ft NGVD, Apr. 14, 1989.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
07	1145	24.14	27	1118	23.95
25	1150	24.58	JUN		
NOV			26	1440	26.05
19	1116	24.99	JUL		
DEC			22	1341	25.66
20	1301	25.26	AUG		
FEB			19	1300	24.11
27	1312	23.04	SEP		
APR			24	1149	25.96
04	1200	21.78			
18	1135	21.36			



WELL NUMBER.--262554081283801. Local Number C 687.

LOCATION.--Lat  $26^{\circ}25'54''$ , long  $81^{\circ}28'39''$ , in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.36, T.46 S., R.28 E., Hydrologic Unit 03090204, in island of Tippins Terrace Road, 0.1 mi south of County Road 890, 3.2 mi west of the Immokalee Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 310 ft, cased to 290 ft, open hole 290 to 310 ft.

INSTRUMENTATION.--Satellite data collection platform. Electronic data logger prior to May 28, 2003. Monthly measurement with chalked tape prior to August 2002.

DATUM.--Measuring point: Top of casing, 27.06 ft above National Geodetic Vertical Datum of 1929. From October 1989 to March 17, 1998, top of casing was 25.92 ft above NGVD. From October 1985 to September 1989, top of casing was 26.24 ft above NGVD. Prior to October 1985, top of casing was incorrectly considered to be 9.81 ft above NGVD. See REMARKS.

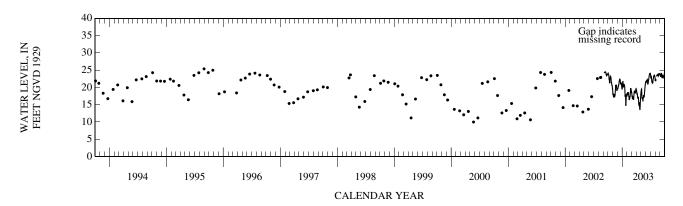
LAND-SURFACE DATUM.--Land surface is approximately 23.6 ft above NGVD.

REMARKS.--The figures of water level as elevation, in feet NGVD, prior to October 1985 are in error. A correction of +15.43 ft has been applied to correct water-level data. Corrected records are in the files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1981 to September 1982 (intermittent), October 1982 to July 2002 (monthly), August 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.38 ft NGVD, Aug. 31, 1995; lowest, 4.03 ft NGVD, Apr. 24, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.82	17.91	19.78	21.73	18.41	17.43	18.25	19.57	21.94	22.68	21.90	23.13
10	22.22	17.95	20.78	20.24	18.59	17.16	17.18	16.67	22.09	21.55	23.34	24.04
15	22.66	17.60	22.26	20.74	16.34	16.43	16.58	16.73	21.43	21.33	23.59	23.44
20	23.02	20.53	21.82	17.30	17.37	19.02	15.51	17.41	22.33	22.82	23.28	22.60
25	21.38	20.63	21.09	15.53	19.80	18.66	13.50	19.07	23.84	23.39	23.99	23.00
EOM	19.77	19.33	19.43	17.83	18.96	19.68	17.93	21.47	24.05	22.42	23.86	24.52
MAX	24.07	20.73	22.40	21.73	19.80	19.68	19.39	21.47	24.08	24.04		24.52



WELL NUMBER.--262555081242501. Local Number C 363.

LOCATION.—Lat  $26^{\circ}25'55$ ", long  $81^{\circ}24'25$ ", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 34, T.46 S., R.29 E., Hydrologic Unit 03090204, 54 ft south of west access road to Immokalee Airport near beacon tower, 1 mi north of State Road 29 and 1.2 mi east of the Immokalee Post Office.

AQUIFER.--Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 119 ft, cased to 84 ft, open hole 84 to 119 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 33.86 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 34.1 ft above NGVD.

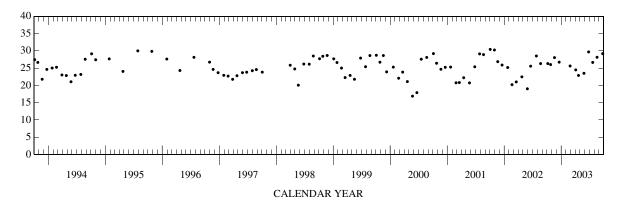
REMARKS.--Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--June 1961 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.19 ft NGVD, June 24, 1982; lowest, 16.89 ft NGVD, May 23, 2000.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	0903	26.32	27	1137	23.51
25	1212	26.04	JUN		
NOV			26	1147	29.70
19	1015	28.06	JUL		
DEC			22	1126	26.66
19	1340	26.74	AUG		
FEB			19	1049	28.15
27	1336	25.63	SEP		
APR			24	1221	29.19
04	1223	24.50			
22	1204	22.89			





WELL NUMBER.--262558081270501. Local Number C 1078.

LOCATION.--Lat  $26^{\circ}25^{\circ}59^{\circ}$ , long  $81^{\circ}27^{\circ}07^{\circ}$ , in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 31, T.46 S., R.29 E., Hydrologic Unit 03090204, 25 ft north of County Road 890, 1.1 mi west of State Road 29 on County Road 890, 2.0 mi west of Immokalee Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 38 ft, cased to 13 ft, screened 13 to 38 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

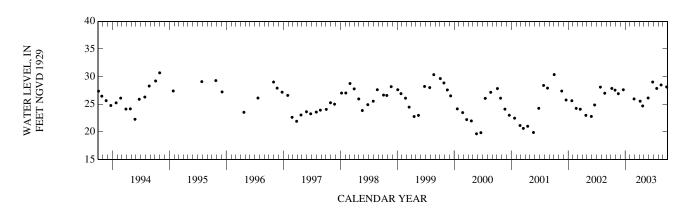
DATUM.--Measuring point: Top of 4 in. casing, 34.99 ft above National Geodetic Vertical Datum of 1929. Prior to August 6, 1995, top of casing was 34.71 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 31.4 ft above NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.17 ft NGVD, Sept. 1, 1988; lowest, 19.65 ft NGVD, May 23, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1315	27.86	28	1132	26.13
28	1053	27.55	JUN		
NOV			26	1057	29.02
18	1550	26.91	JUL		
DEC			22	1010	27.86
20	0954	27.62	AUG		
FEB			19	0932	28.49
27	1610	25.96	SEP		
APR			24	1404	28.13
07	1011	25.55			
23	1110	24.60			



WELL NUMBER.--262724081260701. Local Number C 462.

LOCATION.--Lat 26°27'26", long 81°26'12", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.20, T.46 S., R.29 E., Hydrologic Unit 03090204, in pasture 0.1 mi west of State Road 29, 1.7 mi north of County Road 850 and 2.5 mi northwest of Immokalee.

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 110 ft, cased to 50 ft, slotted casing 50 to 110 ft.

INSTRUMENTATION.--Satellite data collection platform. Monthly measurement with chalked tape prior to May 28, 2003.

DATUM.--Measuring point: Top of recorder base, 37.11 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 33.8 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--November 1968 to September 1996 (daily), October 1996 to May 2003 (monthly), May 2003 to current year.

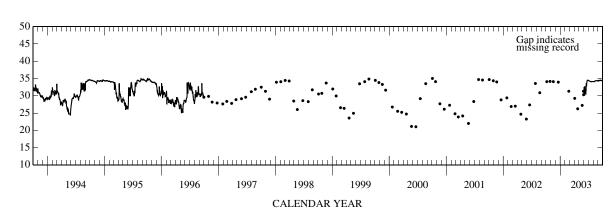
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 35.13 ft NGVD, Sept. 2, 1983; lowest water level measured, 21.02 ft NGVD, June 20, 2000.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			FEB		
07	1414	34.09	25	1644	31.31
28	1220	34.16	APR		
NOV			04	1532	29.25
18	1610	34.09	23	1255	26.22
DEC			MAY		
20	0935	33.94	22	1522	27.21

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5									30.63	34.31	34.09	34.41
10									30.77	34.19	34.19	34.41
15									31.90	34.13	34.32	34.51
20									33.39	34.12	34.38	34.44
25									34.50	34.12	34.38	34.37
EOM								30.29	34.44	34.12	34.34	34.68
MAX									34.51	34.42	34.38	34.68





WELL NUMBER.--262822081213201. Local Number C 1075.

LOCATION.--Lat 26°28'31", long 81°21'57", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 18, T.46 S., R.30 E., Hydrologic Unit 03090205, 3.8 mi north of County Road 846 and 4.5 mi east of State Road 29, 5.0 mi northeast of Immokalee. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 20 ft, cased to 8 ft, screened 8 to 20 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

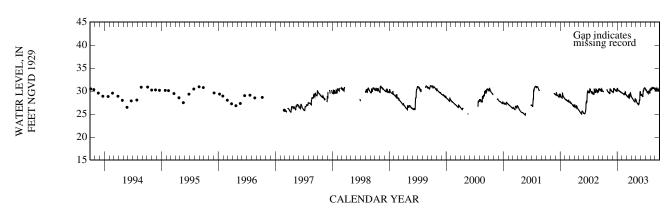
DATUM.--Measuring point: Top of base, 33.36 ft above National Geodetic Vertical Datum of 1929. From October 30, 1996, to March 27, 1998, measuring point was top of casing, 33.38 ft above NGVD. Prior to October 30, 1996, top of casing was 33.94 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 30.6 ft above NGVD.

PERIOD OF RECORD.--April 1986 to October 1996 (monthly), February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 31.17 ft NGVD, Sept. 24, 1999; lowest, 24.79 ft NGVD, May 22, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.87	29.76 29.59	29.81 30.52	30.34 30.12	29.52 29.41	28.90 28.74	28.60 28.39	27.75 27.37	29.10 29.05	30.26 29.86	30.40 30.59	30.58 30.13
10 15		29.47	30.43	29.99	29.20	28.64	28.04	27.27	29.49	29.83	30.62	30.49
20 25		30.22 30.05	30.33 30.17	29.84 29.69	29.42 29.32	28.69 29.04	27.78 27.68	27.21 28.01	30.22 30.60	29.88 29.57	30.71 30.58	30.13 30.42
EOM	30.01	29.84	29.92	29.62	29.13	29.06	28.03	29.22	30.48	30.22	30.32	30.65
MAX		30.50	30.57	30.56	29.86	29.72	28.88	29.97	30.71	30.37	30.76	30.70



WELL NUMBER.--262822081213202. Local Number C 1076.

LOCATION.--Lat 26°28'31", long 81°21'58", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 18, T.46 S., R.30 E., Hydrologic Unit 03090205, 3.8 mi north of County Road 846 and 4.5 mi east of State Road 29, 5 mi northeast of Immokalee. (Corrected).

AQUIFER.--Tamiami aquifer of the Pliocene Age, Geologic Unit 122 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 85 ft, cased to 65 ft, open hole 65 to 85 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

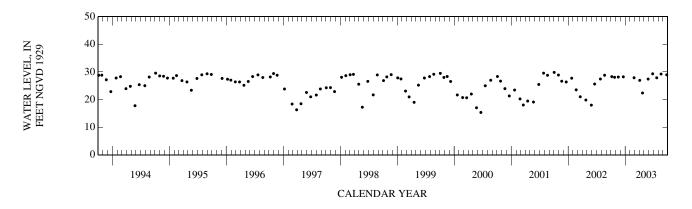
DATUM.--Measuring point: Top of casing, 34.05 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 30.6 ft above NGVD.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.90 ft NGVD, Mar. 31, 1987; lowest, 15.34 ft NGVD, June 20, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1025	28.30	28	1049	27.43
25	1345	28.07	JUN		
NOV			26	1342	29.33
18	1422	28.16	JUL		
DEC			22	1243	27.89
20	1121	28.22	AUG		
FEB			19	1207	29.24
27	1454	27.90	SEP		
APR			24	1303	28.97
04	1410	26.95			
22	1352	22.38			



WELL NUMBER.--262822081213203. Local Number C 1077.

 $LOCATION.--Lat\ 26^{\circ}28'31'', long\ 81^{\circ}21'58'', in\ SW\ {}^{1}\!\!/_{4}\ NE\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ sec. 18, T.46\ S., R.30\ E., Hydrologic\ Unit\ 03090205,\ 3.8\ mi\ north\ of\ County\ Road\ 846, and\ 4.5\ mi\ east\ of\ State\ Road\ 29,\ 5\ mi\ northeast\ of\ Immokalee.\ (Corrected).$ 

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 210 ft, cased to 170 ft, screened 170 to 210 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

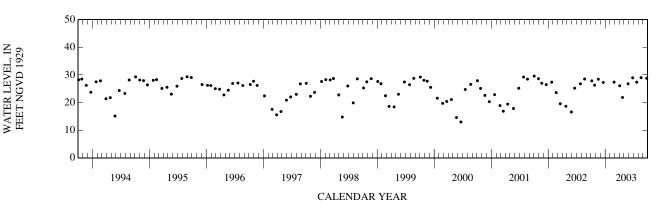
DATUM.--Measuring point: Top of casing, 35.14 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 31.1 ft above NGVD.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.67 ft NGVD, Mar. 31, 1987; lowest, 12.98 ft NGVD, June 20, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
07	1028	27.85	28	1052	26.80
25	1349	26.28	JUN		
NOV			26	1348	28.96
18	1433	28.45	JUL		
DEC			22	1247	27.39
20	1123	27.29	AUG		
FEB			19	1211	29.02
27	1457	27.39	SEP		
APR			24	1306	28.77
04	1418	26.09			
22	1359	21.84			



WELL NUMBER.--262859081273002. Local Number C 532.

LOCATION.--Lat 26°29'33", long 81°27'35", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.7, T.46 S., R.29 E., Hydrologic Unit 03090205, 24 ft north of State Road 82, 1.5 mi west of State Road 29 and 5.5 mi northwest of Immokalee.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 13 ft, cased to 3 ft, screened 3 to 13 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 44.53 ft above National Geodetic Vertical Datum of 1929.

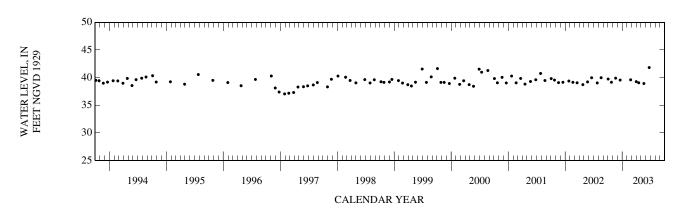
LAND-SURFACE DATUM.--Land surface is approximately 41.9 ft above NGVD.

REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1975 to September 1994 (monthly), October 1994 to July 1996 (quarterly), November 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.82 ft NGVD, June 23, 2003; lowest, 37.05 ft NGVD, Jan. 28, 1997.

		Elev-			Elev-
		ation,			ation,
		feet			feet
		above			above
Date	Time	NGVD	Date	Time	NGVD
		(72020)			(72020)
OCT			APR		
03	1433	39.74	01	1507	39.27
24	1607	39.16	17	1535	39.06
NOV			MAY		
20	1427	39.90	20	1611	38.93
DEC			JUN		
19	1551	39.55	23	1534	41.82
FEB					
24	1549	39.60			



# WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

# COLLIER COUNTY—Continued

# MISCELLANEOUS WATER-LEVEL MEASUREMENTS

Station number	Local ident- i- fier	Lat- i- tude	Long- i- tude	Date	Time	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
261002081483701 C -	525	26 09 58 N	081 48 35 W	10-24-02	0845	3220	760

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# Glades County

# WATER RESOURCES DATA FOR FLORIDA, 2003

# **VOLUME 2B: SOUTH FLORIDA**

# Key to site locations on figure #15

# GLADES COUNTY

Index	Site	Well	Page
Number	Number	Name	Number
1	264941081321301	GL 328	267
2	264623081213601	HE 517	266

# **VOLUME 2B: SOUTH FLORIDA**

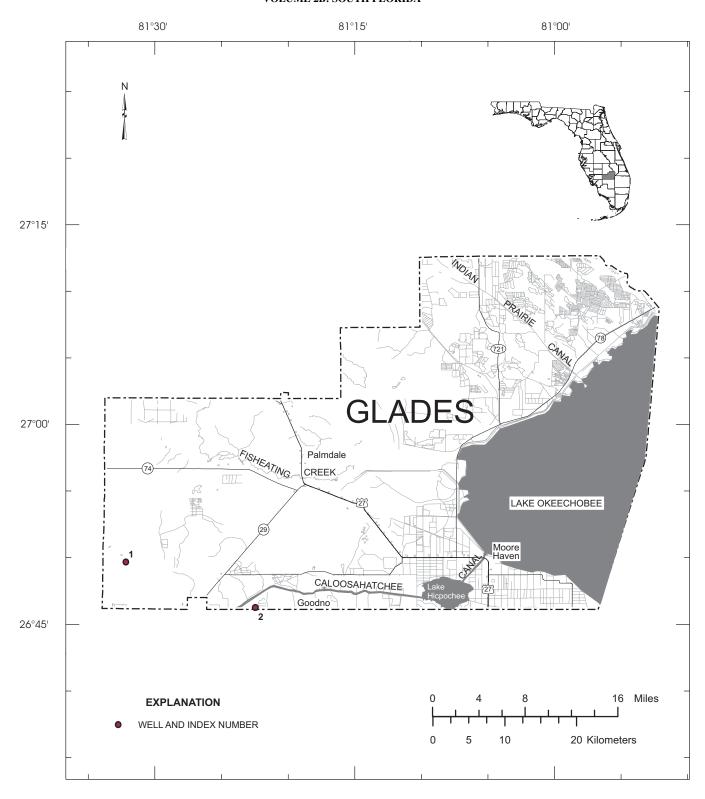


Figure 15: Location of wells in Glades County

#### GLADES COUNTY

WELL NUMBER.--264623081213601. Local Number HE 517.

LOCATION.—Lat  $26^{\circ}46'14''$ , long  $81^{\circ}22'28''$ , in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.36, T.42 S., R.29 E., Hydrologic Unit 03090205, at Port La Belle Golf Course maintenance shop, 4.8 mi east of Birchwood Parkway, 0.7 mi north of State Road 80. (Corrected).

AQUIFER .-- Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 138 ft, cased to 128 ft, screened 128 to 138 ft.

REVISED RECORDS .-- WDR FL-79-2B:1977-78.

INSTRUMENTATION.--Electronic data logger with pressure transducer.

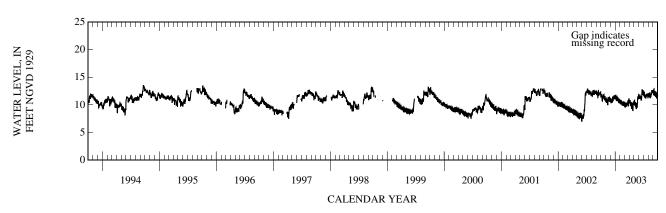
DATUM.--Measuring point: Top of recorder shelf, 18.14 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 16.0 ft above NGVD.

PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.29 ft NGVD; June 25, 1982; lowest, 6.97 ft NGVD, June 1, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	11.69 10.73	10.57 11.02	10.37 10.56	11.79 10.87	10.11 10.71	9.64 10.28	10.65 10.12	10.86 10.41	11.35 11.07	12.33 11.36	11.40 12.15	12.40 11.76
15	11.35	10.06	11.42	10.68	10.36	10.05	9.56	9.40	11.48	11.14	11.90	12.41
20 25	11.89 10.96	10.98 11.41	10.86 11.68	11.26 10.84	9.95 10.09	10.10 10.17	10.23 9.05	9.79 11.31	11.38 11.97	11.94 11.67	11.85 12.12	12.14 11.16
EOM	10.82	11.00	10.97	10.63	10.09	11.11	10.07	11.78	12.55	11.79	12.61	11.87
MAX	11.93	11.41	11.68	11.82	10.84	11.11	10.80	11.78	12.81	12.35	12.66	12.92



#### GLADES COUNTY—Continued

Well Number.--264941081321301. Local Number GL 328. USGS Observation Well near La Belle, FL.

 $LOCATION.-- \ Lat\ 26^{\circ}49'40", long\ 81^{\circ}32'11", in\ SW\ {}^{1}\!\!/_{\!\!4}\ SW\ {}^{1}\!\!/_{\!\!4}\ sec.11, T.42\ S., R.28\ E., Hydrologic\ Unit\ 03090205, 30\ ft\ south\ of\ County\ Road\ 720, 2\ mi\ east\ of\ the\ intersection\ of\ Muse\ Road\ and\ County\ Road\ 720.\ (Corrected).$ 

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS .-- Drilled, observation, artesian well, diameter 8 in., depth 125 ft.

INSTRUMENTATION.--Satellite data collection platform with a pressure transducer.

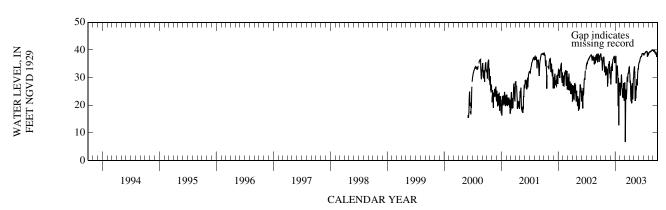
DATUM.--Measuring point: Top of 8 in. iron pipe, 41.63 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 41.0 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 40.06 ft NGVD, Aug. 26, 2003; lowest, 6.74 ft NGVD, Mar. 7, 2003.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	36.78 33.40 36.23 37.20 33.81 33.03	32.95 33.00 28.08 34.80 35.95 30.83	29.28 33.81 35.48 36.81 37.63 35.34	37.74 32.71 34.38 24.94 20.20 24.91	26.64 31.15 26.07 25.27 27.24 21.65	25.81 24.73 23.97 30.36 31.56 33.67	31.12 24.11 23.97 27.36 24.96 31.79	34.06 21.53 25.73 29.09 31.96 34.41	35.66 36.80 37.56 37.83 38.55 38.71	38.38 38.72 39.24 39.38 39.23 38.60	38.88 39.33 39.52 39.69 40.01 39.90	39.71 39.85 39.20 38.47 38.27 39.15
MAX	38.36	35.95	37.69	37.85	31.15	33.67	33.90	34.41	38.73	39.45	40.06	39.89



GLADES COUNTY—Continued

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# Hendry County

# **VOLUME 2B: SOUTH FLORIDA**

# Key to site locations on figure $\,\#\,16$

# HENDRY COUNTY

Index	Site	Well	Page		
Number	Number	Name	Number		
1	263845081260701	HE 555	274		
2	263845081260702	HE 556	275		
3	263930081301501	HE 559	277		
4	263845081260703	HE 851	276		
5	261735080534001	HE 861	272		
6	261735080534002	HE 862	273		

# WATER RESOURCES DATA FOR FLORIDA, 2003

# **VOLUME 2B: SOUTH FLORIDA**

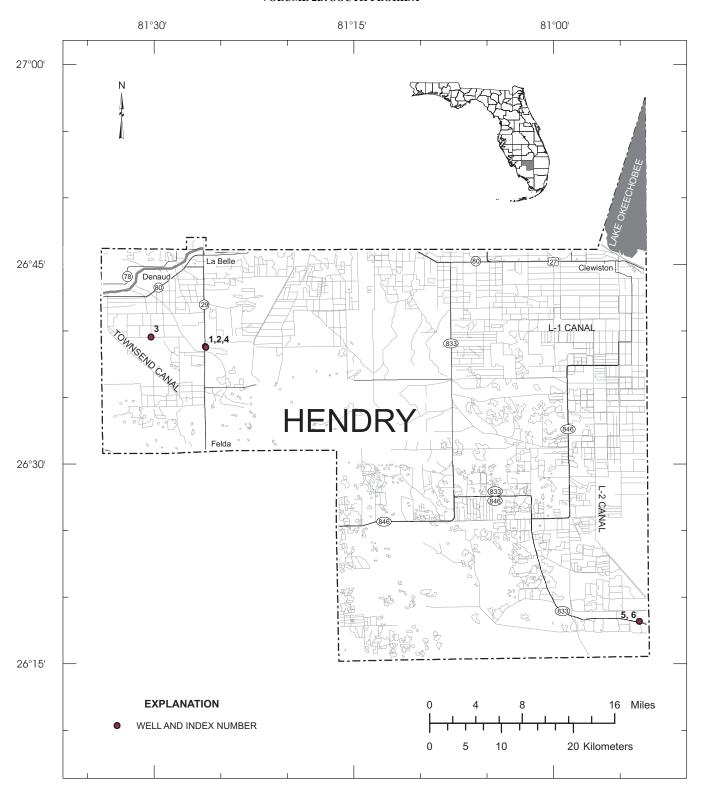


Figure 16: Location of wells in Hendry County

#### HENDRY COUNTY

WELL NUMBER.--261735080534001. Local Number HE 861. USGS Observation Well near Immokalee, FL.

LOCATION.--Lat 26°18'09", long 80°53'35", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.24, T.48 S., R.34 E., Hydrologic Unit 03090202, 35 ft south of County Road 833, 0.75 mi west of the Broward County line and 5.2 mi east of the Big Cypress Forest Office.

AQUIFER.--Tamiami formation, limestone aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 70 ft, cased to 37 ft, open hole 37 to 70 ft.

INSTRUMENTATION.--Data collection platform with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 17.96 ft above National Geodetic Vertical Datum of 1929. From October 1987 to January 25, 19994, measuring point was top of casing, 17.20 ft above NGVD. Prior to October 1987 top of casing was incorrectly considered to be 17.78 ft above NGVD.

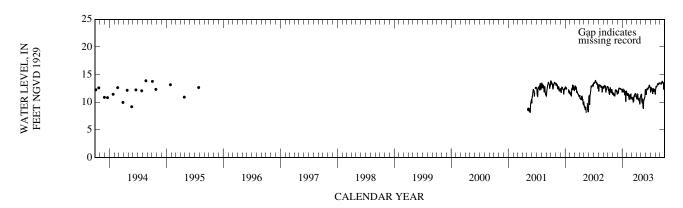
LAND-SURFACE DATUM.--Land surface is approximately 14.4 ft above NGVD.

PERIOD OF RECORD.--September 1977 to November 1977 (monthly), December 1977 to September 1983 (daily), November 1985 to September 1994 (monthly), October 1994 to July 1995 (quarterly), May 2001 to current year.

REMARKS.--Measuring point elevations prior to October 1988 are based on a land-surface elevation estimated from a topographic map. The figures of water level as elevation, in feet NGVD, prior to September 1987 are in error. A -0.58 ft correction is required to correct the water-level data. See DATUM. Records of water levels prior to October 1985 are available in files of the U.S. Geological Survey. Station reconstructed January 25, 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 15.75 ft NGVD, Aug. 24, 25, 1978 (present datum); lowest, 6.94 ft NGVD, May 31, 1981 (present datum).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.15	11.33	11.60	12.19	11.48	10.69	10.76	11.38	11.74		12.78	
10	11.53	11.30	12.51	12.18	11.58	10.81	11.44	9.86	12.50	12.37	12.81	13.39
15	12.48	11.05	12.50	11.74	10.52	10.24	10.49	9.12	12.37	11.50	13.22	13.81
20	12.02	12.24	12.40	11.73	11.12	11.27	10.27	10.43	12.65	12.35	13.20	13.53
25	12.23	12.15	12.40	11.56	11.43	11.57	9.71	10.87	13.06	12.23	13.46	13.00
EOM	11.85	11.50	11.80	11.47	10.73	11.57	11.18	12.29	12.70	11.49	13.46	13.80
MAX	12.78	12.24	12.56	12.33	11.70		11.44	12.30	13.10		13.51	



#### HENDRY COUNTY—Continued

WELL NUMBER.--261735080534002. Local Number HE 862.

LOCATION.--Lat 26°18'09", long 80°53'35", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.24, T.48 S., R.34 E., Hydrologic Unit 03090202, 35 ft south of County Road 833, 0.75 mi west of the Broward County line and 5.2 mi east of the Big Cypress Forest Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 11 ft, cased to 7 ft, 3 ft of screen.

INSTRUMENTATION.--Data collection platform with pressure transducer. Electronic data logger prior to May 2001.

DATUM.--Measuring point: Top of shelf, 17.13 ft above National Geodetic Vertical Datum of 1929. From October 1984 to October 1990, measuring point was incorrectly considered to be 17.71 ft above NGVD. Prior to October 1984, measuring point was incorrectly considered to be 17.69 ft above NGVD.

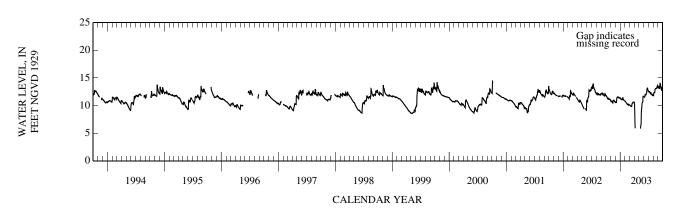
LAND-SURFACE DATUM.--Land surface is approximately 14.4 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, published prior to September 1990 are in error. See DATUM. The well went dry in April 2003 because of construction-related dewatering in the immediate area.

PERIOD OF RECORD.--September 1977 to November 1977 (monthly), December 1977 to September 1983 (daily), October 1983 to September 1988 (monthly), October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.62 ft NGVD, Aug. 23, 1978; lowest, 5.89 ft NGVD, Apr. 7, 2003. Well was dry during the period of Apr. 8 to May 10, 2003. See REMARKS.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.70	10.81	10.66	11.26	10.67	10.03	7.69		11.51		12.35	
10	11.43	10.71	11.28	11.08	10.45	9.89			12.00	12.44	12.33	13.17
15	11.35	10.49	11.55	11.13	10.25	9.81		6.68	11.91	12.35	13.06	13.90
20	11.13	10.96	11.55	11.11	10.25	10.40		9.98	12.34	12.05	13.09	13.28
25	11.19	10.78	11.47	10.96	10.23	10.63		10.65	13.14	11.93	13.40	12.87
EOM	11.00	10.64	11.26	10.82	10.14	10.70		11.64	12.63	11.89	13.42	13.82
MAX	11.83	10.97	11.55	11.41	10.80				13.17		13.70	



DAY

10

15

20

25

23.36

21.18

23.23

**EOM** 

MAX

#### HENDRY COUNTY—Continued

WELL NUMBER.--263845081260701. Local Number HE 555.

LOCATION.--Lat 26°38'47", long 81°26'09", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.21, T.44 S., R.29 E., Hydrologic Unit 03090205, at southeast corner of intersection of State Road 29 and Sears Road, and 3.6 mi west of Sears.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 270 ft, cased to 250 ft, screened 250 to 270 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 32.83 ft above National Geodetic Vertical Datum of 1929.

15.07

22.05

18.37

18.37

LAND-SURFACE DATUM.--Land surface is approximately 30.3 ft above NGVD.

21.88

22.06

REMARKS.--Records of water levels prior to October 1980 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1975 to October 1983 (daily), November 1983 to September 1995 (monthly), December 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.10 ft NGVD, Nov. 9, 1992; lowest daily maximum water level, 8.58 ft NGVD, May 27, 1981.

ELEVATION ABOVE NGVD 1929, FEET

19.66

19.66

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT NOV DEC **FEB** MAY JUN JUL AUG SEP JAN MAR APR 25.52 23.21 21.28 21.94 16.57 18.20 19.89 17.29 20.68 23.96 24.83 25.94 21.39 24.96 25.09 21.32 25.80 25.33 21.04 17.26 16.58 19.18 16.93 21.14 24.23 25.93 24.06 19.55 21.44 21.12 16.92 16.77 18.38 16.65 21.71 24.36 19.99 21.01 19.09 17.17 18.18 15.73 17.02 22.27 24.48 25.32 25.85 24.03 25.57 20.60 21.74 15.72 18.26 18.96 15.21 18.35 23.14 24.58 25.71

15.99

19.93

19.94

19.94

23.58

23.58

24.65

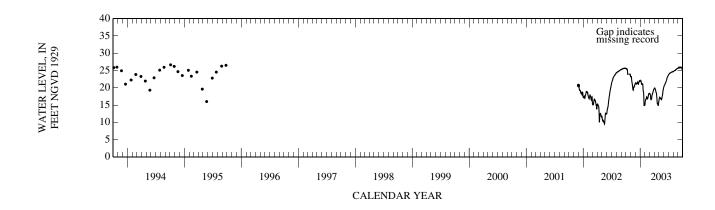
24.68

25.60

25.60

25.71

25.97



#### HENDRY COUNTY—Continued

WELL NUMBER.--263845081260702. Local Number HE 556.

MAX

WATER LEVEL, IN

24.96

22.46

21.23

LOCATION.--Lat 26°38'47", long 81°26'09", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.21, T.44 S., R.29 E., Hydrologic Unit 03090205, at southeast corner of intersection of State Road 29 and Sears Road, and 3.6 mi west of Sears.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 175 ft, cased to 135 ft, screened 135 to 155 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 32.77 ft above National Geodetic Vertical Datum of 1929. From October 1986 to October 1991, measuring point was 32.83 ft above NGVD. From October 1979 to September 1986, measuring point was incorrectly considered to be 30.84 ft above NGVD. Prior to October 1979, measuring point was incorrectly considered to be 35.63 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 30.3 ft above NGVD.

REMARKS.--Station reconstructed February 27, 1992. The figures of water levels as elevation, in feet NGVD, from October 1979 to September 1986 are estimated to require a correction of approximately +2 ft. The figures of water level as elevation, in feet NGVD, prior to October 1979 are estimated to require a correction of approximately -2 ft. See DATUM.

PERIOD OF RECORD.--October 1975 to December 1975 (monthly), January 1976 to current year.

20.98

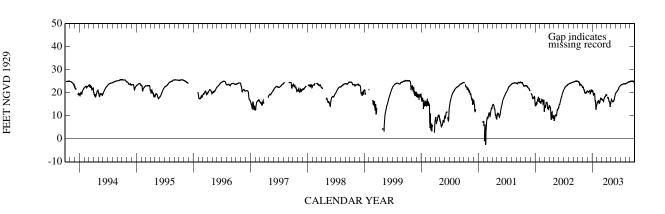
17.62

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.99 ft NGVD, Sept. 25, 1995; lowest 2.67 ft below NGVD, Feb. 16, 2001.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.80	22.39	20.39	20.63	15.88	17.24	19.03	17.05	20.28	23.33	24.02	25.08
10	24.54	21.33	20.58	19.15	16.59	16.93	18.02	16.36	20.69	23.51	24.17	24.93
15	23.69	19.91	20.67	19.70	15.73	16.21	17.66	16.19	21.27	23.68	24.30	25.08
20	23.50	19.99	19.73	16.41	16.29	17.61	16.16	16.80	21.73	23.84	24.57	25.00
25	23.08	20.20	21.00	12.47	17.54	18.39	14.57	18.09	22.65	23.88	24.85	24.74
EOM	22.32	20.57	20.49	14.83	17.51	19.18	15.62	19.62	23.08	23.82	24.75	24.80

19.18



19.62

23.93

24.85

25.11

23.08

#### HENDRY COUNTY—Continued

WELL NUMBER.--263845081260703. Local Number HE 851. USGS Observation Well near Sears, FL.

 $LOCATION.--Lat\ 26^{\circ}38^{\prime}45^{\prime\prime},\ long\ 81^{\circ}26^{\prime}07^{\prime\prime},\ in\ NW\ {}^{1}\!\!/_{\!\!4}\ sec. 21,\ T.44\ S.,\ R.29\ E.,\ Hydrologic\ Unit\ 03090205,\ southeast\ corner\ of\ intersection\ of\ State\ Road\ 29\ and\ Sears\ Road,\ and\ 3.6\ mi\ west\ of\ Sears.$ 

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 10 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 32.26 ft above National Geodetic Vertical Datum of 1929. From October 1980 to September 1991, measuring point was 32.28 ft above NGVD. From October 1986 to September 1989, measuring point was top of shelf, 32.30 ft above NGVD. From October 1979 to September 1986, top of shelf was 30.45 ft above NGVD.

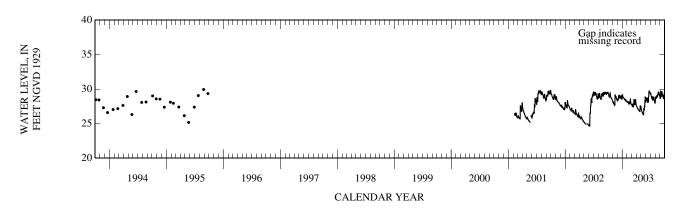
LAND-SURFACE DATUM.--Land surface is approximately 29.6 ft above NGVD.

REMARKS.--Records of water levels prior to October 1979 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1977 to October 1984 (daily), October 1984 to September 1995 (monthly), February 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.49 ft NGVD, Aug. 29, 1990; lowest daily maximum water level, 22.59 ft NGVD, May 26, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.26	27.99	28.40	28.90	28.16	27.58	27.45	26.94	28.62	29.12	28.69	29.64
10	28.90	27.82	29.08	28.75	28.13	27.89	27.23	26.59	28.71	28.70	28.89	29.02
15	29.42	27.62	28.85	28.51	27.82	27.60	26.99	26.42	28.26	28.56	28.91	29.27
20	28.86	28.83	29.05	28.39	27.93	27.89	26.89	27.22	28.96	28.42	29.42	28.85
25	28.62	28.63	29.08	28.28	28.04	27.93	26.76	27.36	29.60	28.29	29.52	29.10
EOM	28.33	28.36	28.66	28.27	27.82	27.84	27.38	28.40	29.32	27.96	28.84	29.50
MAX	29.60	29.22	29.13	29.24	28.56	28.56	27.66	28.90	29.72	29.40	29.55	29.64



# HENDRY COUNTY—Continued

WELL NUMBER.--263930081301501. Local Number HE 559. USGS Observation Well near La Belle, FL.

LOCATION.--Lat 26°39"31", long 81°30"14", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 10, T.44 S., R.28 E., Hydrologic Unit 03090205, 3.8 mi east of Lee/Hendry County line at Berry Groves, 3.6 mi south of State Road 80, and 8.2 mi southwest of La Belle

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation artesian well, diameter 4 in., depth 165 ft, cased to 155 ft, screened 155 to 165 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 30.76 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 27.9 ft above NGVD.

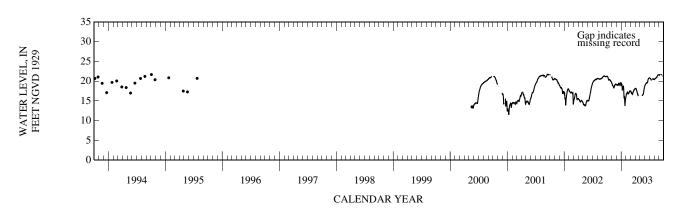
REMARKS.--Satellite data collection platform installed May 2000. Records of water levels prior to October 1976 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.-- October 1975 to November 1979 (monthly), December 1980 to September 1994 (monthly), October 1994 to September 1995 (quarterly), May 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.54 ft NGVD, Nov. 28, 1979; lowest daily maximum water level, 11.51 ft NGVD, Jan. 10, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	21.19 20.67	19.19 18.76	19.04 19.17	19.00 18.02	16.80 17.29	17.26 17.05	18.11 17.69		19.15 19.53	20.72 20.55	20.58 20.82	21.65 21.68
15 20 25	20.39 20.38 20.09	18.30 18.92 19.27	19.43 19.07 19.54	18.72 15.68 13.73	16.75 16.99 17.54	16.70 17.38 17.85	16.87 16.47	16.42 16.58 17.35	19.63 19.82 20.64	20.27 20.55 20.56	20.92 21.27 21.60	21.64
EOM	19.69	19.18	19.00	15.96	17.38	18.16		18.56	20.88	20.43	21.64	21.46
MAX	21.25	19.53	19.61	19.39	17.54	18.16			20.88		21.65	



HENDRY COUNTY—Continued

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# **VOLUME 2B: SOUTH FLORIDA**

# Lee County

# **VOLUME 2B: SOUTH FLORIDA**

# **Key to site locations on figure #17**

# LEE COUNTY

Index Number	Site Number	Well Name	Page Number	Index Number	Site Number	Well Name	Page Number
1	263532081592201	L 581	360	61	263242081572101	L 2244	338
2	262710082005301	L 585	317	62	263718081485003	L 2292	366
3	262538082045701	L 588	302	63	262552081485702	L 2295	304
4	264101081443001	L 652	381	64	262552081485703	L 2308	305
5	264153082022301	L 721	384	65	263344081361704	L 2311	355
6	263850081365401	L 727	372	66	262703081340203	L 2313	313
7	263712081461201	L 728	363	67	263004082111701	L 2315	326
8	263335081394301	L 729	351	68	264608081454103	L 2328	400
9	263138081545801	L 730	335	69	264517081513201	L 2341	394
10	262703081340201	L 731	311	70	263526082010201	L 2434	359
11	262839081503100	L 735	323	71 72	263307081555901	L 2435	346
12	262022081464201	L 738	288	72 72	262622082074401	L 2524	306
13 14	262657081443501	L 739 L 742	309 347	73 74	263117082051001	L 2525 L 2526	332 396
15	263323081522401 263834082005301	L 742 L 781	347 371	74 75	264517082022102 263955082083101	L 2520 L 2527	396 376
16	264517082022101	L 1059	395	76	263907081592701	L 2527 L 2528	373
17	264241081582401	L 1039 L 1110	385	70 77	262944081560801	L 2529	373
18	264147081562701	L 1111	383	78	264308081405402	L 2530	386
19	264120082022101	L 1113	382	79	264427081362601	L 2531	392
20	263327081512001	L 1121	348	80	263955082083103	L 2549	378
21	263532081592202	L 1136	361	81	262711081413701	L 2550	318
22	263950081355402	L 1137	375	82	263813081552801	L 2640	369
23	262703081340202	L 1138	312	83	263257081585701	L 2642	345
24	262549082035301	L 1403	303	84	263253082014201	L 2643	344
25	263630081375301	L 1418	362	85	263440082022001	L 2644	357
26	263233081550301	L 1598	337	86	263743082041201	L 2645	367
27	263329081394302	L 1625	350	87	264537081552202	L 2646	397
28	262435081535101	L 1634	298	88	264002082012801	L 2700	379
29	262435081535001	L 1635	297	89	263819081585801	L 2701	370
30	262042081455001	L 1691	289	90	263955082083102	L 2820	377
31 32	262706081435401	L 1853 L 1963	314 352	91 92	263117082051002	L 2821 L 3207	333 358
32	263344081361701 263344081361702	L 1963 L 1964	352 353	92 93	263440082022002 264053081572501	L 3207 L 4820	358 380
34	263353081335801	L 1965	356	94	263115081483501	L 5641	330
35	263807081430301	L 1968	368	95	263249081474401	L 5648	339
36	263718081485001	L 1973	364	96	262934081495801	L 5649	324
37	263718081485002	L 1974	365	97	262514081393402	L 5664	301
38	264359081424701	L 1975	390	98	262513081432601	L 5667	299
39	264359081424702	L 1976	391	99	262513081472001	L 5669R	300
40	264320081365701	L 1977	387	100	262331082383201	L 5672	294
41	263041081433101	L 1983	327	101	262331082383202	L 5673	295
42	262713081414701	L 1985	320	102	264433081360601	L 5708	393
43	263251081452801	L 1993	341	103	263249081474402	L 5720	340
44	263251081452802	L 1994	342	104	262102081464401	L 5722	290
45	263251081452803	L 1995	343	105	262102081464402	L 5723	291
46	263041081433102	L 1998	328	106	261946081490302	L 5725	285
47	263041081433103	L 1999	329	107	261859081481901	L 5726	282
48 49	263344081361703	L 2186	354 374	108 109	262351081485401	L 5730	296 321
50	263950081355401 262659081382501	L 2187 L 2192	310	110	262755082090902 262706082080201	L 5734 L 5735	315
51	262713081414401	L 2192	319	111	262706082080201	L 5737	316
52	261957081432201	L 2194	286	112	261926081454701	L 5744R	283
53	261957081432202	L 2195	287	113	261926081454702	L 5745R	284
54	264329081340401	L 2200	388	114	262258081471801	L 5746	292
55	264329081340402	L 2202	389	115	262258081471802	L 5747	293
56	263329081394301	L 2204	349	116	263138082112801	L 5766	336
57	262831081575901	L 2212	322	117	263115081483502	L 5801	331
58	263127081351602	L 2215	334	118	262630081484802	L 5808	308
59	264608081454101	L 2216	398	119	262630081484801	L 5844	307
60	264608081454102	L 2217	399				

# WATER RESOURCES DATA FOR FLORIDA, 2003

# **VOLUME 2B: SOUTH FLORIDA**

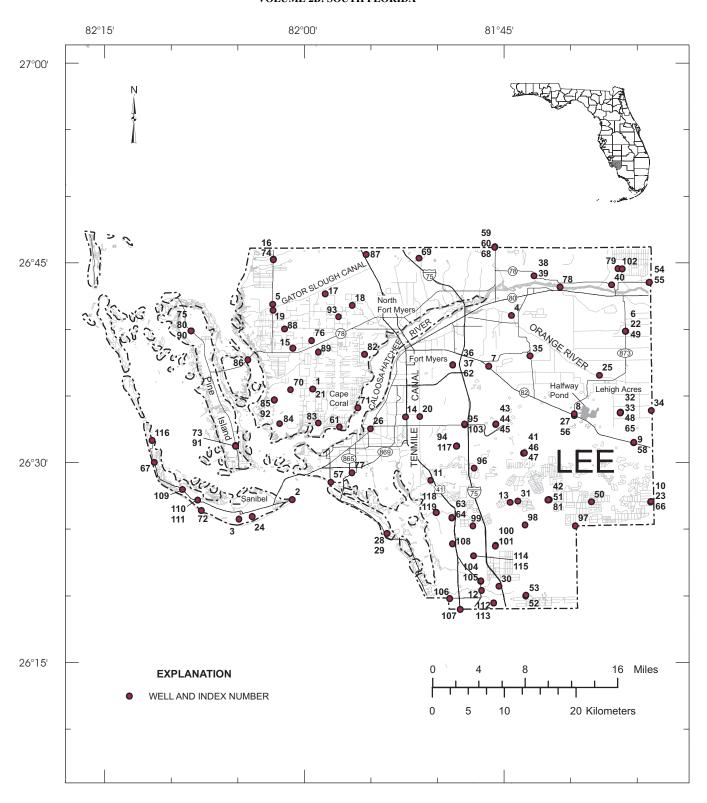


Figure 17: Location of wells in Lee County

# LEE COUNTY

WELL NUMBER.--261859081481901. Local Number L 5726.

LOCATION.--Lat 26°18'59", long 81°47'29", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.4, T.48 S., R.25 E., Hydrologic Unit 03090204, 100 ft north of Lee/Collier County Line on east side of U.S. Highway 41, 1.5 mi southwest of Bonita Springs Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 32 ft, cased to 22 ft, screened 22 to 32 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.90 ft above National Geodetic Vertical Datum of 1929.

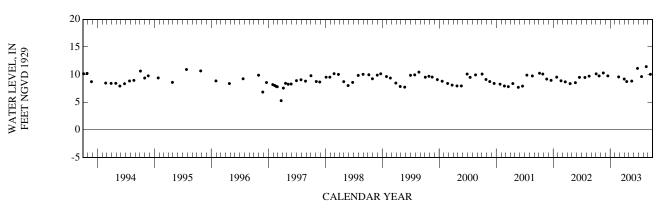
LAND-SURFACE DATUM .-- Land surface is approximately 11.2 ft above NGVD.

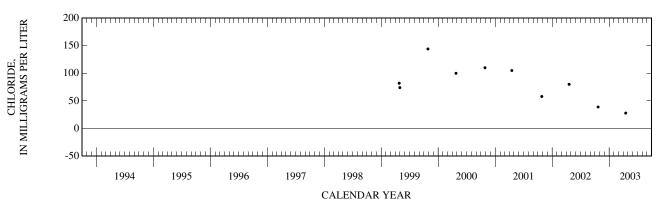
REMARKS.--Well is also used for salinity monitoring. Quality assurance protocols for conductivity and chloride samples collected at this station were reassessed in September 1998. Chloride and conductivity data collected prior to this date are available in the files of the U.S. Geological Survey and should be used with caution. See DATUM.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.44 ft NGVD, Aug. 20, 2003; lowest, 4.32 ft NGVD, June 12, 1989.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	1458	10.14			19	1558	8.83		
22	1537	9.76	222	39.0	JUN				
NOV					25	1621	11.13		
18	1305	10.30			JUL				
DEC					21	1457	9.64		
17	1511	9.77			AUG				
FEB					20	1552	11.44		
24	1544	9.58			SEP				
APR					16	1358	10.06		
01	1455	9.20							
17	1519	8.74	146	28.0					





WELL NUMBER.--261926081454701. Local Number L 5744R.

LOCATION.--Lat 26°19'25", long 81°45'46", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 1, T.48 S., R.25 E., Hydrologic Unit 03090204, in the median of Imperial Street, 150 ft south of the intersection of Imperial Street and Dellwood Lane, 0.5 mi north of Lee/Collier County Line.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., measured depth 19 ft, well construction information unavailable.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.57 ft above National Geodetic Vertical Datum of 1929.

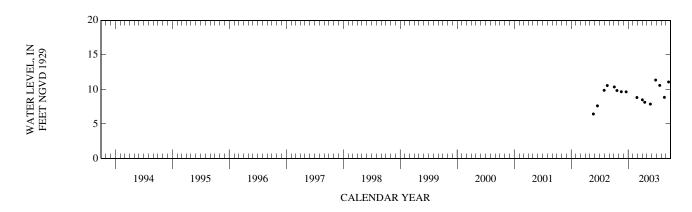
LAND-SURFACE DATUM .-- Land surface is approximately 15.7 ft above NGVD.

REMARKS.--Well replaces L 5744.

PERIOD OF RECORD .-- May 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.36 ft NGVD, June 26, 2003; lowest, 6.44 ft NGVD, May 23, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1143	10.36	23	0939	7.88
21	1219	9.84	JUN		
NOV			26	1233	11.36
18	1346	9.67	JUL		
DEC			22	1313	10.58
19	1501	9.65	AUG		
FEB			21	1228	8.85
26	1254	8.83	SEP		
APR			17	1422	11.08
02	1205	8.49			
17	1606	8.14			



WELL NUMBER.--261926081454702. Local Number L 5745R.

LOCATION.--Lat 26°19'25", long 81°45'46", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 1, T.48 S., R.25 E., Hydrologic Unit 03090204, in the median of Imperial Street, 150 ft south of the intersection of Imperial Street and Dellwood Lane, 0.5 mi north of Lee/Collier County Line.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., measured depth 108 ft, well construction information unavailable.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.45 ft above National Geodetic Vertical Datum of 1929.

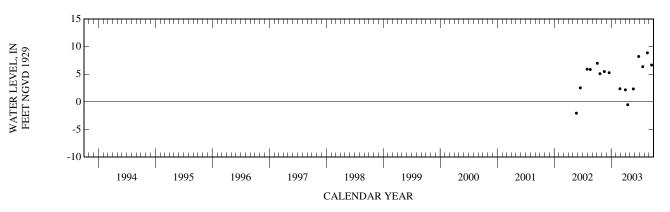
LAND-SURFACE DATUM.--Land surface is approximately 15.8 ft above NGVD.

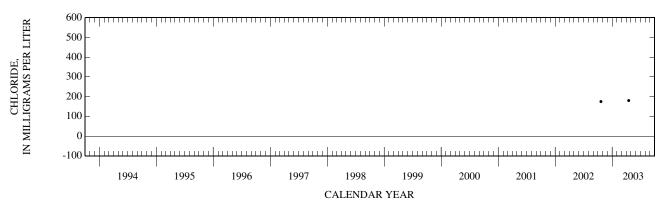
REMARKS.--Well is also used for salinity monitoring. Well replaces L 5745.

PERIOD OF RECORD .-- May 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.88 ft NGVD, Aug. 21, 2003; lowest, 2.04 ft below NGVD, May 23, 2002.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					MAY				
04	1146	6.99			23	0942	2.35		
21	1219	5.10	1,160	175	JUN				
NOV					26	1235	8.22		
18	1349	5.49			JUL				
DEC					22	1317	6.37		
19	1506	5.28			AUG				
FEB					21	1231	8.88		
26	1258	2.38			SEP				
APR					17	1424	6.67		
02	1208	2.18							
17	1558	-0.51	1,080	180					





WELL NUMBER.--261946081490302. Local Number L 5725.

LOCATION.—Lat 26°19'48", long 81°49'06", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.4, T.48 S., R.25 E., Hydrologic Unit 03090204, on east side of Sunset Drive, 150 ft south of Bonita Beach Road, 3 mi west of Bonita Springs Post Office.

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 128 ft, cased to 65 ft, open hole 65 to 128 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 14.96 ft above National Geodetic Vertical Datum of 1929.

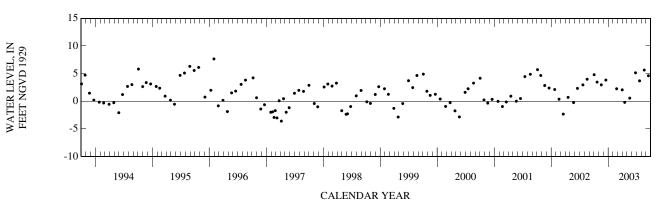
LAND-SURFACE DATUM.--Land surface is approximately 12.0 ft above NGVD.

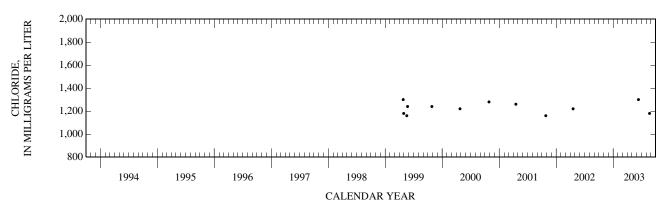
REMARKS.--Well is also used for salinity monitoring. Conductivity and chloride profiles for the previous water years are available in the files of the U.S. Geological Survey. Quality assurance protocols for conductivity and chloride samples collected at this station were reassesed in September 1998. Chloride and conductivity data collected prior to this date are available in the files of the U.S. Geological Survey and should be used with caution.

PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.66 ft NGVD, Jan. 31, 1996; lowest, 3.60 ft below NGVD, Apr. 7, 1997.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
03	1505	4.80			19	1605	0.56		
22	1555	3.46			JUN				
NOV					12	1030		4,920	1,300
18	1312	2.97			25	1630	5.15		
DEC					JUL				
17	1520	3.83			21	1505	3.69		
FEB					AUG				
24	1556	2.26			20	1604	5.64		
APR					22	0930		4,910	1,180
01	1501	2.06			SEP				
17	1535	-0.20			16	1415	4.62		





WELL NUMBER.--261957081432201. Local Number L 2194.

LOCATION.--Lat 26°19'57", long 81°43'22", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$ 

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 137 ft, cased to 81 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of shelf, 17.29 ft above National Geodetic Vertical Datum of 1929. Prior to February 27, 1995, top of shelf was 17.27 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 14.6 ft above NGVD.

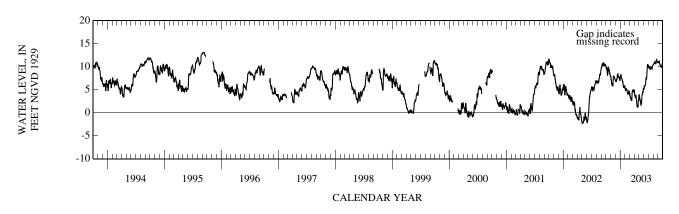
REMARKS:--Station repaired February 27, 1995.

PERIOD OF RECORD.--August 1975 to September 1978 (monthly), October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.42 ft NGVD, Sept. 3, 1983; lowest 2.50 ft below NGVD, Jan. 5, 1991.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.70	7.24	6.83	8.31	4.84	3.67	3.66	3.47	5.56	10.00	10.70	10.83
10	8.47	6.26	7.27	7.53	5.11	3.06	3.41	2.70	5.91	9.58	11.01	10.88
15	10.01	5.70	8.37	7.11	4.59	2.75	2.98	1.86	7.41	9.81	10.85	10.37
20	9.19	7.96	7.79	5.92	3.91	4.72	1.26	3.58	7.71	9.92	11.26	10.12
25		7.64	7.55	5.84	4.47	4.80	1.12	4.60	10.45	9.71	11.24	9.84
EOM	7.88	7.06	6.93	5.30	4.36	4.98	3.19	5.29	10.35	10.39	10.91	11.64
MAX			8.47	8.32	5.60	5.00	4.85	5.29	10.46	10.39	11.54	11.64



WELL NUMBER.--261957081432202. Local Number L 2195.

LOCATION.--Lat 26°19'57", long 81°43'22", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$ 

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 15 ft, cased to 14 ft, open hole 14 to 15 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of flange, 17.26 ft above National Geodetic Vertical Datum of 1929. From October 1989 to February 27, 1995, measuring point was top of shelf, 17.36 ft above NGVD. Prior to October 1989, measuring point was top of casing 17.34 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 14.7 ft above NGVD.

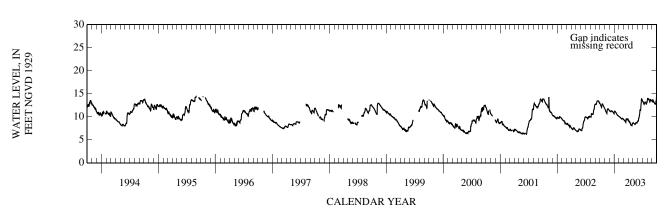
REMARKS.--Well resurveyed to current measuring point February 27, 1995.

PERIOD OF RECORD.--August 1975 to February 1978 (monthly), February 1978 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.83 ft NGVD, July 1-3, 1992; lowest, 6.16 ft NGVD, June 16, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.63	11.43	11.20	11.23	9.94	9.29	9.08	8.66	9.13	13.30	13.97	13.70
10	12.18	11.07	11.21	11.02	9.81	9.09	8.89	8.46	10.04	12.79	13.87	13.32
15	12.71	10.73	11.31	10.75	9.60	8.89	8.53	8.38	11.41	12.94	13.53	13.08
20	12.67	11.69	11.16	10.41	9.52	9.51	8.26	8.71	11.43	13.16	13.65	12.78
25	12.30	11.66	11.00	10.27	9.66	9.47	8.04	8.76	13.90	12.79	13.63	13.05
EOM	11.86	11.40	10.65	10.08	9.51	9.52	8.53	9.00	13.61	13.21	13.43	14.41
MAX	12.98	11.80	11.34	11.23	10.06	9.58	9.42	9.00	13.90	13.50	13.98	14.41



WELL NUMBER.--262022081464201. Local Number L 738.

LOCATION.--Lat 26°20'23", long 81°46'41", in SW  $^{1}\!\!/_{4}$  SW  $^{1}\!\!/_{4}$  NE  $^{1}\!\!/_{4}$  sec.35, T.47 S., R.25 E., Hydrologic Unit 03090204, at northwest corner of Felts Street and Childer Street in Bonita Springs. (Corrected).

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 75 ft, cased to 61 ft, open hole 61 to 75 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of casing, 11.31 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 9.2 ft above NGVD.

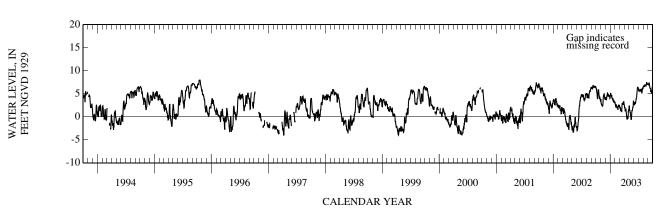
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1975 are in the files of the U.S. Geological Survey.

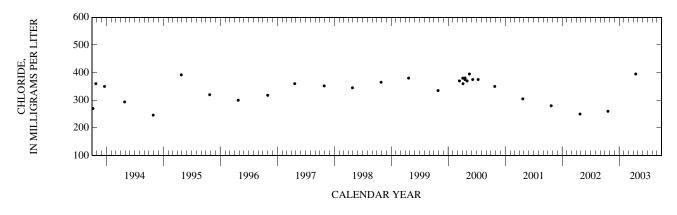
PERIOD OF RECORD.--November 1968 to June 1973 (daily), July 1974 to March 1992 (monthly), April 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.97 ft NGVD, Oct. 20, 1995; lowest water level measured, 5.51 ft below NGVD, Jan. 12, 1989.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.01	2.75	3.70	4.95	2.38	2.06	2.07	1.63	2.61	5.90	6.69	7.13
10	4.22	2.37	4.49	4.61	2.35	1.41	1.38	0.96	2.73	5.51	6.92	6.88
15	5.79	2.67	5.18	3.99	2.03	1.28	0.53	-0.69	3.46	5.88	6.91	6.15
20	5.19	4.60	4.76	3.49	1.49	2.87	-0.35	1.34	4.55	5.82	6.89	5.58
25	4.29	4.54	4.55	3.29	2.54	2.87	-0.34	2.00	6.32	5.71	7.20	5.08
EOM	3.39	3.82	4.08	3.17	2.48	2.75	1.26	3.39	6.13	6.25	7.08	7.31
MAX	6.44	4.99	5.18	5.09	3.17	3.27	2.59	3.39	6.42	6.29	7.44	7.36





WELL NUMBER.--262042081455001. Local Number L 1691.

LOCATION.--Lat 26°20'43", long 81°45'23", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.36, T.47 S., R.25 E., Hydrologic Unit 03090204, on East Terry Street, 1.5 mi east of Business U.S. Highway 41, (County Road 887), and 1.4 mi east of Bonita Springs Post Office.

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 69 ft, cased to 58 ft, open hole 58 to 69 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

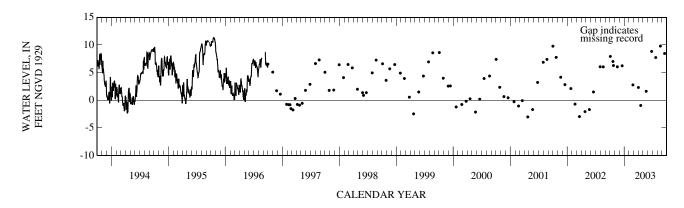
DATUM.--Measuring point: Top of recorder shelf, 15.48 ft above National Geodetic Vertical Datum of 1929.

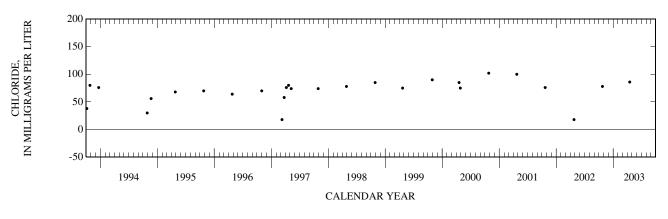
LAND-SURFACE DATUM .-- Land surface is approximately 14.3 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. Records of water levels, prior to October 1973, are available in files of the U.S. Geological Survey. PERIOD OF RECORD.--June 1973 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.92 ft NGVD, Aug. 16, 17, 1974; lowest, 6.58 ft below NGVD, Jan. 7, 1989.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
04	1039	7.93			22	1416	1.62		
21	1055	7.01			JUN				
24	1009	6.28	700	78.0	26	1124	8.84		
NOV					JUL				
18	1312	6.05			22	1346	7.73		
DEC					AUG				
19	1425	6.23			21	1257	9.80		
FEB					SEP				
26	1205	2.77			17	1512	8.46		
APR									
02	1107	2.31							
17	1719	-0.95	784	86.0					





WELL NUMBER.--262102081464401. Local Number L 5722.

 $LOCATION.--Lat\ 26^{\circ}21'04'', long\ 81^{\circ}46'45'', in\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ SE\ {}^{1}\!\!/_{4}\ sec. 26, T.47\ S., R.25\ E., Hydrologic\ Unit\ 03090204, at the northeast corner of Rosemary Drive and Business\ U.S.\ Highway\ 41, (County\ Road\ 887),\ 1.5\ mi\ north\ of\ Bonita\ Springs\ Post\ Office.\ (Corrected).$ 

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 21 ft, cased to 11 ft, screened 11 to 21 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.79 ft above National Geodetic Vertical Datum of 1929. From December 18, 2001, to April 10, 2003, measuring point was 11.02 ft above NGVD. Prior to December 18, 2001, measuring point was 13.36 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 10.5 ft above NGVD.

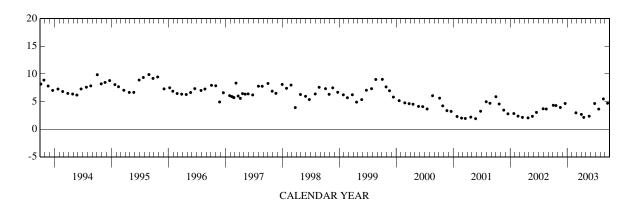
REMARKS.--Well was monitored for salinity until April 1993. The station was reconstructed and resurveyed December 18, 2001. Station was reconstructed again on April 11, 2003. See DATUM.

PERIOD OF RECORD .-- March 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.89 ft NGVD, Aug. 30, 1995; lowest, 1.91 ft NGVD, May 24, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1005	4.33	22	1406	2.35
21	1036	4.28	JUN		
NOV			26	1108	4.65
18	1251	3.93	JUL		
DEC			22	1354	3.64
19	1141	4.65	AUG		
FEB			21	1304	5.48
26	1141	2.96	SEP		
APR			17	1521	4.70
02	1047	2.68			
17	1742	2.14			





WELL NUMBER.--262102081464402. Local Number L 5723.

LOCATION.--Lat 26°21'04", long 81°46'45", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.26, T.47 S., R.25 E., Hydrologic Unit 03090204, at northeast corner of Rosemary Drive and Business U.S. Highway 41, (County Road 887), 1.5 mi north of Bonita Springs Post Office. (Corrected).

AQUIFER .-- Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 140 ft, cased to 55 ft, open hole 55 to 140 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.02 ft above National Geodetic Vertical Datum of 1929. Prior to December 18, 2001, measuring point was 13.10 ft above NGVD. See REMARKS.

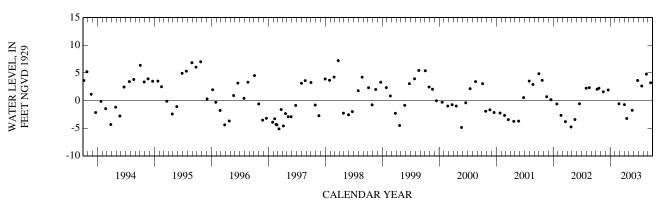
LAND-SURFACE DATUM.--Land surface is approximately 10.8 ft above NGVD.

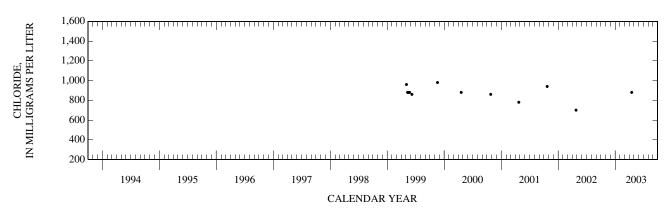
REMARKS.--Well is also used for salinity monitoring. Conductivity and chloride profiles for the previous water years are available in the files of the U.S. Geological Survey. Quality assurance protocols for conductivity and chloride samples collected at this station were reassessed in September 1998. Chloride and conductivity data collected prior to this date are available in the files of the U.S. Geological Survey and should be used with caution. The station was reconstructed and resurveyed December 18, 2001. See DATUM.

PERIOD OF RECORD .-- March 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.40 ft NGVD, Aug. 14, 1989; lowest, 5.33 ft below NGVD, Dec. 15, 1986.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
09	1517	2.04			22	1407	-1.76		
21	1038	2.24			JUN				
NOV					26	1111	3.64		
18	1254	1.59			JUL				
DEC					22	1355	2.64		
19	1409	1.91			AUG				
FEB					21	1306	4.79		
26	1145	-0.58			SEP				
APR					17	1523	3.22		
02	1050	-0.74							
17	1740	-3.24	4,060	880					





WELL NUMBER.--262258081471801. Local Number L 5746.

LOCATION.--Lat 26°22'59", long 81°47'16", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.47 S., R.25 E., Hydrologic Unit 03090204, 25 ft west of Stillwell Parkway and 50 ft north of Strike Lane, 1.3 mi east of old U.S. Highway 41, (County Road 887), 3.5 mi north of Bonita Springs.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 15 ft, cased to 10 ft, screened 10 to 15 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

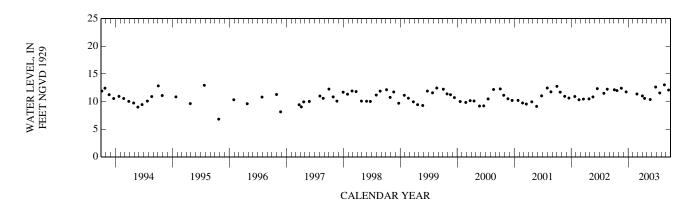
DATUM.--Measuring point: Top of casing, 15.39 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 13.9 ft above NGVD.

PERIOD OF RECORD.--July 1987 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.03 ft NGVD, Aug 21, 2003; lowest, 6.82 ft NGVD, Oct. 25, 1995.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	0947	12.14	22	1351	10.37
21	1022	11.99	JUN		
NOV			26	1056	12.63
18	1235	12.41	JUL		
DEC			22	1420	11.56
19	1129	11.75	AUG		
FEB			21	1346	13.03
26	1129	11.37	SEP		
APR			17	1537	12.09
02	1037	11.02			
16	1555	10.57			



WELL NUMBER.--262258081471802. Local Number L 5747.

 $LOCATION.--Lat\ 26^{\circ}22'59", long\ 81^{\circ}47'16", in\ NE\ {}^{1}\!\!/_{4}\ NE\ {}^{1}\!\!/_{4}\ SE\ {}^{1}\!\!/_{4}\ sec.15, T.47\ S., R.25\ E., Hydrologic\ Unit\ 03090204,\ 25\ ft\ west\ of\ Stillwell\ Parkway\ and\ 50\ ft\ north\ of\ Strike\ Lane,\ 1.3\ mi\ east\ of\ old\ U.S.\ Highway\ 41,\ (County\ Road\ 887),\ 3.5\ mi\ north\ of\ Bonita\ Springs.$ 

AQUIFER.--Lower Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 105 ft, cased to 59 ft, 46 ft of open hole.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of casing, 15.66 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 13.9 ft above NGVD.

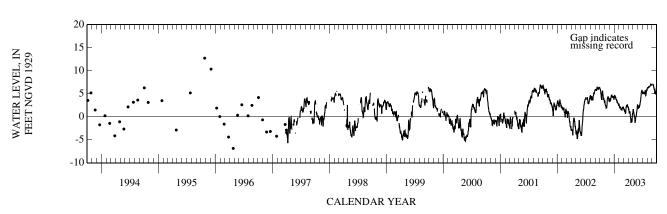
REMARKS .-- Well is also used for salinity monitoring.

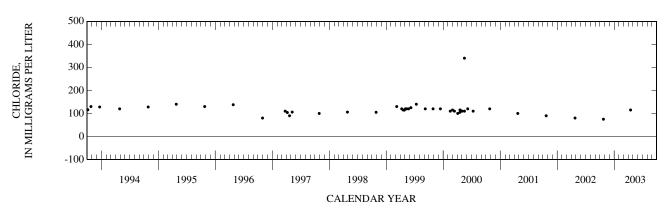
PERIOD OF RECORD.--July 1987 to September 1994 (monthly), October 1994 to September 1995 (quarterly), October 1995 to March 1997 (monthly), April 1997 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.73 ft NGVD, Oct. 25, 1995; lowest, 6.87 ft below NGVD, Apr. 25, 1996.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.89	2.53	3.46	4.58	2.08	1.68	1.66	1.01	1.77	5.37	6.34	6.94
10	4.20	1.90	4.07	4.27	2.02	1.27	0.85	0.36	1.97	4.98	6.56	6.77
15	5.22	2.30	4.72	3.72	1.55	0.76	0.07	-1.32	2.59	5.28	6.66	6.02
20	5.09	4.10	4.41	3.17	1.37	2.22	-0.95	0.01	3.85	5.31	6.66	5.30
25	3.94	4.22	4.22	2.91	2.13	2.29	-1.19	1.06	5.48	5.28	6.99	4.84
EOM	3.18	3.40	3.87	2.78	2.06	2.27	0.72	2.60	5.48	5.85	6.87	6.88
MAX	6.27		4.72	4.65	2.78		2.18	2.60	5.76	5.92		





WELL NUMBER.--262331082383201. Local Number L 5672.

LOCATION.--Lat 26°23'45", long 81°45'38", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.8, T.47 S., R.26 E., Hydrologic Unit 03090204, 4.85 mi north of Bonita Beach Road, 0.75 mi east of U.S. Interstate 75, and 3.5 mi east of Bonita Springs Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 38 ft, open hole 23 to 38 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 19.20 ft above National Geodetic Vertical Datum of 1929.

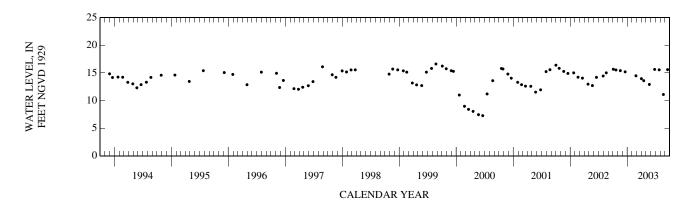
LAND-SURFACE DATUM.--Land surface is approximately 16.2 ft above NGVD.

REMARKS.--Site inaccessible April to September 1998 because of elevated water levels. 1999 extreme for period of record may have been exceeded during this period. See EXTREMES FOR PERIOD OF RECORD.

PERIOD OF RECORD.--May 1983 to April 1993 (semiannual), December 1993 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.62 ft NGVD, Aug. 24, 1999; lowest, 7.27 ft NGVD, June 19, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1334	15.67	23	1039	12.92
21	1340	15.54	JUN		
NOV			26	1339	15.64
18	1503	15.42	JUL		
DEC			25	1030	15.56
19	1605	15.20	AUG		
FEB			21	1159	11.10
26	1412	14.48	SEP		
APR			17	1349	15.60
02	1313	13.96			
17	1649	13.60			



WELL NUMBER.--262331082383202. Local Number L 5673.

LOCATION.--Lat 26°23'45", long 81°45'38", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.8, T.47 S., R.26 E., Hydrologic Unit 03090204, 4.85 mi north of Bonita Beach Road, 0.75 mi east of U.S. Interstate 75 and 3.5 mi east of Bonita Springs Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 135 ft, open hole 130 to 135 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

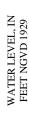
DATUM.--Measuring point: Top of casing, 18.22 ft above National Geodetic Vertical Datum of 1929.

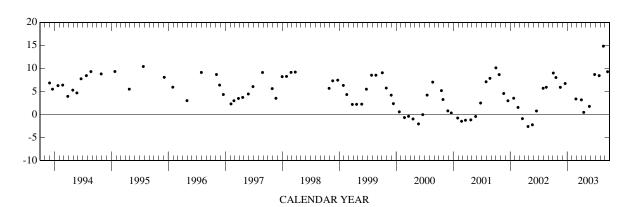
LAND-SURFACE DATUM.--Land surface is approximately 16.2 ft above NGVD.

PERIOD OF RECORD.--May 1983 to April 1993 (semiannual), May 1993 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.83 ft NGVD Aug. 21, 2003; lowest, 2.62 ft below NGVD, Apr. 25, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
04	1339	8.99	23	1044	1.75
21	1343	8.02	JUN		
NOV			26	1340	8.67
18	1459	5.89	JUL		
DEC			25	1026	8.43
19	1610	6.72	AUG		
FEB			21	1202	14.83
26	1406	3.36	SEP		
APR			17	1352	9.28
02	1315	3.17			
17	1647	0.45			





WELL NUMBER.--262351081485401. Local Number L 5730.

LOCATION.--Lat 26°23'52", long 81°48'53", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.9, T.47 S., R.25 E., Hydrologic Unit 03090204, 100 ft south of Coconut Road, 0.15 mi west of U.S. Highway 41, 5 mi north of Bonita Springs.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 40 ft, cased to 27 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

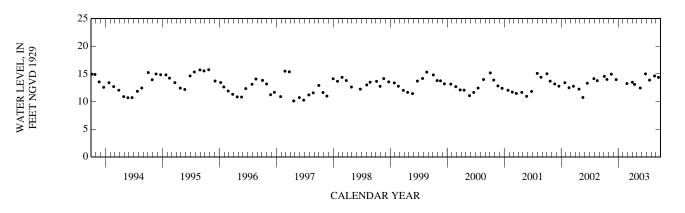
DATUM.--Measuring point: Top of casing, 16.34 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 16.2 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.77 ft NGVD, Oct. 25, 1995; lowest, 9.64 ft NGVD, May 22, 1990.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
04	0853	14.56	22	1331	12.45
21	0953	14.01	JUN		
NOV			25	1651	15.01
18	1206	14.96	JUL		
DEC			21	1521	13.88
19	1320	13.97	AUG		
FEB			22	0858	14.64
26	1103	13.26	SEP		
APR			16	1440	14.38
02	1012	13.50			
16	1532	13.11			



WELL NUMBER.--262435081535001. Local Number L 1635.

LOCATION.--Lat 26°24'38", long 81°53'48", in NE ½ SW ½ sec.3, T.47 S., R.24 E., Hydrologic Unit 03090204, at Bay Beach Golf Course, 120 ft north of golf shop, 0.2 mi east of Estero Boulevard on Bay Beach Lane, 0.5 mi southeast of Matanzas Pass Bridge and 4.5 mi southeast of Fort Myers Beach Post Office.

AQUIFER.--Lower Hawthorn aquifer of the Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 620 ft, cased to 360 ft, open hole 360 to 620 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Prior to May 16, 2003, electronic data logger with pressure transducer. Prior to October 29, 2002, monthly measurement with pressure gage.

DATUM.--Measuring point: Top of flange on gate valve, 4.71 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 3.5 ft above NGVD.

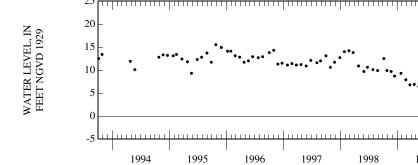
REMARKS.--Records of water levels prior to October 1975 are available in files of U.S. Geological Survey.

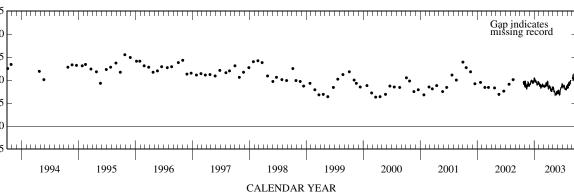
PERIOD OF RECORD.--February 1975 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to September 2002 (monthly), October 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.7 ft NGVD, Sept. 27, 1979; lowest, 6.3 ft NGVD, Mar. 21, 2000.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		9.74	9.15	9.98	8.66	8.56	8.37	8.30	7.18	8.21	8.84	10.52
10		8.89	9.75	9.84	8.75	8.69	8.72	7.59	7.00	8.90	9.46	10.41
15		8.30	9.96	9.50	8.46	8.65	7.91	6.85	7.01	8.44	9.51	10.34
20		8.79	9.43	8.85	8.62	9.31	8.15	6.84	8.19	8.14	9.10	10.00
25		9.40	9.44	9.37	8.80	8.87	7.67	7.57	8.46	7.90		10.10
EOM	8.76	8.66	10.32	9.48	8.60	8.96	7.92	7.60	9.10	8.27		10.93
MAX		9.76	10.32	10.46	9.35	9.73	8.73	8.46	9.10	8.98		





WELL NUMBER.--262435081535101. Local Number L 1634.

LOCATION.--Lat 26°24′38″, long 81°53′48″, in NE ½ NE ½ SW ½ sec.3, T.47 S., R.24 E., Hydrologic Unit 03090204, at Bay Beach Golf Course 100 ft north of golf shop, 0.2 mi east of Estero Boulevard on Bay Beach Lane, 5 mi southeast of Matanzas Pass Bridge and 4.5 mi southeast of Fort Myers Beach Post Office.

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

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 950 ft, cased to 740 ft, open hole 740 to 950 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 6 in. elbow, 5.88 ft above National Geodetic Vertical Datum of 1929.

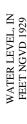
LAND-SURFACE DATUM.--Land surface is approximately 3.3 ft above NGVD.

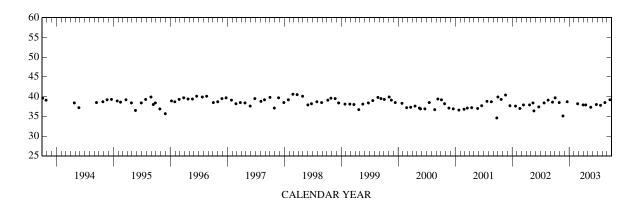
REMARKS.--Records of water levels, prior to October 1975, are available in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--January 1975 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.3 ft NGVD, July 27, 1988; lowest, 27.6 ft NGVD, July 23, 1991.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1423	39.7	19	1234	37.3
29	1131	38.5	JUN		
NOV			24	1243	38.0
22	1046	35.1	JUL		
DEC			21	1320	37.8
19	1256	38.7	AUG		
FEB			18	1504	38.5
24	1402	38.2	SEP		
MAR			19	1203	39.2
31	1506	37.9			
APR					
17	1216	37.9			





WELL NUMBER.--262513081432601. Local Number L 5667.

LOCATION.--Lat 26°25'17", long 81°43'26", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.33, T.46 S., R.26 E., Hydrologic Unit 03090204, 2.4 mi south of Corkscrew Road, 5.35 mi east of U.S. Highway 41, and 6.0 mi east of Estero Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 32 ft, open hole 22 to 32 ft.

INSTRUMENTATION.--Electronic data logger. Monthly measurement with chalked tape prior to September 2002.

DATUM.--Measuring point: Top of casing, 20.10 ft above National Geodetic Vertical Datum of 1929. From October 1992 to October 2001, measuring point was incorrectly considered to be 19.09 ft above NGVD. From April 1983 to September 1992, measuring point was incorrectly considered to be 18.80 ft above NGVD.

LAND-SURFACE DATUM.--Land surface datum is approximately 18.2 ft above NGVD.

REMARKS.--Well also used for salinity monitoring until April, 1993. The figures of water levels as elevation, in ft NGVD, from April 1983 to October 2001, are in error. +1.01 ft correction has been applied to water-level records, from October 1992 to September 2001. A +1.30 ft correction has been applied to water-level records from April 1983 to September 1992. See DATUM. Corrected records are available in the files of the U.S. Geological Survey.

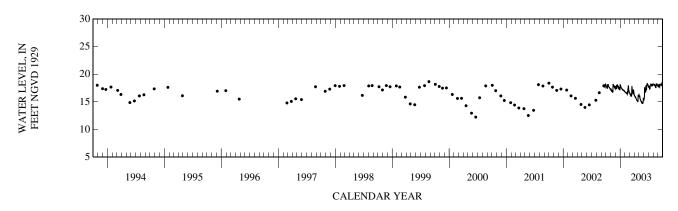
PERIOD OF RECORD.--April 1983 to April 1993 (semiannual), October 1993 to September 1994 (monthly), October 1994 to September 1996 (quarterly), February 1997 to August 2002 (monthly), September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.67 ft (present datum) NGVD, Aug. 24, 1999; lowest, 12.25 ft (present datum) NGVD, June 19, 2000.

ELEVATION ABOVE NGVD 1929, FEET

# WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES JAN FEB MAR APR MAY JUN JUL 17.77 16.73 16.40 15.99 16.07 15.75 17.87

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.81	17.07	17.41	17.77	16.73	16.40	15.99	16.07	15.75	17.87	18.07	18.12
10	17.46	16.89	18.04	17.45	16.58	16.48	15.78	15.47	17.45	17.41	18.14	17.75
15	18.14	16.74	17.88	17.26	16.40	16.06	15.47	15.08	17.93	18.16	17.77	18.11
20	17.74	17.97	17.90	17.10	17.45	16.95	15.22	14.87	17.84	18.05	18.19	18.23
25	17.52	17.70	17.71	16.98	17.12	16.50	14.99	14.91	18.23	17.85	18.21	18.23
EOM	17.29	17.40	17.88	16.85	16.78	16.46	16.24	15.53	17.87	18.07	17.85	18.60
MAX	18.14	18.17	18.09	18.16	17.89	17.83	16.27	16.31	18.32	18.23	18.24	18.60



WELL NUMBER.--262513081472001. Local Number L 5669R.

LOCATION.--Lat 26°25'13", long 81°47'20", in NW  $^{1}$ /4 NW  $^{1}$ /4 sec.2, T.46 S., R.25 E., Hydrologic Unit 03090204, 48 ft west of Sweetwater Road, 0.4 mi south of Horne Lane, 0.35 mi east of River Ranch Road, 0.35 mi south of Corkscrew Road, 1.05 mi west of U.S. Interstate 75, 2.5 mi southeast of Estero Post Office.

AQUIFER .-- Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

 $WELL\ CHARACTERISTICS. -Drilled,\ observation,\ water-table\ well,\ diameter\ 4\ in.,\ depth\ 33\ ft,\ cased\ to\ 25\ ft,\ screened\ 25\ to\ 30\ ft,\ open\ hole\ 30\ to\ 33\ ft.$ 

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. casing, 18.06 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 15.8 ft above NGVD.

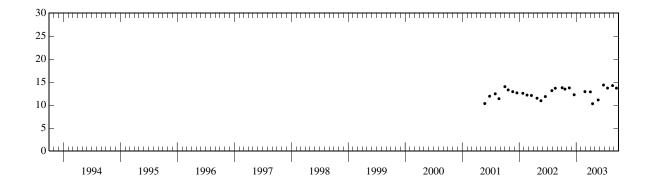
REMARKS.--Replacement for well L-5669, which was destroyed by road construction.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.36 ft NGVD, June 25, 2003; lowest, 10.30 ft NGVD, Apr. 16, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1135	13.77	22	1053	11.12
21	0924	13.48	JUN		
NOV			25	1658	14.36
18	1154	13.74	JUL		
DEC			21	1529	13.70
19	1310	12.25	AUG		
FEB			22	0849	14.24
26	1051	12.93	SEP		
APR			16	1445	13.68
02	1005	12.87			
16	1228	10.30			





WELL NUMBER.--262514081393402. Local Number L 5664.

LOCATION.--Lat 26°25′16″, long 81°39′38″, in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$ 

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 300 ft, cased to 180 ft, open hole 180 to 300 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 21.28 ft above National Geodetic Vertical Datum of 1929. From October 1991 to January 1998, measuring point was top of coupling 24.12 ft above NGVD. Prior to October 1991, top of coupling was considered to be 22.92 ft above NGVD.

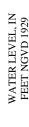
LAND-SURFACE DATUM.--Land surface is approximately 21.2 ft above NGVD.

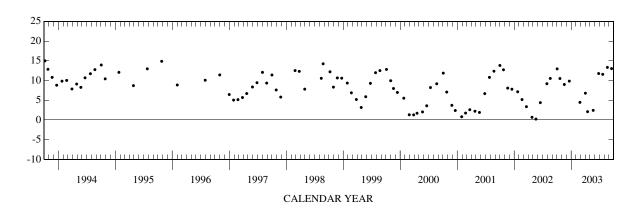
REMARKS.--Records of water levels, prior to October 1983, are available in the files of the U.S. Geological Survey. The figures of water levels, as elevation in feet NGVD, prior to October 1991, are in error. Corrected records are in the files of the U.S. Geological Survey. See DATUM. Well was monitored for salinity from October 1982 to April 1993.

PERIOD OF RECORD.--November 1982 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.55 ft NGVD, July 31, 1984; lowest, 0.24 ft NGVD, May 20, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1412	12.96	22	1151	2.45
21	1609	10.52	JUN		
NOV			26	1554	11.78
18	1757	9.01	JUL		
DEC			22	1106	11.58
20	1457	9.86	AUG		
FEB			21	1020	13.33
26	1650	4.48	SEP		
APR			17	1130	13.03
02	1605	6.80			
16	1337	2.11			





WELL NUMBER.--262538082045701. Local Number L 588.

LOCATION.--Lat 26°25'43", long 82°04'55", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 35, T.46 S., R.22 E., Hydrologic Unit 03100103, 15 ft south of interpretive sign, 0.1 mi west of Tarpon Bay Road at Ding Darling Wildlife Refuge-Bailey Tract and 0.7 mi south of Sanibel Post Office.

AQUIFER .-- Lower Hawthorn aquifer of the Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 557 ft, cased to 403 ft, open hole 403 to 557 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: "X" on 10 in. casing, 4.14 ft above National Geodetic Vertical Datum of 1929. From January 6, 1999, to May 23, 2002, measuring points were top of faucet and center of pressure transducer, 6.40 ft and 6.15 ft above NGVD respectively. From February 14, 1977 to January 6, 1999, measuring point was top of 2 in. elbow, 4.59 ft above NGVD. From January 1964 to February 1977, measuring point was top of 6 in. steel coupling, 4.09 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 2.7 ft above NGVD.

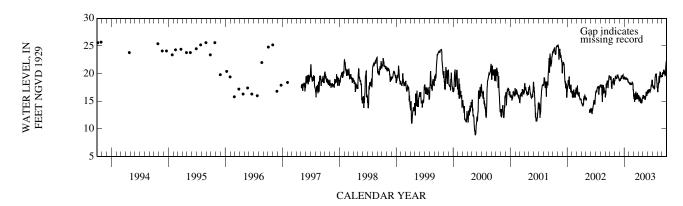
REMARKS.--Water levels affected by nearby pumping. Records of water levels prior to October 1978 are available in the files of the U.S. Geological Survey. Changes in measuring point elevation, February 1997, January 1999, and May 2002, were the result of station reconstruction.

PERIOD OF RECORD.--January 1964 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to February 1997 (monthly), May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.80 ft NGVD, Oct. 7, 1992; lowest, 4.6 ft NGVD, Apr. 18, 1977.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	19.07 18.84 17.74 18.48 19.16 18.57	19.48 19.26 19.29 19.71 19.35 18.91	18.98 19.08 19.41 19.65 19.75 19.31	19.13 19.19 19.10 19.02 18.65 18.43	18.03 18.21 18.17 18.14 18.20 17.04	15.56 15.81 15.24 16.20 15.44 15.36	15.28 15.63 15.30 14.78 15.13 15.69	15.55 15.77 15.44 16.15 16.38 16.90	16.52 17.20 16.75 17.17 17.66 18.85	17.68 17.69 17.18 19.61 19.94 17.70	17.00 18.30 18.36 20.20 19.36 19.67	20.21 20.27 20.60 19.66 21.43 22.47
MAX	19.56	19.73	19.75	19.36	18.51	17.11	16.06	16.90	18.87	20.01	20.24	22.47



WELL NUMBER.--262549082035301. Local Number L 1403.

LOCATION.--Lat 26°25'55", long 82°03'55", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.25, T.46 S., R.22 E., Hydrologic Unit 03100103, 10 ft north of Casa Ybel Road, 0.9 mi south of intersection of Periwinkle Way and Casa Ybel Road and 1.1 mi southeast of Sanibel Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 12 ft, cased to 3.0 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 8.58 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 6.1 ft above NGVD.

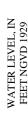
REMARKS.--Records of water levels, prior to October 1973, are available in the files of the U.S. Geological Survey.

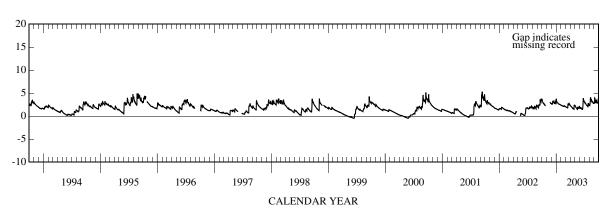
PERIOD OF RECORD .-- February 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.30 ft NGVD, Sept. 14, 2001; lowest, 0.62 ft below NGVD, June 17, 1989.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	3.20 2.81		2.62 3.29	3.12 2.86	2.32 2.23	2.00 1.88	2.18 2.00	2.09 1.78	1.70 1.71	2.92 2.67	2.68 3.91	3.93 3.07
15	2.68		3.13	2.71	2.12	1.79	1.75	1.54	1.56	2.35	3.55	3.48
20 25	2.39 2.23	2.88	2.90 3.15	2.57 2.52	2.13 2.19	2.51 2.74	1.68 1.52	1.90 1.78	1.54 3.65	2.16 2.37	3.20 2.87	2.99 2.85
EOM		2.67	2.73	2.38	2.08	2.38	2.29	2.05	3.10	2.40	2.75	3.88
MAX			3.29	3.76	2.38	2.89	2.39	2.31	3.89	3.10	4.09	4.04





WELL NUMBER.--262552081485702. Local Number L 2295.

 $LOCATION.--Lat\ 26^{\circ}25'53'', long\ 81^{\circ}48'54'', in\ SW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec. 33, T.46\ S., R.25\ E., Hydrologic\ Unit\ 03090204, at entrance\ to\ Koreshan\ State\ Park,\ 0.3\ mi\ west\ of\ U.S.\ Highway\ 41,\ and\ 2.1\ mi\ southeast\ of\ Estero\ Post\ Office.$ 

AQUIFER.--Lower Hawthorn aquifer of the Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 610 ft, cased to 300 ft, open hole 300 to 610 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 4 in. cap, 15.32 ft above National Geodetic Vertical Datum of 1929. Prior to March 2000, measuring point was top of casing, 18.01 ft above NGVD. See REMARKS.

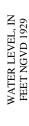
LAND-SURFACE DATUM.--Land surface is approximately 15.7 ft above NGVD.

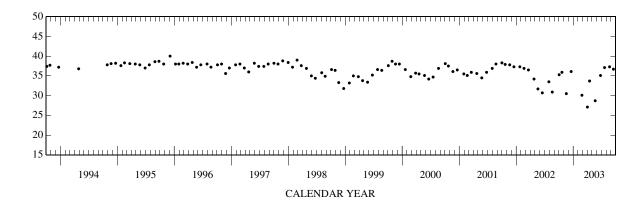
REMARKS.--Records of water levels, prior to October 1976, are available in files of the U.S. Geological Survey. Well was monitored for salinity from June 1978 to April 1993. Well casing cut for curb box installation, February 25, 2000. See DATUM.

PERIOD OF RECORD.--July 1976 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.3 ft NGVD, Oct. 29, 1987; lowest, 27.1 ft NGVD, Apr. 2, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1040	35.3	22	1040	28.7
21	0916	35.9	JUN		
NOV			25	1706	35.1
18	1110	30.5	JUL		
DEC			21	1537	37.1
19	1258	36.1	AUG		
FEB			22	0839	37.3
26	1031	30.1	SEP		
APR			16	1455	36.7
02	0954	27.1			
16	1520	33.7			





WELL NUMBER.--262552081485703. Local Number L 2308.

LOCATION.—Lat 26°25'53", long 81°48'54", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.33, T.46 S., R.25 E., Hydrologic Unit 03090204, at entrance to Koreshan State Park, 0.3 mi west of U.S. Highway 41, and 2.1 mi southeast of Estero Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 13.5 ft, cased to 12 ft, open hole 12 to 13.5 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.71 ft above National Geodetic Vertical Datum of 1929. Prior to February 25, 2000, top of casing was 17.99 ft above NGVD. See REMARKS.

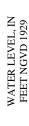
LAND-SURFACE DATUM.--Land surface is approximately 15.5 ft above NGVD.

