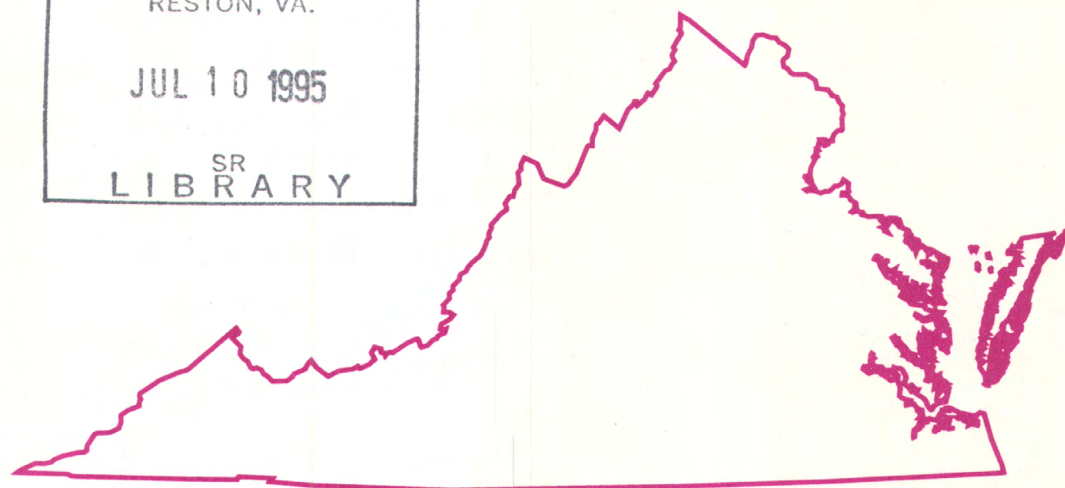
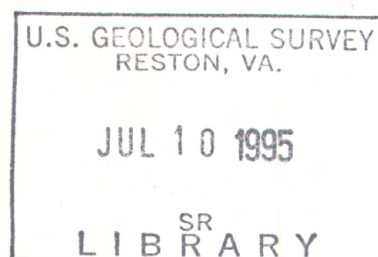




# Water Resources Data Virginia Water Year 1994

Volume 2. Ground-Water-Level and  
Ground-Water-Quality Records



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT VA-94-2  
Prepared in cooperation with the Virginia Department of Environmental  
Quality and with other agencies



## CALENDAR FOR WATER YEAR 1994

1993

[illegible]

1994

[illegible]

APRIL							MAY							JUNE						
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# Water Resources Data Virginia Water Year 1994

Volume 2. Ground-Water-Level and  
Ground-Water-Quality Records

by Byron J. Prugh, Jr., and Eugene D. Powell



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT VA-94-2  
Prepared in cooperation with the Virginia Department of Environmental  
Quality and with other agencies



**U.S. DEPARTMENT OF THE INTERIOR**

BRUCE BABBITT, Secretary

**U.S. GEOLOGICAL SURVEY**

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Charlottesville, Virginia 22903

1995



## PREFACE

This volume of the annual hydrologic data report of Virginia is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's and cooperating agencies' surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality 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 Virginia are contained in two volumes:

Volume 1. Surface-Water-Discharge and Surface-Water-Quality Records

Volume 2. Ground-Water-Level and Ground-Water-Quality Records

This report (Volume 2) is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey and the Virginia Department of Environmental Quality who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the 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 personnel contributed significantly to the collection, computation, processing, and completion of this information:

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This report was prepared in cooperation with the State of Virginia and with other agencies under the general supervision of Pixie A. Hamilton, District Chief.



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# WATER RESOURCES DATA - VIRGINIA, 1994

## VOLUME 2. GROUND-WATER-LEVEL AND GROUND-WATER-QUALITY RECORDS

### INTRODUCTION

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

This series of annual reports for Virginia began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1990 water year, the quantity of data to be published made it necessary to present the data in two volumes; Volume 1 encompassed surface-water-discharge and surface-water-quality records and Volume 2 encompassed ground-water-level and ground-water-quality records.

This report is Volume 2 in our 1994 series and includes records of water levels and water quality of ground-water wells. It contains records for water levels at 400 observation wells and water quality at 67 wells. Locations of these wells are shown on figures 4, 5, 6, and 7. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Virginia.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Virginia were published in U.S. Geological Survey Water-Supply Papers. Data on water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." These Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Branch of Information Services, Federal Center, Bldg. 41, Box 25286, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report VA-94-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Additional information, including current prices, for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone (804) 771-2427. A limited number of CD-ROM discs will be available for sale by the Branch of Information Services, U.S. Geological Survey, Federal Center, Box 25286, Denver, Colorado 80225.

### COOPERATION

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

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, Peter W. Schmidt, executive director.

CITY OF NEWPORT NEWS, F. W. Mueller, Jr., director, Department of Public Utilities.

HAMPTON ROADS PLANNING DISTRICT COMMISSION, Arthur L. Collins, executive director.

Organizations that provided data are acknowledged in station descriptions.

## RECORDS COLLECTED BY THE STATE OF VIRGINIA

In addition to data collected by the U.S. Geological Survey, there are included herein records for 214 index wells operated by the Virginia Department of Environmental Quality. These records are published as provided and are acknowledged in the "REMARKS" paragraph of each individual well. The Virginia Department of Environmental Quality is under the direction of Peter W. Schmidt, executive director. Published material for the ground-water wells is supplied, respectively, through the Water Division, Robert G. Burnley, director, and Office of Water Resources Management, Larry G. Lawson, director.

## SUMMARY OF HYDROLOGIC CONDITIONS

Ground-water levels during the 1994 water year in the shallow water-table aquifers in the State were characterized by a trend from a mixture of above-average and below-average water-level conditions at the beginning of the water year, to predominately above-average conditions in the middle of the year, to average conditions at the end of the year (fig. 1).

The following summary of hydrologic conditions is based on water-level measurements from a network of 12 index observation wells visited near the end of each month. These index wells were selected to represent large areas of the State having similar physiographic, geologic, and climatologic conditions; however, water levels in one of the many other observation wells listed in this report might differ from the general trends because of local environmental conditions. Index wells used in the summary are as follows: in the counties of Accomack (67M2), Buchanan (14E40), Buckingham (41H3), Clarke (46W175), Fairfax (52V2), James City (56H27), Loudoun (50W4C), Louisa (45N1), Montgomery (27F2), Rockingham (41Q1), and Westmoreland (55P9), and in the cities of Colonial Heights (51G1), Franklin (55B16), and Suffolk (58B13). A complete description of the index wells used for this summary can be found in the data tables and on figures 4, 5, 6, and 7.

At the beginning of the water year (October 1993), water levels were below average in 7 of 12 index wells used to monitor current conditions in the water-table aquifers across the State. Water levels were above the long-term average in northern Virginia in index wells in Clarke, Louisa, and Loudoun Counties; in southwestern Virginia in Buchanan County; and in the Eastern Shore at Wallops Island in Accomack County. Water levels fell in all 12 of the index wells during October. A new record-high water level for the month of October was recorded in the Clarke County well. The previous record was established in 1987. Annual low-water levels were recorded in the index wells in the eastern third of the State during the month.

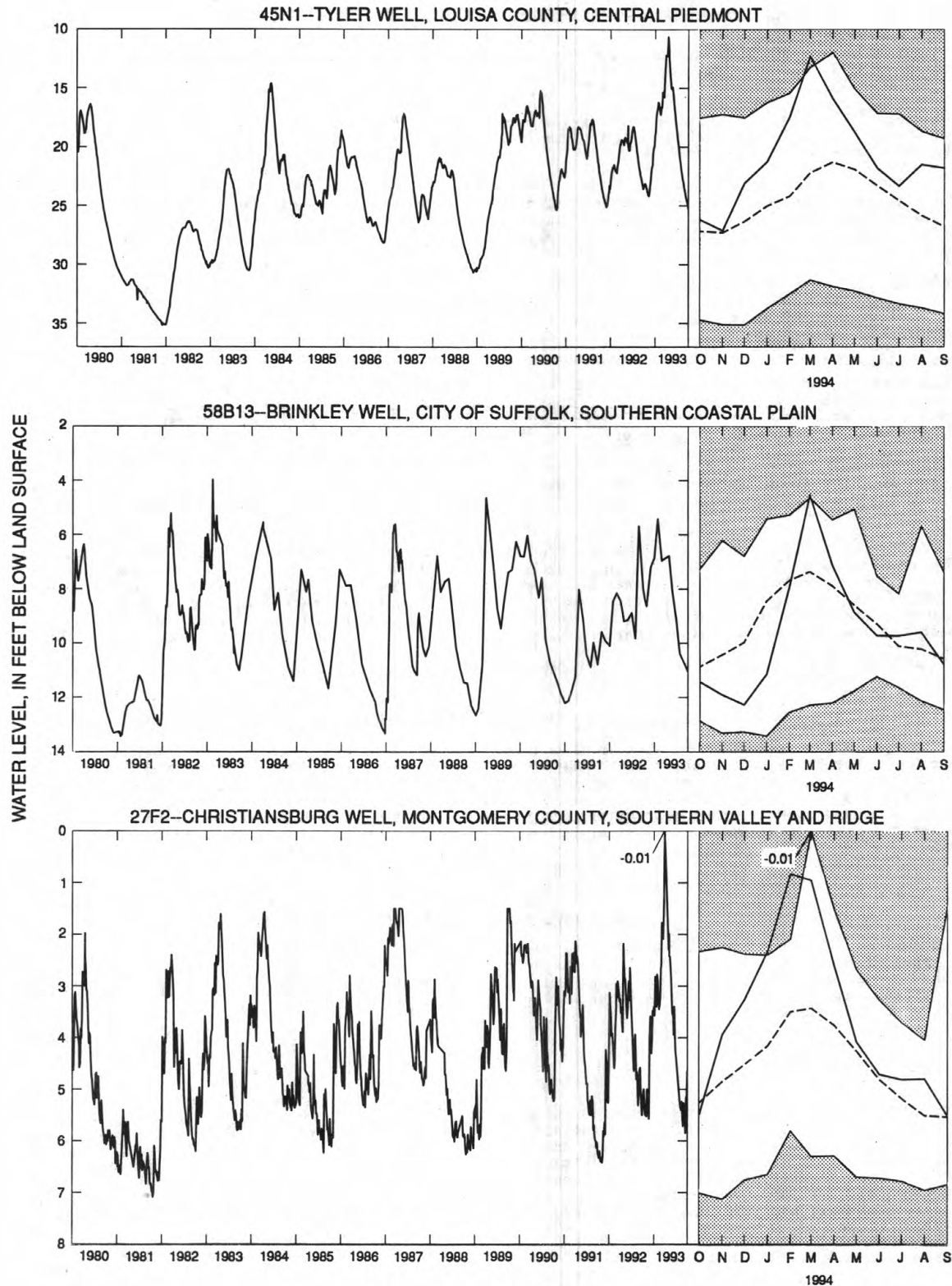
In November, water-level conditions were similar to those observed in October except for the wells with above-average water levels, which expanded to include the index well in Montgomery County. The trend in water levels was generally downward with the exception of water levels in Buchanan, Fairfax, Montgomery, and Westmoreland Counties which rose. The recorded water level in the Clarke County well was again at a new record high for this well for the month. Annual low-water levels were recorded in wells in the central third of the State during the month.

In December, the part of the State having above-average water-level conditions again expanded as the status of the Westmoreland County well changed from below average to above average. The trend in water levels was upward in all the index wells. The well in Clarke County again recorded a new high for the month--the highest for December in 7 years.

In January, only 3 of the 12 index wells (Buckingham and Fairfax Counties and the city of Suffolk) recorded below-average water levels. Water levels rose at all the index wells during the month. New record-high water levels for January were recorded at index wells in Buchanan, Clarke, and Montgomery Counties. In the index well near Christiansburg in Montgomery County, the water level was the highest for January since systematic collection of data began in 1969.

At the end of February, water levels were above average across the State except in the southeast part where index wells in the cities of Colonial Heights and Suffolk averaged 0.24 foot below average for the month. Water levels rose in all the wells except at Colonial Heights, which declined 1.0 foot. The departure from average water-level conditions varied from plus 9.47 feet in Clarke County (the fourth consecutive month with a new record-high water level) to minus 0.27 foot at Suffolk. New record-high water levels for the month were also recorded at index wells in Buchanan, Montgomery, and Westmoreland Counties.

At the end of March, all index wells were reporting water levels above average for this time of year. New record-high water levels were recorded at index wells in Buchanan, Louisa, Clarke, and Loudoun Counties, and the city of Suffolk. Water levels generally continued an upward trend except in a narrow band across the State stretching from Montgomery County in the west, eastward through Buckingham and Westmoreland Counties, to Accomack County on the Eastern Shore where water levels declined. Annual high-water levels were recorded in wells in the eastern and northern part of the State during the month.



**Figure 1. Monthly ground-water levels at key observation wells in water-table aquifer.**



For April, water levels were above average for the month with the exception of the index well in Westmoreland County, which was about 0.5 foot below the long-term average. The trend in water levels was generally downward except in a narrow band stretching from Buckingham County eastward through the city of Colonial Heights to Accomack County on the Eastern Shore where water levels rose slightly. No new record extremes in water levels were recorded during the month at the index wells.

The area of the State exhibiting below-average water-level conditions expanded during May to include most of the Coastal Plain in the eastern third of the State plus the extreme southwestern corner of the State. The trend in water levels continued downward.

During June, water levels continued to decline but remained above average in the western two-thirds of the State. No new record extremes were recorded. Water levels in the index wells again declined during July but continued to remain above the long-term average except in the Rockingham County well.

Water levels rose in August in unseasonable fashion in response to recharge from widespread showers at mid-month. An exception was in wells west of the Blue Ridge in Buchanan, Montgomery, and Rockingham Counties where water levels continued to decline. Water levels at all the index wells were above average for the month. A new record-high water level for the month was recorded in the Clarke County well.

In September, water levels declined in all the index wells. Water levels were above average in 10 of the 12 index wells--the two exceptions were in Rockingham County and the city of Suffolk where index wells had below-average water levels. At monthend, water levels were declining. The annual low-water level was recorded in the index well in Montgomery County during the month.

In summary, the ground-water-level conditions in the shallow water-table aquifers in Virginia began the year mixed, exhibited above-average conditions in the winter and spring, then declined thereafter.

The water level in the heavily pumped confined upper Potomac aquifer on the Coastal Plain at Toano in James City County declined 1.7 feet during the year. The cumulative decline in the upper Potomac aquifer at Toano from May 1985 to the end of this water year has been about 14.3 feet. Further south near the center of the major pumping area in the middle Potomac aquifer near the city of Franklin in Isle of Wight County, the net change in water level for the year was up 2.5 feet. Despite this rise in the water level, the cumulative decline in the middle Potomac aquifer near Franklin has been about 103 feet since the early 1960's (fig. 2).

#### EXPLANATION OF THE RECORDS

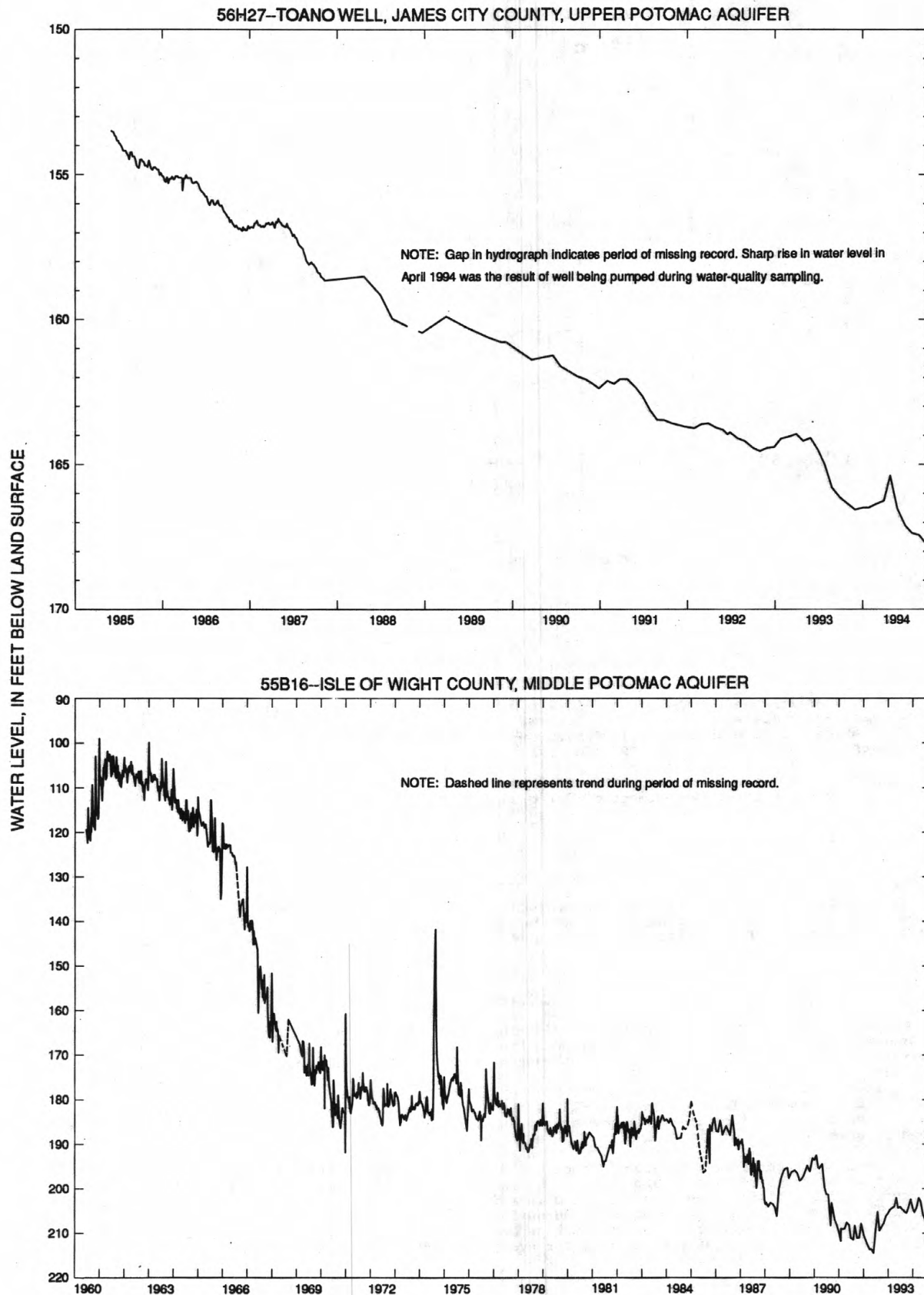
The ground-water records published in this report are for the 1994 water year that began October 1, 1993, and ended September 30, 1994. A calendar of the water year is provided on the inside of the front cover. The records contain ground-water-level and ground-water-quality data. The locations of the wells where the data were collected are shown in figures 4, 5, 6, and 7. 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 well in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given well and to no other. The number usually is assigned when a well is first established and is retained for that well indefinitely. The system used by the U.S. Geological Survey to assign identification numbers for ground-water well sites is based on geographic location. The "latitude-longitude" system is used for wells.

#### Latitude-Longitude System

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



**Figure 2.** Ground-water levels in selected observation wells in confined Coastal Plain aquifers.



Well records furnished by the State of Virginia also include the well number that is based on an indexing system used by the Virginia Department of Environmental Quality.

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Virginia are shown in figures 4, 5, 6, and 7.

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

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

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



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

#### Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the current water year, and a graph of the water levels for the current water year or other selected period. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

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

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

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

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

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

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

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level. A hydrograph for a selected period of record follows each water-level table.

#### Records of Ground-Water Quality

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

#### Data Collection and Computation

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

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO). 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.

## Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

## Remark Codes

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

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

## ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- \* Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- \* Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- \* Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- \* Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey  
National Water Data Exchange  
421 USGS National Center  
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Branch of Information Services, U.S. Geological Survey, Federal Center, Box 25286, Denver, Colorado 80225.

## DEFINITION OF TERMS

Terms related to water quality and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

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

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

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.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which 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  $\pm 1.0^\circ\text{C}$  on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C  $\pm 0.2^\circ\text{C}$  on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C  $\pm 1.0^\circ\text{C}$  on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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 the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, 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.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.



Cells/volume refers to the number of cells of any organism which 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, usually milliliters (mL) or liters (L).

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 natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

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

Dissolved refers to that material in a representative water sample which passes through a 0.45  $\mu$ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water 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 of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

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

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

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.

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

Micrograms per gram ( $\mu$ /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 liter ( $\mu$ g/L,  $\mu$ /L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in more than one-third of the study units and ultimately will be conducted in 60 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 will be 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 a basis for decision making on the use of water resources within the study units and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Organism is any living entity.

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

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

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) 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 used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

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

Percent composition 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, mass, or volume.

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

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

Picocurie (PC, pCi) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second. A picocurie yields 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.

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

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

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

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

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

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

Milligrams of carbon per area or volume per unit time [ $\text{mg C}/(\text{m}^2 \cdot \text{time})$ ] for periphyton and macrophytes and [ $\text{mg C}/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [ $\text{mg O}_2/(\text{m}^2 \cdot \text{time})$ ] for periphyton and macrophytes and [ $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are the units for expressing primary productivity. They define 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.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 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.



Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with 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 water-suspended sediment sample that is retained on a 0.45  $\mu$ m 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45  $\mu$ m membrane filter. 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 determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

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

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	<u>Hexagenia</u>
Species.....	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Total is the total amount of a given constituent in a representative water-suspended sediment 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 all of the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment 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, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year 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, 1994, is called the "1994 water year."

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

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

- 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, Chapter D1. 1975. 65 pages.
- 1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 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, Chapter D1. 1974. 116 pages.
- 2-D2. Application of seismic-refraction techniques to hydrologic studies, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. Borehole geophysics applied to ground-water investigations, by W. Scott Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. Application of drilling, coring, and sampling techniques to test holes and wells, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. J. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 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, Chapter A9. 1989. 27 pages.

- 3-A10. Discharge ratings at gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A-15. 1984. 48 pages.
- 3-A16. Measurement of discharge using tracers, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A-16. 1985. 52 pages.
- 3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. Determination of stream reaeration coefficients by use of tracers, by F. A. Kilpatrick, R. E. Rathburn, N. Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. Levels of streamflow gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.
- 3-A20. Simulation of soluble waste transport and buildup in surface waters using tracers, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. Introduction to ground-water hydraulics, a programmed test for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. Regression modeling of ground-water flow, by Richard L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1994. 8 pages.
- 3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. The principle of superposition and its application in ground-water hydraulics, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow, by Eliezer J. Wexler: USGS--TWRI Book 3, Chapter B7. 1994. 90 pages.
- 3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 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, Chapter A3. 1987. 80 pages.
- 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, Chapter A4. 1989. 363 pages.
- 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, Chapter A5. 1977. 95 pages.
- 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, Chapter A6. 1982. 181 pages.
- 5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. A modular three-dimensional finite-difference ground-water flow model, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 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, Chapter A2. 1991. 68 pages.
- 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, Chapter A3. 1994. 136 pages.
- 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, Chapter A4. 1992. 108 pages.
- 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, Chapter A5. 1994. 243 pages.
- 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, Chapter C1. 1976. 116 pages.



- 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, Chapter C2. 1978. 90 pages.
- 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, Chapter C3. 1981. 110 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. Installation and service manual for U.S. Geological Survey manometers, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

## SELECTED U.S. GEOLOGICAL SURVEY REPORTS ON WATER RESOURCES IN VIRGINIA

Listed below is a selection of reports on water resources in Virginia which are available through the Virginia District at the U.S. Geological Survey, WRD, 3600 West Broad Street, Room 606, Richmond, Virginia 23230.

An index of geophysical logging in Virginia by the U.S. Geological Survey, by M. P. Mulheren, J. D. Larson, and H. T. Hopkins: U.S. Geological Survey Open-File Report 82-432. 1982. 34 pages.

Annual maximum stages and discharges of selected streams in Virginia through 1990, by B. J. Prugh, Jr., E. H. Nuckels, and C. G. Humphrey: U.S. Geological Survey Open-File Report 90-587. 1991. 442 pages.

Assessment of ground-water contamination from a leaking underground storage tank at a Defense Supply Center near Richmond, Virginia, by W. G. Wright and J. D. Powell: U.S. Geological Survey Water-Resources Investigations Report 90-4091. 1990. 38 pages.

Availability and quality of ground water in the Piedmont province of Virginia, by J. D. Powell and J. M. Abe: U.S. Geological Survey Water-Resources Investigations Report 85-4235. 1985. 33 pages.

Compilation of surface-water and water-quality data-collection sites on selected streams in Virginia, by B. J. Prugh, Jr. and C. G. Humphrey: U.S. Geological Survey Open-File Report 93-462. 1993. 645 pages.

Conceptualization and analysis of ground-water flow system in the Coastal Plain of Virginia and adjacent parts of Maryland and North Carolina, by J. F. Harsh and R. J. Laczniaik: U.S. Geological Survey Professional Paper 1404-F. 1990. 100 pages.

Documentation of a multiple-technique computer program for plotting major-ion composition of natural waters, by L. I. Briel: U.S. Geological Survey Open-File Report 93-74. 1993.

Documentation of geographic-information-system coverages and data-input files used for analysis of the geohydrology of the Virginia Coastal Plain, by M. J. Focazio and T. B. Samsel, III: U.S. Geological Survey Water-Resources Investigations Report 93-4015. 1993. 53 pages.

Effects of fracturing on well yields in the coalfield areas of Wise and Dickenson Counties, southwestern Virginia, by W. G. Wright: U.S. Geological Survey Water-Resources Investigations Report 85-4061. 1985. 21 pages.

Estimating net drawdown resulting from episodic withdrawals at six well fields in the Coastal Plain physiographic province of Virginia, by M. J. Focazio and G. K. Speiran: U.S. Geological Survey Water-Resources Investigations Report 93-4159. 1993. 21 pages.

Evaluation of municipal withdrawals from the confined aquifers of southeastern Virginia, by D. L. Richardson, R. J. Laczniaik, and P. A. Hamilton: U.S. Geological Survey Open-File Report 88-723. 1988. 50 pages.

Flood of November 1985 in West Virginia, Pennsylvania, Maryland, and Virginia, by J. B. Lescinsky: U.S. Geological Survey Open-File Report 86-486. 1987. 33 pages.

Floods in West Virginia, Virginia, Pennsylvania, and Maryland, November 1985, by D. H. Carpenter: U.S. Geological Survey Water-Resources Investigations Report 88-4213. 1990. 86 pages.

Geohydrology and the occurrence of volatile organic compounds in ground water, Culpeper basin of Prince William County, Virginia, by D. L. Nelms and D. L. Richardson: U.S. Geological Survey Water-Resources Investigations Report 90-4032. 1991. 94 pages.

Ground water in Virginia: Use during 1990, availability, and resource information needs, by McFarland, E. R. and Focazio, M. J.: U.S. Geological Survey Open-File Report 94-114. 1 page.

Ground-water availability along the Blue Ridge Parkway, Virginia, by H. T. Hopkins: U.S. Geological Survey Water-Resources Investigations Report 84-4168. 1985. 154 pages.

Ground-water contamination and movement at the Defense General Supply Center, Richmond, Virginia, by J. D. Powell, W. G. Wright, D. L. Nelms, and R. J. Ahlin: U.S. Geological Survey Water-Resources Investigations Report 90-4113. 1991. 36 pages.

Ground-water concerns for the Eastern Shore, Virginia, by D. L. Richardson: U.S. Geological Survey Open-File Report 93-93. 1993. 4 pages (Water-Resources Notes).

Ground-water discharge from the Coastal Plain of Virginia, by D. L. Richardson: U.S. Geological Survey Water-Resources Investigations Report 93-4191. 1994.

Ground-water hydrology and quality in the Valley and Ridge and Blue Ridge physiographic provinces of Clarke County, Virginia, by W. G. Wright: U.S. Geological Survey Water-Resources Investigations Report 90-4134. 1991. 61 pages.

Ground-water use and levels in the southern Coastal Plain of Virginia, by J. D. Larson and R. J. Lacznik: U.S. Geological Survey Open-File Report 91-187. 1991. 165 pages.

Ground-water withdrawals from the confined aquifers in the Coastal Plain of Virginia, 1891-1983, by T. K. Kull and R. J. Lacznik: U.S. Geological Survey Water-Resources Investigations Report 87-4049. 1987. 37 pages.

Guide to obtaining U.S. Geological Survey information, by K. Dodd, H. K. Fuller, and P. F. Clarke: U.S. Geological Survey Circular 900. 1985. 35 pages.

Hydraulic characteristics of, and ground-water flow in, coal-bearing rocks of southwestern Virginia, by G. E. Harlow, Jr. and G. D. LeCain: U.S. Geological Survey Water Supply Paper 2388. 1993. 36 pages.

Hydrogeologic and water-quality data for the Main Site, Naval Surface Warfare Center, Dahlgren Laboratory, Dahlgren, Virginia, by C. F. Bell, T. P. Bolles, and G. E. Harlow, Jr.: U.S. Geological Survey Open-File Report 94-301. 1994. 81 pages.

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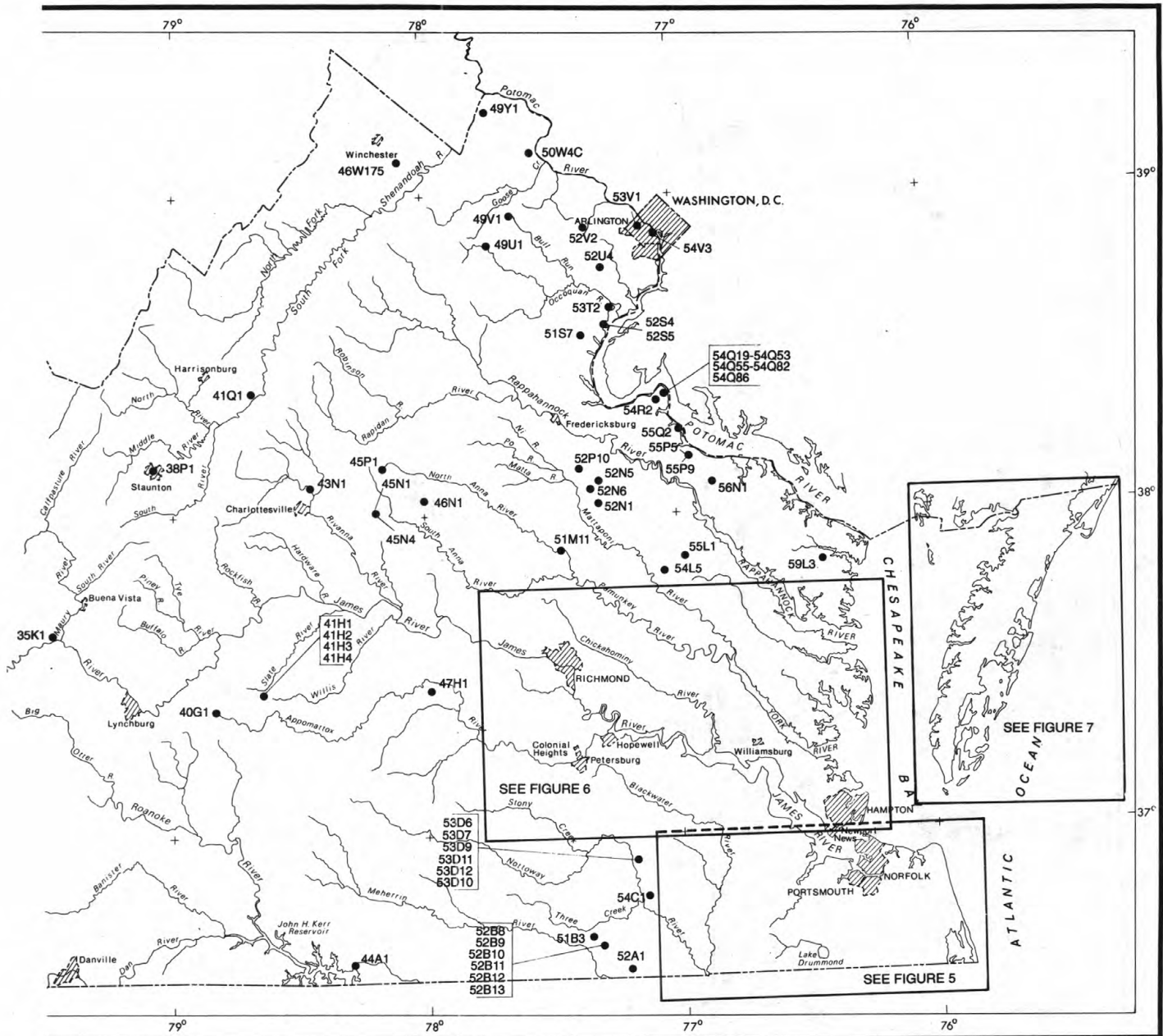
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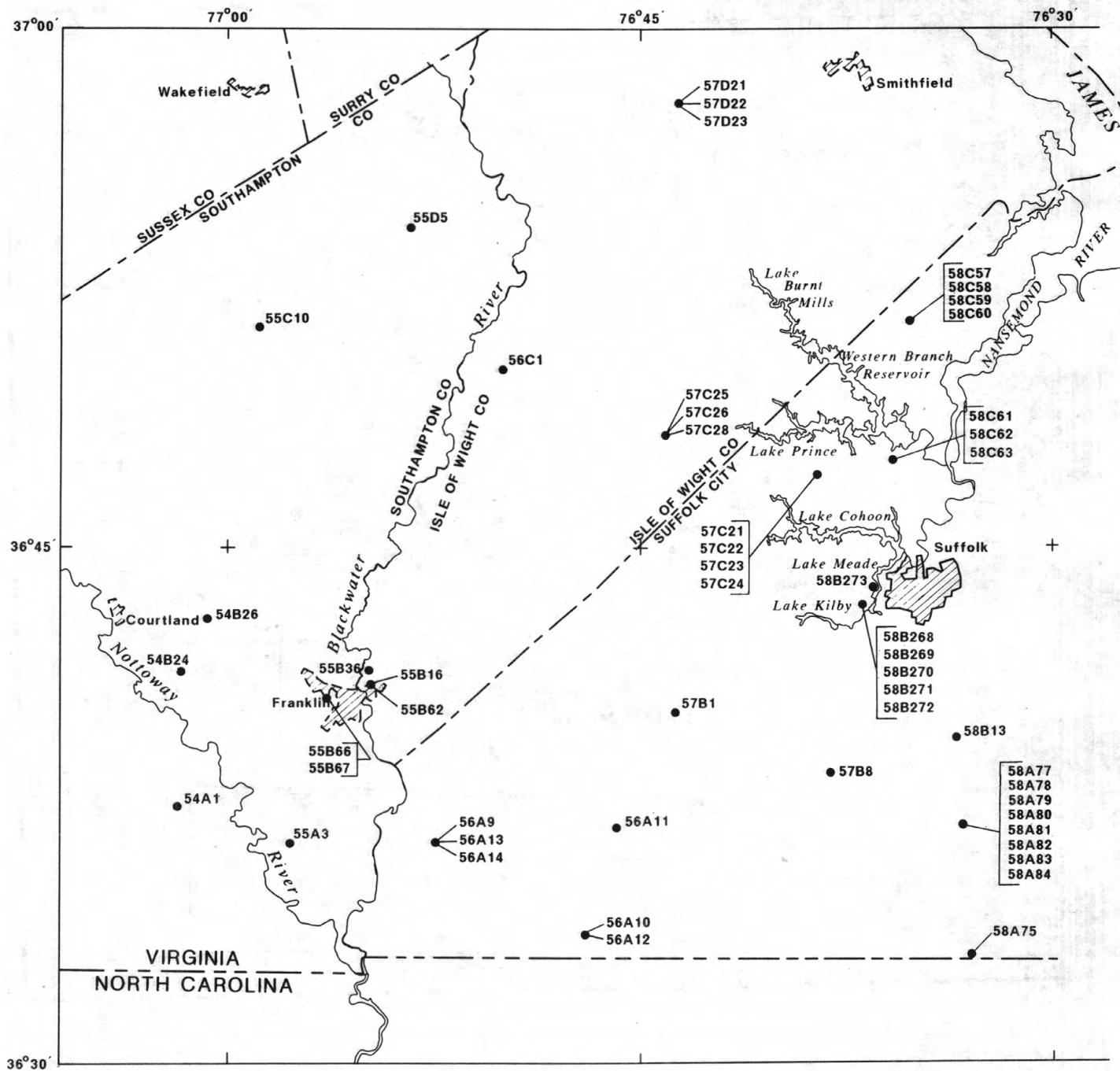
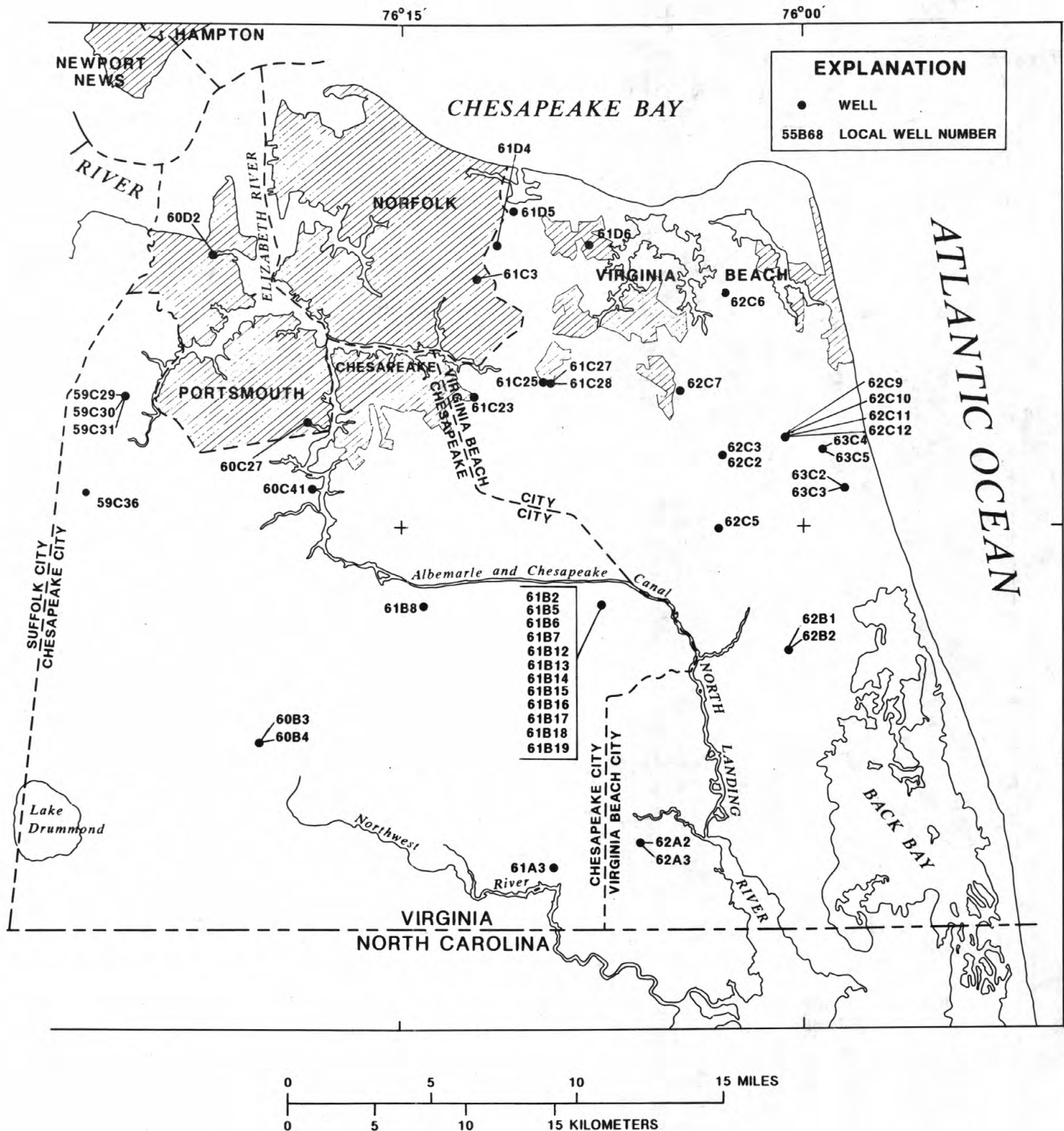


Figure 5. Location of ground-water observation wells in southeastern Virginia.





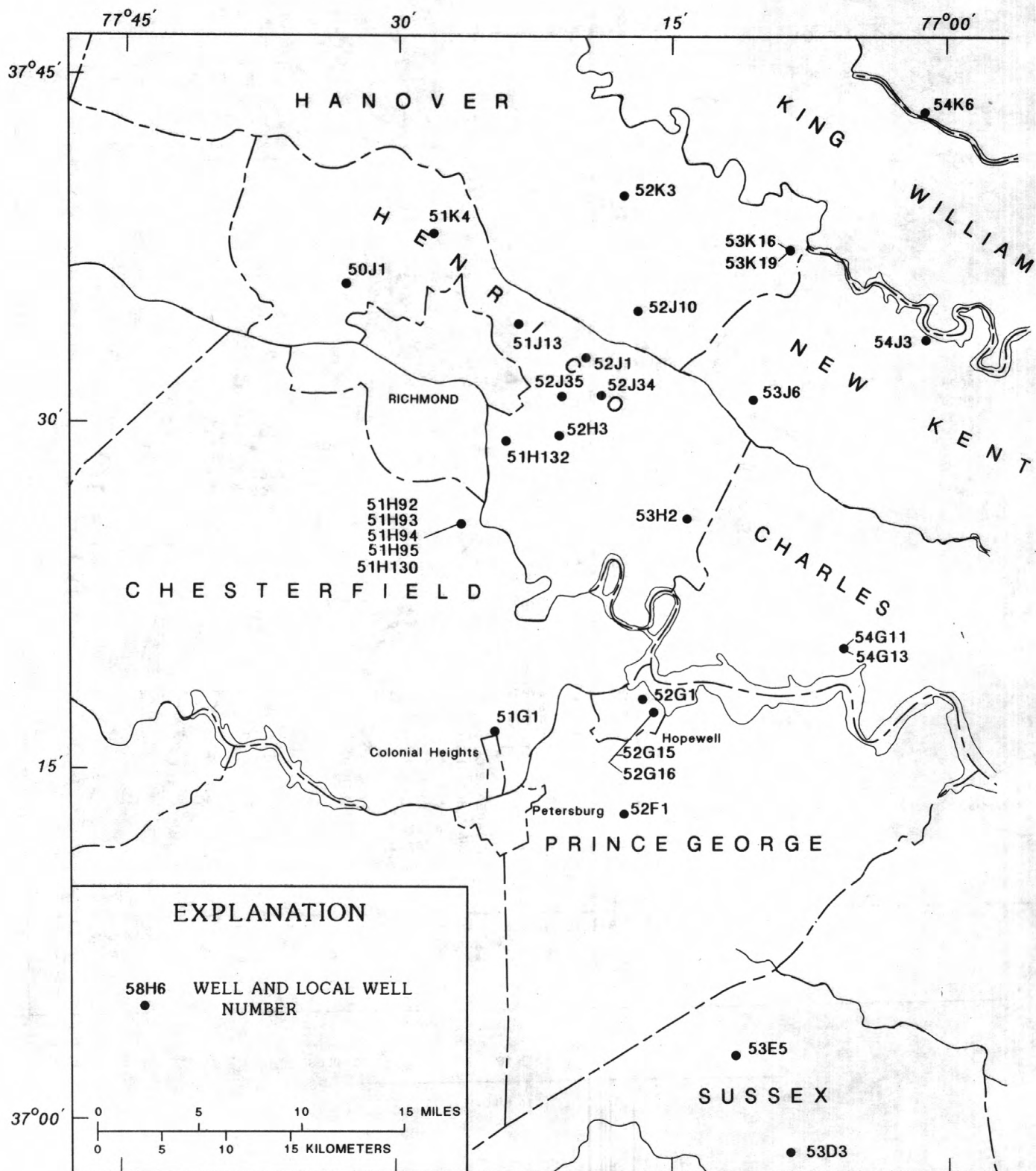
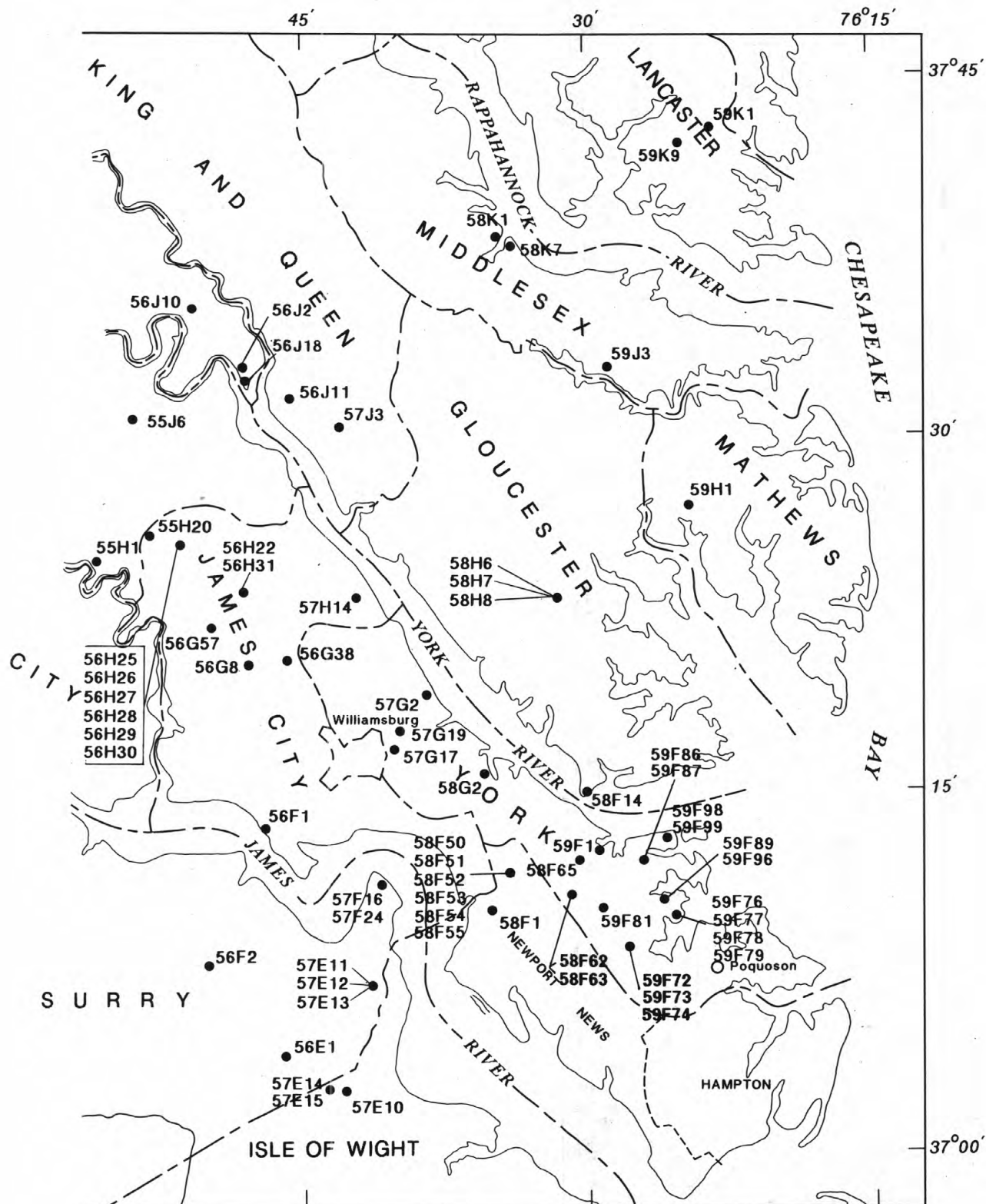


Figure 6. Location of ground-water observation wells on York-James peninsula and vicinity.



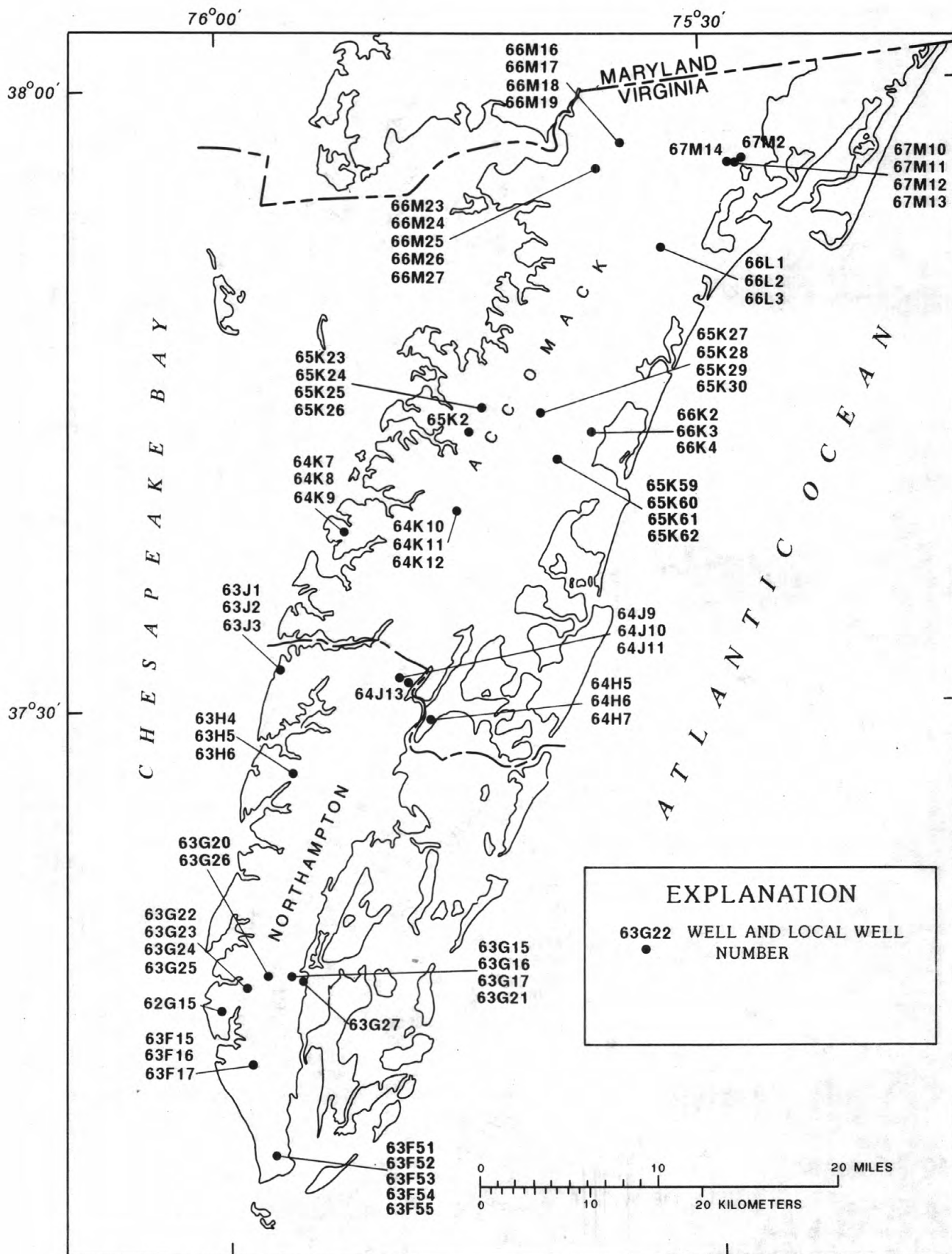


Figure 7. Location of ground-water observation wells on Delmarva peninsula.



**GROUND-WATER-LEVEL RECORDS**

## GROUND-WATER LEVELS

## ACCOMACK COUNTY

372922076470101. Local number, 64H 5 SOW 102C.

LOCATION.--Lat 37°29'21", long 75°47'05", Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 306 ft, screened 296 to 306 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 1, 1988; 1.1 ft thereafter.

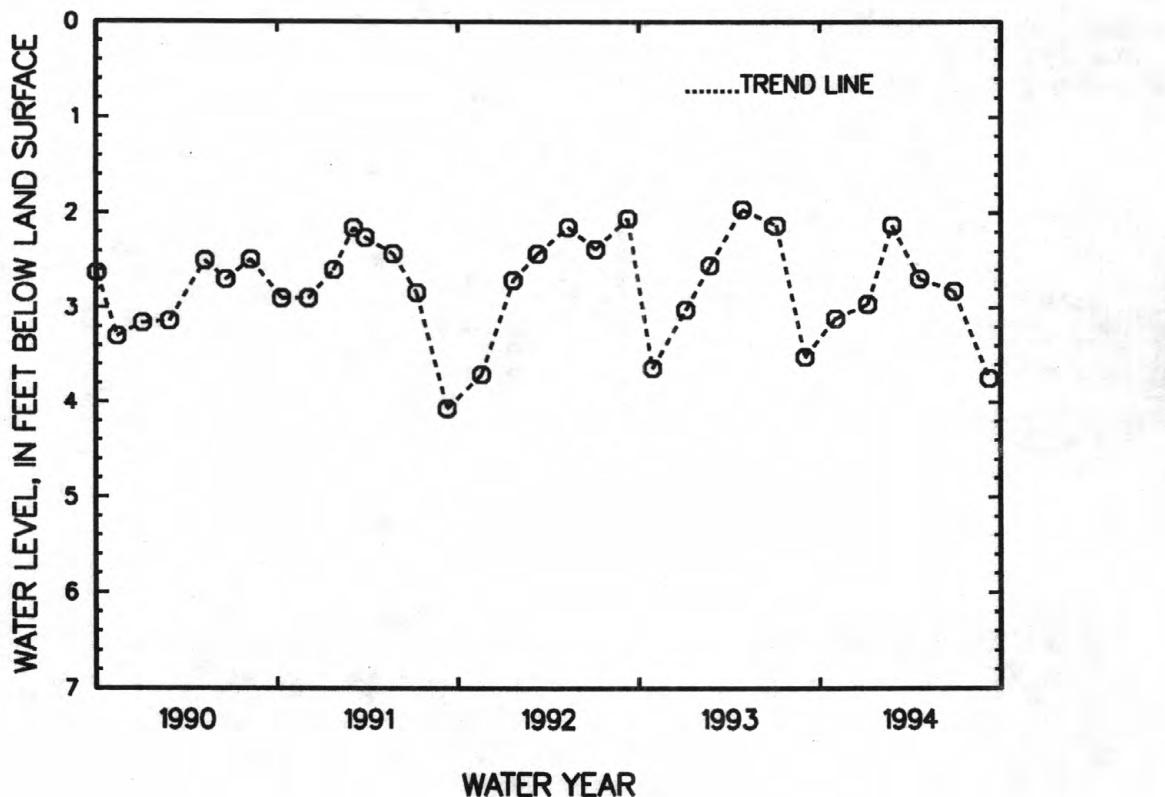
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.70 ft below land-surface datum, June 6, 1984; lowest measured, 7.35 ft below land-surface datum, Nov. 1, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	3.11	JAN 06	2.96	FEB 24	2.13	APR 20	2.69	JUN 28	2.82	SEP 07	3.75
WATER YEAR 1994		HIGHEST	2.13	FEB 24, 1994		LOWEST	3.75	SEP 07, 1994			



## ACCOMACK COUNTY

372905075474002. Local number, 64H 6 SOW 102A.

LOCATION.--Lat 37°29'21", long 75°47'05", Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 154 ft, screened 144 to 154 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

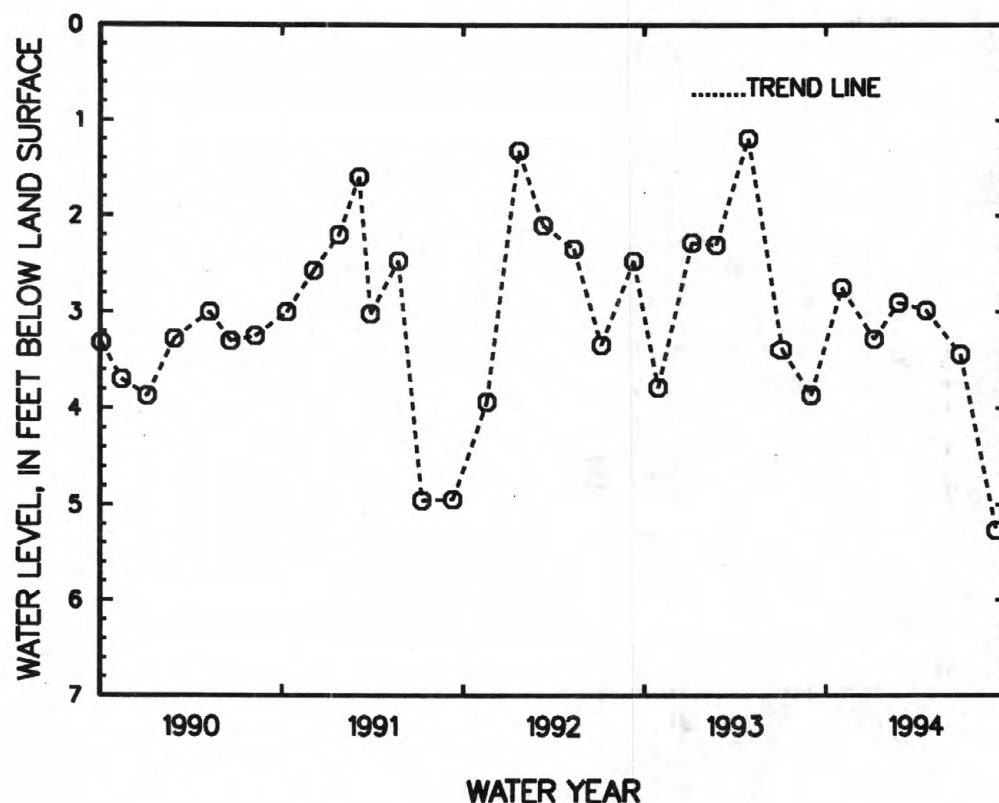
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.33 ft below land-surface datum, Oct. 30, 1984; lowest measured, 9.63 ft below land-surface datum, Sept. 1, 1977.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	2.75	JAN 06	3.28	FEB 24	2.90	APR 20	2.98	JUN 28	3.44	SEP 07	5.27
WATER YEAR 1994		HIGHEST	2.75	NOV 02, 1993	LOWEST	5.27	SEP 07, 1994				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

372905075474001. Local number, 64H 7 SOW 102B.

LOCATION.--Lat 37°29'21", long 75°47'05", Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

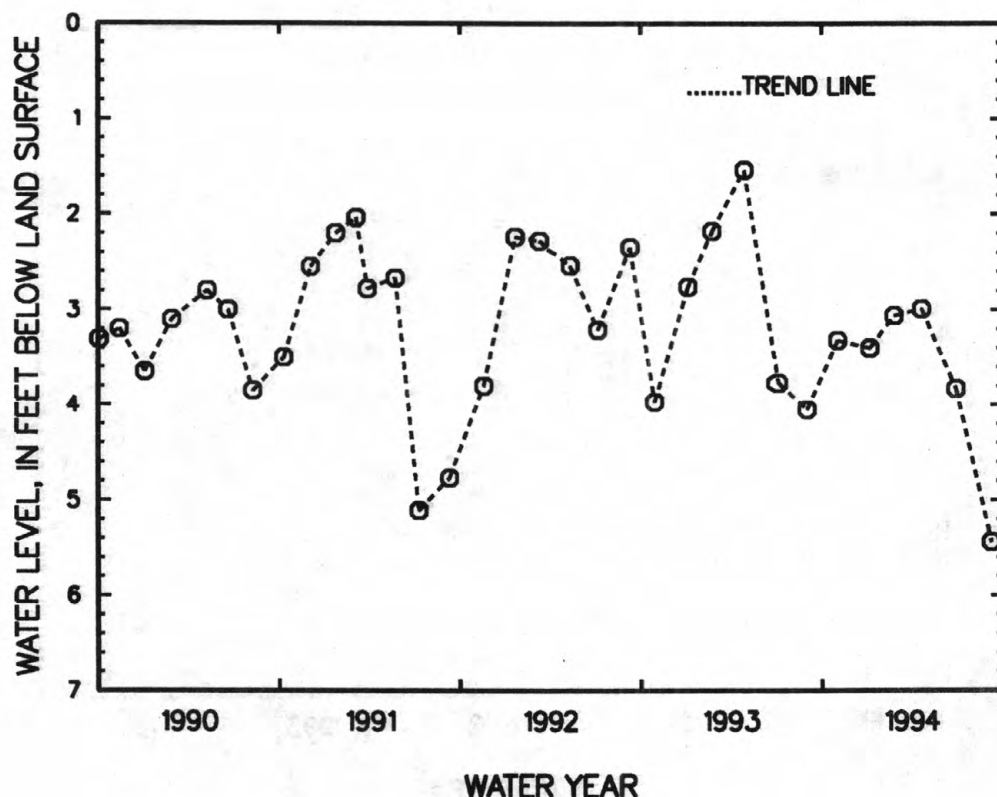
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.19 ft below land-surface datum, July 10, 1984; lowest measured, 8.76 ft below land-surface datum, Nov. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	3.32	JAN 06	3.40	FEB 24	3.06	APR 20	2.99	JUN 28	3.83	SEP 07	5.44
WATER YEAR 1994		HIGHEST	2.99	APR 20, 1994	LOWEST	5.44	SEP 07, 1994				





## GROUND-WATER LEVELS

33

## ACCOMACK COUNTY

373845075522501. Local number, 64K 7 SOW 106C.

LOCATION.--Lat 37°38'45", long 75°52'25", Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

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

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above sea level, from topographic map. Measuring point: Top of casing, 0.73 ft above land-surface datum.

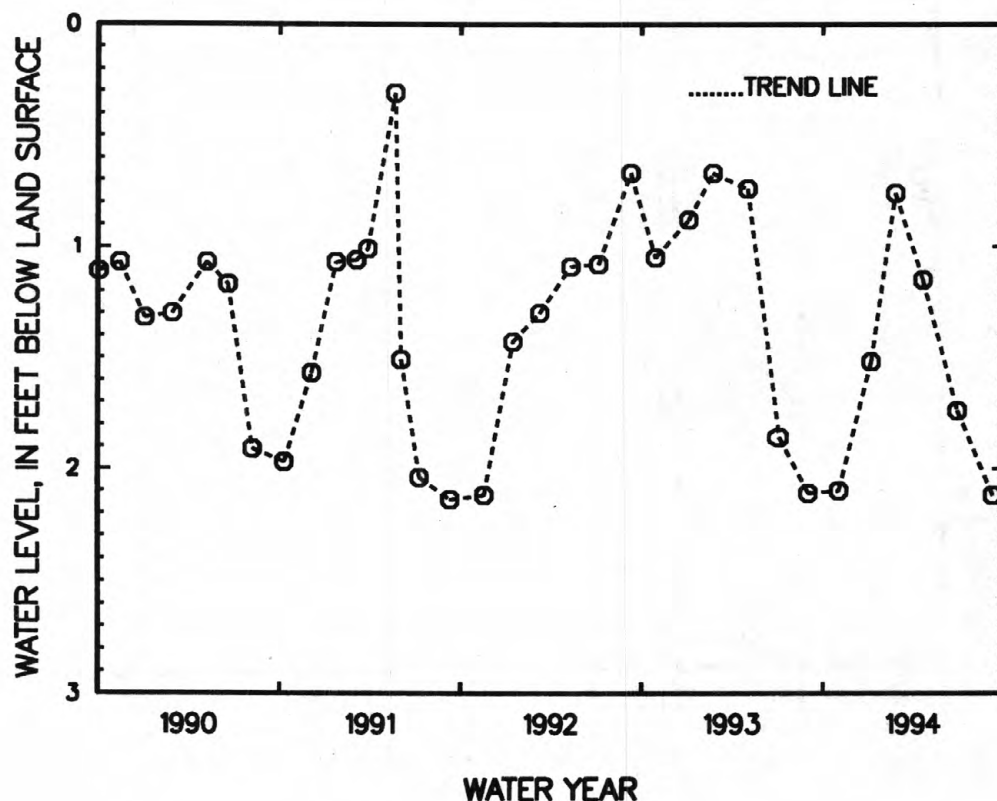
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.31 ft below land-surface datum, May 22, 1991; lowest measured, 2.35 ft below land-surface datum, July 16, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	2.10	JAN 06	1.52	FEB 24	0.76	APR 20	1.15	JUN 28	1.74	SEP 06	2.12
WATER YEAR 1994		HIGHEST	0.76	FEB 24, 1994	LOWEST	2.12	SEP 06, 1994				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

373845075522503. Local number, 64K 8 SOW 106B.

LOCATION.--Lat 37°38'45", long 75°52'25", Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 95 ft, screened 85 to 95 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above sea level, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality. - Water Division.

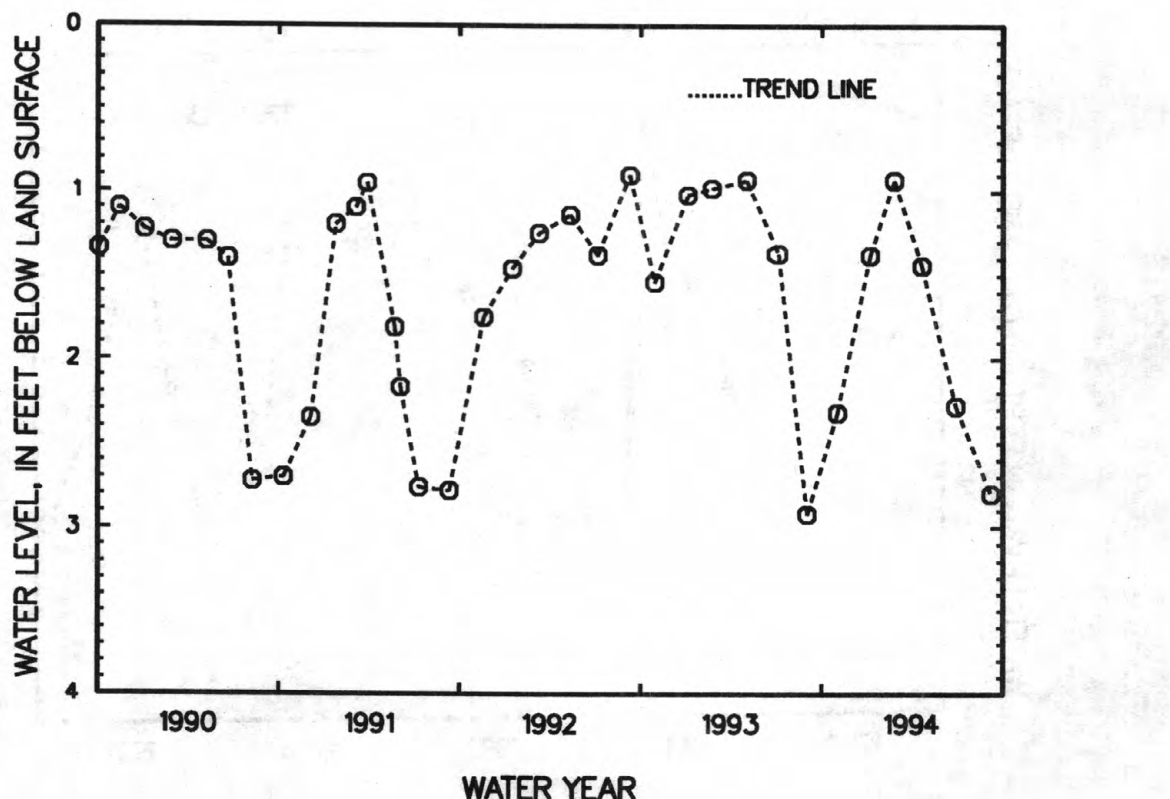
PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.70 ft below land-surface datum, Apr. 21, 1983; lowest measured, 2.92 ft below land-surface datum, Sept. 2, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	2.32	JAN 06	1.38	FEB 24	0.93	APR 20	1.44	JUN 28	2.28	SEP 06	2.80

WATER YEAR 1994      HIGHEST    0.93    FEB 24, 1994      LOWEST    2.80    SEP 06, 1994



## GROUND-WATER LEVELS

35

## ACCOMACK COUNTY

373845075522502. Local number, 64K 9 SOW 106A.

LOCATION.--Lat 37°38'45", long 75°52'25", Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is approximately 3 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

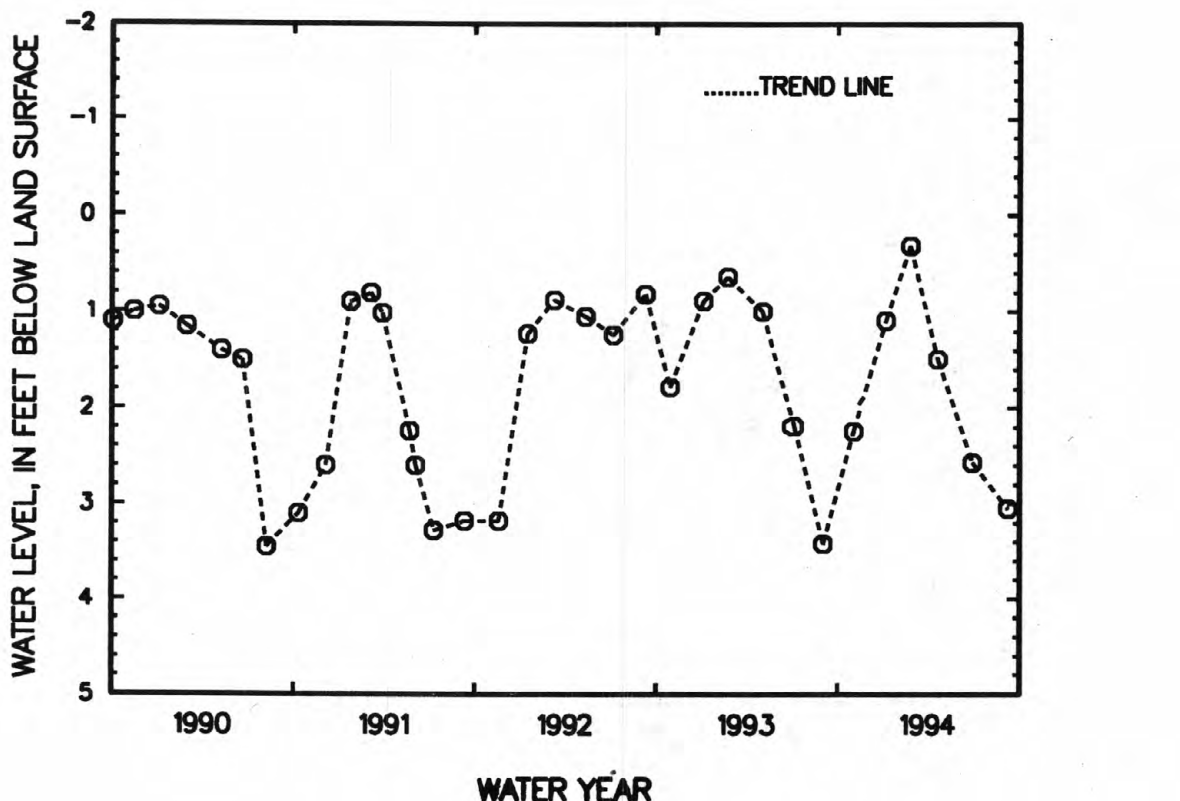
PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land-surface datum, Feb. 24, 1994; lowest measured, 3.46 ft below land-surface datum, Sept. 14, 1987.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	2.24	JAN 06	1.09	FEB 24	0.32	APR 20	1.49	JUN 28	2.57	SEP 06	3.05

WATER YEAR 1994      HIGHEST    0.32    FEB 24, 1994      LOWEST    3.05    SEP 06, 1994



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

373932075452701. Local number, 64K 10 SOW 108A.

LOCATION.--Lat 37°39'32", long 75°45'27", Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 50 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above sea level, from topographic map. Measuring point: Top of casing, 0.22 ft above land-surface datum prior to Mar. 1, 1988; 0.75 ft thereafter.

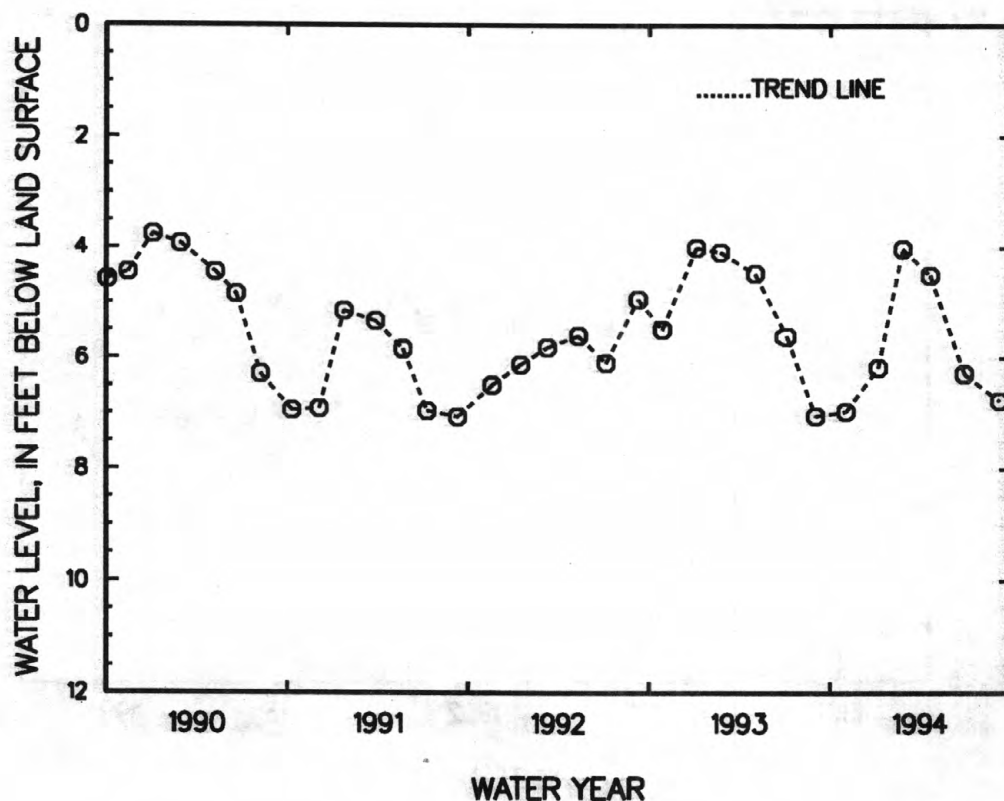
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, Apr. 21, 1983; lowest measured, 15.06 ft below land-surface datum, Jan. 30, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	6.97	JAN 06	6.17	FEB 24	4.02	APR 20	4.50	JUN 28	6.28	SEP 06	6.77
WATER YEAR 1994		HIGHEST	4.02	FEB 24, 1994	LOWEST	6.97	NOV 02, 1993				





## GROUND-WATER LEVELS

37

## ACCOMACK COUNTY

373932075452702. Local number, 64K 11 SOW 108B.

LOCATION.--Lat 37°39'32", long 75°45'27", Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 180 ft, screened 170 to 180 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

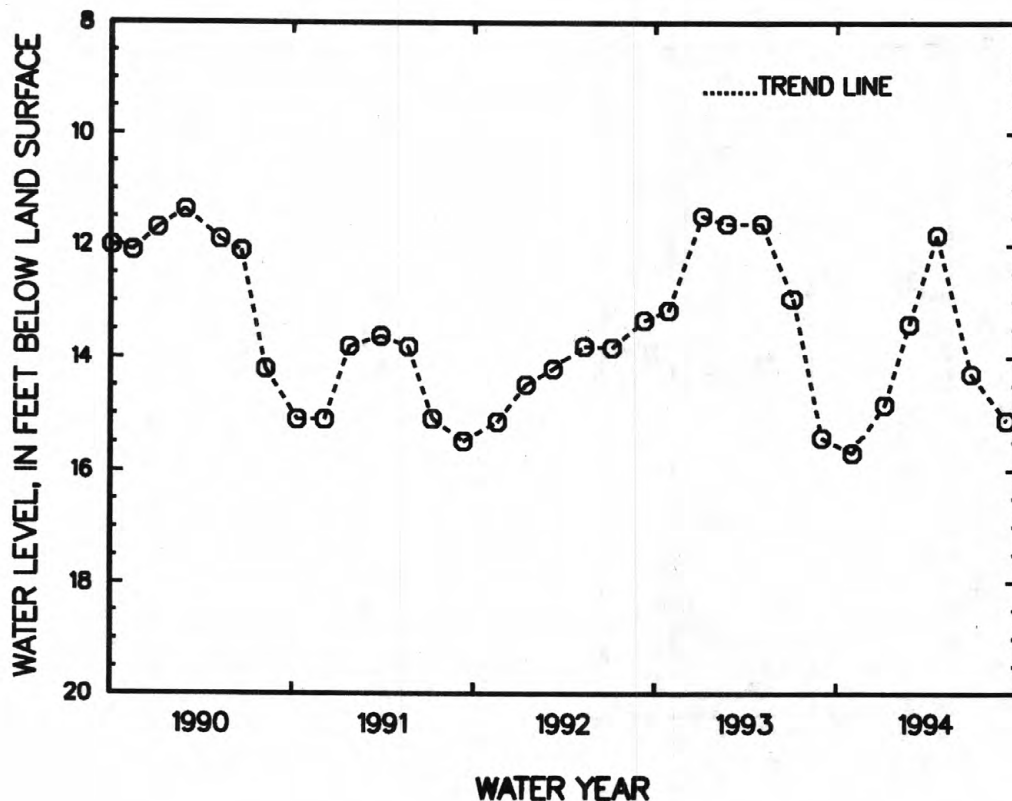
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.03 ft below land-surface datum, Aug. 1, 1979; lowest measured, 16.24 ft below land-surface datum, Nov. 10, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	15.69	JAN 06	14.84	FEB 24	13.40	APR 20	11.82	JUN 28	14.29	SEP 06	15.12
WATER YEAR 1994		HIGHEST	11.82	APR 20, 1994	LOWEST	15.69	NOV 02, 1993				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

373932075452703. Local number, 64K 12 SOW 108C.

LOCATION.--Lat 37°39'32", long 75°45'27", Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 284 ft, screened 274 to 284 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above sea level, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

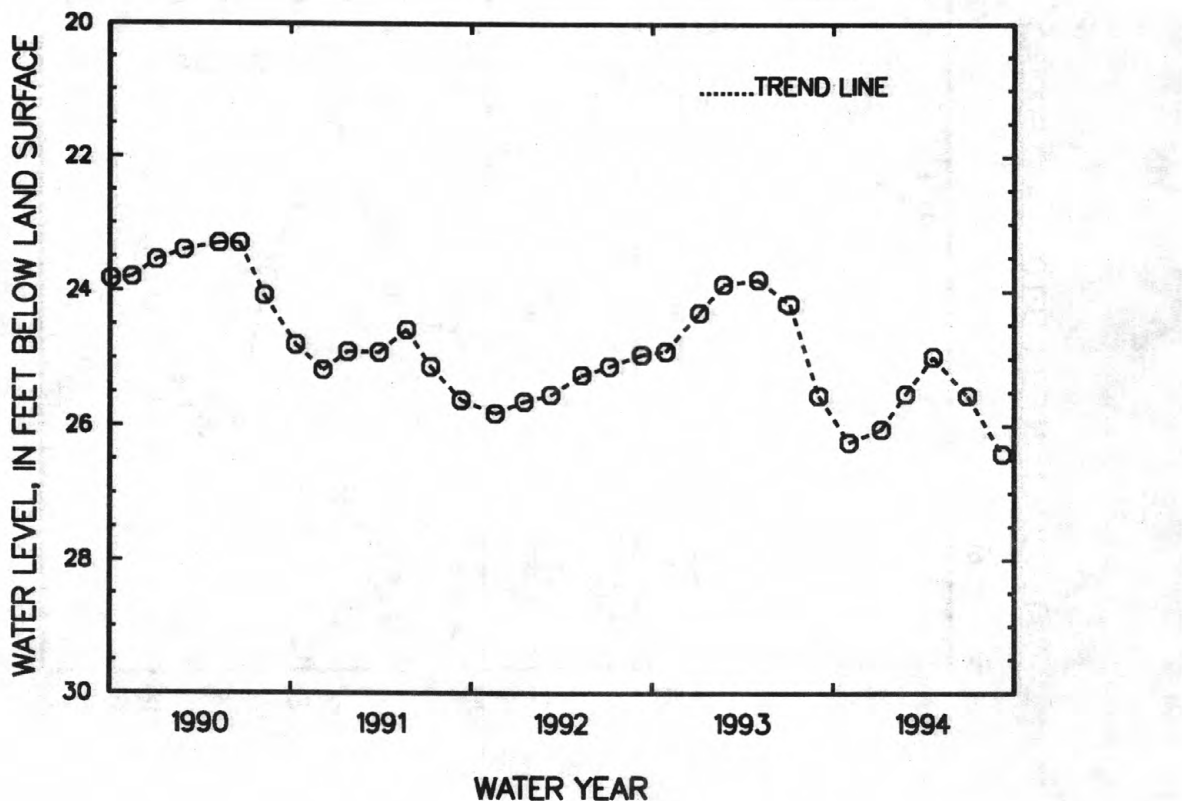
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.50 ft below land-surface datum, Feb. 2, 1984; lowest measured, 26.73 ft below land-surface datum, Nov. 20, 1978.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	26.24	JAN 06	26.05	FEB 24	25.52	APR 20	24.97	JUN 28	25.55	SEP 06	26.42
WATER YEAR 1994		HIGHEST	24.97	APR 20, 1994	LOWEST	26.42	SEP 06, 1994				



## GROUND-WATER LEVELS

39

## ACCOMACK COUNTY

374324075443201. Local number, 65K 2 SOW 058.

LOCATION.--Lat 37°43'24", long 75°44'32", Hydrologic Unit 02080110, 100 ft southeast of State Highway 658, 0.3 mi northeast of intersection of State Highways 653 and 658, and 0.9 mi north of Onancock. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in. to 96.5 ft, diameter 6 in. from 96.5 to 187 ft, depth 187 ft, screened 97.3 to 107 ft, 116 to 126 ft, 135 to 145 ft, 162 to 182 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 20, 1980, to Oct. 1, 1985, occasional measurement with chalked tape. July 15, 1972, to Aug. 20, 1980, continuous strip-chart recorder. Prior to July 15, 1972, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.1 ft above land-surface datum.

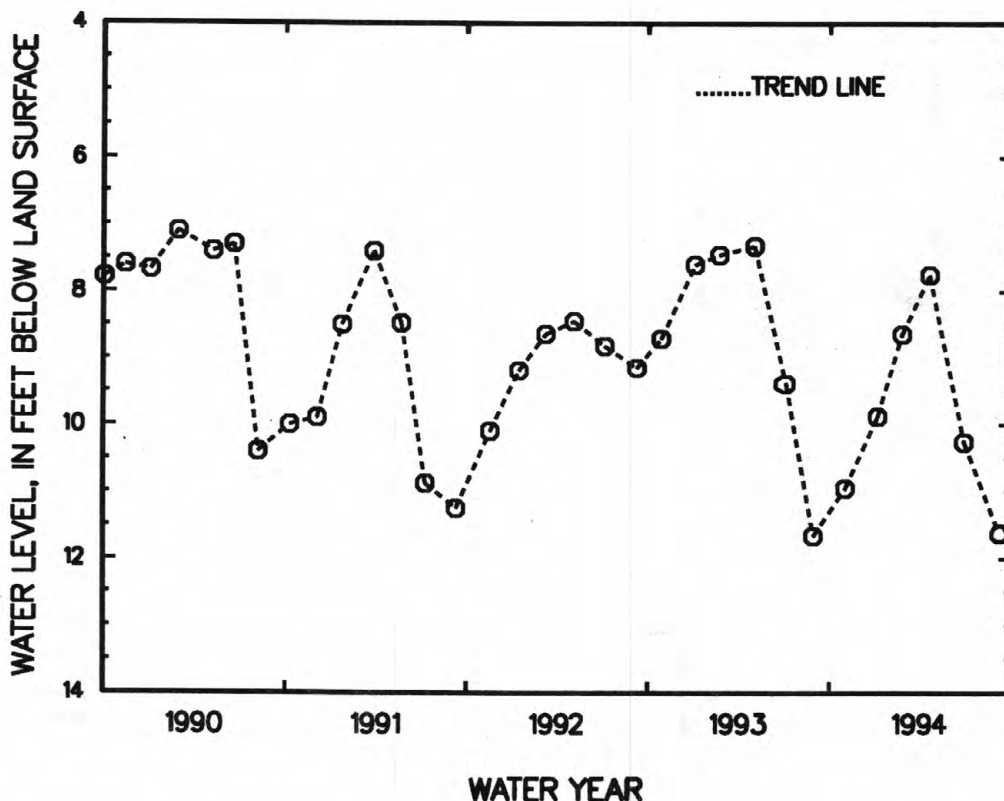
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--February 1972 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.95 ft below land-surface datum, Feb. 8, 1972; lowest measured, 11.66 ft below land-surface datum, Aug. 30, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	10.95	JAN 06	9.88	FEB 24	8.64	APR 20	7.75	JUN 28	10.26	SEP 06	11.62
WATER YEAR 1994		HIGHEST	7.75	APR 20, 1994		LOWEST	11.62	SEP 06, 1994			



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374442075432501. Local number, 65K 23 SOW 109C.

LOCATION.--Lat 37°44'28", long 75°43'28", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 290 ft, screened 280 to 290 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above sea level, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum.

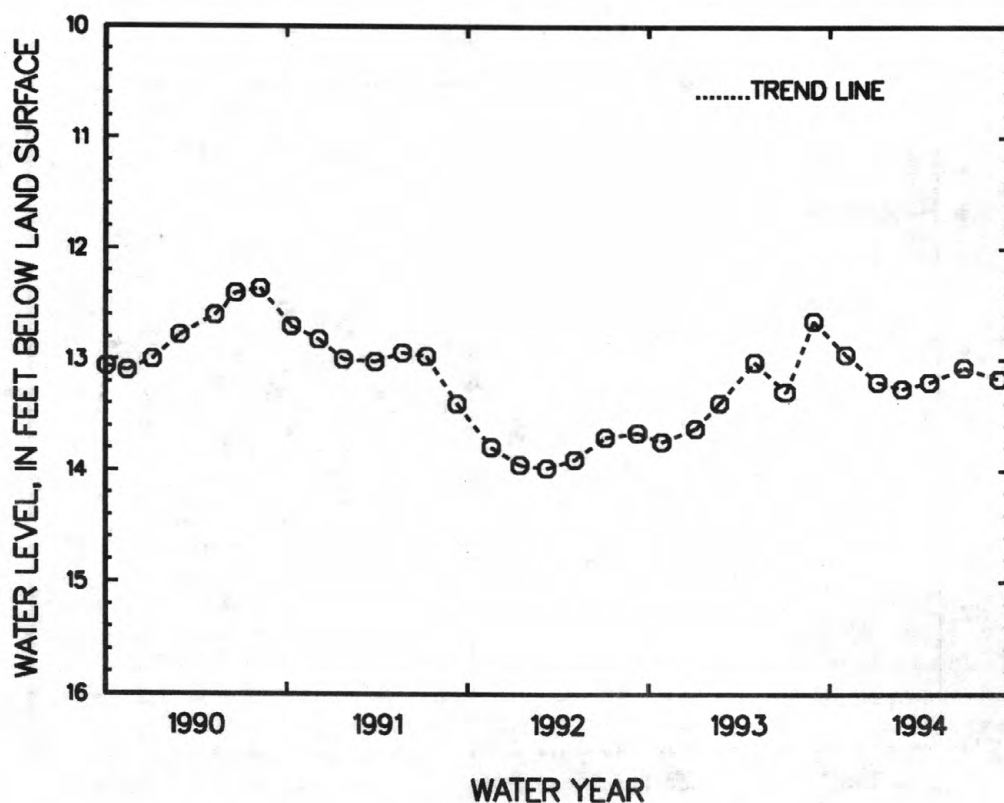
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.36 ft below land-surface datum, Dec. 30, 1982; lowest measured, 16.65 ft below land-surface datum, Mar. 12, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	12.95	JAN 06	13.20	FEB 24	13.26	APR 20	13.20	JUN 28	13.07	SEP 06	13.17
WATER YEAR 1994      HIGHEST   12.95   NOV 02, 1993      LOWEST   13.26   FEB 24, 1994											





## GROUND-WATER LEVELS

41

## ACCOMACK COUNTY

374442075432502. Local number, 65K 24 SOW 109A.

LOCATION.--Lat 37°44'42", long 75°43'25", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

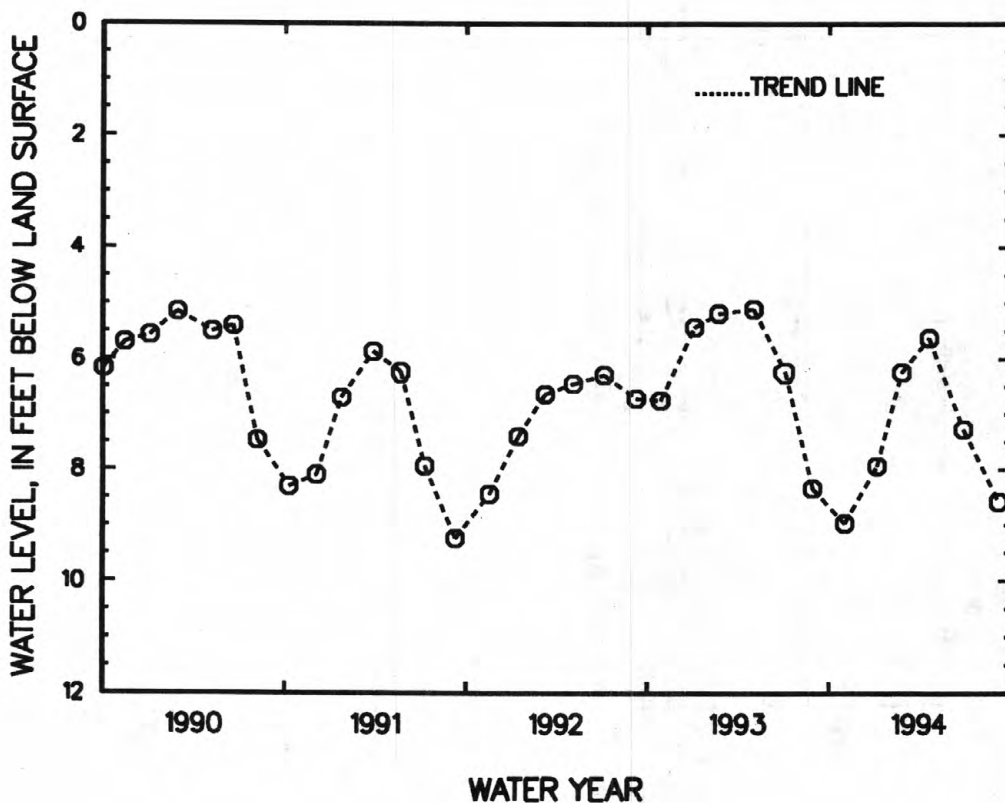
PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.35 ft below land-surface datum, Apr. 21, 1983; lowest measured, 9.24 ft below land-surface datum, Sept. 10, 1991.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	8.97	JAN 06	7.94	FEB 24	6.24	APR 20	5.62	JUN 28	7.27	SEP 06	8.58

WATER YEAR 1994      HIGHEST    5.62    APR 20, 1994      LOWEST    8.97    NOV 02, 1993



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374442075432503. Local number, 65K 25 SOW 109B.

LOCATION.--Lat 37°44'42", long 75°43'25", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 228 ft, screened 218 to 228 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above sea level, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

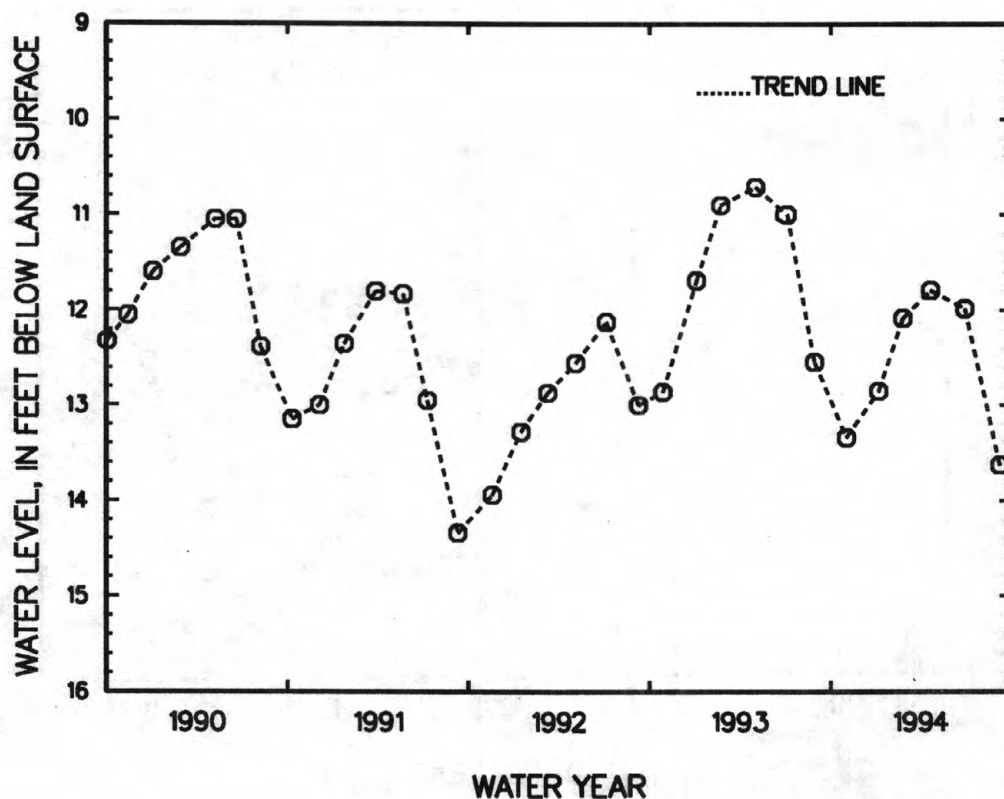
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.15 ft below land-surface datum, June 20, 1984; lowest measured, 14.34 ft below land-surface datum, Sept. 10, 1991.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	13.34	JAN 06	12.85	FEB 24	12.08	APR 20	11.79	JUN 28	11.98	SEP 06	13.63
WATER YEAR 1994		HIGHEST	11.79	APR 20, 1994	LOWEST	13.63	SEP 06, 1994				



## GROUND-WATER LEVELS

43

## ACCOMACK COUNTY

374442075432504. Local number, 65K 26 SOW 109S.

LOCATION.--Lat 37°44'42", long 75°43'25", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 15 to 25 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above sea level, from topographic map. Measuring point: Top of casing, 0.37 ft above land-surface datum prior to Mar. 1, 1988; 0.5 ft thereafter.

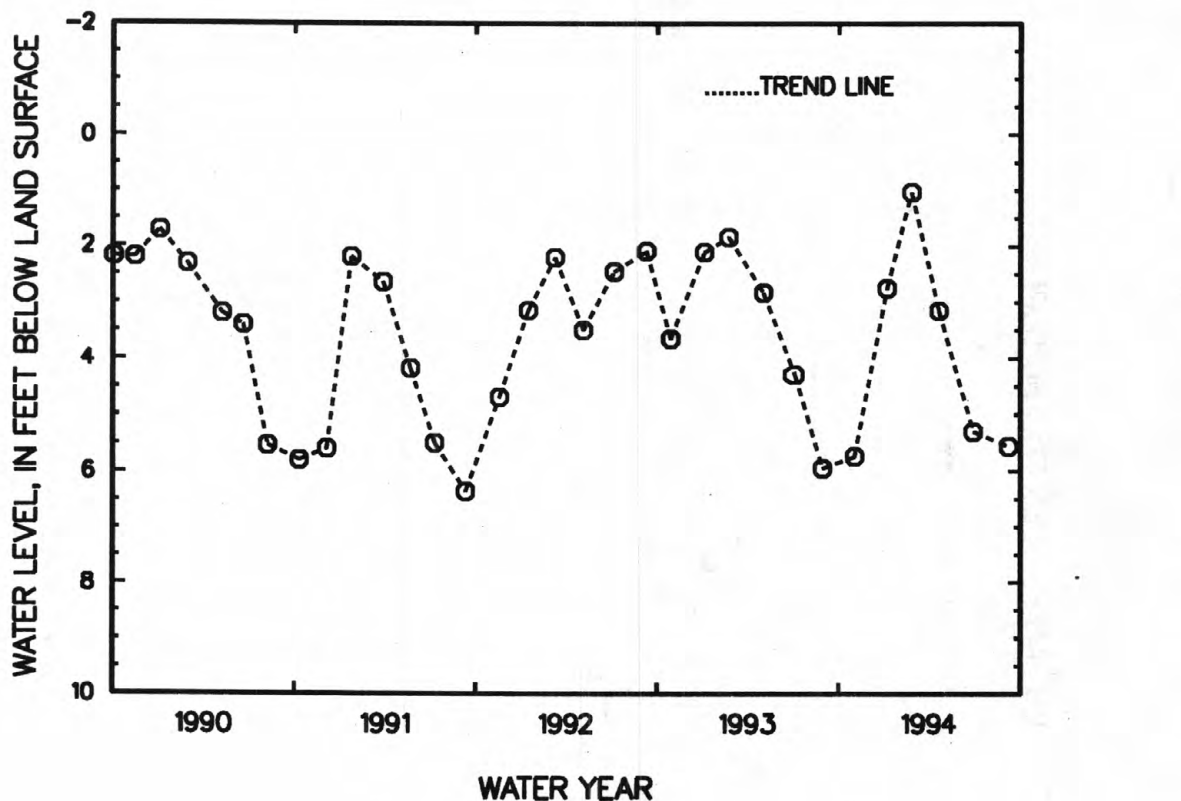
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.03 ft below land-surface datum, Feb. 24, 1994; lowest measured, 6.57 ft below land-surface datum, Oct. 31, 1978.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	5.74	JAN 06	2.75	FEB 24	1.03	APR 20	3.15	JUN 28	5.30	SEP 06	5.56
WATER YEAR 1994		HIGHEST	1.03	FEB 24, 1994	LOWEST	5.74	NOV 02, 1993				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374425075400001. Local number, 65K 27 SOW 114A.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 160 ft, screened 150 to 160 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.4 ft above land-surface datum prior to Feb. 27, 1990; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

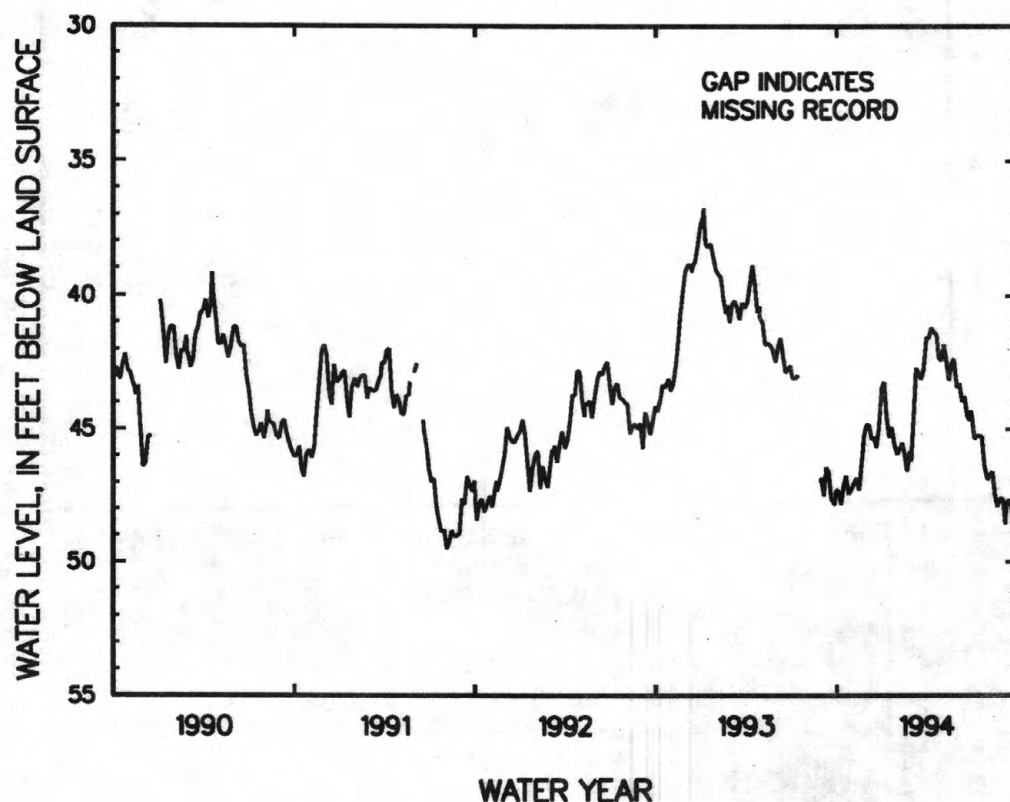
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.59 ft below land-surface datum, June 6, 1984; lowest measured, 49.98 ft below land-surface datum, Nov. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.33	47.03	44.83	43.22	45.74	44.56	41.58	41.83	43.28	45.37	46.72	48.57
10	47.83	46.83	45.38	44.58	45.53	42.70	41.20	42.42	43.96	45.24	46.60	47.67
15	47.12	47.28	45.30	45.31	45.95	42.88	41.36	43.15	43.76	45.27	47.47	47.75
20	46.76	46.36	45.68	44.93	46.58	43.10	41.44	42.55	44.48	45.29	47.91	48.28
25	47.43	45.27	45.00	45.54	45.84	42.75	42.31	42.35	44.68	46.35	47.60	48.70
EOM	47.24	44.84	43.45	45.93	46.19	41.56	42.42	43.43	44.53	46.89	47.64	48.75

WATER YEAR 1994      HIGHEST INSTANTANEOUS    40.54    APR 07, 1994      LOWEST INSTANTANEOUS    48.75    SEP 30, 1994

## DAILY LOW-WATER LEVELS





## ACCOMACK COUNTY

374425075400002. Local number, 65K 28 SOW 114B.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 230 ft, screened 220 to 230 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

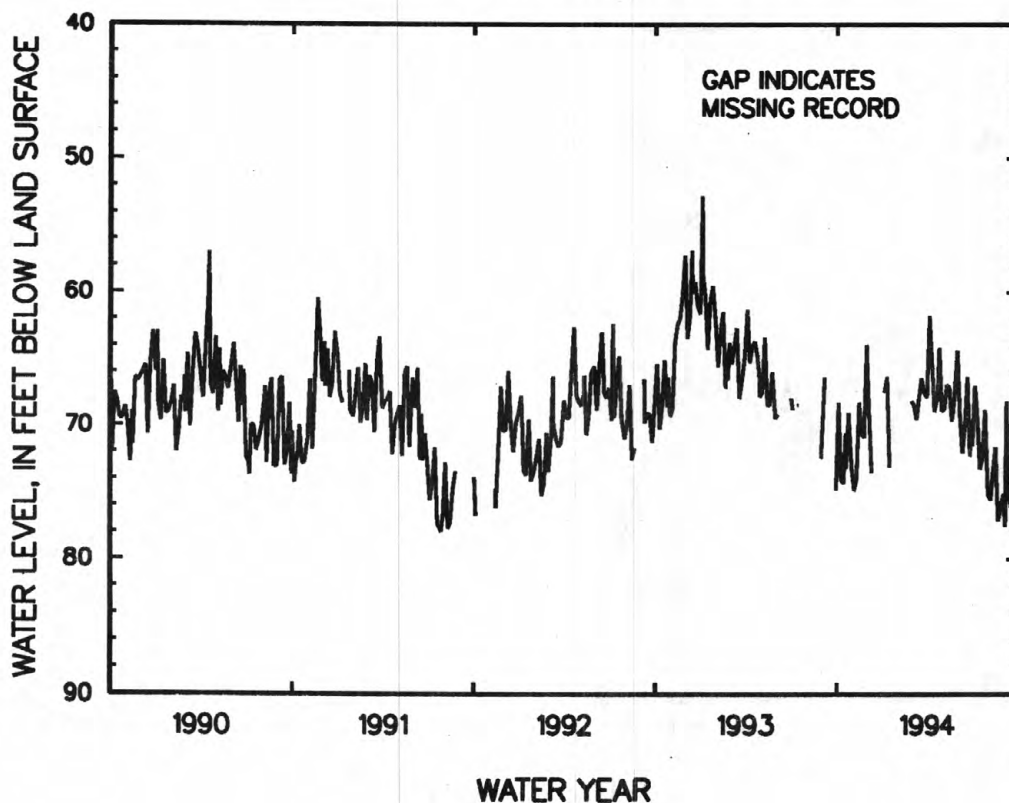
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 49.40 ft below land-surface datum, June 6, 1987; lowest recorded, 77.99 ft below land-surface datum, July 27, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.30	74.90	69.05	67.48	---	68.50	61.75	68.80	69.30	67.00	75.59	71.10
10	74.10	73.95	73.55	66.35	---	69.55	65.05	66.95	72.05	69.50	73.45	75.10
15	74.35	68.30	---	73.10	---	67.95	68.95	67.10	70.00	73.25	71.68	76.15
20	73.18	70.70	---	---	---	66.45	68.10	69.65	66.35	72.45	77.15	73.85
25	69.08	70.90	---	---	---	67.55	64.15	67.95	72.30	68.85	76.18	75.95
EOY	73.17	63.95	---	---	68.20	67.90	68.90	64.35	71.50	75.18	75.15	77.55

WATER YEAR 1994      HIGHEST INSTANTANEOUS    59.30    APR 05, 1994  
                               LOWEST INSTANTANEOUS    77.55    SEP 03, 30, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374425075400003. Local number, 65K 29 SOW 114C.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 315 ft, screened 305 to 315 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum prior to Feb. 27, 1990; 1.6 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 71.50 ft below land-surface datum, Feb. 24, 1986; lowest recorded, 108.92 ft below land-surface datum, Aug. 17, 1991.

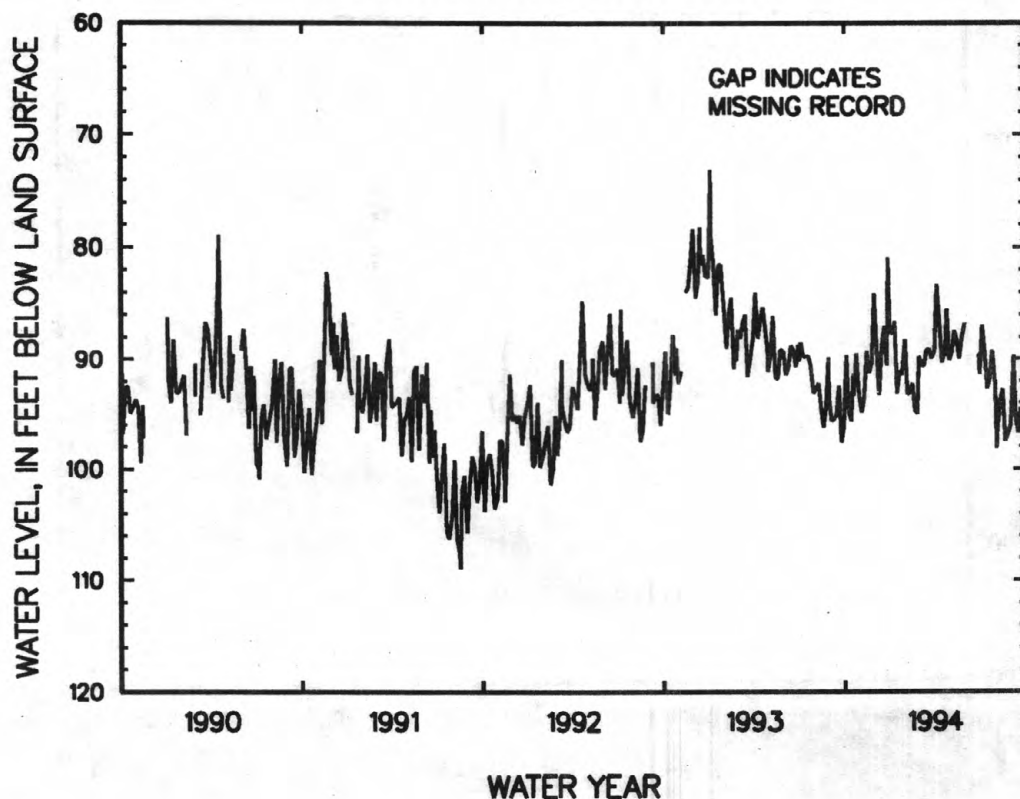
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	89.70	94.90	89.25	87.73	93.23	90.55	83.30	89.40	---	87.00	96.10	---
10	94.90	93.50	93.30	86.63	93.13	90.65	86.55	87.45	---	89.35	93.90	95.55
15	95.65	89.30	88.90	93.18	92.23	89.20	90.30	88.30	---	92.70	92.75	96.75
20	93.35	91.25	87.05	91.12	94.72	89.10	89.40	89.95	---	91.85	97.50	94.50
25	89.55	90.39	90.55	91.43	95.02	89.95	85.50	88.10	---	89.25	96.90	97.10
EOM	93.40	84.15	87.50	88.23	89.80	89.30	90.10	86.80	91.35	92.30	95.99	97.60

WATER YEAR 1994      HIGHEST INSTANTANEOUS      80.95      DEC 28, 1993

LOWEST INSTANTANEOUS      98.15      AUG 03, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

47

## ACCOMACK COUNTY

374425075400004. Local number, 65K 30 SOW 114S.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Mar. 1, 1988; 1.5 ft thereafter.

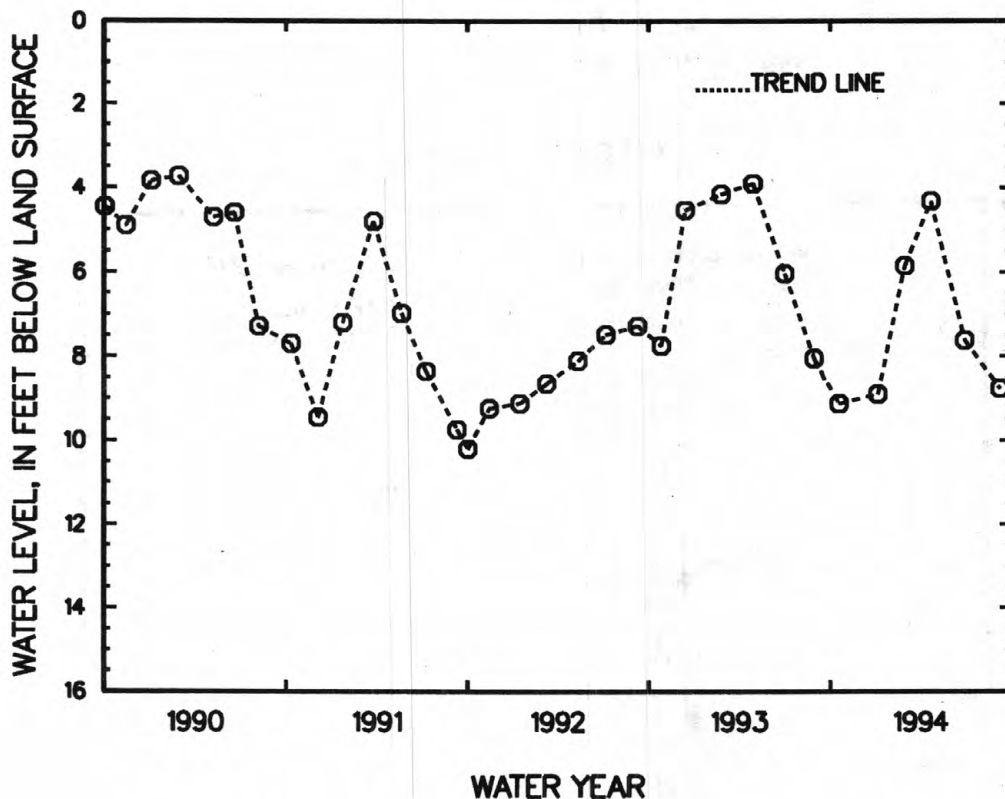
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.73 ft below land-surface datum, Feb. 27, 1990; lowest measured, 20.10 ft below land-surface datum, Dec. 9, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	9.13	JAN 05	8.90	FEB 28	5.85	APR 21	4.32	JUN 29	7.62	SEP 06	8.77
WATER YEAR 1994	HIGHEST	4.32	APR 21, 1994	LOWEST	9.13	OCT 19, 1993					



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374314075401402. Local number, 65K 59 SOW 183A.

LOCATION.--Lat 37°43'14", long 75°40'14", Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 250 ft, diameter 2 in. from 250 to 285 ft, depth 285 ft, screened 275 to 285 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Aug. 7, 1990, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 52.28 ft below land-surface datum, Jan. 13, 1993; lowest recorded, 61.24 ft below land-surface datum, Sept. 29, 1991.

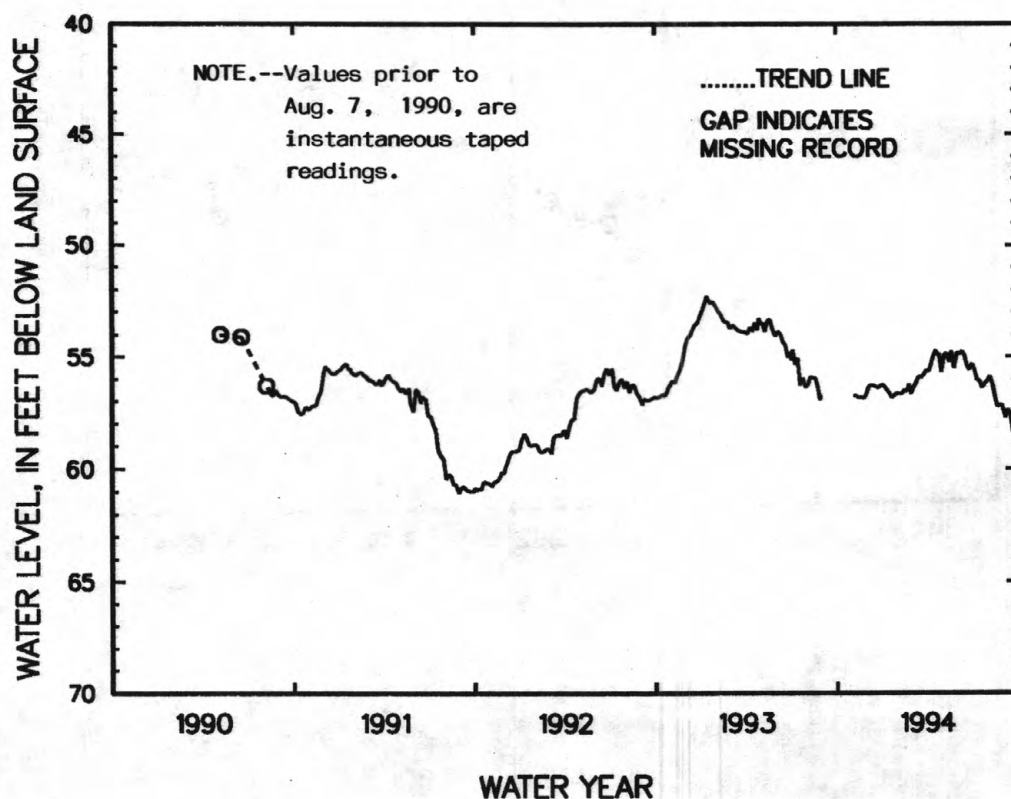
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	56.72	56.30	56.30	56.65	56.35	55.65	54.92	54.89	55.58	55.87	57.73
10	---	56.73	56.27	56.47	56.63	56.16	55.23	54.82	54.75	56.05	56.21	57.35
15	---	56.83	56.28	56.60	56.48	55.88	54.88	55.24	54.96	56.05	56.77	57.63
20	---	56.80	56.33	56.82	56.55	55.93	54.89	54.74	55.42	56.39	57.25	58.37
25	---	56.84	56.38	56.72	56.38	55.80	54.86	55.51	55.58	56.23	57.17	58.13
EOM	---	56.68	56.24	56.63	56.66	55.60	55.69	54.80	55.33	56.09	57.31	57.97

WATER YEAR 1994 HIGHEST INSTANTANEOUS 54.43 JUN 07, 08, 1994

LOWEST INSTANTANEOUS 58.48 SEP 21, 1994

## DAILY LOW-WATER LEVELS





## ACCOMACK COUNTY

374314075401403. Local number, 65K 60 SOW 183B.

LOCATION.--Lat 37°43'14", long 75°40'14", Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 210 ft, diameter 2 in. from 210 to 235 ft, depth 235 ft, screened 225 to 235 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

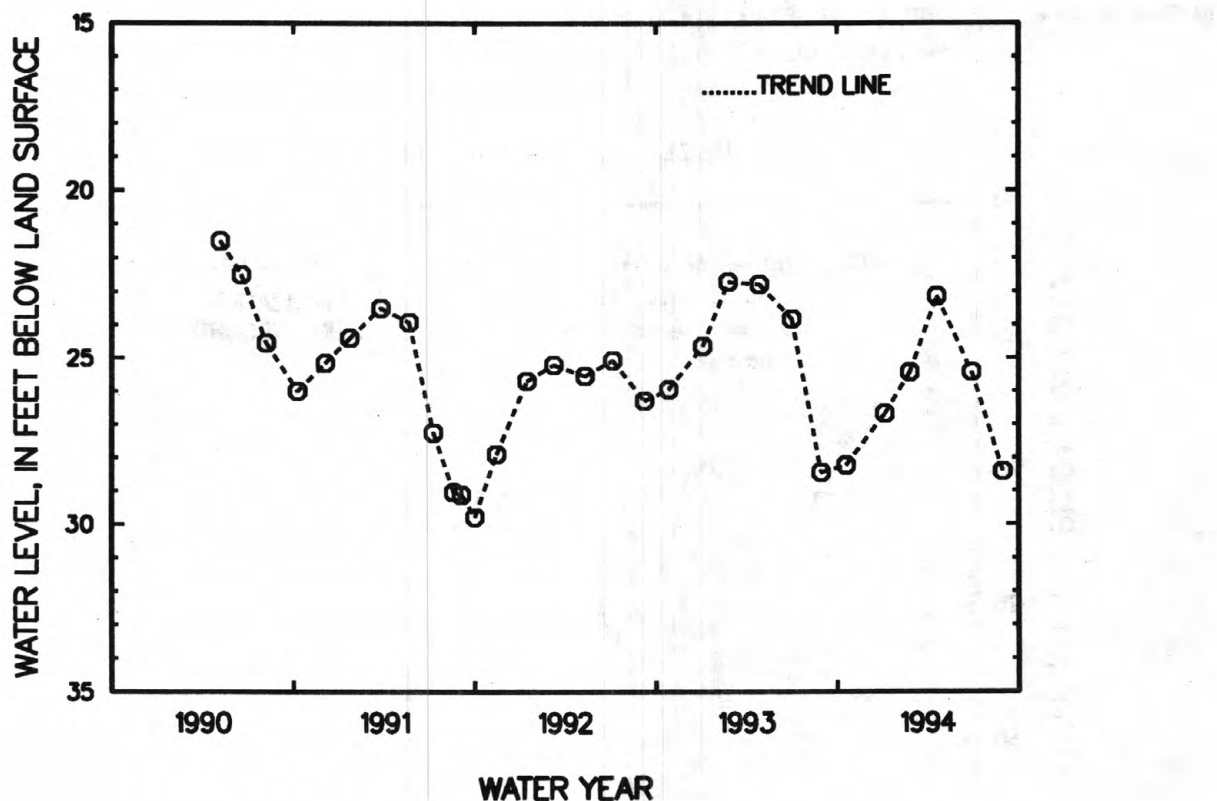
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.50 ft below land-surface datum, May 7, 1990; lowest measured, 29.78 ft below land-surface datum, Oct. 2, 1991.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	28.23	JAN 05	26.68	FEB 24	25.43	APR 19	23.15	JUN 29	25.42	AUG 29	28.41
WATER YEAR 1994		HIGHEST	23.15	APR 19, 1994		LOWEST	28.41	AUG 29, 1994			



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374314075401404. Local number, 65K 61 SOW 183C

LOCATION.--Lat 37°43'14", long 75°40'14", Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 82 ft, diameter 2 in. from 82 to 134 ft, depth 134 ft, screened 124 to 134 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Aug. 6, 1990, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.20 ft below land-surface datum, May 7, 1990; lowest recorded, 26.70 ft below land-surface datum, Sept. 25, 1991.