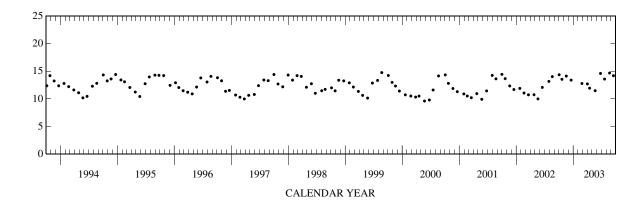
REMARKS.--Well casing cut to accomodate nearby construction, February 25, 2000. See DATUM.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.81 ft NGVD, Sept. 28, 1984; lowest, 8.30 ft NGVD, May 28, 1982.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1044	14.37	22	1037	11.48
21	0914	13.55	JUN		
NOV			25	1707	14.61
18	1115	14.13	JUL		
DEC			21	1539	13.59
19	1305	13.40	AUG		
FEB			22	0836	14.68
26	1040	12.79	SEP		
APR			16	1253	14.20
02	0948	12.71			
16	1518	11.94			





WELL NUMBER.--262622082074401. Local Number L 2524.

LOCATION.--Lat 26°26'23", long 82°07'44", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.29, T.46 S., R.21 E., Hydrologic Unit 03100103, at end of West Gulf Drive, 0.10 mi north of road, 4.0 mi south of Sanibel Post Office.

AQUIFER.--Lower Hawthorn aquifer of the Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 625 ft, cased to 512 ft, open hole 512 to 625 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage or chalked tape.

DATUM.--Measuring point for pressure gage: top of 8 in. casing, 7.66 ft above National Geodetic Vertical Datum of 1929. Measuring point for tapedown with chalked tape: top of well cap, 7.86 ft above NGVD. See REMARKS.

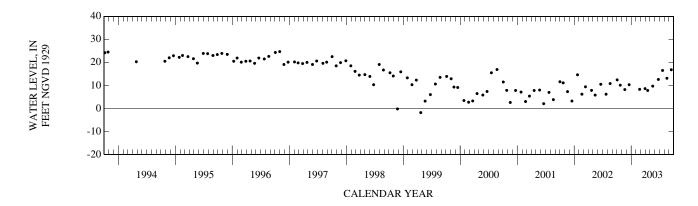
LAND-SURFACE DATUM.--Land surface is approximately 5.2 ft above NGVD.

REMARKS.--Records of water levels, prior to October 1983, are available in the files of the U.S. Geological Survey. There is uncertainty as to the measuring point used prior to 1999.

PERIOD OF RECORD.--October 1977 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.2 ft NGVD, June 7, 1978; lowest, 1.81 ft below NGVD, Apr. 23, 1999.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1226	12.4	19	1008	9.7
23	1056	10.1	JUN		
NOV			24	1008	12.6
21	1401	8.2	JUL		
DEC			21	1108	16.5
19	1004	10.3	AUG		
FEB			18	1309	13.1
24	1048	8.3	SEP		
MAR			15	1505	16.8
31	1215	8.6			
APR					
17	1108	7.8			



WELL NUMBER.--262630081484801. Local Number L 5844.

LOCATION.--Lat 26°26′17″, long 81°50′04″, in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.29, T.46 S., R.24 E., Hydrologic Unit 03090204, 0.25 mi southwest of intersection of Park Place and Coconut Drive, 300 ft west of Coconut Drive, 500 ft east of Park Place and 1.8 mi west of Estero Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 35 ft, cased to 25 ft, screened from 25 to 35 ft.

INSTRUMENTATION .-- Satellite data collection platform, with pressure transducer.

DATUM .-- Measuring point: Top of base, 10.00 ft above National Geodetic Vertical Datum of 1929.

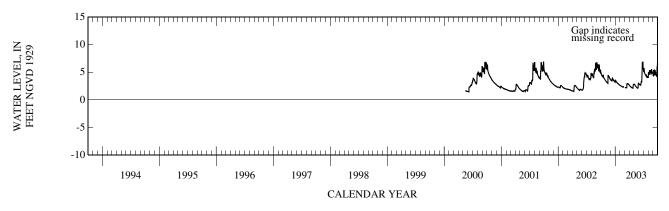
LAND-SURFACE DATUM.--Land surface is approximately 6.9 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.91 ft above NGVD, June 27, 2003; lowest, 1.46 ft above NGVD, June 7, 2000.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.59	3.30	3.56	3.46	2.55	2.26	2.52	2.79	2.85	5.76	4.69	5.43
10	4.29	3.14	3.55	3.20	2.47	2.23	2.39	2.60	2.77	4.79	5.30	4.62
15	4.47	2.99	3.90	3.05	2.37	2.18	2.27	2.38	2.98	4.47	5.26	5.12
20	4.00	4.26	3.58	2.90	2.30	2.96	2.18	2.22	3.31	4.33	4.71	4.52

3.78 4.03 6.39 4.01 25 3.41 2.79 2.89 2.12 4.28 2.37 2.16 5.11 EOM 2.65 2.82 3.50 3.74 3.19 2.74 3.02 5.54 4.51 6.36 4.09 4.49 3.96 2.82 3.02 5.76 MAX 4.99 3.57 6.91 6.77



WELL NUMBER.--262630081484802. Local Number L 5808.

LOCATION.--Lat 26°26′16″, long 81°50′04″, in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 29, T.46 S., R.25 E., Hydrologic Unit 03090205, 0.25 mi southwest of intersection of Park Place and Coconut Drive, 300 ft west of Coconut Drive, 500 ft east of Park Place and 1.8 mi west of Estero Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 208 ft, cased to 192 ft, screened from 192 to 208 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 8.61 ft above National Geodetic Vertical Datum of 1929.

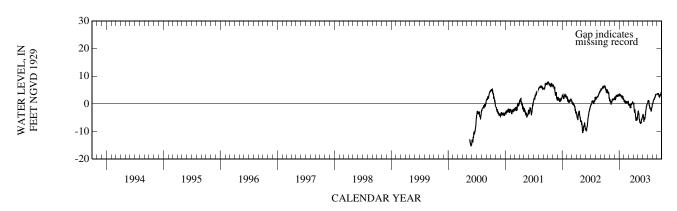
LAND-SURFACE DATUM.--Land surface is approximately 6.9 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.78 ft NGVD, Sept. 29, 2001, Oct. 3, 2001; lowest, 15.04 ft below NGVD, May 29, 2000.

# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DEC JAN FEB MAR APR MAY JUN JU

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.47	1.14	1.73	3.19	1.07	-0.12	-0.58	-3.30	-4.23	1.03	0.31	3.64
10	4.35	-0.07	2.63	3.25	0.96	-0.30	-3.14	-5.66	-5.07	0.92	1.42	3.64
15	5.10	0.45	2.99	2.54	0.37	-1.17	-4.01	-6.79	-5.20	-0.83	2.14	2.64
20	4.16	1.78	3.10	1.93	0.75	-0.40	-5.61	-6.69	-2.82	-1.76	2.59	3.25
25	4.00	1.60	3.28	2.65	0.28	0.15	-5.52	-5.58	-0.94	-2.40	3.37	3.51
EOM	1.15	1.62	3.37	1.60	0.75		-3.90	-4.45	0.02	-0.97	3.40	4.73
MAX	6.50		3.37	3.67	1.38		0.28	-2.70	0.02	1.23		4.73



WELL NUMBER.--262657081443501. Local Number L 739.

LOCATION.--Lat 26°26′58", long 81°44′33", in NE ½ SE ½ NW ½ sec.30, T.46 S., R.26 E., Hydrologic Unit 03090204, 13 ft north of Corkscrew Road, 2.6 mi east of U.S. Interstate 75, and 5.3 mi southeast of Estero Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 20 ft, cased to 18 ft, open hole 18 to 20 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 24.46 ft above National Geodetic Vertical Datum of 1929. From October 1993 to January 17, 2002, top of casing was 22.44 ft above NGVD, but considered to be 21.18 ft above NGVD until September 2000. From November 1, 1989 to September 1993, top of casing was 22.78 ft above NGVD, but considered to be 21.52 ft above NGVD. From October 1988 to November 1989, top of casing was 22.96 ft above NGVD, but considered to be 21.70 ft above NGVD. From August 30, 1985 to September 1988, top of casing was 24.91 ft above NGVD, but considered to be 23.65 ft above NGVD. Prior to August 30, 1985, top of casing was 21.52 ft above NGVD. From October 1974 to September 1977, measuring point was top of shelf, 21.65 ft above NGVD. The figures of water level as elevation, in feet NGVD, from August 30, 1985 to September 2000 are in error. See REMARKS.

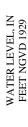
LAND-SURFACE DATUM.--Land surface is approximately 21.9 ft above NGVD.

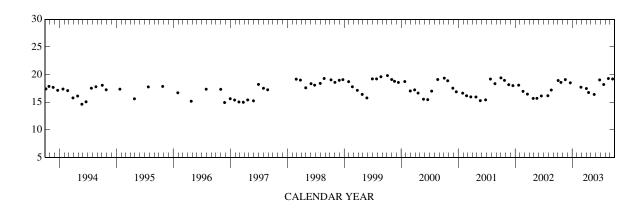
REMARKS.--Records of water levels prior to October 1974, are available in files of the U.S. Geological Survey. The published figures of water level as elevation, in feet NGVD, from August 30, 1985 to September 2000 are in error. A +1.26 ft correction has been applied to correct water-level data from August 30, 1985 to September 2000. Corrected records are in the files of the U.S. Geological Survey. See DATUM. The well has been reconstructed: August 30, 1985, June 21, 1994, (damaged October 1993), January 17, 2002.

PERIOD OF RECORD.--August 1968 to September 1974 (bimonthly), October 1974 to September 1977 (daily), October 1977 to September 1994 (monthly), October 1994 to October 1996 (quarterly), November 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.82 ft NGVD, Oct. 5, 1999; lowest, 13.03 ft NGVD, May 30, 1985.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1146	18.93	22	1101	16.41
21	1414	18.59	JUN		
NOV			26	1415	19.04
18	1548	19.10	JUL		
DEC			22	0854	18.21
20	0955	18.52	AUG		
FEB			21	0827	19.29
26	1456	17.72	SEP		
APR			17	0820	19.21
02	1411	17.48			
16	1246	16.76			





WELL NUMBER.--262659081382501. Local Number L 2192.

LOCATION.--Lat 26°27′01", long 81°38′27", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.29, T.46 S., R.27 E., Hydrologic Unit 03090204, 10 ft south of Corkscrew Road, 8.45 mi east of U.S. Interstate 75, and 11.6 mi east of Estero Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 184 ft, cased to 155 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 31.22 ft above National Geodetic Vertical Datum of 1929. From September 1992 to June 2002, measuring point was 31.06 ft above NGVD. Prior to September 1992, top of casing was 30.06 ft above NGVD.

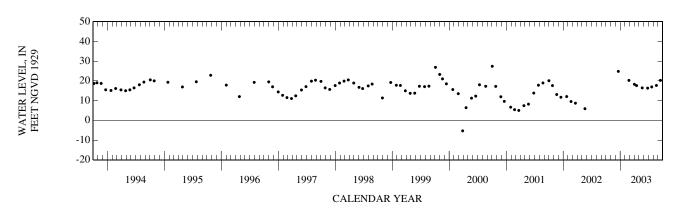
LAND-SURFACE DATUM.--Land surface is approximately 27.3 ft above NGVD.

REMARKS.--Well was damaged in June 2002 and repaired December 2002. The well was originally open to the aquifer from 155 to 184 ft. The cased interval has collapsed or become obstructed at a depth of 28 ft.

PERIOD OF RECORD.--August 1975 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.41 ft NGVD, Oct. 3, 2000; lowest, 5.32 below ft NGVD, Mar. 27, 2000.

		Elev-			Elev-
		ation,			ation,
		feet			feet
-	<b></b>	above	<b>.</b>		above
Date	Time	NGVD	Date	Time	NGVD
		(72020)			(72020)
DEC			JUN		
20	1513	24.82	26	1603	16.33
FEB			JUL		
26	1703	20.24	22	1112	16.95
APR			AUG		
02	1619	18.27	21	1028	17.69
16	1349	17.62	SEP		
MAY			16	1205	20.26
22	1144	16.45			



WELL NUMBER.--262703081340201. Local Number L 731.

LOCATION.--Lat 26°27'03", long 81°33'59", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.25, T.46 S., R.27 E., Hydrologic Unit 03090204, 21 ft south of Corkscrew Road, 5.6 mi south of State Road 82 and County Road 850 intersection, and 11.7 mi southeast of Lehigh Acres Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 243 ft, cased to 165 ft, open hole 165 to 243 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 27.58 ft above National Geodetic Vertical Datum of 1929. Prior to October 1995, measuring point was top of shelf, 27.61 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is aproximately 24.4 ft above NGVD.

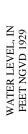
REMARKS.--Water levels affected by pumping wells. Records of water levels, prior to October 1973, are available in the files of the U.S. Geological Survey. PERIOD OF RECORD.--August 1968 to current year.

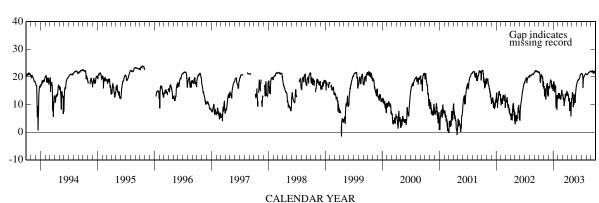
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 24.62 ft NGVD, Oct. 5, 1969; lowest, 7.86 ft below NGVD, Mar. 30, 1990.

ELEVATION ABOVE NGVD 1929, FEET

# WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT NOV DEC JAN FEB MAR APR MAY JUN JUL 21.58 15.64 15.78 18.24 13.40 12.92 13.13 14.47 18.29 21.10

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.58	15.64	15.78	18.24	13.40	12.92	13.13	14.47	18.29	21.10	20.86	21.87
10	18.97	15.44	16.89	15.82	14.16	12.30	11.73	9.07	18.90	19.59	21.10	22.17
15	20.45	12.12	18.86	16.57	12.04	11.38	12.36	12.04	19.21	19.68	21.41	21.95
20	20.43	16.93	18.05	9.98	11.86	13.70	10.59	12.51	19.72	20.47	21.75	21.70
25	20.03	17.60	17.05	8.38	15.18	13.33	5.72	14.58	20.82	21.02	21.90	21.51
EOM	18.20	12.90	15.00	12.00	13.80	14.97	12.23	17.17	21.20	21.11	22.08	22.70
MAX	21.79	17.66	18.91	18.24	15.30	14.97	14.26	17.17	21.20	21.28	22.11	22.70





WELL NUMBER.--262703081340202. Local Number L 1138.

LOCATION.--Lat 26°27'03", long 81°33'59", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.25, T.46 S., R.27 E., Hydrologic Unit 03090204, 21 ft south of Corkscrew Road, 5.6 mi south of intersection of State Road 82 and County Road 850, and 11.7 mi southeast of Lehigh Acres Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 20 ft, cased to 15 ft, screened 15 to 20 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of cap, 27.69 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 24.4 ft above NGVD.

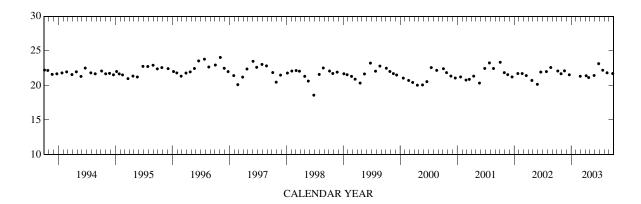
REMARKS.--Records of water levels, prior to October 1975, are available in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--June 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.00 ft NGVD, Aug. 27, 1970; lowest, 18.59 ft NGVD, June 26, 1998.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
07	1512	22.09	28	1225	21.44
28	1243	21.69	JUN		
NOV			26	0930	23.15
19	0936	22.11	JUL		
DEC			22	0850	22.20
20	0904	21.54	AUG		
FEB			19	0814	21.83
28	0934	21.33	SEP		
APR			24	1521	21.72
07	1154	21.40			
23	1010	21.14			





WELL NUMBER.--262703081340203. Local Number L 2313.

LOCATION.--Lat 26°27'03", long 81°33'59", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.25, T.46 S., R.27 E., Hydrologic Unit 03090204, 21 ft south of Corkscrew Road, 5.6 mi south of intersection of State Road 82 and County Road 850, and 11.7 mi southeast of Lehigh Acres Post Office.

AQUIFER.--Lower Hawthorn aquifer of the Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 670 ft, cased to 400 ft, open hole 400 to 670 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 27.66 ft above National Geodetic Vertical Datum of 1929.

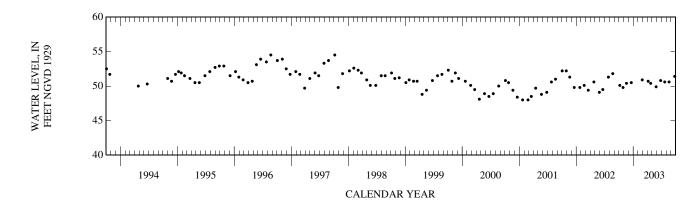
LAND-SURFACE DATUM.--Land surface is approximately 24.4 ft above NGVD.

REMARKS.--Records of water levels, prior to October 1982, are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--August 1976 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.5 ft NGVD, Nov. 24, 1987 and Aug. 22, 1996; lowest, 46.6 ft NGVD, June 28, 1978.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
07	1500	50.1	28	1223	49.9
28	1241	49.8	JUN		
NOV			26	0932	50.8
19	0939	50.4	JUL		
DEC			22	0845	50.6
20	0939	50.5	AUG		
FEB			19	0809	50.6
28	0927	50.9	SEP		
APR			24	1519	51.4
07	1151	50.7			
23	1007	50.4			



WELL NUMBER.--262706081435401. Local Number L 1853.

LOCATION.--Lat 26°27'07", long 81°43'57", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.20, T.46 S., R.26 E., Hydrologic Unit 03090204, 17 ft north of Corkscrew Road, 3.2 mi east of U.S. Interstate 75, and 6.0 mi east of Estero Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 210 ft, cased to 130 ft, open hole 130 to 210 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 24.80 ft above National Geodetic Vertical Datum of 1929. Prior to October 2000, measuring point was considered to be 24.73 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 22.0 ft above NGVD.

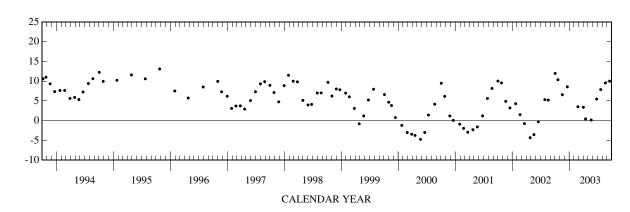
REMARKS.--Records of water levels prior to October 1975 are available in the files of the U.S. Geological Survey. Well was monitored for salinity from May 1981 to 1992. The casing is cracked at approximately 15 ft. In January 2002, the well was resurveyed. The figures of water level as elevation, in feet NGVD, prior to October 2000, are in error. A correction of +0.07 ft is required to correct the water-level data. See DATUM.

PERIOD OF RECORD.--November 1974 to September 1995 (monthly), October 1995 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.59 ft NGVD, Sept. 28, 1983 (present datum); lowest, 4.66 ft below NGVD, May 23, 2000 (present datum). (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1157	11.98	22	1115	0.18
21	1424	10.38	JUN		
NOV			26	1421	5.48
18	1555	6.58	JUL		
DEC			22	0901	7.89
20	1006	8.58	AUG		
FEB			21	0830	9.55
26	1502	3.53	SEP		
APR			17	0825	10.03
02	1419	3.40			
16	1249	0.46			





WELL NUMBER.--262706082080201. Local Number L 5735.

LOCATION.--Lat 26°27'09", long 82°08'01", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.20, T.46 S., R.22 E., Hydrologic Unit 03100103, 1.8 mi northwest of intersection of Sanibel-Captiva Road and Rabbit Road.

AQUIFER .-- Upper Floridan Aquifer of the Oligocene Age, Geologic Unit 120 UFAQ.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 1 1/4 in., depth 770 ft, cased to 740 ft, open hole 740 to 770 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape or pressure gage.

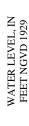
DATUM.--Measuring points: For pressure gage, top of flange, 4.50 ft above National Geodetic Vertical Datum of 1929; for chalked tape, top of 1 in. pipe casing, 5.37 ft above NGVD.

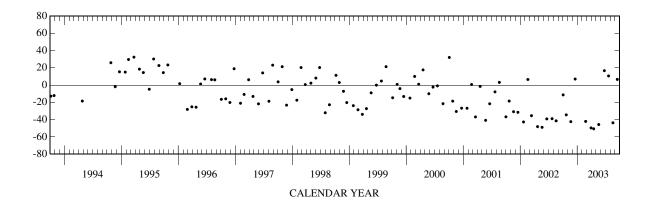
LAND-SURFACE DATUM.--Land surface is approximately 2.7 ft above NGVD.

PERIOD OF RECORD.--March 1987 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.33 ft NGVD, Mar. 23, 1995; lowest, 50.62 ft below NGVD, Apr. 17, 2003.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1211	-11.33	19	0954	-45.69
23	1038	-34.48	JUN		
NOV			24	0946	16.7
21	1325	-42.34	JUL		
DEC			21	1053	10.6
19	1030	7.00	AUG		
FEB			18	1256	-43.69
24	1025	-42.05	SEP		
MAR			15	1451	6.6
31	1201	-49.59			
APR					
17	1053	-50.62			





WELL NUMBER.--262706082080202. Local Number L 5737.

LOCATION.--Lat 26°27'09", long 82°08'01", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 20, T.46 S., R.22 E., Hydrologic Unit 03100103, 1.8 mi northwest of intersection of Sanibel-Captiva Road and Rabbit Road on Sanibel Island.

AQUIFER.--Upper Floridan aquifer of the Oligocene Age, Geologic Unit 120 UFAQ. (Corrected).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 700 ft, cased to 665 ft, open hole 665 to 700 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape or pressure gage.

DATUM.--Measuring points: For pressure gage, top of steel flange, 4.50 ft above NGVD; for chalked tape, top of 1 in. pipe, 5.85 ft above NGVD.

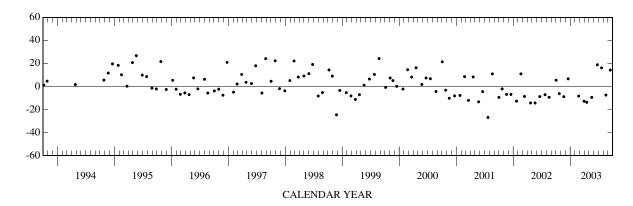
LAND-SURFACE DATUM.--Land surface is approximately 2.7 ft above NGVD.

PERIOD OF RECORD.--March 1987 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.7 ft NGVD, May 22, 1995; lowest, 26.95 ft below NGVD, July 23, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1207	5.4	19	0950	-9.55
23	1036	-6.25	JUN		
NOV			24	0943	18.8
21	1320	-8.91	JUL		
DEC			21	1045	16.1
19	1032	6.6	AUG		
FEB			18	1239	-7.51
24	1018	-8.40	SEP		
MAR			15	1450	14.2
31	1154	-12.87			
APR					
17	1049	-13.79			





WELL NUMBER.--262710082005301. Local Number L 585.

 $LOCATION.--Lat\ 26^{\circ}27'11'', long\ 82^{\circ}00'55'', in\ SW\ ^{1}\!\!/_{4}\ sec. 21,\ T.46\ S.,\ R.23\ E.,\ Hydrologic\ Unit\ 03100103,\ 200\ ft\ west\ of\ Sanibel\ Island\ Lighthouse, along\ trail\ from\ lighthouse\ to\ beach\ at\ Point\ Ybel,\ 7\ mi\ east\ of\ Sanibel\ Post\ Office.$ 

AQUIFER .-- Lower Hawthorn aquifer of the Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 475 ft, cased to 335 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Reference mark on 3 in. brass exhaust for gate valve, 4.78 ft above National Geodetic Vertical Datum of 1929. From June 9, 1994 to November 2, 1998, reference mark was on northwest corner of meter box, 3.24 ft above NGVD. From March 24, 1993 to June 9, 1994, measuring point was top of plug, 3.66 ft above NGVD. From October 1990 to March 24, 1993, measuring point was base of faucet, 2.93 ft above NGVD. Prior to October 1990, measuring point was top of 6 in. plug, 4.83 ft above NGVD.

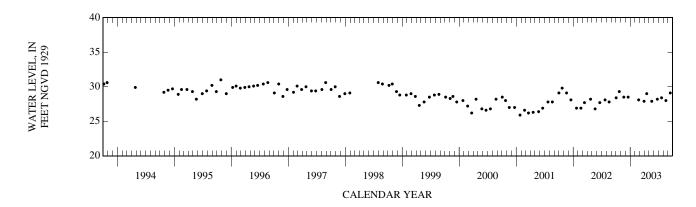
LAND-SURFACE DATUM.--Land surface is approximately 2.3 ft above NGVD.

REMARKS.--Records of water levels, prior to October 1981, are in the files of the U.S. Geological Survey. The well was also used for salinity monitoring from October 1982 to October 1997.

PERIOD OF RECORD.--January 1964 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.3 ft NGVD, July 26, 1988; lowest, 21.2 ft NGVD, Jan. 28, 1988.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1327	28.4	19	1137	27.9
23	1215	29.3	JUN		
NOV			24	1108	28.2
21	1535	28.5	JUL		
DEC			21	1209	28.4
19	0900	28.5	AUG		
FEB			18	1403	28.0
24	1204	28.1	SEP		
MAR			15	1538	29.1
31	1324	27.9			
APR					
17	1221	29.0			



WELL NUMBER.--262711081413701. Local Number L 2550.

LOCATION.--Lat 26°27'12", long 81°41'37", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 22, T.46 S., R.26 E., Hydrologic Unit 03050204, 0.75 mi east of Alico Road, 0.05 mi north of Corkscrew Road, 1.8 mi east of U.S. Interstate 75, and 8.2 mi east of Estero Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 134 ft, cased to 67 ft, open hole 67 to 134 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of flange, 21.11 ft above National Geodetic Vertical Datum of 1929. Prior to October 2002, measuring point was incorrectly considered to be 21.07 ft above NGVD. The figures of water level as elevation, in ft NGVD, from March 1992 to October 2002, are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 18.6 ft above NGVD.

12.85

12.06

11.88

REMARKS.--The figures of water as elevation, in ft NGVD, from March 1992 to October 2002, are in error. A correction of +0.04 ft is required to correct water-level data. See DATUM.

PERIOD OF RECORD .-- March 1992 to current year.

15.15

1994

1995

1996

1997

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 20.37 ft NGVD, Oct. 13, 1995; lowest, 6.71 ft NGVD, June 7, 1999.

				WATER		OBER 2002 MAXIMUN		MBER 2003	i			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.88	14.41	13.65	13.41	11.68	10.69	10.75	10.02	11.00	17.57	17.39	17.94
10	16.34	13.79	13.32	13.00	11.53	10.26	10.54	9.90	11.97	18.39	17.42	18.89
15	18.03	12.98	14.89	12.90	10.98	10.07	10.38	9.99	11.78	18.50	17.05	18.01
20	18.01	15.24	13.11	12.56	10.92	10.22	10.34	10.25	12.22	17.70	17.86	17.98

11.89

10.10

9.96

18.01

17.07

2001

18.03

2002

2003

18.02

ELEVATION ABOVE NGVD 1929, FEET

25 EOM 16.16 14.02 12.44 11.75 10.79 12.22 10.37 10.84 17.67 18.02 17.76 18.67 MAX 18.13 16.05 14.89 13.41 11.88 12.22 12.31 11.64 18.96 18.63 18.66 18.99 Gap indicates missing record 25 WATER LEVEL, IN FEET NGVD 1929 20 10

1998

CALENDAR YEAR

1999

2000

17.18

WELL NUMBER.--262713081414401. Local Number L 2193.

LOCATION.—Lat  $26^{\circ}27'12''$ , long  $81^{\circ}41'43''$ , in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 22, T.46 S., R.26 E., Hydrologic Unit 03050204, 0.75 mi east of Alico Road, 50 ft north of Corkscrew Road, 1.8 mi east of U.S. Interstate 75, and 8.2 mi east of Estero Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 292 ft, cased to 220 ft, screened 220 to 292 ft.

INSTRUMENTATION.--Electronic data logger, with pressure transducer.

DATUM.--Measuring point: Top of flange, 22.03 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 19.5 ft above NGVD.

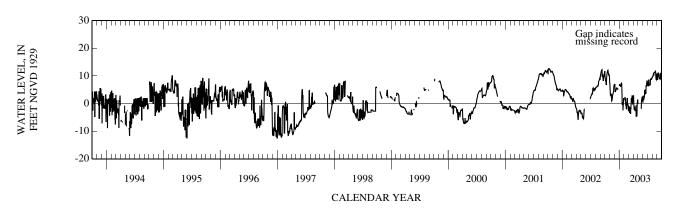
REMARKS.--Records of water levels prior to March 1992 may be available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1975 to January 1978 (monthly), March 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.07 ft NGVD, Sept. 26, 1975; lowest daily maximum water level, 16.10 ft below NGVD, June 2, 1992.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.38	3.32	5.37	6.82	1.37	-1.30	-0.74		1.91	6.95	9.66	8.77
10	6.72	2.91	4.77	6.26	1.81	-3.45	-1.30		2.18	8.71	10.13	9.75
15 20	10.95 12.02	1.12 3.13	5.54 5.39	7.41 -0.40	-0.89 0.54	-3.72 1.88	-4.76		3.45 3.55	6.68 8.32	11.28 11.46	9.15 9.09
25	10.56	4.20	5.24	-2.42	-0.23	2.83	-3.69	0.84	6.28	8.59	9.00	11.05
EOM	8.71	6.74		0.86	-1.33	1.95	0.86	1.96	7.60	9.37	9.42	11.86
MAX	12.07	7.54		7.41		2.93			8.35	9.37	11.54	11.86



WELL NUMBER.--262713081414701. Local Number L 1985.

LOCATION.--Lat 26°27'12", long 81°41'42", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.22, T.46 S., R.26 E., Hydrologic Unit 03090204, 20 ft north of Corkscrew Road, 5.55 mi east of U.S. Interstate 75, and 8.2 mi east of Estero Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 50 ft, cased to 43 ft, open hole 43 to 50 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. PVC, 20.95 ft above National Geodetic Vertical Datum of 1929. From September 21, 1993 to October 2001, measuring point was 20.96 ft above NGVD. From October 1, 1992 to September 21, 1993, top of casing was 23.32 ft above NGVD. From October 1980 to September 30, 1992, measuring point was top of shelf, 23.38 ft above NGVD. From October 1978 to September 1980, top of shelf was 23.46 ft above NGVD.

LAND-SURFACE DATUM .-- Land surface is approximately 20.8 ft above NGVD.

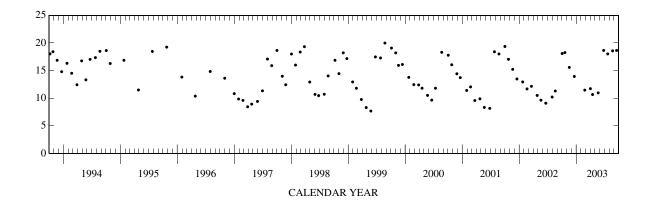
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. Well was monitored for salinity until April 1993.

PERIOD OF RECORD.--December 1974 to September 1978 (monthly), February 1978 to September 1992 (daily), October 1992 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 22.73 ft NGVD, Aug. 2, 1991; lowest measured water level, 7.30 ft NGVD, May 7, 1990.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1355	18.09	22	1202	10.97
21	1557	18.26	JUN		
NOV			26	1612	18.65
18	1737	15.58	JUL		
DEC			22	1057	18.02
20	1446	13.94	AUG		
FEB			22	0955	18.58
25	1441	11.47	SEP		
APR			17	1120	18.65
02	1553	11.73			
16	1327	10.67			





WELL NUMBER.--262755082090902. Local Number L 5734.

LOCATION.--Lat 26°27'56", long 82°09'09", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.18, T.46 S., R.22 E., Hydrologic Unit 03100103, 200 ft south of Sanibel-Captiva Road and 40 ft east of Bowman's Beach Road.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 608 ft, cased to 440 ft, open hole 440 to 608 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage or chalked tape.

DATUM.--Measuring point: Top of 8 in. casing, 4.44 ft above National Geodetic Vertical Datum of 1929. Prior to January 1992, measuring point was top of cap, 5.49 ft above NGVD.

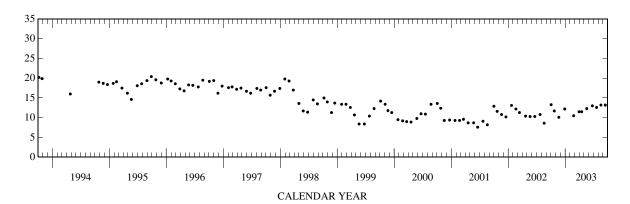
LAND-SURFACE DATUM.--Land surface is approximately 4.1 ft above NGVD.

PERIOD OF RECORD.--October 1989 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.4 ft NGVD, Oct. 7, 1992; lowest, 17.17 ft below NGVD, Mar. 20, 1991.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1109	13.3	19	0933	12.3
23	1019	11.7	JUN		
NOV			24	0925	13.0
21	1306	10.1	JUL		
DEC			21	1027	12.6
29	1055	12.2	AUG		
FEB			18	1211	13.2
24	0955	10.5	SEP		
MAR			15	1439	13.2
31	1141	11.5			
APR					
17	1031	11.5			





WELL NUMBER.--262831081575901. Local Number L 2212.

 $LOCATION.--Lat\ 26^{\circ}28'33'', long\ 81^{\circ}58'01'', in\ NW\ \frac{1}{4}\ NW\ \frac{1}{4}\ sec. 13, T.46\ S., R.23\ E., Hydrologic\ Unit\ 03090205, at\ Bunch\ Beach, 400\ ft\ east\ of\ John\ Morris\ Road\ at\ San\ Carlos\ Bay,\ 1.2\ mi\ south\ of\ Summerlin\ Road,\ 2\ mi\ northwest\ of\ Ft.\ Myers\ Beach\ Post\ Office.$ 

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 236 ft, cased to 135 ft, open hole 135 to 236 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage or chalked tape.

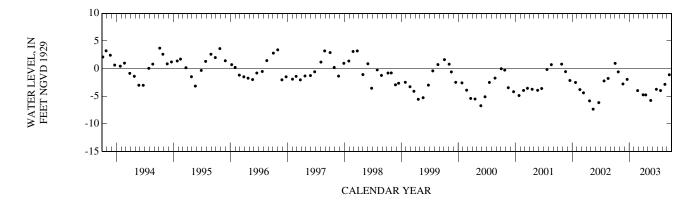
DATUM.--Measuring point: Top of 4 in. steel cap, 1.62 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 1.1 ft above NGVD.

PERIOD OF RECORD .-- February 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.82 ft NGVD, Aug. 30, 1989; lowest, 7.34 ft below NGVD, May 15, 2002.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1348	0.95	19	1200	-5.76
23	1239	-0.59	JUN		
NOV			24	1131	-3.74
22	1016	-2.78	JUL		
DEC			21	1234	-3.97
19	1225	-1.95	AUG		
FEB			18	1425	-2.85
24	1235	-3.98	SEP		
MAR			15	1558	-1.11
31	1350	-4.74			
APR					
17	1255	-4.76			



WELL NUMBER.--262839081503100. Local Number L 735.

LOCATION.—Lat 26°28'40", long 81°50'31", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.18, T.46 S., R.25 E., Hydrologic Unit 03090204, 13 ft south of Park Road, 0.2 mi west of U.S. Highway 41, and 1.5 mi northwest of Estero Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 270 ft, cased to 223 ft, open hole 223 to 270 ft.

INSTRUMENTATION.--Electronic data logger. Monthly measurement with chalked tape prior to September 2002.

DATUM.--Measuring point: Top of casing, 8.92 ft above National Geodetic Vertical Datum of 1929. From June 22, 1999 to September 2002, measuring point was 7.32 ft above NGVD. Prior to June 22, 1999, measuring point was top of cap, 7.52 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 5.2 ft above NGVD.

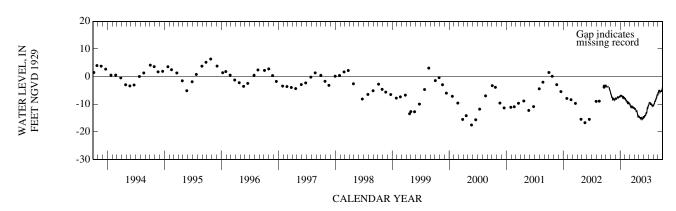
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. In September 2002, the station was reconstructed with a new measuring point elevation. See DATUM.

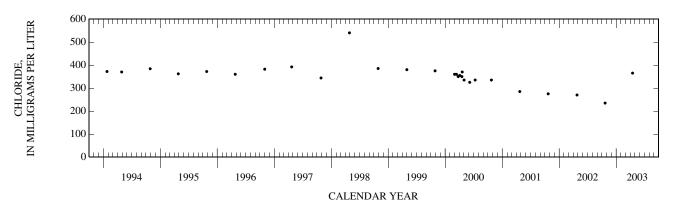
PERIOD OF RECORD.--August 1968 to November 1974 (bimonthly), December 1974 to August 2002 (monthly), September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.4 ft NGVD, Oct. 31, 1969; lowest, 17.51 ft below NGVD, May 23, 2000.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	-3.44 -4.04	-6.80 -7.39	-8.15 -7.80	-6.95 -7.01	-8.41 -8.60	-9.97 -10.70	-11.87 -11.80	-14.68 -15.19	-14.83 -13.95	-9.95 -9.38	-10.02 -9.06	-5.33 -5.24
15	-3.74	-8.47	-7.29	-7.39	-9.27	-11.18	-12.34	-14.86	-13.25	-9.48	-8.63	-5.36
20 25	-4.60	-8.24 -8.13	-7.76 -7.32	-7.18 -7.50	-9.64 -9.40	-11.19 -10.99	-13.08 -14.55	-15.07 -15.11	-13.16 -11.03	-10.17 -10.38	-8.02 -6.63	-5.50 -5.16
EOM	-5.79	-8.00	-7.06	-8.10	-9.81	-11.31	-14.76	-14.98	-10.62	-10.47	-6.13	-3.67
MAX		-5.95	-7.06	-6.76	-7.94	-9.86	-11.27	-14.41	-10.62	-9.38	-6.13	-3.67





WELL NUMBER.--262934081495801. Local Number L 5649.

LOCATION.--Lat 26°29'35", long 81°47'14", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 10, T.46 S., R.25 E., Hydrologic Unit 03090204, on the north side of Alico Road, 0.3 mi east of U.S. Interstate 75, and 12 mi southeast of Ft. Myers Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 128 ft, cased to 118 ft, screened 118 to 128 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.—Measuring point: Top of shelf, 24.93 ft above National Geodetic Vertical Datum of 1929. From August 1994 to September 2001, measuring point was incorrectly considered to be 25.10 ft above NGVD. From October 1982 to August 1994, measuring point was 22.56 ft above NGVD, but was incorrectly considered to be 22.73 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 22.7 ft above NGVD.

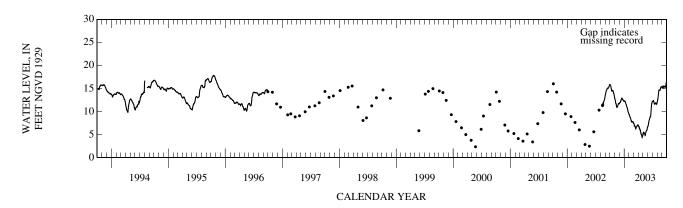
REMARKS.--In the 2002 water year the well was re-surveyed and the land-surface datum and height of the measuring point were corrected. The figures of water levels as elevation, in feet NGVD, from October 1982 to October 2001, are in error. A -0.17 ft correction is required to correct the water-level data. See DATUM.

PERIOD OF RECORD.--October 1982 to September 1996 (daily), October 1996 to July 2002 (monthly), August 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.24 ft NGVD, Sept. 12, 13, 1986 (present datum); lowest water level measured, 2.15 ft NGVD, May 23, 2000 (present datum).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	15.67 14.93 14.50 14.58 14.02 13.08	12.32 11.68 10.86 11.11 11.70 11.67	11.93 12.30 12.84 12.72 12.46 12.18	12.28 11.84 11.33 10.84 9.99 9.48	9.02 8.59 8.00 7.66 7.78 7.58	7.30 6.84 6.33 6.61 6.94 7.07	6.67 6.29 5.88 5.06 4.42 4.87	5.46 5.13 4.81 5.48 5.92 6.62	7.15 8.10 8.73 9.11 11.47 12.15	12.35 12.12 11.60 11.86 11.56 11.96	12.83 14.34 14.59 14.65 15.34 15.27	15.15 15.41 15.43 15.51 15.42 16.40
MAX	15.84	12.85	12.89	12.28	9.36	7.43	7.02	6.62	12.15	12.38	15.39	16.40



WELL NUMBER.--262944081560801. Local Number L 2529.

LOCATION.--Lat  $26^{\circ}29^{\circ}15^{\circ}$ , long  $81^{\circ}56^{\circ}24^{\circ}$ , in SW  $\frac{1}{4}$  sec.7, T.46 S., R.24 E., Hydrologic Unit 03090204, on south side of Pine Ridge Road, 0.25 mi east of State Road 865, and 2.6 mi north of Ft. Myers Beach Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 545 ft, cased to 304 ft, open hole 304 to 545 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of meter box, west side, 6.04 ft above National Geodetic Vertical Datum of 1929. From January 1978 to September 1990, measuring point was top of casing, 6.11 ft above NGVD.

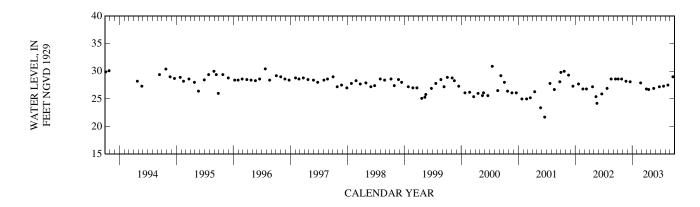
LAND-SURFACE DATUM.--Land surface is approximately 5.8 ft above NGVD.

REMARKS.--Records of water levels prior to October 1980 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1978 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.0 ft NGVD, Nov. 30, 1981; lowest, 21.7 ft NGVD, June 19, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1440	28.6	19	1253	26.9
25	1217	28.6	JUN		
NOV			24	1302	27.2
22	1146	28.2	JUL		
DEC			21	1408	27.3
19	1235	28.1	AUG		
FEB			18	1524	27.5
24	1459	27.9	SEP		
APR			19	1223	29.0
02	0858	26.8			
17	1454	26.7			



WELL NUMBER.--263004082111701. Local Number L 2315.

LOCATION.--Lat 26°29'58", long 82°11'16", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.3, T.46 S., R.21 E., Hydrologic Unit 03100103, 25 ft north of private drive, 125 ft west of Sanibel-Captiva Road, 1.1 mi north of Blind Pass bridge and 1.8 mi south of Captiva.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 600 ft, cased to 535 ft, open hole 535 to 600 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 6 in. plug, 9.55 ft above National Geodetic Vertical Datum of 1929.

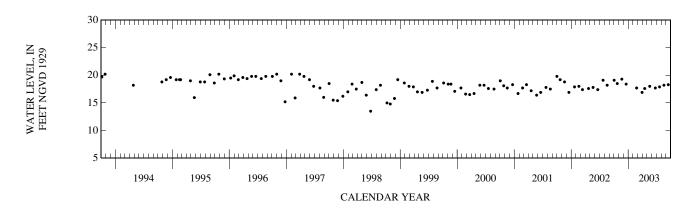
LAND-SURFACE DATUM.--Land surface is approximately 7.8 ft above NGVD.

REMARKS .-- Landowner uses well for irrigation.

PERIOD OF RECORD.--March 1987 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.8 ft NGVD, Aug. 30, 1989; lowest, 13.5 ft NGVD, June 25, 1998.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1147	19.1	19	0923	18.0
23	1005	18.5	JUN		
NOV			24	0910	17.7
21	1248	19.3	JUL		
DEC			21	1015	17.9
19	1104	18.4	AUG		
FEB			18	1202	18.2
24	0945	17.7	SEP		
MAR			15	1429	18.3
31	1120	16.9			
APR					
17	1022	17.6			



WELL NUMBER.--263041081433101. Local Number L 1983.

LOCATION.--Lat 26°30'42", long 81°43'32", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 33, T.45 S., R.26 E., Hydrologic Unit 03090204, 1.25 mi north of Alico Road, 1.85 mi east of Airport Haul Road, 2.5 mi west of U.S. Interstate 75 and 7.2 mi northeast of Estero Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 345 ft, cased to 321 ft, open hole 321 to 345 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of cap, 28.92 ft above National Geodetic Vertical Datum of 1929.

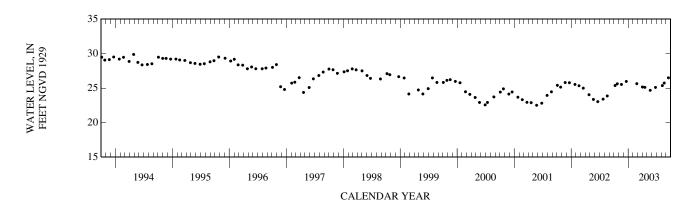
LAND-SURFACE DATUM.--Land surface is approximately 26.7 ft above NGVD.

REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. Prior to 1996, monthly measurements were made using a pressure gage. Well was also used for salinity monitoring from October 1985 to April 1993.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.1 ft NGVD, Oct. 29, 1975; lowest, 22.51 ft NGVD, May 24, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
09	0926	25.37	22	1246	24.68
23	1430	25.62	JUN		
NOV			25	1058	25.10
19	1238	25.53	AUG		
DEC			08	1315	25.36
20	1316	25.96	20	1052	25.73
FEB			SEP		
25	1305	25.64	16	1118	26.49
APR					
02	1139	25.16			
18	1419	25.11			



WELL NUMBER.--263041081433102. Local Number L 1998.

LOCATION.--Lat 26°30'42", long 81°43'32", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 33, T.45 S., R.26 E., Hydrologic Unit 03090204, 1.25 mi north of Alico Road, 1.85 mi east of Airport Haul Road, 2.5 mi west of U.S. Interstate 75, and 7.2 mi northeast of Estero Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 160 ft, cased to 100 ft, open hole 100 to 160 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 29.14 ft above National Geodetic Vertical Datum of 1929. Prior to March 2001, measuring point was 29.21 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 26.6 ft above NGVD.

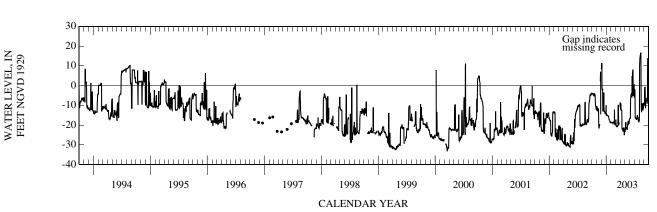
REMARKS.--In March 2001, the well was reconstructed and resurveyed. See DATUM. Water levels affected by pumping of nearby wells. Revised water levels for July 1997 to September 1997 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--November 1974 to September 1996 (daily), October 1996 to June 1997 (monthly), July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.98 ft NGVD, Dec. 12, 1975; lowest, 32.88 ft below NGVD, Mar. 18, 2000.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	-3.98 -4.80 -5.17 -4.62 -10.09 -12.50	-11.45 -11.78 -21.17 -19.70 6.08 8.40	-0.80 -12.47 -12.79 -13.05 -14.23 -10.03	-15.00 -15.09 -15.65 -17.28 -18.26 -18.51	-18.82 -18.75 -18.45 -18.74 -19.20 -19.86	-20.00 -20.67 -20.57 -9.83 -19.11 -8.49	-12.39 -12.47 -21.81 -22.89 -21.36 -22.40	-20.45 -21.52 -22.44 -18.79 -19.28 -16.89	-16.40 -4.64 -5.98 7.46 -1.34 -6.03	-5.15 -16.57 -17.18 -14.99 -17.50 -17.55	13.79 16.44 -12.93 -9.02 -11.23 -9.94	-1.02 -11.45 -8.12 -9.17 13.82 -6.73
MAX	-3.92		11.43	-13.42	-12.23		-9.02	-16.89	8.10	-1.94	16.59	13.82



WELL NUMBER.--263041081433103. Local Number L 1999.

LOCATION.--Lat 26°30'42", long 81°43'32", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 33, T.45 S., R.26 E., Hydrologic Unit 03090204, 1.25 mi north of Alico Road, 1.85 mi east of Airport Haul Road, 2.5 mi west of U.S. Interstate 75 and 7.2 mi northeast of Estero Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 26 ft, cased to 16 ft, open hole 16 to 26 ft.

INSTRUMENTATION .-- Satellite data collection platform, with pressure transducer.

DATUM.--Measuring point: Top of shelf, 28.92 ft above National Geodetic Vertical Datum of 1929. Prior to March 2001, measuring point was top of casing, 29.92 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 26.9 ft above NGVD.

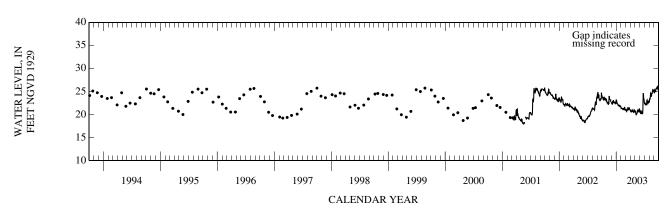
REMARKS.--In March 2001, the well was reconstructed and resurveyed. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--November 1974 to February 2001 (monthly), March 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.28 ft NGVD, Sept. 29, 2003; lowest, 17.94 ft NGVD, May 17, 2001.

# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES V DEC JAN FEB MAR APR MAY JUN JUL 54 22.37 22.75 21.30 20.85 20.80 20.60 20.40 22.43

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.71	22.54	22.37	22.75	21.30	20.85	20.80	20.60	20.40	22.43	23.53	25.34
10	23.30	22.24	22.87	22.27	21.22	21.10	20.59	20.19	20.37	22.14	24.53	25.05
15	23.74	22.26	22.74	21.94	21.14	21.05	20.60	20.39	20.18	22.20	24.20	25.68
20	23.19	23.37	22.61	21.93	21.14	21.16	20.52	20.78	20.35	22.64	24.49	25.92
25	23.35	23.10	22.60	21.83	21.32	21.19	20.42	20.78	24.21	22.89	25.40	26.03
EOM	23.03	22.50	22.43	21.43	21.02	20.83	20.72	21.00	22.64	22.68	24.93	26.25
MAX	24.08		23.01	23.22	21.50		21.01	21.19	24.62	23.15	25.41	26.28



WELL NUMBER.--263115081483501. Local Number L 5641.

LOCATION.--Lat 26°31'14", long 81°48'34", in NW \( \frac{1}{4} \) SE \( \frac{1}{4} \) NE \( \frac{1}{4} \) sec.33, T.45 S., R.25 E., Hydrologic Unit 03090204, at golf course in Fiddlesticks Country Club, 0.75 mi west of U.S. Interstate 75 on Daniels Road and 1.5 mi south on Palomino Street to gate house, 0.25 mi west on Fiddlesticks Boulevard to Cannongate Drive, 0.1 mi south to Tweedale Circle. Golf cart path is behind lot 300.

AQUIFER.--Upper Floridan aquifer of the Oligocene Age, Geologic Unit 120 UFAQ.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 1,410 ft, cased to 950 ft, open hole 950 to 1,410 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

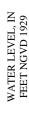
DATUM.--Measuring point: Top of 4 in. coupling, 27.80 ft above National Geodetic Vertical Datum of 1929.

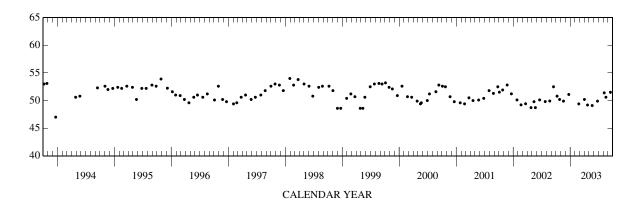
LAND-SURFACE DATUM .-- Land surface is approximately 26.1 ft above NGVD.

PERIOD OF RECORD.--May 1984 to October 1991 (semiannual), January 1992 to October 1993 (monthly), December 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.0 ft NGVD, Sept. 14, 1992 and Jan. 30, 1998; lowest, 47.0 ft NGVD, Dec. 21, 1993.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
09	0859	50.8	22	1450	49.1
25	1220	50.2	JUN		
NOV			25	1214	49.9
19	1435	49.9	AUG		
DEC			07	1302	51.4
23	1533	51.1	18	0940	50.6
FEB			SEP		
25	1530	49.4	16	0949	51.5
APR					
02	1329	50.2			
2.2	0929	49.2			





WELL NUMBER.--263115081483502. Local Number L 5801.

LOCATION.--Lat 26°31'14", long 81°48'34", NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  in sec.33, T.45 S., R.25 E., Hydrologic Unit 03090204, at golf course in Fiddlesticks Country Club, 0.75 mi west of U.S. Interstate 75 on Daniels Road and 1.5 mi south on Palomino Street to gate house, 0.25 mi west on Fiddlesticks Boulevard to Cannongate Drive, 0.1 mi south to Tweedale Circle. Golf cart path is behind lot 300.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 1 in., depth 635 ft, cased to 450 ft, open hole 450 to 635 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

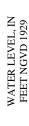
DATUM.--Measuring point: Top of 4 in. coupling on well L 5641, 27.80 ft above National Geodetic Vertical Datum of 1929.

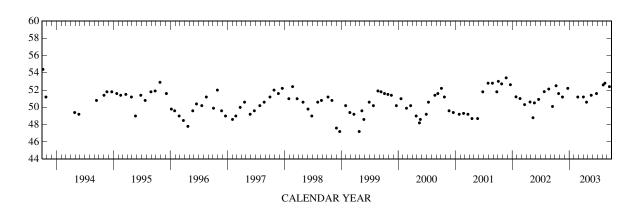
LAND-SURFACE DATUM.--Land surface is approximately 26.1 ft above NGVD.

PERIOD OF RECORD.--March 1992 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.4 ft NGVD, Oct. 7, 1993; lowest, 47.2 ft NGVD, Dec. 22, 1998 and Apr. 26, 1999

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
09	0902	52.5	22	1446	51.4
25	1218	51.6	JUN		
NOV			25	1216	51.6
19	1438	51.2	AUG		
DEC			07	1306	52.6
23	1535	52.2	18	0944	52.8
FEB			SEP		
25	1527	51.2	16	0952	52.4
APR					
02	1326	51.2			
22	0935	50.6			





WELL NUMBER.--263117082051001. Local Number L 2525.

LOCATION.--Lat 26°31'17", long 82°05'10", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.26, T.45 S., R.22 E., Hydrologic Unit 03100103, 32 ft west of H. Stringfellow Road (County Road 767) and 6.6 mi south of Pine Island Road and 0.9 mi north of Saint James City Post Office. (Corrected).

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 645 ft, cased to 405 ft, open hole 405 to 645 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Electronic data logger with pressure transducer, prior to August 2003.

DATUM.--Measuring point: Top of 5/16 in. carriage bolt, securing base to flange, 6.44 ft above National Geodetic Vertical Datum of 1929. From October 1977 to August 2002, measuring point was top of casing, 6.19 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 3.9 ft above NGVD.

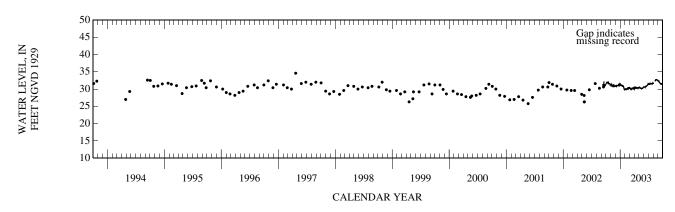
REMARKS.--There is insufficient record to publish 2002 daily record. Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--October 1977 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to August 2002 (monthly), August 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.6 ft NGVD, Apr. 22, 1997; lowest, 25.4 ft NGVD, Aug. 28, 1980.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	31.78 31.98	31.26 31.11	30.99 31.05	31.13 31.19	30.08 30.03	30.27 30.04	30.36 30.39	30.45 30.33	30.64 30.46	31.45 31.46		32.35 31.90
15	31.96	30.94	30.95	30.93	30.13	30.02	30.24	30.24	30.82	31.67	32.53	31.69
20 25	31.66 31.61	31.00 30.93	31.24 31.45	30.75 30.14	30.10 30.26	30.23 30.16	30.36 30.36	30.11 30.26	30.86 31.16	31.51 31.54	32.68 32.62	31.42 31.57
EOM	31.24	30.94	31.48	29.96	30.29	30.03	30.34	30.51	31.47	31.67	32.38	31.56
MAX	32.04	31.34	31.48	31.51	30.57	30.45	30.50	30.51	31.51	31.77		32.41



WELL NUMBER.--263117082051002. Local Number L 2821.

LOCATION.--Lat 26°31'17", long 82°05'10", in SE 1/4 SW 1/4 sec.26, T.45 S., R.22 E., Hydrologic Unit 03100103, 32 ft west of H. Stringfellow Road (County Road 767) and 6.6 mi south of Pine Island Road and 0.9 mi north of Saint James City Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 340 ft, cased to 290 ft, open hole 290 to 340 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Monthly measurement with pressure gage, prior to August 2003.

DATUM.--Measuring point: Top of 8 in. casing, 6.55 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 3.4 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. This well is open to the aquifer for 50 ft. The exact depth from which the chloride-containing water is emanating cannot be further delineated.

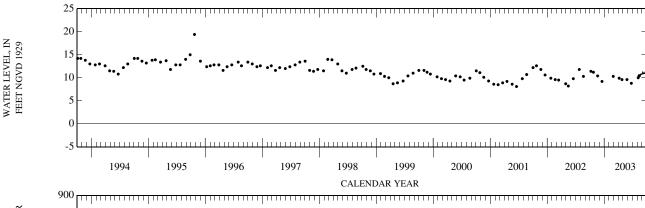
PERIOD OF RECORD .-- October 1978 to current year.

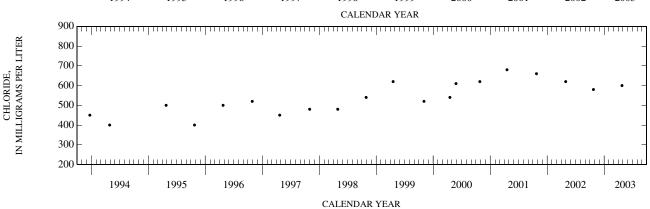
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.4 ft NGVD, Oct. 24, 1995; lowest, 8.1 ft NGVD, June 18, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5												11.15
10												10.92
15											10.43	10.97
20											10.58	11.12
25											10.75	11.53
EOM											10.79	11.80
37.37												11.00
MAX												11.80
	WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003											

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
08	1230	11.4			27	1616	9.6		
24	1055	11.2	2,560	580	JUN				
NOV					24	1103	8.8		
20	0825	10.4			AUG				
DEC					07	1025	10.0		
18	0912	9.2			21	1116	10.6		
FEB					SEP				
28	1231	10.3			17	0912	11.0		
APR									
07	1522	9.9							
25	1108	9.6	2,560	600					





WELL NUMBER.--263127081351602. Local Number L 2215.

LOCATION.--Lat 26°31'28", long 81°35'17", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.35, T.45 S., R.27 E., Hydrologic Unit 03090205, 66 ft east of Eisenhower Boulevard, 68 ft north of State Road 82, and 7.6 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 149 ft, cased to 99 ft, screened 99 to 149 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 31.54 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 30.2 ft above NGVD.

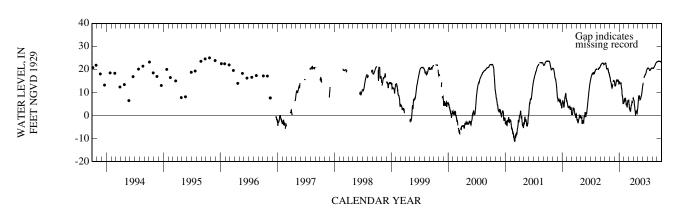
REMARKS.--In 1999 and 2000, hydrologic profiles and water quality samples were collected for a drought alert project and the well was sampled for water quality for a saltwater intrusion project.

PERIOD OF RECORD.--October 1975 to October 1996 (monthly), November 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.97 ft NGVD, Aug. 30, 1978; lowest daily maximum water level, 11.40 ft below NGVD, Mar. 2, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	22.73 21.59	15.67 14.24	12.78 13.35	14.42 13.80	6.35 7.64	4.88 2.87	6.60 3.83	7.98 7.97	16.60	20.53 20.47	20.40 20.72	23.44 23.56
15	20.21	12.15	15.41	12.11	4.44	1.89	0.44	6.90	17.45	19.56	21.25	23.48
20	20.42	13.30	15.11	8.67	4.25	4.45	1.55	7.74	17.97	19.84	21.96	23.49
25	18.78	15.09	15.34	5.42	6.29	6.45	1.10	9.30	19.34	20.32	22.77	23.39
EOM	17.60	14.91	13.78	5.82	6.26	7.52	3.30	12.48	20.31	20.64	23.27	23.30
MAX	22.76		15.41	14.59	7.64		7.60	12.48		20.67	23.27	23.60



WELL NUMBER.--263138081545801. Local Number L 730.

LOCATION.--Lat 26°31'28", long 81°35'17", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 35, T.45 S., R.27 E., Hydrologic Unit 03090205, 21 ft east of Eisenhower Boulevard, 68 ft north of State Road 82, and 7.6 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 19 ft, cased to 18.7 ft, open hole 18.7 to 19 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of recorder base, 33.90 ft above National Geodetic Vertical Datum of 1929. Prior to July 1991, measuring point was 33.95 ft above NGVD.

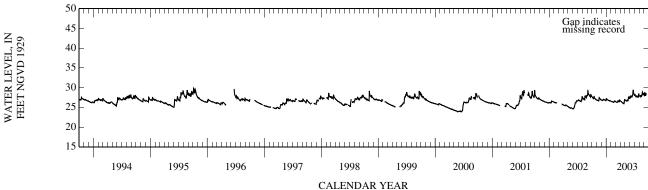
LAND-SURFACE DATUM.--Land surface is approximately 31.5 ft above NGVD.

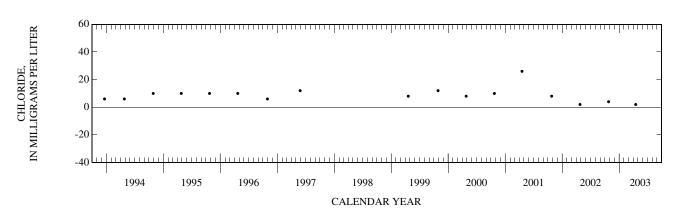
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1974 are available in files of the U.S. Geological Survey. PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 30.48 ft NGVD, Oct. 30, 1969; lowest, 23.87 ft NGVD, June 17, 2000.

ELEVATION ABOVE NGVD 1020 FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.50	26.79	26.78	27.11	26.48	26.35	26.54	26.74	27.40	28.27	27.88	28.73
10	27.27	26.73	26.85	26.91	26.43	26.33	26.36	26.63	27.84	27.75	28.00	28.03
15	27.78	26.65	27.03	26.77	26.34	26.27	26.17	26.86	27.65	27.71	27.96	28.23
20	27.32	27.27	26.92	26.68	26.40	26.60	26.01	26.74	28.12	27.70	28.29	
25	27.08	27.08	26.84	26.68	26.62	26.48	25.91	27.57	28.78	27.61	28.33	
EOM	26.87	26.86	26.70	26.56	26.52	26.72	26.98	27.49	28.15	28.00	28.19	
MAX	27.78	27.46	27.05	27.20	26.64	26.87	27.00	27.65	29.44	28.39	28.88	





WELL NUMBER.--263138082112801. Local Number L 5766.

LOCATION.--Lat 26°31'38", long 82°11'27", in NE ½ NW ½ SW ½ sec.26, T.45 S., R.21 E., Hydrologic Unit 03100103, behind two storage sheds, 350 ft southwest of the South Seas Plantation Dive Shop, 0.05 mi southeast of South Seas Plantation Road, 0.18 mi northeast of Captiva Road, 0.2 mi northeast of Captiva Post Office.

AQUIFER.--Upper Floridan aquifer of the Oligocene Age, Geologic Unit 120 UFAQ.

WELL CHARACTERISTICS.--Driven, observation, artesian well, diameter 4 in., depth 730 ft, cased to 686 ft, open hole 686 to 730 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

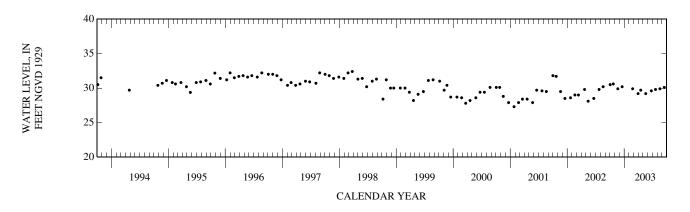
DATUM.--Measuring point: Top of 4 in. by 2 in. reducer, 7.57 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 4.3 ft above NGVD.

PERIOD OF RECORD.--April 1989 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.3 ft NGVD, Oct. 5, 1989; lowest, 27.3 ft NGVD, Jan. 25, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1132	30.5	19	0913	29.2
23	1000	30.6	JUN		
NOV			24	0901	29.6
21	1234	29.9	JUL		
DEC			21	1004	29.8
19	1115	30.2	AUG		
FEB			18	1130	29.9
24	0924	29.9	SEP		
MAR			15	1415	30.1
31	1109	29.2			
APR					
17	1011	29.7			



WELL NUMBER.--263233081550301. Local Number L 1598.

LOCATION.--Lat 26°32'32", long 81°55'02", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.21, T.45 S., R.24 E., Hydrologic Unit 03090205, 400 ft west of intersection of South Town and River Drive and McGregor Boulevard (State Road 867), 17 ft north of South Town and River Drive, and 2.1 mi southeast of Cape Coral Post Office

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 176 ft, cased to 137 ft, open hole 137 to 176 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 9.02 ft above National Geodetic Vertical Datum of 1929.

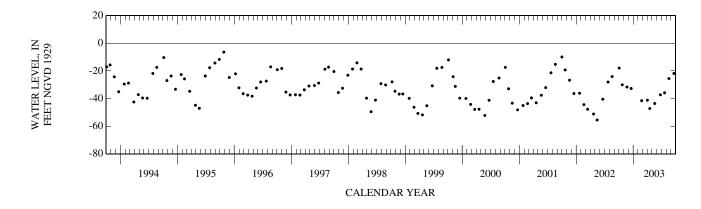
LAND-SURFACE DATUM.--Land surface is approximately 6.5 ft above NGVD.

REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- July 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.87 ft NGVD, Mar. 30, 1978; lowest, 55.50 ft below NGVD, May 15, 2002. (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
03	1505	-17.95	19	1305	-43.54
23	1337	-30.03	JUN		
NOV			24	1317	-37.28
22	1239	-31.63	JUL		
DEC			21	1421	-35.78
19	0824	-32.71	AUG		
FEB			18	1538	-25.50
24	1513	-41.52	SEP		
APR			19	1239	-21.85
02	0916	-41.18			
17	1526	-47.19			



WELL NUMBER.--263242081572101. Local Number L 2244.

 $LOCATION.--Lat\ 26^{\circ}32'43", long\ 81^{\circ}57'18", in\ SE\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec. 19, T.45\ S., R.24\ E., Hydrologic\ Unit\ 03090205, in\ front\ yard\ of\ 931\ Dolphin\ Drive, 4.5\ ft\ north\ of\ Dolphin\ Drive, 0.5\ mi\ west\ of\ Driftwood\ Parkway\ and\ 1.5\ mi\ southwest\ of\ Cape\ Coral\ Post\ Office.\ (Corrected).$ 

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 207 ft, cased to 150 ft, open hole 150 to 207 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.58 ft above National Geodetic Vertical Datum of 1929.

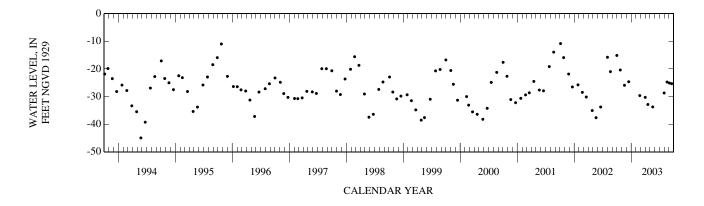
LAND-SURFACE DATUM.--Land surface is approximately 5.4 ft above NGVD.

REMARKS.--Well was also used for salinity monitoring from April 1978 to April 2002. During the 2003 water year salinity monitoring was discontinued because of an obstruction that prevents sampling the well. Conductivity and chloride profiles for previous water years are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1977 to April 1988 (intermittent), May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.29 ft below NGVD, Sept. 25, 1979; lowest, 44.97 ft below NGVD, May 25, 1994.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
01	1316	-15.12	19	1230	-33.75
23	0707	-20.38	JUL		
NOV			31	1219	-28.69
19	1317	-25.92	AUG		
DEC			19	1249	-24.74
16	1236	-24.64	SEP		
FEB			03	1217	-25.11
25	1352	-29.63	18	1129	-25.32
APR					
01	1240	-30.29			
18	1023	-32.86			



WELL NUMBER.--263249081474401. Local Number L 5648.

LOCATION.--Lat 26°32'50", long 81°47'58", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.22, T.45 S., R.24 E., Hydrologic Unit 03090204, on the north side of Daniels Road, 113 ft east of Danport Boulevard, 600 ft west of U.S. Interstate 75, and 6.5 mi southeast of Ft. Myers Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 123 ft, cased to 118 ft, screened 118 to 123 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of PVC threaded coupling, 24.01 ft above National Geodetic Vertical Datum of 1929.

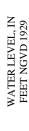
LAND-SURFACE DATUM .-- Land surface is approximately 23.9 ft above NGVD.

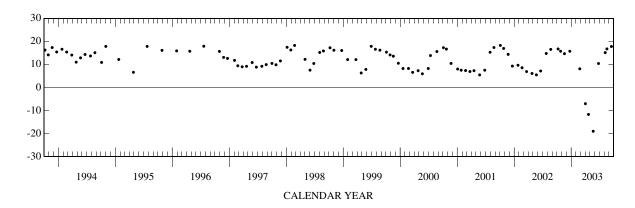
REMARKS.--Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--June 1982 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.57 ft NGVD, Sept. 28, 1983; lowest, 19.04 ft below NGVD, May 22, 2003.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
09	0843	16.70	22	1432	-19.04
25	1204	15.72	JUN		
NOV			25	1156	10.39
19	1413	14.66	AUG		
DEC			07	1242	15.12
23	1518	15.71	18	0956	16.72
FEB			SEP		
25	1514	8.08	16	1009	17.79
APR					
02	1312	-7.06			
22	0916	-11.73			





WELL NUMBER.--263249081474402. Local Number L 5720.

LOCATION.--Lat 26°32'50", long 81°47'58", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.22, T.45 S., R.24 E., Hydrologic Unit 03090204, on the north side of Daniels Road, 105 ft east of Danport Boulevard, 600 ft west of U.S. Interstate 75, and 6.5 mi southeast of Ft. Myers Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 30 ft, cased to 20 ft, screened 20 to 30 ft, with 0.02 in. slot. INSTRUMENTATION.--Monthly measurement with chalked tape.

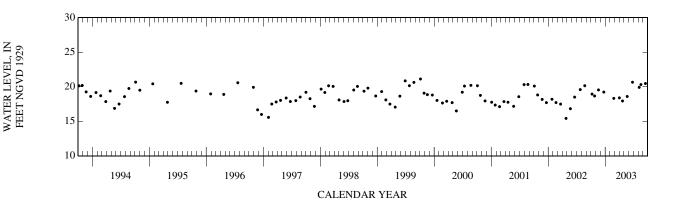
DATUM.--Measuring point: Top of casing, 24.40 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 24.2 ft above NGVD.

PERIOD OF RECORD.--April 1986 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.47 ft NGVD, Oct. 23, 1992; lowest, 15.42 ft NGVD, Apr. 25, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
09	0846	18.94	22	1434	18.59
25	1205	18.66	JUN		
NOV			25	1157	20.66
19	1351	19.54	AUG		
DEC			07	1236	19.91
23	1521	19.23	18	1000	20.32
FEB			SEP		
25	1516	18.32	16	1014	20.47
APR					
02	1315	18.39			
22	0921	17.94			



WELL NUMBER.--263251081452801. Local Number L 1993.

LOCATION.—Lat 26°32'52", long 81°45'37", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.24, T.45 S., R.25 E., Hydrologic Unit 03090204, 2 mi east of intersection of U.S. Interstate 75 and Daniels Road, 0.3 mi north of airport access road on dirt road and 9.6 mi southeast of Fort Myers Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 242 ft, cased to 190 ft, open hole 190 to 242 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 27.37 ft above National Geodetic Vertical Datum of 1929. From March 15, 2001 to September 30, 2001, measuring point was incorrectly considered to be 28.06 ft above NGVD. From January 3, 1985 to March 15, 2001, top of shelf was 27.22 ft above NGVD, but was incorrectly considered to be 27.91 ft above NGVD. From March 19, 1983 to January 2, 1985, top of shelf was 27.24 ft above NGVD, but was incorrectly considered to be 27.93 ft above NGVD. Prior to March 18, 1983, top of shelf was 27.29 ft above NGVD, but was incorrectly considered to be 27.98 ft above NGVD. The figures of water levels as elevation, in feet NGVD, prior to October 1, 2001 are in error. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 24.0 ft above NGVD.

REMARKS.--On December 11, 2002, the well was re-leveled and the land-surface datum was found to be 23.95 ft above National Geodetic Vertical Datum of 1929. A -0.69 ft correction has been applied to daily maximum values data prior to October 1, 2001. Corrected records are available in the files of the U.S. Geological Survey. The station was reconstructed on March 9, 1978, March 19, 1983, January 3, 1985 and March 15, 2001. See DATUM.

PERIOD OF RECORD.--December 1974 to current year.

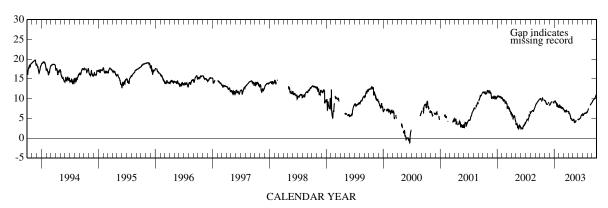
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 26.19 ft NGVD Nov. 13, 1975 and Apr. 1-4, 1980; lowest, 1.20 ft below NGVD, June 19, 2000.

ELEVATION ABOVE NGVD 1929, FEET

					YEAR OC	TOBER 2002 MAXIMUM	TO SEPTE	EMBER 2003	<b>;</b>			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.84	9.38	8.60	9.34	8.36	7.10	6.12	4.65	4.65	5.84	7.02	9.49
10		9.05	8.84	9.11	7.97	6.92	6.20	4.10	4.80	5.98	7.52	9.67
15	9.97	8.62	9.15	8.78	7.94	6.71	5.42	3.86	4.98	6.29		10.02
20	9.88	8.66		8.48	7.53	7.09	4.92	4.32	5.24	6.31	8.28	10.20
25		0.00	0.17	0.01	7.50	(70	4.60		5.56	c 15	0.60	10.67

9.00 9.17 6.72 5.76 6.45 8.69 10.67 8.21 4.60**EOM** 9.49 8.51 9.05 7.79 7.22 6.78 4.56 4.75 6.02 6.51 9.03 10.97 MAX 9.40 8.38 6.77 6.02 6.51 10.99





**EOM** 

MAX

13.63

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#### LEE COUNTY—Continued

WELL NUMBER.--263251081452802. Local Number L 1994.

LOCATION.—Lat 26°32'52", long 81°45'37", in NE \(^1\)/4 NE \(^1\)/4 sec.24, T.45 S., R.25 E., Hydrologic Unit 03090204, 2 mi east of intersection of U.S. Interstate 75 and Daniels Road, 0.3 mi north of airport access road on dirt road and 9.6 mi southeast of Fort Myers Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 155 ft, cased 0 to 70 ft and 100 to 125 ft, screened 70 to 100 ft, open hole 125 to 155 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Electronic data logger prior to March, 2001.

DATUM.--Measuring point: Top of recorder shelf, 26.93 ft above National Geodetic Vertical Datum of 1929. From May 10, 2000 to September 30, 2001, measuring point was incorrectly considered to be 27.62 ft above NGVD. From July 28, 1981 to May 9, 2000, top of shelf was 27.83 above NGVD, but was incorrectly considered to be 28.52 ft above NGVD. Prior to July 28, 1981, top of shelf was 27.86 ft above NGVD, but was incorrectly considered to be 28.55 ft above NGVD. The figures of water levels as elevation, in feet NGVD, prior to October 1, 2001 are in error. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 24.3 ft above NGVD.

13.15

10.07

13.88

8.24

10.09

REMARKS.--On December 11, 2002, the well was releveled and land-surface datum was found to be 23.95 ft above National Geodetic Vertical Datum of 1929. A -0.69 ft correction has been applied to daily maximum values data prior to October 1, 2001. Corrected records are available in the files of the U.S. Geological Survey. See DATUM. The station was reconstructed on March 9, 1978, July 27, 1981 and May 9, 2000.

PERIOD OF RECORD.--December 1974 to current year.

13.10

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 22.46 ft NGVD, Oct. 7, 1975; lowest, 3.26 ft NGVD, Apr. 30, 2002.

#### DAILY MAXIMUM VALUES DAY OCT NOV FEB JUN SEP DEC JAN MAR APR MAY JUL AUG 17.49 12.67 13.56 13.70 9.58 7.94 7.29 9.89 15.51 15.30 18.63 10 12.08 13.94 12.97 9.23 7.34 7.21 6.06 11.34 14.90 18.19 18.68 15 16.06 11.27 14.74 11.95 8.85 6.92 6.18 5.66 11.61 14.38 18.19 18.99 20 15.76 12.42 11.27 8.30 8.49 5.43 7.72 12.65 14.74 18.44 18.55 25 13.16 13.74 10.90 8.88 8.77 4.48 8.28 15.64 14.42 19.23 18.91

9.19

6.77

9.18

9.32

15.58

15.66

14.45

15.54

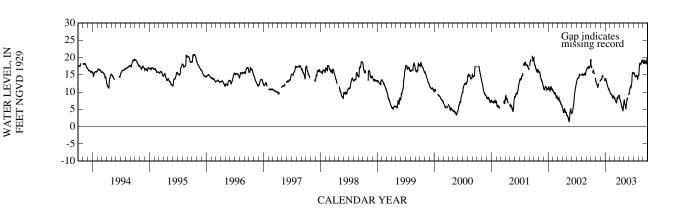
18.63

19.23

20.07

20.07

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



WELL NUMBER.--263251081452803. Local Number L 1995.

LOCATION.--Lat 26°32'52", long 81°45'37", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.24, T.45 S., R.25 E., Hydrologic Unit 03090204, 2 mi east of intersection of U.S. Interstate 75 and Daniels Road, 0.3 mi north of airport access road on dirt road and 9.6 mi southeast of Fort Myers Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 24 ft, cased to 14 ft, screened 14 to 24 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Electronic data logger prior to March 2001.

DATUM.--Measuring point: Top of recorder shelf, 27.87 ft above National Geodetic Vertical Datum of 1929. From December 19, 1985 to September 30, 2001, measuring point was incorrectly considered to be 28.57 ft above NGVD. From May 15, 1981 to December 16, 1983, top of shelf was 27.88 ft above NGVD, but was incorrectly considered to be 28.58 ft above NGVD. Prior to May 15, 1981, measuring point was 27.94 ft above NGVD, but was incorrectly considered to be 28.64 ft above NGVD. The figures of water levels as elevation, in feet NGVD, prior to October 1, 2001, are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 23.9 ft above NGVD.

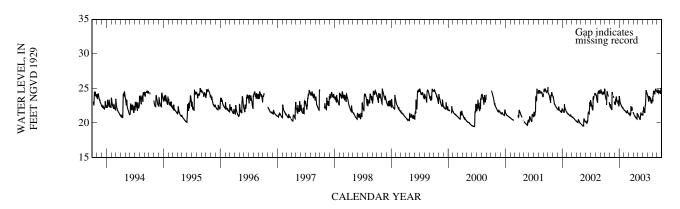
REMARKS.--On December 11, 2002, the well was releveled and the land-surface datum was found to be 23.94 ft above National Geodetic Vertical Datum of 1929. A -0.70 ft correction has been applied to daily maximum values data prior to October 1, 2001. Corrected records are available in the files of the U.S. Geological Survey. See DATUM. The station was reconstructed on March 9, 1978, May 15, 1981 and December 16, 1983.

PERIOD OF RECORD .-- January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.05 ft NGVD, Aug. 25, 1995; lowest, 17.86 ft NGVD, Mar. 30, 1990.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15	23.84  24.52	22.27 22.13 21.91	22.70 23.51 23.48	23.32 22.80 22.49	21.81 21.70 21.54	21.27 21.39 21.23	21.28 21.03 20.82	20.87 20.72 20.53	21.59 21.66 22.02	23.80 23.90 23.63	23.86 24.55 24.52	24.77 24.40 24.56
20 25 EOM	24.32 24.15  22.68	24.17 23.84 23.14	23.48 23.27 22.53	22.49 22.27 22.11 21.94	21.54 21.53 21.52 21.42	21.23 21.89 22.02 21.59	20.82 20.71 20.55 21.18	21.46 21.18 21.28	23.24 24.51 24.10	23.69 23.30 23.22	24.32 24.71 24.82 24.50	24.40 24.81 24.85
MAX	22.08	23.14		23.87	21.42	21.39	21.18	21.28	24.75	24.06	24.82	25.03



WELL NUMBER.--263253082014201. Local Number L 2643.

LOCATION.--Lat 26°32'56", long 82°01'50", in SW  ${}^{1}\!\!/_{4}$  SE  ${}^{1}\!\!/_{4}$  sec. 17, T.45 S., R.23 E., Hydrologic Unit 03100103, in the median of El Dorado Boulevard West, 100 ft east of Sands Boulevard, and 5.3 mi west of the Cape Coral Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 200 ft, cased to 141 ft, open hole 141 to 200 ft. (Corrected).

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 9.28 ft above National Geodetic Vertical Datum of 1929.

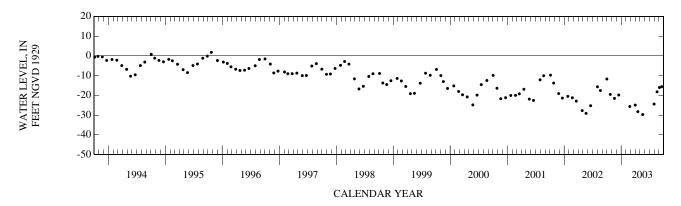
LAND-SURFACE DATUM .-- Land surface is approximately 6.5 ft above NGVD.

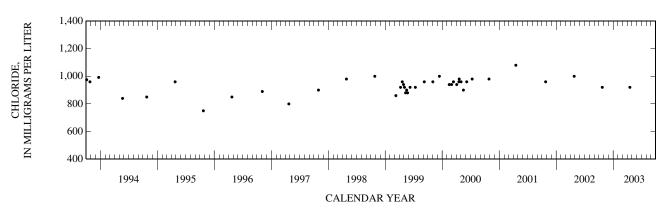
REMARKS.--Well is also used for salinity monitoring. Conductivity and chloride profiles for previous water years are available in the files of the U.S. Geological Survey. Records of water levels, prior to October 1980, are available in the files of the U.S. Geological Survey. The well was originally open to the aquifer from 141 to 200 ft. The well's open interval has collapsed or become obstructed at a depth of 145 ft.

PERIOD OF RECORD.--May 1978 to September 1979 (bimonthly), October 1979 to September 1980 (semiannual), October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.31 ft NGVD, Sept. 28, 1978; lowest, 29.76 ft below NGVD, May 19, 2003.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
01	1219	-11.76			19	1137	-29.76		
23	0748	-19.56	3,790	920	JUL				
NOV					31	1117	-24.46		
19	1128	-21.55			AUG				
DEC					19	1139	-18.25		
16	1155	-19.86			SEP				
FEB					03	1141	-16.06		
25	1309	-25.67			18	1054	-15.63		
APR									
01	1135	-24.96							
18	0948	-28.26	3.730	920					





WELL NUMBER.--263257081585701. Local Number L 2642.

LOCATION.--Lat 26°32'58", long 81°58'56", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.14, T.45 S., R.23 E., Hydrologic Unit 03090205, in the median of Pelican Boulevard, 150 ft north of El Dorado Parkway West, 1 mi south of Cape Coral Parkway and 2.5 mi southwest of the Cape Coral Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 160 ft, cased to 108 ft, open hole 108 to 160 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.82 ft above National Geodetic Vertical Datum of 1929.

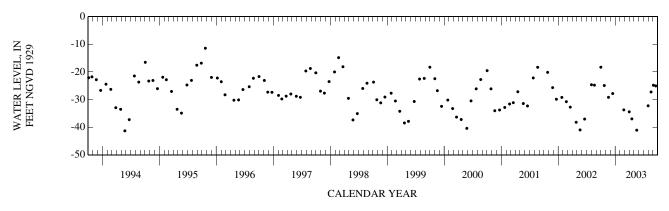
LAND-SURFACE DATUM.--Land surface is approximately 5.4 ft above NGVD. (Corrected). See REMARKS.

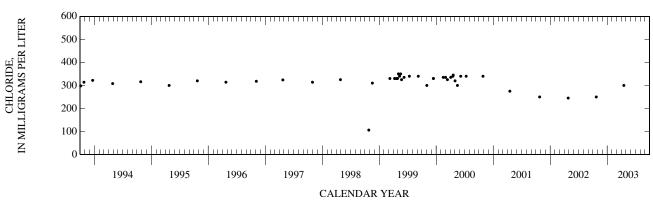
REMARKS.--Well is also used for salinity monitoring. Conductivity and chloride profiles for previous water years are available in the files of the U.S. Geological Survey. Records of water level, prior to October 1980, are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--May 1978 to August 1979 (bimonthly), October 1979 to October 1980 (semiannual), January 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.14 ft below NGVD, Aug. 1, 1978; lowest, 41.32 ft below NGVD, May 25, 1994.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
01	1239	-18.29			19	1201	-41.09		
23	0722	-24.92	1,450	250	JUL				
NOV			,		31	1127	-32.26		
19	1228	-29.18			AUG				
DEC					19	1158	-27.24		
16	1217	-27.82			SEP				
FEB					03	1152	-24.81		
25	1327	-33.72			18	1117	-25.06		
APR									
01	1225	-34.44							
18	1006	-36.99	1,360	300					





WELL NUMBER.--263307081555901. Local Number L 2435.

LOCATION.--Lat  $26^{\circ}34^{\circ}07^{\circ}$ , long  $81^{\circ}55^{\circ}59^{\circ}$ , in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.8, T.45 S., R.24 E., Hydrologic Unit 03090205, at intersection of 20th Place and 44th Street, 15 ft east of 20th Place, 37 ft south of 44th Street, and 0.6 mi northeast of Cape Coral Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 704 ft, cased to 352 ft, open hole 352 to 704 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 10 in. casing, 6.19 ft above National Geodetic Vertical Datum of 1929.

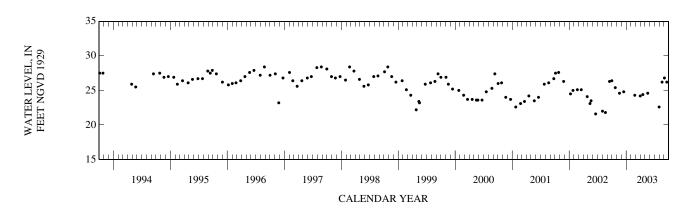
LAND-SURFACE DATUM.--Land surface is approximately 4.5 ft above NGVD. (Corrected). See REMARKS.

REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--March 1977 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.8 ft NGVD, Sept. 27, 1979; lowest, 21.6 ft NGVD, June 19, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
01	1351	26.4	19	1311	24.6
23	0653	25.4	JUL		
NOV			31	1247	22.6
19	1355	24.6	AUG		
DEC			19	1307	26.2
16	1419	24.8	SEP		
FEB			03	1320	26.8
25	1443	24.3	18	1405	26.2
APR					
01	1337	24.2			
18	1047	24.4			



WELL NUMBER.--263323081522401. Local Number L 742.

LOCATION.—Lat 26°33'26", long 81°52'24", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.14, T.45 S., R.24 E., Hydrologic Unit 03090205, 175 ft north of College Parkway, 0.1 mi west of U.S. Highway 41, and 6.0 mi south of Fort Myers Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 225 ft, cased to 138 ft, open hole 138 to 225 ft.

INSTRUMENTATION .-- Satellite data collection platform, with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 11.44 ft above National Geodetic Vertical Datum of 1929. Prior to October 1989, top of shelf was 11.47 ft above NGVD.

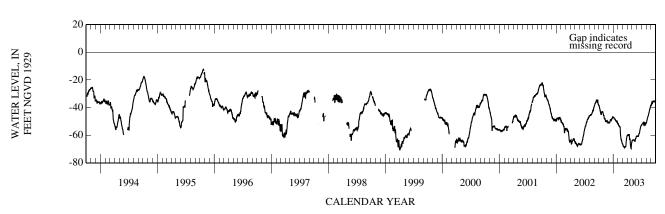
LAND-SURFACE DATUM.--Land surface is approximately 10.3 ft above NGVD.

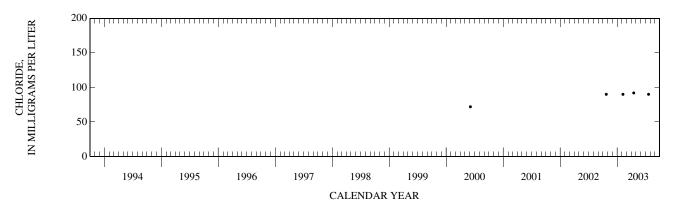
REMARKS.--Well is also used for salinity monitoring. Records of water levels, prior to October 1973, are available in the files of the U.S. Geological Survey. PERIOD OF RECORD.--October 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.02 ft NGVD, Dec. 15, 1968; lowest, 78.61 ft below NGVD, May 16, 1974.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-39.71	-47.74	-51.58	-47.25	-53.12	-67.40	-59.95	-63.84	-60.80	-51.99	-49.23	-36.61
10	-42.26	-48.37	-50.48	-48.18	-53.62	-68.32	-60.04	-63.29	-60.75	-51.43	-46.96	-36.88
15	-44.64	-49.88	-48.90	-49.13	-54.71	-68.45	-62.19	-63.78	-58.85	-50.62	-45.27	-35.61
20	-43.02	-50.33	-48.42	-49.60	-62.65	-68.56	-64.53	-64.86	-57.33	-50.83	-43.19	-35.66
25	-43.15	-50.00	-47.89	-49.78	-64.64	-64.61	-69.53	-62.37	-54.47	-52.51	-40.90	-36.00
EOM	-45.35	-50.48	-47.14	-51.54	-65.85	-60.64	-65.30	-60.65	-52.98	-51.56	-38.36	-34.29
MAX	-38.23	-45.74	-46.70	-47.02	-51.54	-60.64		-60.65	-52.98	-50.62	-38.36	-34.29





WELL NUMBER.--263327081512001. Local Number L 1121.

LOCATION.--Lat 26°33'28", long 81°51'19", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.13, T.45 S., R.23 E., Hydrologic Unit 03090205, 120 ft east of the intersection of Fordham Street and Gorham Avenue, 65 ft east of backyard fence of house at 8766 Fordham Street, and 2 mi south of Ft. Myers Post Office at Page Field.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 220 ft, cased to 147 ft, open hole 147 to 220 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

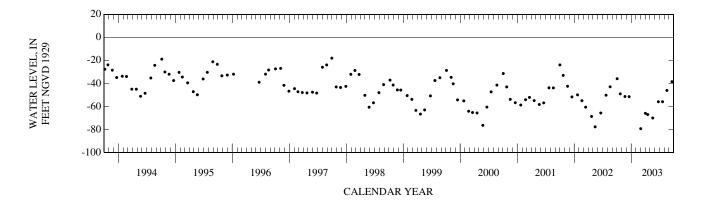
DATUM.-- Measuring point: Top of casing, 16.16 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is 15.7 ft above NGVD.

PERIOD OF RECORD.--August 1970 to March 1971 (semiannual), May 1973 to April 1974 (annual), May 1975 to April 1978 (semiannual), June 1978 to August 1979 (bimonthly), September 1979 to May 1985 (semiannual), June 1985 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.20 ft NGVD, Oct. 20, 1970; lowest, 79.31 ft below NGVD, Mar. 3, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1520	-35.92	19	1328	-70.04
23	1411	-49.06	JUN		
NOV			24	1411	-55.92
22	1304	-51.37	JUL		
DEC			21	1442	-55.90
19	1443	-51.51	AUG		
MAR			18	1610	-46.09
03	1535	-79.31	SEP		
APR			19	1329	-38.49
02	1024	-65.96			
17	1600	-67.02			



WELL NUMBER.--263329081394301. Local Number L 2204.

LOCATION.--Lat 26°33'30", long 81°39'42", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.13, T.45 S., R.26 E., Hydrologic Unit 03090205, at southeast corner of intersection of State Road 82 and Alabama Road, and 3.3 mi south of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 26 ft, cased to 23 ft, open hole 23 to 26 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 30.65 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 30.2 ft above NGVD.

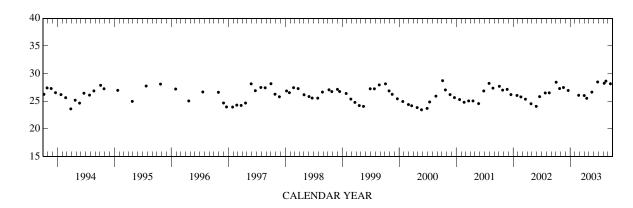
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1975 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.44 ft NGVD, Sept. 27, 1979; lowest, 18.31 ft NGVD, Nov. 25, 1985.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1539	28.44	20	1653	26.65
25	0824	27.30	JUN		
NOV			26	1423	28.49
19	1502	27.48	AUG		
DEC			07	1536	28.25
19	1648	26.95	18	1329	28.64
FEB			SEP		
24	1634	26.08	16	1238	28.16
APR					
01	1555	26.03			
17	1637	25.53			





WELL NUMBER.--263329081394302. Local Number L 1625.

LOCATION.--Lat 26°33'30", long 81°39'42", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec. 13, T.45 S., R.26 E., Hydrologic Unit 03090205, at southeast corner of intersection of State Road 82 and Alabama Road, and 3.3 mi south of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 218 ft, cased to 162 ft, open hole 162 to 218 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 31.82 ft above National Geodetic Vertical Datum of 1929.

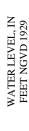
LAND-SURFACE DATUM .-- Land surface is approximately 30.3 ft above NGVD.

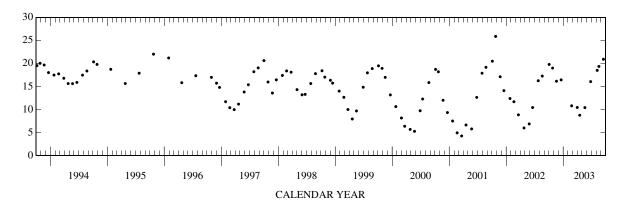
REMARKS.--Records of water levels, prior to October 1982, are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1975 to September 1994 (monthly), October 1994 to September 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.49 ft NGVD, Nov. 25, 1985; lowest, 4.24 ft NGVD, Mar. 21, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1536	19.77	20	1650	10.40
25	0819	18.98	JUN		
NOV			26	1419	16.05
19	1500	16.13	AUG		
DEC			07	1531	18.49
19	1647	16.42	18	1333	19.34
FEB			SEP		
24	1632	10.79	16	1232	20.90
APR					
01	1552	10.43			
17	1633	8.74			





WELL NUMBER.--263335081394301. Local Number L 729.

LOCATION.--Lat  $26^{\circ}33'37''$ , long  $81^{\circ}39'43''$ , in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 13, T.45 S., R.26 E., Hydrologic Unit 03090205, at northwest corner of intersection of State Road 82 and Alabama Road, 56 ft west of Alabama Road and 215 ft north of State Road 82 and 3.2 mi south of Lehigh Acres Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 103 ft, cased to 81 ft, open hole 81 to 103 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 31.80 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 29.3 ft above NGVD.

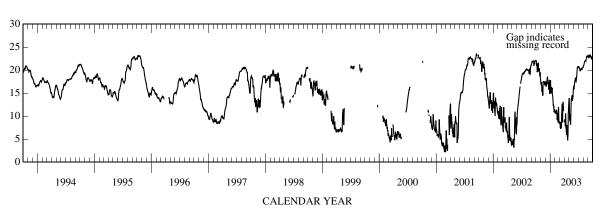
REMARKS.--Records of water levels prior to May 1977 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--August 1968 to May 1977 (monthly), May 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.46 ft NGVD, Oct. 1, 2, 1979; lowest, 2.17 ft NGVD, Feb. 25, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	21.47 19.54	16.73 15.48	16.56 17.56	14.94 15.86	11.00 11.24	8.20 8.32	9.07 10.58	9.06 8.67	16.84 18.07	20.57 20.04	21.18 21.83	23.16 23.02
15	21.37	15.48	18.47	14.59	9.20	10.17	5.96	12.83	17.71	20.05	22.00	23.21
20 25	19.78 19.48	17.25 16.83	17.18 17.70	12.57 10.85	8.67 9.73	10.85 13.09	6.13 5.63	14.43 14.58	18.68 20.65	20.33 20.35	22.39 23.02	22.80 22.47
EOM	18.04	17.15	16.58	10.79	8.54		12.90	16.39	20.67	20.57	22.78	23.05
MAX	22.10			17.79	11.95		12.90	16.39	20.77	20.67	23.10	23.26





WELL NUMBER.--263344081361701. Local Number L 1963.

LOCATION.--Lat 26°33'44", long 81°36'17", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.45 S., R.27 E., Hydrologic Unit 03090205, at northeast corner of Alexander Graham Bell Boulevard and Milwaukee Boulevard, and 4.0 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 74 ft, cased to 68 ft, screened 68 to 74 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 33.41 ft above National Geodetic Vertical Datum of 1929.

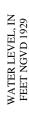
LAND-SURFACE DATUM .-- Land surface is approximately 30.9 ft above NGVD.

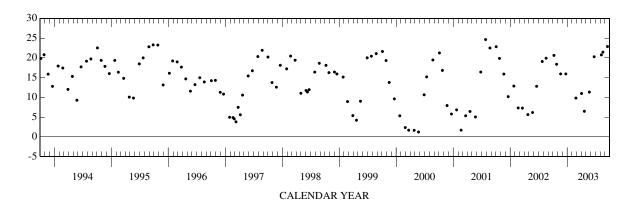
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.53 ft NGVD, Sept. 26, 1975; lowest, 1.21 ft NGVD, May 23, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1429	20.61	23	1120	11.31
25	1001	18.36	JUN		
NOV			23	1621	20.27
20	1511	15.92	AUG		
DEC			08	0841	20.75
23	1333	15.92	18	1410	21.43
FEB			SEP		
26	1319	9.80	16	1339	22.86
APR					
03	1128	10.97			
21	1505	6.45			





WELL NUMBER.--263344081361702. Local Number L 1964.

LOCATION.--Lat 26°33'44", long 81°36'17", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.45 S., R.27 E., Hydrologic Unit 03090205, at northeast corner of Alexander Graham Bell Boulevard and Milwaukee Boulevard, and 4.0 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 24 ft, cased to 14 ft, open hole 14 to 24 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 33.40 ft above National Geodetic Vertical Datum of 1929.

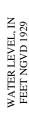
LAND-SURFACE DATUM .-- Land surface is approximately 31.0 ft above NGVD.

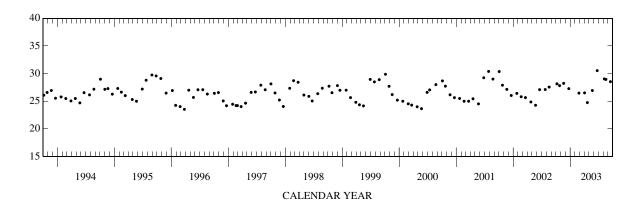
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.54 ft NGVD, June 23, 2003; lowest, 22.47 ft NGVD, May 28, 1975.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	1431	28.15	23	1122	26.94
25	1002	27.82	JUN		
NOV			23	1621	30.54
20	1513	28.24	AUG		
DEC			08	0849	29.03
23	1335	27.28	18	1412	28.95
FEB			SEP		
26	1321	26.47	16	1342	28.54
APR					
03	1130	26.51			
21	1507	24.75			





WELL NUMBER.--263344081361703. Local Number L 2186.

LOCATION.--Lat 26°33'44", long 81°36'17", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.45 S., R.27 E., Hydrologic Unit 03090205, at northeast corner of Alexander Graham Bell Boulevard and Milwaukee Boulevard, and 14.0 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 160 ft, cased to 133 ft, screened 133 to 160 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of recorder shelf, 33.30 ft above National Geodetic Vertical Datum of 1929.

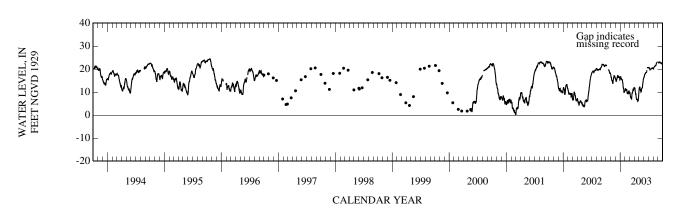
LAND-SURFACE DATUM .-- Land surface is approximately 31.1 ft above NGVD.

REMARKS--Records of water levels prior to October 1977 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--August 1975 to September 1996 (daily), October 1996 to April 2000 (monthly), May 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.30 ft NGVD, Sept. 30, 1979; lowest, 0.09 ft NGVD, Mar. 1, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.63	16.37	14.85	16.55	11.28	9.36	11.72	12.04	16.99	20.64	20.64	22.95
10		14.93	15.59	15.53	11.12	7.87	9.11	10.86	17.86	19.92	21.28	23.01
15		13.76	17.18	15.27	9.50	6.98	6.99	10.20	18.49	19.87	21.54	22.93
20	19.52	16.10	16.51	11.98	9.42	9.66	6.66	11.73	19.01	20.24	22.16	22.69
25	18.49	17.01	16.60	9.80	10.49	11.31	6.33	13.35		20.41	22.91	22.28
EOM	17.95	16.16	15.48	10.48	9.57	11.96	9.42	15.89	20.72	20.40		23.07
MAX		17.54	17.18	16.70	11.51	11.96	11.98	15.89				



WELL NUMBER.--263344081361704. Local Number L 2311.

LOCATION.--Lat 26°33'44", long 81°36'17", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.15, T.45 S., R.27 E., Hydrologic Unit 03090205, at northeast corner of Alexander Graham Bell Boulevard and Milwaukee Boulevard, and 14 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 625 ft, cased to 300 ft, open hole 300 to 625 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 33.35 ft above National Geodetic Vertical Datum of 1929.

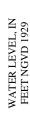
LAND-SURFACE DATUM.--Land surface is approximately 31.2 ft above NGVD.

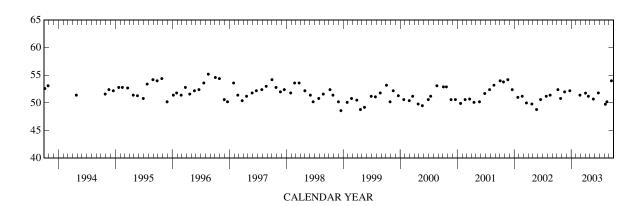
REMARKS.--Records of water levels prior to October 1980 are available in files of the U.S. Geological Survey. Well was also used for salinity monitoring from October 1982 to June 2000.

PERIOD OF RECORD.--August 1976 to September 1993 (monthly), October 1993 to September 1994 (semiannual), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 55.2 ft NGVD, Sept. 1, 1988, Aug. 19,1996; lowest, 48.1 ft NGVD, June 28, 1978.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1415	52.4	23	1127	50.7
25	0955	50.8	JUN		
NOV			24	1512	51.8
20	1508	52.0	AUG		
DEC			08	1415	49.75
23	1329	52.2	18	1415	50.2
FEB			SEP		
26	1317	51.4	16	1348	54.0
APR					
03	1125	51.77			
21	1503	51.2			





WELL NUMBER.--263353081335801. Local Number L 1965.

LOCATION.--Lat 26°33'52", long 81°33'58", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 13, T.45 S., R.27 E., Hydrologic Unit 03090205, at intersection of Naples Avenue and Milwaukee Boulevard, 18 ft west of Naples Avenue and 158 ft north of Milwaukee Boulevard, 5.7 mi southeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Tamiami aquifer of the Pliocene Age, Geologic Unit 121 TMIM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 225 ft, cased to 50 ft, screened 50 to 83 ft, screened 127 to 137 ft, open hole 156 to 225 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 32.07 ft above National Geodetic Vertical Datum of 1929.

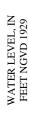
LAND-SURFACE DATUM.--Land surface is approximately 29.7 ft above NGVD.

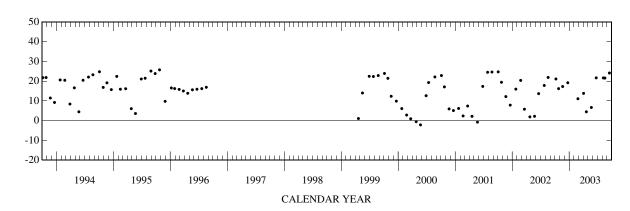
REMARKS.--Records of water levels prior to October 1976 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1965 to August 1996, April 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.26 ft NGVD, Aug. 30, 1978; lowest, 2.13 ft below NGVD, May 23, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1358	21.15	23	1156	6.70
25	0946	16.25	JUN		
NOV			23	1547	21.71
20	1440	17.31	AUG		
DEC			08	0937	21.68
23	1309	19.22	18	1438	21.60
FEB			SEP		
26	1258	11.11	16	1359	24.16
APR					
03	1107	13.84			
21	1453	4.51			





WELL NUMBER.--263440082022001. Local Number L 2644.

LOCATION.--Lat 26°34'43", long 82°02'15", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.5, T.45 S., R.23 E., Hydrologic Unit 03100103, in the median of Surfside Boulevard, at the intersection of 39th Terrace, and 5.5 mi west of the Cape Coral Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 180 ft, cased to 128 ft, open hole 128 to 180 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of flange, 10.71 ft above National Geodetic Vertical Datum of 1929.

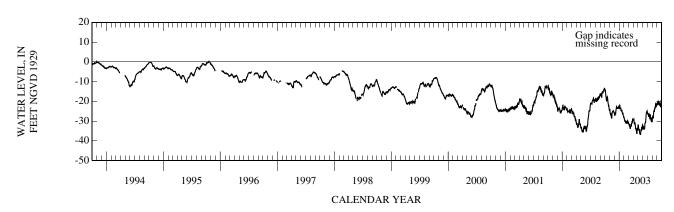
LAND-SURFACE DATUM.--Land surface is approximately 7.7 ft above NGVD.

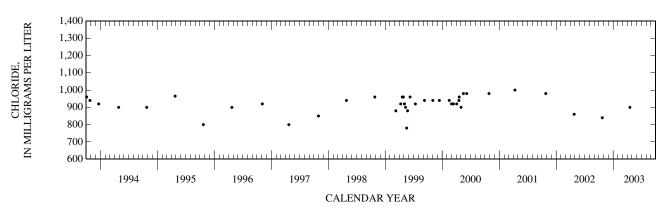
REMARKS.--Well is also used for salinity monitoring. The well was originally open to the aquifer from 128 to 180 ft. The well's open interval has collapsed or become obstructed at 140 ft. Salinity samples are collected at a depth of 140 ft. Records of water levels prior to October 1980 are available in the files of the U.S. Geological Survey. Conductivity profiles for previous water years are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.28 ft NGVD, Sept. 22, 1986; lowest, 36.92 ft below NGVD, May 15, 2003.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	-14.86 -19.07 -17.94 -19.41 -21.93 -24.94	-26.43 -26.75 -27.89 -25.14 -25.21 -25.75	-27.27 -25.10 -22.74 -23.36 -23.46 -23.62	-22.59 -23.40 -24.64 -25.61 -25.83 -27.97	-29.63 -30.66 -30.19 -31.39 -30.23 -30.58	-31.81 -33.04 -33.01 -32.62 -30.13 -29.52	-29.16 -31.60 -32.91 -34.36 -35.55 -33.83	-33.67 -34.19 -36.92 -34.48 -33.11 -31.81	-34.21 -33.74 -31.37 -29.78 -25.36 -25.69	-25.95 -27.98 -28.22 -27.58 -29.03 -30.55	-27.96 -25.39 -24.29 -23.09 -22.62 -21.78	-20.81 -20.96 -20.81 -21.41 -22.04 -18.75
MAX	-14.14		-22.73	-22.10	-27.75		-29.16	-31.81	-24.97	-25.80	-21.27	-18.75





WELL NUMBER.--263440082022002. Local Number L 3207.

LOCATION.--Lat 26°34'43", long 82°02'15", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.5, T.45 S., R.23 E., Hydrologic Unit 03100103, in the median of Surfside Boulevard, at the intersection of 39th Terrace, and 5.5 mi west of the Cape Coral Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1.25 in., depth 18 ft, cased to 8 ft, screened 8 to 18 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.91 ft above National Geodetic Vertical Datum of 1929.

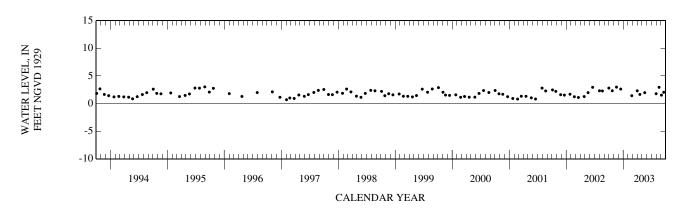
LAND-SURFACE DATUM .-- Land surface is approximately 6.6 ft above NGVD.

REMARKS.--Records of water levels prior to October 1980 are available in files of the U.S. Geological Survey. The well was also used for salinity monitoring from October 1986 to April 1999.

PERIOD OF RECORD.--May 1978 to September 1979 (bimonthly), May 1980 to October 1980 (semiannual), January 1981 to September 1995 (monthly), October 1995 to October 1996 (quarterly), November 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.22 ft NGVD, Mar. 31, 1987; lowest, 0.57 ft below NGVD, Nov. 28, 1978.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
01	1206	2.80	19	1125	1.97
23	0831	2.32	JUL		
NOV			31	1107	1.78
19	1113	2.98	AUG		
DEC			19	1125	2.94
16	1146	2.62	SEP		
FEB			03	1129	1.52
25	1250	1.43	18	1047	2.04
APR					
01	1126	2.31			
18	0935	1.65			



WELL NUMBER.--263526082010201. Local Number L 2434.

LOCATION.--Lat 26°35'26", long 82°01'02", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.4, T.45 S., R.23 E., Hydrologic Unit 03100103, at the southwest corner of 32nd Street and SW 20th Avenue and 5 mi northwest of Cape Coral Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 700 ft, cased to 353 ft, open hole 353 to 700 ft.

INSTRUMENTATION .-- Electronic data logger, with a pressure transducer.

DATUM.--Measuring point: Top of recorder shelf, 17.33 ft above National Geodetic Vertical Datum of 1929. From May 1980 to September 15, 1993, top of shelf was 25.47 ft above NGVD. Prior to May 1980, measuring point was top of casing, 7.84 ft above NGVD. See REMARKS.

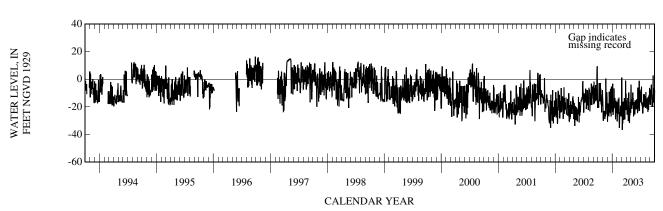
LAND-SURFACE DATUM.--Land surface is approximately 5.3 ft above NGVD. (Corrected). See REMARKS.

REMARKS.--Water levels affected by nearby pumping. Land-surface datum has been corrected based on field observations. Because the correction does not affect the measuring point elevation, the figures of water levels as elevation from preceding years are unaffected. Water level elevations prior to May 1980 were measured using a pressure gage. See DATUM. Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--March 1977 to September 1980 (monthly), April 1981 to current year. (Corrected)

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.35 ft NGVD, Sept. 11, 1983; lowest, 36.60 ft below NGVD, Mar. 7, 2003.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	-18.16 -14.63 -14.28 -8.77 -23.91	-30.03 -22.95 -28.82 -5.33 -16.99	-24.75 -26.33 -12.46 -24.67 -26.93	-12.06 -16.33 -17.32 -21.27 -15.44	-25.34 -16.81 -30.84 -26.44 -23.99	-20.12 -31.91 -25.58 -13.71 -21.13	-22.40 -19.92 -28.55 -24.64 -26.25	-15.04 -16.83 -13.40 -22.10 -23.06	-17.53 -21.19 -14.67 -11.40 -22.92	-10.19 -17.51 -24.82 -19.40 -10.85	-9.34 -18.91 -17.21 -12.87 -16.14	-7.70 -11.56 -16.36 2.77 -13.14
EOM	-12.14	-22.44	-7.86	-24.84	-25.66	-10.47	-12.54	-21.11	-15.36	-12.26	-17.35	-7.63
MAX	-2.66	0.51	-5.21	-3.28	-13.32	1.17	-9.58	-3.78	-1.14	-5.41	-6.32	2.77



WELL NUMBER.--263532081592201. Local Number L 581.

LOCATION.--Lat 26°35'32", long 81°59'22", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.2, T.45 S., R.23 E., Hydrologic Unit 03090205, 0.1 mi east of intersection of Skyline Boulevard and Gleason Parkway, in median of Gleason Parkway and 3.5 mi northwest of Cape Coral Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 177 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of shelf, 12.98 ft above National Geodetic Vertical Datum of 1929.

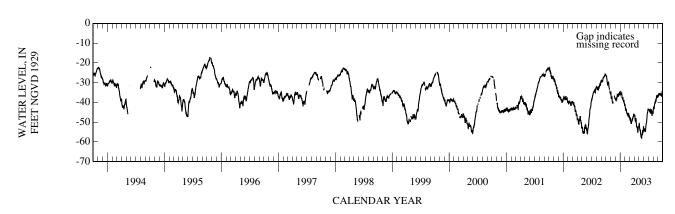
LAND-SURFACE DATUM .-- Land surface is approximately 9.6 ft above NGVD.

REMARKS.--Water levels affected by pumping of nearby wells. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.77 ft below NGVD, Sept. 10, 1960; lowest, 58.38 ft below NGVD, May 18, 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	-26.44 -30.31 -29.97 -31.16 -33.10 -35.97	-38.00 -38.38 -40.01  -37.19 -37.64	-38.97 -37.84 -35.99 -35.98 -36.01 -36.30	-35.18 -35.87 -38.36 -38.87 -39.21 -41.30	-43.38 -44.86 -45.32 -47.21 -46.29 -47.03	-48.78 -49.94 -49.80 -49.28 -47.34 -46.38	-46.56 -49.16 -51.31 -52.90 -54.42 -52.64	-52.79 -53.84 -57.89 -56.22 -54.46 -52.18	-54.81 -54.59 -51.85 -49.10 -45.19 -43.74	-43.45 -45.06 -45.30 -44.58 -45.89 -45.36	-42.52 -40.59 -39.48 -38.39 -37.61 -36.80	-35.96 -36.03 -35.63 -36.03 -36.32 -34.05
MAX			-35.17	-34.70	-41.25		-46.26	-50.86	-43.50	-43.45	-36.58	-34.05



WELL NUMBER.--263532081592202. Local Number L 1136.

LOCATION.--Lat 26°35'32", long 81°59'22", in NW \(^1/4\) NW \(^1/4\) sec.2, T.45 S., R.23 E., Hydrologic Unit 03090205, 0.1 mi east of intersection of Skyline Boulevard and Gleason Parkway, in median of Gleason Parkway and 3.5 mi northwest of Cape Coral Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 20 ft, cased to 15 ft, screened 15 to 20 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of 4 in. casing, 12.36 ft above National Geodetic Vertical Datum of 1929. From April 1996 to September 30, 1997, measuring point was incorrectly considered to be top of 4 in. cap, 12.71 ft above NGVD. Prior to April 1996, measuring point was top of 4 in. cap, 12.71 ft above NGVD. See REMARKS.

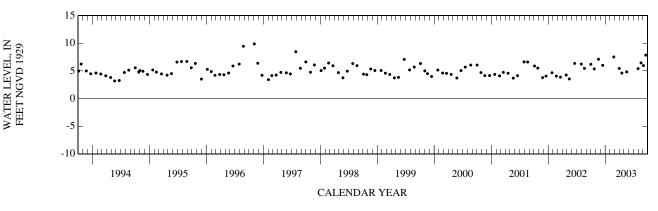
LAND-SURFACE DATUM.--Land surface is approximately 9.7 ft above NGVD.

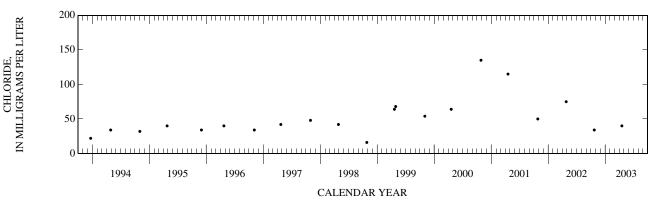
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. The figures of water levels, as elevation in feet NGVD, for the period April 1996 to September 30, 1997 are in error. A -0.35 ft correction has been applied to correct the water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD .-- June 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.90 ft NGVD, Nov. 4, 1996; lowest, 2.01 ft NGVD, Apr. 29, 1974.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
01	1018	6.20			19	1037	4.83		
23	0909	5.38	709	34.0	JUL				
NOV					31	0947	5.42		
19	1005	7.12			AUG				
DEC					19	1036	6.46		
16	1032	6.02			SEP				
FEB					03	1044	5.97		
25	1140	7.54			18	0927	7.87		
APR									
01	1020	5.45							
18	0802	4.62	591	40.0					





WELL NUMBER.--263630081375301. Local Number L 1418.

LOCATION.--Lat 26°36'31", long 81°37'51", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.32, T.44 S., R.27 E., Hydrologic Unit 03090205, 20 ft north of Davis Road, 0.1 mi west of Texas Road, 0.5 mi north of intersection of Leeland Heights Boulevard and Texas Road and 1.0 mi northeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 62 ft, cased to 55 ft, open hole 55 to 62 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of flange, 25.28 ft above National Geodetic Vertical Datum of 1929. From March 10, 1989 to September 30, 2001, measuring point was top of shelf, 25.31 ft above NGVD. Prior to March 1989, measuring point was top of flange, 25.23 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 23.7 ft above NGVD.

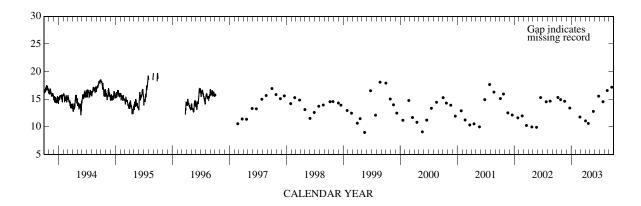
REMARKS.--Water levels affected by pumping at nearby wells. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1971 to October 1988, March 1989 to September 1996 (daily), February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.05 ft NGVD, June 20, 1971; lowest, 8.53 ft NGVD, May 1, 1975.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1537	15.32	23	1105	12.80
25	1107	14.93	JUN		
NOV			26	1357	15.55
20	1600	14.64	JUL		
DEC			24	1429	14.55
23	1423	13.40	AUG		
FEB			20	1542	16.58
26	1425	11.78	SEP		
APR			18	1416	17.18
03	1231	11.08			
21	1602	10.62			





WELL NUMBER.--263712081461201. Local Number L 728.

LOCATION.--Lat 26°37'13", long 81°46'10", in NE  $\frac{1}{4}$  Sw  $\frac{1}{4}$  sec.25, T.44 S., R.25 E., Hydrologic Unit 03090204, 40 ft east of State Road 82 and 0.2 mi north of County Road 884, 6.6 mi southeast of Fort Myers Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 19 ft, cased to 18 ft, open hole 18 to 19 ft.

INSTRUMENTATION.--Electronic data logger. Monthly measurement with chalked tape prior to August 2002.

DATUM.--Measuring point: Top of shelf, 23.34 ft above National Geodetic Vertical Datum of 1929. Prior to August 2002, measuring point was top of 4 in. casing, 22.65 ft above NGVD. See REMARKS.

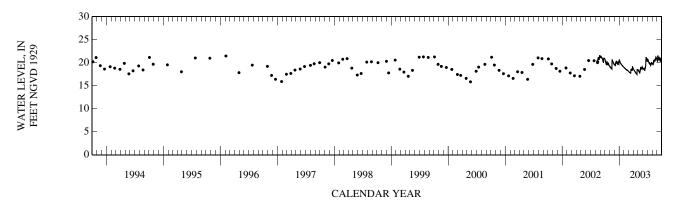
LAND-SURFACE DATUM .-- Land surface is approximately 21.0 ft above NGVD.

REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. In the 2002 water year the instrumentation changed to an electronic data logger from a tape-down well. The height of the measuring point was changed as part of the station construction. See DATUM.

PERIOD OF RECORD.--July 1968 to February 1972 (bimonthly), March 1972 to September 1994 (monthly), October 1994 to July 1996 (quarterly), October 1996 to July 2002 (monthly), August 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.62 ft NGVD, Aug. 29, 2002; lowest water level measured, 15.85 ft NGVD, May 23, 2000.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.29	18.97	19.44	20.35	18.85	18.01	18.47	18.22	18.75	20.62	19.62	21.44
10	19.65	18.84	20.08	19.92	18.70	17.90	18.19	17.94	18.60	20.06	20.26	20.78
15	20.21	18.63	20.16	19.66	18.49	17.72	17.91	18.43	18.89	19.74	20.45	21.13
20	19.60	20.27	20.22	19.40	18.39	18.54	17.68	19.02	19.53	19.50	20.56	20.46
25	19.73	19.90	20.30	19.21	18.30	18.52	17.45	18.85	20.82	19.97	21.18	20.92
EOM	19.28	19.60	20.06	19.02	18.20	18.87	18.50	18.86	20.23	19.78	20.56	20.99
MAX	20.78	20.56	20.41	20.69	18.99	19.14	18.77	19.09	21.20	20.92	21.24	21.47



WELL NUMBER.--263718081485001. Local Number L 1973.

LOCATION.--Lat 26°37'19", long 81°48'50", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.28, T.44 S., R.25 E., Hydrologic Unit 02090205, at Eastwood Golf Course, 176 ft south of Vince Smith Drive, 0.15 mi west of Ortiz Avenue, 3.9 mi southeast of Fort Myers Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 225 ft, cased to 172 ft, open hole 172 to 225 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 22.51 ft above National Geodetic Vertical Datum of 1929. Prior to April 1981, top of casing was 22.54 ft above NGVD. From April 1981 to September 1997, top of casing was considered to be 22.54 ft above NGVD. See DATUM.

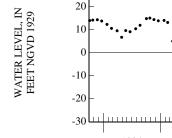
LAND-SURFACE DATUM.--Land surface is approximately 19.8 ft above NGVD.

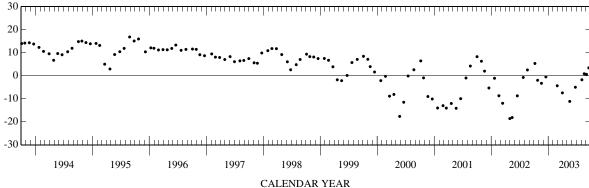
REMARKS.--Conductivity and chloride profiles for previous years are available in files of the U.S. Geological Survey. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. A correction of -0.03 ft is required to correct water-level data from April 1981 to September 1997. See DATUM.

PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.50 ft NGVD, Sept. 17, 1974; lowest, 18.60 ft below NGVD, Apr. 30, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1630	5.33	19	1414	-11.14
25	1146	-1.96	JUN		
NOV			24	0825	-4.99
19	0955	-3.27	AUG		
DEC			05	1438	-1.76
17	0902	-0.50	20	1005	0.87
FEB			SEP		
28	1455	-4.34	03	0737	0.62
APR			18	1549	3.43
02	1129	-7 44			





WELL NUMBER.--263718081485002. Local Number L 1974.

LOCATION.--Lat 26°37'19", long 81°48'50", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.28, T.44 S., R.25 E., Hydrologic Unit 03090205, at Eastwood Golf Course, 193 ft south of Vince Smith Drive and 0.15 mi west of Ortiz Boulevard, 3.9 mi southeast of Fort Myers Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 135 ft, cased to 85 ft, screened 85 to 135 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 22.64 ft above National Geodetic Vertical Datum of 1929.

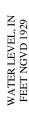
LAND-SURFACE DATUM .-- Land surface is approximately 19.9 ft above NGVD.

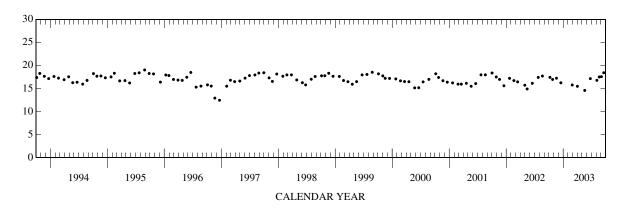
REMARKS.--Conductivity and chloride profiles for previous years are available in the files of the U.S. Geological Survey. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.13 ft NGVD, Sept. 26, 1975; lowest, 12.43 ft NGVD, Dec. 20, 1996. (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1622	17.40	19	1409	14.57
25	1149	16.95	JUN		
NOV			24	0827	17.13
19	0959	17.22	AUG		
DEC			05	1441	16.76
17	0911	16.22	20	1001	17.49
FEB			SEP		
28	1500	15.74	03	0741	17.55
APR			18	1552	18.40
02	1121	15.46			





WELL NUMBER.--263718081485003. Local Number L 2292.

LOCATION.--Lat 26°37'19", long 81°48'50", in SW  ${}^{1}\!\!/_{4}$  NE  ${}^{1}\!\!/_{4}$  sec.28, T.44 S., R.25 E., Hydrologic Unit 03090205, at Eastwood Golf Course, 159 ft south of Vince Smith Drive, 0.15 mi west of Ortiz Avenue, 3.9 mi southeast of Fort Myers Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 616 ft, cased to 302 ft, open hole 302 to 616 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 22.30 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 20.1 ft above NGVD.

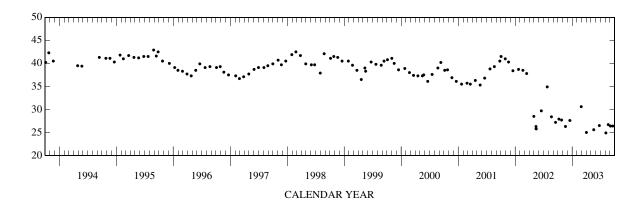
REMARKS.--Records of water levels prior to October 1982 are available in files of the U.S. Geological Survey. The approximately 10 ft decrease in water levels that occurred in May 2002 is believed to have resulted from shift of water usage in this area from the Caloosahatchee River to the lower Hawthorn aquifer.

PERIOD OF RECORD.--August 1976 to June 1978 (intermittent), October 1981 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.9 ft NGVD, Sept. 13, 1993 and Aug. 28, 1995; lowest, 24.9 ft NGVD, Aug. 5, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1619	27.9	19	1412	25.6
25	1144	27.7	JUN		
NOV			24	0823	26.5
19	0957	26.3	AUG		
DEC			05	1436	24.9
17	0909	27.6	20	1010	26.7
FEB			SEP		
28	1454	30.6	03	0747	26.4
APR			18	1547	26.4
02	1126	25.0			





WELL NUMBER.--263743082041201. Local Number L 2645.

LOCATION.--Lat  $26^{\circ}37'42''$ , long  $82^{\circ}04'13''$ , in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.24, T.44 S., R.22 E., Hydrologic Unit 03100103, across the street from the Matlacha Fire House at Matlacha Park and 0.1 mi south of Matlacha Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 210 ft, cased to 160 ft, open hole 160 to 210 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 8.24 ft above National Geodetic Vertical Datum of 1929.

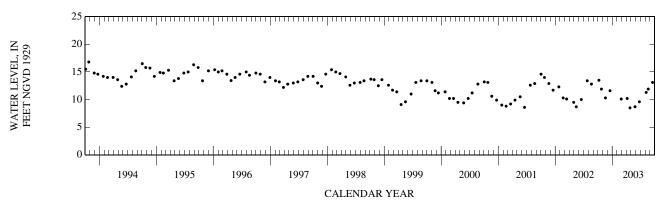
LAND-SURFACE DATUM.--Land surface is approximately 5.5 ft above NGVD.

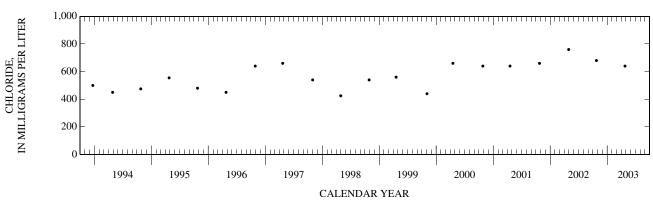
REMARKS.--Well is also used for salinity monitoring. This well is open to the aquifer from 160 to 210 ft. The exact depth from which the chloride-containing water is emanating cannot be further delineated. Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.4 ft NGVD, Nov. 26, 1986; lowest, 8.5 ft NGVD, Apr. 25, 2003.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
08	1354	13.5			27	1646	8.7		
24	1232	11.9	2,500	680	JUN				
NOV					24	1128	9.6		
19	1527	10.3			AUG				
DEC					07	0816	11.3		
18	0953	11.6			20	1250	11.9		
FEB					SEP				
28	1246	10.1			17	0837	13.1		
APR									
07	1554	10.2							
25	0938	8.5	2,520	640					





WELL NUMBER.--263807081430301. Local Number L 1968.

LOCATION.--Lat 26°37'59", long 81°43'04", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 21, T.44 S., R.26 E., Hydrologic Unit 03090205, at northwest corner of Centennial Boulevard and Gunnery Road, and 4.8 mi northwest of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 165 ft, cased to 70 ft, open hole 70 to 165 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 25.93 ft above National Geodetic Vertical Datum of 1929.

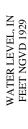
LAND-SURFACE DATUM .-- Land surface is approximately 23.1 ft above NGVD.

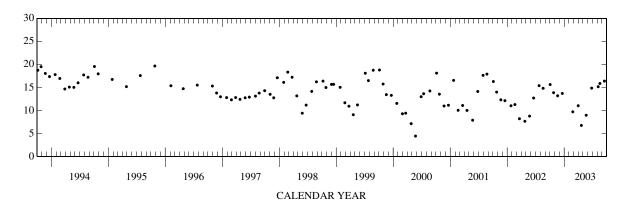
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1974 to September 1994 (monthly), October 1994 to June 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.01 ft NGVD, Sept. 27, 1979; lowest, 4.43 ft NGVD, May 23, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
03	1608	15.62	22	1416	8.96
25	1123	13.86	JUN		
NOV			26	1437	14.85
20	1615	13.18	AUG		
DEC			07	1431	15.15
20	1454	13.69	18	1314	15.86
FEB			SEP		
25	1455	9.70	16	1219	16.38
APR					
01	1619	11.03			
21	1618	6.74			





WELL NUMBER.--263813081552801. Local Number L 2640.

LOCATION.--Lat 26°38'08", long 81°55'27", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.20, T.44 S., R.24 E., Hydrologic Unit 03090205, in median at intersection of SE 24th Avenue and Birkdale Avenue, 1 mi south of Hancock Bridge Parkway and 5.2 mi north of Cape Coral Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 180 ft, cased to 128 ft, open hole 128 to 180 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of casing, 10.14 ft above National Geodetic Vertical Datum of 1929.

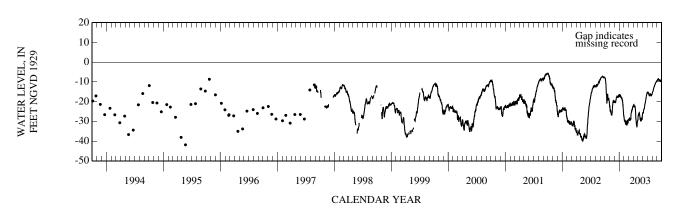
LAND-SURFACE DATUM.--Land surface is approximately 7.5 ft above NGVD.

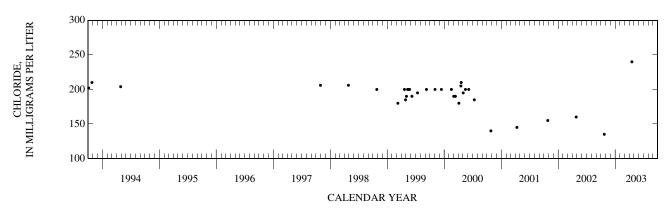
REMARKS.--Well is also used for salinity monitoring. The well was originally open to the aquifer from 128 to 180 ft. The open interval has collapsed or become obstructed at a depth of 168 ft. Chloride samples are being collected from a depth of 140 ft and 165 ft. Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey. Documentation of the highest water level measured on September 5, 1978, is poor. However, the water level is consistent when compared to L-581. Conductivity and chloride profiles for previous years are available in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--May 1978 to September 1997 (monthly), September 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.94 ft below NGVD, Sept. 5, 1978; lowest, 42.89 ft below NGVD, June 10, 1985.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-8.59	-24.37	-20.66	-16.44	-29.61	-28.92	-21.49	-26.87	-25.46	-15.22	-14.77	-8.73
10 15	-15.20 -19.10	-25.67 -26.58	-19.64 -17.80	-17.51 -18.08	-31.23 -29.86	-29.68 -28.53	-22.86 -24.25	-25.74 -28.97	-23.74 -21.38	-16.50 -17.06	-13.26 -12.00	-8.45 -9.11
20 25	-16.99 -18.56	-21.72 -19.95	-17.61 -17.54	-19.15 -21.65	-32.05 -30.54	-25.60 -23.72	-30.12 -32.96	-29.26 -28.41	-19.21 -16.82	-16.08 -16.65	-11.02 -10.25	-9.13 -9.74
EOM	-21.93	-19.85	-17.29	-27.63	-29.31	-22.37	-29.58	-25.96	-15.50	-16.30	-9.41	-8.84
MAX	-7.97	-19.61	-16.80	-16.39	-27.59	-22.37	-21.49	-25.74	-15.50	-15.22	-9.41	-8.45





WELL NUMBER.--263819081585801. Local Number L 2701.

LOCATION.--Lat 26°38'18", long 81°58'58", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.14, T.44 S., R.23 E., Hydrologic Unit 03090205, in the median of Nicholas Parkway West, at the intersection of SW 7th Terrace, 5.3 mi northwest of the Cape Coral Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 206 ft, cased to 175 ft, open hole 175 to 206 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of casing, 15.65 ft above National Geodetic Vertical Datum of 1929. Prior to May 12, 1999, measuring point was top of recorder shelf, 15.72 ft above NGVD.

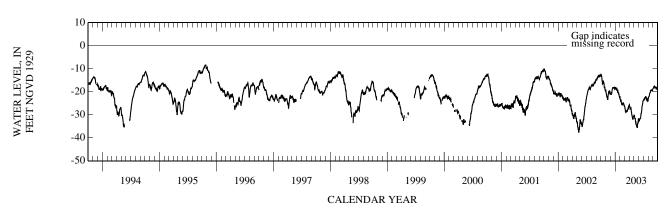
LAND-SURFACE DATUM .-- Land surface is approximately 13.0 ft above NGVD.

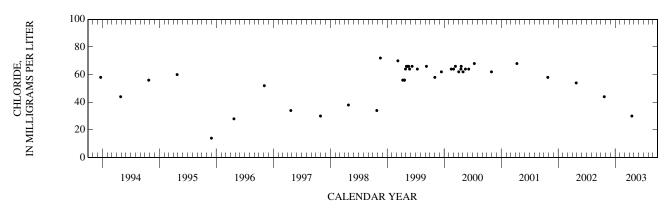
REMARKS.--Well is also used for salinity monitoring. Conductivity and chloride for previous years are available in the files of U.S. Geological Survey. Revised measuring point May 1999, for installation of new recorder shelf. Records of water levels prior to October 1980 are available in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 2.81 ft below NGVD, Sept. 11, 1986; lowest, 37.72 ft below NGVD, May 12, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-12.85	-20.99	-21.39	-18.53	-23.69	-27.15	-26.55	-30.91	-32.57	-23.14	-22.09	-18.01
10 15	-15.58 -15.57	-22.49 -22.81	-20.43 -18.46	-18.59 -19.41	-24.66 -24.97	-28.41 -28.50	-27.42 -28.90	-31.68 -34.09	-31.71 -29.59	-23.06 -22.10	-20.82 -19.72	-17.57 -18.06
20 25	-15.97 -18.07	-20.07 -19.75	-18.43 -18.20	-20.23 -20.87	-25.43 -25.60	-28.50 -26.95	-30.70 -31.95	-34.64 -33.70	-28.16 -25.52	-22.71 -23.74	-19.38 -19.68	-18.28 -18.76
EOM	-19.87	-20.51	-19.00	-22.32	-25.99	-26.24	-30.66	-31.71	-23.82	-23.92	-18.62	-17.25
MAX	-12.47	-19.31	-18.03	-18.13	-22.23	-26.21	-25.67	-30.16	-23.82	-22.10	-18.62	-17.25





WELL NUMBER.--263834082005301. Local Number L 781.

LOCATION.--Lat 26°38'36", long 82°00'51", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.16, T.44 S., R.23 E., Hydrologic Unit 03100103, 0.4 mi north of State Road 78 and 0.45 mi west of Chiquita Boulevard, and 3.5 mi northeast of Matlacha Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 290 ft, cased to 82 ft, open hole 82 to 290 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of flange, 12.28 ft above National Geodetic Vertical Datum of 1929. Prior to October 1996, the measuring point was top of shelf, 12.31 ft above NGVD. From October 1997 to September 1998, the measuring point was incorrectly considered to be top of shelf, 12.31 ft above NGVD. See REMARKS.

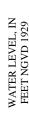
LAND-SURFACE DATUM .-- Land surface is approximately 10.0 ft above NGVD.

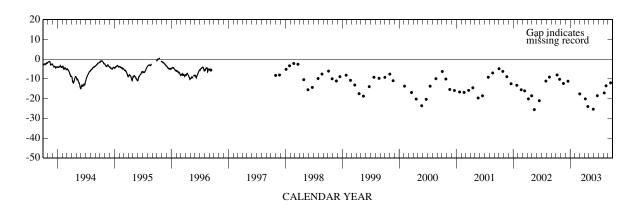
REMARKS.--Conductivity and chloride profiles for the previous years are available in the files of the U.S. Geological Survey. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The figures of water level as elevation, in feet NGVD, from October 1997 to September 1999 are in error. A correction of -0.03 ft is required to correct water level data for the period October 1997 to September 1999. See DATUM.

PERIOD OF RECORD.--October 1971 to September 1996 (daily), October 1997 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.24 ft NGVD, Oct. 14, 1977; lowest, 51.01 ft below NGVD, Feb. 25, 1991. (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
09	0919	-8.01	29	1300	-25.36
25	0831	-10.21	JUN		
NOV			24	1428	-18.52
19	1335	-12.33	AUG		
DEC			07	0750	-17.12
18	0825	-11.17	19	0944	-13.50
MAR			SEP		
03	0850	-17.60	17	0809	-12.00
APR					
08	0823	-20.12			
24	1530	-24.00			





WELL NUMBER.--263850081365401. Local Number L 727.

LOCATION.--Lat 26°39'49", long 81°35'53", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.11, T.44 S., R.27 E., Hydrologic Unit 03090205, 20 ft east of Joel Boulevard, 3.1 mi south of intersection of State Road 80 and Joel Boulevard and 5.1 mi northeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 71 ft, cased to 67 ft, open hole 67 to 71 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 24.08 ft above National Geodetic Vertical Datum of 1929. From January 1981 to September 1989, top of shelf was reported as 24.14 ft above NGVD. Prior to January 1981, top of shelf was 24.14 ft above NGVD.

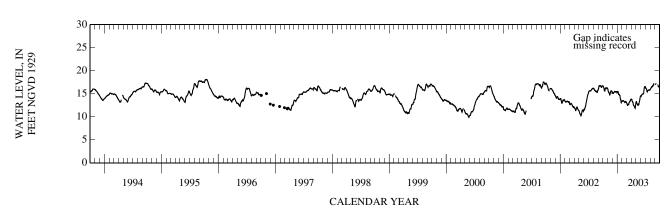
LAND-SURFACE DATUM.--Land surface is approximately 22.3 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--July 1968 to October 1996 (daily), November 1996 to February 1997 (monthly), March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.53 ft NGVD, Mar. 30, 1970; lowest, 9.89 ft NGVD, May 26, 2000.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.54	15.52	15.04	15.52	13.39	12.76	13.72	13.14	14.56	16.15	16.23	17.16
10	15.79	15.25	15.26	14.84	13.47	12.48	13.24	12.71	14.86	15.64	16.47	
15	15.95	14.76	15.49	14.81	13.32	12.68	12.55	12.67	14.98	15.54	16.62	
20	16.24	15.46	15.38	14.10	13.18	13.18	12.29	12.79	15.10	15.82	16.82	16.73
25	16.30	15.64	15.45	13.37	13.32	13.45	11.89	13.62	16.46	15.81	17.19	
EOM	16.18	15.36	15.20	13.42	13.18	13.84	12.85	14.55	16.54	15.85		16.54
MAX	16.73	16.04	15.51	15.52	13.52	13.84	13.84	14.55	16.58	16.37		



WELL NUMBER.--263907081592701. Local Number L 2528.

LOCATION.—Lat 26°39'09", long 81°59'27", in SW  ${}^{1}\!\!/_{4}$  sec.11, T.44 S., R.23 E., Hydrologic Unit 03100103, 200 ft northeast of intersection of Embers Parkway and Nelson Road NW and 6.8 mi northwest of Cape Coral Post Office. (Corrected).

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 625 ft, cased to 420 ft, open hole 420 to 625 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

WATER LEVEL, IN

DATUM.--Measuring point: Top of 3/4 in. reducer, 12.22 ft above National Geodetic Vertical Datum of 1929. From October 1995 to SEptember 2000, measuring point was incorrectly considered to be 12.27 ft above NGVD. From October 25, 1993 to September 1995, measuring point was top of north side of meter box, 12.65 ft above NGVD. From October 1989 to October 25, 1993, the top of meter box was 12.74 ft above NGVD. From October 1987 to September 1989, measuring point was top of casing, 14.81 ft above NGVD. From January 1978 to September 1987, top of casing was 14.66 ft above NGVD. The figures of water level as elevation, in ft NGVD, from October 1995 to September 2000 are in error. See REMARKS.

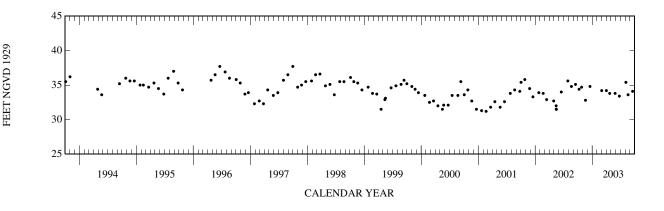
LAND-SURFACE DATUM.--Land surface is approximately 12.2 ft above NGVD.

REMARKS.--Records of water levels prior to October 1980 are available in the files of the U.S. Geological Survey. The figures of water level as elevation, in ft NGVD, from October 1995 to September 2000 are in error. A correction of -0.05 ft is required to correct water-level data. Station damaged and reconstructed in 1988, October 1990, October 25, 1993. See DATUM.

PERIOD OF RECORD.--January 1978 to September 1989 (monthly), September 1990 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to October 1995 (monthly), April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.4 ft NGVD, Feb. 26, 1986; lowest, 31.2 ft NGVD, Feb. 20, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
09	0938	34.4	28	1356	33.8
25	0921	34.7	JUN		
NOV			24	1202	33.4
19	1600	32.8	AUG		
DEC			05	1546	35.4
18	0809	34.8	19	0933	33.6
MAR			SEP		
03	0829	34.2	17	1330	34.1
APR					
02	1507	34.2			
23	1625	33.8			



WELL NUMBER.--263950081355401. Local Number L 2187.

LOCATION.--Lat 26°39'49", long 81°35'53", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  Sec.11, T.44 S., R.27 E., Hydrologic Unit 03090205, 20 ft east of Joel Boulevard, 3.1 mi south of intersection of State Road 80 and Joel Boulevard and 5.1 mi northeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 154 ft, cased to 136 ft, open hole 136 to 154 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 24.50 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 21.9 ft above NGVD.

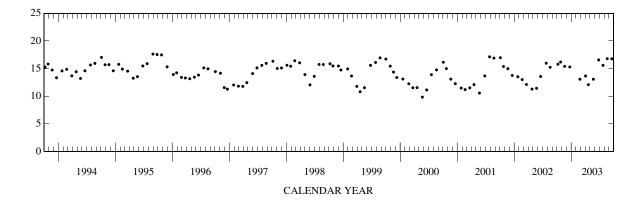
REMARKS.--Records of water levels prior to October 1982 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- August 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.88 ft NGVD, Sept. 27, 1979; lowest, 9.84 ft NGVD, May 22, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1507	15.80	23	1033	13.08
25	1030	16.19	JUN		
NOV			26	1336	16.57
20	1537	15.41	JUL		
DEC			24	1453	15.58
23	1355	15.30	AUG		
FEB			20	1613	16.80
26	1358	13.08	SEP		
APR			18	1440	16.77
03	1205	13.66			
21	1535	12.09			





WELL NUMBER.--263950081355402. Local Number L 1137.

LOCATION.--Lat 26°39'49", long 81°35'53", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  Sec.11, T.44 S., R.27 E., Hydrologic Unit 03090205, 20 ft east of Joel Boulevard, 3.1 mi south of intersection of State Road 80 and Joel Boulevard and 5.1 mi northeast of Lehigh Acres Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 20 ft, cased to 15 ft, slotted 15 to 20 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of flange, 24.14 ft above National Geodetic Vertical Datum of 1929.

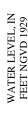
LAND-SURFACE DATUM.--Land surface is approximately 22.1 ft above NGVD.

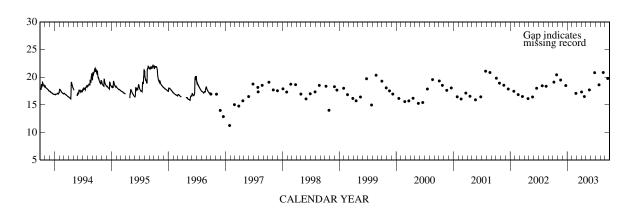
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--June 1970 to September 1996 (daily), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 22.20 ft NGVD, Sept. 25, 1995; lowest water level measured, 11.27 ft NGVD, Jan. 28, 1997.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1502	19.12	23	1038	17.71
25	1033	20.45	JUN		
NOV			26	1336	20.83
20	1540	19.50	JUL		
DEC			24	1451	18.63
23	1357	18.50	AUG		
FEB			20	1611	20.86
26	1357	17.09	SEP		
APR			18	1438	19.78
03	1204	17.34			
21	1537	16.51			





WELL NUMBER.--263955082083101. Local Number L 2527.

LOCATION.--Lat 26°39'53", long 82°08'31", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.6, T.44 S., R.22 E., Hydrologic Unit 03100103, 19 ft west of H. Stringfellow Road (County Road 767), 3.95 mi north of Pine Island Road and 3.0 mi southeast of Bokeelia Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 605 ft, cased to 360 ft, open hole 360 to 605 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 10.74 ft above National Geodetic Vertical Datum of 1929.

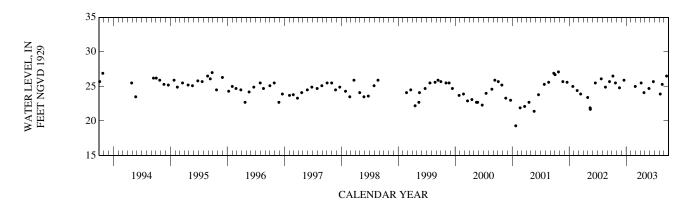
LAND-SURFACE DATUM .-- Land surface is approximately 8.2 ft above NGVD.

REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1978 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.2 ft NGVD, Sept. 30, 1981; lowest, 19.3 ft NGVD, Jan. 23, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	1155	26.5	27	1559	24.7
24	1027	25.5	JUN		
NOV			24	1042	25.7
19	1454	24.8	AUG		
DEC			07	0840	23.9
18	0933	25.9	20	0840	25.3
FEB			SEP		
28	1132	25.0	17	0949	26.5
APR					
07	1502	25.5			
25	1010	24.1			



WELL NUMBER.--263955082083102. Local Number L 2820.

LOCATION.--Lat 26°39′53", long 82°08′31", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.6, T.44 S., R.22 E., Hydrologic Unit 03100103, 10 ft west of H. Stringfellow Road (County Road 767) and 3.95 mi north of Pine Island Road, and 3.0 mi southwest of Bokeelia Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 241 ft, cased to 192 ft, open hole 192 to 241 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage or chalked tape.

DATUM.--Measuring point: For pressure-gage measurements, top of 8 in. casing, 10.56 ft above National Geodetic Vertical Datum of 1929. For chalked-tape measurements, top of cap 11.04 ft above NGVD.

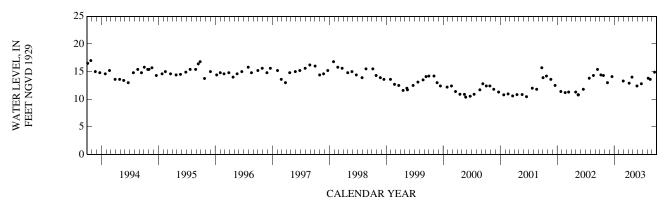
LAND-SURFACE DATUM.--Land surface is approximately 7.6 ft above NGVD.

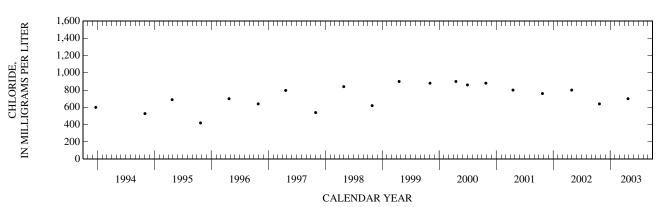
REMARKS.--Well is also used for salinity monitoring. This well is open to the aquifer from 192 to 241 ft. The exact depth from which the chloride-containing water is emanating cannot be further delineated.

PERIOD OF RECORD .-- October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.6 ft NGVD, Nov. 26, 1985; lowest, 10.38 ft NGVD, May 24, 2000.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
08	1203	14.4			27	1601	12.4		
24	1030	14.3	2,470	640	JUN				
NOV			,		24	1045	12.8		
19	1452	13.0			AUG				
DEC					07	0847	13.8		
18	0936	14.1			20	1331	13.6		
FEB					SEP				
28	1141	13.3			17	0953	14.9		
APR									
07	1504	12.9							
25	1013	14.0	2.710	700					





WELL NUMBER.--263955082083103. Local Number L 2549.

LOCATION.--Lat 26°39'53", long 82°08'31", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.6, T.44 S., R.22 E., Hydrologic Unit 03100103, 19 ft west of H. Stringfellow Road (County Road 767), 3.95 mi north of Pine Island Road, 3.0 mi southeast of Bokeelia Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 80 ft, cased to 58 ft, open hole 58 to 80 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.88 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 8.2 ft above NGVD.

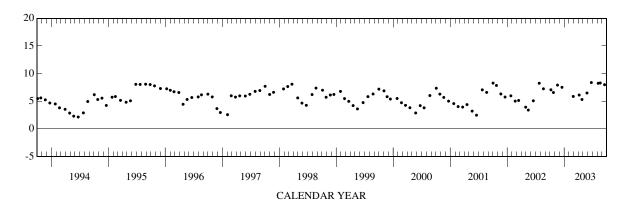
REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.38 ft NGVD, Mar. 31, 1987, June 24, 2003; lowest, 2.15 ft NGVD, June 22, 1994.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1201	7.07	27	1604	6.49
24	1036	6.58	JUN		
NOV			24	1046	8.38
19	1450	7.92	AUG		
DEC			07	0850	8.25
18	0930	7.52	20	1319	8.30
FEB			SEP		
28	1144	5.87	17	0948	7.99
APR					
07	1506	6.12			
25	1041	5.32			





WELL NUMBER.--264002082012801. Local Number L 2700.

LOCATION.--Lat 26°40′02", long 82°01′29", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.5, T.44 S., R.23 E., Hydrologic Unit 03100103, at intersection of Tropicana Parkway and NW 24th Place in median, 2 mi north of Pine Island Road and 3.8 mi northeast of Matlacha Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 205 ft, cased to 165 ft, open hole 165 to 205 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage or chalked tape.

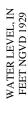
DATUM.--Measuring point: Top of 4 in. steel cap, 9.54 ft above National Geodetic Vertical Datum of 1929. Prior to October 1989, measuring point was top of casing, 9.16 ft above NGVD.

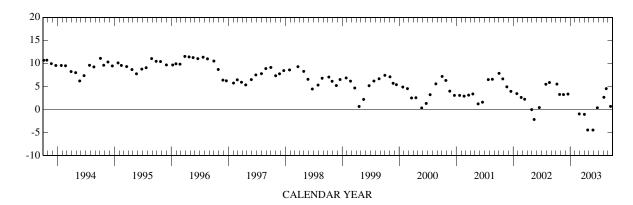
LAND-SURFACE DATUM.--Land surface is approximately 7.1 ft above NGVD.

PERIOD OF RECORD .-- October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.0 ft NGVD, Sept. 27, 1979; lowest, 4.47 ft below NGVD, May 27, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1440	5.50	27	1700	-4.47
25	0916	3.26	JUN		
NOV			24	1020	0.36
19	1358	3.23	AUG		
DEC			05	1606	2.64
18	1004	3.34	20	0847	4.52
FEB			SEP		
28	1300	-0.97	17	1220	0.66
APR					
02	1456	-1.07			
23	1608	-4.46			





WELL NUMBER.--264053081572501. Local Number L 4820.

LOCATION.—Lat 26°40'57", long 81°57'25", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 6, T.44 S., R.24 E., Hydrologic Unit 03090205, at the southeast corner of Andalusia Boulevard and East Diplomat Parkway, and 4.5 mi northwest of North Ft. Myers Post Office.

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 190 ft, cased to 128 ft, open hole 128 to 190 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring Point: Top of recorder shelf, 16.67 ft above National Geodetic Vertical Datum of 1929.

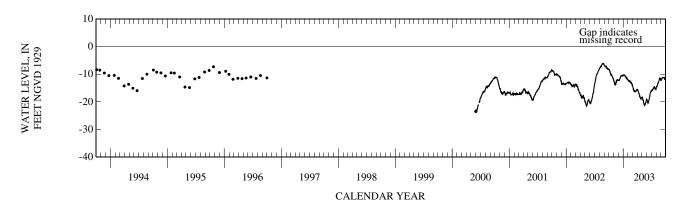
LAND-SURFACE DATUM.--Land surface is approximately 14.2 ft above NGVD.

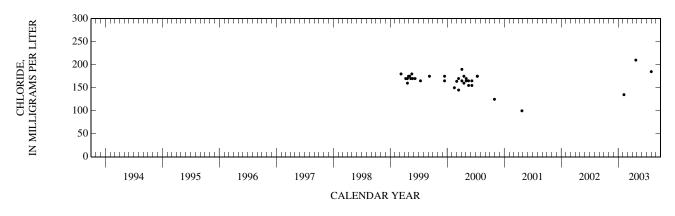
REMARKS.--Well also used for salinity monitoring. Continuous conductivity records for water years 2000 to 2002 and chloride sample results for previous years are available in the files of the U.S. Geological Survey. Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey. Conductivity probe discontinued September 30, 2002.

PERIOD OF RECORD.--April 1981 to September 1981 (monthly), October 1983 to September 1996 (monthly), April 2000 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.15 ft NGVD, Sept. 28, 1984; lowest daily maximum water level, 23.49 ft below NGVD, May 31, 2000.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DAI	ocı	NOV	DEC	JAN	LED	WIAK	AIK	IVIA I	JUN	JUL	AUG	SEI
5	-8.43	-13.04	-12.30	-10.36	-12.42	-14.91	-15.68	-18.90	-19.78	-15.78	-14.28	-11.62
10	-9.53	-13.35	-11.71	-10.27	-12.52	-15.76	-16.79	-19.51	-20.44	-15.51	-13.50	-11.24
15	-10.10	-13.45	-10.90	-10.74	-12.64	-16.08	-17.76	-20.87	-19.28	-14.90	-13.03	-11.16
20	-10.34	-12.21	-10.51	-11.43	-13.34	-16.22	-18.27	-20.81	-18.08	-14.48	-12.01	-11.22
25	-10.98	-12.16	-10.50	-11.46	-13.37	-15.85	-19.06	-20.22	-16.58	-15.42	-11.57	-12.06
EOM	-11.92	-12.12	-10.51	-11.96	-13.85	-15.60	-18.42	-18.97	-15.98	-15.28	-12.06	-11.34
MAX	-8.27	-12.01	-10.40	-10.22	-11.99	-13.80	-15.53	-18.25	-15.98	-14.47	-11.40	-11.13





WELL NUMBER.--264101081443001. Local Number L 652.

LOCATION.--Lat 26°41'00", long 81°44'27", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 5, T.44 S., R.26 E., Hydrologic Unit 03090205, at J. Hudson House, 0.30 mi east of Orange River Loop Road, 0.50 mi north of Orange River Road, and 8.5 mi northeast of Fort Myers Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 598 ft, cased to 188 ft, open hole 188 to 598 ft.

INSTRUMENTATION.--Satellite data collection platform with pressure transducer. Electronic data logger with pressure transducer prior to May 15, 2003. Monthly measurement with pressure gage prior to September 2002.

DATUM.--Measuring point: Top of 2 in. plug on pressure gage 8.84 ft above National Geodetic Vertical Datum of 1929.

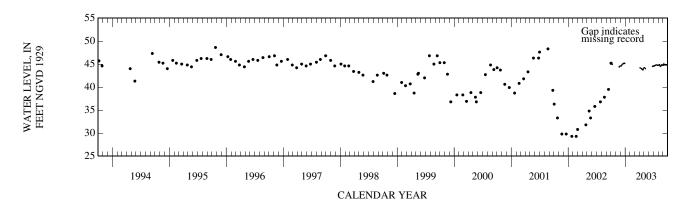
LAND-SURFACE DATUM.--Land surface is approximately 6.8 ft above NGVD.

REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. Records of water levels from May 1998 to September 27, 2002, are considered to be estimates because of problems identified with the pressure gage and precise measuring point used. Well was also used for salinity monitoring, May 1980 to April 1993.

PERIOD OF RECORD.--October 1967 to October 1969 (semiannual), February 1970 to August 1971 (quarterly), October 1971 to December 1974 (bimonthly), January 1975 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to August 2002 (monthly), September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.60 ft NGVD, Oct. 24, 1995; lowest, 29.3 ft NGVD (estimated), Jan. 24 and Feb. 21, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.12		44.62				44.19	44.18		44.61	44.81	45.03
10	44.97		44.80				44.15	44.04		44.69	44.90	44.82
15			44.98				43.98			44.78	44.52	44.86
20			45.12				43.79			44.82	44.64	44.79
25		44.46	45.25				43.71		44.53	44.73	44.79	44.82
EOM		44.56	45.26				44.16		44.54	44.68	44.74	44.95
MAX			45.26							44.84	44.92	45.08



WELL NUMBER.--264120082022101. Local Number L 1113.

LOCATION.--Lat 26°41'25", long 82°02'20", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.32, T.43 S., R.23 E., Hydrologic Unit 03100103, 100 ft northeast of intersection of Van Buren Parkway and Burnt Store Road (County Road 765), 3.5 mi north of Pine Island Road, and 5.1 mi northeast of Matlacha Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 230 ft, open hole 126 to 230 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage or chalked tape.

DATUM.--Measuring point: Top of 2 in. casing, 10.90 ft above National Geodetic Vertical Datum of 1929. From April 1993 to September 2000, the measuring point was considered to be 10.54 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.6 ft above NGVD.

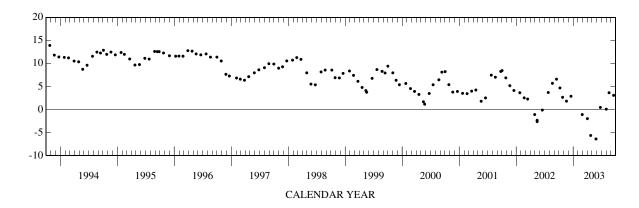
REMARKS.--The figures of water level as elevation, in ft NGVD, from April 1993 to September 2000, are incorrect. Corrected records are available in the files of the U.S. Geological Survey. This well is open hole 126 to 230 ft. Well has collapsed or is obstructed to 128 ft. It is considered that this does not affect the water levels. See DATUM.

PERIOD OF RECORD.--February 1970 to September 1993 (intermittent), October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.4 ft NGVD, Oct. 12, 1976; lowest, 6.41 ft below NGVD, May 27, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1430	4.67	27	1538	-6.41
25	0909	2.64	JUN		
NOV			24	1015	0.44
19	1405	1.80	AUG		
DEC			01	1152	0.06
18	1013	2.86	19	1316	3.63
FEB			SEP		
28	1310	-1.11	17	1037	3.06
APR					
02	1426	-2.00			
23	1550	-5.65			





WELL NUMBER.--264147081562701. Local Number L 1111.

LOCATION.--Lat 26°41'49", long 81°56'23", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.29, T.43 S., R.24 E., Hydrologic Unit 03100103, 500 ft northeast of intersection of Del Prado Boulevard N and Kismet Parkway E. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 165 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of thread of 2 in. PVC casing, 20.59 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 16.8 ft above NGVD.

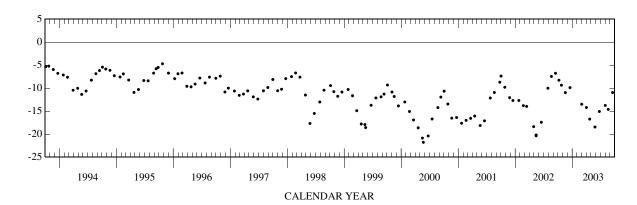
REMARKS.--Conductivity and chloride profiles for previous water years are available in the files of the U.S. Geological Survey. Records of water levels prior to February 1976 are available in the files of the U.S. Geological Survey

PERIOD OF RECORD.--May 1970 to July 1985 (intermittent), August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.26 ft NGVD, May 15, 1980; lowest, 21.78 ft below NGVD, May 22, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1500	-8.29	27	1726	-18.45
24	1547	-9.37	JUN		
NOV			24	1349	-15.08
18	1613	-10.98	AUG		
DEC			01	1131	-13.77
18	1120	-9.90	20	0801	-14.62
MAR			SEP		
03	0810	-13.51	17	1200	-10.97
APR					
02	1404	-14.21			
23	1650	-16.73			





WELL NUMBER.--264153082022301. Local Number L 721.

LOCATION.--Lat 26°41'53", long 82°02'22", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.30, T.43 S., R.23 E., Hydrologic Unit 03100103, at northwest corner of County Road 765 and Delilah Drive, 4.2 mi north of Pine Island Road and 5.1 mi northeast of Matlacha Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 18 ft, cased to 9 ft, slotted 9 to 18 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.85 ft above National Geodetic Vertical Datum of 1929. Prior to October 1990, measuring point was top of cap, 8.98 ft above NGVD.

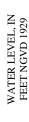
LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

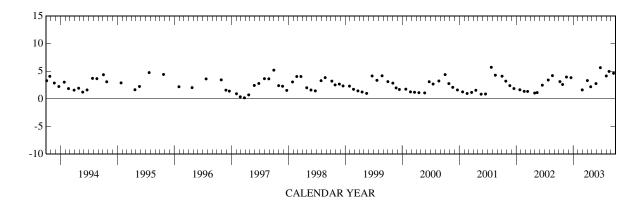
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--July 1968 to September 1994 (monthly), October 1994 to September 1996 (quarterly), September 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.72 ft NGVD, July 25, 2001; lowest, 0.20 ft NGVD, Mar. 26, 1997.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	1424	3.13	27	1535	2.77
25	0907	2.61	JUN		
NOV			24	1010	5.65
19	1409	3.96	AUG		
DEC			01	1202	4.15
18	1017	3.84	19	1337	4.97
FEB			SEP		
28	1317	1.63	17	1044	4.64
APR					
02	1430	3.32			
23	1540	2.20			





WELL NUMBER.--264241081582401. Local Number L 1110.

LOCATION.--Lat  $26^{\circ}42'41''$ , long  $81^{\circ}58'25''$ , in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 25, T.43 S., R.23 E., Hydrologic Unit 03100103, northeast corner of Juanita Boulevard and Jacaranda Parkway, 1 mi north of Kismet Parkway, 2 mi west of Del Prado Boulevard, 2 mi north of Pine Island Road, 2 mi west of U.S. Highway 41, and 3.25 mi north of Ft. Myers Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 238 ft, open hole 147 to 238 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 19.92 ft above National Geodetic Vertical Datum of 1929.

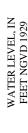
LAND-SURFACE DATUM.--Land surface is approximately 15.8 ft above NGVD.

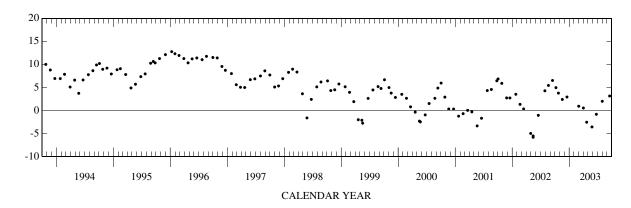
REMARKS.--Conductivity and chloride profiles for previous water years are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--February 1970 to September 1993 (intermittent), October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.38 ft NGVD, Oct. 12, 1976; lowest, 5.83 ft below NGVD, May 15, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			APR		
08	1451	4.95	02	1413	0.53
24	1532	3.76	23	1637	-2.55
NOV			MAY		
18	1559	2.39	27	1714	-3.59
DEC			JUN		
18	1128	2.92	24	1330	-0.83
MAR			AUG		
03	0817	0.92	01	1117	1.99
			SEP		
			17	1233	3.14





WELL NUMBER.--264308081405402. Local Number L 2530.

LOCATION.--Lat 26°43′08", long 81°40′49", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.23, T.43 S., R.26 E., Hydrologic Unit 03090205, 0.25 mi north of State Road 80, 0.30 mi east on Werner Drive and 4.3 mi west of Alva Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 614 ft, cased to 475 ft, 2 in. diameter open hole 475 to 614 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 9.90 ft above National Geodetic Vertical Datum of 1929.

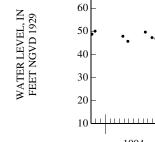
LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

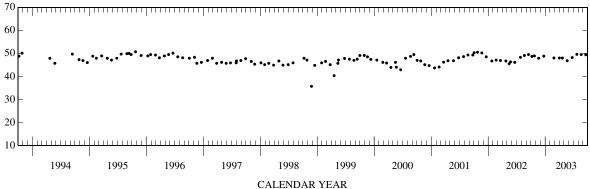
REMARKS.--Records of water levels prior to October 1979 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1978 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.9 ft NGVD, Oct. 29, 1981; lowest, 35.7 ft NGVD, Nov. 25, 1998. (Corrected).

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	0748	48.7	22	1541	46.8
24	1025	48.9	JUN		
NOV			23	0919	48.2
20	0855	47.9	JUL		
DEC			23	1215	49.6
23	0811	48.8	AUG		
FEB			20	1630	49.5
26	0810	48.0	SEP		
APR			18	1504	49.4
02	1444	48.0			
21	1001	48.0			





WELL NUMBER.--264320081365701. Local Number L 1977.

LOCATION.--Lat 26°43'19", long 81°36'56", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.21, T.43 S., R.27 E., Hydrologic Unit 03090205, 11.5 ft west of Parkinson Road, 300 ft north of State Road 78, and 0.7 mi northwest of Alva Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 185 ft, cased to 65 ft, screened 65 to 85 ft and cased 85 to 122 ft, open hole 122 to 185 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.20 ft above National Geodetic Vertical Datum of 1929. From January 1999 to March 2000, top of casing was 17.79 ft above NGVD. Prior to May 1998, top of casing was 19.89 ft above NGVD.

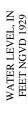
LAND-SURFACE DATUM.--Land surface is approximately 17.1 ft above NGVD.

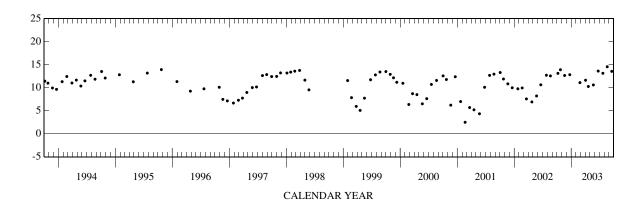
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1974 to September 1994 (monthly), October 1994 to July 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.18 ft NGVD, Sept. 1, 1988; lowest, 2.50 ft NGVD, Feb. 20, 2001.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	0803	13.13	23	0800	10.61
24	1039	13.92	JUN		
NOV			23	1057	13.62
20	0907	12.67	JUL		
DEC			23	1220	13.14
23	0937	12.83	AUG		
FEB			20	1050	14.56
26	0922	11.11	SEP		
APR			18	1032	13.56
03	0720	11.63			
21	1123	10.28			





WELL NUMBER.--264329081340401. Local Number L 2200.

LOCATION.--Lat 26°43'30", long 81°34'06", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.24, T.43 S., R.27 E., Hydrologic Unit 03090205, west side of the Lee/Hendry County Line and south side of State Road 78, and 2.8 mi northeast of Alva Post Office.

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 163 ft, cased to 122 ft, screened 122 to 163 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 20.00 ft above National Geodetic Vertical Datum of 1929.

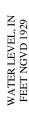
LAND-SURFACE DATUM .-- Land surface is approximately 17.3 ft above NGVD.

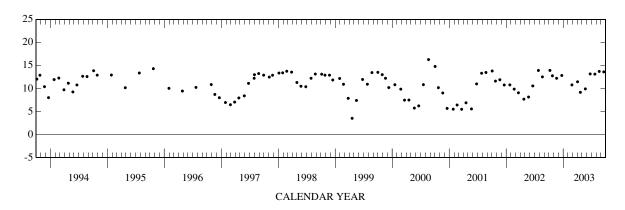
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1975 to September 1994 (monthly), October 1994 to July 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.32 ft NGVD, Sept. 23, 1986; lowest, 3.51 ft NGVD, Apr. 19, 1999.

		Elev- ation, feet			Elev- ation, feet
Date	Time	above NGVD (72020)	Date	Time	above NGVD (72020)
OCT			MAY		
08	0955	13.91	23	0817	9.90
24	1213	12.74	JUN		
NOV			23	1145	13.15
20	1042	12.20	JUL		
DEC			23	1247	13.11
23	1003	12.81	AUG		
FEB			20	1117	13.69
26	0949	10.77	SEP		
APR			18	1055	13.59
03	0747	11.44			
21	1138	9.15			





WELL NUMBER.--264329081340402. Local Number L 2202.

LOCATION.--Lat 26°43'30", long 81°34'06", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.24, T.43 S., R.27 E., Hydrologic Unit 03090205, west side of the Lee/Hendry County Line and south side of State Road 78, and 2.8 mi northeast of Alva Post Office.

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 17.4 ft, cased to 7.4 ft, screened 7.4 to 17.4 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.-- Measuring point: Top of casing, 20.03 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 17.3 ft above NGVD.

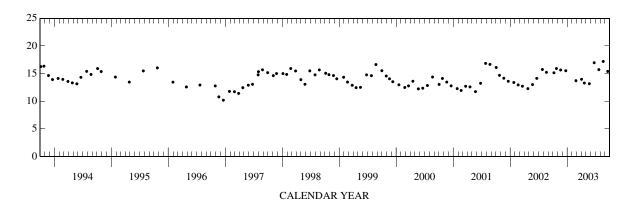
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1975 to September 1994 (monthly), October 1994 to July 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.20 ft NGVD, Aug. 20, 2003; lowest, 10.19 ft NGVD, Dec. 19, 1997.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	0958	15.15	23	0818	13.17
24	1206	15.92	JUN		
NOV			23	1147	16.97
20	1046	15.65	JUL		
DEC			23	1250	15.72
23	1004	15.52	AUG		
FEB			20	1120	17.20
26	0951	13.72	SEP		
APR			18	1055	15.40
03	0750	13.98			
21	1142	13.29			





WELL NUMBER.--264359081424701. Local Number L 1975.

LOCATION.—Lat 26°43'59", long 81°42'45", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.16, T.43 S., R.26 E., Hydrologic Unit 03090205, at northwest corner of State Road 78 and North Olga Drive, and 6.5 mi west of Alva Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 168 ft, cased to 102 ft, screened 102 to 142 ft, cased 142 to 158 ft, open hole 158 to 168 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape or pressure gage.

DATUM.--Measuring point: Top of 4 in. cap, 15.59 ft above National Geodetic Vertical Datum of 1929. Prior to October 1995, measuring point was top of casing, 15.52 ft above NGVD.

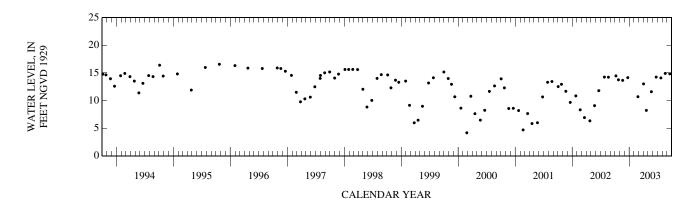
LAND-SURFACE DATUM .-- Land surface is approximately 13.1 ft above NGVD.

REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1974 to September 1994 (monthly), October 1994 to July 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.02 ft NGVD, Nov. 29, 1979; lowest, 4.17 ft NGVD, Feb. 25, 2000.

Date	Time	Elevation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	0814	14.47	23	0747	11.60
24	1050	13.76	JUN		
NOV			23	1047	14.25
20	0918	13.66	JUL		
DEC			23	1155	14.10
23	0924	14.15	AUG		
FEB			20	1040	14.91
26	0911	10.70	SEP		
APR			18	1013	14.84
03	0706	13.02			
21	1111	8.22			



WELL NUMBER.--264359081424702. Local Number L 1976.

LOCATION.—Lat 26°43'59", long 81°42'45", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.16, T.43 S., R.26 E., Hydrologic Unit 03090205, at northwest corner of State Road 78 and North Olga Drive, and 6.5 mi west of Alva Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 15 ft, cased to 5 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.54 ft above National Geodetic Vertical Datum of 1929.

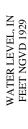
LAND-SURFACE DATUM .-- Land surface is approximately 13.1 ft above NGVD.

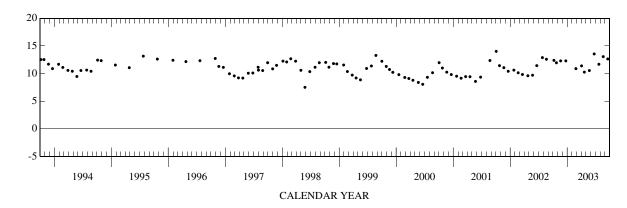
REMARKS.--Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1974 to September 1994 (monthly), October 1994 to July 1996 (quarterly), October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.03 ft NGVD, Oct. 3, 2001; lowest, 7.52 ft NGVD, May 26, 1998.

Date	Time	Elev- ation, feet above NGVD	Date	Time	Elev- ation, feet above NGVD
		(72020)			(72020)
OCT			MAY		
08	0816	12.40	23	0747	10.55
24	1051	11.96	JUN		
NOV			23	1047	13.56
20	0918	12.30	JUL		
DEC			23	1155	11.69
23	0927	12.30	AUG		
FEB			20	1040	13.07
26	0913	10.90	SEP		
APR			18	1014	12.65
03	0709	11.40			
21	1113	10.27			





WELL NUMBER.--264427081362601. Local Number L 2531.

LOCATION.--Lat 26°44′35″, long 81°36′23″, in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.10, T.43 S., R.27 E., Hydrologic Unit 03090205, 2 mi north of Alva on Persimmon Ridge Road, on west side of road and 1.2 mi north of State Road 78.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 605 ft, cased to 345 ft, open hole 345 to 605 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. PVC casing, 20.66 ft above National Geodetic Vertical Datum of 1929.

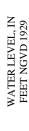
LAND-SURFACE DATUM .-- Land surface is approximately 19.7 ft above NGVD.

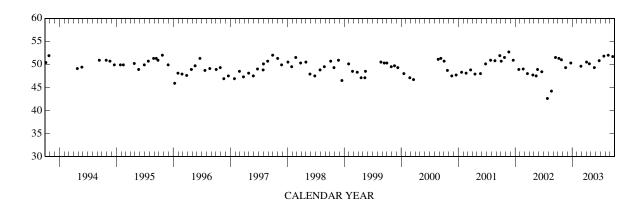
REMARKS.--Records of water levels prior to October 1983 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--March 1978 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.6 ft NGVD, Sept. 1, 1988; lowest, 42.6 ft NGVD, July 26, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	0938	51.3	23	0808	49.3
24	1157	51.0	JUN		
NOV			23	1108	50.81
20	1031	49.3	JUL		
DEC			23	1235	51.8
23	0945	50.3	AUG		
FEB			20	1110	52.0
26	0929	49.6	SEP		
APR			18	1048	51.7
03	0729	50.5			
21	1130	50.14			





WELL NUMBER.--264433081360601. Local Number L 5708.

LOCATION.--Lat 26°44'31", long 81°36'09", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 10, T.43 S., R.27 E., Hydrologic Unit 03090205, 250 ft west of Frank Green House, 700 ft south of Persimmon Ridge Road, 1.6 mi north then east of intersection of State Road 78 and Persimmon Ridge Road and 1.9 mi north of Alva.

AQUIFER.--Upper Floridan aquifer of the Oligocene Age, Geologic Unit 120 UFAQ.

WELL CHARACTERISTICS.--Driven, observation, artesian well, diameter 6 in., depth 920 ft, cased to 620 ft, open hole 620 to 902 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

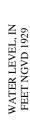
DATUM.--Measuring point: Top of 4 in. by 2 in. reducer, 21.55 ft above National Geodetic Vertical Datum of 1929.

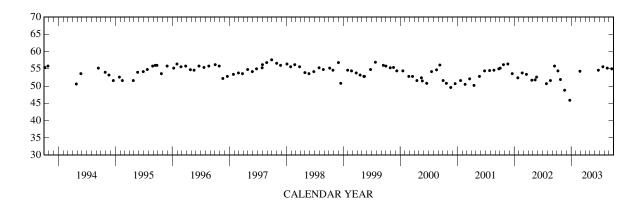
LAND-SURFACE DATUM .-- Land surface is approximately 19.4 ft above NGVD.

PERIOD OF RECORD.--May 1984 to September 1988 (semiannual), September 1989 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.6 ft NGVD, Sept. 30, 1986, Sept. 29, 1997; lowest, 45.9 ft NGVD, Dec. 23, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
		(72020)			(72020)
OCT			JUN		
08	0943	54.4	24	1110	54.6
24	1200	51.9	JUL		
NOV			23	1219	55.6
20	1035	48.8	AUG		
DEC			20	1104	55.2
23	0951	45.9	SEP		
FEB			18	1045	55.0
26	0942	54 3	10	- 3 .0	22.0





WELL NUMBER.--264517081513201. Local Number L 2341.

LOCATION.--Lat 26°45'18", long 81°51'24", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.7, T.43 S., R.25 E., Hydrologic Unit 03100103, at southeast corner of intersection of Nalle Grade Road and Huber Road, 15 ft east of Huber Road, 47 ft south of Nalle Grade Road, 0.4 mi west of Slater Road, 4 mi north of State Road 78 and 6.1 mi northeast of North Fort Myers Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 585 ft, cased to 300 ft, open hole 300 to 585 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 8 in. casing, 25.17 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 23.6 ft above NGVD.

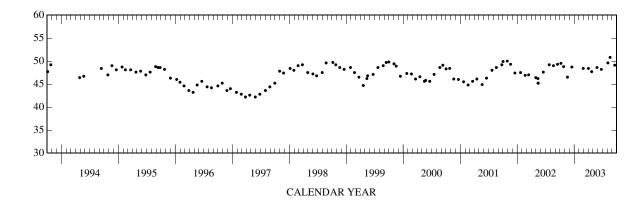
REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1976 to October 1993 (monthly), April 1994 to September 1994 (intermittent), October 1994 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.0 ft NGVD, Dec. 27, 1985; lowest, 42.2 ft NGVD, Mar. 26 and May 28, 1997.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1552	49.5	27	1442	48.6
25	1018	48.8	JUN		
NOV			24	0853	48.2
19	1022	46.5	AUG		
DEC			05	1512	49.6
17	1720	48.7	19	1519	50.8
FEB			SEP		
28	1422	48.4	18	1511	49.1
APR					
02	1244	48.4			
23	1442	47.7			





WELL NUMBER.--264517082022101. Local Number L 1059.

LOCATION.--Lat 26°45'15", long 82°02'21", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.7, T.43 S., R.23 E., Hydrologic Unit 03100103, 48 ft west of County Road 765, 8.0 mi north of Pine Island Road (State Road 78), and 8.8 mi northeast of Matlacha Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 2 in., depth 189 ft, cased to 156 ft, open hole 156 to 189 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage or chalked tape.

DATUM.--Measuring point: Top of bushing, 14.42 ft above National Geodetic Vertical Datum of 1929. From September 1994 to September 1997, measuring point was incorrectly considered to be 14.17 ft above NGVD. From October 1993 to September 1994, measuring point was 13.81 ft above NGVD. From October 1980 to September 1993, measuring point was top of casing, 12.89 ft above NGVD. Prior to October 1980, top of casing was 10.71 ft above NGVD. See REMARKS.

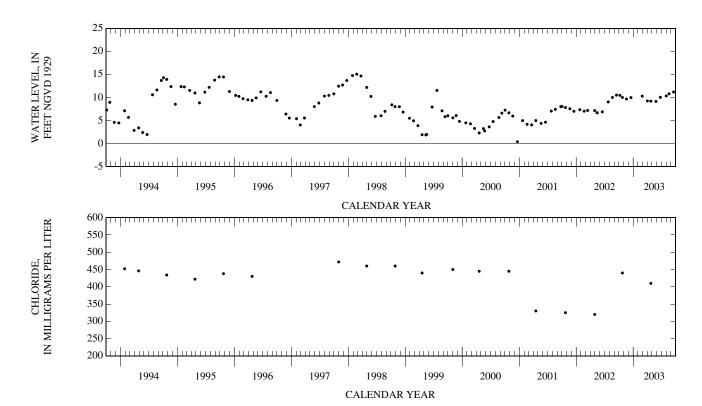
LAND-SURFACE DATUM.--Land surface is approximately 10.6 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. The well was originally open to the aquifer from depth of 156 to 189 ft. The open-hole portion of the well has collapsed or become obstructed. Chloride concentration samples are being collected from a depth of 156 ft. Records of water levels prior to October 1975 are available in files of the U.S. Geological Survey. The figures of water level as elevation, in feet NGVD, from September 28, 1994 to September 1997 are in error. A +0.25 ft correction has been applied to correct the records. Corrected records are in files of the U.S. Geological Survey. Station rebuilt September 1994. See DATUM.

PERIOD OF RECORD.--May 1970 to December 1974 (bimonthly), January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.9 ft NGVD, Jan. 30, 1980; lowest, 0.38 ft NGVD, Dec. 20, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
08	1416	10.46			27	1528	9.13		
24	0940	10.00	1,723	440	JUN				
NOV					24	0953	10.03		
19	1420	9.66			AUG				
DEC					01	1222	10.32		
18	1027	9.96			19	1339	10.79		
FEB					SEP				
28	1330	10.28			17	1053	11.17		
APR									
02	1446	9.24							
24	1158	9.18	1 725	410					



WELL NUMBER.--264517082022102. Local Number L 2526.

LOCATION.--Lat 26°45'14", long 82°02'18", in NE \(^1\_4\) sec.7, T.43 S., R.23 E., Hydrologic Unit 03100103, 48 ft west of State Road 765, 8 mi north of State Road 78, and 8.8 mi northeast of Matlacha Post Office.

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 605 ft, cased to 300 ft, open hole 300 to 605 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of casing, 12.06 ft above National Geodetic Vertical Datum of 1929. From November 23, 1999 to April 2003, measuring point was 13.54 ft above NGVD. From September 28, 1999 to November 22, 1999, measuring point was top of bucket, 11.64 ft above NGVD. From September 1997 to September 1999, measuring point was top of faucet, 13.61 ft above NGVD. From October 1990 to September 1997, measuring point was top of bushing, 13.63 ft above NGVD. From October 1982 to September 1990, measuring point top of casing, 13.64 ft above NGVD. Prior to October 1982, top of casing was 12.81 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 10.7 ft above NGVD.

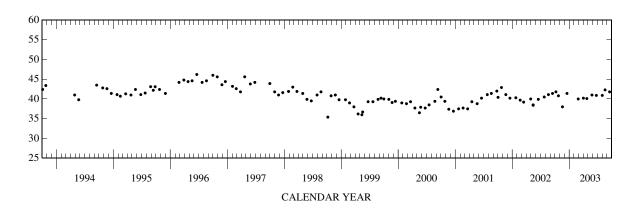
REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey. Site was repaired and releveled in April 2003.

PERIOD OF RECORD.--January 1978 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.2 ft NGVD, June 19, 1996; lowest, 35.4 ft NGVD, Oct. 7, 1998.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	1412	41.8	27	1524	41.0
24	1708	40.8	JUN		
NOV			24	0950	40.9
19	1422	38.0	AUG		
DEC			01	1207	40.9
18	1024	41.4	19	1343	42.3
FEB			SEP		
28	1325	40.0	17	1050	41.8
APR					
02	1439	40.2			
24	1118	40.1			





WELL NUMBER.--264537081552202. Local Number L 2646.

LOCATION.--Lat 26°45'37", long 81°55'21", in NW \( \frac{1}{4} \) SW \( \frac{1}{4} \) sec.4, T.43 S., R.24 E., Hydrologic Unit 03100103, at intersection of Lakeville Drive and Dalewood Road, 14 ft east of Dalewood Road, 20 ft south of Lakeville Drive, 0.2 mi east of U.S. Highway 41, and 6.9 mi northwest of North Fort Myers Post Office. (Corrected).

AQUIFER.--Mid-Hawthorn aquifer of the Miocene Age, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 220 ft, cased to 170 ft, open hole 170 to 220 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 23.41 ft above National Geodetic Vertical Datum of 1929. From October 1995 to September 1997, measuring point was incorrectly considered to be 23.16 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 20.8 ft above NGVD.

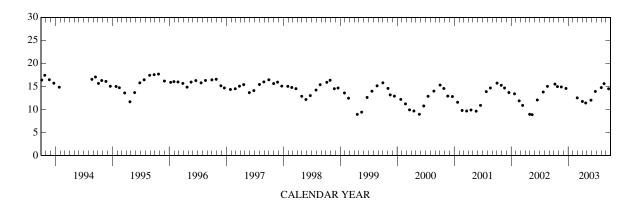
REMARKS.--Records of water levels prior to October 1978 are available in files of the U.S. Geological Survey. The figures of water levels, as elevation in feet NGVD, for the period October 1995 to September 1997 are in error. A correction of + 0.25 ft has been applied to correct water-level data. See DATUM.

PERIOD OF RECORD .-- May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.36 ft NGVD, Sept. 28, 1978; lowest, 8.86 ft NGVD, May 15, 2002.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	1518	15.50	27	1456	12.01
24	1605	14.96	JUN		
NOV			24	0913	13.91
18	1642	14.89	AUG		
DEC			01	1258	14.75
18	1109	14.56	19	1339	15.60
FEB			SEP		
28	1406	12.51	17	1123	14.48
APR					
02	1305	11.74			
23	1300	11.41			





WELL NUMBER.--264608081454101. Local Number L 2216.

LOCATION.--Lat 26°46'09", long 81°45'41", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.1, T.43 S., R.25 E., Hydrologic Unit 03090205, west side of State Road 31 at Lee/Charlotte County Line, and 10.0 mi northwest of Alva Post Office. (Corrected).

AQUIFER.--Sandstone aquifer of the Miocene Age, Geologic Unit 122 SNDS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 150 ft, cased to 130 ft, screened 130 to 150 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 28.46 ft above National Geodetic Vertical Datum of 1929. Prior to October 2000, top of casing was considered to be 28.61 ft above NGVD.

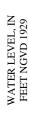
LAND-SURFACE DATUM.--Land surface is approximately 26.3 ft above NGVD.

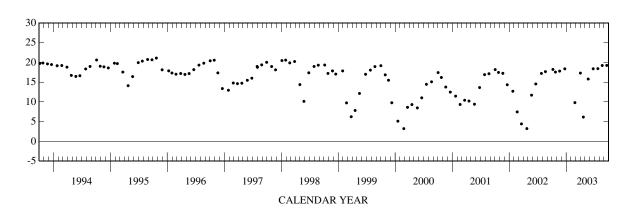
REMARKS.--Well was also used for salinity monitoring, May 1981 to January 2000.

PERIOD OF RECORD .-- October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.16 ft NGVD, Oct. 6, 1992; lowest, 3.24 ft NGVD, Feb. 25, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	0916	18.24	22	1625	15.81
24	1135	17.57	JUN		
NOV			23	1030	18.41
20	1000	17.82	JUL		
DEC			23	1001	18.44
23	0911	18.39	AUG		
FEB			20	1009	19.24
26	0857	9.84	SEP		
APR			18	1007	19.26
02	1537	17.32			
21	1055	6.17			





WELL NUMBER.--264608081454102. Local Number L 2217.

LOCATION.--Lat 26°46'09", long 81°45'41", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.1, T.43 S., R.25 E., Hydrologic Unit 03090205, west side of State Road 31 at Lee/Charlotte County Line, and 10.0 mi northwest of Alva Post Office. (Corrected).