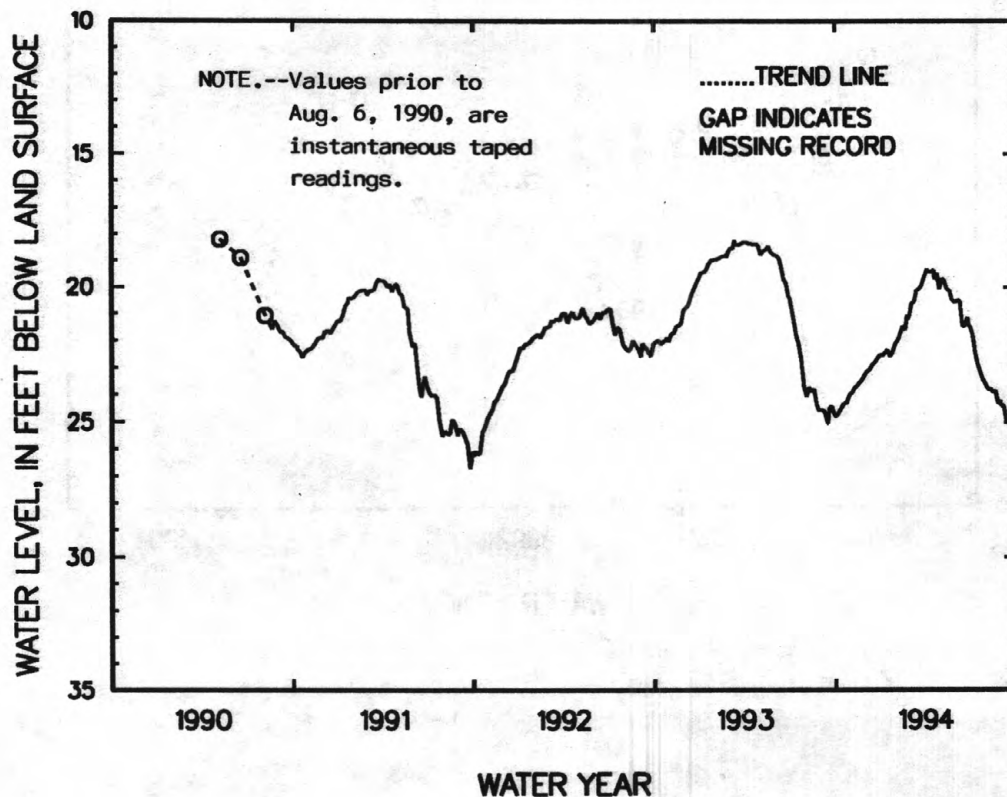
WATER LEVEL IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.75	23.90	23.12	22.55	21.99	20.60	19.33	19.67	20.49	21.74	23.80	24.38
10	24.60	23.73	23.07	22.45	21.73	20.45	19.43	19.78	20.56	22.40	23.78	24.88
15	24.44	23.65	22.88	22.34	21.46	20.10	19.40	20.09	21.48	22.85	23.90	25.00
20	24.32	23.52	22.81	22.57	21.60	20.08	19.69	20.11	21.46	23.13	23.86	25.25
25	24.26	23.43	22.68	22.43	21.18	19.92	19.48	20.49	21.14	23.41	24.33	25.11
EOM	23.98	23.25	22.52	22.10	21.10	19.58	20.07	20.58	21.46	23.60	24.40	25.34

WATER YEAR 1994      HIGHEST INSTANTANEOUS      19.33      APR 05, 13, 1994

LOWEST INSTANTANEOUS      25.34      SEP 30, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

51

## ACCOMACK COUNTY

374314075401405. Local number, 65K 62 SOW 183D.

LOCATION.--Lat 37°43'14", long 75°40'14", Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 15 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

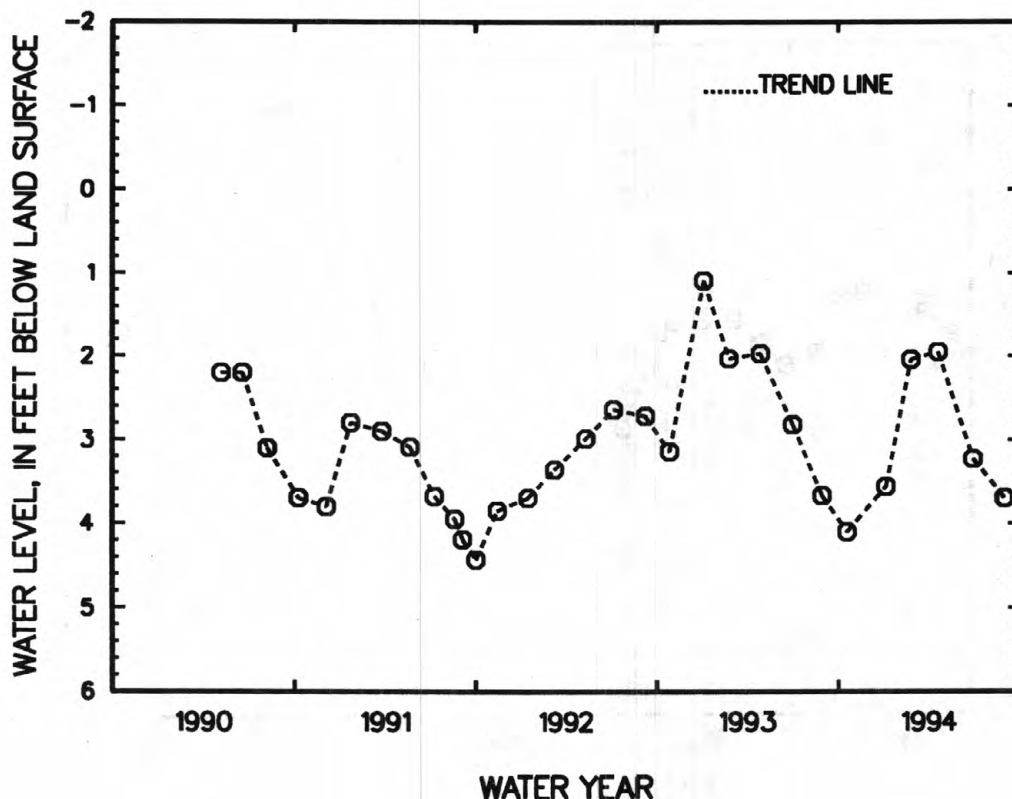
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.09 ft below land-surface datum, Jan. 4, 1993; lowest measured, 4.43 ft below land-surface datum, Oct. 2, 1991.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	4.10	JAN 05	3.56	FEB 24	2.04	APR 19	1.95	JUN 29	3.23	AUG 29	3.70
WATER YEAR 1994		HIGHEST	1.95	APR 19, 1994	LOWEST	4.10	OCT 19, 1993				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374320075380501. Local number, 66K 2 SOW 101C.

LOCATION.--Lat 37°43'19", long 75°36'54", Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 292 ft, screened 282 to 292 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Mar. 1, 1988; 0.6 ft thereafter.

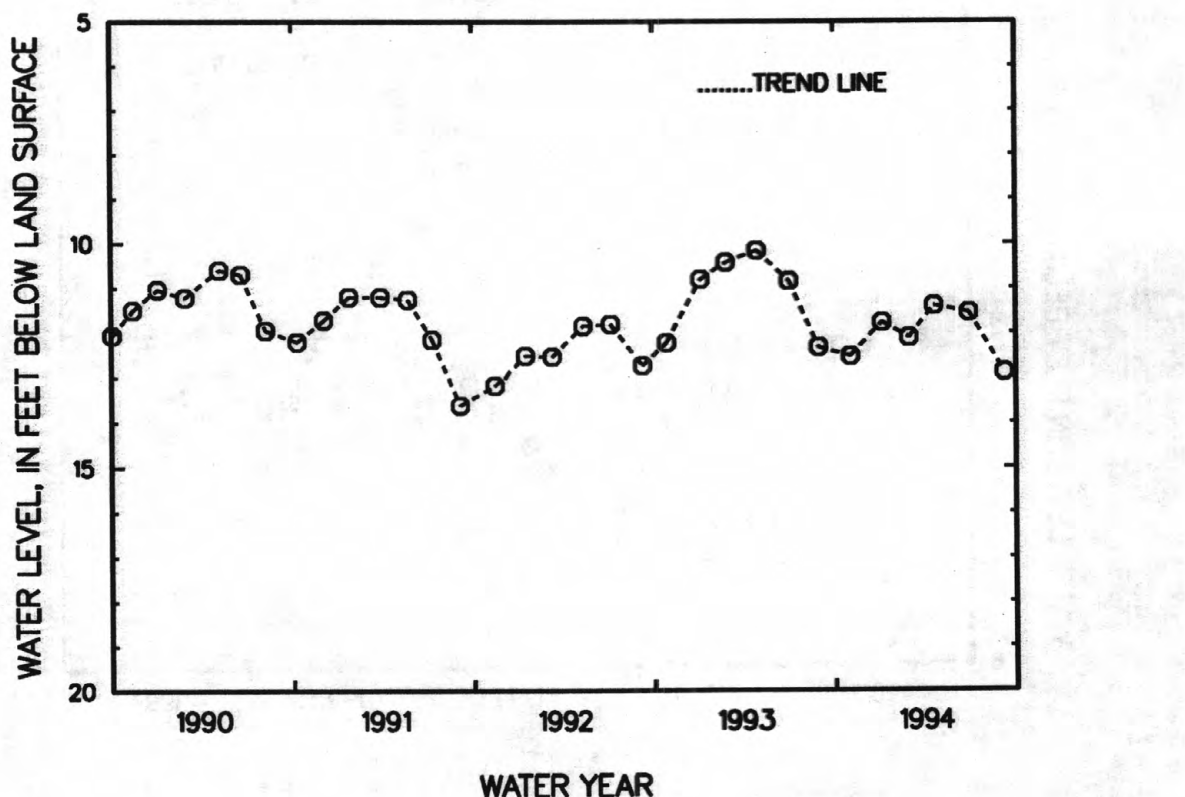
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.57 ft below land-surface datum, Apr. 25, 1984; lowest measured, 17.30 ft below land-surface datum, Aug. 5, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	12.52	JAN 05	11.77	FEB 28	12.11	APR 19	11.40	JUN 28	11.55	SEP 06	12.88
WATER YEAR 1994		HIGHEST	11.40	APR 19, 1994	LOWEST	12.88	SEP 06, 1994				





## GROUND-WATER LEVELS

53

## ACCOMACK COUNTY

374320075365602. Local number, 66K 3 SOW 101B.

LOCATION.--Lat 37°43'20", long 75°38'05", Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above sea level, from topographic map. Measuring point: Top of casing, 0.36 ft above land-surface datum prior to Mar. 1, 1988; 0.65 ft thereafter.

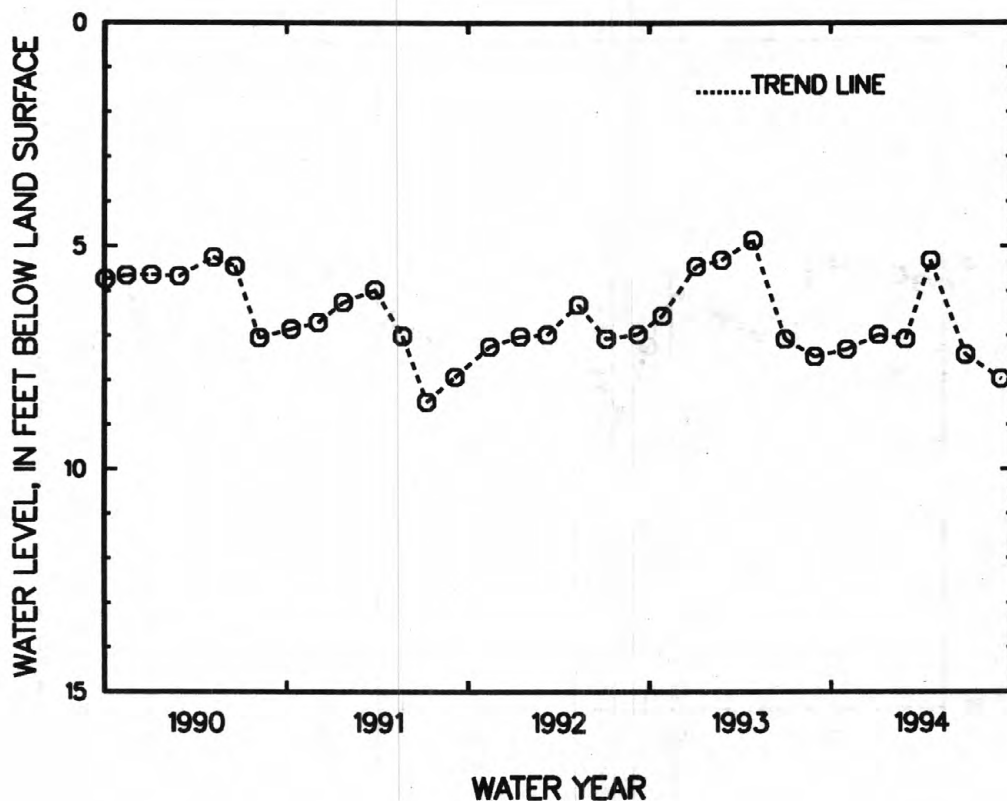
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.04 ft below land-surface datum, Apr. 25, 1984; lowest measured, 9.84 ft below land-surface datum, Aug. 5, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	7.31	JAN 05	6.98	FEB 28	7.08	APR 19	5.32	JUN 28	7.43	SEP 06	7.97
WATER YEAR 1994		HIGHEST	5.32	APR 19, 1994	LOWEST	7.97	SEP 06, 1994				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

374320075365603. Local number, 66K 4 SOW 101A.

LOCATION.--Lat 37°43'20", long 75°36'56", Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 152 ft, screened 142 to 152 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Mar. 1, 1988; 0.65 ft Mar. 1, 1988, to June 20, 1989; at land-surface datum June 21, 1989, to Jan. 3, 1990; 0.85 ft above land-surface datum thereafter.

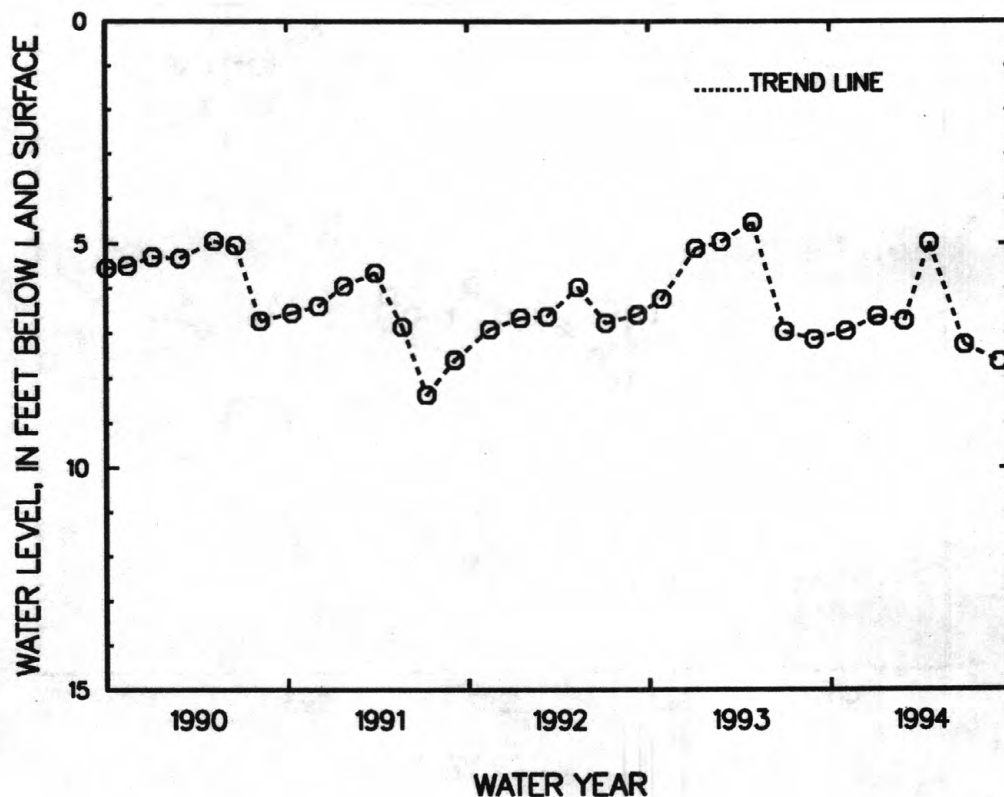
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.99 ft below land-surface datum, Apr. 25, 1984; lowest measured, 9.93 ft below land-surface datum, Aug. 5, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	6.95	JAN 05	6.62	FEB 28	6.72	APR 19	4.98	JUN 28	7.25	SEP 06	7.63
WATER YEAR 1994		HIGHEST	4.98	APR 19, 1994	LOWEST	7.63	SEP 06, 1994				



## GROUND-WATER LEVELS

55

## ACCOMACK COUNTY

375225075321701. Local number, 66L 1 SOW 107C.

LOCATION.--Lat 37°52'25", long 75°32'17", Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 305 ft, screened 295 to 305 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.33 ft above land-surface datum prior to Mar. 1, 1988; 0.4 ft thereafter.

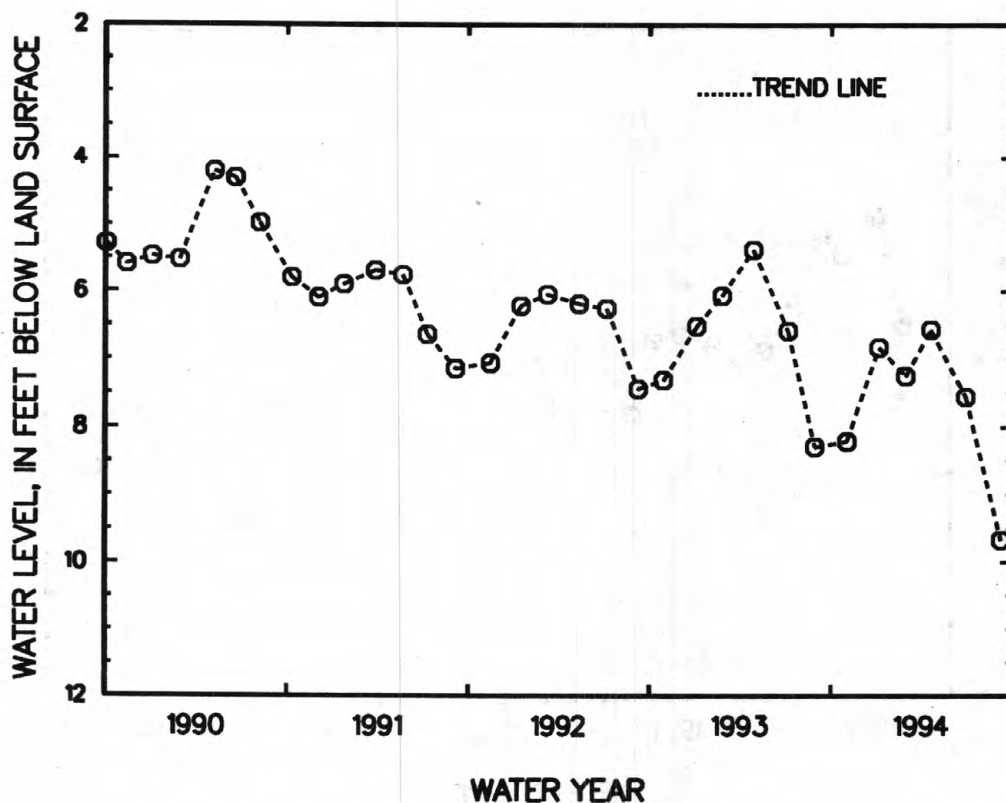
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.06 ft below land-surface datum, Jan. 4, 1984; lowest measured, 9.67 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	8.21	JAN 05	6.83	FEB 28	7.25	APR 19	6.57	JUN 29	7.56	SEP 06	9.67
WATER YEAR 1994		HIGHEST	6.57	APR 19, 1994	LOWEST	9.67	SEP 06, 1994				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375225075321702. Local number, 66L 2 SOW 107A.

LOCATION.--Lat 37°52'25", long 75°32'17", Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 0.23 ft above land-surface datum prior to Mar. 1, 1988; 0.6 ft thereafter.

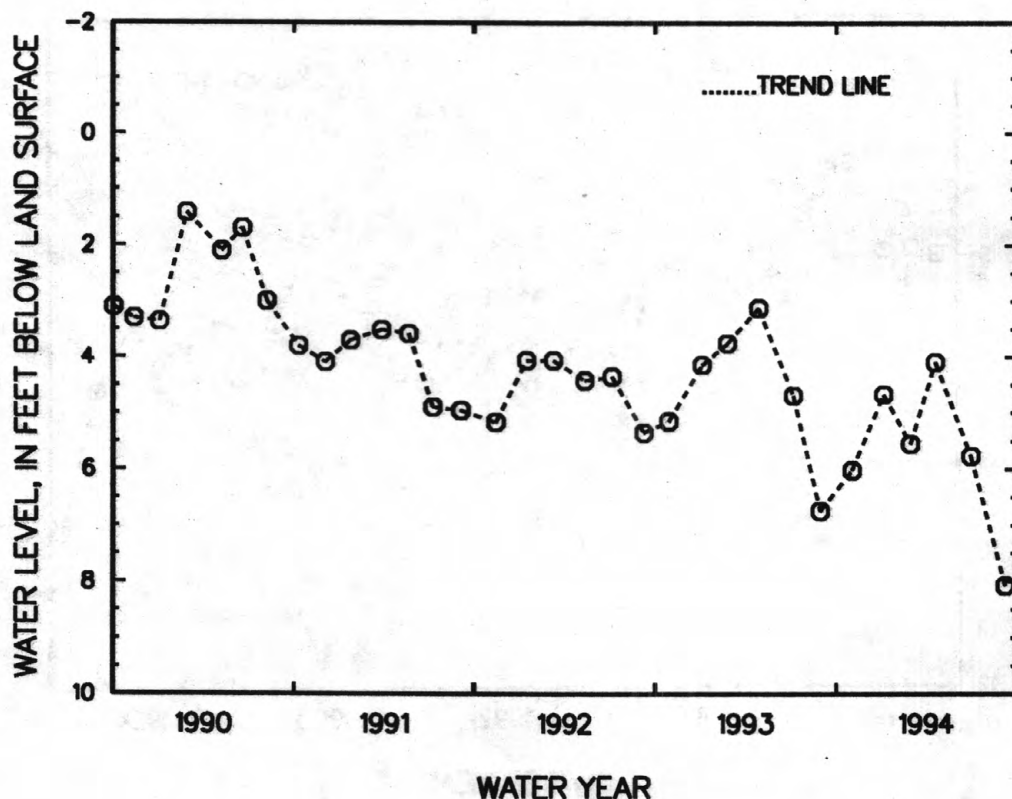
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.21 ft below land-surface datum, Apr. 25, 1984; lowest measured, 8.07 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	6.02	JAN 05	4.67	FEB 28	5.55	APR 19	4.09	JUN 29	5.77	SEP 06	8.07
WATER YEAR 1994		HIGHEST	4.09	APR 19, 1994	LOWEST	8.07	SEP 06, 1994				





## ACCOMACK COUNTY

375225075321703. Local number, 66L 3 SOW 107B.

LOCATION.--Lat 37°52'25", long 75°32'17", Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 206 ft, screened 191 to 201 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum prior to June 19, 1990; 0.3 ft thereafter.

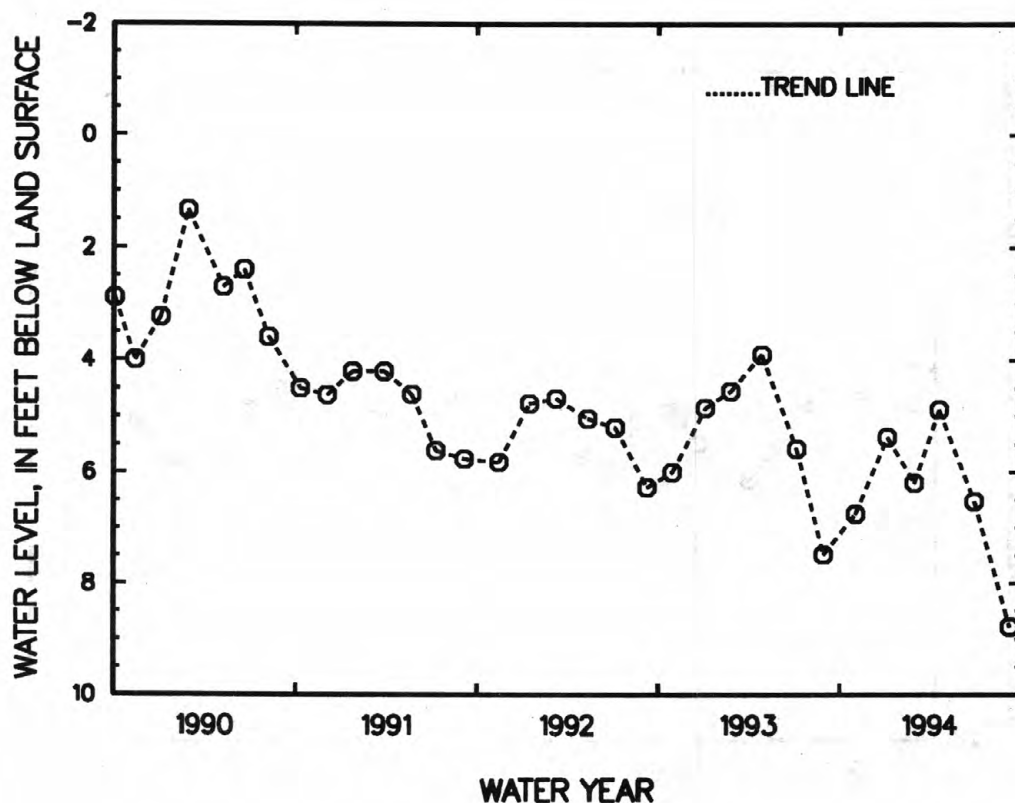
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.64 ft below land-surface datum, Apr. 25, 1984; lowest measured, 8.78 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	6.75	JAN 05	5.37	FEB 28	6.19	APR 19	4.88	JUN 29	6.52	SEP 06	8.78
WATER YEAR 1994		HIGHEST	4.88	APR 19, 1994	LOWEST	8.78	SEP 06, 1994				



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375723075344401. Local number, 66M 16 SOW 110A.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above sea level, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum prior to Feb. 29, 1988; 0.65 ft Mar. 1, 1988, to Oct. 3, 1989; at land surface datum Oct. 4, 1989, to Jan. 3, 1990; 1.0 ft above land-surface datum Jan. 4, 1990, to Oct. 10, 1990; 0.70 ft thereafter.

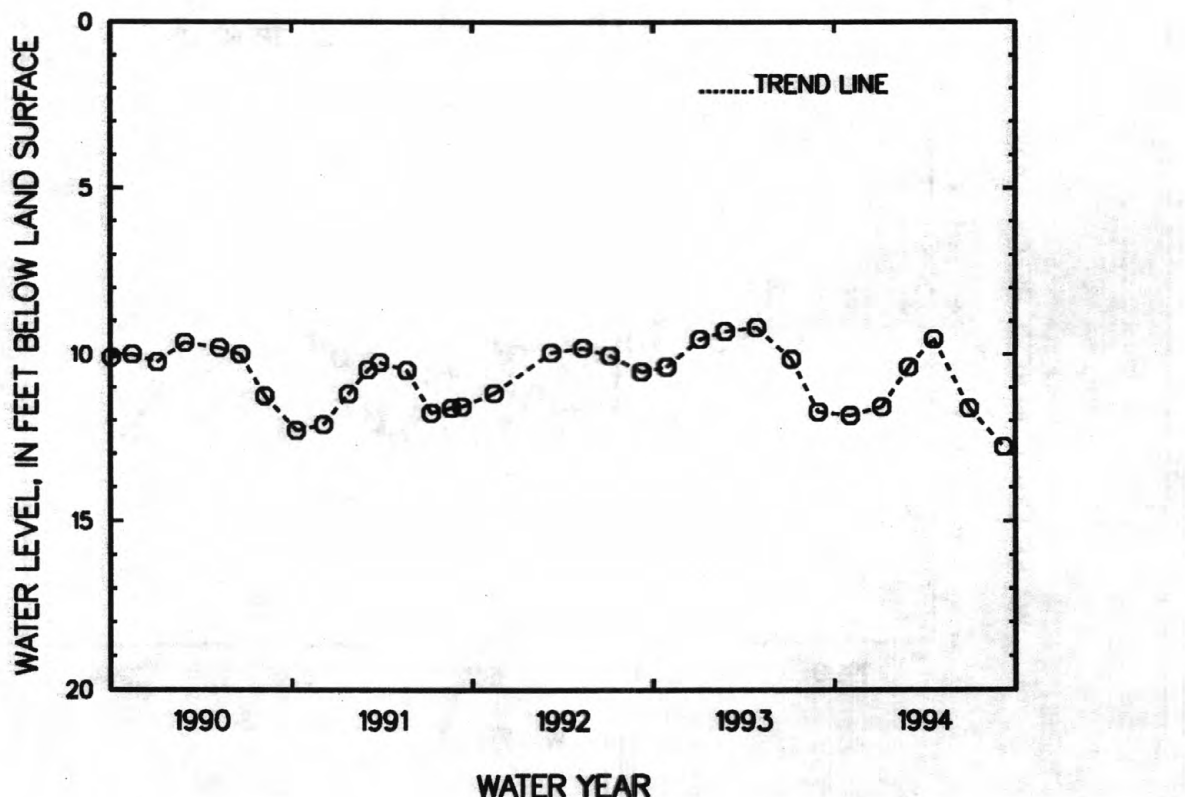
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.28 ft below land-surface datum, Feb. 19, 1986; lowest measured, 12.78 ft below land-surface datum, Sept. 6, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	11.84	JAN 05	11.58	FEB 28	10.38	APR 19	9.53	JUN 29	11.62	SEP 06	12.78
WATER YEAR 1994		HIGHEST	9.53	APR 19, 1994	LOWEST	12.78	SEP 06, 1994				



## GROUND-WATER LEVELS

59

## ACCOMACK COUNTY

375723075344402. Local number, 66M 17 SOW 110B.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 178 ft, screened 168 to 178 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above sea level, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum prior to Feb. 29, 1988; 0.75 ft thereafter.

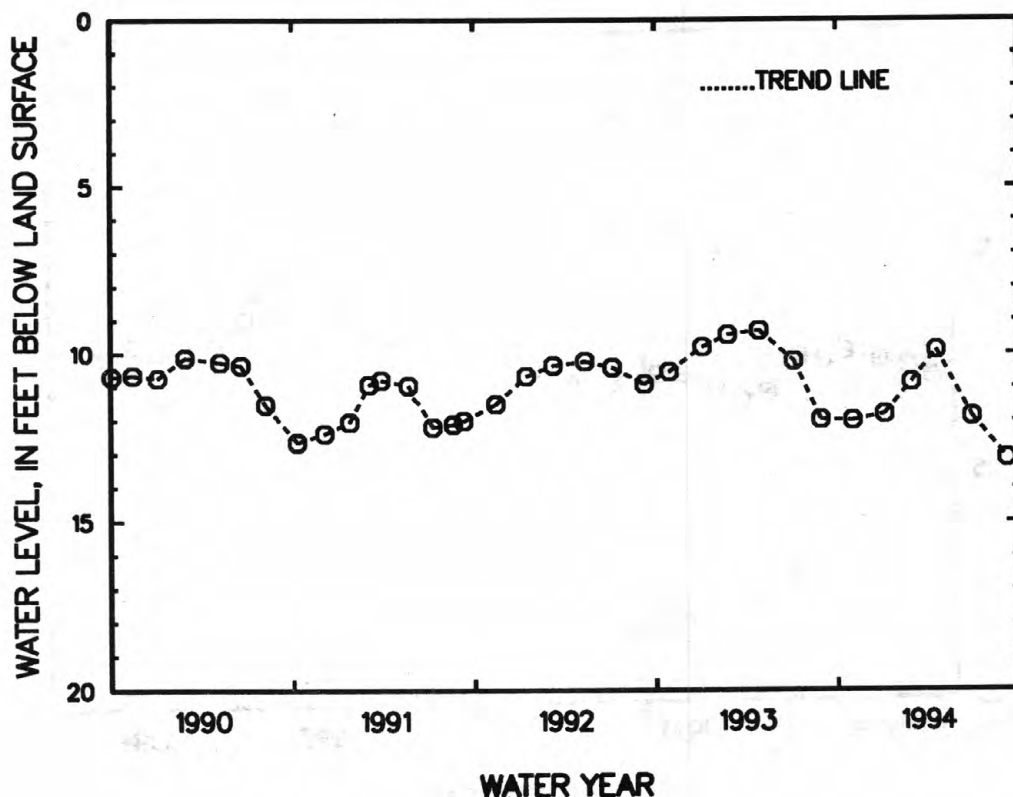
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.76 ft below land-surface datum, Apr. 1, 1980; lowest measured, 13.12 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	12.00	JAN 05	11.81	FEB 28	10.85	APR 19	9.90	JUN 29	11.88	SEP 06	13.12
WATER YEAR 1994		HIGHEST	9.90	APR 19, 1994		LOWEST	13.12	SEP 06, 1994			



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375723075344403. Local number, 66M 18 SOW 110C.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 240 ft, screened 230 to 240 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above sea level, from topographic map. Measuring point: Top of casing, 0.65 ft above land-surface datum.

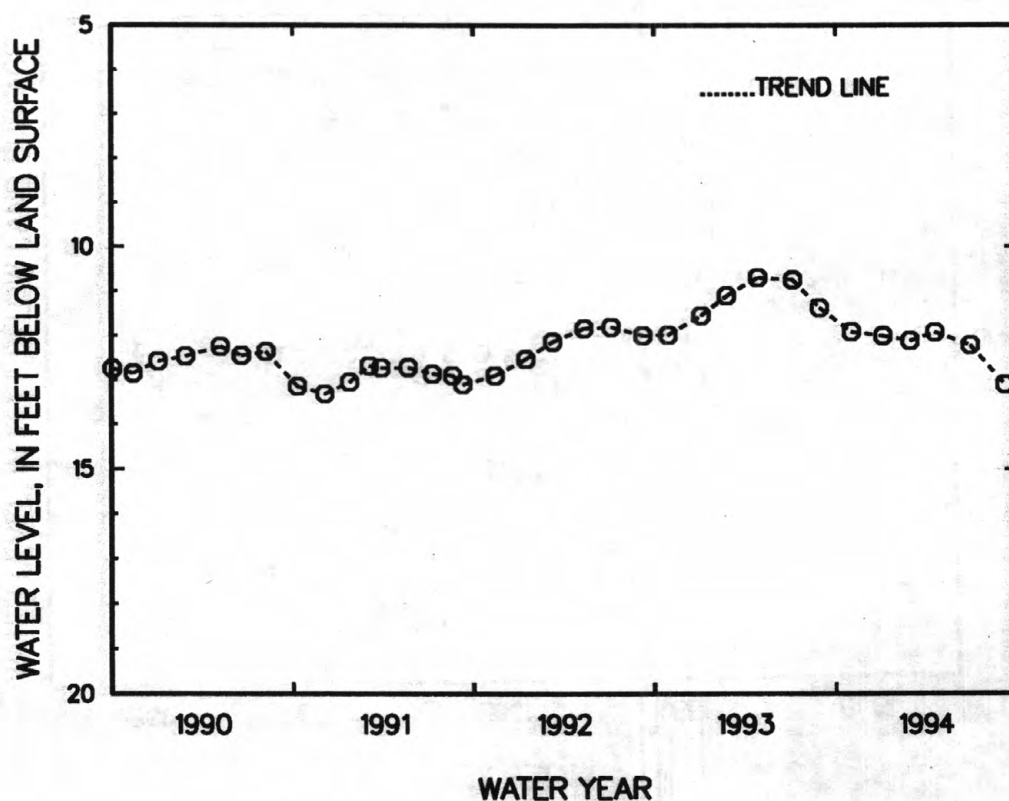
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.43 ft below land-surface datum, Aug. 12, 1981; lowest measured, 13.35 ft below land-surface datum, Jan. 10, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	11.92	JAN 05	12.01	FEB 28	12.12	APR 19	11.93	JUN 29	12.22	SEP 06	13.10
WATER YEAR 1994		HIGHEST	11.92	NOV 02, 1993	LOWEST	13.10	SEP 06, 1994				



## GROUND-WATER LEVELS

61

## ACCOMACK COUNTY

375723075344404. Local number, 66M 19 SOW 110S.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 36 ft, screened 26 to 36 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Feb. 29, 1988; 0.35 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

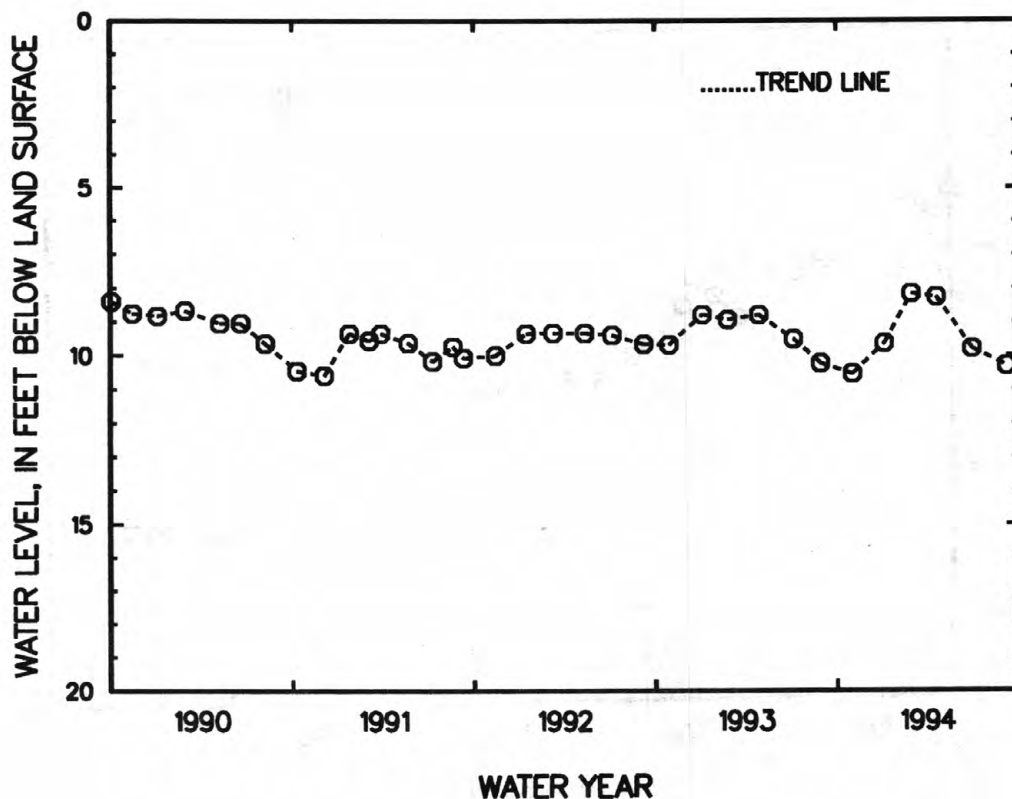
PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.06 ft below land-surface datum, Mar. 17, 1987; lowest measured, 11.34 ft below land-surface datum, Nov. 6, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	10.54	JAN 05	9.64	FEB 28	8.17	APR 19	8.27	JUN 29	9.80	SEP 06	10.30

WATER YEAR 1994      HIGHEST    8.17    FEB 28, 1994      LOWEST    10.54    NOV 02, 1993





## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375610075361801. Local number, 66M 23 SOW 181A.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 1,300 ft, screened 1,290 to 1,300 ft.

INSTRUMENTATION.--Bimonthly measurement with manometer or chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional pumpage.

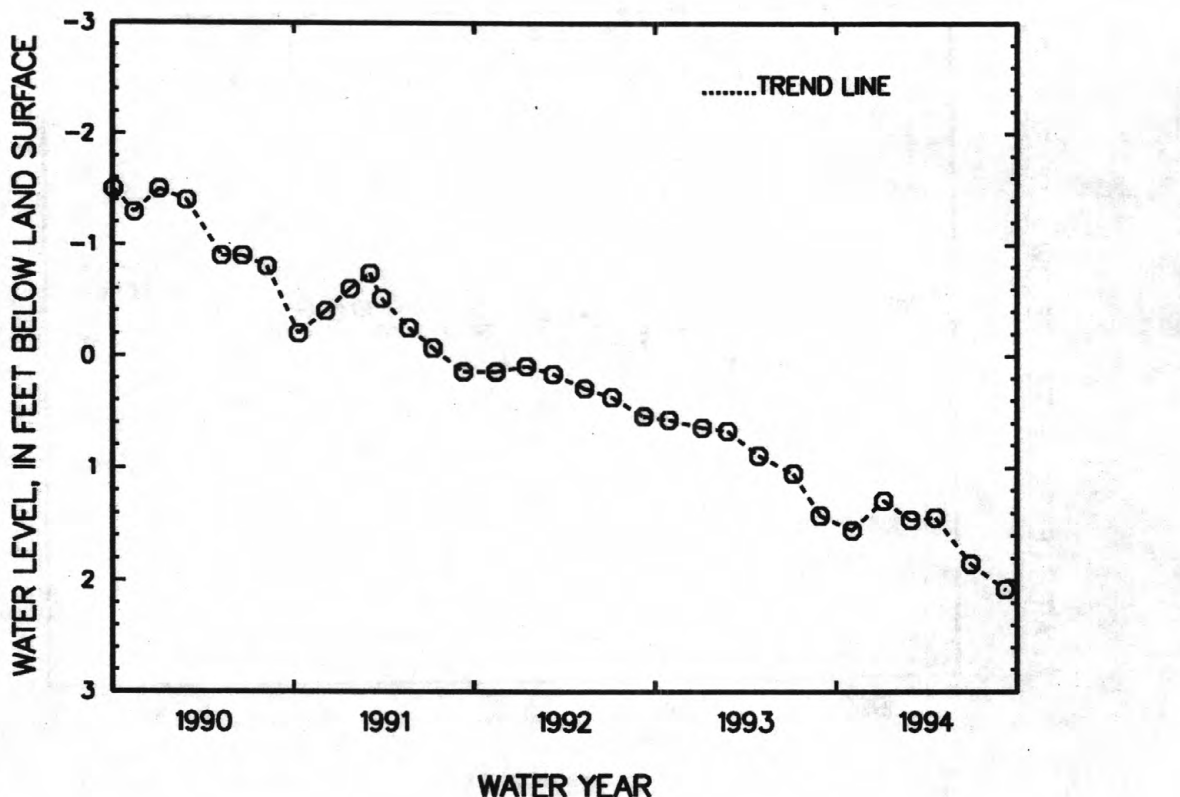
PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.38 ft above land-surface datum, Jan. 26, 1988; lowest measured, 2.08 ft below land-surface datum, Sept. 6, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	1.55	JAN 05	1.29	FEB 28	1.46	APR 19	1.44	JUN 29	1.85	SEP 06	2.08

WATER YEAR 1994      HIGHEST    1.29    JAN 05, 1994      LOWEST    2.08    SEP 06, 1994



## GROUND-WATER LEVELS

63

## ACCOMACK COUNTY

375610075361802. Local number, 66M 24 SOW 181B.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--St. Mary-Choptank aquifer of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 508 ft, screened 498 to 508 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

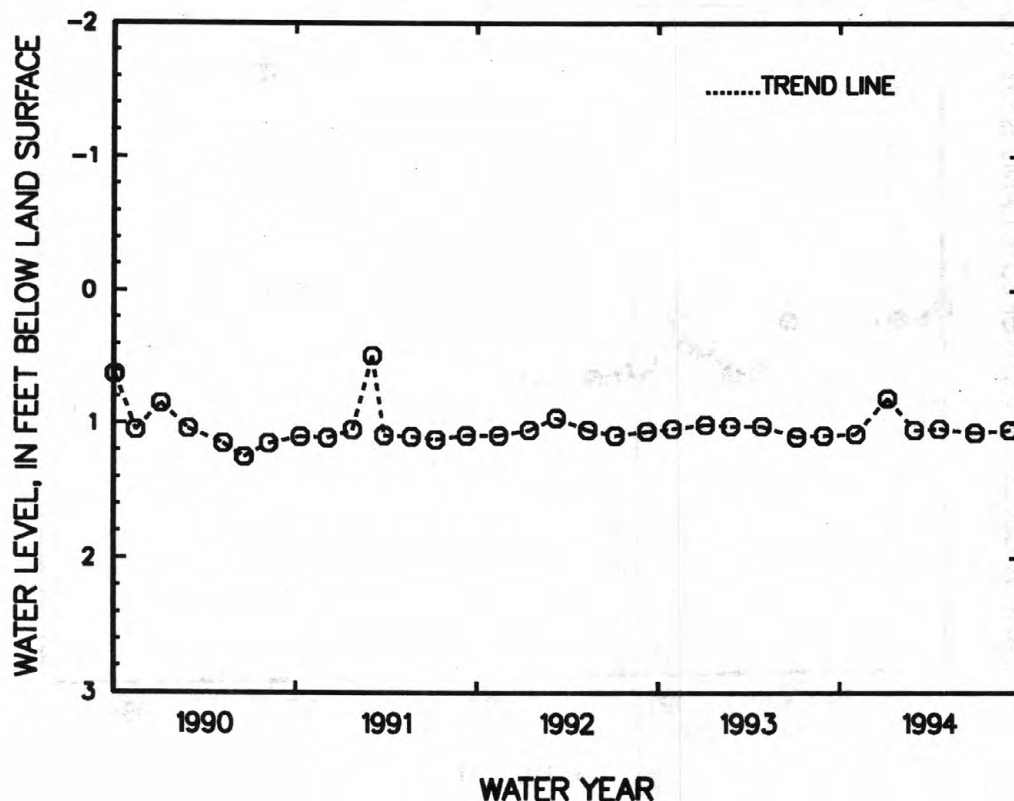
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land-surface datum, Mar. 7, 1989; lowest measured, 1.25 ft below land-surface datum, June 19, 1990.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	1.08	JAN 05	0.81	FEB 28	1.05	APR 19	1.04	JUN 29	1.07	SEP 06	1.05
WATER YEAR 1994      HIGHEST   0.81   JAN 05, 1994      LOWEST   1.08   NOV 02, 1993											



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375610075361803. Local number, 66M 25 SOW 181C.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 340 ft, screened 330 to 340 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.95 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

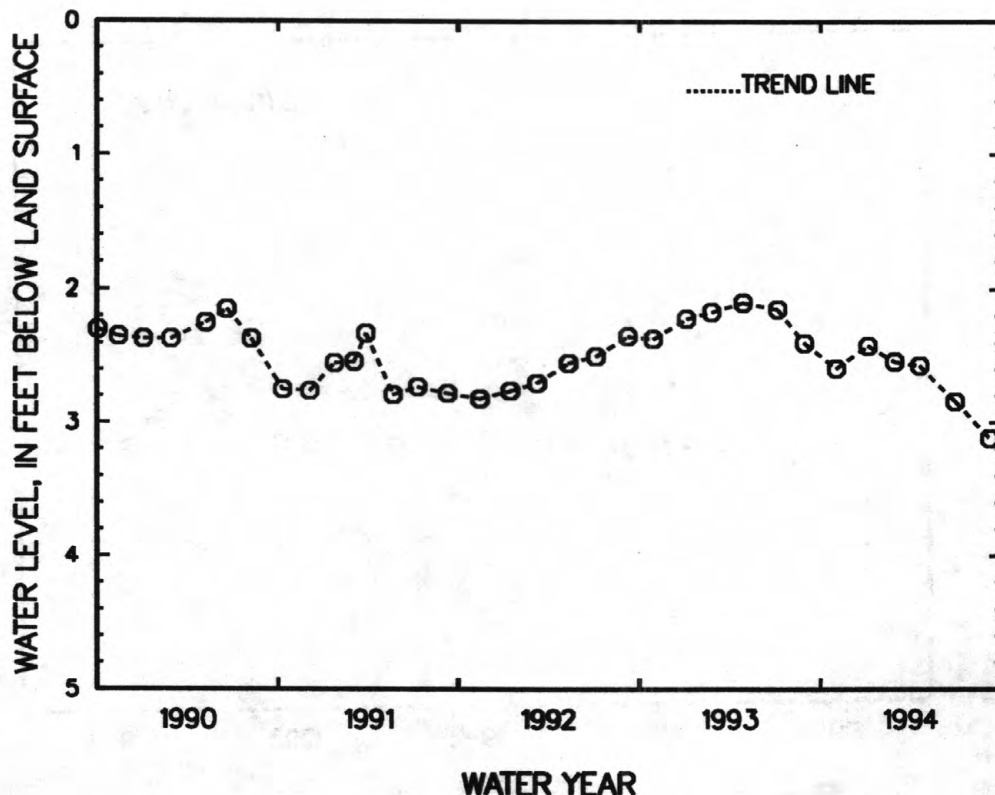
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.10 ft below land-surface datum, Apr. 28, 1993; lowest measured, 3.12 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	2.59	JAN 05	2.42	FEB 28	2.54	APR 19	2.57	JUN 29	2.84	SEP 06	3.12

WATER YEAR 1994      HIGHEST    2.42    JAN 05, 1994      LOWEST    3.12    SEP 06, 1994



## GROUND-WATER LEVELS

65

## ACCOMACK COUNTY

375610075361804. Local number, 66M 26 SOW 181D.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 230 ft, screened 220 to 230 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

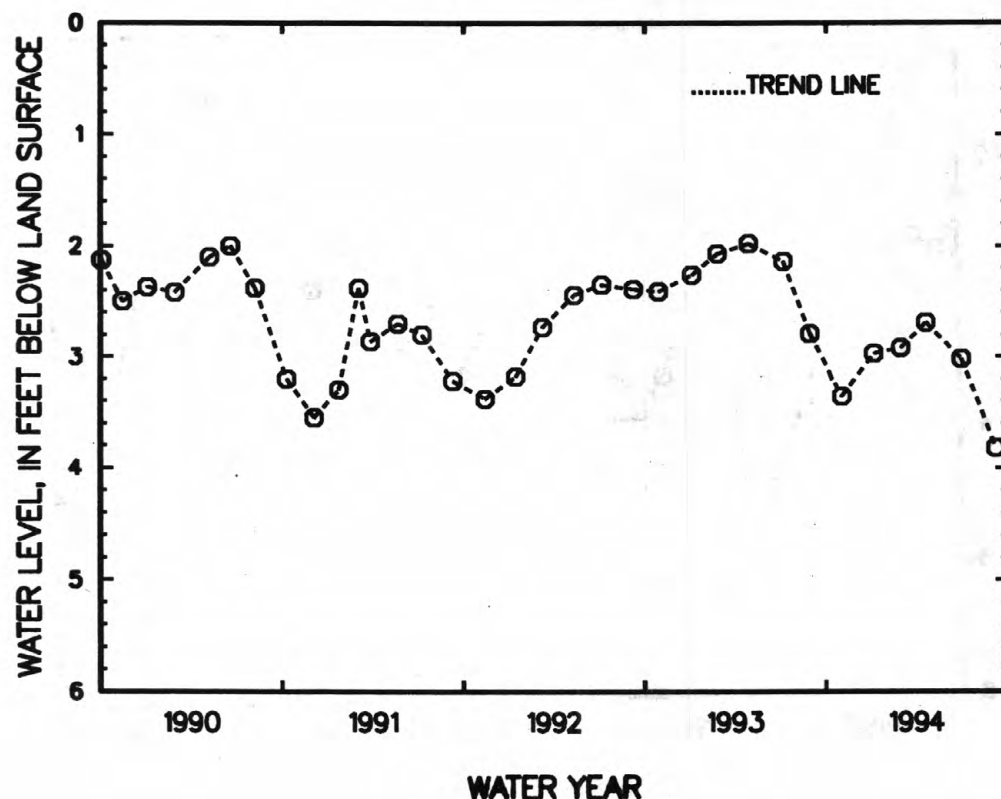
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.93 ft below land-surface datum, Apr. 28, 1993; lowest measured, 3.82 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	3.36	JAN 05	2.97	FEB 28	2.92	APR 19	2.69	JUN 29	3.02	SEP 06	3.82

WATER YEAR 1994      HIGHEST    2.69    APR 19, 1994      LOWEST    3.82    SEP 06, 1994



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375610075361805. Local number, 66M 27 SOW 181E.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

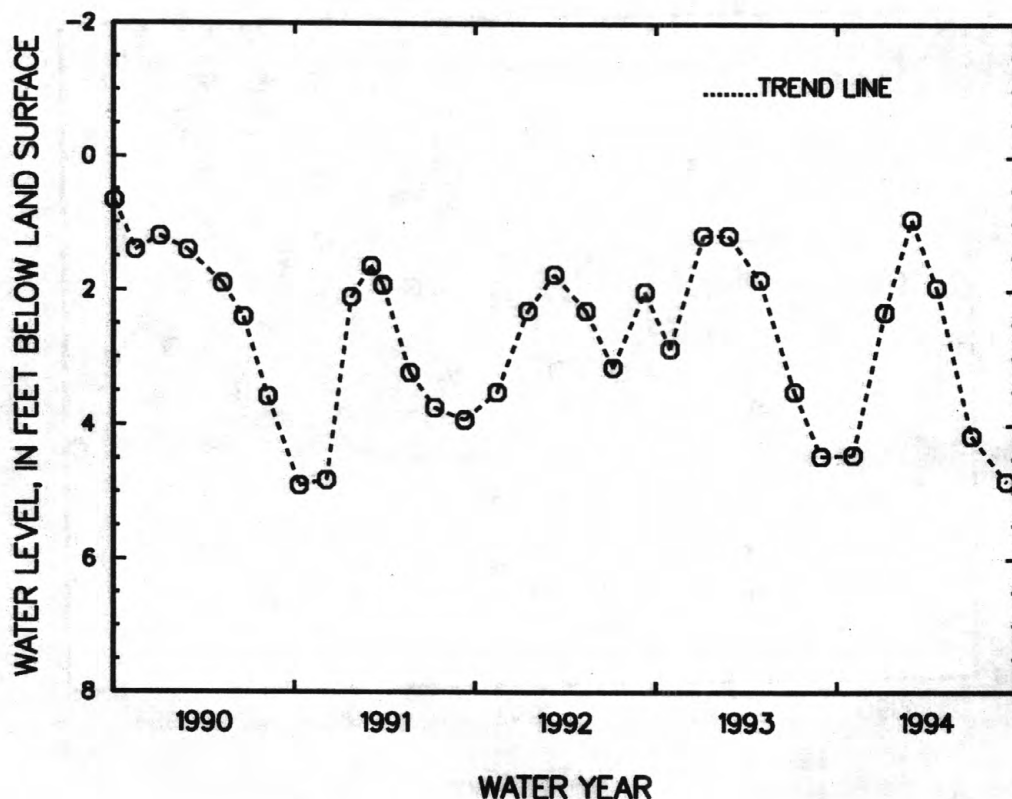
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.50 ft below land-surface datum, Aug. 8, 1989; lowest measured, 4.90 ft below land-surface datum, Oct. 10, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	4.44	JAN 05	2.32	FEB 28	0.94	APR 19	1.95	JUN 29	4.16	SEP 06	4.84
WATER YEAR 1994		HIGHEST	0.94	FEB 28, 1994	LOWEST	4.84	SEP 06, 1994				





## GROUND-WATER LEVELS

67

## ACCOMACK COUNTY

375622075280101. Local number, 67M 2.

LOCATION.--Lat 37°56'23", long 75°28'02", Hydrologic Unit 02060010, well B31 Wallops Flight Center, 5.0 mi west of Chincoteague. Owner: National Aeronautics and Space Administration (formerly U.S. Naval Air Station, Wallops Island).

AQUIFER.--Columbia Group sand of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 60 ft, screen depth unknown.

INSTRUMENTATION.--Monthly measurement with chalked tape by National Aeronautics and Space Administration personnel.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.38 ft above land-surface datum.

REMARKS.--Records provided by the National Aeronautics and Space Administration. Water levels for water years 1963 to 1974 should be 4.71 ft lower than previously published.

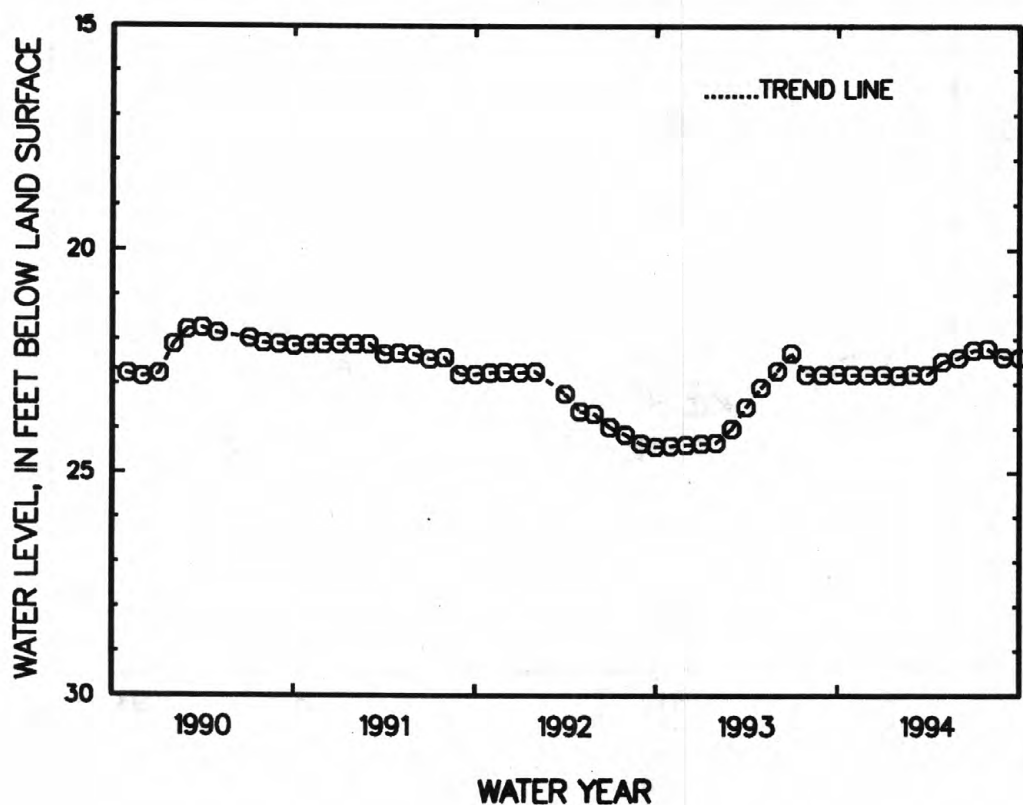
PERIOD OF RECORD.--May 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.82 ft below land-surface datum, July 2, 1979; lowest measured, 27.02 ft below land-surface datum, Jan. 20, 1967.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	22.78	DEC 31	22.79	FEB 28	22.77	APR 29	22.50	JUN 30	22.24	AUG 31	22.40
NOV 30	22.78	JAN 31	22.80	MAR 31	22.78	MAY 31	22.41	JUL 28	22.21	SEP 30	22.41

WATER YEAR 1994      HIGHEST    22.21    JUL 28, 1994      LOWEST    22.80    JAN 31, 1994



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375635075271501. Local number, 67M 10 SOW 115A.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 52 ft, screened 32 to 52 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above sea level, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum prior to Feb. 28, 1988; 1.7 ft thereafter.

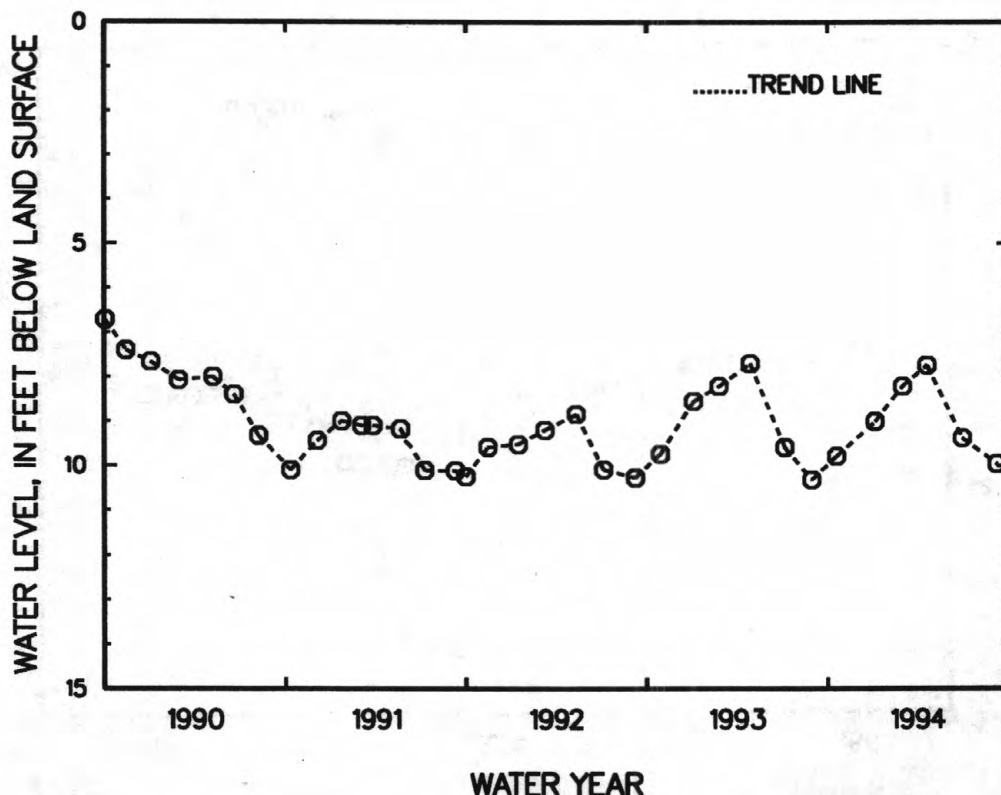
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.72 ft below land-surface datum, Oct. 3, 1989; lowest measured, 10.32 ft below land-surface datum, Aug. 30, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	9.79	JAN 05	9.01	MAR 01	8.21	APR 19	7.74	JUN 29	9.38	SEP 06	9.96
WATER YEAR 1994		HIGHEST	7.74	APR 19, 1994		LOWEST	9.96	SEP 06, 1994			



## GROUND-WATER LEVELS

69

## ACCOMACK COUNTY

375635075271502. Local number, 67M 11 SOW 115B.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 138 ft, screened 118 to 138 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 14 ft above sea level, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum prior to Feb. 29, 1988; 1.9 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

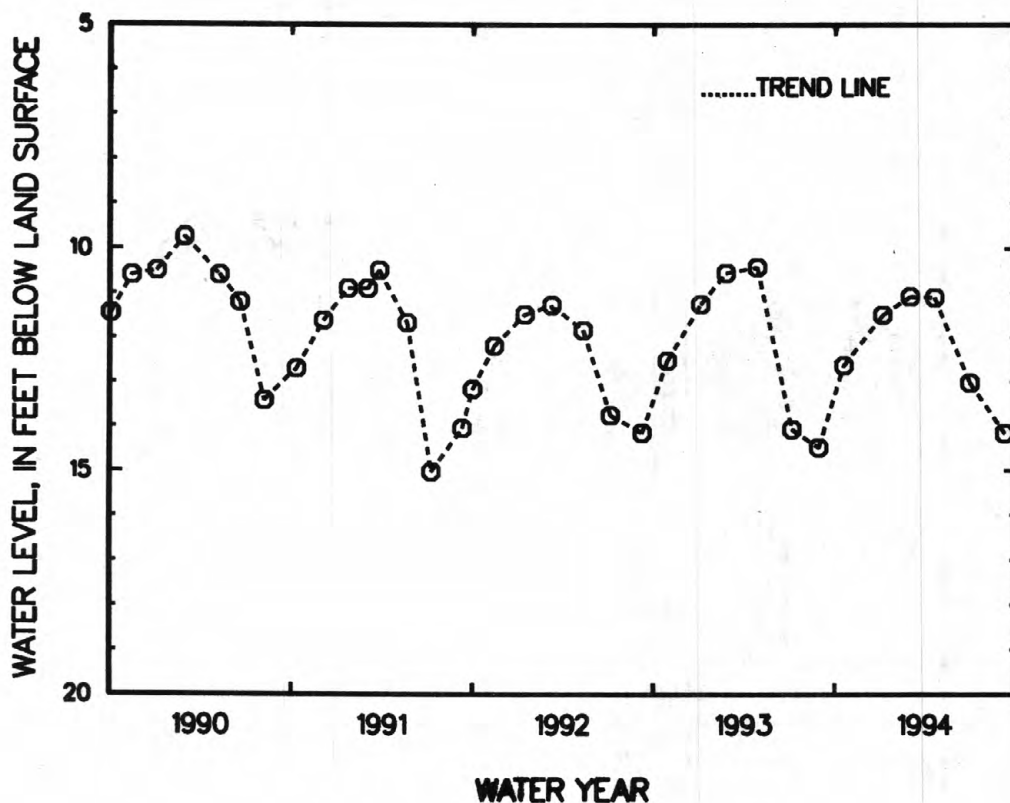
PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.70 ft below land-surface datum, May 6, 1982; lowest measured, 15.45 ft below land-surface datum, Aug. 5, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	12.63	JAN 05	11.49	MAR 01	11.08	APR 19	11.10	JUN 29	13.02	SEP 06	14.16

WATER YEAR 1994      HIGHEST    11.08    MAR 01, 1994      LOWEST    14.16    SEP 06, 1994



## GROUND-WATER LEVELS

## ACCOMACK COUNTY

375635075271503. Local number, 67M 12 SOW 115C.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 222 ft, screened 202 to 222 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Nov. 15, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 13 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.35 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water levels affected by local pumpage.

PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

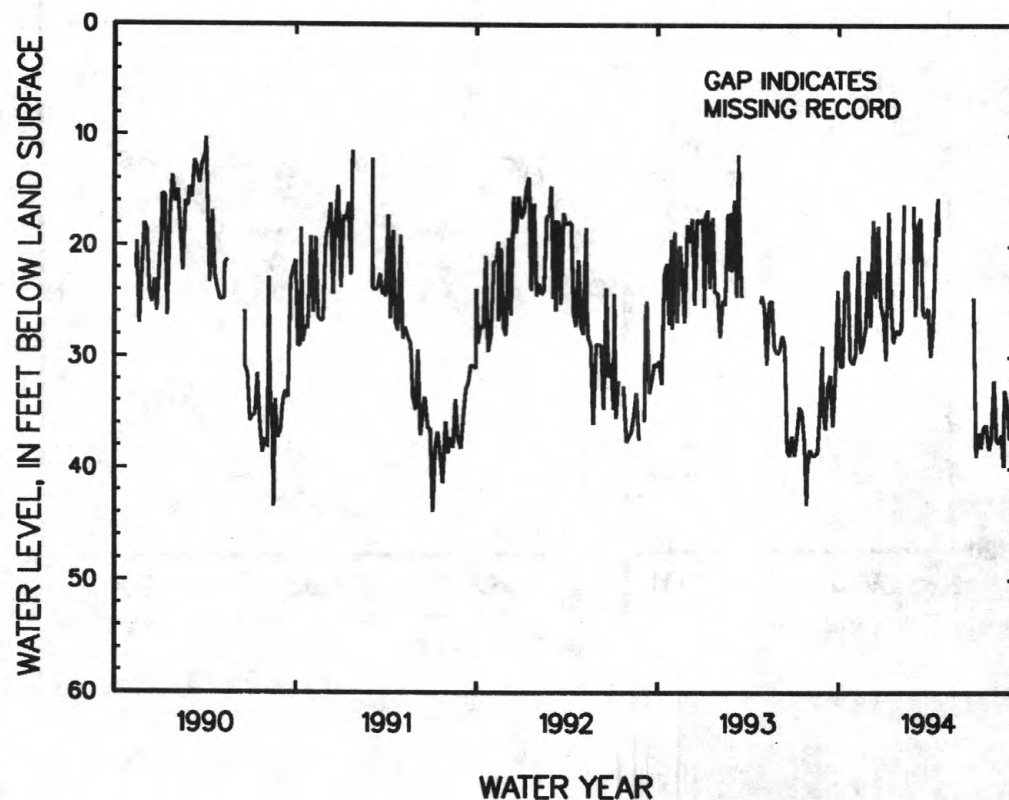
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.28 ft below land-surface datum, Apr. 2, 1990; lowest recorded, 51.40 ft below land-surface datum, Aug. 17, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.78	29.65	27.22	30.19	27.41	26.20	29.90	---	---	38.90	37.16	---
10	30.81	20.85	17.65	16.88	16.23	18.16	27.29	---	---	36.80	32.08	37.36
15	22.39	29.55	24.65	25.12	---	17.44	18.33	---	---	38.12	37.43	33.75
20	22.33	28.74	18.17	28.67	---	26.04	18.97	---	---	36.39	37.74	33.31
25	30.13	27.33	25.20	27.56	---	26.38	---	---	---	36.05	36.97	32.98
EOM	30.57	22.19	26.47	27.90	---	25.57	---	---	24.63	38.28	32.95	30.26

WATER YEAR 1994      HIGHEST INSTANTANEOUS    13.49    MAR 29, 1994      LOWEST INSTANTANEOUS    39.80    AUG 29, 1994

## DAILY LOW-WATER LEVELS



## ACCOMACK COUNTY

375635075271504. Local number, 67M 13 SOW 115D.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 50 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.6 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 249 ft, screened 229 to 249 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 16 ft above sea level, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum prior to Aug. 8, 1989; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water levels affected by local pumpage.

PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

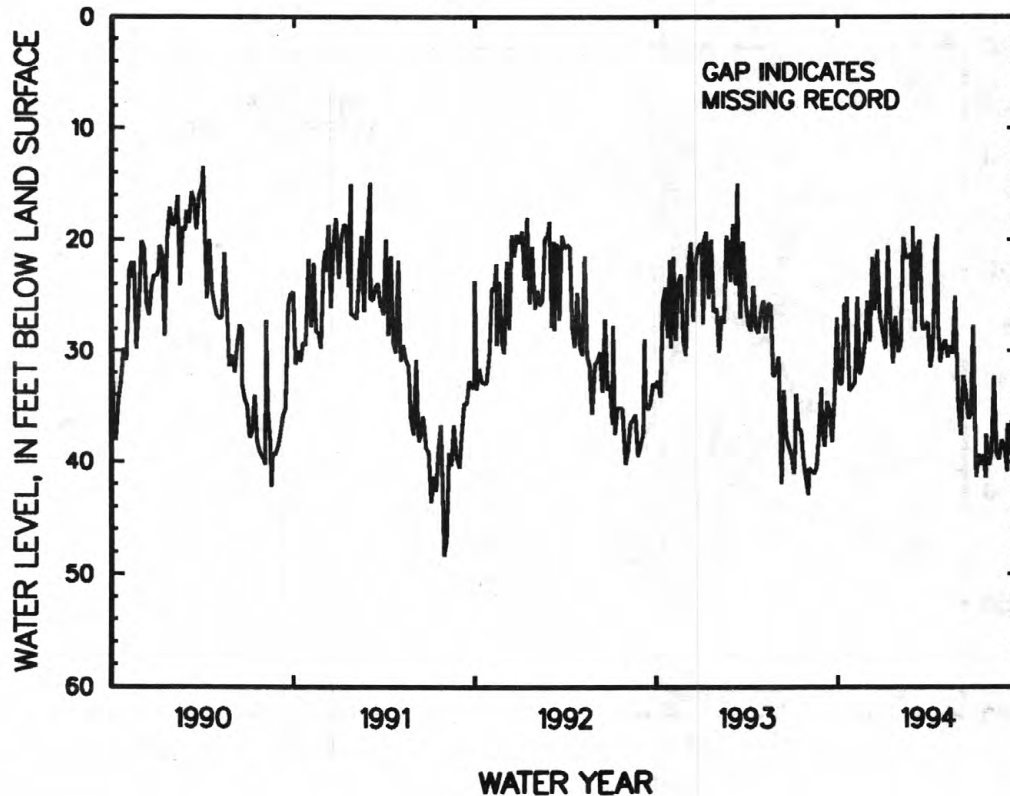
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 13.45 ft below land-surface datum, Apr. 2, 1990; lowest recorded, 52.52 ft below land-surface datum, Aug. 17, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.02	32.88	29.12	29.77	29.30	28.17	31.49	29.03	37.56	41.32	39.13	40.85
10	32.96	25.15	21.65	20.57	19.85	20.86	29.77	30.53	32.25	39.33	32.30	39.37
15	25.70	32.11	26.31	27.04	21.57	20.10	21.05	29.57	33.71	40.28	39.32	36.32
20	25.19	31.05	20.97	31.05	21.74	27.99	27.25	30.24	36.14	39.40	39.78	38.00
25	33.58	29.32	26.89	26.94	21.25	28.03	31.00	25.10	35.77	37.52	38.05	35.54
EOM	33.22	25.53	28.36	30.07	25.78	27.43	29.52	34.73	27.72	40.30	38.72	32.65

WATER YEAR 1994      HIGHEST INSTANTANEOUS 16.99      MAR 29, 1994      LOWEST INSTANTANEOUS 41.42      JUL 24, 1994

## DAILY LOW-WATER LEVELS





375617075273701. Local number. 67M 14 SOW 115E.

LOCATION.--Lat 37°56'17", long 75°27'37", Hydrologic Unit 02060010, 100 ft west of State Highway 175, inside fence of NASA Wallops Flight Center, 2.1 mi northeast of intersection of State Highways 175 and 798, and 2.1 mi east of Wattsville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 280 ft, screened 260 to 280 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 26 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.3 ft above land-surface datum prior to Aug. 8, 1989; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water levels affected by local pumpage.

PERIOD OF RECORD.--February 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

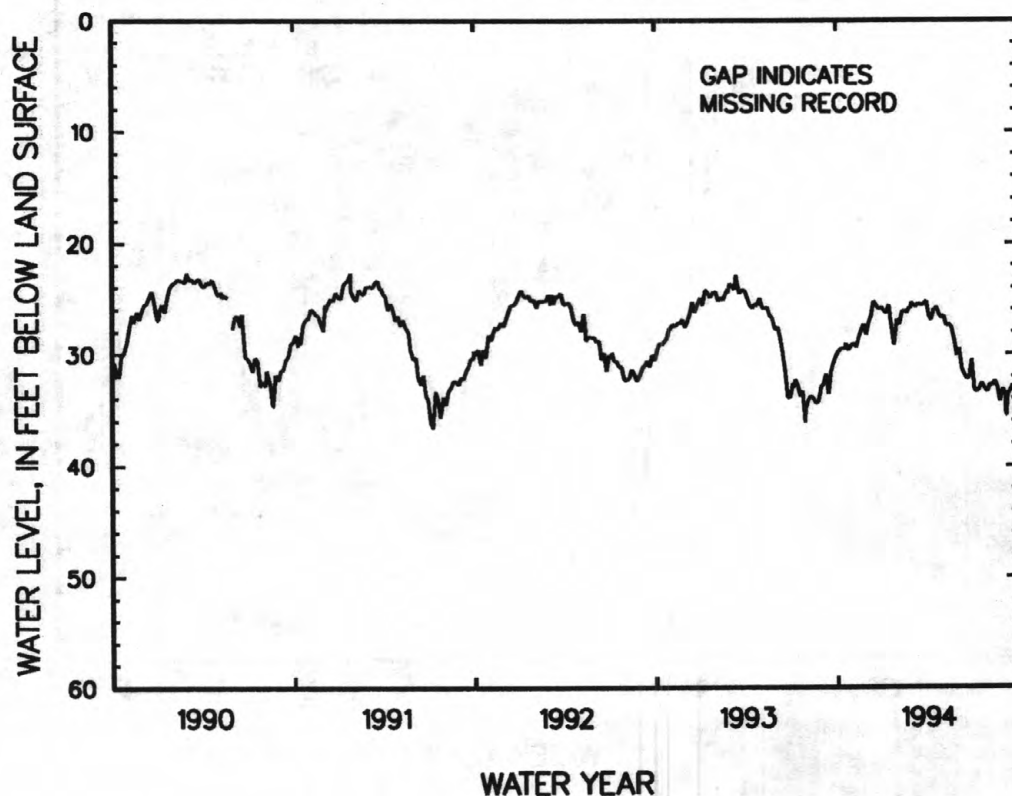
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.45 ft below land-surface datum, June 9, 1982;  
lowest recorded, 42.45 ft below land-surface datum, Aug. 17, 18, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.77	29.08	27.19	26.15	27.33	25.64	26.58	26.63	29.55	33.22	32.75	33.73
10	29.54	29.40	26.64	26.34	26.30	25.76	26.95	27.48	31.33	33.36	32.83	33.57
15	29.53	28.57	25.28	25.64	26.12	25.51	25.99	27.35	31.85	33.09	32.47	33.28
20	29.08	27.90	25.64	27.55	26.31	25.62	25.77	27.60	32.25	32.64	32.95	32.82
25	29.65	27.35	25.97	29.20	25.83	25.58	26.44	28.55	32.12	33.04	34.26	33.76
EOM	29.25	28.29	25.85	26.94	25.89	25.28	26.77	30.13	30.52	33.38	33.14	31.44

WATER YEAR 1994	HIGHEST INSTANTANEOUS	24.28	MAR 03, 1994
	LOWEST INSTANTANEOUS	35.53	SEP 06, 07, 1994

### DAILY LOW-WATER LEVELS



380333078264801. Local number, 43N 1 SOW 028.

AQUIFER.--Lynchburg Formation of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 409 ft, cased to 52 ft, open hole 52 to 409 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. June 25, 1974, to Apr. 10, 1981, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to June 25, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 345 ft above sea level, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.65 ft below land-surface datum, May 3, 1984;  
lowest recorded, 22.10 ft below land-surface datum, Nov. 30, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.36	16.80	17.26	17.03	15.26	13.00	11.93	14.02	14.20	15.00	14.50	15.12
10	18.54	16.95	17.02	16.29	15.56	11.94	12.73	13.73	14.36	15.26	15.10	15.22
15	18.55	17.23	17.30	15.45	15.52	12.01	13.09	13.54	14.40	15.80	15.40	15.76
20	18.04	17.47	17.42	15.41	14.91	12.92	13.33	13.42	14.54	15.80	14.63	15.47
25	17.71	17.72	17.39	15.29	13.49	13.58	13.54	13.58	14.84	15.71	15.30	15.48
EOM	17.22	17.20	17.60	15.01	13.29	11.46	14.13	14.12	14.89	13.82	15.41	15.67

WATER YEAR 1994	HIGHEST INSTANTANEOUS	11.29	APR 02, 1994
	LOWEST INSTANTANEOUS	18.58	OCT 11, 12, 1993

WATER LEVEL, IN FEET BELOW LAND SURFACE

5

10

15

20

25

1990 1991 1992 1993 1994

WATER YEAR

GAP INDICATES MISSING RECORD

## GROUND-WATER LEVELS

## AMELIA COUNTY

372709077585801. Local number, 47H 1 SOW 166.

LOCATION.--Lat 37°27'09", long 77°58'58", Hydrologic Unit 02080207, 800 ft north of State Highway 616, 0.95 mi west of intersection of State Highways 609 and 616, and 2.3 mi east of Lodore. Owner: R. K. Anderson.

AQUIFER.--Saprolite of porphyroblastic garnet-biotite gneiss of Late Precambrian-Early Paleozoic age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 48 in., depth 44 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 2, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 340 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division..

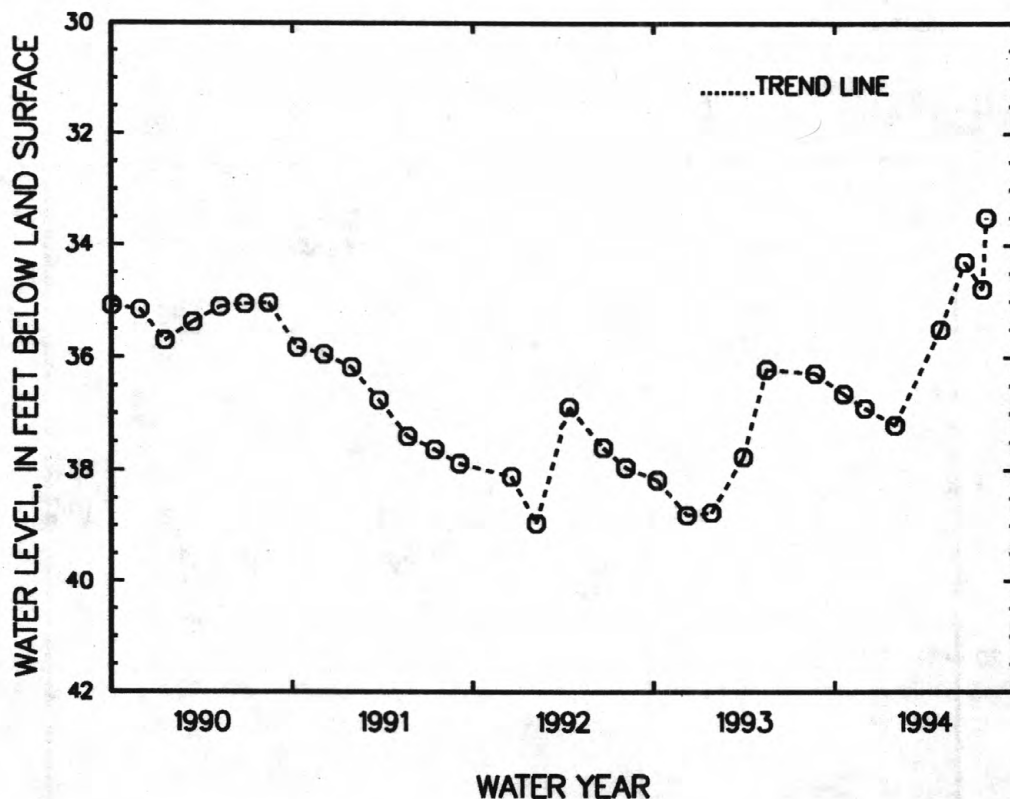
PERIOD OF RECORD.--May 1983 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.50 ft below land-surface datum, Aug. 2, 1994; lowest measured, 38.95 ft below land-surface datum, Feb. 6, 1992.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	36.64	JAN 31	37.20	MAY 02	35.50	JUN 20	34.30	JUL 25	34.78	AUG 02	33.50
DEC 01	36.90										

WATER YEAR 1994      HIGHEST    33.50    AUG 02, 1994      LOWEST    37.20    JAN 31, 1994



## GROUND-WATER LEVELS

75

## APPOMATTOX COUNTY

372133078493701. Local number, 40G 1 SOW 012.

LOCATION.--Lat 37°21'33", long 78°49'37", Hydrologic Unit 02080207, 0.45 mi east of State Highway 131, 300 ft north of U.S. Highway 460 in the town of Appomattox. Owner: Town of Appomattox.

AQUIFER.--Fork Mountain Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 288 ft, cased to 40 ft, open hole 40 to 288 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 15, 1967, one measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 860 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1949, October 1967 to current year. Unpublished record available May 1949 in files of the Virginia Department of Environmental Quality - Water Division.

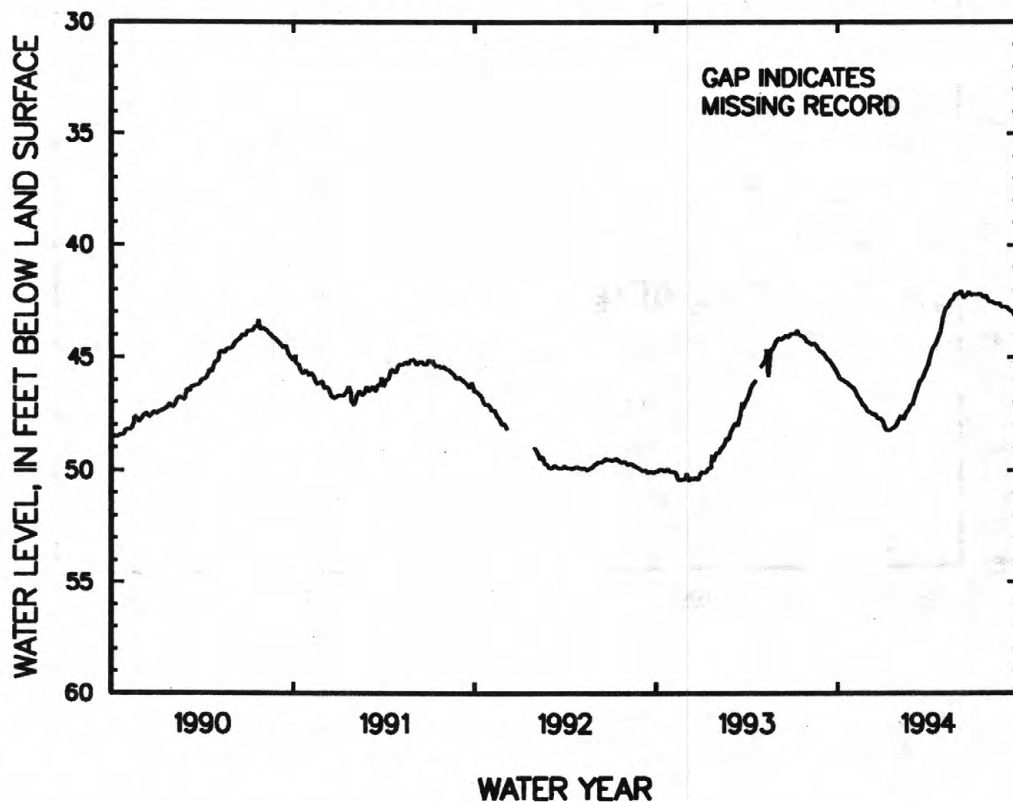
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 34.78 ft below land-surface datum, June 13, 1973; lowest recorded, 58.21 ft below land-surface datum, Nov. 17, 18, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.93	46.45	47.44	48.18	47.61	46.70	44.88	42.85	42.05	42.22	42.53	42.80
10	45.99	46.74	47.53	48.25	47.77	46.38	44.56	42.75	42.35	42.19	42.59	42.93
15	46.06	46.88	47.52	48.22	47.48	46.05	44.43	42.50	42.27	42.20	42.65	42.96
20	46.13	47.10	47.72	48.15	47.33	45.94	44.15	42.42	42.11	42.35	42.60	43.18
25	46.23	47.19	47.70	48.07	47.10	45.64	43.86	42.18	42.23	42.27	42.77	43.17
EOM	46.35	47.40	47.87	47.81	47.12	45.34	43.24	42.20	42.20	42.53	42.75	43.38

WATER YEAR 1994      HIGHEST INSTANTANEOUS    41.72    JUN 07, 1994      LOWEST INSTANTANEOUS    48.25    JAN 10, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## APPOMATTOX COUNTY

372514078394301. Local number, 41H 2.

LOCATION.--Lat 37°25'14", long 78°39'43", Hydrologic Unit 02080207, 1.0 mi south of intersection of State Highway 636 on the east side of State Highway 640, 2.8 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 68 ft, diameter 1.25 in. from 68 to 73 ft, depth 73 ft, screened 68 to 73 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 640 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

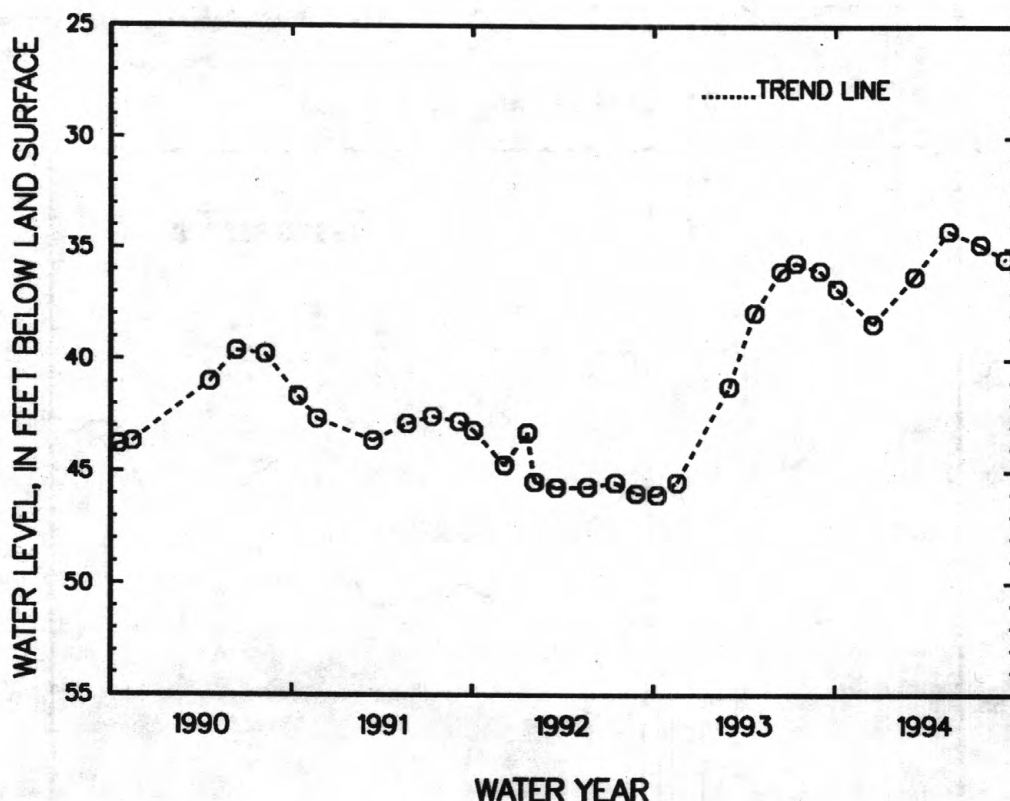
PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 32.99 ft below land-surface datum, May 20, 1973; lowest measured, 49.41 ft below land-surface datum, Mar. 30, 1971.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	36.80	DEC 16	38.36	MAR 10	36.24	MAY 17	34.20	JUL 19	34.79	SEP 08	35.46

WATER YEAR 1994      HIGHEST    34.20    MAY 17, 1994      LOWEST    38.36    DEC 16, 1993





## GROUND-WATER LEVELS

77

## ARLINGTON COUNTY

385346077073701. Local number, 53V 1.

LOCATION.--Lat 38°53'46", long 77°07'37", Hydrologic Unit 02070010, at Langston School, 4854 Lee Highway in Arlington. Owner: Arlington County School Board.

AQUIFER.--Brandywine Formation of Pleistocene age and Bryn Mawr (?) Gravel of Pliocene (?) age, overlying the Sykesville Formation of Precambrian age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 24 in., depth 35 ft, terracotta casing.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1989, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 410 ft above sea level, from topographic map. Measuring point: Inner flange of manhole, at land-surface datum.

REMARKS.--Water levels affected by water running into well from broken water main October 1992 to August 1993.

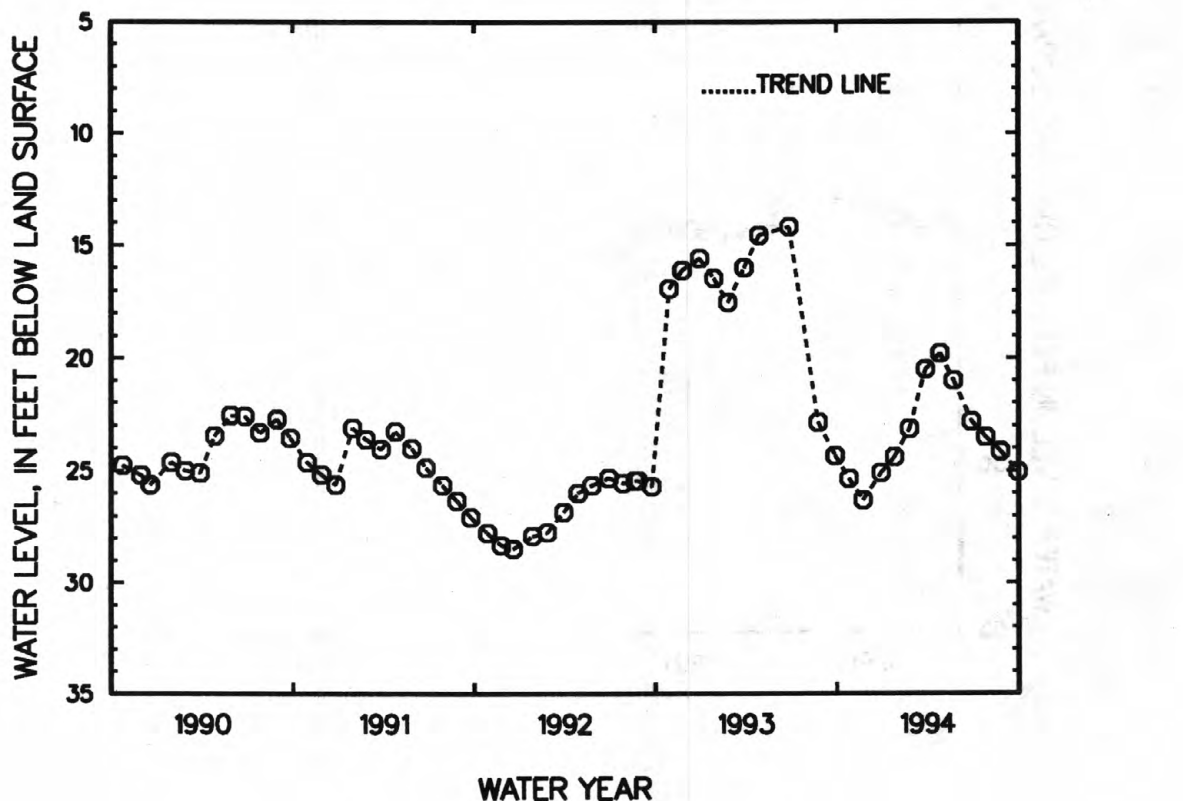
PERIOD OF RECORD.--October 1931 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.19 ft (result of broken water main) below land-surface datum, June 28, 1993; lowest measured, 34.81 ft below land-surface datum, Dec. 5, 1931.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	25.35	DEC 29	25.09	FEB 24	23.14	APR 26	19.78	JUN 28	22.82	AUG 25	24.15
NOV 23	26.30	JAN 25	24.39	MAR 28	20.50	MAY 23	21.00	JUL 26	23.51	SEP 28	25.05

WATER YEAR 1994	HIGHEST	19.78	APR 26, 1994	LOWEST	26.30	NOV 23, 1993
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## GROUND-WATER LEVELS

## ARLINGTON COUNTY

385253077042301. Local number, 54V 3.

LOCATION.--Lat 38°52'53", long 77°04'23", Hydrologic Unit 02070010, at Arlington National Cemetery in Arlington.  
Owner: National Park Service, National Capitol Parks.

AQUIFER.--Terrace gravels of Holocene age and sand of Early Cretaceous age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 48 in., depth 50 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1989, bimonthly measurement with chalked tape.

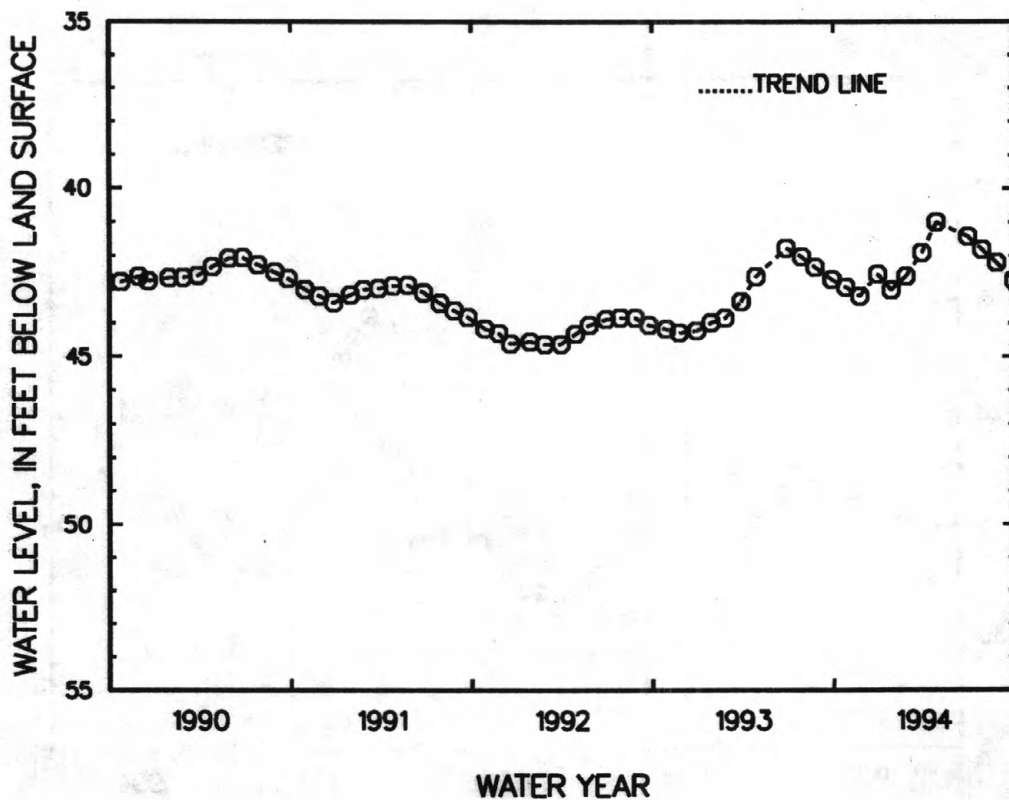
DATUM.--Elevation of land-surface datum is 205 ft above sea level, from topographic map. Measuring point: Top of brick and stone casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.34 ft below land-surface datum, June 26, 1978;  
lowest measured, 45.28 ft below land-surface datum, Nov. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	42.92	DEC 29	42.54	FEB 24	42.60	APR 26	41.00	JUL 26	41.80	SEP 28	42.73
NOV 23	43.19	JAN 25	43.01	MAR 28	41.90	JUN 28	41.42	AUG 25	42.20		
WATER YEAR 1994		HIGHEST	41.00	APR 26, 1994		LOWEST	43.19	NOV 23, 1993			



## GROUND-WATER LEVELS

79

## AUGUSTA COUNTY

382523078535501. Local number, 38P 1 SOW 070.

LOCATION.--Lat 38°07'48", long 79°04'07", Hydrologic Unit 02070005, 100 ft east of State Highway 613, 0.5 mi south of intersection of State Highway 613 and U.S. Highway 11, and 0.9 mi south of Dogwood Hill. Owner: Augusta County Water Authority.

AQUIFER.--Beekmantown Group of Early Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 30 ft, diameter 6 in. from 30 to 97 ft, depth 250 ft, open hole from 97 to 250 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Jan. 10, 1974, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 1,490 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--December 1973 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

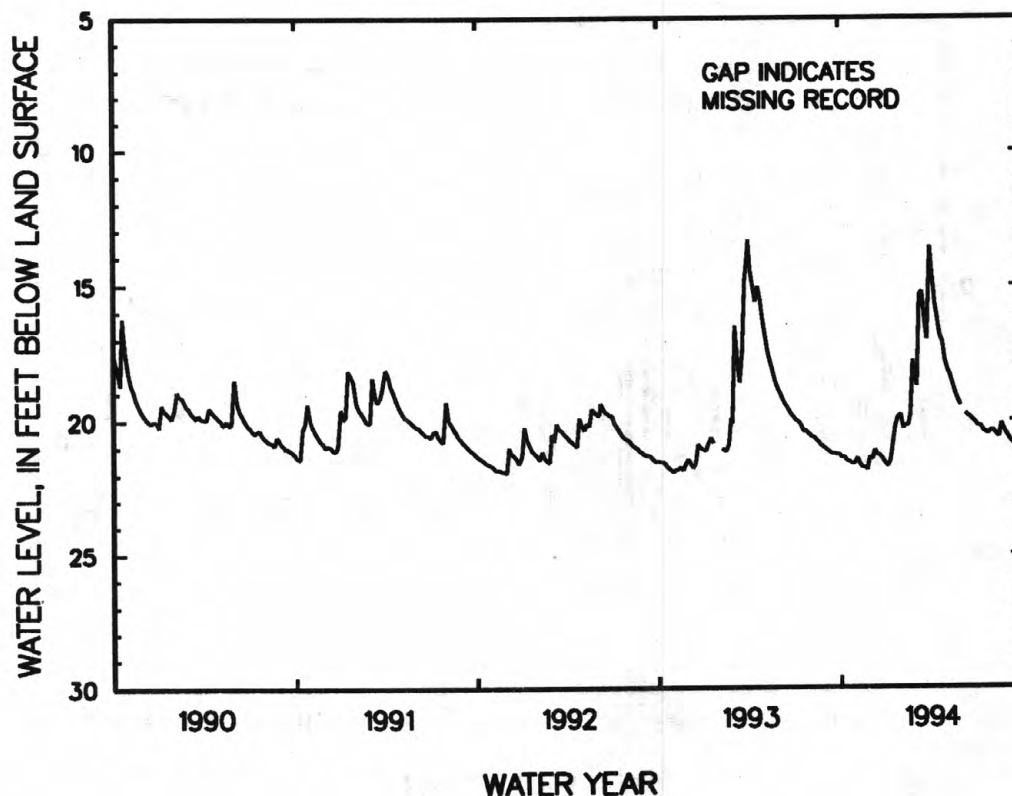
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.70 ft below land-surface datum, Apr. 25, 1987; lowest recorded, 27.02 ft below land-surface datum, Oct. 16, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.36	21.39	21.45	21.70	20.30	18.72	14.68	18.12	19.62	20.22	20.41	20.72
10	21.42	21.62	21.10	21.51	20.17	15.38	15.66	18.32	19.76	20.23	20.53	20.85
15	21.50	21.75	21.28	20.85	20.21	15.25	16.28	18.66	19.85	20.40	20.63	20.89
20	21.53	21.74	21.30	20.21	19.75	16.28	16.90	18.97	19.92	20.46	20.13	21.01
25	21.60	21.82	21.42	19.90	17.78	17.00	17.11	19.23	20.01	20.50	20.36	21.10
EOY	21.59	21.36	21.60	19.80	18.43	13.60	17.78	19.46	20.12	20.38	20.55	21.20

WATER YEAR 1994      HIGHEST INSTANTANEOUS    12.74    MAR 29, 1994      LOWEST INSTANTANEOUS    21.84    NOV 27, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## BUCHANAN COUNTY

370443082022301. Local number, 14E 40.

LOCATION.--Lat 37°04'43", long 82°02'23", Hydrologic Unit 05070202, 50 ft south of the intersection of State Highways 620 and 622, at Grissom School. Owner: U.S. Geological Survey.

AQUIFER.--Jawbone coal bed of Norton Formation of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 60 ft, cased to 14 ft, open hole 14 to 60 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. October 1986 to June 1988, occasional measurement with chalked tape by USGS personnel. August 1982 to September 1983, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 1,820 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD.--August 1982 to September 1983, October 1986 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.21 ft below land-surface datum, Feb. 11, 1994; lowest recorded, 11.49 ft below land-surface datum, Oct. 6, 1982.

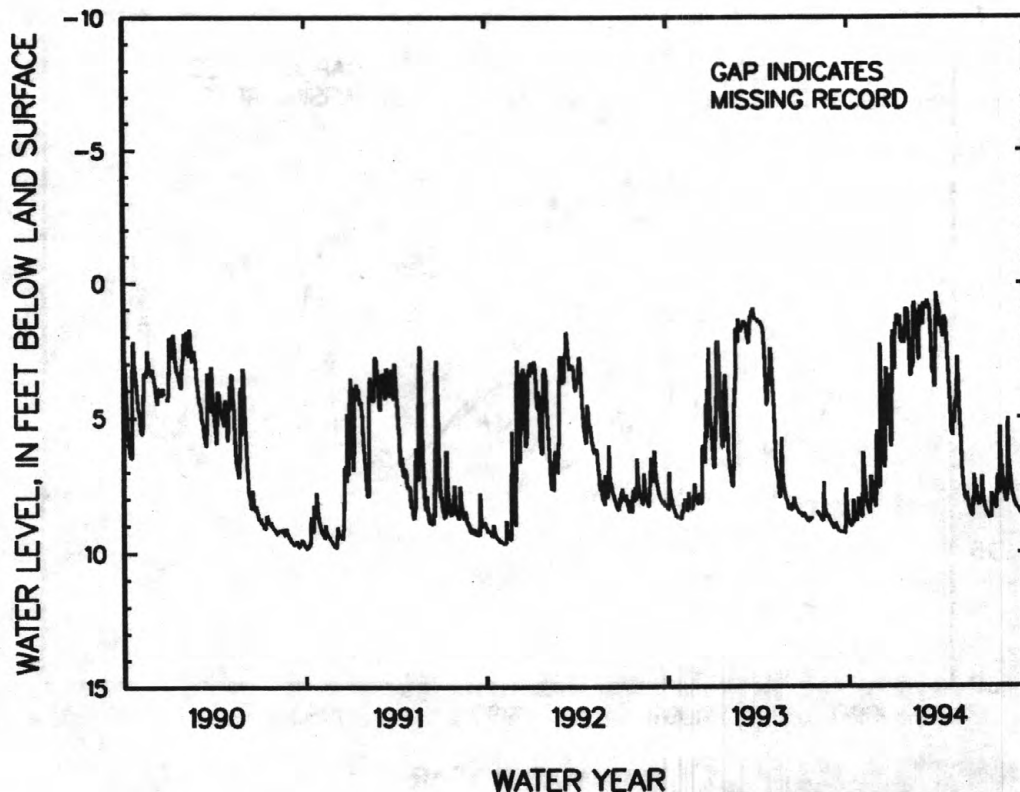
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.94	7.55	2.27	1.50	3.49	.86	1.64	4.44	8.59	8.48	6.80	8.33
10	8.83	8.34	6.23	1.47	1.02	.65	2.03	3.35	8.27	8.66	7.74	8.50
15	8.66	7.95	5.97	1.86	1.13	1.07	1.38	5.58	7.52	8.72	8.04	8.59
20	8.58	7.72	5.31	1.91	2.85	3.33	3.02	7.39	8.24	8.16	6.62	8.50
25	8.42	8.25	5.19	1.49	.90	3.83	4.96	8.03	8.12	8.36	7.65	8.63
EOM	6.29	6.93	1.79	1.47	1.40	.79	5.20	8.26	8.04	7.71	8.15	8.40

WATER YEAR 1994      HIGHEST INSTANTANEOUS      0.21      FEB 11, 1994

LOWEST INSTANTANEOUS      9.02      OCT 09, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

81

## BUCKINGHAM COUNTY

372541078392101. Local number, 41H 1.

LOCATION.--Lat 37°25'41", long 78°39'21", Hydrologic Unit 02080207, 200 ft east of State Highway 640, 2.6 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 83 ft, diameter 1.25 in. from 83 to 88 ft, depth 88 ft, screened 83 to 88 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

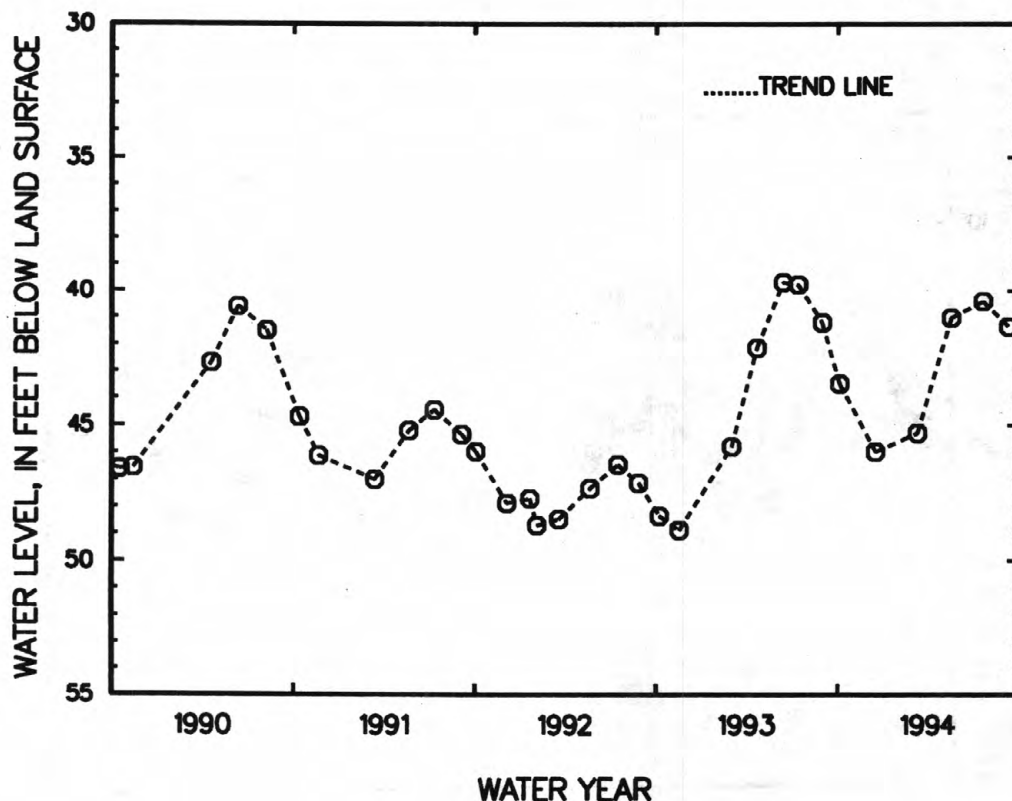
DATUM.--Elevation of land-surface datum is 660 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 30.95 ft below land-surface datum, May 20, 1973; lowest measured, 50.81 ft below land-surface datum, Mar. 8, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	43.47	DEC 16	45.97	MAR 10	45.29	MAY 17	41.02	JUL 19	40.40	SEP 08	41.35
WATER YEAR 1994		HIGHEST	40.40	JUL 19, 1994		LOWEST	45.97	DEC 16, 1993			





## GROUND-WATER LEVELS

## BUCKINGHAM COUNTY

372608078404601. Local number, 41H 3.

LOCATION.--Lat 37°26'08", long 78°40'46", Hydrologic Unit 02080207, 0.85 mi west of Ranger Headquarters on south side of dirt road off State Highway 636, 1.5 mi south of Sliders. Owner: U.S. Geological Survey.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 49 ft, diameter 1.25 in. from 49 to 54 ft, depth 54 ft, screened 49 to 54 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 683.8 ft above sea level. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--Prior to Oct. 1, 1981, well was reported as being located in Appomattox County.

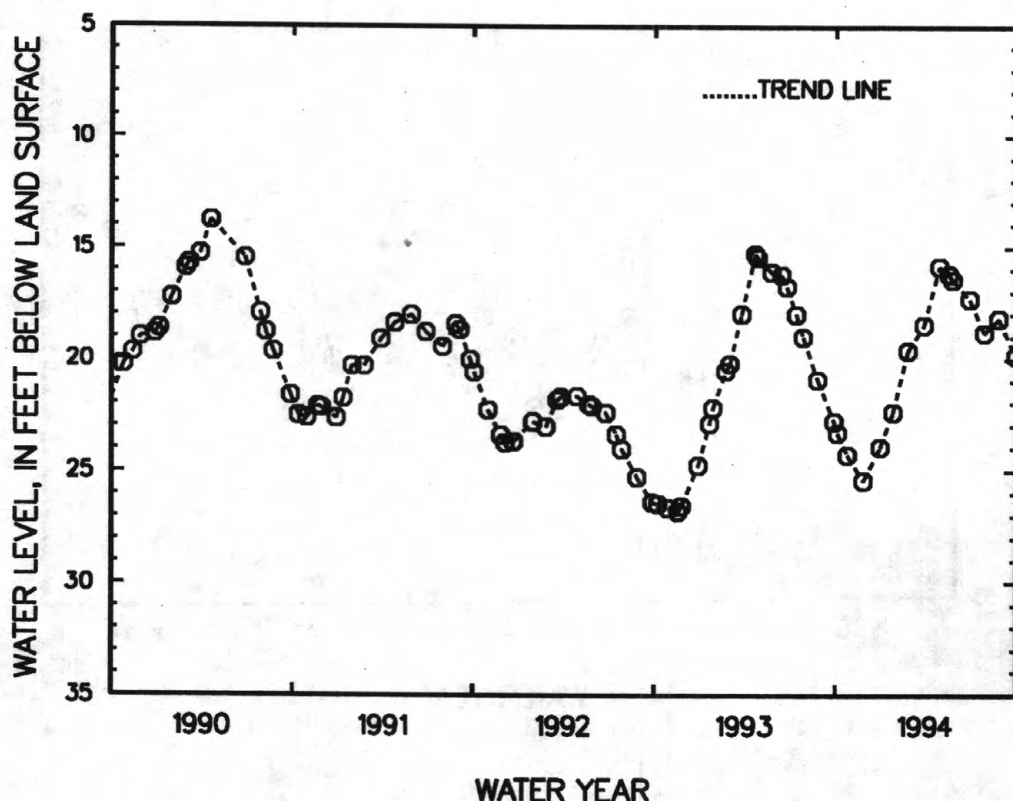
PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.31 ft below land-surface datum, Apr. 12, 1973; lowest measured, 28.30 ft below land-surface datum, Oct. 17, 1977.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	23.30	DEC 30	23.93	MAR 28	18.45	MAY 17	16.18	JUN 28	17.30	AUG 25	18.16
25	24.27	JAN 25	22.39	APR 28	15.84	25	16.43	JUL 27	18.80	SEP 28	19.84
NOV 26	25.41	FEB 24	19.60								

WATER YEAR 1994      HIGHEST 15.84      APR 28, 1994      LOWEST 25.41      NOV 26, 1993



## GROUND-WATER LEVELS

83

## BUCKINGHAM COUNTY

372519078374001. Local number, 41H 4.

LOCATION.--Lat 37°25'19", long 78°37'40", Hydrologic Unit 02080207, 0.65 mi northeast of Holiday Creek, 0.85 mi southeast of State Highway 636 off State Highway 614, and 4.0 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 72 ft, diameter 1.25 in. from 72 to 77 ft, depth 77 ft, screened 72 to 77 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 647 ft above sea level, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

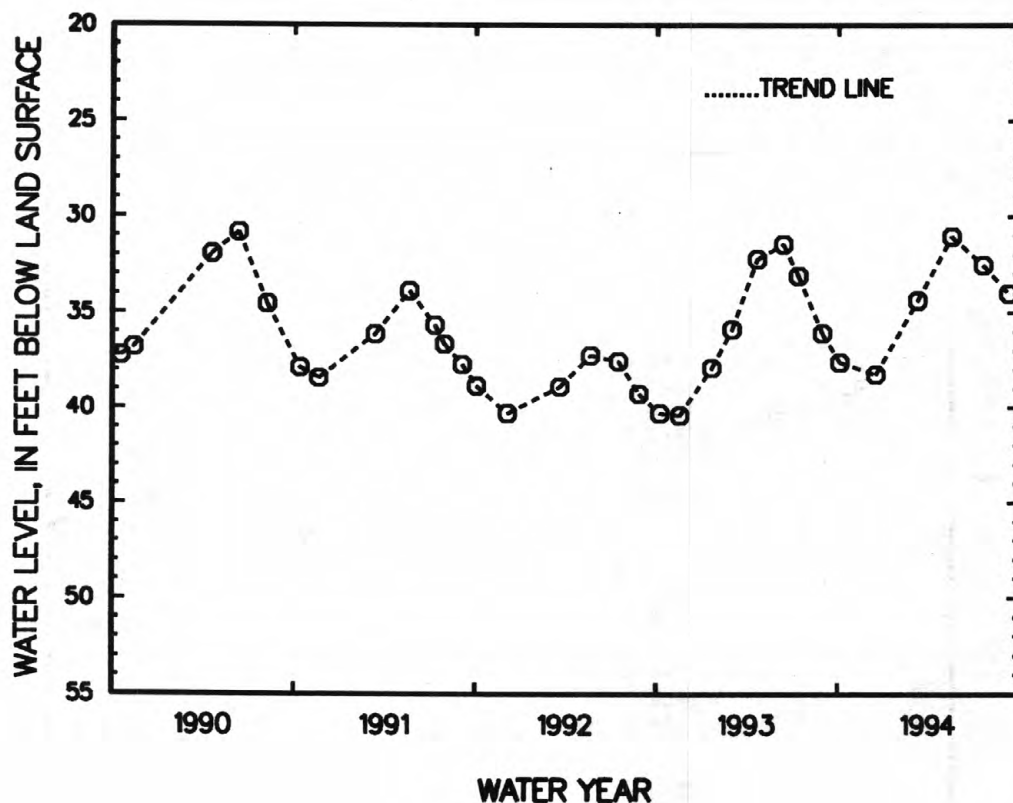
PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.45 ft below land-surface datum, May 1, 1980; lowest measured, 48.13 ft below land-surface datum, Mar. 30, 1971.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	37.60	DEC 16	38.24	MAR 10	34.36	MAY 17	31.05	JUL 19	32.52	SEP 08	34.00

WATER YEAR 1994      HIGHEST   31.05   MAY 17, 1994      LOWEST   38.24   DEC 16, 1993



## GROUND-WATER LEVELS

## CAROLINE COUNTY

380239077193101. Local number, 52N 1.

LOCATION.--Lat 38°02'49", long 77°18'29", Hydrologic Unit 02080105, 0.2 mi north of the intersection of State Highways 619 and 667 near the old ammunition supply point at Fort A. P. Hill near Bowling Green and 3.7 mi southeast of the intersection of U.S. Highway 301 and South Range Road. Owner: U.S. Department of the Army.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 278 ft, depth of screens unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Mar. 10, 1988, to June 1, 1990, annual measurement with chalked tape. Apr. 30, 1974, to Aug. 5, 1986, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division. Prior to Apr. 30, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 200 ft above sea level, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum. Prior to Aug. 5, 1986, measuring point was 0.3 ft above land-surface datum. Measuring point changed when the U.S. Department of the Army added 1.4 ft of casing sometime between Aug. 5, 1986, and Mar. 10, 1988.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Aug. 5, 1986; U.S. Geological Survey after Mar. 10, 1988. Water level affected by regional drawdown.

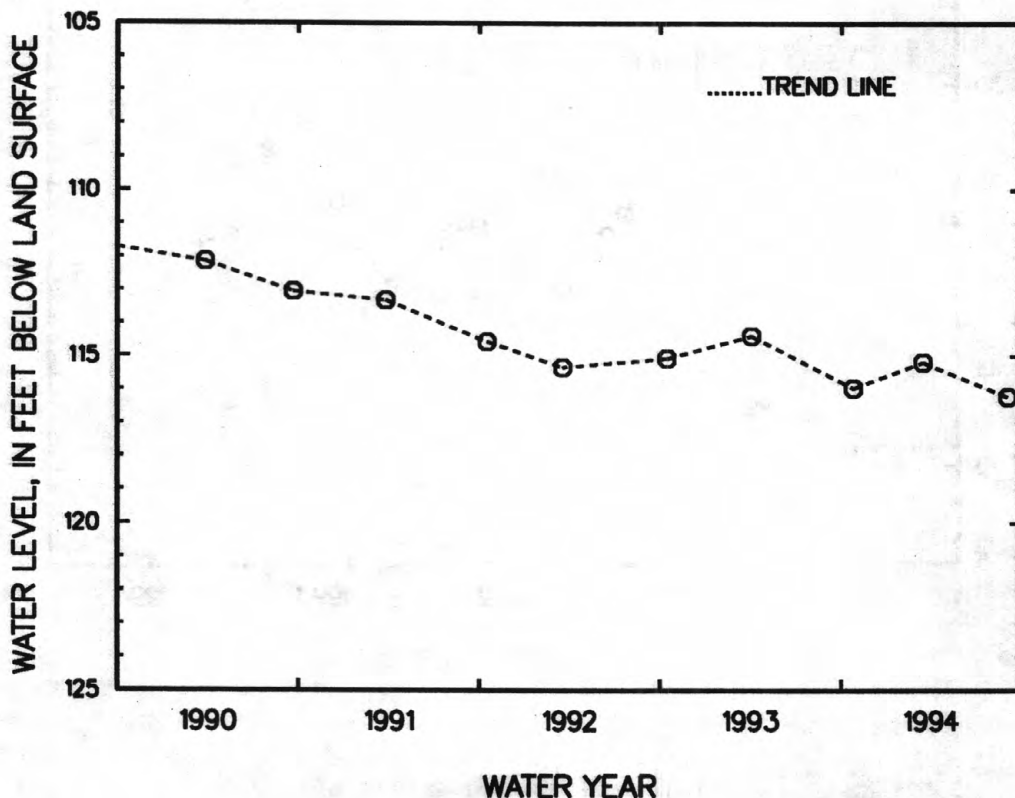
PERIOD OF RECORD.--September 1971 to August 1986, March 1988 to current year. Unpublished records available prior to August 1986 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 102.47 ft below land-surface datum, Sept. 1, 1973; lowest measured, 116.22 ft below land-surface datum, Sept. 1, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	115.96	MAR 15	115.18	SEP 01	116.22

WATER YEAR 1994      HIGHEST 115.18 MAR 15, 1994      LOWEST 116.22 SEP 01, 1994



## CAROLINE COUNTY

380624077172801. Local number, 52N 5.

LOCATION.--Lat 38°06'24", long 77°17'28", Hydrologic Unit 02080104, in block pumphouse under water tank at Camp Wilcox at Fort A. P. Hill, 1.1 mi north of U.S. Highway 301, and near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to unknown depth, diameter 4 in. from unknown depth to 524 ft, depth 524 ft, screened 468 to 501 ft.

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

DATUM.--Elevation of land-surface datum is 210 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

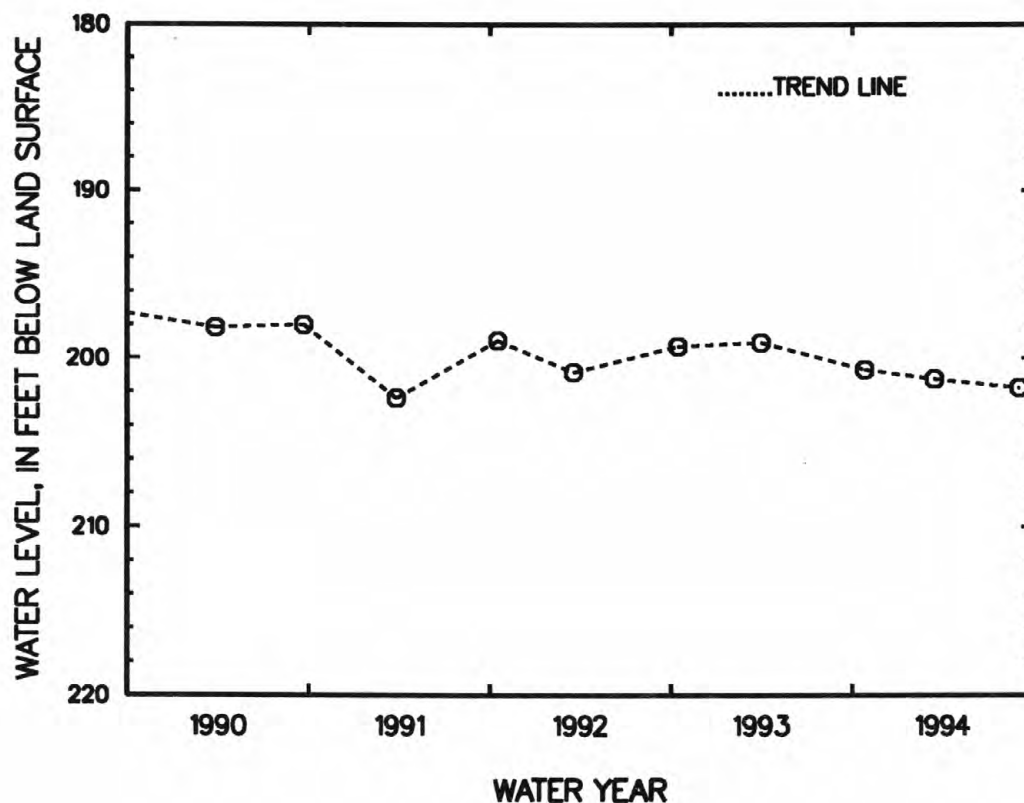
PERIOD OF RECORD.--December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 172.20 ft below land-surface datum, Dec. 16, 1971; lowest measured, 207.48 ft below land-surface datum, Mar. 19, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	200.68	MAR 15	201.24	SEP 01	201.76

WATER YEAR 1994	HIGHEST	200.68	OCT 26, 1993	LOWEST	201.76	SEP 01, 1994
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## GROUND-WATER LEVELS

## CAROLINE COUNTY

380415077194101. Local number, 52N 6.

LOCATION.--Lat 38°04'15", long 77°19'41", Hydrologic Unit 02080105, on the southwest corner of the intersection of Burke Street and Second Street in the headquarters area of Fort A. P. Hill near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 480 ft, diameter 3 in. from 446 to 500 ft, depth 500 ft, screened 488 to 498 ft.

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

DATUM.--Elevation of land-surface datum is 214 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

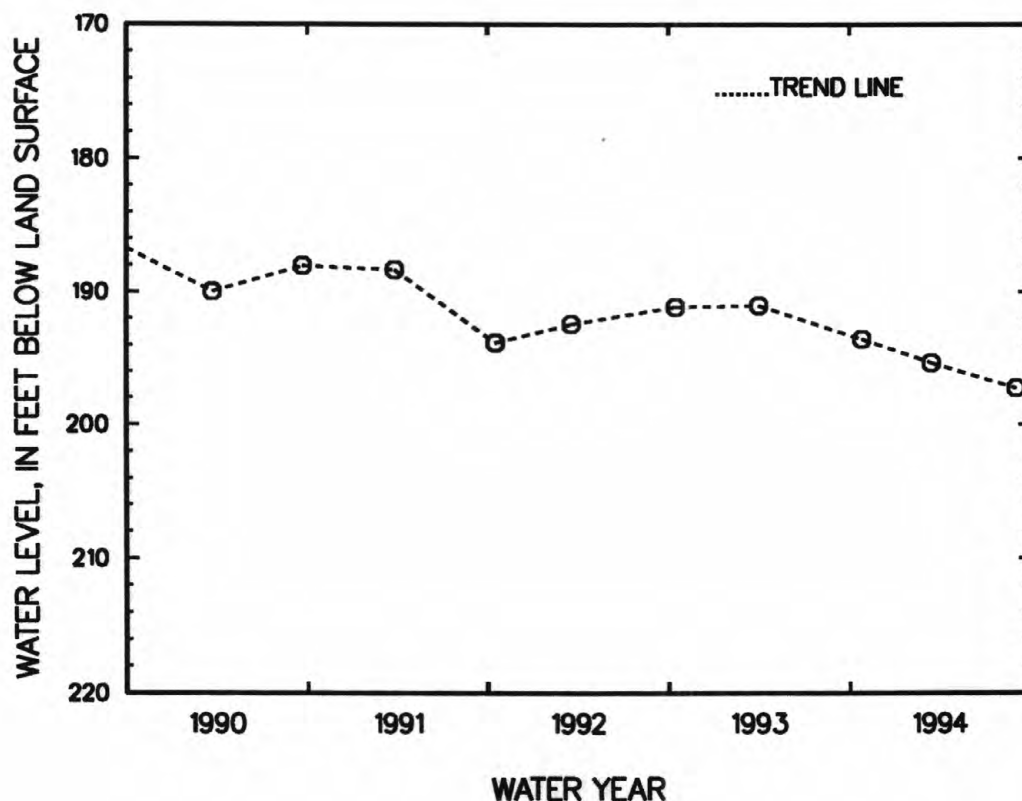
PERIOD OF RECORD.--December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 158.65 ft below land-surface datum, Feb. 10, 1982; lowest measured, 207.74 ft below land-surface datum, Mar. 19, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	193.58	MAR 15	195.37	SEP 01	197.27

WATER YEAR 1994	HIGHEST	193.58	OCT 26, 1993	LOWEST	197.27	SEP 01, 1994
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## CAROLINE COUNTY

380836077211401. Local number, 52P 10.

LOCATION.--Lat 38°08'36", long 77°21'14", Hydrologic Unit 02080104, on the northwest corner of the intersection of A. P. Hill Drive and Jackson Drive, 6.8 mi northwest of the intersection of U.S. Highway 301 and A. P. Hill Drive at Liberty Corner at Fort A. P. Hill near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 702 ft, screened 544 to 552 ft, 603 to 612 ft, 648 to 657 ft, open hole 666 to 702 ft.

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

DATUM.--Elevation of land-surface datum is 222 ft above sea level, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

REMARKS.--Water level may be affected by regional drawdown.

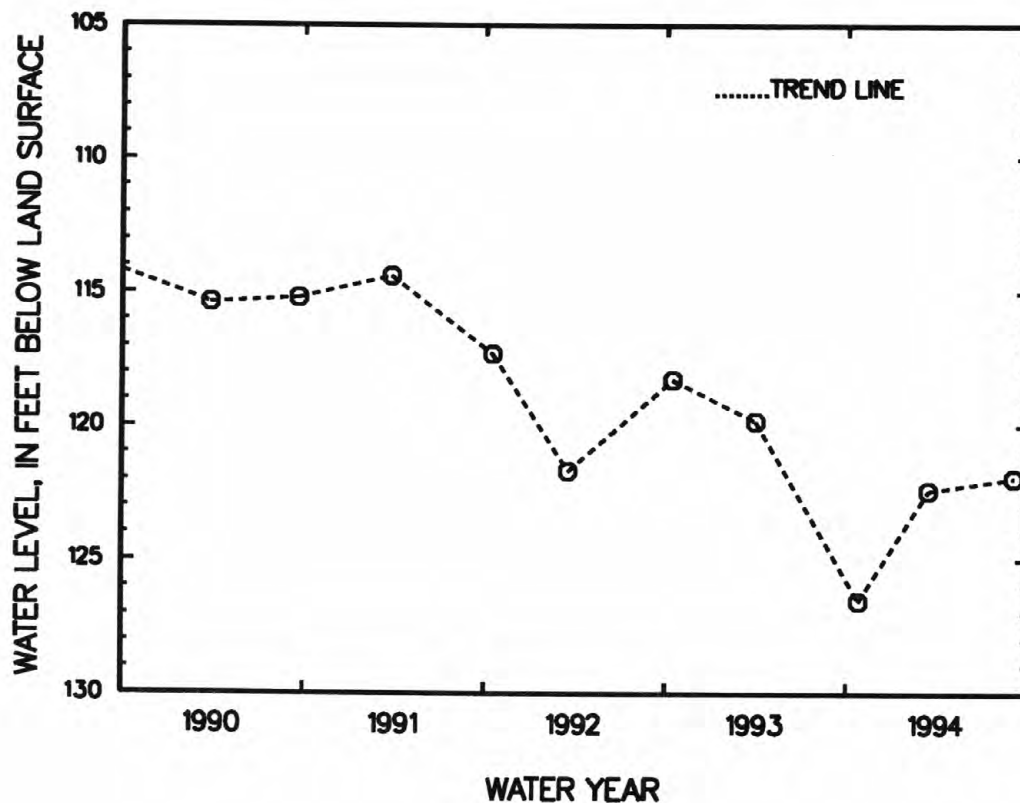
PERIOD OF RECORD.--March 1986 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.94 ft below land-surface datum, Mar. 30, 1989; lowest measured, 126.53 ft below land-surface datum, Oct. 26, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	126.53	MAR 15	122.42	SEP 01	121.95

WATER YEAR 1994	HIGHEST	121.95	SEP 01, 1994	LOWEST	126.53	OCT 26, 1993
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## GROUND-WATER LEVELS

## CHARLES CITY COUNTY

371956077055203. Local number, 54G 11 SOW 066.

LOCATION.--Lat 37°19'56", long 77°05'52", Hydrologic Unit 02080206, 0.6 mi east of Bowens Store on State Highway 5, 1.6 mi west of Charles City. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle and lower Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 540 ft, screened 290 to 310 ft, 404 to 424 ft, 486 to 496 ft, 510 to 530 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. June 5, 1976, to Sept. 30, 1985, occasional measurement with chalked tape. Jan. 10, 1974, to June 5, 1976, continuous strip-chart recorder. Prior to Jan. 10, 1974, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 54 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

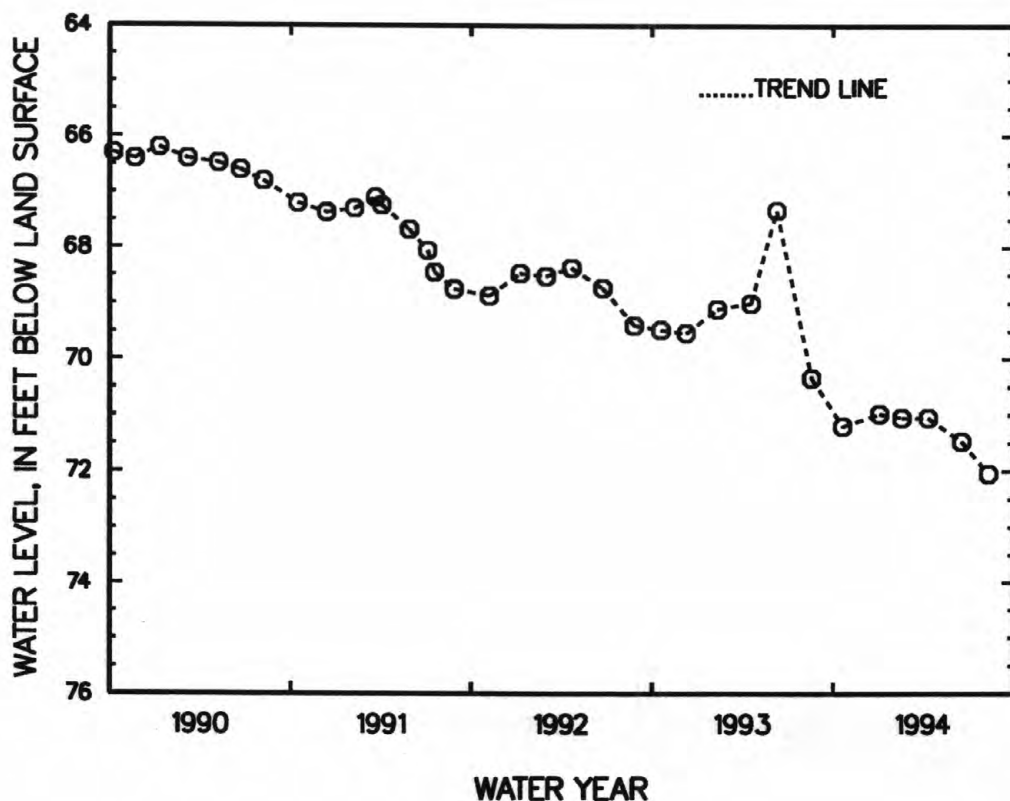
PERIOD OF RECORD.--May 1973 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.07 ft below land-surface datum, May 1, 1973; lowest measured, 72.05 ft below land-surface datum, Aug. 10, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	71.20	JAN 03	70.98	FEB 17	71.05	APR 11	71.05	JUN 17	71.47	AUG 10	72.05

WATER YEAR 1994      HIGHEST    70.98    JAN 03, 1994      LOWEST    72.05    AUG 10, 1994



## GROUND-WATER LEVELS

89

## CHARLES CITY COUNTY

371956076055101. Local number, 54G 13 SOW 067.

LOCATION.--Lat 37°19'56", long 77°05'51", Hydrologic Unit 02080206, 0.6 mi east of Bowens Store on State Highway 5, 1.6 mi southwest of Charles City. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 227 ft, screened 222 to 227 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 2.4 ft above land-surface datum.

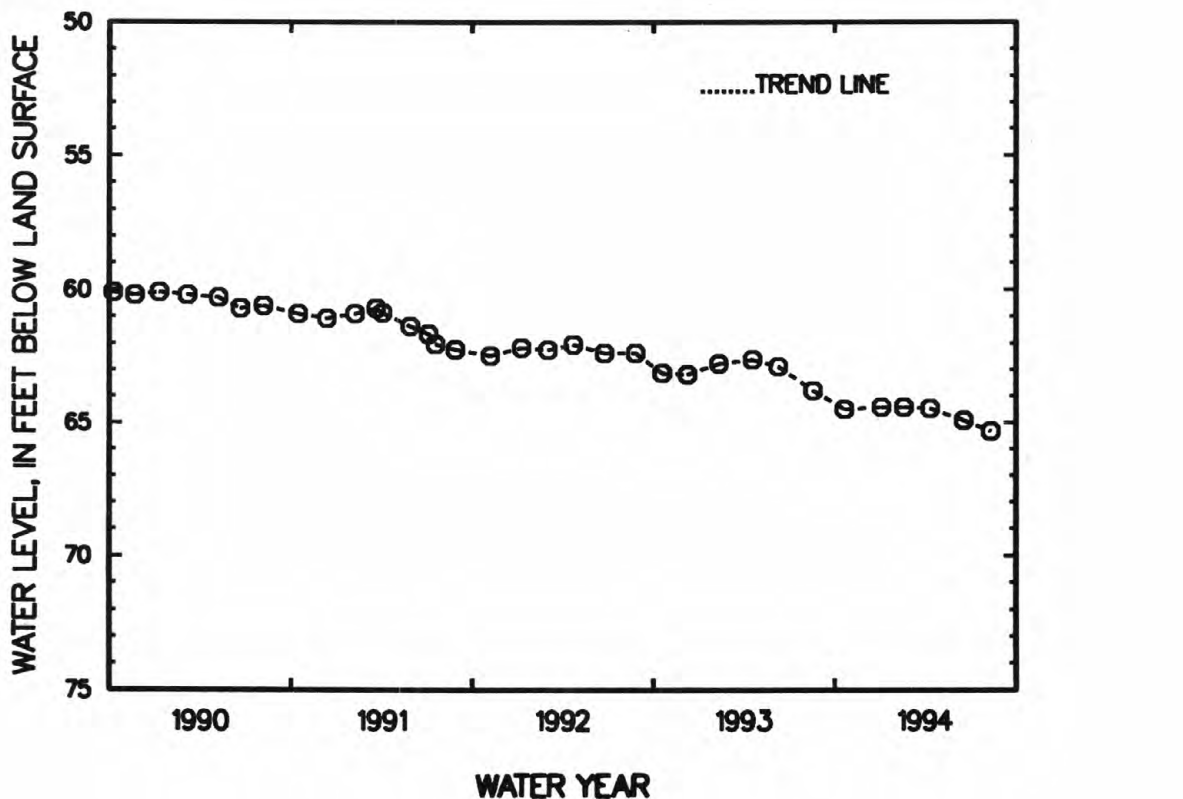
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1973 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.63 ft below land-surface datum, June 7, 1973; lowest measured, 65.33 ft below land-surface datum, Aug. 10, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	64.50	JAN 03	64.42	FEB 17	64.42	APR 11	64.47	JUN 17	64.92	AUG 10	65.33
WATER YEAR 1994      HIGHEST    64.42    JAN 03, FEB 17, 1994      LOWEST    65.33    AUG 10, 1994											



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364852076252201. Local number, 59C 29 SOW 163A.

LOCATION.--Lat 36°48'52", long 76°25'22", Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 35 ft, screened 25 to 35 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Aug. 21, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

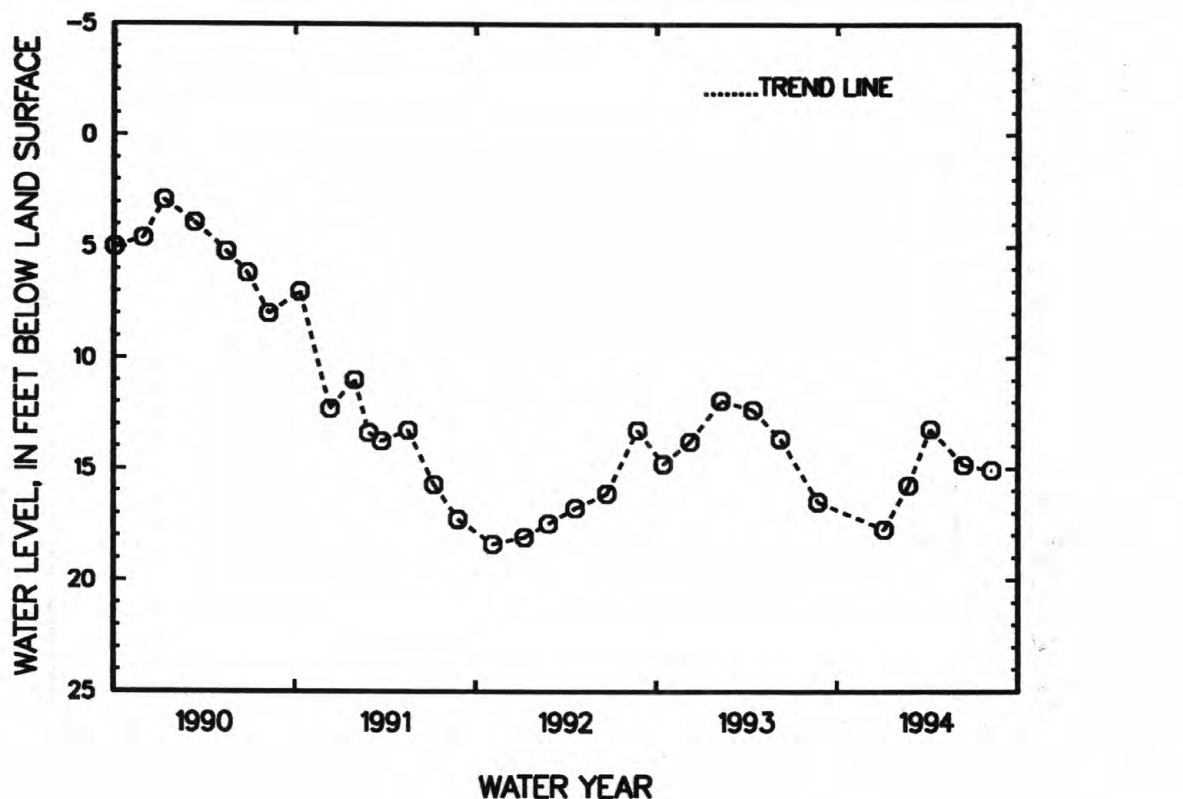
PERIOD OF RECORD.--November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.70 ft below land-surface datum, Mar. 14, 1989; lowest measured, 18.39 ft below land-surface datum, Nov. 5, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	17.31	JAN 04	17.72	FEB 22	15.76	APR 07	13.22	JUN 13	14.83	AUG 08	15.07

WATER YEAR 1994      HIGHEST    13.22    APR 07, 1994      LOWEST    17.72    JAN 04, 1994



## GROUND-WATER LEVELS

91

## CITY OF CHESAPEAKE

364852076252202. Local number, 59C 30 SOW 163B.

LOCATION.--Lat 36°48'52", long 76°25'22", Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 948 ft, screened 938 to 948 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Aug. 21, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

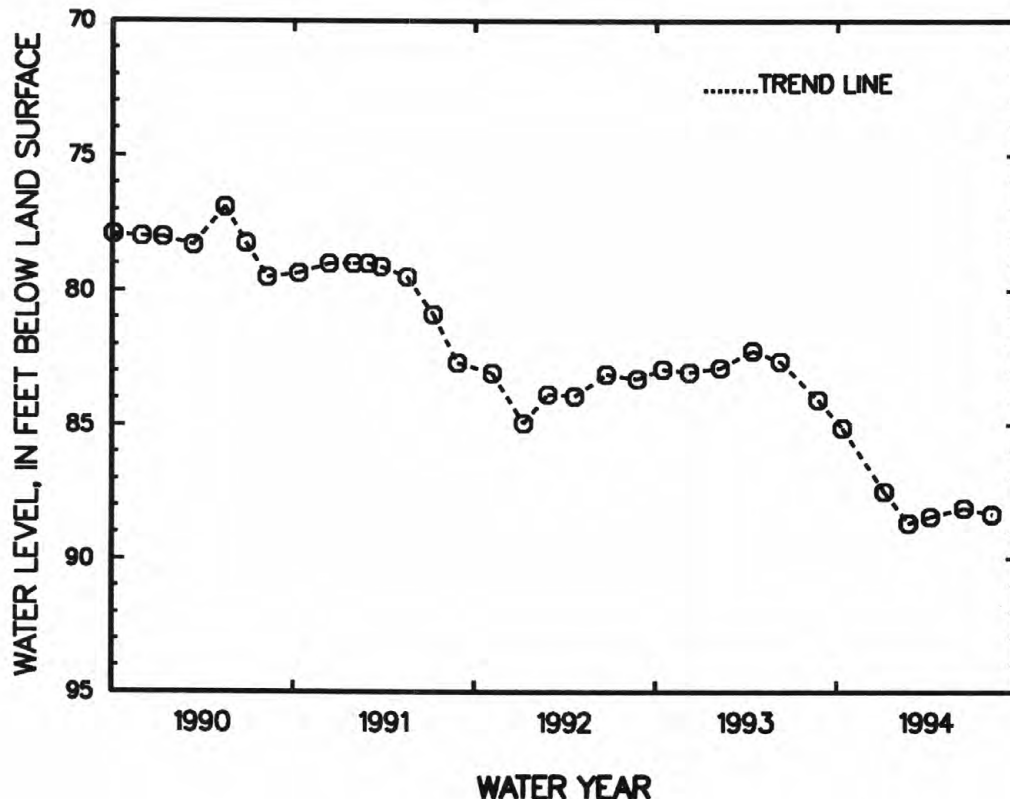
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.06 ft below land-surface datum, May 25, 1983; lowest measured, 88.67 ft below land-surface datum, Feb. 22, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	85.12	JAN 04	87.50	FEB 22	88.67	APR 07	88.44	JUN 13	88.12	AUG 08	88.35
WATER YEAR 1994		HIGHEST	85.12	OCT 12, 1993	LOWEST	88.67	FEB 22, 1994				





## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364852076252203. Local number, 59C 31 SOW 163C.

LOCATION.--Lat 36°48'52', long 76°25'22", Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 631 ft, screened 621 to 631 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Aug. 21, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

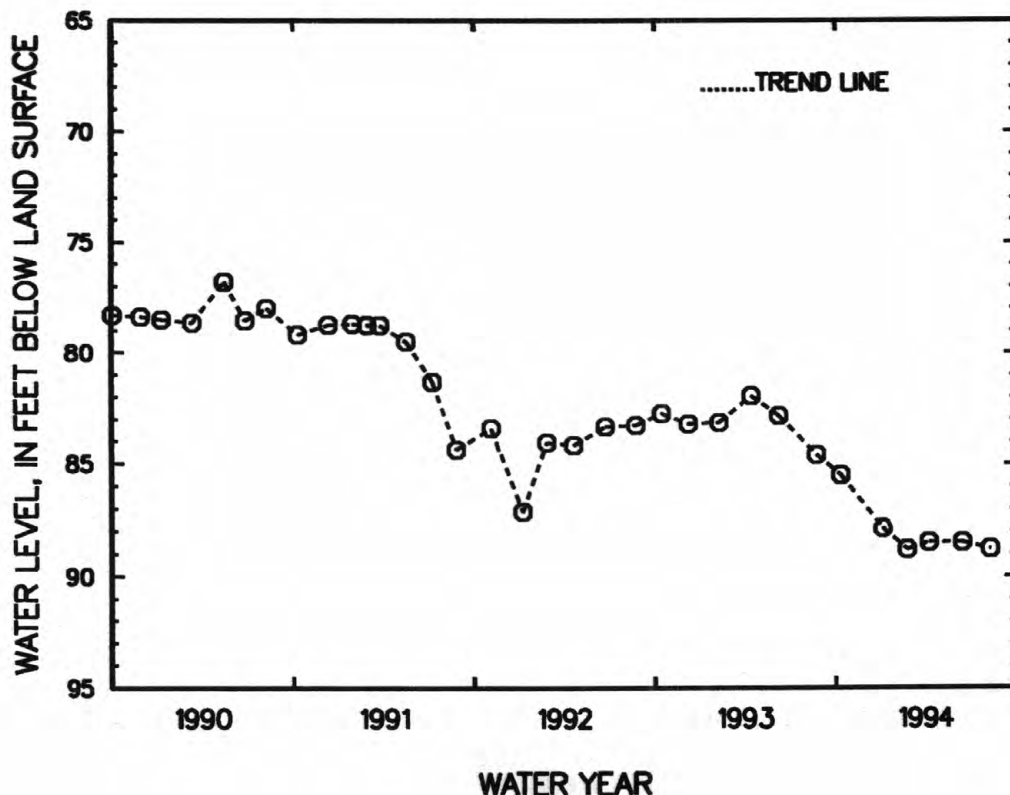
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.13 ft below land-surface datum, Feb. 23, 1983; lowest measured, 88.80 ft below land-surface datum, Feb. 22, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	85.50	JAN 04	87.86	FEB 22	88.80	APR 07	88.48	JUN 13	88.49	AUG 08	88.78
<p>WATER YEAR 1994      HIGHEST   85.50   OCT 12, 1993      LOWEST   88.80   FEB 22, 1994</p>											



## GROUND-WATER LEVELS

93

## CITY OF CHESAPEAKE

364621076273201. Local number, 59C 36.

LOCATION.--Lat 36°46'21", long 76°27'32", Hydrologic Unit 02080208, 2.5 mi southwest of the intersection of U.S. Highways 13, 58, 460, and Interstate Highways 264 and 64 near Bowers Hills in the city of Chesapeake. Owner: City of Chesapeake.

AQUIFER.--Brightseat-upper and middle Potomac aquifers of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observaton water well, diameter 4 in., depth 880 ft, screened 602 to 607 ft, 659 to 664 ft, 706 to 716 ft, 800 to 805 ft, 854 to 859 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1986, recorder by city of Chesapeake.

DATUM.--Elevation of land-surface datum is 22 ft above sea level, from topographic map. Measuring point: Top of casing, 3.2 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

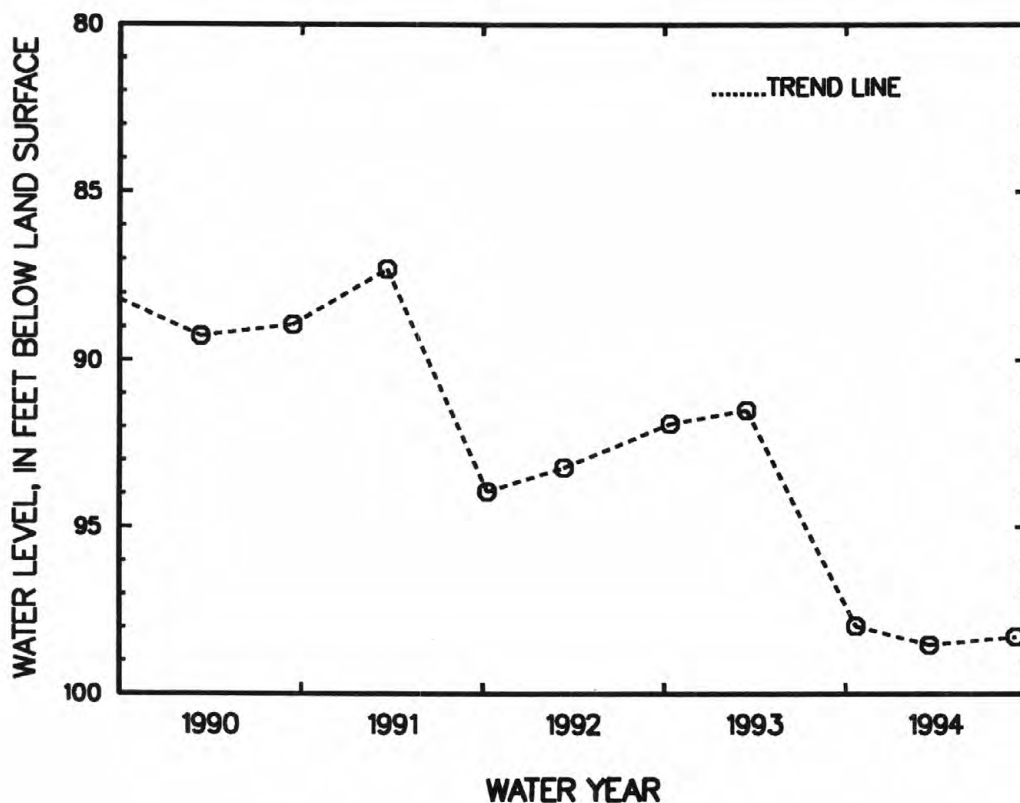
PERIOD OF RECORD.--August 1986 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 85.46 ft below land-surface datum, Aug. 20, 25, 1986; lowest measured, 98.53 ft below land-surface datum, Mar. 18, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	97.96	MAR 18	98.53	SEP 07	98.29

WATER YEAR 1994	HIGHEST	97.96	OCT 22, 1993	LOWEST	98.53	MAR 18, 1994
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## CITY OF CHESAPEAKE

363836076201701. Local number, 60B 3 SOW 090A.

LOCATION.--Lat 36°38'36", long 76°20'17", Hydrologic Unit 03010205, 0.15 mi north of intersection of Benefit and West Roads, 1.5 mi north of Cornland. Owner: Virginia Department of Environmental Quality.

**AQUIFER.**--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 855 ft, screened 824 to 834 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Aug. 25, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 16 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

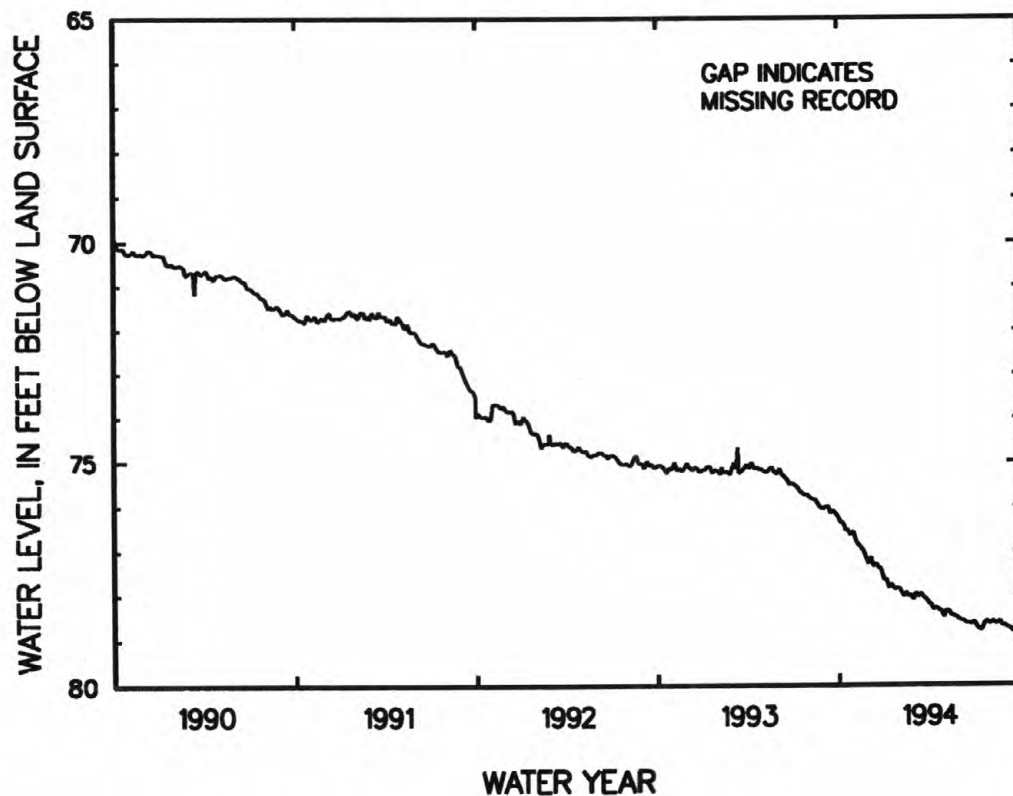
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.80 ft below land-surface datum, July 11, 1978; lowest recorded, 78.84 ft below land-surface datum, Sept. 20, 21, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.35	76.78	77.14	77.64	77.95	77.95	78.22	78.35	78.56	78.70	78.59	78.73
10	76.38	76.87	77.34	77.83	78.03	78.04	78.32	78.35	78.58	78.76	78.63	78.74
15	76.53	76.92	77.29	77.75	77.95	77.96	78.28	78.45	78.63	78.78	78.64	78.80
20	76.53	77.00	77.37	77.85	78.03	78.04	78.33	78.46	78.63	78.64	78.58	78.84
25	76.64	77.15	77.41	77.85	78.00	78.08	78.35	78.48	78.64	78.58	78.68	78.75
EOY	76.56	77.29	77.64	77.84	78.10	78.17	78.48	78.54	78.60	78.64	78.67	78.80

WATER YEAR 1994	HIGHEST INSTANTANEOUS	76.23	OCT 01, 1993
	LOWEST INSTANTANEOUS	78.84	SEP 20, 21, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

95

## CITY OF CHESAPEAKE

363836076201702. Local number, 60B 4 SOW 090B.

LOCATION.--Lat 36°38'36", long 76°20'17", Hydrologic Unit 03010205, 0.15 mi north of intersection of Benefit and West Roads, 1.5 mi north of Cornland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 556 ft, screened 525 to 535 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 16 ft above sea level, from topographic map. Measuring point: Top of casing, 2.05 ft above land-surface datum prior to Mar. 2, 1988; 1.2 ft thereafter.

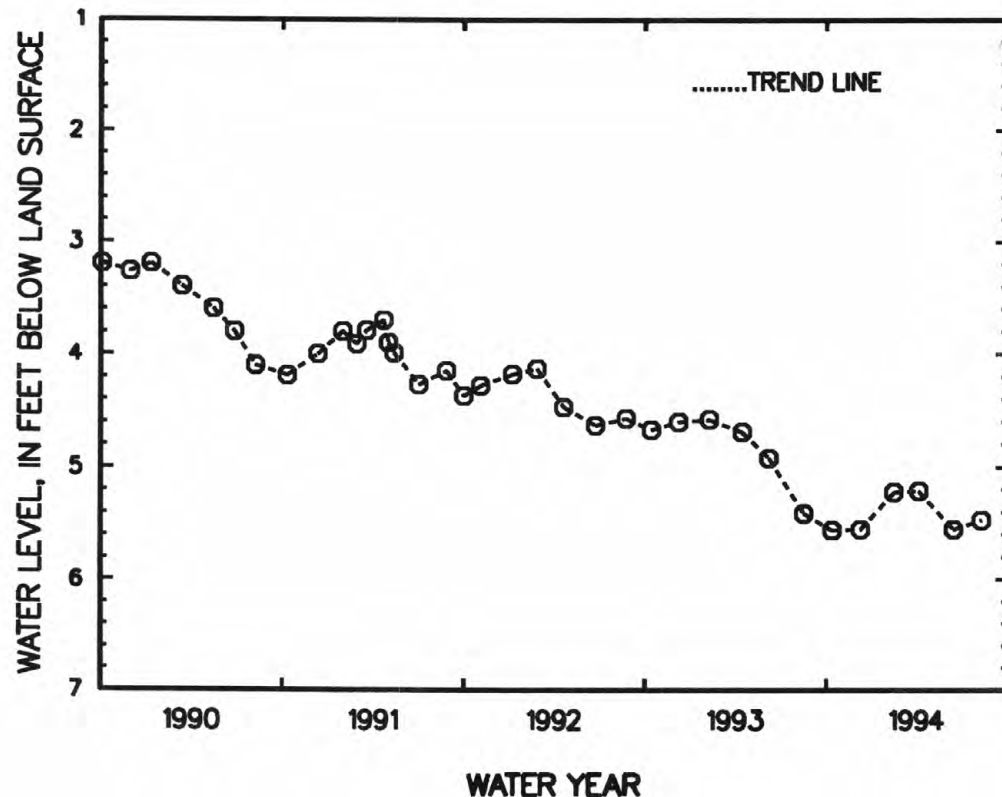
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.20 ft above land-surface datum, Feb. 1, 1978; lowest measured, 5.56 ft below land-surface datum, Oct. 13, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	5.56	DEC 09	5.55	FEB 14	5.22	APR 05	5.21	JUN 13	5.55	AUG 08	5.47
WATER YEAR 1994		HIGHEST	5.21	APR 05, 1994	LOWEST	5.56	OCT 13, 1993				



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364615076182101. Local number, 60C 41 SOW 164.

LOCATION.--Lat 36°46'15", long 76°18'21", Hydrologic Unit 02080208, 50 ft north of entrance road to Virginia Power powerplant, 500 ft south of Military Highway in Chesapeake. Owner: Virginia Power.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 400 ft, diameter 4 in. from 400 to 928 ft, depth 928 ft, screened 770 to 780 ft, 875 to 885 ft, 918 to 928 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Nov. 25, 1982, monthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum prior to July 15, 1987; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--February 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

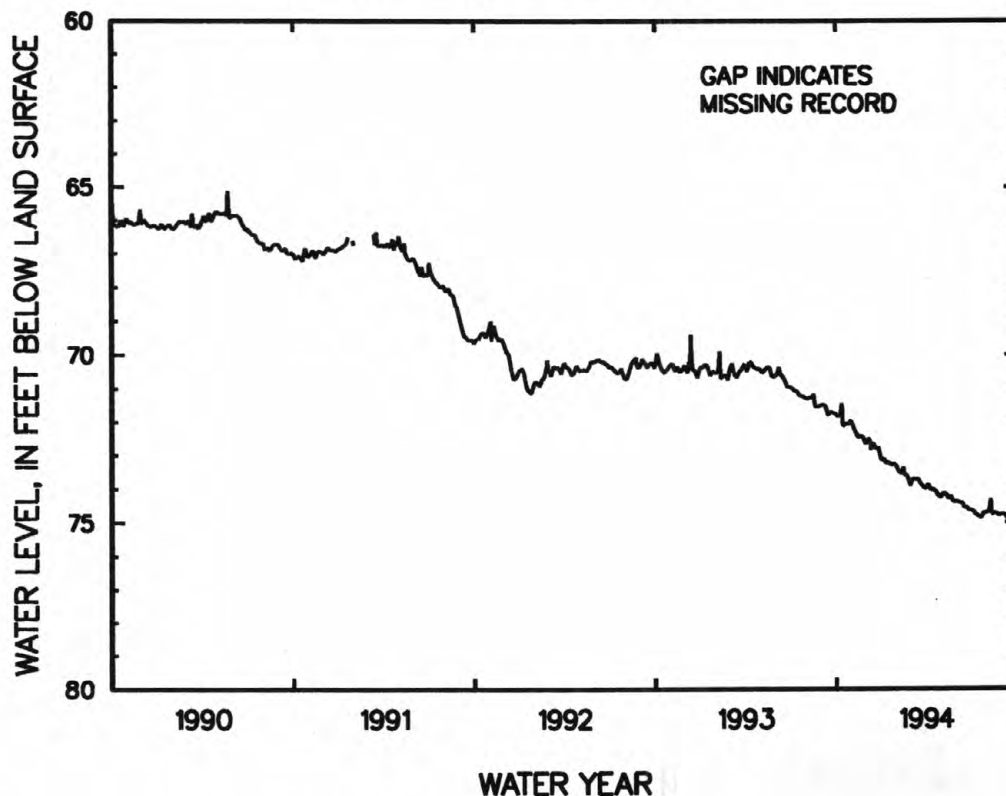
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 55.22 ft below land-surface datum, Mar. 15, 1983; lowest recorded, 74.93 ft below land-surface datum, Sept. 20, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.84	72.16	72.51	73.10	73.50	73.70	73.86	74.12	74.39	74.68	74.67	74.77
10	71.76	72.33	72.85	73.25	73.54	73.72	74.04	74.15	74.43	74.77	74.75	74.88
15	72.12	72.47	72.63	73.20	73.58	73.70	74.00	74.28	74.54	74.81	74.72	74.82
20	72.05	72.42	72.83	73.30	73.58	73.83	74.08	74.21	74.55	74.86	74.73	74.93
25	72.07	72.48	72.76	73.25	73.74	73.93	74.20	74.39	74.63	74.71	74.79	74.80
EOM	71.95	72.67	73.14	73.33	73.90	73.99	74.25	74.36	74.63	74.70	74.74	74.91

WATER YEAR 1994      HIGHEST INSTANTANEOUS    71.28    OCT 17, 1993      LOWEST INSTANTANEOUS    74.93    SEP 20, 1994

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

97

## CITY OF CHESAPEAKE

363502076091201. Local number, 61A 3 SOW 132.

LOCATION.--Lat 36°35'02", long 76°09'12", Hydrologic Unit 03010205, 250 ft south of Indian Creek Road, 0.2 mi southeast of entrance to Northwest River Park, and 3.0 mi southeast of Saint Brides. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 1.5 in., depth 36 ft, screened 28 to 36 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Aug. 23, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum prior to Mar. 2, 1988; 0.15 ft thereafter.

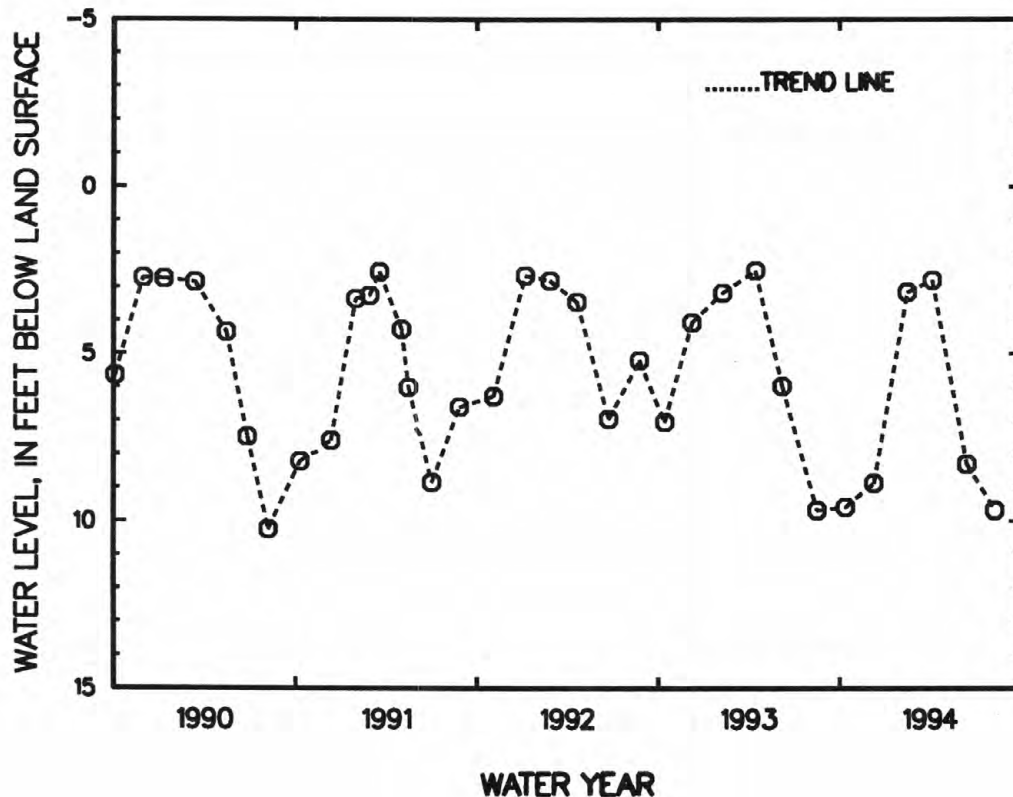
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.95 ft below land-surface datum, Jan. 24, 1980; lowest measured, 10.25 ft below land-surface datum, Aug. 7, 1990.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	9.59	DEC 09	8.87	FEB 14	3.15	APR 05	2.79	JUN 13	8.30	AUG 08	9.68
WATER YEAR 1994		HIGHEST	2.79	APR 05, 1994	LOWEST	9.68	AUG 08, 1994				



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364227076074701. Local number, 61B 2 SOW 091A.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 97 ft, screened 92 to 97 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.05 ft above land-surface datum prior to Jan. 11, 1989; 0.75 ft thereafter.

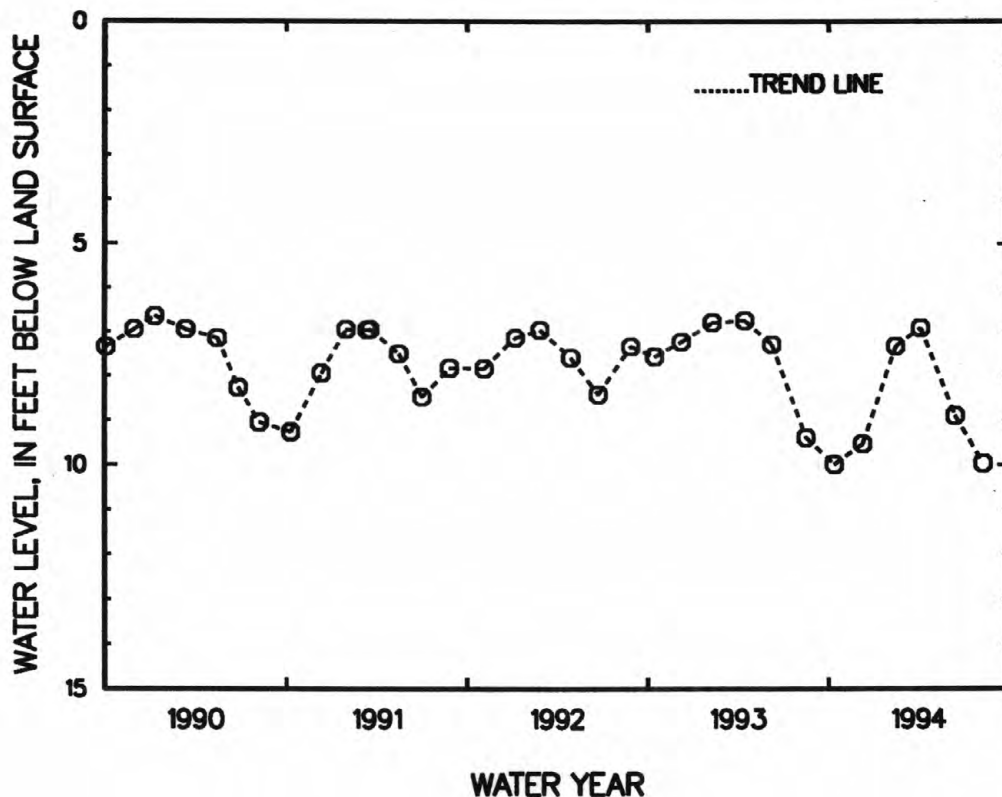
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.01 ft below land-surface datum, Oct. 16, 1979; lowest measured, 10.30 ft below land-surface datum, Sept. 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	9.99	DEC 09	9.53	FEB 14	7.33	APR 05	6.91	JUN 13	8.90	AUG 08	9.97
WATER YEAR 1994		HIGHEST	6.91	APR 05, 1994	LOWEST	9.99	OCT 13, 1993				



## GROUND-WATER LEVELS

99

## CITY OF CHESAPEAKE

364227076074702. Local number, 61B 5 SOW 091B.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,060 ft, screened 1,040 to 1,060 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

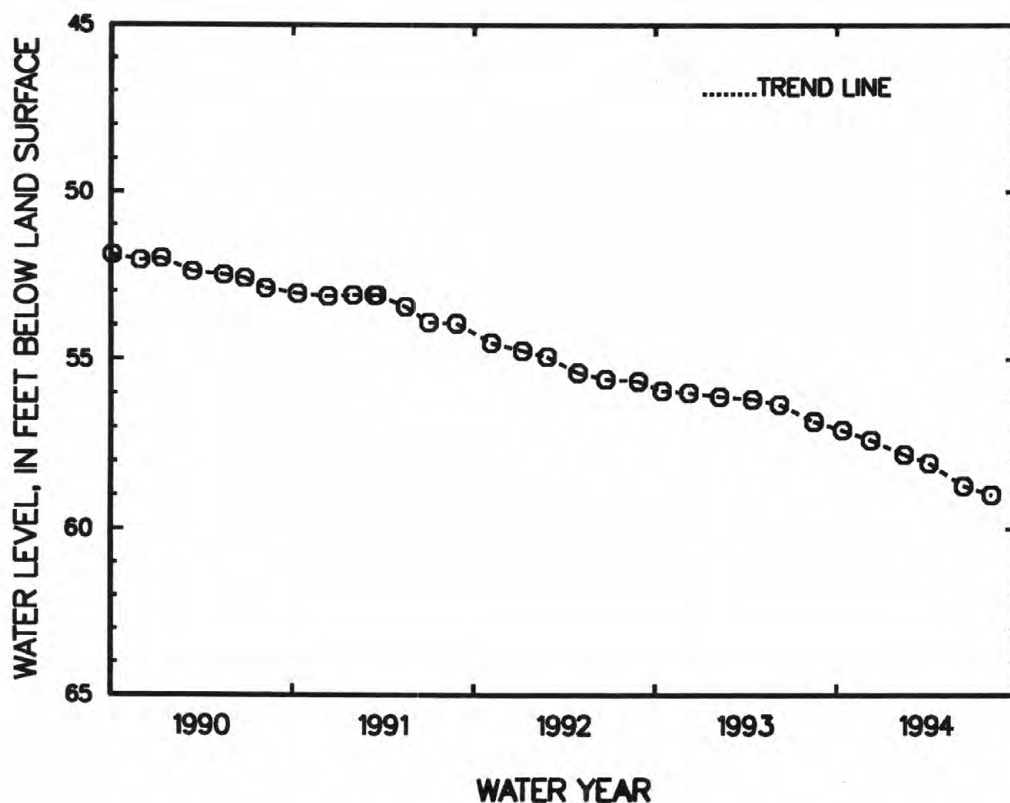
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.83 ft below land-surface datum, Aug. 28, 1980; lowest measured, 58.99 ft below land-surface datum, Aug. 8, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	57.08	DEC 09	57.37	FEB 14	57.80	APR 05	58.05	JUN 13	58.72	AUG 08	58.99
WATER YEAR 1994      HIGHEST    57.08    OCT 13, 1993      LOWEST    58.99    AUG 08, 1994											



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364227076074703. Local number, 61B 6 SOW 091C.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 780 ft, screened 760 to 780 ft.

INSTRUMENTATION.--Bimonthly measurement with manometer by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with manometer.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 7.0 ft above land-surface datum prior to Jan. 11, 1989; 1.2 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

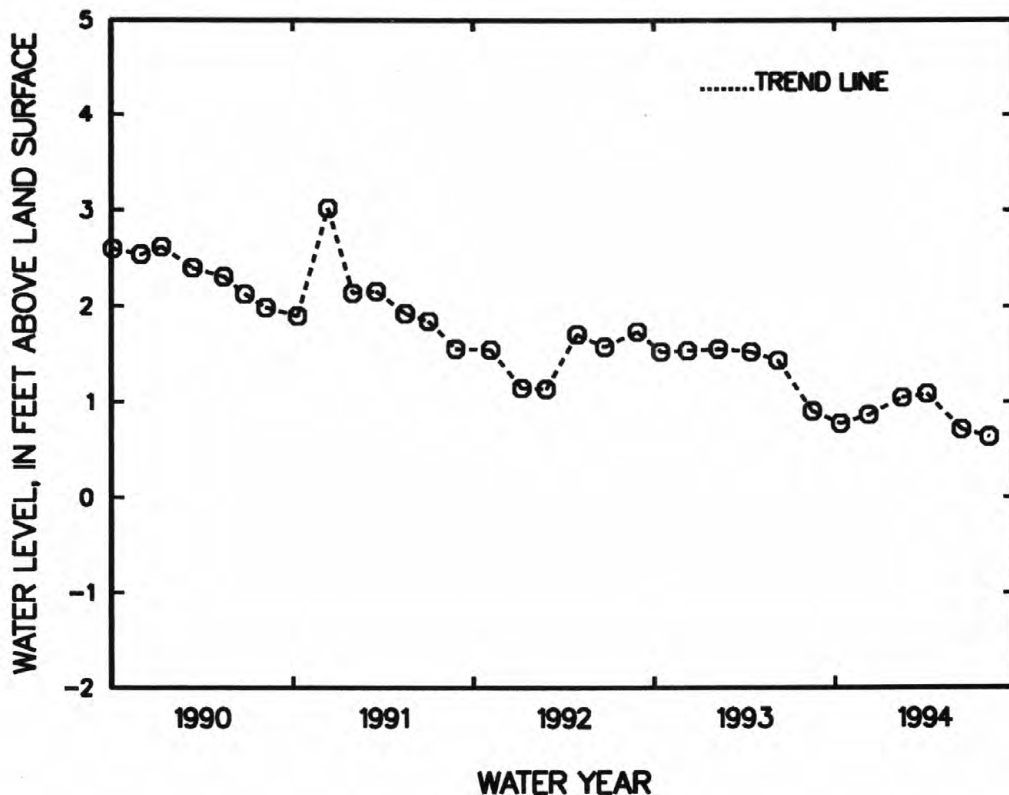
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.37 ft above land-surface datum, July 26, 1979; lowest measured, 0.64 ft above land-surface datum, Aug. 8, 1994.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	0.78	DEC 09	0.87	FEB 14	1.05	APR 05	1.09	JUN 13	0.72	AUG 08	0.64

WATER YEAR 1994      HIGHEST    1.09    APR 05, 1994      LOWEST    0.64    AUG 08, 1994

NOTE.--Flowing well; readings are above land-surface datum.



## GROUND-WATER LEVELS

101

## CITY OF CHESAPEAKE

364227076074704. Local number, 61B 7 SOW 091D.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 22 ft, screened 17 to 22 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

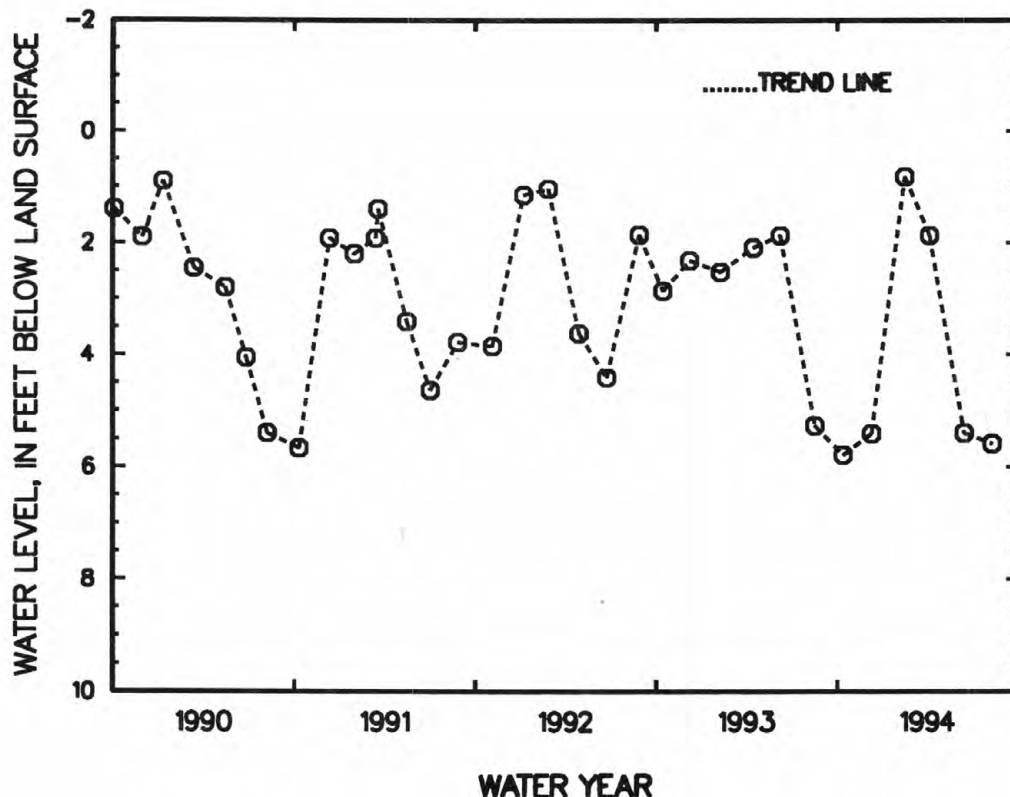
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.35 ft below land-surface datum, Mar. 13, 1989; lowest measured, 6.22 ft below land-surface datum, Sept. 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	5.79	DEC 09	5.41	FEB 14	0.82	APR 05	1.87	JUN 13	5.40	AUG 08	5.59
WATER YEAR 1994		HIGHEST	0.82	FEB 14, 1994	LOWEST	5.79	OCT 13, 1993				





## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364231076140801. Local number, 61B 8 SOW 134.

LOCATION.--Lat 36°42'31", long 76°14'08", Hydrologic Unit 03010205, at Great Bridge Junior High School, in Great Bridge. Owner: Virginia Department of Environmental Quality.

AQUIFER.--St. Mary-Choptank aquifer of Miocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 100 ft, screened 84 to 94 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

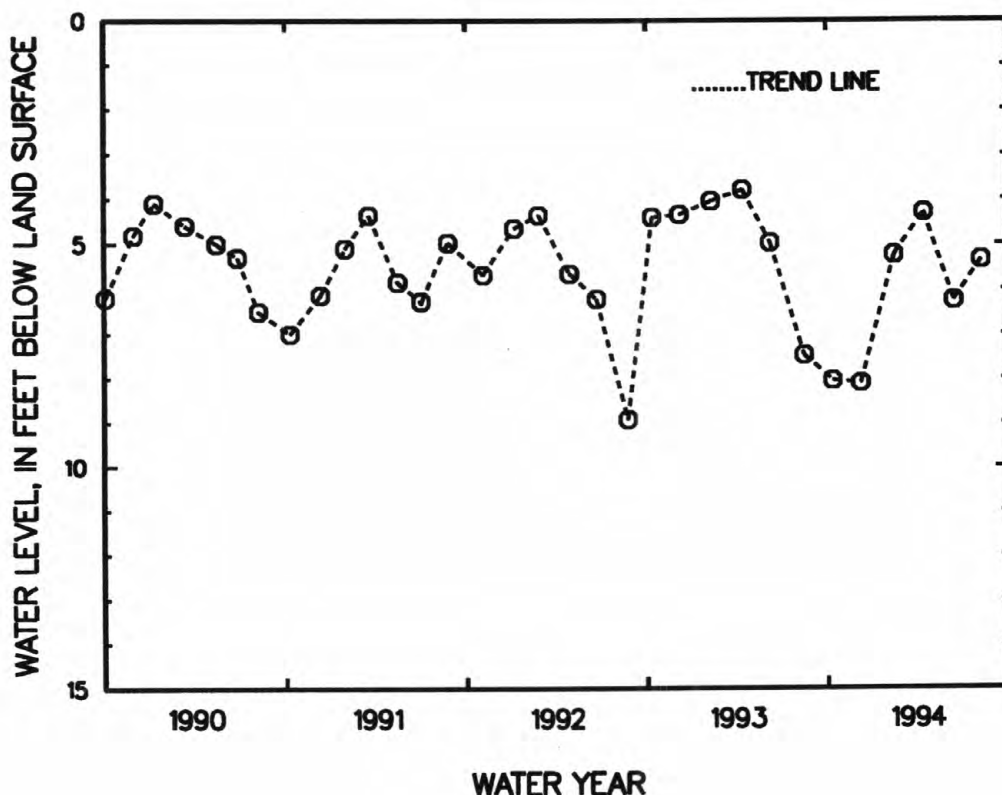
PERIOD OF RECORD.--January 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.80 ft below land-surface datum, Apr. 14, 1993; lowest measured, 16.07 ft below land-surface datum, Sept. 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	8.05	DEC 08	8.11	FEB 14	5.24	APR 15	4.30	JUN 14	6.25	AUG 08	5.35

WATER YEAR 1994      HIGHEST    4.30    APR 15, 1994      LOWEST    8.11    DEC 08, 1993



## GROUND-WATER LEVELS

103

## CITY OF CHESAPEAKE

364227076074706. Local number, 61B 12 SOW 091E.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,630 ft, diameter 2 in. from 1,630 to 1,830 ft, depth 1,830 ft, screened 1,820 to 1,830 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Low-water level drawdown subsequent to summer of 1993 was initially the result of pumping of the well. Cause of nonrecovery to pre-pumpage level is unknown but is under investigation.

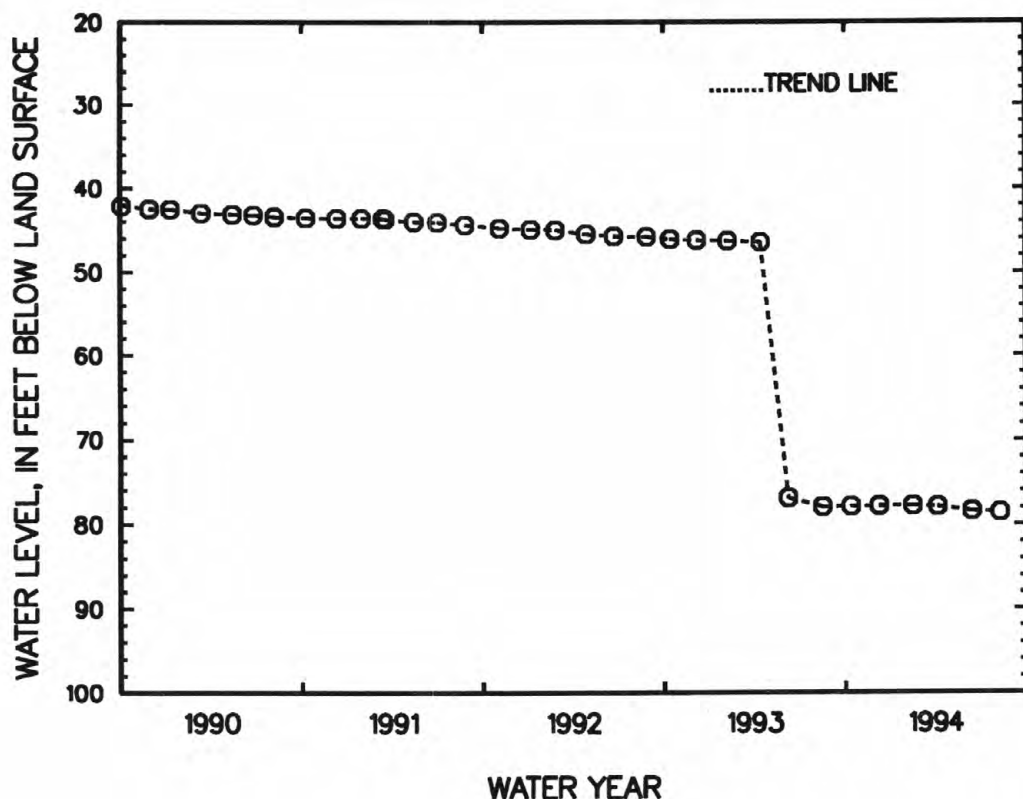
PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.50 ft below land-surface datum, June 21, 1989; lowest measured, 78.54 ft below land-surface datum, Aug. 8, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	77.84	DEC 09	77.80	FEB 14	77.76	APR 05	77.86	JUN 13	78.39	AUG 08	78.54

WATER YEAR 1994      HIGHEST    77.76    FEB 14, 1994      LOWEST    78.54    AUG 08, 1994



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364227076074707. Local number, 61B 13 SOW 091F.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,270 ft, diameter 2 in. from 1,270 to 1,390 ft, depth 1,390 ft, screened 1,370 to 1,380 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

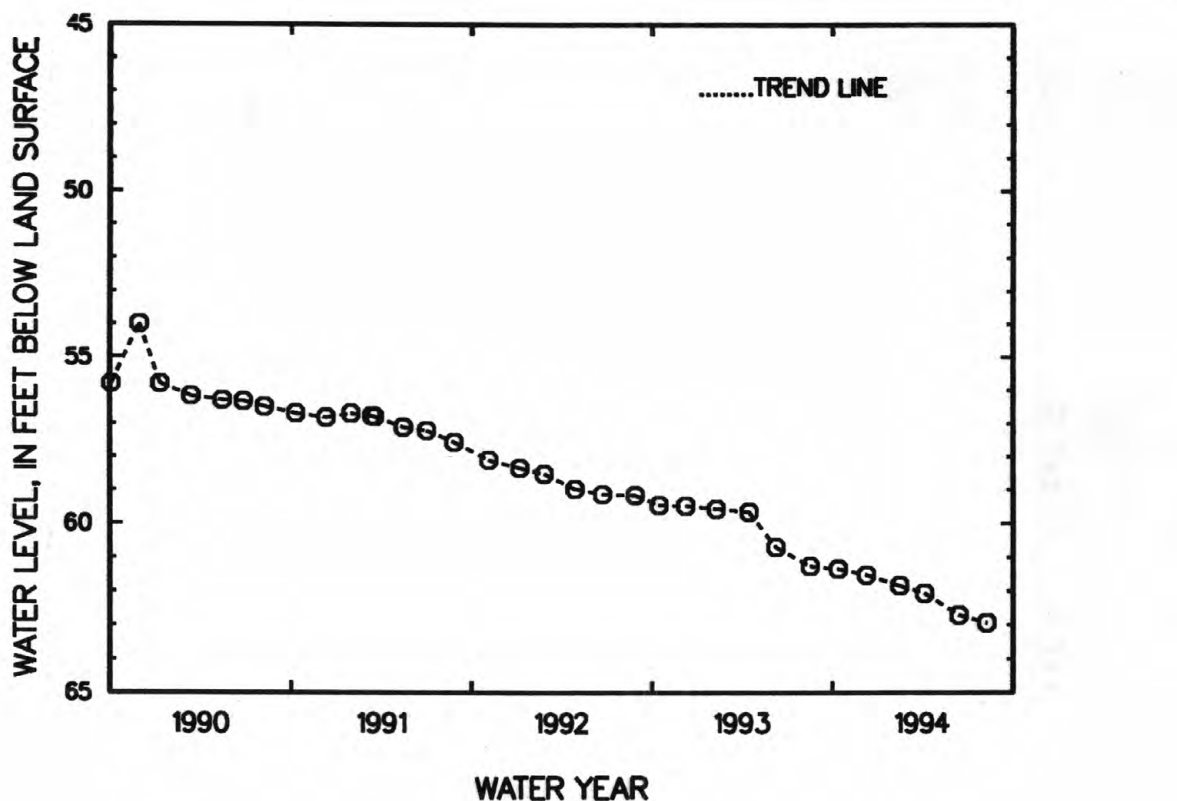
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.00 ft below land-surface datum, Aug. 10, 1989; lowest measured, 62.93 ft below land-surface datum, Aug. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	61.34	DEC 09	61.52	FEB 14	61.84	APR 05	62.06	JUN 13	62.70	AUG 08	62.93
WATER YEAR 1994      HIGHEST   61.34   OCT 13, 1993      LOWEST   62.93   AUG 08, 1994											



## GROUND-WATER LEVELS

105

## CITY OF CHESAPEAKE

364227076074708. Local number, 61B 14 SOW 091G.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 987 ft, diameter 2 in. from 987 to 1,110 ft, depth 1,110 ft, screened 1,090 to 1,100 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

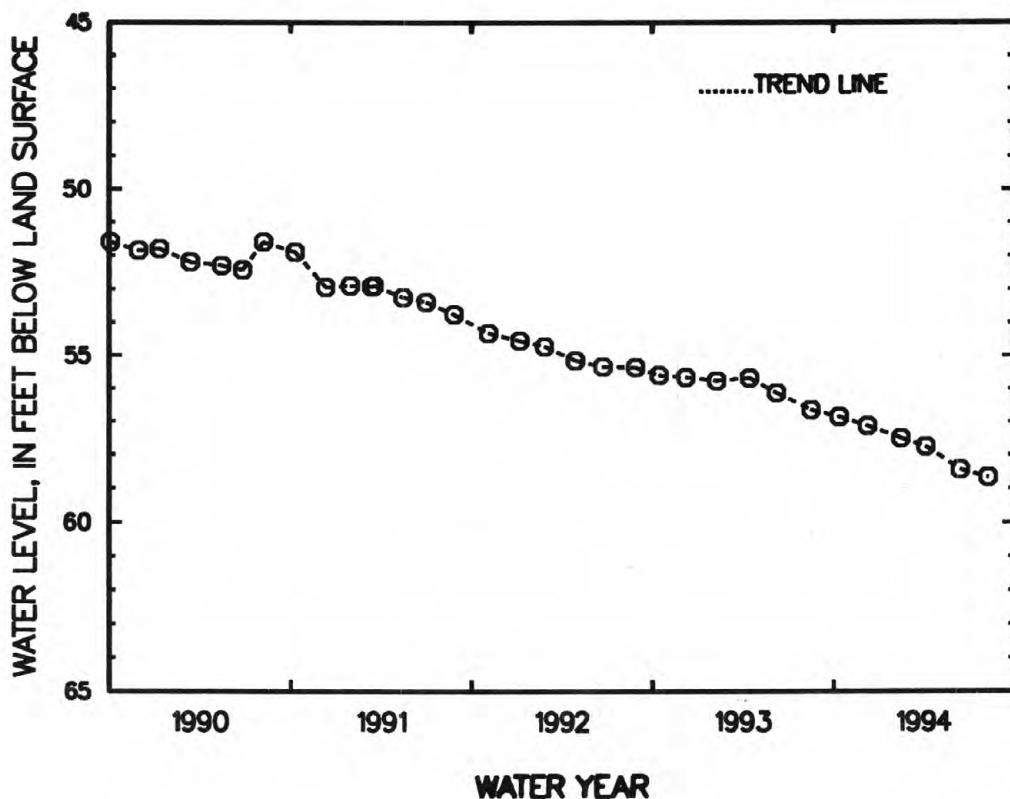
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.30 ft below land-surface datum, Mar. 22, 1989; lowest measured, 58.66 ft below land-surface datum, Aug. 8, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	56.86	DEC 09	57.13	FEB 14	57.50	APR 05	57.75	JUN 13	58.43	AUG 08	58.66
WATER YEAR 1994      HIGHEST   56.86   OCT 13, 1993      LOWEST   58.66   AUG 08, 1994											



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364227076074709. Local number, 61B 15 SOW 091H.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 700 ft, diameter 2 in. from 674 to 790 ft, depth 790 ft, screened 759 to 769 ft.

INSTRUMENTATION.--Bimonthly measurement with manometer by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

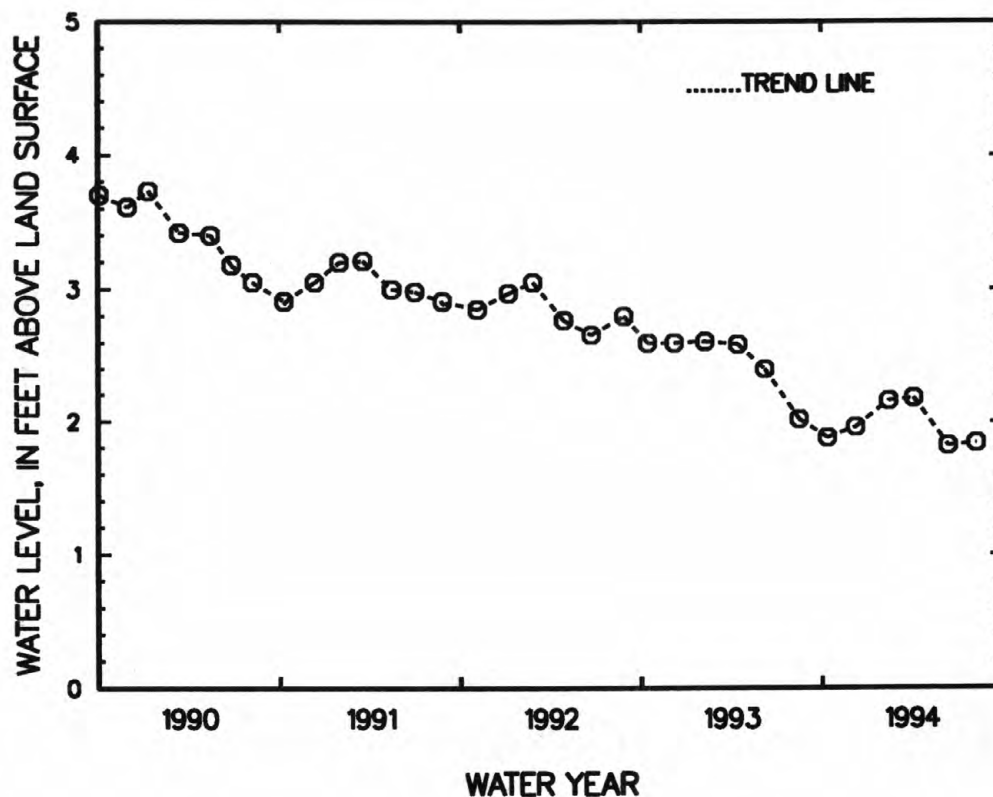
PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.75 ft above land-surface datum, Apr. 20, 1989; lowest measured, 1.82 ft above land-surface datum, June 13, 1994.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	1.88	DEC 09	1.96	FEB 14	2.16	APR 05	2.18	JUN 13	1.82	AUG 08	1.84
WATER YEAR 1994		HIGHEST	2.18	APR 05, 1994		LOWEST	1.82	JUN 13, 1994			

NOTE.--Flowing well; readings are above land-surface datum.





## GROUND-WATER LEVELS

107

## CITY OF CHESAPEAKE

364227076074710. Local number, 61B 16 SOW 091J.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 602 ft, diameter 2 in. from 586 to 690 ft, depth 690 ft, screened 670 to 680 ft.

INSTRUMENTATION.--Bimonthly measurement with manometer by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--March 1989 to current year.

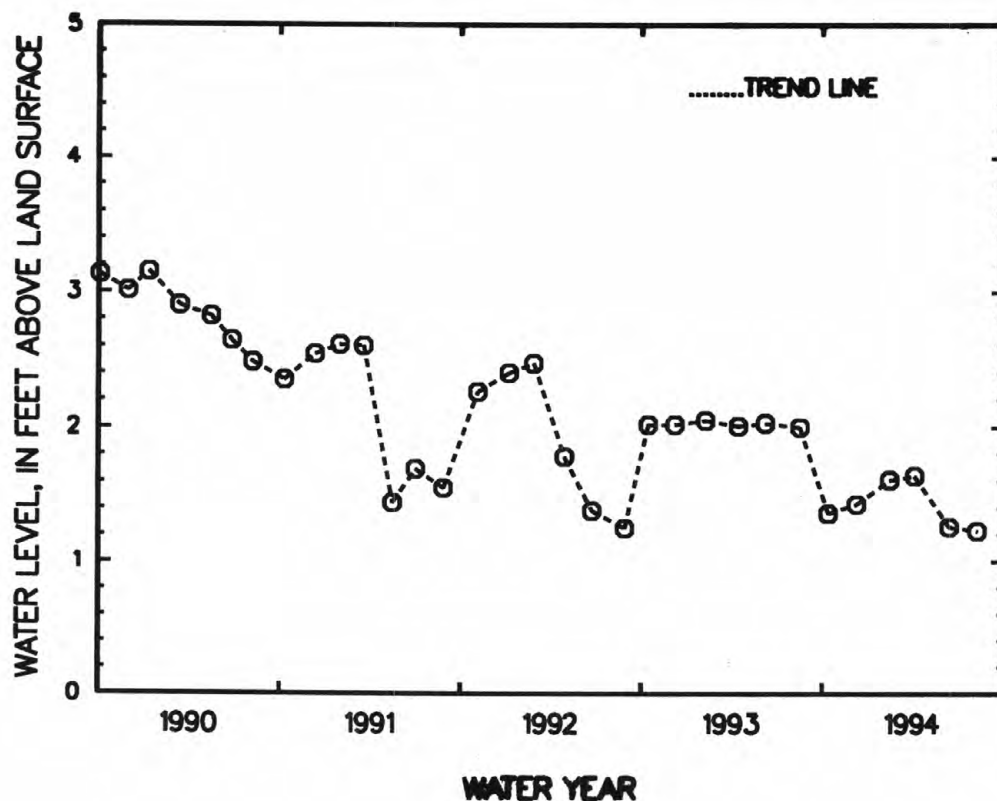
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.31 ft above land-surface datum, Mar. 13, 1989; lowest measured, 1.23 ft above land-surface datum, Aug. 8, 1994.

## WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	1.36	DEC 09	1.43	FEB 14	1.61	APR 05	1.64	JUN 13	1.26	AUG 08	1.23

WATER YEAR 1994      HIGHEST   1.64   APR 05, 1994      LOWEST   1.23   AUG 08, 1994

NOTE.--Flowing well; readings are above land-surface datum.



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364227076074711. Local number, 61B 17 SOW 091K.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 78 ft, diameter 2 in. from 78 to 108 ft, depth 108 ft, screened 88 to 98 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

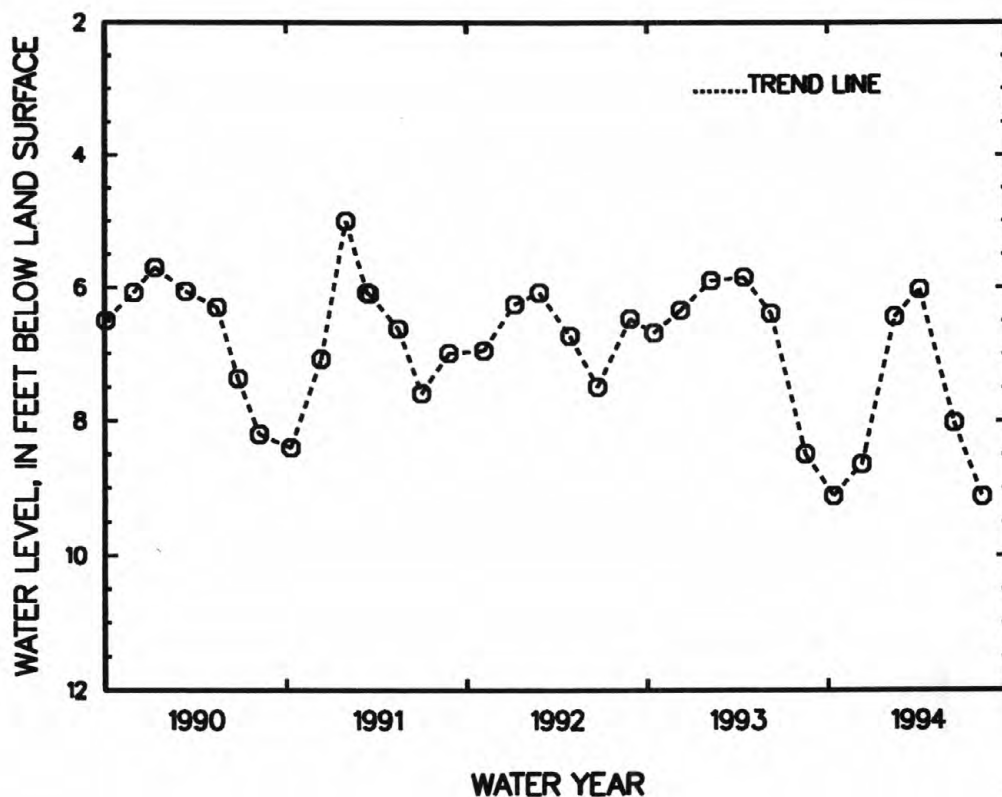
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land-surface datum, Jan. 30, 1991; lowest measured, 9.12 ft below land-surface datum, Aug. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	9.11	DEC 09	8.64	FEB 14	6.44	APR 05	6.03	JUN 13	8.02	AUG 08	9.12
WATER YEAR 1994		HIGHEST	6.03	APR 05, 1994	LOWEST	9.12	AUG 08, 1994				



## GROUND-WATER LEVELS

109

## CITY OF CHESAPEAKE

364227076074712. Local number, 61B 18 SOW 091L.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 37 ft, diameter 2 in. from 37 to 67 ft, depth 67 ft, screened 57 to 67 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

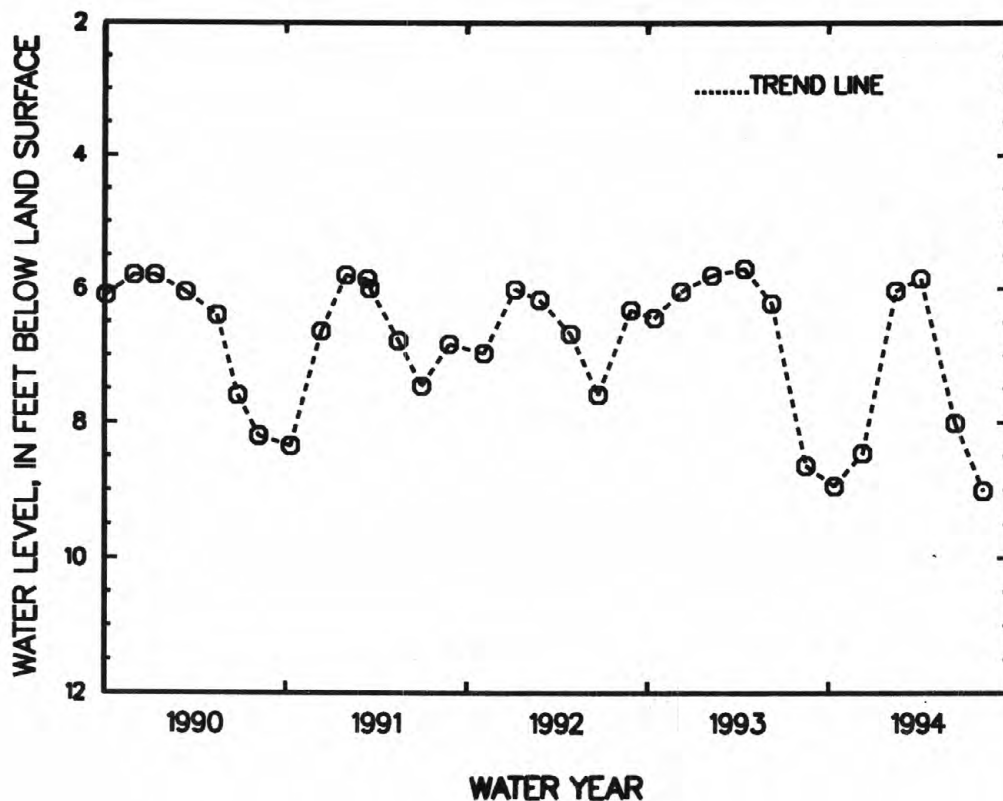
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.40 ft below land-surface datum, Mar. 13, Apr. 20, 1989; lowest measured, 9.01 ft below land-surface datum, Aug. 8, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	8.94	DEC 09	8.46	FEB 14	6.03	APR 05	5.85	JUN 13	8.01	AUG 08	9.01
WATER YEAR 1994		HIGHEST	5.85	APR 05, 1994	LOWEST	9.01	AUG 08, 1994				



## GROUND-WATER LEVELS

## CITY OF CHESAPEAKE

364227076074713. Local number, 61B 19 SOW 091M.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

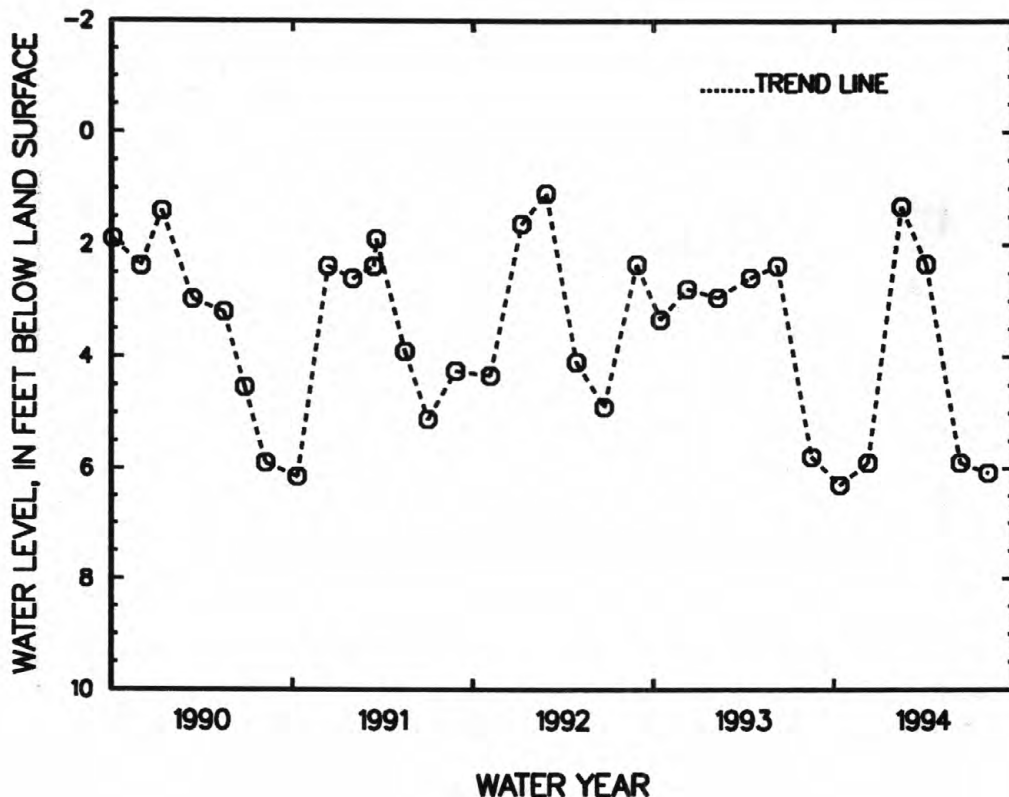
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.09 ft below land-surface datum, Feb. 26, 1992; lowest measured, 6.30 ft below land-surface datum, Oct. 13, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	6.30	DEC 09	5.90	FEB 14	1.32	APR 05	2.34	JUN 13	5.90	AUG 08	6.08
WATER YEAR 1994      HIGHEST    1.32    FEB 14, 1994      LOWEST    6.30    OCT 13, 1993											



## GROUND-WATER LEVELS

111

## CHESTERFIELD COUNTY

372519077264701. Local number, 51H 92.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley, 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 53 ft, screened 51 to 53 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 1, 1985, to Jan. 23, 1991, digital recorder--60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 102.31 ft above sea level. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Water level affected by pumping and sampling at different times during the year.

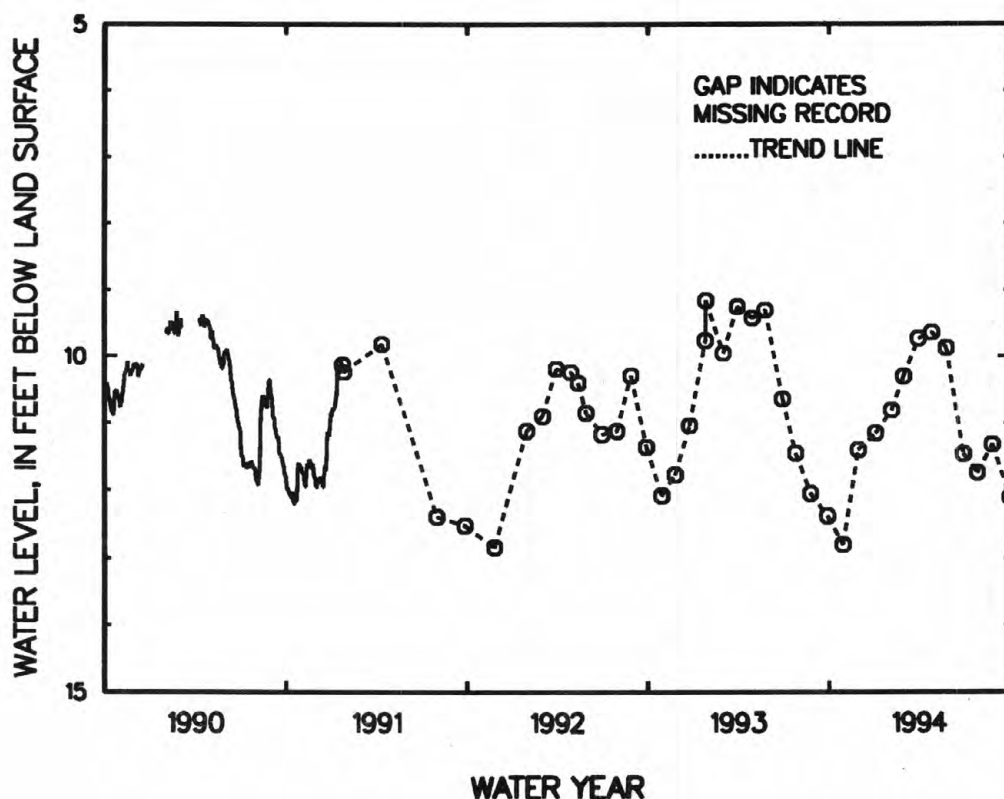
PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.95 ft below land-surface datum, June 14, 1989; lowest measured, 14.35 ft below land-surface datum, Aug. 16, 1985.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	12.80	JAN 03	11.15	FEB 28	10.30	APR 26	9.64	JUN 28	11.46	AUG 25	11.32
NOV 29	11.40	FEB 04	10.81	MAR 30	9.73	MAY 25	9.87	JUL 26	11.74	SEP 29	12.11

WATER YEAR 1994      HIGHEST    9.64    APR 26, 1994      LOWEST    12.80    OCT 29, 1993





## GROUND-WATER LEVELS

## CHESTERFIELD COUNTY

372519077264702. Local number, 51H 93.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road.  
Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 38 ft, screened 36 to 38 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 102.40 ft above sea level. Measuring point: Top of casing, 1.9 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by pumping and sampling at different times during the year.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.94 ft below land-surface datum, May 16, 1989; lowest measured, 14.65 ft below land-surface datum, Aug. 16, 1985.

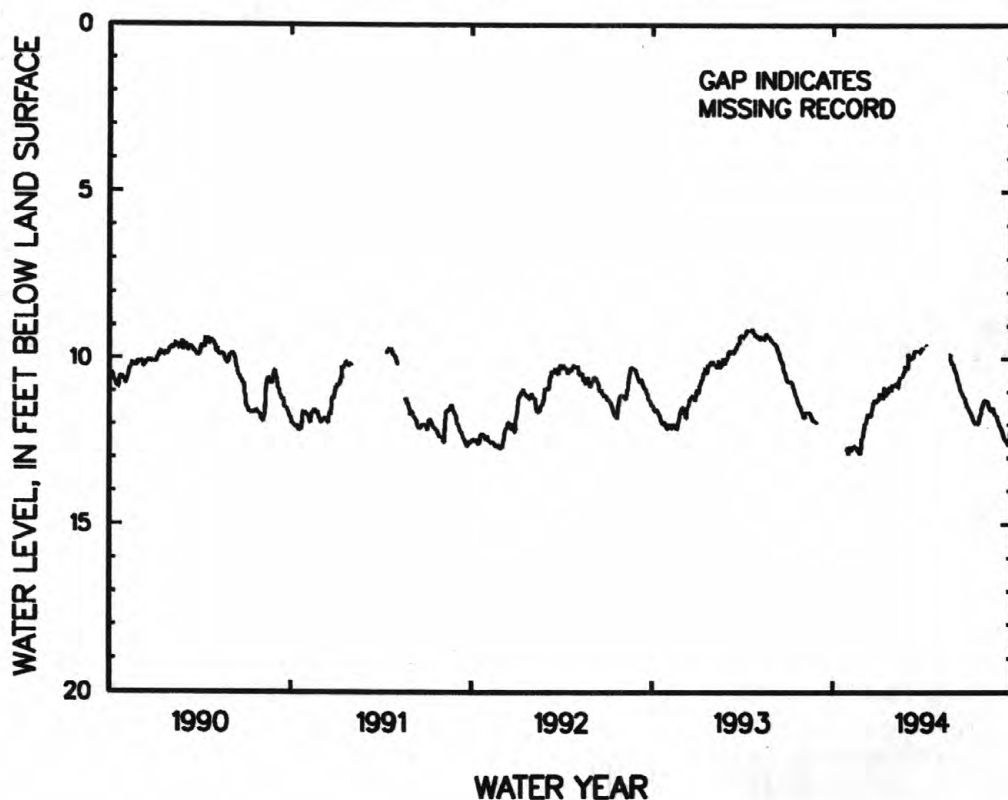
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	12.72	11.96	11.17	10.79	9.96	---	---	10.38	11.62	11.25	12.10
10	---	12.69	11.82	11.22	10.88	9.94	---	---	10.65	11.79	11.36	12.35
15	---	12.64	11.66	11.04	10.57	9.81	---	---	10.94	11.96	11.55	12.48
20	---	12.72	11.58	11.03	10.51	9.77	---	---	11.12	11.96	11.50	12.62
25	---	12.88	11.23	10.88	10.23	---	---	9.87	11.29	11.72	11.71	12.19
EOY	12.68	12.42	11.28	10.81	10.31	9.70	---	10.17	11.48	11.37	11.89	12.21

WATER YEAR 1994      HIGHEST INSTANTANEOUS    a9.50    APR 14, 1994      LOWEST INSTANTANEOUS    12.89    NOV 02, 1993

a Occurred during period of equipment malfunction; water level questionable.

DAILY LOW-WATER LEVELS



## CHESTERFIELD COUNTY

372519077264703. Local number, 51H 94.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road, 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 in Bensley. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 26 ft, screened 24 to 26 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 102.04 ft above sea level. Measuring point: Top of casing, 2.2 ft above land-surface datum.

REMARKS.--Water level affected by pumping and sampling at different times during the year.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.82 ft below land-surface datum, May 16, 1989; lowest measured, 15.19 ft below land-surface datum, Aug. 16, 1985.

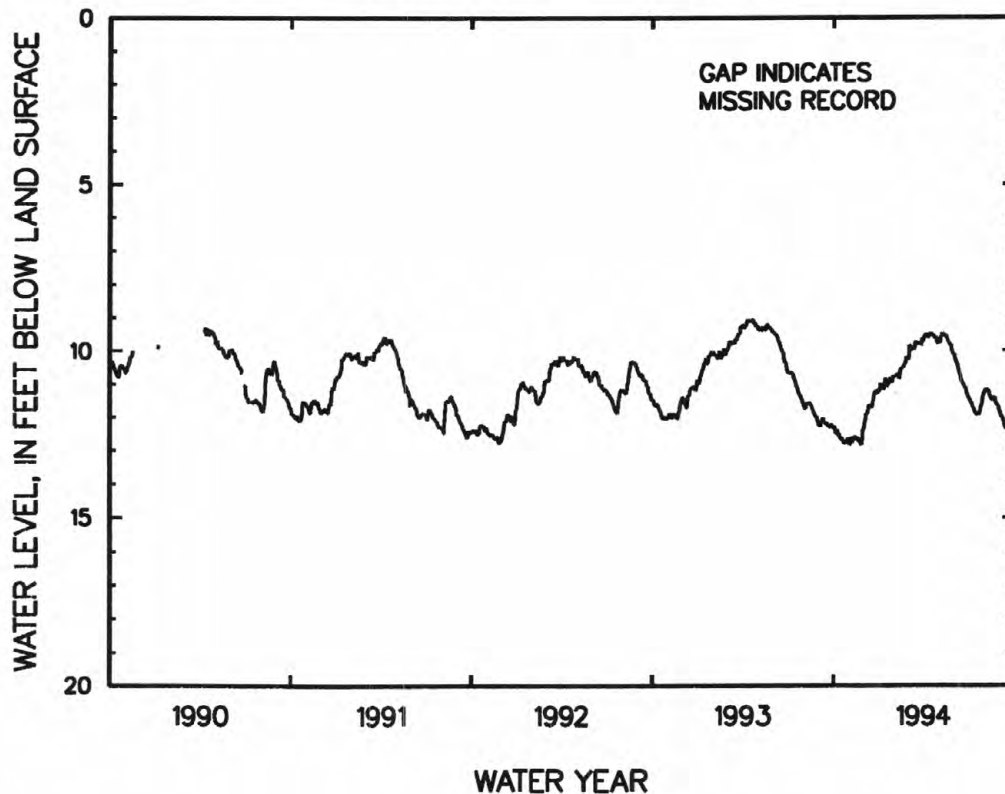
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.45	12.68	11.91	11.11	10.73	9.94	9.52	9.60	10.34	11.59	11.18	12.03
10	12.54	12.66	11.78	11.16	10.85	9.86	9.51	9.52	10.62	11.75	11.30	12.29
15	12.64	12.59	11.63	11.01	10.54	9.72	9.50	9.56	10.91	11.91	11.49	12.39
20	12.70	12.65	11.54	10.99	10.45	9.79	9.53	9.74	11.07	11.93	11.43	12.55
25	12.75	12.81	11.20	10.86	10.21	9.77	9.59	9.85	11.25	11.67	11.64	12.09
EOM	12.63	12.36	11.25	10.79	10.28	9.69	9.72	10.12	11.44	11.30	11.82	12.14

WATER YEAR 1994      HIGHEST INSTANTANEOUS    9.34    APR 13, 1994

LOWEST INSTANTANEOUS    12.83    NOV 02, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## CHESTERFIELD COUNTY

372519077264704. Local number, 51H 95.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road.  
Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 4.7 ft, screened 2.7 to 4.7 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Jan. 23, 1991, digital recorder--60-minute punch and monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 102.23 ft above sea level. Measuring point: Top of casing, 1.9 ft above land-surface datum.

REMARKS.--Upper limit of recorded water-level data is limited by well construction. Water level affected by pumping and sampling at different times during the year.

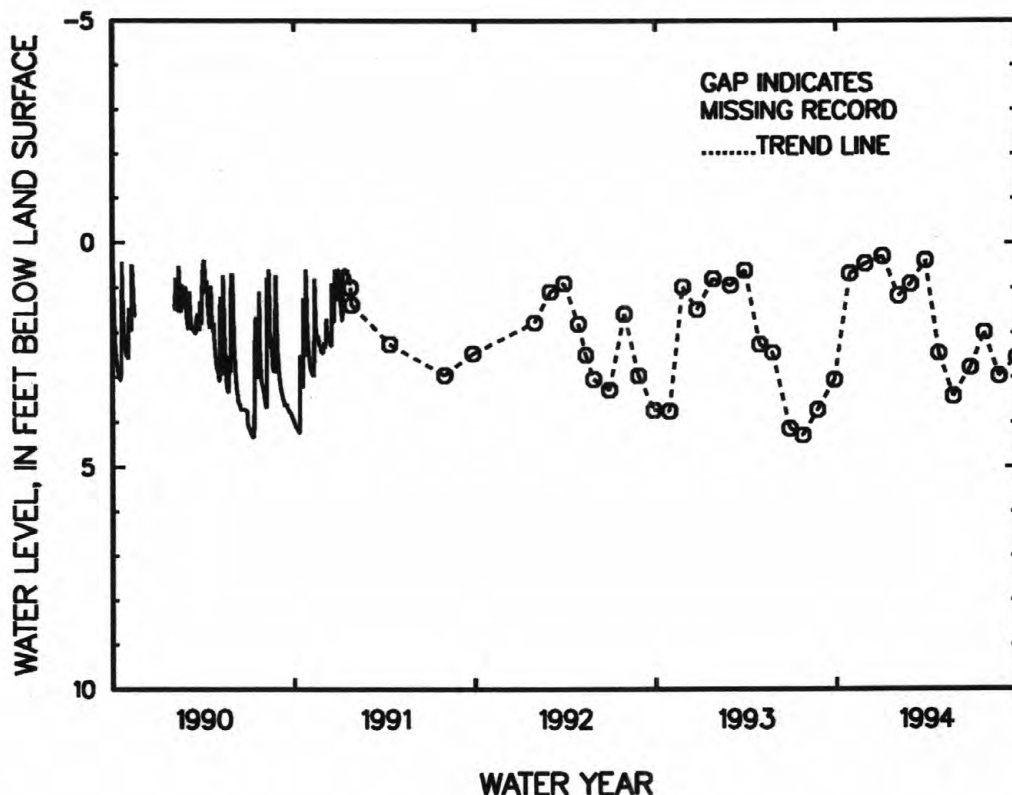
PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.02 ft below land-surface datum, Jan. 11, 12, 1990; lowest recorded, 4.38 ft below land-surface datum, Aug. 8-19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	0.68	JAN 03	0.30	FEB 28	0.91	APR 26	2.45	JUN 28	2.78	AUG 25	2.97
NOV 29	.46	FEB 04	1.17	MAR 30	.39	MAY 25	3.42	JUL 26	1.99	SEP 29	2.55

WATER YEAR 1994      HIGHEST   0.30   JAN 03, 1994      LOWEST   3.42   MAY 25, 1994



## CHESTERFIELD COUNTY

372519077264605. Local number, 51H130.

LOCATION.--Lat 37°25'19", long 77°26'46", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highway 1 and 301 (Jefferson Davis Highway) and Alcott Road.  
Owner: U.S. Geological Survey.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 96 ft, cased to 71 ft, open hole 71 to 96 ft.

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

DATUM.--Elevation of land-surface datum is 102.17 ft above sea level. Measuring point: Top of casing, 1.64 ft above land-surface datum.

REMARKS.--Water level affected by pumping and sampling at different times during the year.

PERIOD OF RECORD.--May 1985 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

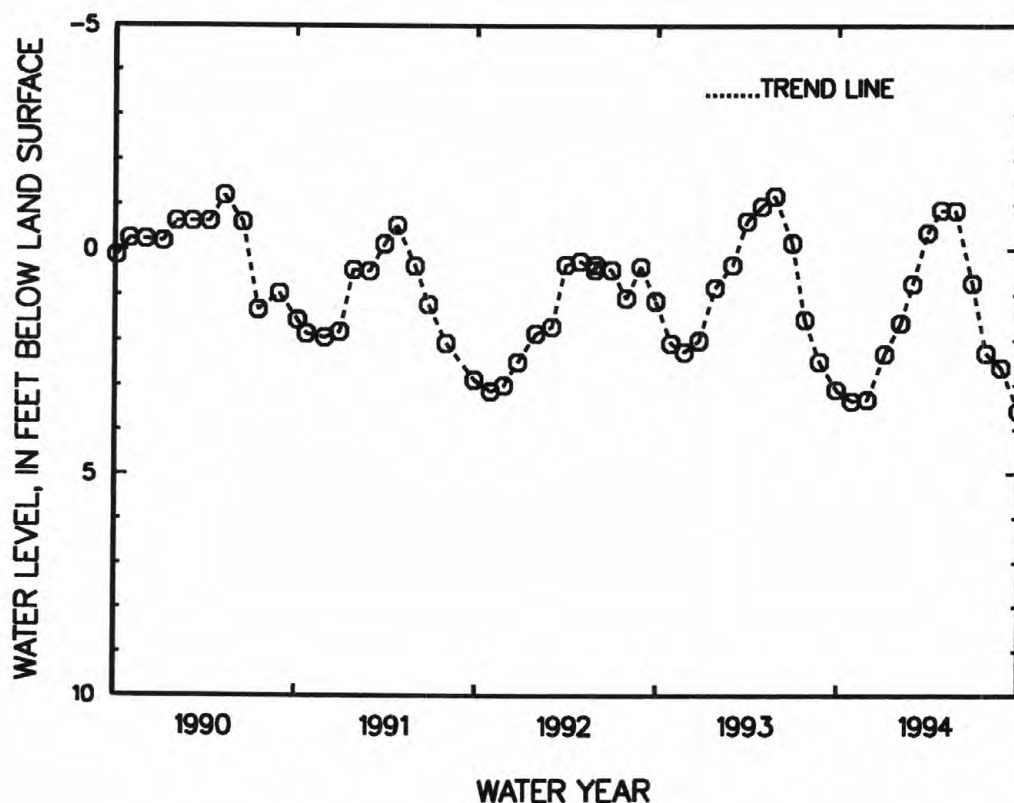
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.64 ft above land-surface datum, June 1, 1989; lowest measured, 3.80 ft below land-surface datum, Aug. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	3.36	JAN 03	2.31	FEB 28	0.76	APR 26	+0.88	JUN 28	0.74	AUG 25	2.61
NOV 29	3.33	FEB 04	1.63	MAR 30	+0.38	MAY 25	+0.87	JUL 26	2.29	SEP 29	3.59

WATER YEAR 1994      HIGHEST    +0.88    APR 26, 1994      LOWEST    3.59    SEP 29, 1994

+ Water level above land-surface datum.



## GROUND-WATER LEVELS

## CLARKE COUNTY

390348078035501. Local number, 46W175.

LOCATION.--Lat 39°03'48", long 78°03'55", Hydrologic Unit 02070007, 1.5 mi east of the intersection of U.S. Highways 17/50 and 340 at Blandy Experimental Farm. Owner: University of Virginia.

AQUIFER.--Conococheague Limestone of Middle Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 80.4 ft, cased to 24 ft, open hole 24 to 80.4 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 600 ft above sea level, from topographic map. Measuring point: Top of casing, 3.7 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 24.81 ft below land-surface datum, Mar. 29, 30, 1994; lowest recorded, 44.51 ft below land-surface datum, Feb. 11, 13-16, 1992.

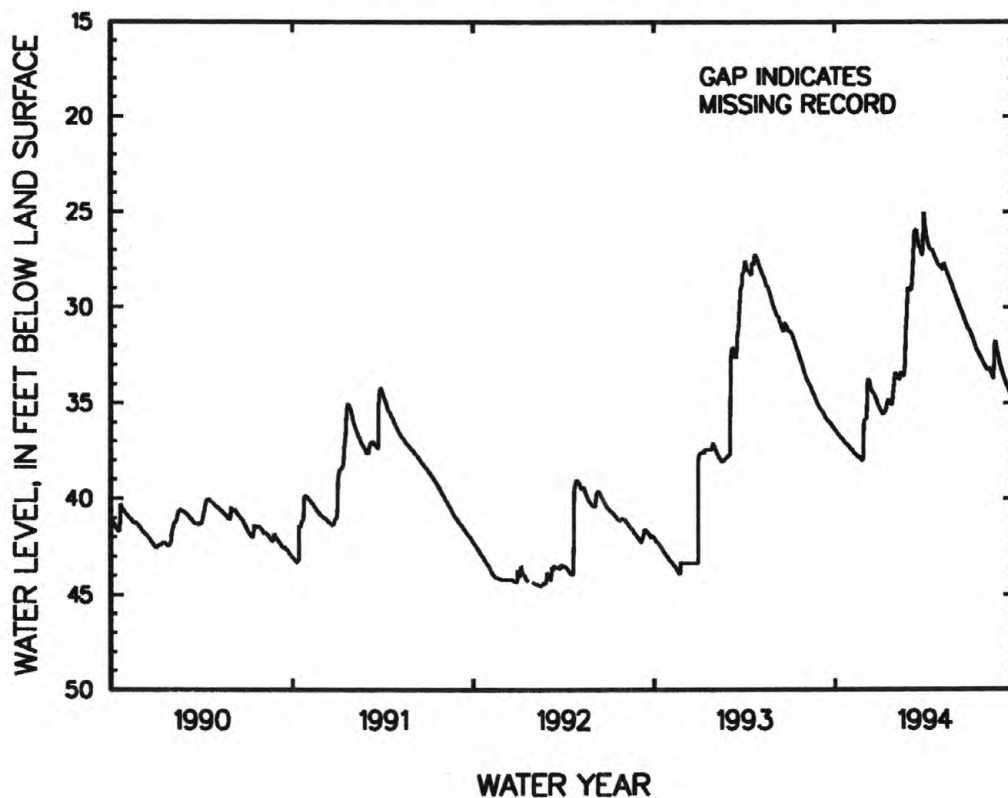
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.50	37.41	35.77	35.53	33.63	29.02	26.33	27.91	29.61	31.56	33.26	33.49
10	36.69	37.60	33.77	35.44	33.51	26.82	26.86	27.78	29.95	31.95	33.33	33.90
15	36.84	37.74	34.37	34.94	33.52	25.93	26.98	28.07	30.30	32.28	33.62	34.22
20	36.99	37.81	34.54	34.93	32.76	26.78	27.27	28.46	30.65	32.51	31.76	34.54
25	37.13	37.98	34.82	35.00	29.26	27.15	27.54	28.78	31.01	32.77	32.35	34.61
ECM	37.26	35.93	35.27	33.46	29.04	25.28	27.77	29.22	31.21	33.07	33.05	34.85

WATER YEAR 1994      HIGHEST INSTANTANEOUS      24.81      MAR 29, 30, 1994

LOWEST INSTANTANEOUS      38.01      NOV 27, 1993

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

117

## CITY OF COLONIAL HEIGHTS

371644077244601. Local number, 51G 1.

LOCATION.--Lat 37°16'44", long 77°24'46", Hydrologic Unit 02080207, 200 ft west of U.S. Highways 1 and 301, 0.5 mi south of the intersection of State Highway 144 (Ashby Avenue) and U.S. Highways 1 and 301 (Boulevard) in Colonial Heights. Owner: Dean Whittington.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 100 ft, cased to 50 ft, open hole 50 to 100 ft.

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

DATUM.--Elevation of land-surface datum is 57.30 ft above sea level. Measuring point: Top of casing, 1.0 ft above land-surface datum.

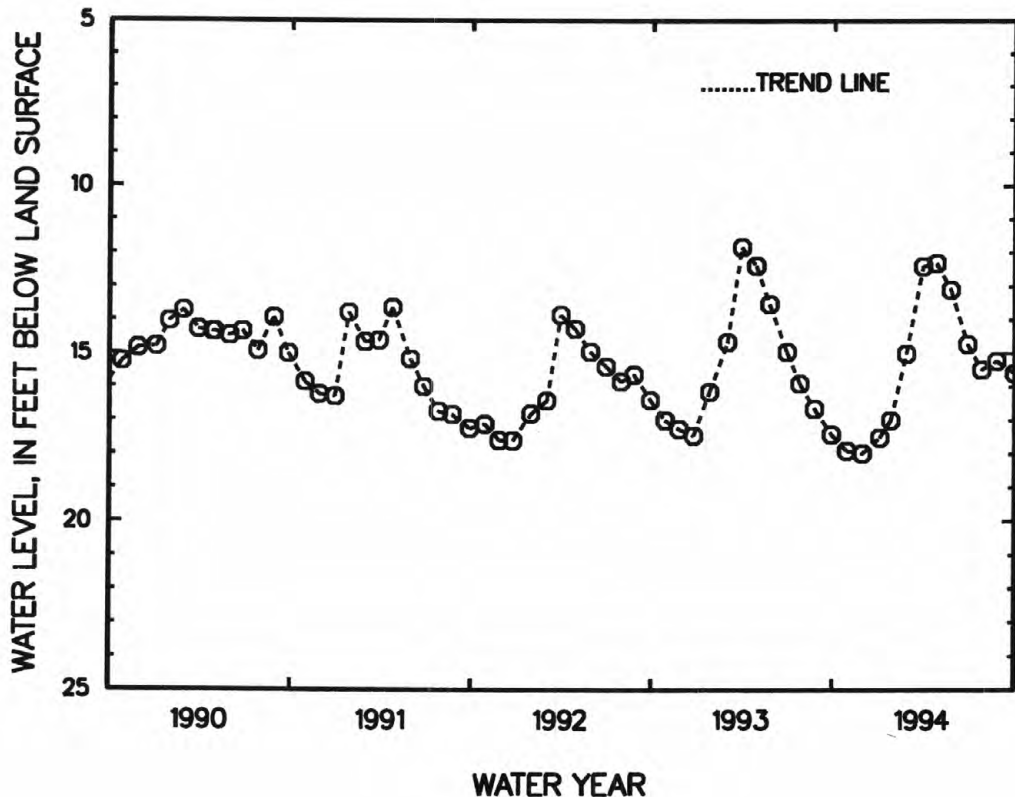
PERIOD OF RECORD.--October 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.73 ft below land-surface datum, Jan. 26, 1978; lowest measured, 19.26 ft below land-surface datum, Dec. 3, 1963.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	17.91	JAN 03	17.52	FEB 25	15.01	APR 26	12.31	JUN 28	14.73	AUG 25	15.22
NOV 29	17.99	25	17.00	MAR 30	12.40	MAY 25	13.10	JUL 26	15.48	SEP 29	15.59

WATER YEAR 1994      HIGHEST 12.31      APR 26, 1994      LOWEST 17.99      NOV 29, 1993



## GROUND-WATER LEVELS

## ESSEX COUNTY

375032076583201. Local number, 55L 1.

LOCATION.--Lat 37°50'32", long 76°58'32", Hydrologic Unit 02080104, 0.4 mi northeast of the intersection of State Highway-621 and private dirt road at Retreat Farm near Millers Tavern and 0.9 mi west of the intersection of U.S. Highway 360 and State Highway 621. Owner: Edward W. Haile.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 621 ft, depth 621 ft, screened 575 to 585 ft, 615 to 621 ft.

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

DATUM.--Elevation of land-surface datum is 162 ft above sea level, from topographic map. Measuring point: Top of lip of concrete hatchway, at land-surface datum.

REMARKS.--Water level affected by regional drawdown.

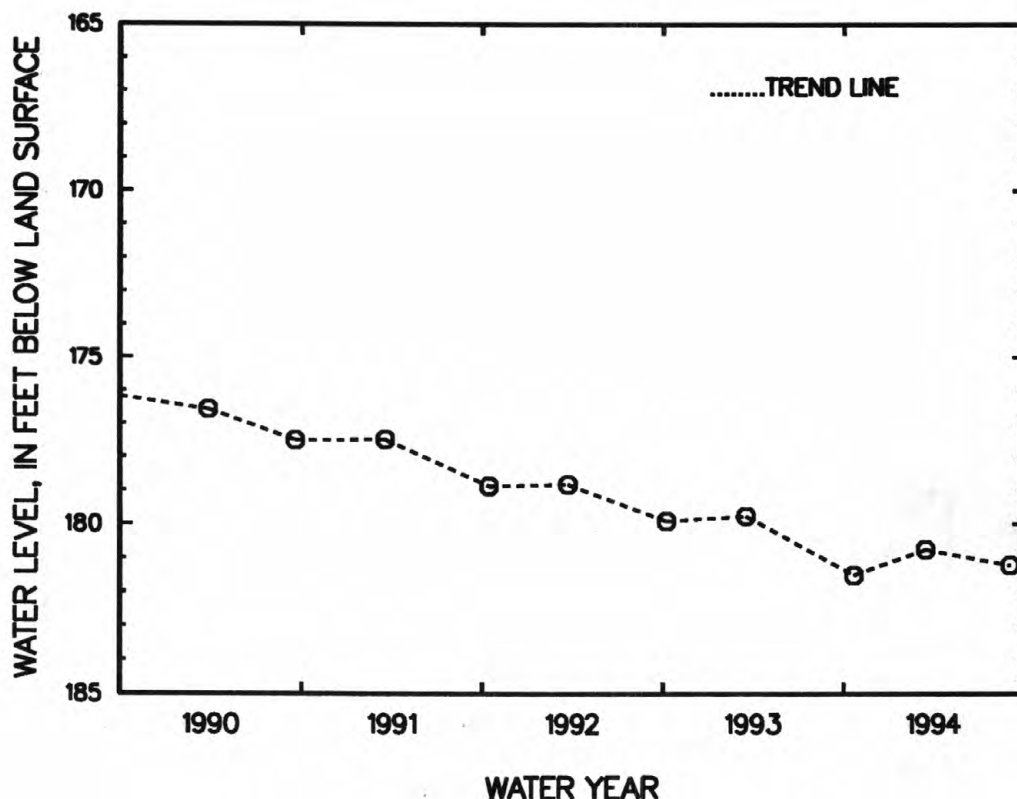
PERIOD OF RECORD.--December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 160.14 ft below land-surface datum, Mar. 1, 1973; lowest measured, 181.51 ft below land-surface datum, Oct. 22, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	181.51	MAR 15	180.75	SEP 01	181.22

WATER YEAR 1994      HIGHEST 180.75 MAR 15, 1994      LOWEST 181.51 OCT 22, 1993



## GROUND-WATER LEVELS

119

## FAIRFAX COUNTY

384518077163501. Local number, 52U 4.

LOCATION.--Lat 38°45'18", long 77°16'35", Hydrologic Unit 02070010, 200 ft east of intersection of State Highways 641 and 643 in Springfield. Owner: Sydenstricker Church.

AQUIFER.--Occoquan Granite of Cambrian-Ordovician age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 24 in., depth 28 ft.

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

DATUM.--Elevation of land-surface datum is 340 ft above sea level, from topographic map. Measuring point: Hole in cement platform, 0.67 ft above land-surface datum.

REMARKS.--Water level occasionally affected by local surface-water runoff into well casing (May 1990 and at other times).

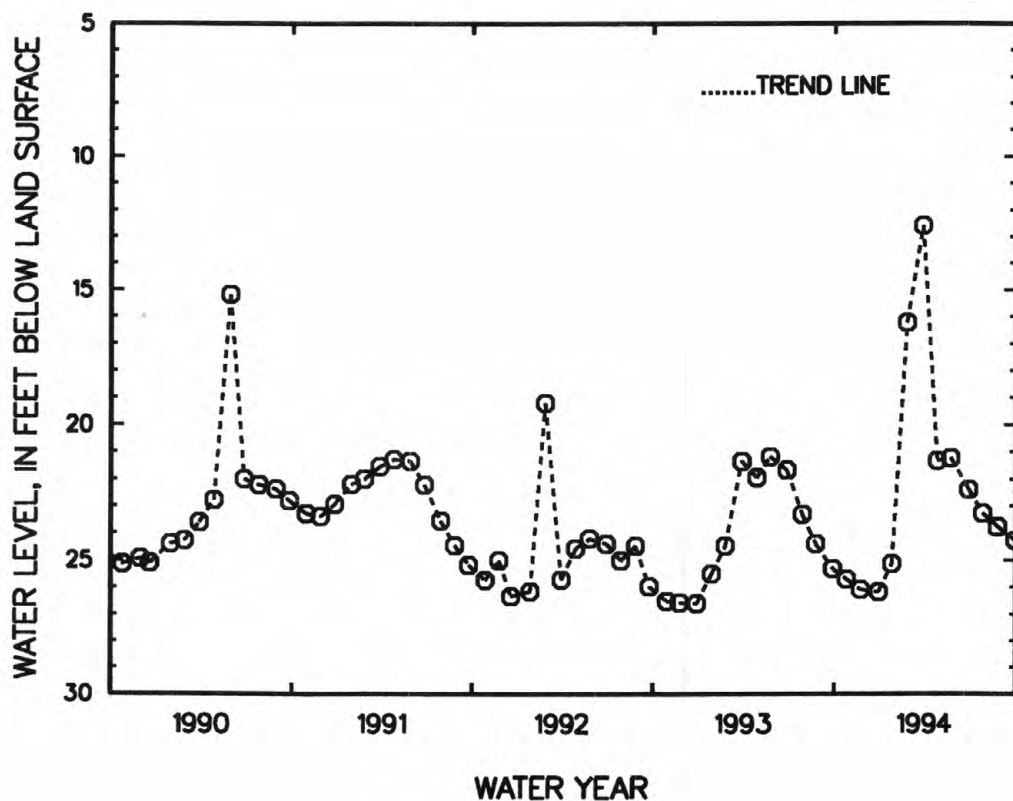
PERIOD OF RECORD.--May 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.54 ft below land-surface datum, Apr. 30, 1973; lowest measured, 28.85 ft below land-surface datum, Jan. 30, 1989.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	25.71	DEC 29	26.17	FEB 24	16.22	APR 26	21.33	JUN 28	22.39	AUG 25	23.76
NOV 23	26.09	JAN 25	25.13	MAR 28	12.59	MAY 23	21.23	JUL 26	23.27	SEP 28	24.27

WATER YEAR 1994	HIGHEST	12.59	MAR 28, 1994	LOWEST	26.17	DEC 29, 1993
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## GROUND-WATER LEVELS

## FAIRFAX COUNTY

385638077220101. Local number, 52V 2.

LOCATION.--Lat 38°56'58", long 77°22'01", Hydrologic Unit 02070008, at U.S. Geological Survey National Center in Reston. Owner: U.S. Geological Survey.