AQUIFER.--Surficial aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 18 ft, cased to 10 ft, screened 10 to 18 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 28.63 ft above National Geodetic Vertical Datum of 1929.

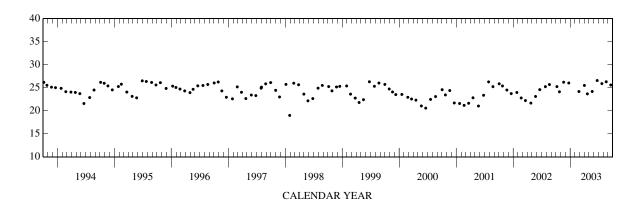
LAND-SURFACE DATUM .-- Land surface is approximately 26.2 ft above NGVD.

PERIOD OF RECORD .-- October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.75 ft NGVD, Aug. 30, 1977; lowest, 19.00 ft NGVD, Jan. 29, 1998.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
OCT			MAY		
08	0919	25.25	22	1627	24.19
24	1136	24.13	JUN		
NOV			23	1038	26.57
20	1005	26.21	JUL		
DEC			23	1005	25.90
23	0913	26.03	AUG		
FEB			20	1011	26.30
26	0900	24.18	SEP		
APR			18	1008	25.60
02	1537	25.50			
21	1058	23.67			





WELL NUMBER.--264608081454103. Local Number L 2328.

LOCATION.--Lat 26°46'09", long 81°45'41", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.1, T.43 S., R.25 E., Hydrologic Unit 03090205, west side of State Road 31 at Lee/Charlotte County Line, and 10.0 mi northwest of Alva Post Office. (Corrected).

AQUIFER.--Lower Hawthorn aquifer of Oligocene to Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 600 ft, cased to 300 ft, open hole 300 to 600 ft.

INSTRUMENTATION .-- Monthly measurement with pressure gage.

DATUM.--Measuring point: Top of 4 in. casing, 28.13 ft above National Geodetic Vertical Datum of 1929. Prior to October 2000, top of casing was considered to be 28.52 ft above NGVD.

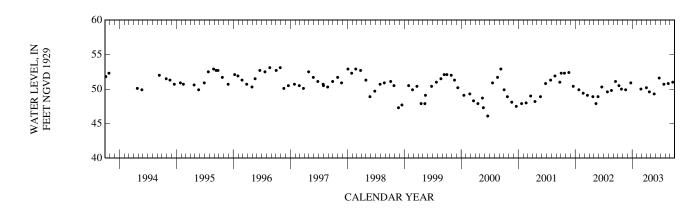
LAND-SURFACE DATUM.--Land surface is approximately 25.5 ft above NGVD.

REMARKS.--Records of water levels prior to October 1982 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD. -- September 1976 to September 1993 (monthly), October 1993 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.3 ft NGVD, July 31 and Oct. 31, 1979; lowest, 46.1 ft NGVD, June 19, 2000.

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elev- ation, feet above NGVD (72020)
OCT			MAY		
08	0913	50.5	22	1623	49.3
24	1132	50.0	JUN		
NOV			23	1030	51.6
20	0958	49.9	JUL		
DEC			23	1009	50.7
23	0907	50.9	AUG		
FEB			20	1010	50.8
26	0902	50.0	SEP		
APR			18	1010	51.0
02	1541	50.2			
21	1100	49.6			



# MISCELLANEOUS WATER-LEVEL MEASUREMENTS

Station number	Local ident- i- fier	Lat- i- tude	Long- i- tude	Date	Time	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chlor- ide, water, fltrd, mg/L (00940)
262513081472002 L -56	68R	26 25 13 N	081 47 20 W	10-21-02	0931	2610	660
		26 25 13 N	081 47 20 W	04-16-03	1235	2530	640
263125081511801 L - 3	31	26 33 26 N	081 51 21 W	10-23-02	0845	2890	620
		26 33 26 N	081 51 21 W	04-17-03	0820	2910	680

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# Martin County

# **VOLUME 2B: SOUTH FLORIDA**

# Key to site locations on figure #18

# MARTIN COUNTY

Index	Site	Well	Page
Number	Number	Name	Number
1	270835080105801	M 1004	410
2	265822080052701	M 1024	407
3	270124080280202	M 1048	408
4	265725080141801	M 1234	406
5	270913080284901	M 1255	411
6	270609080163401	M 1261	409

# **VOLUME 2B: SOUTH FLORIDA**

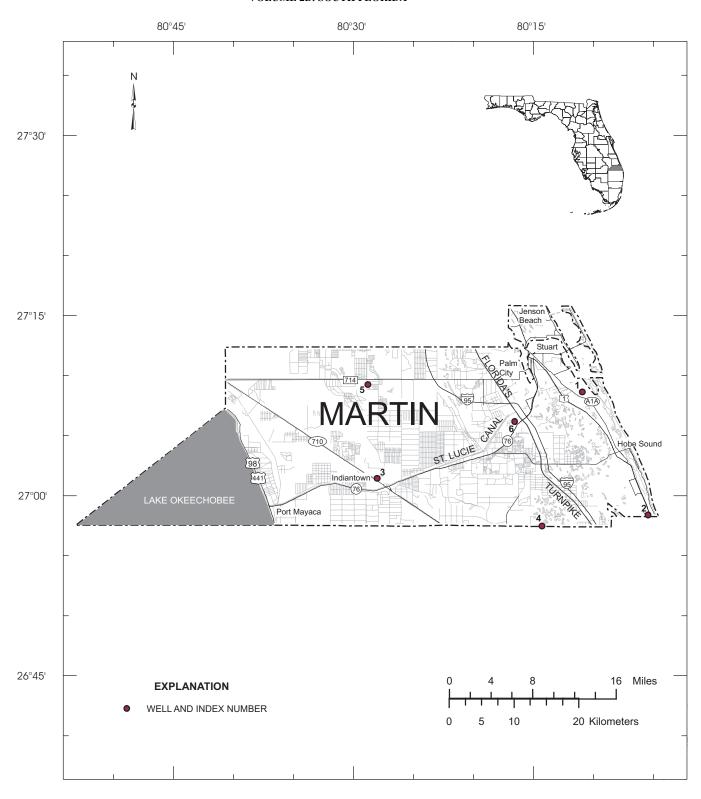


Figure 18: Location of wells in Martin County

## MARTIN COUNTY

WELL NUMBER.--265725080141801. Local Number M 1234. USGS Observation Well near Jupiter, Fl.

 $LOCATION.--Lat\ 26^{\circ}57'25", long\ 80^{\circ}14'18", in\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ sec. 18, T. 40\ S., R. 41\ E., Hydrologic\ Unit\ 03090202, located\ on\ Old\ Indiantown\ Road,\ 0.6\ mi\ northwest\ of\ Mellon\ Lane,\ 4.6\ mi\ west\ of\ junction\ of\ State\ Road\ 706\ and\ Florida\ Turnpike\ near\ Jupiter,\ Fl.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Driven, observation, water-table well, diameter 6 in., depth 18 ft, cased to 18 ft.

INSTRUMENTATION .-- Electronic data logger.

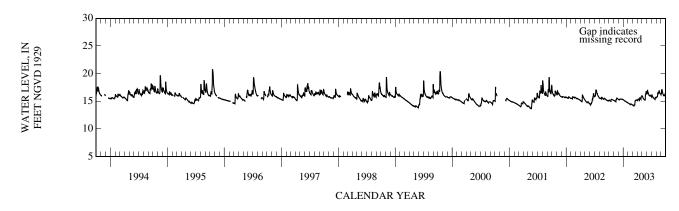
DATUM.--Measuring point: Top of base, 23.65 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 21.2 ft above NGVD.

PERIOD OF RECORD.--October 1988 to August 1989 (semiannual), August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 20.71 ft NGVD, Oct. 17, 18, 1995; lowest, 13.46 ft NGVD, May 29, 1990.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	15.18 15.04 15.26 15.33 15.26 15.17	15.11 15.01 14.91 15.39 15.51 15.36	15.25 15.38 15.40 15.37 15.39 15.28	15.19 15.06 15.01 14.89 14.81 14.70	14.63 14.52 14.37 14.51 14.41 14.35	14.28 14.14 14.35 15.10 15.21 15.21	15.35 15.37 15.16 15.59 15.33 15.99	15.82 15.53 15.31 15.22 16.31 16.51	16.94 16.57 16.09 15.99 16.06 15.80	16.13 15.79 15.56 15.41 15.65 15.63	15.78 16.52 16.50 16.90 16.39 16.18	16.97 16.63 16.12 16.06 16.00 16.52
MAX	15.35	15.58	15.40	15.25	14.70	15.24	15.99	16.74	16.96	16.16	16.90	17.11



WELL NUMBER.--265822080052701. Local Number M 1024. USGS Observation Well near Tequesta, FL.

LOCATION.--Lat 26°58'22", long 80°05'27", in NE ½ SW ½ SW ½ sec.19, T.40 S., R.43 E., Hydrologic Unit 03090202, in Tequesta Park, 0.2 mi north of County Line Road.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 83 ft, cased to 80 ft.

INSTRUMENTATION .-- Electronic data logger.

3.18

3.64

EOM

MAX

3.18

3.33

DATUM.--Measuring point: Top of base, 26.02 ft above National Geodetic Vertical Datum of 1929. From February 1993 to September 1993, the measuring point was incorrectly considered to be 25 ft above NGVD. Prior to February 1993, measuring point was top of casing, 26.10 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 24.5 ft above NGVD.

2.87

3.36

2.27

2.85

REMARKS.--Well is affected by pumping in area. The published figures of water level as elevation, in feet NGVD, from February 1993 to September 1993, are in error. A +1.02 ft correction has been applied to the water-level data. Corrected records are in files of the U.S. Geological Survey. Records of water levels from October 1978 to May 1982 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--December 1975 to April 1979 (daily), May 1982 (intermittent), February 1993 to current year.

2.27

2.27

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.14 ft NGVD, Oct. 18, 19, 1995; lowest, 0.52 ft NGVD, Feb. 22, 1976.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.48	3.16	2.96	2.77	2.16	2.34	3.26	3.18	3.14	2.70	1.94	2.73
10	3.33	3.00	3.16	2.74	2.05	2.18	3.10	2.91	3.20	2.55	2.12	3.03
15	3.28	2.87	3.34	2.60	1.92	2.50	3.09	2.77	3.21	2.46	2.96	3.11
20	3.64	2.95	3.13	2.51	2.13	3.27	3.26	2.59	3.15	2.31	3.12	3.12
25	3.44	3 33	3.01	2 37	2 24	3.68	3.26	2 03	3.07	2.14	2 0/1	2 92

3.62

3.70

3.31

3.58

3.17

3.30

2.92

3.26

1.95

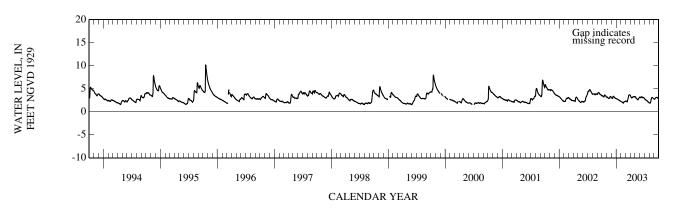
2.87

2.75

3.12

3.17

3.17



WELL NUMBER.--270124080280202. Local Number M 1048. USGS Observation Well in Indiantown, FL.

LOCATION.--Lat 27°01'24", long 80°28'02", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.6, T.40 S., R.39 E., Hydrologic Unit 03090202, near intersection of SW Washington Avenue and SW Osceola Street, 0.1 mi northeast of State Road 710.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 80 ft, cased to 25 ft.

INSTRUMENTATION.--Satellite data collection platform with water-stage shaft encoder.

DATUM.—Measuring point: Top of base, 35.70 ft above National Geodetic Vertical Datum of 1929. From September 1992 to May 4, 2001, top of base was 35.63 ft above NGVD. Prior to October 1992, measuring point was top of casing, 35.61 ft above NGVD. Prior to October 1990, top of casing was considered to be 35.83 ft above NGVD. See REMARKS.

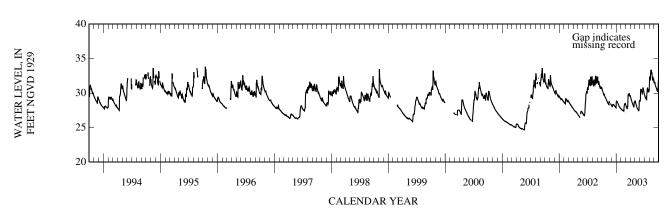
LAND-SURFACE DATUM.--Land surface is approximately 32.8 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1, 1990 are in error. A -0.22 ft correction is required to correct the data prior to October 1990. The station was reconstructed May 4, 2001. See DATUM.

PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.81 ft NGVD, Oct. 17, 1995; lowest, 24.65 ft NGVD, May 22, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	30.37 30.01	28.73 28.51	28.09 28.33	28.81 28.64	27.62 27.52	28.16 27.84	29.31 28.87	28.67 28.25	29.07 30.40	29.43 29.33	31.76 33.08	31.54 31.06
15	29.84	28.31	28.35	28.34	27.41	28.08	28.51	27.85	30.08	29.04	33.12	30.76
20 25	29.55 29.29	28.65 28.47	28.18 28.06	28.07 27.89	27.76 28.40	29.85 29.63	28.20 27.94	27.64 27.49	30.50 30.47	30.72 30.21	32.39 32.25	30.41 30.48
EOM	28.99	28.29	27.86	27.74	28.51	29.70	28.57	28.89	29.83	30.18	31.54	31.88
MAX	30.73		28.36	28.83	28.51		29.60	28.89	30.77	30.72	33.38	31.90



WELL NUMBER.--270609080163401. Local Number M 1261. USGS Observation Well near Stuart, FL.

LOCATION.—Lat 27°06′09", long 80°16′34", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.6, T.39 S., R.41 E., Hydrologic Unit 03090202, on Locks Road, approximately 0.5 mi north of State Road 76 and 0.5 mi northwest of U.S. Interstate 95.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6.0 in., depth 23.0 ft, cased to 20.0 ft.

INSTRUMENTATION .-- Satellite data collection platform with water-stage shaft encoder.

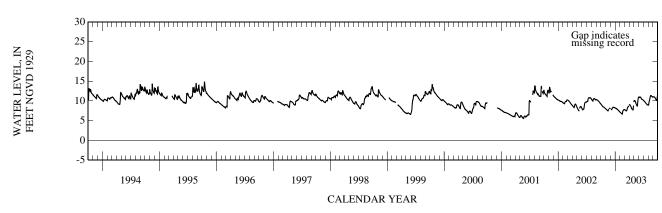
DATUM.--Measuring point: Top of base, 18.54 ft above National Geodetic Vertical Datum of 1929. Prior to January 1993, measuring point was top of casing, 18.47 ft above NGVD.

LAND-SURFACE DATUM .-- Land surface is 14.9 ft above NGVD.

PERIOD OF RECORD.--May 1989 to April 1992 (semiannual), January 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.78 ft NGVD, Oct. 18, 1995; lowest, 5.53 ft NGVD, May 23, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	9.04 8.78 8.50 8.46 8.25 8.03	7.87 7.69 7.50 7.88 8.12 8.09	7.82 8.30 8.40 8.35 8.23	8.15 8.04 7.86 7.67 7.45 7.20	7.02 6.86 6.74 7.52 7.78 7.83	7.74 7.57 7.55 8.18 8.55 8.99	9.01 8.72 8.16 8.01 7.73 9.70	10.12 9.89 9.31 8.84 9.70 10.97	10.88 10.99 10.81 10.43 10.36 10.18	10.02 9.80 9.50 9.28 9.03 8.99	9.52 10.34 11.27 11.34 11.09 11.08	11.00 11.00 10.69 10.33 10.12
MAX	9.24			8.20	7.83			10.97	10.99	10.13	11.37	11.74



WELL NUMBER.--270835080105801. Local Number M 1004. USGS Observation Well in Port Salerno, FL.

LOCATION.--Lat 27°08'35", long 80°10'58", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.30, T.38 S., R.42 E., Hydrologic Unit 03090202, 5.0 mi southeast of Stuart, 0.7 mi east of U.S. Highway 1 Alternate A1A on Cove Road.

AQUIFER .-- Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 17 ft, cased to 17 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.—Measuring point: Top of base, 10.83 ft above National Geodetic Vertical Datum of 1929. Prior to March 15, 1999, measuring point was top of shelf, 10.76 ft above NGVD. Prior to October 1991, top of shelf was considered to be 10.73 ft above NGVD. Prior to 1977, measuring point was top of casing, reported as 23.00 ft above NGVD.

LAND-SURFACE DATUM .-- Land surface is approximately 7.8 ft above NGVD.

REMARKS .-- Station reconstructed March 15, 1999.

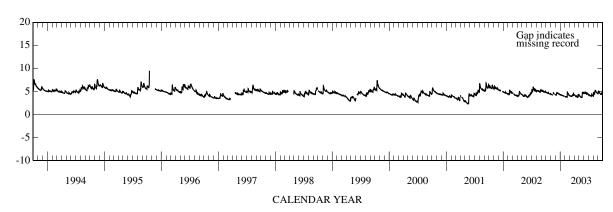
PERIOD OF RECORD.--October 1973 to December 1976, October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.34 ft NGVD, Oct. 17, 1995; lowest, 2.29 ft NGVD, July 7, 1990.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES								
JAN	FEB	MAR	APR	MAY	JUN			

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	4.76 4.62	4.30 4.31	4.27 4.71	4.26 4.21	3.83 3.87	3.99 3.97	4.18 3.93	4.13 3.90	4.55 4.88	4.29 4.12	4.61 4.90	5.07 4.70
15	4.81		4.64	4.09	3.79	3.93	3.85	3.77	4.56	4.10	5.24	4.53
20 25	4.56 4.46	4.52 4.48	4.56 4.49	4.03 3.99	4.47 4.19	4.07 4.09	3.88 3.75	3.65 4.64	4.76 4.46	3.98 4.28	4.84 4.71	4.41 4.74
EOM	4.47	4.31	4.26	3.93	4.16	4.44	4.18	4.66	4.33	3.95	4.53	5.14
MAX	4.86		4.72		4.87		4.41	4.83	4.89	4.46	5.33	5.15





WELL NUMBER.--270913080284901. Local Number M 1255. USGS Observation Well near Indiantown, FL.

 $LOCATION.--Lat\ 27^{\circ}09'13", long\ 80^{\circ}28'49", in\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ Sec. 18, T.38\ S., R.39\ E., Hydrologic\ Unit\ 03090202, at intersection\ of\ County\ Road\ 714\ and\ County\ Road\ 609, approximately\ 10\ mi\ west\ of\ Palm\ City\ and\ 5\ mi\ north\ of\ Indiantown.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4.0 in., depth 35.0 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 31.15 ft above National Geodetic Vertical Datum of 1929. Prior to January 13, 1993, measuring point was top of casing, 31.06 ft above NGVD. See REMARKS.

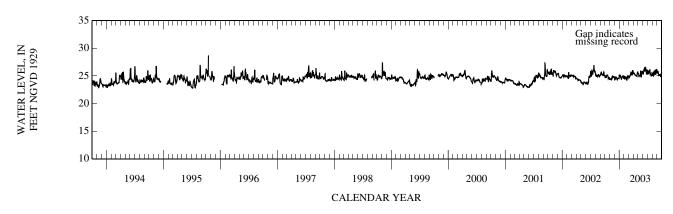
LAND-SURFACE DATUM.--Land surface is approximately 29.6 ft above NGVD.

REMARKS.--Well located near agricultural area. Data logger installed January 13, 1993. See DATUM.

PERIOD OF RECORD.--May 1989 to November 1992 (semiannual), January 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 28.72 ft NGVD, Oct. 18, 1995; lowest, 22.81 ft NGVD, July 8, 1995.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.69	24.47	24.41	24.87	24.63	24.67	25.51	25.37	25.26	25.81	25.17	25.67
10	24.77	24.55	24.90	24.71	24.81	24.92	25.31	24.99	25.90	25.76	25.59	25.34
15	25.19	24.42	24.73	24.41	24.51	25.09	25.14	25.06	26.08	25.94	25.89	25.25
20	25.01	24.76	24.46	24.89	24.61	25.32	24.99	25.85	26.40	25.18	26.11	25.11
25	24.59	24.91	24.55	25.01	24.78	25.23	24.93	25.37	25.26	25.17	25.63	25.09
EOM	24.31	24.78	24.51	24.79	24.83	25.85	25.29	25.71	25.39	25.21	25.73	25.66
MAX	25.19	24.95	24.90	25.22	25.02	26.03	25.71	25.96	26.63	26.19	26.24	25.86



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# Miami-Dade County

# **VOLUME 2B: SOUTH FLORIDA**

# **Key to site locations on figure # 19**

# MIAMI-DADE COUNTY

Index	Site	Well	Page	Index	Site	Well	Page
Number	Number	Name	Number	Number	Number	Name	Number
1	254943080121501	F 45	532	66	254834080171601	G 3466	525
2	254444080144801	F 179	505	67	254839080162301	G 3467	526
3	255008080161801	F 239	538	68	254248080263801	G 3473	498
4 5	254217080171801 252829080285101	F 319 F 358	496 433	69 70	252933080210001	G 3549 G 3550	437 434
6	254950080180801	G 3	536	70 71	252906080213101 254158080294501	G 3550 G 3551	434 489
7	254335080170501	G 432	500	72	254138080284401	G 3551	485
8	254855080163701	G 548	528	73	254152080282101	G 3553	487
9	254130080234501	G 551	484	74	254152080274501	G 3554	486
10	253902080202501	G 553	468	75	254111080272501	G 3555	482
11	254841080164401	G 571	527	76 77	254213080281501	G 3556	494
12 13	254000080181002 253937080304001	G 580A G 596	471 469	77 78	254112080294201	G 3557 G 3558	483 499
13 14	252425080320001	G 613	424	78 79	254334080284401 254445080295001	G 3559	506
15	253258080264301	G 614	452	80	254108080231301	G 3560	481
16	254500080360001	G 618	508	81	254022080263601	G 3561	475
17	254000080460001	G 620	472	82	255112080151901	G 3562	545
18	253537080284401	G 757A	458	83	254340080203601	G 3563	501
19	252928080332401	G 789	436	84	254917080143301	G 3564	530
20	255437080103201	G 852	554 476	85	254218080241801	G 3565	497 537
21 22	254038080280201 253718080192301	G 855 G 860	476 465	86 87	254951080194901 255358080260901	G 3566 G 3567	537 553
23	252612080300701	G 864	426	88	254657080214401	G 3568	512
24	252619080310201	G 864A	427	89	254536080172601	G 3570	509
25	254107080165201	G 896	478	90	255616080180301	G 3571	557
26	254201080173001	G 901	490	91	254432080240401	G 3572	503
27	255600080270001	G 968	556	92	254446080295501	G 3574	507
28 29	255709080223701	G 970	563 549	93 94	254206080294701	G 3575	491 504
30	255209080212801 255208080274001	G 973 G 975	549 548	94 95	254442080305201 254207080300201	G 3576 G 3577	504 492
31	255023080202301	G 976	539	96	254210080304801	G 3578	493
32	254215080201503	G 1074B	495	97	255626080093201	G 3600	560
33	255344080195600	G 1166R	550	98	255358080114101	G 3601	551
34	252944080233401	G 1179	438	99	255116080120601	G 3602	546
35	252947080235301	G 1180	439	100	254722080152201	G 3604	514
36	252918080234201	G 1183	435	101	254629080143101	G 3605	510
37 38	251922080340701 254940080172001	G 1251 G 1282	418 531	102 103	254108080170601 254005080171601	G 3608 G 3609	479 473
39	254813080161501	G 1351	517	104	253710080184701	G 3611	463
40	254833080155801	G 1354	524	105	253457080195501	G 3612	456
41	263630080264801	G 1362	564	106	253214080215401	G 3613	447
42	253233080301001	G 1363	451	107	253024080231001	G 3615	442
43	254950080171202	G 1368A	535	108	252243080335501	G 3619	421
44 45	253012080261401	G 1486 G 1487	441 477	109 110	252312080320301	G 3620	422 420
46	254054080295401 254830080284201	G 1488	522	111	252115080293701 252955080340701	G 3621 G 3622	440
47	252656080350301	G 1502	430	112	253708080304201	G 3626	462
48	255707080255001	G 1637	562	113	253632080321101	G 3627	461
49	254157080214002	G 3074	488	114	253539080320501	G 3628	459
50	254946080172601	G 3250	533	115	254720080253002	G 3676	513
51	255027080245501	G 3253	542	116	252814080244101	G 3698	431
52 53	255026080240302	G 3259A G 3264A	540 541	117 118	252652080244301	G 3699 G 3700	428 444
53 54	255027080221602 253952080321501	G 3204A G 3272	470	119	253027080234701 253214080224601	G 3700 G 3701	449
55	253831080180206	G 3313E	466	120	253334080213601	G 3702	453
56	254823080163701	G 3327	520	121	254822080125501	G 3704	518
57	254752080181501	G 3329	516	122	255625080094901	G 3705	558
58	252007080335701	G 3336	419	123	255035080255401	G 3760	543
59	251724080341401	G 3353	416	124	255035080255402	G 3761	544
60 61	251855080283401	G 3354 G 3355	417 423	125 126	255526080143001	S 18 S 19	555 523
62	252332080300501 252502080253901	G 3356	425 425	126	254832080175001 254857080171101	S 19 S 68	523 529
63	253400080340401	G 3437	455	128	253549080214101	S 182A	460
64	254421080260201	G 3439	502	129	253029080295601	S 196A	446
65	254823080175201	G 3465	521				

# WATER RESOURCES DATA FOR FLORIDA, 2003

# **VOLUME 2B: SOUTH FLORIDA**

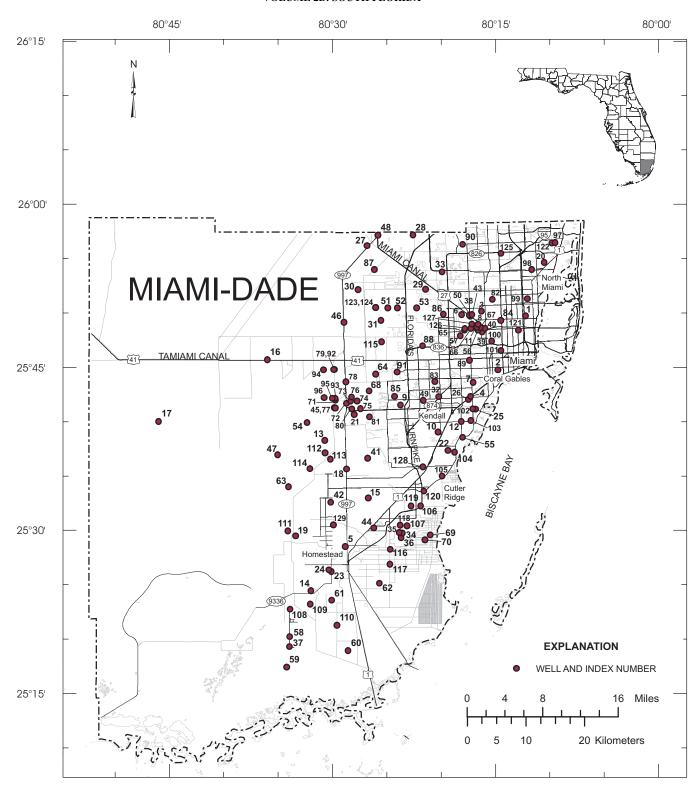


Figure 19: Location of wells in Miami-Dade County

## MIAMI-DADE COUNTY

WELL NUMBER.--251724080341401. Local Number G 3353. USGS Observation Well near Florida City, FL.

LOCATION.--Lat 25°17'24", long 80°34'14", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.18, T.59 S., R.38 E., Hydrologic Unit 03090202, in C-111 drainage basin, 2.5 mi south of L-31W canal and 7 mi west of U.S. Highway 1, 12.5 mi southwest of Florida City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 6 in., depth 8 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 4.73 ft above National Geodetic Vertical Datum of 1929. Prior to July 11, 1997, measuring point was 4.71 ft above NGVD.

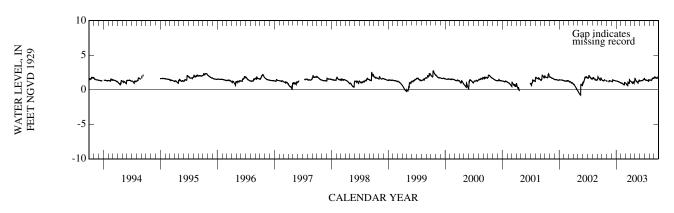
LAND-SURFACE DATUM .-- Land surface is approximately 0.9 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 2.73 ft NGVD, Oct. 17, 1999; lowest, 0.84 ft below NGVD, May 18, 19, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.34	1.21	1.19	1.27	0.96	0.90	1.20	1.48	1.28	1.46	1.43	1.73
10	1.30		1.45	1.21	0.93	0.74	1.11	1.24	1.30	1.38	1.39	1.73
15	1.30	1.16	1.34	1.19	0.78	0.59	0.95	1.13	1.34	1.37	1.39	1.72
20	1.40	1.28	1.33	1.12	0.75	0.98	1.09	0.98	1.33	1.35	1.63	1.66
25	1.37	1.27	1.31	1.05	1.02	0.98	0.90	1.26	1.44	1.30	1.63	1.78
EOM	1.28	1.24	1.27	1.00	1.00	1.31	1.52	1.33	1.65	1.42	1.70	1.98
MAX			1.45	1.27	1.02	1.48	1.52	1.65	1.65	1.63	1.72	1.98



WELL NUMBER.--251855080283401. Local Number G 3354. USGS Observation Well near Florida City, FL.

LOCATION.--Lat 25°18'55", long 80°28'34", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 7, T.59 S., R.39 E., Hydrologic Unit 03090202, in C-111 drainage basin between C-109 and C-110 canals, 1.6 mi west of U.S. Highway 1 and 1.15 mi north of C-111 canal, 8.9 mi south of Florida City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 6 in., depth 8 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 7.27 ft above National Geodetic Vertical Datum of 1929. Prior to destruction of the well, August 24, 1992, top of base was 7.25 ft above NGVD. From September 1992 to September 1993, top of base was incorrectly considered to be 7.03 ft above NGVD. From October 1993 to September 1994, top of base was incorrectly considered to be 7.30 ft above NGVD.

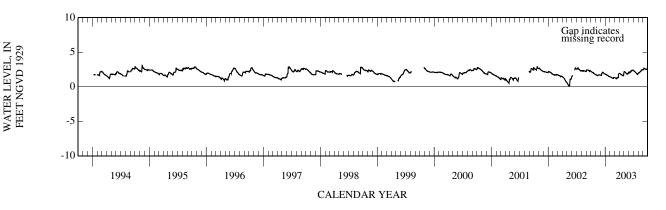
LAND-SURFACE DATUM.--Land surface is approximately 0.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--The figures of water level as elevation, in feet NGVD, from September 1992 to September 1994 are in error. Revised records for 1993 and 1994 water years are in files of the U.S. Geological Survey. The figures of water level as elevation, in feet NGVD, from the period of September 3 to September 30, 2002, are in error due to a misapplication of the datum correction. Corrected records are in the files of the U.S. Geological Survey.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.24 ft NGVD, Aug. 15, 1988; lowest, 0.07 ft NGVD, May 18, 19, 2002.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.17	1.72	1.67	1.78	1.39	1.29	1.92	2.19	2.01	2.27	2.03	2.56
10	2.08	1.65	1.94	1.71	1.35	1.21	1.84	2.11	2.17	2.20	2.11	2.62
15	2.03	1.59	2.05	1.67	1.27	1.15	1.74	1.96	2.15	2.06	2.23	2.56
20	1.94	1.70	2.01	1.58	1.25	1.32	1.67	1.84	2.35	1.95	2.40	2.53
25	1.85	1.72	1.91	1.50	1.34	1.36	1.58	1.90	2.41	1.83	2.45	2.53
EOM	1.76	1.70	1.82	1.44	1.34	1.91	1.95	2.08	2.37	1.89	2.48	2.66
MAX	2.24	1.75	2.08	1.81	1.43	1.91	1.95	2.19	2.41	2.37	2.48	2.69



WELL NUMBER.--251922080340701. Local Number G 1251. USGS Observation Well near Homestead, FL.

 $LOCATION.--Lat~25^{\circ}19'16'', long~80^{\circ}33'58'', in~NE~\frac{1}{4}~SW~\frac{1}{4}~sec.6, T.59~S., R.38~E., Hydrologic~Unit~03090202, 2.5~mi~southwest~of~S-18-C, 5.5~mi~south~of~State~Road~9336~(Ingraham~Highway), 7~mi~west~of~U.S.~Highway~1, and 11.0~mi~southwest~of~Homestead.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 59 ft, cased to 5 ft.

REVISED RECORDS .-- WDR FL-84-2B:1983.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 4.79 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 1984, measuring point was incorrectly considered to be 4.99 ft NGVD. See REMARKS.

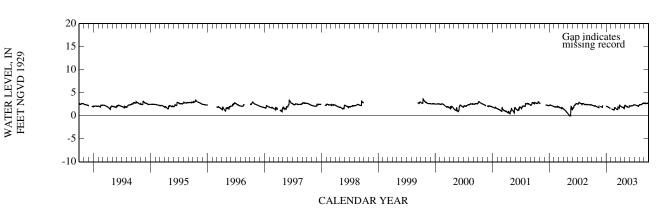
LAND-SURFACE DATUM.--Land surface is approximately 2.8 ft NGVD.

REMARKS.--Well was also used for salinity monitoring until October 1998. The figures of water level as elevation, in feet NGVD, prior to October 1, 1984 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--April 1965 to September 1998, September 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.68 ft NGVD, Oct. 16, 1999; lowest, 1.76 ft below NGVD, May 30, 1965.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.27	1.91	1.89	2.05	1.47	1.54	2.06	2.19	2.11	2.35	2.45	2.67
10	2.19	1.81	2.28	1.94	1.44	1.42	1.94	2.06	2.17	2.31	2.38	2.66
15	2.13	1.75		1.88	1.31	1.32	1.81	2.02	2.16	2.23	2.45	2.66
20	2.08			1.76	1.28	1.85	1.82	1.84	2.17	2.19	2.63	2.65
25	2.13	2.02		1.64	1.80	1.76	1.58	1.97	2.30	2.07	2.71	2.70
EOM	2.00	1.93	2.08		1.74	2.20	2.25	2.15	2.39	2.28	2.66	2.78
MAX	2.32					2.32	2.25		2.39	2.38	2.73	2.78



WELL NUMBER.--252007080335701. Local Number G 3336. USGS Observation Well near Florida City, FL.

 $LOCATION.--Lat~25^{\circ}20'07'', long~80^{\circ}33'57'', in~SW~\frac{1}{4}~NW~\frac{1}{4}~SE~\frac{1}{4}~sec.11, T.58~S., R.38~E., Hydrologic~Unit~03090202, 24~ft~east~of~centerline~of~Aerojet~Road~and~66~ft~southwest~of~Florida~Power~and~Light~power~pole~491, 4.4~mi~south~of~State~Road~9336.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 38 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of base, 8.04 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 2003, measuring point was top of casing, 4.53 ft NGVD.

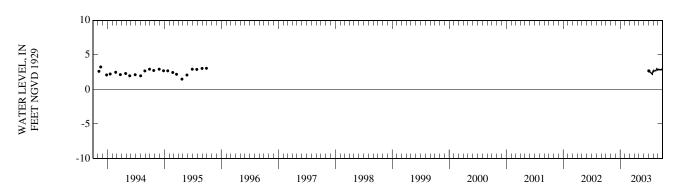
LAND-SURFACE DATUM.--Land surface is approximately 4.5 ft above NGVD.

REMARKS.--Well was used for salinity monitoring until September 1995

PERIOD OF RECORD.--November 1984 to April 1986 (monthly), February 1990 to September 1993 (quarterly), November 1993 to September 1995 (monthly), July 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.68 ft NGVD, Sept. 24, 1985; lowest, 0.22 ft above NGVD, Apr. 19, 1990.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5										2.65	2.75	2.88
10										2.54	2.65	2.84
15										2.43	2.71	2.85
20										2.33	2.83	2.85
25										2.20	2.89	2.90
EOM										2.53	2.87	2.99
MAX											3.00	2.99



WELL NUMBER .-- 252115080293701. Local Number G 3621. USGS Observation Well near Florida City, FL.

LOCATION.--Lat 25°21'15", long 80°29'37", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.26, T.58 S., R.38 E., Hydrologic Unit 03090202, 2.0 mi southeast of S-18-C, 0.9 mi south of SW 424th Street, 1.85 mi west of U.S. Highway 1, on west side of C-110 Canal. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 9 ft.

INSTRUMENTATION .-- Satellite data collection platform.

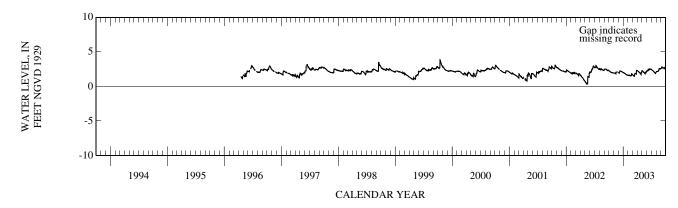
DATUM.--Measuring point: Top of base, 6.56 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 3.1 ft above NGVD.

PERIOD OF RECORD .-- April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.84 ft NGVD, Oct. 15, 1999; lowest, 0.30 ft above NGVD, May 18, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	2.22 2.11 2.03 1.99 1.99 1.93	1.95 1.90 1.82 2.08 2.08 2.02	1.94 2.22 2.22 2.16 2.12 2.01	1.98 1.88 1.82 1.72 1.64 1.62	1.61 1.61 1.54 1.60 1.82 1.75	1.62 1.52 1.68 1.88 1.84 2.35	2.22 2.13 1.98 1.92 1.74 2.21	2.23 2.11 1.98 1.84 1.98 2.20	2.26 2.41 2.42 2.50 2.48 2.46	2.35 2.28 2.15 2.05 1.93 2.06	2.17 2.18 2.24 2.54 2.56 2.58	2.67 2.71 2.70 2.60 2.69 2.87
MAX	2.29		2.24	2.00	1.82		2.30	2.28	2.54	2.44	2.59	2.87



WELL NUMBER.--252243080335501. Local Number G 3619. USGS Observation Well near Homestead, FL.

 $LOCATION.-Lat~25^{\circ}22'43'', long~80^{\circ}33'55'', in~SW~\frac{1}{4}~NW~\frac{1}{4}~SE~\frac{1}{4}~sec.18, T.58~S., R.38~E., Hydrologic~Unit~03090202, 1.5~mi~south~of~State~Road~9336~(Ingraham~Highway)~and~200~feet~east~of~Aerojet~Road, 1.0~mi~east~of~entrance~to~Everglades~National~Park.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 9 ft. (Corrected).

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 6.41 ft above National Geodetic Vertical Datum of 1929.

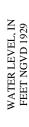
LAND-SURFACE DATUM.--Land surface is approximately 3.4 ft above NGVD.

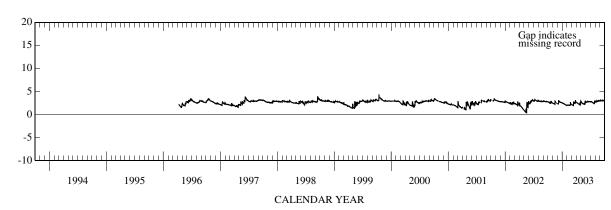
PERIOD OF RECORD .-- April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.24 ft NGVD, Oct. 15, 1999; lowest, 0.47 ft NGVD, May 13, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	2.69 2.54 2.68 2.43 2.65 2.47	2.39 2.30 2.20 2.61 2.47 2.38	2.30 2.96 2.75 2.67 2.61 2.50	2.46 2.34 2.26 2.13 2.04 2.00	2.03 2.03 1.98 2.03 2.33 2.22	2.08 2.01 2.65 2.49 2.49 2.76	2.55 2.43 2.29 2.21 2.03 2.89	2.66 2.43 2.31 2.25 2.46 2.71	2.62 2.75 2.82 2.74 2.80 2.77	2.73 2.70 2.58 2.48 2.37 2.74	2.82 2.76 2.80 2.87 2.98 2.94	2.98 2.97 2.94 3.03 3.06 3.15
MAX	2.93		2.98	2.51	2.66		2.89	2.97	2.82	2.98	3.03	3.15





MAX

2.39

## MIAMI-DADE COUNTY—Continued

WELL NUMBER.--252312080320301. Local Number G 3620. USGS Observation Well near Homestead, FL.

LOCATION.—Lat 25°23'12",long 80°32'01", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 16, T.58 S., R.38 E., Hydrologic Unit 03090202, 1.1 mi south of State Road 9336 (Ingraham Highway) and SW 217th Avenue, 4 mi west of U.S. Highway 1, and 2.0 mi east of entrance to Everglades National Park.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 9 ft. (Corrected).

INSTRUMENTATION .-- Satellite data collection platform

DATUM.--Measuring point: Top of base, 7.04 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 4.0 ft above NGVD.

3.24

2.37

2.18

PERIOD OF RECORD .-- April 1996 to current year.

3.17

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.30 ft NGVD, Sept. 16, 17, 1998; lowest, 0.41 ft NGVD, May 13, 18, 2002.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 2.26 2.26 2.16 2.27 1.98 2.00 2.37 2.51 2.51 2.39 2.72 2.95 2.31 2.19 2.28 2.18 2.51 2.58 10 2.18 2.16 3.24 2.15 2.59 2.78 1.98 1.95 2.09 2.23 2.06 2.55 2.08 1.94 2.79 2.17 3.08 2.66 15 2.07 2.57 2.37 1.96 1.97 2.52 2.13 2.09 2.08 2.93 2.87 20 2.76 2.14 25 2.39 2.35 2.40 2.55 2.21 2.75 2.83 2.99 1.93 1.88 2.12 EOM 2.25 2.24 2.31 2.07 2.79 2.55 2.72 2.71 2.85 3.23 1.87 3.13

3.13

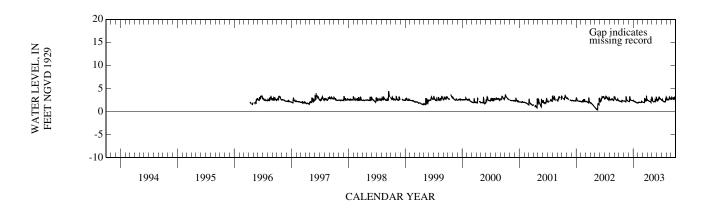
3.12

3.12

2.75

3.11

3.24



WELL NUMBER .-- 252332080300501. Local Number G 3355. USGS Observation Well near Florida City, FL.

LOCATION.—Lat 25°23'32", long 80°30'05", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 11, T.58 S., R.38 E., Hydrologic Unit 03090202, in C-111 drainage basin, 3.8 mi south of Palm Drive on SW 192nd Avenue, in the parking lot of the Everglades Alligator Farm, 2 mi west of U.S. Highway 1, and 4.1 mi southwest of Florida City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 6 in., depth 13 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 7.73 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 5.6 ft above NGVD.

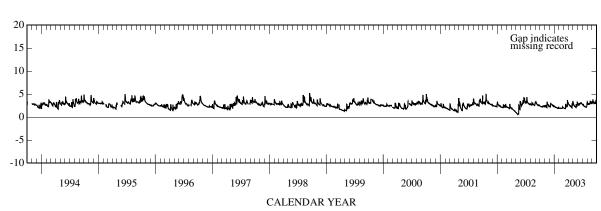
PERIOD OF RECORD .-- August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.21 ft NGVD, Sept. 16, 1998; lowest, 0.54 ft NGVD, May 18, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	2.37 2.26	2.62 2.53	2.27 3.10	2.25 2.18	1.98 1.94	1.93 1.85	2.72 2.54	2.83 2.47	2.65 3.01	2.60 2.48	2.92 2.75	3.42 3.11
15	2.26	2.07		2.07	1.86	2.86	2.30	2.32	2.80	2.28	2.82	3.11
20 25	2.38 2.33	2.70 2.47	2.66 2.40	1.97 1.99	1.94 2.14	2.47 2.41	2.31 1.98	2.21 2.30	2.87 3.02	2.21 2.15	3.45 2.99	2.99 3.60
EOM	2.23	2.43	2.30	1.92	2.07	3.28	3.34	2.97	2.78	2.85	3.10	4.20
MAX	2.47			2.34	2.22		3.34	3.52	3.13	2.95	3.45	4.24





WELL NUMBER.--252425080320001. Local Number G 613. USGS Observation Well near Florida City, FL.

LOCATION.--Lat 25°24'27", long 80°31'27", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  in sec.3, T.58 S., R.38 E., Hydrologic Unit 03090202, on north side of SR 9336 (Ingraham Highway), and 4 mi southwest of Florida City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 21 ft, cased to 18 ft.

INSTRUMENTATION .-- Electronic data logger.

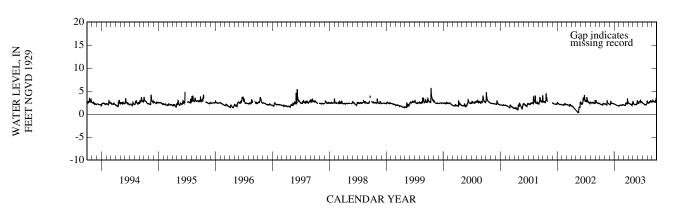
DATUM.--Measuring point: Top of base, 9.13 ft above National Geodetic Vertical Datum of 1929. Prior to the 1996 water year, measuring point was top of casing, 9.06 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 6.1 ft above NGVD.

PERIOD OF RECORD.--January 1950 to current year. Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.11 ft NGVD, Sept. 23, 1960; lowest, 1.49 ft below NGVD, May 14, 1971.

#### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC **FEB** MAR JUN JUL AUG SEP JAN APR MAY 2.23 2.07 2.15 1.93 1.93 2.35 2.35 2.35 2.32 2.76 2.16 2.44 2.26 2.06 2.08 2.85 2.04 2.05 2.72 2.21 2.47 2.72 10 1.95 1.91 2.25 2.32 2.36 2.31 2.10 1.96 1.98 1.90 2.13 2.75 2.09 2.66 2.67 15 2.13 2.73 2.60 2.74 2.84 2.41 2.31 2.07 2.03 2.00 2.67 20 1.99 1.88 1.96 25 2.30 2.23 2.09 2.73 2.99 2.33 2.05 1.81 1.86 2.15 2.50 2.73 **EOM** 2.15 2.16 2.19 2.00 2.63 2.72 2.51 3.46 1.81 2.72 2.85 2.19 2.72 2.50 MAX 2.34 2.88 2.05 3.28 2.91 2.93 2.93 3.48



WELL NUMBER.--252502080253901. Local Number G 3356. USGS Observation Well near Florida City, FL.

LOCATION.--Lat 25°25'09", long 80°25'41", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.34, T.57 S., R.39 E., Hydrologic Unit 03090202, on north side of dirt road approximately 200 ft northeast of Florida Power and Light power pole 267, 2.0 mi south of Palm Drive, and 1.0 mi west of Tallahassee Road, 3.7 mi southeast of Florida City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 6 in., depth 13 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 5.09 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 2.9 ft above NGVD.

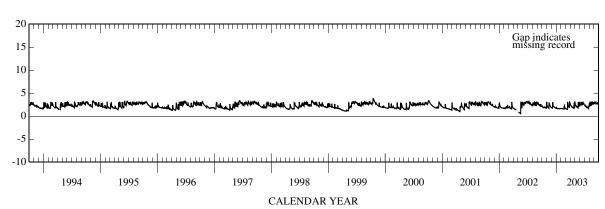
PERIOD OF RECORD .-- October 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.81 ft NGVD, Oct. 16, 1999; lowest, 0.60 ft NGVD, May 18, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	2.28 1.85 1.97 1.91 1.78	2.19 1.86 1.68 2.23 2.07	1.76 3.03 2.12 1.96 1.84	1.72 1.61 1.66 1.64 1.61	1.68 1.64 1.53 1.82 1.89	1.58 1.50 2.93 2.10 1.89	2.27 2.06 1.90 1.85 1.65	2.35 2.09 1.98 1.77 2.39	2.40 2.96 2.91 2.46 2.70	2.22 2.06 1.87 1.85 1.77	3.13 2.35 2.90 3.17 2.71	3.00 2.81 2.83 2.61 2.87
EOM	3.09	1.88	1.69	1.66	1.72	2.98	3.09	2.46	2.42	2.18	2.79	3.03
MAX	3.09	2.94	3.03	1.85	2.54		3.09	3.08	3.12	2.38	3.17	3.15





WELL NUMBER.--252612080300701. Local Number G 864. USGS Observation Well near Florida City, FL.

 $LOCATION.--Lat~25^{\circ}26'12'', long~80^{\circ}30'07'', in~SE~\frac{1}{4}~SW~\frac{1}{4}~sec. 26, T.57~S., R.38~E., Hydrologic~Unit~03090202, on~SW~192nd~Avenue, 0.8~mi~south~of~SW~344th~Street, and~2~mi~southwest~of~Florida~City.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.34 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 8.9 ft above NGVD.

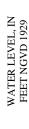
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

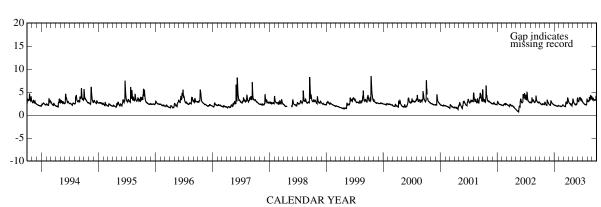
PERIOD OF RECORD .-- January 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.45 ft NGVD, Oct. 15, 1999; lowest, 1.20 ft below NGVD, May 13, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	2.48 2.31 2.26 2.32 2.40	2.66 2.27 2.08 2.93 2.62	2.17 3.08 2.81 2.51 2.35	2.18 2.05 2.03 1.95 1.95	1.97 1.96 1.85 1.99 2.21	1.95 1.88 2.11 2.78 2.55	2.81 2.53 2.29 2.30 1.99	2.98 2.52 2.33 2.21 2.39	2.99 3.75 3.55 3.41 3.55	2.69 2.56 2.32 2.27 2.25	2.95 3.11 3.81 3.91 3.73	3.41 3.44 3.34 3.24 3.49
EOM	2.31	2.33	2.18	1.99	2.17	3.47	3.23	3.55	3.01	3.47	3.75	5.11
MAX	2.62	3.25	3.11	2.18	2.21	3.82	3.31	3.61	3.76	3.48	4.24	5.11





WELL NUMBER.--252619080310201. Local Number G 864A. USGS Observation Well near Florida City, FL.

LOCATION.--Lat 25°26′20″, long 80°30′20″, in SE  $^{1}$ / $_{4}$  NW  $^{1}$ / $_{4}$  SE  $^{1}$ / $_{4}$  sec.26, T.57 S., R.38 E., Hydrologic Unit 03090202, near G-864, 0.25 mi west of SW 192nd Avenue, 0.6 mi south of SW 344th Street, and 2.1 mi southwest of Florida City.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 9 in., depth 20 ft, cased to 7 ft.

REVISED RECORDS .-- WDR FL-85-2B:1982.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.35 ft above National Geodetic Vertical Datum of 1929. From October 1, 1982 to September 30, 1984, measuring point was incorrectly considered to be 9.74 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 8.5 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD from October 1, 1982 to September 30, 1984 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

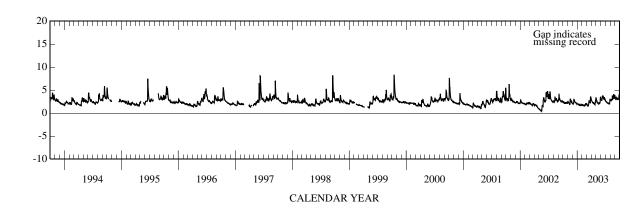
PERIOD OF RECORD .-- January 1962 to current year.

WATER LEVEL, IN FEET NGVD 1929

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.41 ft NGVD, Aug. 18, 1981; lowest, 1.11 ft below NGVD, May 6, 1975.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC **FEB** JUN JUL AUG SEP JAN MAR APR MAY 2.29 2.44 1.96 2.00 1.92 1.66 2.64 2.79 2.46 3.13 2.34 10 2.24 2.11 2.99 1.84 1.70 1.58 2.31 2.27 3.51 2.95 3.14 2.10 2.67 1.84 1.54 1.81 2.10 2.05 3.29 2.15 3.60 3.03 15 1.91 20 2.13 2.75 2.30 1.72 1.67 2.49 2.09 2.02 3.17 2.11 3.01 3.69 2.14 25 2.23 2.57 2.14 1.70 2.14 2.31 1.80 3.37 2.05 3.47 3.29 **EOM** 2.06 2.14 1.98 1.71 1.97 3.24 3.07 3.35 2.78 3.03 3.49 4.97 3.05 3.43 3.79 4.97 MAX 2.61 3.01 2.01 2.14 3.62 3.12 3.03 4.01



WELL NUMBER.--252652080244301. Local Number G 3699. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°26′52", long  $80^{\circ}24'43$ ", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.23, T.57 S., R.39 E., Hydrologic Unit 03090202, 40 ft northeast of east bridge abutment north of SW 344th Street and 0.2 mi east of SW 137th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 88 ft, cased to 83 ft, screened 83 to 88 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.80 ft above National Geodetic Vertical Datum of 1929.

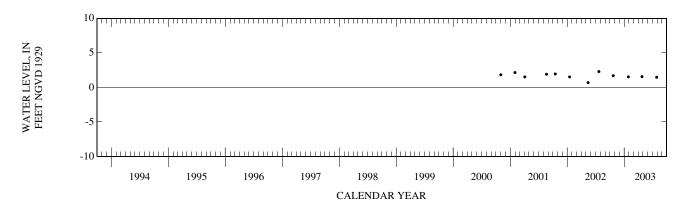
LAND-SURFACE DATUM.--Land surface is approximately 5.8 ft above NGVD.

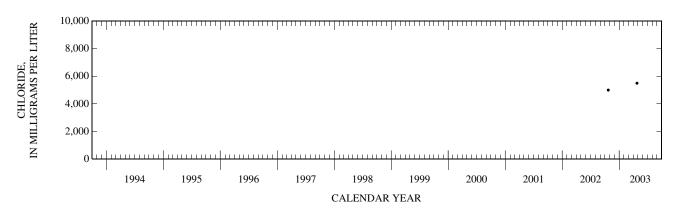
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in October 2002. Water-level measurements began in November 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.29 ft NGVD, July 23, 2002; lowest, 0.70 ft NGVD, May 15, 2002.

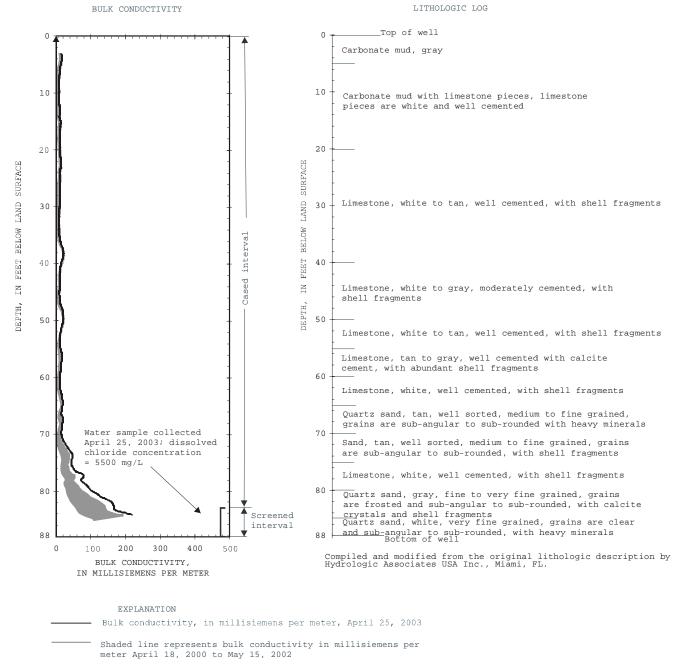
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT	0010	1.70	15.000	5,000	APR	0000	1.56	15.600	5 500
23 JAN	0910	1.70	15,000	5,000	25 JUL	0908	1.56	15,600	5,500
28	0853	1.53			28	0856	1.47		





WELL NUMBER.--252652080244301. Local Number G 3699. USGS Observation Well near Homestead, FL.

#### 252652080244301 G-3699



Delimits the interval for which the well is open to the aquifer

WATER LEVEL, IN FEET NGVD 1929

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--252656080350301. Local Number G 1502. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°36'56", long  $80^\circ35'03$ ", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 25, T.55 S., R.37 E., Hydrologic Unit 03090202, in Grossman Hammock, 11.5 mi northwest of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 31 ft, cased to 11 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.00 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 2000, top of base was incorrectly considered to be 8.98 ft above NGVD. Prior to October 1992, measuring point was top of casing, 8.98 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 8.3 ft above NGVD.

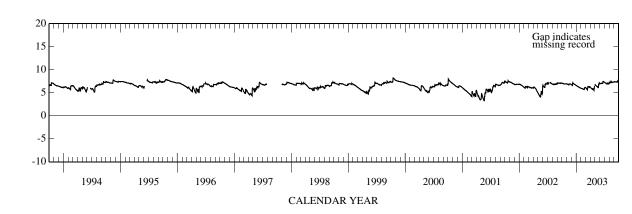
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The figures of water level as elevation in ft NGVD from October 1992 to September 2001 are in error. Because the error (-0.02 ft), is within the accuracy of the instrumentation, records have not been corrected. See DATUM.

PERIOD OF RECORD .-- May 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.24 ft NGVD, Oct. 15, 16, 1999 (current datum); lowest, 0.49 ft NGVD, May 14, 1971. (Corrected).

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.06	6.90	6.67	6.53	5.92	6.03	6.09	6.69	7.00	7.21	7.16	7.38
10	6.96	6.78	7.15	6.38	5.89	5.79	5.92	6.49	7.05	7.09	7.22	7.36
15	6.92	6.72	6.98	6.30	5.77	6.02	5.70	6.36	7.08	6.95	7.31	7.33
20	6.91	6.92	6.89	6.17	5.73	6.33	5.80	6.17	7.01	7.09	7.30	7.38
25	6.93	6.90	6.75	6.09	6.10	6.18	5.50	6.78	7.40	6.97	7.29	7.43
EOM	6.94	6.77	6.60	6.01	6.17	6.28	6.57	7.04	7.30	7.03	7.33	7.72
MAX	7.06	6.93	7.15	6.58	6.17	6.37		7.13	7.55	7.29	7.39	7.75



WELL NUMBER.--252814080244101. Local Number G 3698. USGS Observation Well near Homestead, FL.

 $LOCATION.--Lat~25^{\circ}28'14'', long~80^{\circ}24'41'', in~NW~\frac{1}{4}~NW~\frac{1}{4}~SW~\frac{1}{4}~sec.14, T.57~S., R.39~E., Hydrologic~Unit~03090202, at the northeast corner of the intersection of SW~137th~Avenue~and~SW~320th~Street.~(Corrected).$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 85 ft, cased to 80 ft, screened 80 to 85 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.82 ft above National Geodetic Vertical Datum of 1929.

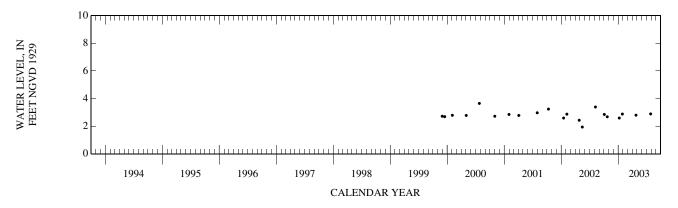
LAND-SURFACE DATUM.--Land surface is approximately 5.8 ft above NGVD.

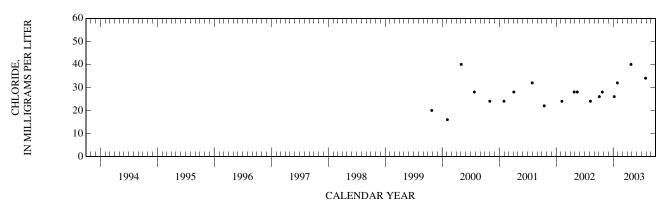
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in October 1999. Water-level measurements began in November 1999.

PERIOD OF RECORD.--October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.65 ft NGVD, July 25, 2000; lowest, 1.94 ft NGVD, May 16, 2002.

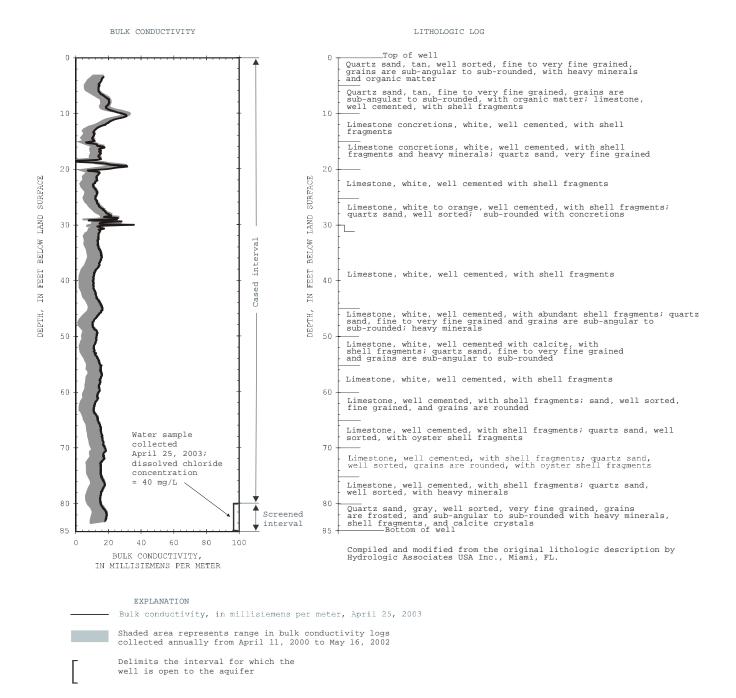
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
04	0952	2.85	364	26.0	25	1052	2.80	362	40.0
23	0945	2.68	382	28.0	JUL				
JAN					28	0912	2.89	369	34.0
08	1448	2.59	339	26.0					
28	0915	2.88	356	32.0					





WELL NUMBER.--252814080244101. Local Number G 3698. USGS Observation Well near Homestead, FL

252814080244101 G-3698



WELL NUMBER.--252829080285101. Local Number F 358. USGS Observation Well in Homestead, FL.

LOCATION.--Lat 25°28'29", long 80°28'51", in NE  $^{1}\sqrt{_4}$  NE  $^{1}\sqrt{_4}$  sec.13, T.57 S., R.38 E., Hydrologic Unit 03090202, at NW 6th Street and NW 2nd Avenue in Homestead, 0.2 mi west of State Road 997 (Krome Avenue).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 54 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.01 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.8 ft above NGVD.

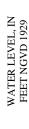
REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

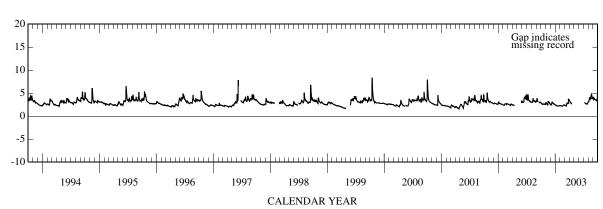
PERIOD OF RECORD .-- January 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.35 ft NGVD, Oct. 15, 1999; lowest, 1.18 ft below NGVD, June 13, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.81	2.90	2.45	2.40	2.25	2.30	3.20				3.21	3.85
10	2.63	2.55	2.87	2.26	2.25	2.26	2.96			2.88	3.87	3.69
15	2.65	2.42	2.97	2.20	2.16	2.60	2.72			2.69	4.10	3.60
20	2.64	3.07	2.75	2.19	2.26	2.83				2.67	4.44	3.48
25	2.60	2.85	2.64	2.20	2.44	2.79				2.65	4.01	3.43
EOM	2.78	2.64	2.43	2.32	2.44	3.59				3.07	3.93	4.85
MAX	2.88	3.16	3.04	2.41	2.44	3.67					4.93	4.85





WELL NUMBER.--252906080213101. Local Number G 3550. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°29'08", long 80°21'31", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.8, T.57 S., R.40 E., Hydrologic Unit 03090202, east of Homestead Air Force Base on SW 304th Street (Kings Highway), 0.5 mi east of SW 107th Avenue, 7.5 mi east of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 13 ft, cased to 8 ft, screened 8 to 13 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 5.79 ft above National Geodetic Vertical Datum of 1929.

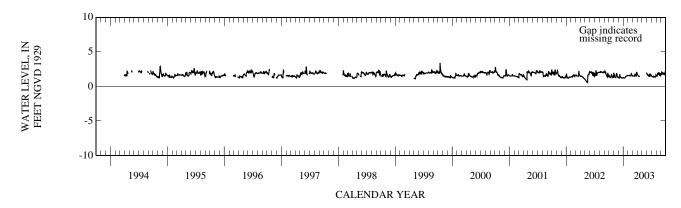
LAND-SURFACE DATUM.--Land surface is approximately 2.9 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.40 ft NGVD, Oct. 15, 1999; lowest, 0.59 ft NGVD, May 18, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.48	1.71	1.24	1.24	1.59	1.51	1.61		1.72	1.41	1.51	1.98
10	1.29	1.34	1.75	1.21	1.59	1.50	1.47		1.61	1.42	1.72	1.79
15	1.45	1.25	1.32	1.37	1.50	1.57	1.45		1.61	1.44	1.81	1.85
20	1.64	1.85	1.28	1.47	1.74	1.67			1.39	1.41	1.96	1.74
25	1.34	1.43	1.24	1.49	1.68	1.52			1.65	1.39	1.55	1.89
EOM	1.30	1.27	1.24	1.59	1.58	1.95		2.00	1.59	1.63	1.82	2.08
MAX	1.70	1.91	1.75	1.59	1.82	2.04			1.84	1.68	1.96	2.09



WELL NUMBER.--252918080234201. Local Number G 1183. USGS Observation Well in Homestead, FL.

LOCATION.--Lat 25°29'18", long 80°23'42", in NW  $^{1}/_{4}$  SW  $^{1}/_{4}$  NW  $^{1}/_{4}$  sec.12, T.57 S., R.39 E., Hydrologic Unit 03090202, on Homestead Air Force Base, 3.0 mi southeast of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 9 in., depth 47 ft.

INSTRUMENTATION .-- Satellite data collection platform and rain gage. See REMARKS.

DATUM.--Measuring point: Top of base, 8.06 ft above National Geodetic Vertical Datum of 1929. Prior to March 26, 2001, the measuring point elevation was 8.05 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

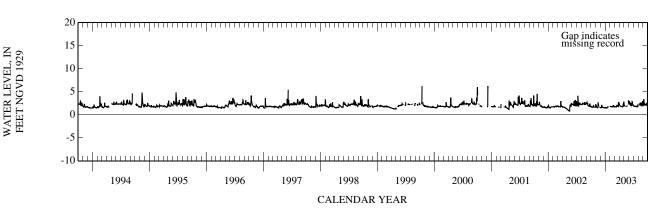
REMARKS.--Well also used for salinity monitoring. A tipping bucket rain gage was installed on April 26, 2001 and removed in April 2003. Records of water levels prior to October 1973, are available in files of the U.S. Geological Survey. Station was rebuilt and a new measuring point was established March 26, 2001. See DATUM.

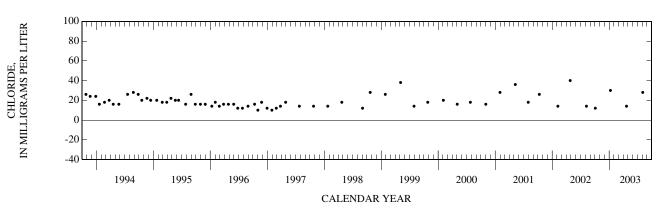
PERIOD OF RECORD .-- January 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.23 ft NGVD, Oct. 15, 1999; lowest, 0.83 ft below NGVD, May 12, 1971 and May 18, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	1.77 1.63 1.75 1.92 1.57	1.96 1.59 1.52 2.06 1.72	1.54 2.15 1.64 1.60 1.54	1.50  1.65 1.72	1.80 1.81 1.71 2.01 1.88	1.76 1.72 1.84 1.92 1.87	1.99 1.83 1.81 1.73 1.74	1.94 1.85 1.80	2.99 2.39 2.28 1.95 2.46	1.87 1.84 1.80 1.87 1.79	2.24 2.33 2.65 1.92	3.20 2.12 2.18 2.10 2.52
EOM MAX	1.70	1.57	1.53 2.15	1.80	1.84 2.05	2.68	2.75 2.75	2.46	2.06	2.04 2.19	2.33	2.60 3.38





WELL NUMBER.--252928080332401. Local Number G 789. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°29'28", long 80°33'24", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec. 6, T.57 S., R.38 E., Hydrologic Unit 03090202, in agricultural field at Homestead General Airport, north of Avocado Drive, 3.5 mi northwest of Homestead, and 4.9 mi west of State Road 997 (Krome Avenue).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 30 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.35 ft above National Geodetic Vertical Datum of 1929. Prior to October 1996, measuring point was top of casing, 9.33 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 6.3 ft above NGVD.

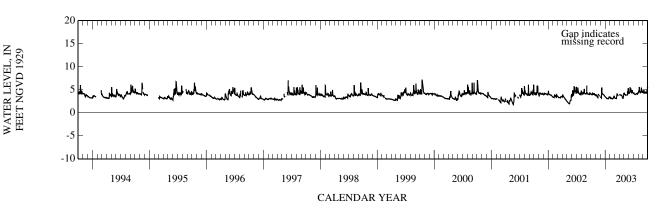
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.73 ft NGVD, Aug. 18, 1981; lowest, 0.90 ft below NGVD, May 8, 1975.

ELEVATION ABOVE NGVD 1929, FEET

				WATER		OBER 2002 MAXIMUM		MBER 2003				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.97	3.85	3.32	3.37	3.19	3.17	3.92	4.06	4.42	4.18	4.76	4.50
10	3.94	3.53	5.48	3.15	3.16	3.11	3.85	3.90	4.97	4.02	4.58	4.38
15	3.90	3.29	4.12	3.10	3.05	3.43	3.81	3.87	5.29	3.96	4.44	4.35
20	4.01	3.99	3.95	3.03	3.08	3.95	3.50	3.86	4.34	4.15	4.83	4.37
25	3.91	3.77	3.83	3.38	3.59	3.79	3.02	4.69	4.45	4.04	4.55	4.60
EOM	3.74	3.51	3.51	3.39	3.60		4.28	4.29	4.25	4.30	4.56	5.33
MAX	4.41		5.48	3.46	3.63			5.32	5.55	4.33	5.49	5.77



WELL NUMBER.--252933080210001. Local Number G 3549. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°29'33", long 80°21'00", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec.5, T.57 S., R.40 E., Hydrologic Unit 03090202, east of Homestead Air Force Base, 0.23 mi north of Military Canal and 0.2 mi west of L-31 East Canal, 0.9 mi east of SW 107th Avenue, 8.5 mi northeast of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 11 ft, cased to 6 ft, screened 6 to 11 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 7.03 ft above National Geodetic Vertical Datum of 1929. Prior to June 27, 2002, measuring point was 7.02 ft above NGVD.

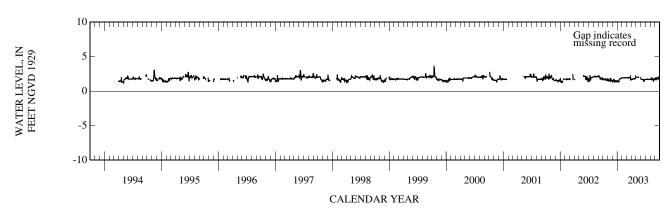
LAND-SURFACE DATUM .-- Land surface is approximately 4.1 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 3.53 ft NGVD, Oct. 15, 1999; lowest, 1.20 ft NGVD, May 4, 1994.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	1.75 1.68	1.68 1.53	1.40 1.76	1.42 1.35	1.93 1.94	1.94 1.93	1.73 1.72	1.99 2.01	1.70 1.67	1.68 1.69	1.70 1.68	1.92 1.72
15	1.71	1.48	1.44	1.70	1.90	1.94	1.78	2.03	1.68	1.70	1.66	1.82
20 25	1.69 1.54	1.87 1.58	1.47 1.48	1.78 1.83	1.94 1.94	1.94 1.92	1.78 1.78	2.03	1.41 1.62	1.70 1.69	1.69 1.64	1.85 1.88
EOM	1.56	1.45	1.49	1.92	1.94	1.72	2.20	2.00	1.68	1.69	1.80	1.98
MAX	1.82	1.87	1.76	1.92	1.96	2.23	2.20		1.81	1.73	2.00	2.00



WELL NUMBER.--252944080233401. Local Number G 1179. USGS Observation Well in Homestead, FL.

LOCATION.--Lat 25°29'44", long 80°23'34", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 1, T.57 S., R.39 E., Hydrologic Unit 03090202, 23 mi southwest of Miami, 3 mi southeast of U.S. Highway 1, in field southeast of Sandia and St. Lo intersection at Homestead Air Force Base.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 9 in., depth 80 ft.

INSTRUMENTATION .-- Semiannual measurement with chalked tape.

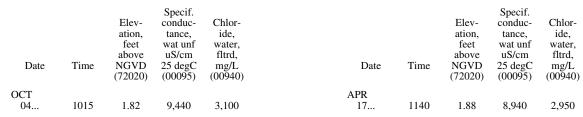
DATUM.--Measuring point: Top of casing, 8.57 ft above National Geodetic Vertical Datum of 1929.

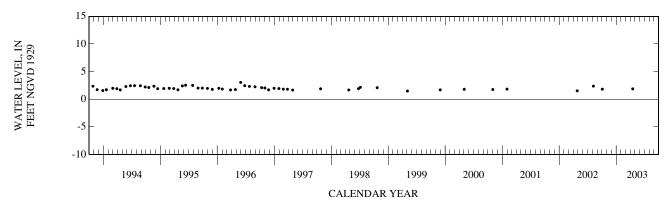
LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

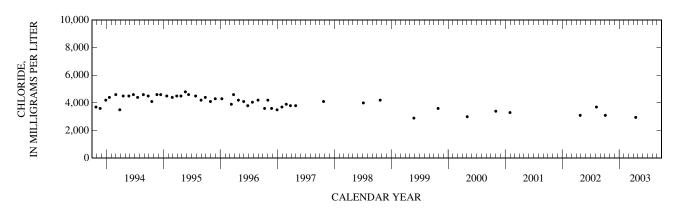
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD .-- June 1983 to March 1997 (monthly), April 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.22 ft NGVD, May 31, 1985; lowest, 0.87 ft NGVD, Mar. 27, 1985.







WELL NUMBER.--252947080235301. Local Number G 1180. USGS Observation Well in Homestead, FL.

LOCATION.--Lat 25°29'47", long 80°23'53", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.2, T.53 S., R.57 E., Hydrologic Unit 03090202, 23 mi southwest of Miami, 3 mi southeast of U.S. Highway 1, at Homestead Air Force Base.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 9 in., depth 67 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.91 ft above National Geodetic Vertical Datum of 1929. Prior to May 7, 2001, measuring point was top of casing, 6.46 ft above NGVD. Prior to October 1999, measuring point was incorrectly considered to be 5.46 ft above NGVD.

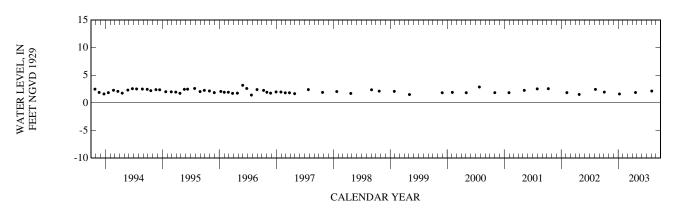
LAND-SURFACE DATUM.--Land surface is approximately 6.5 ft above NGVD.

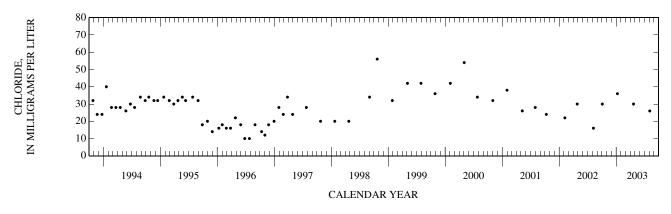
REMARKS.--Well also used for salinity monitoring. Revised measuring point May 7, 2001, is from top of well reconstruction. Figures of water levels as elevation, in ft NGVD, prior to October 1999, are in error. Corrected records are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- June 1983 to March 1997 (monthly), April 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.70 ft NGVD, July 28, 1983; lowest, 0.50 ft below NGVD, Feb. 25, 1985.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
04	1135	1.95	557	30.0	22	1103	1.88	519	30.0
JAN	1006	1.60	506	26.0	AUG	0025	2.15	500	26.0
09	1236	1.62	526	36.0	04	0935	2.15	522	26.0





WELL NUMBER.--252955080340701. Local Number G 3622. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°29'55", long 80°34'07", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.6, T.57 S., R.36 E., Hydrologic Unit 03090202, 0.7 mi west of Homestead General Airport, south of SW 288th Street, 3.5 mi northwest of Homestead, and 5.0 mi west of State Road 997 (Krome Avenue).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 9 ft. (Corrected).

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.16 ft above National Geodetic Vertical Datum of 1929. Prior to June 30, 2000, measuring point was 8.94 ft above NGVD.

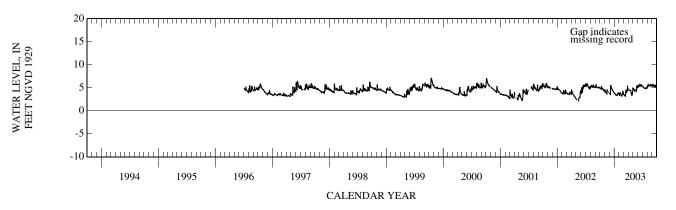
LAND-SURFACE DATUM.--Land surface is approximately 5.9 ft above NGVD.

REMARKS.--Well was destroyed June 29, 2001, and rebuilt with new base July 18, 2001.

PERIOD OF RECORD.--June 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.04 ft NGVD, Oct. 16, 17, 1999; lowest, 2.11 ft NGVD, May 15, 2002.

					YEAR OC	I ABOVE NO TOBER 2002 MAXIMUN	TO SEPTE	FEET EMBER 2003				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.85	4.25	3.67	3.75	3.65	3.46	4.53	4.81	5.48	5.21	5.48	5.42
10	4.75	3.91	5.58	3.52	3.89	3.28	4.48	4.52	5.61	4.99	5.57	5.45
15	4.80	3.67	4.96	3.44	3.25	3.89	4.39	4.44	5.68	4.86	5.38	5.37
20	4.76	4.27	4.55	3.32	3.35	4.27	3.82	4.48	5.34	4.92	5.56	5.43
25	4.47	4.09	4.27	3.80	4.25	4.24	3.26	5.29	5.56	4.84	5.53	5.48
EOM	4.20	3.83	3.92	3.76	4.01	4.82	4.76	5.16	5.33	5.04	5.42	5.94
MAX	5.39		5.58	3.88	4.25		4.76	5.57	5.72	5.37	5.74	5.96



WELL NUMBER.--253012080261401. Local Number G 1486. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°30'10", long 80°26'14", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.4, T.57 S., R.39 E., Hydrologic Unit 03090202, at the southwest corner of SW 284th Street and SW 152nd Avenue, 0.3 mi east of U.S. Highway 1, and 3.0 mi northeast of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 32 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 13.07 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 10.4 ft above NGVD.

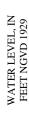
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

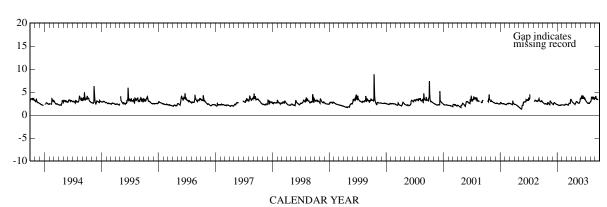
PERIOD OF RECORD .-- May 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.87 ft NGVD, Aug. 18, 1981; lowest, 0.82 ft below NGVD, May 13, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.65	2.66	2.34	2.24	2.22	2.28	3.01	2.96	3.97	3.03	3.09	4.03
10	2.49	2.38	2.64	2.13	2.22	2.20	2.77	2.82	3.77	2.82	3.85	3.52
15	2.46	2.22	2.69	2.13	2.14	2.28	2.63	2.65	4.09	2.62	3.63	3.44
20	2.48	2.86	2.53	2.13	2.25	2.59	2.49	2.53	3.66	2.61	3.98	
25	2.40	2.71	2.41	2.14	2.36	2.61	2.30	2.80	3.52	2.58	3.43	
EOM	2.55	2.49	2.28	2.23	2.36	3.43	2.65	3.62	3.42	2.81	3.74	
MAX	2.77	3.06	2.72	2.27	2.36	3.43	3.35	3.62	4.30	3.34	3.98	





WELL NUMBER.--253024080231001. Local Number G 3615. USGS Observation Well near Homestead, FL.

LOCATION.—Lat 25°30'24", long 80°23'10", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.1, T.57 S., R.39 E., Hydrologic Unit 03090202, approximately 0.9 mi west of SW 112th Avenue on SW 280th Street, 17 ft east of Homestead Air Force Base perimeter fence.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 80 ft, cased to 75 ft, screened 75 to 80 ft.

INSTRUMENTATION .-- Annual profile using an induction logger.

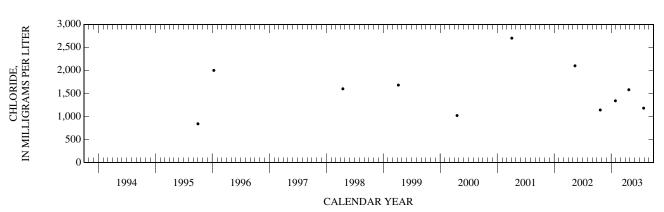
DATUM.--Measuring point: Top of casing, 4.54 ft above National Geodetic Vertical Datum of 1929. Prior to March, 2000, measuring point was estimated to be 5.00 ft above NGVD using a topographic map. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 4.5 ft above NGVD.

REMARKS.--Well also used for salinity monitoring. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in September 1995. Water level measurements began in April 2000. Water level elevation data collected prior to March 14, 2000, has been computed using the measuring point established on March 14, 2000, and it is in the files of the U.S. Geological Survey.

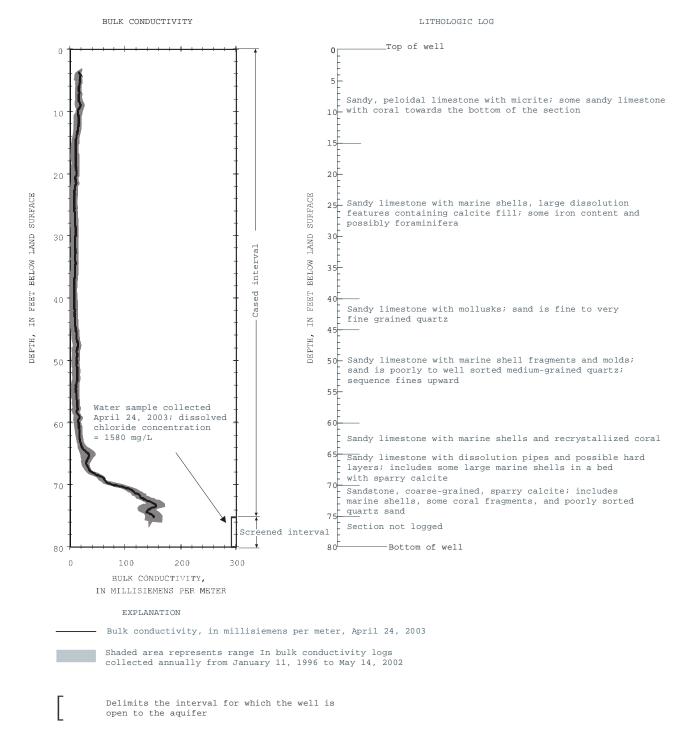
PERIOD OF RECORD.--September 1995 to current year. (Corrected).

Date	Time	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT				APR			
23	1123	4,040	1,140	24	1024	4,950	1,580
JAN				JUL			
28	1037	4,300	1,340	28	1020	3,930	1,180



## WELL NUMBER.--253024080231001. Local Number G 3615. USGS Observation Well near Homestead, FL.

#### 253024080231001 G-3615



WELL NUMBER.--253027080234701. Local Number G 3700. USGS Observation Well near Homestead, FL.

LOCATION.—Lat 25°30'27", long 80°23'47", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.35, T.56 S., R.39 E., Hydrologic Unit 03090202, in the sidewalk 37 ft north of SW 280th Street and 200 ft west of SW 127th Avenue. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 82.5 ft, cased to 77.5 ft, screened 77.5 to 82.5 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.-- Measuring point: Top of casing, 9.35 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 9.4 ft above NGVD.

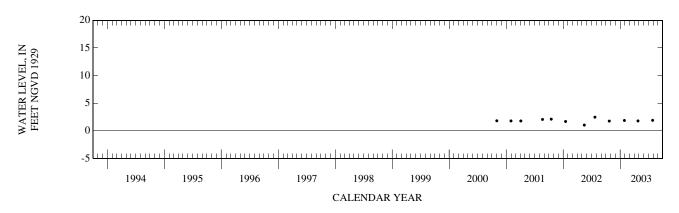
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Annual induction logs began in April 2000. The induction logs published in the 2001 water year are in error. Salinity monitoring began in October 2002. Water-level measurements began in November 2000.

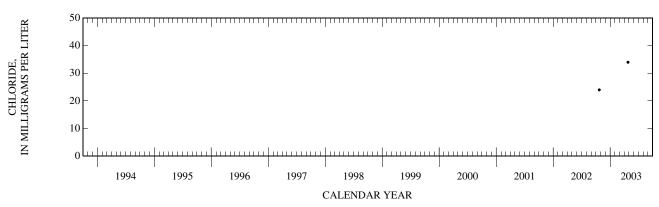
PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.48 ft NGVD, July 23, 2002; lowest, 1.05 ft NGVD, May 16, 2002.

REVISIONS.--The incorrect plot of bulk conductivity was published in Water Resources Data, Florida, Water Year 2001, Volume 2B. The correct plot is available in the files of the U.S. Geological Survey.

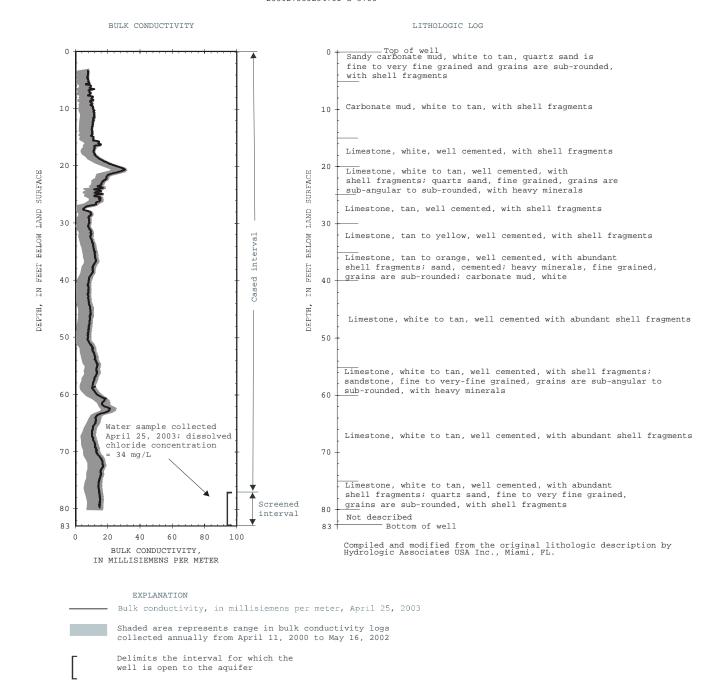
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT	1020	1.77	510	24.0	APR	1.00	470	24.0
23 JAN	1020	1.77	519	24.0	25 1317 JUL	1.80	478	34.0
28	0950	1.88			28 0953	1.91		





WELL NUMBER.--253027080234701. Local Number G 3700. USGS Observation Well near Homestead, FL.

#### 253027080234701 G-3700



WELL NUMBER.--253029080295601. Local Number S 196A. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°30'29", long 80°29'56", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.35, T.56 S., R.38 E., Hydrologic Unit 03090202, at Institute of Food and Agricultural Science Station on Waldin Drive (SW 280th Street), 3.3 mi northwest of Homestead, and 4.3 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

 $WELL\ CHARACTERISTICS.\text{--}Drilled, observation, water-table\ well,\ diameter\ 8\ in.,\ depth\ 20\ ft.$ 

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 13.68 ft above National Geodetic Vertical Datum of 1929. From July 26, 2000 to May 25, 2001, measuring point was 13.54 ft above NGVD. Prior to July 26, 2000, measuring point was 13.48 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 10.3 ft above NGVD.

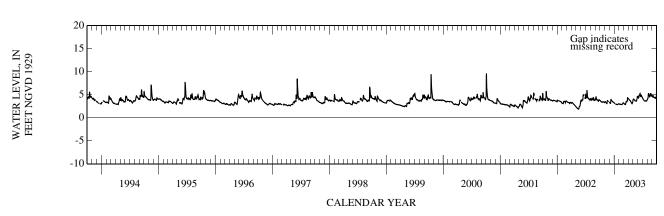
REMARKS.--Revised measuring point because of station re-construction. See DATUM. This well replaced S-196 in January 1956.

PERIOD OF RECORD.--January 1932 to January 1956, S-196. January 1956 to current year, S-196A.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.64 ft NGVD, Oct. 4, 2000; lowest, 1.64 ft below NGVD, May 20, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.67	3.49	3.20		2.94	3.08	3.99	4.06	4.49	4.08	4.27	4.65
10	3.44	3.28	3.79	2.99	2.95	2.96	3.83	3.88	4.91	3.83	5.06	4.61
15	3.49	3.09	3.78	2.92	2.85	2.93	3.68	3.70	5.28	3.65	4.73	4.43
20	3.39	3.73	3.56	2.84	2.90	3.56	3.38	3.62	4.64	3.66	4.99	4.36
25	3.44	3.61	3.43	2.93	3.12	3.64	3.05	3.87	4.77	3.65	5.10	4.25
EOM	3.30	3.39	3.24	3.04	3.26	4.29	3.52	4.64	4.39	3.87	4.77	5.58
MAX	3.78		3.97		3.26		4.25	4.65	5.30	4.31	5.28	5.58



WELL NUMBER.--253214080215401. Local Number G 3613. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°32'14", long 80°21'54", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.19, T.56 S., R.40 E., Hydrologic Unit 03090202, approximately 60 ft east of Florida Turnpike, 20 ft north of SW 248th Street, approximately 160 ft north of Goulds Canal.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 60 ft, cased to 55 ft, screened 55 to 60 ft.

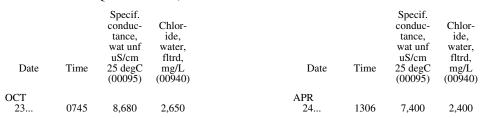
INSTRUMENTATION .-- Annual profile using an induction logger.

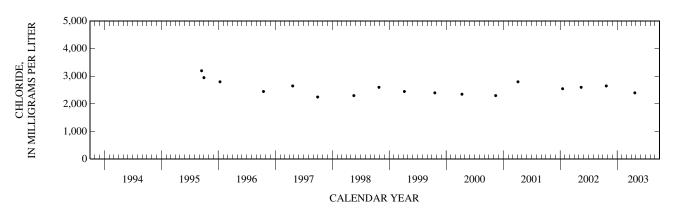
DATUM.-- Measuring point: Top of casing, 4.42 ft above National Geodetic Vertical Datum of 1929. Prior to March, 2000, measuring point was estimated to be 5.00 ft above NGVD from a topographic map.

LAND-SURFACE DATUM.--Land surface is approximately 4.4 ft above NGVD.

REMARKS.--Well is used for semiannual salinity monitoring, including an annual induction log. Salinity monitoring began in September 1995. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book.

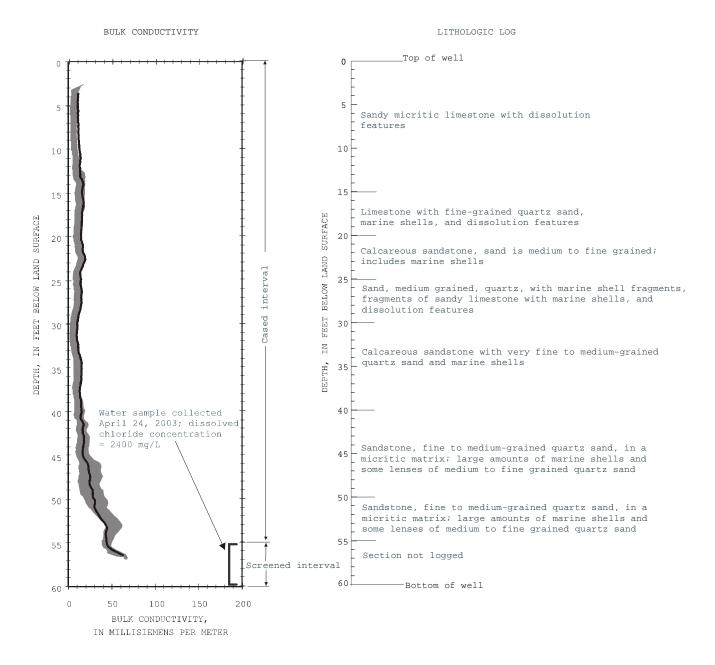
PERIOD OF RECORD.--September 1995 to current year.





WELL NUMBER.--253214080215401. Local Number G 3613. USGS Observation Well near Homestead, FL.

#### 253214080215401 G-3613



#### EXPLANATION

- Bulk conductivity, in millisiemens per meter, Apr. 24, 2003

Shaded area represents range in bulk conductivity logs collected annually from January 12, 1996 to May 15, 2002.

Delimits the interval for which the well is open to the aquifer.  $\label{eq:delta_point}$ 

WELL NUMBER.--253214080224601. Local Number G 3701. USGS Observation Well near Goulds, FL.

LOCATION.--Lat 25°32'14", long 80°22'46", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.19, T.56 S., R.40 E., Hydrologic Unit 03090202, 35 ft north of SW 248th Street and 190 ft east of SW 117th Avenue. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 83 ft, cased to 78 ft, screened 78 to 83 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.64 ft above National Geodetic Vertical Datum of 1929.

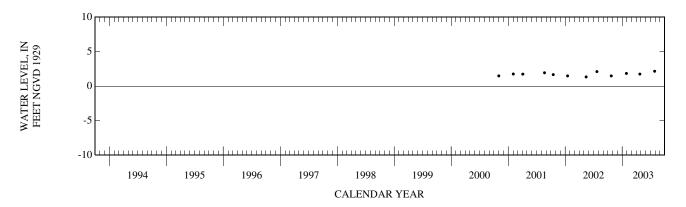
LAND-SURFACE DATUM.--Land surface is approximately 6.6 ft above NGVD.