AQUIFER.--Manassas Sandstone of Triassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in., depth 205 ft, cased to 35 ft, open hole 35 to 205 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 390 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.47 ft below land-surface datum, Mar. 30, 1984; lowest recorded, 18.19 ft below land-surface datum, Oct. 25, 1986.

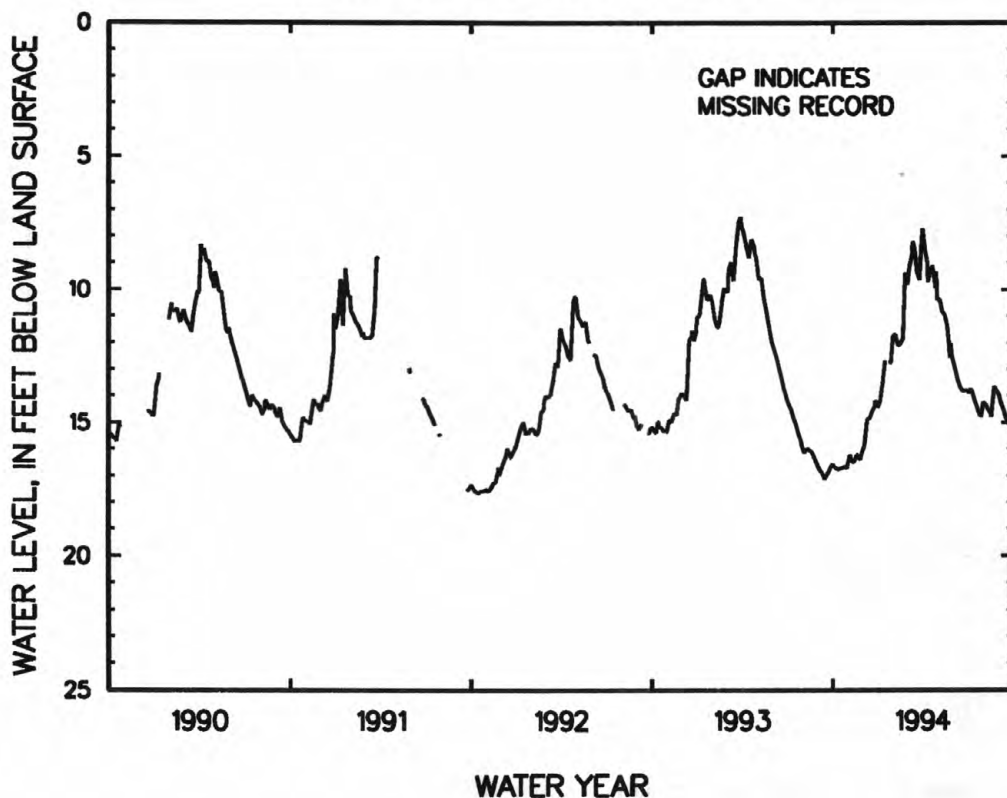
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.68	16.22	15.85	14.22	11.70	9.10	8.49	10.38	12.99	13.88	14.32	14.29
10	16.73	16.52	14.88	13.55	12.12	8.73	8.99	10.85	13.38	13.91	14.52	14.53
15	16.75	16.45	14.84	12.68	12.05	8.45	9.32	10.95	13.68	14.23	14.65	14.83
20	16.72	16.31	14.59	---	11.85	9.33	9.10	11.38	13.81	14.50	14.08	15.05
25	16.67	16.39	14.40	12.79	9.37	9.62	9.72	12.56	13.80	14.74	13.76	14.97
EOY	16.65	16.12	14.43	11.74	9.76	7.71	10.38	12.56	13.85	14.25	13.94	14.82

WATER YEAR 1994      HIGHEST INSTANTANEOUS    7.71    MAR 31, 1994

LOWEST INSTANTANEOUS    16.78    OCT 11, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

121

## CITY OF FRANKLIN

364033076562603. Local number, 55B 66 SOW 145C.

LOCATION.--Lat 36°40'33", long 76°56'26", Hydrologic Unit 03010202, at P. D. Camp Community College in Franklin.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 360 ft, screened 350 to 360 ft.

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

DATUM.--Elevation of land-surface datum is 34 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.58 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

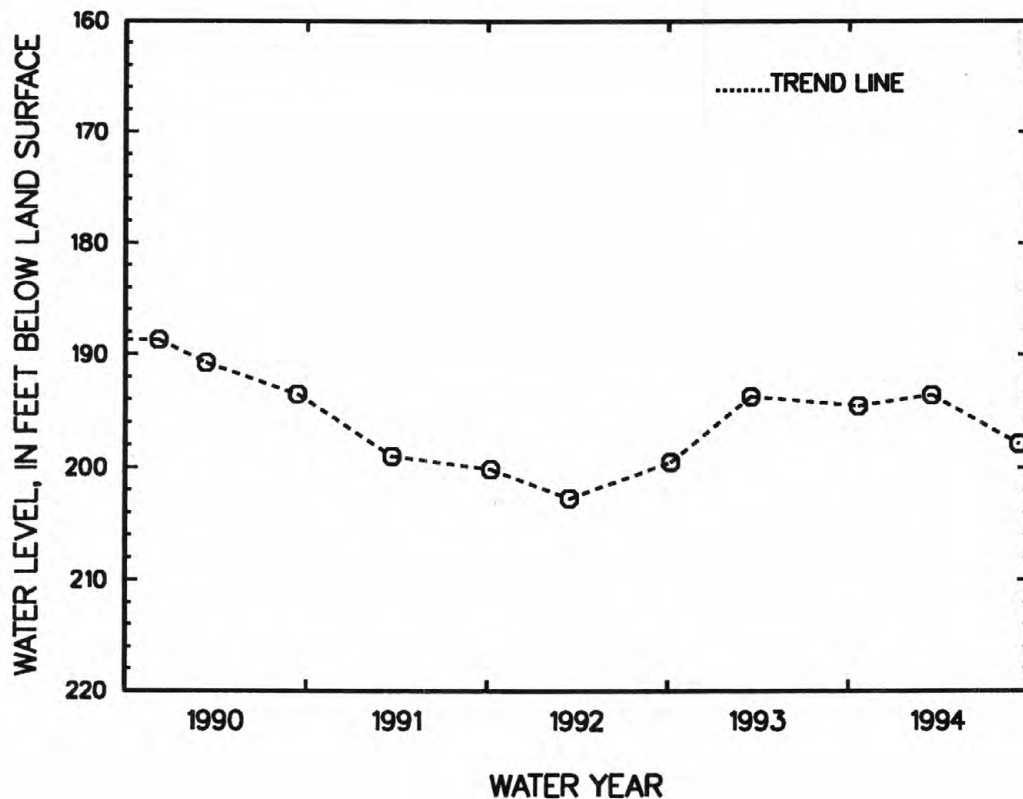
PERIOD OF RECORD.--November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 175.39 ft below land-surface datum, Dec. 27, 1984;  
lowest measured, 202.72 ft below land-surface datum, Mar. 16, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	194.54	MAR 17	193.57	SEP 08	197.90

WATER YEAR 1994	HIGHEST	193.57	MAR 17, 1994	LOWEST	197.90	SEP 08, 1994
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## GROUND-WATER LEVELS

## CITY OF FRANKLIN

364033076562604. Local number, 55B 67 SOW 145D.

LOCATION.--Lat 36°40'33", long 76°56'26", Hydrologic Unit 03010202, at P. D. Camp Community College in Franklin.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

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

DATUM.--Elevation of land-surface datum is 34 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.15 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

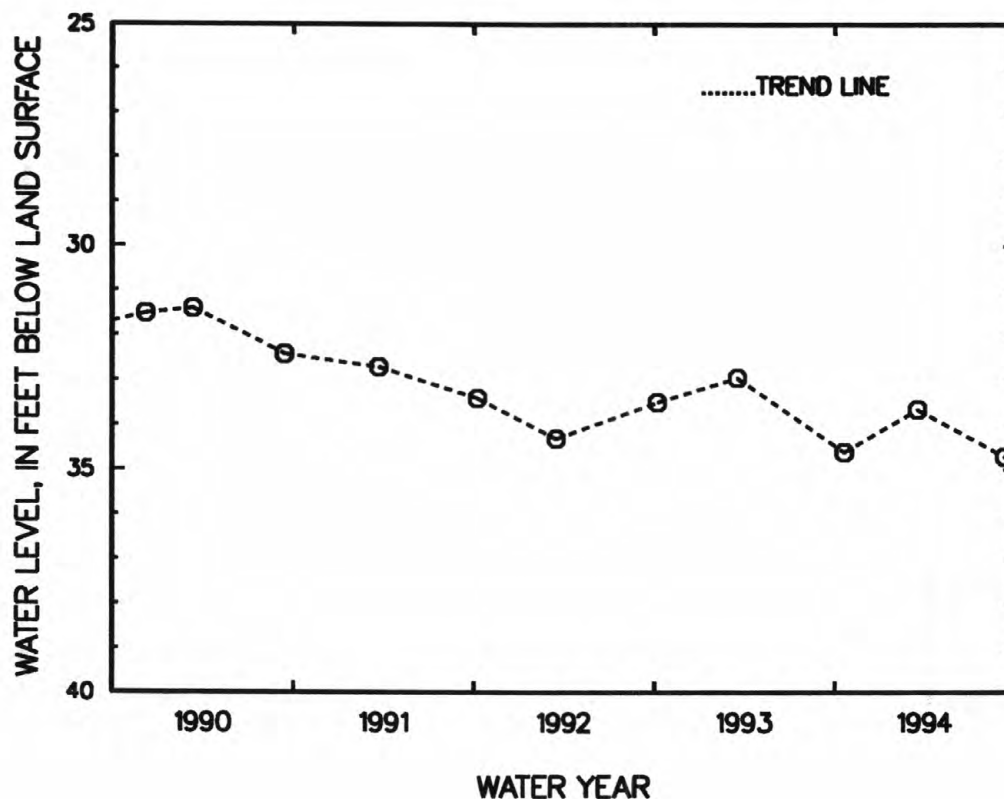
PERIOD OF RECORD.--November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.51 ft below land-surface datum, Mar. 19, 1985;  
lowest measured, 34.71 ft below land-surface datum, Sept. 8, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	34.61	MAR 17	33.66	SEP 08	34.71

WATER YEAR 1994      HIGHEST 33.66 MAR 17, 1994      LOWEST 34.71 SEP 08, 1994



## GROUND-WATER LEVELS

123

## GLOUCESTER COUNTY

371444076301501. Local number, 58F 14.

LOCATION.--Lat 37°14'44", long 76°30'15", Hydrologic Unit 02080107, at Gloucester Point under U.S. Highway 17 bridge in block pumphouse. Owner: County of Gloucester.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled unused public supply well, diameter 4 in. to 252 ft, diameter 2 in. from 252 to 395 ft, depth 395 ft, screened 347 to 387 ft.

INSTRUMENTATION.--Occasional measurement with a manometer by USGS personnel.

DATUM.--Elevation of land-surface datum is 6 ft above sea level, from topographic map. Measuring point: Top of casing, 3.6 ft above land-surface datum.

REMARKS.--Well destroyed. Some historical water-level readings may have been affected by local pumpage.

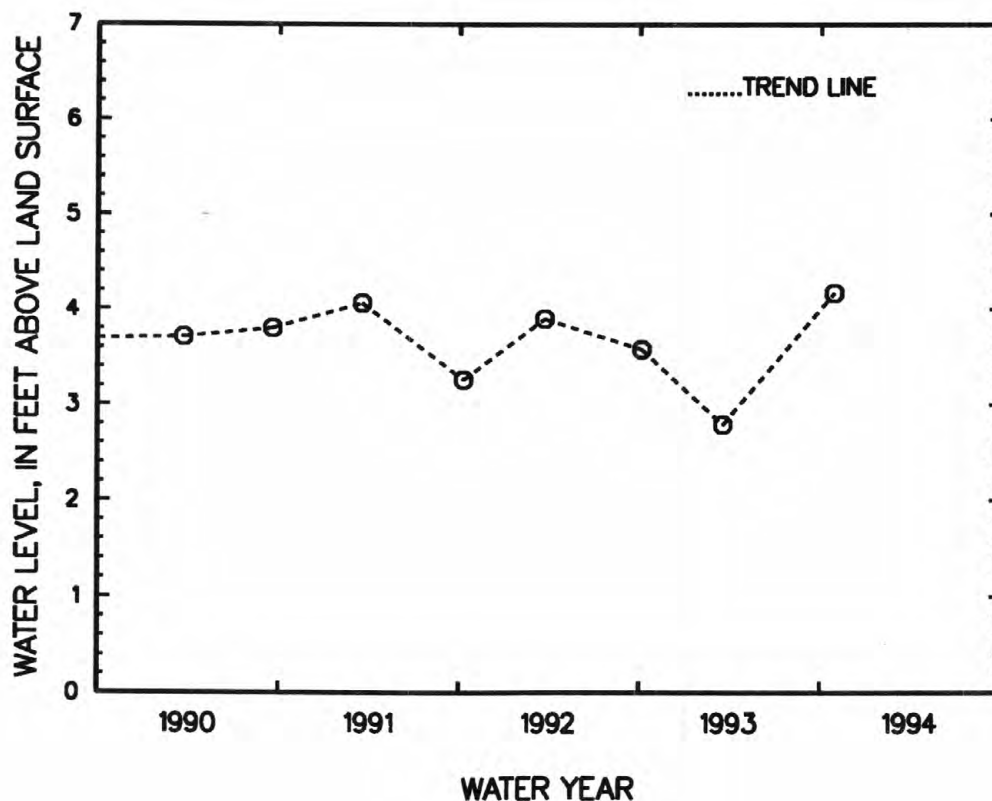
PERIOD OF RECORD.--December 1972 to February 1994 (discontinued). Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.80 ft above land-surface datum, Feb. 12, 1980; lowest measured, 26.41 ft below land-surface datum, Feb. 10, 1981 (well pumping at time of measurement).

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, OCTOBER 1993 TO FEBRUARY 1994

DATE	WATER LEVEL
OCT 29	4.17

NOTE.--Flowing well; reading is above land-surface datum.



## GROUND-WATER LEVELS

## GLOUCESTER COUNTY

372331076312602. Local number, 58H 6 SOW 168A.

LOCATION.--Lat 37°23'31", long 76°31'26", Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,300 ft, screened 1,290 to 1,300 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to June 11, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 75 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

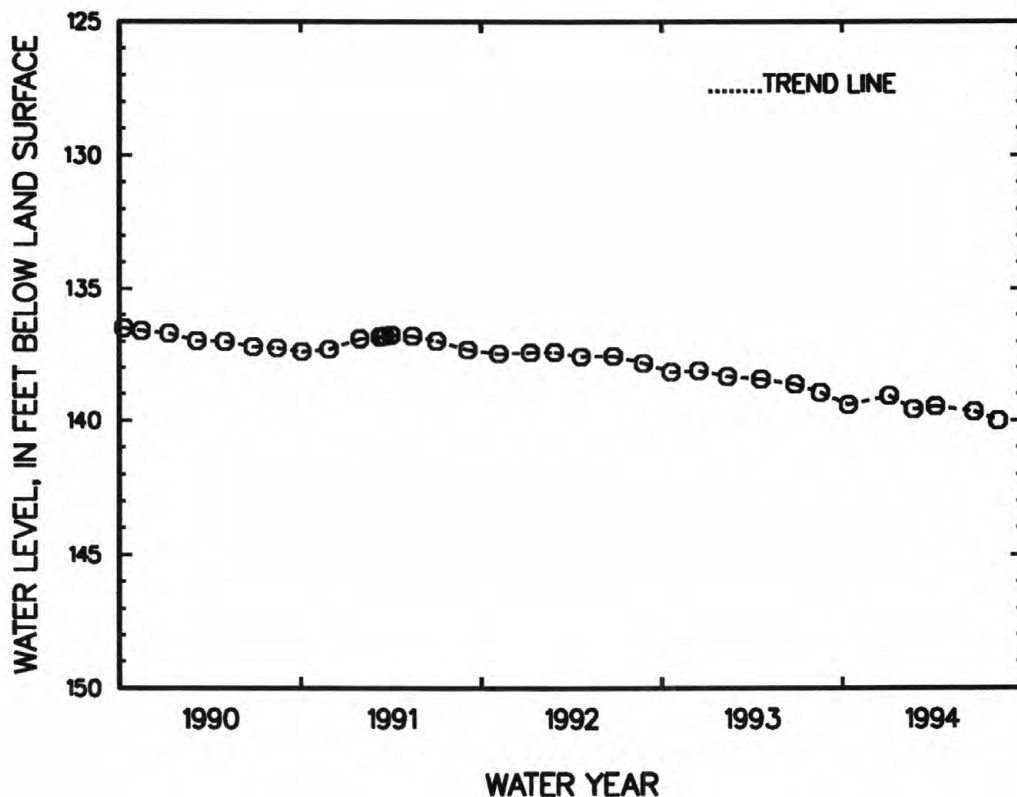
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.26 ft below land-surface datum, Feb. 14, 1983; lowest measured, 140.00 ft below land-surface datum, Aug. 11, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	139.40	JAN 04	139.07	FEB 22	139.58	APR 07	139.46	JUN 24	139.66	AUG 11	140.00
WATER YEAR 1994      HIGHEST    139.07    JAN 04, 1994      LOWEST    140.00    AUG 11, 1994											



## GROUND-WATER LEVELS

125

## GLOUCESTER COUNTY

372331076312603. Local number, 58H 7 SOW 168B.

LOCATION.--Lat 37°23'31", long 76°31'26", Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 186 ft, diameter 2 in. from 186 to 960 ft, depth 960 ft, screened 950 to 960 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 75 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

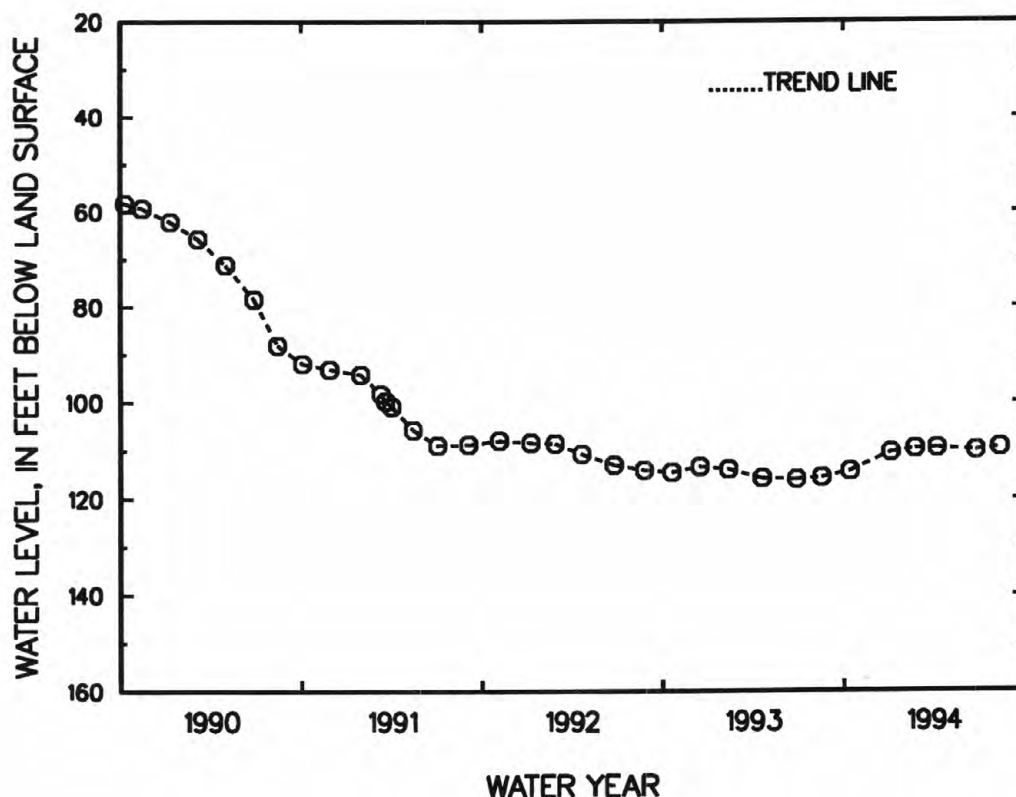
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.55 ft below land-surface datum, Nov. 20, 1985; lowest measured, 115.92 ft below land-surface datum, June 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	114.20	JAN 04	110.32	FEB 22	109.58	APR 07	109.46	JUN 24	109.96	AUG 11	109.35
WATER YEAR 1994      HIGHEST    109.35    AUG 11, 1994      LOWEST    114.20    OCT 14, 1993											



## GROUND-WATER LEVELS

## GLOUCESTER COUNTY

372331076312604. Local number, 58H 8 SOW 168C.

LOCATION.--Lat 37°23'31", long 76°31'26", Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 75 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

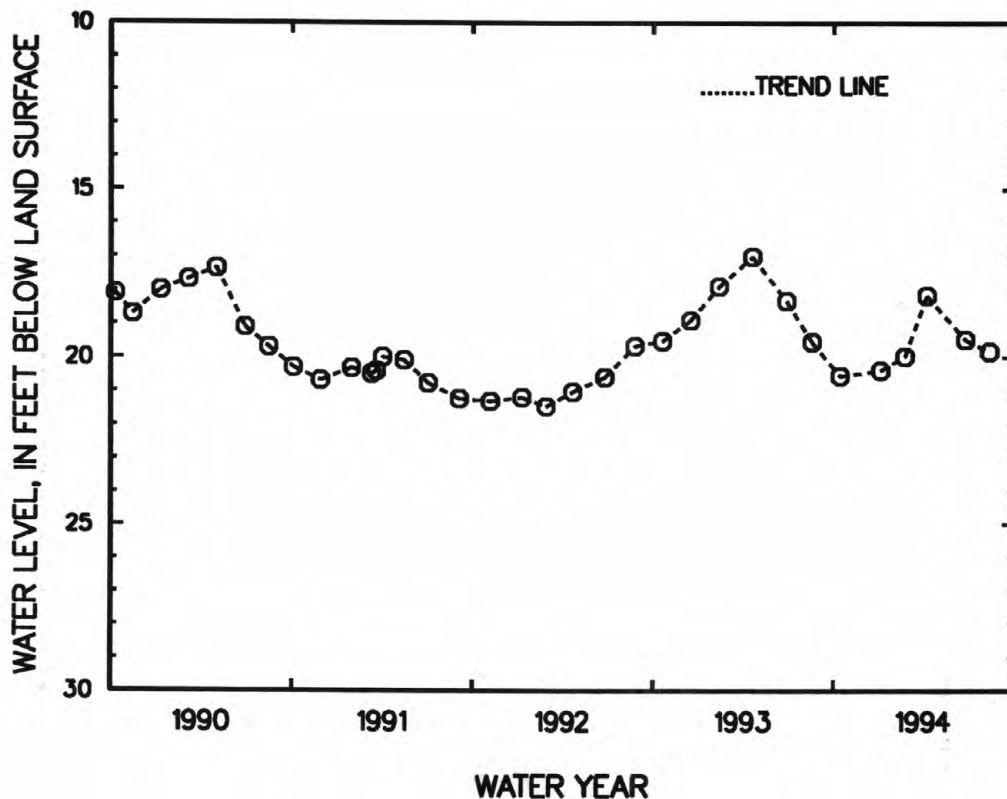
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.00 ft below land-surface datum, Apr. 20, 1993; lowest measured, 21.81 ft below land-surface datum, Sept. 23, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	20.55	JAN 04	20.39	FEB 22	19.97	APR 07	18.16	JUN 24	19.48	AUG 11	19.83
WATER YEAR 1994		HIGHEST	18.16	APR 07, 1994		LOWEST	20.55	OCT 14, 1993			





## GROUND-WATER LEVELS

127

## HANOVER COUNTY

375316077274701. Local number, 51M 11.

LOCATION.--Lat 37°53'16", long 77°27'47", Hydrologic Unit 02080106, 900 ft east of U.S. Highway 1 on a private dirt road at the North Anna River and 9.9 mi north of Ashland on U.S. Highway 1. Owner: Weyerhaeuser Inc.

AQUIFER.--Newark Supergroup of late Triassic age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 175 ft, cased to 20 ft, open hole 20 to 175 ft.

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

DATUM.--Elevation of land-surface datum is 70 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum.

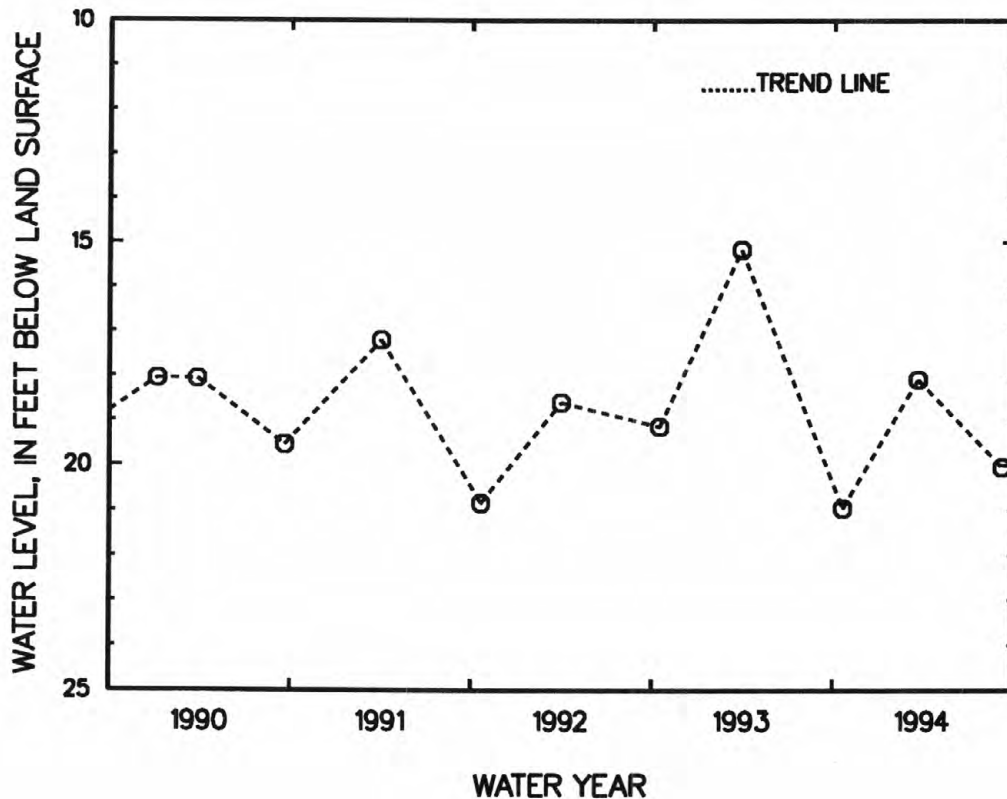
PERIOD OF RECORD.--January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.17 ft below land-surface datum, Mar. 30, 1993; lowest measured, 20.96 ft below land-surface datum, Oct. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	20.96	MAR 21	18.09	SEP 06	20.05

WATER YEAR 1994      HIGHEST 18.09 MAR 21, 1994      LOWEST 20.96 OCT 21, 1993



## GROUND-WATER LEVELS

## HANOVER COUNTY

373507077171201. Local number, 52J 10.

LOCATION.--Lat 37°35'07", long 77°17'12", Hydrologic Unit 02080206, 150 ft north of State Highway 156 at the Cold Harbor Visitor Center, 1.0 mi southwest of the intersection of State Highways 156 and 619, and 4.9 mi east of Mechanicsville. Owner: U.S. National Park Service.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 270 ft, screened 255 to 270 ft.

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

DATUM.--Elevation of land-surface datum is 172 ft above sea level, from topographic map. Measuring point: Top of casing, 1.55 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

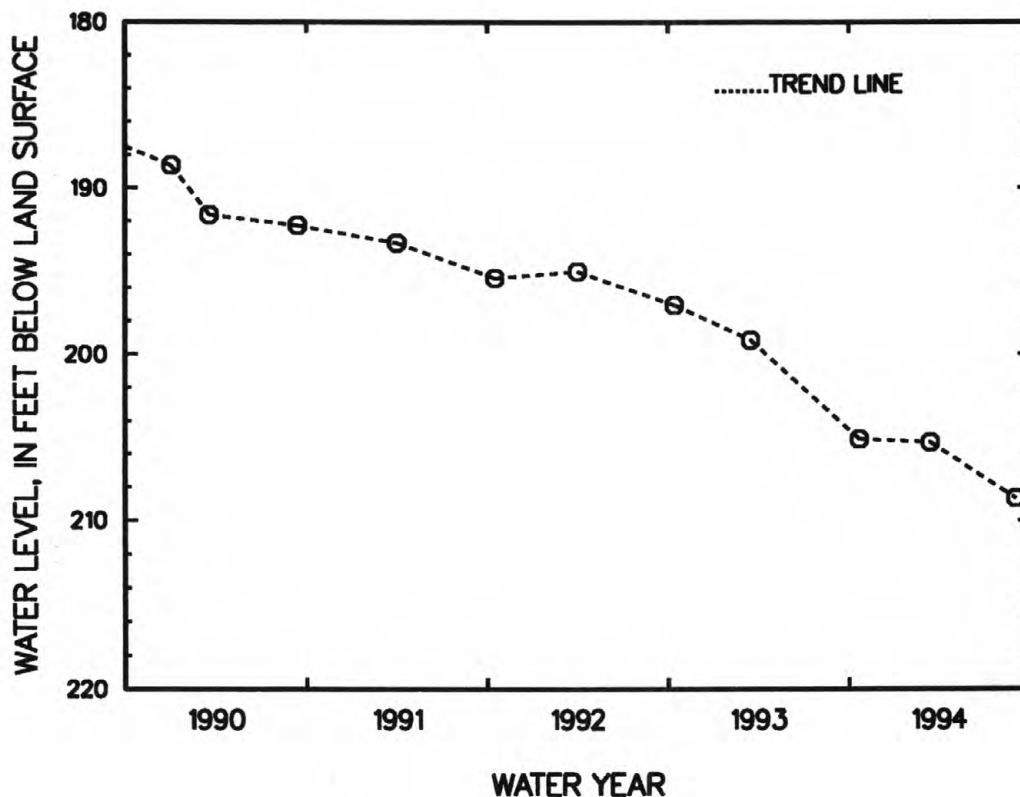
PERIOD OF RECORD.--December 1972, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 165.75 ft below land-surface datum, Dec. 1, 1972; lowest measured, 208.66 ft below land-surface datum, Sept. 1, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	205.10	MAR 14	205.30	SEP 01	208.66

WATER YEAR 1994      HIGHEST 205.10 OCT 22, 1993      LOWEST 208.66 SEP 01, 1994



## HANOVER COUNTY

374720077300501. Local number, 52K 3.

LOCATION.--Lat 37°40'05", long 77°17'54", Hydrologic Unit 02080106, 200 ft west of State Highway 615, 0.65 mi southwest of Studley, and 1.95 mi northwest of the intersection of State Highways 615 and 627. Owner: Sydnor Hydrodynamics.

AQUIFER.--Middle and lower Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled public supply water well, diameter 6 in., depth 426 ft, screened 355 to 365 ft, 392 to 422 ft.

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

DATUM.--Elevation of land-surface datum is 163 ft above sea level, from topographic map. Measuring point: Top of casing, 2.76 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

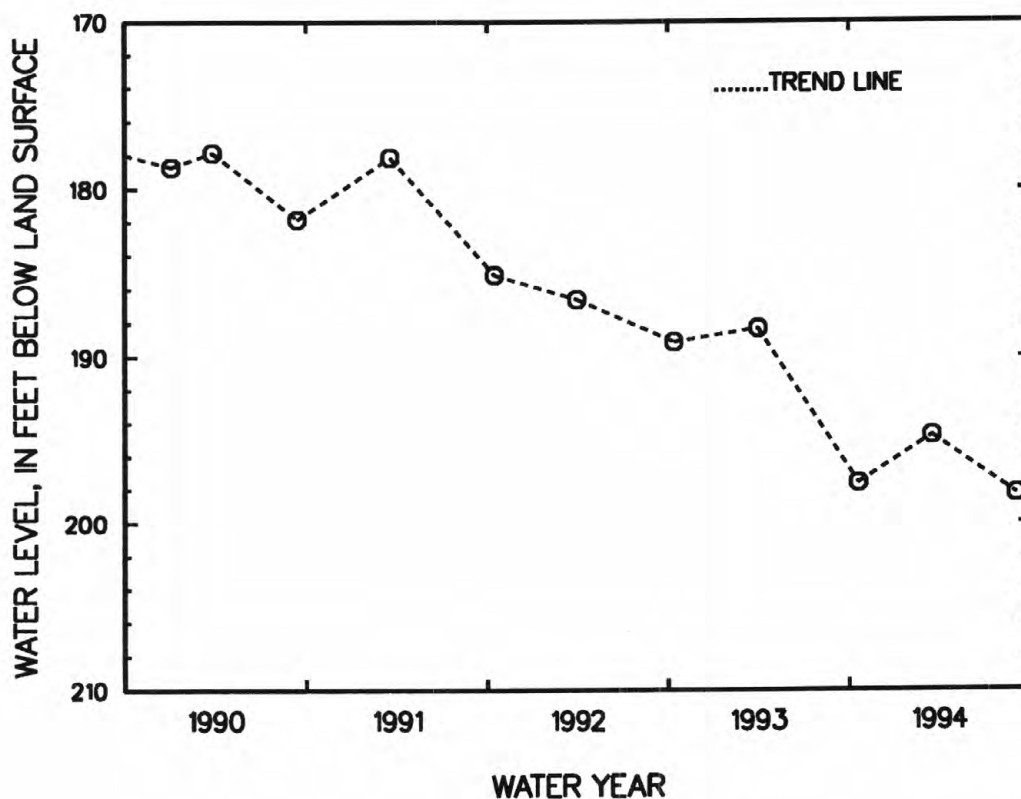
PERIOD OF RECORD.--May 1970, November 1973, December 1974, January 1984 to March 1986, March 1988 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 142.50 ft below land-surface datum, May 21, 1970; lowest measured, 198.27 ft below land-surface datum, Sept. 1, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	197.61	MAR 17	194.75	SEP 01	198.27

WATER YEAR 1994      HIGHEST 194.75 MAR 17, 1994      LOWEST 198.27 SEP 01, 1994



## GROUND-WATER LEVELS

## HANOVER COUNTY

373738077082801. Local number, 53K 16.

LOCATION.--Lat 37°37'38", long 77°08'28", Hydrologic Unit 02080106, 1,000 ft northeast of the intersection of State Highways 606 and 629 at Eastern View Farm, 0.6 mi southeast of Glimps Corner, 4.7 mi east of Old Church, and 5.95 mi east of the intersection of U.S. Highway 360 and State Highway 606. Owner: John Maples.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 366 ft, screen depth unknown.

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

DATUM.--Elevation of land-surface datum is 100 ft above sea level, from topographic map. Measuring point: Top of casing, 5.3 ft below land-surface datum.

REMARKS.--Water level affected by regional drawdown and local pumpage.

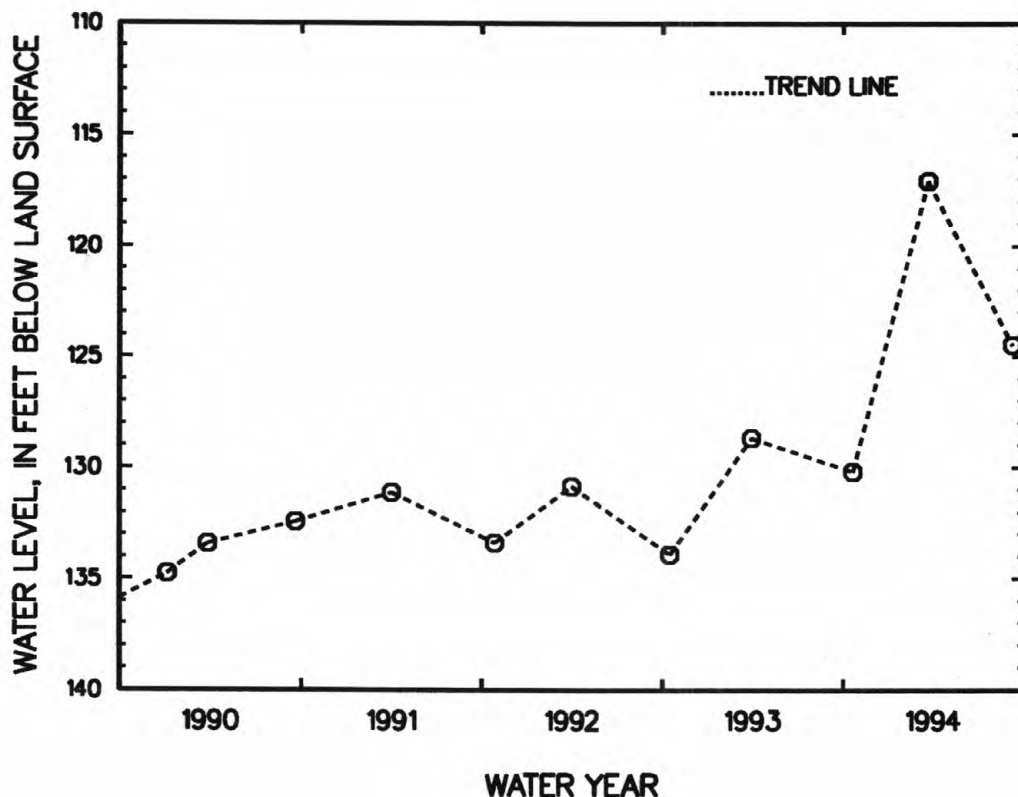
PERIOD OF RECORD.--January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 117.09 ft below land-surface datum, Mar. 21, 1994; lowest measured, 138.70 ft below land-surface datum, Dec. 15, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	130.19	MAR 21	117.09	SEP 06	124.46

WATER YEAR 1994      HIGHEST 117.09 MAR 21, 1994      LOWEST 130.19 OCT 21, 1993



## GROUND-WATER LEVELS

131

## HANOVER COUNTY

373737077083201. Local number, 53K 19 SOW 080.

LOCATION.--Lat 37°37'37", long 77°08'32", Hydrologic Unit 02080106, 500 ft northeast of State Highway 606, 0.15 mi west of intersection of State Highways 606 and 629, and 4.6 mi east of Old Church. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 30 in., depth 35 ft, cased to 35 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. May 20, 1978, to Oct. 2, 1985, occasional measurement with chalked tape. Prior to May 20, 1978, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 130 ft above sea level, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

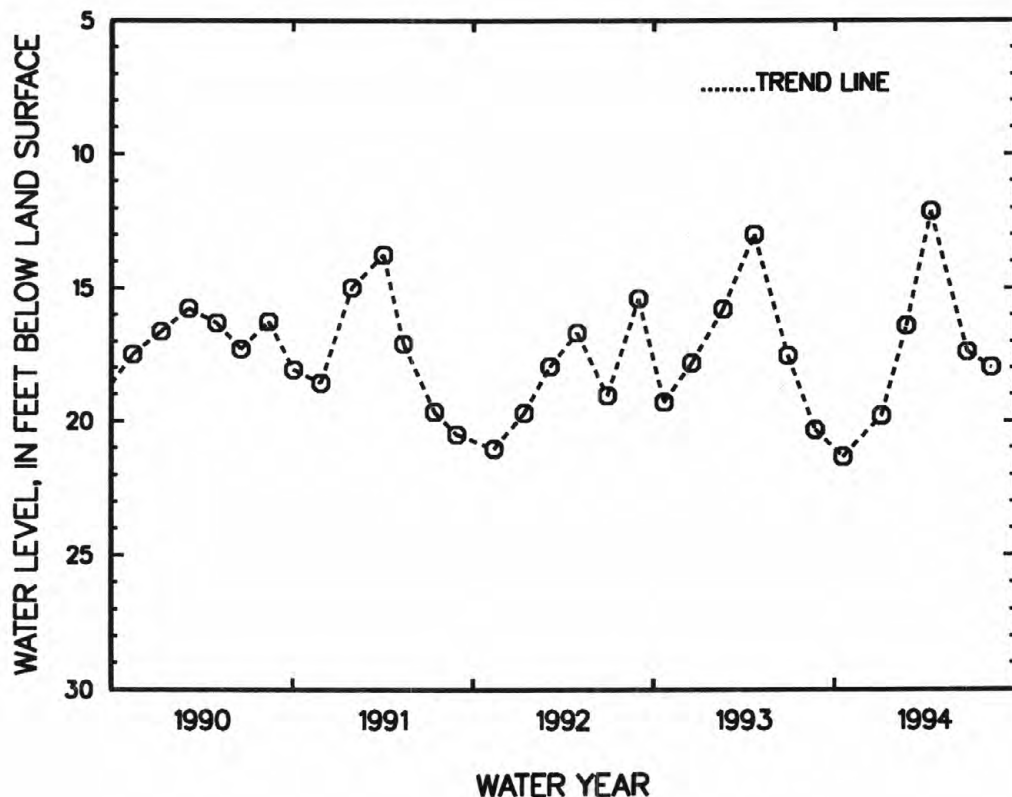
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--January 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.05 ft below land-surface datum, Jan. 25, 1978; lowest measured, 22.85 ft below land-surface datum, Aug. 3, 1984.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	21.34	JAN 03	19.80	FEB 22	16.40	APR 12	12.13	JUN 24	17.39	AUG 11	17.97
WATER YEAR 1994      HIGHEST    12.13    APR 12, 1994      LOWEST    21.34    OCT 18, 1993											





## GROUND-WATER LEVELS

## HENRICO COUNTY

373607077331401. Local number, 50J 1 SOW 023.

LOCATION.--Lat 37°36'07", long 77°33'14", Hydrologic Unit 02080205, 200 ft north of Three Chopt Road, 1.0 mi southeast of intersection of Three Chopt Road and Parham Road in Richmond. Owner: E. L. Gilman.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in., depth 300 ft, cased to 68 ft, open hole 68 to 300 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. June 5, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to June 5, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 275 ft above sea level, from topographic map. Measuring point: Top of casing, 1.88 ft above land-surface datum.

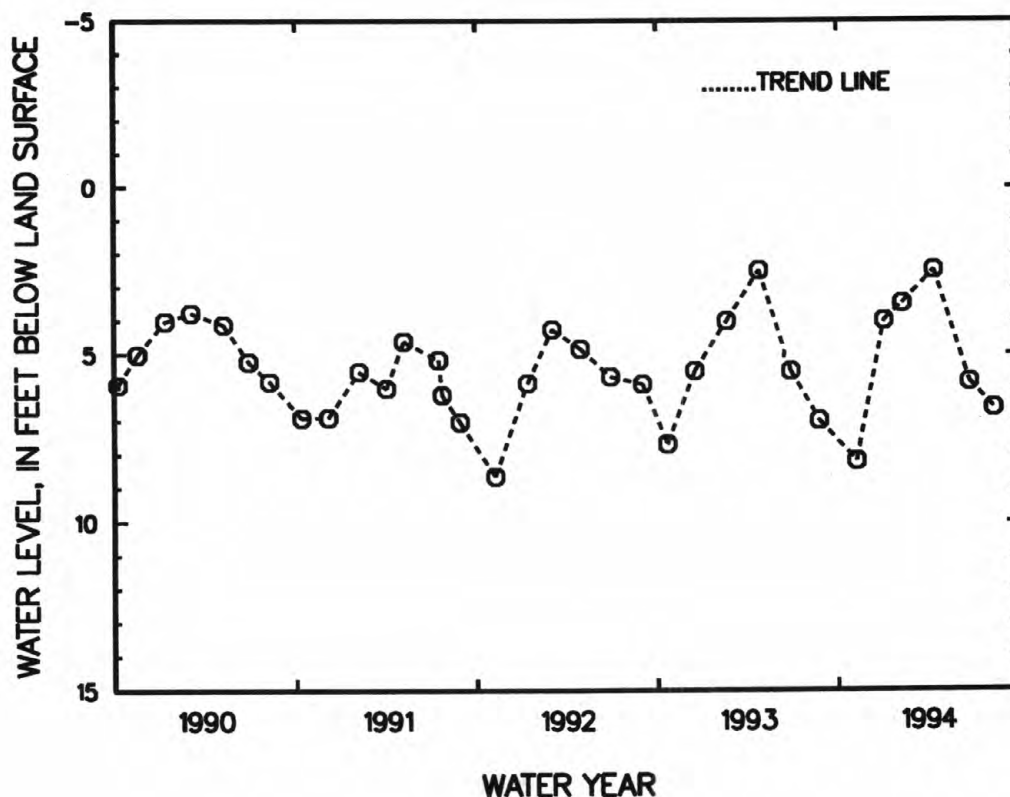
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.48 ft below land-surface datum, June 5, 1970; lowest recorded, 10.43 ft below land-surface datum, Jan. 5, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08	8.18	JAN 03	4.00	FEB 09	3.48	APR 14	2.49	JUN 24	5.82	AUG 11	6.61
WATER YEAR 1994		HIGHEST	2.49	APR 14, 1994	LOWEST	8.18	NOV 08, 1993				



## HENRICO COUNTY

372920077241001. Local number, 51H132 SOW 081.

LOCATION.--Lat 37°29'20", long 77°24'10", Hydrologic Unit 02080206, 100 ft west of State Highway 5, 2.0 mi northwest of intersection of State Highway 5 and Laburnum Avenue, and 5.3 mi southwest of Sandston. Owner: Mike Moses.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 30 in., depth 40 ft, cased to 40 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 160 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

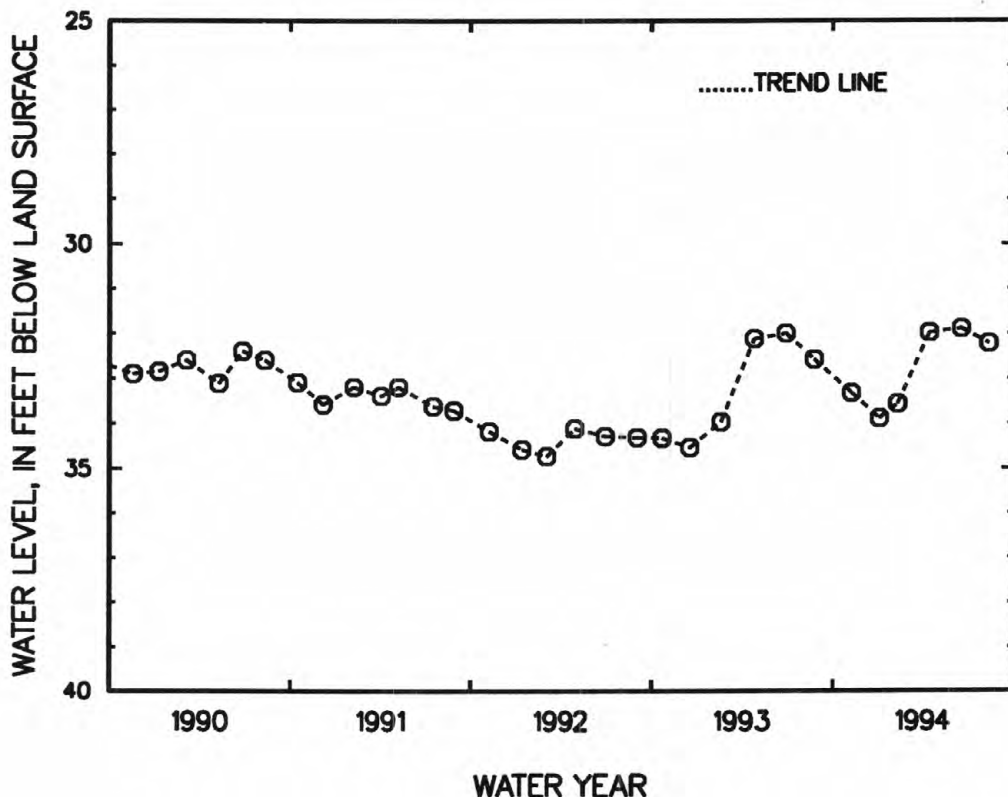
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.79 ft below land-surface datum, June 16, 1980; lowest measured, 35.23 ft below land-surface datum, Sept. 24, 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08	33.33	JAN 03	33.89	FEB 09	33.57	APR 14	31.98	JUN 17	31.89	AUG 11	32.22
WATER YEAR 1994		HIGHEST	31.89	JUN 17, 1994	LOWEST	33.89	JAN 03, 1994				



## GROUND-WATER LEVELS

## HENRICO COUNTY

373428077233001. Local number, 51J 13.

LOCATION.--Lat 37°34'28", long 77°23'30", Hydrologic Unit 02080206, 1,600 ft east of the intersection of U.S. Highway 360 (Mechanicsville Turnpike) and Laburnum Avenue and 500 ft south of Laburnum Avenue at water tower. Owner: Henrico County.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 167 ft, diameter 6 in. from 167 to 275 ft, depth 275 ft, screened 167 to 186 ft, 213 to 226 ft, 248 to 258 ft.

INSTRUMENTATION.--Weekly measurements by Henrico County personnel and occasional measurements with chalked tape by USGS personnel. Prior to Apr. 2, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 168 ft above sea level, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum prior to Apr. 8, 1992; 0.2 ft thereafter.

REMARKS.--Water level affected by regional decline and local pumpage.

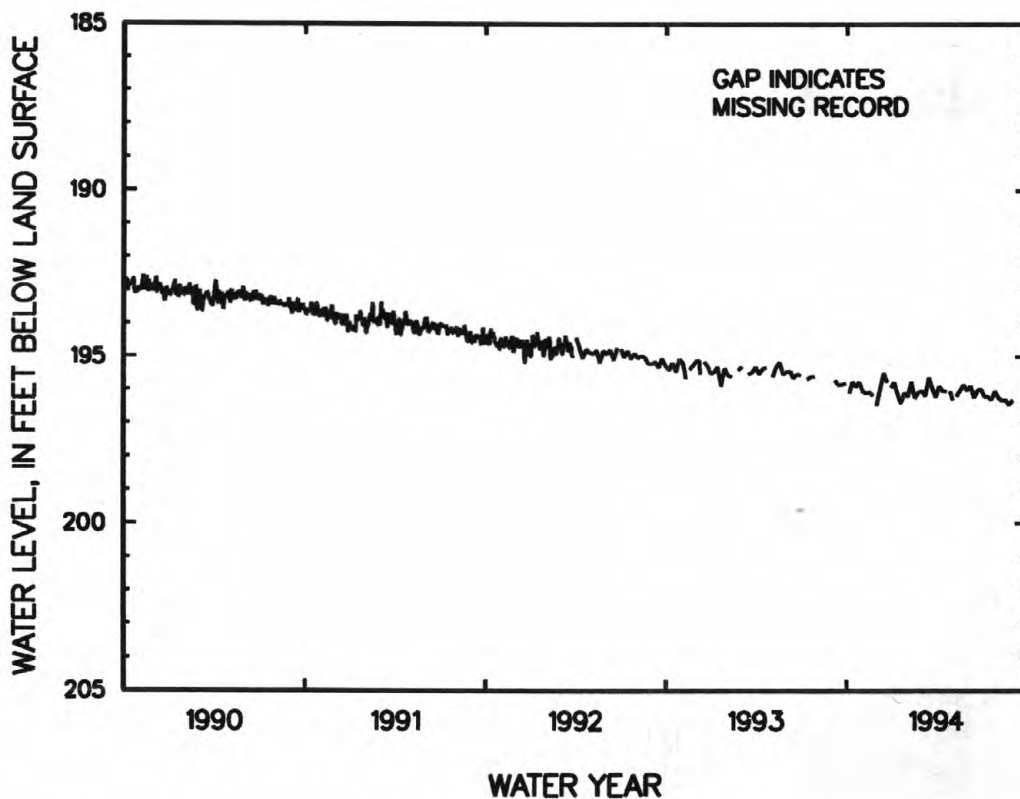
PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 190.85 ft below land-surface datum, Apr. 7, 1988; lowest measured, 196.47 ft below land-surface datum, Dec. 1, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	196.09	DEC 08	195.96	FEB 09	195.76	APR 13	196.03	JUN 15	196.23	AUG 17	196.30
13	195.75	15	195.49	16	196.25	20	196.03	22	196.01	24	196.45
20	195.90	22	195.76	23	196.08	28	196.04	29	195.97	31	196.32
27	195.76	30	195.91	MAR 02	196.03	MAY 03	196.30	JUL 06	196.21	SEP 14	196.44
NOV 03	196.04	JAN 05	195.77	09	196.18	11	196.18	13	196.20	28	196.14
10	196.10	12	196.10	16	195.62	18	196.02	20	196.30		
17	196.06	19	196.42	23	195.95	25	195.85	27	196.04		
23	196.16	26	196.09	30	196.22	JUN 01	196.01	AUG 03	196.24		
DEC 01	196.47	FEB 02	196.20	APR 06	195.89	08	195.88	10	196.33		

WATER YEAR 1994      HIGHEST 195.49 DEC 15, 1993      LOWEST 196.47 DEC 01, 1993



## GROUND-WATER LEVELS

135

## HENRICO COUNTY

373817077282501. Local number, 51K 4 SOW 137.

LOCATION.--Lat 37°38'17", long 77°28'25", Hydrologic Unit 02080206, 50 ft east of entrance to J. Sargeant Reynolds Community College, 0.9 mi west of intersection of Parham Road and U.S. Highway 1, and 0.9 mi west of Yellow Tavern. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 280 ft, cased to 35 ft, open hole 35 to 280 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 180 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Sept. 9, 1980; 1.5 ft thereafter.

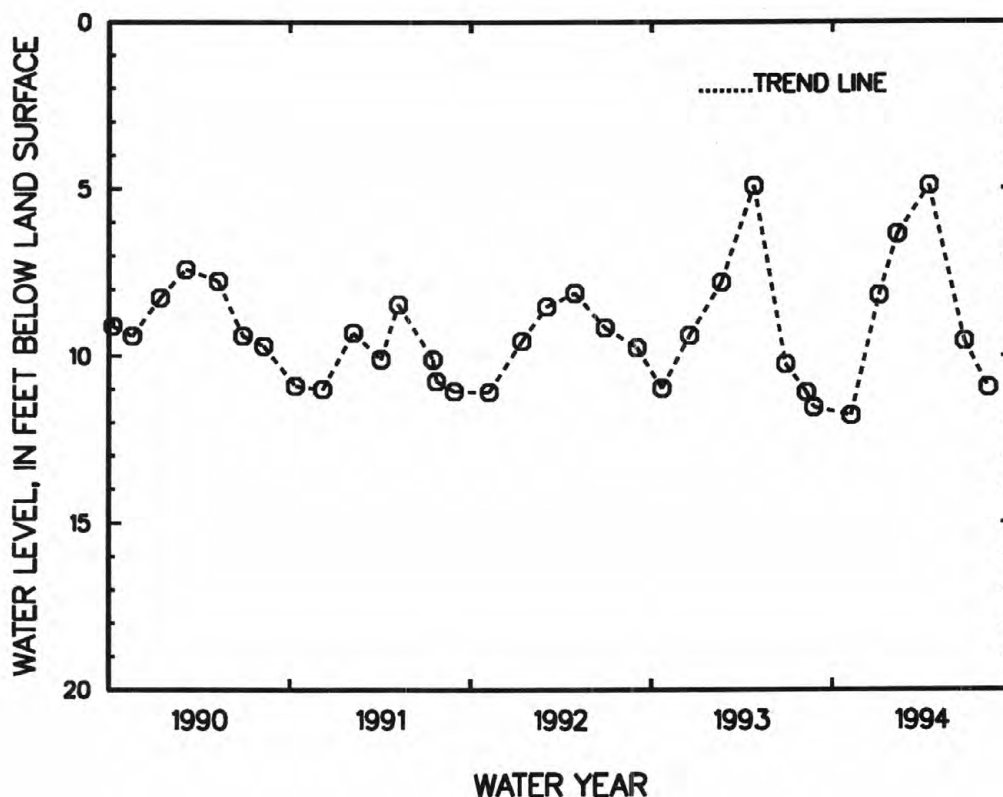
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.37 ft below land-surface datum, Apr. 30, 1987; lowest measured, 12.12 ft below land-surface datum, Oct. 6, 1981, Aug. 22, 1983.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08	11.79	JAN 03	8.17	FEB 09	6.35	APR 14	4.91	JUN 24	9.55	AUG 11	10.95
WATER YEAR 1994      HIGHEST    4.91    APR 14, 1994      LOWEST    11.79    NOV 08, 1993											



## GROUND-WATER LEVELS

## HENRICO COUNTY

372936077211101. Local number, 52H 3 SOW 136.

LOCATION.--Lat 37°29'36", long 77°21'11", Hydrologic Unit 02080206, 100 ft west of Laburnum Avenue, 0.9 mi north of intersection of Laburnum Avenue and Darbytown Road, and 2.4 mi southwest of Sandston. Owner: Nabisco Incorporated.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 209 ft, screened 149 to 159 ft, 199 to 209 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Mar. 25, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 150 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

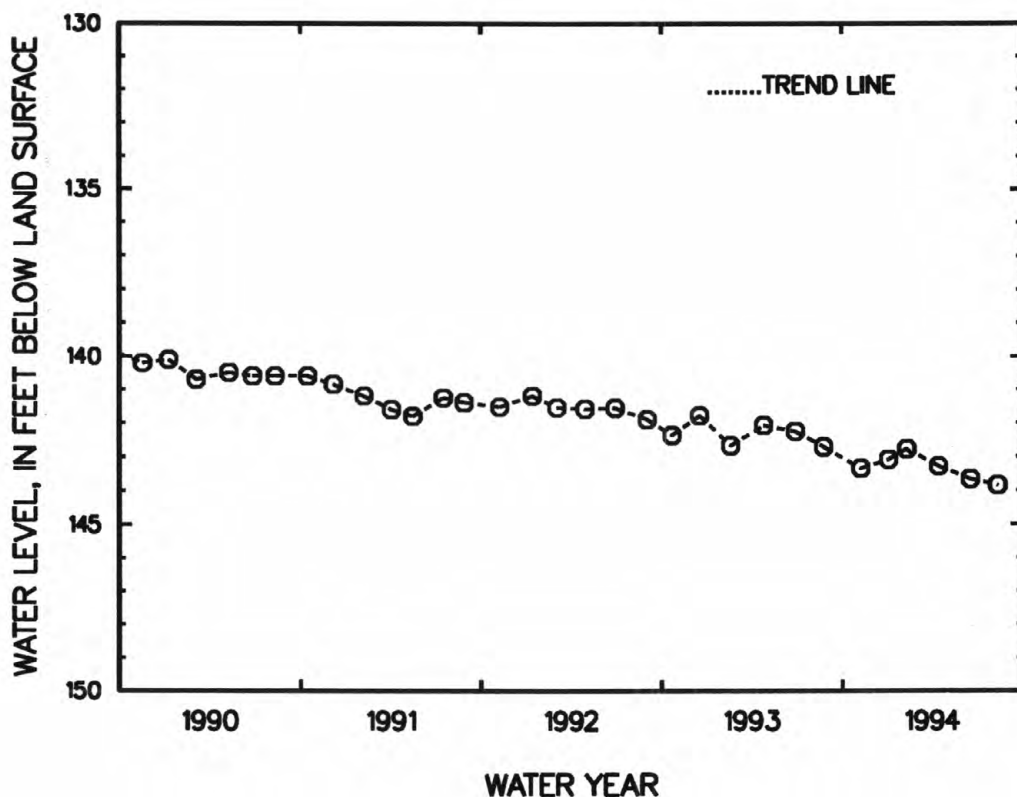
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1974 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.42 ft below land-surface datum, Dec. 2, 1974; lowest measured, 143.84 ft below land-surface datum, Aug. 11, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08	143.34	JAN 03	143.08	FEB 09	142.77	APR 14	143.28	JUN 17	143.66	AUG 11	143.84
WATER YEAR 1994      HIGHEST    142.77    FEB 09, 1994      LOWEST    143.84    AUG 11, 1994											





## HENRICO COUNTY

373301077194001. Local number, 52J 1.

LOCATION.--Lat 37°33'01", long 77°19'40", Hydrologic Unit 02080206, at the intersection of Daisy and Vine Streets, at water tower in Highland Springs. Owner: Henrico County.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 212 ft, diameter 6 in. from 212 to 306 ft, depth 306 ft, screened 212 to 306 ft.

INSTRUMENTATION.--Weekly measurements by Henrico County personnel and occasional measurements with chalked tape by USGS personnel. Prior to Apr. 2, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 172 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

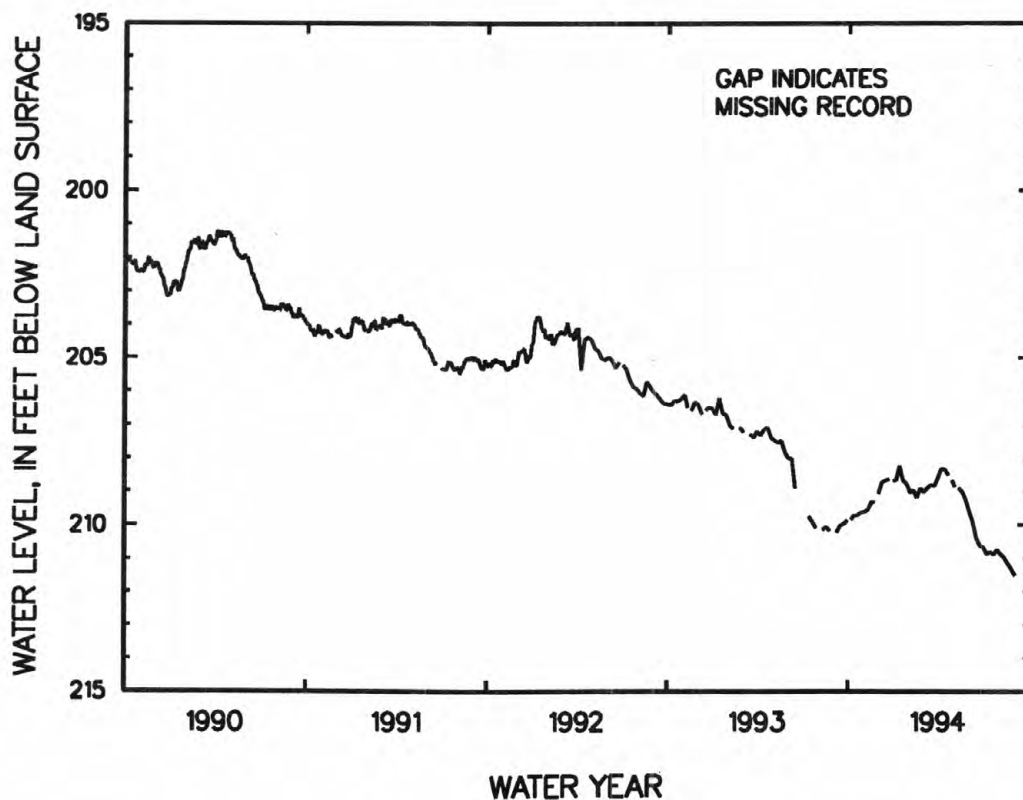
PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 197.64 ft below land-surface datum, Jan. 25, 26, 1988; lowest measured, 211.50 ft below land-surface datum, Aug. 31, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	209.83	DEC 08	208.71	FEB 09	208.97	APR 13	208.34	JUN 15	210.38	AUG 17	211.15
13	209.72	15	208.66	16	209.18	20	208.51	22	210.61	24	211.31
20	209.70	22	208.63	23	208.91	28	208.67	29	210.66	31	211.50
27	209.62	30	208.67	MAR 02	209.02	MAY 03	208.86	JUL 06	210.86	SEP 14	211.40
NOV 03	209.60	JAN 05	208.67	09	208.90	11	208.90	13	210.81	28	211.39
10	209.53	12	208.23	16	208.81	18	209.01	20	210.87		
17	209.31	19	208.67	23	208.84	25	209.25	27	210.74		
23	209.31	26	208.76	30	208.59	JUN 01	209.60	AUG 03	210.87		
DEC 01	209.06	FEB 02	209.03	APR 06	208.31	08	209.92	10	210.97		

WATER YEAR 1994      HIGHEST 208.23 JAN 12, 1994      LOWEST 211.50 AUG 31, 1994



## GROUND-WATER LEVELS

## HENRICO COUNTY

373125077185001. Local number, 52J 34.

LOCATION.--Lat 37°31'25", long 77°18'50", Hydrologic Unit 02080206, 300 ft north of the intersection of U.S. Highway 60 (Williamsburg Road) and Finley Drive and 200 ft east of Finley Drive. Owner: Henrico County.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 165 ft, diameter 8 in. from 165 to 272 ft, depth 272 ft, screened 222 to 265 ft.

INSTRUMENTATION.--Weekly measurements by Henrico County personnel and occasional measurements with chalked tape by USGS personnel. Prior to Feb. 18, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 162 ft above sea level, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

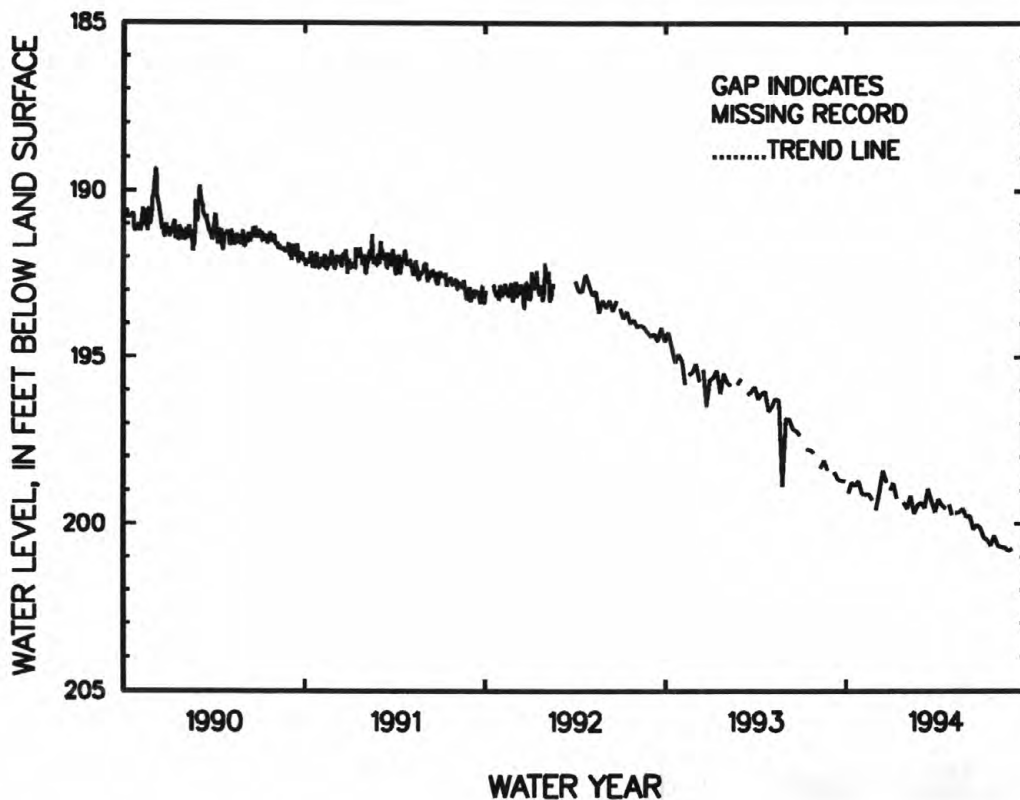
PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 187.76 ft below land-surface datum, Apr. 7, 1988; lowest measured, 200.96 ft below land-surface datum, Sept. 14, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07 199.05		DEC 08 199.01		FEB 16 199.68		APR 20 199.52		JUN 22 200.03		AUG 24 200.81	
13 198.75		15 198.41		23 199.44		28 199.42		29 200.13		31 200.76	
20 198.85		22 198.74		MAR 02 199.35		MAY 03 199.71		JUL 06 200.40		SEP 14 200.96	
27 198.71		30 198.96		09 199.51		11 199.66		13 200.48		28 200.75	
NOV 03 199.08		JAN 05 198.77		16 198.95		18 199.64		20 200.65			
10 199.10		12 199.21		23 199.30		25 199.54		27 200.36			
17 199.09		26 199.35		30 199.63		JUN 01 199.79		AUG 03 200.65			
23 199.26		FEB 02 199.53		APR 06 199.25		08 199.75		10 200.70			
DEC 01 199.57		09 199.16		13 199.43		15 200.16		17 200.71			

WATER YEAR 1994      HIGHEST 198.41 DEC 15, 1993      LOWEST 200.96 SEP 14, 1994



## HENRICO COUNTY

373117077210201. Local number, 52J 35.

LOCATION.--Lat 37°31'17", long 77°21'02", Hydrologic Unit 02080206, 400 ft east of the intersection of South Laburnum Avenue and Finley Street, on Finley Street. Owner: Henrico County.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 265 ft, screened 220 to 260 ft.

INSTRUMENTATION.--Weekly measurements by Henrico County personnel and occasional measurements with chalked tape by USGS personnel. Prior to Apr. 2, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 160 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

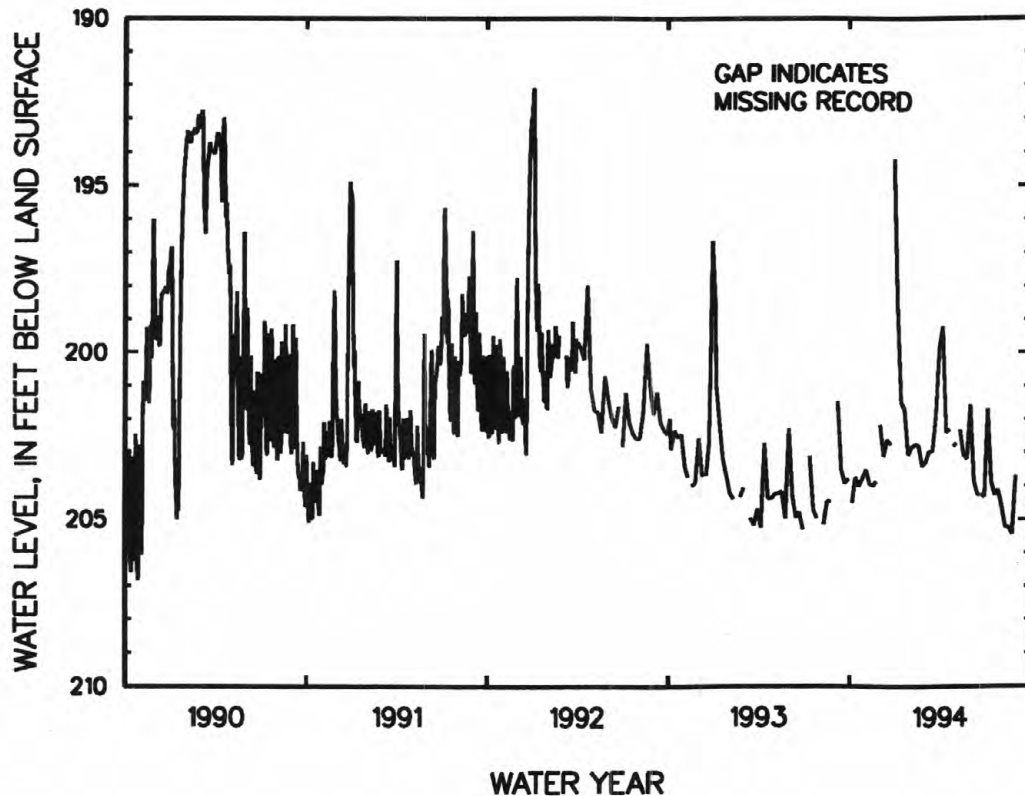
PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 191.24 ft below land-surface datum, Jan. 20, 1988; lowest recorded, 206.84 ft below land-surface datum, Oct. 27, 1989.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	204.49	DEC 08	203.11	FEB 09	202.76	APR 13	202.39	JUN 15	204.27	AUG 17	205.23
13	203.74	15	202.61	16	202.78	20	202.31	22	204.26	24	205.44
20	204.00	22	202.75	23	203.40	28	202.80	29	204.32	31	203.70
27	203.77	30	194.21	MAR 02	203.30	MAY 03	202.73	JUL 06	201.69	SEP 14	205.32
NOV 03	203.51	JAN 05	198.62	09	202.97	11	202.31	13	203.86	28	205.64
10	203.94	12	201.49	16	202.97	18	203.07	20	204.27		
17	203.98	19	201.70	23	201.89	25	203.19	27	204.12		
23	203.87	26	203.06	30	199.85	JUN 01	201.57	AUG 03	204.61		
DEC 01	202.17	FEB 02	202.85	APR 06	199.20	08	203.86	10	205.22		

WATER YEAR 1994      HIGHEST 194.21 DEC 30, 1993      LOWEST 205.64 SEP 28, 1994



## GROUND-WATER LEVELS

## HENRICO COUNTY

372555077153001. Local number, 53H 2.

LOCATION.--Lat 37°25'55", long 77°15'30", Hydrologic Unit 02080206, 0.7 mi south of the intersection of State Highways 156 (Willis Church Road) and 600 (Charles City Road) at the Glendale National Cemetery, 5.0 mi southwest of the city of Richmond. Owner: U.S. Department of Veterans Affairs.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 232 ft, screen depth unknown.

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

DATUM.--Elevation of land-surface datum is 128 ft above sea level, from topographic map. Measuring point: Top of casing, 3.95 ft below land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

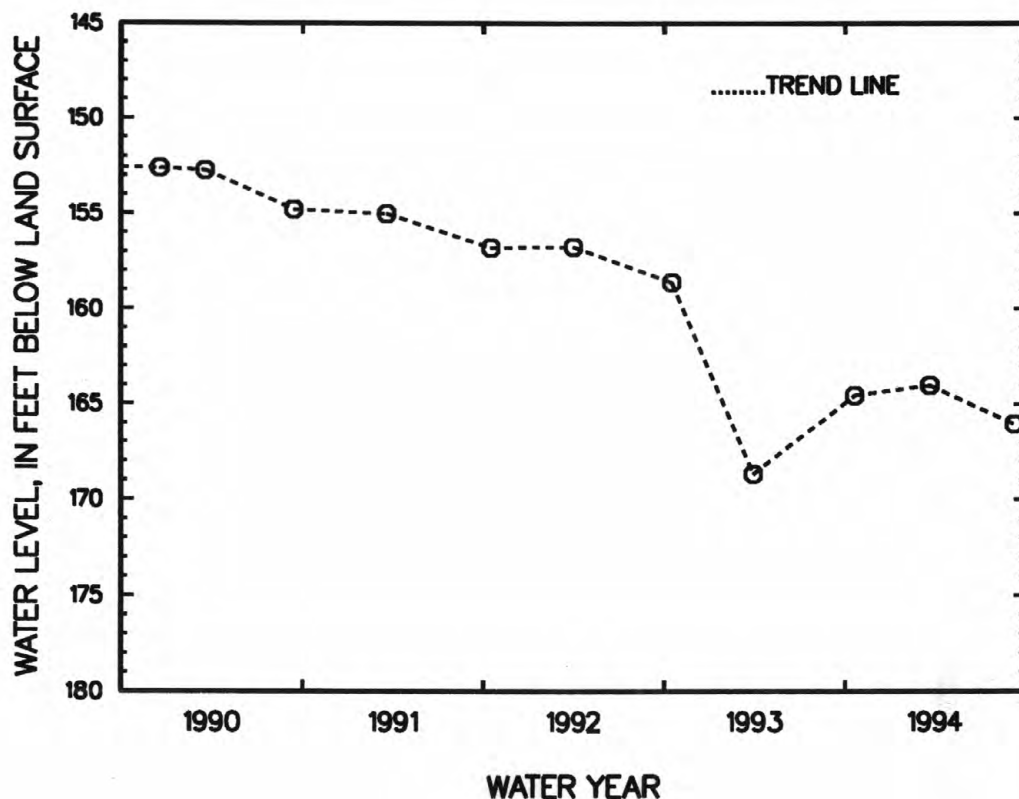
PERIOD OF RECORD.--January 1943, November 1973, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.00 ft below land-surface datum, Jan. 1, 1943; lowest measured, 168.68 ft below land-surface datum, Mar. 30, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	164.54	MAR 21	164.02	SEP 06	166.03

WATER YEAR 1994      HIGHEST 164.02 MAR 21, 1994      LOWEST 166.03 SEP 06, 1994



## GROUND-WATER LEVELS

141

## CITY OF HOPEWELL

371801077164201. Local number, 52G 1.

LOCATION.--Lat 37°18'01", long 77°16'42", Hydrologic Unit 02080206, 0.2 mi north of intersection of State Highways 10 and 156 in Hopewell. Owner: Virginia American Water Corporation.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 300 ft, screen depth unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to July 5, 1994, weekly measurement with chalked tape by USGS observer.

DATUM.--Elevation of land-surface datum is 50.26 ft above sea level. Measuring point: Top of casing, 0.34 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

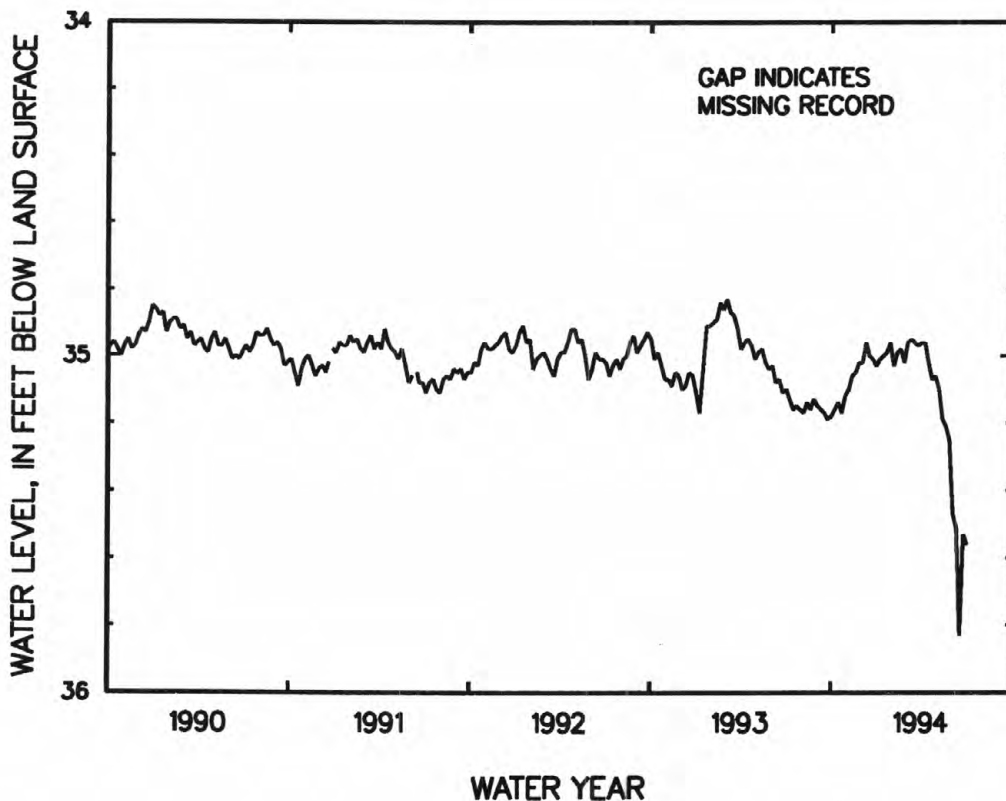
PERIOD OF RECORD.--May 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.56 ft below land-surface datum, Sept. 7, 1979; lowest measured, 56.95 ft below land-surface datum, Aug. 14, 1943.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	35.18	NOV 19	35.05	JAN 07	35.01	FEB 25	35.02	APR 15	35.02	JUN 03	35.47
08	35.16	26	35.02	14	35.00	MAR 04	34.96	22	35.07	10	35.51
15	35.14	DEC 03	35.02	21	34.99	11	34.95	29	35.06	17	35.83
22	35.17	10	34.96	28	34.96	18	34.96	MAY 06	35.10	24	35.53
29	35.12	17	35.00	FEB 04	35.03	25	34.97	13	35.19	JUL 01	35.56
NOV 05	35.10	24	35.01	11	34.99	APR 01	34.96	20	35.21	SEP 12	35.51
12	35.06	31	35.03	18	34.98	08	34.96	27	35.25		

WATER YEAR 1994 HIGHEST 34.95 MAR 11, 1994 LOWEST 35.83 JUN 17, 1994





## GROUND-WATER LEVELS

## CITY OF HOPEWELL

371727077160401. Local number, 52G 15 SOW 142A.

LOCATION.--Lat 37°17'27", long 77°16'04", Hydrologic Unit 02080206, 0.2 mi south of State Highway 10, 0.8 mi east of State Highway 156 in Hopewell. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 100 ft, screened 84 to 94 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

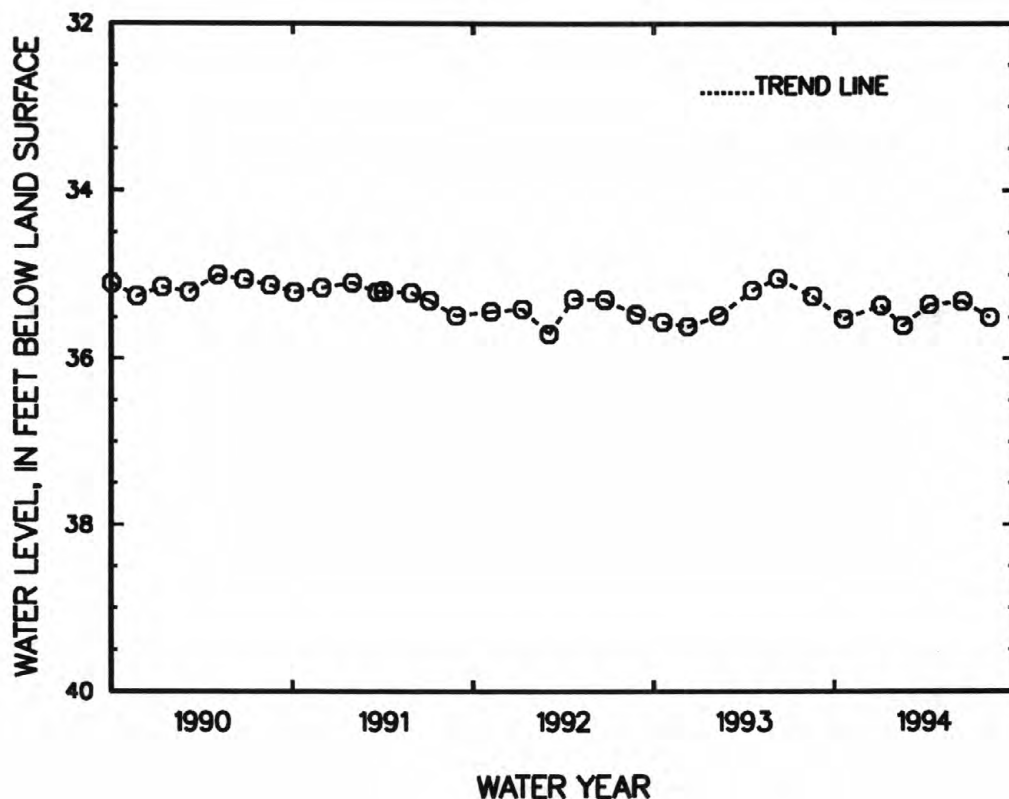
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.67 ft below land-surface datum, Feb. 24, 1986; lowest measured, 35.70 ft below land-surface datum, Mar. 3, 1992.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	35.52	JAN 04	35.36	FEB 17	35.60	APR 11	35.35	JUN 17	35.31	AUG 10	35.50
WATER YEAR 1994		HIGHEST	35.31	JUN 17, 1994	LOWEST	35.60	FEB 17, 1994				



## GROUND-WATER LEVELS

143

## CITY OF HOPEWELL

371727077160402. Local number, 52G 16 SOW 142B.

LOCATION.--Lat 37°17'27", long 77°16'04", Hydrologic Unit 02080206, 0.2 mi south of State Highway 10, 0.8 mi east of State Highway 156 in Hopewell. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 164 ft, screened 154 to 164 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

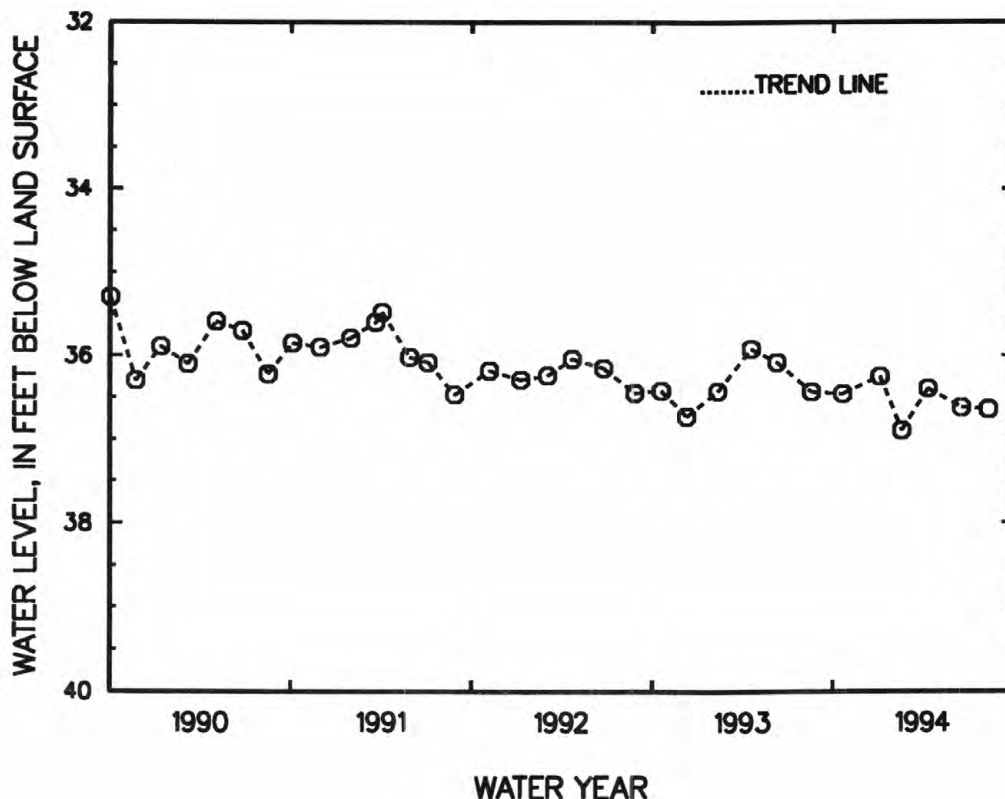
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.93 ft below land-surface datum, Feb. 24, 1986; lowest measured, 36.90 ft below land-surface datum, Feb. 17, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	36.46	JAN 04	36.25	FEB 17	36.90	APR 11	36.40	JUN 17	36.63	AUG 10	36.65
WATER YEAR 1994		HIGHEST	36.25	JAN 04, 1994	LOWEST	36.90	FEB 17, 1994				



## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

364059076544901. Local number, 55B 16.

LOCATION.--Lat 36°40'59", long 76°54'49", Hydrologic Unit 03010202, off U.S. Highways 258 and 58, 200 ft west of the intersection of U.S. Highways 258 and 58 and Lynn Road, and 0.3 mi east of Franklin. Owner: Union Camp Corporation.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 305 ft, screened 285 to 305 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to May 27, 1988, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 25 ft above sea level, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 99.00 ft below land-surface datum, Dec. 27, 1960; lowest recorded, 216.72 ft below land-surface datum, May 23, 1992.

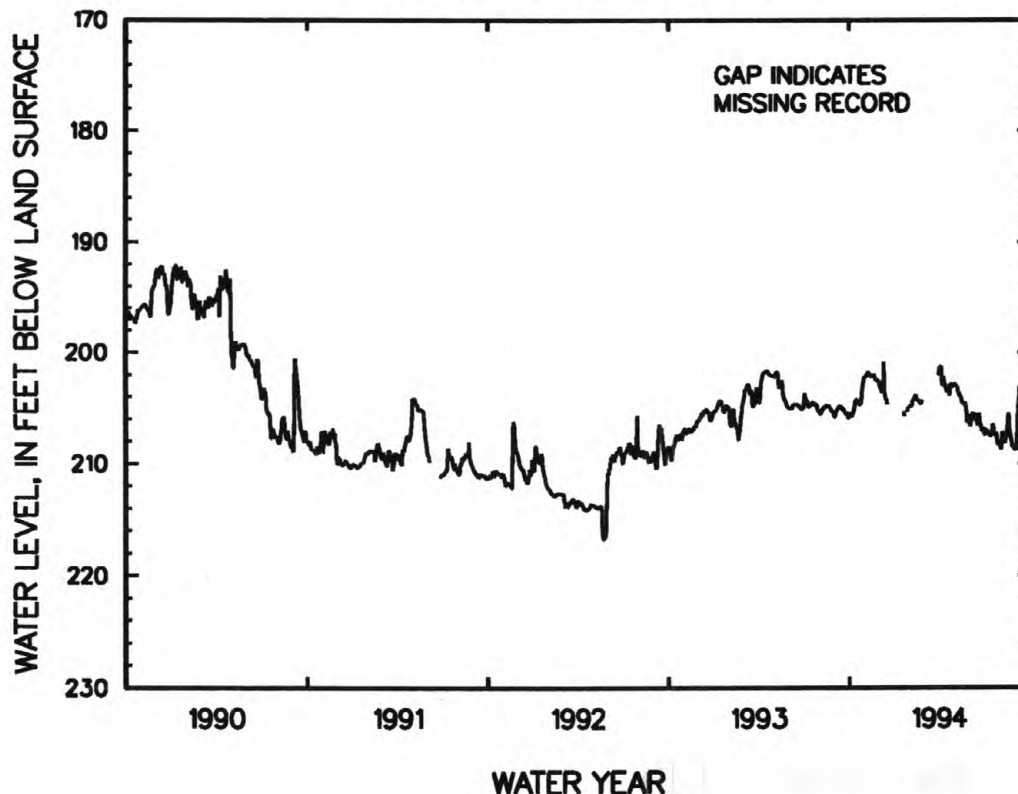
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	205.47	202.10	203.39	---	204.75	---	201.24	202.95	205.74	207.03	207.61	206.60
10	205.40	201.90	200.86	---	204.16	---	202.11	203.62	205.99	207.28	207.87	203.58
15	204.30	202.12	204.15	---	204.14	---	203.32	204.00	206.26	207.50	207.52	204.83
20	204.52	201.93	---	205.32	204.43	---	203.27	204.66	205.51	207.20	206.99	205.49
25	204.46	202.51	---	---	204.29	---	202.90	204.98	207.02	207.31	208.42	204.79
EOY	202.38	202.57	---	204.88	---	202.04	202.87	206.10	206.90	208.11	208.72	---

WATER YEAR 1994      HIGHEST INSTANTANEOUS      199.36      DEC 10, 1993

LOWEST INSTANTANEOUS      208.79      SEP 03, 1994

## DAILY LOW-WATER LEVELS



GROUND-WATER LEVELS  
ISLE OF WIGHT COUNTY

145

364125076544801. Local number, 55B 36.

LOCATION.--Lat 36°41'25", long 76°54'48", Hydrologic Unit 03010202, on Lynn Road, 0.45 mi north of intersection with U.S. Highways 258 and 58, and 0.7 mi northeast of Franklin. Owner: Union Camp Corporation.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 860 ft, screened 720 to 725 ft, 800 to 805 ft, 855 to 860 ft.

INSTRUMENTATION.--Monthly measurements with chalked tape by USGS personnel. October 1986 to August 1993, continuous strip-chart recorder. September 1983 to October 1986, occasional measurement with chalked tape. October 1982 to September 1983, continuous strip-chart recorder. November 1972 to October 1982, occasional measurement with chalked tape. July 1969 to November 1972, continuous strip-chart recorder. Prior to July 1969, continuous strip-chart recorder and occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 37 ft above sea level, from topographic map. Measuring point: Top of casing, 4.56 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

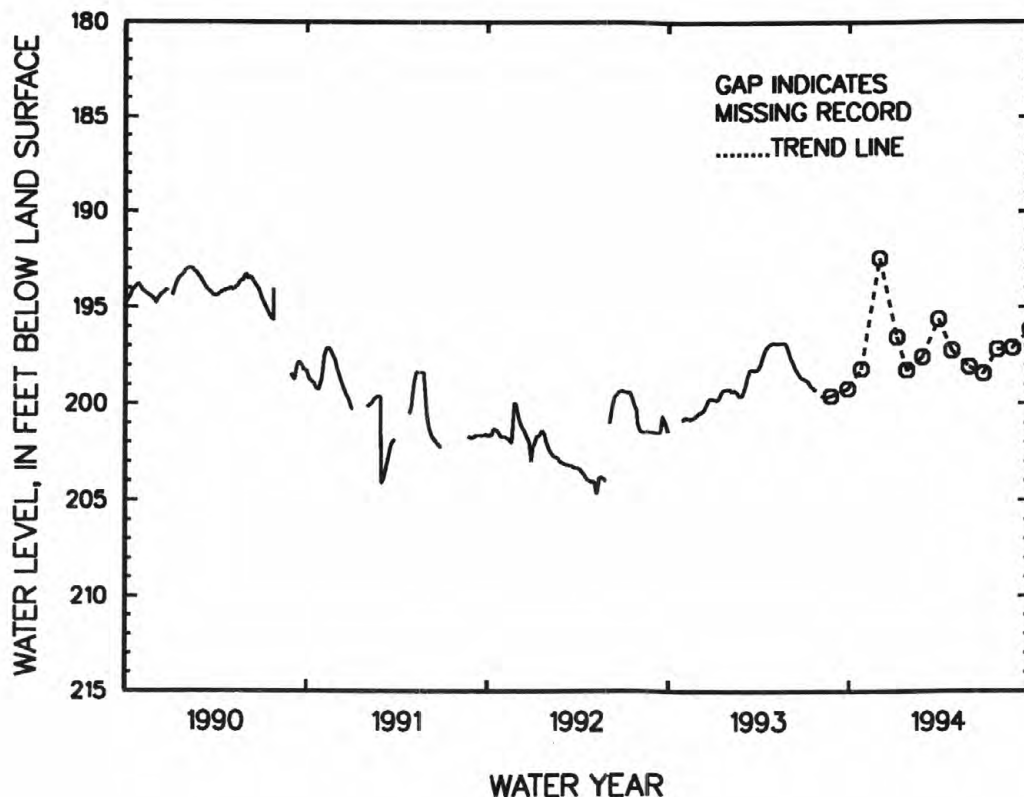
PERIOD OF RECORD.--March 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 156.65 ft below land-surface datum, Dec. 27, 1969; lowest measured, 219.29 ft below land-surface datum, May 18, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	198.17	JAN 05	196.54	FEB 25	197.57	APR 26	197.24	JUN 28	198.42	AUG 25	197.11
DEC 01	192.44	25	198.24	MAR 30	195.61	MAY 31	198.07	JUL 26	197.19	SEP 29	196.14

WATER YEAR 1994      HIGHEST 192.44    DEC 01, 1993      LOWEST 198.42    JUN 28, 1994



## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

364101076544803. Local number, 55B 62 SOW 096B.

LOCATION.--Lat 36°41'01", long 76°54'48", Hydrologic Unit 03010202, 200 ft northwest of intersection of U.S. Highways 58 and 258 and Lynn Road, 0.3 mi east of Franklin. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 30.77 ft, screened 25 to 30 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to October 1984, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 27 ft above sea level, from topographic map. Measuring point:

Top of casing, 2.15 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

PERIOD OF RECORD.--May 1979, October 1980 to September 1981, October 1982 to September 1983, October 1984 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 9.46 ft below land-surface datum, Apr. 8, 9, Aug. 19, 1990; lowest measured, 15.38 ft below land-surface datum, Oct. 17, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.39	---	---	---	10.80	10.01	9.52	9.59	9.97	10.17	10.13	10.19
10	---	---	---	11.02	10.79	9.86	9.56	9.68	9.90	10.24	10.14	10.29
15	---	---	---	10.97	10.52	9.59	9.57	9.73	9.99	10.30	10.22	10.37
20	---	---	---	10.91	10.49	9.77	9.60	9.80	9.94	10.24	9.97	10.44
25	11.48	---	---	10.89	10.39	9.76	9.62	9.86	10.04	10.21	10.06	10.14
EOY	---	---	---	10.80	10.43	9.53	9.68	9.87	10.11	10.09	10.19	10.30

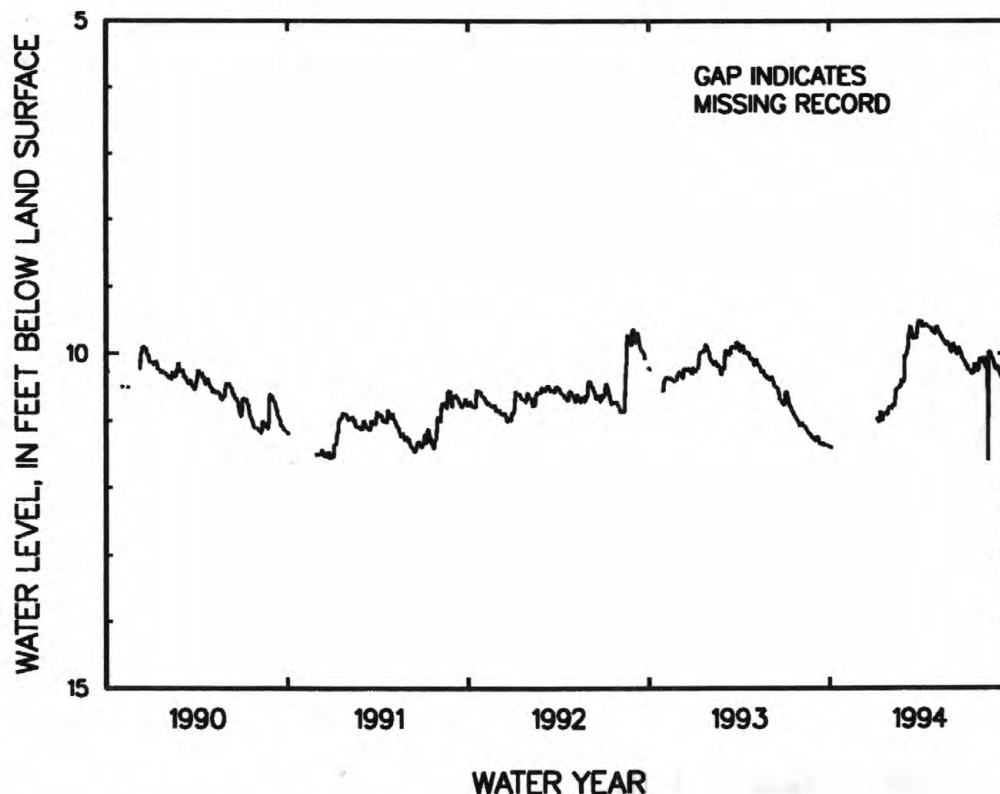
WATER YEAR 1994      HIGHEST INSTANTANEOUS      9.48    MAR 31, APR 01, 03, 04, 1994

LOWEST INSTANTANEOUS    a11.48    OCT 25, 1993  
   b11.59    AUG 17, 1994

a Lowest water level from natural causes.

b Lowest water level caused by pumpage for water-quality sampling.

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

147

## ISLE OF WIGHT COUNTY

365305076380001. Local number, 56C 1.

LOCATION.--Lat 36°50'06", long 76°50'03", Hydrologic Unit 03010202, 0.13 mi west of State Highway 614, 2.2 mi south of Zuni. Owner: Zuni Presbyterian Training Center.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water well, diameter 8 in., depth 434 ft, screened 418 to 434 ft.

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

DATUM.--Elevation of land-surface datum is 75 ft above sea level, from topographic map. Measuring point: Top of pump base, 1.7 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

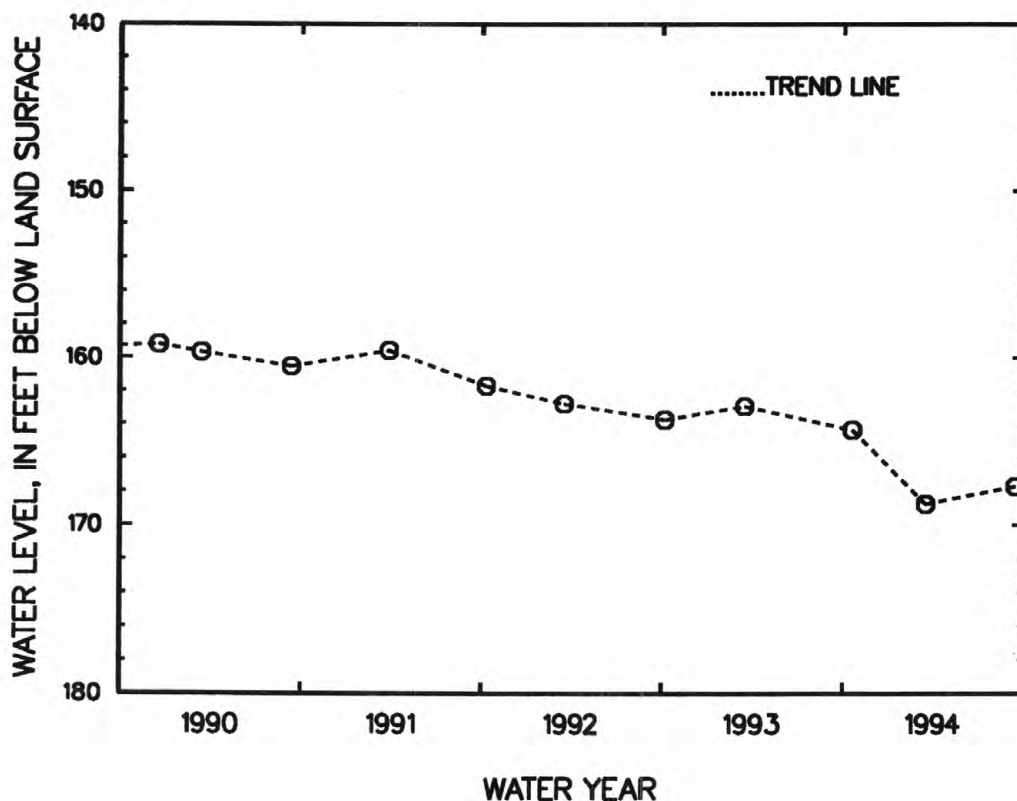
PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.02 ft below land-surface datum, Aug. 27, 1970; lowest measured, 168.75 ft below land-surface datum, Mar. 16, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	164.36	MAR 16	168.75	SEP 12	167.71

WATER YEAR 1994	HIGHEST	164.36	OCT 20, 1993	LOWEST	168.75	MAR 16, 1994
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## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

364814076440701. Local number, 57C 25 SOW 149A.

LOCATION.--Lat 36°48'14", long 76°44'07", Hydrologic Unit 02080208, at Windsor Community Center in Windsor.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 26 ft, screened 16 to 26 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 70 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.2 ft above land-surface datum.

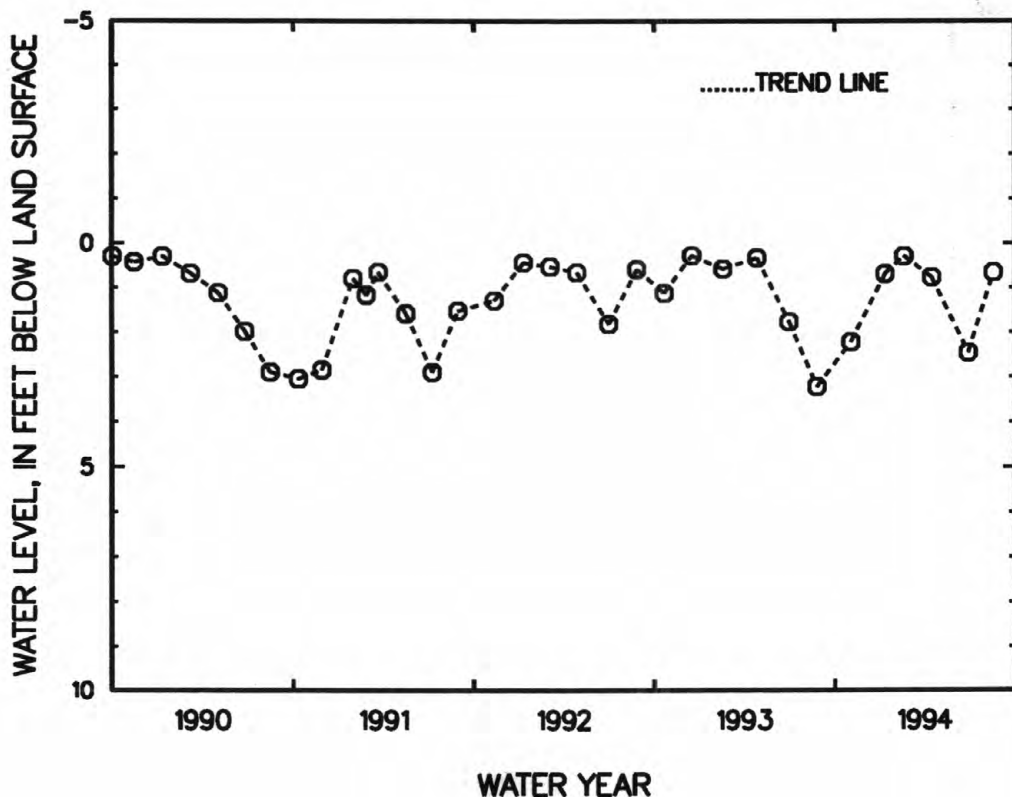
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.27 ft above land-surface datum, Feb. 23, 1987;  
lowest measured, 3.29 ft below land-surface datum, July 22, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	2.22	JAN 11	0.69	FEB 18	0.29	APR 15	0.77	JUN 27	2.46	AUG 17	0.66
WATER YEAR 1994		HIGHEST	0.29	FEB 18, 1994		LOWEST	2.46	JUN 27, 1994			



## GROUND-WATER LEVELS

149

## ISLE OF WIGHT COUNTY

364814076440702. Local number, 57C 26 SOW 149B.

LOCATION.--Lat 36°48'14", long 76°44'07", Hydrologic Unit 02080208, at Windsor Community Center in Windsor.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 380 ft, screened 370 to 380 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 70 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.2 ft above land-surface datum.

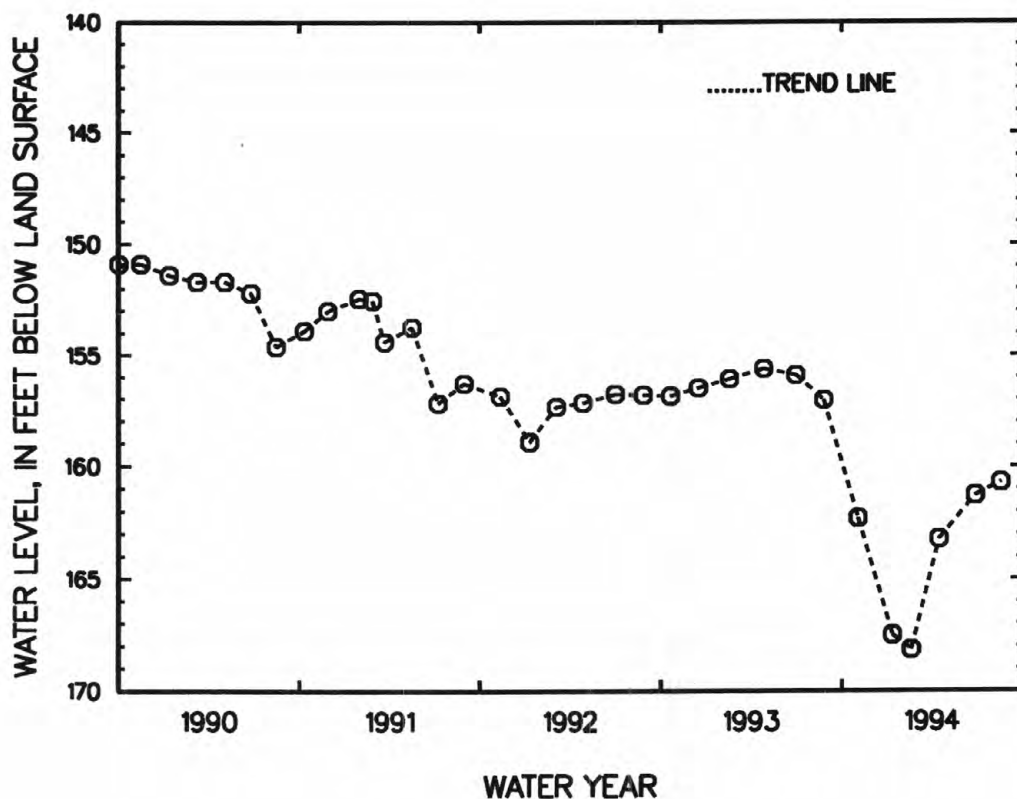
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 144.42 ft below land-surface datum, Feb. 25, 1986;  
lowest measured, 168.14 ft below land-surface datum, Feb. 18, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	162.30	JAN 11	167.50	FEB 18	168.14	APR 15	163.22	JUN 27	161.29	AUG 17	160.71
WATER YEAR 1994		HIGHEST	160.71	AUG 17, 1994		LOWEST	168.14	FEB 18, 1994			



## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

364814076440704. Local number, 57C 28 SOW 149D.

LOCATION.--Lat 36°48'14", long 76°44'07", Hydrologic Unit 02080208, at Windsor Community Center in Windsor.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 807 ft, screened 797 to 807 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 70 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.4 ft above land-surface datum.

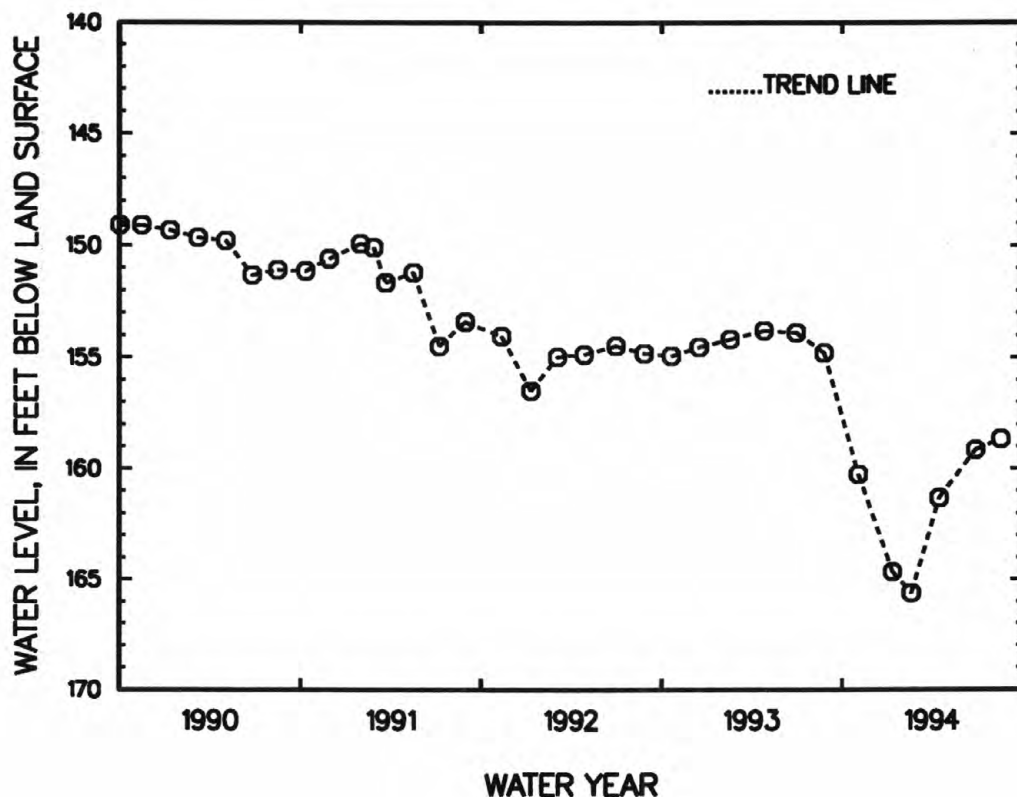
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 142.80 ft below land-surface datum, Feb. 25, 1986;  
lowest measured, 165.62 ft below land-surface datum, Feb. 18, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	160.26	JAN 11	164.66	FEB 18	165.62	APR 15	161.32	JUN 27	159.15	AUG 17	158.66
WATER YEAR 1994		HIGHEST	158.66	AUG 17, 1994		LOWEST	165.62	FEB 18, 1994			



## GROUND-WATER LEVELS

151

## ISLE OF WIGHT COUNTY

365751076433501. Local number, 57D 21 SOW 143A.

LOCATION.--Lat 36°57'51", long 76°43'35", Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 650 ft, screened 640 to 650 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

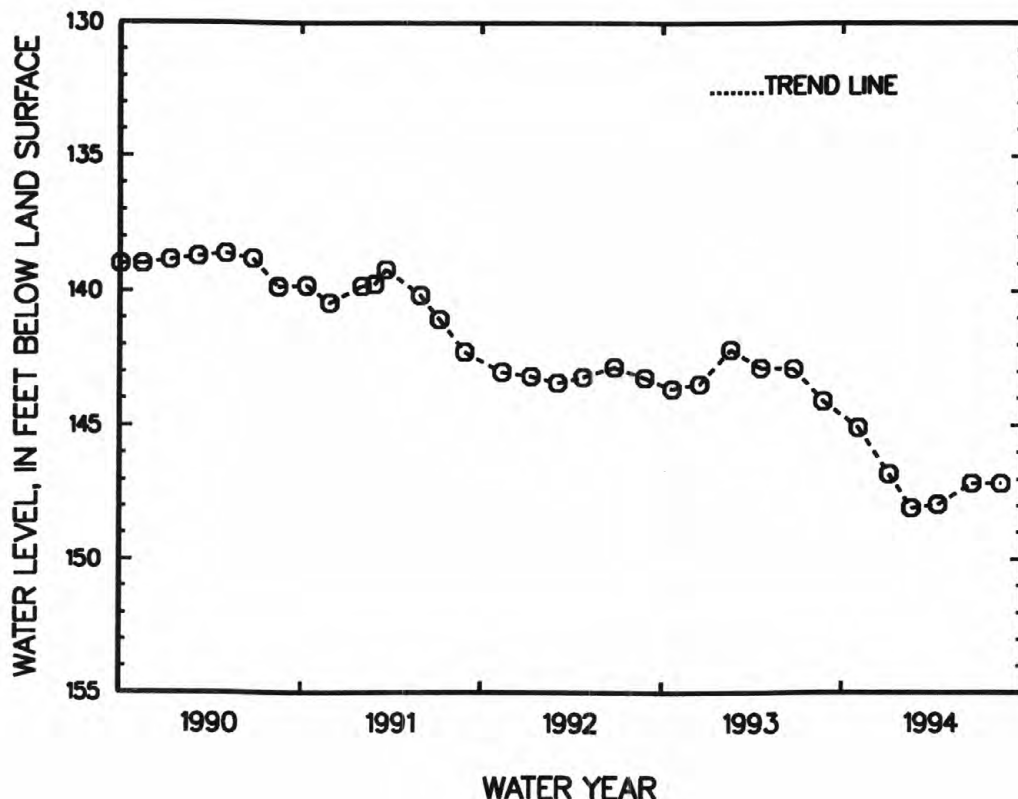
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 122.60 ft below land-surface datum, Aug. 27, 1980; lowest measured, 148.07 ft below land-surface datum, Feb. 18, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	145.07	JAN 04	146.79	FEB 18	148.07	APR 13	147.94	JUN 20	147.15	AUG 17	147.16
WATER YEAR 1994		HIGHEST	145.07	NOV 03, 1993		LOWEST	148.07	FEB 18, 1994			





## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

365751076433502. Local number, 57D 22 SOW 143B.

LOCATION.--Lat 36°57'51", long 76°43'35", Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 350 ft, screened 340 to 350 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

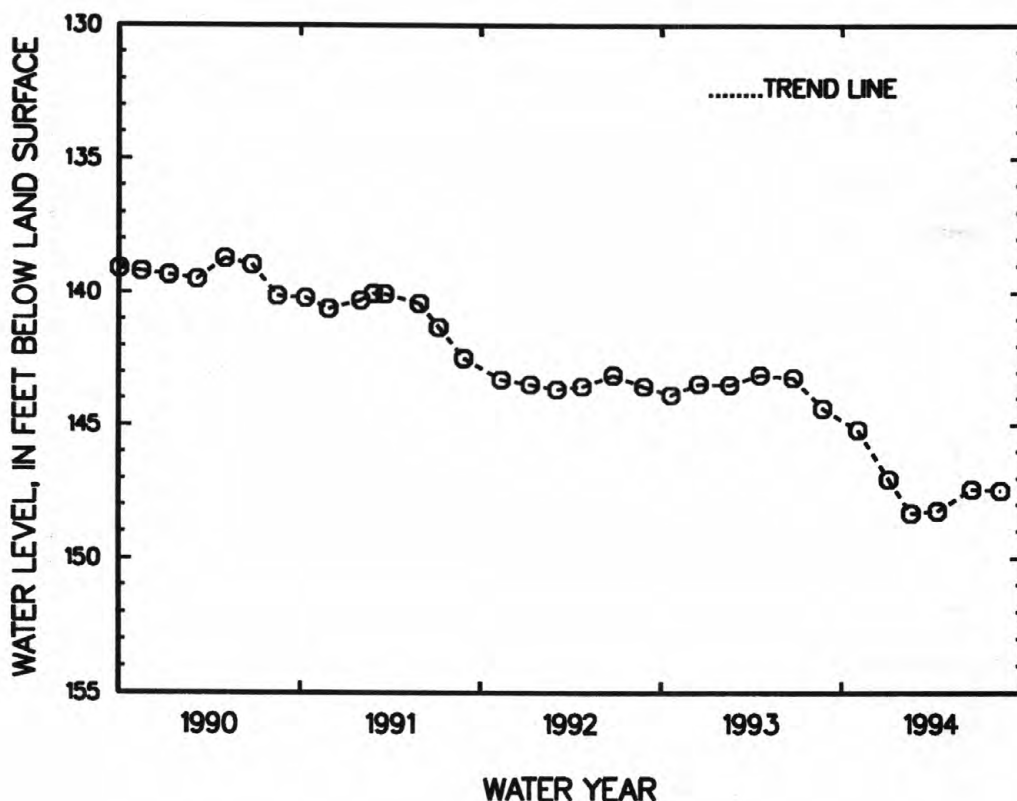
PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.10 ft below land-surface datum, Apr. 24, May 29, 1980; lowest measured, 148.32 ft below land-surface datum, Feb. 18, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	145.18	JAN 04	147.04	FEB 18	148.32	APR 13	148.23	JUN 20	147.42	AUG 17	147.47

WATER YEAR 1994      HIGHEST    145.18    NOV 03, 1993      LOWEST    148.32    FEB 18, 1994



## GROUND-WATER LEVELS

153

## ISLE OF WIGHT COUNTY

365751076433503. Local number, 57D 23 SOW 143C.

LOCATION.--Lat 36°57'51", long 76°43'35", Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 18 ft, screened 8 to 18 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

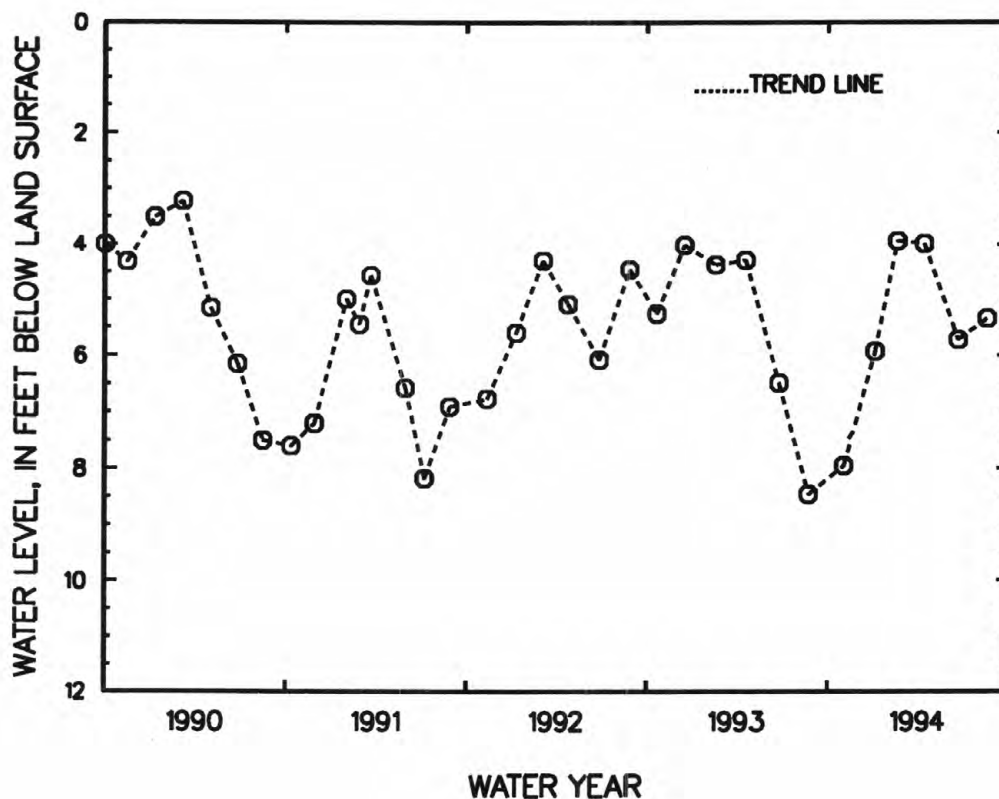
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.29 ft below land-surface datum, Feb. 23, 1987; lowest measured, 8.70 ft below land-surface datum, Aug. 11, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	7.95	JAN 04	5.93	FEB 18	3.94	APR 13	3.99	JUN 20	5.72	AUG 17	5.34
WATER YEAR 1994		HIGHEST	3.94	FEB 18, 1994	LOWEST	7.95	NOV 03, 1993				



## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

370236076425901. Local number, 57E 10 SOW 144B.

LOCATION.--Lat 37°02'36", long 76°42'59", Hydrologic Unit 02080206, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 85 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

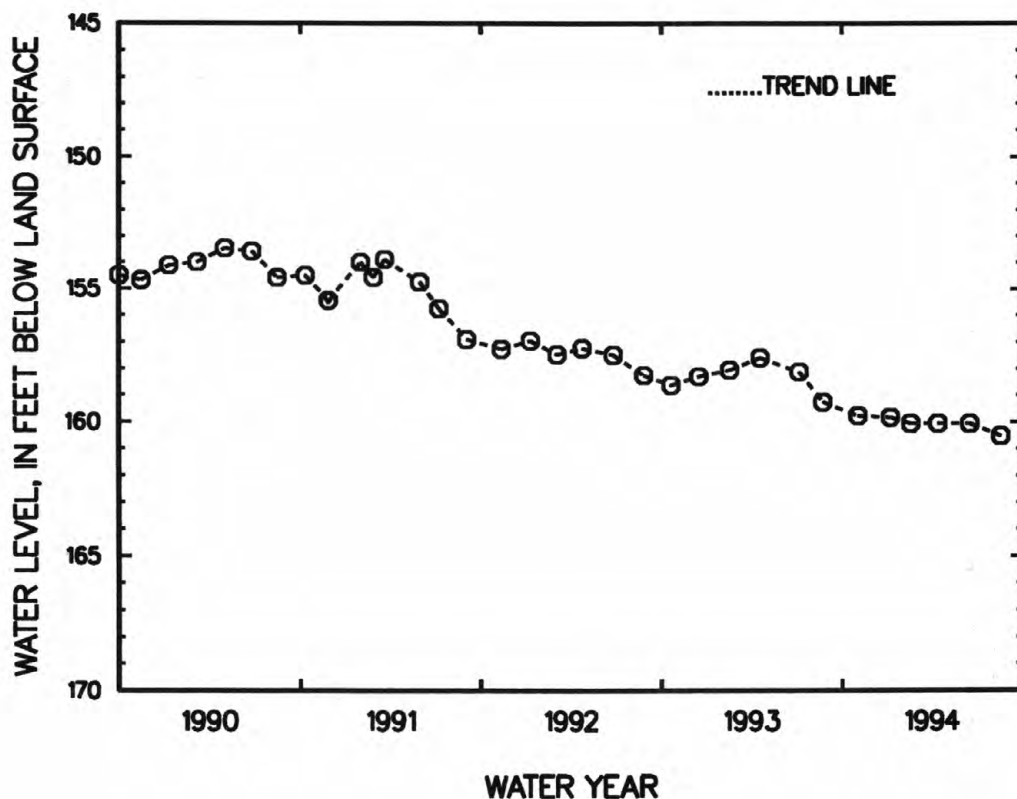
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 139.90 ft below land-surface datum, Apr. 24, July 24, 1980; lowest measured, 160.52 ft below land-surface datum, Aug. 17, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	159.77	JAN 07	159.83	FEB 17	160.06	APR 13	160.05	JUN 16	160.06	AUG 17	160.52
WATER YEAR 1994		HIGHEST	159.77	NOV 03, 1993		LOWEST	160.52	AUG 17, 1994			



## GROUND-WATER LEVELS

155

## ISLE OF WIGHT COUNTY

370253076431201. Local number, 57E 14 SOW 144A.

LOCATION.--Lat 37°02'53", long 76°43'12", Hydrologic Unit 02080208, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 590 ft, diameter 3 in. from 590 to 600 ft, depth 600 ft, screened 590 to 600 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 86 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

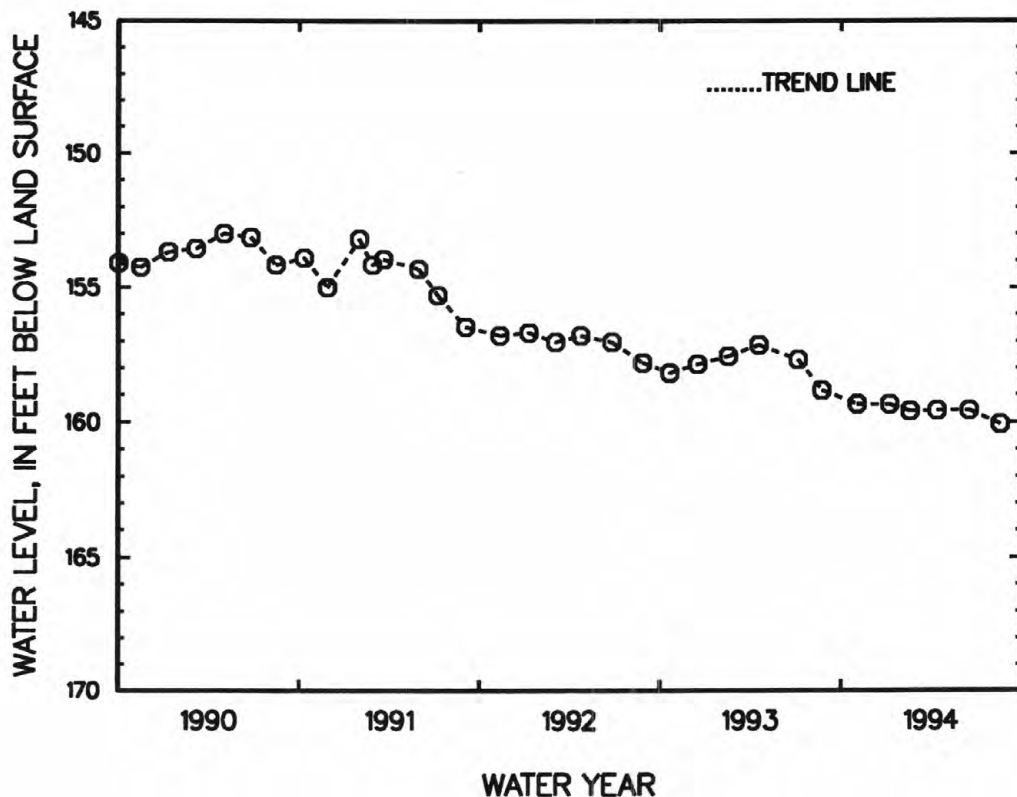
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 139.49 ft below land-surface datum, Apr. 24, 1980; lowest measured, 160.08 ft below land-surface datum, Aug. 17, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	159.34	JAN 07	159.35	FEB 17	159.60	APR 13	159.58	JUN 16	159.57	AUG 17	160.08
WATER YEAR 1994		HIGHEST	159.34	NOV 03, 1993		LOWEST	160.08	AUG 17, 1994			



## GROUND-WATER LEVELS

## ISLE OF WIGHT COUNTY

370253076431202. Local number, 57E 15 SOW 144C.

LOCATION.--Lat 37°02'53", long 76°43'12", Hydrologic Unit 02080208, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 86 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

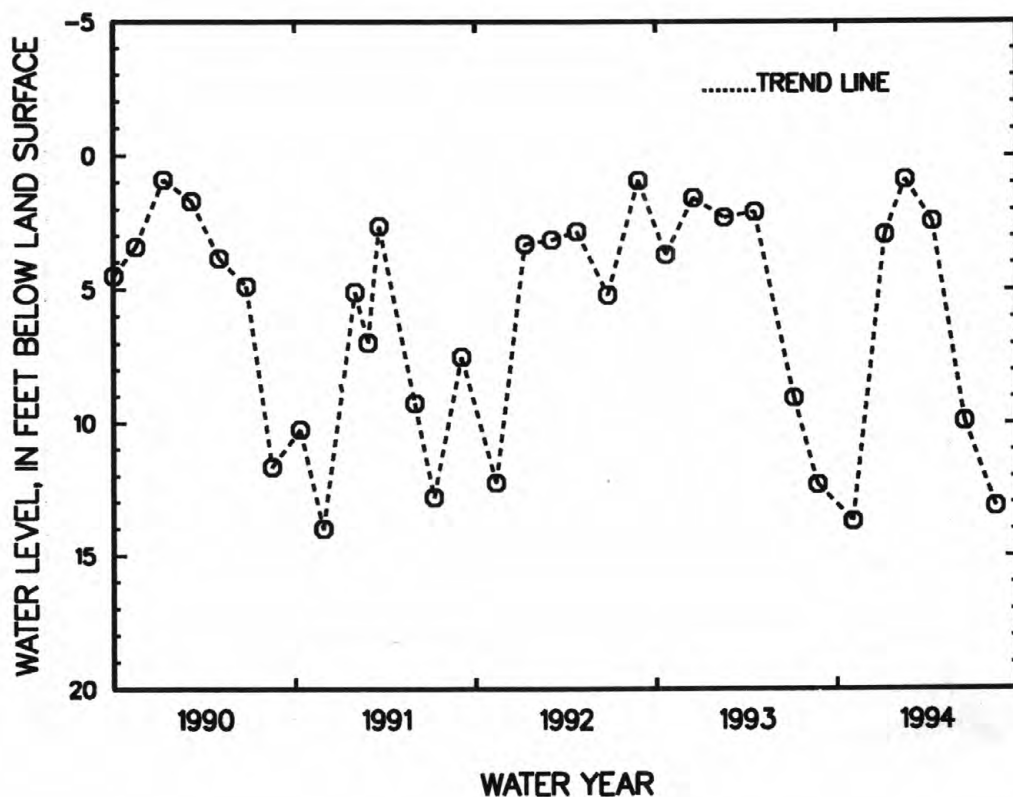
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.88 ft below land-surface datum, Feb. 17, 1994; lowest measured, 14.00 ft below land-surface datum, Nov. 27, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	13.69	JAN 07	2.94	FEB 17	0.88	APR 13	2.44	JUN 16	9.92	AUG 17	13.14
WATER YEAR 1994		HIGHEST	0.88	FEB 17, 1994	LOWEST	13.69	NOV 03, 1993				





## JAMES CITY COUNTY

372546076532901. Local number, 55H 20.

LOCATION.--Lat 37°25'46", long 76°53'29", Hydrologic Unit 02080206, 100 ft north of State Highway 603, 700 ft east of the pumping station at Diascund Creek Reservoir, and 0.6 mi northwest of the intersection of U.S. Highway 60 and State Highway 603 in James City County. Owner: City of Newport News.

AQUIFER.--Lower and middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in. to 300 ft, diameter 6 in. from 300 to 735 ft, depth 735 ft, screened 515 to 540 ft, 600 to 620 ft, 630 to 655 ft, 665 to 685 ft, 720 to 730 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point: Top of casing, 3.6 ft above land-surface datum.

REMARKS.--Water levels for the period May to September 1988 should be 100.00 ft higher than previously published. Water level affected by regional drawdown.

PERIOD OF RECORD.--May 1988 to current year.

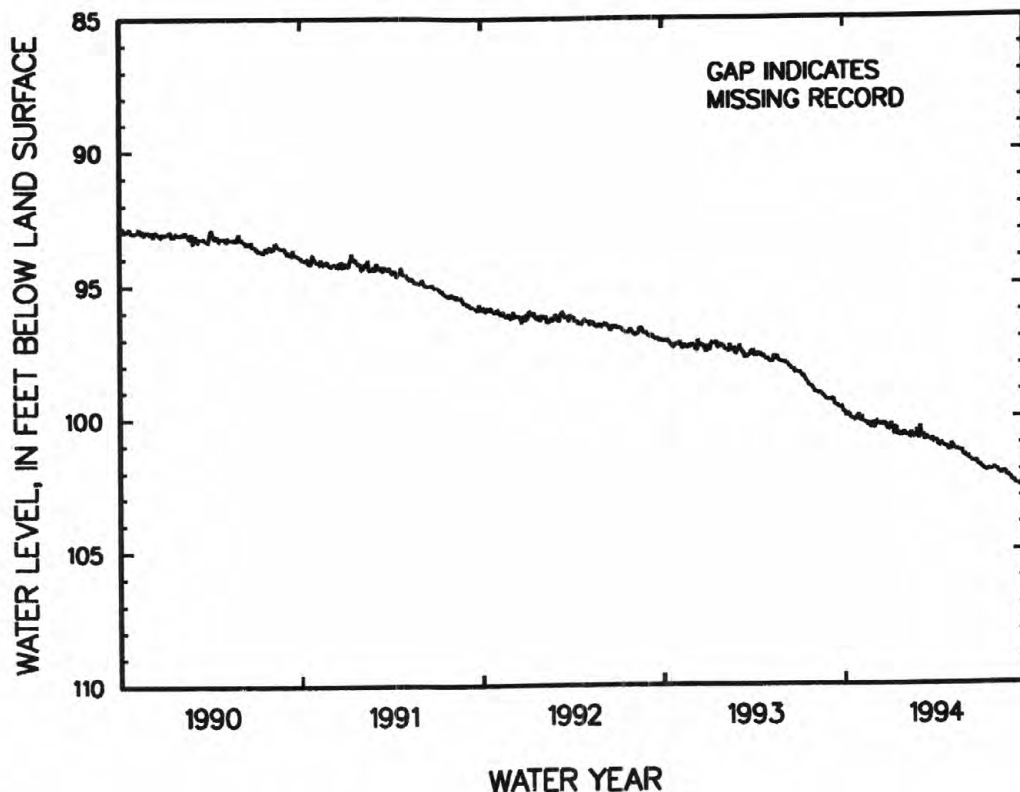
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 90.99 ft below land-surface datum, June 4, 1988; lowest recorded, 102.64 ft below land-surface datum, Sept. 20, 21, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.90	100.05	100.12	100.38	100.64	100.64	100.89	101.00	101.53	101.91	101.97	102.44
10	99.87	100.13	100.24	100.63	100.78	100.62	101.00	101.17	101.59	101.99	102.13	102.51
15	100.02	100.19	100.19	100.56	100.61	100.70	100.99	101.23	101.67	102.04	102.06	102.56
20	100.04	100.21	100.26	100.67	100.73	100.84	101.07	101.26	101.69	102.02	102.10	102.64
25	100.08	100.37	100.23	100.61	100.53	100.82	101.10	101.26	101.72	102.01	102.25	102.45
ECM	99.87	100.38	100.45	100.58	100.80	100.94	101.20	101.47	101.82	101.96	102.32	102.56

WATER YEAR 1994      HIGHEST INSTANTANEOUS    99.66    OCT 02, 1993  
                               LOWEST INSTANTANEOUS    102.64    SEP 20, 21, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## JAMES CITY COUNTY

371311076463601. Local number, 56F 1 SOW 018.

LOCATION.--Lat 37°13'11", long 76°46'36", Hydrologic Unit 02080206, 1,100 ft southwest of Colonial Parkway, 0.5 mi west of State Highway 682, and 0.6 mi north of Jamestown. Owner: U.S. Department of Interior, Colonial National Historical Park.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 346 ft, screened 336 to 346 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1980, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1980, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top edge of recorder shelf, 3.15 ft above land-surface datum.

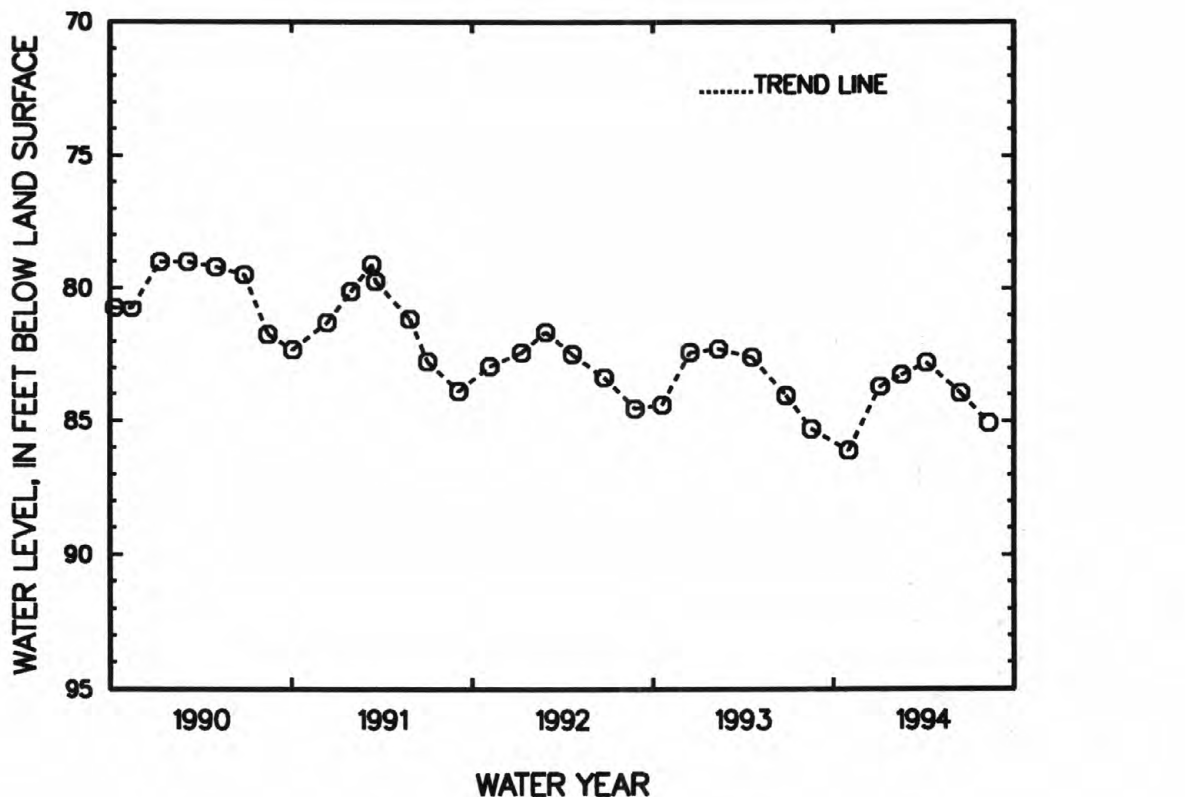
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.29 ft below land-surface datum, May 8, 1969; lowest measured, 86.10 ft below land-surface datum, Nov. 1, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	86.10	JAN 04	83.69	FEB 16	83.25	APR 07	82.79	JUN 15	83.95	AUG 10	85.07
WATER YEAR 1994      HIGHEST   82.79   APR 07, 1994      LOWEST   86.10   NOV 01, 1993											



## GROUND-WATER LEVELS

159

## JAMES CITY COUNTY

371810076473001. Local number, 56G 8.

LOCATION.--Lat 37°20'08", long 76°47'32", Hydrologic Unit 02080206, 0.55 mi east of the intersection of State Highways 611 and 614 on State Highway 611, 2.1 mi west of Lightfoot. Owner: Peninsula Boy Scout Council.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 490 ft, screened 480 to 490 ft.

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

DATUM.--Elevation of land-surface datum is 143 ft above sea level, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

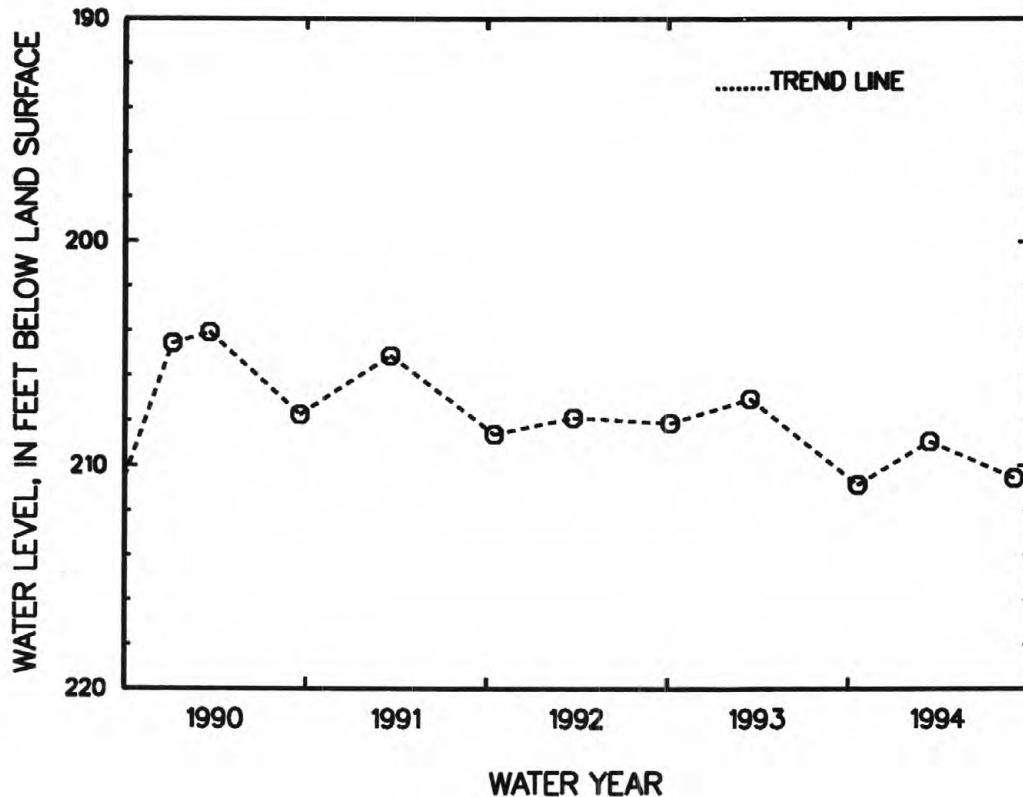
PERIOD OF RECORD.--November 1965, September 1978, January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 160.00 ft below land-surface datum, November 1965; lowest measured, 211.28 ft below land-surface datum, Sept. 19, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	210.86	MAR 14	208.94	AUG 30	210.57

WATER YEAR 1994      HIGHEST 208.94 MAR 14, 1994      LOWEST 210.86 OCT 20, 1993



## GROUND-WATER LEVELS

## JAMES CITY COUNTY

372028076452401. Local number, 56G 38.

LOCATION.--Lat 37°20'24", long 76°45'24", Hydrologic Unit 02080206, 200 ft southwest of U.S. Highway 60 in Lightfoot, 550 ft northwest of the intersection of U.S. Highway 60 and State Highway 646. Owner: Chesapeake and Potomac Telephone Company.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 300 ft, screened 262 to 300 ft.

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

DATUM.--Elevation of land-surface datum is 122 ft above sea level, from topographic map. Measuring point: Top of casing, 1.53 ft below land-surface datum.

REMARKS.--Water level affected by regional drawdown.

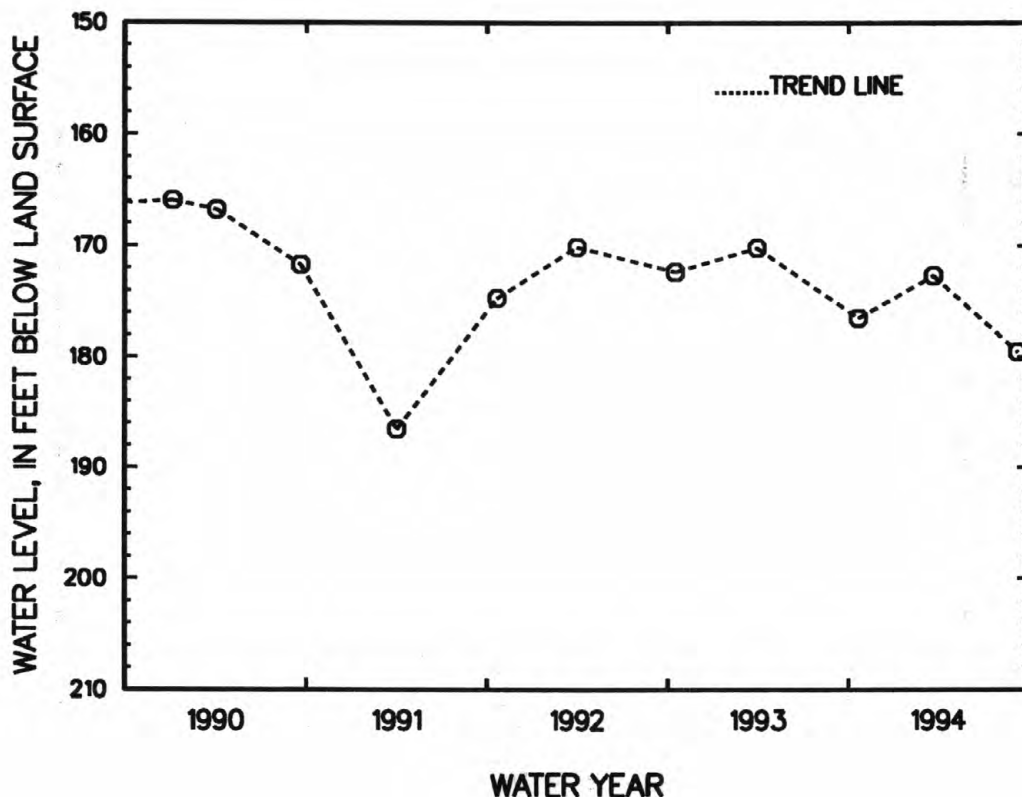
PERIOD OF RECORD.--February to September 1978, February 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 137.61 ft below land-surface datum, Feb. 9, 1978; lowest measured, 186.55 ft below land-surface datum, Apr. 2, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	176.48	MAR 21	172.69	SEP 06	179.52

WATER YEAR 1994      HIGHEST 172.69 MAR 21, 1994      LOWEST 179.52 SEP 06, 1994



## JAMES CITY COUNTY

372145076493201. Local number, 56G 57.

LOCATION.--Lat 37°21'45", long 76°49'32", Hydrologic Unit 02080206, 1.75 mi south of the intersection of U.S. Highway 60 and State Highway 631 (Church Lane), off a dirt road at the end of State Highway 631, and 0.10 mi north of the pump station at Little Creek Reservoir. Owner: City of Newport News.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in. to 300 ft, diameter 6 in. from 300 to 695 ft, depth 695 ft, screened 530 to 540 ft, 558 to 598 ft, 604 to 624 ft, 660 to 690 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 84 ft above sea level, from topographic map. Measuring point: Top of casing, 4.3 ft above land-surface datum.

REMARKS.--Cause of low-water levels in May 1990 unknown. Water level affected by regional drawdown.

PERIOD OF RECORD.--May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 155.79 ft below land-surface datum, May 25, 1988; lowest recorded, 165.39 ft below land-surface datum, Sept. 30, 1994.

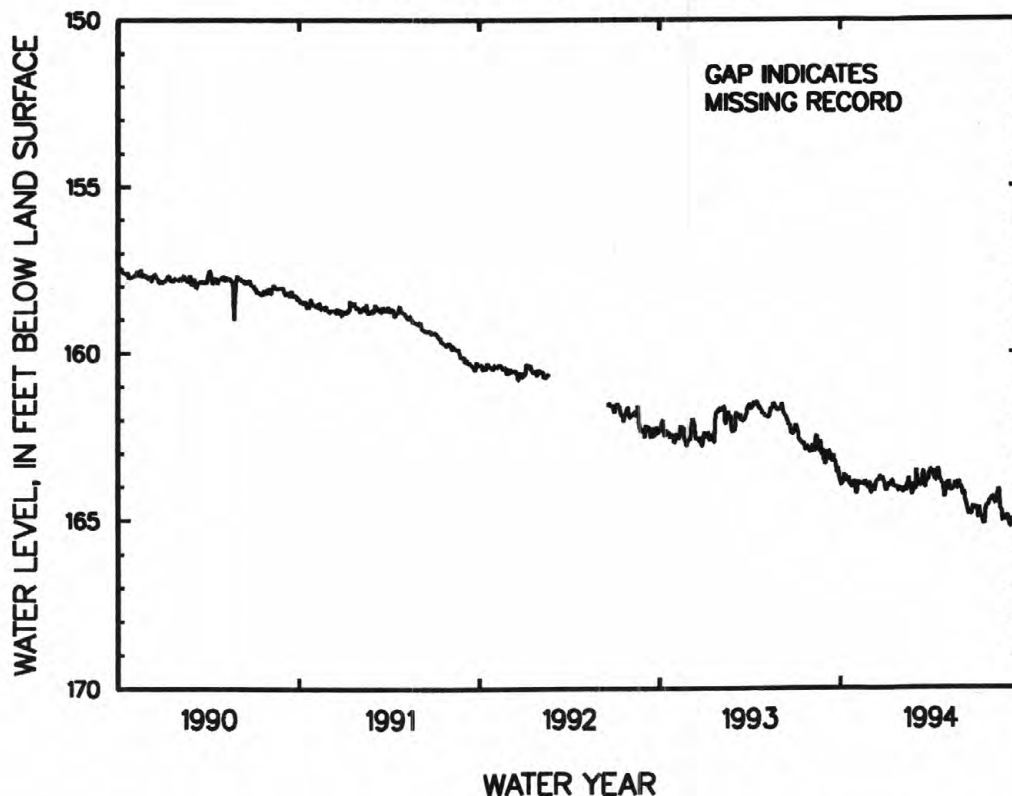
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	163.90	164.00	163.95	164.02	164.12	163.79	163.64	163.89	164.27	164.97	164.31	165.14
10	163.73	163.93	164.11	163.97	164.14	163.91	163.69	164.03	164.46	164.91	164.44	165.01
15	163.84	163.88	163.78	163.93	163.74	163.82	163.50	164.10	164.77	165.12	164.09	165.24
20	163.93	163.82	163.68	164.02	164.02	164.03	163.83	163.88	164.86	164.71	164.72	165.15
25	164.02	164.02	163.71	164.02	163.95	163.78	163.94	164.09	164.60	164.60	164.96	165.27
ECM	163.82	164.06	164.11	164.05	164.09	163.49	164.28	164.05	164.64	164.42	165.03	165.39

WATER YEAR 1994      HIGHEST INSTANTANEOUS    163.37    MAR 31, APR 16, 1994

LOWEST INSTANTANEOUS    165.39    SEP 30, 1994

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

## JAMES CITY COUNTY

372314076480401. Local number, 56H 22 SOW 135A.

LOCATION.--Lat 37°23'14", long 76°48'04", Hydrologic Unit 02080107, 100 ft south of State Highway 754, 0.2 mi east of intersection of U.S. Highway 60 and State Highway 754, and 0.5 mi north of Toano. Owner: James City Service Authority.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 2 in., depth 645 ft, screened 625 to 645 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 105 ft above sea level, from topographic map. Measuring point: Top of casing, 0.50 ft above land-surface datum prior to Mar. 3, 1988; at land-surface datum Mar. 3, 1988, to Mar. 1, 1989; 0.50 ft below land-surface datum thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown and occasional local pumpage.

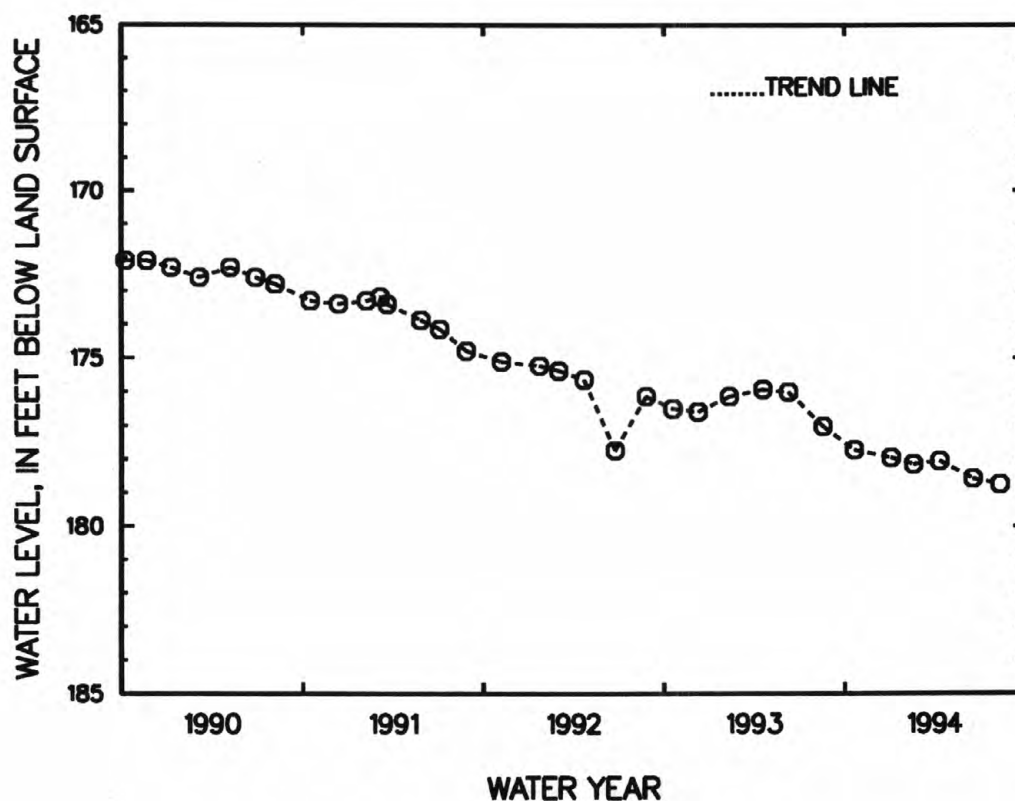
PERIOD OF RECORD.--March 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 154.85 ft below land-surface datum, Apr. 5, 1979; lowest measured, 178.74 ft below land-surface datum, Aug. 10, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	177.72	JAN 03	177.95	FEB 17	178.14	APR 11	178.05	JUN 17	178.57	AUG 10	178.74

WATER YEAR 1994      HIGHEST    177.72    OCT 21, 1993      LOWEST    178.74    AUG 10, 1994



## JAMES CITY COUNTY

372506076511701. Local number, 56H 25 SOW 177A.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 929 ft, screened 888 to 908 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 20, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above sea level, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

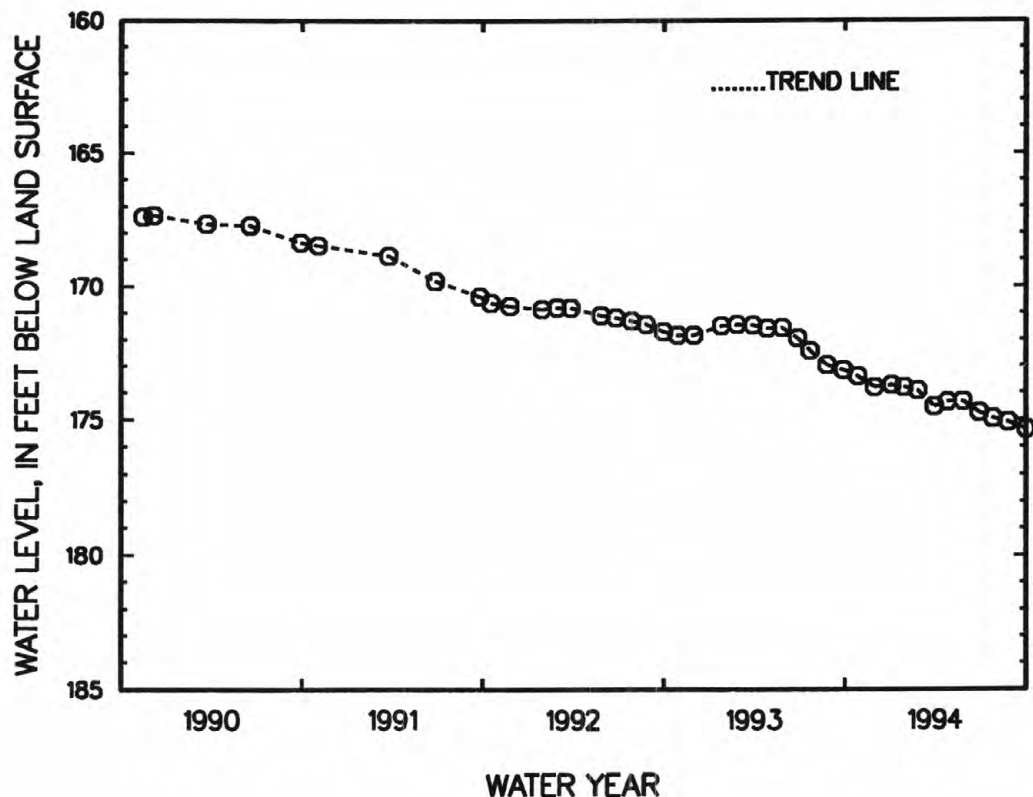
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 158.21 ft below land-surface datum, Mar. 19, 20, 1986; lowest measured, 175.10 ft below land-surface datum, Aug. 25, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	173.38	JAN 03	173.71	FEB 25	173.92	APR 26	174.34	JUN 28	174.74	AUG 25	175.10
NOV 30	173.79	28	173.79	MAR 30	174.52	MAY 26	174.32	JUL 26	174.96	SEP 30	175.36
WATER YEAR 1994		HIGHEST	173.38	OCT 27, 1993	LOWEST	175.10	AUG 25, 1994				



## GROUND-WATER LEVELS

## JAMES CITY COUNTY

372506076511702. Local number, 56H 26 SOW 177B.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 581 ft, screened 550 to 560 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above sea level, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

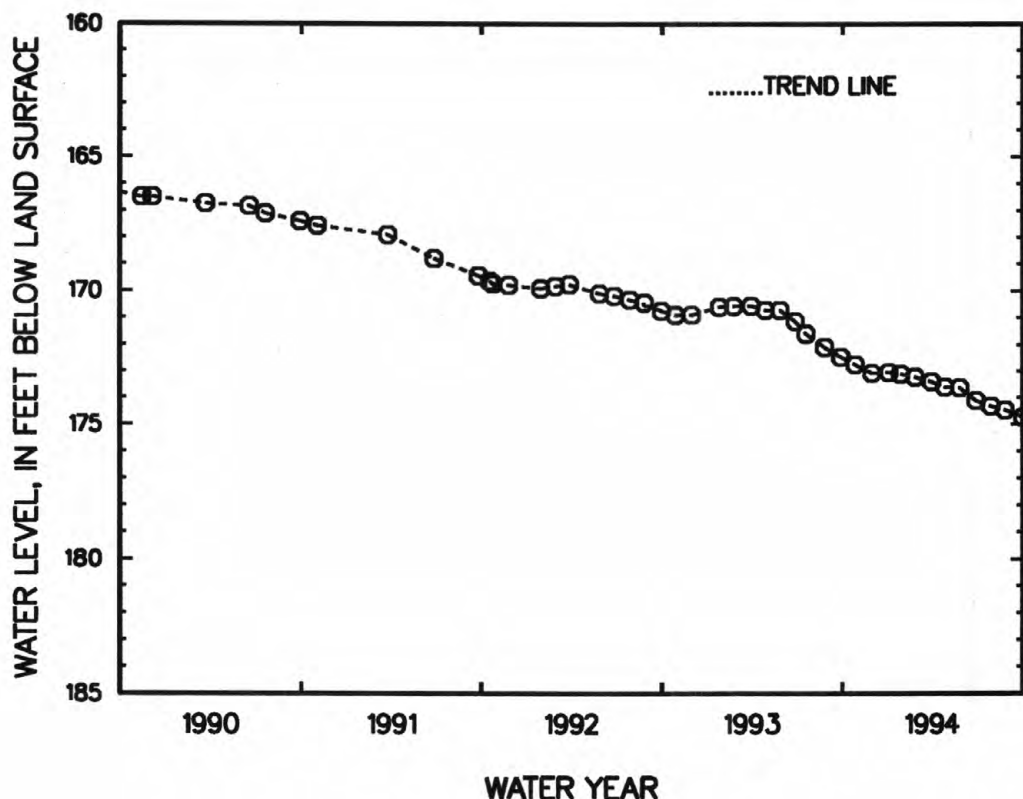
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records prior to October 1986 and fragmentary periods of continuous record for water year 1989 available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 157.61 ft below land-surface datum, June 1, 2, 1985; lowest measured, 174.75 ft below land-surface datum, Sept. 30, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	172.75	JAN 03	173.05	FEB 25	173.23	APR 26	173.60	JUN 28	174.12	AUG 25	174.47
NOV 30	173.08	27	173.11	MAR 30	173.40	MAY 26	173.63	JUL 27	174.32	SEP 30	174.75
WATER YEAR 1994		HIGHEST	172.75	OCT 27, 1993		LOWEST	174.75	SEP 30, 1994			



## JAMES CITY COUNTY

372506076511703. Local number, 56H 27 SOW 177C.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 401 ft, screened 370 to 380 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. Prior to Aug. 26, 1993, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above sea level, from topographic map. Measuring point: Top of casing, 2.95 ft above land-surface datum.

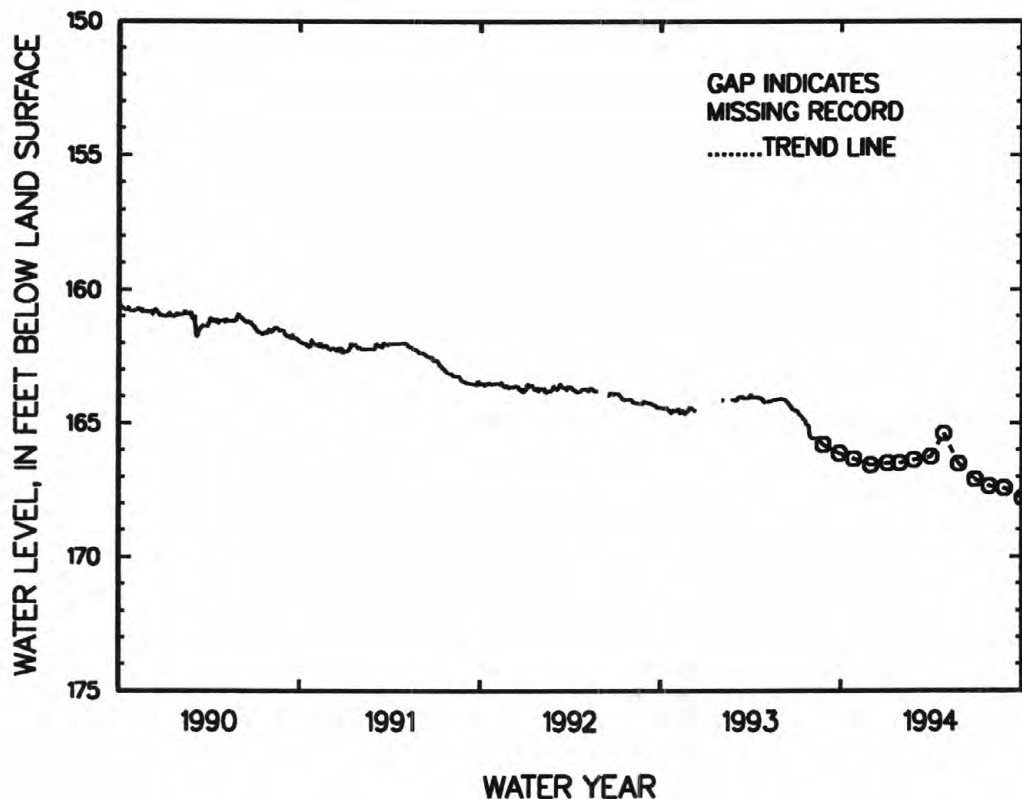
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 153.47 ft below land-surface datum, June 1, 2, 1985; lowest measured, 167.81 ft below land-surface datum, Sept. 30, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	166.33	JAN 03	166.49	FEB 25	166.37	APR 26	165.39	JUN 28	167.11	AUG 25	167.44
NOV 30	166.56	27	166.49	MAR 31	166.25	MAY 26	166.52	JUL 26	167.36	SEP 30	167.81
WATER YEAR 1994		HIGHEST	165.39	APR 26, 1994	LOWEST		167.81	SEP 30, 1994			



## GROUND-WATER LEVELS

## JAMES CITY COUNTY

372506076511704. Local number, 56H 28 SOW 177D.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168, 0.7 mi north of the intersection of State Highways 168 and 601, and on the northwest side of State Highway 601 in James City County. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 321 ft, screened 290 to 300 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Sept. 16, 1989, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 193 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum prior to Dec. 4, 1989; 0.9 ft thereafter.

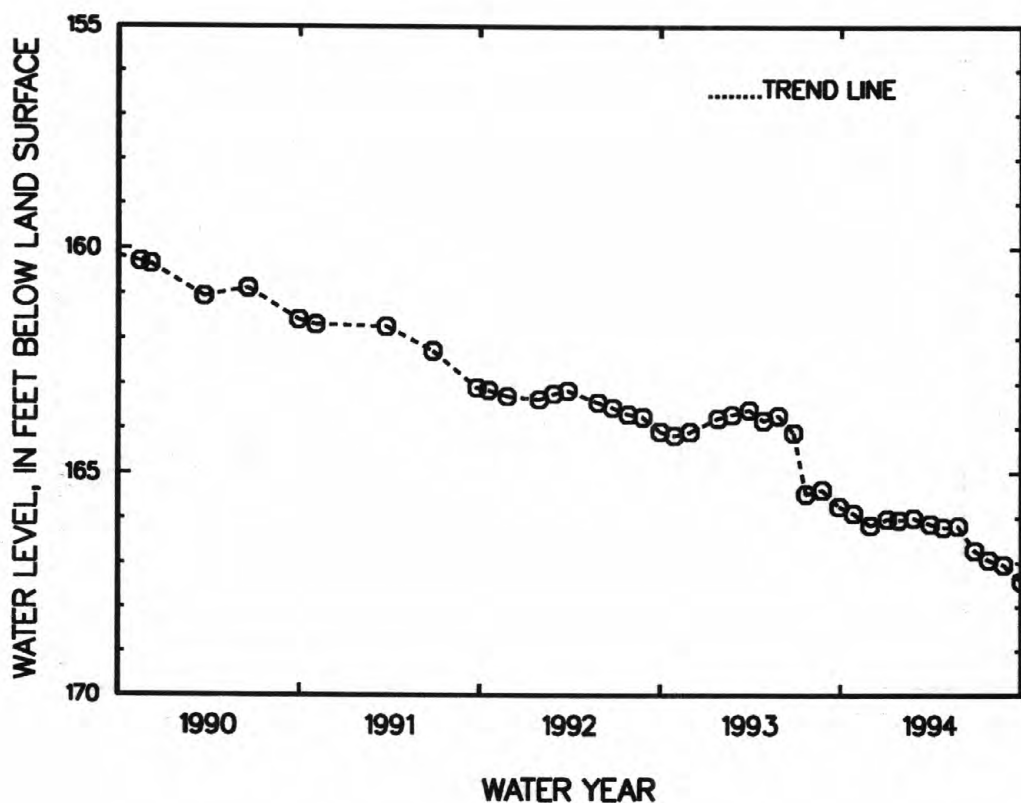
PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 153.20 ft below land-surface datum, May 31, 1985; lowest measured, 167.43 ft below land-surface datum, Sept. 30, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	165.89	JAN 03	166.02	FEB 25	166.00	APR 26	166.21	JUN 28	166.73	AUG 25	167.05
NOV 30	166.16	27	166.04	MAR 31	166.13	MAY 26	166.18	JUL 26	166.94	SEP 30	167.43

WATER YEAR 1994      HIGHEST 165.89    OCT 27, 1993      LOWEST 167.43    SEP 30, 1994





## JAMES CITY COUNTY

372506076511705. Local number, 56H 29 SOW 177E.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 235 ft, screened 204 to 214 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Sept. 21, 1989, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above sea level, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum prior to Dec. 4, 1989; 0.75 ft thereafter.

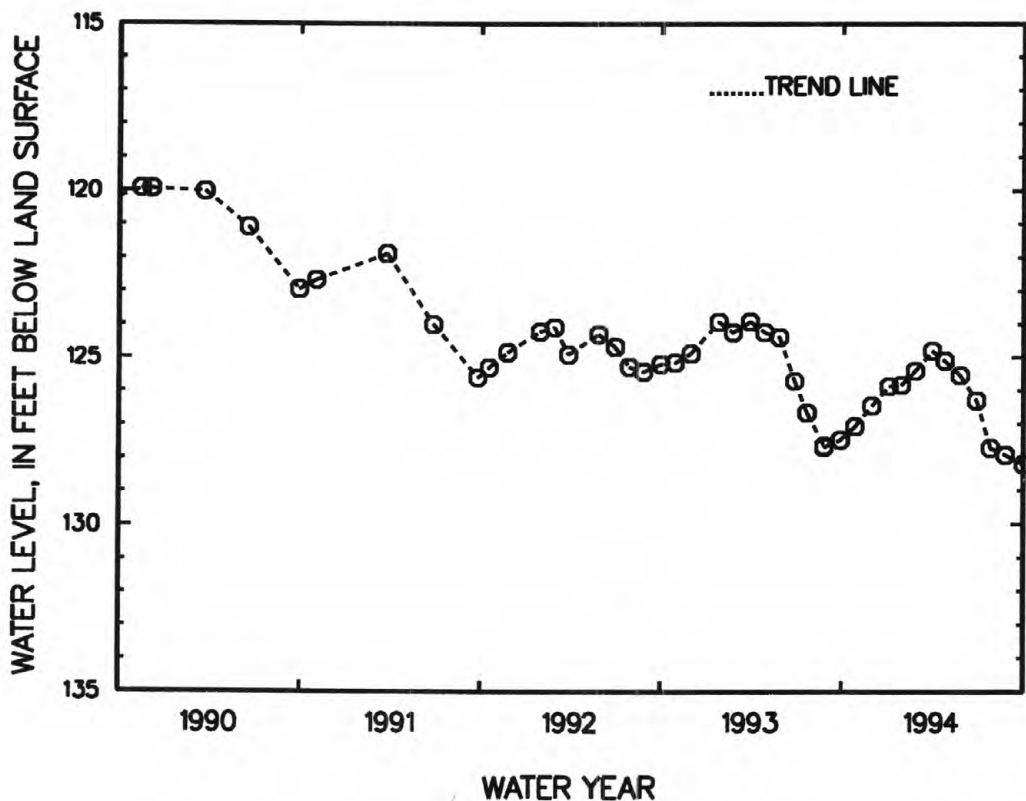
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 111.96 ft below land-surface datum, Feb. 27, 1986; lowest measured, 128.21 ft below land-surface datum, Sept. 30, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	127.07	JAN 03	125.87	FEB 25	125.40	APR 26	125.10	JUN 28	126.30	AUG 25	127.93
NOV 30	126.45	28	125.83	MAR 31	124.80	MAY 26	125.54	JUL 26	127.72	SEP 30	128.21
WATER YEAR 1994		HIGHEST	124.80	MAR 31, 1994	LOWEST		128.21	SEP 30, 1994			



## GROUND-WATER LEVELS

## JAMES CITY COUNTY

372506076511706. Local number, 56H 30 SOW 177F.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Sept. 20, 1989, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum prior to Dec. 4, 1989; 1.1 ft thereafter.

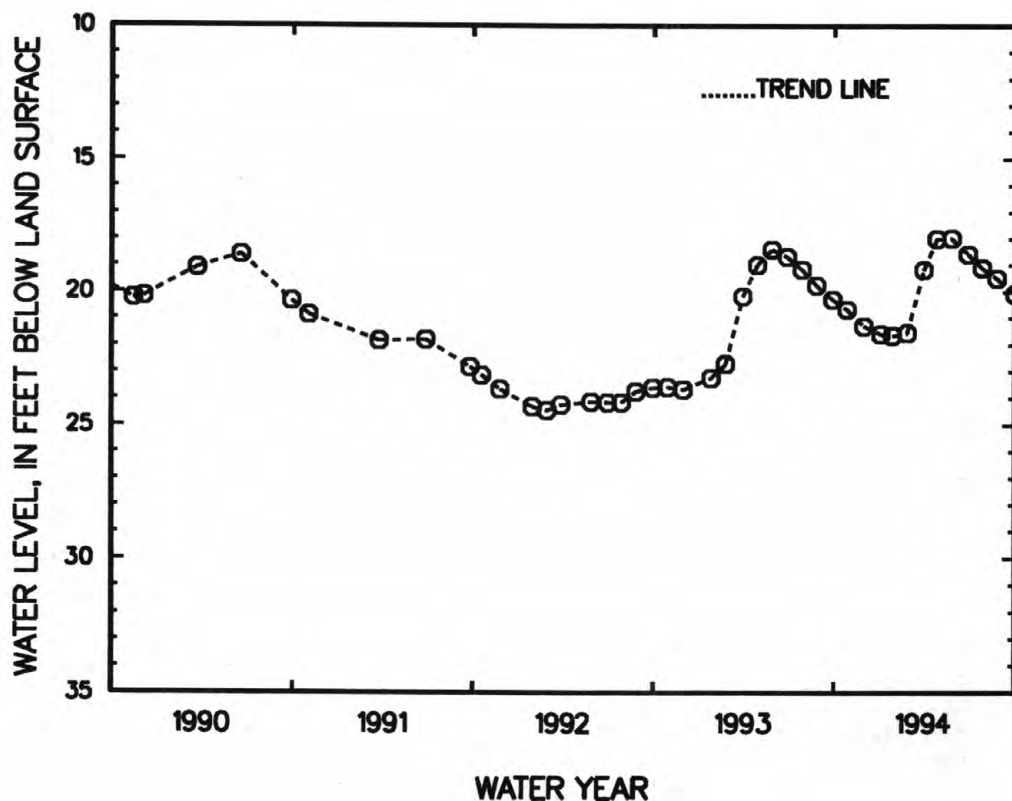
PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 17.25 ft below land-surface datum, June 8, 9, 12, 13, 1987; lowest measured, 24.45 ft below land-surface datum, Feb. 28, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	20.67	JAN 03	21.60	FEB 25	21.56	APR 26	18.00	JUN 28	18.58	AUG 25	19.50
NOV 30	21.30	27	21.66	MAR 31	19.17	MAY 26	17.98	JUL 26	19.10	SEP 30	20.09

WATER YEAR 1994      HIGHEST    17.98    MAY 26, 1994      LOWEST    21.66    JAN 27, 1994



## GROUND-WATER LEVELS

169

## JAMES CITY COUNTY

372314076480402. Local number, 56H 31 SOW 135B.

LOCATION.--Lat 37°23'14", long 76°48'04", Hydrologic Unit 02080107, 100 ft south of State Highway 754, 0.2 mi east of intersection of State Highway 754 and U.S. Highway 60, and 0.5 mi north of Toano. Owner: James City Service Authority.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above sea level, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 3, 1988; at land-surface datum Mar. 3, 1988, to Mar. 1, 1989; 0.2 ft below land-surface datum thereafter.

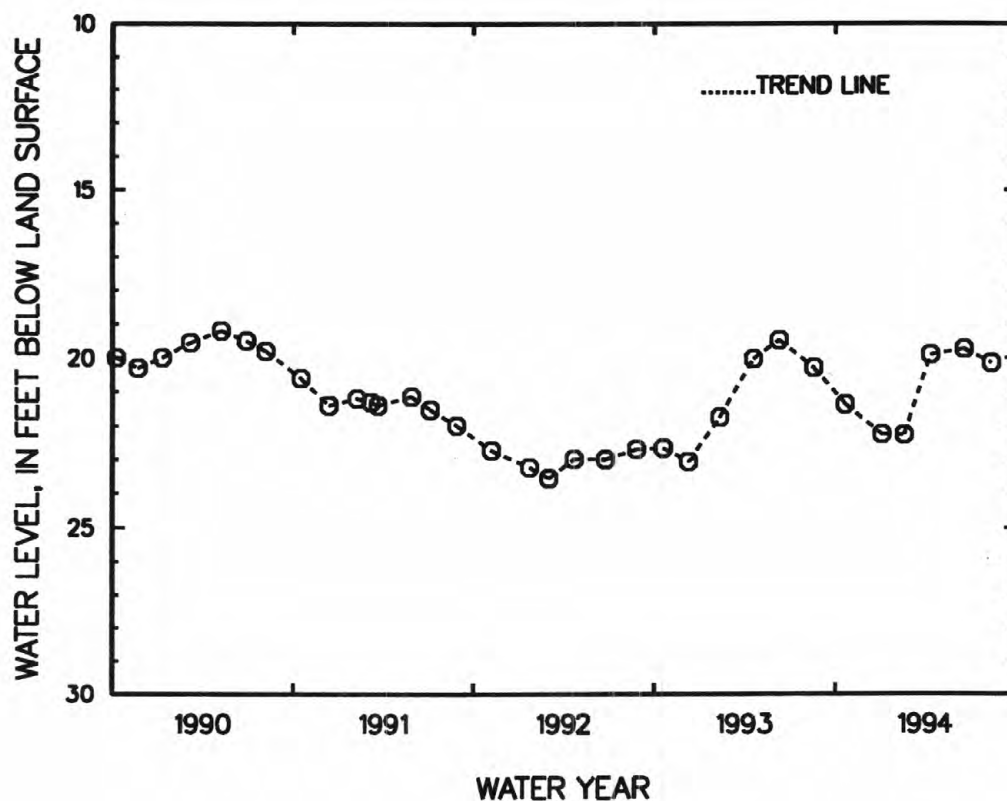
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--August 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.28 ft below land-surface datum, June 8, 1984; lowest measured, 23.80 ft below land-surface datum, Mar. 1, 1989.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	21.36	JAN 03	22.24	FEB 17	22.25	APR 11	19.90	JUN 17	19.73	AUG 10	20.14
WATER YEAR 1994      HIGHEST    19.73    JUN 17, 1994      LOWEST    22.25    FEB 17, 1994											



## GROUND-WATER LEVELS

## JAMES CITY COUNTY

372315076415001. Local number 57H 14 SOW 095.

LOCATION.--Lat 37°23'15", long 76°41'50", Hydrologic Unit 02080107, 500 ft north of State Highway 606, 0.8 mi east of intersection of State Highway 606 and 646, and 3.3 mi east of Croaker. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 123 ft, screened 118 to 123 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Mar. 3, 1988; 1.4 ft thereafter.

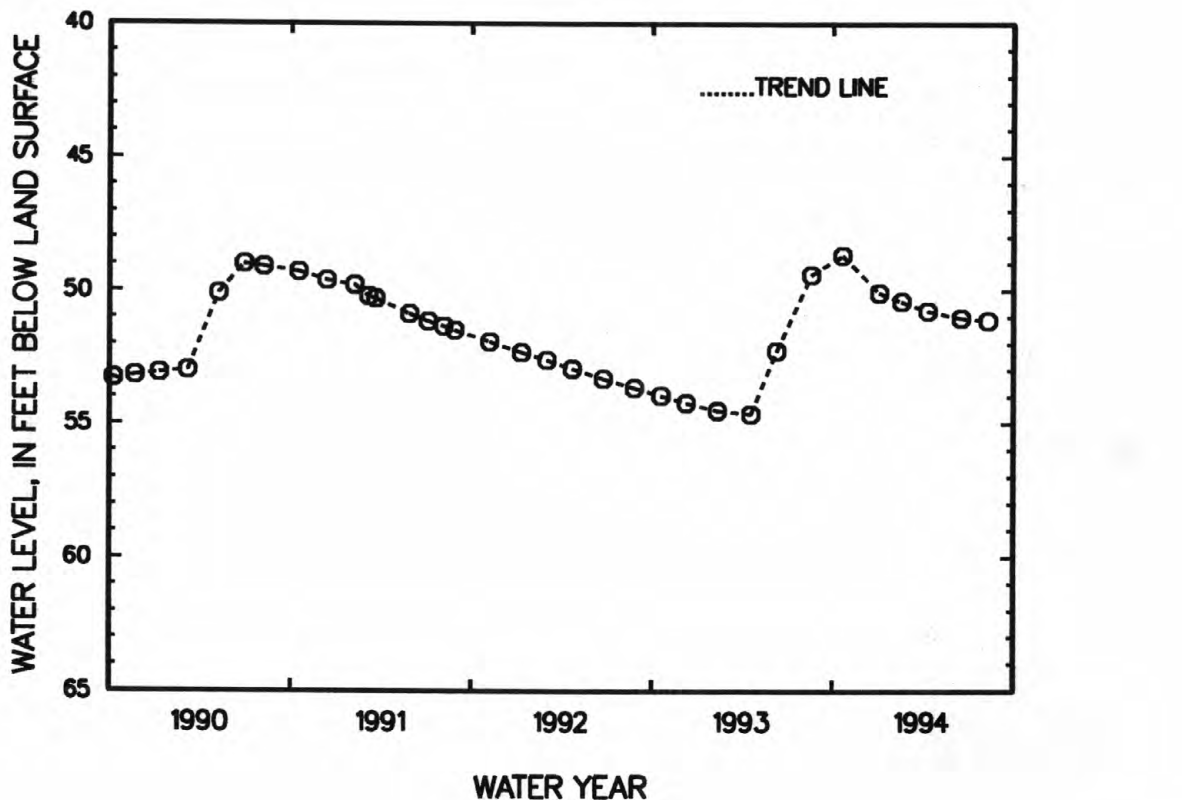
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.00 ft below land-surface datum, Sept. 21, 1978; lowest measured, 54.64 ft below land-surface datum, Apr. 19, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	48.67	JAN 03	50.08	FEB 17	50.40	APR 11	50.75	JUN 17	51.02	AUG 10	51.12
<p>WATER YEAR 1994      HIGHEST    48.67    OCT 21, 1993      LOWEST    51.12    AUG 10, 1994</p>											



## GROUND-WATER LEVELS

171

## KING AND QUEEN COUNTY

374328077012801. Local number, 54K 6 SOW 064.

LOCATION.--Lat 37°43'28", long 77°01'28", Hydrologic Unit 02080105, 100 ft west of State Highway 629, 0.2 mi southeast of Walkerton, and 0.25 mi south of intersection of State Highways 629 and 634. Owner: C. L. Walker.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 66 ft, diameter 4 in. from 66 to 390 ft, depth 390 ft, screened 341 to 372 ft, 376 to 387 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Apr. 30, 1979, to Oct. 2, 1985, occasional measurement with chalked tape. Jan. 5, 1974, to Apr. 30, 1979, continuous strip-chart recorder. Prior to Jan. 5, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 2.17 ft above land-surface datum prior to Nov. 18, 1985; 1.3 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

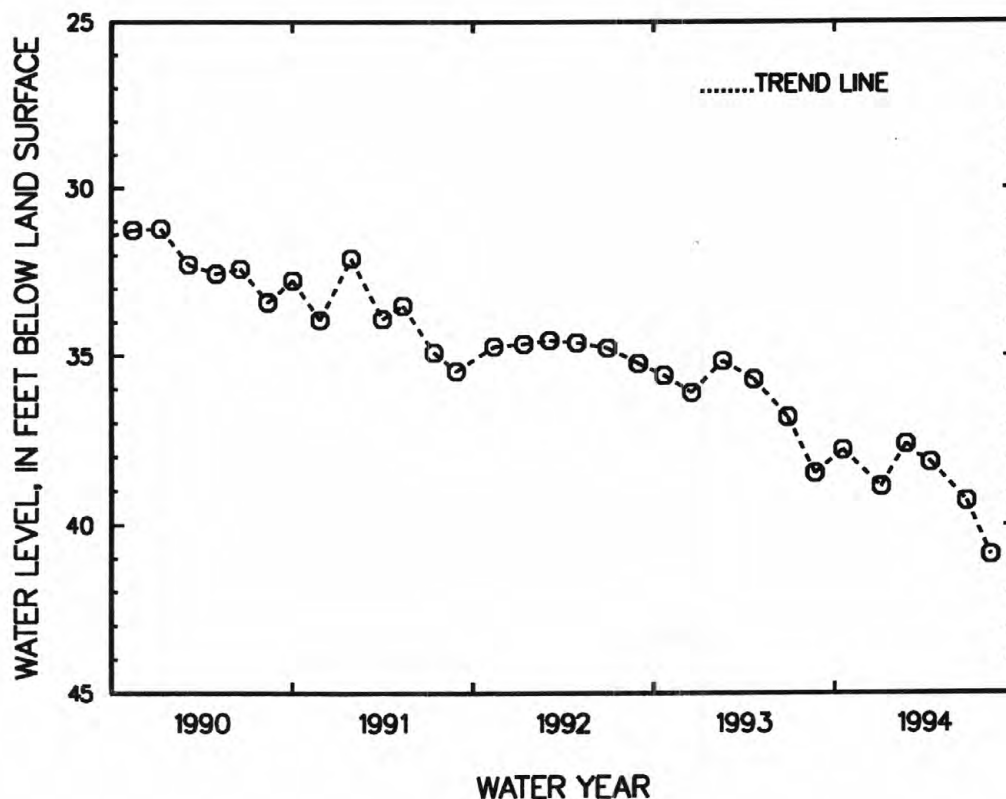
PERIOD OF RECORD.--August 1972 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.82 ft below land-surface datum, Aug. 1, 1972; lowest measured, 40.89 ft below land-surface datum, Aug. 11, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	37.79	JAN 03	38.87	FEB 22	37.62	APR 12	38.16	JUN 24	39.30	AUG 11	40.89

WATER YEAR 1994	HIGHEST	37.62	FEB 22, 1994	LOWEST	40.89	AUG 11, 1994
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GROUND-WATER LEVELS  
KING AND QUEEN COUNTY

374806077034801. Local number, 54L 5.

LOCATION.--Lat 37°48'06", long 77°03'48", Hydrologic Unit 02080105, 75 ft west of U.S. Highway 360 at St. Stephens Church and 0.4 mi southwest of the intersection of U.S. Highway 360 and State Highway 14. Owner: Nick Stolfi.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 252 ft, diameter 2 in. from 252 to 546 ft, depth 546 ft, screened 515 to 525 ft.

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

DATUM.--Elevation of land-surface datum is 160 ft above sea level, from topographic map. Measuring point: Top of 0.5 in. nipple, 5.05 ft below land-surface datum. Prior to Mar. 20, 1985, measuring point was top of casing, 5.5 ft below land-surface datum.

REMARKS.--Water level affected by regional drawdown.

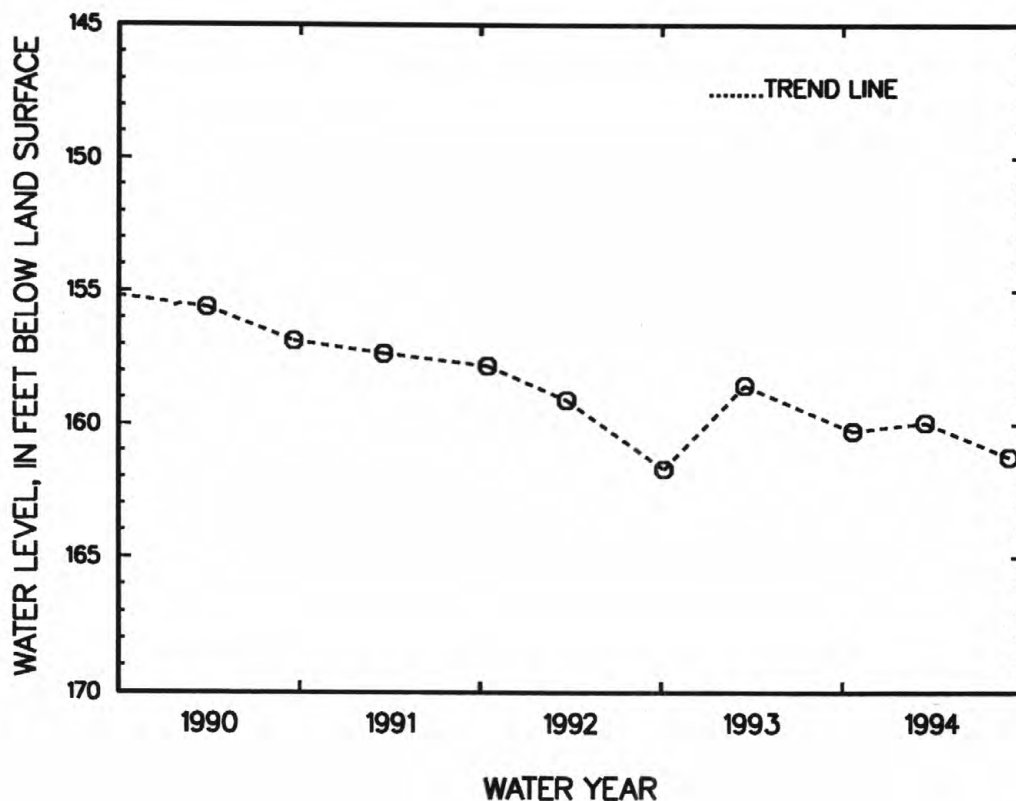
PERIOD OF RECORD.--June 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 133.00 ft below land-surface datum, June 8, 1970; lowest measured, 161.69 ft below land-surface datum, Oct. 6, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	160.26	MAR 17	159.94	SEP 01	161.23

WATER YEAR 1994      HIGHEST 159.94 MAR 17, 1994      LOWEST 161.23 SEP 01, 1994



## GROUND-WATER LEVELS

173

## KING AND QUEEN COUNTY

373126076454101. Local number, 56J 11 SOW 073.

LOCATION.--Lat 37°31'26", long 76°45'41", Hydrologic Unit 02080105, at West Point Airport, 1.7 mi southeast of West Point. Owner: Chesapeake Corporation.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 1,254 ft, screened 1,233 to 1,248 ft.

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

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

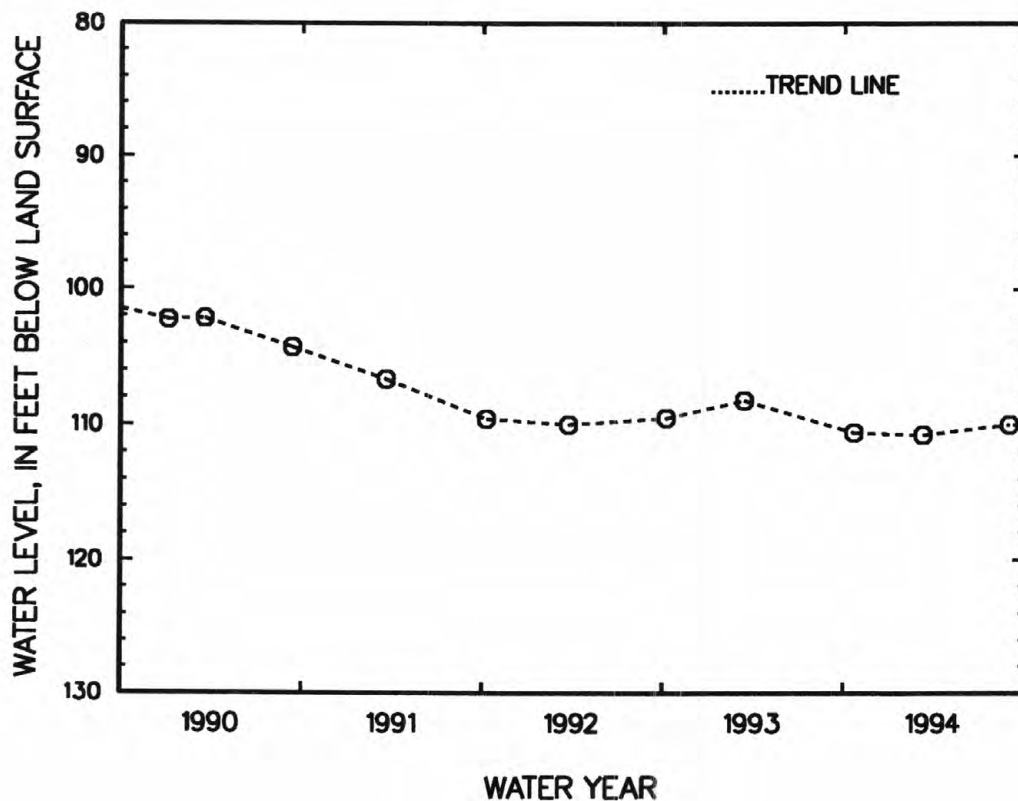
PERIOD OF RECORD.--November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.08 ft below land-surface datum, Apr. 25, 1975; lowest measured, 110.75 ft below land-surface datum, Mar. 10, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	110.59	MAR 10	110.75	AUG 30	110.00

WATER YEAR 1994	HIGHEST	110.00	AUG 30, 1994	LOWEST	110.75	MAR 10, 1994
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GROUND-WATER LEVELS  
KING AND QUEEN COUNTY

373008076425601. Local number, 57J 3 SOW 074.

LOCATION.--Lat 37°30'08", long 76°42'56", Hydrologic Unit 02080107, off State Highway 606, 0.4 mi northeast of intersection of State Highways 606 and 605, and 2.8 mi south of Shacklefords. Owner: Chesapeake Corporation.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 200 ft, diameter 4 in. from 200 to 760 ft, depth 760 ft, screened 741 to 756 ft.

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

DATUM.--Elevation of land-surface datum is 51 ft above sea level, from topographic map. Measuring point: Top of casing, 0.20 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

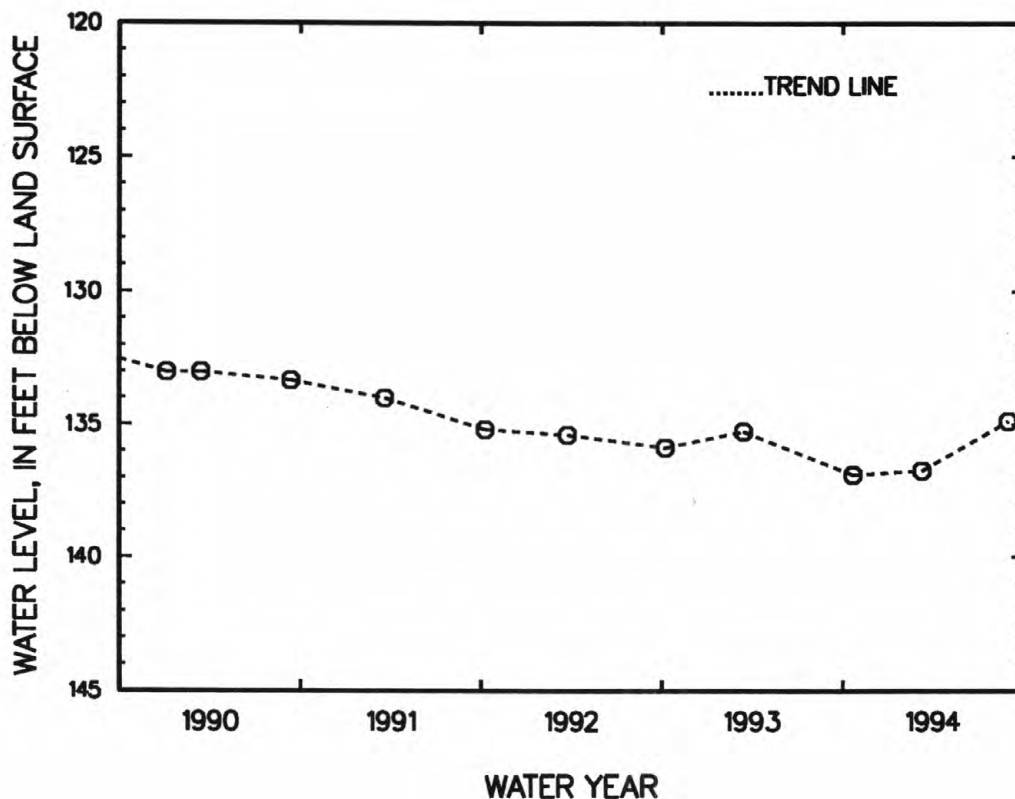
PERIOD OF RECORD.--November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.90 ft below land-surface datum, Jan. 26, 1975; lowest measured, 136.90 ft below land-surface datum, Oct. 22, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	136.90	MAR 10	136.74	AUG 30	134.88

WATER YEAR 1994	HIGHEST	134.88	AUG 30, 1994	LOWEST	136.90	OCT 22, 1993
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## KING GEORGE COUNTY

382103077025401. Local number, 54Q 19.

LOCATION.--Lat 38°21'03", long 77°02'54", Hydrologic Unit 02070011, 100 ft southwest of intersection of Bennion Road and Perimeter Road, 100 ft east of Perimeter Road at edge of woods, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 30 ft, diameter 4 in. from 0 to 180 ft, 200 to 202.25 ft, depth 202.25 ft, screened 180 to 200 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 21.6 ft above sea level. Measuring point: Top of recorder shelf, 2.5 ft above land-surface datum.

REMARKS.--Low-water levels in May 1993 are the result of the well being pumped for water-quality sampling.

PERIOD OF RECORD.--September 1992 to current year.

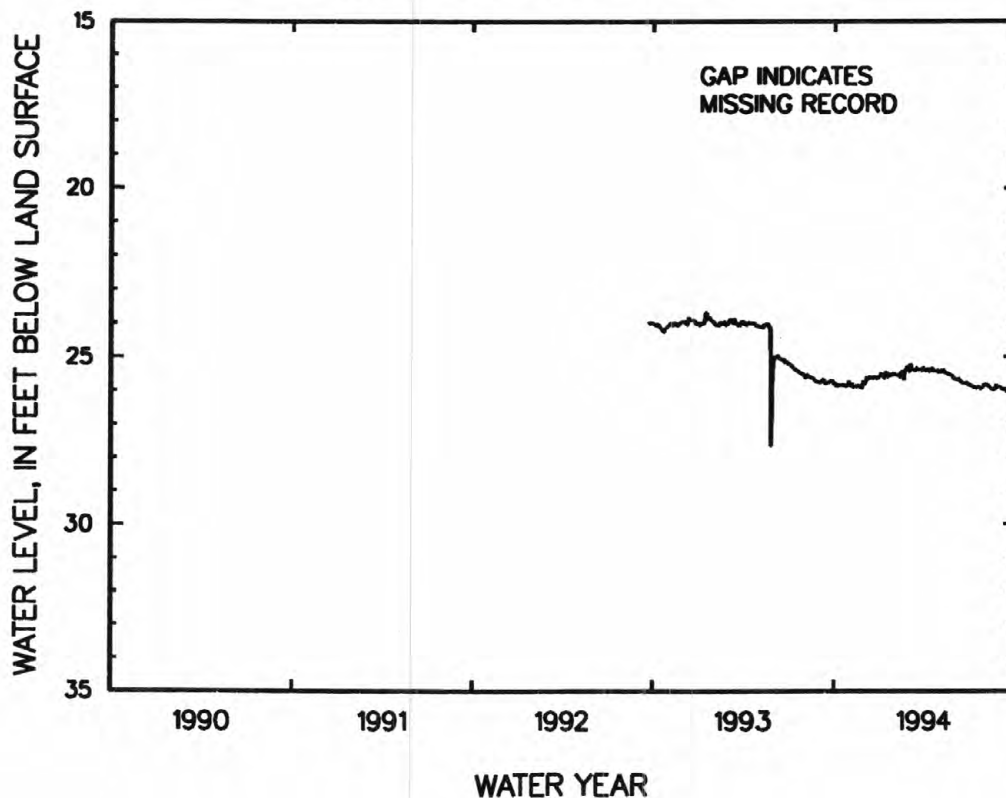
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.67 ft below land-surface datum, Jan. 17, 1993; lowest recorded, 27.64 ft below land-surface datum, May 27, 28, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.84	25.83	25.63	25.54	25.53	25.32	25.39	25.40	25.68	25.89	25.84	25.97
10	25.84	25.89	25.65	25.63	25.61	25.38	25.39	25.45	25.71	25.90	25.94	26.01
15	25.86	25.85	25.58	25.53	25.47	25.33	25.35	25.48	25.79	25.94	25.97	26.05
20	25.84	25.83	25.64	25.57	25.41	25.39	25.42	25.52	25.80	25.95	25.96	26.07
25	25.88	25.92	25.61	25.51	25.30	25.37	25.39	25.56	25.80	25.92	25.92	25.96
EOY	25.72	25.80	25.59	25.53	25.43	25.40	25.45	25.66	25.83	25.85	25.93	25.97

WATER YEAR 1994      HIGHEST INSTANTANEOUS    25.16    MAR 03, 1994  
                              LOWEST INSTANTANEOUS    26.08    SEP 21, 22, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382103077025402. Local number, 54Q 20.

LOCATION.--Lat 38°21'03", long 77°02'54", Hydrologic Unit 02070011, 100 ft southwest of intersection of Bennion Road and Perimeter Road, 100 ft east of Perimeter Road at edge of woods, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Chickahominy-Piney Point aquifer (?) of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 30 ft, diameter 4 in. from 0 to 85 ft, 95 to 97.25 ft, depth 97.25 ft, screened 85 to 95 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 21.59 ft above sea level. Measuring point: Top of recorder shelf, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

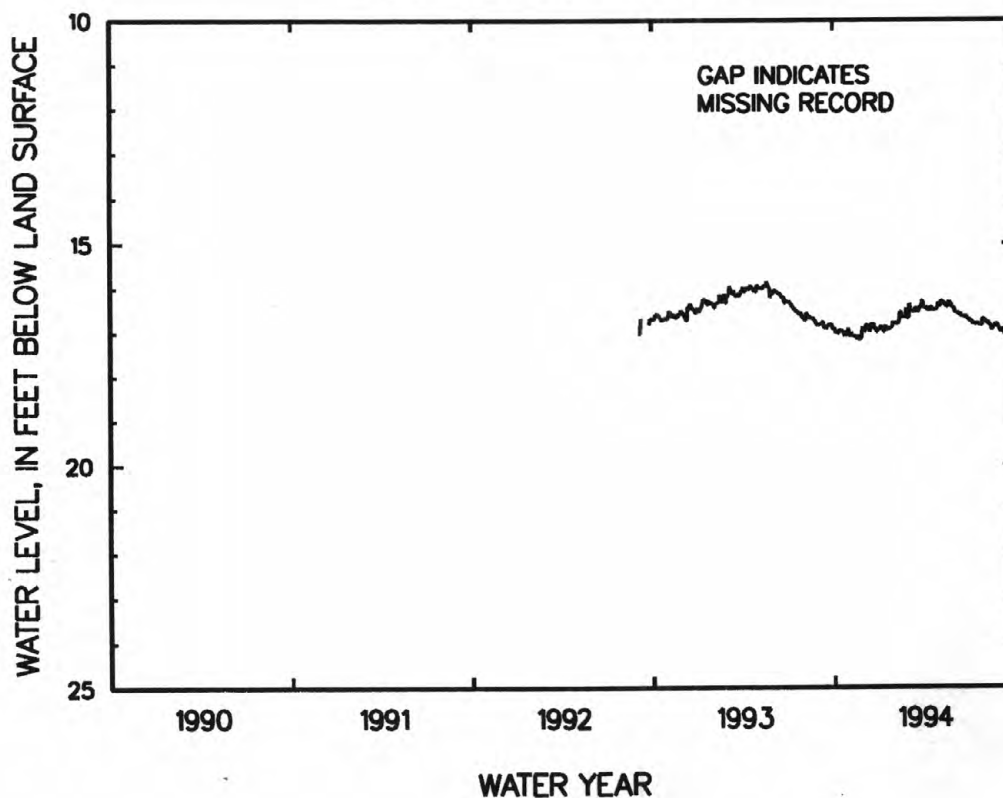
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 15.82 ft below land-surface datum, May 19, 1993; lowest recorded, 17.15 ft below land-surface datum, Nov. 23, 24, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.99	17.05	16.86	16.86	16.81	16.48	16.46	16.27	16.55	16.74	16.77	16.95
10	17.01	17.08	16.85	16.98	16.75	16.50	16.47	16.32	16.59	16.78	16.81	17.03
15	16.96	17.10	16.87	16.89	16.59	16.45	16.44	16.38	16.63	16.83	16.93	17.11
20	16.98	17.07	16.84	16.93	16.66	16.53	16.50	16.38	16.66	16.83	16.89	17.09
25	17.06	17.14	16.90	16.89	16.47	16.45	16.48	16.35	16.65	16.84	16.81	16.93
EOM	16.91	16.97	16.95	16.80	16.68	16.43	16.34	16.46	16.71	16.71	16.93	16.98

WATER YEAR 1994            HIGHEST INSTANTANEOUS    16.21    MAR 29, 1994  
                              LOWEST INSTANTANEOUS    17.15    NOV 23, 24, 1993

## DAILY LOW-WATER LEVELS





## KING GEORGE COUNTY

382129077005801. Local number, 54Q 21.

LOCATION.--Lat 38°21'29", long 77°00'58", Hydrologic Unit 02070011, 200 ft west of the Potomac River, 400 ft south of U.S. Highway 301, 750 ft east of Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 25 ft, diameter 4 in. from 0 to 197 ft, 217 to 219.25 ft, depth 219.25 ft, screened 197 to 217 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 20.46 ft above sea level. Measuring point: Top of recorder shelf, 2.65 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

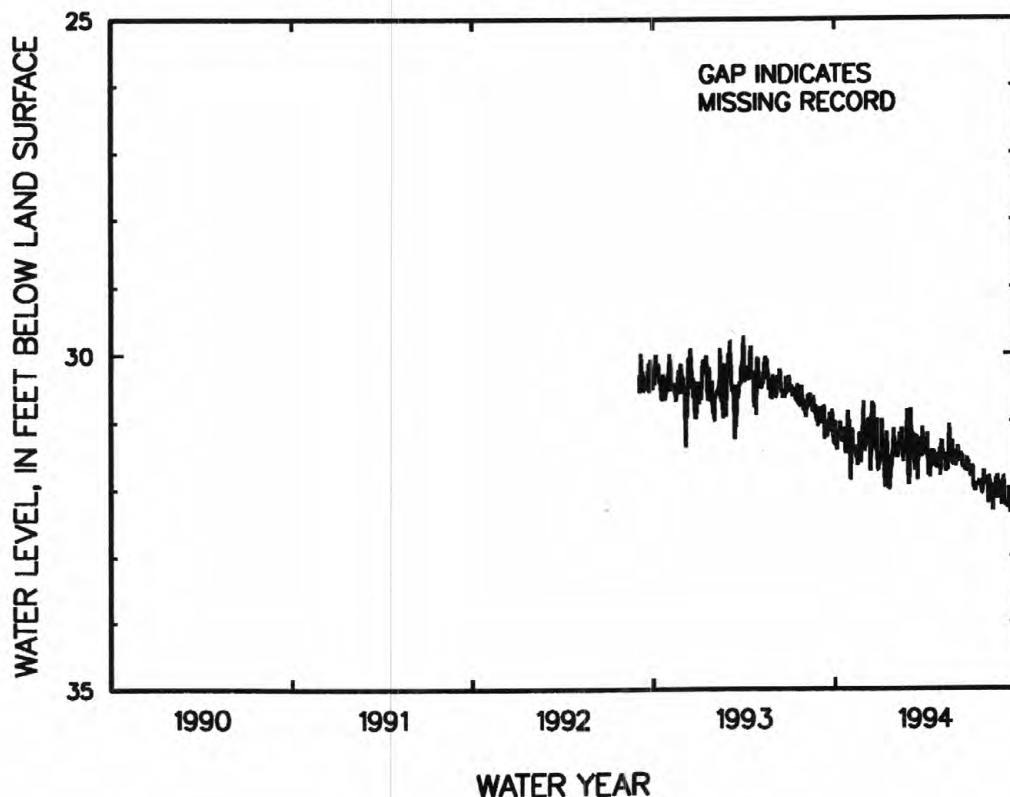
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 29.00 ft below land-surface datum, Mar. 4, 1993; lowest recorded, 32.44 ft below land-surface datum, Sept. 30, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.38	31.10	31.04	31.36	31.51	31.23	31.38	31.28	31.44	31.65	31.86	31.81
10	31.21	31.40	30.97	31.97	31.38	31.28	31.53	31.52	31.56	32.02	31.96	32.23
15	31.29	31.52	30.71	31.88	31.43	31.21	31.45	31.48	31.65	31.92	32.32	32.19
20	31.15	31.16	31.16	31.89	31.34	31.30	31.67	31.04	31.72	31.94	32.01	32.14
25	31.30	31.22	30.95	31.54	31.06	31.42	31.70	31.35	31.64	32.07	31.94	31.95
EOY	30.97	31.43	31.57	31.49	31.86	31.43	31.56	31.47	31.66	31.95	31.96	32.44

WATER YEAR 1994      HIGHEST INSTANTANEOUS    29.98    NOV 28, 1993      LOWEST INSTANTANEOUS    32.44    SEP 30, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382129077005802. Local number, 54Q 22.

LOCATION.--Lat 38°21'29", long 77°00'58", Hydrologic Unit 02070011, 200 ft west of the Potomac River, 400 ft south of U.S. Highway 301, 750 ft east of Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Chickahominy-Piney Point aquifer (?) of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 20 ft, diameter 4 in. from 0 to 46 ft, 56 to 58.25 ft, depth 58.25 ft, screened 46 to 56 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 20.52 ft above sea level. Measuring point: Top of recorder shelf, 2.6 ft above land-surface datum.

REMARKS.--Low-water levels in May 1993 are the result of the well being pumped for water-quality sampling.

PERIOD OF RECORD.--September 1992 to current year.

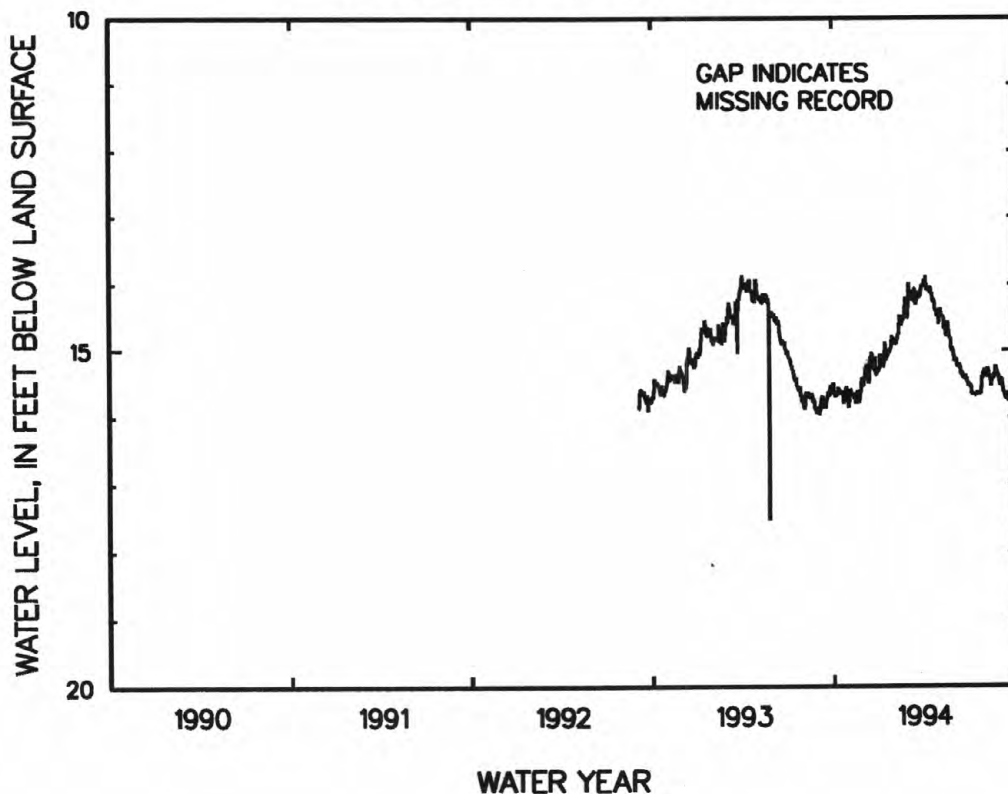
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 13.71 ft below land-surface datum, Apr. 17, 1993; lowest recorded, 17.52 ft below land-surface datum, May 26, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.68	15.58	15.29	15.14	14.91	14.14	13.99	14.37	15.13	15.51	15.28	15.42
10	15.67	15.65	15.22	15.25	14.76	14.12	14.03	14.48	15.24	15.65	15.33	15.64
15	15.64	15.72	15.09	15.08	14.60	14.07	14.05	14.63	15.33	15.68	15.54	15.71
20	15.63	15.60	15.23	15.07	14.53	14.15	14.27	14.56	15.42	15.65	15.41	15.67
25	15.74	15.64	15.09	14.98	14.24	14.15	14.41	14.82	15.38	15.66	15.28	15.45
EOY	15.58	15.53	15.31	14.89	14.51	14.02	14.46	15.02	15.47	15.34	15.39	15.48

WATER YEAR 1994      HIGHEST INSTANTANEOUS    13.77    MAR 03, 1994      LOWEST INSTANTANEOUS    15.85    NOV 02, 1993

## DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381915077020301. Local number, 54Q 23.

LOCATION.--Lat 38°19'15", long 77°02'03", Hydrologic Unit 02070011, 100 ft south of Tisdale Road, 200 ft east of security gate at intersection of Tisdale Road and Welch Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 30 ft, diameter 4 in. from 0 to 192.40 ft, 212.40 to 214.70 ft, depth 214.70 ft, screened 192.40 to 212.40 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 10.70 ft above sea level. Measuring point: Top of recorder shelf, 2.6 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.31 ft below land-surface datum, Dec. 11, 1992; lowest recorded, 24.31 ft below land-surface datum, Nov. 2, 1993.

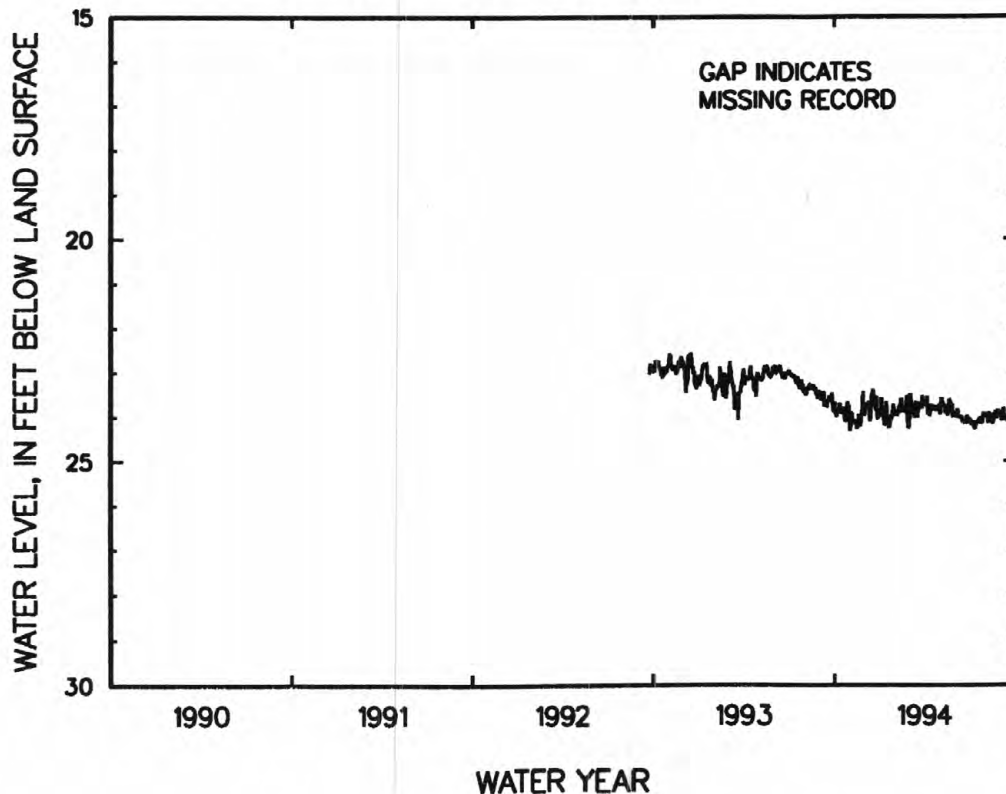
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.98	23.91	23.69	23.74	23.95	23.70	23.70	23.57	23.90	24.10	23.92	23.80
10	23.88	24.13	23.64	24.18	23.91	23.71	23.80	23.72	24.02	24.26	23.97	24.07
15	23.91	24.13	23.50	24.10	23.82	23.66	23.74	23.79	24.07	24.11	24.16	24.09
20	23.83	23.93	23.61	24.19	23.89	23.76	23.86	23.60	24.15	24.04	23.98	24.05
25	23.98	23.95	23.54	24.03	23.65	23.72	23.85	23.73	24.01	24.15	23.87	23.82
EOY	23.73	23.96	23.98	23.95	24.22	23.71	23.83	23.93	24.03	24.01	23.93	24.04

WATER YEAR 1994      HIGHEST INSTANTANEOUS    23.00    JAN 04, MAR 03, 1994

LOWEST INSTANTANEOUS    24.31    NOV 02, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381915077020302. Local number, 54Q 24.

LOCATION.--Lat 38°19'15", long 77°02'03", Hydrologic Unit 02070011, 100 ft south of Tisdale Road, 200 ft east of security gate at intersection of Tisdale Road and Welch Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Chickahominy-Piney Point aquifer (?) of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 15 ft, diameter 4 in. from 0 to 61.80 ft, 71.80 to 74.20 ft, depth 74.20 ft, screened 61.80 to 71.80 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 10.70 ft above sea level. Measuring point: Top of recorder shelf, 2.6 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

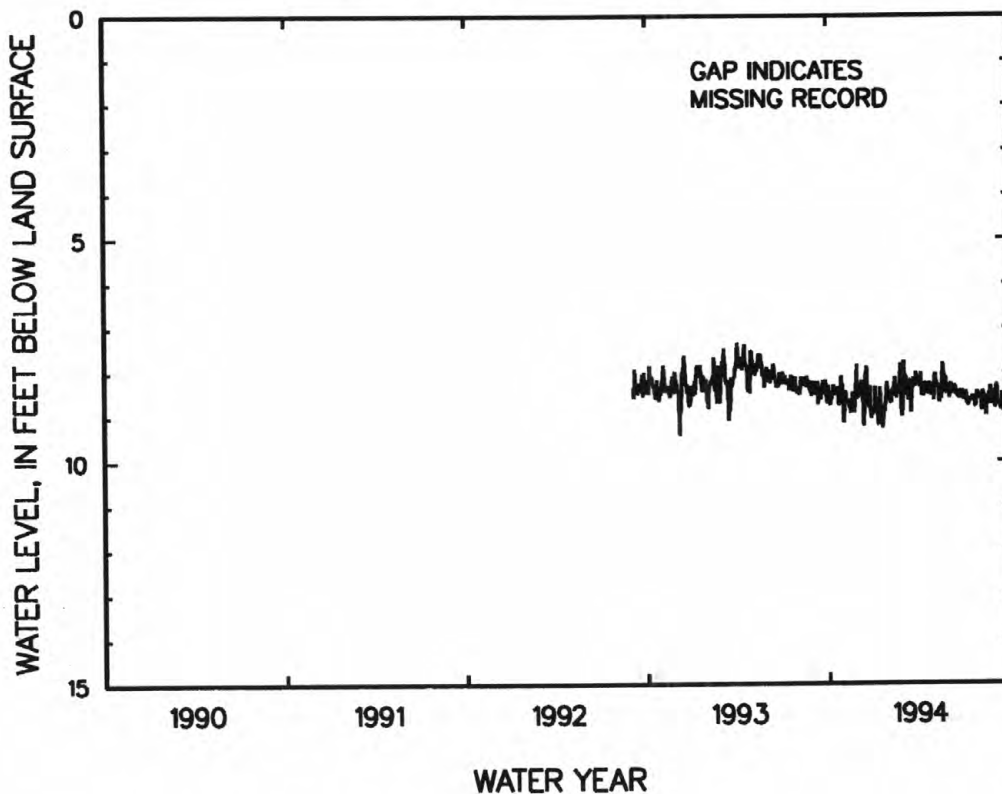
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.79 ft below land-surface datum, Mar. 4, 1993; lowest recorded, 9.41 ft below land-surface datum, Dec. 6, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.71	8.43	8.34	8.58	8.70	8.18	8.22	8.04	8.33	8.44	8.51	8.28
10	8.54	8.68	8.29	9.17	8.38	8.19	8.34	8.30	8.47	8.76	8.52	8.76
15	8.51	8.82	8.06	9.02	8.51	8.20	8.27	8.35	8.48	8.62	8.98	8.74
20	8.41	8.46	8.41	9.12	8.42	8.28	8.51	7.80	8.59	8.60	8.61	8.62
25	8.61	8.48	8.32	8.72	8.06	8.26	8.53	8.12	8.44	8.79	8.45	8.40
EOY	8.29	8.58	8.92	8.62	8.92	8.19	8.38	8.34	8.47	8.61	8.58	8.79

WATER YEAR 1994      HIGHEST INSTANTANEOUS    7.12    MAR 03, 1994      LOWEST INSTANTANEOUS    9.26    JAN 19, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

181

## KING GEORGE COUNTY

382017077030401. Local number, 54Q 25.

LOCATION.--Lat 38°20'17", long 77°03'04", Hydrologic Unit 02070011, 60 ft east of Perimeter Road, 0.9 mi south of intersection of Bennion Road and Perimeter Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5 ft, 10 to 12.5 ft, depth 12.5 ft, screened 5 to 10 ft.

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

DATUM.--Elevation of land-surface datum is 20.48 ft above sea level. Measuring point: Top of casing, 2.2 ft above land-surface datum.

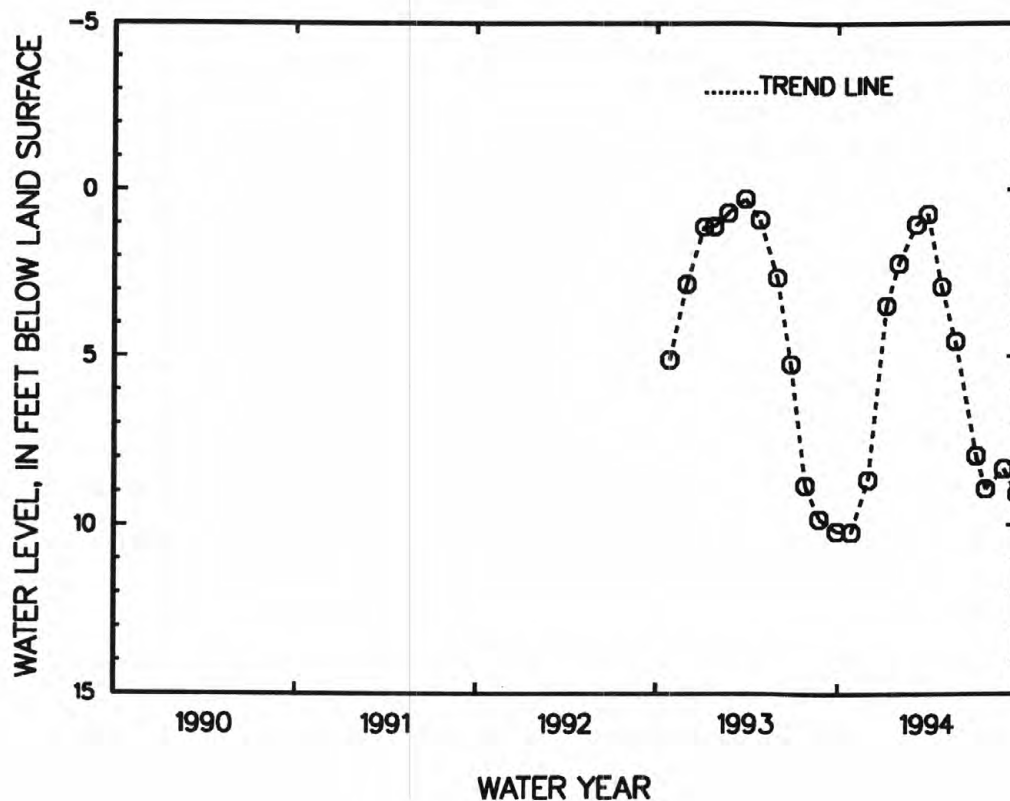
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.28 ft below land-surface datum, Mar. 30, 1993; lowest measured, 10.20 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	10.20	JAN 07	3.46	MAR 08	1.03	APR 28	2.89	JUL 07	7.95	AUG 31	8.34
DEC 01	8.64	FEB 01	2.20	31	.72	MAY 26	4.54	26	8.92	SEP 27	9.09

WATER YEAR 1994      HIGHEST   0.72   MAR 31, 1994      LOWEST   10.20   OCT 28, 1993





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382031077030101. Local number, 54Q 26.

LOCATION.--Lat 38°20'31", long 77°03'01", Hydrologic Unit 02070011, 250 ft east of Perimeter Road on fire break, 0.7 mi from intersection of Bennion Road and Perimeter Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5 ft, 15 to 17.5 ft, depth 17.5 ft, screened 5 to 15 ft.

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

DATUM.--Elevation of land-surface datum is 21.05 ft above sea level. Measuring point: Top of casing, 2.2 ft above land-surface datum.

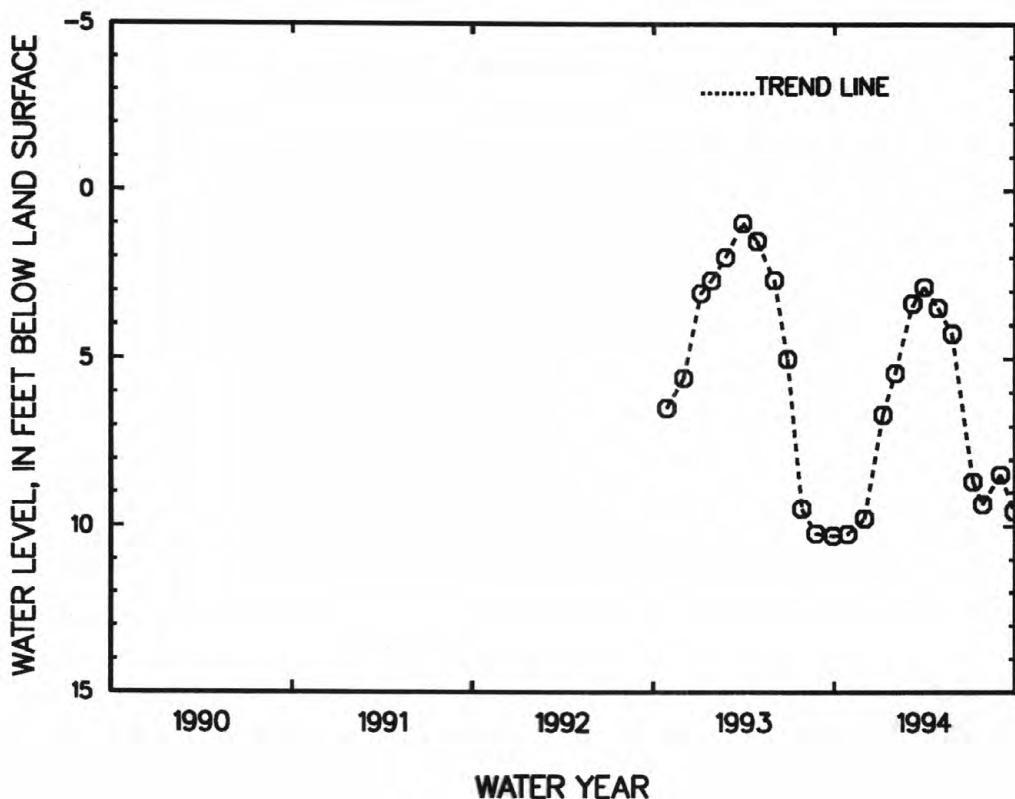
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land-surface datum, Mar. 30, 1993; lowest measured, 10.28 ft below land-surface datum, Sept. 29, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	10.23	JAN 07	6.65	MAR 08	3.36	APR 28	3.49	JUL 07	8.66	AUG 31	8.45
DEC 01	9.76	FEB 01	5.42	31	2.87	MAY 26	4.25	26	9.34	SEP 27	9.55

WATER YEAR 1994      HIGHEST    2.87    MAR 31, 1994      LOWEST    10.23    OCT 28, 1993



## GROUND-WATER LEVELS

183

## KING GEORGE COUNTY

382055077025901. Local number, 54Q 27.

LOCATION.--Lat 38°20'55", long 77°02'59", Hydrologic Unit 02070011, 100 ft east of Perimeter Road, 0.2 mi south of intersection of Bennion Road and Perimeter Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.5 ft, 19.5 to 22 ft, depth 22 ft, screened 9.5 to 19.5 ft.

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

DATUM.--Elevation of land-surface datum is 22.15 ft above sea level. Measuring point: Top of casing, 2.3 ft above land-surface datum.

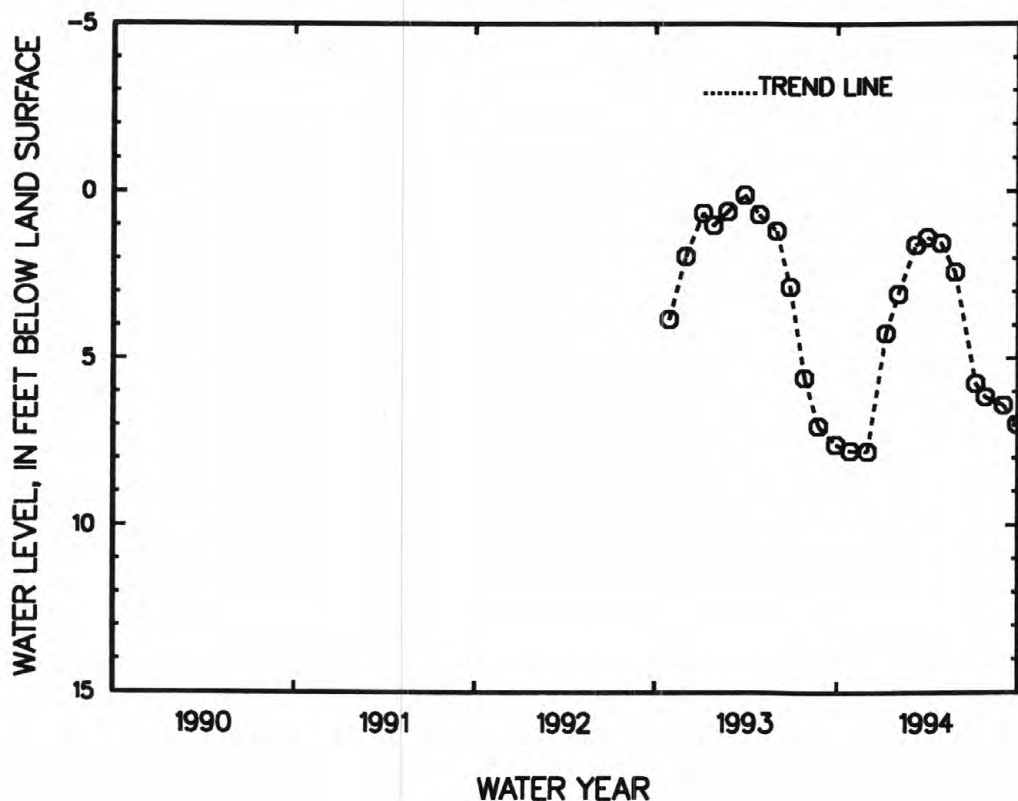
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.11 ft below land-surface datum, Mar. 30, 1993; lowest measured, 7.80 ft below land-surface datum, Dec. 1, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	7.78	JAN 07	4.24	MAR 08	1.60	APR 28	1.54	JUL 07	5.75	AUG 31	6.40
DEC 01	7.80	FEB 01	3.06	MAR 31	1.37	MAY 26	2.41	JUL 26	6.15	SEP 27	6.98

WATER YEAR 1994      HIGHEST   1.37   MAR 31, 1994      LOWEST   7.80   DEC 01, 1993



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382103077025403. Local number, 54Q 28.

LOCATION.--Lat 38°21'03", long 77°02'54", Hydrologic Unit 02070011, 100 ft southwest of intersection of Bennion Road and Perimeter Road, 100 ft east of Perimeter Road at edge of woods, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.7 ft, 19.7 to 21.95 ft, depth 21.95 ft, screened 9.7 to 19.7 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 21.33 ft above sea level. Measuring point: Top of recorder shelf, 2.5 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

PERIOD OF RECORD.--September 1992 to current year.

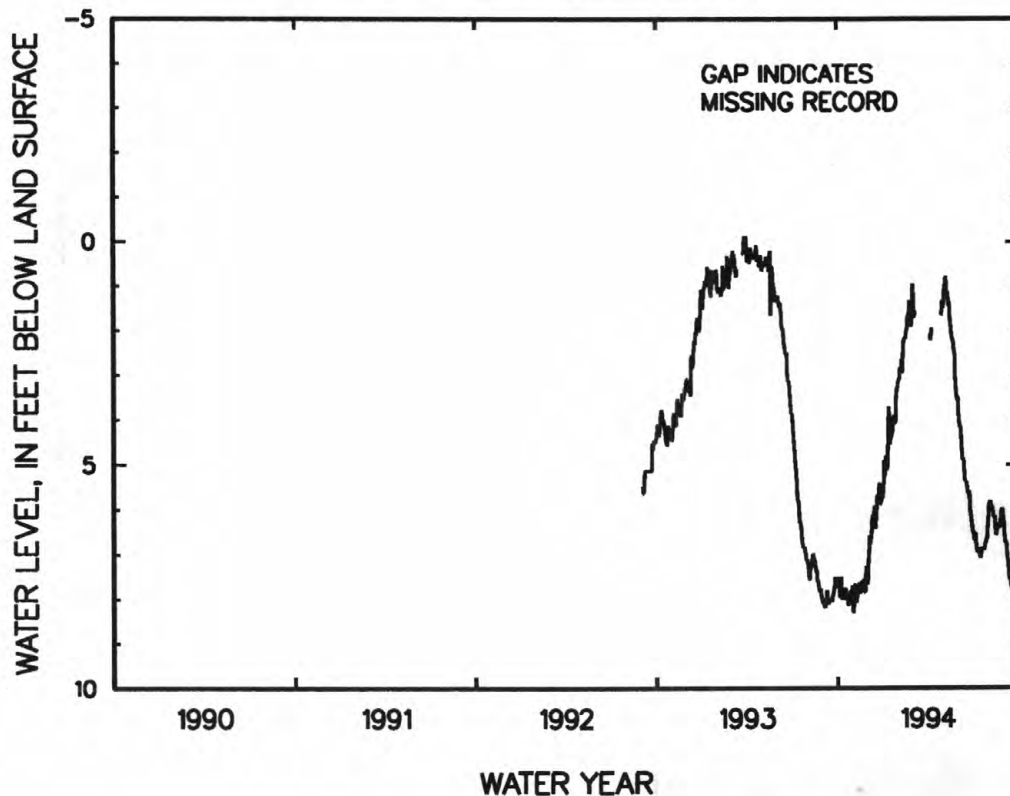
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.85 ft above land-surface datum, Mar. 13, 1993; lowest recorded, 8.30 ft below land-surface datum, Nov. 2, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.85	7.75	6.58	5.24	2.86	1.53	---	1.12	4.15	6.65	5.81	6.76
10	7.95	7.86	6.35	5.12	2.96	---	1.94	1.11	4.84	6.94	6.06	7.32
15	7.99	7.64	5.91	4.28	2.18	---	---	1.36	5.32	7.04	6.43	7.70
20	7.89	7.59	5.98	4.28	1.88	---	---	2.13	5.59	6.90	6.38	7.94
25	7.97	7.84	5.41	3.97	1.49	---	---	2.50	5.95	6.78	6.28	7.42
EOM	7.70	7.64	5.74	3.28	1.91	1.97	1.58	3.55	6.47	6.29	6.15	6.93

WATER YEAR 1994      HIGHEST INSTANTANEOUS    0.57    MAY 08, 1994      LOWEST INSTANTANEOUS    8.30    NOV 02, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

185

## KING GEORGE COUNTY

382112077024401. Local number, 54Q 29.

LOCATION.--Lat 38°21'12", long 77°02'44", Hydrologic Unit 02070011, 25 ft southeast of Blandy Boulevard, 0.2 mi northeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 8 ft, 18 to 20.5 ft, depth 20.5 ft, screened 8 to 18 ft.

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

DATUM.--Elevation of land-surface datum is 19.92 ft above sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.

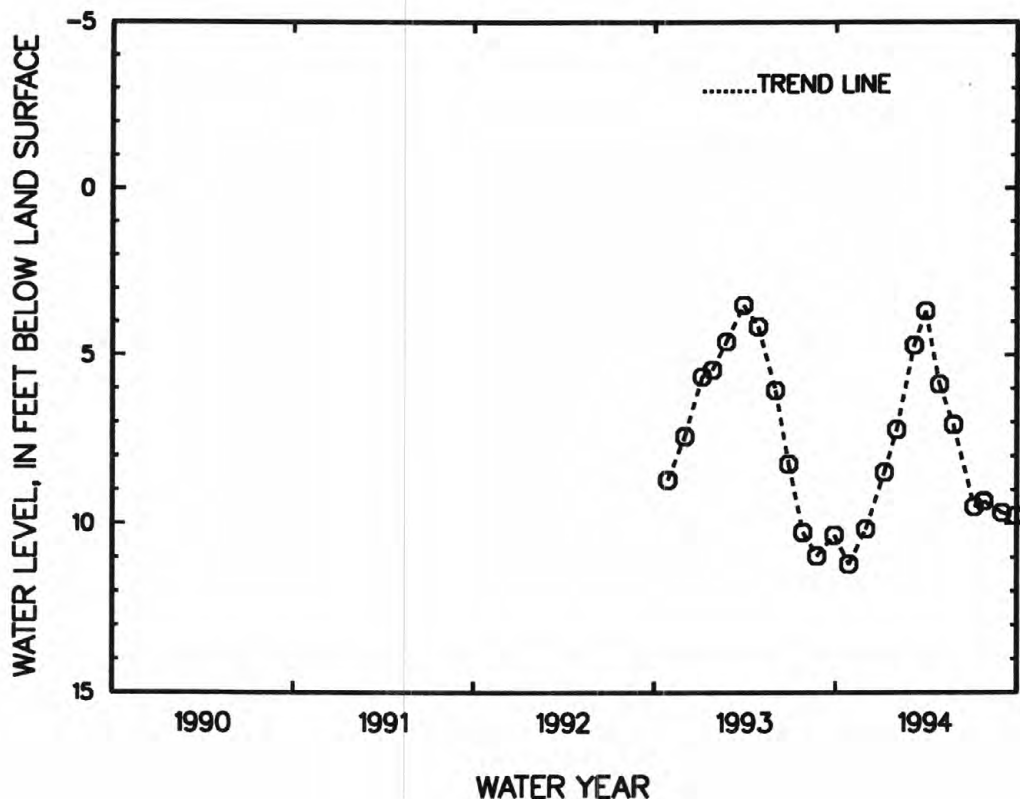
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.50 ft below land-surface datum, Mar. 30, 1993; lowest measured, 11.20 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.20	JAN 07	8.48	MAR 08	4.70	APR 28	5.87	JUL 07	9.49	AUG 31	9.67
DEC 01	10.16	FEB 01	7.22	MAR 31	3.68	MAY 26	7.07	JUL 26	9.33	SEP 27	9.77

WATER YEAR 1994      HIGHEST   3.68   MAR 31, 1994      LOWEST   11.20   OCT 28, 1993



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382116077023501. Local number, 54Q 30.

LOCATION.--Lat 38°21'16", long 77°02'35", Hydrologic Unit 02070011, 25 ft southeast of Blandy Boulevard, 0.4 mi northeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.9 ft, 9.9 to 12.4 ft, depth 12.4 ft, screened 4.9 to 9.9 ft.

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

DATUM.--Elevation of land-surface datum is 17.61 ft above sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1992 to current year.