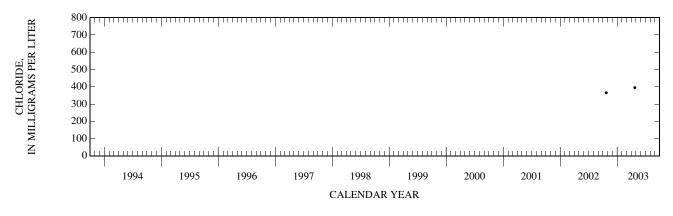
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Annual induction logging began in April 2000. Salinity monitoring began in October 2002. Water-level measurements began in November 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.15 ft NGVD, July 28, 2003; lowest, 1.33 ft NGVD, May 15, 2002.

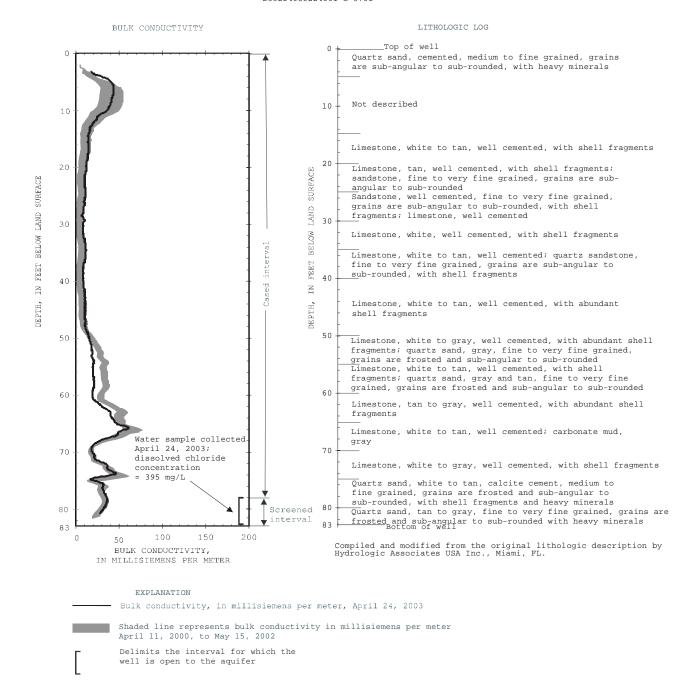
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT 23	0817	1.47	1.480	365	APR 24	1408	1.74	1.350	395
JAN	0817	1.47	1,460	303	24 JUL	1408	1./4	1,330	393
28	0806	1.83			28	0816	2.15		





WELL NUMBER.--253214080224601. Local Number G 3701. USGS Observation Well near Goulds, FL.

#### 253214080224601 G-3701



WELL NUMBER.--253233080301001. Local Number G 1363. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°32'33", long 80°30'10", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.23, T.56 S., R.38 E., Hydrologic Unit 03090202, on Tower Road, 1.5 mi west of State Road 997 (Krome Avenue), and 5.4 mi northwest of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 33 ft, cased to 12 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.63 ft above National Geodetic Vertical Datum of 1929. Prior to August 16, 1997, the measuring point was top of casing, 12.44 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 8.8 ft above NGVD.

3.60

4.18

3.31

3.57

3.63

3.63

REMARKS.--Station reconstructed August 28, 1997. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The open interval of the well has become obstructed or has collapsed at a depth of 23.6 ft. The well remains in communication with the aquifer from 12 to 23.6 ft.

PERIOD OF RECORD .-- November 1968 to current year.

3.75

3.99

DAY

3.63

4.05

**EOM** 

MAX

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.80 ft NGVD (estimated), Aug. 18, 1981; lowest, 0.70 ft below NGVD, May 15, 1971.

ELEVATION ABOVE NGVD 1929, FEET

4.37

4.39

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES											
OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
3.95 3.80	3.72 3.59	3.57 4.00	3.48 3.33	3.23 3.28	3.45 3.28	4.18 4.04	4.67 4.18	4.95 4.99	4.37 4.11	4.83 5.30	5.18 5.01
3.78	3.44	4.11	3.22	3.16	3.19	3.90	3.99	5.79	3.88	5.43	4.75
3.66	3.97	3.93	3.11	3.17	3.78	3.72	3.87	4.94	3.92	5.07	4.64
3.78	3.94	3.77	3.19	3.43	3.75	3.37	4.03	5.48	3.95	5.63	4.50

4.23

4.36

5.11

5.21

4.75

5.79

4.22

4.65

5.01

5.88

6.33

6.33

Gap indicates missing record 15 WATER LEVEL, IN FEET NGVD 1929 10 0 -5 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 CALENDAR YEAR

MAX

3.57

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--253258080264301. Local Number G 614. USGS Observation Well in Goulds, FL.

2.97

2.99

 $LOCATION.--Lat~25°32'58", long~80°26'43", in~NW~\frac{1}{4}~NW~\frac{1}{4}~sec. 21, T.56~S., R.39~E., \\ Hydrologic~Unit~03090202, at southeast corner of Newton~Road~and~Silver~Palm~Drive, 3.0~mi~west~of~U.S.~Highway~1.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 18 ft.

REVISED RECORDS .-- WDR FL-85-2B:1981.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 14.40 ft above National Geodetic Vertical Datum of 1929. From September 1995 to October 1997, the measuring point was 14.39 ft above NGVD. Prior to September 1995, the measuring point was 14.15 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 11.1 ft above NGVD.

REMARKS.--Revised measuring point elevations, September 1995 and October 2, 1997, are the result of station reconstruction. Records of water levels prior to January 1957 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1950 to current year.

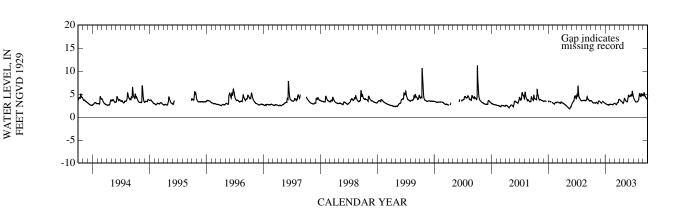
3.51

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.24 ft NGVD, Oct. 4, 2000; lowest, 0.62 ft below NGVD, May 14, 1971.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC **FEB** JUN JUL AUG SEP JAN MAR APR MAY 3.53 3.20 3.11 2.91 2.96 4.08 4.46 3.96 4.18 5.07 10 3.32 3.06 3.14 2.77 2.77 2.82 3.57 3.74 4.51 3.63 5.07 4.88 3.11 2.89 3.44 2.73 2.70 2.72 3.42 3.50 4.76 3.35 4.53 15 4.64 20 3.05 3.42 3.30 2.63 2.72 3.11 3.23 3.33 3.27 4.55 4.14 4.63 25 3.08 3.47 3.17 2.65 2.91 3.17 2.97 3.81 5.44 3.34 4.99 3.96 **EOM** 3.03 3.30 3.00 2.78 2.99 3.85 3.30 4.77 4.54 3.56 4.77 4.83

3.85



3.86

4.77

4.41

5.10

5.32

5.58

WELL NUMBER.--253334080213601. Local Number G 3702. USGS Observation Well near Cutler Ridge, FL.

LOCATION.--Lat 25°33'34", long 80°21'36", in SE ½ SW ¼ NW ¼ sec.17, T.56 S., R.40 E., Hydrologic Unit 03090202, 32 ft west of Black Creek Canal and 183 ft north of Old Cutler Road. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 83 ft, cased to 78 ft, screened 78 to 83 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 4.49 ft above National Geodetic Vertical Datum of 1929.

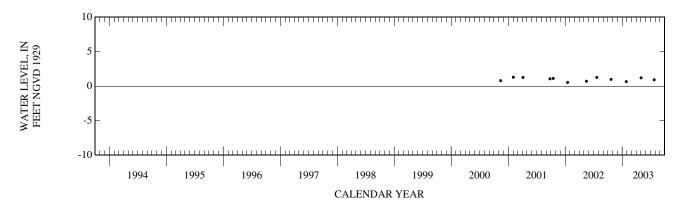
LAND-SURFACE DATUM.--Land surface is approximately 4.5 ft above NGVD.

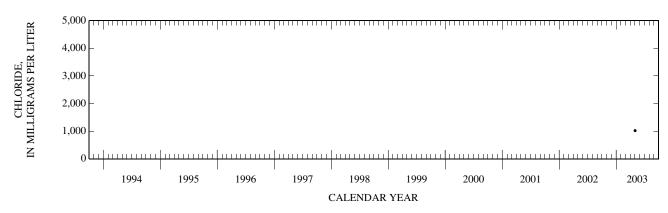
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in May 2003. Annual induction logs began in April 2000. Water-level measurements began in November 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR THE PERIOD OF RECORD.-Highest water level measured, 1.28 ft NGVD, Feb. 2, 2001; lowest, 0.53 ft NGVD, Jan. 16, 2002.

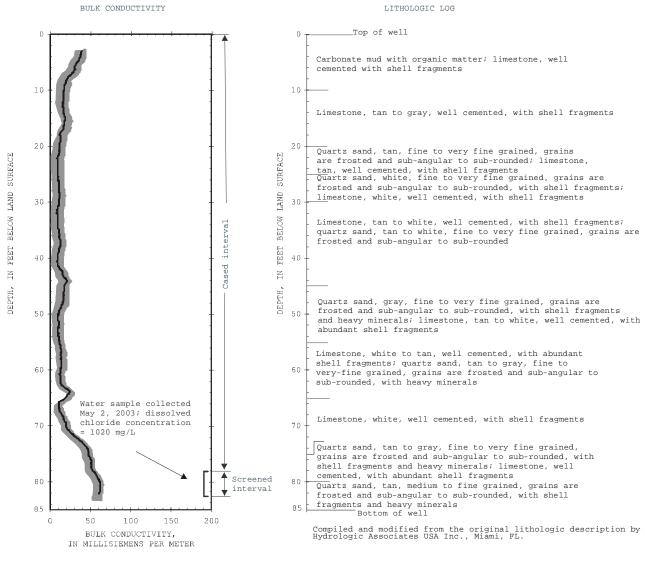
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
22	1635	0.97			02	0837	1.20	3,510	1,020
JAN					JUL				
27	1458	0.65			25	1358	0.91		





WELL NUMBER.--253334080213601. Local Number G 3702. USGS Observation Well near Cutler Ridge, FL.

#### 253334080213601 G-3702



#### EXPLANATION

Bulk conductivity, in millisiemens per meter, May 2, 2003

Shaded area represents range in bulk conductivity logs collected annually from April 11, 2000 to May 17, 2002.

Delimits the interval for which the well is open to the aquifer

WELL NUMBER.--253400080340401. Local Number G 3437. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°34′00", long 80°34′04", in SE ½ SW ½ sec.7, T.56 S., R.38 E., Hydrologic Unit 03090202, 1.5 mi west of Levee 31, 0.15 mi north of SW 216th Street and 10 mi northwest of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 12.5 ft, cased to 12.5 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.63 ft above National Geodetic Vertical Datum of 1929. Prior to April 9, 2002, measuring point was 7.89 ft above NGVD. From April 1, 1988 to February 14, 1996, measuring point was incorrectly considered to be top of base 7.82 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.8 ft above NGVD.

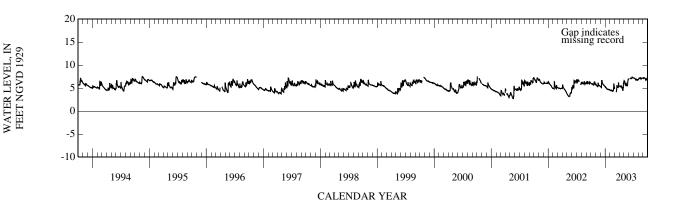
REMARKS.--During a major storm that occurred on October 3-4, 2000, heavy rains caused flooding that caused the float to come out of the well. The extreme water level shown for the period of record, on October 5, 2000, was determined by a manual depth to water measurement made from the measuring point. The actual highest water level that occurred could not be determined. On April 9, 2002, the shelter was rebuilt to prevent water from rising over the base in case of an extreme rain event. The figures of water level as elevation, in feet NGVD, between the period April 1, 1988 to September 30, 1995 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD .-- October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.68 ft NGVD, Oct. 5, 2000; lowest daily maximum water level, 1.61 ft NGVD, May 23, 1990.

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.93	5.64	5.21	5.14	4.50		5.44	6.52		7.16	7.05	7.17
10	5.84	5.43	6.75	4.93	4.55		5.38	5.67	7.17	7.12	7.14	7.22
15	5.76	5.21	6.02	4.80	4.36	4.70	5.20	5.66	7.15	6.82	7.26	7.02
20	5.76	5.65	5.78	4.67	4.39	5.21	4.93	5.52	7.08	6.94	7.00	7.00
25	6.43	5.53	5.60	4.67	5.98	5.17	4.42	6.26	7.35	6.74	7.17	6.99
EOM	5.73	5.38	5.33	4.61	5.28	5.49	6.35	6.99	7.21	6.87	7.15	7.40
MAX	6.43	6.09	6.75	5.28	5.98		6.35	6.99		7.20	7.27	7.40



WELL NUMBER.--253457080195501. Local Number G 3612. USGS Observation Well near Cutler Ridge, FL.

LOCATION.--Lat 25°34′57″, long 80°19′55″, in SW  $^{1}\!\!/_{4}$  SW  $^{1}\!\!/_{4}$  SW  $^{1}\!\!/_{4}$  sec.3, T.56 S., R.40 E., Hydrologic Unit 03090202, at St. Timothy's Church, east of intersection of SW 86th Avenue and SW 198th Street, 6 ft south of SW 198th Street, 2.2 mi east of U.S. Highway 1 and the Florida Turnpike.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 62 ft, cased to 56 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.07 ft above National Geodetic Vertical Datum of 1929. Prior to the 2000 water year, measuring point was estimated to be 5.00 ft above NGVD from the topographic map.

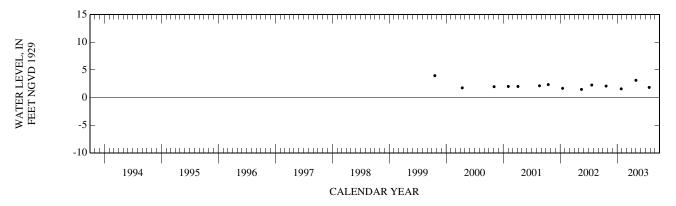
LAND-SURFACE DATUM.--Land surface is approximately 8.1 ft above NGVD.

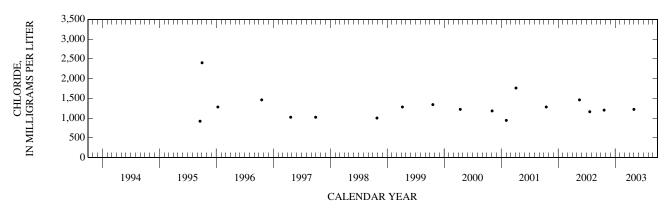
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began September 1995. Water-level measurements began October 1999.

PERIOD OF RECORD.--September 1995 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.97 ft NGVD, Oct. 20, 1999; lowest, 1.48 ft NGVD, May 17, 2002.

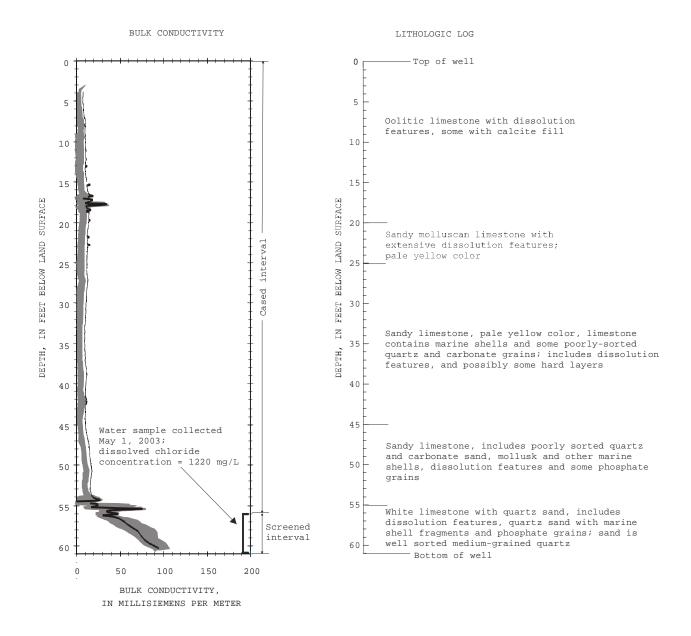
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
22	1616	2.08	4,120	1,200	01	1335	3.12	3,950	1,220
JAN					JUL				
27	1440	1.58			25	1332	1.83		





WELL NUMBER.--253457080195501. Local Number G 3612. USGS Observation Well near Cutler Ridge, FL.

#### 253457080195501 G-3612



# EXPLANATION

- Bulk conductivity, in millisiemens per meter, May 1, 2003

Shaded area represents range in conductivity logs collected annually from January 12, 1996 to May 17, 2002

Delimits the interval for which the well is open to the aquifer  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

WELL NUMBER.--253537080284401. Local Number G 757A. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°35'37", long 80°28'44", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.1, T.56 S., R.38 E., Hydrologic Unit 03090202, at southwest corner of Eureka Drive and State Road 997 (Krome Avenue), 8.7 mi north of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 33 ft, cased to 12.4 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 12.56 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 9.9 ft above National Geodetic Vertical Datum of 1929. (Corrected).

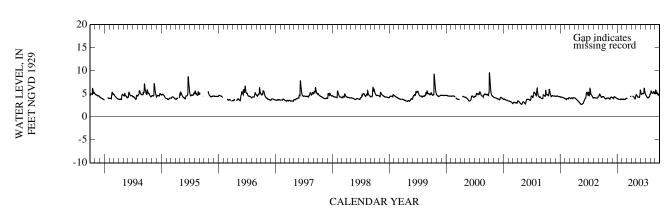
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The well was originally open to 33 ft. The open interval has collapsed or become obstructed at a depth of 12.5 ft. Tests indicate the well is in good communication with the aquifer.

PERIOD OF RECORD .-- January 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.60 ft NGVD, Sept. 10, 1960; lowest, 0.02 ft NGVD, May 13, 14, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.36	4.10	4.05	3.91	3.83	3.95		4.78	4.90	4.64	5.56	5.80
10	4.16	3.98	4.20	3.82	3.83		4.46	4.42	4.98	4.36	5.40	5.21
15	3.98	3.83	4.34	3.78	3.79		4.39	4.30	5.09	4.12		5.20
20	3.84	4.21	4.22	3.75	3.77		4.18	4.24	4.92	4.12	5.13	4.87
25	4.02	4.26	4.07	3.80	3.91		3.88	4.50	5.90	4.34	5.36	4.64
EOM	4.03	4.18	3.98	3.81	4.02	4.52	4.52	5.69	5.08	4.94	5.27	6.16
MAX	4.38	4.26	4.35	3.95	4.02			5.80	6.18	4.94		6.16



WELL NUMBER.--253539080320501. Local Number G 3628. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°35'39", long 80°32'05", SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.33, T.55 S., R.38 E. Hydrologic Unit 03090202, located 1.7 mi south on first road west of SW 205th Avenue off of SW 168th Street, 0.7 mi west of pump station S-331. The station is located 0.5 mi west of the L-31 levee, 20 ft north of the red gate in the field by the curve in the road. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 12 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 10.51 ft above National Geodetic Vertical Datum of 1929.

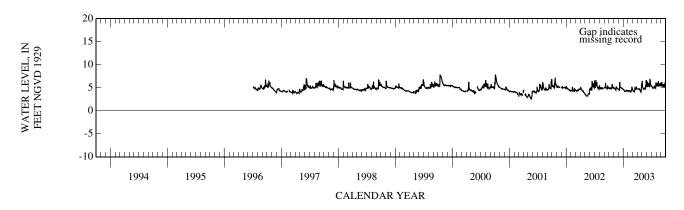
LAND-SURFACE DATUM.--Land surface is approximately 6.1 ft above NGVD.

REMARKS.--Landnet information is not available on U.S. Geological Survey topographic maps.

PERIOD OF RECORD .-- July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.85 ft NGVD, Oct. 15, 1999; lowest, 2.52 ft NGVD, May 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.82	4.92	4.56	4.53	4.39	4.39	4.75	5.21	5.61	5.22	6.06	5.89
10	4.84	4.71	6.24	4.34	4.35	4.18	4.72	4.77	5.61	4.93	5.35	5.40
15	4.67	4.51	5.10	4.25	4.22	4.36	4.64	4.85	6.00	4.98	5.42	5.36
20	4.81	4.96	4.95	4.23	4.26	4.84	4.44	4.69	5.22	5.28	5.82	5.31
25	5.05	4.88	4.87	4.35	5.14	4.78	4.02	5.39	5.84	4.95	5.45	5.72
EOM	4.93	4.73	4.64	4.34	4.85	4.84	5.85	5.41	5.41	5.56	5.52	6.35
MAX	5.81	5.17	6.24	4.60	5.14		5.89	6.64	6.84	6.08	6.38	6.62



WELL NUMBER.--253549080214101. Local Number S 182A. USGS Observation Well near Peters, FL.

LOCATION.—Lat 25°35'49", long 80°21'41", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.5, T.56 S., R.40 E., Hydrologic Unit 03090202, on SW 185th Terrace west of SW 104th Avenue, 0.1 mi north of Quail Roost Drive, 0.4 mi west of U.S. Highway 1, and 16.4 mi southwest of Miami.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 51 ft, cased to 8.7 ft.

REVISED RECORDS .-- WDR FL-84-2B:1983

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 13.47 ft above National Geodetic Vertical Datum of 1929. From May 31, 1995 to May 23, 2000, top of base was 13.62 ft above NGVD. From May 31, 1995 to September 1995, top of base was incorrectly considered to be 13.53 ft above NGVD. From October 1994 to May 1995, top of base was 13.53 ft NGVD. From July 1981 to October 1994, measuring point was top of casing, 13.53 ft above NGVD. Prior to July 1981, top of casing was 14.14 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 11.1 ft above NGVD.

REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey. The well was published as S-182 prior to the 1975 water year. The well was damaged May 23, 1995, reconstructed May 31, 1995; also damaged in February 2000, reconstructed on May 23, 2000. The figures of water levels as elevation, in ft NGVD, from June 1995 to September 1995 are in error. Corrected records are in the files of the U.S. Geological Survey. See DATUM. The well was originally open to the aquifer from 9 to 51 ft. The open interval has collapsed or become obstructed at a depth of 28 ft. Measured well depth at 32.7 ft, below NGVD, in October 17, 1940; 30.4 ft top of base on May 27, 2003.

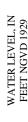
PERIOD OF RECORD .-- January 1940 to current year.

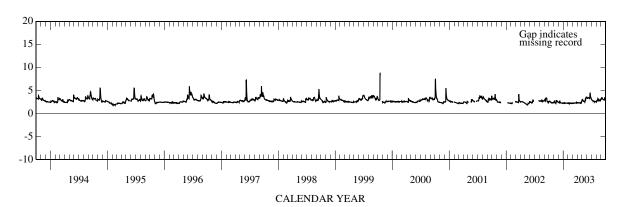
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.70 ft NGVD, Sept. 10, 1960; lowest, 0.44 ft below NGVD, June 21, 1945.

ELEVATION ABOVE NGVD 1929, FEET

# 

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.67	2.69	2.39	2.20	2.20	2.26	2.28	3.05	3.38	2.88	2.73	3.15
10 15	2.59 2.33	2.28 2.25	2.80 2.28	2.22 2.26	2.23 2.24	2.23 2.23	2.28 2.32	2.74 2.60	3.38 3.43	2.75 2.66	2.99 2.73	3.22 3.02
20	2.30	2.81	2.28	2.24	2.24	2.28	2.28	2.44	3.10	2.53	2.95	2.89
25	2.32	2.60	2.28	2.24	2.25	2.24	2.28	3.29	3.65	2.61	2.68	3.32
EOM	2.34	2.39	2.26	2.24	2.20	2.39	2.74	3.54	3.25	2.48	3.01	3.19
MAX	2.67	2.81	2.80	2.43	2.26	2.43	2.74	3.56	4.42	3.13	3.25	3.53





WELL NUMBER.--253632080321101. Local Number G 3627. USGS Observation Well near Miami, FL.

 $LOCATION.--Lat~25^{\circ}36'32'', long~80^{\circ}30'11'', NE~\frac{1}{4}NE~\frac{1}{4}NW~\frac{1}{4}sec.35~T.55~S., R.38~E., Hydrologic~Unit~03090202, located~on~the~southwest~corner~of~SW~168th~Street~and~SW~192nd~Avenue,~1.5~mi~west~of~State~Road~997~(Krome~Avenue).~(Corrected).$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 12 ft, cased to 10.8 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 10.95 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 7.9 ft above NGVD.

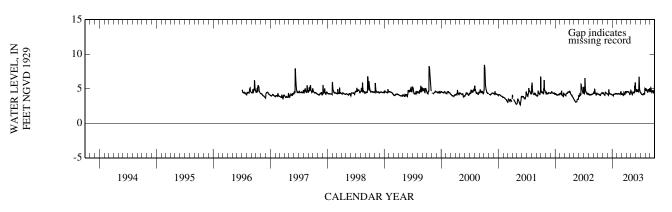
REMARKS.--The well was reported as originally open to the aquifer from 10.8 to 12 ft. The open interval of this well has become collapsed or obstructed at a depth of 9.6 ft.

ELEVATION ABOVE NGVD 1929, FEET

PERIOD OF RECORD.--July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.27 ft NGVD, Oct. 15, 1999; lowest, 2.65 ft NGVD, May 22, 2001.

DAY	OCT	NOV	DEC	JAN	DAILY FEB	MAXIMUN MAR	I VALUES APR	MAY	JUN	JUL	AUG	SEP
5	4.24	4.38	4.14	4.09	4.29	4.33	4.60	4.44	4.53	4.35	5.03	4.92
10	4.17	4.18	4.90	4.18	4.30	4.11	4.58	4.13	4.81	4.17	4.67	4.62
15	3.96	4.05	4.31	4.23	4.25	4.13	4.50	4.56	4.69	4.15	4.53	4.61
20	4.17	4.41	4.25	4.24	4.24	4.28	4.43	4.43	4.46	4.30	4.81	4.57
25	4.37	4.37	4.19	4.26	4.54	4.38	4.09	5.44	5.17	4.23	4.74	4.42
EOM	4.30	4.27	4.11	4.27	4.25	4.30	4.79	5.00	4.51	5.01	4.75	5.86
MAX	4.41	4.50	4.90	4.33	4.63		4.79	5.91	6.73	5.05	5.07	5.90



WELL NUMBER.--253708080304201. Local Number G 3626. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°37'06", long 80°30'41", SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 26 T.55 S., R.38 E., Hydrologic Unit 03090202, located 20 ft east of SW 197th Avenue, 1.3 mi south of Howard Drive (SW 136th Street), 2.1 mi west of State Road 997 (Krome Avenue). (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 10 in., depth 12 ft, cased to 10.8 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 10.74 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.3 ft above NGVD.

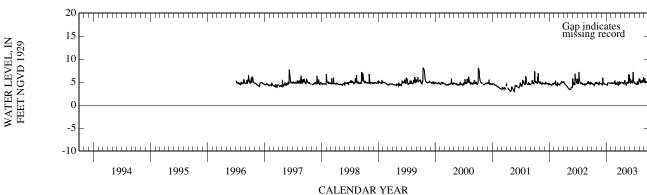
REMARKS.--The well was reported originally open to the aquifer from 10.8 to 12 ft. The open interval has become obstructed or collapsed at a depth of 9.2 ft. PERIOD OF RECORD.--July 1996 to current year.

ELEVATION ABOVE NGVD 1929, FEET

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.03 ft NGVD, Oct. 15, 1999; lowest, 2.96 ft NGVD, May 22, 2001.

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 4.78 4.77 4.93 4.52 4.45 4.83 4.67 4.84 4.75 5.54 4.95 4.68 10 4.57 4.78 4.89 4.51 5.93 4.79 4.57 4.34 5.33 4.58 4.44 4.95 5.06 4.56 5.07 15 4.31 4.66 4.83 4.76 4.50 4.84





WELL NUMBER.--253710080184701. Local Number G 3611. USGS Observation Well near Cutler, FL.

LOCATION.--Lat 25°37'10", long 80°18'47", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 26, T.55 S., R.40 E., Hydrologic Unit 03090202, adjacent to Deering Estate, 6 ft east of SW 74th Avenue, 40 ft north of SW 163rd Street, 0.1 mi west of Old Cutler Road, 2 mi east of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 100 ft, cased to 95 ft, screened 95 to 100 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.98 ft above National Geodetic Vertical Datum of 1929. Prior to March 2000, measuring point was estimated to be 9.00 ft above NGVD from a topographic map. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.0 ft above NGVD.

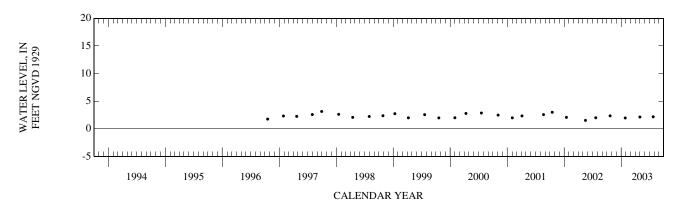
REMARKS.--Well is also used for quarterly salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began August 1995. Water-level measurements began in October 1996. Water-level elevation data collected prior to March 14, 2000, have been computed using the measuring point established on March 14, 2000 and are in the files of the U.S. Geological Survey.

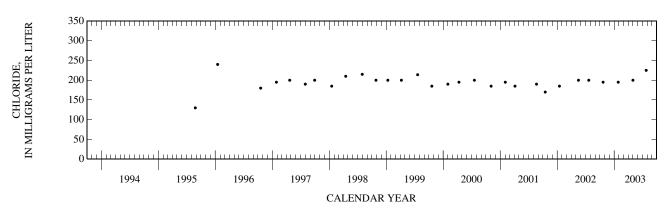
PERIOD OF RECORD.--August 1995 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.00 ft NGVD, Oct. 16, 2002; lowest, 1.53 ft NGVD, May 17, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

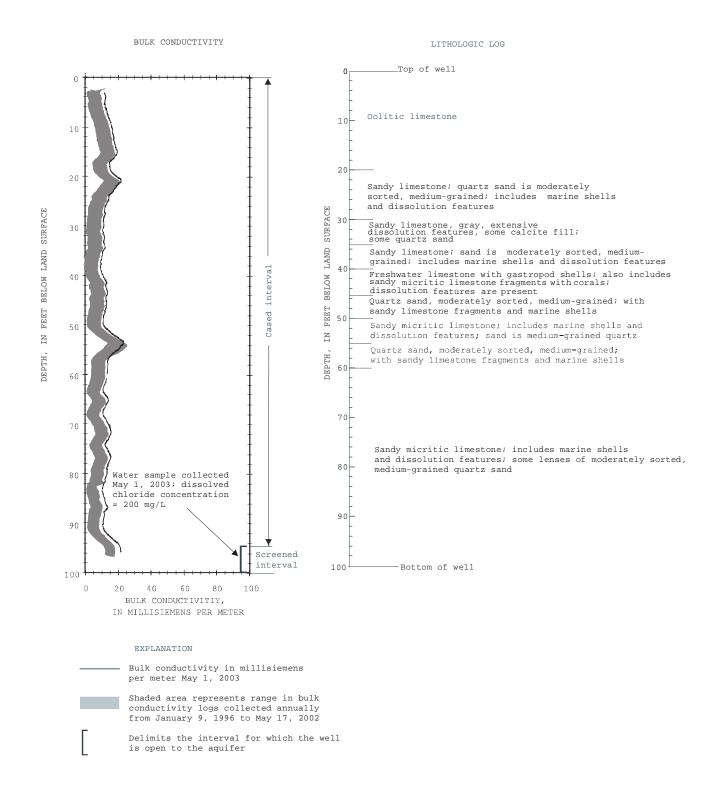
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
22	1523	2.36	1,020	195	01	1120	2.14	958	200
JAN					JUL				
27	1401	1 97	919	195	25	1303	2.18	1.020	225





WELL NUMBER.--253710080184701. Local Number G 3611. USGS Observation Well near Cutler, FL.

#### 253710080184701 G-3611



WELL NUMBER.--253718080192301. Local Number G 860. USGS Observation Well near Perrine, FL.

LOCATION.--Lat 25°37′18″, long 80°19′23″, in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.27, T.55 S., R.40 E., Hydrologic Unit 03090202, at Kahn Road and SW 160th Street, 1.2 mi east of U.S. Highway 1, 1.7 mi northeast of Perrine, and 13 mi southwest of Miami.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 10.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 12.95 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 10.4 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

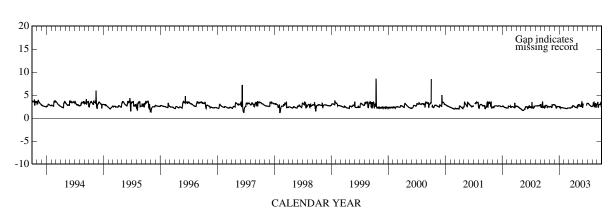
PERIOD OF RECORD .-- March 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.45 ft NGVD, Sept. 23, 1960; lowest, 0.38 ft NGVD, May 22, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.68	2.55	2.83	2.42	2.15	2.22	2.61	2.95	3.10	3.20	2.73	3.30
10	2.79	2.45	2.48	2.42	2.15	2.18	2.47	2.93		3.04	3.32	2.41
15	2.35	2.31	2.34	2.29	2.10	2.15	2.33	2.55		2.81	2.64	2.96
20	2.48	2.79	2.48	2.28	2.07	2.37	2.34	2.59		2.64	3.14	2.99
25	2.47	2.95	2.53	2.22	2.19	2.40	2.25	3.13	2.70	2.59	2.37	3.40
EOM	2.41	2.94	2.48	2.17	2.19	2.69	2.76	2.33	3.21	2.52	3.10	2.56
MAX	2.79	2.95	2.88	2.49	2.19	2.70	2.76	3.55		3.22	3.48	3.52





WELL NUMBER.--253831080180206. Local Number G 3313E. USGS Observation Well near Pinecrest, FL.

LOCATION.--Lat 25°38'31", long 80°18'02", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  Sec.24, T.55 S., R.40 E., Hydrologic Unit 03090202, at USDA Agricultural Station, 50 ft east of fence along SW 67th Avenue, 75 ft north of intersection of SW 67th Avenue and SW 138th Terrace, 2.1 mi east of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8.25 in. to a depth of 32 ft, diameter 7.5 in. from 32 to 114 ft, depth 114 ft, cased to 32 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.70 ft above National Geodetic Vertical Datum of 1929. Prior to March, 2000 measuring point was estimated to be 12 ft NGVD, from topographic map. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 12.7 ft above NGVD.

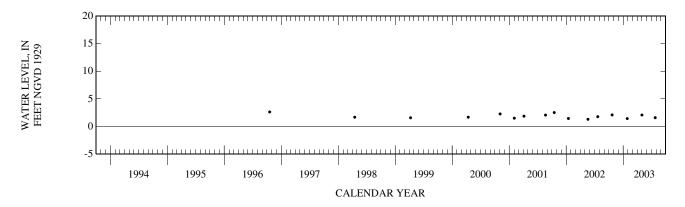
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the freshwater/salt-water interface in ground water. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1995 and 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. The incorrect plot of bulk conductivity was published in Water Resources Data, Florida, Water Year 2000, Volume 2B. The correct plot is in the files of the U.S. Geological Survey. Water-level elevation data collected prior to March 14, 2000, have been computed using the measuring point established on March 14, 2000, and are in the files of the U.S. Geological Survey.

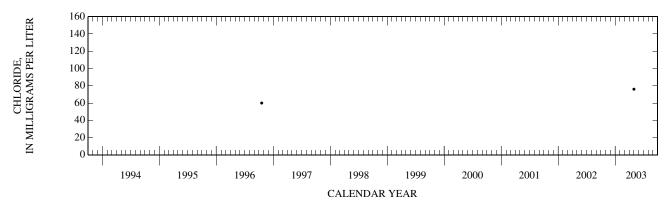
PERIOD OF RECORD.--October 1996 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.64 ft NGVD, Oct. 18, 1996 (Corrected); lowest, 1.31 ft NGVD, May 20, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

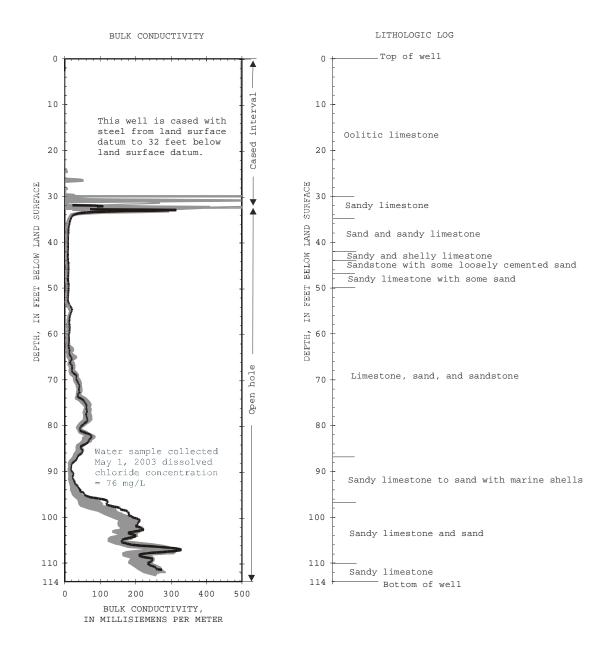
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT 22	1438	2.10			MAY 01	0853	2.09	622	76.0
JAN 27	1340	1.44			JUL 25	1250	1.60		70.0
41	1340	1.44			23	1230	1.00		





WELL NUMBER.--253831080180206. Local Number G 3313E. USGS Observation Well near Pinecrest, FL.

#### 253831080180206 G-3313E



## EXPLANATION

Bulk conductivity, in millisiemens per meter, May 1, 2003

Shaded area represents range in bulk conductivity logs collected annually from June 19, 1995 to May 20, 2002

WELL NUMBER.--253902080202501. Local Number G 553. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°39'02", long 80°20'19", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.16, T.55 S., R.40 E., Hydrologic Unit 03090202, on the south side of SW 128th Street, 0.5 mi west of US Highway 1, 13 mi southwest of Miami. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 24 in. from a depth of 0 to 36 ft, 18 in. from 36 to 79 ft, 12 in. from 79 to 91 ft. Depth 91 ft, cased to 36 ft, slotted casing 36 to 79 ft, open hole from 79 to 91 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 14.87 ft above National Geodetic Vertical Datum of 1929. From October 29, 1992 to November 23, 1999, top of base was 12.50 ft above NGVD. From October 29, 1992 to September 1995 measuring point was incorrectly considered to be top of casing, 12.76 ft above NGVD. From July 1970 to October 29, 1992, measuring point was top of casing, 12.76 ft above NGVD. From October 1975 to September 1979, top of casing was incorrectly reported as 15.11 ft above NGVD. Prior to June 25, 1970, measuring point was top of casing, 12.41 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 12.1 ft above NGVD.

REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey. Based on a review of historical records, the published records of water level, in ft NGVD, from October 29, 1992 to April 12, 1996 are in error. Station was reconstructed June 1970, November 1992 and November 23, 1999. This well was originally open to the aquifer from 36 to 91 ft. The open interval has collapsed or become obstructed at a depth of 34 ft. Well is still considered in good hydrologic communication with the aquifer.

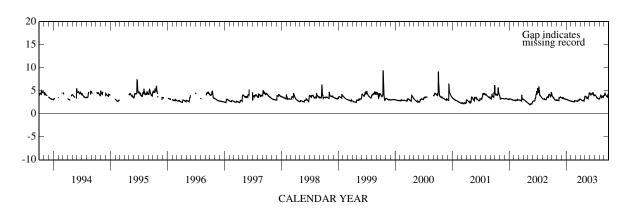
PERIOD OF RECORD .-- January 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.06 ft NGVD, Oct. 5, 1948; lowest, 0.81 ft NGVD, May 14, 15, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.75	2.95	3.40	3.10	2.71	2.79	3.06	3.76	4.33	4.11	3.41	4.12
10	3.48	2.92	3.64	3.04	2.67	2.72	2.95	3.54	4.28	3.90	3.92	4.22
15	3.33	2.84	3.42	2.94	2.62	2.67	2.90	3.44	4.40	3.61	3.54	3.90
20	3.07	3.49	3.22	2.89	2.60	2.97	2.85	3.29	4.30	3.36	3.80	3.69
25	2.97	3.66	3.23	2.83	2.85	2.98	2.76	3.77	4.05	3.28	3.65	4.04
EOM	2.87	3.54	3.12	2.76	2.81	3.18	3.73	4.45	3.99	3.20	3.93	4.41
MAX	4.25	3.66	3.64	3.12	2.85	3.19	3.73	4.52	4.59	4.11	4.05	4.62





WELL NUMBER.--253937080304001. Local Number G 596. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°38'16", long 80°30'44", in SW  $\frac{1}{4}$  sec.14, T.55 S., R.38 E., Hydrologic Unit 03090202, on SW 197th Avenue, 70 ft north of Howard Drive, 2 mi west of State Road 997 (Krome Avenue), and 15.5 mi north of Homestead.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 16 ft, cased to 16 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of flange, 10.76 ft above National Geodetic Vertical Datum of 1929. From October 21, 1992 to September 1, 1994, the measuring point was top of shelf, 10.45 ft above NGVD. From October 1990 to October 20, 1992, top of shelf was 10.62 ft above NGVD. From November 21, 1986 to October 1, 1990, measuring point was top of base 10.59 ft above NGVD. Measuring point of original well G-596, in service prior to November 20, 1986 was top of shelf, 9.10 ft above NGVD. Prior to October 1978, measuring point was incorrectly considered to be 10.32 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 8.0 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in ft NGVD, prior to October 1978 are in error. Corrected records are in files of the U.S. Geological Survey. Current well is a replacement well, drilled 250 ft east of original site and surveyed on November 21, 1986. Data for this well is published under the original well name and station ID number. The station at the current site was destroyed and reconstructed October 22, 1992 and September 2, 1994. Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey. See DATUM.

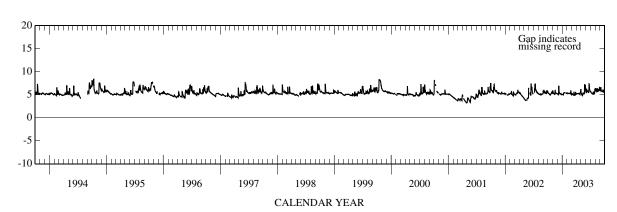
PERIOD OF RECORD.--January 1949 to November 1986 (orginal site), November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.37 ft NGVD, Oct. 12, 1994; lowest, 0.56 ft NGVD, May 14, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.33	5.45	5.15	5.06	5.32	5.26	5.29	5.17	5.50	5.53	6.18	5.94
10	5.16	5.20	6.94	5.34	5.30	5.05	5.26	4.82	5.87	5.32	5.71	5.83
15	4.99	5.08	5.36	5.46	5.29	4.93	5.21	5.42	5.80	5.22	6.41	5.71
20	5.11	5.38	5.21	5.39	5.24	5.06	5.26	5.18	5.40	5.59	6.15	5.78
25	5.58	5.31	5.22	5.33	5.87	5.02	5.02	7.29	6.44	5.22	6.04	5.74
EOM	5.30	5.22	4.99	5.34	5.14	4.99	6.21	5.99	5.76	6.09	5.91	7.07
MAX	5.60	5.93	6.94		5.87		6.21	7.29	7.36	6.29	6.72	7.21





WELL NUMBER.--253952080321501. Local Number G 3272. USGS Observation Well near Homestead, FL.

LOCATION.--Lat 25°39'52", long  $80^\circ32'21$ ", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.9, T.55 S., R.38E., Hydrologic Unit 03090202, on north side of 104th Street, 2 mi north and 0.5 mi west of intersection of Howard Drive and SW 207th Avenue. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 10 ft, cased to 7.5 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.43 ft above National Geodetic Vertical Datum of 1929. From February 1985 to April 22, 2000, measuring point was top of base, 9.40 ft above NGVD. Prior to February 1985, measuring point was top of base, 9.33 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.0 ft above NGVD.

REMARKS.--Station reconstructed April 23, 2000. See DATUM.

PERIOD OF RECORD.--June 1983 to February 1985, October 1995 to current year. (Corrected).

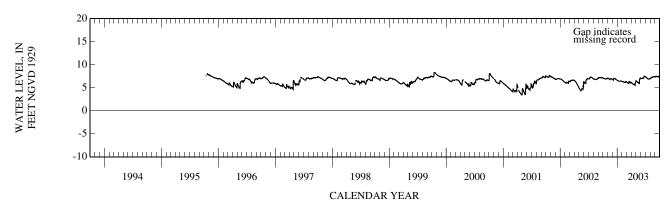
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.42 ft NGVD, Oct. 15, 1999; lowest, 3.42 ft NGVD, Apr. 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET

SEP

# WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG 5 7.09 7.07 6.73 6.54 6.35 6.16 5.99 6.48 7.00 7.25 7.09 10 6.99 6.92 7.02 6.47 6.29 6.03 5.87 6.22 7.00 7.15 7.25 15 6.92 6.79 7.05 6.46 6.19 5.88 5.71 6.20 7.14 7.00 7.35

5	7.09	7.07	6.73	6.54	6.35	6.16	5.99	6.48	7.00	7.25	7.09	7.44
10	6.99	6.92	7.02	6.47	6.29	6.03	5.87	6.22	7.00	7.15	7.25	7.49
15	6.92	6.79	7.05	6.46	6.19	5.88	5.71	6.20	7.14	7.00	7.35	7.39
20	6.91	6.95	6.91	6.45	6.16	6.31	5.72	5.94	7.06	6.89	7.34	7.40
25	6.99	6.96	6.80	6.43	6.34	6.11	5.52	6.81	7.51	6.92	7.37	7.42
EOM	6.97	6.86	6.62	6.38	6.37	6.19	6.46	7.12	7.38	6.98	7.39	7.73
MAX	7.15	7.10	7.05	6.59	6.38	6.34	6.46	7.13	7.51	7.34	7.42	7.73



WELL NUMBER.--254000080181002. Local Number G 580A. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°40'00", long 80°18'10", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.11, T.55 S., R.40 E., Hydrologic Unit 03090202, at northwest corner of Ludlam Road and Killian Drive, 1.2 mi east of U.S. Highway 1, and 10.5 mi southwest of Miami. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 22 ft, cased to 8 ft, open hole 8 to 22 ft. (Corrected).

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of recorder shelf, 11.70 ft above National Geodetic Vertical Datum of 1929. Prior to May 10, 1991, the measuring point was top of casing, 11.90 ft above NGVD. Prior to February 23, 1981, top of casing was 12.42 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 9.2 ft above NGVD.

REMARKS.--G-580A (254000080181002) replaced the 100 ft deep, 6 in. diameter well G-580 (254000080181001) in September 1960. G-580 was destroyed on June 12, 1960. The data for G-580A has been published under the site ID of G-580 until the water year 1995 and under both the site ID and local name G-580 for the water years 1993 and 1994. The well has been damaged and reconstructed on February 23, 1981 and May 10, 1991. Based on July 2002 soundings, the open hole interval is obstructed at 12 ft below land-surface datum. Measured well depth was 14.9 ft, top of base, on October 2, 2003.

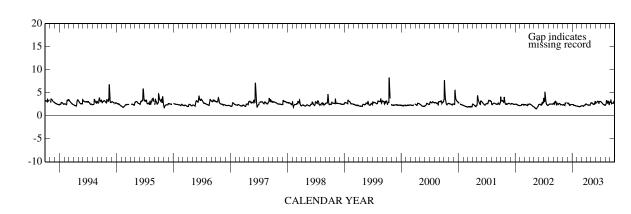
ELEVATION ABOVE NGVD 1929, FEET

PERIOD OF RECORD.--September 1960 to current year.

WATER LEVEL, IN FEET NGVD 1929

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.34 ft, Sept. 23, 1960; lowest, 0.58 ft NGVD, May 10, 1971.

				WAIER		MAXIMUN		EMBER 2003				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.53	2.41	2.65	2.41	2.07	2.20	2.48	2.82	2.76	3.01	2.50	3.02
10	2.70	2.35	2.69	2.39	2.04	2.13	2.37	2.77	3.11	2.86	3.30	2.66
15	2.58	2.24	2.29	2.26	1.96	2.05	2.28	2.47	3.16	2.63	2.73	2.73
20	2.44	2.71	2.35	2.21	1.98	2.35	2.35	2.47	2.88	2.48	3.10	2.75
25	2.44	2.84	2.45	2.12	2.09	2.36	2.27	2.64	3.09	2.40	2.50	2.98
EOM	2.33	2.80	2.44	2.11	2.16	2.54	2.74	2.84	3.13	2.30	3.01	2.87
MAX	2.70		2.78	2.46	2 16		2 74	3.12		3 11	3 30	3 41



WELL NUMBER .-- 254000080460001. Local Number G 620. USGS Observation Well in Everglades National Park, FL.

LOCATION.--Lat 25°40′00″, long 80°46′00″, in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.30, T.55 S., R.36 E., Hydrologic Unit 03090202, at look-out tower in Everglades National Park, 6.5 mi south of U.S. Highway 41, and 18.9 mi southwest of the intersection of U.S. Highway 41 and State Road 997.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 16 ft, cased to 6 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of shelf, 9.86 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.8 ft above NGVD.

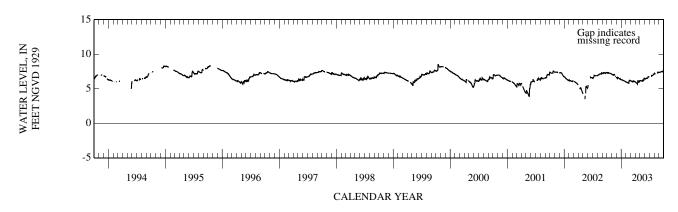
REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--January 1950 to September 1980, November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.51 ft NGVD, Oct. 16, 1999; minimum water level recorded, 1.86 ft NGVD, May 30, 1965.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.33	7.05	6.54	6.30	5.93	6.13	5.92	6.18	6.41		7.18	7.37
10	7.35	7.01	6.64	6.25	5.90	6.05	5.84	6.17	6.48			7.41
15	7.27	6.95	6.57	6.18	5.82	5.99	5.68	6.12	6.52	6.93		7.50
20	7.24	7.00	6.45	6.14	6.20	6.05	6.01	6.22	6.52	6.91	7.27	7.49
25	7.21	6.81	6.45	6.07	6.23	6.02	5.92	6.27	6.74	7.00	7.43	7.53
EOM	7.12	6.67	6.31	6.00	6.19	6.02	6.17	6.49	6.68	7.10	7.37	7.83
MAX	7.35		6.65	6.31	6.23		6.19	6.52	6.74			7.83



WELL NUMBER.--254005080171601. Local Number G 3609. USGS Observation Well near Pinecrest, FL.

LOCATION.--Lat 25°40′05", long 80°17′16", in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.12, T.55 S., R. 40 E., Hydrologic Unit 03090202, at Parrot Jungle, 76 ft east of SW 59th Avenue and 6 ft south of SW 111th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 85 ft, cased to 80 ft, screened 80 to 85 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 14.75 ft above National Geodetic Vertical Datum of 1929. Prior to March 2000, measuring point was estimated to be 15.00 ft above NGVD from a topographic map. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 14.8 ft above NGVD.

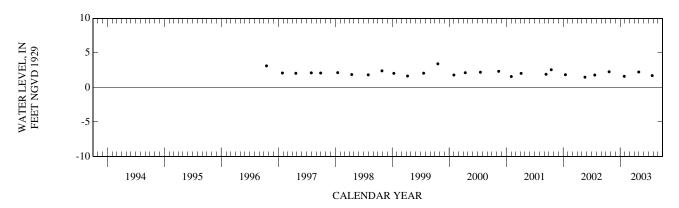
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in September 1995. Water-level measurements began October 1996. Water-level elevation data collected prior to March 14, 2000, have been computed using the measuring point established on March 14, 2000, and are in the files of the U.S. Geological Survey.

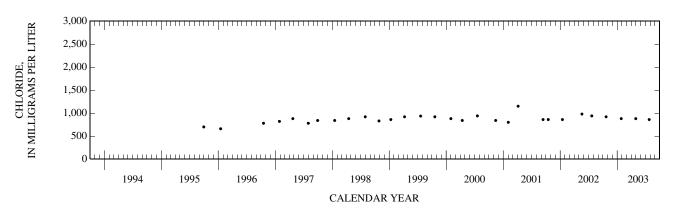
PERIOD OF RECORD.--September 1995 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.42 ft NGVD, Oct. 20, 1999; lowest, 1.48 ft NGVD, May 20, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

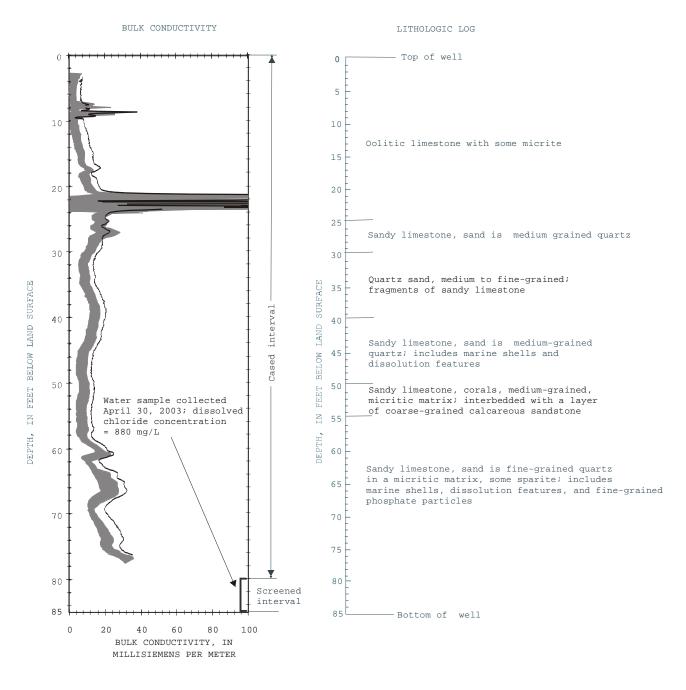
Specif.   Elev- conduc- Chloration, tance, ide, ation, feet wat unf water, above uS/cm fltrd,	wat unf water, uS/cm fltrd, D 25 degC mg/L
OCT APR	
22 1349 2.27 3,270 920 30 1250 2.23	3,030 880
JAN JUL 27 1307 1.61 2.860 880 25 1200 1.71	3,080 860





WELL NUMBER.--254005080171601. Local Number G 3609. USGS Observation Well near Pinecrest, FL.

#### 254005080171601 G-3609



#### EXPLANATION

Bulk conductivity in millisiemens per meter April 30, 2003

Shaded area represents range in bulk conductivity logs collected annually from January 1, 1996 to May 20, 2002

Delimits the interval for which the well is open to the aquifer  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

WELL NUMBER.--254022080263601. Local Number G 3561. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°40′22″, long 80°26′36″, in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.4, T.55 S., R.39 E., Hydrologic Unit 03090202, in the northeast corner of the Metro-Dade Hammocks fire station, on Hammocks Boulevard, 0.2 mi north of SW 104th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19 ft, cased to 14 ft, screened 14 to 19 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 13.24 ft above National Geodetic Vertical Datum of 1929.

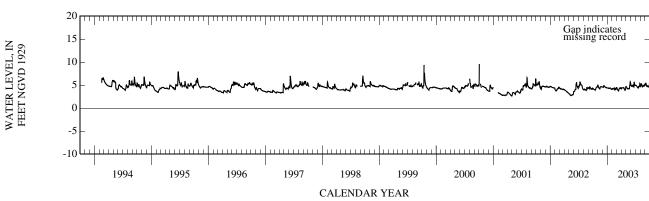
LAND-SURFACE DATUM.--Land surface is approximately 10.4 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.58 ft NGVD, Oct. 3, 2000; lowest, 2.64 ft NGVD, Apr. 30, and May 1, 2001.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20	4.15 4.04 3.94 4.20	4.67 4.33 4.09 4.64	4.52 4.88 4.73 4.54	4.37 4.30 4.33 4.36	4.16 4.21 4.32 4.24	4.27 3.92 3.90 4.26	4.39 4.44 4.37 4.23	4.55 4.25 4.21 4.20	4.89 4.86 4.99 4.72	4.94 4.73 4.47 4.50	4.97 5.13 4.69 4.83	5.13 4.91 4.74 4.62

4.89 25 4.56 4.65 4.51 4.17 4.05 4.41 3.87 5.16 4.82 4.63 4.72 EOM 4.61 4.12 4.61 4.39 4.37 4.40 5.43 4.94 5.13 4.99 5.52 4.63 5.01 4.45 5.35 5.52 MAX 4.61 4.89 4.37 4.37 4.63 5.71 5.60 5.29



WELL NUMBER.--254038080280201. Local Number G 855. USGS Observation Well near Kendall, FL.

LOCATION.—Lat 25°40'38", long 80°28'02", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.6, T.55 S., R.39 E., Hydrologic Unit 03090202, 0.9 mi east of State Road 997 (Krome Avenue), 0.4 mi south of State Road 94 (Kendall Drive), and 9.2 mi west of Kendall. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft.

REVISED RECORDS.--See REMARKS

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.70 ft above National Geodetic Vertical Datum of 1929. From July 29, 1993 to July 1999, top of base was 9.45 ft above NGVD. From August 1986 to July 29, 1993, top of base was 9.52 ft above NGVD. From September 1978 to August 1986, top of base was 10.88 ft above NGVD. From June 24, 1970 to August 7, 1978, measuring point was top of shelf 10.39 ft above NGVD. Prior to June 24, 1970 measuring point was top of base 10.90 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.9 ft above NGVD.

REMARKS.--The published figures of water levels as elevation, in feet NGVD, for October 1969 to November 1978 are in error. Previous corrections published prior to water year 2001 are in error. Corrected records are in the files of the U.S. Geological Survey. Well was reconstructed July 1970, September 1978, August 1986, July 29, 1993 and July 1999. The well was originally reported open to the aquifer from 10 to 20 ft. The open interval has since become obstructed or collapsed at a depth of 11.7 ft. See DATUM.

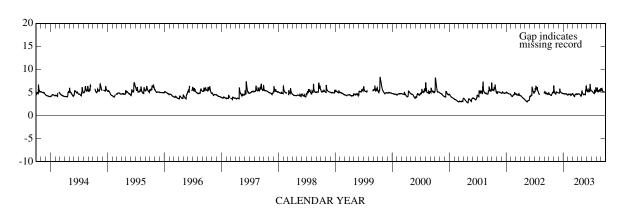
PERIOD OF RECORD .-- January 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.37 ft NGVD, Oct. 15, 1999; lowest, 0.52 ft NGVD, present datum, May 14, 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	4.60 4.46	5.16 4.80	4.86 5.80	4.75 4.66	4.52 4.57	4.60 4.27	4.68 4.71	4.87 4.55	5.38 5.33	5.29 5.07	5.30 5.44	5.63 5.38
15	4.34	4.55	5.10	4.70	4.65	4.15	4.61	4.61	5.67	4.85	5.42	5.17
20	4.60	5.01	4.90	4.72	4.46	4.57	4.50	4.52	5.09	5.02	5.42	5.11
25	5.05	4.98	4.85	4.54	4.56	4.66	4.17	5.57	5.83	5.13	5.30	
EOM	4.95	4.92	4.75	4.48	4.71	4.67	5.29	5.80	5.37	5.74	5.37	
MAX	5.05	6.47	5.80	4.75	4.71	4.75	5.29	6.38	6.84	6.10	5.97	





WELL NUMBER.--254054080295401. Local Number G 1487. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'15", long 80°29'50", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.35, T.54 S., R.38 E., Hydrologic Unit 03090202, west of levee on west side of L-31N Canal, 5.1 mi south of U.S. Highway 41, 3.5 mi north of Howard Drive, and 1 mi west of State Road 997 (Krome Avenue). (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 9.0 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of flange, 9.40 ft above National Geodetic Vertical Datum of 1929. Prior to November 18, 1999, measuring point was top of base, 8.38 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 6.8 ft above NGVD.

REMARKS.--The published figures of water levels as elevation, in feet NGVD, for August 13, 1999 to September 30, 1999 are in error. The corrected records are available in the files of the U.S. Geological Survey.

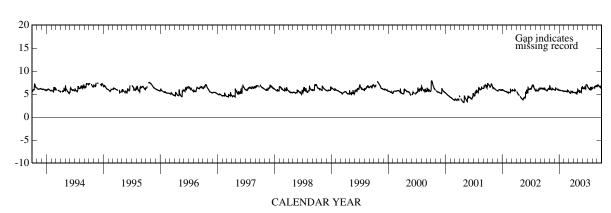
PERIOD OF RECORD.--April 1970 to May 1976, June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.67 ft NGVD, Oct. 15, 1999 (estimated from high water mark in shelter); lowest daily maximum water level, 1.59 ft NGVD, May 7, 8, 1975.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	5.94 5.80 5.69 6.00 6.33 6.05	6.28 6.03 5.91 6.08 6.05 5.98	5.89  6.12 6.01 6.03 5.83	5.86 5.78 5.73 5.74 5.69 5.64	5.63 5.60 5.61 5.54 5.79 5.71	5.52 5.29 5.14 5.49 5.38 5.46	5.37 5.35 5.22 5.26 5.00 6.02	5.66 5.43 5.52 5.35 6.16 6.55	6.23 6.24 6.51 6.17 7.09 6.85	6.48 6.21 6.00 6.41 6.09 6.38	6.23 6.45 6.52 6.70 6.72 6.74	6.80 6.92 6.65 6.63 6.65 7.18
MAX	6.33	6.78		5.88	5.79		6.02	6.63		6.79		7.18





WELL NUMBER.--254107080165201. Local Number G 896. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'07", long 80°16'52", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.6, T.55 S., R.41 E., Hydrologic Unit 03090202, 3 ft south of rock wall, 0.25 mi west of SW 52nd Avenue (School House Road), 0.5 mi south of Kendall Drive.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 74 ft, cased to 60 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.25 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

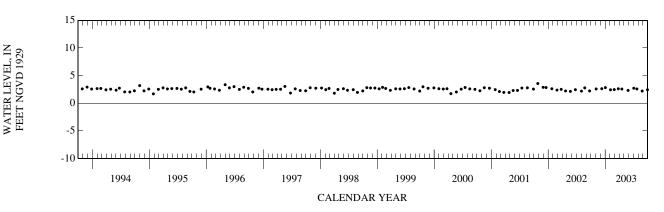
REMARKS .-- Well also used for salinity monitoring.

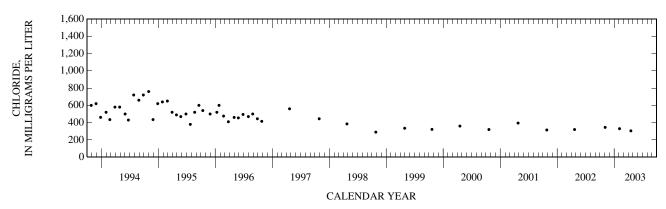
PERIOD OF RECORD.--May 1978 to May 1990 (semiannual), August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.71 ft NGVD, Sept. 30, 1993; lowest, 1.52 ft NGVD, Apr. 18, 1991.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					APR				
04	1650	2.58	1,500	345	18	1419	2.57	1,370	305
DEC					MAY				
10	1315	2.63			28	1230	2.32		
JAN					JUL				
02	1423	2.82			03	1405	2.72		
FEB					23	1428	2.58		
04	1320	2.43	1,410	330	AUG				
28	1116	2.47			26	1036	2.21		
MAR					SEP				
26	1401	2.62			29	1028	2.44		





WELL NUMBER.--254108080170601 Local Number G 3608. USGS Observation Well near Kendall, FL.

LOCATION.--Lat 25°41'08", long 80°17'06", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.6, T.55 S., R.41 E., Hydrologic Unit 03090202, 16 ft east of SW 57th Avenue and 700 ft north of SW 94th Street, across the street from 9320 SW 57th Avenue, west of Snapper Creek.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 100 ft, cased to 95 ft, screened 95 to 100 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.95 ft above National Geodetic Vertical Datum of 1929. Prior to March 2000, measuring point was estimated to be 11.00 ft above NGVD from a topographic map. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 11.0 ft above NGVD.

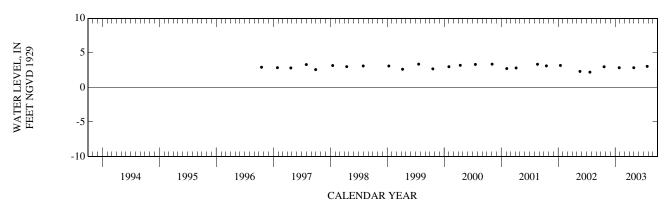
REMARKS.--Well is also used for quarterly salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity measurements began in August 1995. Water-level measurements began in October 1996. Water-level elevation data collected prior to March 14, 2000, have been computed using the measuring point established on March 14, 2000, and are in the files of the U.S. Geological Survey.

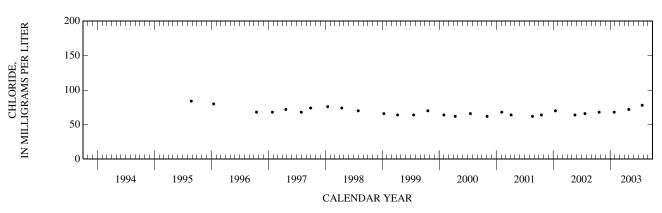
PERIOD OF RECORD.--August 1995 to current year. See REMARKS.

EXTREMES FOR PERIODS OF RECORD.--Highest water level measured, 3.37 ft NGVD, Nov. 3, 2000; lowest, 2.21 ft NGVD, July 23, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

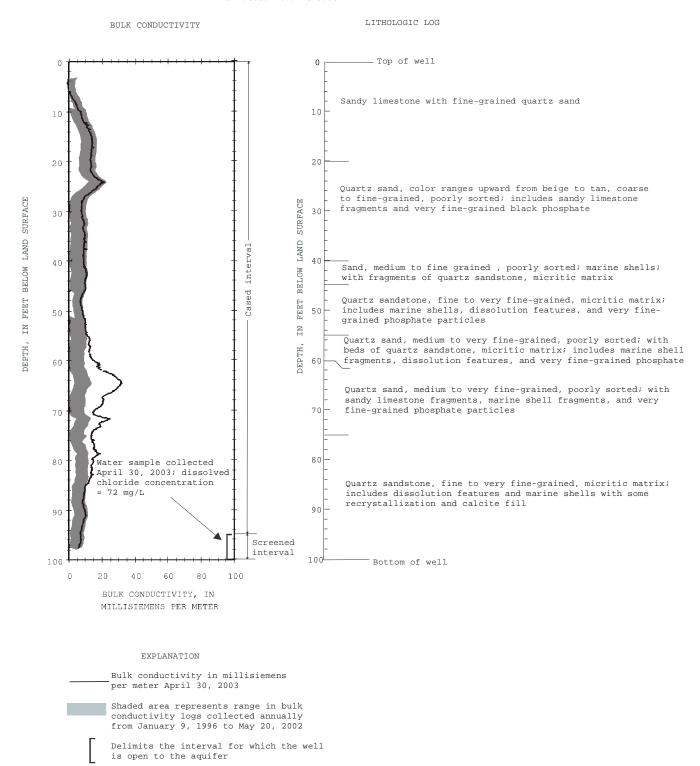
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Specif.   Elev- conductor ation, tance, ide, feet wat unf water, above uS/cm fltrd,   Date   Time   NGVD   25 degC mg/L (72020) (000940) (00940)
OCT					APR
22	1240	2.99	609	68.0	30 1053 2.85 564 72.0
JAN 27	1246	2.85	544	68.0	JUL 25 1130 3.05 627 78.0





WELL NUMBER.--254108080170601 Local Number G 3608. USGS Observation Well near Kendall, FL.

#### 254108080170601 G-3608



WELL NUMBER.--254108080231301. Local Number G 3560. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'08", long 80°28'13", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.31, T.55 S., R.39 E., Hydrologic Unit 03090202, on the north side of SW 88th Street (Kendall Drive) about 0.75 mi west of SW 162nd Avenue.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.5 ft, cased to 14.5 ft, screened 14.5 to 19.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 10.16 ft above National Geodetic Vertical Datum of 1929. From October 16, 1996 to August 20, 1998, top of shelf was 10.58 ft above NGVD. The published measuring point elevation, 10.57 ft above NGVD, is in error. From September 25, 1995 to September 30, 1996, top of shelf was 10.74 ft above NGVD. From September 25 to September 30, 1996, measuring point was considered to be 11.60 ft above NGVD. The figures os water level as elevation, in feet NGVD, from September 25 to September 30, 1996 are in error. From April 1994 to September 25, 1995, top of shelf was 10.04 ft above NGVD. See REMARKS

LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

REMARKS.--The well was reconstructed September 25, 1995, October 16, 1996 and August 20, 1998. The figures of water level as elevation, in feet NGVD, from September 25 to September 30, 1996 are in error. A -0.87 ft correction has been applied to correct water level from September 25 to September 30, 1996. Corrected records are in the files of the U.S. Geological Survey. See DATUM.

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

6.41

5.97

4.85

4.82

MAX

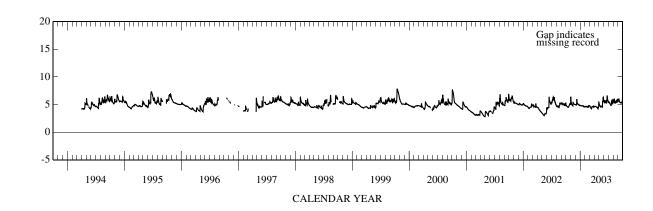
WATER LEVEL, IN FEET NGVD 1929 5.26

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.82 ft NGVD, Oct. 15, 16, 1999; lowest, 2.79 ft NGVD, Apr. 29 to May 1, 2001.

ELEVATION ABOVE NGVD 1929, FEET

DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.79	5.31	4.94	4.80	4.62	4.66	4.67	4.96	5.51	5.45	5.33	5.79
10	4.62	4.94	5.97	4.76	4.63	4.42	4.66	4.60	5.54	5.20	5.53	5.57
15	4.48	4.74	5.17	4.80	4.68	4.25	4.53	4.73	5.82	4.94	5.51	5.36
20	4.70	5.10	5.02	4.77	4.60	4.63	4.51	4.57	5.23	5.48	5.60	5.35
25	5.13	5.05	4.98	4.60	4.82	4.65	4.22	5.63	6.12	5.19	5.44	5.33
EOM	5.02	5.00	4.80	4.57	4.78	4.64	5.45	5.87	5.49	5.76	5.46	6.36

4.78



5.45

6.32

6.57

6.01

6.04

6.37

WELL NUMBER.--254111080272501. Local Number G 3555. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'11", long 80°27'25", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.32, T.54 S., R.39 E., Hydrologic Unit 03090202, at northwest corner of a lake near the northwest corner of SW 162nd Avenue and SW 88th Street (Kendall Drive).

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19 ft, cased to 14 ft, screened 14 to 19 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 10.87 ft above National Geodetic Vertical Datum of 1929.

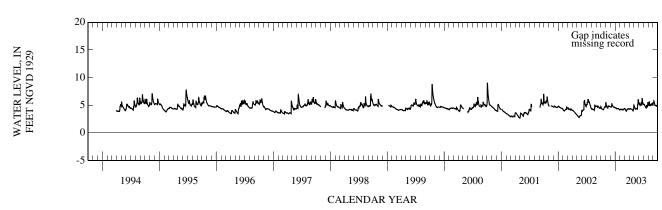
LAND-SURFACE DATUM.--Land surface is approximately 8.2 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.99 ft NGVD, Oct. 3, 4, 2000; lowest, 2.66 ft NGVD, Apr. 30, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	4.43 4.30 4.18 4.31 4.66 4.69	4.99 4.64 4.39 4.83 4.81 4.73	4.68 5.27 4.93 4.74 4.68 4.54	4.55 4.42 4.40 4.39 4.27 4.17	4.26 4.25 4.28 4.25 4.25 4.39	4.34 4.07 3.99 4.29 4.34 4.35	4.32 4.36 4.28 4.25 3.98 4.94	4.70 4.34 4.42 4.30 5.14 5.69	5.30 5.10 5.37 4.95 5.75 5.19	5.19 4.93 4.63 4.74 4.85 5.42	5.00 5.23 5.01 5.09 5.07 5.15	5.53 5.27 5.00 4.90 4.86 5.96
MAX	4.76	5.47	5.27	4.55	4.39	4.42	4.94	6.06	6.23	5.50	5.62	5.96



6.92

6.56

6.41

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--254112080294201. Local Number G 3557. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'14", long 80°29'46", in NW  $\frac{1}{4}$ , sec.32, T.54 S., R.38 E., Hydrologic Unit 03090202, 5.2 mi south of Tamiami Trail (U.S. Highway 41) and 100 ft east of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.5 ft, cased to 14.5 ft, screened 14.5 to 19.5 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of shelf, 9.37 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 7.0 ft above NGVD.

6.45

5.77

5.66

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

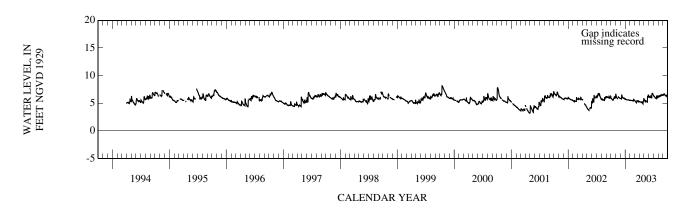
MAX

6.25

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.17 ft NGVD, Oct. 15, 1999; lowest, 3.18 ft NGVD, Apr. 30, 2001.

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 6.20 5.93 5.84 5.83 5.73 5.51 5.44 5.26 5.50 6.10 6.27 6.13 6.54 5.24 5.13 10 6.07 6.30 5.67 5.53 6.45 5.65 5.49 5.29 5.21 6.11 6.65 6.07 5.61 5.50 5.06 5.39 6.39 6.41 15 6.34 5.89 6.03 5.90 5.87 5.44 5.41 5.17 5.23 6.05 6.24 6.45 6.40 20 5.62 25 5.92 5.54 4.87 6.43 6.25 5.30 6.79 6.01 6.39 5.95 5.66 6.10 EOM 5.96 5.91 5.54 6.92 5.59 5.85 6.46 5.72 5.39 6.49 6.30 6.37

ELEVATION ABOVE NGVD 1929, FEET



5.85

6.48

6.79

WELL NUMBER.--254130080234501. Local Number G 551. USGS Observation Well near South Miami, FL.

LOCATION.--Lat 25°41'30", long 80°23'45", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.36, T.54 S., R.39 E., Hydrologic Unit 03090202, on the east side of SW 125th Avenue, 0.6 mi south of Sunset Drive and 6.5 mi west of South Miami.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 24 in. from a depth of 0 to 29 ft, diameter 18 in. from 29 to 71 ft, depth 80 ft, cased to 71 ft, slotted 29 to 71 ft, open hole 71 to 80 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 10.12 ft above National Geodetic Vertical Datum of 1929. Prior to May 11, 1992, top of shelf was 10.26 ft above NGVD. From December 1947 to April 1961, measuring point was top of casing, 8.62 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 8.0 ft above NGVD.

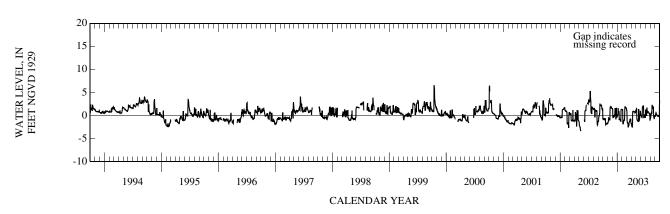
REMARKS.--Water levels affected by pumping. Station rebuilt May 1992.

PERIOD OF RECORD.--December 1947 to April 1961, March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.77 ft NGVD, Oct. 5, 1948; lowest, 3.39 ft below NGVD, May 13, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	-0.90 -0.87 -0.60 -2.05 -1.78 -1.81	-1.34 -0.93 -0.97 1.71 1.59 1.51	-0.47 -0.13 -0.13 1.41 1.25 -0.39	0.09 0.85 -0.92 -0.93 1.15 1.33	1.25 -1.57 -1.05 1.91 1.69 1.60	-1.07 -1.66 -1.86 -1.36 -0.83 -1.73	-2.39 0.70 0.85 0.83 0.54 1.07	1.45 -1.05 -1.28 -1.07 -0.42 0.60	-0.08 -0.30 1.84 -0.38 0.13 -0.37	0.38 1.62 0.62 0.74 0.43 -1.05	0.12 0.46 1.70 1.82 -0.60 -0.15	0.37 0.21 -0.06 -0.10 -0.16 3.24
MAX	-0.54	1.89	1.56	1.58	1.91	1.53	1.07	1.45	2.08	1.62	2.21	3.24



WELL NUMBER.--254138080284401. Local Number G 3552. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'38", long 80°28'44", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.31, T.54 S., R.39 E., Hydrologic Unit 03090202, 1,900 ft north of SW 88th Street (Kendall Drive) on west side of SW 177th Avenue (Krome Avenue).

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.4 ft, cased to 14.4 ft, screened 14.4 to 19.4 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 10.01 ft above National Geodetic Vertical Datum of 1929.

5.14

5.15

LAND-SURFACE DATUM.--Land surface is approximately 7.4 ft above NGVD.

6.08

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

6.37

MAX

5.56

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.73 ft NGVD, Oct. 17, 1999; lowest, 2.85 ft NGVD, Apr. 30, 2001.

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 5.74 5.47 5.10 5.11 5.64 5.18 4.93 4.94 4.79 5.09 5.73 5.53 6.02 6.08 5.48 10 5.25 5.63 6.00 5.75 4.98 5.07 4.92 4.74 5.83 4.76 4.83 5.09 5.04 4.91 5.95 5.24 5.76 15 4.83 4.49 4.65 4.96 5.39 5.29 5.04 5.04 4.96 4.86 4.67 4.79 5.48 6.05 5.89 5.74 20 5.75 25 5.30 4.95 5.50 5.87 5.67 5.47 5.26 5.15 4.84 4.38 5.60 6.38 EOM 5.09 5.22 5.04 5.31 4.89 4.86 5.47 6.05 5.83 5.78 6.36

5.01

5.47

6.28

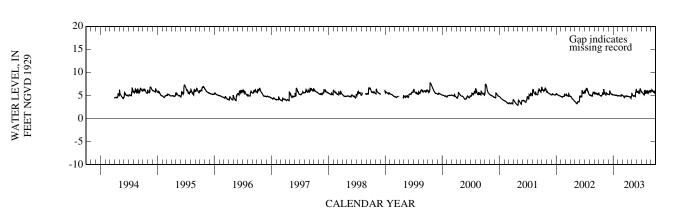
6.43

6.05

6.15

6.36

ELEVATION ABOVE NGVD 1929, FEET



WELL NUMBER.--254152080274501. Local Number G 3554. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41′52″, long 80°27′45″, in NW  $^{1}$ /<sub>4</sub> NW  $^{1}$ /<sub>4</sub> sec.32, T.54 S., R.39 E., Hydrologic Unit 03090202, at southeast corner of SW 72nd Street (Sunset Drive) and SW 167th Avenue.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 20 ft, cased to 15 ft, screened 15 to 20 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 10.60 ft above National Geodetic Vertical Datum of 1929. Prior to April 21, 1994, measuring point was 10.03 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.4 ft above NGVD.

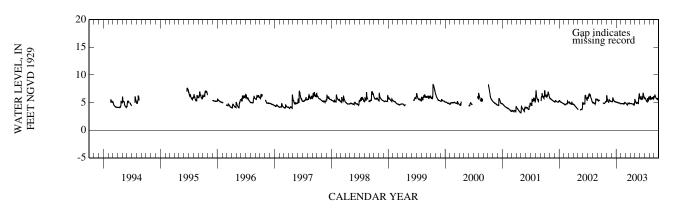
REMARKS.--Station destroyed August 21, 1994, rebuilt June 19, 1995.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.25 ft NGVD, Oct. 3, 2000; lowest, 3.14 ft NGVD, Apr. 29, 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		5.60	5.16	5.07	4.83	4.88	4.82	5.18	5.96	5.88	5.57	6.22
10	4.91	5.20	5.91	5.00	4.80	4.70	4.81	4.89	5.72	5.55	5.89	6.05
15	4.81	5.01	5.49	4.95	4.82	4.57	4.73	5.06	6.05	5.26	5.75	5.77
20	4.90	5.36	5.24	4.93	4.87	4.86	4.72	4.86	5.57	5.63	5.82	5.68
25	5.18	5.30	5.20	4.85	5.02	4.84	4.53	5.75	6.41	5.51	5.79	5.61
EOM	5.16	5.21	5.07	4.78	4.96	4.85	5.57	6.23	5.89	5.96	5.81	6.48
MAX		6.22	5.91	5.11	5.04	4.93	5.57	6.53	6.69	6.02	6.13	6.51



WELL NUMBER.--254152080282101. Local Number G 3553. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41′52″, long 80°28′21″, in NW  $^{1}\!\!/_{4}$  NE  $^{1}\!\!/_{4}$  NW  $^{1}\!\!/_{4}$  sec.31, T.54 S., R.39 E., Hydrologic Unit 03090202, on SW 72nd Street (Sunset Drive) west of SW 172nd Avenue.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.9 ft, cased to 14.9 ft, screened 14.9 to 19.9 ft.

INSTRUMENTATION.--Satellite data collection platform and tipping bucket rain gage.

DATUM.--Measuring point: Top of shelf, 8.83 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

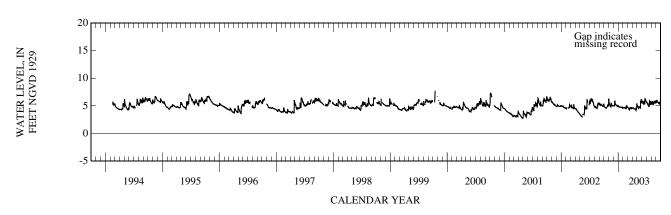
REMARKS.--Rainfall data is not published but is available in the files of the U.S. Geological Survey.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.64 ft NGVD, Oct. 17, 18, 1999; lowest, 2.72 ft NGVD, Apr. 30, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	4.82 4.73	5.40 5.03	5.00 5.96	4.88 4.79	4.65 4.65	4.69 4.48	4.64 4.52	4.96 4.66	5.68 5.53	5.64 5.26	5.29 5.66	5.89 5.81
15 20	4.57 4.79	4.82 5.23	5.29 5.10	4.77 4.77	4.63 4.74	4.27 4.63	4.43 4.44	4.90 4.66	5.89 5.31	5.02 5.94	5.55 5.72	5.58 5.50
25	5.15	5.05	5.09	4.67	5.04	4.61	4.20	5.61	6.15	5.33	5.62	5.44
EOM	5.11	5.03	4.88	4.61	4.76	4.61	5.44	5.94	5.68	5.64	5.58	6.10
MAX	5.32		5.96	4.97	5.04		5.44	6.15	6.32	5.94	5.96	6.21



WELL NUMBER.--254157080214002. Local Number G 3074. USGS Observation Well near South Miami, FL.

LOCATION.--Lat 25°41'57", long 80°21'40", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.32, T.54 S., R.40 E., Hydrologic Unit 03090202, on north side of Snapper Creek Canal, 0.25 mi southeast of the intersection of SW 107th Avenue and Sunset Drive, and 4.6 mi west of South Miami. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

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

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.22 ft above National Geodetic Vertical Datum of 1929. Prior to October 1994, measuring point was top of flange, 8.17 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 3.5 ft above NGVD.

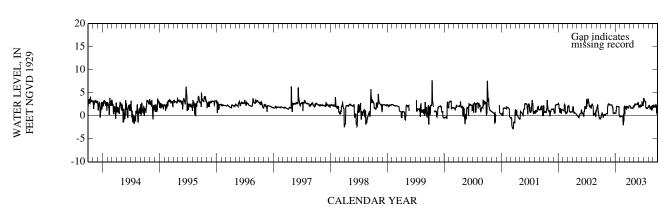
REMARKS.--Cased interval is obstructed at a depth of 34.4 ft. The well remains in good communication with the aquifer.

PERIOD OF RECORD.--September 1977 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.68 ft NGVD, Oct. 15, 1999; lowest, 3.78 ft below NGVD, May 8, 1987.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	0.21 0.63	0.47 0.43	2.32 2.46	0.57 2.04	-0.18 -0.10	1.91 1.82	2.18 1.97	2.16 2.42	2.17 2.28	3.67 3.17	2.33 1.97	2.08 2.07
15 20 25	-0.07 0.13 0.28	2.09 2.57 2.52	1.93 0.51 0.62	2.04 1.98 1.96	-0.12 -1.22 0.40	1.46 1.95 1.82	1.64 1.71 1.63	2.56 2.44 2.88	2.20 2.13 2.74	3.06 1.63 1.62	1.57 2.00 1.24	1.91 2.30 0.62
EOM	0.17	2.39	0.56	-0.07	1.96	2.17	2.09	2.38	2.66	1.88	1.96	1.92
MAX	0.63	2.60	2.46	2.04	1.96	2.17	2.18	2.88	3.01	3.84	2.33	2.44



WELL NUMBER.--254158080294501. Local Number G 3551. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°41'58", long 80°29'45", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  Sec.36, T.54 S., R.38 E., Hydrologic Unit 03090202, 4.2 mi south of Tamiami Trail (U.S. Highway 41) and 100 ft east of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.3 ft, cased to 13.3 ft, screened 13.3 to 18.3 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.18 ft above National Geodetic Vertical Datum of 1929.

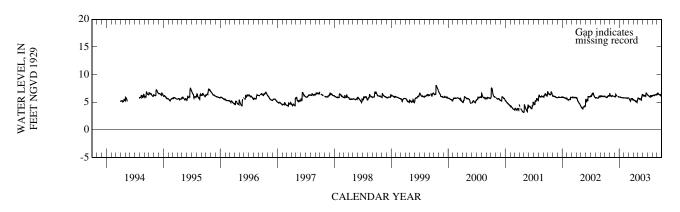
LAND-SURFACE DATUM.--Land surface is approximately 6.6 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.03 ft NGVD, Oct. 15, 16, 1999; lowest, 3.15 ft NGVD, Apr. 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.97	6.25	5.99	5.95	5.77	5.70	5.39	5.74	6.16	6.27	6.17	6.48
10	5.92	6.09	6.43	5.91	5.77	5.41	5.31	5.59	6.16	6.12	6.28	6.53
15	5.83	6.02	6.19	5.84	5.77	5.20	5.18	5.68	6.23	5.99	6.27	6.38
20	6.08	6.15		5.84	5.70	5.65	5.18	5.48	6.10	6.18	6.35	6.34
25	6.21	6.11	6.03	5.80	5.78	5.54	4.92	5.93	6.65	6.04	6.35	6.33
EOM	6.12	6.08	5.93	5.81	5.80	5.58	5.68	6.33	6.40	6.21	6.39	6.72
MAX	6.21			5.97	5.81		5.68	6.42	6.68	6.34	6.47	6.72



WELL NUMBER.--254201080173001. Local Number G 901. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°42'01", long 80°17'30", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.36, T.54 S., R.40 E., Hydrologic Unit 03090202, at southwest corner of intersection of SW 76th Street and SW 54th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 96 ft, cased to 94.8 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 7.91 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 7.9 ft above NGVD.

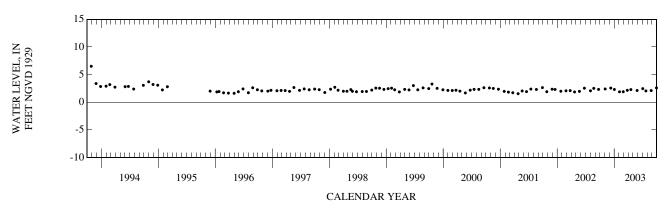
REMARKS .-- Well also used for salinity monitoring.

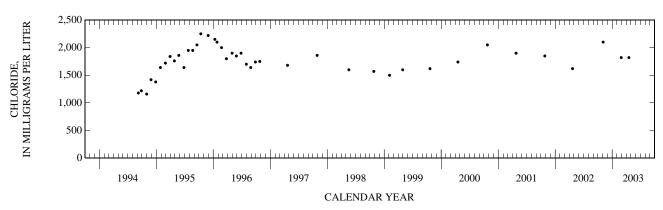
PERIOD OF RECORD.--October 1975 to October 1981, May 1992 to November 1992 (intermittent), February 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.51 ft NGVD, Oct. 28, 1993; lowest, 1.16 ft NGVD, May 2, 1977.

### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					APR				
04	1630	2.40	6,410	2,100	18	1345	2.29	5,730	1,820
DEC					MAY				
10	1322	2.56			28	1221	2.13		
JAN					JUL				
02	1402	2.31			03	1349	2.46		
FEB					23	1400	2.05		
04	1255	1.89			AUG				
28	1057	1.90	6,000	1,820	26	1005	2.11		
MAR					SEP				
26	1340	2.16			29	0956	2.60		





6.91

7.19

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--254206080294701. Local Number G 3575. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°42'06", long 80°29'47", in NW  $^{1}$ / $_{4}$  NE  $^{1}$ / $_{4}$  NE  $^{1}$ / $_{4}$  sec.35, T.54 S., R.38 E., Hydrologic Unit 03090202, 4.07 mi south of U.S. Highway 41 (Tamiami Trail), next to levee on west side of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

6.71

6.42

6.32

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 8.9 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 9.09 ft above National Geodetic Vertical Datum of 1929. Prior to August 23, 2001, the measuring point was incorrectly considered to be 8.94 ft above NGVD. The figures of water level as elevation, in ft NGVD, from February 1995 to September 2000 are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.1 ft above National Geodetic Vertical Datum of 1929

REMARKS.--On August 23, 2001, the measuring point elevation was found to be in error. The published figures of water level as elevation, in feet NGVD, from February 1995 to September 2000, are in error. Corrected data can be found in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--February 1995 to current year.

6.86

MAX

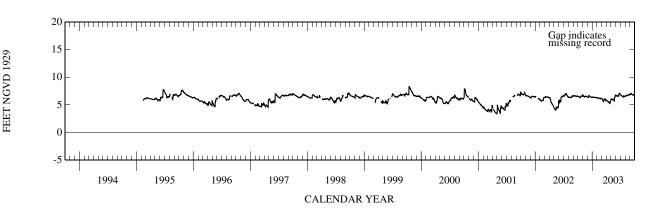
WATER LEVEL, IN

6.62

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.31 ft NGVD, Oct. 15, 16, 1999; lowest, 3.40 ft NGVD, Apr. 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET

6.93 6.98
3 6.98
3 6.86
1 6.81
2 6.83
5 7.19
5.8 5.8 5.8



5.91

6.78

7.11

6.85

WELL NUMBER.--254207080300201. Local Number G 3577. USGS Observation Well near Miami, FL.

 $LOCATION.--Lat~25^{\circ}42'07'', long~80^{\circ}30'02'', NW~\frac{1}{4}~NE~\frac{1}{4}~sec.~35, T.54~S., R.38~E., Hydrologic~Unit~03090202, 4.08~mi~south~of~U.S.~Highway~41~(Tamiami~Trail)~and~0.24~mi~west~of~levee~on~west~side~of~L-31N~Canal.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 8.0 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 8.99 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above NGVD.

6.88

6.63

6.55

REMARKS.--The published figures of water level as elevation, in feet NGVD, for the 2000 water year are in error. Corrected data are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- March 1995 to current year.

7.04

6.95

MAX

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.33 ft NGVD, Oct. 19, 1999; lowest, 3.25 ft NGVD, Apr. 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.86	6.90	6.58	6.60	6.53	6.36	5.94	6.18		7.09	6.83	7.19
10	6.75	6.74	6.88	6.61	6.51	6.16	5.82	6.09		6.96	6.98	7.30
15	6.65	6.63	6.84	6.63	6.44	5.96	5.66	6.20	6.89	6.80	7.04	7.20
20	6.75	6.80	6.68	6.63	6.37	6.19	5.61	5.96	6.90	6.74	7.11	7.15
25	6.81	6.78	6.57	6.61	6.38	6.18	5.39	6.41	7.36	6.76	7.16	7.22
EOM	6.78	6.68	6.54	6.55	6.38	6.12	5.88	6.92	7.22	6.79	7.16	7.49

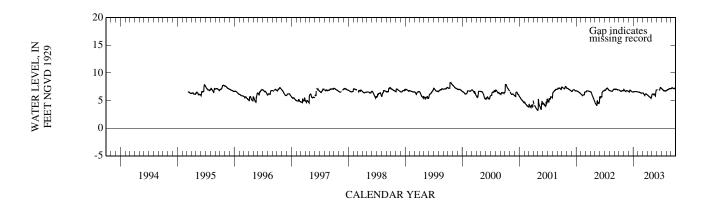
6.08

6.92

7.20

7.17

7.49



WELL NUMBER.--254210080304801. Local Number G 3578. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°42'10", long 80°30'48", NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 34, T.54 S., R.38 E., Hydrologic Unit 03090202, 4.02 mi south of U.S. Highway 41 (Tamiami Trail) and 1.01 mi west of levee on west side of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 4 in., depth 6.0 ft.

INSTRUMENTATION.--Satellite data collection platform.

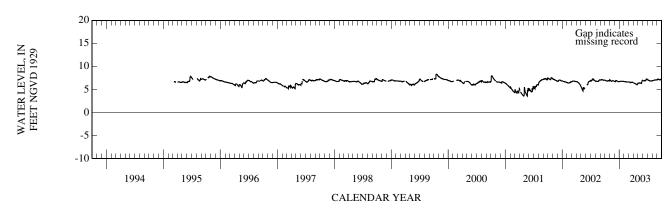
DATUM.--Measuring point: Top of base, 8.94 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above NGVD.

PERIOD OF RECORD .-- March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.39 ft NGVD, Oct. 18, 1999: lowest, 3.55 ft NGVD, May 22, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	6.94 6.85 6.79 6.88 6.90 6.86	6.96 6.83 6.73 6.90 6.87 6.78	6.69 6.95 6.91 6.78 6.70 6.68	6.73 6.75 6.78 6.78 6.76 6.72	6.70 6.68 6.64 6.61 6.63 6.62	6.61 6.55 6.47 6.55 6.52 6.49	6.41 6.31 6.23 6.14 6.00 6.30	6.39 6.36 6.39 6.33 6.50 6.98	6.87 6.87 6.95 6.91 7.28 7.14	7.03 6.97 6.86 6.84 6.85 6.86	6.92 6.98 7.01 7.04 7.08 7.09	7.12 7.22 7.14 7.08 7.17 7.51
MAX	7.03	7.12	6.95	6.78	6.72		6.47	6.99	7.28	7.12	7.09	7.51



WELL NUMBER.--254213080281501. Local Number G 3556. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°42'13", long 80°28'15", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.30, T.54 S., R.39 E., Hydrologic Unit 03090202, east of SW 172nd Avenue and approximately 0.4 mi north of SW 72nd Street (Sunset Drive).

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.1 ft, cased to 14.1 ft, screened 14.1 to 19.1 ft.

INSTRUMENTATION .-- Electronic data logger.