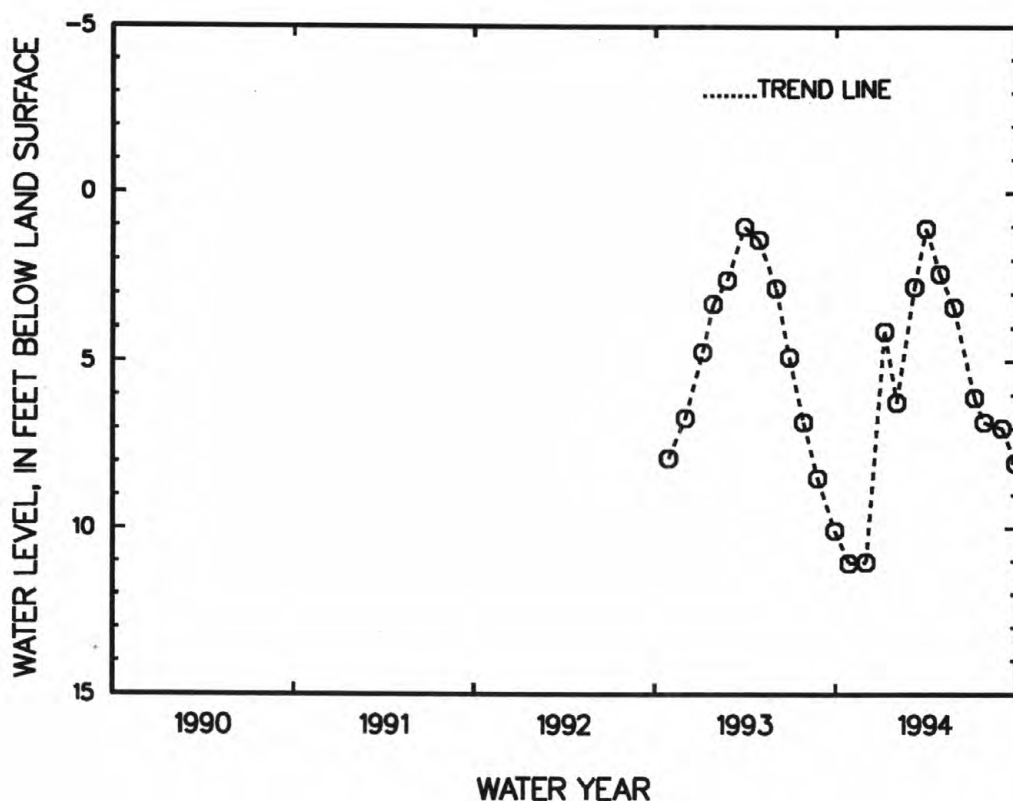
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.02 ft below land-surface datum, Mar. 30, 1993; lowest measured, 11.06 ft below land-surface datum, Oct. 28, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	a11.06	JAN 07	4.10	MAR 08	2.79	APR 28	2.40	JUL 07	6.08	AUG 31	6.99
DEC 01	a11.03	FEB 01	6.22	MAR 31	1.06	MAY 26	3.39	JUL 26	6.81	SEP 27	8.04

WATER YEAR 1994      HIGHEST    1.06    MAR 31, 1994      LOWEST    a11.06    OCT 28, 1993

a Water level measured is below bottom of screen and may not reflect true water-level elevation in the aquifer.



## GROUND-WATER LEVELS

187

## KING GEORGE COUNTY

382123077020501. Local number, 54Q 31.

LOCATION.--Lat 38°21'23", long 77°02'05", Hydrologic Unit 02070011, 50 ft south of Blandy Boulevard, 0.8 mi northeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.7 ft, 14.7 to 17.2 ft, depth 17.2 ft, screened 4.7 to 14.7 ft.

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

DATUM.--Elevation of land-surface datum is 19.81 ft above sea level. Measuring point: Top of casing, 2.17 ft above land-surface datum.

PERIOD OF RECORD.--October 1992 to current year.

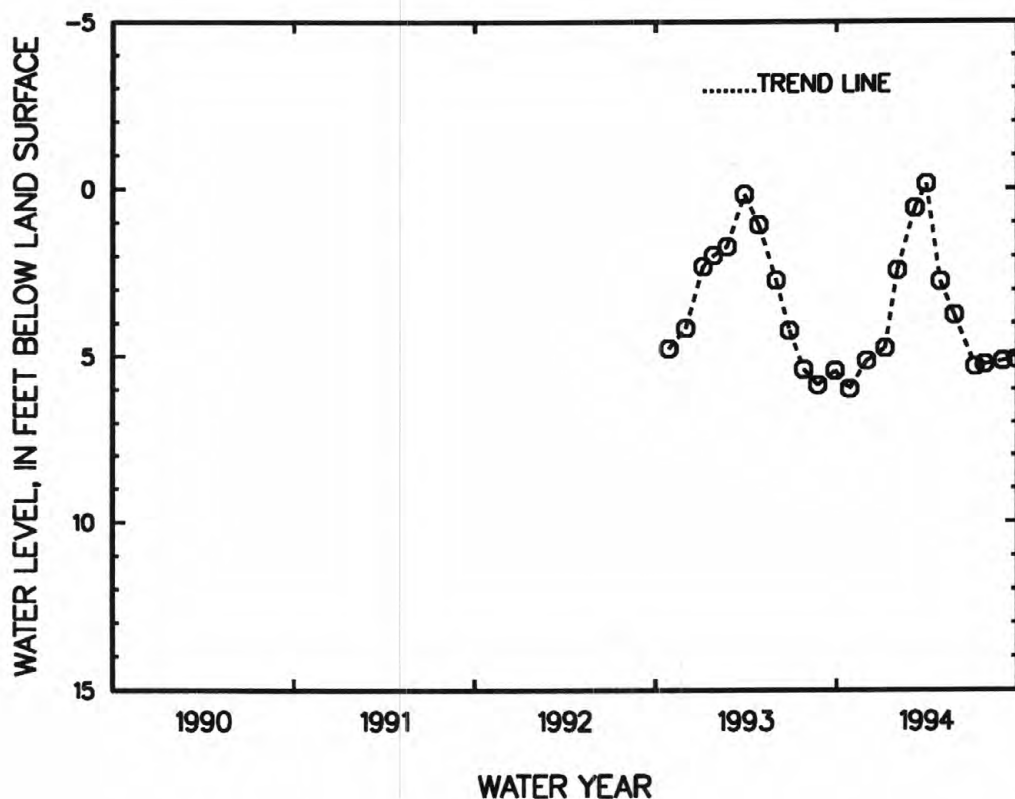
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.15 ft above land-surface datum, Mar. 31, 1994; lowest measured, 5.98 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	5.98	JAN 07	4.75	MAR 08	0.57	APR 28	2.75	JUL 07	5.31	AUG 31	5.14
DEC 01	5.13	FEB 01	2.42	31	+1.15	MAY 26	3.75	26	5.24	SEP 27	5.09

WATER YEAR 1994      HIGHEST +0.15    MAR 31, 1994      LOWEST 5.98    OCT 28, 1993

+ Water level is above land-surface datum.





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382127077013301. Local number, 54Q 32.

LOCATION.--Lat 38°21'27", long 77°01'33", Hydrologic Unit 02070011, 25 ft south of Blandy Boulevard, 1.3 mi northeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 17.75 ft, 27.75 to 30 ft, depth 30 ft, screened 17.75 to 27.75 ft.

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

DATUM.--Elevation of land-surface datum is 21.02 ft above sea level. Measuring point: Top of casing, 2.04 ft above land-surface datum.

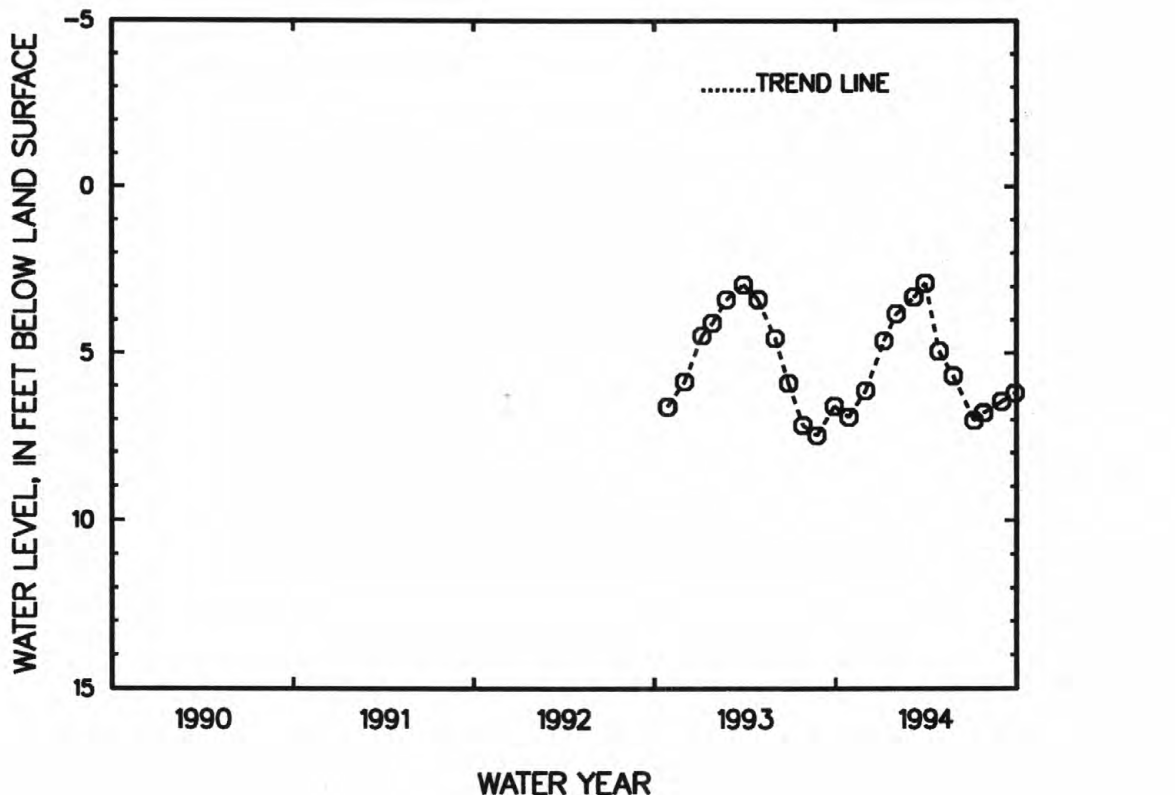
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.90 ft below land-surface datum, Mar. 31, 1994; lowest measured, 7.48 ft below land-surface datum, Aug. 25, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	6.92	JAN 07	4.63	MAR 08	3.32	APR 28	4.94	JUL 07	7.03	AUG 31	6.46
DEC 01	6.13	FEB 01	3.81	31	2.90	MAY 26	5.68	26	6.80	SEP 27	6.21

WATER YEAR 1994      HIGHEST    2.90    MAR 31, 1994      LOWEST    7.03    JUL 07, 1994



## KING GEORGE COUNTY

382130077010801. Local number, 54Q 33.

LOCATION.--Lat 38°21'30", long 77°01'08", Hydrologic Unit 02070011, 1,100 ft west of the Potomac River along boundary fence, 1.7 mi northeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12.88 ft, 22.88 to 25.13 ft, depth 25.13 ft, screened 12.88 to 22.88 ft.

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

DATUM.--Elevation of land-surface datum is 21.20 ft above sea level. Measuring point: Top of casing, 2.3 ft above land-surface datum.

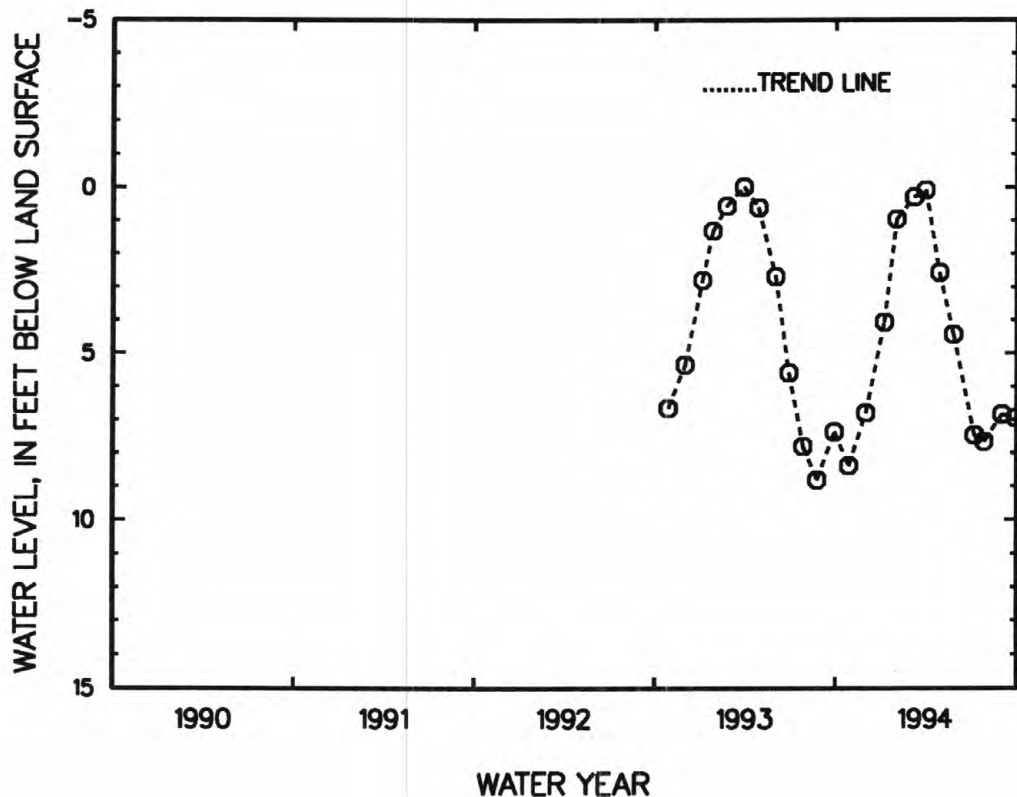
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.02 ft above land-surface datum, Mar. 30, 1993; lowest measured, 8.80 ft below land-surface datum, Aug. 25, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	8.38	JAN 07	4.06	MAR 08	0.29	APR 28	2.57	JUL 07	7.47	AUG 31	6.84
DEC 01	6.80	FEB 01	.95	MAR 31	.08	MAY 26	4.43	JUL 26	7.66	SEP 27	6.95

WATER YEAR 1994      HIGHEST 0.08    MAR 31, 1994      LOWEST 8.38    OCT 28, 1993



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382129077005803. Local number, 54Q 34.

LOCATION.--Lat 38°21'29", long 77°00'58", Hydrologic Unit 02070011, 200 ft west of the Potomac River, 400 ft south of U.S. Highway 301, 750 ft east of Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 7.75 ft, 17.75 to 20 ft, depth 20 ft, screened 7.75 to 17.75 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 20.44 ft above sea level. Measuring point: Top of recorder shelf, 2.7 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

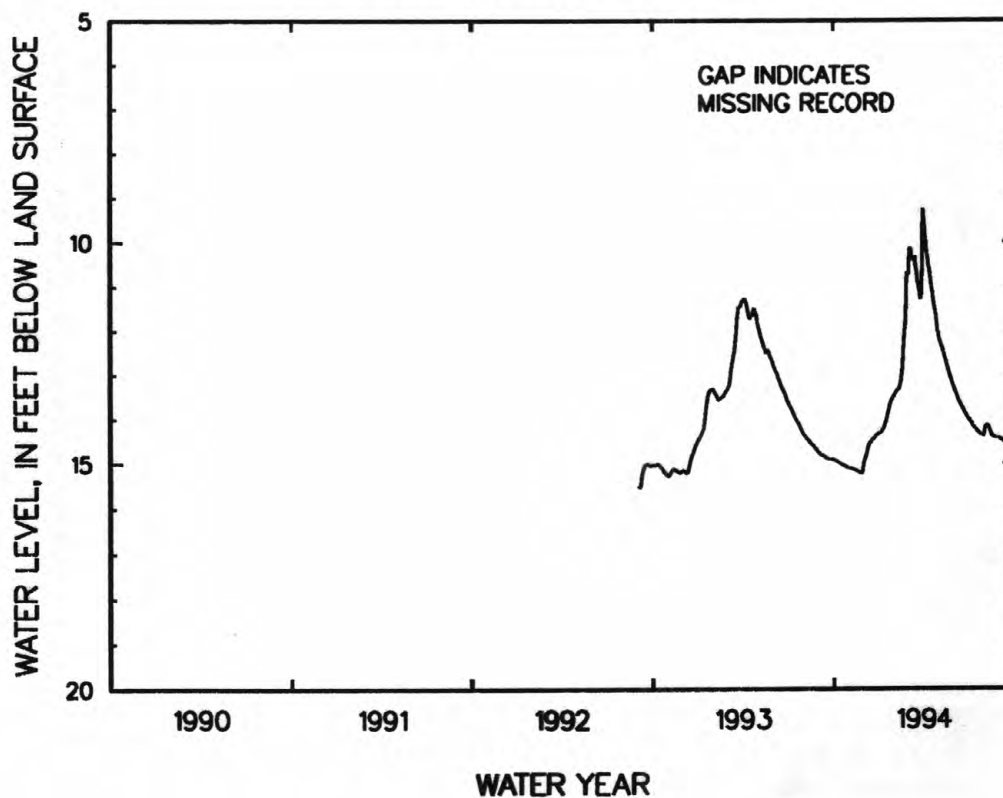
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 9.12 ft below land-surface datum, Mar. 31, 1994; lowest recorded, 15.53 ft below land-surface datum, Sept. 5, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.93	15.10	14.85	14.29	13.37	10.13	9.94	12.29	13.41	14.06	14.14	14.47
10	14.97	15.12	14.63	14.21	13.32	10.38	10.47	12.47	13.58	14.18	14.23	14.52
15	15.00	15.15	14.51	14.02	13.06	10.35	10.83	12.66	13.70	14.24	14.37	14.59
20	15.03	15.18	14.46	13.80	12.24	10.90	11.29	12.88	13.80	14.31	14.41	14.65
25	15.06	15.21	14.38	13.60	11.30	11.24	11.64	13.07	13.91	14.35	14.42	14.67
ECM	15.09	15.08	14.32	13.48	10.68	9.27	12.03	13.26	14.00	14.29	14.46	14.54

WATER YEAR 1994      HIGHEST INSTANTANEOUS 9.12 MAR 31, 1994      LOWEST INSTANTANEOUS 15.21 NOV 25-27, 1993

## DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

382131077005501. Local number, 54Q 35.

LOCATION.--Lat 38°21'31", long 77°00'55", Hydrologic Unit 02070011, 100 ft west of the Potomac River, 300 ft south of U.S. Highway 301, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 7.0 ft, 12 to 14.25 ft, depth 14.25 ft, screened 7 to 12 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to October 1992, measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 4.4 ft above sea level. Measuring point: Top of recorder shelf, 2.65 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.07 ft above land-surface datum, Mar. 29, 1994; lowest recorded, 3.15 ft below land-surface datum, Aug. 5, 6, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

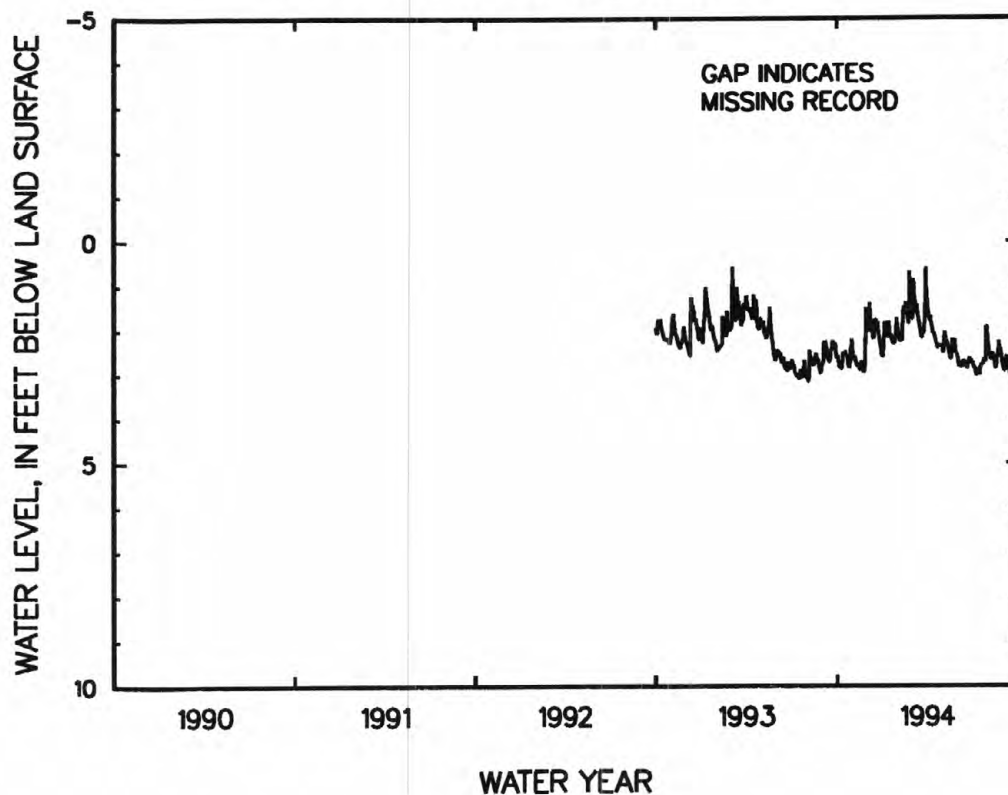
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.75	2.65	1.88	1.80	2.24	1.12	1.76	2.16	2.81	2.85	2.59	2.75
10	2.85	2.78	1.88	2.05	1.87	1.47	1.90	2.23	2.83	2.97	2.52	2.83
15	2.53	2.82	2.12	2.02	1.46	1.79	2.11	2.49	2.77	3.01	2.81	3.05
20	2.55	2.68	1.88	2.24	1.69	2.16	2.32	2.51	2.87	2.78	2.61	2.84
25	2.81	2.93	2.12	2.29	1.01	2.04	2.34	2.27	2.62	2.71	2.42	2.27
EOY	2.20	1.74	2.57	1.95	1.66	1.24	2.35	2.56	2.75	2.20	2.83	2.25

WATER YEAR 1994      HIGHEST INSTANTANEOUS    +0.07    MAR 29, 1994

LOWEST INSTANTANEOUS    3.05    SEP 15, 16, 1994

+ Water level is above land-surface datum.

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382055077011301. Local number, 54Q 36.

LOCATION.--Lat 38°20'55", long 77°01'13", Hydrologic Unit 02070011, 400 ft west of Higley Road, 0.2 mi north of intersection of Higley Road and Tisdale Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 8 ft, 18 to 18.5 ft, depth 18.5 ft, screened 8 to 18 ft.

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

DATUM.--Elevation of land-surface datum is 20.24 ft above sea level. Measuring point: Top of casing, 1.8 ft above land-surface datum.

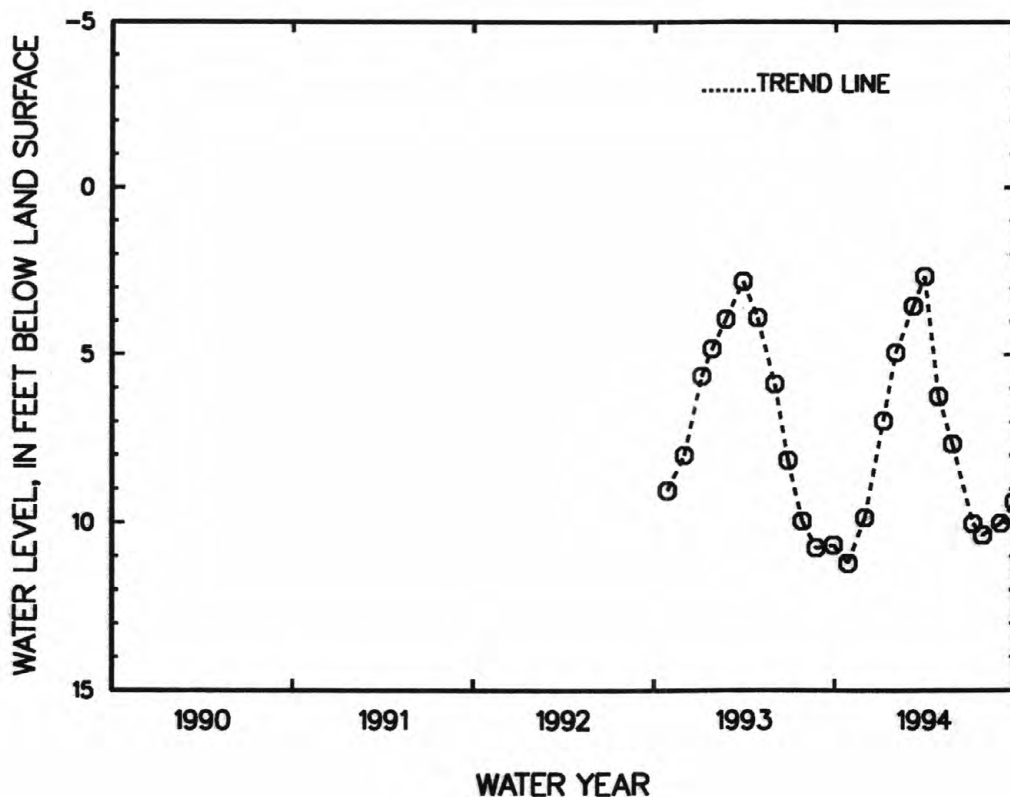
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.66 ft below land-surface datum, Mar. 31, 1994; lowest measured, 11.21 ft below land-surface datum, Oct. 28, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.21	JAN 07	6.97	MAR 08	3.55	APR 28	6.24	JUL 07	10.03	AUG 31	10.02
DEC 01	9.85	FEB 01	4.94	31	2.66	MAY 26	7.66	26	10.37	SEP 27	9.38

WATER YEAR 1994      HIGHEST    2.66    MAR 31, 1994      LOWEST    11.21    OCT 28, 1993



## GROUND-WATER LEVELS

193

## KING GEORGE COUNTY

382042077011901. Local number, 54Q 37.

LOCATION.--Lat 38°20'42", long 77°01'19", Hydrologic Unit 02070011, 75 ft southwest of unnamed road, 0.3 mi northwest of intersection of Tisdale Road and unnamed road, 0.3 mi west of the Potomac River, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 8 ft, 18 to 18.5 ft, depth 18.5 ft, screened 8 to 18 ft.

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

DATUM.--Elevation of land-surface datum is 15.81 ft above sea level. Measuring point: Top of casing, 1.65 ft above land-surface datum.

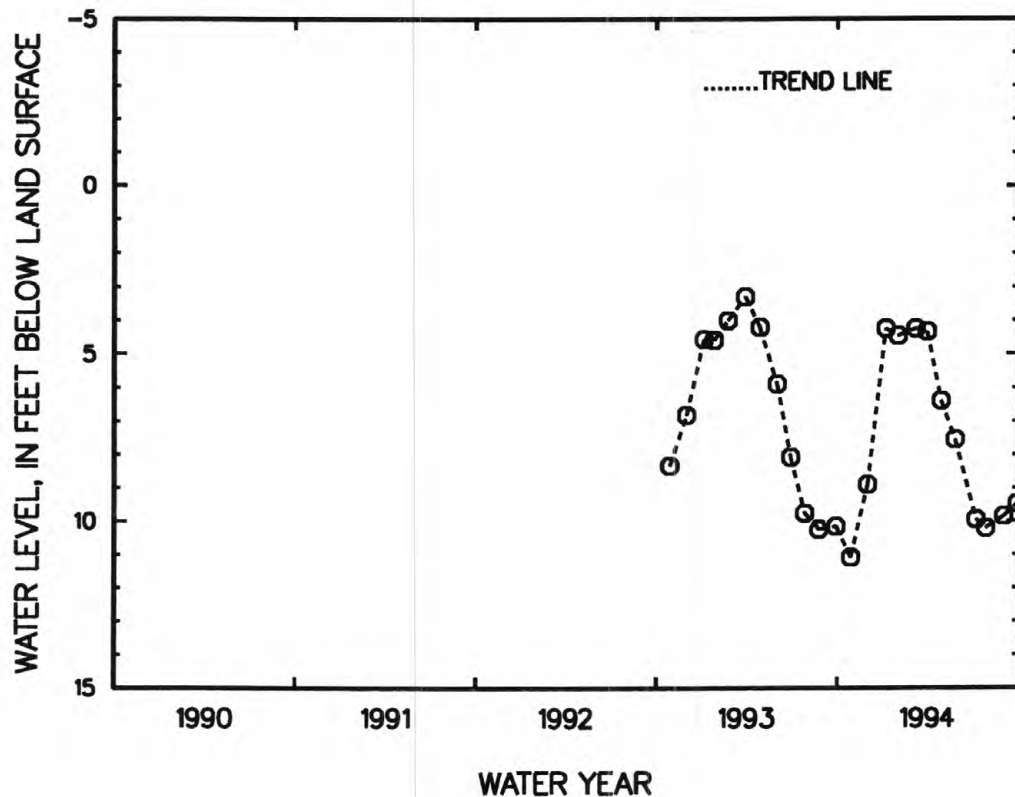
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.30 ft below land-surface datum, Mar. 30, 1993; lowest measured, 11.09 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.09	JAN 07	4.25	MAR 08	4.25	APR 28	6.40	JUL 07	9.95	AUG 31	9.85
DEC 01	8.90	FEB 01	4.46	31	4.34	MAY 26	7.55	26	10.21	SEP 27	9.47

WATER YEAR 1994      HIGHEST    4.25    JAN 07, MAR 08, 1994      LOWEST    11.09    OCT 28, 1993





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382048077015201. Local number, 54Q 38.

LOCATION.--Lat 38°20'48", long 77°01'52", Hydrologic Unit 02070011, 10 ft east of unnamed road, 500 ft north of Bagby Road on unnamed road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 16.5 ft, 26.5 to 27 ft, depth 27 ft, screened 16.5 to 26.5 ft.

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

DATUM.--Elevation of land-surface datum is 17.05 ft above sea level. Measuring point: Top of casing, 2.65 ft above land-surface datum.

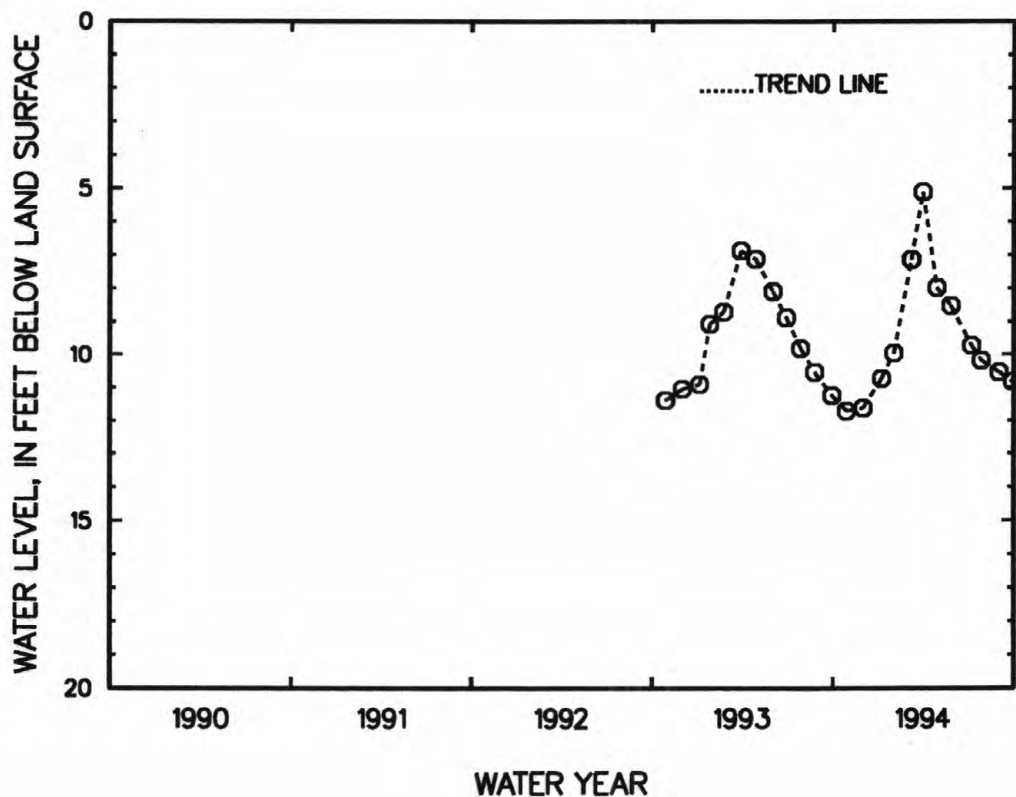
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.11 ft below land-surface datum, Mar. 31, 1994; lowest measured, 11.71 ft below land-surface datum, Oct. 28, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.71	JAN 07	10.72	MAR 08	7.13	APR 28	7.98	JUL 07	9.73	AUG 31	10.54
DEC 01	11.62	FEB 01	9.95	31	5.11	MAY 26	8.52	26	10.18	SEP 27	10.83

WATER YEAR 1994      HIGHEST    5.11    MAR 31, 1994      LOWEST    11.71    OCT 28, 1993



## GROUND-WATER LEVELS

195

## KING GEORGE COUNTY

382054077024201. Local number, 54Q 39.

LOCATION.--Lat 38°20'54", long 77°02'42", Hydrologic Unit 02070011, 50 ft southwest of Bennion Road, 0.3 mi southeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5 ft, 15 to 17.5 ft, depth 17.5 ft, screened 5 to 15 ft.

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

DATUM.--Elevation of land-surface datum is 23.43 ft above sea level. Measuring point: Top of casing, 1.85 ft above land-surface datum.

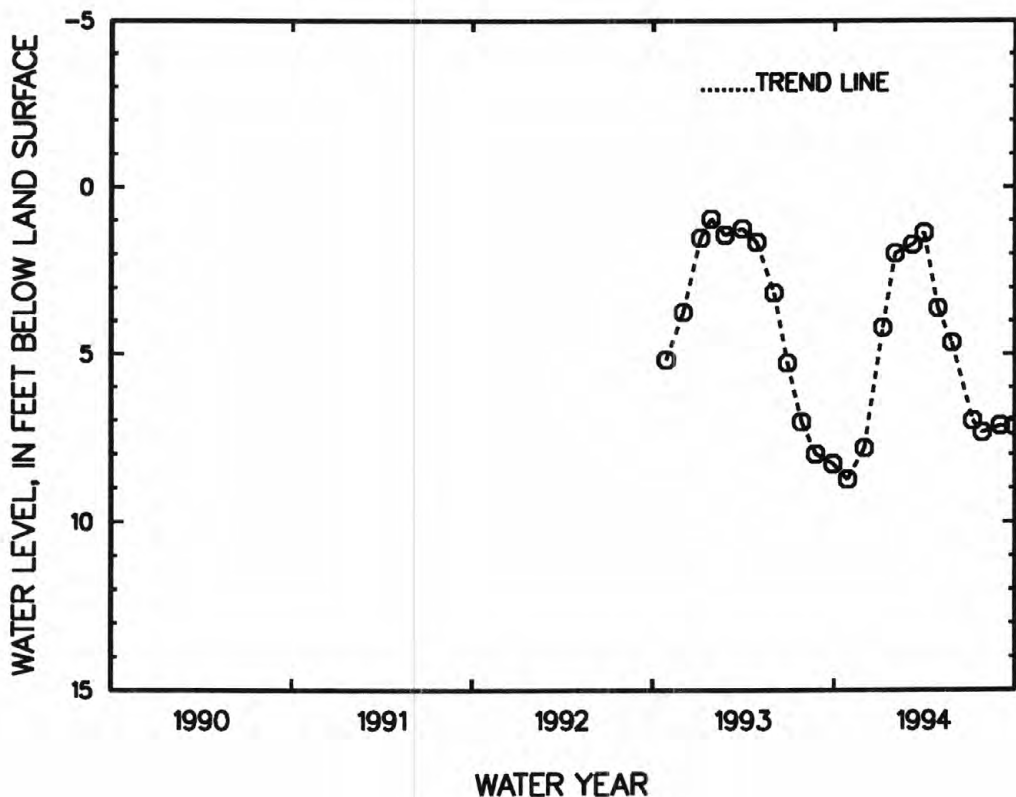
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.95 ft below land-surface datum, Jan. 26, 1993; lowest measured, 8.75 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	8.75	JAN 07	4.20	MAR 08	1.72	APR 28	3.62	JUL 07	7.00	AUG 31	7.15
DEC 01	7.82	FEB 01	1.98	31	1.37	MAY 26	4.65	26	7.35	SEP 27	7.17

WATER YEAR 1994      HIGHEST    1.37    MAR 31, 1994      LOWEST    8.75    OCT 28, 1993



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382042077022401. Local number, 54Q 40.

LOCATION.--Lat 38°20'42", long 77°02'24", Hydrologic Unit 02070011, 50 ft southwest of Bennion Road, 0.6 mi southeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5 ft, 15 to 17.5 ft, depth 17.5 ft, screened 5 to 15 ft.

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

DATUM.--Elevation of land-surface datum is 21.83 ft above sea level. Measuring point: Top of casing, 1.89 ft above land-surface datum.

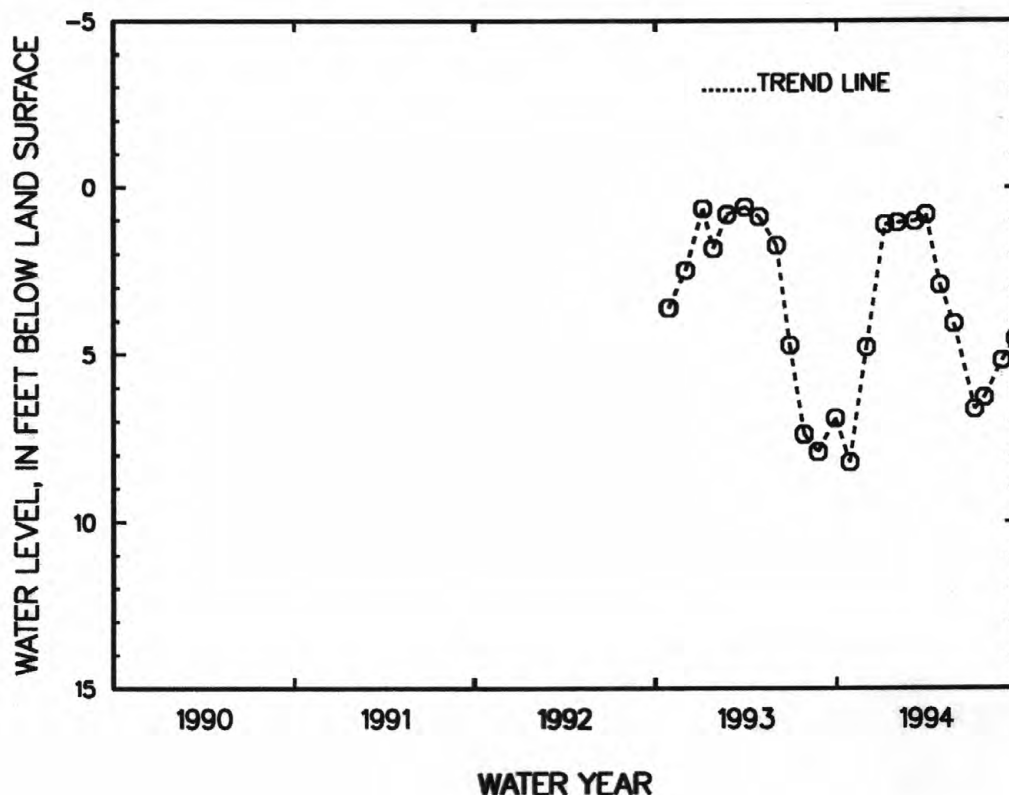
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.59 ft below land-surface datum, Mar. 30, 1993; lowest measured, 8.21 ft below land-surface datum, Oct. 28, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	8.21	JAN 07	1.11	MAR 08	1.01	APR 28	2.91	JUL 07	6.63	AUG 31	5.18
DEC 01	4.78	FEB 01	1.05	31	.81	MAY 26	4.07	JUL 26	6.28	SEP 27	4.53

WATER YEAR 1994      HIGHEST    0.81    MAR 31, 1994      LOWEST    8.21    OCT 28, 1993



## GROUND-WATER LEVELS

197

## KING GEORGE COUNTY

382027077020201. Local number, 54Q 41.

LOCATION.--Lat 38°20'27", long 77°02'02", Hydrologic Unit 02070011, at intersection of Bennion Road and Caskey Road, 75 ft southwest of intersection, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 3 ft, 13 to 15.5 ft, depth 15.5 ft, screened 3 to 13 ft.

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

DATUM.--Elevation of land-surface datum is 13.68 ft above sea level. Measuring point: Top of casing, 1.93 ft above land-surface datum.

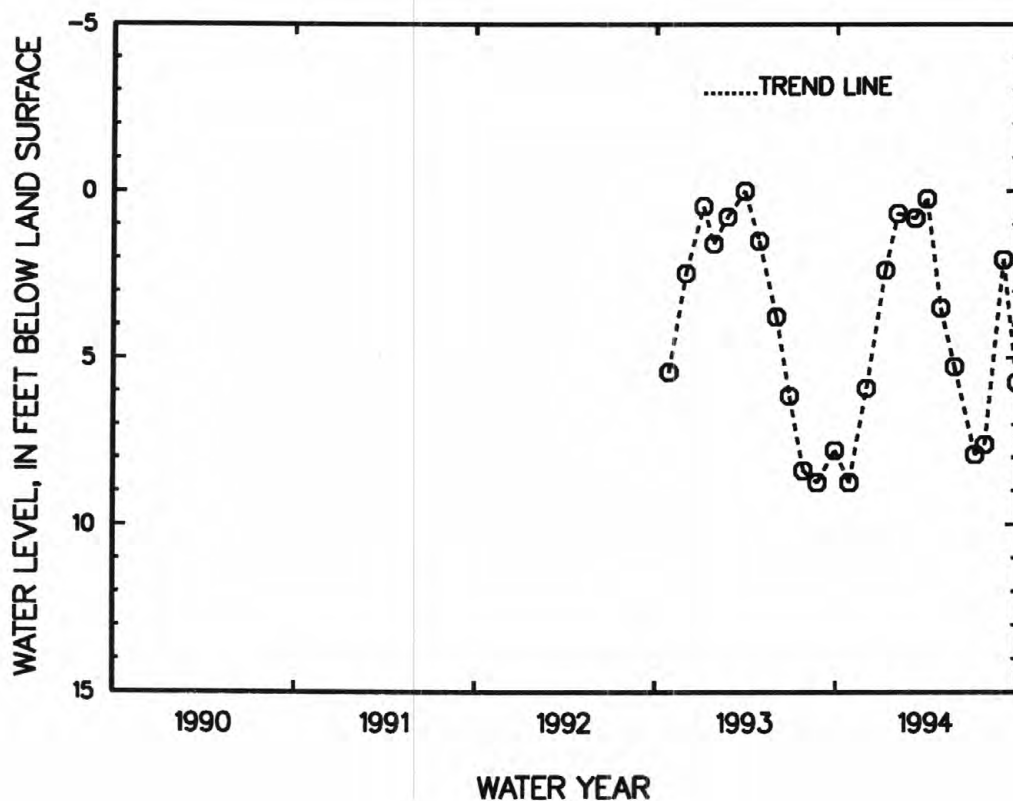
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, at land-surface datum, Mar. 30, 1993; lowest measured, 8.75 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	8.75	JAN 07	2.37	MAR 08	0.81	APR 28	3.50	JUL 07	7.92	AUG 31	2.05
DEC 01	5.92	FEB 01	.67	MAR 31	.23	MAY 26	5.26	JUL 26	7.62	SEP 27	5.74

WATER YEAR 1994      HIGHEST 0.23      MAR 31, 1994      LOWEST 8.75      OCT 28, 1993



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

382014077020101. Local number, 54Q 42.

LOCATION.--Lat 38°20'14", long 77°02'01", Hydrologic Unit 02070011, 50 ft west of Caskey Road, 0.2 mi south of intersection of Bennion Road and Caskey Road, 0.7 mi north of intersection of Caskey Road and Dahlgren Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12.3 ft, 22.3 to 24.8 ft, depth 24.8 ft, screened 12.3 to 22.3 ft.

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

DATUM.--Elevation of land-surface datum is 14.5 ft above sea level. Measuring point: Top of casing, 2.65 ft above land-surface datum.

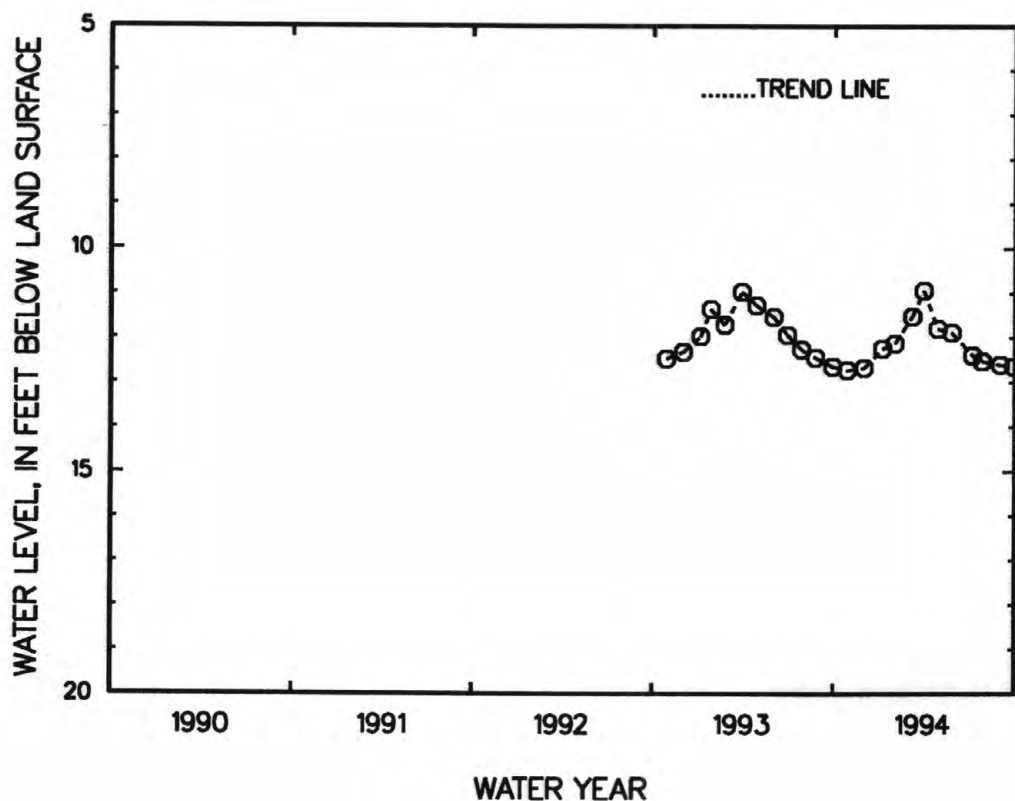
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.94 ft below land-surface datum, Mar. 31, 1994; lowest measured, 12.73 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	12.73	JAN 07	12.25	MAR 08	11.52	APR 28	11.80	JUL 07	12.40	AUG 31	12.61
DEC 01	12.68	FEB 01	12.13	31	10.94	MAY 26	11.89	26	12.53	SEP 27	12.65

WATER YEAR 1994      HIGHEST    10.94    MAR 31, 1994      LOWEST    12.73    OCT 28, 1993



## GROUND-WATER LEVELS

199

## KING GEORGE COUNTY

382004077015701. Local number, 54Q 43.

LOCATION.--Lat 38°20'04", long 77°01'57", Hydrologic Unit 02070011, 100 ft east of Caskey Road, 0.4 mi south of intersection of Bennion Road and Caskey Road, 0.5 mi north of intersection of Caskey Road and Dahlgren Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.3 ft, 14.3 to 16.8 ft, depth 16.8 ft, screened 9.3 to 14.3 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. Prior to May 20, 1993, digital recorder--60-minute punch. Measurement with chalked tape by USGS personnel Sept. 30, 1992.

DATUM.--Elevation of land-surface datum is 13.89 ft above sea level. Measuring point: Top of casing, 2.58 ft above land-surface datum. Prior to May 28, 1993, measuring point was top of recorder shelf, 3.0 ft above land-surface datum.

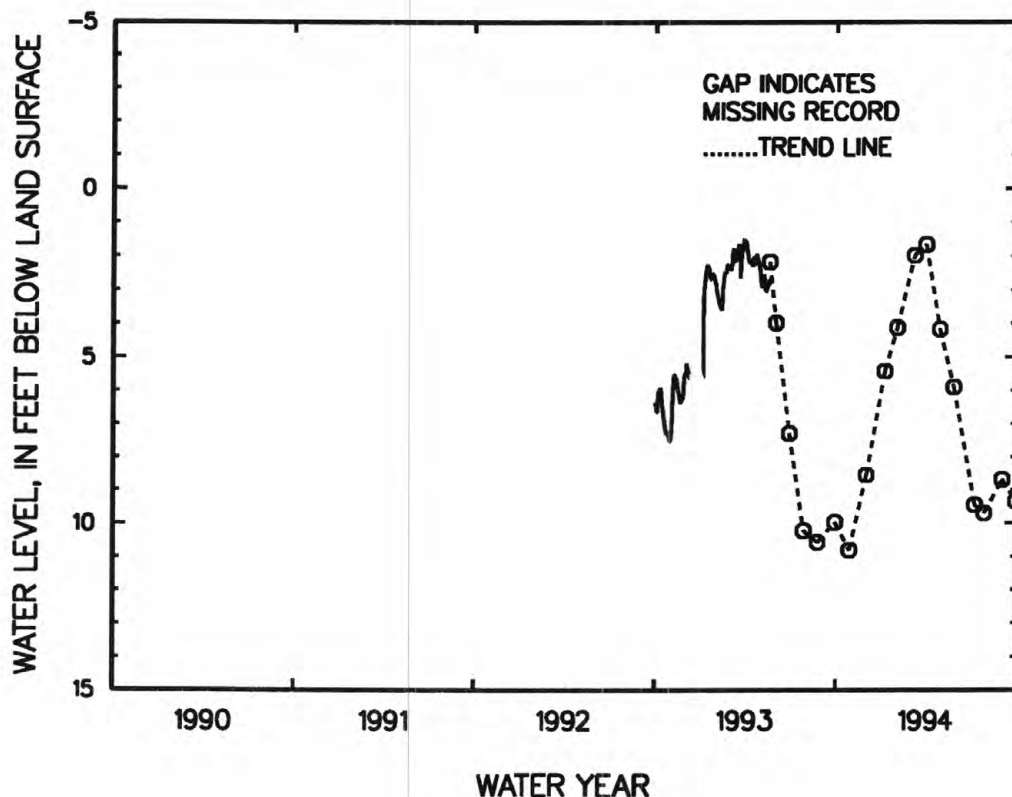
PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.47 ft below land-surface datum, Mar. 30, 1993; lowest measured, 10.81 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	10.81	JAN 07	5.42	MAR 08	1.98	APR 28	4.17	JUL 07	9.45	AUG 31	8.69
DEC 01	8.55	FEB 01	4.12	MAR 31	1.66	MAY 26	5.90	JUL 26	9.70	SEP 27	9.35

WATER YEAR 1994      HIGHEST   1.66   MAR 31, 1994      LOWEST   10.81   OCT 28, 1993





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381946077015901. Local number, 54Q 44.

LOCATION.--Lat 38°19'46", long 77°01'59", Hydrologic Unit 02070011, 25 ft west of Caskey Road, 600 ft north of intersection of Dahlgren Road and Caskey Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12 ft, 22 to 24.5 ft, depth 24.5 ft, screened 12 to 22 ft.

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

DATUM.--Elevation of land-surface datum is 16.44 ft above sea level. Measuring point: Top of casing, 0.35 ft below land-surface datum.

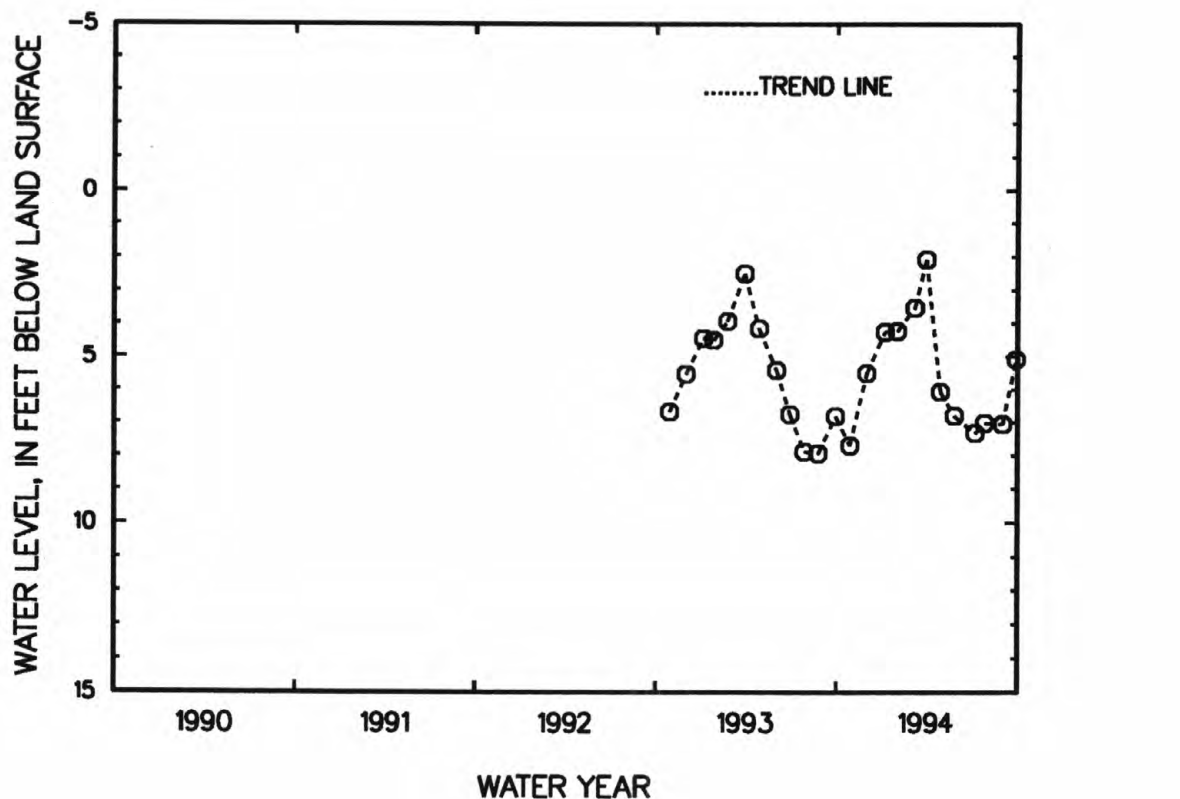
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.08 ft below land-surface datum, Mar. 31, 1994; lowest measured, 7.69 ft below land-surface datum, Aug. 25, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	7.69	JAN 07	4.25	MAR 08	3.52	APR 28	6.06	JUL 07	7.32	AUG 31	7.05
DEC 01	5.50	FEB 01	4.23	31	2.08	MAY 26	6.80	26	7.02	SEP 27	5.09

WATER YEAR 1994      HIGHEST    2.08    MAR 31, 1994      LOWEST    7.69    OCT 28, 1993



## GROUND-WATER LEVELS

201

## KING GEORGE COUNTY

381949077013101. Local number, 54Q 45.

LOCATION.--Lat 38°19'49", long 77°01'31", Hydrologic Unit 02070011, 400 ft east of Tisdale Road, 0.2 mi northeast of intersection of Dahlgren Road and Tisdale Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12.6 ft, 22.6 to 25.1 ft, depth 25.1 ft, screened 12.6 to 22.6 ft.

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

DATUM.--Elevation of land-surface datum is 16.24 ft above sea level. Measuring point: Top of casing, 2.2 ft above land-surface datum.

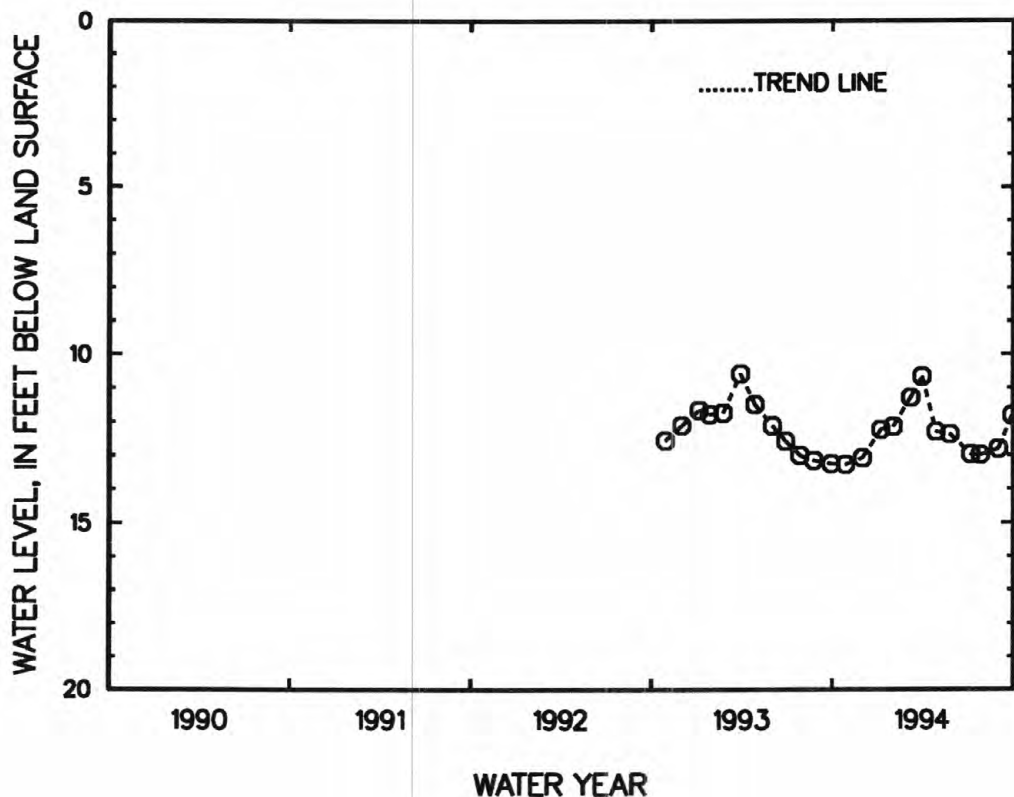
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.57 ft below land-surface datum, Mar. 30, 1993; lowest measured, 13.26 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	13.26	JAN 07	12.23	MAR 08	11.29	APR 28	12.30	JUL 07	12.97	AUG 31	12.81
DEC 01	13.07	FEB 01	12.14	31	10.66	MAY 26	12.37	26	12.99	SEP 27	11.82

WATER YEAR 1994	HIGHEST	10.66	MAR 31, 1994	LOWEST	13.26	OCT 28, 1993
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## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381946077014201. Local number, 54Q 46.

LOCATION.--Lat 38°19'46", long 77°01'42", Hydrologic Unit 02070011, 200 ft west of Tisdale Road at edge of woods, 0.2 mi northeast of intersection of Dahlgren Road and Tisdale Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.5 ft, 14.5 to 17 ft, depth 17 ft, screened 4.5 to 14.5 ft.

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

DATUM.--Elevation of land-surface datum is 14.61 ft above sea level. Measuring point: Top of casing, 2.3 ft above land-surface datum.

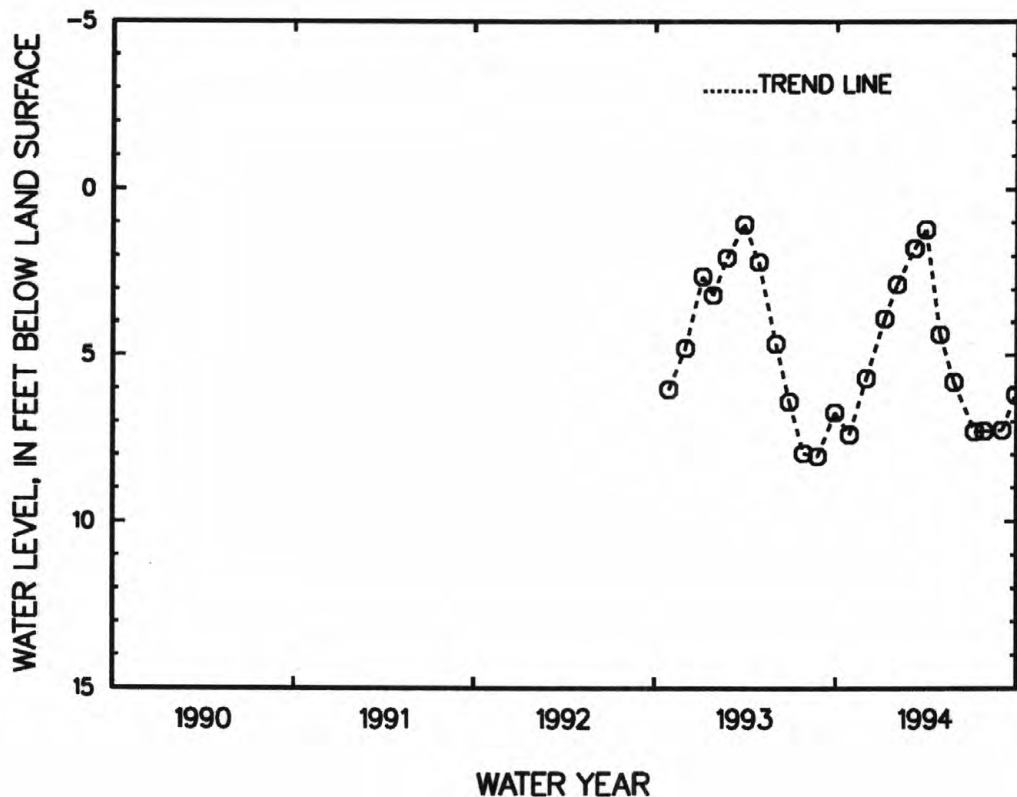
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.05 ft below land-surface datum, Mar. 30, 1993; lowest measured, 8.04 ft below land-surface datum, Aug. 25, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	7.38	JAN 07	3.89	MAR 08	1.77	APR 28	4.37	JUL 07	7.29	AUG 31	7.25
DEC 01	5.69	FEB 01	2.85	31	1.20	MAY 26	5.80	26	7.28	SEP 27	6.19

WATER YEAR 1994      HIGHEST    1.20    MAR 31, 1994      LOWEST    7.38    OCT 28, 1993



## GROUND-WATER LEVELS

203

## KING GEORGE COUNTY

382010077020001. Local number, 54Q 47.

LOCATION.--Lat 38°20'10", long 77°02'00", Hydrologic Unit 02070011, 50 ft west of Caskey Road, 0.3 mi south of intersection of Bennion Road and Caskey Road, 0.6 mi north of intersection of Dahlgren Road and Caskey Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12 ft, 22 to 24.5 ft, depth 24.5 ft, screened 12 to 22 ft.

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

DATUM.--Elevation of land-surface datum is 3.91 ft above sea level. Measuring point: Top of casing, 2.7 ft above land-surface datum.

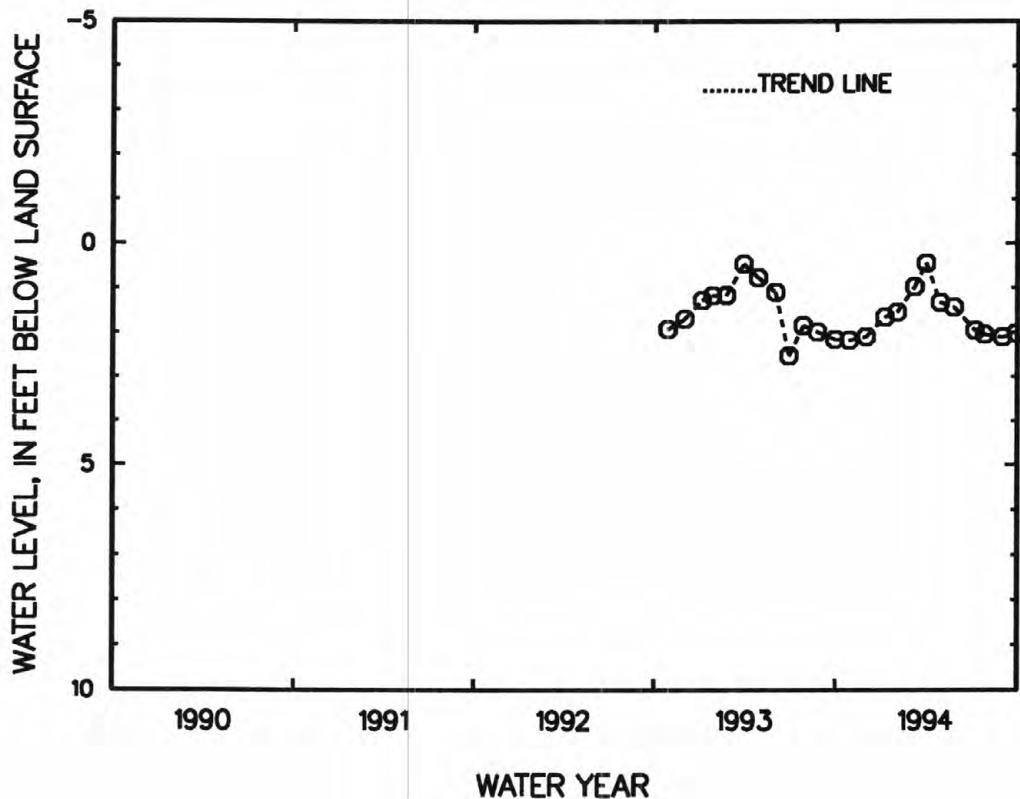
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.45 ft below land-surface datum, Mar. 31, 1994; lowest measured, 2.53 ft below land-surface datum, June 29, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	2.18	JAN 07	1.66	MAR 08	0.98	APR 28	1.33	JUL 07	1.96	AUG 31	2.11
DEC 01	2.10	FEB 01	1.55	31	.45	MAY 26	1.44	26	2.05	SEP 27	2.03

WATER YEAR 1994      HIGHEST 0.45    MAR 31, 1994      LOWEST 2.18    OCT 28, 1993



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381915077020303. Local number, 54Q 48.

LOCATION.--Lat 38°19'15", long 77°02'03", Hydrologic Unit 02070011, 100 ft south of Tisdale Road, 200 ft east of security gate at intersection of Tisdale Road and Welch Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 2.68 ft, 12.68 to 14.93 ft, depth 14.93 ft, screened 2.68 to 12.68 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 10.68 ft above sea level. Measuring point: Top of recorder shelf, 2.6 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.07 ft above land-surface datum, Mar. 29, 1994; lowest recorded, 8.10 ft below land-surface datum, Sept. 16, 17, 1993.

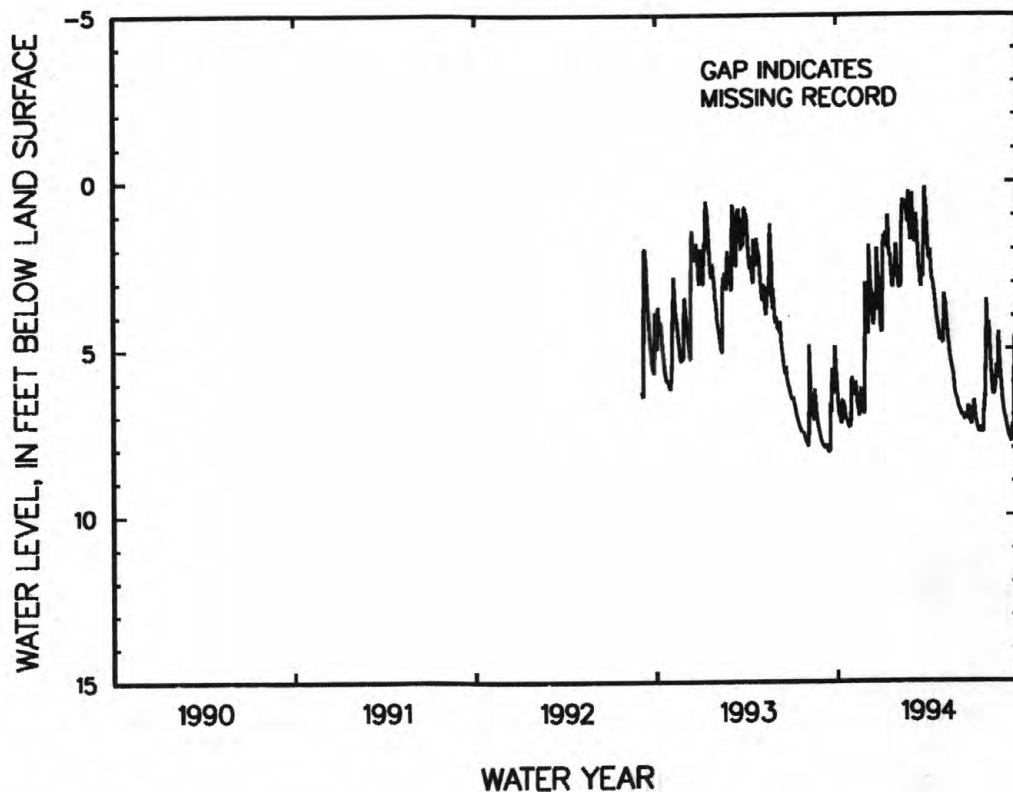
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.77	6.26	4.38	1.59	3.17	1.17	2.19	4.35	6.80	6.58	4.59	7.09
10	7.20	6.19	3.13	1.81	1.21	1.16	2.49	3.88	6.99	7.28	6.11	7.48
15	6.63	6.85	4.27	1.83	.73	1.95	3.14	4.77	7.12	7.54	6.33	7.74
20	7.07	6.17	3.85	2.67	.89	3.06	3.85	5.41	7.11	7.46	5.76	7.41
25	7.30	6.88	2.82	2.60	.50	2.85	4.43	5.81	7.00	6.60	5.29	5.23
ECM	6.15	3.51	4.46	2.10	1.68	.69	4.71	6.47	7.30	3.95	6.58	4.89

WATER YEAR 1994      HIGHEST INSTANTANEOUS    +0.07    MAR 29, 1994      LOWEST INSTANTANEOUS    7.82    SEP 17, 1994

+ Water level is above land-surface datum.

DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381926077023201. Local number, 54Q 49.

LOCATION.--Lat 38°19'26", long 77°02'32", Hydrologic Unit 02070011, 300 ft west of Sampson Road in open field, 0.1 mi south of intersection of Sampson Road and Caffee Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.5 ft, 19.5 to 25 ft, depth 25 ft, screened 9.5 to 19.5 ft.

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

DATUM.--Elevation of land-surface datum is 10.62 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

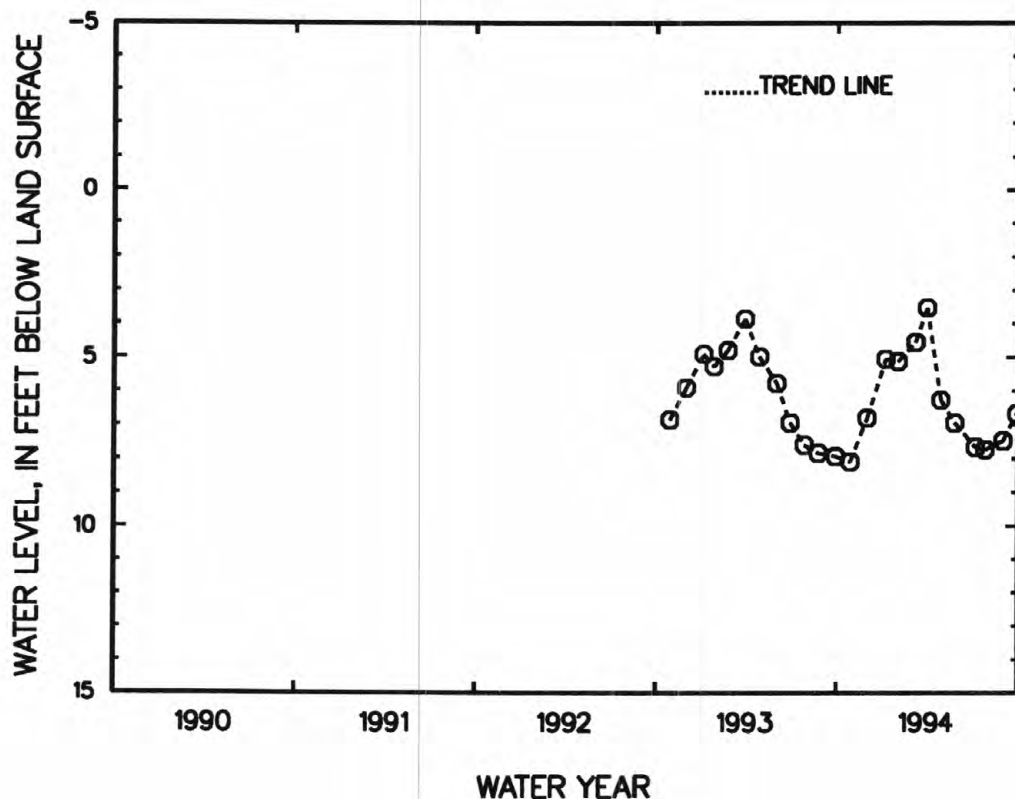
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.53 ft below land-surface datum, Mar. 31, 1994; lowest measured, 8.08 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	8.08	JAN 07	5.05	MAR 08	4.55	APR 28	6.27	JUL 07	7.66	AUG 31	7.47
DEC 01	6.80	FEB 01	5.12	31	3.53	MAY 26	6.95	26	7.73	SEP 27	6.68

WATER YEAR 1994      HIGHEST   3.53   MAR 31, 1994      LOWEST   8.08   OCT 28, 1993





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381926077021701. Local number, 54Q 50.

LOCATION.--Lat 38°19'26", long 77°02'17", Hydrologic Unit 02070011, 325 ft southwest of Welch Road behind movie theatre at golf course, 0.3 mi north of intersection of Sampson Road and Welch Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 8 ft, 18 to 20.5 ft, depth 20.5 ft, screened 8 to 18 ft.

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

DATUM.--Elevation of land-surface datum is 10.80 ft above sea level. Measuring point: Top of casing, 1.85 ft above land-surface datum.

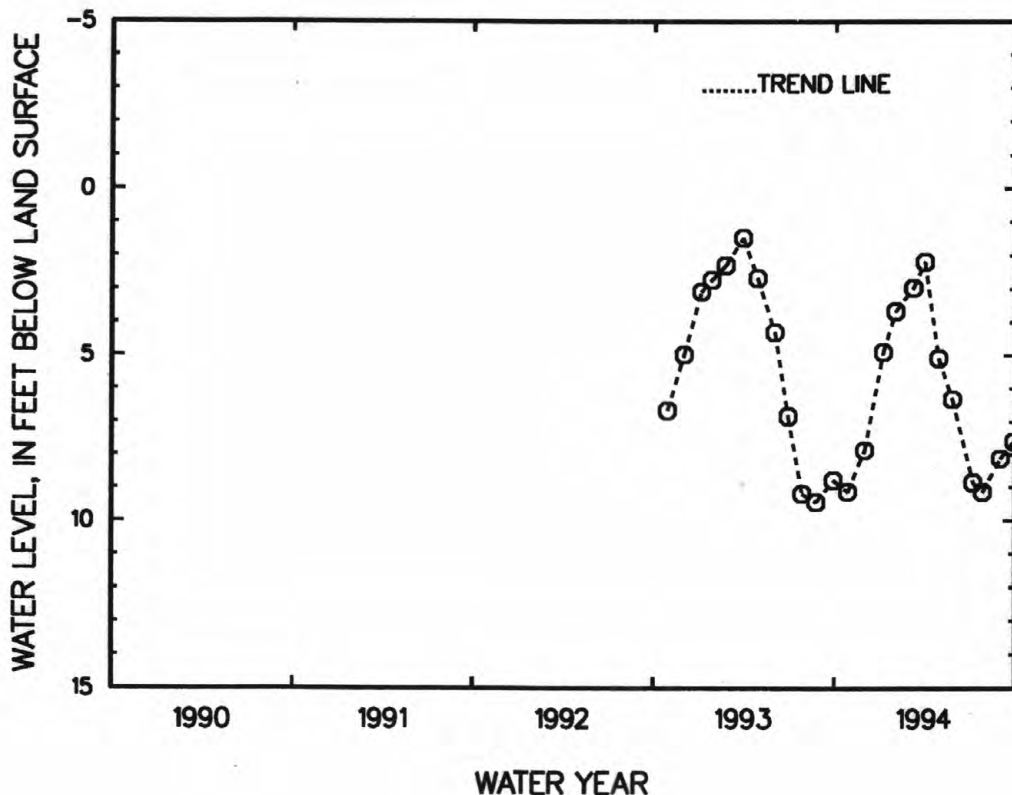
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.48 ft below land-surface datum, Mar. 30, 1993; lowest measured, 9.44 ft below land-surface datum, Aug. 25, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	9.13	JAN 07	4.90	MAR 08	2.96	APR 28	5.08	JUL 07	8.85	AUG 31	8.12
DEC 01	7.87	FEB 01	3.67	31	2.19	MAY 26	6.33	26	9.14	SEP 27	7.60

WATER YEAR 1994      HIGHEST    2.19    MAR 31, 1994      LOWEST    9.14    JUL 26, 1994



## GROUND-WATER LEVELS

207

## KING GEORGE COUNTY

381937077024801. Local number, 54Q 51.

LOCATION.--Lat 38°19'37", long 77°02'48", Hydrologic Unit 02070011, 75 ft west of Gilmore Road, 0.3 mi south of intersection of Dahlgren Road and Gilmore Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5 ft, 15 to 15.5 ft, depth 15.5 ft, screened 5 to 15 ft.

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

DATUM.--Elevation of land-surface datum is 7.95 ft above sea level. Measuring point: Top of casing, 2.2 ft above land-surface datum.

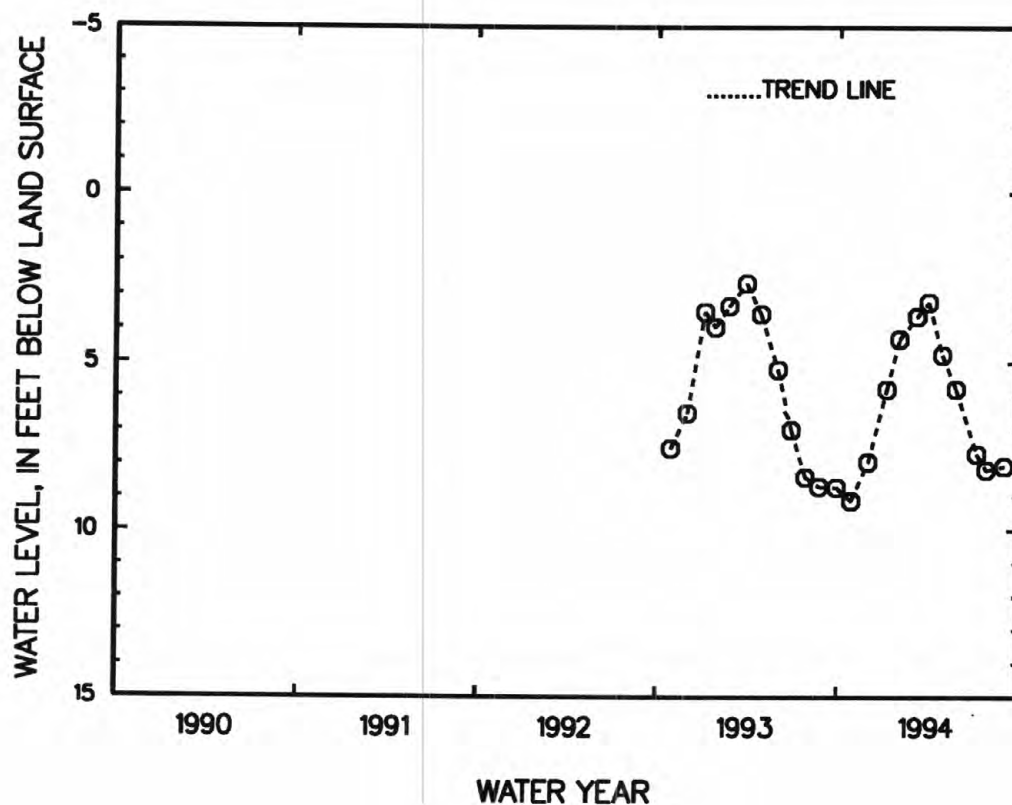
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.66 ft below land-surface datum, Mar. 30, 1993; lowest measured, 9.10 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	9.10	JAN 07	5.78	MAR 08	3.63	APR 28	4.76	JUL 07	7.70	AUG 31	8.07
DEC 01	7.94	FEB 01	4.29	MAR 31	3.21	MAY 26	5.77	JUL 26	8.18		

WATER YEAR 1994	HIGHEST	3.21	MAR 31, 1994	LOWEST	9.10	OCT 28, 1993
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## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381954077024901. Local number, 54Q 52.

LOCATION.--Lat 38°19'54", long 77°02'49", Hydrologic Unit 02070011, 200 ft northeast of Dahlgren Road behind northwest corner of U.S. Post Office, 300 ft northwest of intersection of Dahlgren Road and Gilmore Road, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 7 ft, 12 to 14.5 ft, depth 14.5 ft, screened 7 to 12 ft.

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

DATUM.--Elevation of land-surface datum is 18.48 ft above sea level. Measuring point: Top of casing, 2.4 ft above land-surface datum.

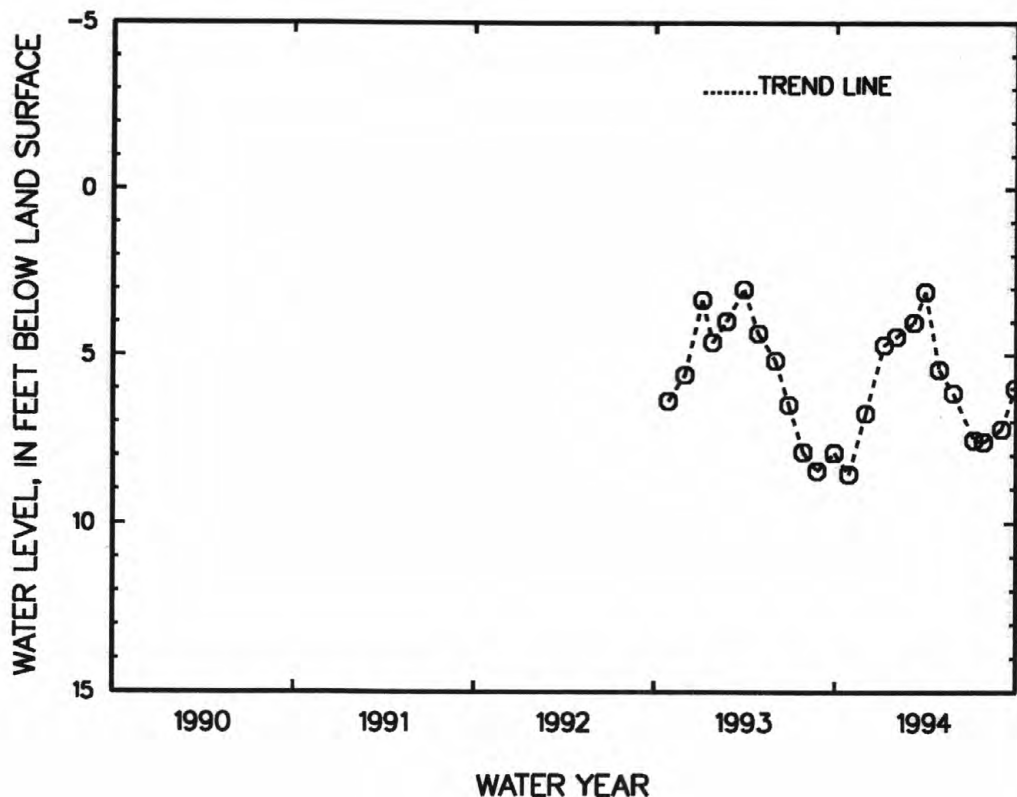
PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.01 ft below land-surface datum, Mar. 30, 1993; lowest measured, 8.55 ft below land-surface datum, Oct. 28, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	8.55	JAN 07	4.69	MAR 08	4.01	APR 28	5.43	JUL 07	7.54	AUG 31	7.22
DEC 01	6.74	FEB 01	4.44	MAR 31	3.09	MAY 26	6.13	JUL 26	7.60	SEP 27	6.00

WATER YEAR 1994      HIGHEST    3.09    MAR 31, 1994      LOWEST    8.55    OCT 28, 1993



## KING GEORGE COUNTY

382113077024101. Local number, 54Q 53.

LOCATION.--Lat 38°21'13", long 77°02'41", Hydrologic Unit 02070011, 300 ft southeast of U.S. Highway 301, 0.2 mi northeast of intersection of Bennion Road and Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12.5 ft, 17.5 to 20 ft, depth 20 ft, screened 12.5 to 17.5 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to May 28, 1993, monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 8.85 ft above sea level. Measuring point: Top of recorder shelf, 2.51 ft above land-surface datum. Prior to May 28, 1993, measuring point was top of casing, 2.05 ft above land-surface datum.

PERIOD OF RECORD.--October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.79 ft below land-surface datum, May 8-10, 12, 1994; lowest recorded, 6.09 ft below land-surface datum, Nov. 16, 1993.

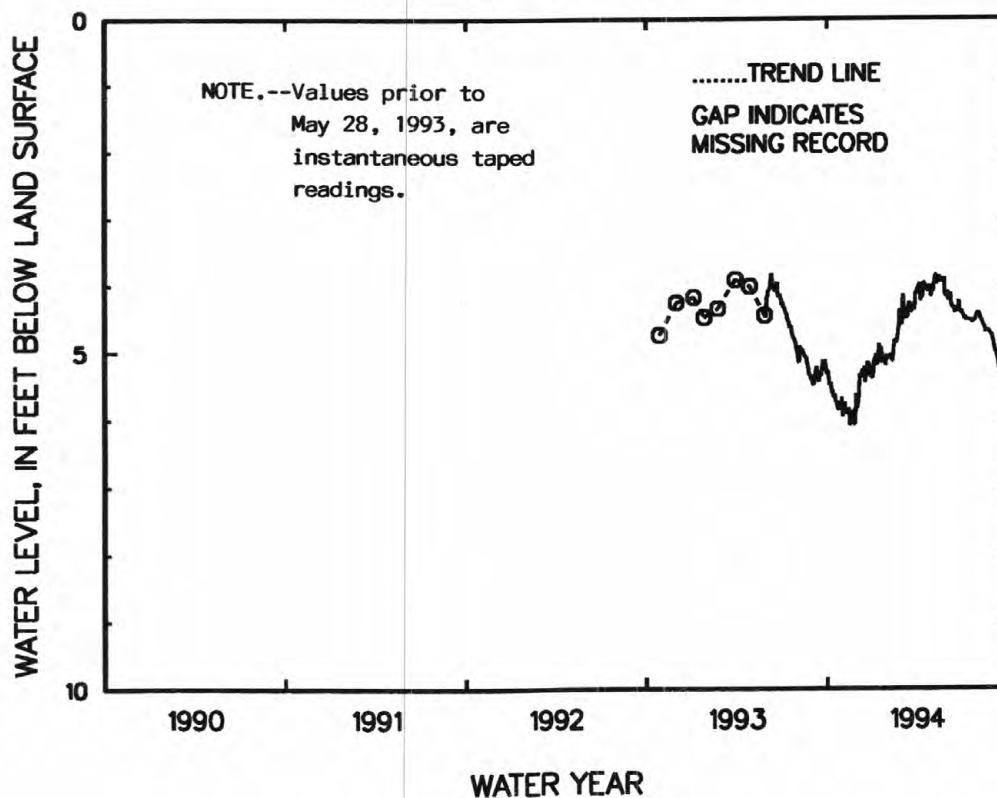
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.46	5.79	5.53	5.10	5.09	4.28	4.02	3.98	4.19	4.50	4.48	5.00
10	5.57	5.87	5.36	5.18	5.13	4.46	4.12	3.98	4.33	4.51	4.56	5.14
15	5.67	5.95	5.21	4.92	4.82	4.28	4.00	3.92	4.38	4.53	4.66	5.32
20	5.74	5.88	5.32	5.14	4.81	4.40	4.02	3.95	4.39	4.56	4.68	5.42
25	5.84	6.08	5.17	5.09	4.36	4.30	4.00	3.93	4.35	4.52	4.72	5.35
EOM	5.67	5.84	5.38	5.08	4.58	4.12	4.14	4.15	4.40	4.42	4.82	---

WATER YEAR 1994      HIGHEST INSTANTANEOUS      3.79      MAY 08-10, 12, 1994

LOWEST INSTANTANEOUS      6.09      NOV 16, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381737077024601. Local number, 54Q 55.

LOCATION.--Lat 38°17'37", long 77°02'46", Hydrologic Unit 02070011, 300 ft northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 49.9 ft, 59.9 to 70.4 ft, depth 70.4 ft, screened 49.9 to 59.9 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 24.44 ft above sea level. Measuring point: Top of recorder shelf, 2.25 ft above land-surface datum.

REMARKS.--Missing record due to equipment malfunction. Well sampled for water quality.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.45 ft below land-surface datum, Apr. 7, 1994; lowest recorded, 10.75 ft (caused by pumpage for water-quality sampling) below land-surface datum, June 22, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	7.53	7.83	8.63	---	9.79	10.08
10	---	---	---	---	---	---	7.52	7.88	8.83	9.55	9.85	10.16
15	---	---	---	---	---	---	7.52	7.94	9.02	9.71	9.82	10.33
20	---	---	---	---	---	7.70	7.60	8.06	9.08	9.79	9.84	10.41
25	---	---	---	---	---	7.70	7.68	8.19	---	9.86	---	---
EOM	---	---	---	---	---	7.58	7.79	8.43	---	---	9.94	---

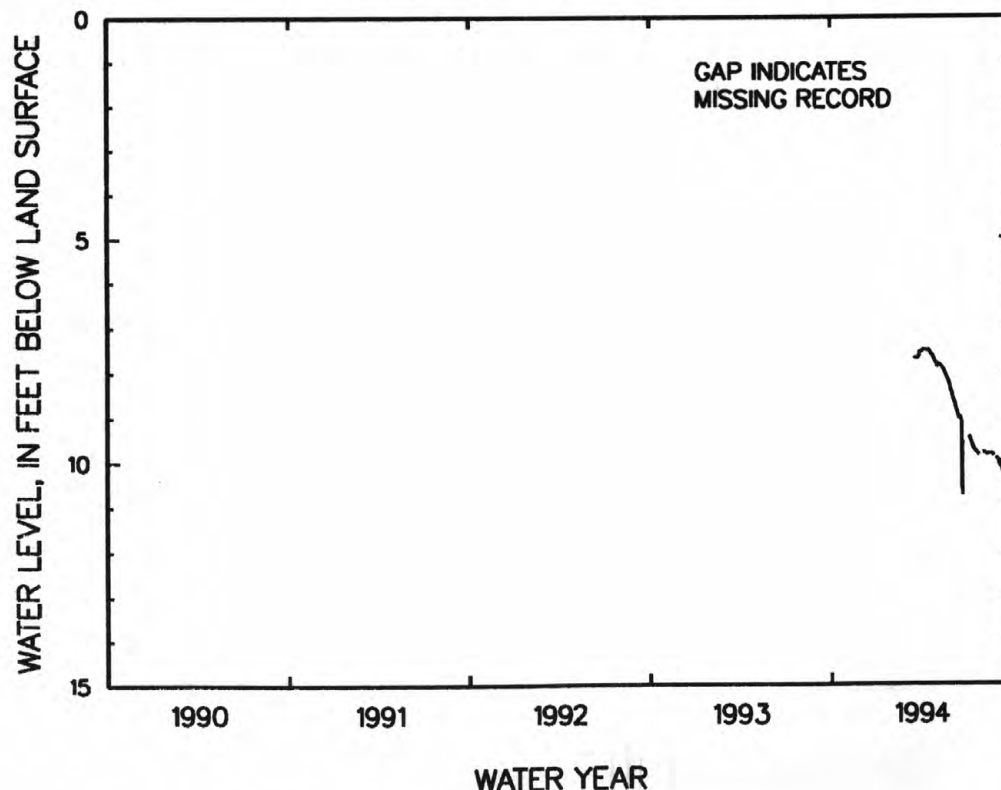
PERIOD MARCH TO SEPTEMBER 1994      HIGHEST INSTANTANEOUS      7.45      APR 07, 1994

LOWEST INSTANTANEOUS      a10.43      SEP 21, 22, 1994  
b10.75      JUN 22, 1994

a Lowest water level from natural causes.

b Lowest water level caused by pumpage for water-quality sampling.

## DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381737077024602. Local number, 54Q 56.

LOCATION.--Lat 38°17'37", long 77°02'46", Hydrologic Unit 02070011, 300 ft northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 22.2 ft, 22.2 to 24.7 ft, depth 24.7 ft, screened 12.2 to 22.2 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 24.46 ft above sea level. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.50 ft below land-surface datum, Mar. 29, 1994; lowest recorded, 6.48 ft below land-surface datum, Sept. 17, 1994.

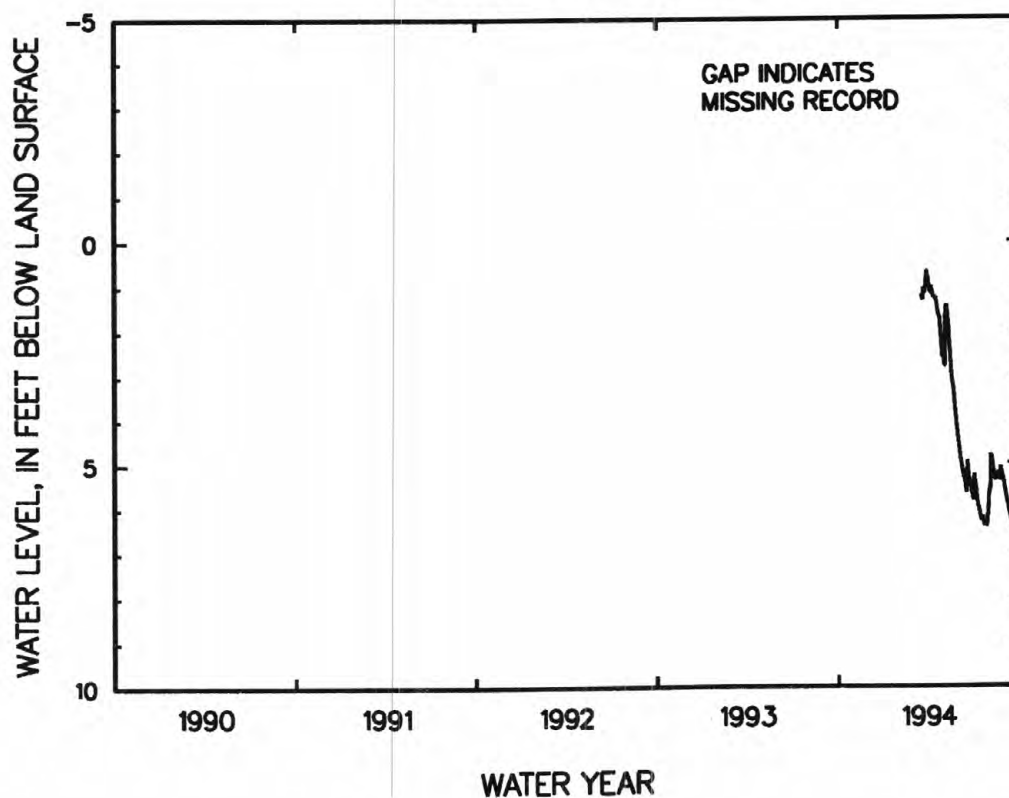
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	1.16	1.69	4.98	5.63	4.85	5.88
10	---	---	---	---	---	---	1.21	1.72	5.33	5.99	5.27	6.16
15	---	---	---	---	---	---	1.31	2.61	5.63	6.28	5.32	6.42
20	---	---	---	---	---	1.29	1.59	3.21	5.30	6.38	5.36	6.46
25	---	---	---	---	---	1.14	1.93	3.89	5.62	6.42	5.24	5.65
EOM	---	---	---	---	---	.79	2.21	4.53	5.84	5.62	5.57	5.55

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST INSTANTANEOUS    0.50    MAR 29, 1994

LOWEST INSTANTANEOUS    6.48    SEP 17, 1994

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381746077020001. Local number, 54Q 57.

LOCATION.--Lat 38°17'46", long 77°02'00", Hydrologic Unit 02070011, 0.7 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Nanjemoy-Marlboro confining unit of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 48.4 ft, 58.4 to 63.9 ft, depth 63.9 ft, screened 48.4 to 58.4 ft.

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

DATUM.--Elevation of land-surface datum is 17.77 ft above sea level. Measuring point: Top of casing, 2.29 ft above land-surface datum.

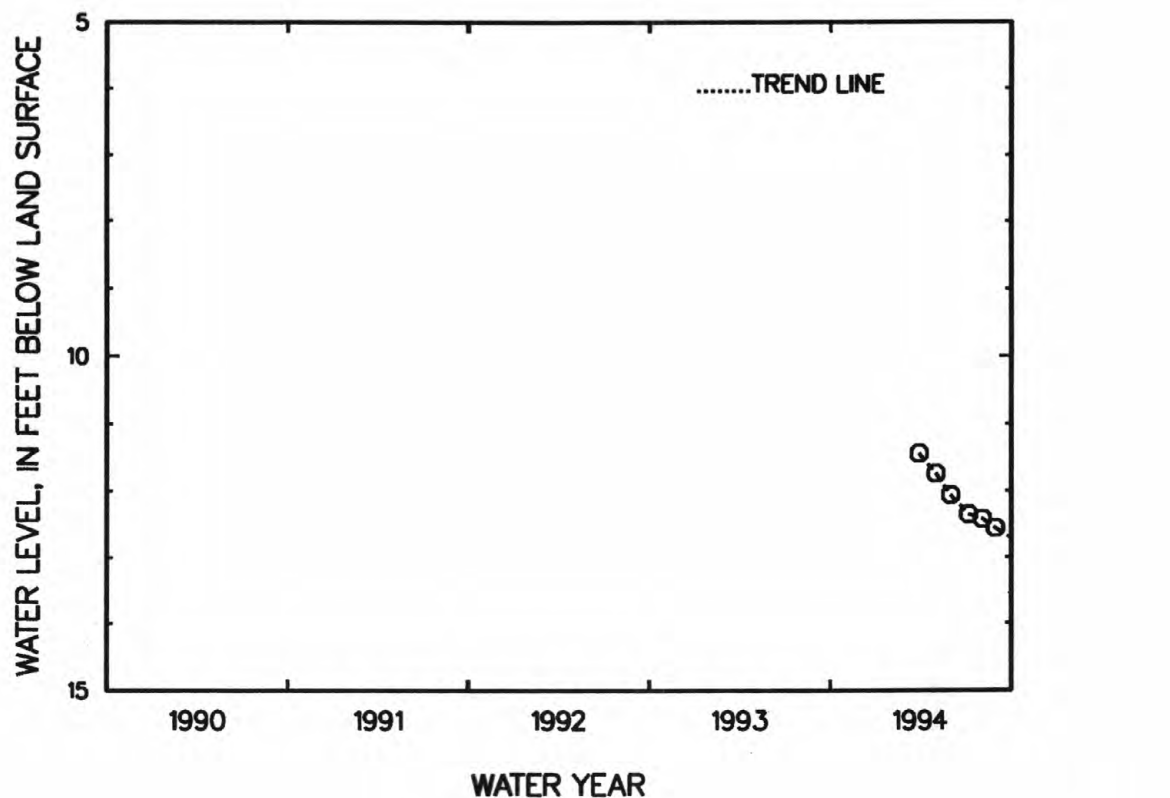
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.44 ft below land-surface datum, Mar. 29, 1994; lowest measured, 12.56 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	11.44	MAY 02	11.74	MAY 31	12.06	JUL 06	12.35	AUG 03	12.42	AUG 29	12.56

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST   11.44   MAR 29, 1994      LOWEST   12.56   AUG 29, 1994



## GROUND-WATER LEVELS

213

## KING GEORGE COUNTY

381746077020002. Local number, 54Q 58.

LOCATION.--Lat 38°17'46", long 77°02'00", Hydrologic Unit 02070011, 0.7 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.3 ft, 14.3 to 16.8 ft, depth 16.8 ft, screened 9.3 to 14.3 ft.

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

DATUM.--Elevation of land-surface datum is 17.89 ft above sea level. Measuring point: Top of casing, 2.29 ft above land-surface datum.

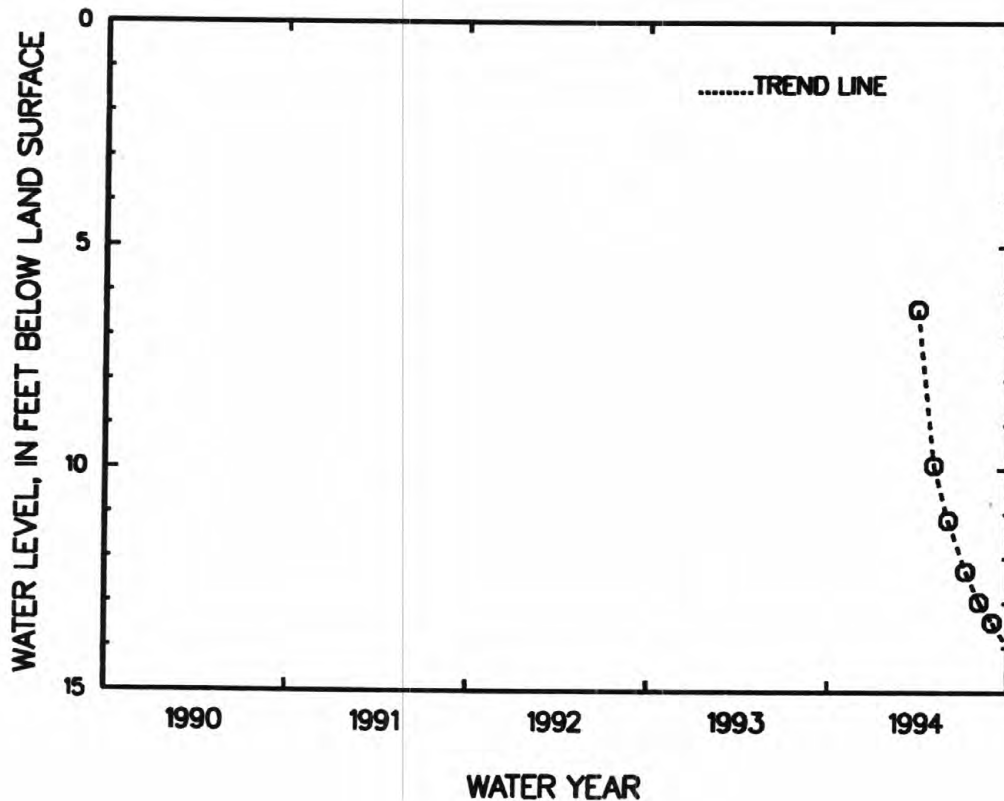
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.40 ft below land-surface datum, Mar. 29, 1994; lowest measured, 13.43 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	6.40	MAY 02	9.91	MAY 31	11.14	JUL 06	12.29	AUG 03	12.98	AUG 29	13.43

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST      6.40      MAR 29, 1994      LOWEST      13.43      AUG 29, 1994



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381759077011401. Local number, 54Q 59.

LOCATION.--Lat 38°17'59", long 77°01'14", Hydrologic Unit 02070011, 250 ft southwest of the Potomac River, 1.5 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 82.7 ft, 92.7 to 95.2 ft, depth 95.2 ft, screened 82.7 to 92.7 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 8.16 ft above sea level. Measuring point: Top of recorder shelf, 2.4 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 5.02 ft below land-surface datum, Sept. 22, 1994; lowest recorded, 6.97 ft below land-surface datum, Mar. 17, 1994.

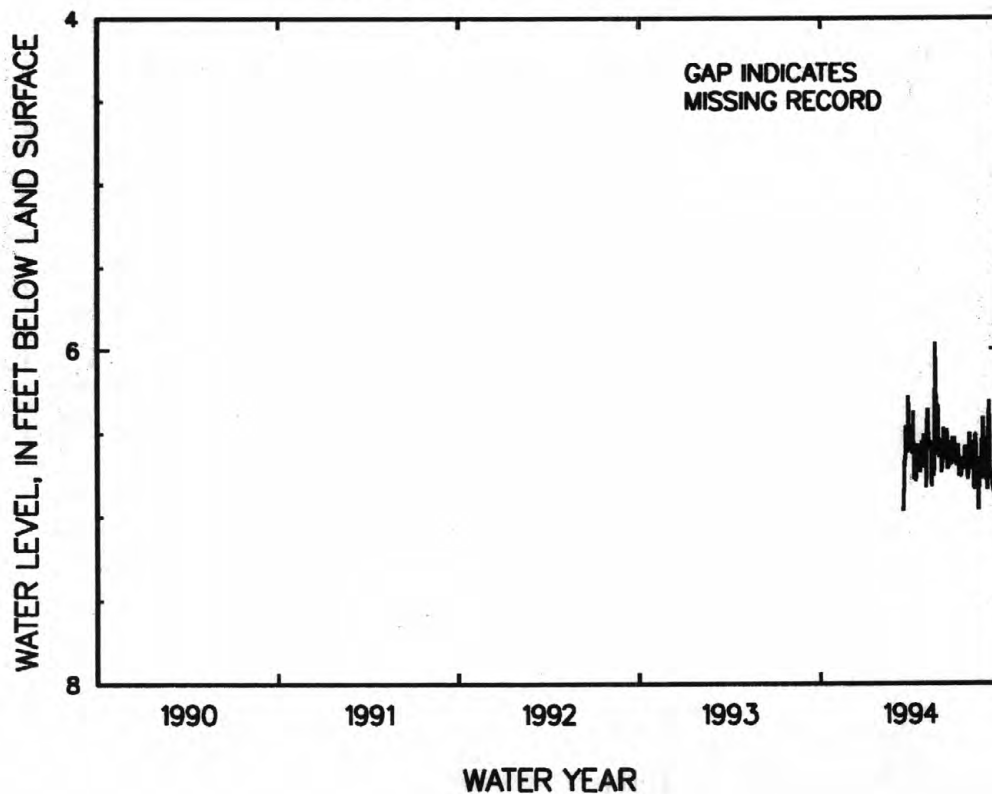
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	6.58	6.36	6.56	6.57	6.60	6.31
10	---	---	---	---	---	---	6.65	6.55	6.63	6.76	6.60	6.78
15	---	---	---	---	---	---	6.59	6.63	6.67	6.68	6.96	6.79
20	---	---	---	---	---	6.64	6.74	5.96	6.70	6.67	6.70	6.68
25	---	---	---	---	---	6.53	6.71	6.34	6.54	6.78	6.55	6.50
EOM	---	---	---	---	---	6.52	6.62	6.57	6.58	6.72	6.71	6.83

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST INSTANTANEOUS    5.02    SEP 22, 1994

LOWEST INSTANTANEOUS    6.97    MAR 17, 1994

## DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381759077011402. Local number, 54Q 60.

LOCATION.--Lat 38°17'59", long 77°01'14", Hydrologic Unit 02070011, 250 ft southwest of the Potomac River, 1.5 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 20.1 ft, 30.1 to 32.6 ft, depth 32.6 ft, screened 20.1 to 30.1 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 8.36 ft above sea level. Measuring point: Top of recorder shelf, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 5.33 ft below land-surface datum, Sept. 22, 1994; lowest recorded, 8.58 ft below land-surface datum, Aug. 15, 1994.

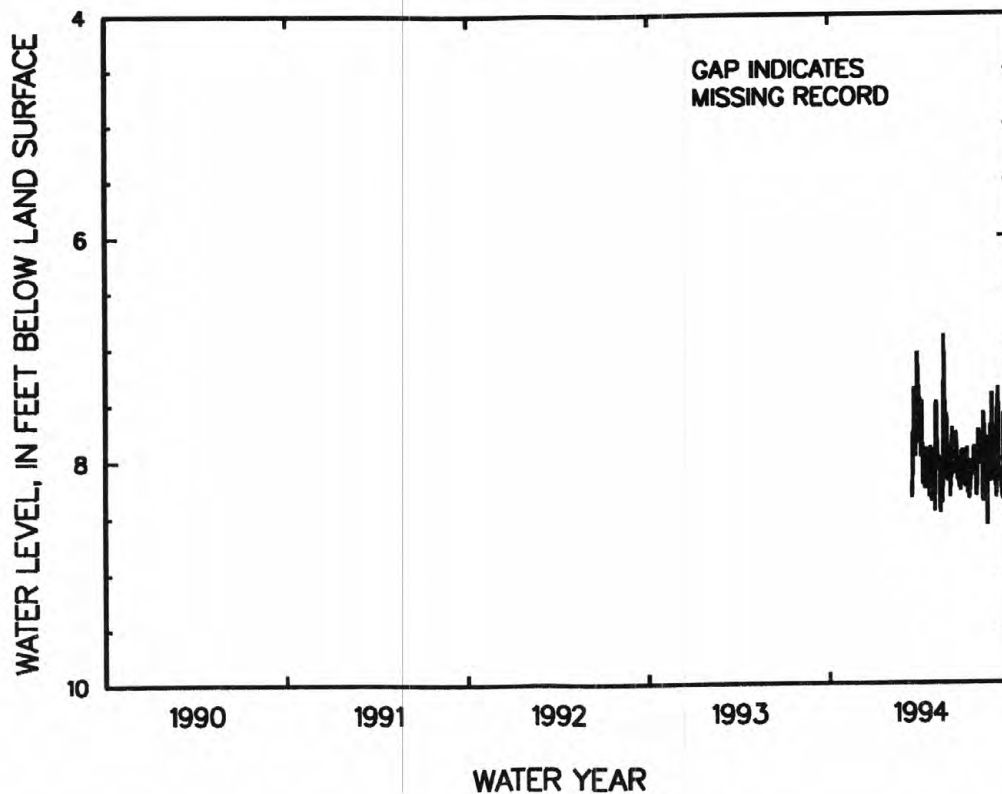
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	7.78	7.50	7.81	7.89	7.81	7.36
10	---	---	---	---	---	---	7.94	7.98	7.97	8.33	7.84	8.19
15	---	---	---	---	---	---	7.93	8.03	8.08	8.08	8.58	8.12
20	---	---	---	---	---	7.83	8.33	6.89	8.25	7.98	7.96	7.82
25	---	---	---	---	---	7.76	8.37	7.59	8.01	8.32	7.71	7.53
EOY	---	---	---	---	---	7.39	8.09	7.90	8.01	8.05	7.97	8.27

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST INSTANTANEOUS    5.33    SEP 22, 1994

LOWEST INSTANTANEOUS    8.58    AUG 15, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381814077030301. Local number, 54Q 61.

LOCATION.--Lat 38°18'14", long 77°03'03", Hydrologic Unit 02070011, 0.8 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Nanjemoy-Marlboro confining unit of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 52.5 ft, 62.5 to 68.0 ft, depth 68.0 ft, screened 52.5 to 62.5 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 23.94 ft above sea level. Measuring point: Top of recorder shelf, 3.1 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.16 ft below land-surface datum, Mar. 29, 1994; lowest recorded, 12.85 ft (caused by pumpage for water-quality sampling) below land-surface datum, July 5, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	.68	1.97	4.45	12.85	3.87	5.23
10	---	---	---	---	---	---	.66	1.19	4.83	5.46	4.63	5.54
15	---	---	---	---	---	---	.76	1.89	5.08	5.77	4.69	5.79
20	---	---	---	---	---	.86	1.13	2.65	4.57	5.94	4.69	5.70
25	---	---	---	---	---	.67	1.49	3.24	4.82	5.62	4.43	4.78
EOM	---	---	---	---	---	.39	2.07	3.98	5.19	4.20	4.88	4.45

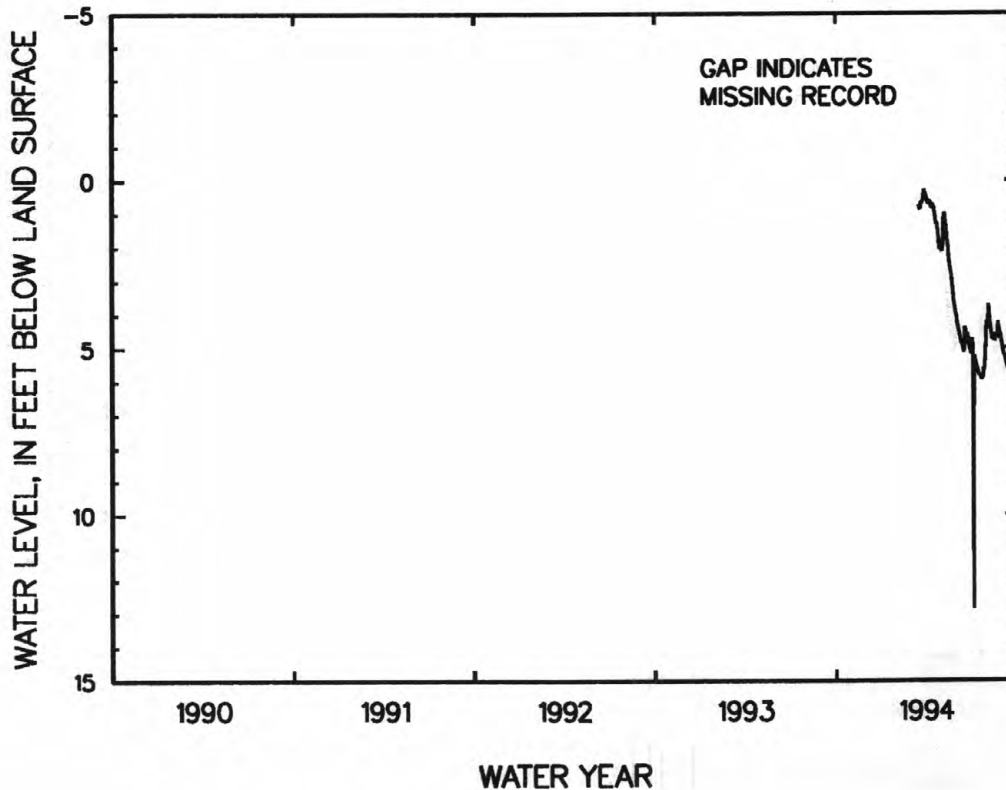
PERIOD MARCH TO SEPTEMBER 1994      HIGHEST INSTANTANEOUS      0.16      MAR 29, 1994

LOWEST INSTANTANEOUS      a5.96      JUL 29, 1994  
b12.85      JUL 05, 1994

a Lowest water level from natural causes.

b Lowest water level caused by pumpage for water-quality sampling.

## DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381814077030302. Local number, 54Q 62.

LOCATION.--Lat 38°18'14", long 77°03'03", Hydrologic Unit 02070011, 0.8 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5.0 ft, 10.0 to 12.5 ft, depth 12.5 ft, screened 5.0 to 10.0 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 23.83 ft above sea level. Measuring point: Top of recorder shelf, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.13 ft below land-surface datum, Mar. 28, 1994; lowest recorded, 5.43 ft below land-surface datum, July 21, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

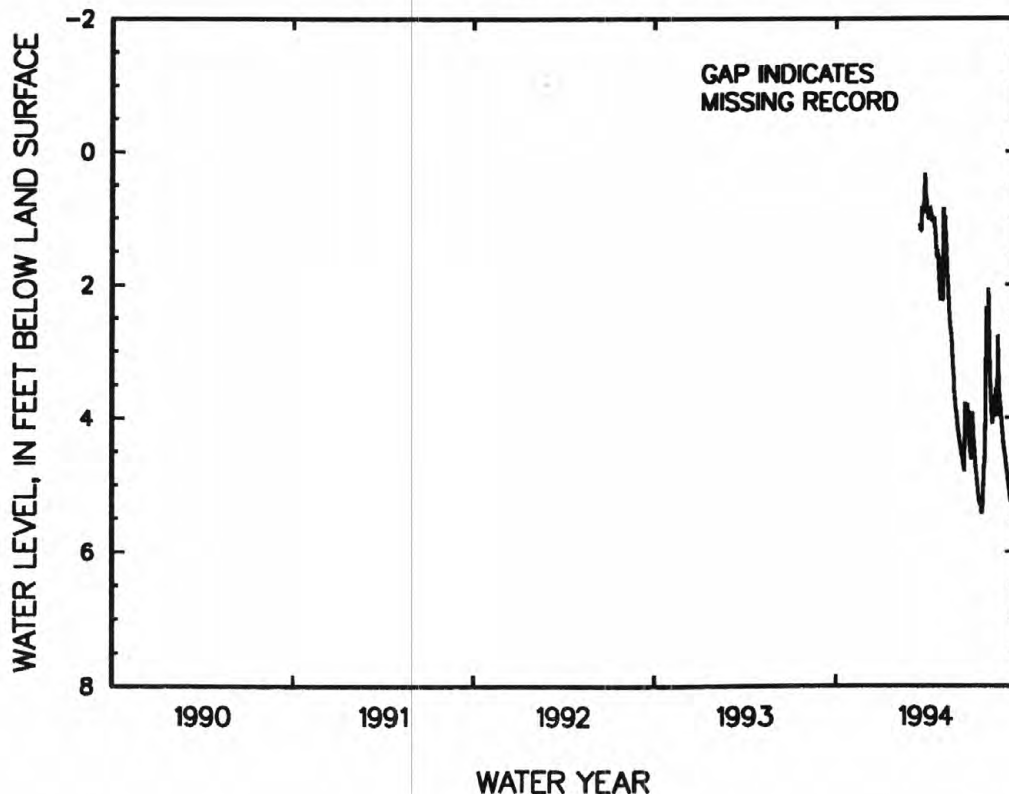
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	1.03	.85	4.26	4.42	2.88	4.54
10	---	---	---	---	---	---	1.00	1.37	4.53	4.83	3.96	4.85
15	---	---	---	---	---	---	1.08	2.13	4.75	5.21	3.89	5.17
20	---	---	---	---	---	1.20	1.51	2.69	4.05	5.40	3.93	4.77
25	---	---	---	---	---	.94	1.80	3.33	4.22	4.70	3.62	3.59
EOM	---	---	---	---	---	.70	1.59	3.91	4.62	2.76	4.17	3.49

PERIOD MARCH TO SEPTEMBER 1994

HIGHEST INSTANTANEOUS 0.13 MAR 28, 1994

LOWEST INSTANTANEOUS 5.43 JUL 21, 1994

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381758077023001. Local number, 54Q 63.

LOCATION.--Lat 38°17'58", long 77°02'30", Hydrologic Unit 02070011, 0.5 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Nanjemoy-Marlboro confining unit of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 49.7 ft, 59.7 to 62.2 ft, depth 62.2 ft, screened 49.7 to 59.7 ft.

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

DATUM.--Elevation of land-surface datum is 22.42 ft above sea level. Measuring point: Top of casing, 0.05 ft below land-surface datum.

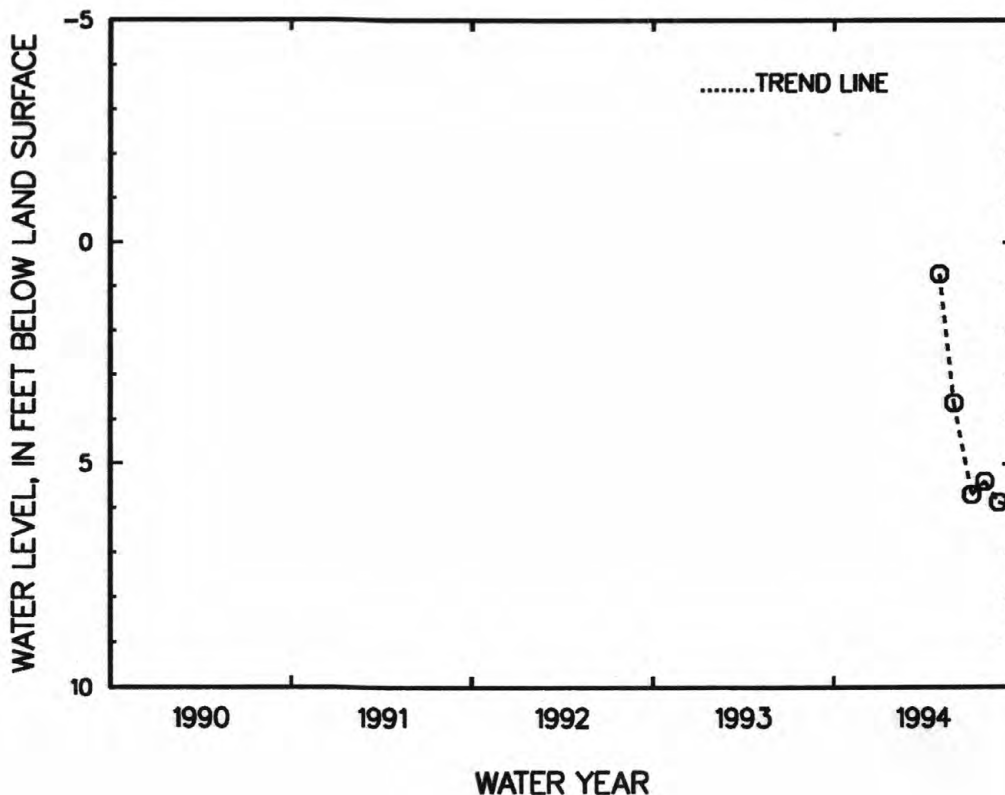
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.12 ft below land-surface datum, Mar. 29, 1994; lowest measured, 5.91 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	0.12	MAY 02	0.77	MAY 31	3.57	JUL 06	5.67	AUG 01	5.84	AUG 29	5.91

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 0.12 MAR 29, 1994      LOWEST 5.91 AUG 29, 1994



## GROUND-WATER LEVELS

219

## KING GEORGE COUNTY

381758077023002. Local number, 54Q 64.

LOCATION.--Lat 38°17'58", long 77°02'30", Hydrologic Unit 02070011, 0.5 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 2.8 ft, 12.8 to 13.3 ft, depth 13.3 ft, screened 2.8 to 12.8 ft.