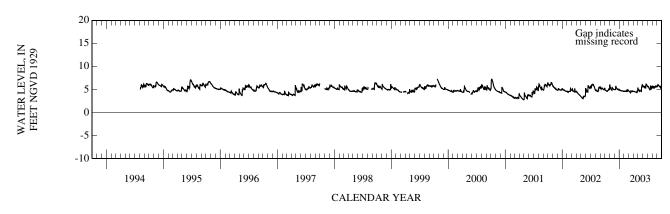
DATUM.--Measuring point: Top of shelf, 7.86 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 5.1 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.29 ft NGVD, Oct. 22, 1999; lowest, 2.74 ft NGVD, Apr. 29, 30, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	4.80 4.71 4.57 4.78 5.07 5.14	5.43 5.03 4.81 5.14 5.04 4.97	4.96 5.77 5.29 5.04 5.05 4.83	4.84 4.75 4.71 4.69 4.62 4.57	4.60 4.59 4.58 4.73 4.95 4.71	4.63 4.46 4.31 4.57 4.55 4.58	4.57 4.52 4.42 4.43 4.22 5.38	4.92 4.60 4.85 4.60 5.52 5.89	5.67 5.50 5.76 5.33 6.13 5.72	5.67 5.34 4.99 5.72 5.32 5.56	5.30 5.62 5.54 5.63 5.59 5.59	5.89 5.90 5.65 5.55 5.44 5.97
MAX	5.26	6.05	5.77	4.94	4.95	4.72	5.38	6.05	6.15	5.74	5.82	6.08



WELL NUMBER.--254215080201503. Local Number G 1074B. USGS Observation Well in South Miami, FL.

LOCATION.--Lat 25°42'15", long 80°20'15", in SE  $^1\!\!/_4$  SE  $^1\!\!/_4$  sec.28, T.54 S., R.40 E., Hydrologic Unit 03090202, 0.15 mi west of Galloway Road and 0.20 mi north of Sunset Drive.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 39.0 ft, cased to 17.0 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of PVC casing, 13.47 ft above National Geodetic Vertical Datum of 1929. Prior to October 1997, measuring point was top of base, 13.48 ft above NGVD.

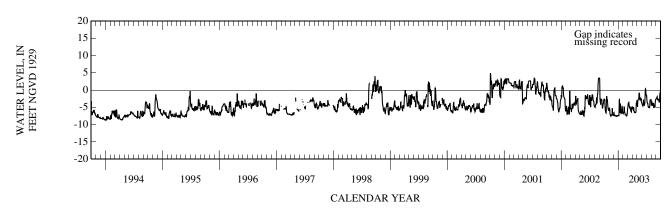
LAND-SURFACE DATUM.--Land surface is approximately 10.2 ft above NGVD.

PERIOD OF RECORD .-- October 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.92 ft NGVD, Oct. 4, 2000; lowest, 9.61 ft below NGVD, Sept. 21, 1992.

# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES NOV DEC JAN FEB MAR APR MAY JUN

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-2.72	-5.21	-6.49	-7.40	-6.44	-4.22	-5.50	-4.83	-4.27	-3.26	-4.30	-2.29
10	-5.71	-6.95	-7.30	-5.28	-5.74	-3.57	-4.95	-2.65	-4.31	-3.98	-4.53	-2.78
15	-6.64	-7.53	-7.45	-4.08	-7.14	-4.99	-6.51	-0.95	-3.58	-5.01	-3.87	-2.83
20	-2.22	-7.25	-7.62	-6.73	-7.27	-5.34	-6.51	-2.54	-3.94	-5.07	-4.41	-3.53
25	-3.52	-6.67	-7.36	-4.56	-7.46	-6.27	-6.34	-2.46	0.41	-2.87	-4.96	-1.39
EOM	-5.80	-7.33	-7.36	-6.83	-6.78	-5.11	-3.10	-3.58	-1.58	-2.81	-2.55	-0.09
MAX	-1.74	-5.20	-6.49	-2.75	-4.73	-3.57	-3.10	-0.79	0.41	-1.72	-2.55	-0.09



WELL NUMBER.--254217080171801. Local Number F 319. USGS Observation Well in South Miami, FL.

LOCATION.--Lat 25°42'17", long 80°17'18", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.25, T.54 S., R.40 E., Hydrologic Unit 03090202, in parking lot, on west side of SW 58th Avenue, north of Sunset Drive in South Miami, 0.1 mi south of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 17 ft, cased to 13 ft.

INSTRUMENTATION .-- Electronic data logger.

2.38

2.34

2.48

EOM

MAX

2.56

2.97

DATUM.—Measuring point: Top of base, 13.81 ft above National Geodetic Vertical Datum of 1929. Prior to October 1980, measuring point was top of casing, 13.81 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 11.1 ft above NGVD.

2.48

2.39

2.81

2.08

2.05

2.42

2.05

2.05

2.13

REMARKS.--In 1953, F-319 replaced a destroyed well of similar depth 250 ft south of current location. Both wells were published under the designation of F-319.

PERIOD OF RECORD.--January 1940 to current year. Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.86 ft NGVD, Oct. 11, 1947; lowest, 0.47 ft NGVD, May 17, 1945.

#### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 2.34 2.29 2.23 2.20 2.17 2.16 2.42 2.05 2.14 2.46 2.52 2.58 2.20 2.54 2.67 2.65 2.42 2.36 2.30 2.36 2.51 2.47 10 2.48 2.81 1.94 2.10 3.50 2.42 2.64 15 2.48 2.14 1.90 2.04 2.53 2.84 2.26 2.52 2.17 2.34 20 2.37 2.23 1.92 2.35 2.45 2.52 ---2.65 2.48 25 2.67 2.27

2.43

2.30

2.57

2.94

2.94

CALENDAR YEAR

2.47

2.50

2.94

3.25

2.88

3.54

2.21

2.10

2.55

2.75

2.87

3.04

3.09

\_\_\_\_\_\_ Gap indicates missing record 15 WATER LEVEL, IN FEET NGVD 1929 10 -5 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003

WELL NUMBER.--254218080241801. Local Number G 3565. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°42'18", long 80°24'18", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.26, T.54 S., R.39 E., Hydrologic Unit 03090202, 9 ft from edge of pavement in the northeast corner of the cul-de-sac at SW 68th Terrace and SW 131st Court.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19 ft, cased to 14 ft, open hole 14 to 19 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.82 ft above National Geodetic Vertical Datum of 1929.

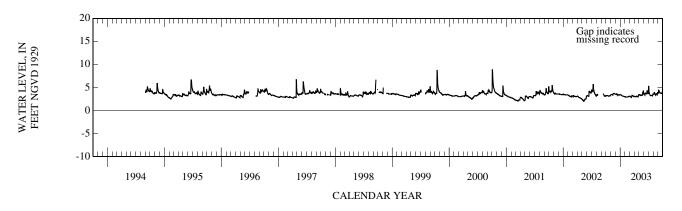
LAND-SURFACE DATUM.--Land surface is approximately 8.3 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.84 ft NGVD, Oct. 3, 2000; lowest, 1.98 ft NGVD, May 13, 14, 2002.

ELEVATION ABOVE NGVD 1929, FEET

#### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 3.22 3.46 3.47 3.41 2.96 3.08 3.05 3.44 3.50 4.00 3.59 4.29 3.24 3.15 3.70 10 3.25 3.44 3.74 3.65 2.89 2.90 2.97 3.32 3.48 3.90 3.19 3.33 3.35 2.92 2.94 2.99 3.73 3.23 3.39 3.76 15 3.38 3.09 3.68 3.40 3.10 2.98 3.28 3.03 3.27 3.51 3.24 3.74 20 3.66 3.76 25 3.06 3.04 3.14 4.16 3.22 3.17 3.66 3.42 2.95 3.85 3.34 EOM 3.39 3.00 3.91 3.52 3.56 3.46 4.72 3.20 3.09 3.08 3.63 3.74 MAX 3.25 3.70 3.65 3.41 3.09 3.29 3.46 4.21 4.29 5.33 3.92 4.72



DAY

OCT

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--254248080263801. Local Number G 3473. USGS Observation Well near South Miami, FL.

LOCATION.--Lat 25°42'48", long 80°26'38", in SW  $^{1}/_{4}$  sec. 21, T.54 S., R.39 E., Hydrologic Unit 03090202, on north side of Miller Drive at SW 154th Court and 0.3 mi west of SW 152nd Avenue. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 20.4 ft, cased to 20.4 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of flange, 10.69 ft above National Geodetic Vertical Datum of 1929. From October 29, 1994 to October 1996, measuring point was top of base, 10.75 ft above NGVD. Prior to October 2, 1994, measuring point was top of casing, 11.80 ft above NGVD. Prior to October 1993, top of casing was incorrectly considered to be 10.76 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 8.5 ft above NGVD.

REMARKS.--The published figures of water levels as elevation, in feet NGVD, prior to October 1993, are in error. Corrected figures are available in the files of the U.S. Geological Survey. Station reconstructed October 29, 1994.

ELEVATION ABOVE NGVD 1929, FEET

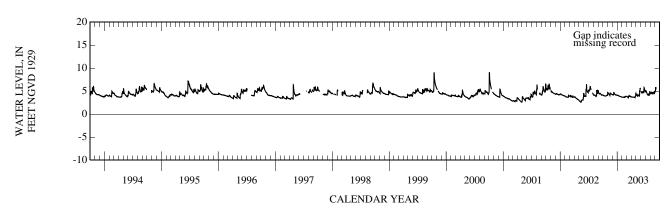
PERIOD OF RECORD .-- October 1991 to current year.

NOV

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.05 ft NGVD, Oct. 15, 1999; lowest, 2.07 ft NGVD, June 2, 1992.

		YEAR OCT	OBER 2002 MAXIMUM	TO SEPTE	EMBER 2003				
DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
4.19	4.11	3.69	3.81	3.71	4.16	4.89	4.95	4.43	5.65
4.70	4.00	3.66	3.67	3.69	3.96	4.65	4.59	4.68	
4.41	3.90	3.66	3.83	3.66	4.15	4.91	4.22	4.53	

5	4.04	4.54	4.19	4.11	3.69	3.81	3.71	4.16	4.89	4.95	4.43	5.65
10	4.00	4.27	4.70	4.00	3.66	3.67	3.69	3.96	4.65	4.59	4.68	
15	3.92	4.09	4.41	3.90	3.66	3.83	3.66	4.15	4.91	4.22	4.53	
20	3.91	4.43	4.21	3.83	3.84	3.95	3.67	3.92	4.58	4.25	4.71	
25	4.03	4.36	4.19	3.78	3.84	3.79	3.56	5.15	5.39	4.28	4.57	
EOM	4.08	4.25	4.07	3.69	3.87	3.78	4.45		4.85	4.62	4.78	5.52
MAX	4.16	4.69	4.70	4.11	3.87	4.05	4.45			5.11	4.92	



6.08

5.61

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--254334080284401. Local Number G 3558. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°43'39", long 80°28'47", in SW  $^{1}\!\!/_{4}$  SW  $^{1}\!\!/_{4}$  SW  $^{1}\!\!/_{4}$  sec.18, T.54 S., R.39 E., Hydrologic Unit 03090202, at the northeast corner of Florida Power and Light service road next to Bird Drive extension canal and SW 177th Avenue (Krome Avenue).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19 ft, cased to 14 ft, screened 14 to 19 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of shelf, 9.93 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.1 ft above NGVD.

5.50

5.12

5.01

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

5.51

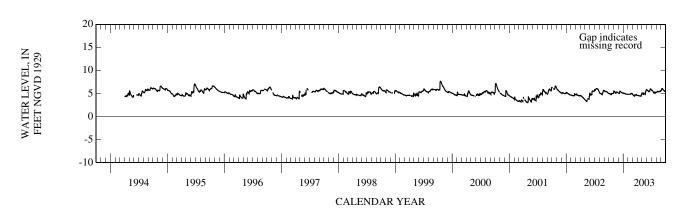
5.05

MAX

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.62 ft NGVD, Oct. 17-19, 1999; lowest, 2.98 ft NGVD, Apr. 29, 30, 2001.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5	4.95	5.48	5.04	5.08	4.81	4.68	4.53	4.98	5.69	5.66	5.26	5.87	
10	4.82	5.24	5.49	4.97	4.81	4.49	4.53	4.79	5.54	5.49	5.46	6.02	
15	4.75	5.03	5.40	4.92	4.80	4.41	4.46	5.06	5.40	5.18	5.40	5.80	
20	4.96	5.31	5.24	4.85	4.97	4.71	4.47	4.82	5.41	5.14	5.42	5.60	
25	5.00	5.24	5.13	4.84	5.00	4.65	4.36	5.35	6.01	5.27	5.47	5.43	
EOM	5.05	5.11	5.03	4.80	4.96	4.63	5.06	5.81	5.77	5.24	5.60	5.75	



5.81

5.06

6.01

5.72

WELL NUMBER.--254335080170501. Local Number G 432. USGS Observation Well near Coral Gables, FL.

LOCATION.--Lat 25°43'35", long 80°17'05", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  Sw  $\frac{1}{4}$  Sec.19, T.54 S., R.41 E., Hydrologic Unit 03090202, at the northwest corner of intersection of Blue Road and Alhambra Circle, 28 ft west of Alhambra Circle and 6 ft north of Blue Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.5 in., depth 99.5 ft, cased to 97.5 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.99 ft above National Geodetic Vertical Datum of 1929

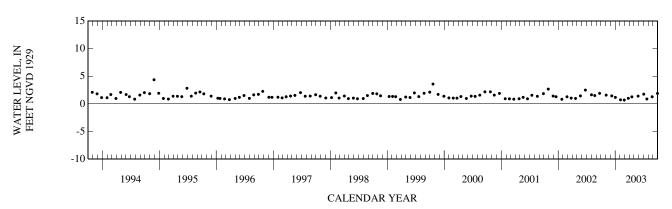
LAND-SURFACE DATUM.--Land surface is approximately 12.0 ft above NGVD.

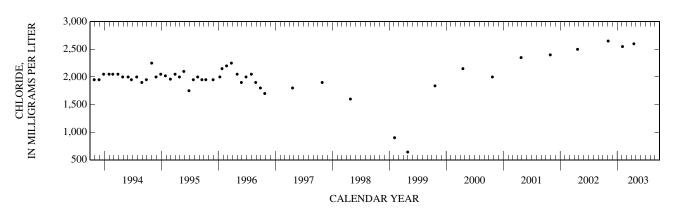
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD.--October 1983 to October 1984 (semiannual), February 1985 to April 1985 (weekly), January 1986 to April 1986 (monthly), October 1986 to October 1990 (semiannual), November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.37 ft NGVD, Nov. 28, 1994 (Corrected); lowest, 0.11 ft NGVD, Apr. 15, 1985.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					APR				
04	1602	1.59	8,120	2,650	18	1305	1.28	7,990	2,600
DEC					MAY				
10	1245	1.45			28	1155	1.41		
JAN					JUL				
02	1343	1.18			03	1335	1.76		
FEB					23	1340	0.89		
04	1202	0.74	7,740	2,550	AUG				
28	1025	0.71			26	0945	1.29		
MAR					SEP				
26	1315	1.01			29	0936	1.89		





WELL NUMBER.--254340080203601. Local Number G 3563. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°43'40", long 80°20'36", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.21, T.54 S., R.40 E., Hydrologic Unit 03090202, at SW 92nd Avenue between SW 43rd Street and SW 43rd Terrace, 7 ft west of curb. (Corrected).

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.1 ft, cased to 13.1 ft, open hole 13.1 to 18.1 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.97 ft above National Geodetic Vertical Datum of 1929.

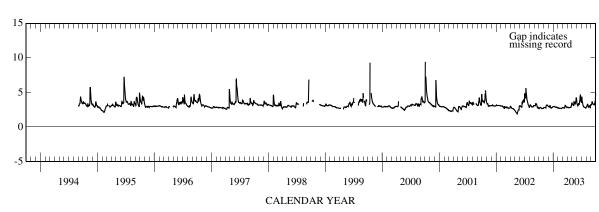
LAND-SURFACE DATUM.--Land surface is approximately 8.8 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.42 ft NGVD, Oct. 3, 2000; lowest, 1.88 ft NGVD, May 15, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	2.72 2.83 2.79 2.66 2.67 2.70	2.82 2.80 2.74 3.10 3.12 3.00	2.91 3.09 2.88 2.74 2.85 2.95	2.96 2.92 2.90 2.87 2.83 2.77	2.77 2.71 2.71 2.71 2.67 2.78	2.81 2.75 2.72 3.12 2.96 2.84	2.86 2.79 2.79 2.83 2.83 3.47	3.29 3.15 3.67 3.34 3.72 3.99	3.22 3.21 3.29 3.70 4.54 3.60	3.99 3.28 2.91 2.86 2.80 2.86	3.05 3.27 2.91 3.06 2.89 3.25	3.29 3.48 3.29 3.27 3.52 4.85
MAX	2.83	3.19	3.09	2.97	2.79	3.12	3.47	4.21	4.58	4.37	3.28	4.85





MAX

4.18

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--254421080260201. Local Number G 3439. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°44'21", long 80°26'02", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 16, T.54 S., R.39 E., Hydrologic Unit 03090202, on north side of SW 30th Street, 500 ft west of SW 147th Avenue, 0.75 mi north of Bird Road, 15 mi west of Miami.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 12 ft, cased to 10 ft, open hole 10 ft to 12 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of flange, 8.51 ft above National Geodetic Vertical Datum of 1929. Prior to March 14, 2002, the measuring point was 7.49 ft above NGVD. Prior to October 5, 1999, the measuring point was 7.56 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 5.8 ft above NGVD.

4.90

4.14

4.00

REMARKS.--Station reconstructed October 5, 1999, March 14, 2002.

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

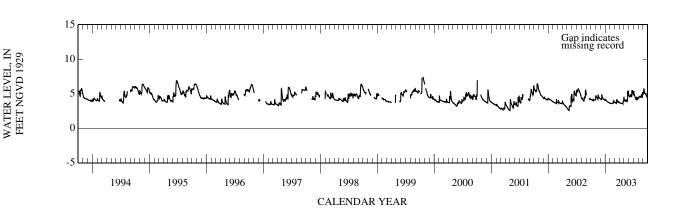
4.83

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.44 ft NGVD, Oct. 16, 1999; lowest, 2.15 ft NGVD, May 23, 1990.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.14	4.58	4.18	4.13	3.62	3.76	3.68	4.10	4.57	5.04	4.38	5.43
10	4.09	4.39	4.90	3.95	3.58	3.66	3.64	3.91	4.64	4.61	4.60	5.22
15	3.98	4.18	4.44	3.85	3.57	4.16	3.60	4.13	4.90	4.30	4.48	5.02
20	4.04	4.51	4.22	3.77	3.78	3.96	3.62	3.92	4.57	4.56	4.68	4.85
25	4.11	4.42	4.21	3.72	4.00	3.78	3.55	5.37	5.43	4.26	4.54	4.70
EOM	4.13	4.28	4.04	3.63	3.82	3.77	4.40	4.96	4.87	4.42	4.80	5.47

4.16

ELEVATION ABOVE NGVD 1929, FEET



4.40

5.39

5.47

5.36

5.25

5.77

WELL NUMBER.--254432080240401. Local Number G 3572. USGS Observation Well near Miami, FL.

 $LOCATION.--Lat~25^{\circ}44'32'', long~80^{\circ}24'04'', in~SE~\frac{1}{4}~NE~\frac{1}{4}~NE~\frac{1}{4}~Sec. 14, T.54~S., R.39~E., Hydrologic~Unit~03090202, 6~ft~from~edge~of~pavement~in~southwest~corner~of~cul-de-sac~at~SW~27th~Terrace~and~SW~127th~Avenue.~(Corrected).$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.4 ft, cased to 14.4 ft, open hole 14.4 to 19.4 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.01 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 8.0 ft above NGVD.

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

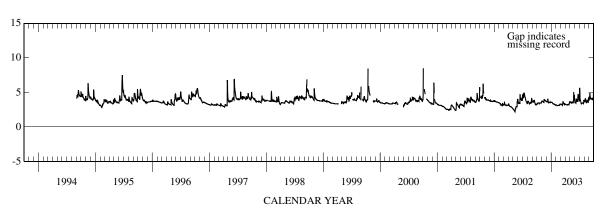
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.50 ft NGVD, Oct. 3, 2000; lowest, 2.20 ft NGVD, May 14, 2002.

ELEVATION ABOVE NGVD 1929, FEET

	YEAR OCT	OBER 2002 MAXIMUM	TO SEPTE	EMBER 2003		
JAN	FEB	MAR	APR	MAY	JUN	J

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	3.45 3.48	3.75 3.67	3.64 4.07	3.58 3.44	3.13 3.10	3.30 3.25	3.27 3.21	3.57 3.49	3.55 4.11	4.10 3.60	3.74 3.77	4.41 4.11
15	3.41	3.55	3.55	3.36	3.11	3.22	3.19	3.65	3.95	3.42	3.51	4.07
20 25	3.41 3.50	3.87 3.81	3.55 3.62	3.30 3.26	3.17 3.27	3.54 3.36	3.25 3.19	3.50 5.07	3.62 4.47	3.48 3.44	3.86 3.53	4.02 4.10
EOM	3.49	3.73	3.57	3.18	3.30	3.31	3.69	3.92	3.78	3.69	3.93	5.02
MAX	3.51	4.01	4.07	3.58	3.31	3.66	3.69		4.71	5.66	4.19	5.10





WELL NUMBER.--254442080305201. Local Number G 3576. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°44'44", long 80°30'50", NE  $\frac{1}{4}$  sec. 13, T.54 S., R.38 E., Hydrologic Unit 03090202, 1.1 mi south of U.S. Highway 41 (Tamiami Trail) and 1.03 mi west of levee on west side of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 9.6 ft.

INSTRUMENTATION.--Satellite data collection platform.

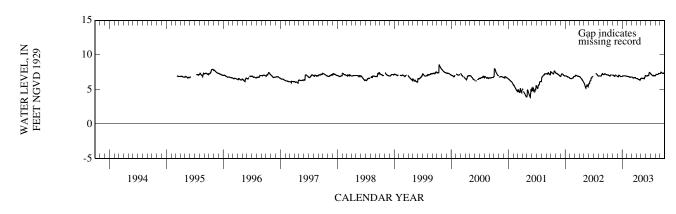
DATUM.--Measuring point: Top of base, 9.51 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above NGVD.

PERIOD OF RECORD .-- March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.55 ft NGVD, Oct. 16, 1999; lowest, 3.85 ft NGVD, May 22, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.06	7.05	6.85	6.95	6.89	6.80	6.58	6.61	6.94	7.20	7.12	7.36
10	6.98	6.95	7.06	6.97	6.86	6.70	6.54	6.58	6.97	7.10	7.17	7.44
15	6.94	6.89	7.01	6.97	6.84	6.63	6.45	6.63	7.01	6.99	7.18	7.37
20	7.08	7.07	6.90	6.97	6.77	6.71	6.42	6.57	7.00	6.97	7.22	7.31
25	7.05	7.00	6.86	6.93	6.77	6.71	6.32	6.70	7.47	7.00	7.31	7.36
EOM	7.07	6.92	6.88	6.90	6.79	6.64	6.57	7.01	7.33	6.98	7.31	7.63
MAX			7.06	6.97	6.90		6.61	7.02	7.47	7.29	7.32	7.63



WELL NUMBER.--254444080144801. Local Number F 179. USGS Observation Well near South Miami, FL.

 $LOCATION.-Lat~25^{\circ}44'44'', long~80^{\circ}14'48'', in~SE~\frac{1}{4}~NW~\frac{1}{4}~sec.16, T.54~S., R.41~E., Hydrologic~Unit~03090202, at northwest corner of SW~24th~Terrace~and~SW~32nd~Avenue, 0.5~mi~north~of~U.S.~Highway~1, and 3.8~mi~northeast~of~South~Miami.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 77 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of plywood base, 11.26 ft above National Geodetic Vertical Datum of 1929. Prior to December 1982, measuring point was top of casing, 11.17 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 8.8 ft above NGVD.

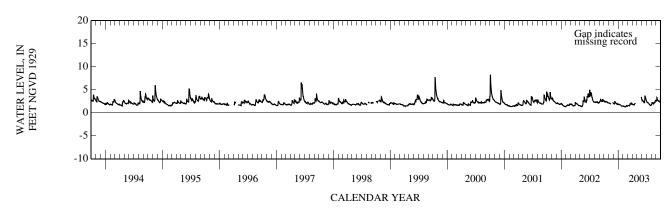
REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.16 ft NGVD, Oct. 4, 2000; lowest, 0.69 ft NGVD, Mar. 18, 1943.

# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES JAN FEB MAR APR MAY JUN JUL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.56	2.10	1.94	1.83	1.44	1.60	1.78		2.74	2.27	2.22	2.73
10	2.42	2.02	2.45	1.72	1.35	1.58	1.76		2.51	2.19	2.14	2.79
15	2.32	1.88	2.19	1.71	1.29	1.50	1.81		2.38	2.09	2.14	2.66
20	2.42		2.00	1.56	1.38	1.96	2.02		2.75	1.81	2.28	2.45
25	2.20		1.97	1.42	1.50	2.01			3.31	1.66	2.25	2.45
EOM	2.14	2.11	1.86	1.47	1.43	2.00		3.09	2.73	1.65	2.62	3.51
MAX	2.59		2.45	1.92	1.57	2.11			3.64	2.61	2.72	3.51



WELL NUMBER.--254445080295001. Local Number G 3559. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°44'45", long 80°29'50", in SE  $^{1}/_{4}$  SE  $^{1}/_{4}$  SE  $^{1}/_{4}$  sec.11, T.54 S., R.38 E., Hydrologic Unit 03090202, 1 mi south of Tamiami Trail (U.S. Highway 41) and 100 ft east of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 19.5 ft, cased to 14.5 ft, screened 14.5 to 19.5 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of shelf, 11.11 ft above National Geodetic Vertical Datum of 1929. During the 1994 water year the measuring point was incorrectly considered to be 11.38 ft above NGVD.

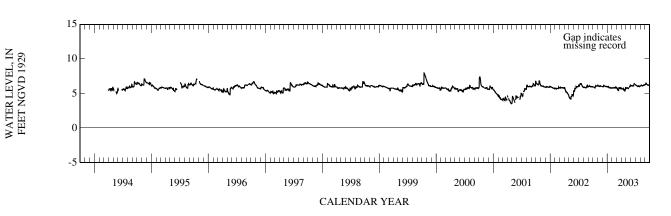
LAND-SURFACE DATUM.--Land surface is approximately 8.6 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, published for the 1994 water year are in error. Corrected records are in the files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD .-- April 1994 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.97 ft NGVD, Oct. 15, 1999; lowest, 3.51 ft NGVD, Apr. 27-29, 2001.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5	5.92	6.08	5.97	5.99	5.76	5.76	5.71	5.75	6.11	6.20	6.14	6.35	
10	5.88	6.03	6.19	5.97	5.81	5.48	5.68	5.77	6.12	6.11	6.16	6.39	
15	5.79	6.02	6.06	5.81	5.83	5.44	5.66	5.82	6.09	6.01	6.11	6.28	
20	6.14	6.07	6.01	5.85	5.76	5.78	5.52	5.72	6.10	6.09	6.15	6.22	
25	6.08	6.04	6.03	5.77	5.84	5.69	5.35	5.97	6.45	6.02	6.18	6.17	
EOM	6.09	6.00	5.95	5.82	5.85	5.74	5.85	6.17	6.28	6.09		6.46	
MAX	6.14		6.19	6.00	5.90					6.25			



WELL NUMBER.--254446080295501. Local Number G 3574. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°44'46", long 80°29'55", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.14, T.54 S., R.38 E., Hydrologic Unit 03090202, 1.06 mi south of U.S. Highway 41 (Tamiami Trail) next to levee on west side of L-31N Canal.

AQUIFER.--Biscayne limestone aquifer of Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 6.8 ft.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 8.88 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD.

6.50

6.40

6.15

PERIOD OF RECORD .-- February 1995 to current year.

6.54

MAX

WATER LEVEL, IN FEET NGVD 1929 6.46

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.18 ft NGVD, Oct. 15, 16, 1999; lowest, 3.58 ft NGVD, Apr. 27-29, 2001.

ELEVATION ABOVE NGVD 1929, FEET

DAILY MAXIMUM VALUES														
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
5	6.30	6.45	6.32	6.34	6.01	6.07	5.98	5.98	6.31	6.44	6.42	6.69		
10	6.25	6.38	6.50	6.24	6.07	5.86	5.95	5.99	6.33	6.34	6.44	6.73		
15	6.17	6.36	6.37	6.34	6.10	5.83	5.90	6.04	6.31	6.29	6.41	6.62		
20	6.46	6.45	6.34	6.32	6.03	6.07	5.79	5.95	6.33	6.35	6.48	6.57		
25	6.46	6.39	6.30	6.25	6.10	6.01	5.64	6.15	6.71	6.30	6.50	6.54		
EOM	6.41	6.34	6.30	6.08	6.12	6.02	6.02	6.39	6.56	6.35	6.61	6.85		

15 Gap indicates missing record 10 5 0 1998 1994 1995 1996 1997 1999 2000 2001 2002 2003 CALENDAR YEAR

6.05

6.42

6.71

6.52

6.61

6.85

WELL NUMBER.--254500080360001. Local Number G 618. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°45'40", long 80°36'00", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 12, T.54 S., R.37 E., Hydrologic Unit 03090202, on south side of U.S. Highway 41, 7.4 mi west of State Road 997 (Krome Avenue), and 25 mi west of Miami.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft, cased to 11 ft.

INSTRUMENTATION .-- Electronic data recorder.

DATUM.--Measuring point: Top of base, 10.17 ft above National Geodetic Vertical Datum of 1929.

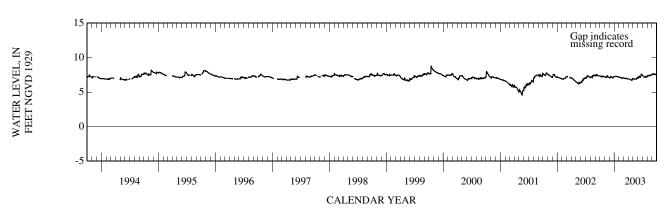
LAND-SURFACE DATUM.--Land surface is approximately 7.4 ft above NGVD.

REMARKS.--Records of water levels prior to January 1957 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.52 ft NGVD, Nov. 2, 1960; lowest, 2.56 ft NGVD, May 2, 1962.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	7.28 7.20 7.19 7.28 7.25 7.23	7.20 7.11 7.14 7.27 7.19 7.09	7.08 7.29 7.17 7.07 7.16 7.22	7.27 7.29 7.27 7.25 7.20 7.17	7.15 7.12 7.04 7.04 7.05 7.08	7.04 6.97 6.93 7.01 6.94 6.89	6.90 6.86 6.80 6.76 6.71 6.94	6.93 6.88 6.90 6.86 6.94 7.08	7.14 7.27 7.20 7.16 7.60 7.45	7.33 7.22 7.15 7.16 7.21 7.19	7.40 7.42 7.39 7.43 7.48 7.49	7.55 7.59 7.60 7.55 7.57 7.87
MAX	7.35	7.39	7.29	7.29	7.17	7.08	6.94	7.13	7.60	7.44	7.51	7.87



WELL NUMBER.--254536080172601. Local Number G 3570. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°45'36", long 80°17'26", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 12, T.54 S., R.40 E., Hydrologic Unit 03090202, at the northeast corner of SW 11th Street and SW 58th Avenue, 10 ft south of SW 11th Street and 22 ft west of SW 58th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.7 ft, cased to 13.7 ft, open hole 13.7 to 18.7 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring Point: Top of base, 13.28 ft above National Geodetic Vertical Datum of 1929.

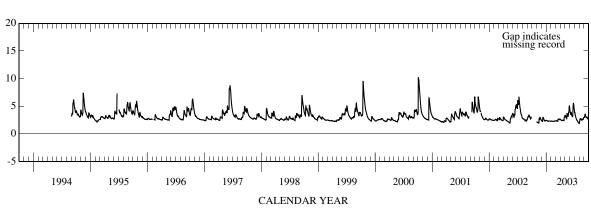
LAND-SURFACE DATUM.--Land surface is approximately 10.2 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.16 ft NGVD, Oct. 3, 2000; lowest, 1.90 ft NGVD, Aug. 2, 2003.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		2.10	2.32	2.40	2.32	2.37	2.56	3.26	3.80	3.59	2.59	3.03
10		2.02	2.97	2.33	2.27	2.32	2.42	2.88	3.88	3.02	2.75	3.40
15		1.95	2.77	2.31	2.27	2.27	2.45	3.68	3.28	2.59	2.68	3.01
20		2.73	2.47	2.31	2.29	2.67	2.46	3.18	3.27	2.32	2.62	2.96
25		2.78	2.37	2.31	2.33	2.58	2.42	3.92	5.52	2.14	2.59	2.71
EOM	2.09	2.53	2.43	2.31	2.33	2.65	3.23	4.84	4.25	1.92	2.98	3.99
MAX		2.98	2.99	2.45	2.33	2.69	3.23	5.06	5.52	4.01	2.98	3.99





WELL NUMBER.--254629080143101. Local Number G 3605. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°46′29", long 80°14′31", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.4, T.54 S., R.41 E., Hydrologic Unit 03090202, at northwest corner of Dade County Auditorium parking lot, northwest of the intersection of NW 29th Avenue and Flagler Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 110 ft, cased to 105 ft, screened 105 to 110 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.17 ft above National Geodetic Vertical Datum of 1929.

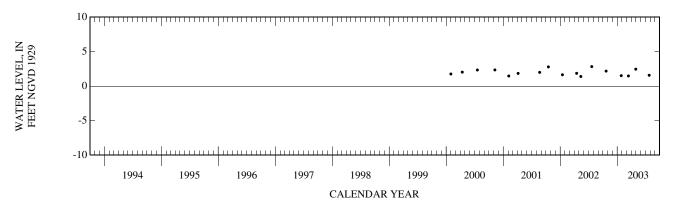
LAND-SURFACE DATUM.--Land surface is approximately 13.2 ft above NGVD.

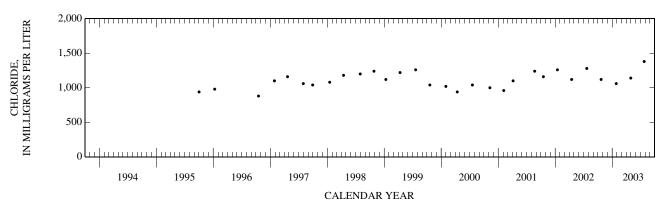
REMARKS.--Well is also used for quarterly salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. The induction log for the 2002 water year was not published because the data was considered questionable. This data may be published in subsequent years pending continued assessment of data quality. Salinity monitoring began September 1995. Water-level measurements began January 2000. (Corrected).

PERIOD OF RECORD.--September 1995 to current year. See REMARKS. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.82 ft NGVD, July 22, 2002; lowest, 1.39 ft NGVD, May 13, 2002.

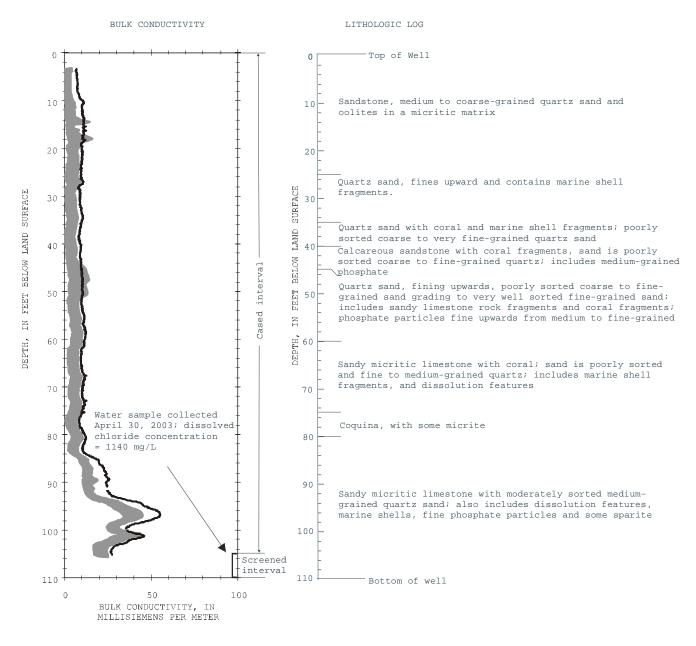
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	1055	2.17	4,050	1,120	30	0855	2.45	3,980	1,140
JAN					JUL				
27	1037	1.51	3,540	1,060	25	1003	1.57	4,840	1,380
MAR									
14	1030	1.47							





#### WELL NUMBER.--254629080143101. Local Number G 3605. USGS Observation Well near Miami, FL.

#### 254629080143101 G-3605



## EXPLANATION

Bulk conductivity, in millisiemens per meter, April 30, 2003

Shaded area represents range in bulk conductivity logs collected annually from January 10, 1996 to April 6, 2001 Plot for the 2002 water year has been excluded because the data is considered questionable. This data may be published in subsequent years pending continued assessment of data quality.

Delimits the interval for which the well is open to the aquifer  $% \left( 1\right) =\left( 1\right)$ 

WELL NUMBER.--254657080214401. Local Number G 3568. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°46'57", long 80°21'44", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.32, T.53 S., R.40 E., Hydrologic Unit 03090202, 10 ft south of edge of NW 12th Street and 1,742 ft east of NW 107th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

 $WELL\ CHARACTERISTICS. --Drilled,\ observation,\ water-table\ well,\ diameter\ 5\ in.,\ depth\ 16.8\ ft,\ cased\ to\ 11.8\ ft,\ open\ hole\ 11.8\ to\ 16.8\ ft.$ 

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.15 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.6 ft above NGVD.

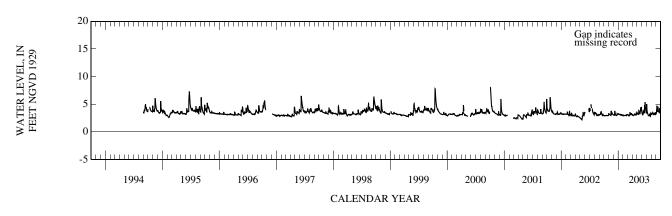
PERIOD OF RECORD.--September 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.05 ft NGVD, Oct. 3, 4, 2000; lowest, 2.17 ft NGVD, May 14, 2002.

# WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	2.92 2.96 2.92 2.94 2.94 3.00	3.17 3.07 3.00 3.34 3.24 3.10	3.03 3.80 3.14 2.94 3.29 3.23	3.22 3.14 3.16 3.11 3.08 3.03	2.95 2.98 2.98 3.01 3.15 3.09	3.10 2.88 2.99 3.32 3.13 3.15	3.10 3.04 3.04 3.10 3.06 3.57	3.29 3.19 3.72 3.29 4.27 3.94	3.25 3.63 4.03 4.54 4.26 3.38	3.88 3.23 2.94 3.16 2.90 3.19	3.36 3.46 3.19 3.42 3.12 3.40	3.88 3.73 3.86 3.54 4.08 4.95
MAX	3.00	3.72	3.80	3.24	3.15	3.51	3.57	4.50	5.37	5.03	3.48	5.12



5.77

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--254720080253002. Local Number G 3676. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°47'20", long 80°25'30", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.34, T.53 S., R.39 E., Hydrologic Unit 03090202, on north side of service road and north side of conveyor belt, on Rinker Materials property, 0.4 mi west of SW 137th Street 1.7 mi north of U.S. Highway 41 (Tamiami Trail).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 33 ft, cased to 23 ft, screened 23 to 33 ft.

INSTRUMENTATION .-- Electronic data logger.

MAX

4.98

DATUM.--Measuring point: Top of shelf, 10.90 ft above National Geodetic Vertical Datum of 1929.

4.69

4.25

LAND-SURFACE DATUM.--Land surface is approximately 8.3 ft above NGVD.

5.13

PERIOD OF RECORD.--December 1998 to current year.

5.15

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.30 ft NGVD, Oct. 16, 17, 1999; lowest, 2.63 ft NGVD, Apr. 29, 2001.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5	4.89	4.94	4.69	4.59	3.98	3.98	3.99	4.25	4.78	5.28	4.92	5.48	
10	4.79	4.83	5.11	4.42	3.92	3.87	3.92	4.12	5.14	5.05	5.00	5.61	
15	4.70	4.70	4.96	4.31	3.85	4.07	3.81	4.41	5.20	4.80	5.05	5.69	
20	4.83	4.95	4.79	4.19	3.96	4.12	3.90	4.15	5.08	4.87	5.09	5.46	
25	4.86	4.87	4.83	4.13	4.25	4.06	3.75	4.72	5.52	4.70	5.02	5.52	
EOM	4.81	4.75	4.58	4.04	4.08	4.08	4.44	4.95	5.20	4.85	5.23	5.72	

4.36

4.44

5.07

5.70

5.34

5.30

20 Gap indicates missing record 15 WATER LEVEL, IN FEET NGVD 1929 10 5 0 -5 1995 1996 1997 1998 1999 2000 2001 2002 2003 1994 CALENDAR YEAR

WELL NUMBER.--254722080152201. Local Number G 3604. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°47'22", long 80°15'22", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.32, T.53 S., R.41 E., Hydrologic Unit 03090202, at north side of parking lot of Stephen Clark Building, at intersection of NW 37th Avenue and NW 17th Street, 57 ft west of sidewalk, 0.3 mi north of State Road 836.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 120 ft, cased to 115 ft, screened 115 to 120 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring Point: Top of casing, 5.03 ft above National Geodetic Vertical Datum of 1929.

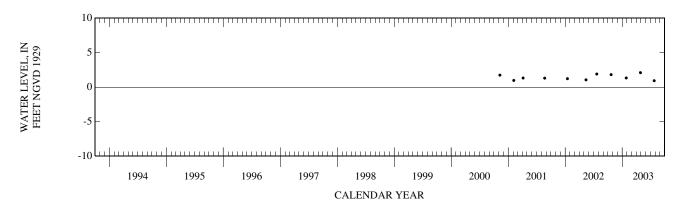
LAND-SURFACE DATUM.--Land surface is approximately 5.0 ft above NGVD.

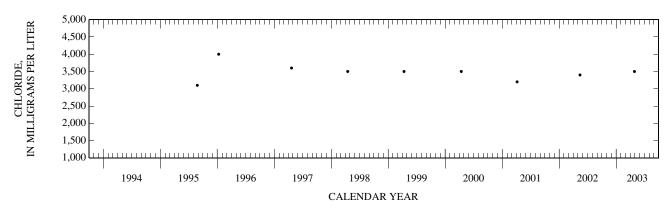
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998 and 2000) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began August 1995. Water-level measurements began November 2000.

PERIOD OF RECORD .-- August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.09 ft NGVD, Apr. 28, 2003; lowest, 0.96 ft NGVD, Feb. 5, 2001.

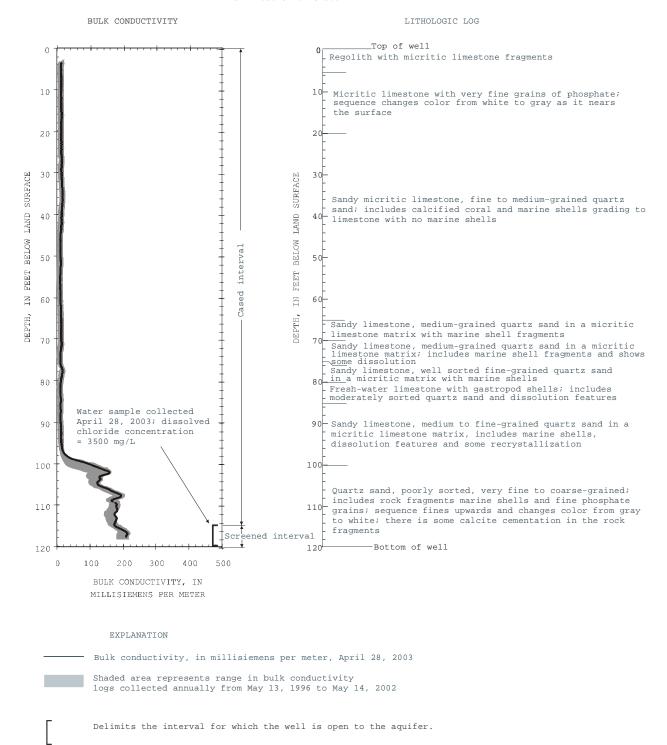
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	1036	1.80			28	1053	2.09	10,600	3,500
JAN					JUL				
27	1018	1.32			25	0947	0.92		





#### WELL NUMBER.--254722080152201. Local Number G 3604. USGS Observation Well near Miami, FL.

#### 254722080152201 G-3604



WELL NUMBER.--254752080181501. Local Number G 3329. USGS Observation Well near Miami Springs, FL.

 $LOCATION.-Lat~25^{\circ}47'52'', long~80^{\circ}18'15'', in~SW~^{1}\!\!/_{4}~SW~^{1}\!\!/_{4}~SW~^{1}\!\!/_{4}~sec.25, T.53~S., R.40~E., \\ Hydrologic~Unit~03090202, on~the~west~side~of~Miami~International~Airport, 314~ft~north~of~NW~25th~Street, 0.5~mi~east~of~Milam~Dairy~Road.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 54.6 ft, cased to 53 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of plywood base, 9.30 ft above National Geodetic Vertical Datum of 1929.

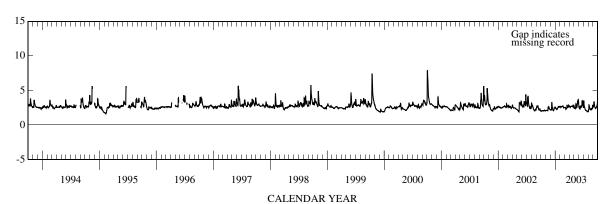
LAND-SURFACE DATUM .-- Land surface is approximately 6.1 ft above NGVD.

PERIOD OF RECORD .-- January 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.86 ft NGVD, Oct. 4, 2000; lowest, 1.63 ft NGVD, Feb. 12, 1995.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	2.03 2.09 2.03 2.06 2.13 2.03	2.12 2.09 2.07 2.35 2.31 2.22	2.21 3.28 2.30 2.11 2.43 2.59	2.41 2.28 2.36 2.62 2.70 2.66	2.59 2.65 2.68 2.75 2.46 2.51	2.54 2.29 2.34 2.70 2.60 2.76	2.68 2.67 2.70 2.71 2.63 2.77	2.56 2.37 3.04 2.64 3.46 3.16	2.46 2.71 2.72 2.74 3.38 2.57	2.94 2.42 2.16 2.06 1.95 2.03	2.91 2.48 2.29 2.38 2.29 2.63	2.88 2.83 2.45 2.49 2.66 3.87
MAX	2.14	2.64	3.28	2.70	2.75	2.88	2.88	3.67	3.52	3.48	2.91	3.87





WELL NUMBER.--254813080161501. Local Number G 1351. USGS Observation Well near Miami Springs, FL.

LOCATION.--Lat 25°48'13", long 80°16'15", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 29, T.53 S., R.41 E., Hydrologic Unit 03090202, approximately 3 ft north of access road between canal and fence, behind the former Eastern Airlines hanger, west of Le Jeune Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 103 ft, cased to 100 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.80 ft above National Geodetic Vertical Datum of 1929. Prior to November 22, 2002, measuring point was 6.52 ft above NGVD. See REMARKS.

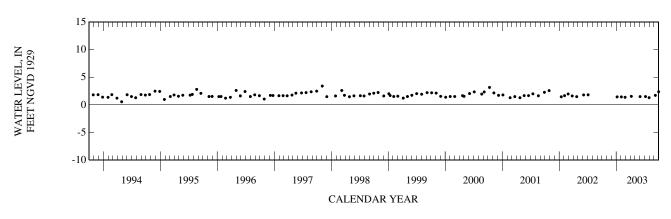
LAND-SURFACE DATUM.--Land surface is approximately 6.8 ft above NGVD. Prior to November 22, 2002, land surface was approximately 6.5 ft above NGVD. See REMARKS.

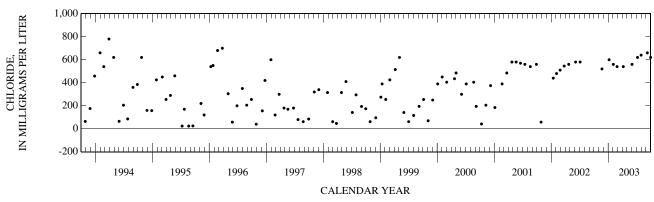
REMARKS.--Well also used for salinity monitoring. The well was buried by road construction in August 2002. In November 22, 2002, the well was uncovered and reconstructed. As a result both land surface and the measuring point changed. See DATUM and LAND-SURFACE DATUM.

PERIOD OF RECORD.--October 1975 to September 1990 (intermittent), October 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.41 ft NGVD, Nov. 4, 1997; lowest, 1.18 ft below NGVD, Oct. 7, 1986.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					JUN				
22	1225		2,160	520	03	1436	1.50	2,200	560
JAN					JUL				
07	1440	1.45	2,380	600	08	1257	1.51	2,180	620
FEB					31	1330	1.31	2,160	640
03	1040	1.45	2,090	560	SEP				
27	1334	1.38	2,180	540	09	1303	1.73	2,320	660
APR					30	1338	2.38	2,150	620
08	1055	1.55	2,190	540				,	





WELL NUMBER.--254822080125501. Local Number G 3704. USGS Observation Well in Miami, FL.

LOCATION.--Lat 25°48'22", long 80°12'55", in SW  $^{1}_{4}$  NW  $^{1}_{4}$  NE  $^{1}_{4}$  sec.26, T.53 S., R.41 E., Hydrologic Unit 03090202, in the southeast corner of the Metrorail parking lot, 36 ft north of NW 32nd Street and 55 ft west of NW 11th Place. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 112 ft, cased to 107 ft, screened 107 to 112 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.36 ft above National Geodetic Vertical Datum of 1929.

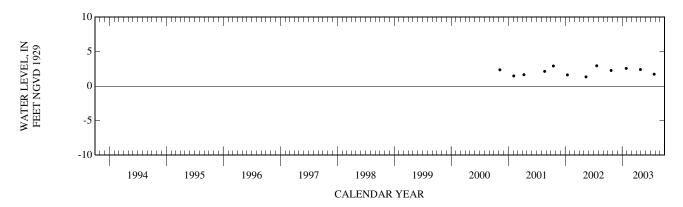
LAND-SURFACE DATUM.--Land surface is approximately 10.4 ft above NGVD.

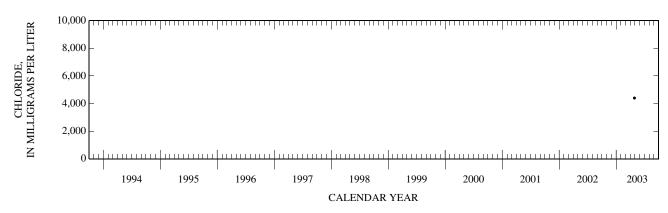
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the freshwater/salt-water interface in ground water. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of the book. Induction logging began April 2000. Salinity monitoring began in April 2003. Water-level measurements began November 2000.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.94 ft NGVD, July 22, 2002; lowest, 1.34 ft NGVD, May 14, 2002.

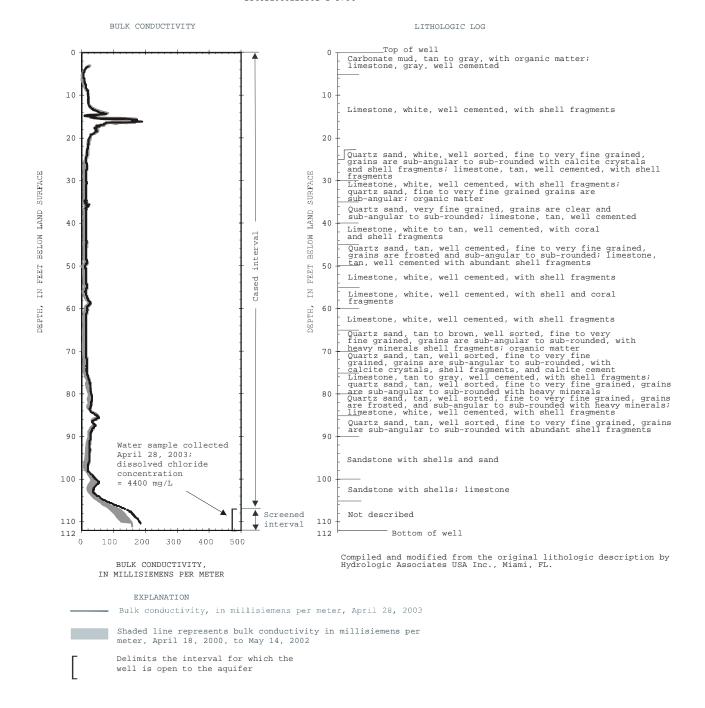
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	0940	2.26			28	0855	2.40	12,600	4,400
JAN					JUL				
27	0931	2.56			25	0923	1.72		





#### WELL NUMBER.--254822080125501. Local Number G 3704. USGS Observation Well in Miami, FL.

#### 254822080125501 G-3704



WELL NUMBER.--254823080163701. Local Number G 3327. USGS Observation Well near Miami Springs, FL.

LOCATION.--Lat 25°48'23", long 80°16'37", in NW  $^{1}\sqrt{_4}$  NE  $^{1}\sqrt{_4}$  sec.30, T.53 S., R.41 E., Hydrologic Unit 03090202, in the former Pan Am International Flight Academy parking lot, 0.2 mi south of NW 36th Street, 1.3 mi west of Le Jeune Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 54 ft, cased to 53 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.06 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.2 ft above NGVD. See REMARKS.

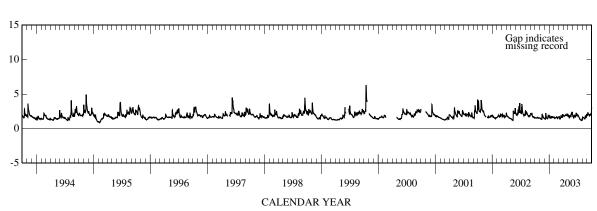
REMARKS.--Because of construction around well, the land surface was eroded during the 2003 water year.

PERIOD OF RECORD .-- May 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.30 ft NGVD, Oct. 15, 1999; lowest, 0.85 ft NGVD, Feb. 10, 11, 1995.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.57	1.50	1.39	1.78	1.48	1.72	1.84	1.87	1.74	1.96	1.65	2.01
10	1.55	1.42	2.24	1.51	1.60	1.44	1.85	1.58	1.91	1.68	1.60	2.01
15	1.54	1.36	1.59	1.75	1.61	1.53	1.89	1.84	1.92	1.46	1.50	1.90
20	1.56	1.60	1.46	1.73	1.70	1.83	1.96	1.91	1.73	1.29	1.83	2.07
25	1.52	1.60	1.83	1.68	1.44	1.64	1.89	2.35	2.21	1.18	1.62	2.03
EOM	1.53	1.50	1.92	1.64	1.61	2.00	1.94	2.00	1.83	1.41	1.97	3.10
MAX	1.64	2.07	2.24	1.87	1.73	2.01	2.12	2.37	2.22	1.99	2.06	3.10





WELL NUMBER.--254823080175201. Local Number G 3465. USGS Observation Well near Virginia Gardens, FL.

LOCATION.--Lat 25°48'23", long 80°17'52", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.25, T.53 S., R.40 E., Hydrologic Unit 03090202, on the north side of the USDA parking lot on NW 62nd Avenue, 600 ft south of NW 36th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 28.8 ft, cased to 28.8 ft.

INSTRUMENTATION.--Satellite data collection platform.

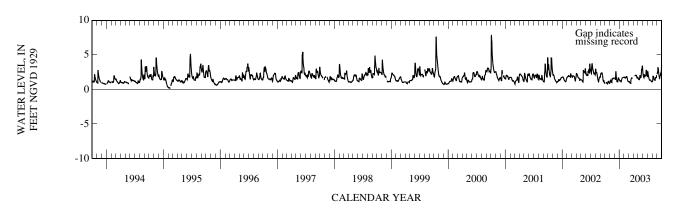
DATUM.--Measuring point: Top of base, 10.36 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 8.3 ft above NGVD.

PERIOD OF RECORD .-- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.79 ft NGVD, Oct. 4, 2000; lowest, 0.18 ft NGVD, Feb. 12, 1995.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	1.02 0.84 0.91 1.16 0.88	1.31 1.12 1.01 1.44 1.63 1.66	1.63 2.56 1.47 1.10 1.55 1.40	1.28 1.22 1.28 1.67 1.81 1.74	1.77 1.69 1.81 1.81 1.23 1.14	1.12 1.00 0.89 1.62 1.64	1.93 2.03 2.05 1.61 1.66	1.49 1.40 2.02 1.74 2.95 3.09	1.99 2.12 1.97 2.02 2.73 1.90	2.33 1.70 1.33 1.37 1.21 1.14	1.88 1.72 1.44 1.45 1.72	2.51 2.68 1.75 1.96 2.32 3.50
MAX		1.66	2.56		1.87			3.38	2.77	2.57		3.50



WELL NUMBER.--254830080284201. Local Number G 1488. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°49'07", long 80°28'57", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 30, T.53 S., R.39 E., Hydrologic Unit 03090202, 20 ft east of State Road 997 (Krome Avenue), 4 mi north of U.S. Highway 41, and 13.0 mi west of Miami.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.98 ft above National Geodetic Vertical Datum of 1929. Prior to January 3, 2001, the top of base was 9.93 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 7.4 ft above NGVD.

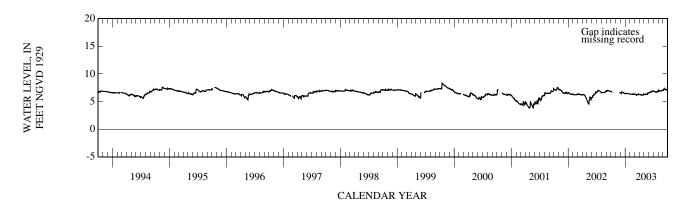
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Station reconstructed January 3, 2001.

PERIOD OF RECORD .-- May 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.33 ft NGVD, Oct. 15, 1999; lowest, 2.74 ft NGVD, May 23, 1990.

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	DAILY FEB	MAXIMUN MAR	I VALUES APR	MAY	JUN	JUL	AUG	SEP
5	6.79		6.50	6.43	6.32	6.30	6.25	6.30	6.60	6.85	6.86	7.16
10			6.75	6.48	6.34	6.30	6.22	6.27	6.73	6.79	6.95	7.16
15			6.68	6.50	6.32	6.10	6.22	6.32	6.83	6.70	6.95	7.21
20			6.60	6.44	6.33	6.26	6.20	6.27	6.76	6.72	6.95	7.14
25		6.64	6.55	6.40	6.42	6.26	6.13	6.43	6.89	6.75	6.97	7.15
EOM		6.59	6.43	6.37	6.32	6.29	6.31	6.57	6.87	6.85	7.05	7.28
MAX			6.75	6.50	6.42	6.39	6.36	6.60	6.90	6.95	7.08	7.33



WELL NUMBER.--254832080175001. Local Number S 19. USGS Observation Well in Virginia Gardens, FL.

LOCATION.—Lat 25°48'32", long 80°17'50", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.25, T.53 S., R.40 E., Hydrologic Unit 03090202, at intersection of NW 62nd Avenue and NW 39th Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 95 ft, cased to 91 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.44 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.2 ft above NGVD.

REMARKS.--Water levels affected by pumping. Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1939 to current year.

NOV

DAY

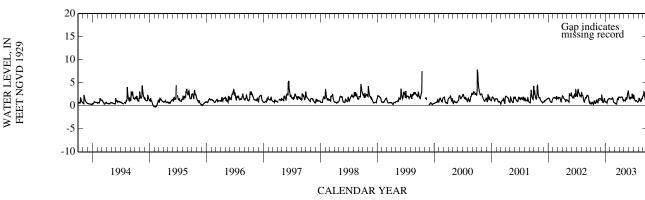
OCT

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.74 ft NGVD, Oct. 3, 4, 2000; lowest, 1.44 ft below NGVD, June 18-21, 1945.

ELEVATION ABOVE NGVD 1929, FEET

	WATER		OBER 2002 MAXIMUM		EMBER 2003				
DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1.44	0.80	1.49	0.57	1.85	1.15	1.81	1.97	1.55	2.46
2.24	0.74	1.45	0.45	1.77	1.04	1.87	1.30	1.38	2.50
0.98	1.04	1.66	0.35	1.90	1.74	1.75	1.11	1.14	1.35

5	0.41	1.16	1.44	0.80	1.49	0.57	1.85	1.15	1.81	1.97	1.55	2.46
10	0.78	0.78	2.24	0.74	1.45	0.45	1.77	1.04	1.87	1.30	1.38	2.50
15	0.40	0.65	0.98	1.04	1.66	0.35	1.90	1.74	1.75	1.11	1.14	1.35
20	0.72	1.00	0.77	1.44	1.45	1.44	1.91	1.59	1.77	1.11	1.18	1.91
25	0.84	1.57	1.41	1.57	0.75	1.38	1.17	2.77	2.43	0.91	1.58	2.25
EOM	0.50	1.50	0.94	1.53	0.67	1.91	1.26	2.81	1.55	0.88	2.10	3.40
MAX	1.03	1.59	2.24	1.57	1.73	1.91	1.92	3.21	2.52	2.30	2.10	3.40
	20 г											



WELL NUMBER.--254833080155801. Local Number G 1354. USGS Observation Well in Miami Springs, FL.

LOCATION.—Lat 25°48'33", long 80°15'58", SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec. 20, T.53 S., R.41 E., Hydrologic Unit 03090202, on west side of Coolidge Drive, 400 ft south of South Royal Poinciana Boulevard, in concrete meter box in line with the fourth bank teller driveway from the north.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 104 ft, cased to 91 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.61 ft above National Geodetic Vertical Datum of 1929.

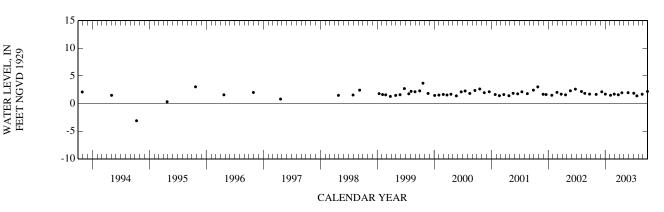
LAND-SURFACE DATUM.--Land surface is approximately 6.61 ft above NGVD.

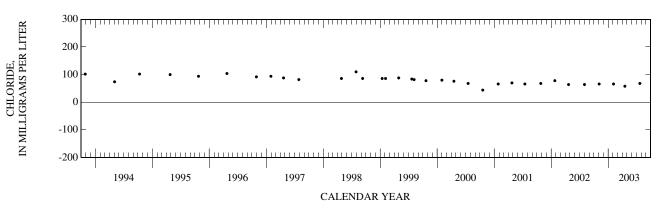
REMARKS.--Well also used for salinity monitoring. Because of an error on site maps, G-1354 was confused with another well. As a result, the figures of water level as elevation, in feet NGVD, and water-quality data from October 1994 to September 1997 are in error. Corrected data are in files of the U.S. Geological Survey.

PERIOD OF RECORD.--May 1976 to July 1997 (semiannual), April 1998 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.69 ft NGVD, Oct. 21, 1999; lowest, 3.11 ft below NGVD, Oct. 11, 1994.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					APR				
04	1205	1.66	591	66.0	18	0912	1.96	546	58.0
DEC					MAY				
10	1045	2.13			28	1102	1.97		
JAN					JUL				
02	1233	1.71			03	1129	1.87		
FEB					23	0935	1.39	548	68.0
04	1029	1.51	548	66.0	AUG				
28	0925	1.71			26	0849	1.69		
MAR					SEP				
26	1130	1.59			29	0835	2.19		





WELL NUMBER.--254834080171601. Local Number G 3466. USGS Observation Well in Miami Springs, FL.

 $LOCATION.-Lat~25^{\circ}48'34'', long~80^{\circ}17'16'', in~SW~\frac{1}{4}~SW~\frac{1}{4}~sec.19, T.53~S., R.41~E., Hydrologic~Unit~03090202, located~0.25~mi~north~of~Fairway~Drive~on~the~east~side~of~Eldron~Drive, on~the~north~side~of~the~parking~lot~at~Miami~Springs~Golf~Course.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 19.5 ft, cased to 19.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 10.64 ft above National Geodetic Vertical Datum of 1929. Prior to July 2002, measuring point was 10.63 ft above NGVD.

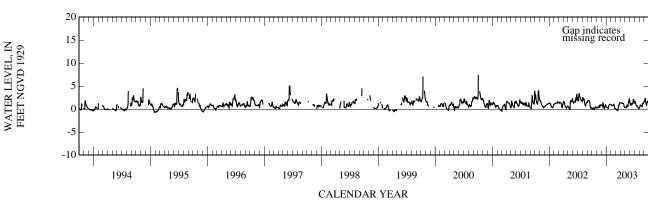
LAND-SURFACE DATUM.--Land surface is approximately 8.3 ft above NGVD.

PERIOD OF RECORD .-- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.46 ft NGVD, Oct. 3, 2000; lowest, 0.74 ft below NGVD, Jan. 30, 1995.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	-0.06 0.28	0.39 0.39	0.81 1.37	0.38 0.26	0.84 0.75	-0.06 -0.17	1.37 1.28	0.38 0.29	0.94 1.25	1.61 1.04	0.49 0.89	1.71 1.98
15	-0.04	0.32	0.56	0.38	0.92	-0.30	1.25	0.87	0.96	0.70	0.69	0.94

1.71 1.98 0.94 20 25 0.63 0.92 0.13 0.76 0.78 1.74 0.52 1.29 0.11 0.92 1.00 1.23 1.28 0.69 1.50 0.66 0.52 0.22 1.04 0.92 0.76 2.10 0.34 1.61 0.16 **EOM** 0.86 0.60 1.02 0.38 1.34 1.55 0.15 1.39 2.06 0.16 3.03 0.52 0.97 1.37 3.03 MAX 1.05 1.06 1.39 1.39 2.24 2.10 1.69 1.55



WELL NUMBER.--254839080162301. Local Number G 3467. USGS Observation Well in Miami Springs, FL.

LOCATION.—Lat 25°48'39", long 80°16'23", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.20, T.53 S., R.41 E., Hydrologic Unit 03090202, at East Drive Park, 0.10 mi south of Labaron Drive on East Drive. Located on east side of street next to the parking lot.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 27.5 ft, cased to 27.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of shelf, 7.07 ft above National Geodetic Vertical Datum of 1929. Prior to March 2002, measuring point was 5.99 ft above NGVD.

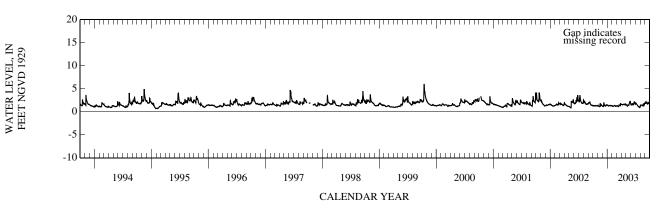
LAND-SURFACE DATUM.--Land surface is approximately 4.3 ft above NGVD.

REMARKS.--The well was reconstructed March 26, 2002.

PERIOD OF RECORD .-- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.95 ft NGVD, Oct. 15, 16, 1999; lowest, 0.68 ft NGVD, Feb. 11, 12, 1995.

#### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT DAY NOV DEC **FEB** MAR APR MAY JUN JUL AUG SEP JAN 1.33 1.26 1.19 1.40 1.20 1.32 1.59 1.51 1.64 1.87 1.45 1.84 1.24 1.27 10 1.33 1.17 2.02 1.25 1.13 1.56 1.25 1.75 1.60 1.47 1.88 15 1.26 1.12 1.40 1.38 1.15 1.56 1.47 1.75 1.36 1.36 1.71 20 1.32 1.41 1.26 1.39 1.37 1.48 1.63 1.52 1.58 1.16 1.67 1.95 25 1.29 1.40 1.51 1.37 1.18 1.38 1.51 2.10 2.15 0.99 1.50 1.85 **EOM** 1.26 1.26 1.50 1.36 1.26 1.71 1.59 1.89 1.73 1.24 1.84 3.18 MAX 1.37 1.75 2.02 1.49 1.39 1.76 1.73 2.27 2.17 1.93 1.91 3.18



WELL NUMBER.--254841080164401. Local Number G 571. USGS Observation Well in Miami Springs, FL.

LOCATION.--Lat 25°48'41", long 80°16'44", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.19, T.53 S., R.41 E., Hydrologic Unit 03090202, at northeast corner of intersection of Labaron and De Leon Drive, 60 ft north of Labaron Drive and 20 ft east of De Leon Drive.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.5 in., depth 94.5 ft, cased to 94.5 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.00 ft above National Geodetic Vertical Datum of 1929.

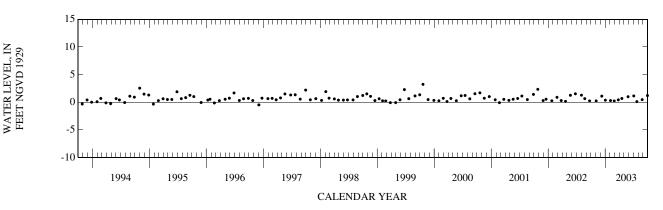
LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above NGVD.

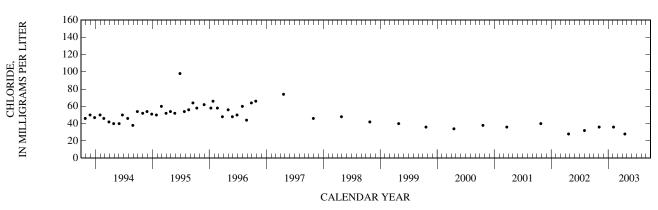
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD.--October 1975 to September 1990 (intermittent), October 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.24 ft NGVD, Oct. 21, 1999; lowest, 1.00 ft below NGVD, May 16, 1983.

Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
				APR				
1135	0.24	504	36.0	18	0846	0.68	444	28.0
				MAY				
1020	1.11			28	1032	1.00		
				JUL				
1205	0.37				1110	1.14		
				23	0913	0.11		
1000	0.30	447	36.0	AUG				
0910	0.23			26	0830	0.47		
				SEP				
1102	0.43			29	0815	1.20		
	1135 1020 1205 1000 0910	Time ation, feet above NGVD (72020)  1135 0.24 1020 1.11 1205 0.37 1000 0.30 0910 0.23	ation, feet above above (72020)         tance, wat unf uS/cm uS/cm (72020)           1135         0.24         504           1020         1.11            1205         0.37            1000         0.30         447           0910         0.23	Elevation, conductance, feet wat unfabove uS/cm fltrd, mg/L (72020) (00095) (00940)  1135 0.24 504 36.0  1020 1.11 1205 0.37 1000 0.30 447 36.0 0910 0.23	Elevation	Elevation, feet wat unfabove uS/cm fltrd, roughly flower	Elevation, tance, ation, feet wat uniffered bove uS/cm fltrd, above	Elevation, tance, ide, wat unfabove uS/cm   Elevation, feet wat unfabove uS/cm   fltrd,   Date   Time   NGVD   25 degC (72020) (00095)   (00940)     Date   Time   NGVD   25 degC (72020) (00095)





WELL NUMBER.--254855080163701. Local Number G 548. USGS Observation Well in Miami Springs, FL.

LOCATION.--Lat 25°48'55", long 80°16'37", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.19, T.53 S., R.41 E., Hydrologic Unit 03090202, at the northwest corner of intersection of Pinecrest Drive and La Villa Drive, 58 ft west of center of La Villa Drive and 30 ft north of center of Pinecrest Drive.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 97.3 ft, cased to 91.4 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.35 ft above National Geodetic Vertical Datum of 1929.

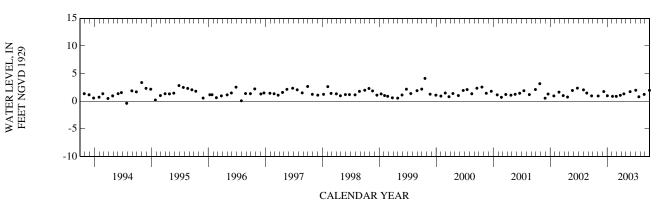
LAND-SURFACE DATUM.--Land surface is approximately 6.4 ft above NGVD.

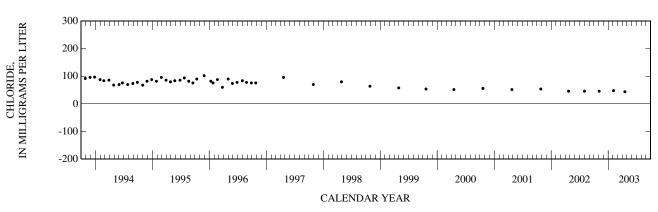
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD.--October 1975 to September 1990 (intermittent), October 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.13 ft NGVD, Oct. 21, 1999; lowest, 0.08 ft below NGVD, July 27, 1994.

Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
				APR				
1149	0.95	531	46.0	18	0858	1.34	500	44.0
				MAY				
1031	1.75			28	1043	1.73		
				JUL				
1220	0.99			03	1120	1.99		
				23	0923	0.80		
1020	0.89	504	48.0	AUG				
0857	0.88			26	0835	1.24		
				SEP				
1115	1.08			29	0822	1.97		
	1149 1031 1220 1020 0857	Time ation, feet above NGVD (72020)  1149 0.95 1031 1.75 1220 0.99 1020 0.89 0857 0.88	ation, feet above above ITime         tance, wat unf uS/cm VGVD (72020)         tance, wat unf uS/cm VGVD (72020)           1149         0.95         531           1031         1.75            1220         0.99            1020         0.89         504           0857         0.88	Elevation, conductance, feet wat unfabove uS/cm fltrd, mg/L (72020) (00095) (00940)  1149 0.95 531 46.0  1031 1.75 1220 0.99 1020 0.89 504 48.0 0857 0.88	Elevation,   Conductation,   Chloration,   Chloration,	Elevation,   Conductation,   Conductation,	Elevation, feet ation, feet wat uniffered bove uS/cm fltrd, water, above uS/cm fltrd, water, feet above uS/cm fltrd, water	Elevation, tance, ide, wat unfeet wat unfeet wat unfeet above uS/cm fltrd,   Date   Time   NGVD   25 degC (72020) (00095)   (00940)     Date   Time   NGVD   25 degC (72020) (00095)





WELL NUMBER.--254857080171101. Local Number S 68. USGS Observation Well in Miami Springs, FL.

LOCATION.--Lat 25°48'57", long 80°17'11", in NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.19, T.53 S., R.41 E., Hydrologic Unit 03090202, in center median of Curtis Parkway, 75 ft northeast of Deer Run.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 61 ft, cased to 51 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of recorder shelf, 9.68 ft above National Geodetic Vertical Datum of 1929.

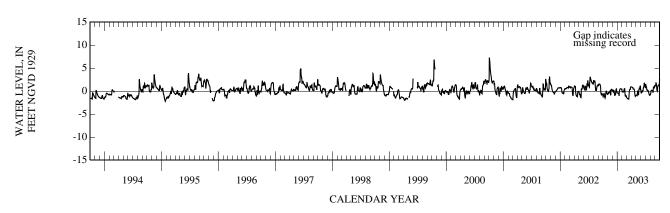
LAND-SURFACE DATUM.--Land surface is approximately 6.4 ft above NGVD.

REMARKS.--Water levels affected by pumping. Records of water levels prior to January 1957 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.18 ft NGVD, Oct. 3, 4, 2000; lowest, 4.39 ft below NGVD, May 5, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	-0.97 -0.61	-0.26 -0.29	0.01 0.15	-0.41 -0.47	-0.19 -0.12	-1.54 -1.67	0.87 0.78	-0.89 -0.71	-0.32 0.02	1.15 0.31	-0.20 0.18	1.18 1.32
15	-1.51	-0.38	-0.77	-0.04	0.44	-1.76	0.45	-0.11	0.13	0.18	0.09	0.00
20	-0.42	-0.90	-0.81	0.49	-0.50	0.15	0.43	0.28	0.89	-0.11	0.18	1.20
25	-0.34	0.38	0.36	0.48	-0.93	0.40	-0.90	0.65	1.73	-0.72	0.84	1.25
EOM	-0.71	0.12	-0.34	0.40	-1.10	0.92	-0.99	0.56	0.75	-0.80	1.12	2.62
MAX	-0.02	0.41	0.47	0.51	0.53	0.92	0.92	1.15	1.73	1.41	1.16	2.62



WELL NUMBER.--254917080143301. Local Number G 3564. USGS Observation Well near Miami, FL.

LOCATION.--Lat 25°49'17", long 80°14'33", in SE  $^{1}/_{4}$  NE  $^{1}/_{4}$  NE  $^{1}/_{4}$  sec.21, T.53 S., R.41 E., Hydrologic Unit 03090202, in Metrorail station parking lot at NW 52nd Street and NW 29th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.8 ft, cased to 13.8 ft, open hole 13.8 to 18.8 ft.

INSTRUMENTATION .-- Electronic data logger.

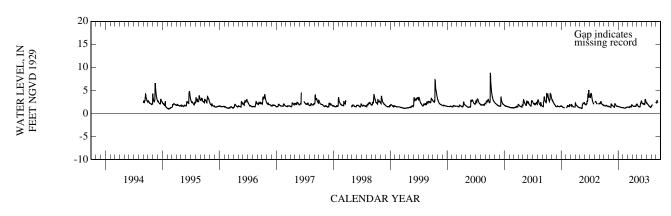
DATUM.--Measuring point: Top of base, 12.90 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 10.2 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.71 ft NGVD, Oct. 3, 4, 2000; lowest, 0.96 ft NGVD, Feb. 11, 12, 1995.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.70	1.50	1.40	1.46	1.23	1.41	1.63	1.82	2.21	2.22	1.80	2.28
10	1.63	1.38	2.10	1.40	1.18	1.35	1.54	1.53	2.09	1.97		2.58
15	1.69	1.32	1.92	1.38	1.15	1.28	1.52	1.48	2.11	1.76		
20	1.70	1.82	1.65	1.30	1.23	1.56	1.58	1.42	1.97	1.55		
25	1.54	1.71	1.57	1.26	1.35	1.42	1.54	2.26	3.01	1.39		
EOM	1.49	1.54	1.51	1.26	1.38	1.82	1.98	2.61	2.38	1.51	2.39	
MAX	1.78	2.07	2.11	1.53	1.38	1.88	1.98	2.70	3.05	2.34		



WELL NUMBER.--254940080172001. Local Number G 1282. USGS Observation Well near Miami Springs, FL.

LOCATION.--Lat 25°49'40", long 80°17'20", SW  $^{1}/_{4}$  NW  $^{1}/_{4}$  SW  $^{1}/_{4}$  sec. 18, T.53 S., R.41 E., Hydrologic Unit 03090202, 100 ft south of Miami Canal, in green meter box 13 ft northeast of the guard rail on the northern side of North Royal Poinciana Boulevard, across from Rio Vista Drive.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 84 ft, cased to 56.8 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.30 ft above National Geodetic Vertical Datum of 1929. Prior to March 24, 1997 measuring point was 10.20 ft above NGVD. From September 1990 to September 1996, measuring point was incorrectly considered to be 9.31 ft above NGVD (measuring point of G-1283). See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.3 ft above NGVD.

REMARKS.--Data collected at this site was published under well ID 254940080172002 (G-1283) from September 1990 to September 1996. The published figures of water level as elevation, in feet NGVD, for this period, are in error. Corrected figures are in the files of the U.S. Geological Survey. See DATUM. The well was originally open to the aquifer from 56.8 to 84 ft. The cased interval is collapsed or obstructed at a depth of 48.1 ft. The well remains in communication with the aquifer.

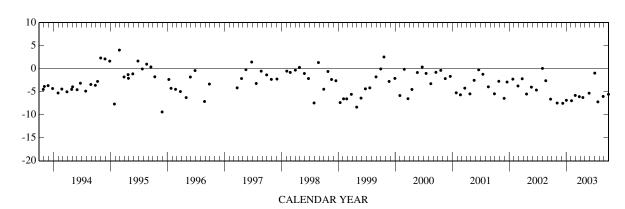
PERIOD OF RECORD.--January 1966 to June 1984 (daily), October 1984 to May 1985 (semiannual), September 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.55 ft NGVD, Sept. 12, 1971 and May 29, 1984; lowest, 13.31 ft below NGVD, May 10, 1983.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elev- ation, feet above NGVD (72020)	Date	Time	Elevation, feet above NGVD (72020)
NOV			APR		
04	1058	-7.45	18	0825	-6.25
DEC			MAY		
10	1007	-7.51	28	1015	-5.31
JAN			JUL		
02	1153	-6.86	03	1102	-0.95
FEB			23	0855	-7.20
04	0945	-6.95	AUG		
28	0840	-5.79	26	0808	-6.02
MAR			SEP		
26	1045	-6.06	29	0802	-5.55





WELL NUMBER.--254943080121501. Local Number F 45. USGS Observation Well in Miami, FL.

LOCATION.--Lat 25°49'43", long 80°12'15", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.13, T.53 S., R.41 E., Hydrologic Unit 03090202, at corner of NW 58th Street and NW 5th Avenue in Miami, 1.3 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 6 in., depth 84.9 ft.

REVISED RECORDS .-- WDR FL-85-2B:1984.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 12.24 ft above National Geodetic Vertical Datum of 1929. Prior to August 4, 2000, top of base was 11.97 ft above NGVD.

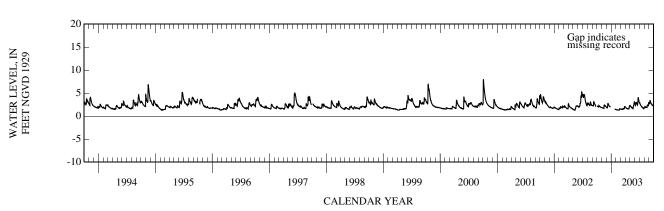
LAND-SURFACE DATUM .-- Land surface is approximately 9.0 ft above NGVD.

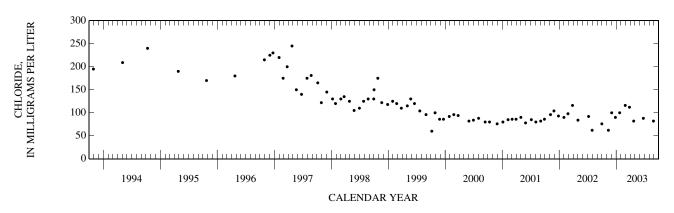
REMARKS.--The station was reconstructed August 4, 2000. Well is also used for salinity monitoring. Records of water levels prior to October 1973 are available in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.10 ft NGVD, Sept. 10, 24, 1960; lowest, 1.10 ft NGVD, Apr. 14, 15, 1979.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	2.12 2.02 2.23 2.08 1.94	1.82 1.76 1.66 2.24 2.19	1.80 2.73 2.49 2.19 2.04	   1.49	1.39 1.34 1.30 1.31 1.61	1.51 1.47 1.46 1.63 1.66	1.83 1.65 1.59 1.62 1.57	2.19 1.92 1.79 1.62 2.35	2.44 2.96 2.83 2.57 3.79	2.67 2.32 2.07 1.87 1.72	2.12 1.92 1.95 2.34 2.30	2.68 3.13 2.68 2.40 2.28
EOM	1.83	1.98		1.44	1.57	2.06	2.29	3.04	3.00	1.80	2.88	3.24
MAX		2.38			1.61	2.09	2.29	3.10	3.99	2.89	2.95	3.39





WELL NUMBER.--254946080172601. Local Number G 3250. USGS Observation Well in Miami Springs, FL.

LOCATION.--Lat 25°49'46", long 80°17'26", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 13, T.53 S., R.40 E., Hydrologic Unit 03090202, approximately 20 ft west of the intersection of Dove Avenue and North Royal Poinciana Boulevard and 3 ft east of Miami Canal.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 116 ft, cased to 106 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.73 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 5.7 ft above NGVD.

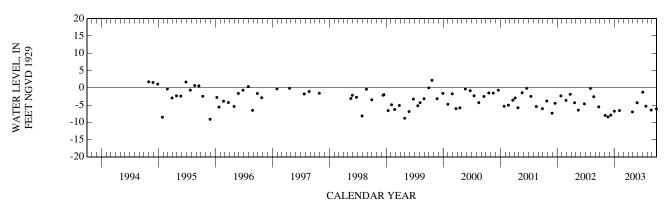
REMARKS.--Well also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book.

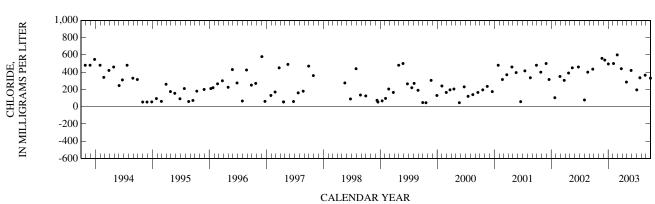
PERIOD OF RECORD.--August 1981 to September 1994 (intermittent), October 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.16 ft NGVD, Oct. 21, 1999; lowest, 9.12 ft below NGVD, Nov. 29, 1995.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

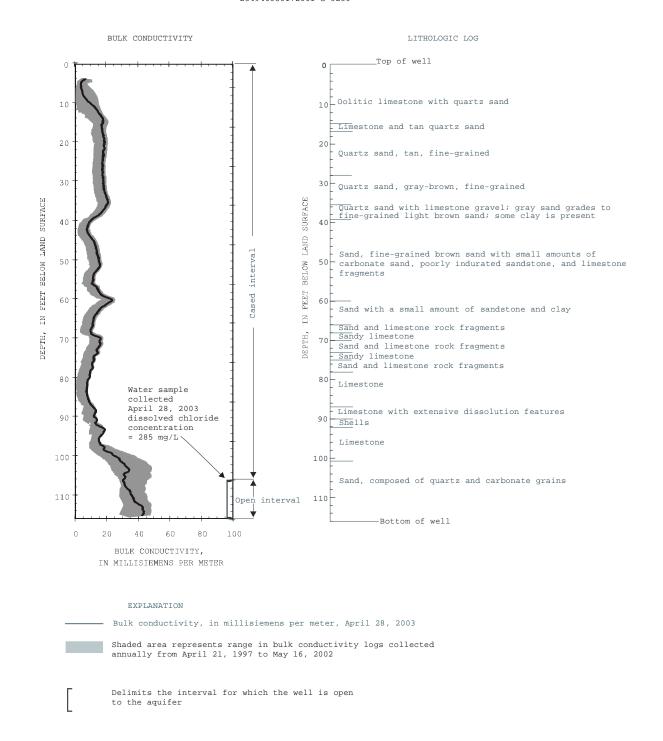
Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
NOV					APR				
04	0910	-8.01			28	1055	-7.01	1,350	285
22	0900	-8.43	2,160	560	MAY				
DEC					28	0950	-4.35	1,770	420
10	0950	-7.94	2,130	540	JUL				
JAN					03	1046	-1.29	1,010	195
02	1135	-6.80	1,970	495	23	0750	-5.35	1,500	335
FEB					AUG				
04	0930	-6.59	2,100	500	26	0744	-6.44	1,730	365
28	0810		2,230	600	SEP				
MAR					29	0737	-6.13	1,570	330
26	1025		2,010	440					





WELL NUMBER.--254946080172601. Local Number G 3250. USGS Observation Well in Miami Springs, FL.

#### 254946080172601 G-3250



WELL NUMBER.--254950080171202. Local Number G 1368A. USGS Observation Well in Hialeah, FL.

LOCATION.—Lat 25°49′50", long 80°17′12", in SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.18, T.53 S., R.41 E., Hydrologic Unit 03090202, near West 2nd Avenue, 0.3 mi east of Red Road.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 39 ft, cased to 38.4 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 11.49 ft above National Geodetic Vertical Datum of 1929.

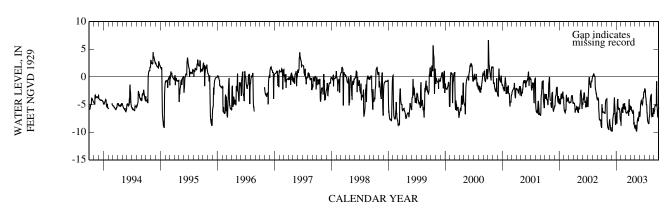
LAND-SURFACE DATUM .-- Land surface is approximately 8.2 ft above NGVD.

REMARKS .-- Water levels affected by pumping.

PERIOD OF RECORD .-- April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.75 ft NGVD, Oct. 9, 1991; lowest, 14.01 ft below NGVD, Apr. 28, 29, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	-6.21 -6.34	-8.43 -9.26	-9.63 -7.66	-8.13 -4.18	-5.85 -5.92	-6.39 -6.51	-5.90 -6.11	-8.81 -9.72	-5.66 -4.37	-2.18 -3.76	-5.35 -3.48	-5.95 -5.13
15 20	-6.42 -6.51	-9.50 -7.75	-6.67 -3.89	-5.77 -5.72	-4.97 -5.26	-6.32 -6.49	-6.49 -6.52	-8.58 -7.42	-4.75 -4.80	-5.01 -7.58	-5.76 -6.90	-5.28 -5.37
25	-4.52	-9.09	-6.53	-6.58	-5.28	-4.05	-8.26	-7.46	-3.76	-8.28	-6.45	-7.26
EOM	-4.02	-9.66	-7.95	-7.84	-5.60	-5.72	-9.21	-6.92	-2.68	-7.61	-6.65	-5.48
MAX	-4.02	-3.98	-3.71	-3.99	-4.76	-4.05	-5.29	-6.28	-2.68	-2.14	-3.25	-0.80



WELL NUMBER.--254950080180801. Local Number G 3. USGS Observation Well in Miami Springs, FL.

 $LOCATION.--Lat~25^{\circ}49'50", long~80^{\circ}18'08", in~SW~^{1}\!\!/_{4}~NW~^{1}\!\!/_{4}~SE~^{1}\!\!/_{4}~sec.13,~T.53~S.,~R.40~E.,~Hydrologic~Unit~03090202, at northwest~corner~of~Hammond~N.25', and the corner of the co$ Drive and Ibis Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

 $WELL\ CHARACTERISTICS.\text{--}Drilled, observation, water-table\ well,\ diameter\ 6\ in.,\ depth\ 20\ ft.$ 

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.20 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 6.0 ft above NGVD.

REMARKS.--Water levels affected by pumping. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The well was originally open to the aquifer from 6 to 20 ft. The well has collapsed or become obstructed at a depth of 8.5 ft. Attempts to clear the obstruction have failed; however, water-level data for water-level elevations above -2.5 ft NGVD are unaffected by the obstruction.

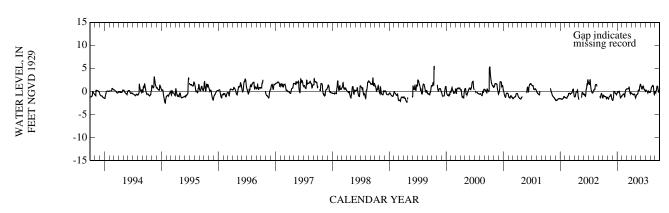
PERIOD OF RECORD .-- February 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.68 ft NGVD, Oct. 11, 1947; lowest, 3.77 ft below NGVD, Apr. 14, 1978.

ELEVATION ABOVE NGVD 1929, FEET

## WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-0.83	-1.62	-1.84	-0.05	-0.75	0.56	-0.48	-0.82	0.86	0.28	0.28	-0.39
10	-1.03	-1.25	-0.06	-0.15	-0.59	0.57	-0.62	-0.60	0.54	0.08	0.95	0.32
15	-1.11	-1.09	-0.02	-0.06	-0.62	0.59	-0.64	-0.05	1.15	-0.19	1.16	1.15
20	-1.13	-0.83	-0.45	-1.18	-0.52	0.45	-0.61	0.21	0.68	0.12	1.22	0.42
25	-1.49	-1.22	-0.60	-1.25	0.35	-0.42	-0.93	1.02	0.45	-0.18	-0.32	-0.09
EOM	-1.31	-1.74	-0.41	-1.01	0.44	-0.28	-1.33	1.53	0.01	-0.19	-0.09	0.66
MAX	-0.81	-0.68	0.02	0.03	0.44	0.93	-0.31	1.55	1.42	0.28	1.32	1.15



WELL NUMBER.--254951080194901. Local Number G 3566. USGS Observation Well near Medley, FL.

LOCATION.--Lat 25°49'51", long 80°19'49", in NE  $^{1}_{4}$  NE  $^{1}_{4}$  SW  $^{1}_{4}$  sec.15, T.53 S., R.40 E., Hydrologic Unit 03090202, 15 ft west of NW 82nd Avenue and 403 ft south of NW 62nd Street.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18 ft, cased to 13.2 ft, open hole 13.2 to 18 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 9.92 ft above National Geodetic Vertical Datum of 1929. Prior to January 8, 1998, measuring point was 9.90 ft above NGVD. See REMARKS.

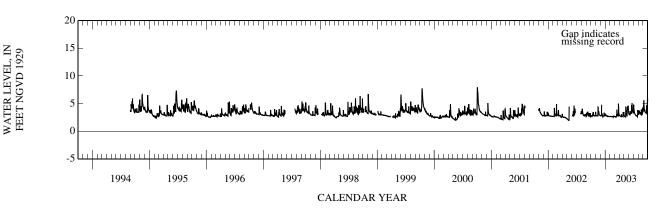
LAND-SURFACE DATUM.--Land surface is approximately 6.9 ft above NGVD.

REMARKS.--Station reconstructed January 8, 1998.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.87 ft NGVD, Oct. 4, 2000; lowest, 1.93 ft NGVD, May 13, 2002.

					YEAR OC	N ABOVE NO TOBER 2002 MAXIMUN	TO SEPTE		1			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.77	2.81	2.80	2.85	2.64	2.65	2.79	2.75	3.04	3.93	3.78	4.36
10	2.83	2.79		2.76	2.65	2.53	2.72	2.59	3.61	3.16	3.27	3.71
15	2.76	2.78	2.73	2.72	2.63	3.03	3.06	3.15	3.54	2.91	3.42	3.38
20	2.83	3.04	2.73	2.70	2.64	2.92	2.73	2.78	4.10	2.76	3.70	3.32
25	2.82	2.93	3.37	2.68	2.82	2.76	2.62	4.48	3.62	2.67	3.08	4.02
EOM	3.50	2.85	2.77	2.68	2.65	3.00	3.48	3.47	3.37	2.98	3.49	5.32
MAX	3.50	4.36		3.17	2.82	4.97	3.48	4.60	5.07	4.82	4.27	6.26



WELL NUMBER.--255008080161801. Local Number F 239. USGS Observation Well in Hialeah, FL.

LOCATION.--Lat 25°50′08", long 80°16′18", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.17, T.53 S., R.41 E., Hydrologic Unit 03090202, 20 ft north of East 15th Street and 50 ft east of East 5th Avenue, 1.3 mi east of NW 57th Avenue.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 52.8 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.22 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 8.0 ft above NGVD.

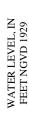
REMARKS.--Water levels affected by pumping. Records of water levels prior to October 1973 are available in the files of the U.S. Geological Survey.

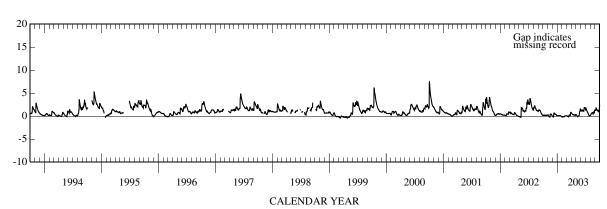
PERIOD OF RECORD .-- January 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.58 ft NGVD, Oct. 9, 1991; lowest, 1.44 ft below NGVD, Apr. 23, 1979.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	0.20	0.11	-0.15	0.08	-0.19	0.00	0.56	0.20	1.23	1.67	0.34	1.21
10	0.18	-0.12	0.61	0.09	-0.11	-0.06	0.36	-0.05	1.31	1.20	0.67	1.65
15	0.21	-0.23	0.61	0.09	-0.09	-0.15	0.28	-0.08	1.27	0.81	0.76	1.24
20	0.14	0.39	0.39	0.09	0.03	0.20	0.26	0.06	1.06	0.44	0.68	1.25
25	0.17	0.32	0.31	0.01	0.07	0.19	0.10	1.00	1.86	0.10	0.78	1.17
EOM	0.23	0.09	0.04	-0.17	0.07	0.78	0.31	1.57	1.50	0.06	1.29	2.45
MAX	0.23	0.47	0.67	0.11	0.07	0.81	0.75	1.59	1.86	1.81	1.29	2.45





WELL NUMBER.--255023080202301. Local Number G 976. USGS Observation Well near Miami Springs, FL.

LOCATION.--Lat 25°49'18", long 80°25'33", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.22, T.53 S., R.39 E., Hydrologic Unit 03090202, 0.75 mi north of NW 41st Street, 1.5 mi east of the Dade/Broward Levee, 4.25 mi north of U.S. Highway 41, and 7.0 mi west of Miami Springs.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

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

REVISED RECORDS .-- WDR FL-79-2B:1978.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 12.38 ft above National Geodetic Vertical Datum of 1929.

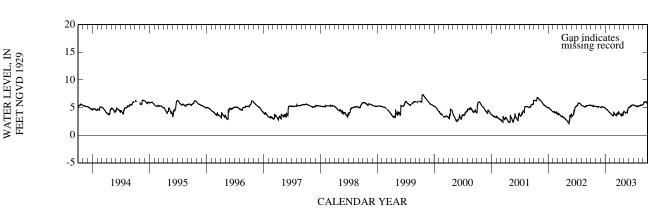
LAND-SURFACE DATUM.--Land surface is approximately 5.4 ft above NGVD.

REMARKS.--Water levels affected by pumping. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.34 ft NGVD, Oct. 18-20, 1999; lowest, 0.61 ft NGVD, June 20-24, 1989.

					YEAR OCT	I ABOVE NO TOBER 2002 MAXIMUM	TO SEPTE	FEET MBER 2003				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.37	5.21	5.02	4.81	3.92	3.77	3.89	4.22	5.05	5.44	5.29	5.72
10	5.28	5.15	5.15	4.63	3.74	3.60	3.70	4.09	5.27	5.38	5.36	5.99
15	5.21	5.07	5.19	4.58	3.58	3.61	3.70	4.12	5.33	5.28	5.44	6.08
20	5.26	5.18	5.08	4.38	3.59	3.86	3.72	4.18	5.31	5.31	5.38	6.00
25	5.23	5.15	5.02	4.23	4.15	3.91	3.56	4.55	5.46	5.18	5.46	6.02
EOM	5.20	5.08	4.90	4.10	3.89	4.06	4.28	5.00	5.43	5.21	5.57	6.18
MAX	5.44		5.19	4.90	4.15		4.28	5.00	5.50	5.47	5.57	6.18



WELL NUMBER.--255026080240302. Local Number G 3259A. USGS Observation Well near Hialeah, FL.

LOCATION.--Lat 25°50′26", long 80°24′03", in SE  ${}^1\!\!/_4$  SE  ${}^1\!\!/_4$  SE  ${}^1\!\!/_4$  Sec.11, T.53 S., R.39 E., Hydrologic Unit 03090202, on north side of NW 74th Street Extension, 0.8 mi west of Snapper Creek Canal Extension, and 1.0 mi north of NW 58th Street. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 4 in., depth 60 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of plywood base, 9.07 ft above National Geodetic Vertical Datum of 1929. Prior to March 27, 2002, measuring point was 7.43 ft above NGVD. See REMARKS.

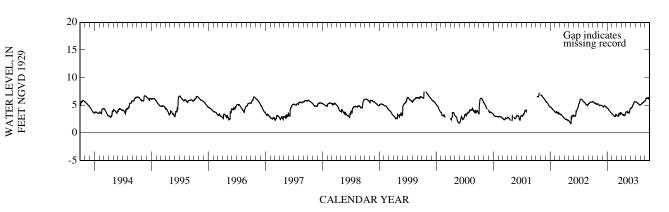
LAND-SURFACE DATUM.--Land surface is approximately 4.5 ft above NGVD.

REMARKS.--Water levels affected by pumping. Record of maximum water levels that occurred during Hurricane Irene October 1999, is incomplete because of equipment failure. Well reconstructed for a higher measuring point March 27, 2002.

PERIOD OF RECORD .-- May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.48 ft NGVD, Oct. 15, 27, 1999; lowest, 1.57 ft below NGVD, June 5, 1989.

#### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 5.21 5.97 5.56 4.74 4.45 3.35 3.14 3.46 3.82 4.49 5.61 5.14 10 5.41 5.05 4.83 4.21 3.18 3.04 3.26 3.70 4.70 5.54 5.30 6.25 3.39 5.36 15 5.28 4.89 4.92 4.03 3.03 3.25 3.74 5.08 5.44 6.35 20 5.33 5.00 4.82 3.83 2.99 3.47 3.18 3.64 5.28 5.25 5.51 6.27 25 5.19 4.97 4.68 3.65 3.45 3.45 3.17 3.92 5.62 5.11 5.67 6.30 EOM 5.23 4.89 4.50 3.47 3.28 3.62 3.73 4.37 5.60 4.99 5.81 6.45 MAX 5.65 5.25 4.92 4.46 3.45 3.75 3.73 4.37 5.63 5.61 5.81 6.45



WELL NUMBER.--255027080221602. Local Number G 3264A. USGS Observation Well near Hialeah, FL.

LOCATION.--Lat 25°50'27", long 80°22'16", in SE  $^1\!\!/_4$  SE  $^1\!\!/_4$  SE  $^1\!\!/_4$  Sec.7, T.53 S., R.40 E., Hydrologic Unit 03090202, on the north side of NW 74th Street Extension, west of Florida Power and Light right-of-way and 1.0 mi east of Snapper Creek Canal Extension.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 4 in., depth 50 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of plywood base, 8.26 ft above National Geodetic Vertical Datum of 1929. From December 8, 1995 to April 16, 2002, measuring point was 7.03 ft above NGVD. Prior to December 8, 1995, measuring point was 6.78 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 5.0 ft above NGVD.

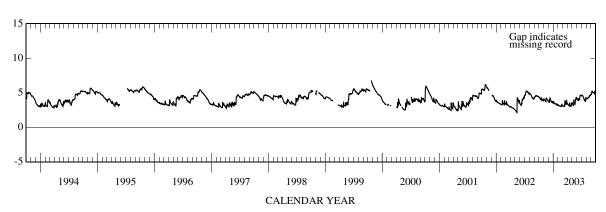
REMARKS.--Since construction began near the well site in November 2002, unusual fluctuations have been noted in the water level data.

PERIOD OF RECORD.--June 1983 to May 1984 (quarterly), June 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.77 ft NGVD, Oct. 22, 1999; lowest, 0.89 ft NGVD, June 5, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.30	4.04	3.70	3.60	3.14	3.10	3.29	3.41	4.02	4.63	4.15	4.92
10 15	4.11 3.97	3.84 3.72	4.18 4.03	3.47 3.40	3.11 3.03	3.04 3.26	3.19 3.57	3.22 3.61	3.98 4.18	4.53 4.26	4.21 4.35	5.15 5.04
20	4.13	4.11	3.72	3.45	3.05	3.48	3.13	3.35	4.16	3.99	4.50	4.94
25	3.91	3.97	3.82	3.25	3.40	3.36	3.03	4.08	4.65	3.80	4.60	5.10
EOM	4.08	3.84	3.52	3.18	3.17	3.54	3.57	4.29	4.58	4.13	4.73	5.29
MAX	4.41	4.22	4.30	3.79	3.40	3.97	3.57	4.33	4.65	4.63	4.74	5.29





WELL NUMBER.--255027080245501. Local Number G 3253. USGS Observation Well near Hialeah, FL.

 $LOCATION.--Lat\ 25^{\circ}50'27'', long\ 80^{\circ}24'55'', in\ SE\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ sec. 11, T.53\ S., R.39\ E., Hydrologic\ Unit\ 03090202, on\ the\ south\ side\ of\ NW\ 74th\ Street,\\ 1.8\ mi\ west\ of\ the\ Florida\ Turnpike\ and\ the\ Snapper\ Creek\ Canal\ Extension,\ and\ 1.0\ mi\ north\ of\ NW\ 58th\ Street.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 34.5 ft, cased to 18 ft. (Corrected).

INSTRUMENTATION.--Electronic data logger. An electronic data logger with pressure transducer was used from March 27, 2003 to June 16, 2003.

DATUM.--Measuring point: Top of base, 9.46 ft above National Geodetic Vertical Datum of 1929. Prior to October 1993, measuring point was top of casing, 9.29 ft above NGVD.

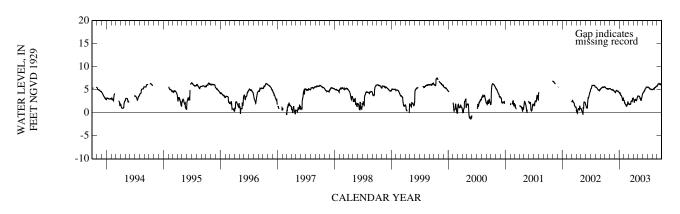
LAND-SURFACE DATUM.--Land surface is approximately 5.3 ft above NGVD.

REMARKS .-- Water levels affected by pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.38 ft NGVD, Oct. 16, 1999; lowest, 4.78 ft below NGVD, June 4, 1992.

					YEAR OC	N ABOVE NO TOBER 2002 MAXIMUN	TO SEPTE		1			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.45	5.24	4.50	4.41	2.16	1.82	2.84	3.64	4.41	5.53	5.08	5.97
10	5.29	5.08	4.63	3.96	1.83	1.86	2.79	3.55	4.75	5.44	5.22	6.26
15	5.15	4.94	4.86	3.70	1.47	1.88	2.92	3.14	5.09	5.27	5.42	6.25
20	5.19	5.03	4.73	3.22	1.50	2.48	2.66	2.71	5.26	5.14	5.49	6.19
25	5.20	4.85	4.71	2.87	2.35	2.48	2.97	3.20	5.60	5.09	5.65	6.28
EOM	5.25	4.72	4.42	2.73	2.06	3.20	3.62	4.10	5.55	4.98	5.82	6.48
MAX	5.65	5.29	4.87	4.41	2.69	3.20	3.62	4.10	5.60	5.55	5.82	6.48



6.03

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--255035080255401. Local Number G 3760. USGS Observation Well near Hialeah Gardens, FL.

LOCATION.--Lat 25°50′29", long 80°26′02", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.22, T.53 S., R.39 E., Hydrologic Unit 03090202, 0.3 mi north of NW 41th Street and 2.96 mi west of State Road 821.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

 $WELL\ CHARACTERISTICS. --Drilled,\ observation,\ water-table\ well,\ diameter\ 8\ in.,\ depth\ 72.7\ ft,\ cased\ to\ 70.7\ ft,\ open\ hole\ 70.7\ ft.$ 

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.20 ft above National Geodetic Vertical Datum of 1929.

4.92

4.14

LAND-SURFACE DATUM.--Land surface is approximately 5.2 ft above NGVD.

5.06

PERIOD OF RECORD .-- July 2001 to current year.

5.14

5.38

EOM

MAX

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.50 ft NGVD, Oct. 22, 23, 2001; lowest, 1.72 ft NGVD, May 14, 2002.

					YEAR OCT	ABOVE NO TOBER 2002 MAXIMUM	TO SEPTE	FEET EMBER 2003				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.28	5.09	4.95	4.90	3.98	3.72	3.96	4.35	4.92	5.36		5.68
10	5.15	5.00	5.06	4.80	3.78	3.56	3.72	4.20	5.05	5.29		5.88
15	5.06	4.97	5.05	4.74	3.58	3.41	3.79	4.23	5.15	5.15		5.97
20	5.09	5.06	5.00	4.57	3.50	3.84	3.91	4.10	5.16	5.07		5.85
25	5.07	5.03	4.98	4.34	4.13	3.87	3.56	4.41	5.38			5.87
EOM	5.12	4.99	4.90	4.14	3.93	4.08	4.35	4.92	5.35		5.54	6.03

4.21

4.35

4.92

5.38

20 Gap indicates missing record 15 WATER LEVEL, IN FEET NGVD 1929 10 5 0 -5 1996 1994 1995 1997 1998 1999 2000 2001 2002 2003 CALENDAR YEAR

WELL NUMBER.--255035080255402. Local Number G 3761. USGS Observation Well near Hialeah Gardens, FL.

LOCATION.--Lat 25°50′29", long 80°26′02", in NW  $^{1}$ / $_{4}$  NW  $^{1}$ / $_{4}$  sec.22, T.53 S., R.39 E., Hydrologic Unit 03090202, 0.3 mi north of NW 41th Street and 2.96 mi west of State Road 821.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 16.3 ft.

INSTRUMENTATION .-- Electronic data logger.

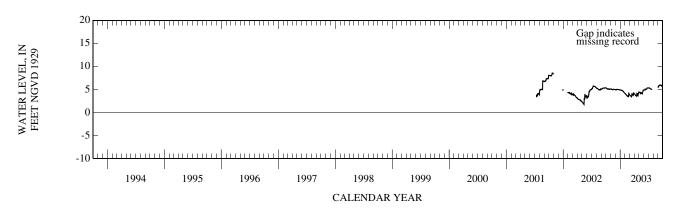
DATUM.--Measuring point: Top of base, 8.11 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 5.1 ft above NGVD.

PERIOD OF RECORD .-- July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.55 ft NGVD, Oct. 22-24, 2001; lowest, 1.74 ft NGVD, May 14, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.25	5.05	4.92	4.86	3.95	3.70	3.95	4.37	4.85	5.33		5.65
10	5.12	4.98	5.01	4.80	3.76	3.56	3.71	4.21	4.98	5.24		5.87
15 20	5.04 5.08	4.93 5.02	5.01 4.98	4.72 4.60	3.57 3.50	3.42 3.84	3.78 3.91	4.24 4.11	5.08 5.09	5.10 5.03		5.98 5.86
20 25	5.08	3.02 4.99	4.98	4.38	4.18	3.87	3.56	4.11	5.33	3.03		5.87
EOM	5.10	4.95	4.87	4.18	3.92	4.11	4.36	4.85	5.30		5.51	6.03
MAX	5.35	5.10	5.02	4.90	4.18	4.26	4.36	4.85	5.33			6.03



WELL NUMBER.--255112080151901. Local Number G 3562. USGS Observation Well near Hialeah, FL.

 $LOCATION.--Lat~25^{\circ}51'12'', long~80^{\circ}15'19'', in~SE~\frac{1}{4}~SW~\frac{1}{4}~SW~\frac{1}{4}~sec.4, T.53~S., R.41~E., Hydrologic~Unit~03090202, at northeast corner of intersection of NW~87th~Terrace~and~NW~35th~Court,~10~ft~east~of~NW~35th~Court~curb,~0.9~mi~west~of~State~Road~9.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.6 ft, cased to 13.6 ft, screened 14.1 to 19.1 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 13.30 ft above National Geodetic Vertical Datum of 1929.

LNAD-SURFACE DATUM .-- Land surface is approximately 10.3 ft above NGVD.

REMARKS .-- Water levels affected by pumping.

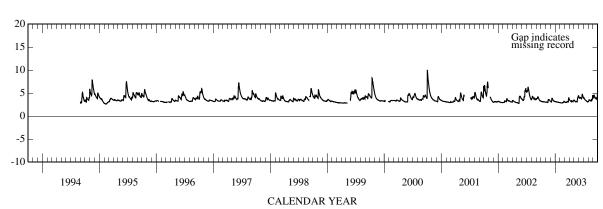
PERIOD OF RECORD.--September 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.94 ft NGVD, Oct. 3, 4, 2000; lowest, 2.61 ft NGVD, Feb. 12, 13, 1995.

	YEAR OCT	ABOVE NO TOBER 2002 MAXIMUM	TO SEPTE			
JAN	FEB	MAR	APR	MAY	JUN	

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.16	3.06	3.12	3.15	2.89	3.04	3.45	3.39	4.00	3.94	3.45	4.00
10	3.15	3.01	3.78	3.08	2.89	2.98	3.24	3.15	4.01	3.63	3.49	4.40
15	3.14	2.95	3.71	3.05	2.87	2.94	3.36	3.21	3.92	3.41	3.38	3.91
20	3.13	3.51	3.36	3.01	2.91	3.20	3.25	3.10	3.94	3.30	3.49	3.87
25	3.08	3.46	3.23	2.97	3.14	3.13	3.10	4.00	4.66	3.14	3.52	4.00
EOM	3.04	3.29	3.13	2.93	3.20	3.82	3.41	4.42	4.04	3.17	4.41	5.52
MAX	3.28	3.61	3.88	3.16	3.24	3.96	3.73	4.44	4.72	4.02	4.49	5.52





WELL NUMBER.--255116080120601. Local Number G 3602. USGS Observation Well near El Portal, FL.

LOCATION.--Lat 25°51'16", long 80°12'06", in SE  $^1\!\!/_4$  SE  $^1\!\!/_4$  SW  $^1\!\!/_4$  sec.1, T.53 S., R.41 E., Hydrologic Unit 03090202, 29 ft west of intersection of NW 2nd Avenue and NW 87th Street, near Horace Mann Middle School.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 160 ft, cased to 155 ft, screened 155 to 160 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 5.23 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 5.2 ft above NGVD.

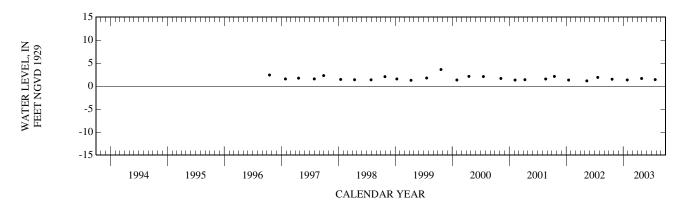
REMARKS.--Well is also used for quarterly salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in September 1995. Water-level measurements began in October 1996.

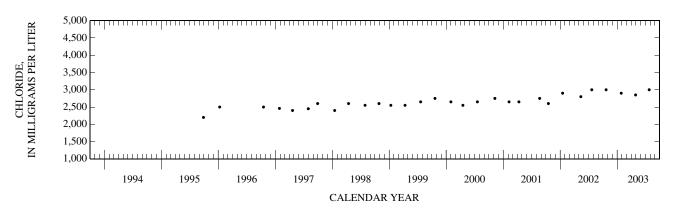
PERIOD OF RECORD.--September 1995 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.60 ft NGVD, Oct. 21, 1999; lowest, 1.13 ft NGVD, May 13, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

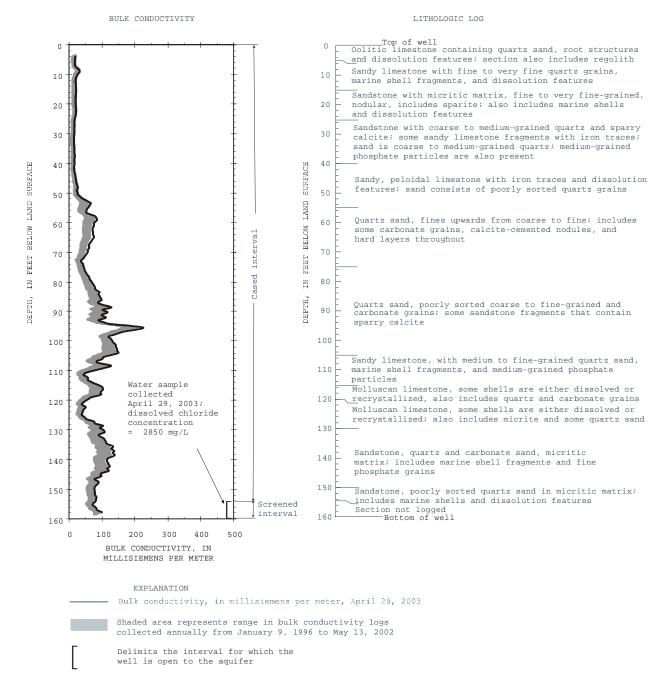
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	0900	1.49	9,710	3,000	29	1045	1.65	8,660	2,850
JAN					JUL				
27	0857	1.33	8,420	2,900	25	0846	1.41	9,340	3,000





WELL NUMBER.--255116080120601. Local Number G 3602. USGS Observation Well near El Portal, FL.

#### 255116080120601 G-3602



WELL NUMBER.--255208080274001. Local Number G 975. USGS Observation Well near Pennsuco, FL.

LOCATION.--Lat 25°52'08", long 80°27'40", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.5, T.53 S., R.39 E., Hydrologic Unit 03090202, 1.0 mi southwest of junction of Pennsuco Canal and Dade/Broward Levee, 5.5 mi southwest of Pennsuco, and 7.5 mi north of U.S. Highway 41. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

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

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 14.38 ft above National Geodetic Vertical Datum of 1929. Between December 13, 2001 and May 1, 2002, the measuring point gradually shifted to the current elevation. Prior to December 13, 2001, measuring point was 14.53 ft above NGVD. See REMARKS.

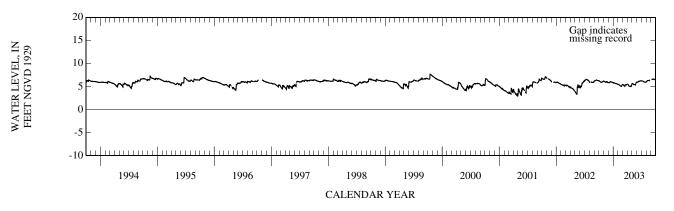
LAND-SURFACE DATUM.--Land surface is approximately 7.4 ft above NGVD.

REMARKS.--Station reconstructed on May 1, 2002 to stabilize the well. Data for the period December 13, 2001 to May 1, 2002, has been corrected to the extent possible but should be considered poor. See DATUM.

PERIOD OF RECORD .-- July 1958 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.78 ft NGVD, Oct. 14, 1960; lowest, 2.07 ft NGVD, June 2, 1962.

#### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 5.92 5.39 6.19 6.16 6.10 5.82 5.78 5.41 5.45 5.64 6.16 6.44 6.58 6.57 10 6.00 5.98 5.93 5.71 5.29 5.19 5.22 5.51 6.00 6.17 6.31 6.30 15 5.91 5.88 6.04 5.64 5.16 5.06 5.01 5.39 6.07 6.02 20 5.95 6.06 5.94 5.61 5.06 5.39 5.05 5.41 6.15 5.99 6.26 6.56 25 5.98 5.90 5.90 5.55 5.09 5.33 4.94 5.50 6.23 5.92 6.30 6.47 EOM 6.13 5.83 5.81 5.48 5.40 5.50 5.36 5.95 6.22 5.91 6.56 MAX 6.22 6.12 6.04 5.79 5.47 5.51 5.95 6.23 6.21



WELL NUMBER.--255209080212801. Local Number G 973. USGS Observation Well near Medley, FL

LOCATION.--Lat 25°52′09", long 80°21′28", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.5, T.53 S., R.40 E., Hydrologic Unit 03090202, on Russian Colony Road, 0.5 mi north of Medley, and 1.0 mi west of Miami Canal.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

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

REVISED RECORDS .-- WDR FL-85-2B:1978.

INSTRUMENTATION.--Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of casing, 6.87 ft above National Geodetic Vertical Datum of 1929. Prior to November 2001, measuring point was 9.30 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM .-- Land surface is approximately 6.30 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Station re-constructed and pressure transducer installed December 19, 2001.

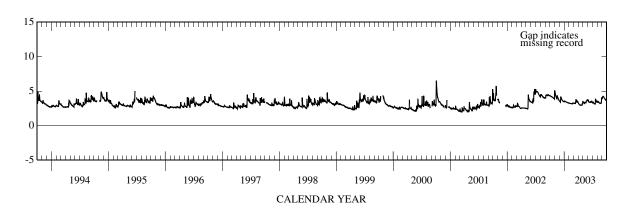
PERIOD OF RECORD .-- April 1958 to current year.

WATER LEVEL, IN FEET NGVD 1929

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.45 ft NGVD, October 3, 4, 2000; lowest, 0.92 ft NGVD, May 31, 1962.

ELEVATION ABOVE NGVD 1929, FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.28	4.60	3.47	3.54	3.23	3.24	3.13	3.35	3.65	3.41	3.53	4.17
10	4.20	4.16	4.15	3.46	3.21	3.22	3.00	3.22	3.41	3.25	3.39	4.22
15	4.15	3.92	3.90	3.41	3.18	3.40	3.00	3.37	3.38	3.16	3.28	3.98
20	4.06	4.12	3.66	3.36	3.16	3.70	2.98	3.32	3.46	3.82	3.25	3.81
25	3.97	3.87	3.53	3.32	3.29	3.39	2.95	3.60	3.51	3.54	3.24	3.79
EOM	5.05	3.63	3.43	3.26	3.27	3.37	3.51	3.73	3.30	3.49	3.98	3.95
MAX	5.05	5.05	4.15	3.56	3.29	3.76	3.51	3.75	3.71	3.82	4.03	4.24



WELL NUMBER.--255344080195600. Local Number G 1166R. USGS Observation Well in Hialeah, FL.

LOCATION.--Lat 25°53'44", long 80°19'56", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 27, T.52 S., R.40 E., Hydrologic Unit 03090202, on the east side of West 24th Avenue, 0.3 mi south of NW 138th Street, 0.5 mi west of State Road 826.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 18 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.66 ft above National Geodetic Vertical Datum of 1929.

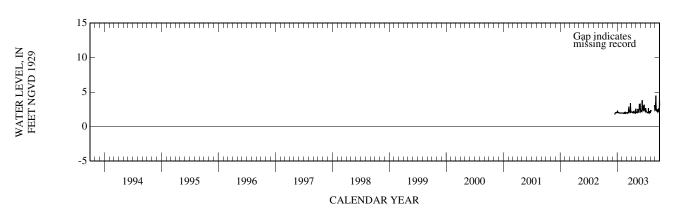
LAND-SURFACE DATUM .-- Land surface is approximately 7.6 ft above NGVD.

REMARKS.--Replacement well for G-1166.

PERIOD OF RECORD.--December 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 4.48 ft NGVD, Sept. 6, 2003; lowest, 1.74 ft NGVD, Dec. 17, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5				2.07	1.96	1.97	2.11	2.11	2.29	2.38	2.38	3.47
10				2.03	1.96	2.01	2.01	2.03	3.81	2.09		2.32
15				1.98	1.95	2.62	2.27	2.16	3.06	2.01		2.21
20			1.98	1.97	2.05	2.15	2.04	2.11	2.69	2.66		2.19
25			2.11	1.96	1.99	2.02	1.98	2.59	2.40	1.99		2.65
EOM			2.03	1.98	1.99	2.11	2.60	2.33	2.22	2.05	2.34	3.07
MAX				2.31	2.05	3.39	2.60	3.35	3.81	2.68		4.48



WELL NUMBER.--255358080114101. Local Number G 3601. USGS Observation Well near North Miami, FL.

 $LOCATION.--Lat~25^{\circ}53'58", long~80^{\circ}11'41", in~SW~\frac{1}{4}~SW~\frac{1}{4}~SW~\frac{1}{4}~Sec. 19, T.52~S., R.42~E., Hydrologic~Unit~03090202, 300~ft~north~of~NW~135th~Street, 28~ft~west~of~Memorial~Boulevard, along~east~bank~of~Biscayne~Canal.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 190 ft, cased to 185 ft, screened 185 to 190 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 6.83 ft above National Geodetic Vertical Datum of 1929. Prior to the 2000 water year measuring point was estimated to be 5 ft above NGVD from topographic map. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately about 6.8 ft above NGVD.

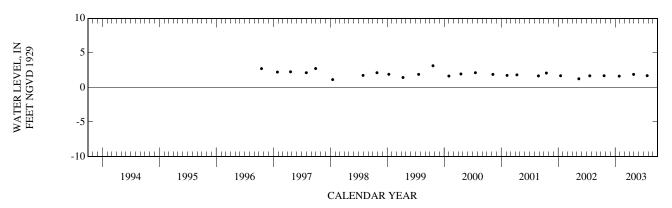
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. Quarterly chloride sampling began in September 1995. Quarterly water-level measurement began in October 1996. Water-level elevation data collected prior to March 14, 2000, have been computed using the measuring point established on March 14, 2000 and are in the files of the U.S. Geological Survey

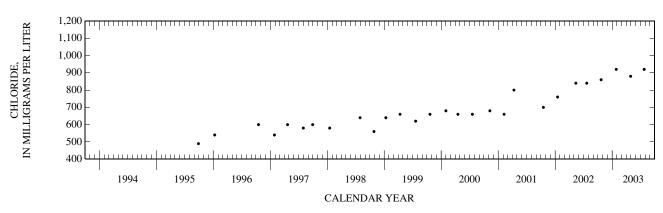
PERIOD OF RECORD .-- September 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.14 ft NGVD, Oct. 21, 1999; lowest, 1.13 ft NGVD, Jan. 16, 1998. (Corrected).

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

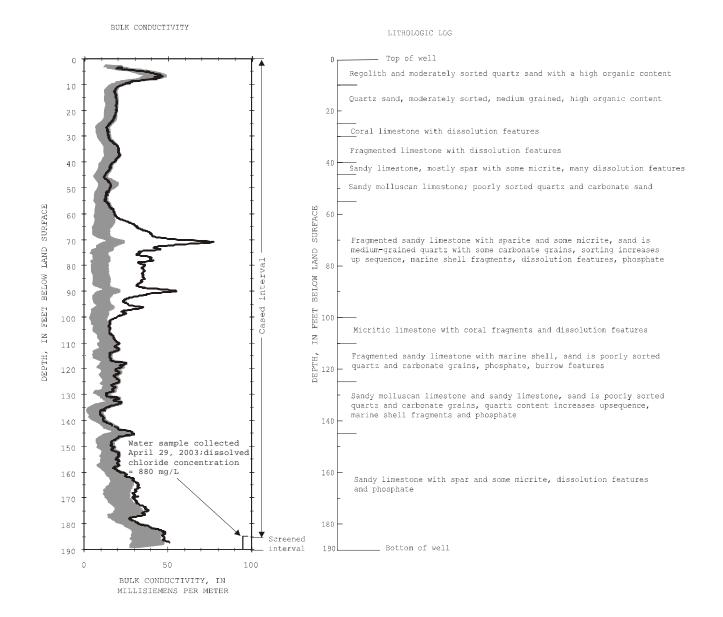
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	0824	1.69	3,210	860	29	0913	1.89	3,140	880
JAN					JUL				
27	0818	1.63	2,880	920	25	0810	1.70	3,310	920





#### WELL NUMBER.--255358080114101. Local Number G 3601. USGS Observation Well near North Miami, FL.

#### 255358080114101 G-3601



#### EXPLANATION

Bulk conductivity in millisiemens per meter April 29, 2003

Shaded area represents range in bulk conductivity logs collected annually from January 17, 1996 to May 13, 2002

Delimits the interval for which the well is open to the aquifer

WELL NUMBER.--255358080260901. Local Number G 3567. USGS Observation Well near Miami, FL.

 $LOCATION.-Lat~25^{\circ}53'58", long~80^{\circ}26'09", in~NW~\frac{1}{4}~SW~\frac{1}{4}~SW~\frac{1}{4}~SW~\frac{1}{4}~Sec. 22, T.52~S., R.39~E., Hydrologic~Unit~03090202, on~dirt~road~next~to~power~pole~27, 6.0~mi~north~of~NW~41st~Street, 2.7~mi~south~of~U.S.~Highway~27, and 2.8~mi~west~of~NW~117th~Avenue~(State~Road~821).$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.7 ft, cased to 13.7 ft, open hole 13.7 to 18.7 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.14 ft above National Geodetic Vertical Datum of 1929.

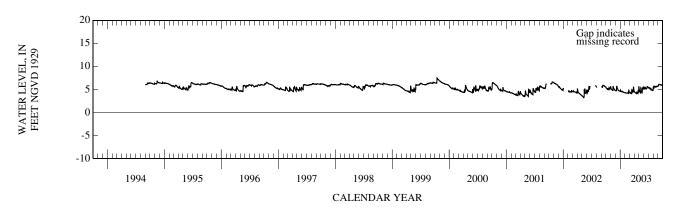
LAND-SURFACE DATUM.--Land surface is approximately 6.5 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.46 ft NGVD, Oct. 15, 1999; lowest, 3.21 ft NGVD, May 13, 2002.

### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES JAN FEB MAR APR MAY JUN JUL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	5.28 5.05 5.05 4.91 5.12 5.58	5.11 4.90 4.80 5.26 4.94 4.79	4.72 5.67 5.20 4.79 4.69 4.57	4.66 4.52 4.52 4.43 4.33 4.28	4.26 4.24 4.19 4.29 4.84 4.40	4.20 4.38 4.12 4.63 4.48 4.72	4.38 4.24 4.47 4.24 4.08 5.57	4.68 4.29 4.90 4.39 5.29 5.19	5.30 5.42 5.23 5.15 5.58 5.39	5.44 5.25 4.98 4.91 4.88 4.77	5.27 5.72 5.63 5.65 5.66 5.72	6.02 6.07 6.02 5.96 5.94 6.16
MAX	5.58	5.64	5.67	4.83	4.84	5.47	5.57	5.58	5.63	5.44	5.75	6.16



WELL NUMBER.--255437080103201. Local Number G 852. USGS Observation Well in North Miami Beach, FL.

LOCATION.--Lat 25°54'37", long 80°10'32", in NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 20, T.52 S., R.42 E., Hydrologic Unit 03090202, at corner of NE 12th Avenue and NE 147th Street in North Miami Beach, 1.3 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS .-- Drilled, observation, water-table well, diameter 6 in, depth 20 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 8.38 ft above National Geodetic Vertical Datum of 1929. From October 1997 to September 2000, measuring point was incorrectly considered to be 8.40 ft above NGVD. From November 1988 to July 1989, measuring point was 8.52 ft above NGVD. From March 1983 to November 1988, measuring point was 8.56 ft above NGVD. From March 1983 to October 1997, top of base measuring point was reported as top of casing. Prior to March 1983, measuring point was top of casing, 8.64 ft above NGVD. The figures of water level as elevation, in feet NGVD, from October 1997 to September 2000 are in error. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 6.1 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The figures of water level as elevation, in feet NGVD, from October 1997 to September 2000, are in error. A correction of -0.02 ft is required to correct water-level data. Because the correction is close to the recorder accuracy, records have not been corrected. See DATUM.

ELEVATION ABOVE NGVD 1929, FEET

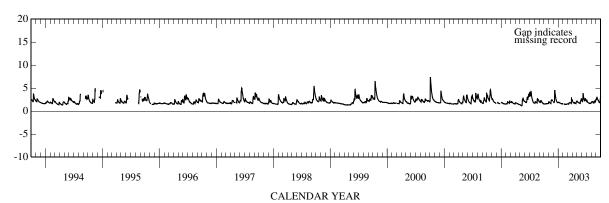
PERIOD OF RECORD .-- January 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.28 ft NGVD, Oct. 3, 4, 2000; lowest, 0.17 ft NGVD, May 31, 1962.

# WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES JAN FEB MAR APR MAY JUN JUL 1.95 1.57 1.56 2.04 1.96 2.04 2.31

DAY	OCI	NOV	DEC	JAN	FEB	MAK	APK	MAI	JUN	JUL	AUG	SEP
5	1.54	1.93	1.86	1.95	1.57	1.56	2.04	1.96	2.04	2.31	2.04	2.65
10	1.57	1.74	4.58	1.81	1.51	1.66	1.79	1.86	3.79	1.91	2.07	2.69
15	1.62	1.66	3.11	1.74	1.45	1.77	1.87	1.85	2.64	1.77	1.86	2.33
20	1.64	2.17	2.31	1.63	1.47	1.82	1.74	1.71	2.33	1.74	2.17	1.89
25	1.62	2.32	1.94	1.56	1.51	1.78	1.60	2.23	2.69	1.72	2.04	1.83
EOM	1.74	2.12	1.83	1.66	1.55	2.59	2.15	2.63	2.20	1.80	2.48	3.28
MAX	1.74		4.58	1.95			2.43	2.69	3.80	2.42	2.48	3.28





WELL NUMBER.--255526080143001. Local Number S 18. USGS Observation Well near Opa-Locka, FL.

 $LOCATION.--Lat\ 25^{\circ}55'26'', long\ 80^{\circ}14'30'', in\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec.15, T.52\ S., R.41\ E., Hydrologic\ Unit\ 03090202, in\ parking\ lot\ of\ the\ North\ Dade\ Regional\ Library,\ 0.2\ mi\ south\ of\ the\ Palmetto\ Expressway\ (State\ Road\ 826),\ 0.2\ mi\ east\ of\ NW\ 27th\ Avenue,\ and\ 1.3\ mi\ north\ of\ Opa-Locka.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 8 in., depth 52 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.18 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 9.1 ft above NGVD.

REMARKS.--Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

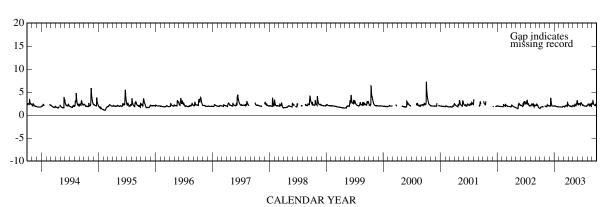
PERIOD OF RECORD .-- January 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.54 ft NGVD, Oct. 12, 1947; lowest, 0.05 ft NGVD, June 3, 1945.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.63	1.93	1.95	2.03	1.80	1.85	2.09	2.03	2.52	2.18	2.35	2.62
10	1.75	1.85	3.73	1.96	1.79	1.92	1.99	1.93	2.52	2.03	2.30	2.44
15	1.78	1.82	2.31	1.87	1.75	1.93	1.93	2.26	2.31	1.98	2.01	2.17
20	1.83	2.07	1.99	1.83	1.75	2.12	1.91	2.07	2.64	1.97	2.42	2.10
25		2.07	1.96	1.81	1.84	2.02	1.81	2.57	2.67	1.93	1.97	2.27
EOM		2.01	1.95	1.80	1.92	2.33	2.07	2.79	2.24	2.11	2.48	2.81
MAX		2.22	3.73	2.03	1.92	2.73	2.27	3.13	2.68	2.27	2.58	3.15





WATER LEVEL, IN FEET NGVD 1929

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--255600080270001. Local Number G 968. USGS Observation Well near Hialeah Gardens, FL.

LOCATION.--Lat 25°56'10", long 80°26'50", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.9, T.52 S., R.39 E., Hydrologic Unit 03090202, 150 ft from the northwest side of Levee 30, 0.6 mi southwest of Miami Canal, 1.3 mi south of Miami-Dade and Broward County Line, and 9 mi northwest of Hialeah Gardens.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 16 in., depth 50 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.-- Measuring point: Top of base, 10.87 ft above National Geodetic Vertical Datum of 1929. Prior to October 1997, measuring point was 10.85 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 5.8 ft above NGVD.

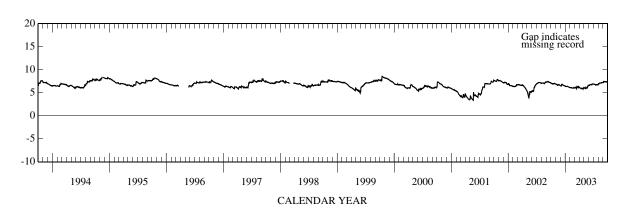
REMARKS.--For an unknown period of time, the transite well casing was cracked, allowing the surface water from the conservation area to combine with the water inside the well. Ground water level records may be affected. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- April 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.57 ft NGVD, Oct. 15, 1999; minimum water level recorded, 1.70 ft NGVD, May 31, 1962.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES  DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP													
DAI	OCI	NOV	DEC	JAIN	LED	MAK	AFK	IVIA 1	JUN	JUL	AUG	SEF	
5	7.05	6.83	6.49	6.41	6.08	6.05	6.05	6.04	6.65	6.89	6.90	7.41	
10	6.90	6.68	6.84	6.36	6.13	6.20	5.99	5.91	6.76	6.80	7.14	7.40	
15	6.95	6.59	6.78	6.39	6.02	5.91	5.88	6.14	6.78	6.68	7.13	7.40	
20	6.96	6.78	6.64	6.30	6.03	6.28	5.95	6.04	6.73	6.70	7.17	7.36	
25	7.04	6.69	6.55	6.21	6.15	6.14	5.77	6.37	6.90	6.76	7.18	7.37	
EOM	6.88	6.58	6.42	6.14	6.09	6.24	6.12	6.59	6.87	6.74	7.25	7.58	
MAX	7.15	6.88	6.84	6.45	6.18	6.40	6.18	6.61	6.92	6.89	7.26	7.58	



Gap indicates missing record

2002

2003

#### MIAMI-DADE COUNTY—Continued

WELL NUMBER.--255616080180301. Local Number G 3571. USGS Observation Well near Miami Lakes, FL.

 $LOCATION.--Lat\ 25^{\circ}56'16'', long\ 80^{\circ}18'03'', in\ NW\ {}^{1}\!\!/_{4}\ SW\ {}^{1}\!\!/_{4}\ Sec.12, T.52\ S., R.40\ E., Hydrologic\ Unit\ 03090202, in\ Mediterranean\ Gardens, between\ NW\ 61st\ Avenue\ and\ NW\ 60th\ Court,\ 10\ ft\ north\ of\ edge\ of\ pavement,\ 0.13\ mi\ south\ of\ Miami\ Gardens\ Drive.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 5 in., depth 18.5 ft, cased to 13.5 ft, open hole 13.5 to 18.5 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.32 ft above National Geodetic Vertical Datum of 1929.

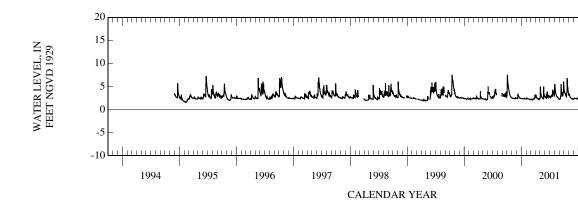
LAND-SURFACE DATUM .-- Land surface is approximately 7.6 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.52 ft NGVD, Oct. 15, 1999; lowest, 1.54 ft NGVD, Feb. 14, 15, 1995.

# ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES JAN FEB MAR APR MAY JUN JU

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.11	2.38	2.37	2.49	2.27	2.35	2.50	2.48	5.08	2.68	2.60	
10	2.17	2.30	3.80	2.42	2.26	3.17	2.39	2.31	5.96	2.35	3.17	
15	2.21	2.29	2.80	2.35	2.21	2.65	2.22	2.41	4.01	2.34	3.76	
20	2.29	2.66	2.45	2.31	2.32	2.86	2.22	2.35	3.56	2.32	3.72	
25	2.37	2.51	2.38	2.29	3.63	2.59	2.13	3.56	3.40	2.35	2.94	
EOM	2.37	2.42	2.39	2.29	2.58	2.79	2.67	3.54	2.73	2.37		
MAX	2.38	3.17	4.01	2.67	3.63	4.70	2.70	4.67	5.96	2.75		



WELL NUMBER.--255625080094901. Local Number G 3705. USGS Observation Well near North Miami Beach, FL.

LOCATION.--Lat 25°56′25", long 80°09′49", in NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.9, T.52 S., R.42 E., Hydrologic Unit 03090202, 15 ft north of NE 179th Street and 175 ft west of NE 19th Avenue, 0.90 mi west of U.S. Highway 1.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 135 ft, cased to 125 ft, screened 125 to 135 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 9.06 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 9.1 ft above NGVD.

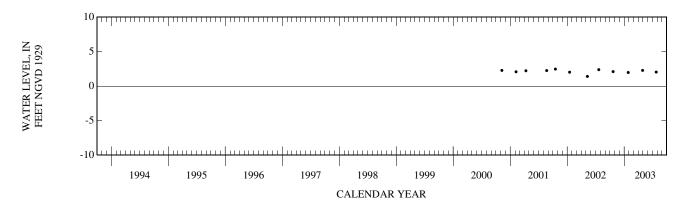
REMARKS.--Well is also used for annual salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the freshwater/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. Annual induction logs began in April 2000. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in May 2002. Water-level measurements began in November 2000.

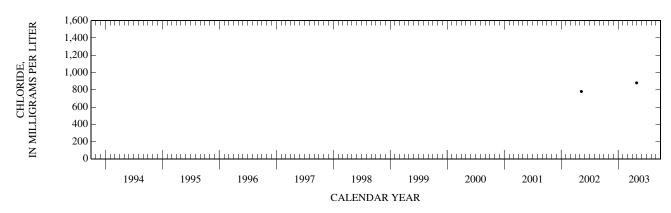
PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.46 ft NGVD, Oct. 17, 2001 (Corrected).; lowest, 1.40 ft NGVD, May 10, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

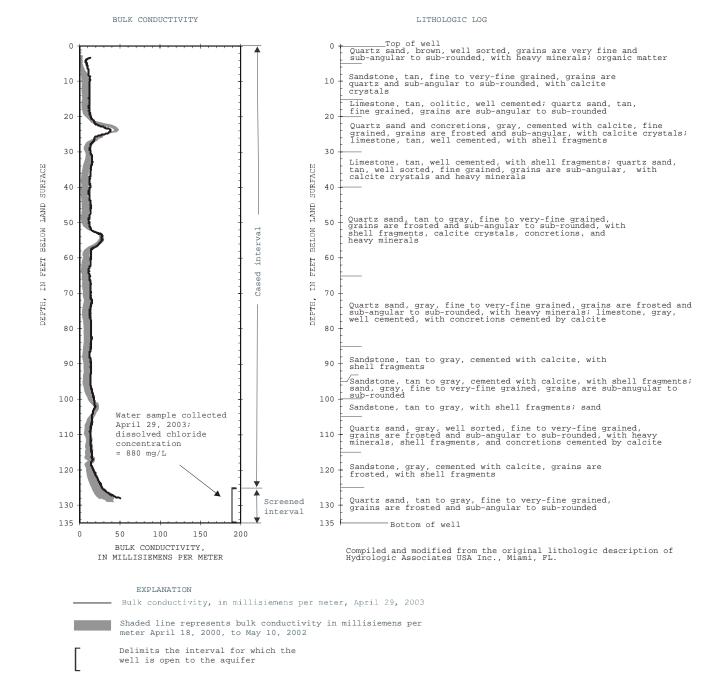
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	0804	2.10			29	1422	2.27	2,940	880
JAN					JUL				
27	0753	1.97			25	0746	2.03		





WELL NUMBER.--255625080094901. Local Number G 3705. USGS Observation Well near North Miami Beach, FL.

#### 255625080094901 G-3705



WELL NUMBER.--255626080093201. Local Number G 3600. USGS Observation Well near North Miami Beach, FL.

 $LOCATION.--Lat~25^{\circ}56'26'', long~80^{\circ}09'32'', in~SW~\frac{1}{4}~NE~\frac{1}{4}~NW~\frac{1}{4}~sec.9, T.52~S., R.42~E., \\ Hydrologic~Unit~03090202, 500~ft~east~of~NW~20th~Avenue~on~south~side~of~NW~179th~Street, 0.6~mi~west~of~U.S.~Highway~1, near~a~golf~course.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 200 ft, cased to 195 ft, screened 195 to 200 ft.

INSTRUMENTATION .-- Quarterly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 9.24 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 9.2 ft above NGVD.

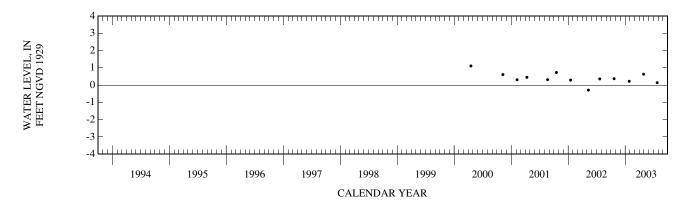
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in August 1995. Water-level measurements began in April 2000.

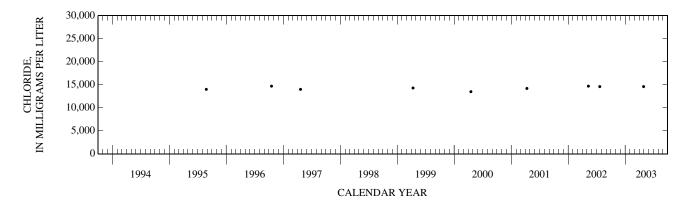
PERIOD OF RECORD .-- August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.11 ft NGVD, Apr. 17, 2000; lowest, 0.29 ft below NGVD, May 10, 2002.

#### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

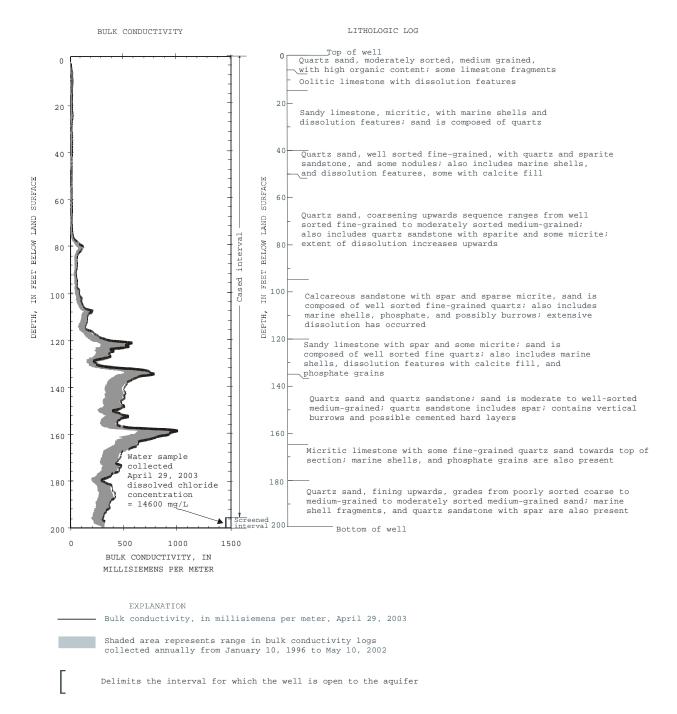
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
22	0753	0.37			29	1250	0.63	38,100	14,600
JAN					JUL				
27	0741	0.22			25	0742	0.14		





### WELL NUMBER.--255626080093201. Local Number G 3600. USGS Observation Well near North Miami Beach, FL.

255626080093201 G-3600



WELL NUMBER.--255707080255001. Local Number G 1637. USGS Observation Well near Hialeah, FL.

 $LOCATION.-Lat~25^{\circ}57'07'', long~80^{\circ}25'50'', in~SW~\frac{1}{4}~NE~\frac{1}{4}~sec.3, T.52~S., R.39~E., Hydrologic~Unit~03090202, at entrance~of~Opa-Locka~West~Training~Airport, 0.2~mi~northeast~of~the~intersection~of~U.S.~Highway~27~and~State~Road~997~(Krome~Avenue), and 10~mi~northwest~of~Hialeah.$ 

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 26 ft, cased to 26 ft.

REVISED RECORDS .-- WDR FL-85-2B:1979.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 8.90 ft above National Geodetic Vertical Datum of 1929.

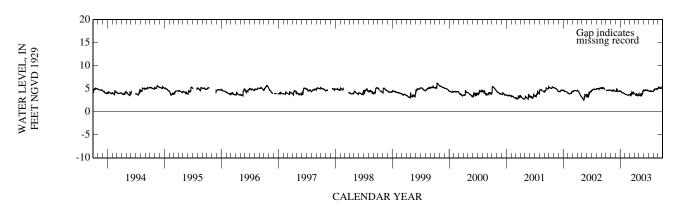
LAND-SURFACE DATUM.--Land surface is approximately 5.9 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--September 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.21 ft NGVD, Oct. 15, 1999; lowest, 2.19 ft NGVD, Apr. 26, 1973.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.62	4.63	4.43	4.48	3.77	3.64	3.86	3.62	4.59	4.50	4.63	5.32
10	4.64	4.50	4.99	4.31	3.75	4.03	3.76	3.51	4.78	4.42	4.96	5.28
15	4.64	4.47	4.53	4.15	3.65	3.73	3.51	3.70	4.72	4.40	4.92	5.21
20	4.66	4.64	4.51	4.10	3.62	4.11	3.75	3.78	4.63	4.42	5.01	5.14
25	4.72	4.52	4.49	4.01	3.66	3.89	3.49	4.39	4.65	4.43	4.94	5.34
EOM	4.68	4.49	4.46	3.86	3.68	4.02	3.87	4.67	4.60	4.38	5.10	5.44
MAX		4.82	4.99	4.54	3.84	4.33	3.97	4.71	4.78	4.56	5.10	5.45



WELL NUMBER.--255709080223701. Local Number G 970. USGS Observation Well near Miami Lakes, FL.

LOCATION.--Lat 25°57'09", long 80°22'37", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.6, T.52 S., R.40 E., Hydrologic Unit 03090202, 0.5 mi south of Snake Creek, 3.5 mi east of U.S. Highway 27, and 4.7 mi west of Miami Lakes.

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

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

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 10.75 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 3.8 ft above NGVD.

DEC

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD .-- January 1958 to current year.

NOV

DAY

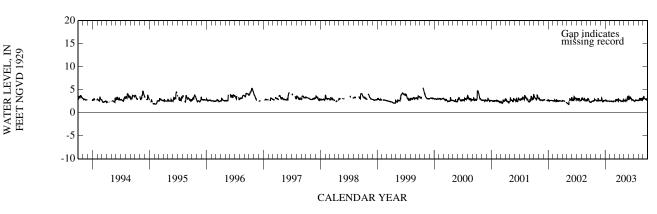
OCT

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 5.55 ft NGVD, Nov. 22, 1959; minimum water level recorded, 1.35 ft NGVD, May 31, 1962.

ELEVATION ABOVE NGVD 1929, FEET

DAILY MAXIMUM VALUES											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
	2.63	2.49	2.50	2.73	2.68	3.23	2.60	2.74	3.41		
	2.69	2.50	2.94	2.67	2.56	3.42	2.50	3.13	3.08		
	2.56	2.42	2.66	2.49	2.60	3.20	2.64	2.83	2.96		

5	2.40	2.73	2.63	2.63	2.49	2.50	2.73	2.68	3.23	2.60	2.74	3.41
10	2.49	2.59	3.13	2.69	2.50	2.94	2.67	2.56	3.42	2.50	3.13	3.08
15	2.52	2.60	2.41	2.56	2.42	2.66	2.49	2.60	3.20	2.64	2.83	2.96
20	2.58	2.70	2.64	2.56	2.49	2.83	2.59	2.69	2.87	2.70	3.23	2.86
25	2.98	2.69	2.65	2.52	2.54	2.47	2.44	3.17	2.87	2.67	2.67	3.05
EOM MAX	2.74 2.98	2.67	2.67 3.21	2.52 2.87	2.57 2.57	2.65	2.87 2.87	3.06 3.54	2.72 3.42	2.64 2.71	3.07 3.23	3.37 3.51



WELL NUMBER.--263630080264801. Local Number G 1362. USGS Observation Well near Perrine, FL.

LOCATION.--Lat 25°36'37", long 80°26'47", in NW  $^{1}/_{4}$  NW  $^{1}/_{4}$  sec. 33, T.55 S., R.39 E., Hydrologic Unit 03090202, 30 ft east of SW 157th Avenue and SW 170th Street, 1.0 mi north of Eureka Drive, 2.0 mi east of State Road 997 (Krome Avenue), and 5 mi west of Perrine. (Corrected).

AQUIFER.--Biscayne limestone aquifer of the Pleistocene Age, Geologic Unit 112 BSCNN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 33 ft, cased to 11 ft.

REVISED RECORDS .-- WDR FL-85-2B:1980.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 13.56 ft above National Geodetic Vertical Datum of 1929. Prior to June 6, 1996, measuring point was top of recorder shelf, 14.08 ft above NGVD.

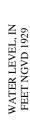
LAND-SURFACE DATUM.--Land surface is approximately 11.5 ft above NGVD.

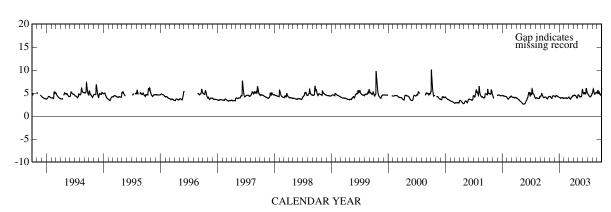
REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The well was originally open to the aquifer from 11 to 33 ft. The open interval has collapsed or become obstructed at a depth of 17 ft.

PERIOD OF RECORD.--November 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.09 ft NGVD, Oct. 4, 2000; lowest, 0.29 ft NGVD, May 15, 1971.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	4.13 4.01	4.27 4.01	4.25 4.31	4.03 3.97	3.94 3.93	4.10 3.81	4.48 4.52	4.64 4.38	4.90 4.97	4.73 4.48	5.65 5.60	5.25 5.16
15	3.77	3.82	4.48	3.97	4.01	3.67	4.44	4.21	4.97	4.26	4.77	5.20
20 25	3.83 4.20	4.31 4.41	4.34 4.20	3.97 3.94	3.82 3.87	4.08 4.21	4.28 3.90	4.22 4.52	4.87 5.89	4.15 4.43	4.84 5.06	4.66 4.54
EOM	4.25	4.36	4.09	3.84	4.06	4.48	4.35	5.75	5.10	4.90	5.20	6.12
MAX	4.25	4.41	4.50	4.07	4.06	4.48	4.53	5.82	6.02	4.99	5.92	6.12





# WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

# MIAMI-DADE COUNTY—Continued

# MISCELLANEOUS WATER-LEVEL MEASUREMENTS

	Local ident- i-	Lat- i-	Long- i-			Elev- ation, feet	Specif. conduc- tance, wat unf	Chlor- ide, water,
Station number	fier	tude	tude	Date	Time	above NGVD (72020)	uS/cm 25 degC (00095)	fltrd, mg/L (00940)
253202080232601 G -3162	2	25 31 32 N 25 31 32 N	080 23 25 W 080 23 25 W	10-04-02 04-17-03	1212 1215	1.88 1.82	2960 3110	860 900
253652080183701 G - 939	)	25 36 52 N 25 36 52 N	080 18 37 W 080 18 37 W	10-22-02 04-14-03	1537 1105	1.95 1.63	6600 7690	1950 2450
253819080183201 G -3610	)	25 38 19 N 25 38 19 N	080 18 32 W 080 18 32 W	10-22-02 04-14-03	1450 1030	2.32	574 606	44.0 48.0
253831080180204 G -3313	3C	25 38 31 N	080 18 02 W	10-22-02	1420		14100	4600
254106080174601 G -1009	В	25 41 06 N	080 17 46 W	10-22-02	1305	2.90	498	30.0
254156080172101 G -360°	,	25 41 56 N 25 41 56 N 25 41 56 N 25 41 56 N	080 17 21 W 080 17 21 W 080 17 21 W 080 17 21 W	10-22-02 01-27-03 04-14-03 07-25-03	1210 1222 0945 1057	2.69 2.43 2.47 2.55	653 565 663 650	66.0 62.0 66.0 72.0
254341080174001 G -3606	s	25 43 41 N 25 43 41 N 25 43 41 N 25 43 41 N	080 17 40 W 080 17 40 W 080 17 40 W 080 17 40 W	10-22-02 01-27-03 04-14-03 07-25-03	1139 1115 0905 1035	2.49 2.23 2.30 2.38	606 535 625 606	38.0 40.0 36.0 40.0
254457080160301 G -3229		25 44 57 N	080 16 03 W	12-10-02 01-02-03 02-04-03 02-28-03 03-26-03	1538 1130 1254 1130 0950 1250 1225 1123 1153 1312 0914 0905	2.08 2.38 1.92 1.57 1.58 1.91 3.02 3.00 1.82 2.46 2.92	2930 2130 2690 2820 3060 3010 3020 3020 3010 2840 3140 2930	840 600 820 860 800 820 820 820 820 840 900 840
254828080161501 G - 354		25 48 28 N 25 48 28 N 25 48 28 N 25 48 28 N	080 16 15 W 080 16 15 W 080 16 15 W 080 16 15 W	11-04-02 02-04-03 04-18-03 07-23-03	1224 1050 0930 1115	1.48 1.39 1.83 1.16	571 506 546 516	54.0 68.0 58.0 58.0
254908080125201 G -3603		25 49 08 N 25 49 08 N	080 12 52 W 080 12 52 W	10-22-02 04-14-03	0950 0804	2.17 1.69	625 652	54.0 58.0
255222080123001 G -3224		25 52 22 N 25 52 22 N	080 12 30 W 080 12 30 W	11-04-02 04-18-03	1300 0957		609 583	44.0 42.0
255315080111501 F - 279	)	25 53 15 N 25 53 15 N	080 11 15 W 080 11 15 W	11-04-02 04-18-03	1400 1101		10200 9240	3400 3000
255350080105801 G - 894	<u>.</u>	25 53 50 N 25 53 50 N	080 10 58 W 080 10 58 W	11-04-02 04-18-03	1331 1025	1.95 1.83	479 454	30.0 28.0

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# Palm Beach County

# **VOLUME 2B: SOUTH FOLRIDA**

# Key to site locations on figure #20

# PALM BEACH COUNTY

Index	Site	Well	Page
Number	Number	Name	Number
1	264005080233501	PB 99	596
2	263328080085201	PB 445	590
3	262114080054001	PB 491	571
4	264230080120501	PB 561	599
5	265812080053901	PB 565	609
6	263524080124301	PB 683	592
7	264208080192201	PB 685	598
8	265633080203001	PB 689	608
9	262218080070101	PB 732	575
10	264123080053801	PB 809	597
11	265106080241402	PB 831	604
12	262435080042904	PB 948	579
13	263044080035102	PB 1195	586
14	262313080044401	PB 1457	576
15	262317080074601	PB 1491	577
16	263255080133601	PB 1576	589
17	263021080070102	PB 1628	585
18	263656080033502	PB 1639	595
19	265233080054001	PB 1642	605
21	264839080115001	PB 1662	602
20	262410080090801	PB 1661	578
22	262209080044702	PB 1669	574
23	262159080054201	PB 1680	573
24	262130080080701	PB 1684	572
25	262033080064001	PB 1686	570
26	262755080040101	PB 1707	582
27	262713080041901	PB 1710	581
28	262803080041101	PB 1714	583
29	263453080031501	PB 1717	591
30	263633080031401	PB 1723	593
31	264643080033401	PB 1726	600
32	264717080033501	PB 1727	601
33	265550080070701	PB 1732	606
34	265611080080201	PB 1733	607
35	264858080044801	PB 1734	603
36	263053080034401	PB 1736	588

# WATER RESOURCES DATA FOR FLORIDA, 2003

# **VOLUME 2B: SOUTH FLORIDA**

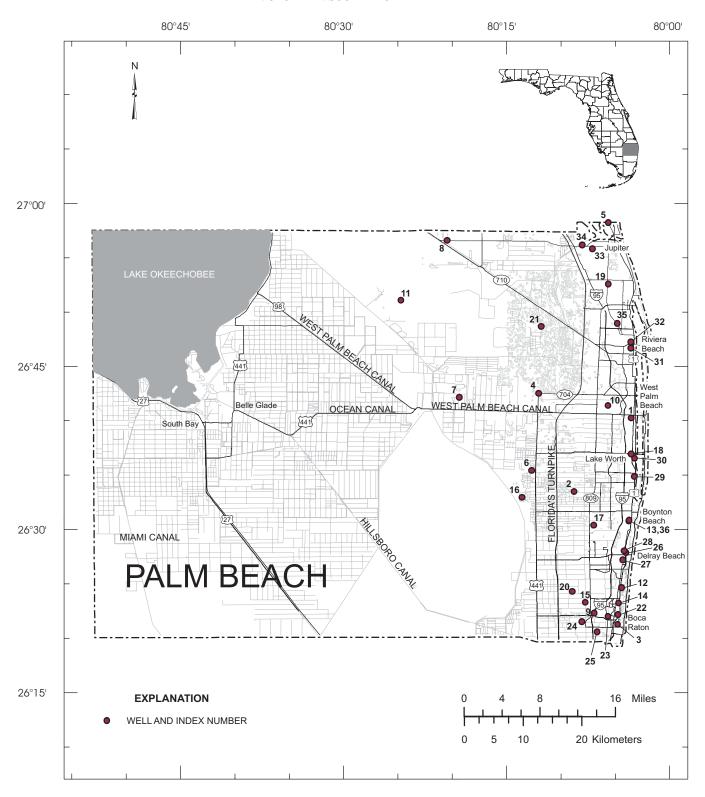


Figure 20: Location of wells in Palm Beach County

#### PALM BEACH COUNTY

WELL NUMBER.--262033080064001. Local Number PB 1686. USGS Observation Well near Boca Raton, FL.

LOCATION.--Lat 26°20'34", long 80°06'41", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.25, T.47 S., R.42 E., Hydrologic Unit 03090202, 10 ft west of SW 12th Avenue, approximately 100 yards south of West Camino Real Road, 0.30 mi east of U.S. Interstate 95 in Boca Raton.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.0 in., depth 131 ft, cased to 126 ft, screened 126 to 131 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.04 ft above National Geodetic Vertical Datum of 1929. Prior to October 27, 2003, top of casing was 11.27 ft above NGVD, but considered to be 11.28 ft above NGVD. Prior to October 1994, top of casing was considered to be 20.00 ft above NGVD. See REMARKS.

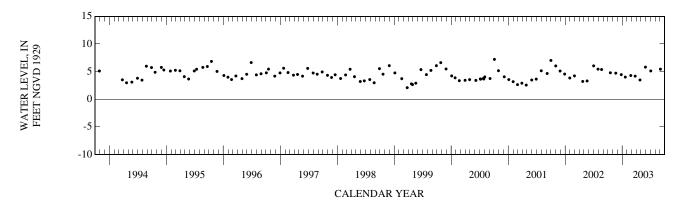
LAND-SURFACE DATUM.--Land surface is approximately 11.3 ft above NGVD.

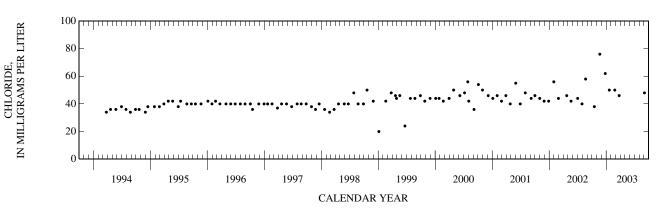
REMARKS.--Well also used for salinity monitoring. The figures of water level as elevation, in feet NGVD, prior to October 1994 are in error. Corrected records, based on a measuring point elevation of 11.28 ft above NGVD, are in files of the U.S. Geological Survey. Because the instrument precision is 0.01 ft, water-level records prior to August 2003 have not been corrected to the 11.27 ft measuring point. The station was damaged and reconstructed in August 2003. Protective meter box installed October 27, 2003. See DATUM.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.22 ft NGVD, Oct. 4, 2000; lowest, 2.09 ft NGVD, Mar. 25, 1999.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAR				
17	1524	4.79	540	38.0	25	1541	4.18	517	46.0
NOV					APR				
21	1432	4.72	527	76.0	25	1328	3.49		
DEC					MAY				
26	1431	4.45	613	62.0	30	1546	5.81		
JAN					JUL				
21	1700	4.01	535	50.0	03	1351	5.12		
FEB					SEP				
25	1426	4.29	545	50.0	03	0857	5.44	543	48.0





WELL NUMBER.--262114080054001. Local Number PB 491. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat  $26^{\circ}21^{\circ}15^{\circ}$ , long  $80^{\circ}09^{\circ}49^{\circ}$ , in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.20, T.47 S., R.43 E., Hydrologic Unit 03090202, near the corner of NE 3rd Court and NE 4th Street, 0.25 mi north and 0.4 mi east of the intersection of Palmetto Park Road and U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.0 in., depth 207 ft, cased to 202 ft, screened 202 to 207 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.34 ft above National Vertical Geodetic Datum of 1929. Prior to October 1981, top of casing was 8.33 ft above NGVD.

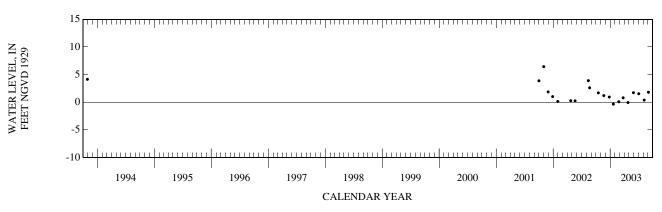
LAND-SURFACE DATUM.--Land surface is approximately 8.6 ft above NGVD.

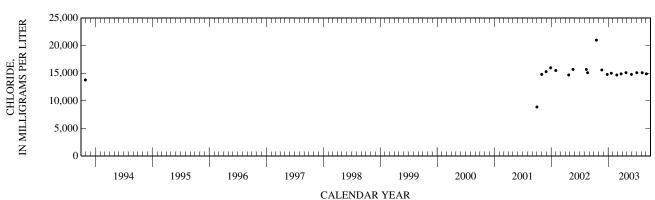
REMARKS.--Well is also used for salinity monitoring. The well was originally open to the aquifer from 202 to 207 ft. The well is obstructed or collapsed at a depth of 182 ft.

PERIOD OF RECORD.--May 1974 to May 1982 (semiannual), November 1982 to October 1993, October 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.44 ft NGVD, Nov. 1, 2001; lowest, 0.90 ft below NGVD, May 7, 1974.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
17	1423	1.70	39,400	21,000	25	1404	-0.05	40,000	15,100
NOV					MAY				
21	1508	1.20	40,900	15,600	30	1510	1.72	39,600	14,800
DEC					JUL				
26	1347	0.94	41,700	14,800	03	1518	1.54	39,200	15,100
JAN					AUG				
21	1616	-0.34	41,300	15,000	07	1436	0.39	39,100	15,100
FEB					SEP				
25	1348	0.09	40,800	14,700	03	1041	1.81	39,900	14,900
MAR									
25	1304	0.80	39,400	14,900					





WELL NUMBER.--262130080080701. Local Number PB 1684. USGS Observation Well near Boca Raton, FL.

LOCATION.--Lat 26°21'30", long 80°08'07", in SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 23, T.47 S., R.42 E., Hydrologic Unit 03090202, 35 ft south of Verde Trail, 0.10 mi east of St. Andrews Road, 0.5 mi south of Glades Road and 0.6 mi west of Military Trail.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4.0 in., depth 40 ft, cased to 35 ft, screened 35 to 40 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 18.85 ft above National Geodetic Vertical Datum of 1929. Prior to October 1994, top of base was considered to be 20.00 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 18.2 ft above NGVD.

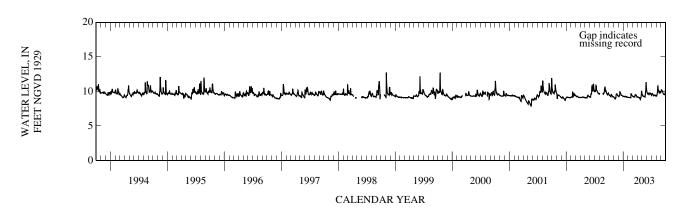
REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1994 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

FLEVATION ABOVE NGVD 1929 FFFT

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 12.75 ft NGVD, Nov. 5, 1998; lowest, 7.82 ft NGVD, May 22, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.44	9.10	9.28	9.31	9.12	9.25	9.18	9.44	9.72	9.69	9.52	10.13
10	9.33	8.94	9.96	9.23	9.11	9.21	9.14	9.33	9.74	9.55	10.71	10.00
15	9.48	9.11	9.75	9.29	9.10	9.23	9.11	9.30	9.73	9.49	10.18	9.68
20	9.48	9.60	9.43	9.24	9.68	9.53	8.93	9.20	9.68	9.46	9.93	9.59
25	9.24	9.44	9.41	9.17	9.49	9.49	9.08	10.08	9.70	9.45	9.87	9.59
EOM	9.21	9.35	9.29	9.17	9.36	9.18	9.90	10.26	9.48	9.32	9.91	10.56
MAX	9.60	9.65	9.96	9.31	9.68	9.53	10.03	11.35	10.09	9.71	10.75	10.56



WELL NUMBER.--262159080054201. Local Number PB 1680. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat 26°21'59", long 80°05'42", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 18, T.47 S., R.43 E., Hydrologic Unit 03090202, 100 yards east of El Rio Canal at NW 17th Street, 0.25 mi north of Glades Road, 1.5 mi east of U.S. Interstate 95.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4.0 in., depth 40 ft, cased to 35 ft, screened 35 to 40 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 10.80 ft above National Geodetic Vertical Datum of 1929. Prior to July 1998, top of base was 10.81 ft above NGVD. Prior to October 1994, top of base was considered to be 20.00 ft above NGVD. See REMARKS.

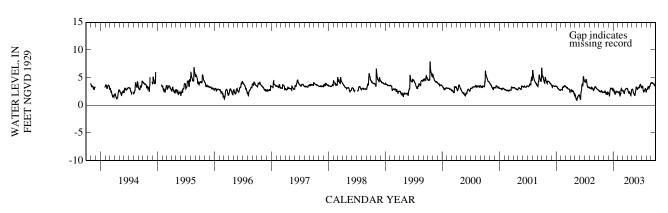
LAND-SURFACE DATUM.--Land surface is approximately 8.7 ft above NGVD.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1994 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--September 1993 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 7.92 ft NGVD, Oct. 15, 1999; lowest, 0.94 ft NGVD, May 11, 14, 2002.

ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20	2.54 2.53 2.44 2.56	2.40 2.58 2.07 2.22	2.04 2.36 3.02 3.03	2.69 2.12 2.34 2.42	2.31 2.38 2.02 2.81	2.63 2.32 2.37 2.87	2.75 2.24 2.17 2.09	2.91 2.33 1.99 1.96	2.88 3.24 3.24 3.54	3.26 3.35 2.45 2.58	2.85 3.17 3.39 3.18	4.05 4.08 3.94 3.69
25 EOM	2.46 2.36	2.11 2.15	3.01 2.88	2.44 2.40	2.89 2.66	3.02 3.04	1.93 2.84	2.59 3.21	3.76 3.21	2.90 2.41	3.44 3.93	3.60 4.38
MAX	2.71	2.59	3.08	2.81	3.00	3.07	2.99	3.29	3.78	3.39	3.95	4.38



WELL NUMBER.--262209080044702. Local Number PB 1669. USGS Observation Well in Boca Raton, FL.

 $LOCATION.--Lat~26^{\circ}22'09", long~80^{\circ}04'47", in~NW~\frac{1}{4}~SW~\frac{1}{4}~SE~\frac{1}{4}~sec.17, T.47~S., R.43~E., Hydrologic~Unit~03090202, 20~ft~south~and~4~ft~east~of~the~junction~of~NE~5th~Avenue~and~NE~4th~Way,~0.1~mi~north~of~NE~20th~Street~and~0.2~mi~west~of~U.S.~Highway~1,~in~downtown~Boca~Raton.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2.0 in., depth 131 ft, cased to 131 ft, open end.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.34 ft above National Geodetic Vertical Datum of 1929. Prior to October 1994, top of casing was considered to be 20.00 ft above NGVD. See REMARKS.

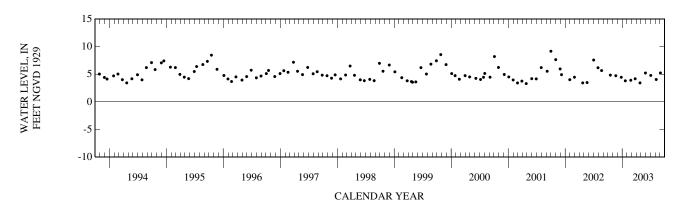
LAND-SURFACE DATUM.--Land surface is approximately 11.6 ft above NGVD.

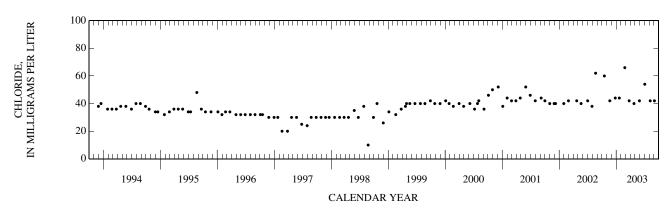
REMARKS.--Well also used for salinity monitoring. The figures of water levels as elevation, in feet NGVD, prior to October 1994 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM. The well was originally open to the aquifer at a depth of 131 ft. The well is obstructed at a depth of 108 ft by sediment heaving into well. Well remains in communication with aquifer.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.17 ft NGVD, Oct. 1, 2001; lowest, 3.31 ft NGVD, Apr. 26, 2001.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
17	1500	4.85	488	60.0	25	1144	3.44	455	40.0
NOV					MAY				
21	1152	4.74	480	42.0	30	1318	5.23	456	42.0
DEC					JUL				
26	1200	4.46	470	44.0	03	1334	4.79	483	54.0
JAN					AUG				
21	1407	3.82	479	44.0	07	1245	4.06	466	42.0
FEB					SEP				
25	1224	3.92	482	66.0	03	1317	5.24	474	42.0
MAR									
25	1438	4.19	456	42.0					





WELL NUMBER.--262218080070101. Local Number PB 732. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat 26°22'18", long 80°06'58", in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.13, T.47 S., R.42 E., Hydrologic Unit 03090202, 25 ft east of Airport Road, 0.35 mi north of Glades Road. (Corrected).

AQUIFER .-- Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in. to 19 ft, 2 in. from 19 to 100 ft, depth 100 ft, cased to 100 ft, open end. INSTRUMENTATION.--Electronic data logger.

DATUM.--Measuring point: Top of base, 13.43 ft above National Geodetic Vertical Datum of 1929. From September 1990 to September 1993 top of base was considered to be 13.38 ft above NGVD. See REMARKS.

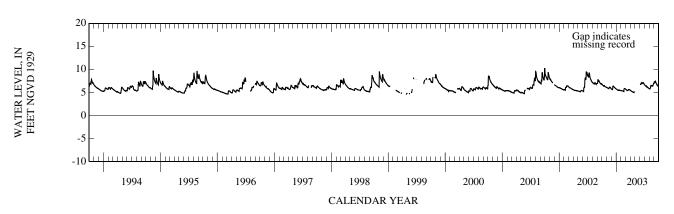
LAND-SURFACE DATUM.--Land surface is approximately 13.0 ft above NGVD.

REMARKS.--Because the difference in reported measuring points is equivalent to the estimate of error for the measurement, the figures of water levels, in feet NGVD, from September 1990 to September 1993, have not been corrected to the 13.43 ft measuring point elevation.

PERIOD OF RECORD .-- March 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.30 ft NGVD, Sept. 29, 2001; lowest, 3.43 ft NGVD, May 6, 1981.

					YEAR OC	I ABOVE NO TOBER 2002 MAXIMUN	TO SEPTE		;			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.66	5.99	5.67	5.67	5.37	5.62	5.35		6.80	6.53	5.83	7.25
10	6.47	5.90	6.26	5.52	5.33	5.46	5.22		7.04	6.37	6.39	7.43
15	6.48	5.80	6.34	5.49	5.28	5.41	5.13		7.19	6.37	6.51	6.93
20	6.33	6.10	6.10	5.45	5.71	5.60	5.05		6.93	6.11	6.38	6.60
25	6.21	6.03	5.95	5.45	5.85	5.62	4.96		7.09	6.00	6.47	6.47
EOM	6.09	5.83	5.75	5.41	5.80	5.52			6.71	5.83	6.96	7.27
MAX	6.79	6.15	6.37	5.73	5.85	5 77				6.66	6.98	7 45



WELL NUMBER.--262313080044401. Local Number PB 1457. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat  $26^{\circ}23'13''$ , long  $80^{\circ}04'44''$ , in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.8, T.47 S., R.43 E., Hydrologic Unit 03090202, approximately 0.05 mi north and 0.1 mi west of the intersection of Spanish River Boulevard and U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 193 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.97 ft above National Geodetic Vertical Datum of 1929.

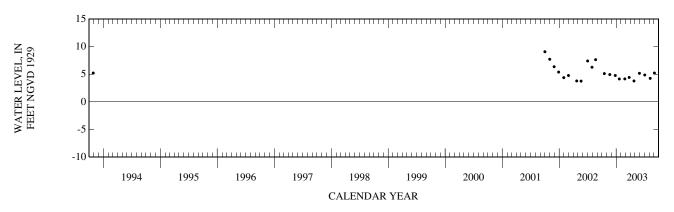
LAND-SURFACE DATUM .-- Land surface is approximately 16.0 ft above NGVD.

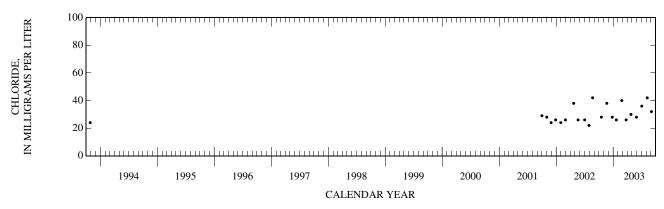
REMARKS .-- Well also used for salinity monitoring.

PERIOD OF RECORD.--April 1983 to October 1993, October 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.08 ft NGVD, Oct. 1, 2001; lowest, 2.24 ft NGVD, Mar. 29, 1990.

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet	wat unf	water,			feet	wat unf	water,
		above	uS/cm	fltrd,			above	uS/cm	fltrd,
Date	Time	NGVD	25 degC	mg/L	Date	Time	NGVD	25 degC	mg/L
		(72020)	(00095)	(00940)			(72020)	(00095)	(00940)
OCT					APR				
17	1356	5.12	424	28.0	25	1109	3.79	419	30.0
NOV					MAY				
21	1237	4.95	434	38.0	30	1248	5.17	417	28.0
DEC					JUL				
26	1123	4.78	436	28.0	03	1302	4.87	425	36.0
JAN					AUG				
21	1340	4.15	443	26.0	07	1143	4.26	423	42.0
FEB					SEP				
25	1142	4.17	443	40.0	03	1338	5.22	419	32.0
MAR									
25	1108	4.43	410	26.0					





WELL NUMBER.--262317080074601. Local Number PB 1491. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat  $26^{\circ}23'17''$ ,  $\log 80^{\circ}07'46''$ , in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 11, T.47 S., R.42 E., Hydrologic Unit 03090202, on the east bank of E-3 canal approximately 0.5 mi south of NW 51st Street (Yamato Road) at Boca Raton. (Corrected).

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 138 ft, cased to 88 ft, screened 88 to 138 ft.

INSTRUMENTATION .-- Satellite data collection platform with pressure transducer.

DATUM.--Measuring point: Top of casing, 18.20 ft above National Geodetic Vertical Datum of 1929. Prior to March 7, 2000, measuring point was top of base, 20.31 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 18.7 ft above NGVD.

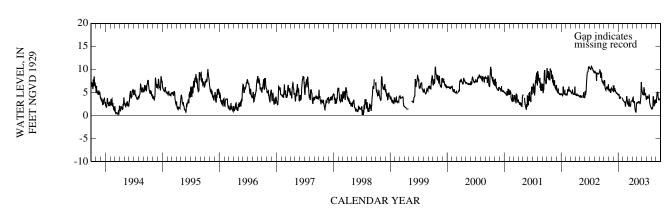
REMARKS.--The well is obstructed or collapsed at a depth of 84 ft as of September 18, 2001.

PERIOD OF RECORD.--April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.72 ft NGVD, July 13, 14, 2002; lowest, 3.04 ft below NGVD, Apr. 14, 1989.

	YEAR OCT	ABOVE NO OBER 2002 MAXIMUM	TO SEPTE	FEET MBER 2003		
JAN	FEB	MAR	APR	MAY	JUN	Д

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.56	5.34	6.53	4.60	3.13	2.45	3.78	2.79	5.00	3.79	1.41	4.08
10	5.87	5.59	5.83	3.88	2.88	1.94	2.81	2.87	4.55	3.94	1.74	4.79
15	5.75	5.30	5.31	3.98	2.38	2.42	3.07	3.02	6.12	4.10	4.15	3.71
20	6.16	5.58	4.83	3.77	2.90	2.02	1.18	2.62	4.38	3.46	2.11	3.55
25	5.84	5.55	4.83	3.78	4.16	3.07	0.70	3.69	4.78	2.27	2.78	
EOM	6.40	6.44	4.44	3.42	3.32		2.78	6.31	3.54	1.67	2.97	
MAX	7.68		6.53		4.16		3.97	7.20	6.12	4.57	4.15	



WELL NUMBER.--262410080090801. Local Number PB 1661. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat 26°24′16", long 80°08′59", in NW ½ SE ½ NW ½ sec.3, T.47 S., R.42 E., Hydrologic Unit 03090202, at sewage lift station near junction of NW 31st Way and NW 61st Street within Seasons of Boca Raton development, off Jog Road, 0.10 mi south of Clint Moore Road, in Boca Raton. (Corrected)

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 15 ft, screened from 15 to 25 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 23.10 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 20.1 ft above NGVD.

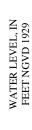
PERIOD OF RECORD.--December 1989 to current year.

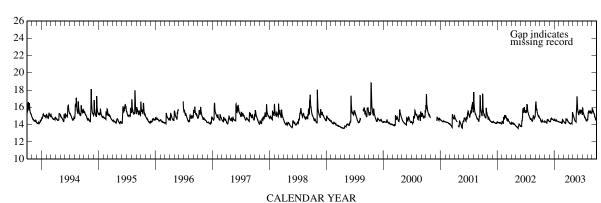
EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.83 ft NGVD, Oct. 15, 1999; lowest, 13.57 ft NGVD, Apr. 23, 1999.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES											
Y	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	
_	14.66	14.22	1422	14.50	14.20	14.20	14.05	14.07	15.00	15 45	

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.66	14.33	14.33	14.52	14.28	14.30	14.25	14.97	15.26	15.45	15.01	15.73
10	14.34	14.27	14.67	14.47	14.27	14.19	14.17	14.72	15.48	15.15	15.58	15.44
15	14.41	14.17	14.68	14.52	14.25	14.26	14.07	14.42	15.66	14.94	15.56	15.26
20	14.40	14.48	14.61	14.41	14.37	14.56	14.16	14.33	15.42	14.74	15.59	14.79
25	14.33	14.51	14.60	14.37	14.52	14.60	14.10	16.19	15.56	14.54	15.35	14.55
EOM	14.29	14.39	14.49	14.34	14.44	14.35	15.30	15.84	15.17	14.44	15.30	15.25
MAX	14.73	14.61	14.75	14.58	14.58	14.65	15.45	17.26	15.73	15.92	15.60	15.89





WELL NUMBER.--262435080042904. Local Number PB 948. USGS Observation Well in Boca Raton, FL.

LOCATION.--Lat  $26^{\circ}24'38''$ , long  $80^{\circ}04'28''$ , in SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.32, T.46 S., R.43 E., Hydrologic Unit 03090202, about 570 ft east of U.S. Highway 1 and 800 ft north of Coventry Street.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 175 ft, cased to 170 ft, screened 170 to 175 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.25 ft above National Geodetic Vertical Datum of 1929. Prior to September 2000, measuring point was 15.38 ft above NGVD.

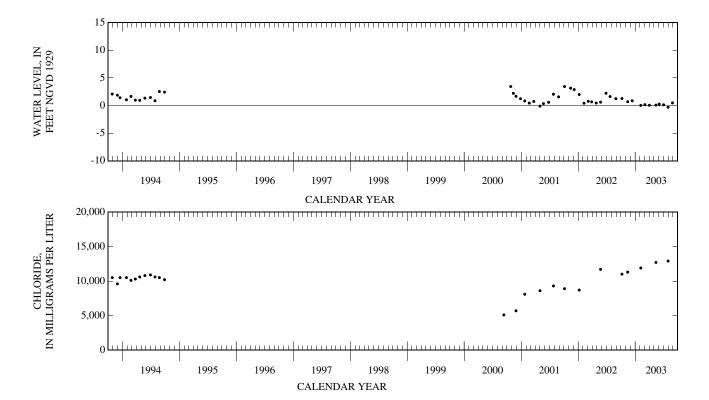
LAND-SURFACE DATUM.--Land surface is approximately 12.5 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface on ground water. See EXPLANATION OF RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier.

PERIOD OF RECORD.--November 1976 to September 1978 (monthly), October 1978 to January 1982 (quarterly), November 1982 to September 1994 (monthly), October 2000 to current year.

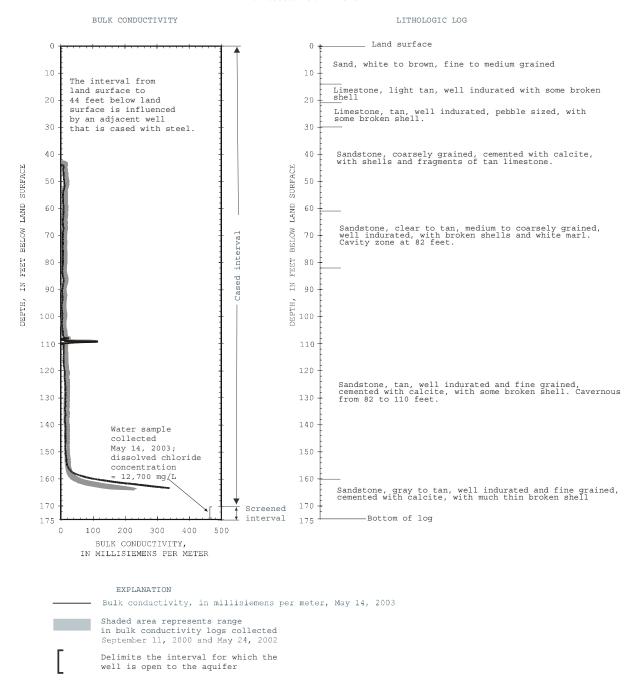
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.02 ft NGVD, Jan. 17, 1977; lowest, 0.30 ft below NGVD, July 31, 2003.

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					MAY				
08	1500	1.28	30,400	11,000	14	0845	0.09	34,100	12,700
NOV					JUN				
14	0824	0.70	30,000	11,300	04	1301	0.27		
DEC					JUL				
13	1230	0.87			02	1235	0.14		
FEB					31	0845	-0.30	33,900	12,900
06	1630	0.03	31,700	11,900	AUG				
MAR					28	1355	0.49		
04	1202	0.17							
APR									
02	1457	0.06							



WELL NUMBER.-- 262435080042904. Local Number PB 948. USGS Observation Well near Boca Raton, FL.

#### 262435080042904 PB-948



WELL NUMBER.--262713080041901. Local Number PB 1710. USGS Observation Well near Delray Beach, FL.

 $LOCATION.-Lat\ 26^{\circ}27'13'', long\ 80^{\circ}04'19'', in\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec. 21, T.46\ S., R.43\ E., Hydrologic\ Unit\ 03090202, on\ north\ side\ of\ SE\ 5th\ Street,\ next\ to\ guardrail,\ between\ SE\ 3rd\ Avenue\ and\ railroad\ tracks,\ 0.3\ mi\ west\ of\ U.S.\ Highway\ 1.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 222 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.22 ft above National Geodetic Vertical Datum of 1929. Prior to October 2002, measuring point was incorrectly considered to be 17.00 ft above NGVD. See REMARKS.

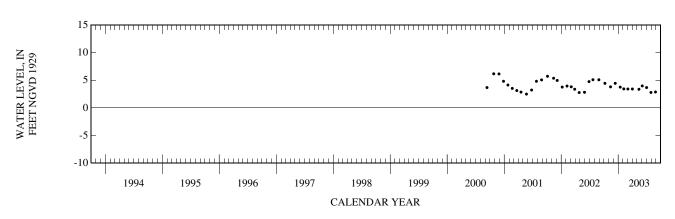
LAND-SURFACE DATUM.--Land surface is approximately 17.2 ft above NGVD.

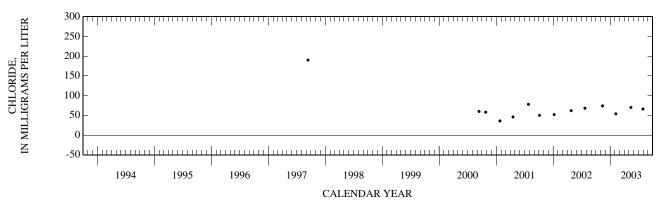
REMARKS.--Well is also used for salinity monitoring. Only salinity was measured prior to October 2000. The figures of water level as elevation, in ft NGVD, prior to October 2002 are in error. A correction of +0.22 ft has been applied to correct water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--September 1997 to September 2000 (intermittent), October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.17 ft NGVD, Oct. 25, 2000; lowest, 2.50 ft NGVD, May 23, 2001. (Corrected).

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1345	4.45			02	1439	3.42		
NOV					MAY				
13	1729	3.81	724	74.0	14	1118	3.37	724	70.0
DEC					JUN				
13	1158	4.45			04	1245	3.98		
JAN					JUL				
14	1140	3.76			02	1210	3.68		
FEB					30	1643	2.80	701	66.0
06	1605	3.44	743	54.0	AUG				
MAR					28	1240	2.88		
04	1141	3 42							





WELL NUMBER.--262755080040101. Local Number PB 1707. USGS Observation Well near Delray Beach, FL.

LOCATION.--Lat 26°27'55", long 80°04'01", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.16, T.46 S., R.43 E., Hydrologic Unit 03090202, on NE 6th Avenue, 1 block east of U.S. Highway 1, on south side of NE 2nd Street.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 161 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.17 ft above National Geodetic Vertical Datum of 1929. Prior to October 2002, measuring point was incorrectly considered to be 12.20 ft above NGVD. See REMARKS.

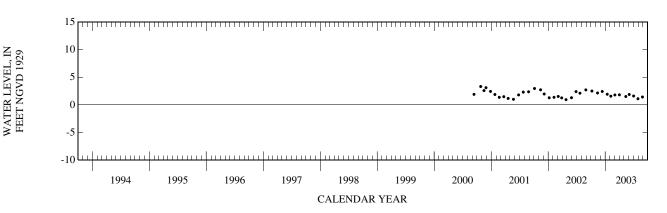
LAND-SURFACE DATUM.--Land surface is approximately 12.2 ft above NGVD.

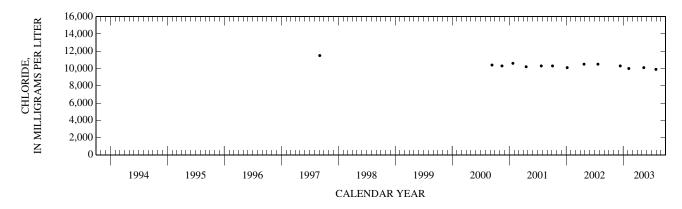
REMARKS.--Well is also used for salinity monitoring. Only salinity was measured prior to September 2000. The figures of water level as elevation, in ft NGVD, prior to October 2002 are in error. A correction of -0.03 ft has been applied to correct water-level data. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--September 1997 to September 2000 (intermittent), October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.33 ft NGVD, Oct. 25, 2000; lowest, 0.95 ft NGVD, Apr. 25, 2002. (Corrected).