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

DATUM.--Elevation of land-surface datum is 22.2 ft above sea level. Measuring point: Top of casing, 0.16 ft below land-surface datum.

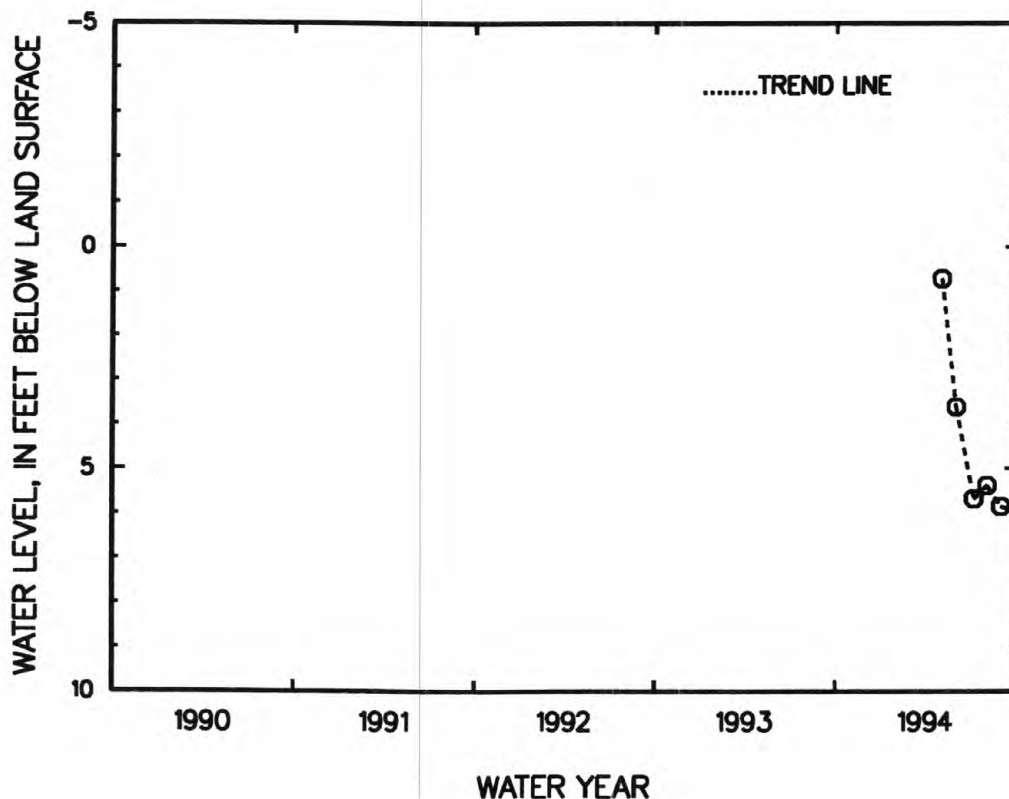
PERIOD OF RECORD.--May to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.72 ft below land-surface datum, May 2, 1994; lowest measured, 5.86 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MAY TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 02	0.72	MAY 31	3.62	JUL 06	5.69	AUG 01	5.39	AUG 29	5.86

PERIOD MAY TO SEPTEMBER 1994      HIGHEST   0.72   MAY 02, 1994      LOWEST   5.86   AUG 29, 1994



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381835077015601. Local number, 54Q 65.

LOCATION.--Lat 38°18'35", long 77°01'56", Hydrologic Unit 02070011, 0.2 mi southwest of Babe Point, 1.4 mi northeast of the main gage at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 86.0 ft, 96.0 to 106.5 ft, depth 106.5 ft, screened 86.0 to 96.0 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 14.15 ft above sea level. Measuring point: Top of recorder shelf, 2.4 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.83 ft below land-surface datum, May 21, 1994; lowest recorded, 12.07 ft below land-surface datum, Mar. 17, 1994.

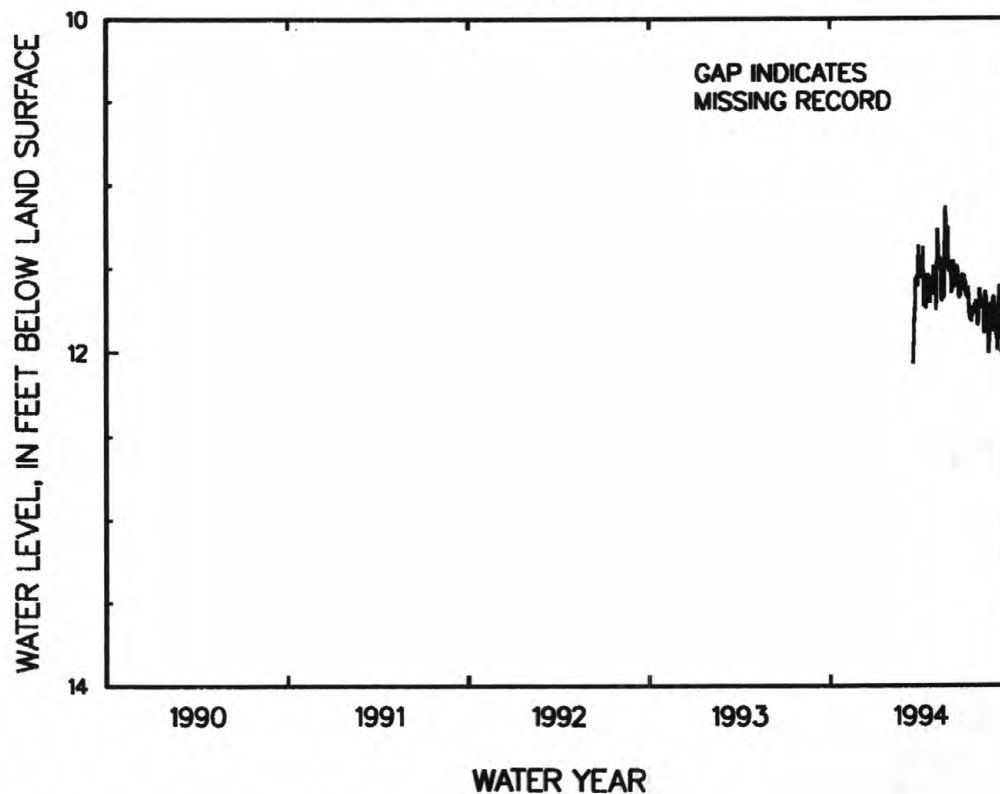
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	11.54	11.26	11.55	11.61	11.69	11.64
10	---	---	---	---	---	---	11.60	11.43	11.61	11.81	11.68	11.93
15	---	---	---	---	---	---	11.56	11.54	11.57	11.77	12.01	12.00
20	---	---	---	---	---	11.78	11.71	11.17	11.67	11.73	11.79	11.90
25	---	---	---	---	---	11.54	11.66	11.28	11.53	11.84	11.67	11.65
EOM	---	---	---	---	---	11.48	11.56	11.49	11.58	11.74	11.85	11.94

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST INSTANTANEOUS      10.83      MAY 21, 1994

LOWEST INSTANTANEOUS      12.07      MAR 17, 1994

## DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381835077015602. Local number, 54Q 66.

LOCATION.--Lat 38°18'35", long 77°01'56", Hydrologic Unit 02070011, 0.2 mi southwest of Babe Point, 1.4 mi northeast of the main gage at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12.2 ft, 17.2 to 19.7 ft, depth 19.7 ft, screened 12.2 to 17.2 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 14.05 ft above sea level. Measuring point: Top of recorder shelf, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.76 ft below land-surface datum, Mar. 29, 1994; lowest recorded, 11.46 ft below land-surface datum, July 22-24, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

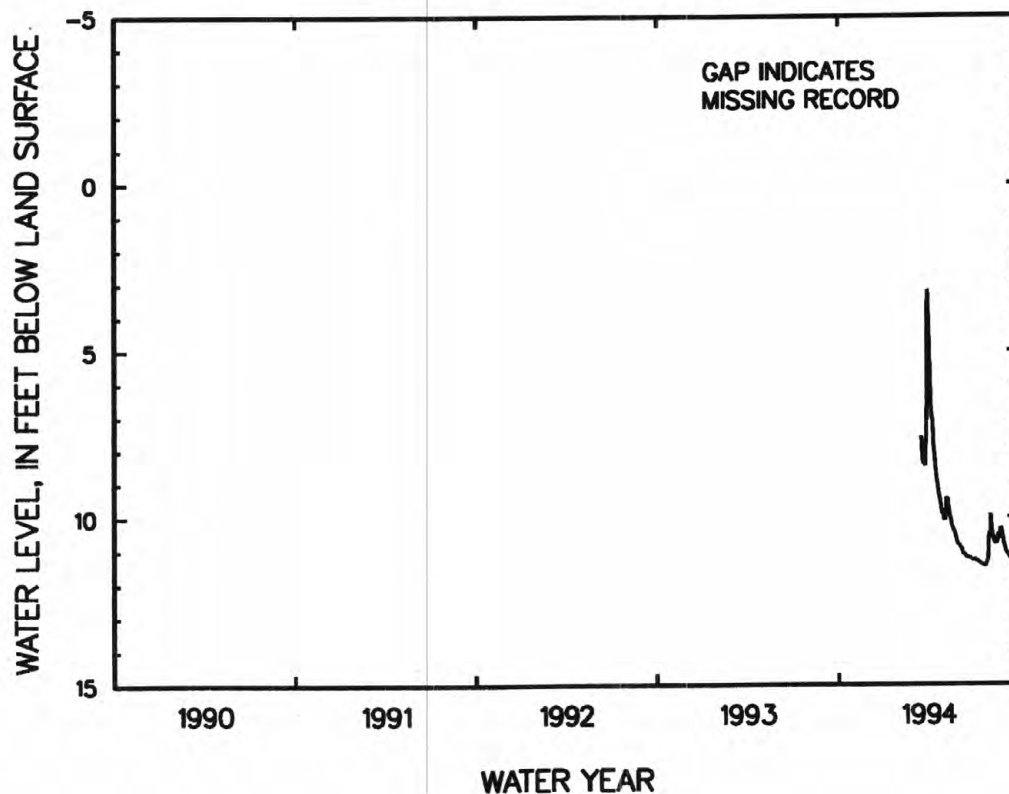
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	6.54	9.85	10.93	11.29	10.36	11.09
10	---	---	---	---	---	---	7.73	9.69	11.11	11.35	10.74	11.22
15	---	---	---	---	---	---	8.61	10.06	11.18	11.40	10.80	11.32
20	---	---	---	---	---	8.36	9.24	10.37	11.22	11.45	10.61	11.38
25	---	---	---	---	---	8.46	9.65	10.59	11.26	11.40	10.42	10.77
ECM	---	---	---	---	---	3.79	9.87	10.83	11.30	10.46	10.88	10.36

PERIOD MARCH TO SEPTEMBER 1994

HIGHEST INSTANTANEOUS 2.76 MAR 29, 1994

LOWEST INSTANTANEOUS 11.46 JUL 22-24, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381829077040101. Local number, 54Q 67.

LOCATION.--Lat 38°18'29", long 77°04'01", Hydrologic Unit 02070011, 1.5 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Nanjemoy-Marlboro confining unit of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 48.2 ft, 58.2 to 68.7 ft, depth 68.7 ft, screened 48.2 to 58.2 ft.

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

DATUM.--Elevation of land-surface datum is 12.61 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

REMARKS.--Water level affected by occasional pumpage for water-quality sampling.

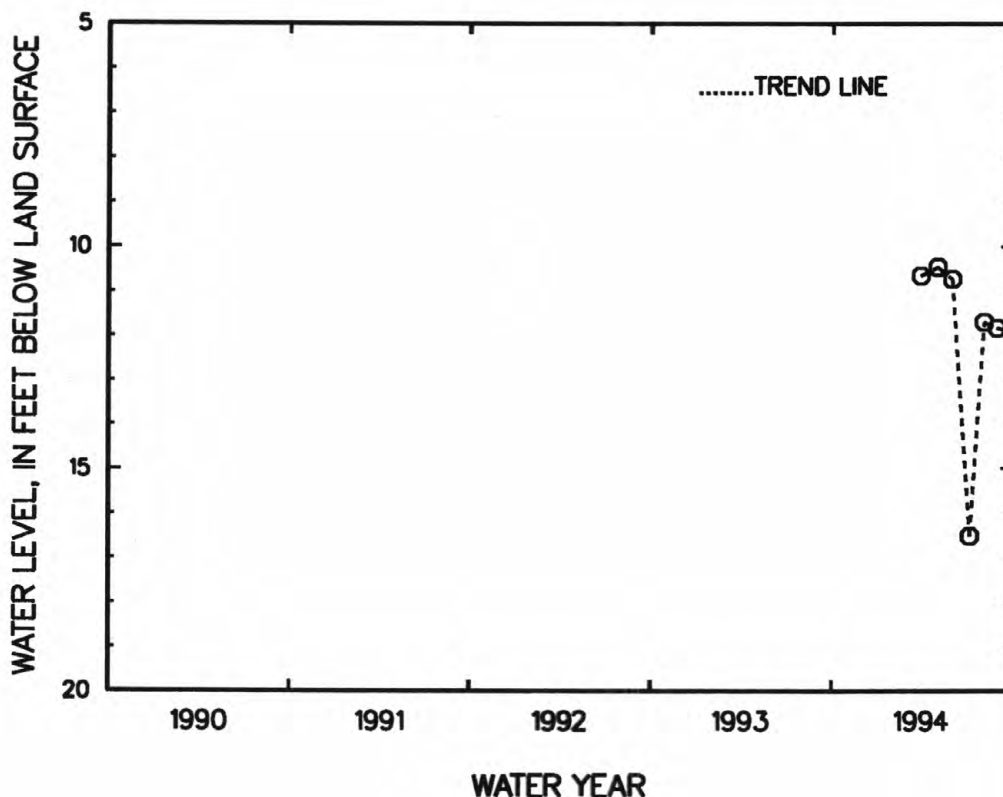
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.46 ft below land-surface datum, May 2, 1994; lowest measured, 16.52 ft (caused by pumpage for water-quality sampling) below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	10.65	MAY 02	10.46	MAY 31	10.73	JUL 06	16.52	AUG 03	11.70	AUG 29	11.83

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST    10.46    MAY 02, 1994      LOWEST    16.52    JUL 06, 1994



## GROUND-WATER LEVELS

223

## KING GEORGE COUNTY

381829077040102. Local number, 54Q 68.

LOCATION.--Lat 38°18'29", long 77°04'01", Hydrologic Unit 02070011, 1.5 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.7 ft, 19.7 to 20.2 ft, depth 20.2 ft, screened 9.7 to 19.7 ft.

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

DATUM.--Elevation of land-surface datum is 12.45 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

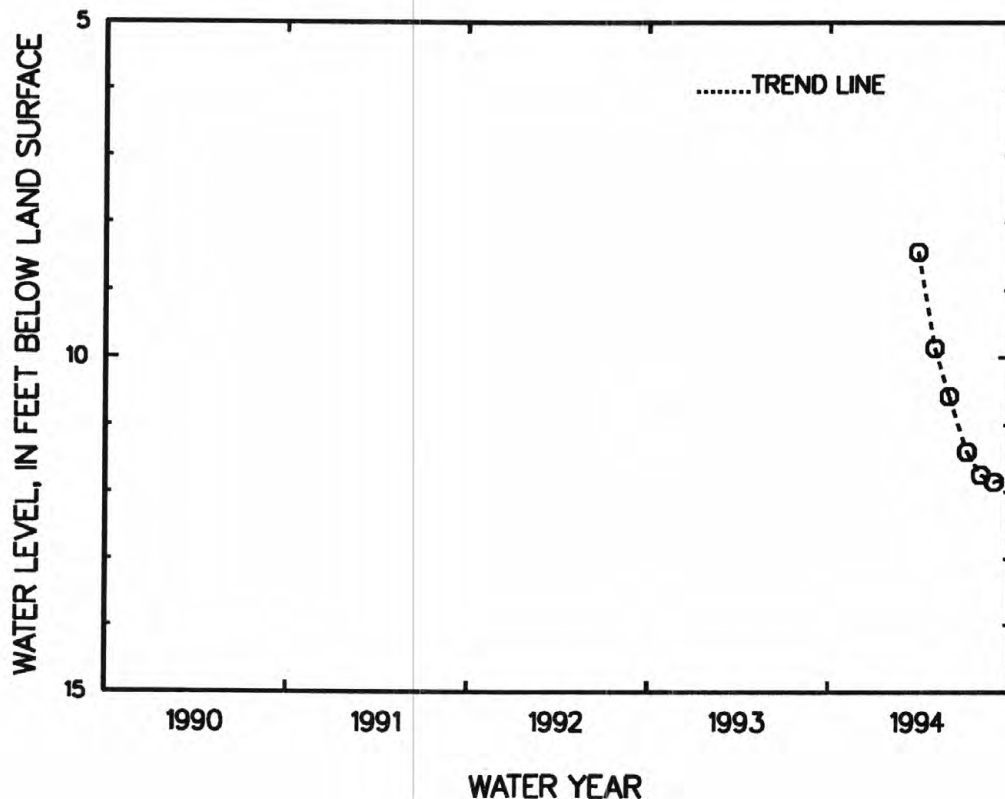
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.43 ft below land-surface datum, Mar. 29, 1994; lowest measured, 11.84 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	8.43	MAY 02	9.86	MAY 31	10.58	JUL 06	11.40	AUG 03	11.74	AUG 29	11.84

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 8.43 MAR 29, 1994      LOWEST 11.84 AUG 29, 1994





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381857077032701. Local number, 54Q 69.

LOCATION.--Lat 38°18'57", long 77°03'27", Hydrologic Unit 02070011, 400 ft southwest of Howland Point, 1.7 mi northwest of the main gage at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 68.6 ft, 78.6 to 84.1 ft, depth 84.1 ft, screened 68.6 to 78.2 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 16.21 ft above sea level. Measuring point: Top of recorder shelf, 2.7 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.90 ft below land-surface datum, June 23, 1994; lowest recorded, 13.88 ft below land-surface datum, Mar. 17, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

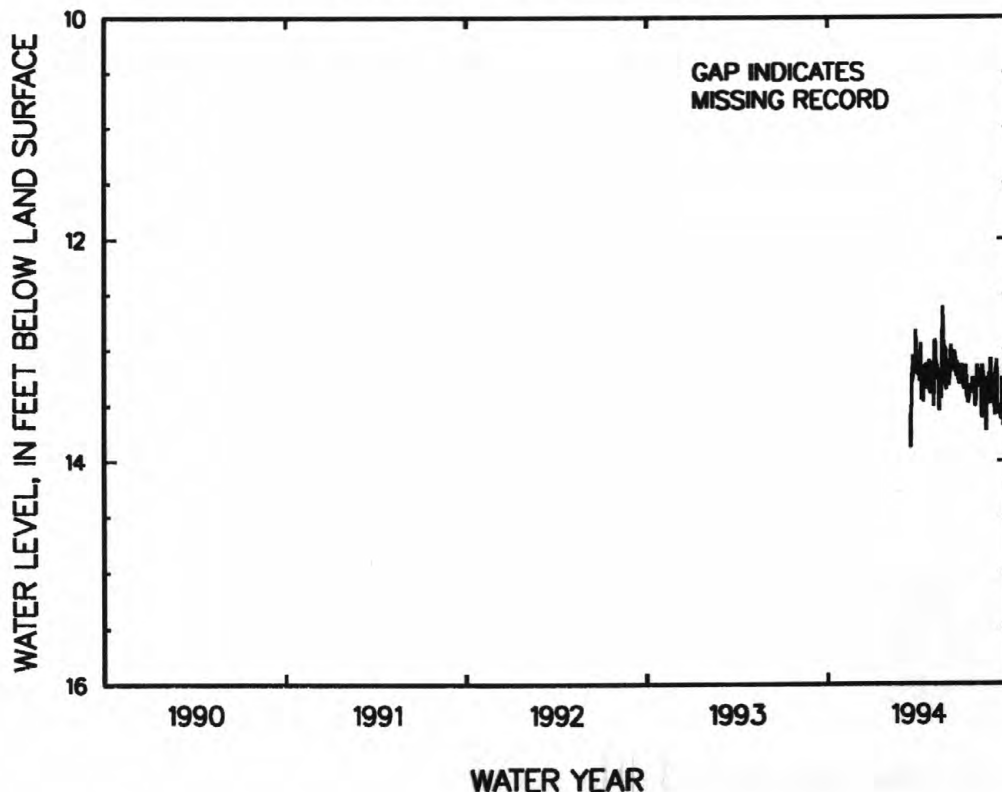
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	13.12	12.93	13.01	13.14	13.22	13.09
10	---	---	---	---	---	---	13.23	13.18	13.11	13.47	13.29	13.55
15	---	---	---	---	---	---	13.15	13.18	13.18	13.34	13.73	13.50
20	---	---	---	---	---	13.15	13.36	12.61	13.27	13.33	13.36	13.38
25	---	---	---	---	---	13.17	13.40	12.98	13.20	13.51	13.24	13.20
EOM	---	---	---	---	---	13.13	13.27	13.15	13.20	13.32	13.34	13.60

PERIOD MARCH TO SEPTEMBER 1994

HIGHEST INSTANTANEOUS 11.90 JUN 23, 1994

LOWEST INSTANTANEOUS 13.88 MAR 17, 1994

DAILY LOW-WATER LEVELS



## KING GEORGE COUNTY

381857077032702. Local number, 54Q 70.

LOCATION.--Lat 38°18'57", long 77°03'27", Hydrologic Unit 02070011, 400 ft southwest of Howland Point, 1.7 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 10.2 ft, 15.2 to 17.7 ft, depth 17.7 ft, screened 10.2 to 15.2 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 16.17 ft above sea level. Measuring point: Top of recorder shelf, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.91 ft below land-surface datum, Mar. 29, 1994; lowest recorded, 7.95 ft below land-surface datum, Sept. 17, 18, 21, 22, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

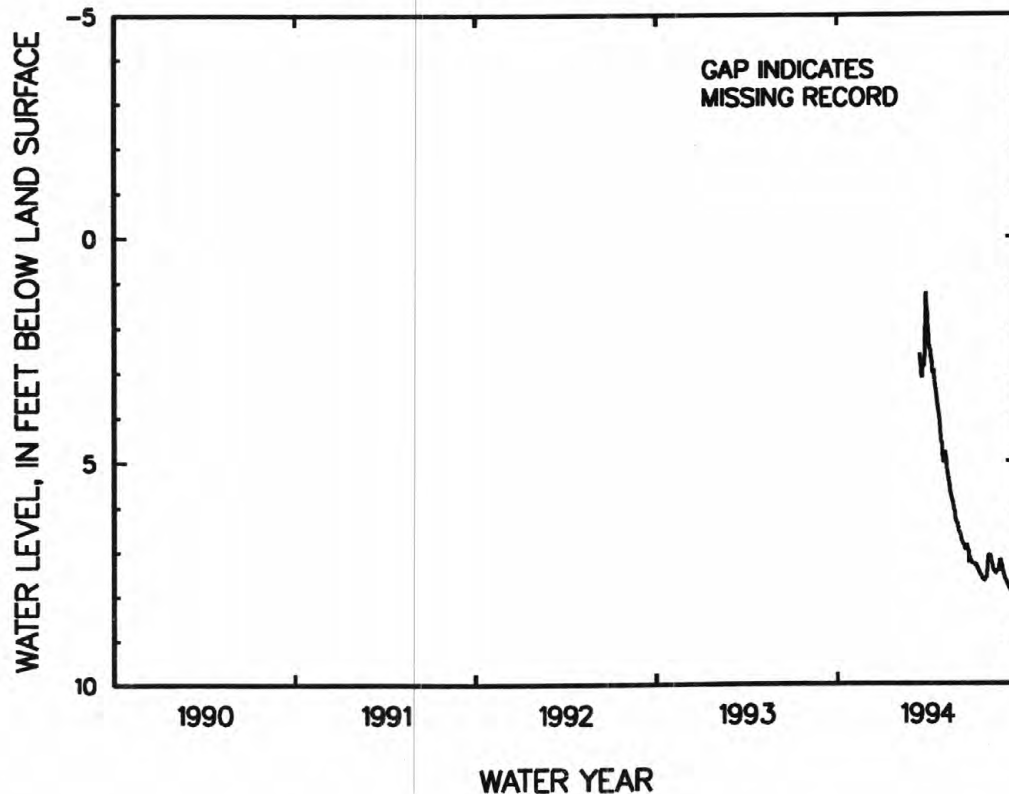
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	2.48	5.00	6.62	7.31	7.16	7.69
10	---	---	---	---	---	---	2.87	5.17	6.83	7.41	7.41	7.82
15	---	---	---	---	---	---	3.18	5.47	6.97	7.53	7.52	7.93
20	---	---	---	---	---	3.10	3.66	5.85	6.97	7.64	7.45	7.93
25	---	---	---	---	---	2.89	4.06	6.13	7.21	7.63	7.22	7.61
EOB	---	---	---	---	---	1.61	4.58	6.39	7.31	7.18	7.52	7.35

PERIOD MARCH TO SEPTEMBER 1994

HIGHEST INSTANTANEOUS 0.91 MAR 29, 1994

LOWEST INSTANTANEOUS 7.95 SEP 17, 18, 21, 22, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381830077031801. Local number, 54Q 71.

LOCATION.--Lat 38°18'30", long 77°03'18", Hydrologic Unit 02070011, 300 ft southeast of Howland Point, 1.2 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.7 ft, 19.7 to 20.2 ft, depth 20.2 ft, screened 9.7 to 19.7 ft.

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

DATUM.--Elevation of land-surface datum is 21.24 ft above sea level. Measuring point: Top of casing, 2.06 ft above land-surface datum.

PERIOD OF RECORD.--March to September 1994.

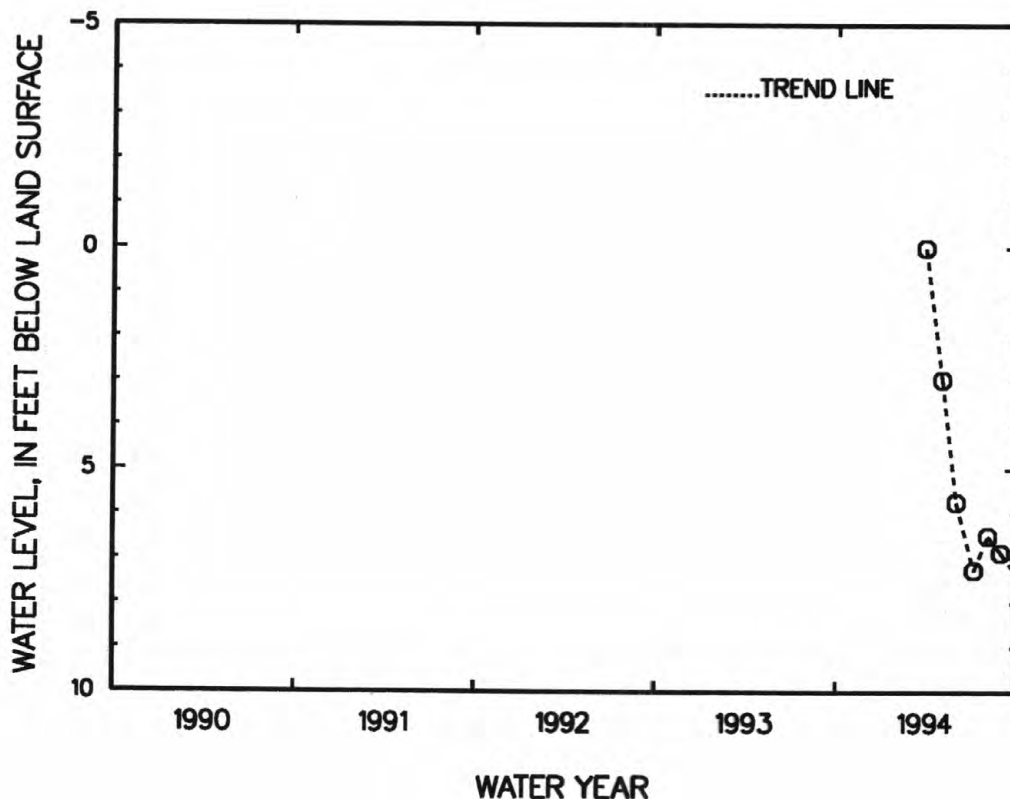
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, at land-surface datum, Mar. 29, 1994; lowest measured, 7.27 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	a0.00	MAY 02	2.97	MAY 31	5.74	JUL 06	7.27	AUG 03	6.50	AUG 29	6.87

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST a0.00    MAR 29, 1994      LOWEST 7.27    JUL 06, 1994

a At land-surface datum.



## GROUND-WATER LEVELS

227

## KING GEORGE COUNTY

381759077025701. Local number, 54Q 72.

LOCATION.--Lat 38°17'59", long 77°02'57", Hydrologic Unit 02070011, 0.5 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 8.1 ft, 13.1 to 15.6 ft, depth 15.6 ft, screened 8.1 to 13.1 ft.

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

DATUM.--Elevation of land-surface datum is 24.76 ft above sea level. Measuring point: Top of casing, 1.87 ft above land-surface datum.

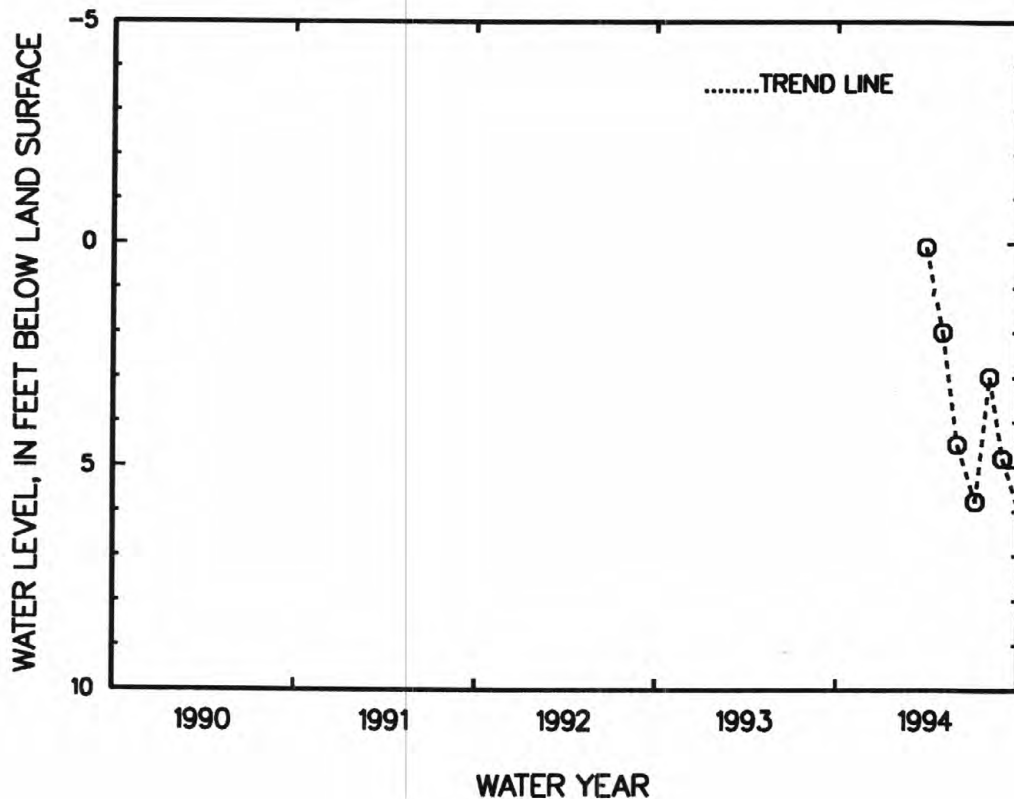
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.09 ft below land-surface datum, Mar. 29, 1994; lowest measured, 5.79 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	0.09	MAY 02	2.00	MAY 31	4.51	JUL 06	5.79	AUG 03	2.99	AUG 29	4.82

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 0.09 MAR 29, 1994      LOWEST 5.79 JUL 06, 1994



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381725077024501. Local number, 54Q 73.

LOCATION.--Lat 38°17'25", long 77°02'45", Hydrologic Unit 02070011, 0.2 mi southeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 18.8 ft, 28.8 to 31.3 ft, depth 31.3 ft, screened 18.8 to 28.8 ft.

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

DATUM.--Elevation of land-surface datum is 25.14 ft above sea level. Measuring point: Top of casing, 2.25 ft above land-surface datum.

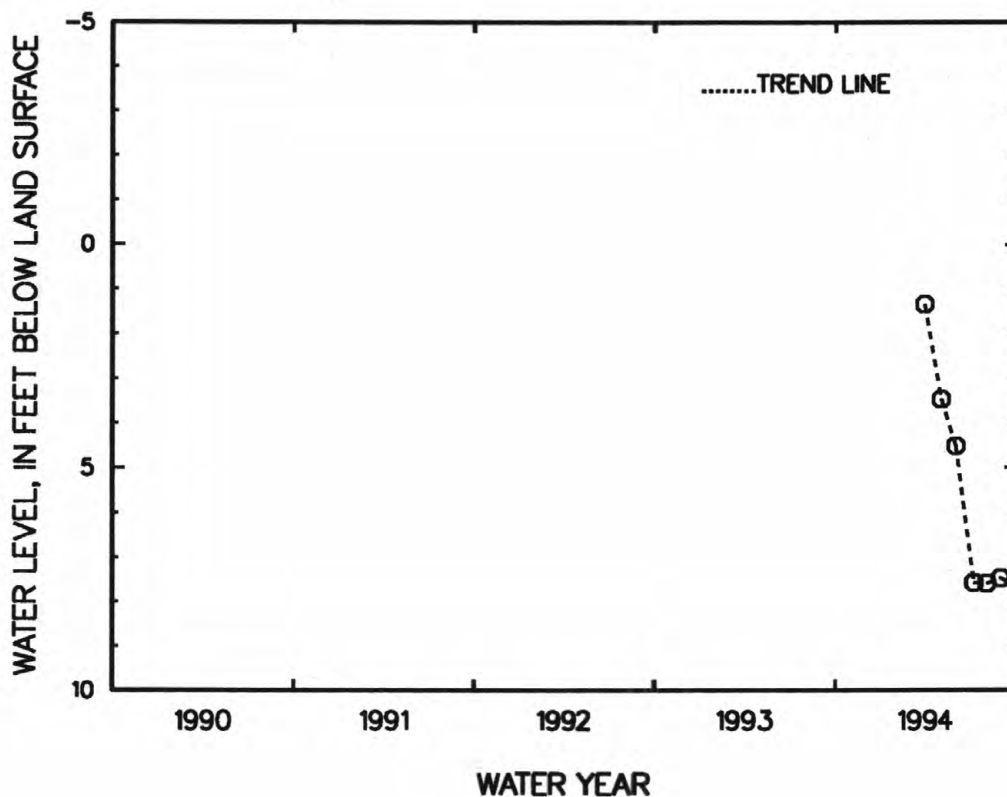
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.34 ft below land-surface datum, Mar. 29, 1994; lowest measured, 7.60 ft below land-surface datum, Aug. 1, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	1.34	MAY 02	3.47	MAY 31	4.52	JUL 06	7.58	AUG 01	7.60	AUG 29	7.48

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 1.34 MAR 29, 1994      LOWEST 7.60 AUG 01, 1994



## GROUND-WATER LEVELS

229

## KING GEORGE COUNTY

381732077021201. Local number, 54Q 74.

LOCATION.--Lat 38°17'32", long 77°02'12", Hydrologic Unit 02070011, 0.5 mi southeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.0 ft, 19.0 to 19.5 ft, depth 19.5 ft, screened 9.0 to 19.0 ft.

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

DATUM.--Elevation of land-surface datum is 12.70 ft above sea level. Measuring point: Top of casing, 2.35 ft above land-surface datum.

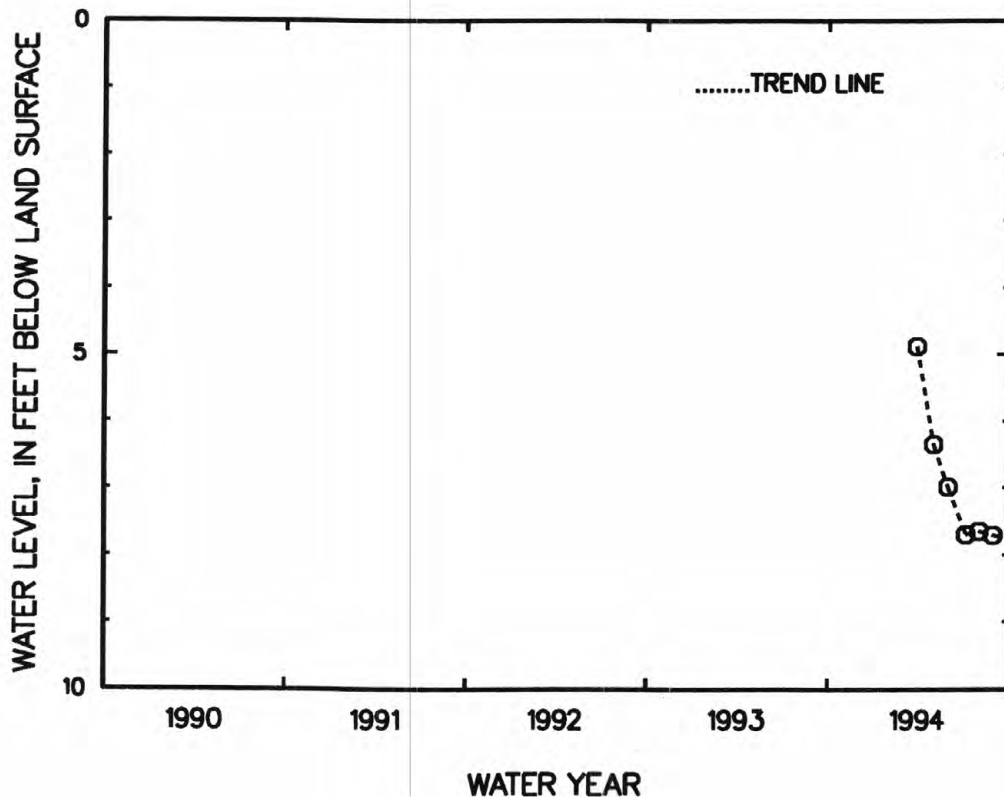
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.88 ft below land-surface datum, Mar. 29, 1994; lowest measured, 7.71 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	4.88	MAY 02	6.35	MAY 31	6.99	JUL 06	7.70	AUG 01	7.65	AUG 29	7.71

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 4.88 MAR 29, 1994      LOWEST 7.71 AUG 29, 1994





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381729077021001. Local number, 54Q 75.

LOCATION.--Lat 38°17'29", long 77°02'10", Hydrologic Unit 02070011, along fence line 0.6 mi southeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 20.7 ft, 30.7 to 33.2 ft, depth 33.2 ft, screened 20.7 to 30.7 ft.

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

DATUM.--Elevation of land-surface datum is 23.11 ft above sea level. Measuring point: Top of casing, 2.06 ft above land-surface datum.

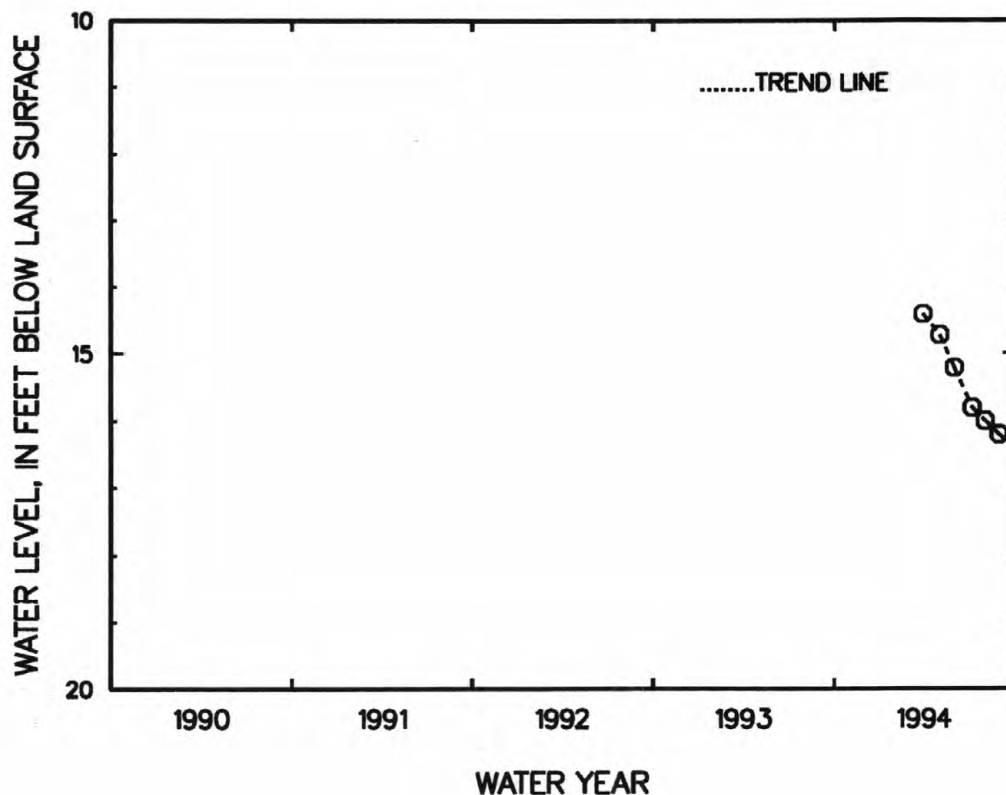
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.41 ft below land-surface datum, Mar. 29, 1994; lowest measured, 16.20 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	14.41	MAY 02	14.72	MAY 31	15.21	JUL 06	15.81	AUG 01	16.00	AUG 29	16.20

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 14.41 MAR 29, 1994      LOWEST 16.20 AUG 29, 1994



## GROUND-WATER LEVELS

231

## KING GEORGE COUNTY

381734077014501. Local number, 54Q 76.

LOCATION.--Lat 38°17'34", long 77°01'45", Hydrologic Unit 02070011, along fence line 1.0 mi southeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.1 ft, 19.1 to 19.6 ft, depth 19.6 ft, screened 9.1 to 19.1 ft.

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

DATUM.--Elevation of land-surface datum is 22.20 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

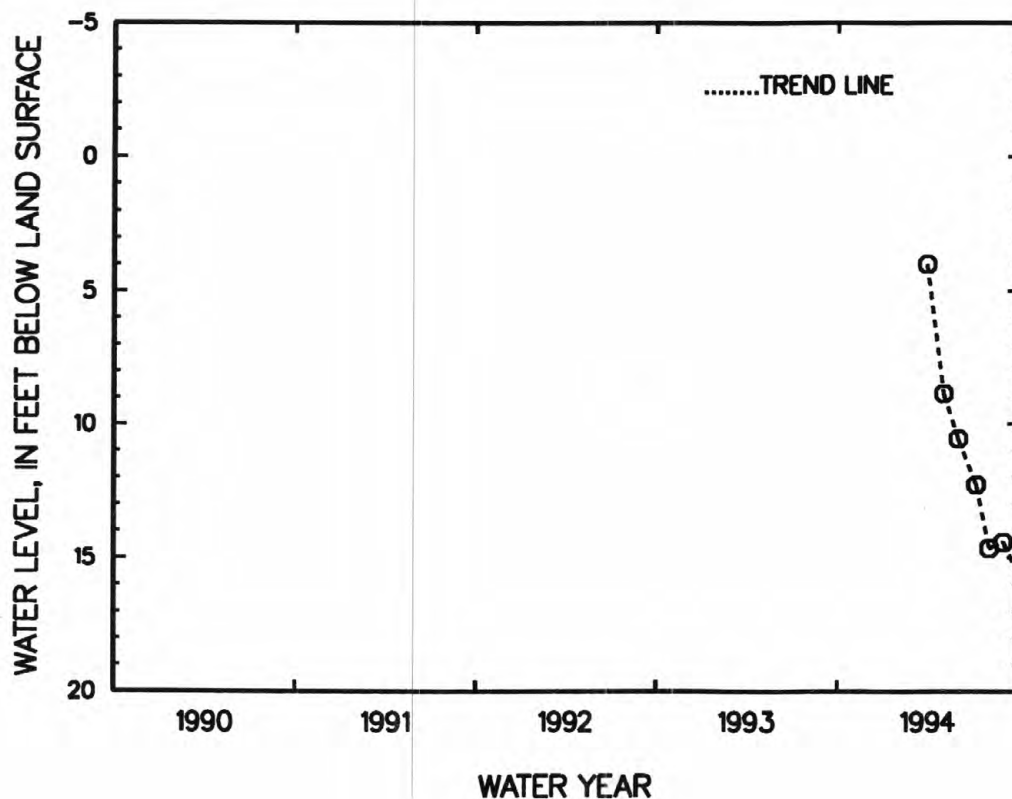
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.00 ft below land-surface datum, Mar. 29, 1994; lowest measured, 14.67 ft below land-surface datum, Aug. 1, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	4.00	MAY 02	8.86	MAY 31	10.57	JUL 06	12.31	AUG 01	14.67	AUG 29	14.44

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 4.00 MAR 29, 1994      LOWEST 14.67 AUG 01, 1994



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381236077013801. Local number, 54Q 77.

LOCATION.--Lat 38°17'36", long 77°01'38", Hydrologic Unit 02070011, along fence line 1.1 mi southeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 14.7 ft, 24.7 to 25.2 ft, depth 25.2 ft, screened 14.7 to 24.7 ft.

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

DATUM.--Elevation of land-surface datum is 21.73 ft above sea level. Measuring point: Top of casing, 2.12 ft above land-surface datum.

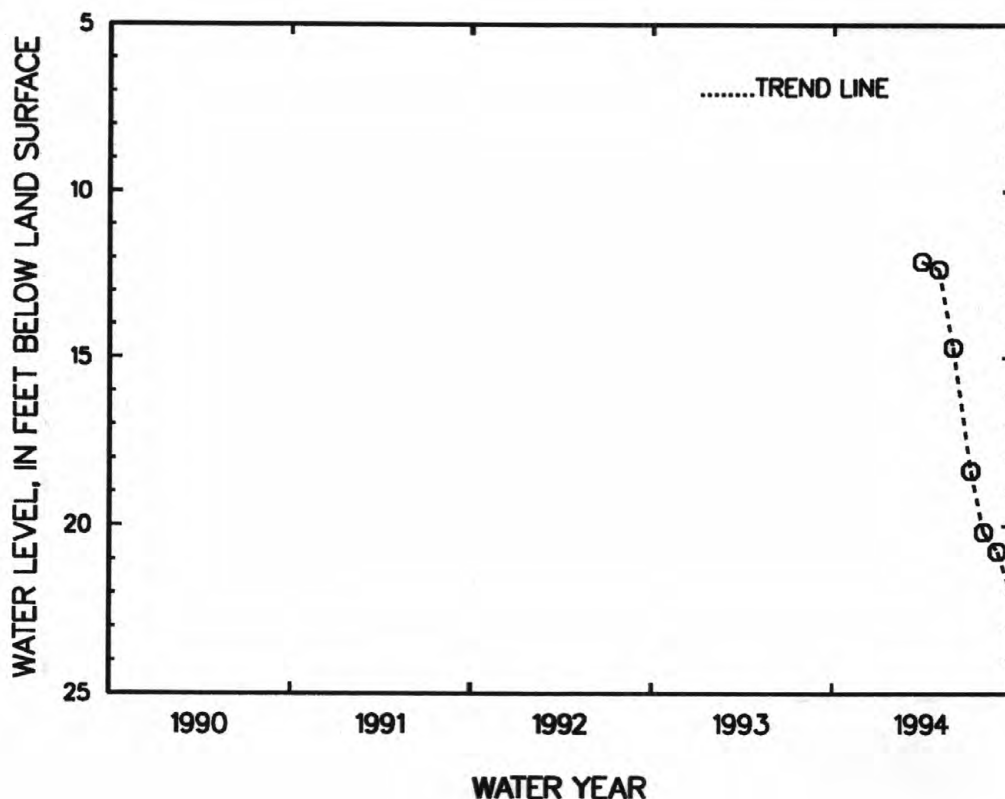
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.10 ft below land-surface datum, Mar. 29, 1994; lowest measured, 20.76 ft below land-surface datum, Aug. 29, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	12.10	MAY 02	12.33	MAY 31	14.69	JUL 06	18.35	AUG 01	20.18	AUG 29	20.76

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 12.10 MAR 29, 1994      LOWEST 20.76 AUG 29, 1994



## GROUND-WATER LEVELS

233

## KING GEORGE COUNTY

381812077015201. Local number, 54Q 78.

LOCATION.--Lat 38°18'12", long 77°01'52", Hydrologic Unit 02070011, at intersection of two unnamed roads, 1.1 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 7.5 ft, 17.5 to 20.0 ft, depth 20.0 ft, screened 7.5 to 17.5 ft.

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

DATUM.--Elevation of land-surface datum is 16.33 ft above sea level. Measuring point: Top of casing, 0.11 ft below land-surface datum.

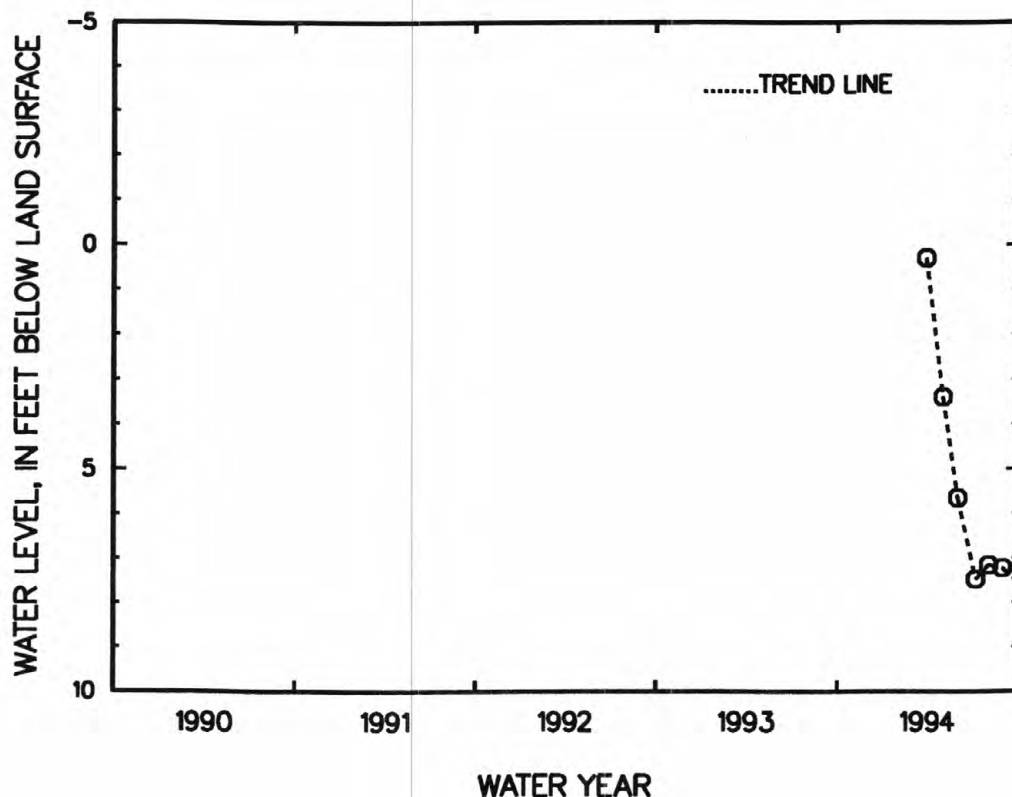
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.30 ft below land-surface datum, Mar. 29, 1994; lowest measured, 7.48 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	0.30	MAY 02	3.40	MAY 31	5.65	JUL 06	7.48	AUG 01	7.16	AUG 29	7.24

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST   0.30   MAR 29, 1994      LOWEST   7.48   JUL 06, 1994



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381825077021101. Local number, 54Q 79.

LOCATION.--Lat 38°18'25", long 77°02'11", Hydrologic Unit 02070011, 1.1 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.1 ft, 14.1 to 16.6 ft, depth 16.6 ft, screened 9.1 to 14.1 ft.

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

DATUM.--Elevation of land-surface datum is 11.43 ft above sea level. Measuring point: Top of casing, 0.10 ft above land-surface datum.

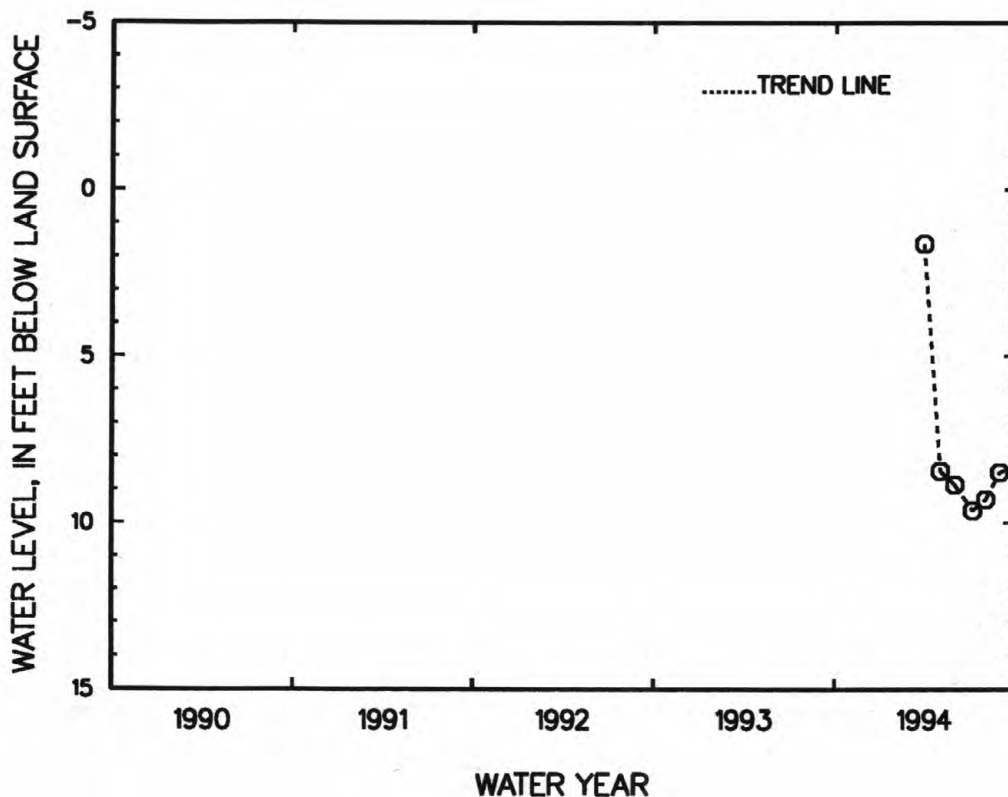
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.62 ft below land-surface datum, Mar. 29, 1994; lowest measured, 9.63 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	1.62	MAY 02	8.45	MAY 31	8.86	JUL 06	9.63	AUG 01	9.30	AUG 29	8.49

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST   1.62   MAR 29, 1994      LOWEST   9.63   JUL 06, 1994



## GROUND-WATER LEVELS

235

## KING GEORGE COUNTY

381817077023101. Local number, 54Q 80.

LOCATION.--Lat 38°18'17", long 77°02'31", Hydrologic Unit 02070011, 0.9 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 7.2 ft, 12.2 to 14.7 ft, depth 14.7 ft, screened 7.2 to 12.2 ft.

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

DATUM.--Elevation of land-surface datum is 15.20 ft above sea level. Measuring point: Top of casing, 0.05 ft below land-surface datum.

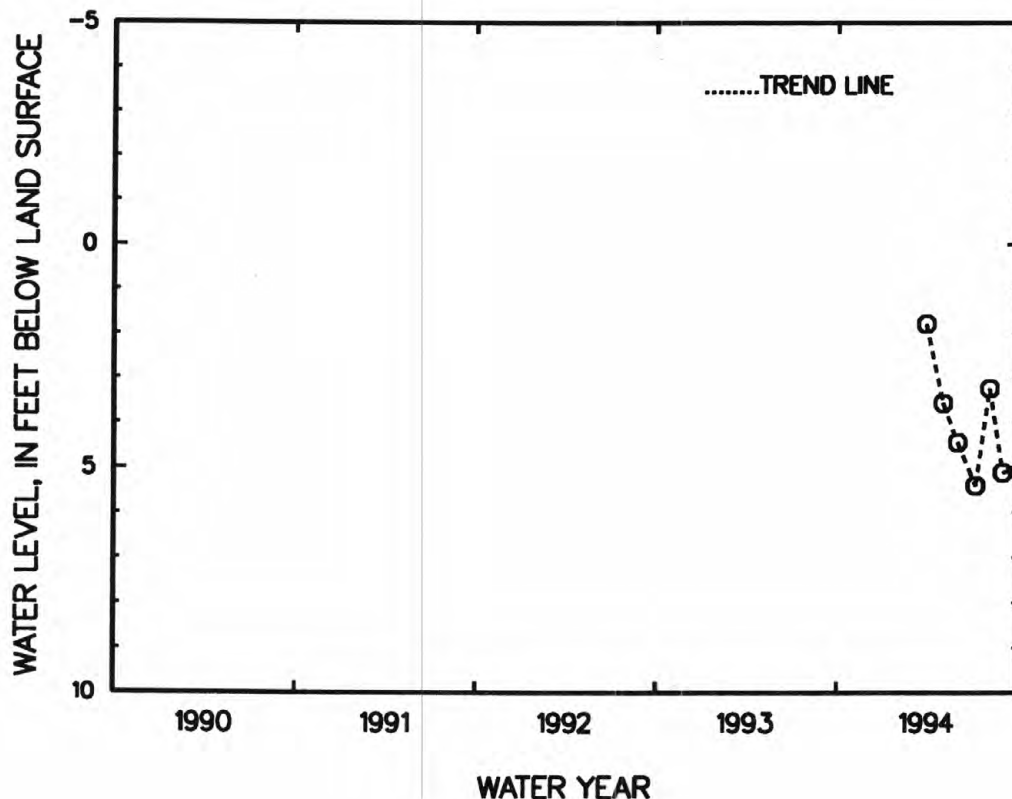
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.79 ft below land-surface datum, Mar. 29, 1994; lowest measured, 5.41 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	1.79	MAY 02	3.58	MAY 31	4.45	JUL 06	5.41	AUG 03	3.25	AUG 29	5.12

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 1.79 MAR 29, 1994      LOWEST 5.41 JUL 06, 1994





## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381820077024501. Local number, 54Q 81.

LOCATION.--Lat 38°18'20", long 77°02'45", Hydrologic Unit 02070011, 0.9 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.7 ft, 9.7 to 12.2 ft, depth 12.2 ft, screened 4.7 to 9.7 ft.

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

DATUM.--Elevation of land-surface datum is 13.21 ft above sea level. Measuring point: Top of casing, 0.31 ft below land-surface datum.

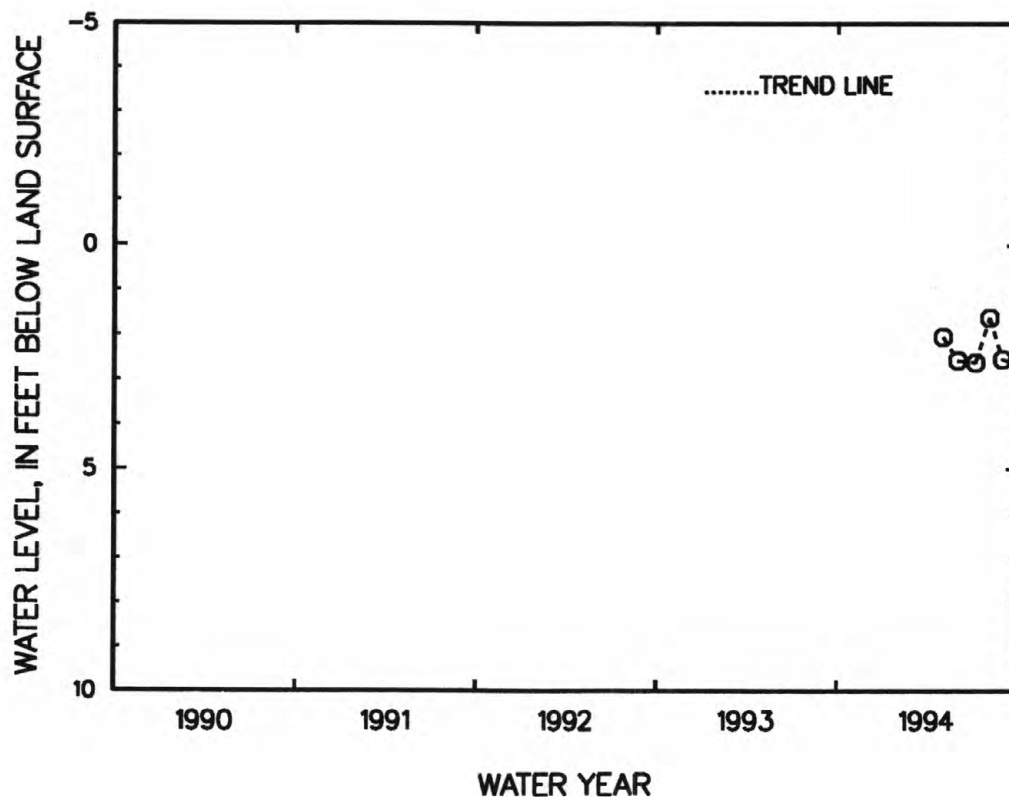
PERIOD OF RECORD.--May to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.61 ft below land-surface datum, Aug. 3, 1994; lowest measured, 2.61 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MAY TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 02	2.04	MAY 31	2.56	JUL 06	2.61	AUG 03	1.61	AUG 29	2.54

PERIOD MAY TO SEPTEMBER 1994      HIGHEST    1.61    AUG 03, 1994      LOWEST    2.61    JUL 06, 1994



## GROUND-WATER LEVELS

237

## KING GEORGE COUNTY

381830077024501. Local number, 54Q 82.

LOCATION.--Lat 38°18'30", long 77°02'45", Hydrologic Unit 02070011, 1.1 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.8 ft, 19.8 to 22.3 ft, depth 22.3 ft, screened 4.8 to 19.8 ft.

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

DATUM.--Elevation of land-surface datum is 11.81 ft above sea level. Measuring point: Top of casing, 0.05 ft below land-surface datum.

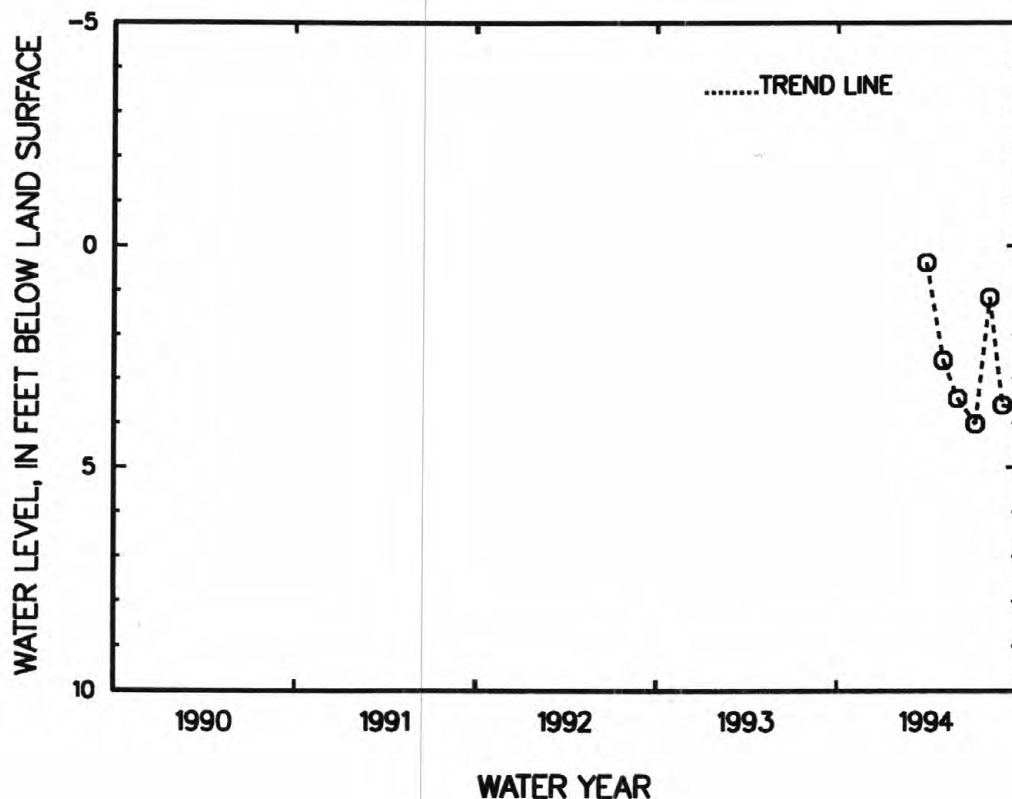
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.38 ft below land-surface datum, Mar. 29, 1994; lowest measured, 4.03 ft below land-surface datum, July 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 29	0.38	MAY 02	2.59	MAY 31	3.45	JUL 06	4.03	AUG 03	1.17	AUG 29	3.61

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST 0.38 MAR 29, 1994      LOWEST 4.03 JUL 06, 1994



## GROUND-WATER LEVELS

## KING GEORGE COUNTY

381804077022001. Local number, 54Q 86.

LOCATION.--Lat 38°18'04", long 77°02'20", Hydrologic Unit 02070011, 0.7 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.5 ft, 14.5 to 17.0 ft, depth 17.0 ft, screened 4.5 to 14.5 ft.

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

DATUM.--Elevation of land-surface datum is 17.30 ft above sea level. Measuring point: Top of casing, 0.4 ft below land-surface datum.

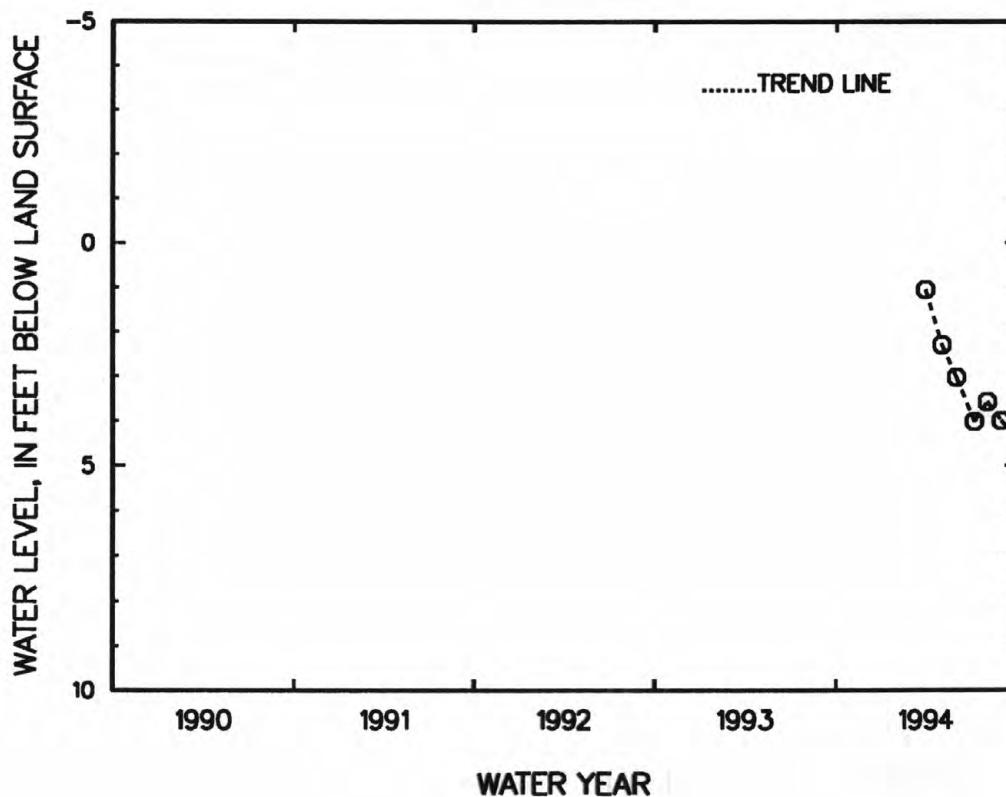
PERIOD OF RECORD.--March to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.06 ft below land-surface datum, Mar. 30, 1994; lowest measured, 4.02 ft below land-surface datum, July 6, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 30	1.06	MAY 02	2.30	MAY 31	3.03	JUL 06	4.02	AUG 01	3.58	AUG 29	4.00

PERIOD MARCH TO SEPTEMBER 1994      HIGHEST    1.06    MAR 30, 1994      LOWEST    4.02    JUL 06, 1994



## GROUND-WATER LEVELS

239

## KING GEORGE COUNTY

382341077032401. Local number, 54R 2.

LOCATION.--Lat 38°23'41", long 77°03'24", Hydrologic Unit 02070011, 50 ft southeast of steep bank of the Potomac River, 150 ft west of State Highway 687, 1.5 mi west of the intersection of U.S. Highway 301 and State Highway 614, 1.9 mi north of the intersection of State Highways 629 and 687, and near Dahlgren.  
Owner: E. V. Bruchez.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 806 ft, depth 806 ft, screened 781 to 801 ft.

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

DATUM.--Elevation of land-surface datum is 70 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

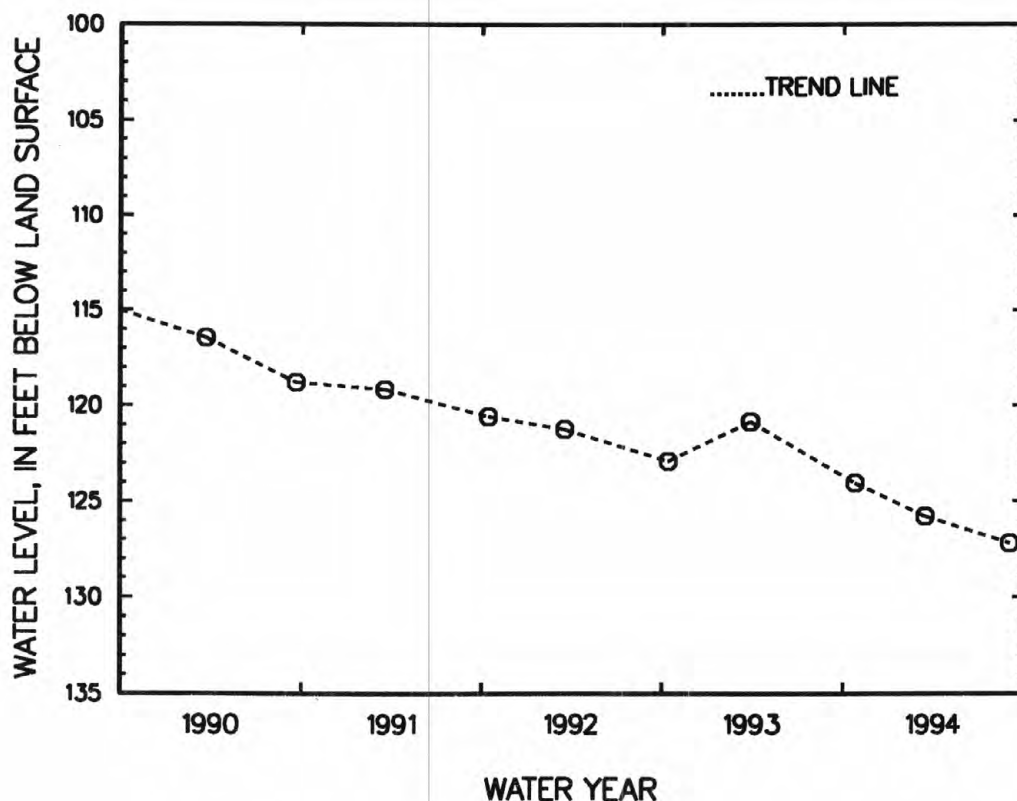
PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 70.00 ft below land-surface datum, Oct. 15, 1969; lowest measured, 127.20 ft below land-surface datum, Aug. 31, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	124.06	MAR 15	125.79	AUG 31	127.20

WATER YEAR 1994	HIGHEST	124.06	OCT 26, 1993	LOWEST	127.20	AUG 31, 1994
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## GROUND-WATER LEVELS

## KING WILLIAM COUNTY

373226076481201. Local number, 56J 2.

LOCATION.--Lat 37°32'26", long 76°48'12", Hydrologic Unit 02080106, 0.1 mi west of State Highway 30, 0.3 mi north of State Highway 33, and in West Point. Owner: Chesapeake Corporation.

AQUIFER.--Brightseat-upper and middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused withdrawal water well, diameter 18 in. to 300 ft, diameter 8 in. from 300 to 600 ft, depth 600 ft, screened 390 to 400 ft, 550 to 570 ft, 580 to 600 ft.

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

DATUM.--Elevation of land-surface datum is 25 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

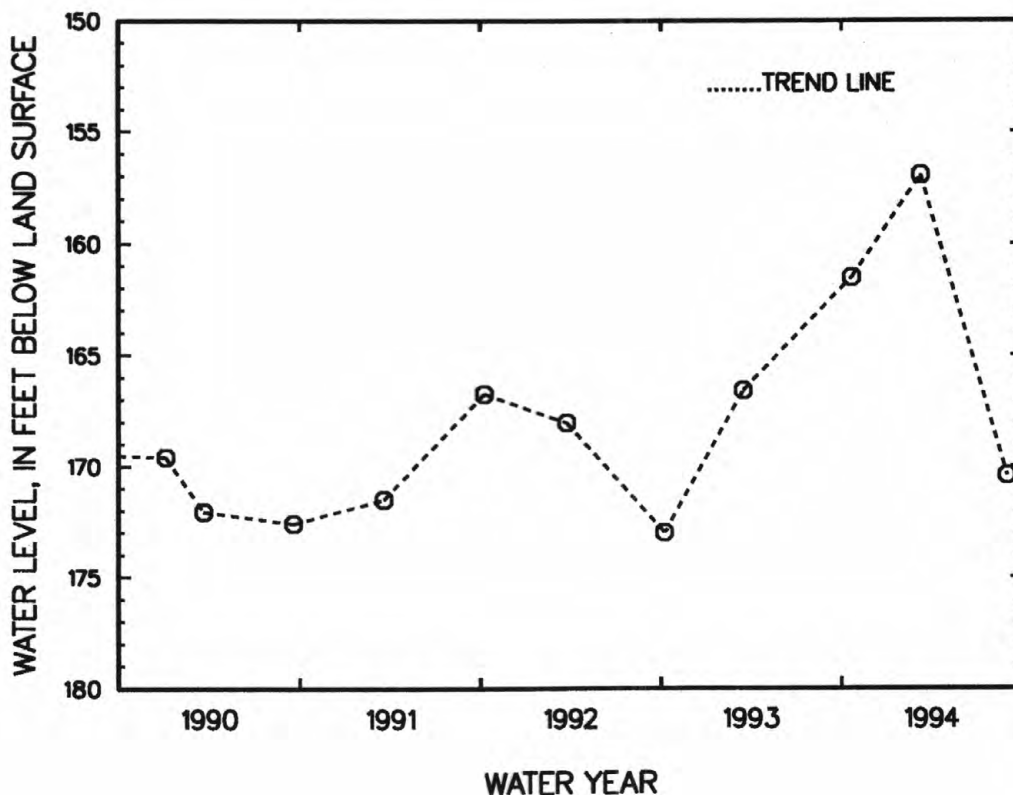
PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 141.48 ft below land-surface datum, Feb. 15, 1983; lowest measured, 174.36 ft below land-surface datum, May 25, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	161.51	MAR 10	156.93	AUG 30	170.41

WATER YEAR 1994	HIGHEST	156.93	MAR 10, 1994	LOWEST	170.41	AUG 30, 1994
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## GROUND-WATER LEVELS

241

## KING WILLIAM COUNTY

373459076510201. Local number, 56J 10.

LOCATION.--Lat 37°34'59", long 76°51'02", Hydrologic Unit 02080105, 100 ft northeast of State Highway 30 at the Virginia State Police office, 4.2 mi west of the intersection of State Highways 30 and 33 in West Point. Owner: Virginia Department of State Police.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 437 ft, screened 417 to 437 ft.

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

DATUM.--Elevation of land-surface datum is 101 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft below land-surface datum.

REMARKS.--Water level affected by regional drawdown.

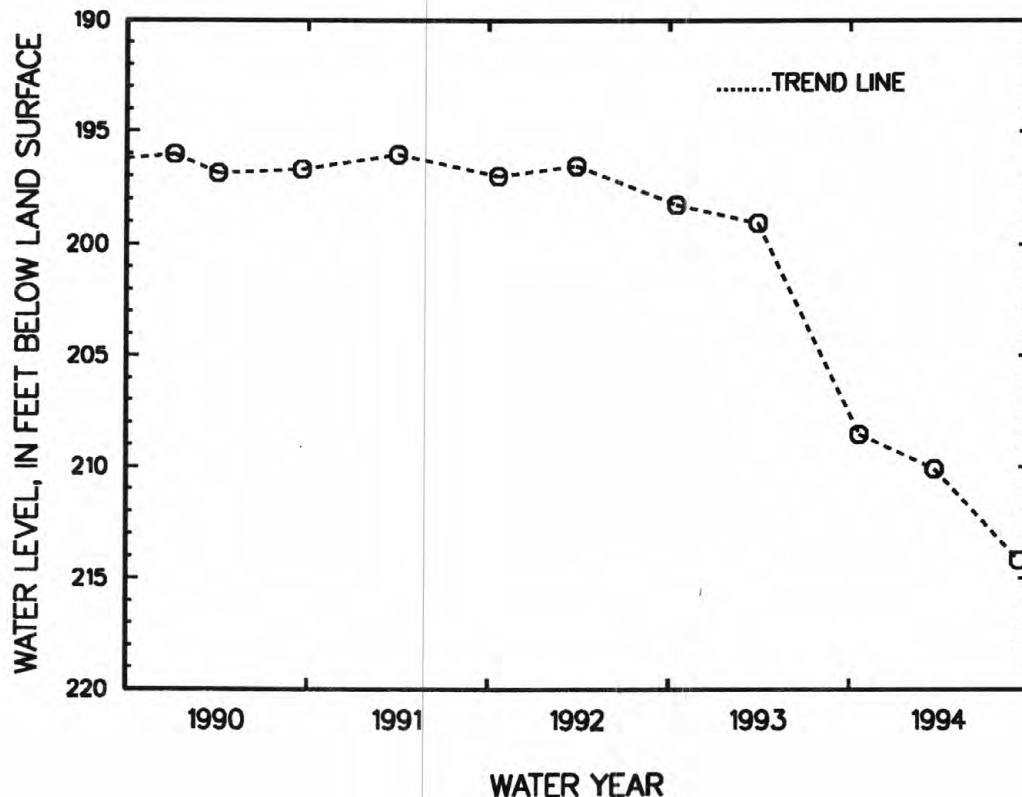
PERIOD OF RECORD.--December 1972, December 1974, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 176.00 ft below land-surface datum, Dec. 8, 1972; lowest measured, 214.20 ft below land-surface datum, Sept. 6, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	208.54	MAR 21	210.11	SEP 06	214.20

WATER YEAR 1994      HIGHEST 208.54 OCT 21, 1993      LOWEST 214.20 SEP 06, 1994





## GROUND-WATER LEVELS

## KING WILLIAM COUNTY

373206076481201. Local number, 56J 18.

LOCATION.--Lat 37°32'06", long 76°48'12", Hydrologic Unit 02080106, near State Highway 33 at Chesapeake Corporation, in brick pump house at northeast corner of 13th and A Streets in West Point. Owner: Chesapeake Corporation.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused withdrawal water well, diameter 18 in. to 180 ft, diameter 8 in. from 165 to 446 ft, depth 446 ft, screened 210 to 240 ft, 380 to 390 ft, 405 to 445 ft.

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

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 2.45 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage.

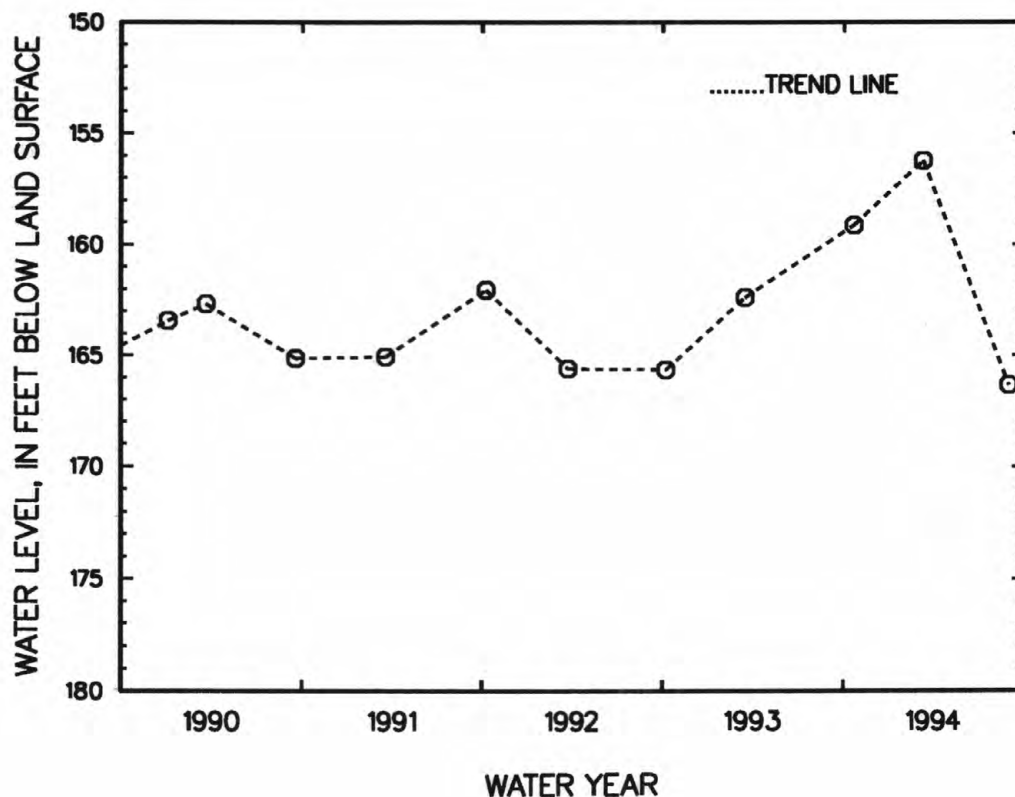
PERIOD OF RECORD.--March 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.68 ft below land-surface datum, Dec. 29, 1978; lowest measured, 173.08 ft below land-surface datum, Feb. 23, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	159.14	MAR 10	156.23	AUG 30	166.33

WATER YEAR 1994	HIGHEST	156.23	MAR 10, 1994	LOWEST	166.33	AUG 30, 1994
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## GROUND-WATER LEVELS

243

## LANCASTER COUNTY

374249076230101. Local number, 59K 1 SOW 015.

LOCATION.--Lat 37°42'49", long 76°23'01", Hydrologic Unit 02080104, at Lancaster County High School in Kilmarnock.  
Owner: Lancaster County Public Schools.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in. to 163 ft, diameter 2 in. from 163 to 716 ft, depth 716 ft, screened 706 to 716 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1976, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1976, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 85 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum prior to July 29, 1991; 0.75 ft above land-surface datum thereafter.

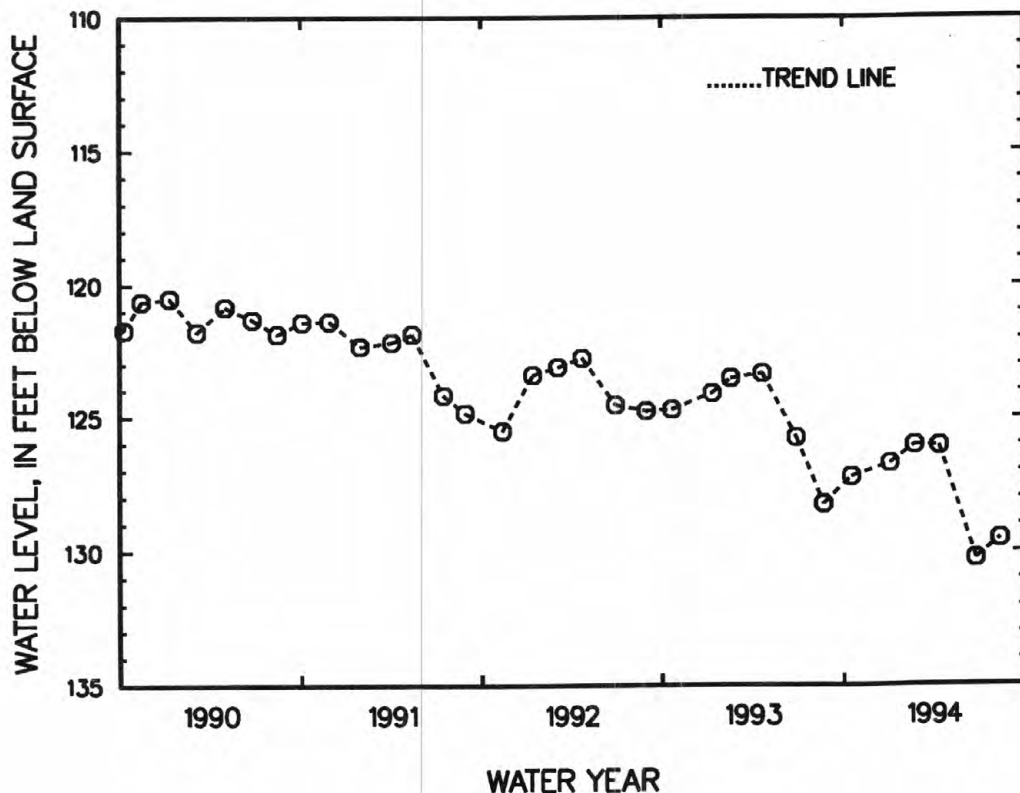
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--October 1967 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 95.89 ft below land-surface datum, Feb. 20, 1968; lowest measured, 130.28 ft below land-surface datum, June 24, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	127.22	JAN 03	126.73	FEB 22	126.04	APR 12	126.08	JUN 24	130.28	AUG 11	129.54
WATER YEAR 1994		HIGHEST	126.04	FEB 22, 1994	LOWEST		130.28	JUN 24, 1994			



## GROUND-WATER LEVELS

## LANCASTER COUNTY

374142076272701. Local number, 59K 9.

LOCATION.--Lat 37°41'42", long 76°27'27", Hydrologic Unit 02080104, on the south bank of Moran Creek, 1,000 ft northwest of the intersection of State Highway 630 and a private dirt drive, 0.8 mi west of Wesley Church, 3.0 mi north of Weems, 4.0 mi west of Kilmarnock and the intersection of State Highways 629 and 630, and near Weems. Owner: Fred Hansen.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 147 ft, diameter 2 in. from 147 to 585 ft, depth 585 ft, screened 565 to 580 ft.

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

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

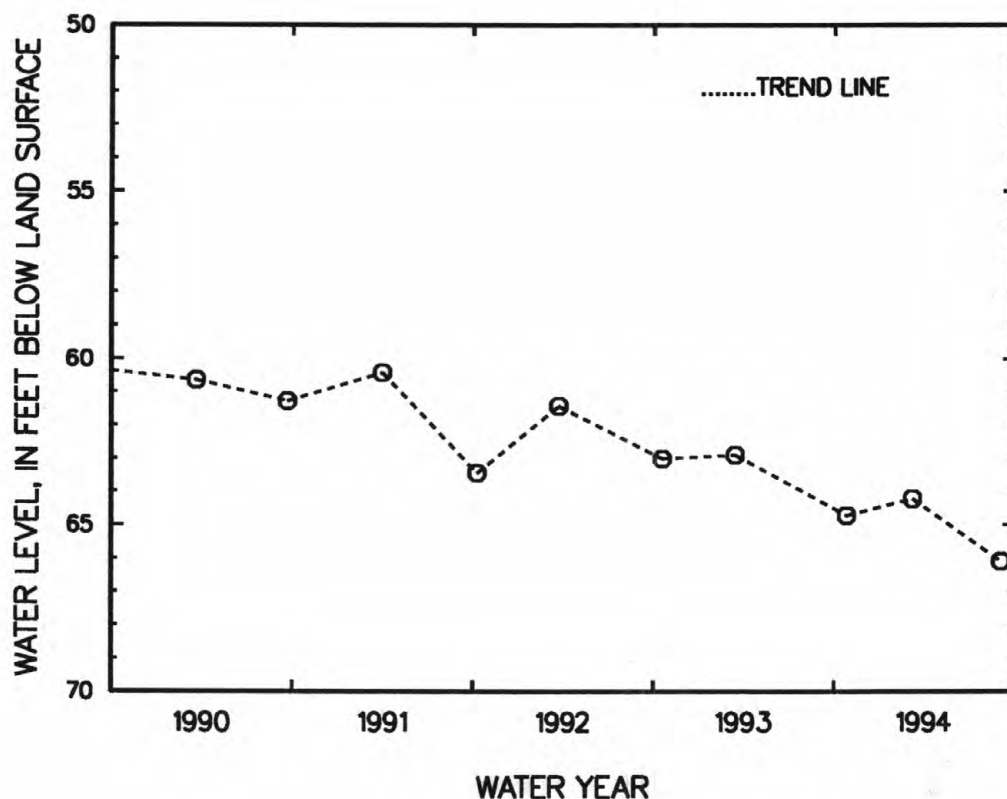
PERIOD OF RECORD.--September 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.00 ft below land-surface datum, Sept. 16, 1969; lowest measured, 66.09 ft below land-surface datum, Sept. 2, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	64.72	MAR 09	64.22	SEP 02	66.09

WATER YEAR 1994      HIGHEST 64.22 MAR 09, 1994      LOWEST 66.09 SEP 02, 1994



## GROUND-WATER LEVELS

245

## LANCASTER COUNTY

374941076254501. Local number, 59L 3.

LOCATION.--Lat 37°49'41", long 76°25'45", Hydrologic Unit 02080104, 100 ft southwest of State Highway 615 at Browns Store and 450 ft southeast of the intersection of State Highways 610 and 615. Owner: Alpha Water Company (Sydnor Hydrodynamics).

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 802 ft, depth 802 ft, screened 770 to 800 ft.

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

DATUM.--Elevation of land-surface datum is 101 ft above sea level, from topographic map. Measuring point: Top of 0.5 in. copper nipple, 1.35 ft above land-surface datum. Prior to Feb. 10, 1981, measuring point was top of casing, 0.9 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

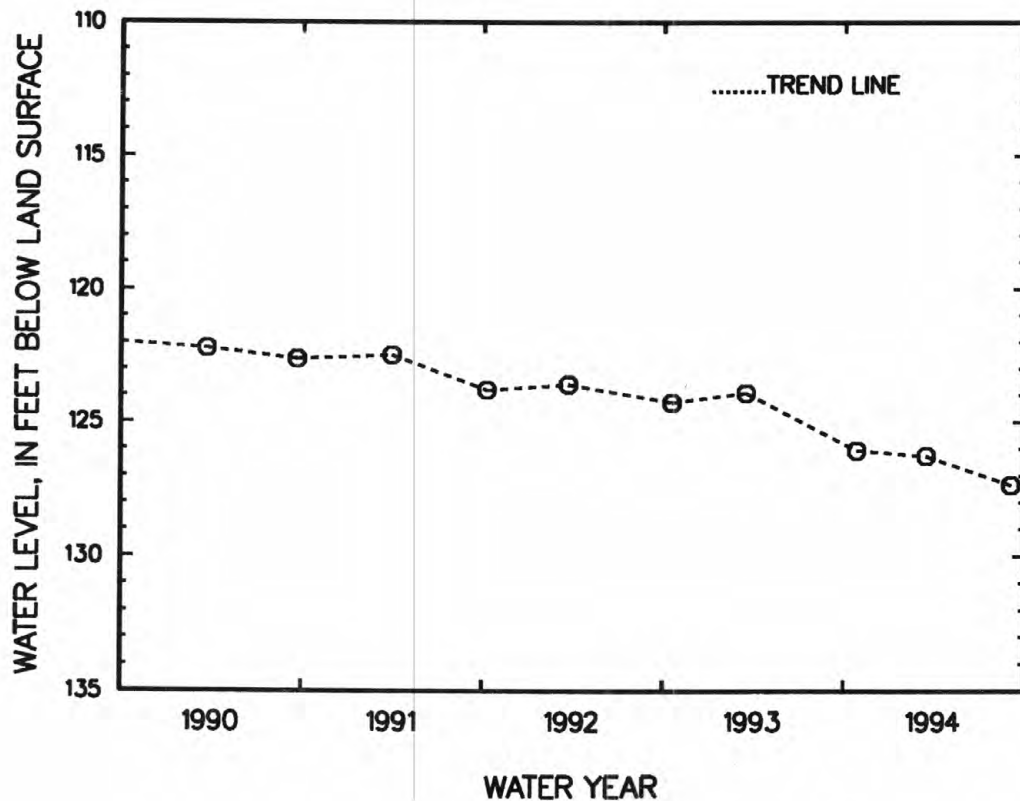
PERIOD OF RECORD.--April 1966 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 97.00 ft below land-surface datum, Apr. 26, 1966; lowest measured, 127.35 ft below land-surface datum, Sept. 2, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	126.06	MAR 16	126.27	SEP 02	127.35

WATER YEAR 1994      HIGHEST 126.06 OCT 27, 1993      LOWEST 127.35 SEP 02, 1994



## GROUND-WATER LEVELS

## LOUDOUN COUNTY

391542077423801. Local number, 49Y 1 SOW 022.

LOCATION.--Lat 39°15'42", long 77°42'38", Hydrologic Unit 02070008, 4.2 mi southeast of Harpers Ferry. Owner: American Telephone and Telegraph Company.

AQUIFER.--Bedrock of Precambrian or Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6.5 in., depth 516 ft, cased to 45 ft, open hole 45 to 516 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 1,100 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

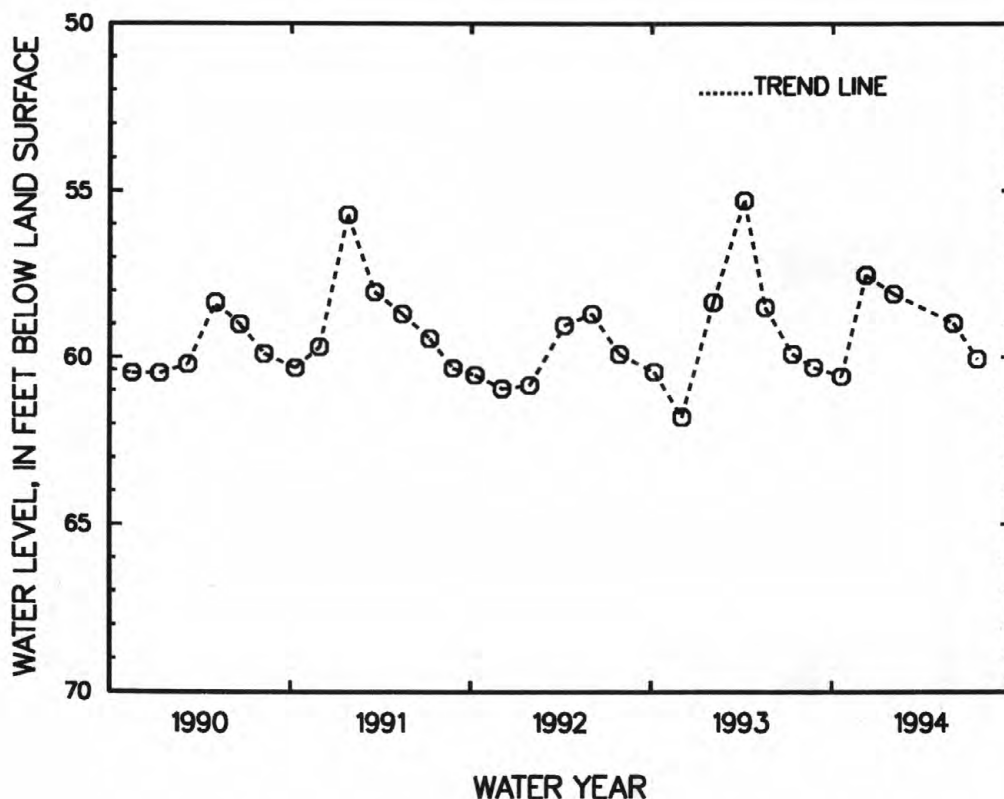
PERIOD OF RECORD.--August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 48.00 ft below land-surface datum, June 22, 1972; lowest measured, 61.80 ft below land-surface datum, Dec. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	60.57	DEC 08	57.53	FEB 02	58.10	JUN 02	58.98	JUL 20	60.05

WATER YEAR 1994	HIGHEST	57.53	DEC 08, 1993	LOWEST	60.57	OCT 20, 1993
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## GROUND-WATER LEVELS

247

## LOUDOUN COUNTY

390623077314201. Local number, 50W 4C.

LOCATION.--Lat 39°06'23", long 77°31'42", Hydrologic Unit 02070008, under water tower 500 ft east of State Highway 7, 0.75 mi east of Leesburg. Owner: Town of Leesburg.

AQUIFER.--Slightly metamorphosed Balls Bluff Formation of Late Triassic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 535 ft, cased to 6 ft, open hole 6 to 535 ft.

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

DATUM.--Elevation of land-surface datum is 400 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

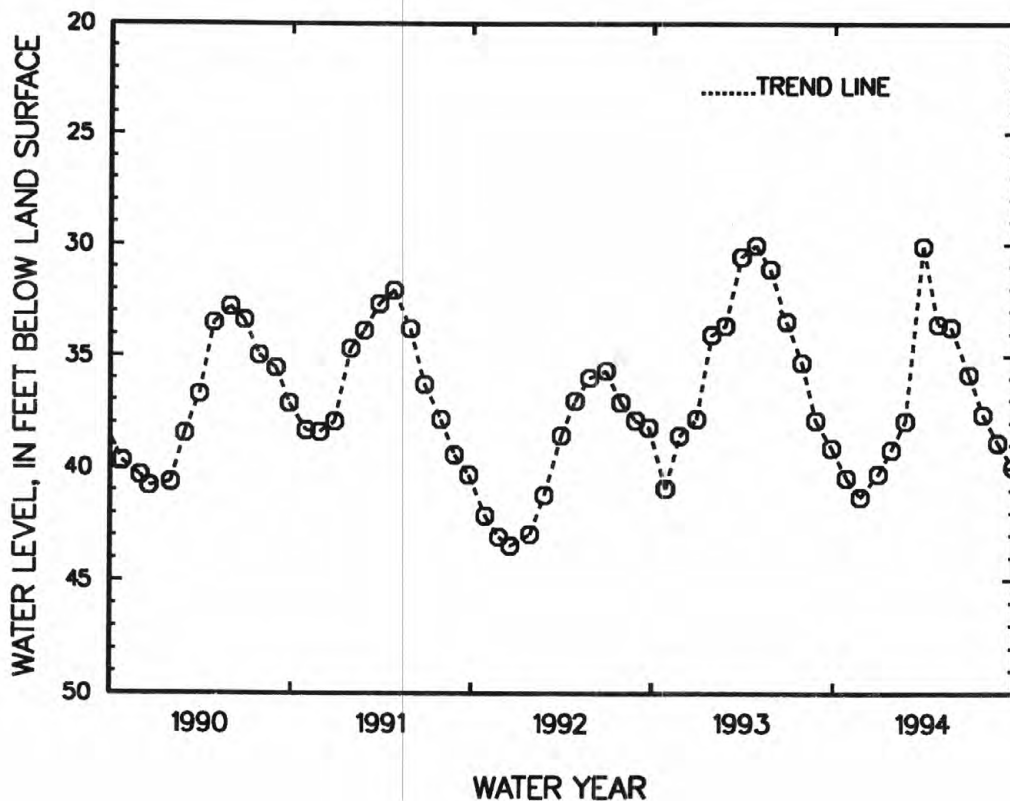
PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.04 ft below land-surface datum, Apr. 27, 1993; lowest measured, 49.06 ft below land-surface datum, Nov. 27, 1985.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	40.43	DEC 30	40.26	FEB 22	37.91	APR 28	33.57	JUN 29	35.82	AUG 26	38.89
NOV 24	41.30	JAN 25	39.20	MAR 29	30.09	MAY 24	33.68	JUL 27	37.63	SEP 26	39.97

WATER YEAR 1994	HIGHEST	30.09	MAR 29, 1994	LOWEST	41.30	NOV 24, 1993
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## GROUND-WATER LEVELS

## LOUISA COUNTY

380217078133701. Local number, 45N 1.

LOCATION.--Lat 38°02'17", long 78°13'43", Hydrologic Unit 02080106, off State Highway 640 on Tyler property, 0.9 mi southeast of Thelma, and 3 mi southwest of Boswells Tavern. Owner: Tyler.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 56 ft, length of casing unknown.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 500 ft above sea level, from topographic map. Measuring point: Top of casing, 1.95 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction.

PERIOD OF RECORD.--July 1952 to current year.

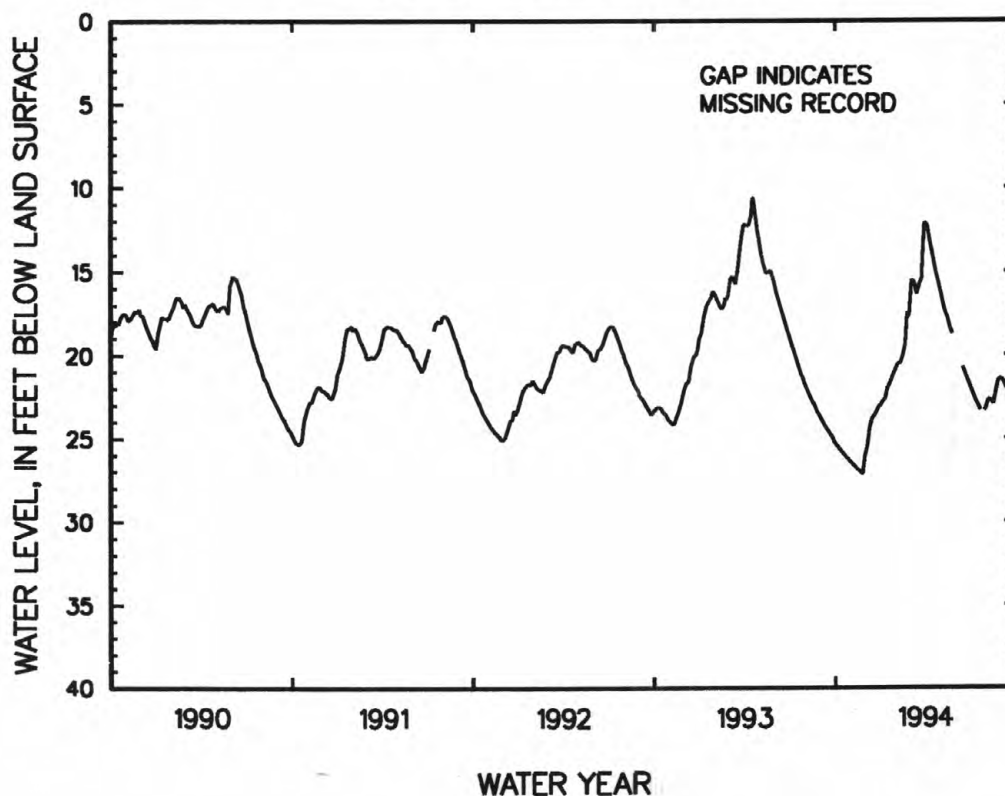
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.63 ft below land-surface datum, Apr. 18, 1993; lowest measured, 35.17 ft below land-surface datum, Dec. 2, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.45	26.52	25.50	22.80	20.52	15.51	12.27	16.69	---	22.27	22.67	21.64
10	25.63	26.70	24.35	22.64	20.49	15.65	13.17	17.34	---	22.68	22.69	21.98
15	25.83	26.86	23.80	22.00	20.05	16.37	13.86	17.73	20.73	22.99	22.95	22.19
20	26.02	27.00	23.60	21.70	19.34	15.86	14.73	18.32	21.11	23.30	22.21	22.60
25	26.20	27.14	23.31	21.30	17.72	15.38	15.36	18.75	21.53	---	21.53	22.61
ECM	26.40	26.11	23.10	20.88	17.59	12.13	16.00	---	21.92	23.20	21.41	21.52

WATER YEAR 1994      HIGHEST INSTANTANEOUS    11.89    APR 01, 1994      LOWEST INSTANTANEOUS    27.18    NOV 27, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

249

## LOUISA COUNTY

380043078111301. Local number, 45N 4.

LOCATION.--Lat 38°00'45", long 78°11'14", Hydrologic Unit 02080106, 0.25 mi east of U.S. Highway 15, 4.1 mi south of Boswells Tavern. Owner: Virginia Department of Corrections.

AQUIFER.--Metamorphosed sedimentary and volcanic rocks of unknown age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 200 ft, cased to 42 ft, open hole 42 to 200 ft.

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

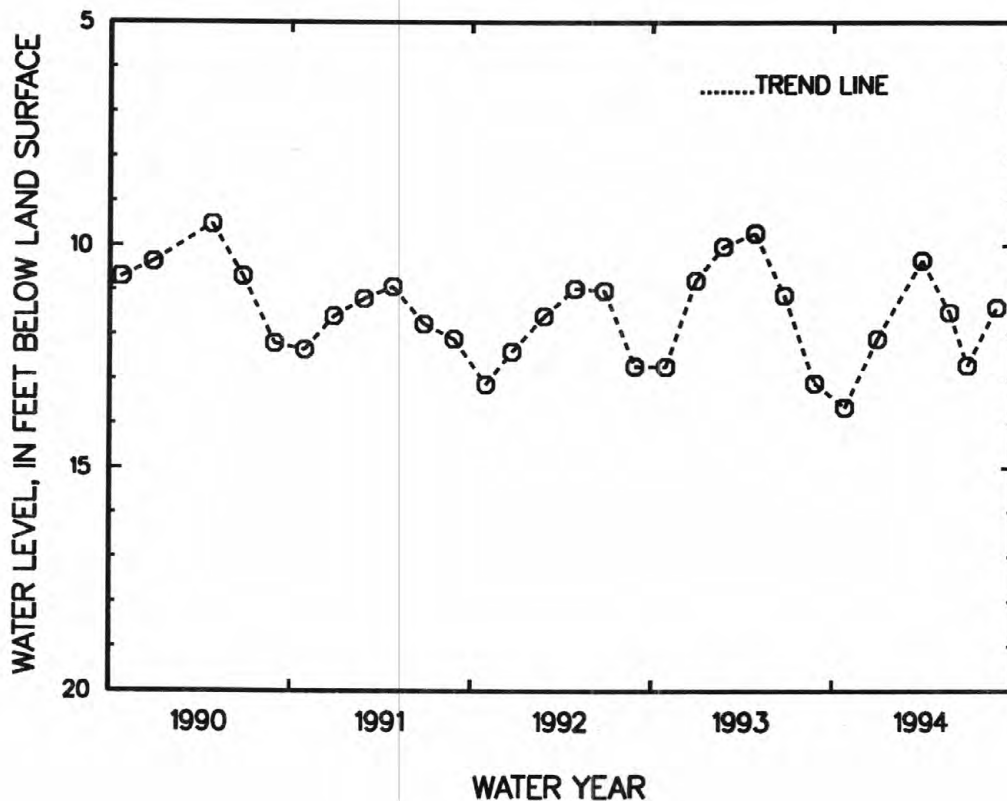
DATUM.--Elevation of land-surface datum is 415 ft above sea level, from topographic map. Measuring point: Top of casing, 2.3 ft above land-surface datum.

PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.40 ft below land-surface datum, Apr. 28, 1980; lowest measured, 14.43 ft below land-surface datum, Aug. 26, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	13.65	DEC 30	12.10	MAR 30	10.33	MAY 24	11.51	JUN 29	12.70	AUG 26	11.40
WATER YEAR 1994		HIGHEST	10.33	MAR 30, 1994		LOWEST	13.65	OCT 26, 1993			



## GROUND-WATER LEVELS

## LOUISA COUNTY

380131078001001. Local number, 46N 1 SOW 056.

LOCATION.--Lat 38°01'31", long 78°00'10", Hydrologic Unit 02080106, 200 ft northeast of intersection of U.S. Highway 33 and State Highway 208 in Louisa. Owner: Town of Louisa.

AQUIFER.--Metamorphosed sedimentary and volcanic rocks of unknown age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 132 ft, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1993, to Oct. 4, 1985, bimonthly measurement with chalked tape. Mar. 31, 1979, to Oct. 4, 1985, occasional measurement with chalked tape. Prior to Mar. 31, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 455 ft above sea level, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

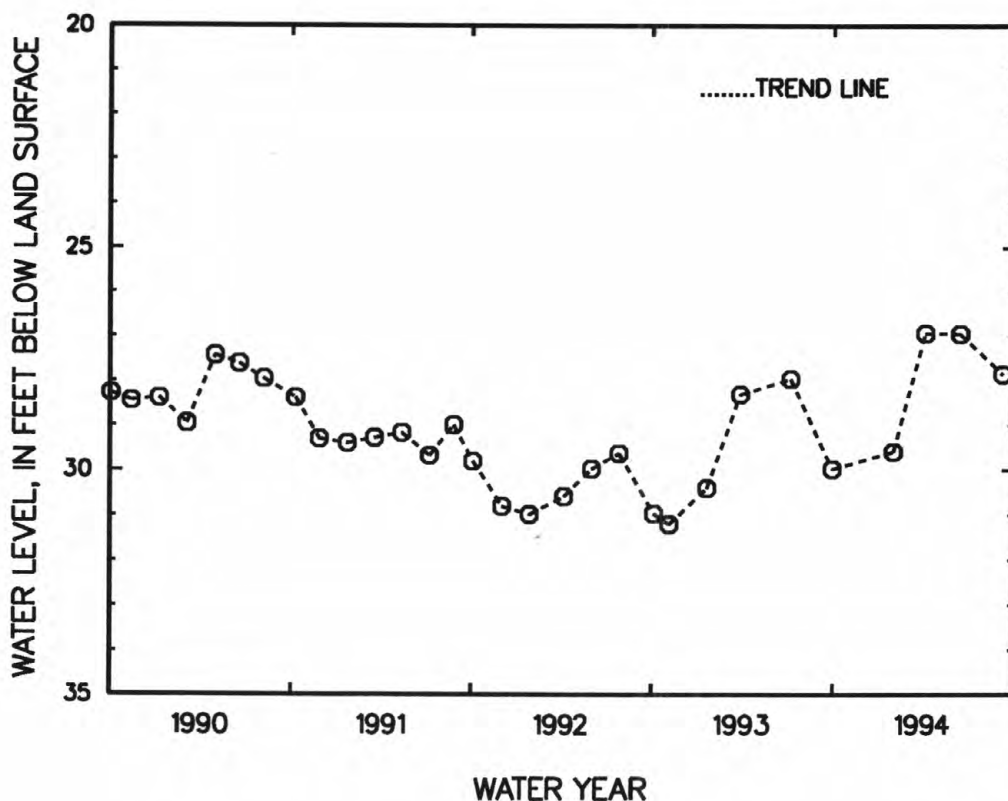
PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 26.27 ft below land-surface datum, May 18, 1973; lowest measured, 34.78 ft below land-surface datum, Dec. 8, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 31	29.58	APR 05	26.93	JUN 14	26.94	SEP 07	27.85

WATER YEAR 1994      HIGHEST    26.93    APR 05, 1994      LOWEST    29.58    JAN 31, 1994



## GROUND-WATER LEVELS

251

## MATHEWS COUNTY

372545076240101. Local number, 59H 1.

LOCATION.--Lat 37°25'45", long 76°24'01", Hydrologic Unit 02080102, 0.5 mi south of the intersection of State Highway 617 and private dirt road at the shore line of Greenmansion Cove at North and 0.7 mi southeast of the intersection of State Highways 14 and 617. Owner: G. T. Abernathy.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled flowing water well, diameter 4 in., depth 568 ft, depth of screen unknown.

INSTRUMENTATION.--Occasional measurement with manometer by USGS personnel.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1950 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

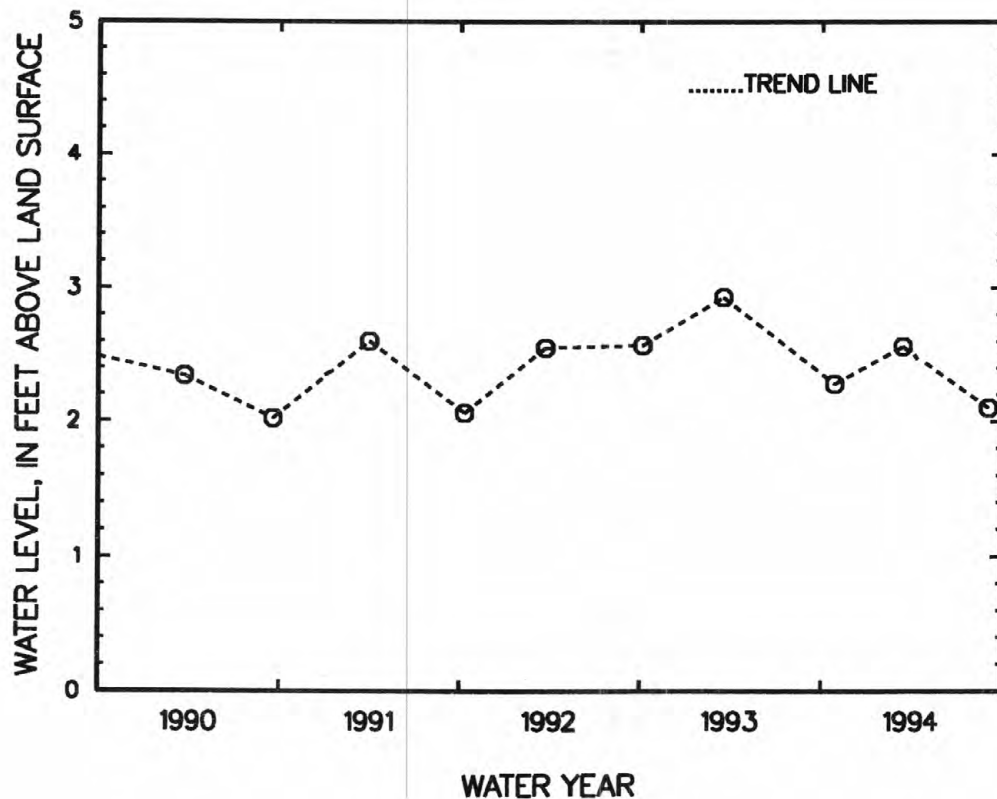
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.70 ft above land-surface datum, Feb. 12, 1980; lowest measured, 1.00 ft above land-surface datum, Jan. 1, 1950.

## WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	2.25	MAR 14	2.56	SEP 02	2.10

WATER YEAR 1994      HIGHEST 2.56 MAR 14, 1994      LOWEST 2.10 SEP 02, 1994

NOTE.--Flowing well; readings are above land-surface datum.



## GROUND-WATER LEVELS

## MECKLENBURG COUNTY

363600078181601. Local number, 44A 1.

LOCATION.--Lat 36°36'00", long 78°18'16", Hydrologic Unit 03010106, 100 ft north of the intersection of State Highways 4 and 678 and 385 ft north of John H. Kerr Dam. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Red Oak Granite of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 76.25 ft, extent of screened interval or open hole unknown.

INSTRUMENTATION.--Digital recorder--60-minute punch. Measurement with chalked tape by USGS personnel Feb. 5, 1992.

DATUM.--Elevation of land-surface datum is 318.25 ft above sea level. Measuring point: Top of casing, 1.15 ft above land-surface datum.

REMARKS.--Water level may be affected by John H. Kerr Reservoir.

PERIOD OF RECORD.--February 1992, June 1992 to October 1993 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.73 ft below land-surface datum, Apr. 21, 1993; lowest measured, 30.41 ft below land-surface datum, Feb. 5, 1992.

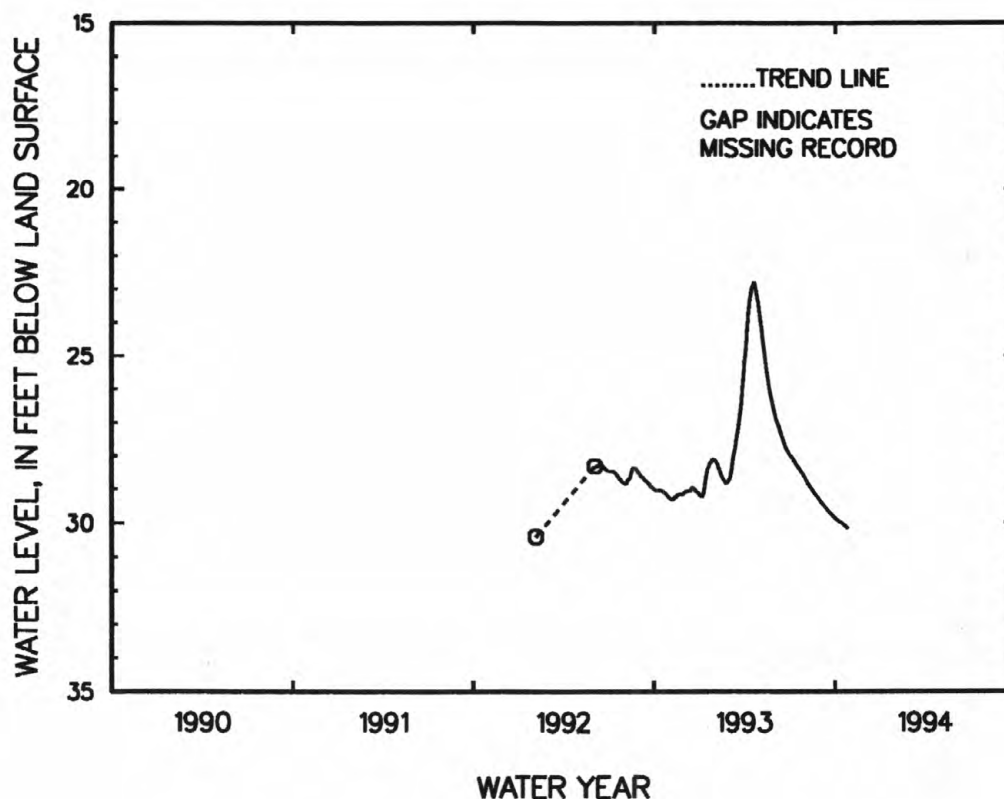
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1993  
LOWEST VALUES

DAY	OCT
5	29.91
10	29.96
15	30.00
20	30.06
25	30.13

PERIOD OCTOBER 1993

HIGHEST 29.84 OCT 01, 1993

LOWEST 30.17 OCT 27, 28, 1993



## MIDDLESEX COUNTY

373809076342501. Local number, 58K 1 SOW 031.

LOCATION.--Lat 37°38'09", long 76°34'25", Hydrologic Unit 02080104, 500 ft southeast of intersection of State Highways 227 and 602 in Urbanna. Owner: Town of Urbanna.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 552 ft, screen depth unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Jan. 25, 1979, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to Jan. 25, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

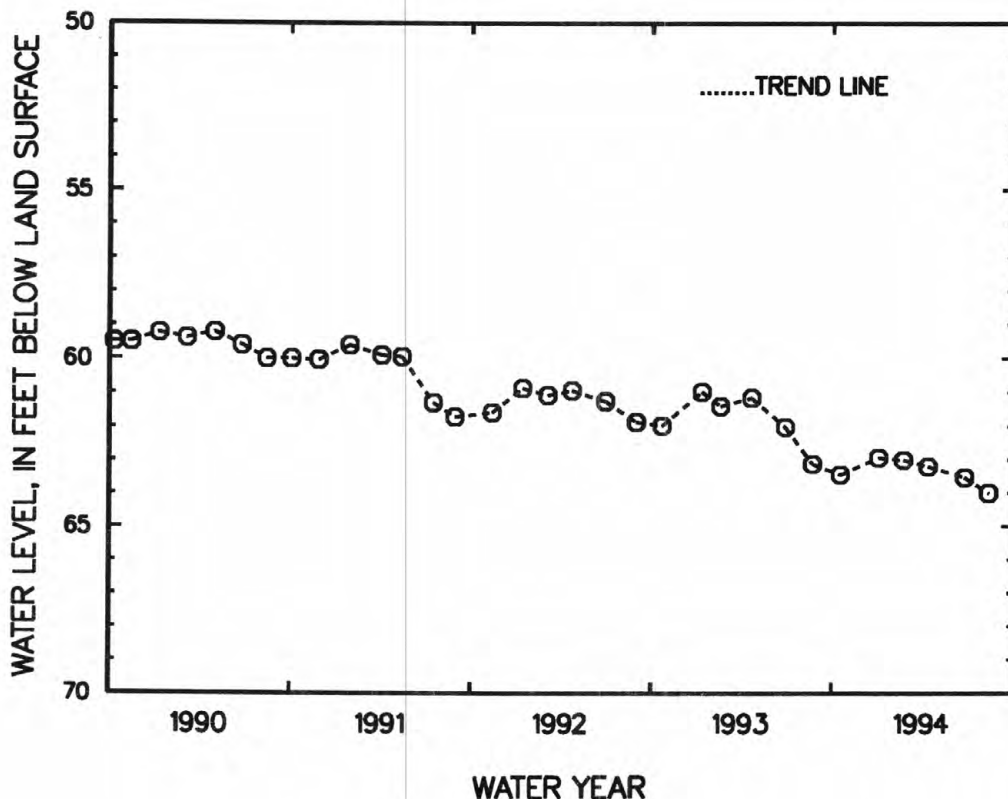
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 44.33 ft below land-surface datum, May 16, 1970; lowest measured, 64.00 ft below land-surface datum, Aug. 11, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	63.45	JAN 03	62.93	FEB 22	63.00	APR 12	63.20	JUN 24	63.53	AUG 11	64.00
WATER YEAR 1994		HIGHEST	62.93	JAN 03, 1994	LOWEST	64.00	AUG 11, 1994				





## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

373802076340201. Local number, 58K 7.

LOCATION.--Lat 37°38'02", long 76°34'02", Hydrologic Unit 02080104, 1.9 mi northwest of the intersection of State Highways 33 and 227 and 0.7 mi north of intersection of State Highway 222 and private farm road near Urbanna. Owner: Strother and Alfred Scott (Rose Gill Farm).