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1330	2.51			02	1417	1.82		
NOV					MAY				
13	1613	2.16			13	1651	1.52	26,900	10,100
DEC					JUN				
13	1140	2.43	31,700	10,300	04	1232	1.89		
JAN					JUL				
14	1125	1.93			02	1151	1.61		
FEB					30	1609	1.11	26,400	9,900
06	1520	1.58	25,900	10,000	AUG				
MAR					28	1159	1.43		
04	1135	1.80							





WELL NUMBER.--262803080041101. Local Number PB 1714. USGS Observation Well near Delray Beach, FL.

LOCATION.--Lat 26°27'56", long 80°04'12", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec. 16, T.46 S., R.43 E., Hydrologic Unit 03090202, 16 ft east of the Florida East Coast Railroad and 22 ft north of the centerline of NE 2nd Street, 0.10 mi west of U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in., depth 159 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 17.85 ft above National Geodetic Vertical Datum of 1929. Prior to June 10, 2003, measuring point was incorrectly considered to be 18.10 ft above NGVD. See REMARKS.

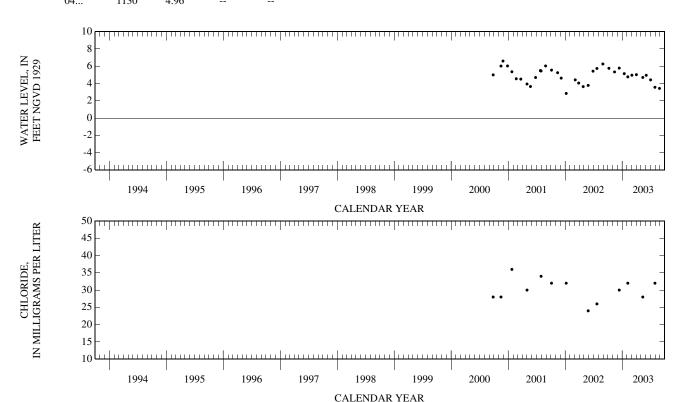
LAND-SURFACE DATUM.--Land surface is approximately 17.9 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface on ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. Induction log data contains spikes that occur at 40 ft increments. The spike data could be caused by well centralizers. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the water year 2002 had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. The figures of water level as elevation, in feet NGVD, prior to October 2003 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

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

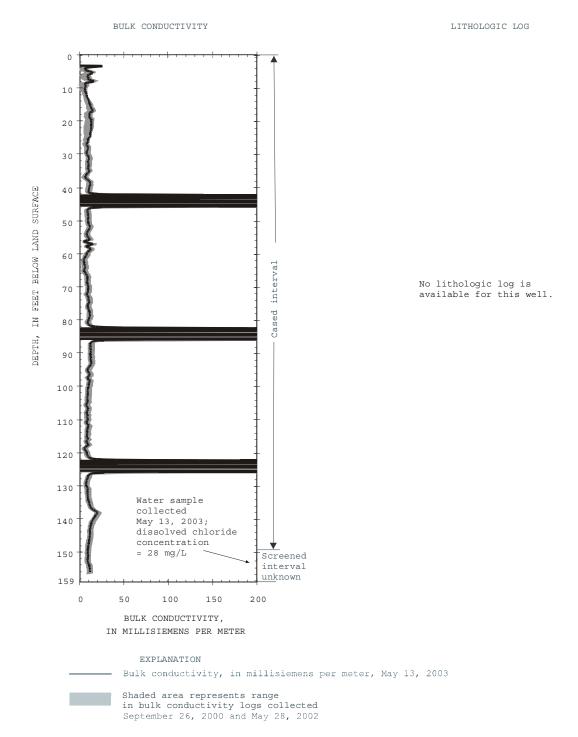
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.60 ft NGVD, Nov. 28, 2000; lowest, 2.85 ft NGVD, Jan. 7, 2002. (Corrected).

			Specif.					Specif.	
		Elev-	conduc-	Chlor-			Elev-	conduc-	Chlor-
		ation,	tance,	ide,			ation,	tance,	ide,
		feet above	wat unf uS/cm	water,			feet	wat unf uS/cm	water,
Date	Time	NGVD	25 degC	fltrd, mg/L	Date	Time	above NGVD	25 degC	fltrd,
Date	Tille	(72020)	(00095)	(00940)	Date	Time	(72020)	(00095)	mg/L (00940)
		(72020)	(00093)	(00940)			(72020)	(00093)	(00940)
OCT					APR				
08	1321	5.76			02	1405	5.02		
NOV					MAY				
13	1544	5.34			13	1645	4.70	473	28.0
DEC					JUN				
13	1114	5.78	546	30.0	04	1224	4.95		
JAN					JUL				
14	1119	5.14			02	1145	4.42		
FEB					30	1543	3.56	468	32.0
06	1505	4.77	467	32.0	AUG				
MAR					28	1150	3.43		
04	1130	4 96							



WELL NUMBER.-- 262803080041101. Local Number PB 1714. USGS Observation Well near Delray Beach, FL.

#### 262803080041101 PB-1714



WELL NUMBER.--263021080070102. Local Number PB 1628. USGS Observation Well near Boynton Beach, FL.

LOCATION.--Lat 26°30'21", long 80°07'01", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.36, T.45 S., R.42 E., Hydrologic Unit 03090202, 33 ft north of Golf Road, 0.4 mi east of Military Trail, 0.38 mi south of Woolbright Road and 3.15 mi west of U.S. Interstate 95.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 109 ft, cased to 104 ft, screened from 104 to 109 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.—Measuring point: Top of base, 21.26 ft above National Geodetic Vertical Datum of 1929. Prior to August 2000, measuring point was top of casing, 18.42 ft above NGVD.

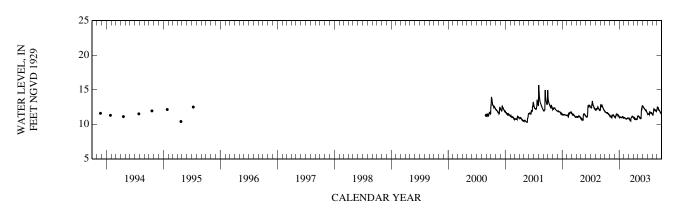
LAND-SURFACE DATUM.--Land surface is approximately 18.9 ft above NGVD.

REMARKS .-- Station built and re-levelled August 14, 2000.

PERIOD OF RECORD.--May 1988 to April 1993 (semiannual), November 1993 to July 1995 (quarterly), August 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 15.68 ft NGVD, Aug. 3, 2001; lowest, 10.29 ft NGVD, May 20-22, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.80	11.24	11.00	11.02	10.95	10.80	10.90	11.20	12.49	11.54	11.39	12.39
10	11.69	11.05	11.17	11.02	10.86	10.69	10.86	11.06	12.36	11.45	12.13	12.16
15	11.59	10.98	11.36	10.98	10.78	10.49	10.68	10.95	12.14	11.79	12.15	11.99
20	11.61	11.20	11.28	11.10	10.83	10.97	10.75	10.83	11.96	11.70	12.01	11.85
25	11.37	11.33	11.32	11.02	10.87	11.17	10.72	12.23	11.84	11.68	11.89	11.64
EOM	11.36	11.13	11.12	10.92	10.88	10.98	11.17	12.63	11.63	11.50	12.08	11.68
MAX	11.88	11.35	11.47	11.15	10.99	11.17	11.17	12.69	12.63	11.82	12.24	12.55



WELL NUMBER.--263044080035102. Local Number PB 1195. USGS Observation Well in Boynton Beach, FL.

LOCATION.--Lat 26°30'47", long 80°03'47", in NE  $^{1}\!\!/_{4}$  NW  $^{1}\!\!/_{4}$  NE  $^{1}\!\!/_{4}$  sec.33, T.45 S., R.43 E., Hydrologic Unit 03090202, about 500 ft southwest of the intersection of the Florida East Coast Railroad and East Woolbright Road, 0.5 mi east of U.S. Interstate 95, about 400 ft south of East Woolbright Road and about 350 ft east of Seacreast Boulevard.

AQUIFER .-- Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, diameter 4 in., depth 325 ft, cased to 300 ft, screened 300 to 320 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 20.13 ft above National Geodetic Vertical Datum of 1929.

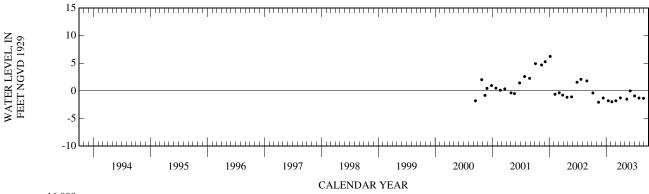
LAND-SURFACE DATUM.--Land surface is approximately 19.0 ft above NGVD.

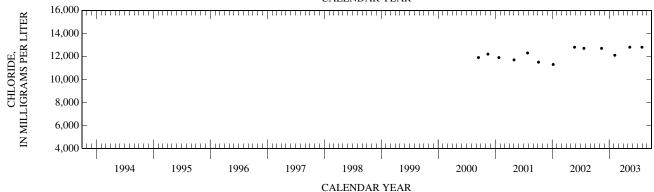
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface on ground water. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the water year 2002 had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Records of water-level elevation prior to October 2001, are available in the files of the U.S. Geological Survey.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.24 ft NGVD, Jan. 7, 2002; lowest, 2.06 ft below NGVD, Nov. 13, 2002.

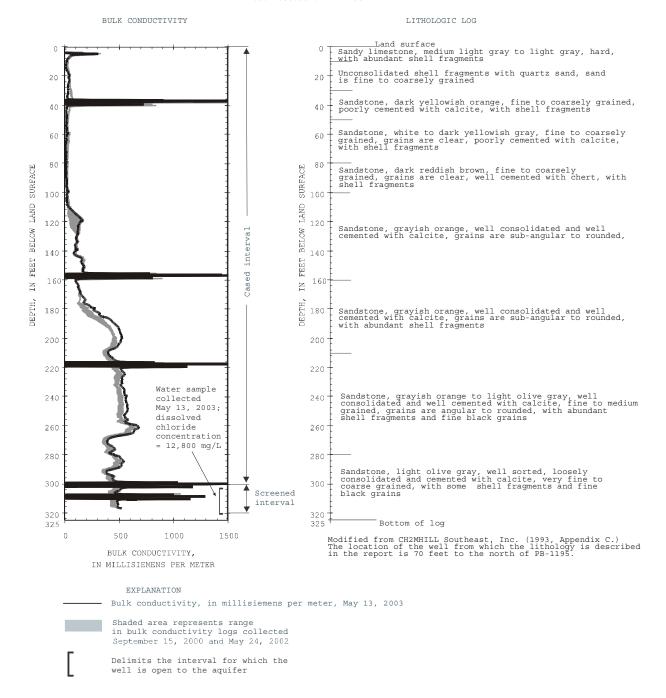
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1240	-0.38			02	1346	-1.27		
NOV					MAY				
13	1425	-2.06	33,500	12,700	13	1345	-1.50	33,900	12,800
DEC					JUN				
13	1045	-1.29			04	1205	0.00		
JAN					JUL				
14	1052	-1.78			02	1130	-0.91		
FEB					30	1350	-1.29	33,900	12,800
06	1049	-1.97	31,800	12,100	AUG				
MAR					28	1030	-1.34		
04	1114	-1.79							





WELL NUMBER.-- 263044080035102. Local Number PB-1195. USGS Observation Well near Boynton Beach, FL.

#### 263044080035102 PB-1195



WELL NUMBER.--263053080034401. Local Number PB 1736. USGS Observation Well near Boynton Beach, FL.

LOCATION.—Lat 26°30'53", long 80°03'36", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.33, T.45 S., R.43 E., Hydrologic Unit 03090202, on SE 15th Avenue and U.S. Highway 1, on sidewalk at southwest corner, 80 ft east of entrance to mall parking lot.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 178 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.71 ft above National Geodetic Vertical Datum of 1929.

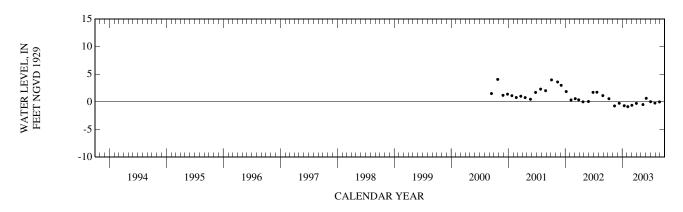
LAND-SURFACE DATUM.--Land surface is approximately 10.7 ft above NGVD.

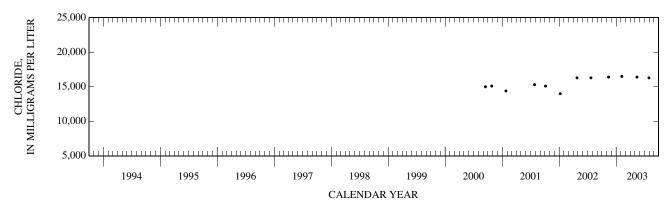
REMARKS .-- Well is also used for salinity monitoring.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.07 ft NGVD, Oct. 25, 2000; lowest, 0.86 ft below NGVD, Feb. 6, 2003.

Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
				APR				
1251	0.58			02	1355	-0.27		
				MAY				
1530	-0.73	42,700	16,400	14	1205	-0.48	42,600	16,400
				JUN				
1033	-0.25			04	1150	0.65		
				JUL				
1101	-0.69			02	1119	0.03		
				30	1520	-0.21	41,800	16,300
1245	-0.86	43,100	16,500	AUG				
				28	1050	0.00		
1058	-0.61							
	1251 1530 1033 1101 1245	Time ation, feet above NGVD (72020)  1251 0.58 1530 -0.73 1033 -0.25 1101 -0.69 1245 -0.86	ation, feet above NGVD (72020)         tance, wat unf uS/cm uS/c	Elevation, feet wat unfabove uS/cm fltrd, mg/L (72020) (00095) (00940)  1251     0.58	Elevation, feet wat unfabove uS/cm fltrd,   Date	Elevation, tance, ide, wat unfabove uS/cm fltrd,   Date   Time   NGVD   25 degC mg/L   Date   Time   NAY   1530   -0.73   42,700   16,400   14   1205   JUN   1033   -0.25       04   1150   JUL   1101   -0.69       02   1119   30   1520   1245   -0.86   43,100   16,500   AUG   28   1050	Elevation, feet atom, feet above us/cm fltrd, r/(72020) (00095) (00940)   Date   Time NGVD (72020) (00095) (00940)   Date   Time NGVD (72020)	Elevation, tance, ide, wat unfabove uS/cm fltrd, represented by the feet wat unfabove uS/cm fltrd, above uS/cm represented by the feet wat unfabove uS/cm represented by the feet wat uS/cm represented by the feet wat unfabove uS/cm represented by the feet wat uS/cm represented by the feet wat unfabove uS/cm represented by the feet wat uS/cm repres





WELL NUMBER.--263255080133601. Local Number PB 1576. USGS Observation Well near Greenacres, FL.

LOCATION.--Lat 26°32′55", long 80°13′36", in NE ½ NW ½ SE ½ sec.14, T.45 S., R.41 E., Hydrologic Unit 03090202, 200 ft north of Eagle Nest Drive and 1400 ft west of 116th Terrace South, 1.3 mi southwest of intersection of Osprey Pond Lane and U.S. Highway 441, 3 mi south of State Road 812, 8 mi southwest of Greenacres.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Observation, water-table well, diameter 2 in., depth 160 ft, cased to 60 ft, screened 60 to 160 ft.

INSTRUMENTATION .-- Electronic data logger with pressure transducer.

DATUM.--Measuring point: Top of base, 20.73 ft above National Geodetic Vertical Datum of 1929, based on a topographic map.

LAND-SURFACE DATUM .-- Land surface is approximately 17.0 ft above NGVD, based on a topographic map.

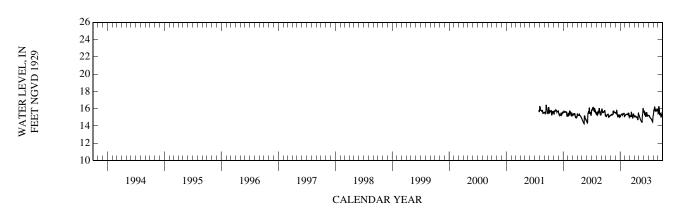
REMARKS.--Well was originally open to the aquifer from 60 to 160 ft. The open interval has collapsed or the well has become obstructed at a depth of 51 ft. Well remains in communication with the aquifer. Water-level data for water years 2001, 2002, were published in WDR FL-03-2B.

PERIOD OF RECORD .-- July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.44 ft NGVD, Sept. 14, 2001; lowest, 14.25 ft NGVD, May 15, 2002.

ELEVATION AROVE NOVD 1020 FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.10	15.28	15.55	15.26	15.27	15.09	15.12	15.06	15.61	15.21	15.86	16.15
10	15.29	15.30	15.79	15.36	15.36	15.14	15.12	14.78	15.44	15.06	16.18	15.37
15	15.38	15.30	15.27	15.24	15.32	15.49	15.03	14.57	15.18	14.89	15.82	15.36
20	15.09	15.72	15.33	15.38	15.37	15.14	14.96	14.43	15.55	14.77	15.88	15.03
25	15.07	15.57	15.29	15.45	15.44	15.12	14.68	15.37	15.23	14.62	15.93	15.24
EOM	15.23	15.53	15.07	15.15	15.01	15.17	15.31	15.60	15.22	15.16	15.81	15.51
MAX	15.38	15.72	15.80	15.46	15.53	15.58	15.50	16.04	15.79	15.21	16.19	16.29



WELL NUMBER.--263328080085201. Local Number PB 445. USGS Observation Well near Boynton Beach, FL. (Corrected).

LOCATION.--Lat 26°33'28", long 80°08'49", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.10, T.45 S., R.42 E., Hydrologic Unit 03090202, approximately 80 ft from the east side of Jog Road, 1.0 mi south of Hypoluxo Road and 2.2 mi west of Military Trail (State Road 809), 9.5 mi southwest of West Palm Beach. (Corrected).

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 11.4 ft, cased to 11.4 ft, gravel packed from 9.4 to 11.4 ft. (Corrected.)

REVISED RECORDS .-- WDR FL-81-2B:1980.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 21.52 ft above National Geodetic Vertical Datum of 1929. Prior to April 1999, measuring point was considered to be 22.86 ft above NGVD. Prior to October 1975, measuring point was considered to be 21.66 ft above NGVD. See REMARKS.

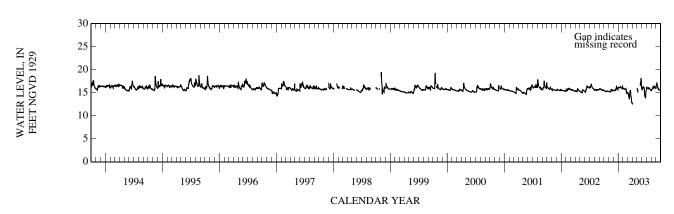
LAND-SURFACE DATUM .-- Land surface is approximately 18.9 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. Published figures of water levels as elevation, in feet NGVD, prior to October 1998 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD .-- January 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.49 ft NGVD, Nov. 5, 1998; lowest, 12.58 ft NGVD, Apr. 2, 2003.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.45	15.27	15.50	16.12	15.88	15.01		15.69	15.83	16.13	15.76	16.83
10	15.30	15.19	15.58	16.11	15.87	14.58		15.39	16.23	15.99	16.12	16.40
15	15.27	15.26	15.58	16.23	15.72	14.28			16.15	15.95	16.15	15.88
20	15.40	15.57	16.23	16.12	15.84	15.52			14.27	15.99	16.43	15.58
25	15.33	15.70	15.91	15.89	15.02	14.13		17.21	13.80	15.65	16.16	15.63
EOM	15.30	15.49	16.13	16.10	14.98	12.71		15.91	15.49	15.61	16.03	15.79
MAX	15.49	15.71	16.31	16.38	16.00	15.60			16.44	16.23	16.46	17.11



WELL NUMBER.--263453080031501. Local Number PB 1717. USGS Observation Well near Lantana, FL.

 $LOCATION.--Lat\ 26^{\circ}34'53'', long\ 80^{\circ}03'15'', in\ SE\ {}^{1}\!\!{}^{\prime}_{4}\ SW\ {}^{1}\!\!{}^{\prime}_{4}\ NW\ {}^{1}\!\!{}^{\prime}_{4}\ sec.3, T.45\ S., R.43\ E., Hydrologic\ Unit\ 03090202, on\ southside\ of\ Wickline\ Road\ west of\ U.S.\ Highway\ 1, in\ planter\ in\ northeast\ corner\ of\ apartment\ building\ \#330\ parking\ lot,\ well\ is\ most\ western\ of\ two\ wells.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 148 ft, cased to 138 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.26 ft above National Geodetic Vertical Datum of 1929.

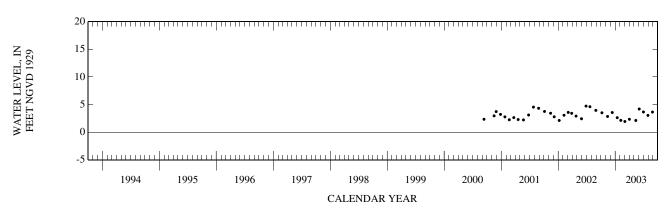
LAND-SURFACE DATUM .-- Land surface is approximately 13.3 ft above NGVD.

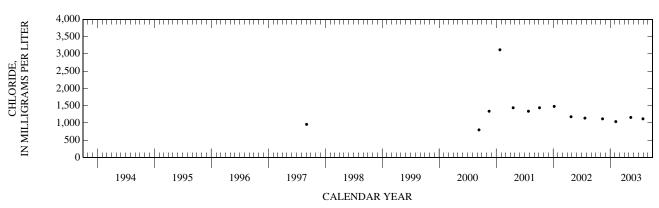
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 2001, are available in the files of the U.S. Geological Survey. Only salinity was measured prior to October 2000.

PERIOD OF RECORD.--September 1997 to September 2000 (intermittent), October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.73 ft NGVD, June 28, 2002; lowest, 1.94 ft NGVD, Mar. 4, 2003.

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1142	3.51			02	1245	2.34		
NOV					MAY				
13	1341	2.85	3,510	1,120	13	1030	2.13	3,710	1,160
DEC					JUN				
13	0952	3.56			04	0922	4.20		
JAN					JUL				
14	1023	2.63			01	1120	3.66		
FEB					30	1250	3.04	3,530	1,120
06	1205	2.14	3,310	1,040	AUG				
MAR					28	1015	3.64		
04	1005	1 94							





WELL NUMBER.--263524080124301. Local Number PB 683. USGS Observation Well near West Palm Beach, FL.

LOCATION.--Lat 26°35'24", long 80°12'43", in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.37, T.44  $\frac{1}{2}$  S., R.41 E., Hydrologic Unit 03090202, 0.3 mi west of U.S. Highway 441, south of Lantana Road near TV tower, and 11 mi southwest of West Palm Beach.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 17 ft, cased to 17 ft, open end.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 20.85 ft above National Geodetic Vertical Datum of 1929. Prior to October 1989, measuring point was considered to be 18.95 ft above NGVD. See REMARKS.

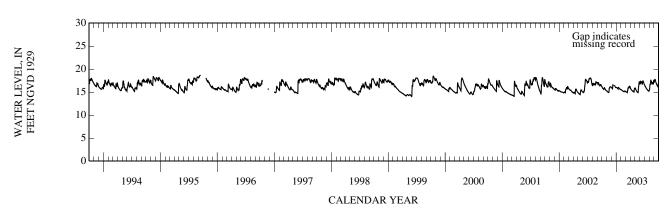
LAND-SURFACE DATUM .-- Land surface is approximately 17.9 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--The figures of water levels as elevation, in feet NGVD, prior to October 1989 are in error. Corrected records are in the files of the U.S. Geological Survey. The well has become obstructed at a depth of 13 ft. A review of water-level records indicates that the well remains in good hydrologic communication with the aquifer. See DATUM.

PERIOD OF RECORD .-- June 1973 to May 1977, May 1979 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.62 ft NGVD, Sept. 13, 1995; lowest, 13.61 ft NGVD, May 5-8, 1975.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.94	15.15	15.85	15.99	15.42	15.06	15.65	15.74	17.22	16.33	16.63	17.69
10	15.69	14.96	16.58	15.79	15.31	14.96	15.42	15.33	17.26	16.03	17.56	17.48
15	15.71	14.97	16.30	16.02	15.17	15.26	15.21	15.05	16.94	15.74	17.26	16.89
20	15.78	15.92		15.82	15.07	15.90	15.21	14.88	17.34	15.47	17.06	16.48
25	15.46	16.15	16.21	15.62	15.25	16.22	14.98	16.27	17.19	15.29	17.04	16.40
EOM	15.29	16.06	16.00	15.55	15.20	16.12	15.83	17.10	16.67	15.38	17.23	17.02
MAX	16.19	16.15		16.02	15.54	16.28	15.98	17.23	17.44	16.59	17.57	17.77



WELL NUMBER.--263633080031401. Local Number PB 1723. USGS Observation Well in Lake Worth, FL.

LOCATION.--Lat 26°36'36", long 80°03'13", in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.27, T.44 S., R.43 E., Hydrologic Unit 03090202, at the northwest corner of the intersection of South M Street and 5th Avenue, 3 ft west of well MW-3, 0.9 mi east of U.S. Interstate 95.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 318 ft, cased to 310 ft, screened 310 to 315 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 11.33 ft above National Geodetic Vertical Datum of 1929.

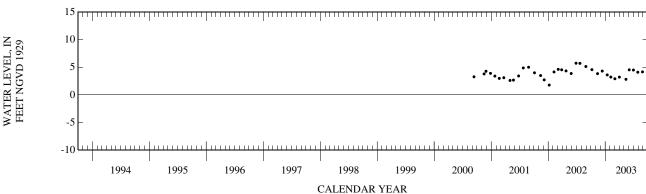
LAND-SURFACE DATUM.--Land surface is approximately 11.3 ft above NGVD.

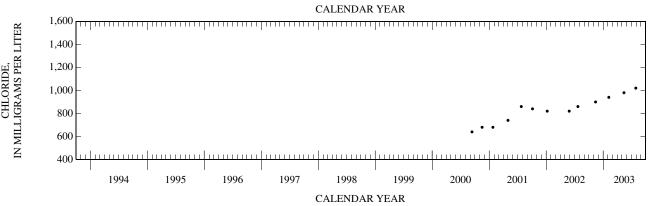
REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface on ground water. Instrument calibration procedures, accuracy, and precision of induction logs are explained in detail in the RECORDS OF BULK CONDUCTIVITY section. See EXPLANATION OF THE RECORDS SECTION, RECORDS OF BULK CONDUCTIVITY in the front of this book. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Well logged with the bore hole camera in August 2000. Something is obstructing well at 307 ft depth. Induction logger does fit past this obstruction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.74 ft NGVD, June 28, 2002; lowest, 1.78 ft NGVD, Jan. 7, 2002.

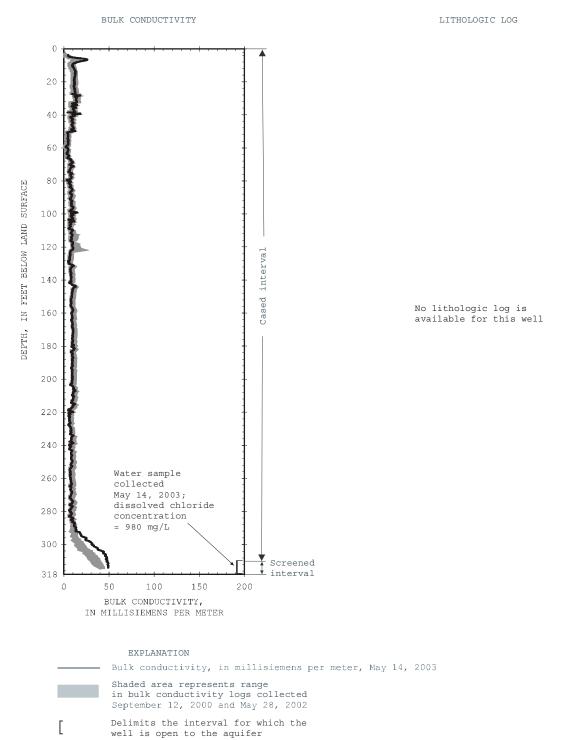
Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1127	4.57			02	1225	3.22		
NOV					MAY				
13	1252	3.85	2,980	900	14	1251	2.82	3,310	980
DEC					JUN				
13	0930	4.31			04	0901	4.54		
JAN					JUL				
14	1008	3.62			01	1135	4.50		
FEB					29	1230	4.10	3,260	1,020
06	1145	3.23	2,990	940	AUG				
MAR					28	0953	4.17		
04	0945	2.92							





WELL NUMBER.-- 263633080031401. Local Number PB 1723. USGS Observation Well near Lake Worth, FL.





WELL NUMBER.--263656080033502. Local Number PB 1639. USGS Observation Well in Lake Worth, FL.

LOCATION.--Lat 26°36′56″, long 80°03′35″, in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 28, T.44 S., R.43 E., Hydrologic Unit 03090202, on east right of way of Florida East Coast Railroad and south side of Lake Avenue, near City Hall in Lake Worth.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 20 ft, screened from 20 to 25 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 19.73 ft above National Geodetic Vertical Datum of 1929. Prior to June 5, 1996, measuring point was 18.45 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 17.4 ft above NGVD.

REMARKS .-- Station reconstructed June 5, 1996.

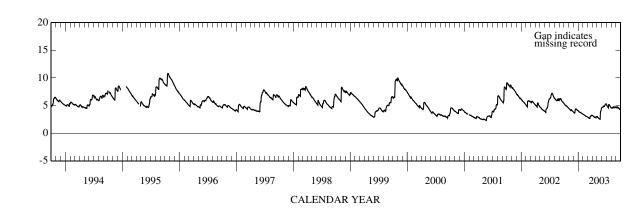
WATER LEVEL, IN FEET NGVD 1929

PERIOD OF RECORD.--May 1989 (semiannual), August 1989 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.83 ft NGVD, Oct. 21, 22, 1995; lowest, 2.31 ft NGVD, May 22, 2001.

ELEVATION ABOVE NGVD 1929, FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.25	4.37	3.72	3.93	3.35	2.87	3.15	2.92	4.68	4.98	4.55	4.71
10	5.06	4.24	3.81	3.81	3.29	2.77	3.01	2.77	4.84	4.75	4.66	4.66
15	5.03	4.07	4.39	3.78	3.18	2.69	2.88	2.62	4.93	5.16	4.78	4.62
20	4.88	4.20	4.38	3.68	3.05	3.03	2.91	2.52	4.90	5.11	4.67	4.39
25	4.70	4.01	4.19	3.55	3.02	3.19	2.76	3.97	5.26	4.87	4.76	4.30
EOM	4.52	3.87	4.07	3.46	2.97	3.26	3.03	4.57	5.28	4.62	4.66	4.74
MAX	5.41	4.49	4.39	4.04	3.43	3.26	3.24	4.57	5.32	5.20	4.78	4.78



WELL NUMBER.--264005080233501. Local Number PB 99. USGS Observation Well in West Palm Beach, FL.

LOCATION.—Lat  $26^{\circ}40'14''$ , long  $80^{\circ}03'35''$ , in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.4, T.44 S., R.43 E., Hydrologic Unit 03090202, at Garden Avenue, 19 ft north of Bradley Street and 0.2 mi west of U.S. Highway 1 in West Palm Beach . (Corrected).

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 20 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 16.69 ft above National Geodetic Vertical Datum of 1929. Prior to October 1993, measuring point was top of casing, 16.63 ft above NGVD. Prior to 1977 water year, measuring point was top of casing, 16.93 ft above NGVD.

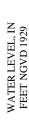
LAND-SURFACE DATUM.--Land surface is approximately 14.4 ft above NGVD.

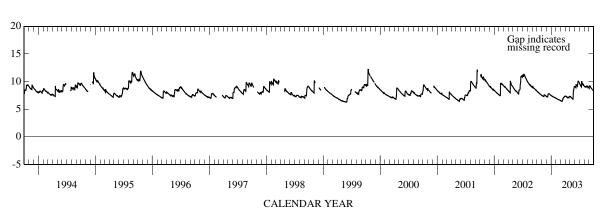
REMARKS.--In 1977, PB-99 replaced a well of similar depth, 55 ft north of current location. Both wells were published under the designation PB-99. Records of water levels prior to January 1957 are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--July 1948 to 1977 (original well), 1977 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.06 ft NGVD, Oct. 6, 1948; lowest, 5.01 ft NGVD, Mar. 23, 1972.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.17	7.44	7.26	7.40	6.95	6.53	7.36	7.27	9.01	9.49	9.06	9.21
10	8.04	7.37	7.47	7.31	6.83	6.44	7.24	7.12	9.47	9.21	9.06	9.05
15	7.93	7.30	7.81	7.26	6.76	6.68	7.07	6.98	9.22	10.07	9.16	8.79
20	7.79	7.58	7.77	7.16	6.69	7.04	7.16	6.84	9.51	9.66	9.19	8.60
25	7.69	7.48	7.66	7.10	6.65	7.21	7.03	8.46	10.07	9.53	9.08	8.45
EOM	7.54	7.35	7.48	7.00	6.60	7.35	7.34	9.14	9.77	9.22	8.82	8.42
MAX	8.28	7.62	7.81	7.46	6.99	7.35	7.38	9.14	10.08	10.07	9.21	9.22





WELL NUMBER.--264123080053801. Local Number PB 809. USGS Observation Well in West Palm Beach, FL.

LOCATION.--Lat 26°41'23", long 80°05'41", in NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.31, T.43 S., R.43 E., Hydrologic Unit 03090202, on 8th Street in West Palm Beach, 1 mi north of State Road 98, and 2.5 mi west of U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 150 ft, cased to 145 ft, screened from 145 to 150 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 16.65 ft above National Geodetic Vertical Datum of 1929.

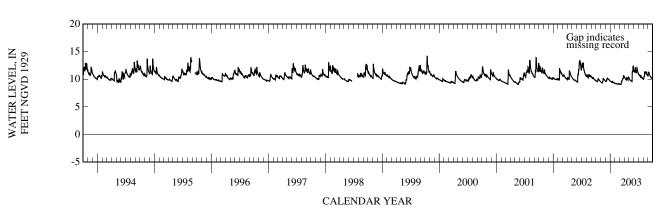
LAND-SURFACE DATUM.--Land surface is approximately 14.6 ft above NGVD.

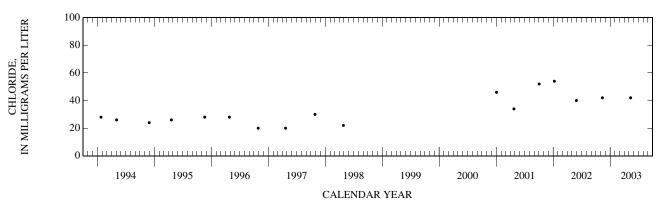
REMARKS.--Well also used for salinity monitoring. Water quality samples were not collected during the 1999 and 2000 water years.

PERIOD OF RECORD .-- May 1975 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 14.30 ft NGVD, Nov. 23, 1984; lowest, 4.83 ft NGVD, May 5, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.69	9.44	9.62	9.59	9.23	9.10	10.23	10.04	11.59	10.82	10.27	11.20
10	9.60	9.36	9.96	9.47	9.20	9.07	10.06	9.80	12.15	10.61	11.22	10.85
15	10.07	9.57	10.22	9.64	9.15	9.49	9.88	9.70	11.43	10.70	11.36	10.54
20	9.93	10.10	9.99	9.45	9.12	9.85	10.15	9.59	11.52	10.40	11.28	10.33
25	9.76	9.87	9.91	9.37	9.22	10.20	9.86	11.27	11.51	10.27	10.89	10.23
EOM	9.55	9.70	9.71	9.28	9.14	10.52	10.38	11.68	11.00	10.02	10.57	10.30
MAX	10.09	10.14	10.22	9.68	9.27	10.67	10.48	12.38	12.15	10.96	11.42	11.29





WELL NUMBER.--264208080192201. Local Number PB 685. USGS Observation Well in West Palm Beach, FL.

LOCATION.--Lat 26°42′08", long 80°19′22", in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  Sec.26, T.43 S., R.40 E., Hydrologic Unit 03090202, approximately 25 ft east of Lion Country Safari Road, 1.3 mi north of Southern Boulevard (State Road 80), approximately 16 mi west of West Palm Beach.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 17 ft, cased to 17 ft, open end.

INSTRUMENTATION .-- Electronic data logger.

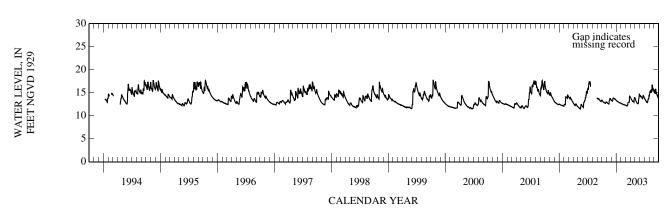
DATUM.--Measuring point: Top of base, 19.32 ft above National Geodetic Vertical Datum of 1929. Prior to January 11, 1994, measuring point was top of coupling, 19.49 ft above NGVD. Prior to October 1988, measuring point was top of shelf, 19.94 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 16.5 ft above NGVD.

PERIOD OF RECORD.--October 1973 to May 1977 (daily), October 1988 to September 1990 (semiannual), October 1990 to December 1993 (monthly), January 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.21 ft NGVD, Oct. 9, 1973; lowest, 11.49 ft NGVD, May 15, 2002.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.29	12.80	13.23	13.23	12.61	12.27	13.80	13.52	14.36	13.55	15.22	15.01
10 15	13.00 12.86	12.66 12.57	13.65 13.84	13.08 12.99	12.56 12.46	12.15 12.31	13.50 13.17	13.09 12.79	14.15 13.89	13.31 13.03	15.48 15.63	15.75 15.10
20 25	12.78 12.74	13.38 13.70	13.65 13.65	12.88 12.82	12.41 12.36	12.90 12.97	13.17 12.92	12.69 13.71	13.81 14.33	12.86 13.66	16.75 15.75	14.49 14.08
EOM	12.94	13.43	13.38	12.71	12.33	14.16	13.92	14.59	13.93	14.51	15.22	14.82
MAX	13.40	13.74	13.85	13.33	12.69	14.28	14.09	14.70	14.47	14.51	16.75	15.75



WELL NUMBER.--264230080120501. Local Number PB 561. USGS Observation Well near Royal Palm Beach, FL. (Corrected).

 $LOCATION.--Lat\ 26^{\circ}42'30",\ long\ 80^{\circ}12'05",\ in\ NW\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec. 30,\ T.43\ S.,\ R.42\ E.,\ Hydrologic\ Unit\ 03090202,\ near\ intersection\ of\ Okeechobee\ Road\ (State\ Road\ 704)\ and\ State\ Road\ 7\ (U.S.\ Highway\ 441),\ 12.5\ mi\ west\ of\ West\ Palm\ Beach.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 11.3 ft, cased to 11.3 ft, open end.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 20.81 ft above National Geodetic Vertical Datum of 1929. Prior to May 1977, top of base was 20.82 ft above NGVD.

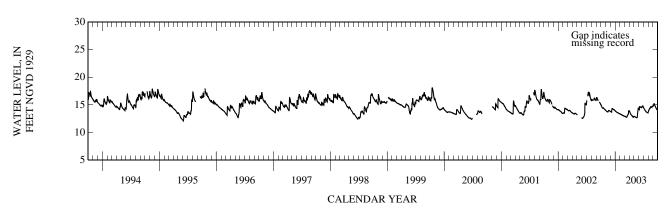
LAND-SURFACE DATUM .-- Land surface is approximately 18.0 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973, are available in files of the U.S. Geological Survey.

PERIOD OF RECORD.--April 1970 to April 1977, May 1979 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 18.08 ft NGVD, Oct. 16, 1999; lowest, 10.94 ft NGVD, Mar. 1, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.82	13.90	13.74	13.83	13.30	12.92	13.70	12.89	14.30	14.32	14.04	14.96
10	14.51	13.78	14.14	13.70	13.23	12.83	13.37	12.81	14.64	14.10	14.38	15.13
15	14.39	13.73	14.34	13.60	13.15	12.75	13.14	12.73	14.60	13.87	14.64	14.71
20	14.35	13.96	14.16	13.54	13.07	13.04	13.03	12.69	14.48	13.70	14.58	14.42
25	14.21	13.97	14.14	13.46	13.01	13.32	12.80	13.73	14.83	13.63	14.73	14.17
EOM	14.04	13.82	13.93	13.39	12.97	13.97	12.91	14.42	14.67	13.61	14.82	14.14
MAX	15.03	14.02	14.35	13.90	13.37	13.97	13.93	14.42	14.83	14.57	14.82	15.23



WELL NUMBER.--264643080033401 Local Number PB 1726. USGS Observation Well near Riviera Beach, FL.

LOCATION.—Lat  $26^{\circ}46'44''$ , long  $80^{\circ}03'34''$ , in SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.28, T.42 S., R.43 E., Hydrologic Unit 03090202, on north side of W 20th Street between F Avenue, 20 ft west of second well, 0.3 mi west of U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 200 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 15.04 ft above National Geodetic Vertical Datum of 1929.

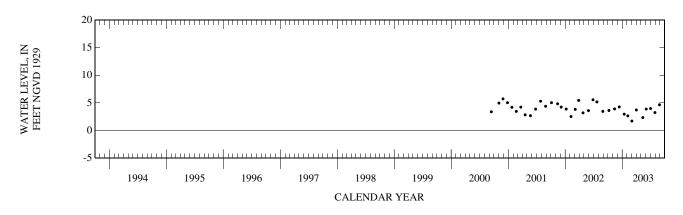
LAND-SURFACE DATUM .-- Land surface is approximately 15.0 ft above NGVD.

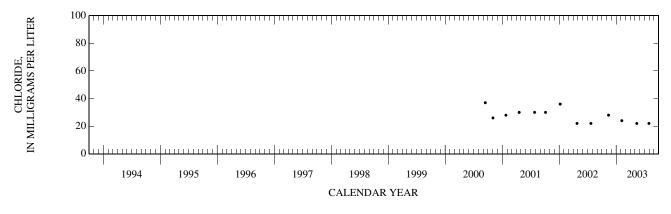
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 2001, are available in the files of the U.S. Geological Survey.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.73 ft NGVD, Nov. 28, 2000; lowest, 1.72 ft NGVD, Mar. 4, 2003.

ev- conduc- Chlor- on, tance, ide, eet wat unf water, ove uS/cm fltrd, VD 25 degC mg/L 020) (00095) (00940)
.72
.34 429 22.0
88
98
25 424 22.0
66
1i CO CO S





WELL NUMBER.--264717080033501 Local Number PB 1727. USGS Observation Well near Riviera Beach, FL.

 $LOCATION.--Lat\ 26^{\circ}47'18'', long\ 80^{\circ}03'35'', in\ NE\ {}^{1}\!\!/_{4}\ SE\ {}^{1}\!\!/_{4}\ NW\ {}^{1}\!\!/_{4}\ sec.28, T.42\ S., R.43\ E., Hydrologic\ Unit\ 03090202, on\ W\ 32nd\ Street\ between\ Avenue\ F\ and\ Avenue\ H\ East,\ next\ to\ wooden\ fence\ at\ the\ southwestern\ corner\ of\ park,\ 0.5\ mi\ east\ of\ Old\ Dixie\ Highway,\ 0.3\ mi\ north\ of\ State\ Road\ 708.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 200 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 13.33 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 13.3 ft above NGVD.

REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 2001, are available in the files of the U.S. Geological Survey.

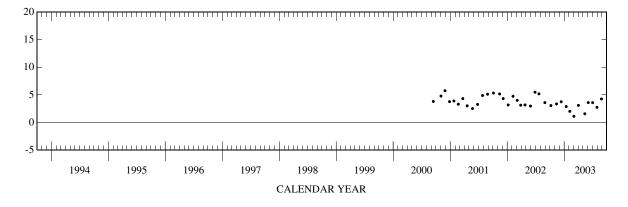
PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.75 ft NGVD, Nov. 28, 2000; lowest, 1.13 ft NGVD, Mar. 4, 2003.

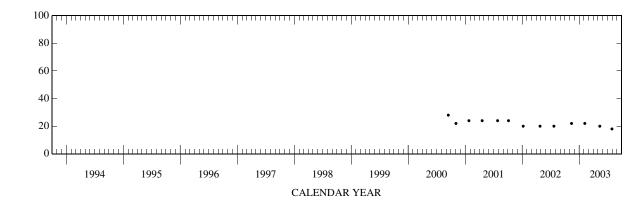
### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1045	3.07			02	1152	3.10		
NOV					MAY				
13	1145	3.37	474	22.0	13	0825	1.59	473	20.0
DEC					JUN				
13	0840	3.76			04	0818	3.61		
JAN					JUL				
14	0939	2.88			02	1008	3.61		
FEB					30	1115	2.75	467	18.0
06	1002	2.03	467	22.0	AUG				
MAR					28	0842	4.27		
04	0901	1 13							









WELL NUMBER.--264839080115001. Local Number PB 1662. USGS Observation Well near West Palm Beach, FL.

LOCATION.--Lat 26°48'39", long 80°11'50", in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.24, T.42 S., R.41 E., Hydrologic Unit 03090202, on Northlake Boulevard at old construction entrance to Ibis Development, 2.7 mi west of State Road 710.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 23 ft, screened from 23 to 25 ft.

INSTRUMENTATION .-- Electronic data logger.

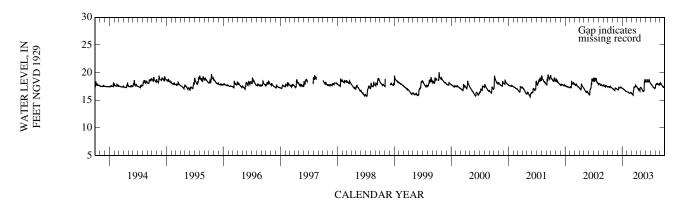
DATUM.-- Measuring point: Top of base, 24.56 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM .-- Land surface is approximately 20.5 ft above NGVD.

PERIOD OF RECORD .-- October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 19.98 ft NGVD, Oct. 15, 16, 1999; lowest, 15.60 ft NGVD, May 21, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	17.48 17.35	17.00 16.83	16.87 17.32	17.11 16.98	16.48 16.43	16.14 15.99	17.39 17.21	17.14 16.82	18.42 18.70	17.91 17.72	17.88 17.98	18.05 17.87
15	17.50	16.79	17.27	16.91	16.28	16.75	16.91	16.57	18.55	17.48	18.03	17.61
20	17.40	17.14	17.39	16.73	16.25	17.33	16.96	16.75	18.45	17.36	17.92	17.38
25	17.31	17.10	17.36	16.61	16.44	17.40	16.66	18.38	18.43	17.25	17.80	17.46
EOM	17.10	16.96	17.17	16.56	16.33	17.60	17.33	18.40	18.13	17.18	17.81	17.66
MAX	17.55	17.19	17.40	17.16	16.55	17.78	17.50	18.76	18.83	18.08	18.05	18.11



WELL NUMBER.--264858080044801 Local Number PB 1734. USGS Observation Well near North Palm Beach, FL.

LOCATION.--Lat 26°48'58", long 80°04'49", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec.33, T.44 S., R.43 E., Hydrologic Unit 03090202, on U.S. Highway 1 Alternate A1A (State Road 811) just north of Hinda Road, 20 ft north from end of eastern side road parallel to U.S. Highway 1 Alternate A1A, 1.2 mi east of U.S. Interstate

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 115 ft, cased to 95 ft, screened 95 to 115 ft. (Corrected).

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 10.62 ft above National Geodetic Vertical Datum of 1929.

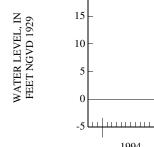
LAND-SURFACE DATUM .-- Land surface is approximately 10.6 ft above NGVD.

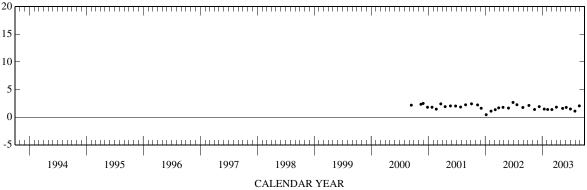
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 2001, are available in the files of the U.S. Geological Survey. PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.67 ft NGVD, June 28, 2002; lowest, 0.45 ft NGVD, Jan. 7, 2002.

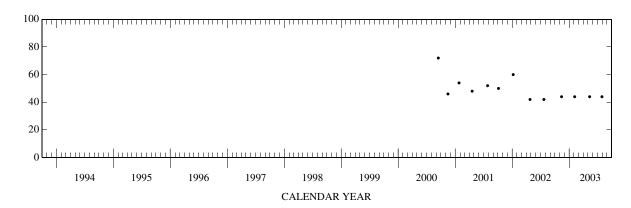
### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	1102	2.13			02	1140	1.82		
NOV					MAY				
13	1112	1.40	450	44.0	12	1756	1.59	450	44.0
DEC					JUN				
13	0818	1.91			04	0806	1.77		
JAN					JUL				
14	0920	1.47			01	1805	1.48		
FEB					30	1049	1.10	453	44.0
05	1640	1.40	423	44.0	AUG				
MAR					27	1524	2.05		
04	0840	1.38							









WELL NUMBER.--265106080241402. Local Number PB 831. USGS Observation Well near Palm Beach Gardens, FL.

LOCATION.--Lat 26°51'06", long 80°24'43", in SW ½ NE ½ NW ½ sec.2, T.42 S., R.39 E., Hydrologic Unit 03090202, 30 ft west of principal dirt road within J.W. Corbett Wildlife Management Area, 8.7 mi from north entrance at junction of State Road 706 and State Road 710, approximately 15 mi west of Palm Beach Gardens. (Corrected).

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 25 ft, cased to 21 ft, screened from 21 to 25 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 26.47 ft above National Geodetic Vertical Datum of 1929. Prior to October 1988, top of base was incorrectly considered to be 24.90 ft above NGVD. See REMARKS.

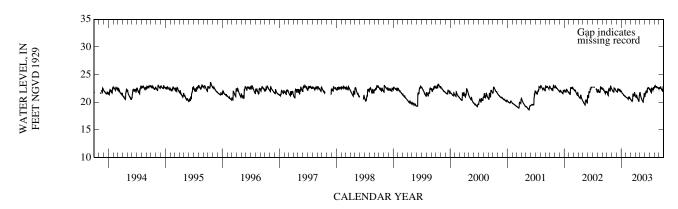
LAND-SURFACE DATUM.--Land surface is approximately 23.5 ft above NGVD.

REMARKS.--Previously published figures of water levels as elevations in feet NGVD, prior to October 1988 are in error. Previously corrected figures in the files of the U.S. Geological Survey have been calculated based on an arbitrary 25.0 ft measuring point. A correction of +0.10 ft is required to correct the water-level data. See DATUM. Well was originally open to the aquifer from 21 to 25 ft. The open interval has collapsed or become obstructed at 21 ft.

PERIOD OF RECORD.--November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.79 ft NGVD (Corrected), May 5, 1975; lowest, 18.53 ft NGVD, June 5, 1989

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10	21.59 21.23	22.16 21.94	21.92 22.40	21.78 21.56	20.83 20.75	20.44 20.23	20.95 21.29	21.24 20.77	21.58 22.03	22.26 21.97	22.89 22.88	22.68 22.79
15	22.51	21.76	22.34	21.40	20.56	20.32	20.71	20.37	21.65	22.57	22.77	22.44
20	22.18	22.48	22.31	21.21	20.75	21.38	20.44	20.11	22.55	22.39	22.76	22.18
25 EOM	22.92 22.49	22.27 22.00	22.20 21.88	21.08 20.95	20.84 20.65	21.23 21.35	20.10 21.52	20.75 21.25	22.47 22.34	22.41 22.66	22.60 22.43	22.33 22.82
MAX	22.92	22.60	22.42	22.02	21.00	21.75	21.53	21.75	22.62	22.66	22.95	22.84



WELL NUMBER.--265233080054001. Local Number PB 1642. USGS Observation Well near Juno Beach, Fl.

LOCATION.--Lat 26°52'33", long 80°05'40", in SW ½ SW ½ NW ½ sec.30, T.41 S., R.43 E., Hydrologic Unit 03090202, approximately 250 ft east of State Road 811 (U.S. Highway 1 Alternate A1A), 0.5 mi south of Donald Ross Road, adjacent to the maintenance yard office in the Frenchman's Creek housing development.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4.0 in., depth 21 ft, cased to 20 ft, screened from 20 to 21 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 16.05 ft above National Geodetic Vertical Datum of 1929.

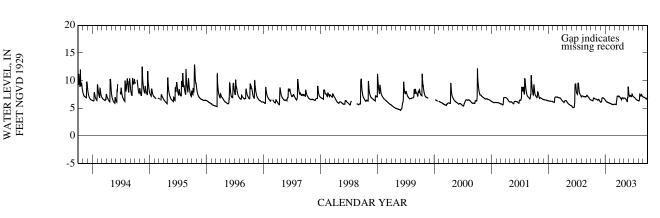
LAND-SURFACE DATUM.--Land surface is approximately 12.4 ft above NGVD.

REMARKS .-- Well affected by irrigation pumping.

PERIOD OF RECORD.--October 1988 to November 1992 (intermittent), April 1993 to September 1993 (monthly), October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 12.82 ft NGVD, Oct. 18, 1995; lowest measured, 3.66 ft NGVD, May 9, 1990.

### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT NOV DAY DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 7.01 6.07 6.33 5.86 7.00 6.85 7.01 6.47 6.64 5.72 7.26 6.33 7.31 10 6.38 6.54 6.58 6.15 5.77 5.67 6.81 6.77 6.89 7.49 6.97 15 6.38 6.45 6.91 6.11 5.68 6.37 6.62 6.55 7.21 6.69 7.23 6.84 20 25 6.84 6.63 6.84 6.03 5.66 7.19 6.89 6.39 7.16 6.55 7.32 6.66 6.74 6.75 6.38 5.96 5.72 7.20 6.80 7.00 7.38 6.45 7.29 6.76 EOM 6.66 6.20 6.53 5.91 5.74 7.20 6.85 8.15 7.11 6.39 7.05 7.05 MAX 6.84 6.65 6.91 6.48 5.90 7.20 7.16 8.91 7.83 7.07 7.56 7.05



WELL NUMBER.--265550080070701. Local Number PB 1732. USGS Observation Well near Jupiter, Fl.

LOCATION.--Lat 26°55'50", long 80°07'08", in NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec.2, T.41 S., R.42 E., Hydrologic Unit 03090202, on Commerce Lane, one block east of Commerce Way, 0.3 mi south of State Road 706, 3.3 mi east of U.S. Interstate 95.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 253 ft, cased to 232 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 8.64 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 7.3 ft above NGVD.

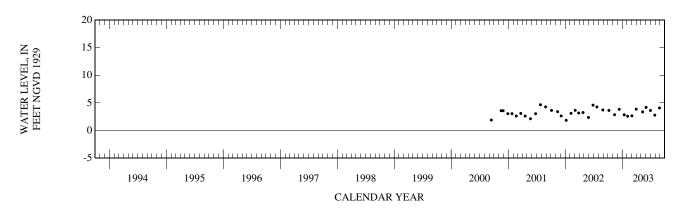
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 2001, are available in the files of the U.S. Geological Survey.

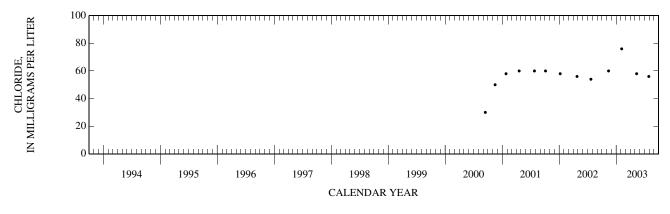
PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.67 ft NGVD, July 26, 2001; lowest, 1.84 ft NGVD, Jan. 7, 2002.

### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	0845	3.64			01	1645	3.87		
NOV					MAY				
13	0830	2.86	656	60.0	12	1925	3.37	675	58.0
DEC					JUN				
13	0745	3.84			03	1540	4.19		
JAN					JUL				
14	0750	2.85			01	1812	3.63		
FEB					29	1741	2.78	663	56.0
05	1800	2.59	661	76.0	AUG				
MAR					28	0809	4.09		
04	0802	2.66							





WELL NUMBER.--265611080080201. Local Number PB 1733. USGS Observation Well near Jupiter, FL.

LOCATION.--Lat 26°56′16″, long 80°08′01″, in SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.3, T.41 S., R.42 E., Hydrologic Unit 03090202, on southeast corner of North Central Boulevard and Riverwalk Road, 0.2 mi north of State Road 706, 1.1 mi east of U.S. Interstate 95.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 3 in., depth 210 ft, cased to 189 ft, screened 189 to 210 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape.

DATUM.--Measuring point: Top of casing, 12.45 ft above National Geodetic Vertical Datum of 1929.

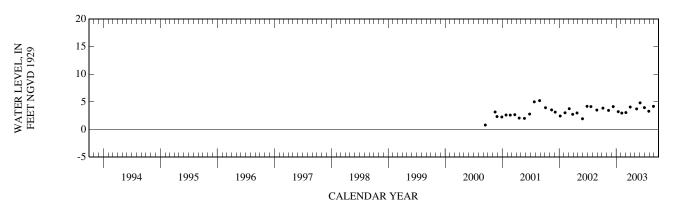
LAND-SURFACE DATUM .-- Land surface is approximately 11.4 ft above NGVD.

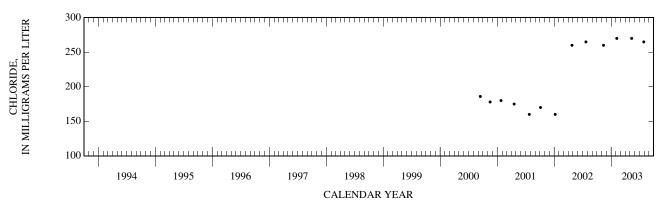
REMARKS.--Well is also used for salinity monitoring. Records of water levels prior to October 2001, are available in the files of the U.S. Geological Survey. PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OR RECORD.--Highest water level measured, 5.23 ft NGVD, Aug. 28, 2001; lowest, 0.81 ft NGVD, Sept. 14, 2000.

### WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Elevation, feet above NGVD (72020)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)	Date	Time	Elevation, feet above NGVD (72020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
OCT					APR				
08	0855	3.87			01	1628	4.07		
NOV					MAY				
13	0908	3.46	1,470	260	12	1855	3.74	1,430	270
DEC					JUN				
13	0753	4.15			03	1558	4.83		
JAN					JUL				
14	0804	3.24			01	1755	3.96		
FEB					29	1725	3.31	1,550	265
06	0850	2.98	1,430	270	AUG				
MAR					28	0817	4.19		
04	0812	3.07							





WELL NUMBER.--265633080203001. Local Number PB 689. USGS Observation Well near Jupiter, FL.

LOCATION.--Lat 26°56'33", long 80°20'30", in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.4, T.41 S., R.40 E., Hydrologic Unit 03090202, on south side of State Road 706, 3.45 mi west of State Road 711 and 0.6 mi east of State Road 710, 12 mi west of Jupiter.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 17 ft, cased to 17 ft, open end.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of base, 27.36 ft above National Geodetic Vertical Datum of 1929. From May 22, 2001 to July 2003, top of base was considered to be 27.37 ft above NGVD. From January 1993 to May 22, 2001, top of base was considered to be 27.43 ft above NGVD. From May 1977 to January 1993, top of base was considered to be 27.00 ft above NGVD. Prior to May 1977, measuring point was 27.11 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 24.4 ft above NGVD.

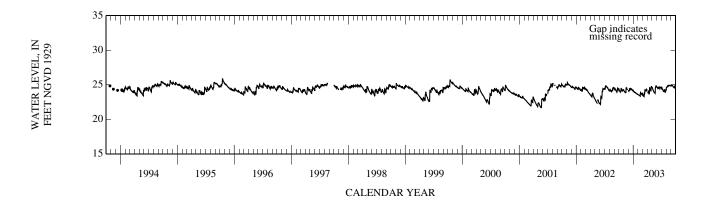
REMARKS.--Figures of water levels as elevation, in feet NGVD, from May 1983 to May 2001 are in error. Corrected records for October 1994 to September 2001 are based on a revised measuring point value of 27.37 ft, and are in the files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--October 1973 to May 1977 (daily), May 1983 to December 1987 (intermittent), May 1988 to November 1992 (semiannual), January 1993 to December 1993 (monthly), January 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.86 ft NGVD, Oct. 17, 18, 1995; lowest, 21.24 ft NGVD, Apr. 11, 1975.

ELEVATION ABOVE NGVD 1929, FEET

### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES OCT NOV DEC JUL AUG SEP DAY FEB MAR APR JUN JAN MAY 24.18 24.02 24.18 24.02 23.52 23.54 23.91 24.48 24.62 24.53 24.64 25.00 23.89 23.81 10 23.94 24.51 23.93 23.46 23.32 24.12 24.16 24.66 24.25 24.85 24.87 23.34 24.48 24.39 23.86 23.73 23.98 23.90 24.53 24.05 24.94 24.68 15 20 24.29 24.46 24.40 23.75 23.67 24.15 24.40 23.80 24.67 24.30 24.91 24.69 24.27 24.36 24.31 23.68 23.64 24.12 24.05 24.69 24.59 24.09 24.87 24.63 **EOM** 24.18 24.15 24.08 23.59 23.76 24.21 24.62 24.71 24.33 24.35 24.83 25.03 MAX 24.51 24.16 23.87 24.38 24.84 24.68 24.65 24.97 25.04



WELL NUMBER.--265812080053901. Local Number PB 565. USGS Observation Well in Tequesta, FL.

LOCATION.—Lat  $26^{\circ}58'12''$ , long  $80^{\circ}05'39''$ , in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec. 25, T.40 S., R.42 E., Hydrologic Unit 03090202, near intersection of Old Dixie Highway and County Line Road in Tequesta, and 0.1 mi west of U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 21.9 ft, cased to 21.9 ft, open end.

INSTRUMENTATION .-- Satellite data collection platform.

DATUM.--Measuring point: Top of base, 17.26 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1999, measuring point was 17.24 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 14.0 ft above NGVD.

REMARKS.--Station reconstructed July 1999, after site was hit by a car. Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. See DATUM.

PERIOD OF RECORD.--April 1970 to current year. (Corrected).

OCT

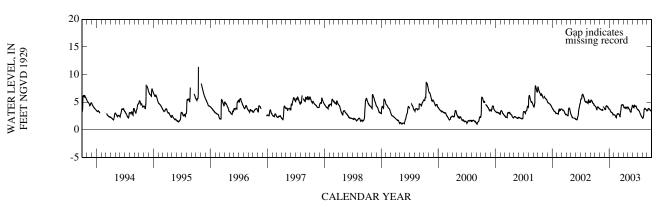
DAY

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 11.39 ft NGVD, Oct. 17, 1995; lowest, 0.23 ft NGVD, Feb. 22, 1976.

ELEVATION ABOVE NGVD 1929, FEET

### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 2.78 4.01 4.10 2.15 3.76 3.68 3.68 4.10 3.65 3.49 3.25 3.66 4.11 3.36 2.45 4.06 3.73 4.43 2.68 3.26 4.37 3.13 3.92 3.38 4.24 3.85

2.68 2.54 2.22 2.75 4.25 3.53 10 3.94 3.84 15 3.76 3.77 20 25 4.17 3.46 4.19 3.11 4.43 4.10 3.21 4.34 2.85 3.80 3.61 2.94 2.53 4.03 4.14 4.09 2.77 4.47 3.85 3.86 4.08 3.68 3.42 2.31 2.77 2.94 **EOM** 3.80 4.04 3.79 4.54 4.13 4.44 3.72 3.42 3.67 MAX 4.37 4.37 3.78 2.96 4.56 4.48 4.45 4.47 3.68 3.90 3.85



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# St. Lucie County

### **VOLUME 2B: SOUTH FLORIDA**

### Key to site locations on figure $\#\ 21$

### ST. LUCIE COUNTY

Index Number	Site Number	Well Name	Page Number
Number	Number	Name	Number
1	272655080401601	STL 42	622
2	272524080242801	STL 125	621
3	272313080182701	STL 172	619
4	271755080153001	STL 175	616
5	271755080153002	STL 176	617
6	271413080311201	STL 185	614
7	272427080240201	STL 213	620
8	271618080245801	STL 214	615
9	273109080270301	STL 264	623
10	272138080374103	STL 313	618

### **VOLUME 2B: SOUTH FLORIDA**

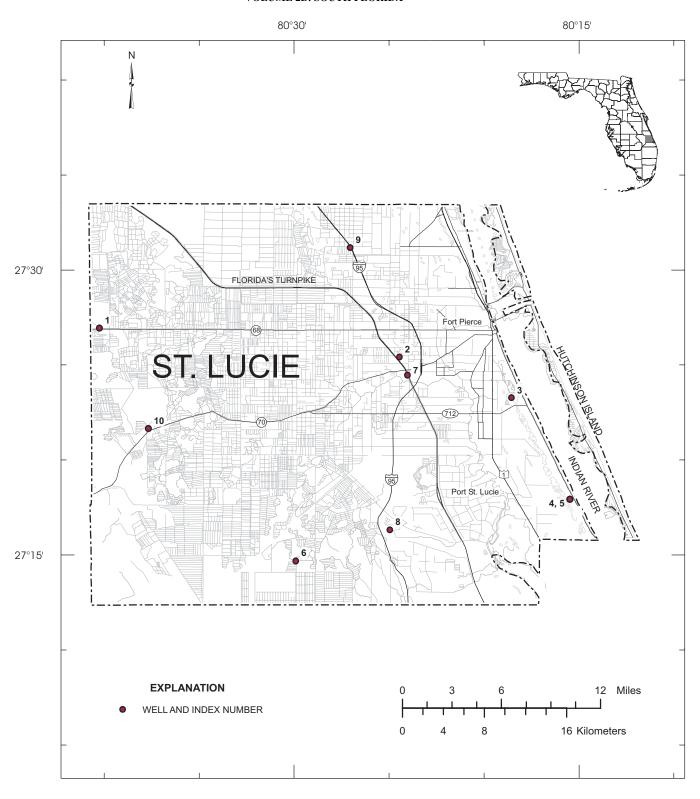


Figure 21: Location of wells in St. Lucie County

### ST. LUCIE COUNTY

WELL NUMBER.--271413080311201. Local Number STL 185. USGS Observation Well near Port St. Lucie, FL.

LOCATION.--Lat 27°14'40", long 80°29'55", in SE ½ SE ½ NE ½ SE. 3, T.37 S., R.38 E., Hydrologic Unit 03090202, 1 mi west of County Road 609 and 3 mi south of County Road 709 in pasture of McCarty Ranch. Ranch entrance is on County Road 709, recorder is 4 gates and 5 pastures to the south, 20 ft west of southern gate.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 115 ft, cased to 113 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 30.33 ft above National Geodetic Vertical Datum of 1929.

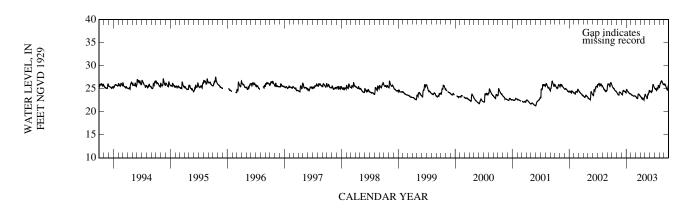
LAND-SURFACE DATUM.--Land surface is approximately 27.9 ft above NGVD.

PERIOD OF RECORD.--September 1976 to April 1977 (intermittent), May 1988 to October 1988 (semiannual), October 1989 to November 1992 (annual), January 1993 to current year.

ELEVATION ABOVE NGVD 1929, FEET

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 27.52 ft NGVD, Oct. 18, 1995; lowest, 21.29 ft NGVD, May 31, 2001.

### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC MAY JUN JUL AUG SEP JAN **FEB** MAR 25.46 24.00 23.77 24.77 23.63 23.24 23.27 23.66 24.49 25.04 25.86 25.86 10 25.13 23.75 24.48 23.60 23.01 23.03 23.25 24.29 25.78 24.42 24.95 26.46 23.63 22.89 25.00 24.64 24.25 23.44 22.85 22.85 24.39 24.64 25.25 15 26.71 22.85 22.55 24.71 24.30 24.40 24.03 23.39 23.87 23.85 25.59 24.96 24.80 20 26.46 23.45 24.87 25.97 23.73 2.5 24.49 24.19 24.39 23.95 24.12 25.73 25.69 26.03 23.99 23.40 23.47 23.47 25.32 25.30 EOM 24.30 24.09 23.86 24.51 25.95 MAX 25.84 24.30 24.65 24.86 23.82 23.87 23.47 24.65 25.94 25.73 26.74 26.06



WELL NUMBER.--271618080245801. Local Number STL 214. USGS Observation Well near Port St. Lucie, FL.

 $LOCATION.--Lat~27^{\circ}16'18", long~80^{\circ}24'58", in~SW~\frac{1}{4}~SW~\frac{1}{4}~NW~\frac{1}{4}~sec. 11, T.37~S., R.39~E., Hydrologic~Unit~03090202, approximately~20~ft~south~of~centerline~of~SW~Savage~Boulevard~and~153~ft~east~of~centerline~of~SW~Brescia~Street, approximately~2.5~mi~west~of~Port~St.~Lucie~Boulevard.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 2 in., depth 70 ft, cased to 40 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

EOM

MAX

19.88

21.62

19.33

19.85

DATUM.--Measuring point: Top of base, 28.40 ft above National Geodetic Vertical Datum of 1929 Prior to February 1993, measuring point was top of casing, 28.27 ft above NGVD.

LAND-SURFACE DATUM.--Land surface is approximately 27.3 ft above NGVD.

19.62

19.79

19.73

20.60

19.22

19.70

REMARKS.--This well is not at its original depth. Depth was measured at 58.3 ft below land-surface datum on December 27, 1999. The difference between the original and measured depth is likely caused by sand in the formation being forced up the well under hydrostatic pressure.

PERIOD OF RECORD.--May 1988 to October 1989 (semiannual), September 1990 to January 1993 (monthly), February 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 25.54 ft NGVD, Aug. 19, 2003; lowest, 17.64 ft NGVD, Mar. 25, 2001.

ELEVATION ABOVE NGVD 1929, FEET

### WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 19.13 22.38 22.33 20.59 19.54 20.01 21.40 19.71 19.24 20.13 23.43 24.87 24.22 23.21 23.79 23.25 21.05 10 19.48 19.47 20.49 19.47 19.03 19.93 19.78 19.53 25.11 25.31 15 20.82 19.34 19.70 20.23 19.36 19.00 19.68 23.57 23.10 20 25 20.45 19.61 19.71 20.07 19.27 20.28 19.55 19.92 23.72 23.02 25.48 22.71 22.47 20.17 19.48 19.73 19.89 19.29 20.41 19.44 20.92 23.78 25.08 24.66

20.25

20.43

20.02

20.23

22.27

22.32

23.69

24.24

24.24

25.12

24.02

25.54

24.46

24.46

Gap indicates missing record WATER LEVEL, IN FEET NGVD 1929 25 20 15 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 CALENDAR YEAR

WELL NUMBER.--271755080153001. Local Number STL 175. USGS Observation Well near Port St. Lucie, FL.

 $LOCATION.--Lat~27^{\circ}17'55", long~80^{\circ}15'30", in~NW~\frac{1}{4}~NW~\frac{1}{4}~SE~\frac{1}{4}~sec. 32, T.36~S., R.41~E., \\ Hydrologic~Unit~03090202, 4~ft~from~north~edge~of~Walton~Road, 0.5~mi~west~of~Indian~River~Drive~(County~Road~707)~approximately~15~ft~east~of~STL-176.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 200 ft, cased to 68 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 21.66 ft above National Geodetic Vertical Datum of 1929. From May 1988 to January 1993, measuring point was top of shelf, 21.97 ft above NGVD. Prior to 1980, top of base was 21.74 ft above NGVD, but was reported as being about 23 ft above NGVD.

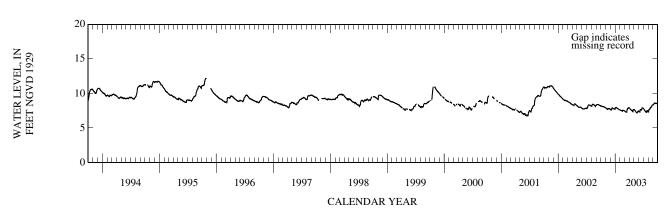
LAND-SURFACE DATUM.--Land surface is approximately 18.7 ft above NGVD.

REMARKS.--Despite attempts to clear the well to its full depth, the well has filled with sand from the formation to a depth of 53.3 ft. Station reconstructed in February 1993.

PERIOD OF RECORD.--February 1975 to January 1979 (daily), May 1988 to January 1993 (intermittent), February 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 12.17 ft NGVD, Oct. 26, 1995; lowest, 6.01 ft NGVD, July 28, 1977.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25	8.18 8.11 8.09 8.07 8.01	7.86 7.75 7.68 7.80 7.80	7.62 7.85 7.90 7.80 7.77	7.97 7.94 7.84 7.75 7.68	7.57 7.51 7.45 7.56 7.52	7.41 7.31 7.29 7.70 7.89	7.82 7.67 7.55 7.47 7.34	7.64 7.47 7.29 7.17 7.36	7.36 7.64 7.63 7.68 7.90	7.70 7.52 7.33 7.31 7.52	7.64 7.74 7.97 8.01 8.27	8.41 8.60 8.56 8.53 8.53
EOM	7.91	7.66	7.69	7.61	7.48	7.93	7.65	7.47	7.83	7.35	8.34	8.77
MAX	8.21	7.90	7.91	7.97	7.61	7.94	7.91	7.67	7.92	7.79	8.34	8.77



WELL NUMBER.--271755080153002. Local Number STL 176. USGS Observation Well near Port St. Lucie, FL.

 $LOCATION.--Lat~27^{\circ}17'55", long~80^{\circ}15'30", in~NW~\frac{1}{4}~NW~\frac{1}{4}~SE~\frac{1}{4}~sec. 32, T.36~S., R.41~E., \\ Hydrologic~Unit~03090202, 4~ft~from~north~edge~of~Walton~Road, 0.5~mi~west~of~Indian~River~Drive~(County~Road~707)~approximately~15~ft~west~of~STL-175.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 30 ft, cased to 26 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 22.20 ft above National Geodetic Vertical Datum of 1929. From May 1988 to November 1992, measuring point was top of shelf, 22.60 ft above NGVD. Prior to 1980, top of base was 22.30 ft above NGVD, but was reported as being about 23 ft above NGVD.

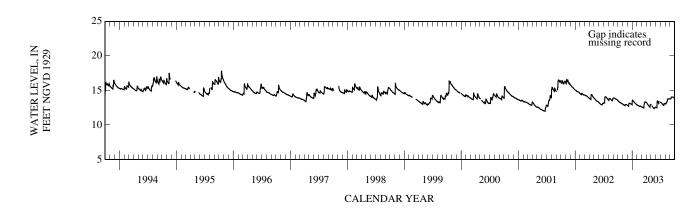
LAND-SURFACE DATUM.--Land surface is approximately 18.8 ft above NGVD.

REMARKS.--Despite attempts to clear the well to its full depth, the well has filled with sand from the formation to a depth of 11.3 ft. Station reconstructed in February 1993.

PERIOD OF RECORD.--February 1974 to January 1979 (daily), May 1988 to November 1992 (semiannual), February 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 17.79 ft NGVD, Oct. 17, 18, 1995; lowest, 10.58 ft NGVD, Sept. 1, 1977.

### ELEVATION ABOVE NGVD 1929, FEET WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MAXIMUM VALUES DAY OCT NOV DEC JAN **FEB** MAR APR MAY JUN JUL AUG SEP 12.85 12.60 13.43 12.94 12.77 13.56 13.18 12.52 13.24 13.07 13.78 10 13.33 12.86 13.02 13.43 12.78 12.53 13.00 12.69 13.45 13.13 13.24 14.04 13.25 13.75 15 12.79 13.14 13.27 12.70 12.47 12.83 12.51 13.36 12.97 14.04 20 13.19 12.97 13.09 13.13 12.72 13.05 12.70 12.38 13.10 12.84 13.76 14.02 25 13.11 12.95 13.03 13.02 12.68 13.33 12.57 12.47 13.09 13.76 13.96 EOM 13.03 12.87 12.94 12.92 12.64 13.30 12.97 12.59 13.31 13.07 13.79 13.93 MAX 13.53 13.01 13.15 13.59 12.91 13.34 13.28 13.30 13.79 14.05



WELL NUMBER.--272138080374103. Local Number STL 313. USGS Observation Well near Okeechobee, FL.

 $LOCATION.--Lat~27^{\circ}21'38", long~80^{\circ}37'41", in~SW~\frac{1}{4}~SW~\frac{1}{4}~NW~\frac{1}{4}~sec. 10, T.36~S., R.37~E., Hydrologic~Unit~03090202, approximately~400~ft~north~of~State~Road~70~and~150~ft~west~of~Old~Bessimer~Road~near~V-2~Ranch,~14~mi~northeast~of~Okeechobee, northwest~of~microwave~tower.~(Corrected).$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 122 ft, cased to 40 ft. Sand has filled in the well to a depth of 40 ft. INSTRUMENTATION.--Electronic data logger.

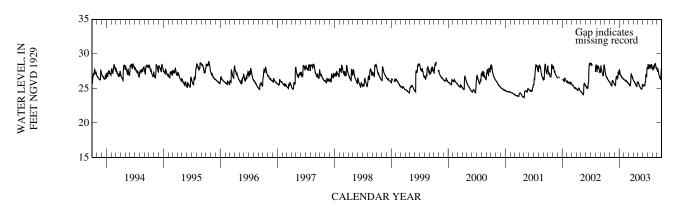
DATUM.--Measuring point: Top of base, 31.69 ft above National Geodetic Vertical Datum of 1929.

LAND-SURFACE DATUM.--Land surface is approximately 29.1 ft above NGVD.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 28.89 ft NGVD, Oct. 20, 1995; lowest, 23.66 ft NGVD, May 2, 2001.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	27.17 26.80 26.57 26.31 26.14 25.93	25.73 25.55 25.35 26.12 25.89 25.67	25.51 26.26 26.67 26.64 27.34 26.97	27.41 26.95 26.74 26.56 26.41 26.33	26.21 26.18 26.00 25.96 25.83 25.75	25.61 25.43 25.76 27.00 26.64 26.28	26.08 25.93 25.60 25.41 25.27 25.86	25.76 25.43 25.17 25.00 24.93 25.58	25.33 25.53 25.43 26.58 26.76 27.92	28.45 27.82 28.40 28.20 28.32 28.04	27.70 28.27 28.41 28.59 28.05 27.80	27.55 27.29 26.78 26.50 26.36 28.14
MAX	27.82	26.13	27.37	27.71	26.31	27.08	26.20	25.94	27.97	28.46	28.59	28.14



WELL NUMBER.--272313080182701. Local Number STL 172. USGS Observation Well near Port St. Lucie, FL.

 $LOCATION.--Lat~27^{\circ}23'15'', long~80^{\circ}18'34'', in~NW~^{1}\!\!/_{4}~NW~^{1}\!\!/_{4}~SE~^{1}\!\!/_{4}~sec.35, T.35~S., R.40~E., Hydrologic~Unit~03090202, in~Savannah~Recreation~Area, approximately~200~ft~east~of~entrance~booth~and~15~ft~east~of~STL~298, approximately~0.5~mi~north~of~Midway~Road~(County~Road~712)~on~Gun~Club~Road.$ 

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 30 ft, cased to 26 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 20.38 ft above National Geodetic Vertical Datum of 1929. Prior to October 1993, top of base was 20.40 ft above NGVD. Prior to 1980, the measuring point was reported as top of casing, 18 ft above NGVD.

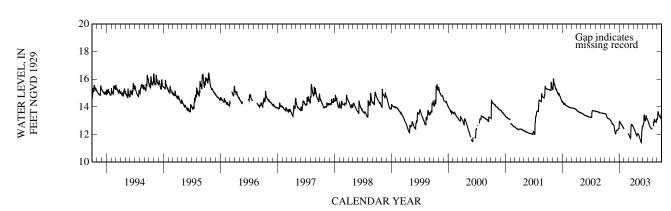
LAND-SURFACE DATUM.--Land surface is approximately 16.5 ft above NGVD.

REMARKS.--Station number published incorrectly as 272315080182701 in WDR FL-97-2B 1997. Despite attempts to clear the well to its full depth, the well has filled with sand from the formation to a depth 12.1 ft.

PERIOD OF RECORD.--May 1988 to October 1989 (semiannual), September 1990 to September 1993 (monthly), October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.44 ft NGVD, Oct. 19, 1995; lowest water level measured, 10.74 ft NGVD, May 2, 1989.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.50	13.04	12.17	12.94		11.96	12.46	12.02	12.74	12.97		13.25
10	13.47	12.96	12.12	12.81		11.84	12.31	11.85	13.40	12.81	12.93	13.53
15	13.25	12.85	12.29	12.74		11.72	12.15	11.66	13.07	12.61	13.09	13.36
20	13.18	12.75	12.32	12.63		12.73	12.02	11.51	13.08	12.52	12.97	13.26
25	13.16	12.71	12.36	12.54		12.70	11.85	12.13	13.21	12.44	12.93	13.19
EOM	13.11	12.58	12.44	12.42	12.06	12.59	12.03	12.61	13.11	12.40	13.07	13.77
MAX	13.51	13.10	12.48	12.95		12.73	12.55	12.61	13.40	13.09		13.77



WELL NUMBER.--272427080240201. Local Number STL 213. USGS Observation Well near Fort Pierce, FL.

LOCATION.--Lat 27°24′27", long 80°24′02", in SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.26, T.35 S., R.39 E., Hydrologic Unit 03090202, 15 ft east of Gordy Road, 1 mi south of State Road 70. The intersection of Gordy Road and State Road 70 is one block west of the Florida Turnpike.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 115 ft, cased to 75 ft, screened 75 to 115 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 20.29 ft above National Geodetic Vertical Datum of 1929. Prior to June 22, 1998, top of base was 20.36 ft above NGVD. Prior to January 1993, measuring point was top of casing, 20.26 ft above NGVD. See REMARKS.

LAND-SURFACE DATUM.--Land surface is approximately 17.8 ft above NGVD.

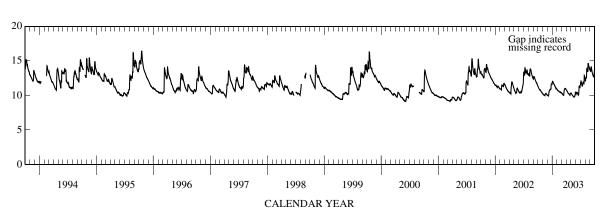
REMARKS.--Revised measuring point because of station reconstruction, and survey of July 2, 1998.

PERIOD OF RECORD.--May 1988 to October 1989 (intermittent), September 1990 to December 1992 (monthly), January 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.39 ft NGVD, Oct. 18, 19, 1995; lowest water level measured, 8.91 ft NGVD, Oct. 27, 1988.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.16	10.16	9.97	11.99	10.75	10.27	10.68	10.26	10.38	12.11	12.58	13.48
10	10.92	10.03	10.33	11.77	10.66	10.14	10.48	10.05	10.36	11.53	13.80	13.90
15	10.78	9.95	10.73	11.51	10.55	10.01	10.27	9.88	10.13	11.60	13.65	13.26
20	10.66	10.26	10.90	11.25	10.51	10.85	10.16	9.76	10.13	11.86	14.67	12.84
25	10.48	10.19	11.41	10.99	10.44	11.00	10.01	9.87	11.17	12.71	14.13	12.68
EOM	10.26	10.06	11.63	10.93	10.38	10.85	10.32	10.47	11.48	12.27	13.68	13.96
MAX	11.38	10.29	11.68	12.03	10.89	11.02	10.80	10.54	11.48	12.87	14.67	14.11





WELL NUMBER.--272524080242801. Local Number STL 125. USGS Observation Well near Fort Pierce, FL.

LOCATION.—Lat  $27^{\circ}25'24''$ , long  $80^{\circ}24'28''$ , in NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.23, T.35 S., R.39 E., Hydrologic Unit 03090202, on Rock Road, 0.14 mi south of White Road, 0.53 mi west of Kings Highway, and 5.0 mi south of Fort Pierce. (Corrected).

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 11.77 ft, cased to 11.77 ft.

INSTRUMENTATION.--Satellite data collection platform.

DATUM.--Measuring point: Top of flange, 23.15 ft above National Geodetic Vertical Datum of 1929. Prior to January 31, 2001, measuring point was top of base, 23.22 ft above NGVD. Prior to April 25, 2000, measuring point was top of casing, 23.16 ft above NGVD. Prior to August 1990, measuring point was considered to be top of casing, 22.75 ft above NGVD. See REMARKS.

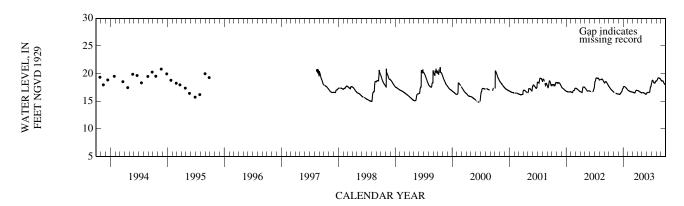
LAND-SURFACE DATUM.--Land surface is approximately 20.2 ft above NGVD.

REMARKS.--Records of water levels prior to October 1973 are available in files of the U.S. Geological Survey. The figures of water levels, as elevation in feet NGVD, prior to August 1990 are in error. A +0.41 ft correction is required to correct the water-level data. See DATUM.

PERIOD OF RECORD.--August 1967(intermittent), January 1968 to April 1979 (daily), October 1979 to September 1995 (monthly), August 1997 to current year. (Corrected).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.17 ft NGVD, Oct. 16, 1999; lowest water level measured, 13.94 ft NGVD (present datum), June 24, 1987.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DAI	ocı	NOV	DEC	JAIN	PED	WIAK	AIK	IVIA I	3011	JUL	AUG	SEI
5	17.55	16.58	16.27	17.66	16.89	16.64	16.93	16.56	16.59	18.66	18.77	18.67
10	17.34		16.23	17.64	16.82	16.56	16.86	16.56	16.60	18.78	19.06	18.70
15	17.14	16.44	16.45	17.54	16.78	16.52	16.74	16.50	16.60	18.38	19.24	18.56
20	17.00	16.36	16.60	17.39	16.72	16.71	16.66	16.38	16.67	18.32	19.18	18.23
25	16.86	16.36	16.90	17.22	16.68	16.96	16.60	16.31	17.55	18.38	19.11	18.06
EOM	16.70	16.31	17.32	17.02	16.66	16.95	16.54	16.42	18.01	18.63	18.85	18.10
MAX	17.71		17.32	17.66	16.99		16.95	16.56	18.01	18.80	19.24	18.80



WELL NUMBER.--272655080401601. Local Number STL 42. USGS Observation Well near Fort Pierce, FL.

LOCATION.--Lat 27°26′55″, long 80°40′16″, in SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  sec.7, T.35 S., R.37 E., Hydrologic Unit 03090202, 85 ft north of State Road 68, 9.8 mi east of U.S. Highway 441 and 20 mi west of Fort Pierce.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Jetted, observation, water-table well, diameter 6 in., depth 18 ft, cased to 13 ft, gravel-packed 13 to 18 ft.

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 30.71 ft above National Geodetic Vertical Datum of 1929. From October 1990 to January 1993, measuring point was top of casing, 30.67 ft above NGVD. Prior to October 1990, top of casing was considered to be 30.59 ft above NGVD. See REMARKS.

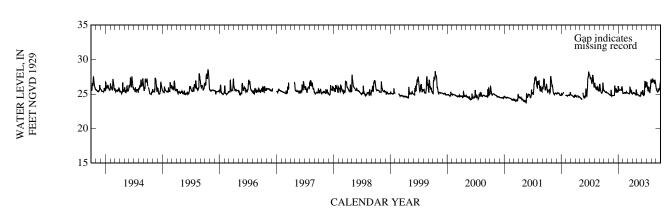
LAND-SURFACE DATUM.--Land surface is approximately 28.0 ft above NGVD.

REMARKS.--Records of water levels prior to October 1950 are available in files of the U.S. Geological Survey. The figures of water levels as elevation in feet NGVD, prior to October 1990 are considered to be in error. See DATUM.

PERIOD OF RECORD.--January 1950 to April 1979, May 1979 to December 1993 (monthly), January 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.27 ft NGVD, present datum, Oct. 16, 1956; lowest, 22.70 ft NGVD, present datum, May 22, 1986.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.48	24.94	24.79	25.72	25.11	25.13	25.11	24.94	24.99	26.68	26.98	25.66
10	25.30	24.87	26.22	25.61	25.19	25.08	25.25	24.88	25.28	25.60	27.19	25.30
15	25.33	24.78	25.54	25.64	25.16	25.15	25.10	24.81	24.87	26.03	26.92	25.41
20	25.20	24.87	25.79	25.53	25.13	25.60	25.05	24.73	26.44	25.49	26.95	25.81
25	25.16	24.78	25.59	26.00	25.21	25.21	24.91	24.78	26.03	26.02	27.01	25.75
EOM	25.05	24.80	25.25	25.13	25.19	25.19	25.10	25.09	26.33	26.87	26.02	26.94
MAX	25.56	25.55	26.22	26.15	25.33	25.96	25.66	25.34	26.83	27.07	27.19	26.96
MAA	23.30	25.55	20.22	20.13	25.55	23.90	23.00	23.34	20.63	27.07	27.19	20.90



WELL NUMBER.--273109080270301. Local Number STL 264. USGS Observation Well near Fort Pierce, FL.

LOCATION.--Lat 27°31'09", long 80°27'03", in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec.17, T.34 S., R.39 E., Hydrologic Unit 03090202, on west side of ditch and culvert 0.4 mi inside east gate to orange grove. Orange grove is on Indrio Road approximately 0.5 mi west of U.S. Interstate 95, approximately 6 mi west of U.S. Highway 1.

AQUIFER.--Surficial aquifer system, Geologic Unit 110 SAQS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 90 ft, cased to 60 ft. (Corrected).

INSTRUMENTATION .-- Electronic data logger.

DATUM.--Measuring point: Top of base, 24.04 ft above National Geodetic Vertical Datum of 1929. From January 1993 to June 8, 2001, top of base was 24.00 ft above NGVD. Prior to January 1993, measuring point was top of casing, 23.90 ft above NGVD. See REMARKS.

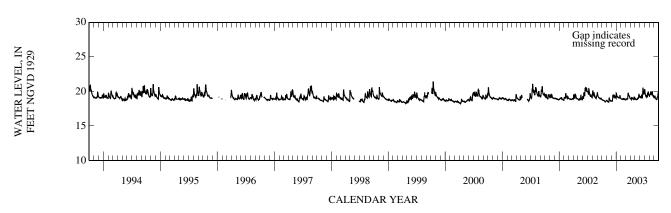
LAND-SURFACE DATUM.--Land surface is approximately 22.0 ft above NGVD.

REMARKS.--Revised measuring point because of station reconstruction, and survey of June 8, 2001.

PERIOD OF RECORD.--May 1988 to November 1992 (semiannual), January 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.42 ft NGVD, Oct. 16, 1999; lowest, 18.23 ft NGVD, Apr. 9, 2000.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5 10 15 20 25 EOM	18.75 18.73 18.66 18.57 18.49 18.70	18.60 18.50 18.47 18.85 18.63 18.62	18.61 19.39 19.38 19.40 19.29 18.99	19.38 19.25 19.09 19.07 19.44 19.00	18.87 18.91 18.90 18.97 18.87 18.80	18.78 18.96 18.91 19.61 19.32 19.02	18.93 19.11 19.01 18.88 18.83 18.97	18.92 18.80 18.87 19.05 19.21 19.27	19.25 19.09 19.33 19.81 19.78 19.65	19.85 19.31 19.44 19.42 19.98 19.46	19.56 19.93 19.89 19.95 19.34 19.18	19.25 19.02 18.84 19.13 19.26 20.03
MAX	18.83	19.04	19.48	19.74	18.99	19.73	19.19	19.56	20.47	20.27	19.95	20.03



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## **Conversion Factors**

Multiply	Ву	To obtain
	Length	
ingh (in )	$2.54 \times 10^{1}$	millimator (mm)
inch (in.)	$2.54 \times 10^{-2}$	millimeter (mm)
S 4 (S)	$2.34 \times 10^{-1}$ $3.048 \times 10^{-1}$	meter
foot (ft)	1.609x10 <sup>0</sup>	meter (m)
mile (mi)	1.609X10°	kilometer (km)
	Area	
acre	$4.047 \times 10^3$	square meter (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	square hectometer (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometer (km²)
square mile (mi <sup>2</sup> )	$2.590 \times 10^{0}$	square kilometer (km²)
	Volume	
gallon (gal)	$3.785 \times 10^{0}$	liter (L)
	$3.785 \times 10^{-3}$	cubic meter (m <sup>3</sup> )
	$3.785 \times 10^{0}$	cubic decimeter (dm <sup>3</sup> )
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometer (hm <sup>3</sup> )
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^{-2}$	cubic meter (m <sup>3</sup> )
	$2.832 \times 10^{1}$	cubic decimeter (dm <sup>3</sup> )
cubic-foot-per-second-per-day		
$[(ft^3/s/d]$	$2.447 \times 10^3$	cubic meter (m <sup>3</sup> )
	$2.447 \times 10^{-3}$	cubic hectometer (hm <sup>3</sup> )
acre-foot (acre-ft)	$1.223 \times 10^3$	cubic meter (m <sup>3</sup> )
	$1.223 \times 10^{-3}$	cubic hectometer (hm <sup>3</sup> )
	1.223x10 <sup>-6</sup>	cubic kilometer (km <sup>3</sup> )
	Flow rate	
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^{1}$	liter (L/s)
subsection per second (it 75)	$2.832 \times 10^{-2}$	cubic meter per second (m <sup>3</sup> /s)
	$2.832 \times 10^{1}$	cubic decimeter per second (dm <sup>3</sup> /s)
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second (L/s)
Sanon per minute (garmin)	$6.309 \times 10^{-5}$	cubic meter per second (m <sup>3</sup> /s)
	$6.309 \times 10^{-2}$	cubic decimeter per second (dm <sup>3</sup> /s)
million gallons per day (Mgal/d)	$4.381 \times 10^{-2}$	cubic meter per second (diff 78)
mmon ganons per uay (mganu)	$4.381 \times 10^{1}$ $4.381 \times 10^{1}$	cubic decimeter per second (dm <sup>3</sup> /s)
	Mass	
ton chart (2,000 lb)	9.072x10 <sup>-1</sup>	magagram (Mg) or matrix ton
ton, short (2,000 lb)	9.072X10 -	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:



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