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 6 in., depth 650 ft, screened 571 to 582 ft, 588 to 603 ft, 630 to 635 ft.

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

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

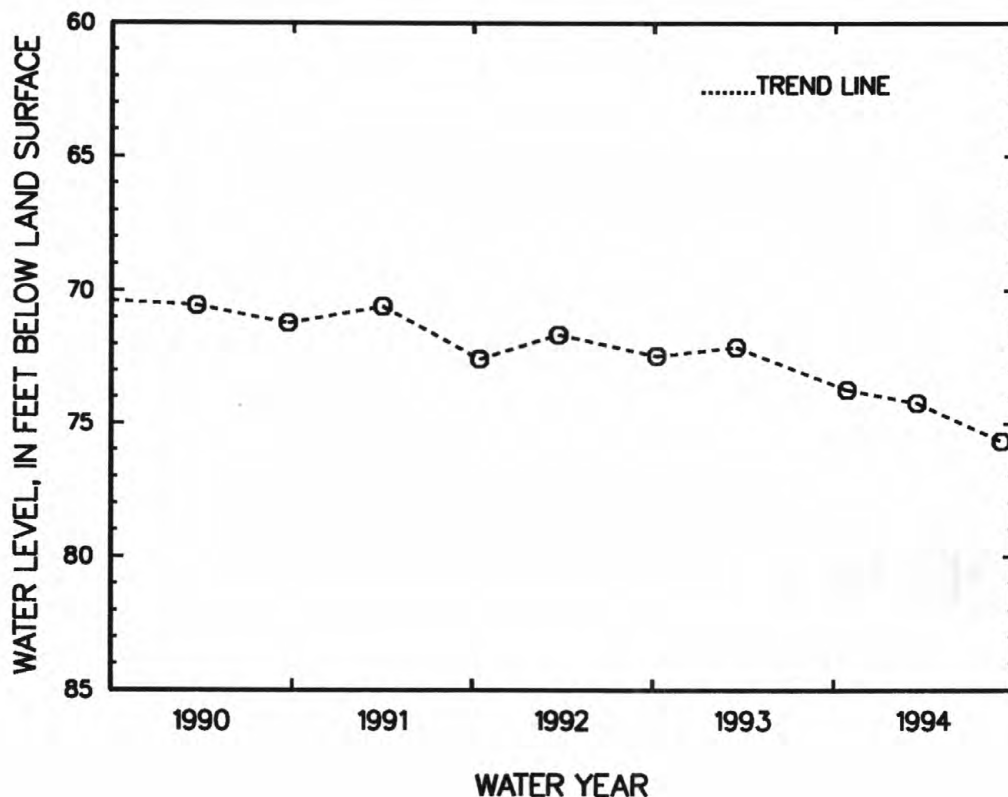
PERIOD OF RECORD.--November 1955 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.00 ft below land-surface datum, Nov. 29, 1955; lowest measured, 75.68 ft below land-surface datum, Sept. 2, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	73.71	MAR 17	74.21	SEP 02	75.68

WATER YEAR 1994      HIGHEST 73.71 OCT 27, 1993      LOWEST 75.68 SEP 02, 1994



## GROUND-WATER LEVELS

255

## MIDDLESEX COUNTY

373224076291001. Local number, 59J 3.

LOCATION.--Lat 37°32'24", long 76°29'10", Hydrologic Unit 02080102, 0.4 mi southeast of the intersection of State Highways 707 and 708 and 1.2 mi southwest of the intersection of State Highway 708 and private road near Grafton. Owner: Robert L. Beckwith (Woodstock Farm).

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 147 ft, diameter 2 in. from 147 to 506 ft, depth 506 ft, screened 493 to 503 ft.

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

DATUM.--Elevation of land-surface datum is 18 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

REMARKS.--Water level may be affected by local pumpage.

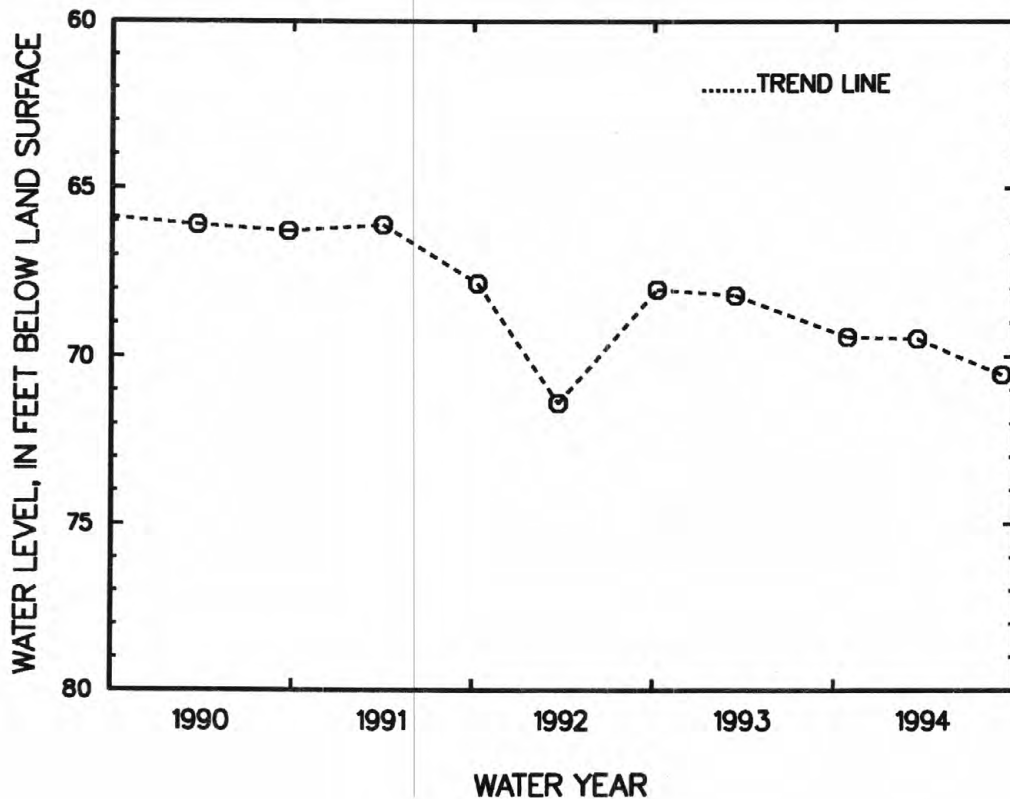
PERIOD OF RECORD.--September 1963 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.00 ft below land-surface datum, Sept. 29, 1964; lowest measured, 71.39 ft below land-surface datum, Mar. 23, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	69.42	MAR 17	69.48	SEP 02	70.54

WATER YEAR 1994      HIGHEST 69.42 OCT 27, 1993      LOWEST 70.54 SEP 02, 1994



## GROUND-WATER LEVELS

## MONTGOMERY COUNTY

370812080261901. Local number, 27F 2 SOW 019.

LOCATION.--Lat 37°08'12", long 80°26'19", Hydrologic Unit 05050001, off entrance road to Round Meadow Country Club, 400 ft north of State Highway 661, and 0.5 mi west of Christiansburg. Owner: Town of Christiansburg.

AQUIFER.--Beekmantown Formation of Early Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 450 ft, length of casing unknown.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Apr. 5, 1969, one measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 1,970 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft below land-surface datum prior to May 1, 1990; 0.43 ft above land-surface datum thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Lowest recorded water level, 7.39 ft, is a result of the Mexico earthquake of Sept. 19, 1985, but is not shown as the minimum of record since it is an earthquake-induced measurement. Prior to May 1, 1990, brief periods when water flowed over top of casing.

PERIOD OF RECORD.--July 1953, April 1969 to current year. Unpublished record available July 1953 in files of the Virginia Department of Environmental Quality - Water Division.

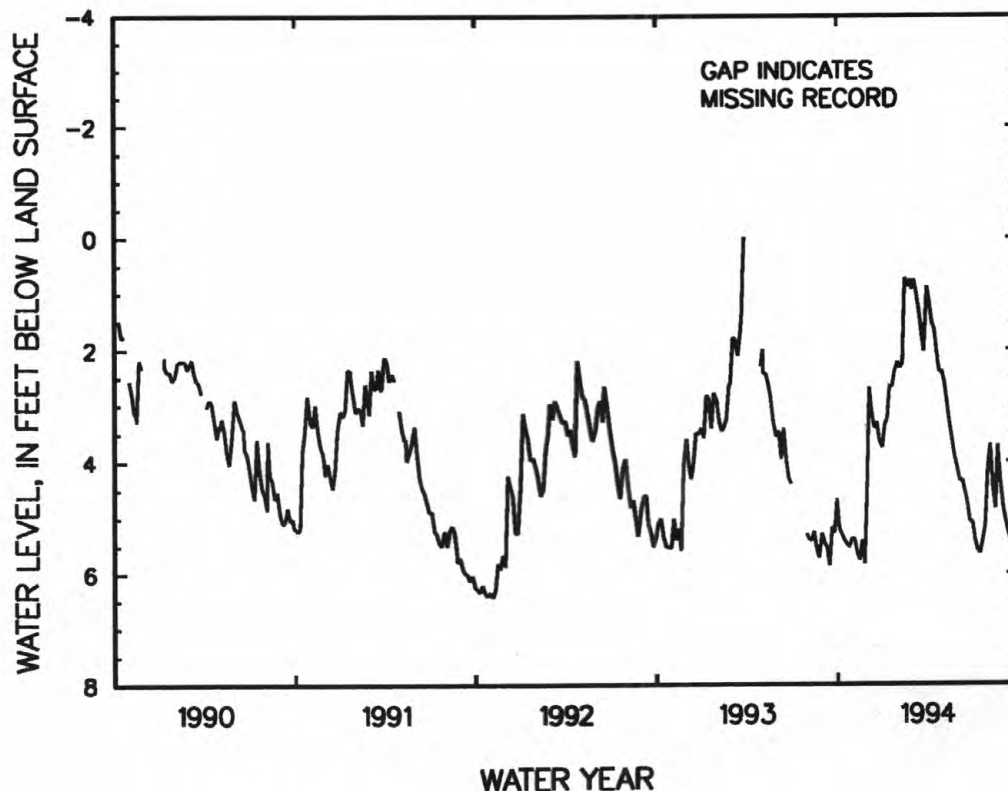
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.02 ft above land-surface datum, Mar. 28, 1993; lowest recorded, 7.30 ft below land-surface datum, Dec. 5, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.19	5.38	2.68	3.35	2.33	.75	1.15	2.58	4.35	5.40	3.70	5.08
10	5.29	5.62	3.13	3.25	2.25	1.00	1.53	2.93	4.33	5.58	4.46	5.28
15	5.39	5.76	3.41	2.65	.72	1.29	1.64	3.30	4.53	5.64	4.84	5.43
20	5.46	5.40	3.30	2.68	.88	1.68	2.07	3.59	4.75	5.40	3.71	5.48
25	5.52	5.82	3.62	2.40	.75	2.03	2.41	3.90	5.08	5.17	4.35	5.47
EOY	5.36	4.48	3.75	2.23	.93	.87	2.39	4.13	5.07	4.09	4.85	5.49

WATER YEAR 1994      HIGHEST INSTANTANEOUS    0.49    FEB 25, 1994      LOWEST INSTANTANEOUS    5.82    NOV 25, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

257

## NEW KENT COUNTY

373111077104601. Local number, 53J 6.

LOCATION.--Lat 37°31'11", long 77°10'46", Hydrologic Unit 02080206, 0.18 mi south of State Highway 249 in Brookwood Manor Subdivision, 0.7 mi northeast of the intersection of Interstate Highway 64 and State Highway 249, and 2.95 mi southwest of Quinton. Owner: Thomas M. Brooks.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 6 in., depth 305 ft, screened 285 to 305 ft.

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

DATUM.--Elevation of land-surface datum is 115 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

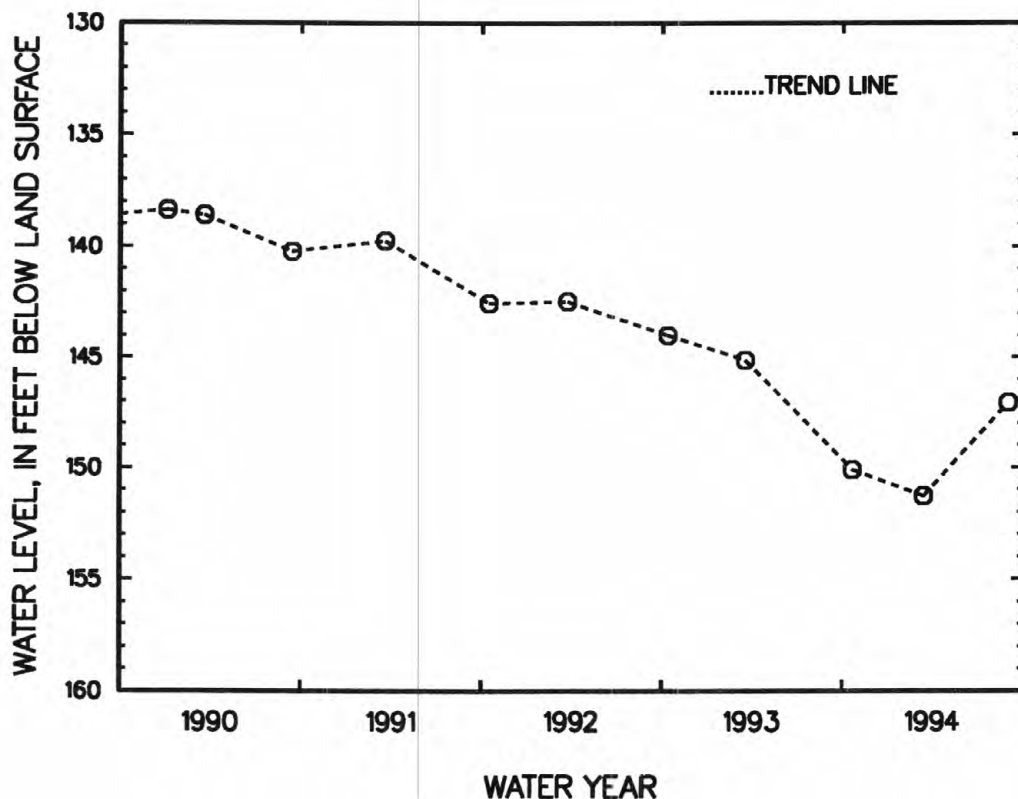
PERIOD OF RECORD.--November 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 129.91 ft below land-surface datum, Feb. 3, 1984; lowest measured, 151.29 ft below land-surface datum, Mar. 14, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	150.10	MAR 14	151.29	AUG 30	147.08

WATER YEAR 1994      HIGHEST 147.08 AUG 30, 1994      LOWEST 151.29 MAR 14, 1994



## GROUND-WATER LEVELS

## NEW KENT COUNTY

373421077012501. Local number, 54J 3.

LOCATION.--Lat 37°34'00", long 77°01'25", Hydrologic Unit 02080106, 0.8 mi northwest of the intersection of State Highway 608 and a private dirt road, 2.6 mi northwest of the intersection of State Highways 249 and 608, and 4.8 mi southeast of Tunstall. Owner: U.S. Department of the Navy.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 125 ft, screen depth unknown.

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

DATUM.--Elevation of land-surface datum is 25 ft above sea level, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

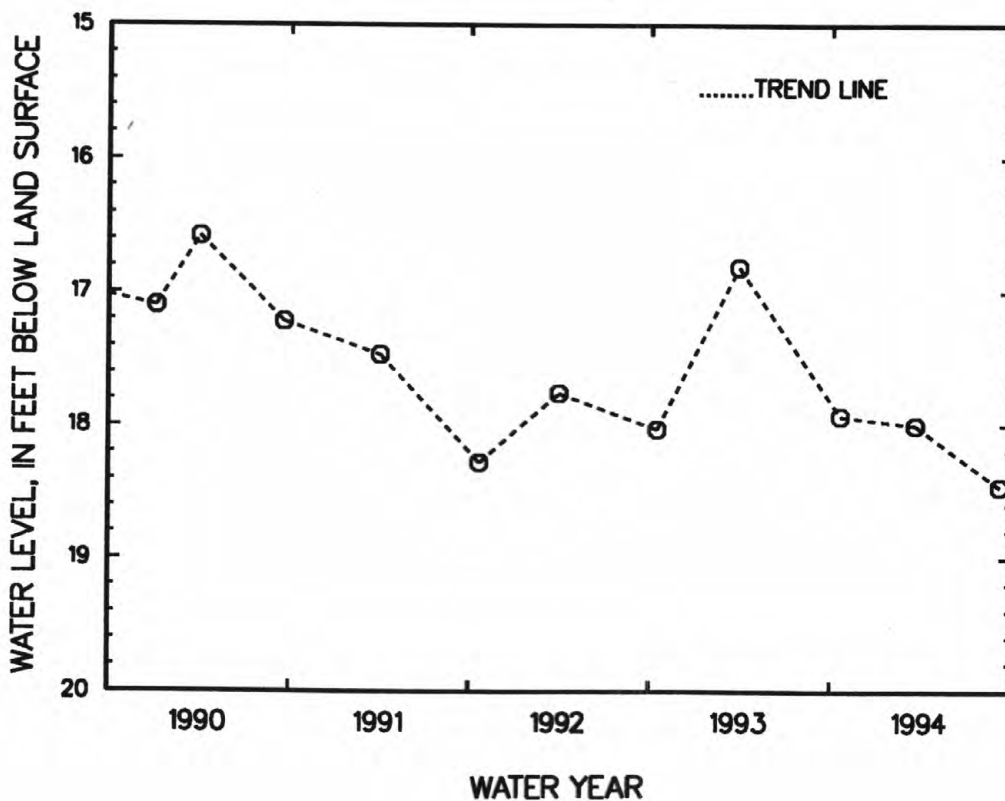
PERIOD OF RECORD.--November 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.23 ft below land-surface datum, Mar. 30, 1984; lowest measured, 18.46 ft below land-surface datum, Sept. 6, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	17.93	MAR 21	18.00	SEP 06	18.46

WATER YEAR 1994      HIGHEST 17.93 OCT 21, 1993      LOWEST 18.46 SEP 06, 1994



## NEW KENT COUNTY

372428076561501. Local number, 55H 1 SOW 017.

LOCATION.--Lat 37°24'28", long 76°56'15", Hydrologic Unit 02080206, at city of Newport News pump station, 500 ft upstream from Walkers Dam, and 0.6 mi southeast of Walkers. Owner: City of Newport News.

AQUIFER.--Brightseat-upper and middle Potomac aquifers of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 145 ft, diameter 4 in. from 145 to 630 ft, depth 630 ft, screened 252 to 257 ft, 339 to 344 ft, 439 to 444 ft, 615 to 625 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Apr. 5, 1979, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Apr. 5, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.7 ft above land-surface datum.

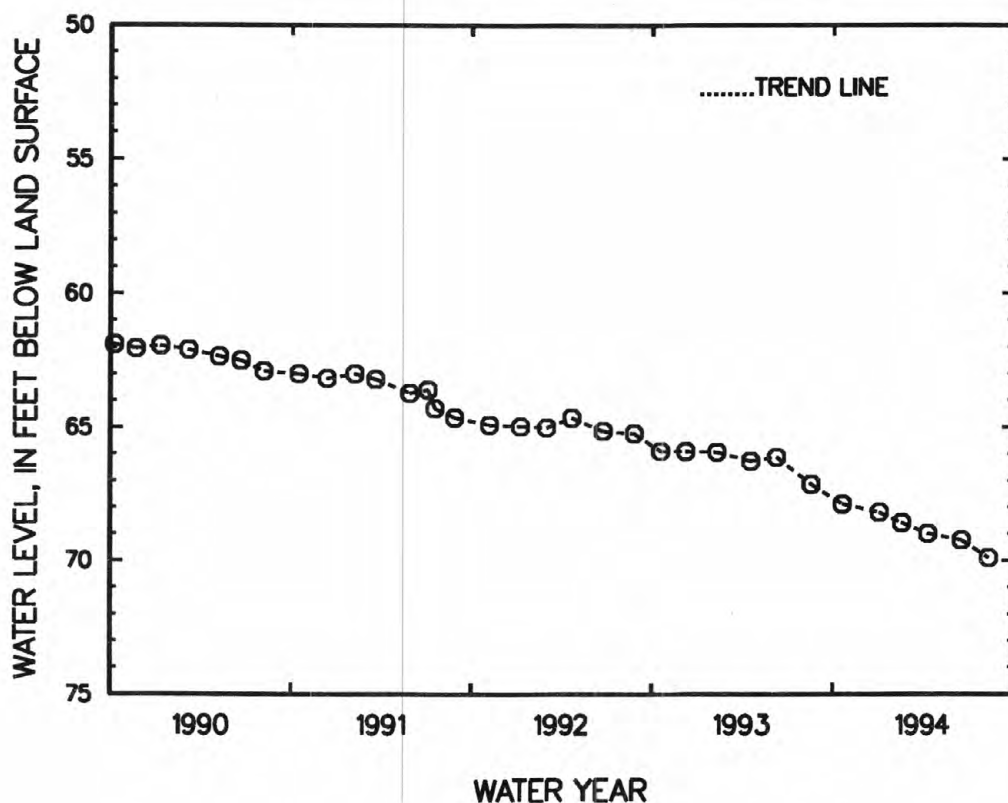
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 30.24 ft below land-surface datum, Apr. 10, 1969; lowest measured, 69.90 ft below land-surface datum, Aug. 10, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	67.89	JAN 03	68.20	FEB 17	68.59	APR 11	68.99	JUN 17	69.24	AUG 10	69.90
WATER YEAR 1994		HIGHEST	67.89	OCT 21, 1993	LOWEST	69.90	AUG 10, 1994				





## GROUND-WATER LEVELS

## NEW KENT COUNTY

373024076542201. Local number, 55J 6.

LOCATION.--Lat 37°30'24", long 76°54'22", Hydrologic Unit 02080106, 0.25 mi north of State Highway 249, 4.3 mi east of New Kent Courthouse. Owner: Chad Brunskole.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 275 ft, screened 265 to 275 ft.

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

DATUM.--Elevation of land-surface datum is 110 ft above sea level, from topographic map. Measuring point: Top of casing, 1.38 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

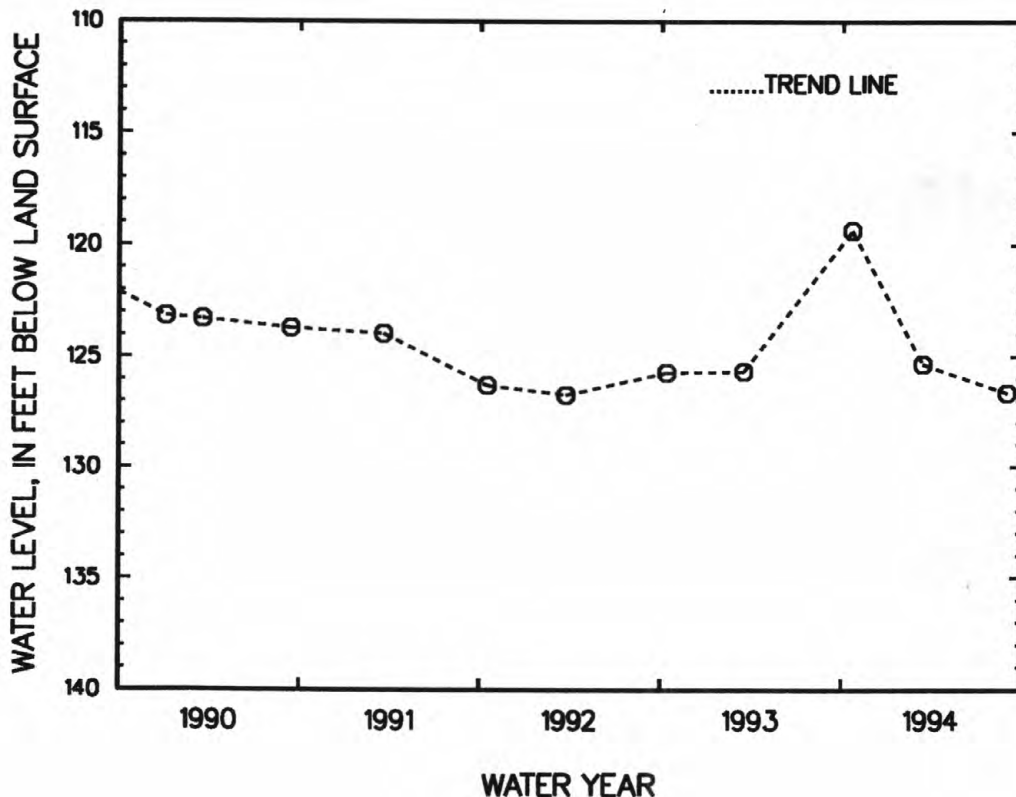
PERIOD OF RECORD.--December 1972, April 1984 to March 1986, March 1988 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 114.10 ft below land-surface datum, Dec. 7, 1972; lowest measured, 126.72 ft below land-surface datum, Mar. 24, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	119.37	MAR 14	125.32	AUG 30	126.64

WATER YEAR 1994      HIGHEST 119.37 OCT 22, 1993      LOWEST 126.64 AUG 30, 1994



## GROUND-WATER LEVELS

261

## CITY OF NEWPORT NEWS

371027076335601. Local number, 58F 1 SOW 002.

LOCATION.--Lat 37°10'27", long 76°33'56", Hydrologic Unit 02080206, on shore of Lee Hall Reservoir, 0.15 mi north of intersection of State Highway 105 and U.S. Highway 60, and 0.65 mi northeast of Fort Eustis in Newport News. Owner: City of Newport News.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 431.3 ft, diameter 8 in. from 431.3 to 443 ft, diameter 6 in. from 443 to 497 ft, depth 497 ft, screened 476 to 493 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

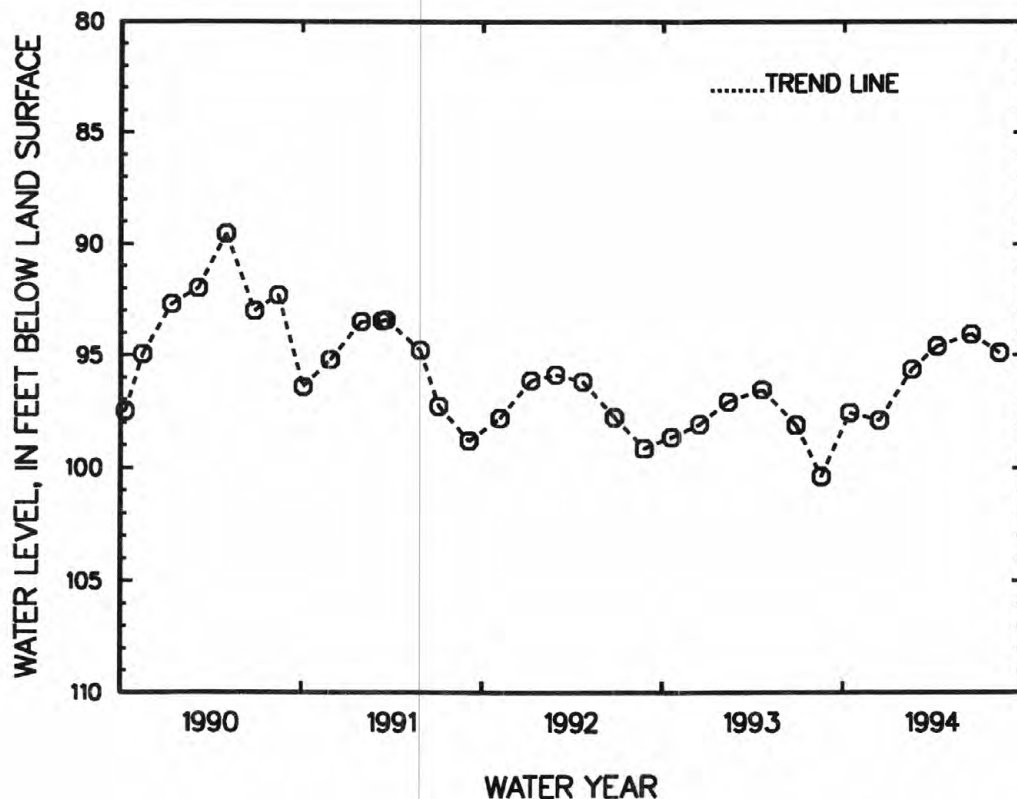
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--January 1968 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.76 ft below land-surface datum, May 10, 1969; lowest measured, 100.37 ft below land-surface datum, Aug. 18, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	97.56	DEC 13	97.89	FEB 16	95.63	APR 07	94.60	JUN 15	94.06	AUG 10	94.89
WATER YEAR 1994		HIGHEST	94.06	JUN 15, 1994	LOWEST	97.89	DEC 13, 1993				



## GROUND-WATER LEVELS

## CITY OF NEWPORT NEWS

371208076341101. Local number, 58F 50 SOW 171A.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,236 ft, screened 1,205 to 1,215 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.85 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water levels in October and November 1990 may have been affected by well drilled at site by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 117.05 ft below land-surface datum, Mar. 20, 1985; lowest recorded, 132.04 ft (caused by pumpage for water-quality sampling) below land-surface datum, July 15, 1993.

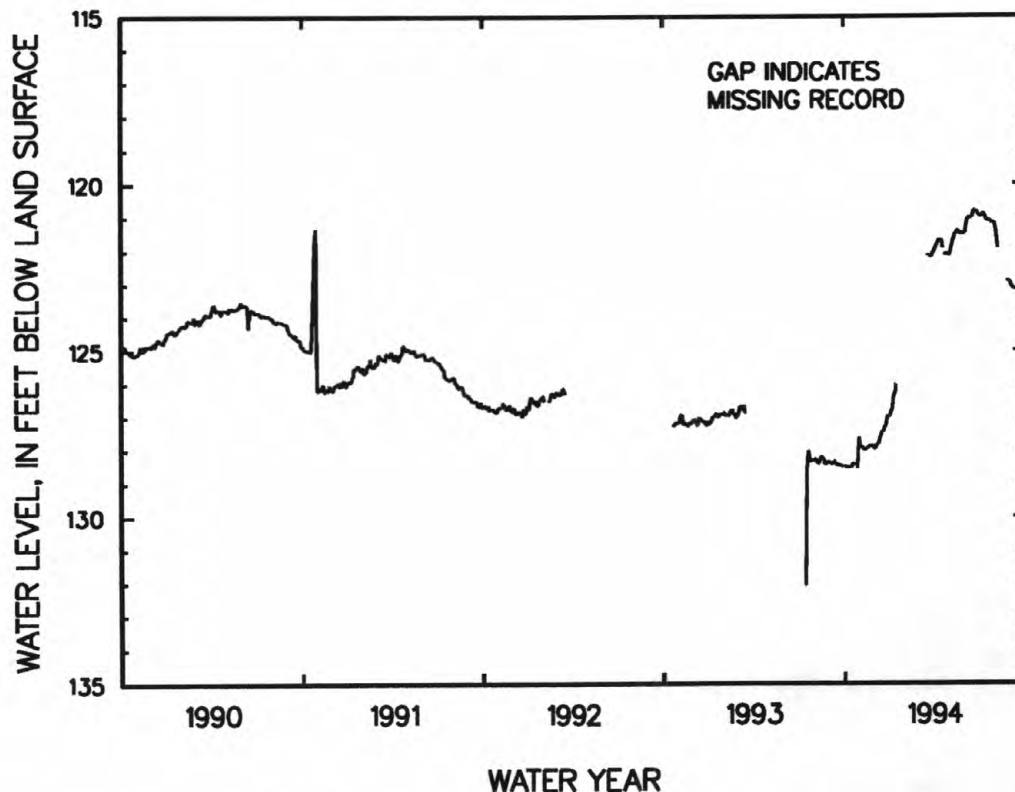
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	128.48	127.89	127.91	126.81	---	---	121.87	121.94	121.20	120.97	121.64	123.13
10	128.50	127.95	127.79	126.36	---	---	121.72	121.66	121.04	120.91	---	123.17
15	128.50	127.97	127.55	---	---	---	121.69	121.49	121.01	121.08	---	123.16
20	128.39	127.90	127.43	---	---	122.13	---	121.44	120.81	121.10	---	123.11
25	---	127.84	127.26	---	---	122.17	122.10	121.50	120.81	121.16	---	122.99
EOM	127.76	127.88	126.98	---	---	122.05	122.13	121.50	120.95	121.21	122.95	122.89

WATER YEAR 1994      HIGHEST INSTANTANEOUS      120.81      JUN 19-22, 24-26, 1994

LOWEST INSTANTANEOUS      128.53      OCT 28, 1993

## DAILY LOW-WATER LEVELS



## CITY OF NEWPORT NEWS

371208076341102. Local number, 58F 51 SOW 171B.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 851 ft, screened 820 to 830 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.80 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water levels in October and November 1990 may have been affected by well drilled at site by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 126.35 ft below land-surface datum, Mar. 23-25, 1985; lowest recorded, 141.02 ft below land-surface datum, Sept. 13, 1993.

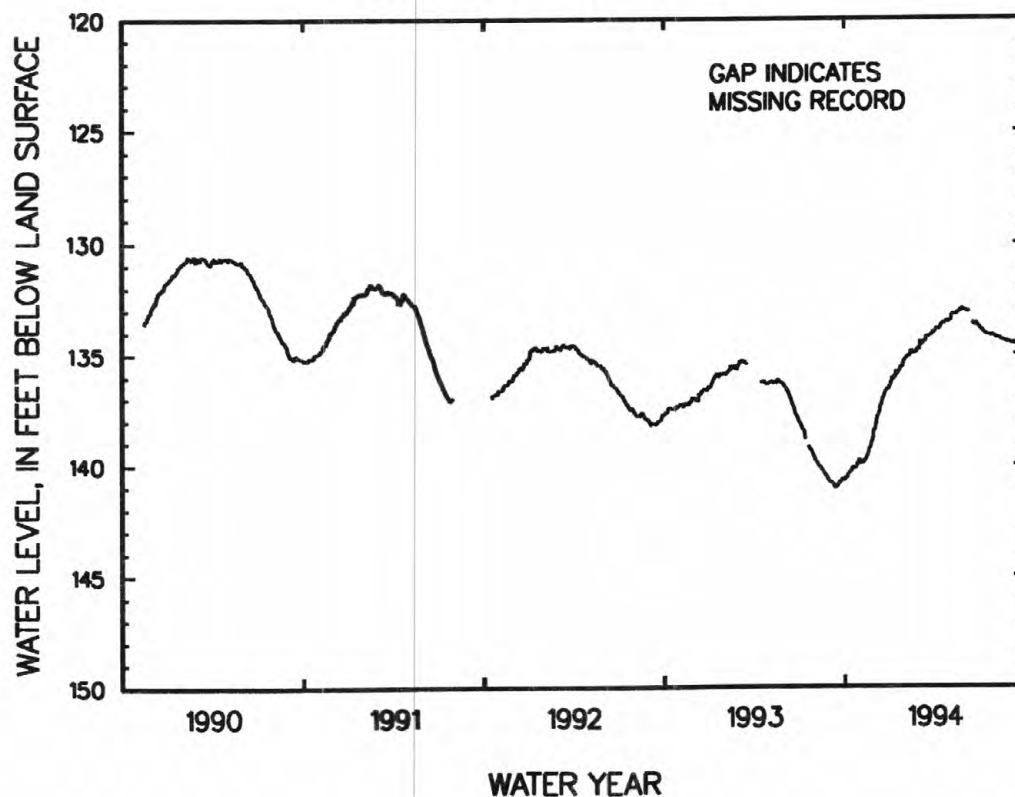
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	140.59	139.89	138.03	136.05	135.09	134.53	133.85	133.23	133.09	133.90	134.24	134.51
10	140.39	139.84	137.65	136.09	135.08	134.39	133.80	133.20	---	134.05	134.30	134.54
15	140.28	139.65	137.25	135.80	134.89	134.22	133.66	133.18	133.58	134.11	134.39	134.61
20	140.12	139.27	136.85	135.73	134.96	134.20	133.59	133.09	133.66	134.12	134.39	134.70
25	140.10	138.95	136.65	135.56	134.76	134.10	133.48	132.97	133.67	134.11	134.46	134.56
EOM	139.75	138.43	136.42	135.26	134.81	134.01	133.49	133.02	133.79	134.21	134.48	134.59

WATER YEAR 1994      HIGHEST INSTANTANEOUS    132.84    MAY 26, 27, 1994

LOWEST INSTANTANEOUS    140.68    OCT 01, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## CITY OF NEWPORT NEWS

371208076341103. Local number, 58F 52 SOW 171C.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 537 ft, screened 527 to 537 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. October 1993 to June 1994, occasional measurement with chalked tape by USGS personnel. Prior to October 1993, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point:

Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 3.1 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water levels in October and November 1990 may have been affected by well drilled at site by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 128.12 ft below land-surface datum, Mar. 23, 1985; lowest measured, 140.93 ft below land-surface datum, Oct. 28, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1993 TO JUNE 1994

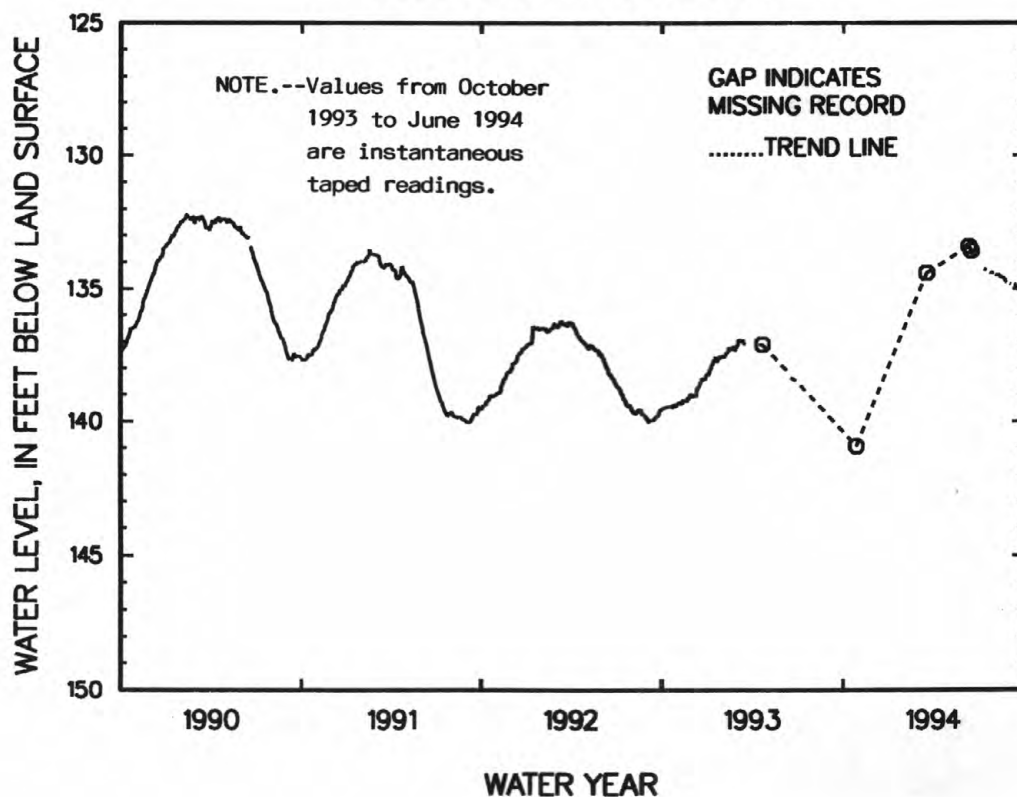
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	140.93	MAR 18	134.40	JUN 10	133.41	JUN 15	133.57

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, JUNE TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	134.48	---
10	---	---	---	---	---	---	---	---	---	---	134.49	134.83
15	---	---	---	---	---	---	---	---	---	134.29	134.56	134.97
20	---	---	---	---	---	---	---	---	133.81	---	134.62	135.04
25	---	---	---	---	---	---	---	---	---	134.42	---	---
EOM	---	---	---	---	---	---	---	---	---	---	---	---

WATER YEAR 1994      HIGHEST INSTANTANEOUS 133.41 JUN 10, 1994      LOWEST INSTANTANEOUS 140.93 OCT 28, 1993

## DAILY LOW-WATER LEVELS



## CITY OF NEWPORT NEWS

371208076341104. Local number, 58F 53 SOW 171D.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 343 ft, screened 333 to 343 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 2.9 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water levels in October and November 1990 may have been affected by well drilled at site by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 55.18 ft below land-surface datum, Feb. 2, 1985; lowest recorded, 62.18 ft below land-surface datum, July 17, 19, 1994.

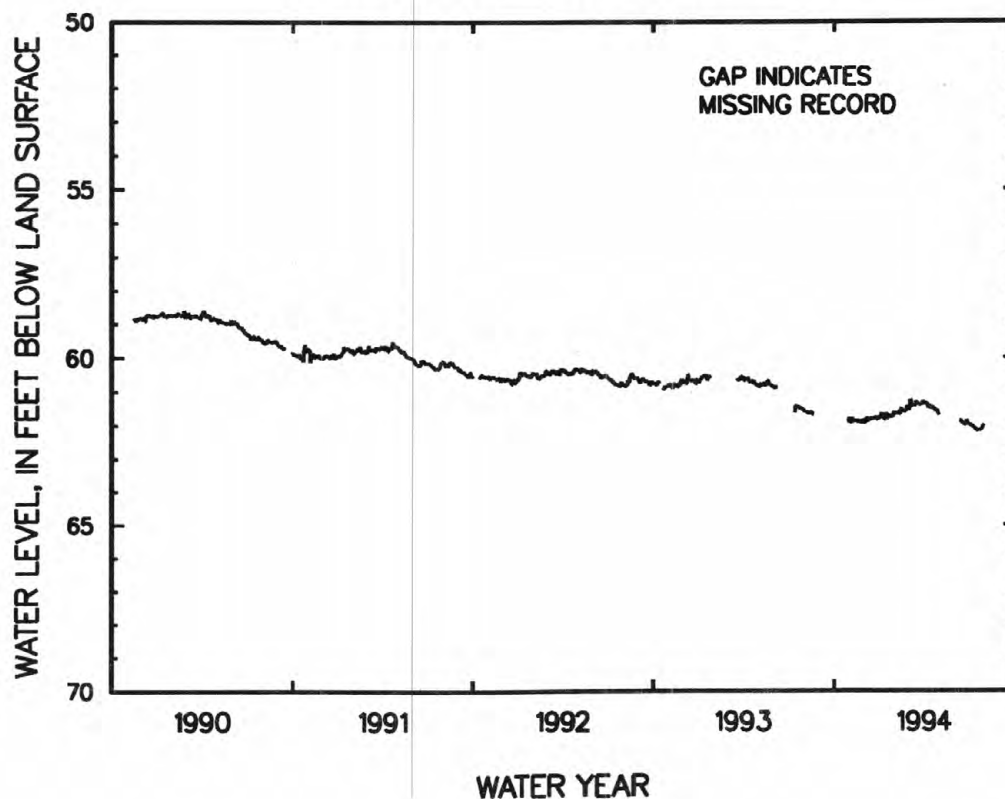
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	61.86	61.77	61.74	61.66	61.39	61.36	---	---	62.04	---	---
10	---	61.87	61.86	61.83	61.68	61.39	61.44	---	---	62.10	---	---
15	---	61.86	61.78	61.74	61.55	61.30	61.46	---	61.94	62.16	---	---
20	---	61.85	61.80	61.76	61.60	61.41	61.53	---	61.98	62.15	---	---
25	---	61.93	61.76	61.71	61.45	61.38	61.56	---	61.92	62.14	---	---
EOM	61.78	61.93	61.80	61.64	61.55	61.36	61.66	---	62.00	---	---	---

WATER YEAR 1994      HIGHEST INSTANTANEOUS      61.15      MAR 02, 03, 1994

LOWEST INSTANTANEOUS      62.18      JUL 17, 19, 1994

## DAILY LOW-WATER LEVELS





371208076341105. Local number, 58F 54 SOW 171E.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 88 ft, screened 78 to 88 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Removed digital recorder Oct. 18, 1991; reinstalled

July 8, 1992. Occasional measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point:

Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction; lowest water level for the 1994 water year may have occurred during this period. Water levels in October and November 1990 may have been affected by well drilled at site by Virginia Department of Environmental Quality - Water Division. Water level affected by occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--June 1984 to October 1991, July 1992 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.05 ft below land-surface datum, May 20, 21, 1993; lowest recorded, 27.34 ft below land-surface datum, Nov. 1, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR, OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

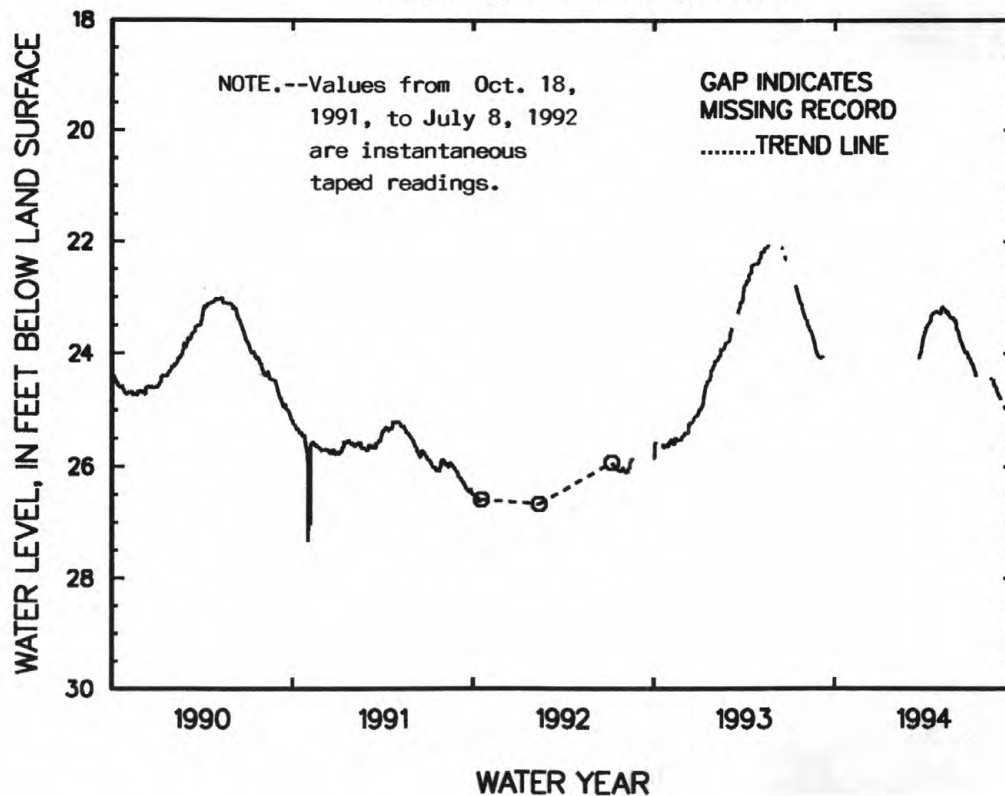
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	25.07	---	---	23.54	23.21	23.58	24.18	---	---
10	---	---	---	---	---	---	23.48	23.22	23.72	24.31	---	24.98
15	---	---	---	---	---	---	23.31	23.28	23.82	---	---	---
20	---	---	---	---	---	24.07	23.27	23.32	23.95	---	24.58	---
25	---	25.13	---	---	---	23.95	23.25	23.38	24.00	---	24.68	---
EOM	---	---	---	---	---	23.69	23.28	23.40	24.08	---	24.81	25.08

WATER YEAR 1994      HIGHEST INSTANTANEOUS    23.16    MAY 05, 06, 1994

LOWEST INSTANTANEOUS    a25.13    NOV 25, 1993

a May have gone lower during period of missing record.

DAILY LOW-WATER LEVELS



## CITY OF NEWPORT NEWS

371208076341106. Local number, 58F 55 SOW 171F.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by occasional pumpage for water-quality sampling. Water levels in October and November 1990 may have been affected by well drilled at site by Virginia Department of Environmental Quality.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.04 ft below land-surface datum, May 21-24, 1993; lowest recorded, 29.09 ft below land-surface datum, Dec. 27, 28, 1991.

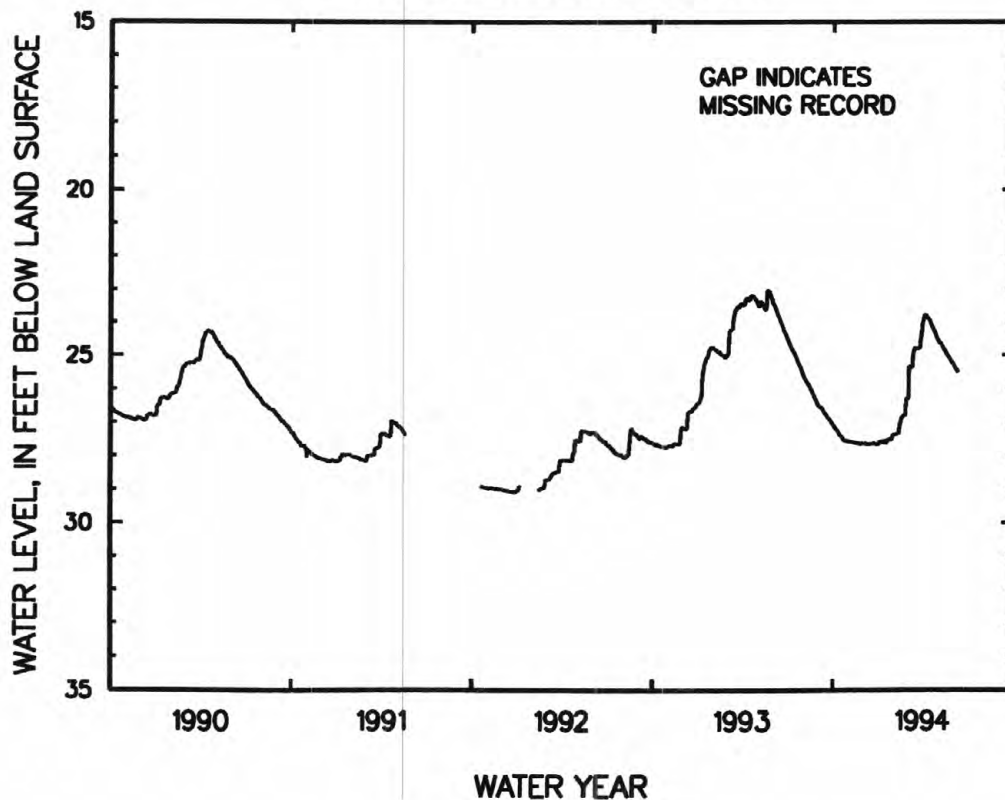
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.18	27.58	27.63	27.58	27.35	25.36	23.78	24.61	25.40	---	---	---
10	27.28	27.59	27.65	27.61	27.34	25.34	23.86	24.77	---	---	---	---
15	27.39	27.61	27.65	27.60	26.96	24.78	24.00	24.88	---	---	---	---
20	27.47	27.62	27.64	27.53	26.82	24.79	24.18	25.01	---	---	---	---
25	27.56	27.65	27.62	27.50	26.29	24.76	24.34	25.13	---	---	---	---
EOM	27.54	27.64	27.66	27.38	26.31	23.99	24.52	25.26	---	---	---	---

WATER YEAR 1994      HIGHEST INSTANTANEOUS      23.74      APR 06, 1994

LOWEST INSTANTANEOUS      27.66      DEC 09, 12, 13, 30, 31, 1993, JAN 01, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## CITY OF NORFOLK

365221076121303. Local number, 61C 3.

LOCATION.--Lat 36°52'21", Long 76°12'15", Hydrologic Unit 02080108, at Moores Bridge Filter Plant, 0.3 mi east of intersection of State Highway 165 and U.S. Highway 13 in Norfolk. Owner: U.S. Geological Survey.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 991 ft, screened 900 to 980.7 ft.

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

DATUM.--Elevation of land-surface datum is 7 ft above sea level, from topographic map. Measuring point: Top of casing, 1.22 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

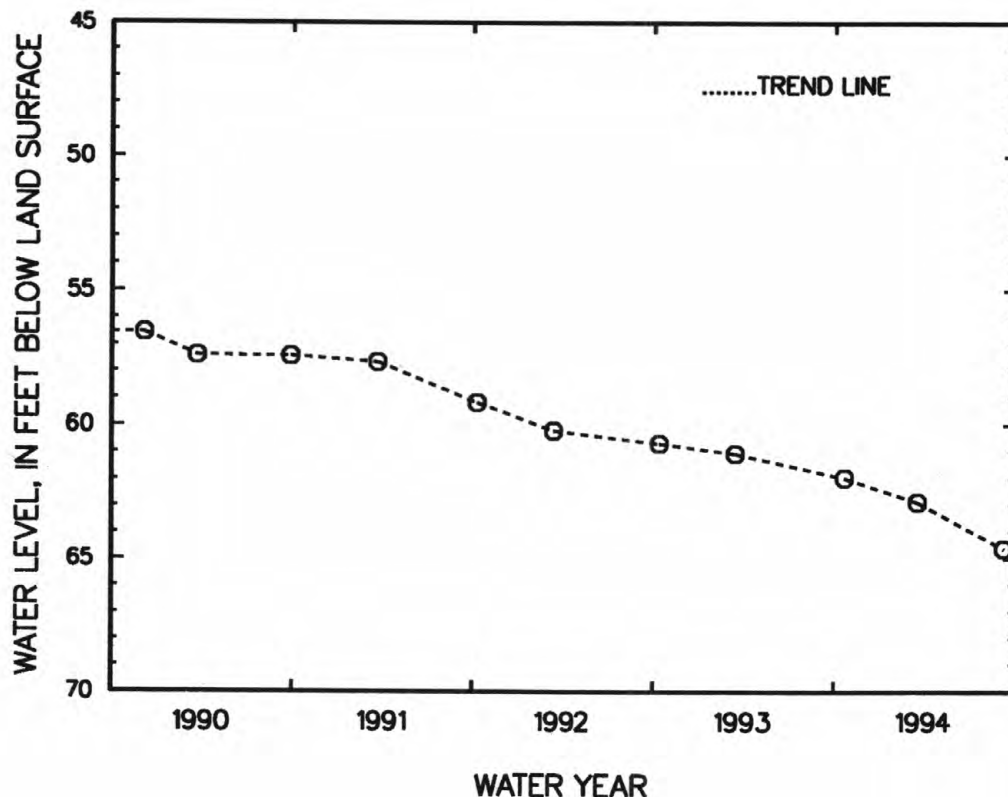
PERIOD OF RECORD.--February 1969 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.30 ft below land-surface datum, Feb. 19, 1969; lowest measured, 64.62 ft below land-surface datum, Sept. 7, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	61.96	MAR 18	62.86	SEP 07	64.62

WATER YEAR 1994      HIGHEST 61.96 OCT 22, 1993      LOWEST 64.62 SEP 07, 1994



## NORTHAMPTON COUNTY

371543076003401. Local number, 62G 15 SOW 121.

LOCATION.--Lat 37°15'43", long 76°00'34", Hydrologic Unit 02080110, 100 ft southwest of State Highway 642, 0.5 mi south of intersection of State Highways 184 and 642, and 0.7 mi southeast of Cape Charles. Owner: Brown and Root Corporation.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 190 ft, screened 180 to 190 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 15, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 12 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--November 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

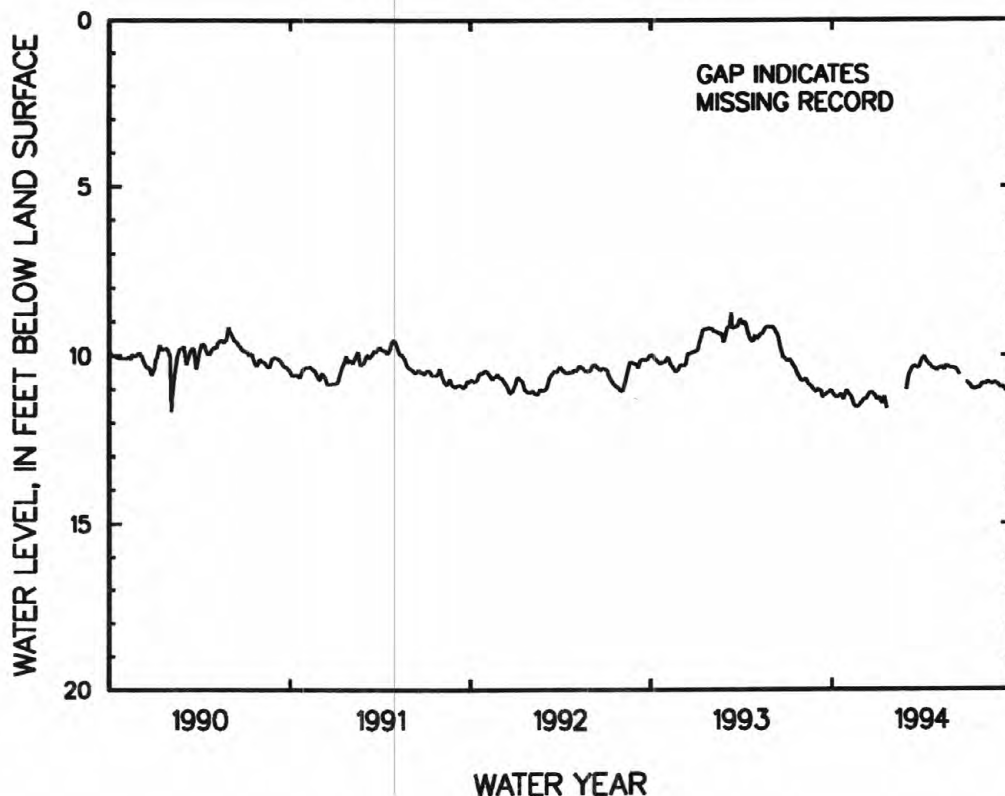
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.74 ft below land-surface datum, Mar. 13, 1993; lowest recorded, 14.31 ft below land-surface datum, Jan. 16, 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.18	11.15	11.31	11.25	---	10.56	10.03	10.37	10.38	10.86	10.85	10.95
10	11.23	11.25	11.28	11.43	---	10.41	10.18	10.33	10.43	10.98	10.78	10.93
15	11.23	11.48	11.14	11.23	---	10.30	10.25	10.41	10.56	11.00	10.83	11.04
20	11.15	11.54	11.09	11.58	---	10.34	10.34	10.29	---	10.97	10.84	11.10
25	11.31	11.50	11.15	---	---	10.36	10.38	10.35	---	10.95	10.80	10.91
EOM	11.03	11.41	11.31	---	11.01	10.11	10.43	10.36	10.80	10.83	10.88	11.02

WATER YEAR 1994      HIGHEST INSTANTANEOUS    9.94    APR 06, 1994      LOWEST INSTANTANEOUS    11.62    NOV 21, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371307075583501. Local number, 63F 15 SOW 105A.

LOCATION.--Lat 37°13'07", 75°58'35", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 31.97 ft above sea level. Measuring point: Top of recorder shelf, 1.1 ft above land-surface datum prior to July 21, 1987; 1.4 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.44 ft below land-surface datum, Apr. 12, 1982; lowest recorded, 24.62 ft below land-surface datum, June 15, 1988.

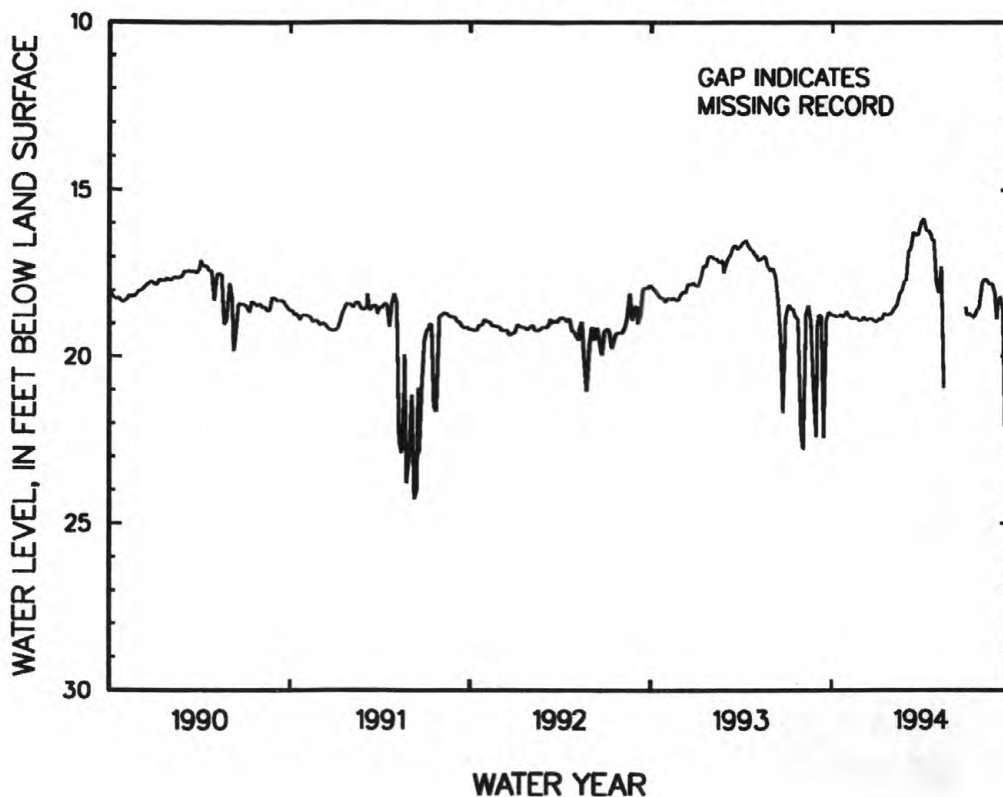
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.76	18.78	18.80	18.85	18.53	16.85	15.85	18.08	---	18.70	17.67	18.18
10	18.77	18.83	18.89	18.88	18.43	16.73	16.20	17.29	---	18.77	17.71	18.57
15	18.78	18.84	18.86	18.70	18.11	16.24	16.20	20.95	---	18.81	17.82	22.13
20	18.74	18.83	18.85	18.74	17.99	16.35	16.35	---	---	18.62	17.80	18.95
25	18.80	18.90	18.90	18.73	17.70	16.31	16.50	---	---	18.51	18.07	18.28
EOM	18.63	18.90	18.94	18.67	17.71	15.95	17.75	---	18.75	17.78	18.36	18.28

WATER YEAR 1994      HIGHEST INSTANTANEOUS      15.83      APR 03, 04, 1994

LOWEST INSTANTANEOUS      22.29      SEP 17, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

271

## NORTHAMPTON COUNTY

371307075583502. Local number, 63F 16 SOW 105C.

LOCATION.--Lat 37°13'07", long 75°58'35", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 285 ft, screened 275 to 285 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.16 ft above sea level. Measuring point: Top of casing, 0.1 ft above land-surface datum prior to Mar. 1, 1994; 0.6 ft thereafter.

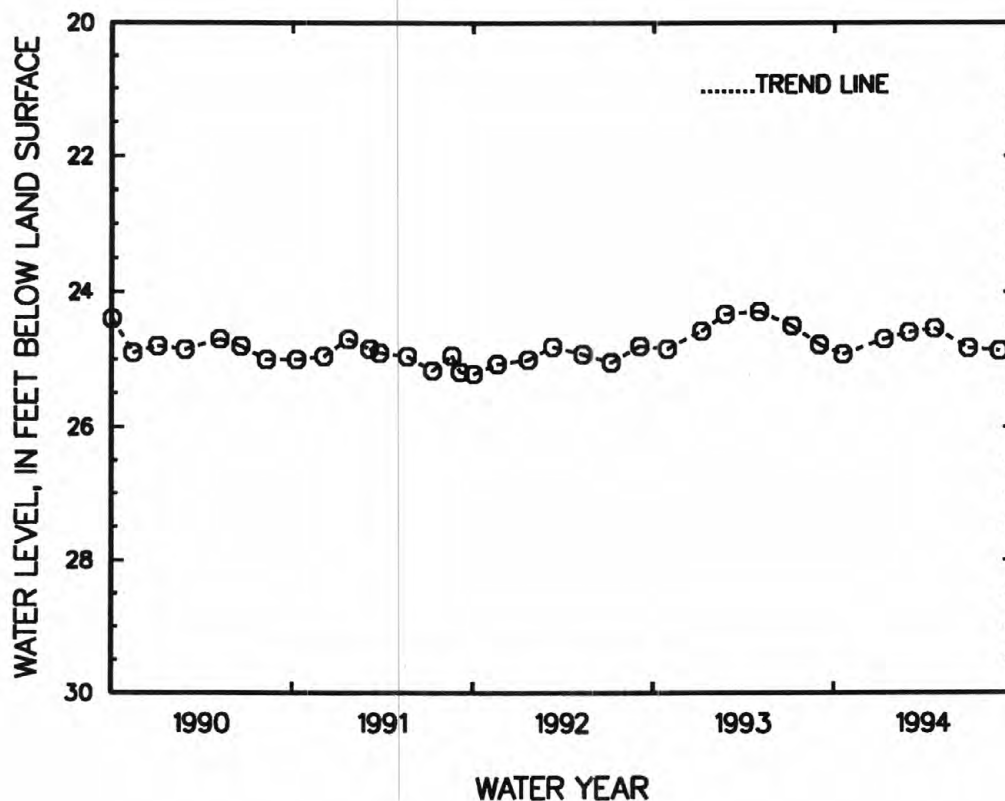
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.91 ft below land-surface datum, Jan. 9, 1979; lowest measured, 29.58 ft below land-surface datum, May 23, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	24.92	JAN 10	24.70	MAR 01	24.60	APR 21	24.54	JUN 28	24.83	AUG 29	24.87
WATER YEAR 1994		HIGHEST	24.54	APR 21, 1994	LOWEST	24.92	OCT 19, 1993				





## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371307075583503. Local number, 63F 17 SOW 105B.

LOCATION.--Lat 37°13'07", long 75°58'35", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 196 ft, screened 186 to 196 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.50 ft above sea level. Measuring point: Top of casing, 0.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

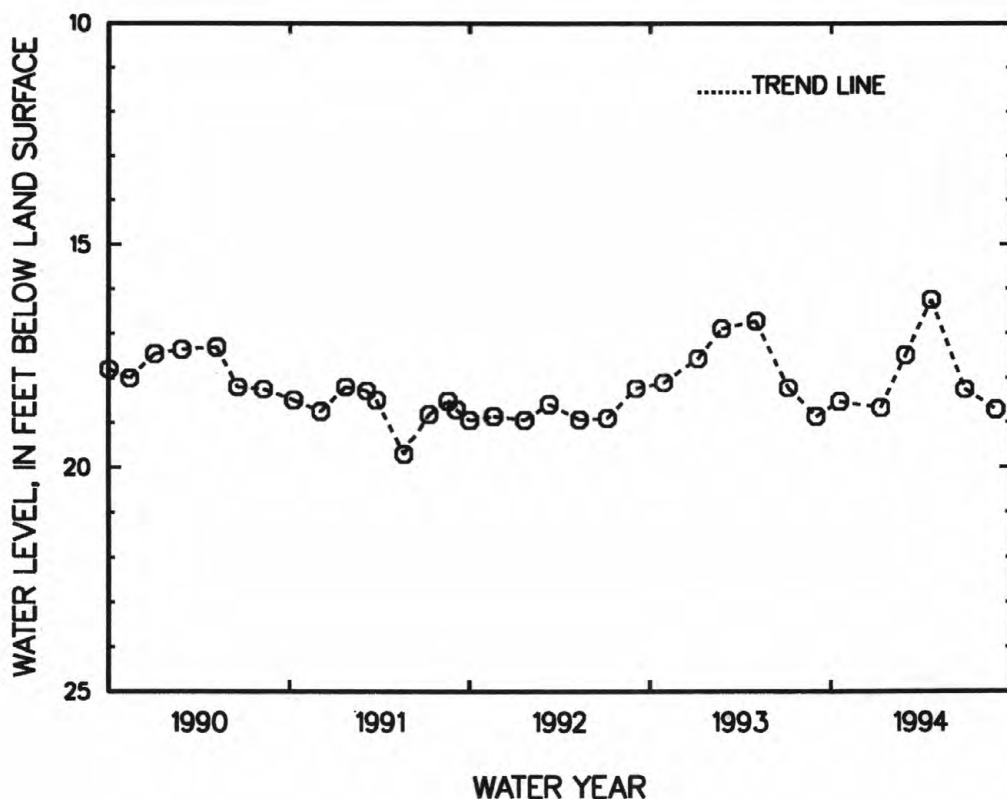
PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.78 ft below land-surface datum, Apr. 25, 1984; lowest measured, 21.68 ft below land-surface datum, Feb. 11, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	18.53	JAN 10	18.67	MAR 01	17.48	APR 21	16.25	JUN 28	18.26	AUG 29	18.72

WATER YEAR 1994      HIGHEST   16.25   APR 21, 1994      LOWEST   18.72   AUG 29, 1994



## GROUND-WATER LEVELS

273

## NORTHAMPTON COUNTY

370807075570802. Local number, 63F 51 SOW 182A

LOCATION.--Lat 37°08'07", long 75°57'08", Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,730 ft, screened 1,720 to 1,730 ft.

INSTRUMENTATION.--Bimonthly measurement with manometer and/or chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

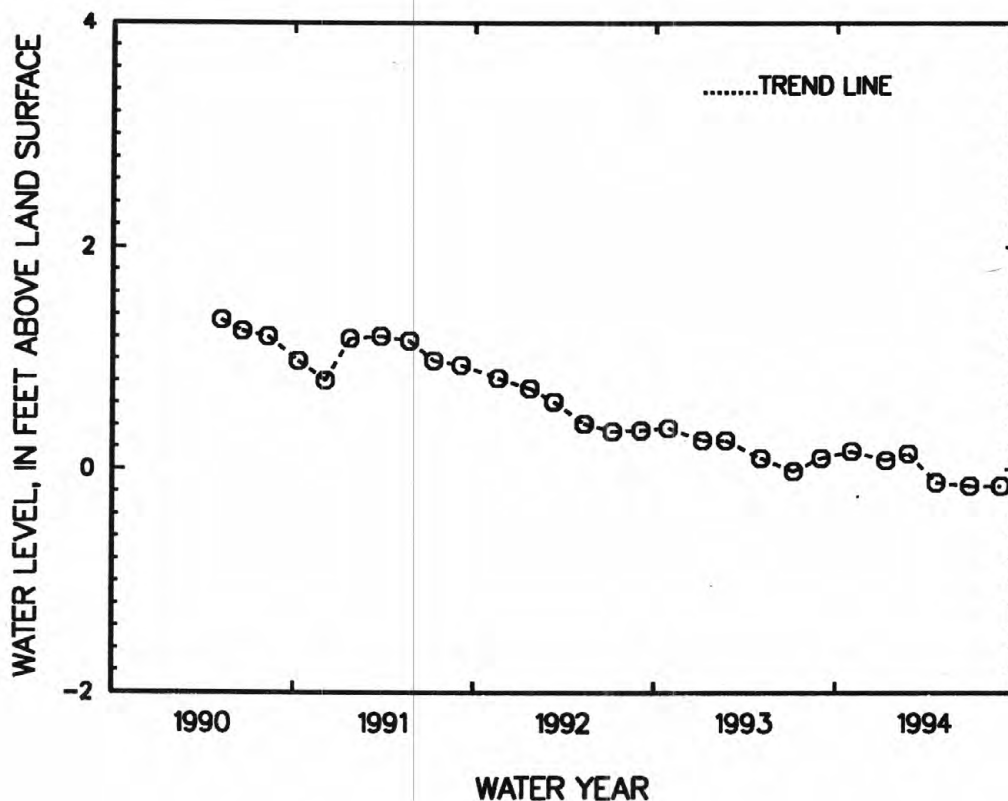
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.35 ft above land-surface datum, May 7, 1990; lowest measured, 0.15 ft below land-surface datum, June 28, Aug. 29, 1994.

## WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	0.16	JAN 10	0.08	FEB 24	0.14	APR 21	-0.12	JUN 28	-0.15	AUG 29	-0.15

WATER YEAR 1994      HIGHEST   0.16   NOV 02, 1993      LOWEST   -0.15   JUN 28, AUG 29, 1994

NOTE.--Flowing well; readings are above land-surface datum.



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

370807075570803. Local number, 63F 52 SOW 182B.

LOCATION.--Lat 37°08'07", long 75°57'08", Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,040 ft, diameter 2 in. from 1,040 to 1,320 ft, depth 1,320 ft, screened 1,300 to 1,320 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

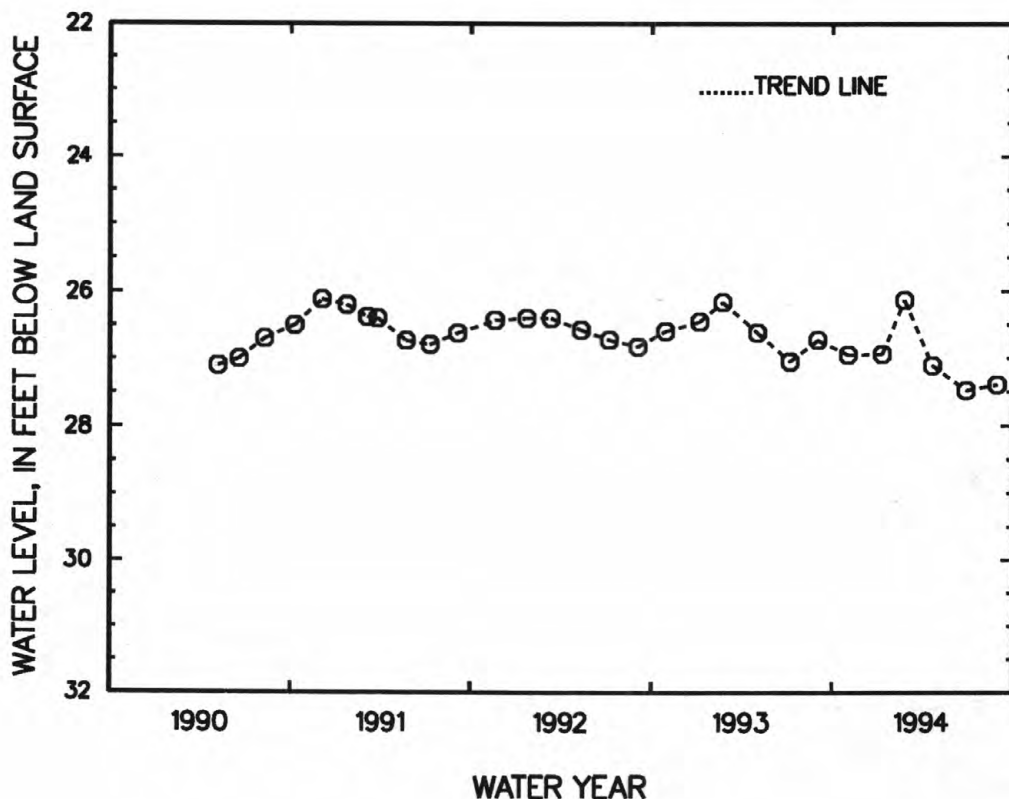
PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.12 ft below land-surface datum, Dec. 3, 1990; lowest measured, 27.48 ft below land-surface datum, June 28, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	26.94	JAN 10	26.93	FEB 24	26.13	APR 21	27.10	JUN 28	27.48	AUG 29	27.39

WATER YEAR 1994      HIGHEST    26.13    FEB 24, 1994      LOWEST    27.48    JUN 28, 1994



## NORTHAMPTON COUNTY

370807075570804. Local number, 63F 53 SOW 182C.

LOCATION.--Lat 37°08'07", long 75°57'08", Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 188 ft, diameter 2 in. from 188 to 220 ft, depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

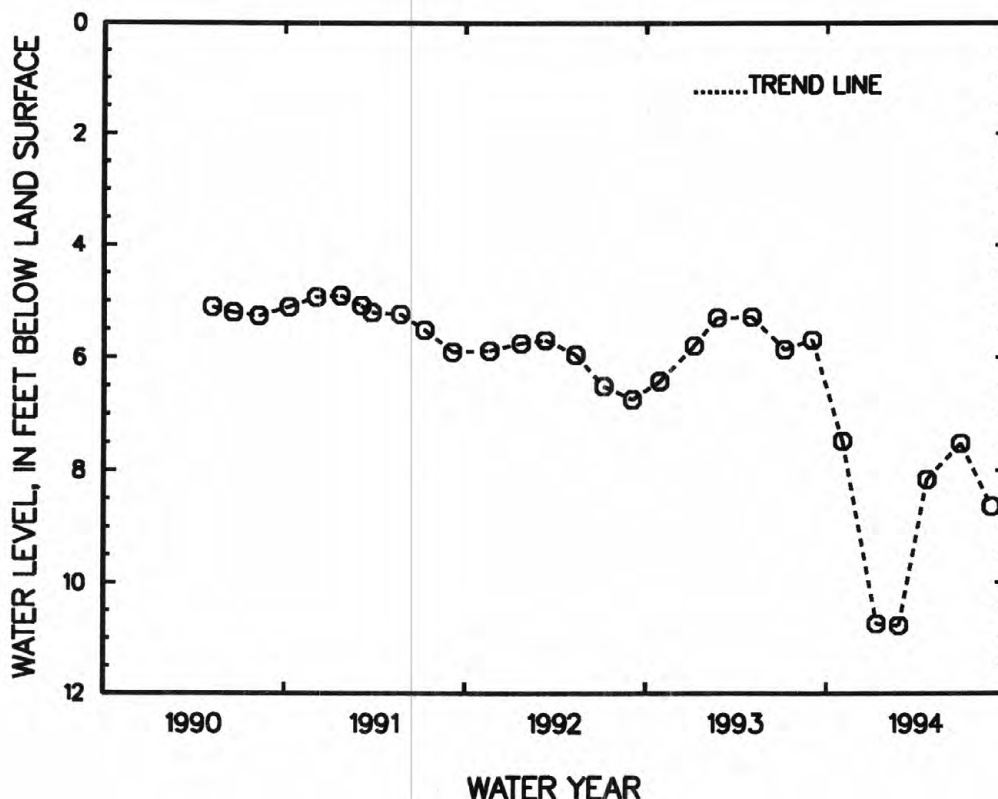
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.90 ft below land-surface datum, Jan. 22, 1991; lowest measured, 10.77 ft below land-surface datum, Feb. 24, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	7.48	JAN 10	10.74	FEB 24	10.77	APR 21	8.16	JUN 28	7.53	AUG 29	8.64
WATER YEAR 1994		HIGHEST	7.48	NOV 02, 1993		LOWEST	10.77	FEB 24, 1994			



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

370807075570805. Local number, 63F 54 SOW 182D.

LOCATION.--Lat 37°08'07", long 75°57'08", Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 55 ft, screened 45 to 55 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

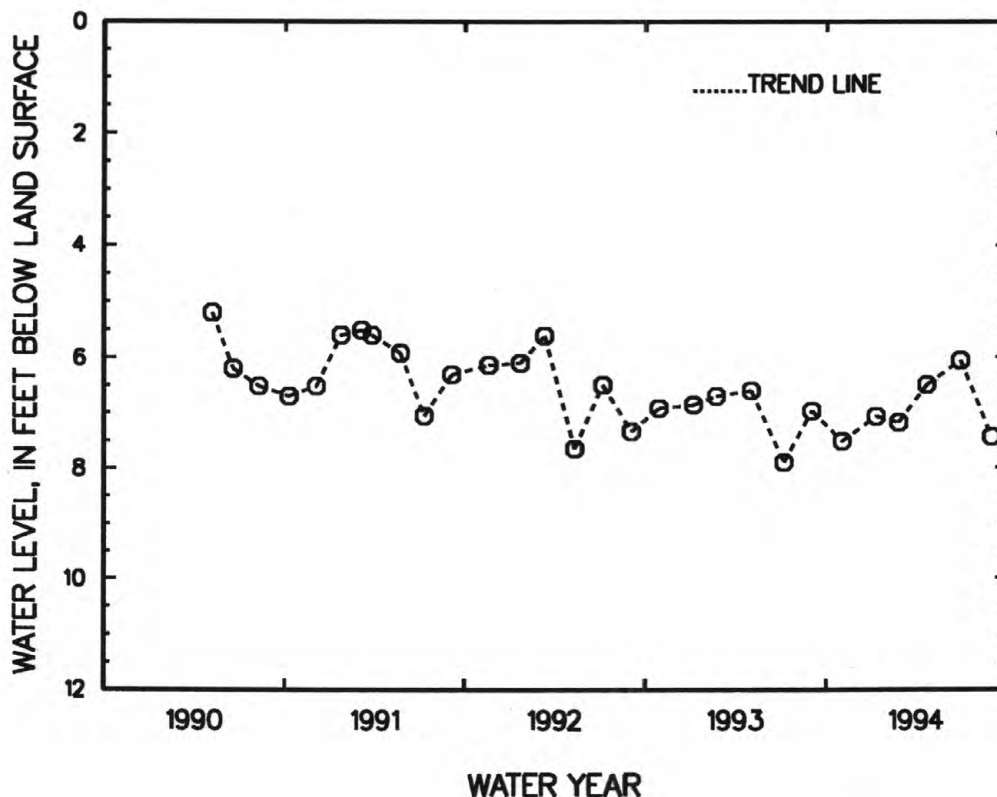
PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.20 ft below land-surface datum, May 7, 1990; lowest measured, 7.90 ft below land-surface datum, July 8, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	7.52	JAN 10	7.07	FEB 24	7.18	APR 21	6.50	JUN 28	6.06	AUG 29	7.45

WATER YEAR 1994      HIGHEST    6.06    JUN 28, 1994      LOWEST    7.52    NOV 02, 1993



## GROUND-WATER LEVELS

277

## NORTHAMPTON COUNTY

370807075570806. Local number, 63F 55 SOW 182E.

LOCATION.--Lat 37°08'07", long 75°57'08", Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

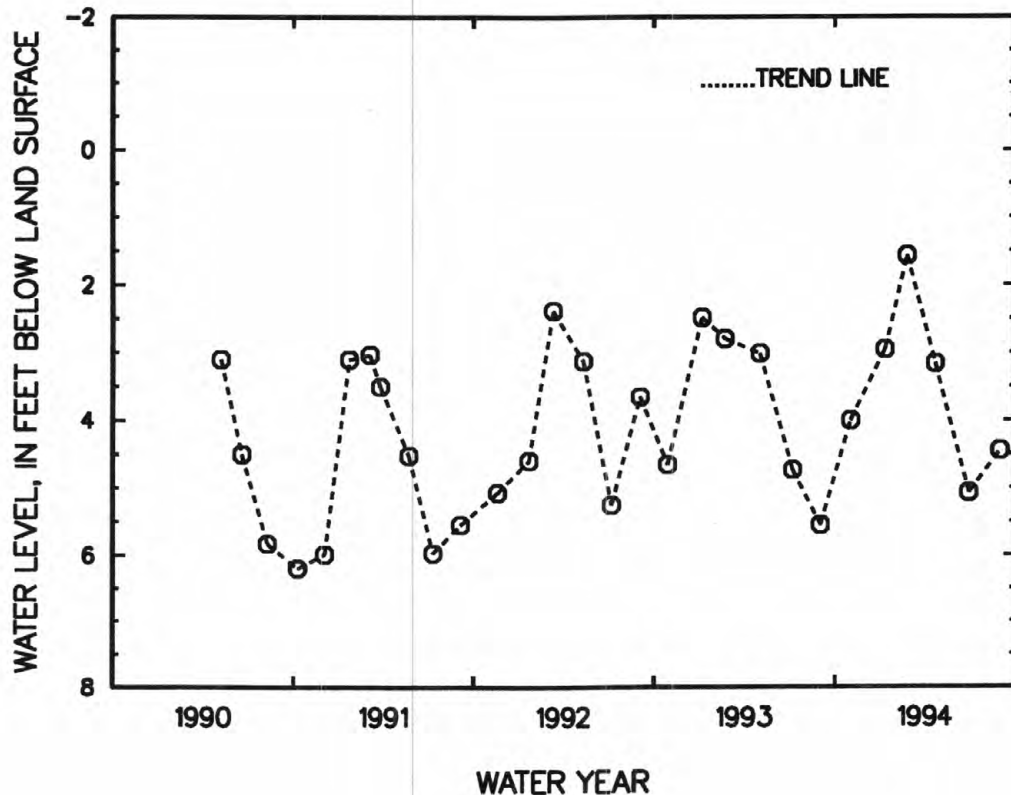
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.57 ft below land-surface datum, Feb. 24, 1994; lowest measured, 6.20 ft below land-surface datum, Oct. 9, 1990.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	4.00	JAN 10	2.95	FEB 24	1.57	APR 21	3.16	JUN 28	5.07	AUG 29	4.45
WATER YEAR 1994		HIGHEST	1.57	FEB 24, 1994	LOWEST	5.07	JUN 28, 1994				





## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371709075560801. Local number, 63G 15 SOW 104C.

LOCATION.--Lat 37°17'09", long 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 310 ft, screened 300 to 310 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 15, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point:

Top of recorder shelf, 1.24 ft above land-surface datum prior to Nov. 10, 1986; 1.75 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 16.76 ft below land-surface datum, Mar. 13, 1993; lowest measured, 27.96 ft below land-surface datum, Oct. 8, 1982.

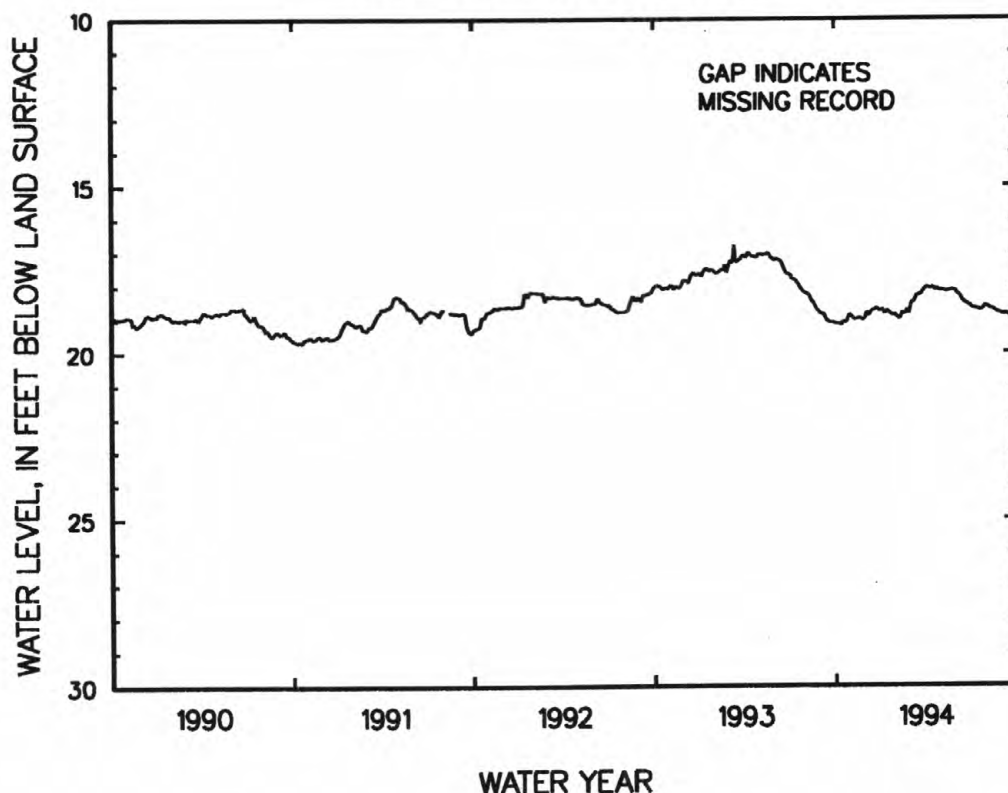
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.12	18.93	18.78	18.70	18.93	18.50	18.04	18.13	18.24	18.66	18.63	18.85
10	19.12	19.00	18.88	18.82	18.99	18.47	18.09	18.15	18.30	18.67	18.67	18.84
15	19.16	18.99	18.73	18.72	18.80	18.30	18.05	18.17	18.42	18.68	18.69	18.85
20	19.06	18.95	18.72	18.80	18.84	18.28	18.06	18.15	18.51	18.73	18.75	18.93
25	19.09	19.00	18.66	18.87	18.70	18.23	18.08	18.13	18.53	18.70	18.79	18.77
EOY	18.84	19.00	18.74	18.85	18.82	18.10	18.14	18.14	18.58	18.60	18.84	18.82

WATER YEAR 1994      HIGHEST INSTANTANEOUS      17.93      MAY 26, 27, 1994

LOWEST INSTANTANEOUS      19.16      OCT 15, 1993

## DAILY LOW-WATER LEVELS



## NORTHAMPTON COUNTY

371709075560802. Local number, 63G 16 SOW 104B.

LOCATION.--Lat 37°17'09", 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 240 ft, screened 230 to 240 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Feb. 29, 1988; 0.9 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

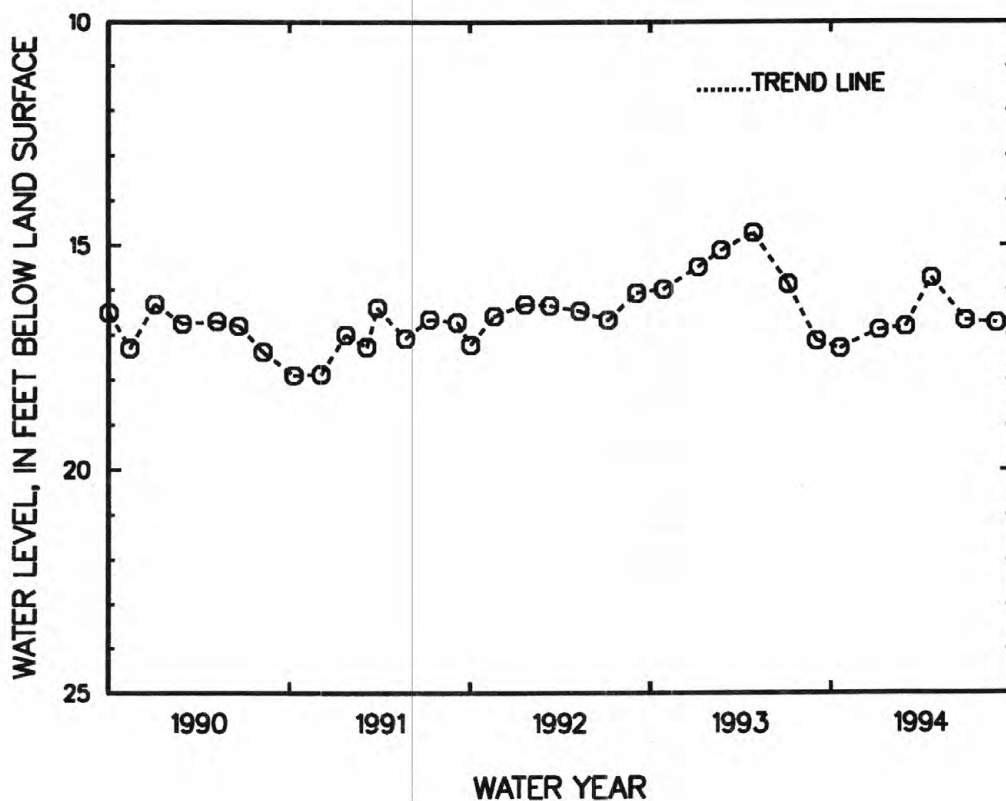
PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.93 ft below land-surface datum, May 25, 1983; lowest measured, 23.47 ft below land-surface datum, Oct. 8, 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	17.30	JAN 06	16.89	FEB 28	16.82	APR 21	15.74	JUN 28	16.68	AUG 29	16.74

WATER YEAR 1994	HIGHEST	15.74	APR 21, 1994	LOWEST	17.30	OCT 19, 1993
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## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371709075560803. Local number, 63G 17 SOW 104A.

LOCATION.--Lat 37°17'09", long 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point: Top of casing, 0.05 ft above land-surface datum prior to Feb. 29, 1988; 0.5 ft thereafter.

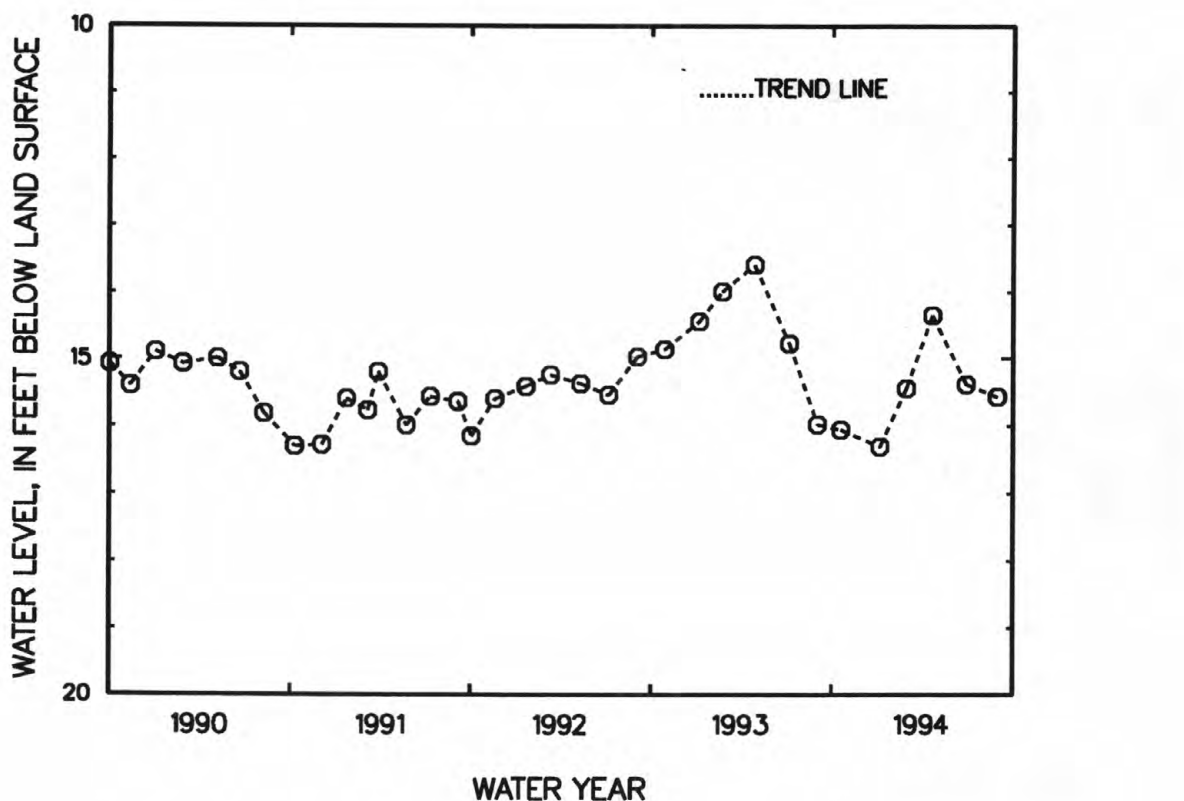
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.59 ft below land-surface datum, Apr. 28, 1993; lowest measured, 21.99 ft below land-surface datum, Oct. 8, 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	16.05	JAN 06	16.30	FEB 28	15.44	APR 21	14.35	JUN 28	15.38	AUG 29	15.57
WATER YEAR 1994		HIGHEST	14.35	APR 21, 1994	LOWEST	16.30	JAN 06, 1994				



## NORTHAMPTON COUNTY

371735075572601. Local number, 63G 20 SOW 075.

LOCATION.--Lat 37°17'35", long 75°57'26", Hydrologic Unit 02080101, at Kane Miller Corporation plant 0.4 mi north of State Highway 639, 0.7 mi northwest of intersection of State Highways 637 and 639, and 0.9 mi east of Cheriton. Owner: Kane Miller Corporation.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 20 in. to 56 ft, diameter 10 in. from 56 to 240 ft, depth 240 ft, screened 56 to 61 ft, 95 to 100 ft, 160 to 165 ft, 188 to 193 ft, 210 to 215 ft, 235 to 240 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.6 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--November 1974 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

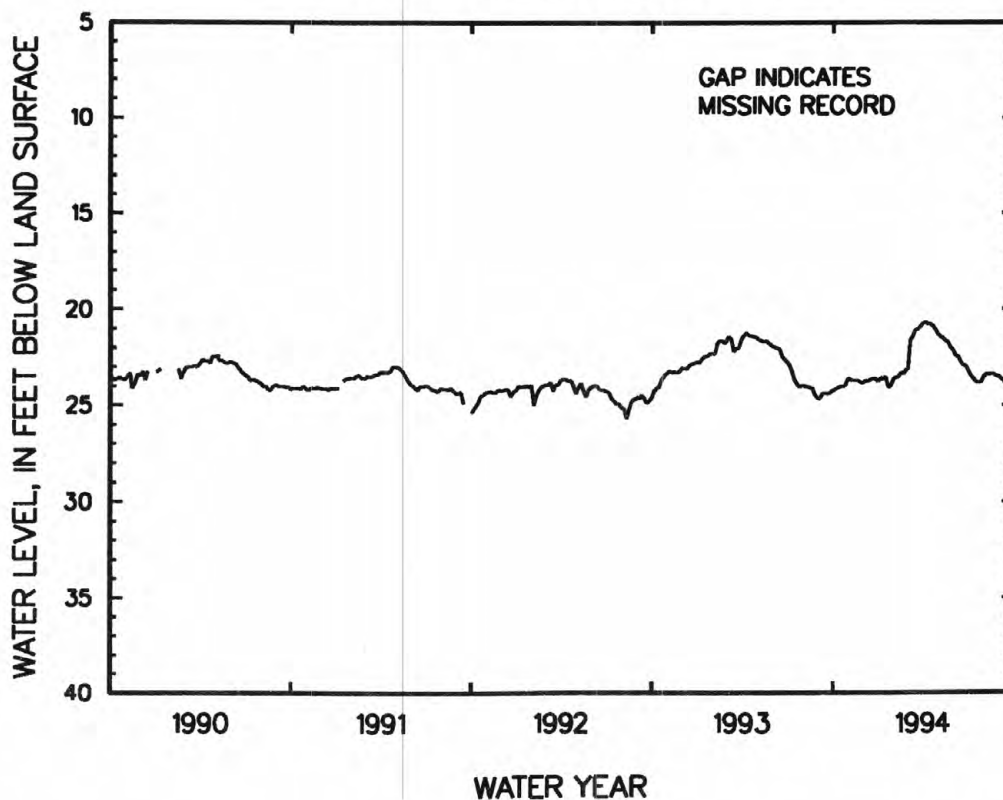
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 20.63 ft below land-surface datum, Apr. 1, 1994; lowest recorded, 85.57 ft below land-surface datum, Aug. 5, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.18	23.68	23.71	23.58	23.56	21.65	20.70	21.40	22.43	23.46	23.38	23.65
10	24.10	23.72	23.75	23.63	23.51	21.43	20.77	21.51	22.45	23.60	23.40	23.76
15	24.04	23.72	23.67	23.52	23.30	21.10	20.78	21.65	22.76	23.78	23.36	24.01
20	24.00	23.72	23.62	24.05	23.36	21.04	20.88	21.71	22.91	23.81	23.38	24.02
25	24.00	23.80	23.60	24.02	23.13	20.92	21.04	21.96	22.96	23.82	23.47	23.90
EOY	23.60	23.84	23.76	23.60	23.16	20.75	21.30	22.14	23.20	23.51	23.52	23.96

WATER YEAR 1994      HIGHEST INSTANTANEOUS    20.63    APR 01, 1994      LOWEST INSTANTANEOUS    24.30    SEP 13, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371709075560804. Local number, 63G 21 SOW 104S.

LOCATION.--Lat 37°17'09", long 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 36 ft, screened 26 to 36 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum.

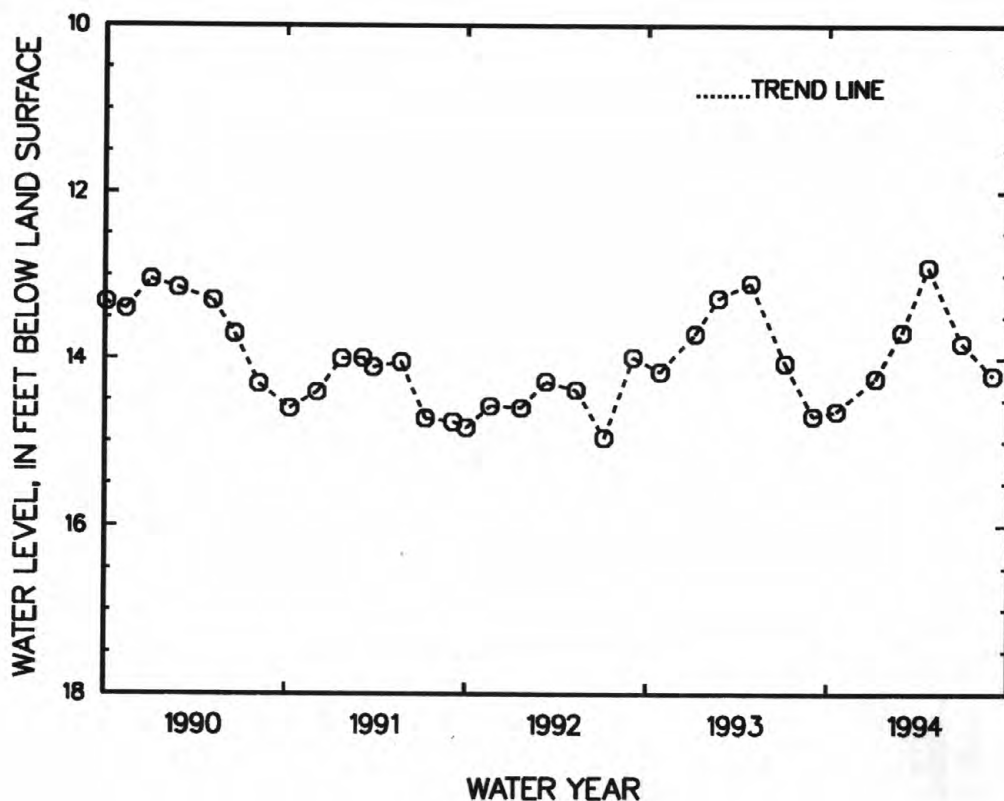
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.25 ft below land-surface datum, Nov. 23, 1979; lowest measured, 16.35 ft below land-surface datum, Nov. 15, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	14.63	JAN 06	14.23	FEB 28	13.68	APR 21	12.90	JUN 28	13.81	AUG 29	14.20
WATER YEAR 1994      HIGHEST    12.90    APR 21, 1994      LOWEST    14.63    OCT 19, 1993											



## GROUND-WATER LEVELS

283

## NORTHAMPTON COUNTY

371653075584801. Local number, 63G 22 SOW 111A.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 150 ft, screened 140 to 150 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum prior to Apr. 27, 1987; 1.60 ft Apr. 27, 1987, to Feb. 29, 1988; 1.1 ft Mar. 1, 1988, to June 19, 1989; 0.80 ft thereafter.

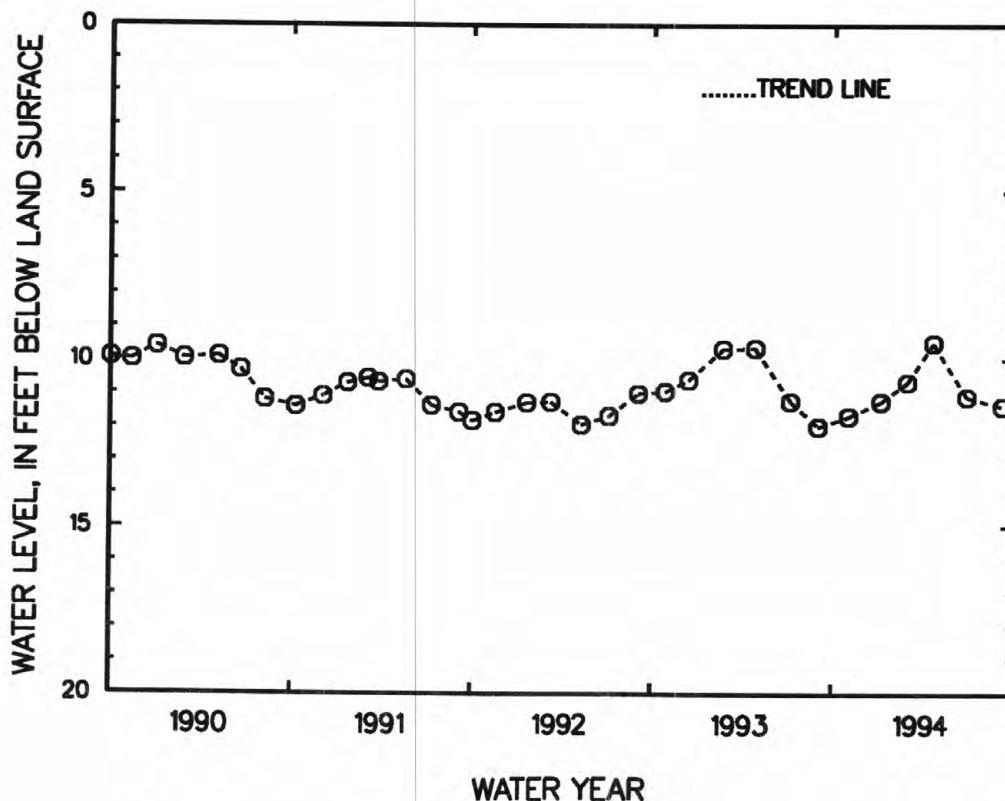
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.80 ft below land-surface datum, Feb. 2, 1984; lowest measured, 14.51 ft below land-surface datum, Feb. 17, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	11.70	JAN 06	11.26	FEB 28	10.67	APR 21	9.50	JUN 28	11.12	SEP 07	11.40
WATER YEAR 1994		HIGHEST	9.50	APR 21, 1994		LOWEST	11.70	NOV 02, 1993			





## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371653075584802. Local number, 63G 23 SOW 111B.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.42 ft above land-surface datum prior to July 20, 1987; 1.56 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

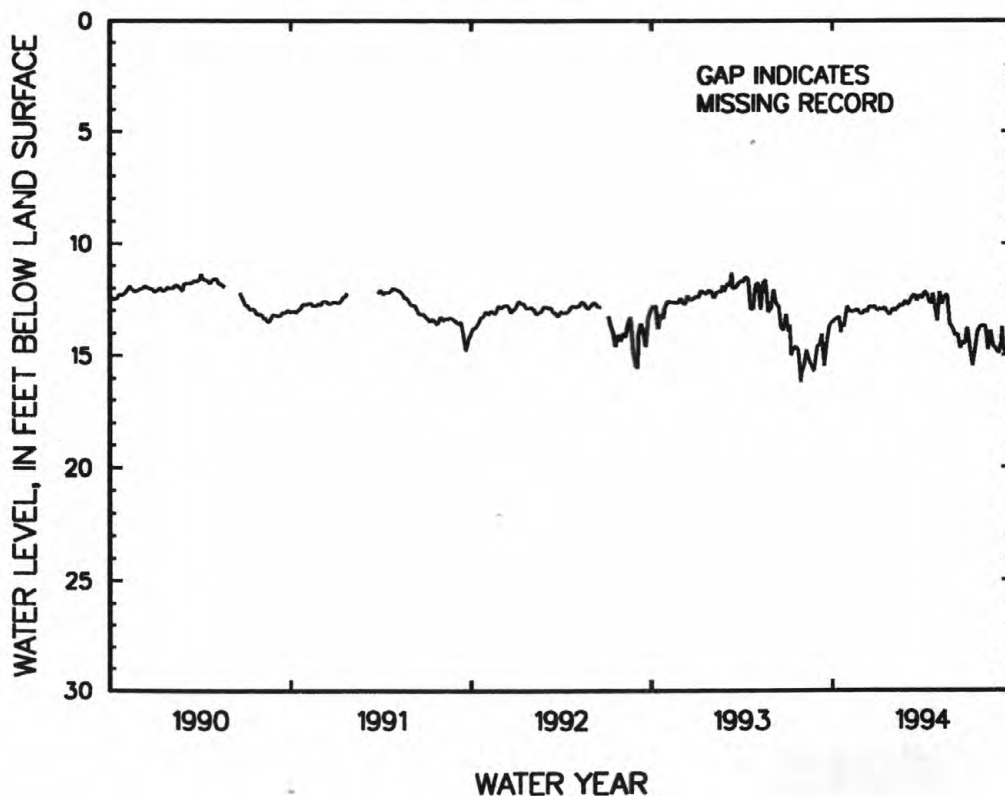
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.01 ft below land-surface datum, Dec. 30, 1982; lowest measured, 22.47 ft below land-surface datum, Sept. 15, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.45	13.02	12.99	12.92	13.00	12.54	12.16	12.20	14.13	14.72	13.74	14.43
10	13.35	13.05	13.08	12.98	12.88	12.43	12.31	12.72	14.06	15.47	14.75	14.78
15	13.29	13.02	12.82	12.87	12.75	12.31	12.68	12.36	14.69	14.73	13.92	14.86
20	13.61	12.94	12.87	13.09	12.80	12.58	12.62	12.33	14.40	13.95	14.60	14.96
25	13.70	13.11	12.81	13.18	12.59	12.34	12.74	13.61	14.50	13.75	14.70	14.38
EOM	12.82	13.15	12.99	12.92	12.75	12.47	13.48	13.80	13.78	13.67	14.91	15.28

WATER YEAR 1994      HIGHEST INSTANTANEOUS      11.93      APR 14, 1994      LOWEST INSTANTANEOUS      15.48      SEP 04, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

285

## NORTHAMPTON COUNTY

371653075584803. Local number, 63G 24 SOW 111C.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 330 ft, screened 320 to 330 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.67 ft above land-surface datum prior to Feb. 28, 1988; 1.95 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

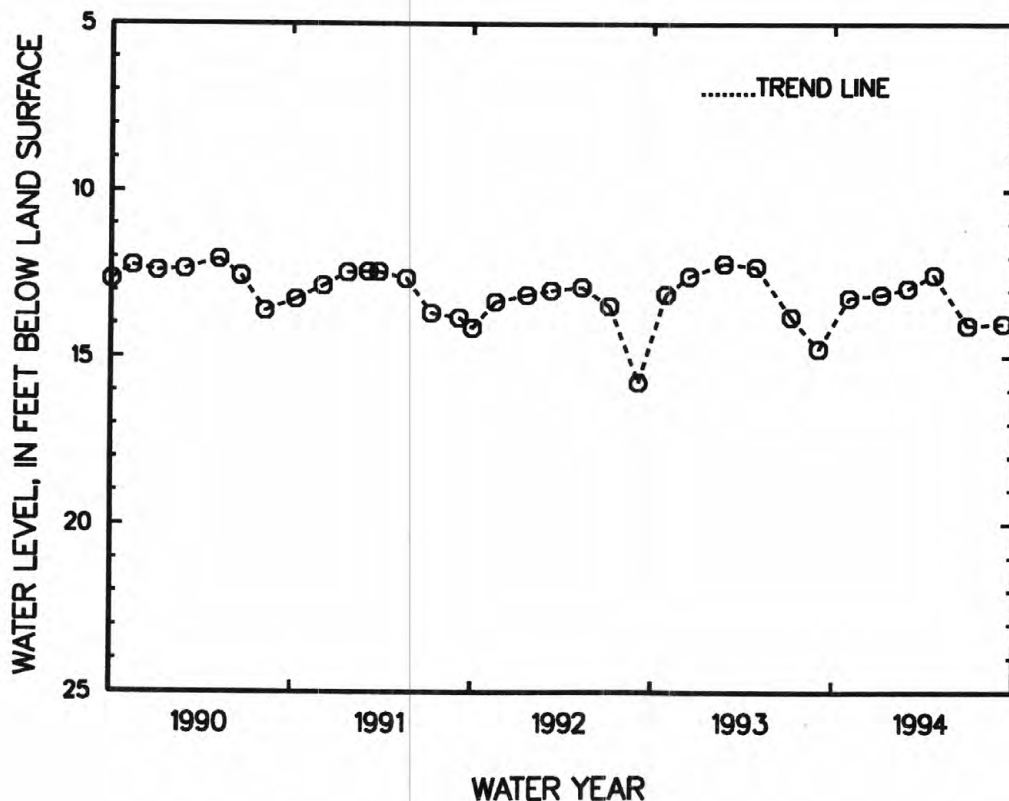
PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.01 ft below land-surface datum, Feb. 17, 1981; lowest measured, 22.71 ft below land-surface datum, Sept. 15, 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	13.21	JAN 06	13.11	FEB 28	12.92	APR 21	12.52	JUN 28	14.05	SEP 07	13.99

WATER YEAR 1994      HIGHEST    12.52    APR 21, 1994      LOWEST    14.05    JUN 28, 1994



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371653075584804. Local number, 63G 25 SOW 111S.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 1.5 in., depth 70 ft, screened 60 to 70 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.64 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

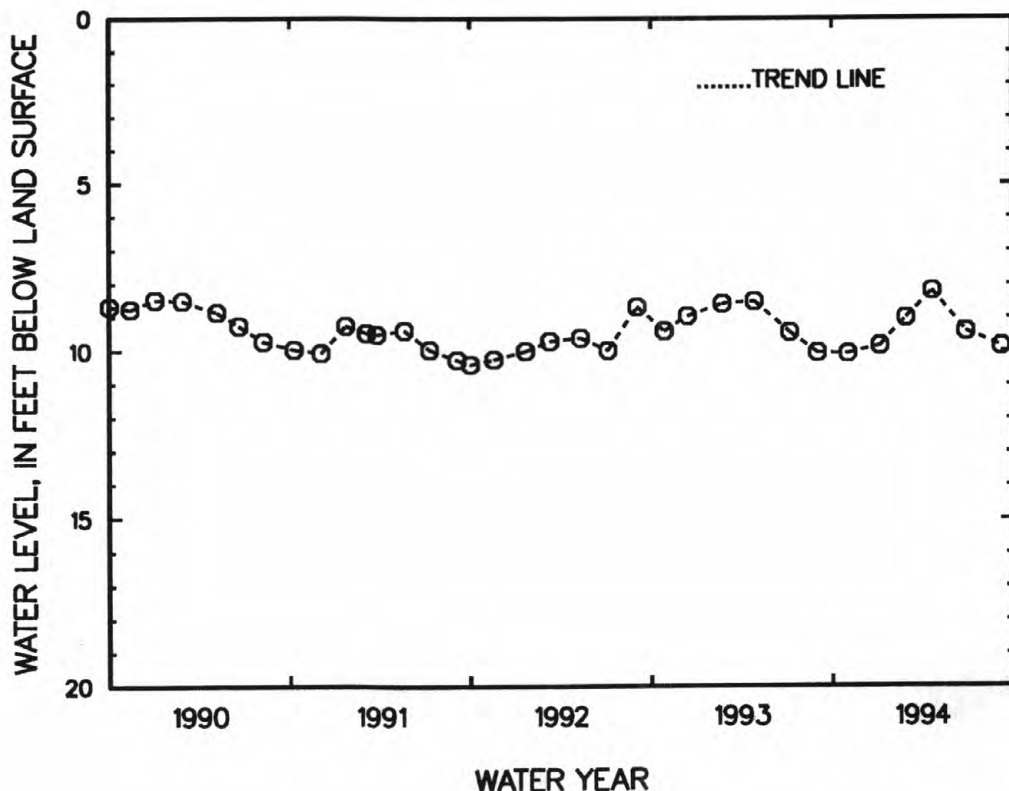
PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.96 ft below land-surface datum, Apr. 18, 1989; lowest measured, 10.82 ft below land-surface datum, Nov. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	10.06	JAN 06	9.83	FEB 28	9.00	APR 21	8.20	JUN 28	9.41	SEP 07	9.85

WATER YEAR 1994      HIGHEST    8.20    APR 21, 1994      LOWEST    10.06    NOV 02, 1993



## GROUND-WATER LEVELS

287

## NORTHAMPTON COUNTY

371726075572801. Local number, 63G 26 SOW 160.

LOCATION.--Lat 37°17'26", long 75°57'28", Hydrologic Unit 02080110, at Kane Miller Corporation plant, 0.4 mi north of State Highway 639, 0.7 mi northwest of intersection of State Highways 637 and 639, and 0.8 mi east of Cheriton. Owner: Kane Miller Corporation.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 2 in., depth 320 ft, screened 310 to 320 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 34 ft above sea level, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

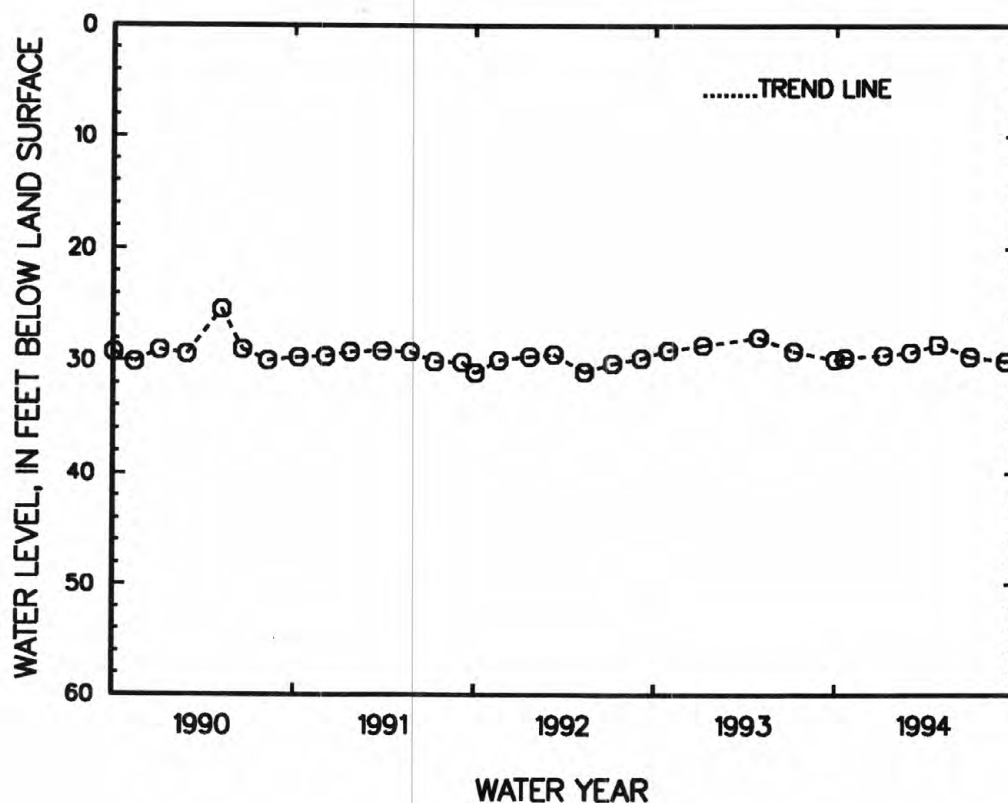
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by pumpage.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.99 ft below land-surface datum, July 23, 1980; lowest measured, 74.90 ft below land-surface datum, Oct. 16, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	29.72	JAN 05	29.46	MAR 01	29.22	APR 25	28.51	JUN 28	29.61	SEP 07	30.02
WATER YEAR 1994		HIGHEST	28.51	APR 25, 1994	LOWEST	30.02	SEP 07, 1994				



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

371710075552201. Local number, 63G 27 SOW 161.

LOCATION.--Lat 37°17'10", long 75°55'22", Hydrologic Unit 02080110, 15 ft south of State Highway 639, 100 ft southeast of intersection of State Highways 639 and 1801, and at town of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 185 ft, screened 175 to 185 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5.5 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

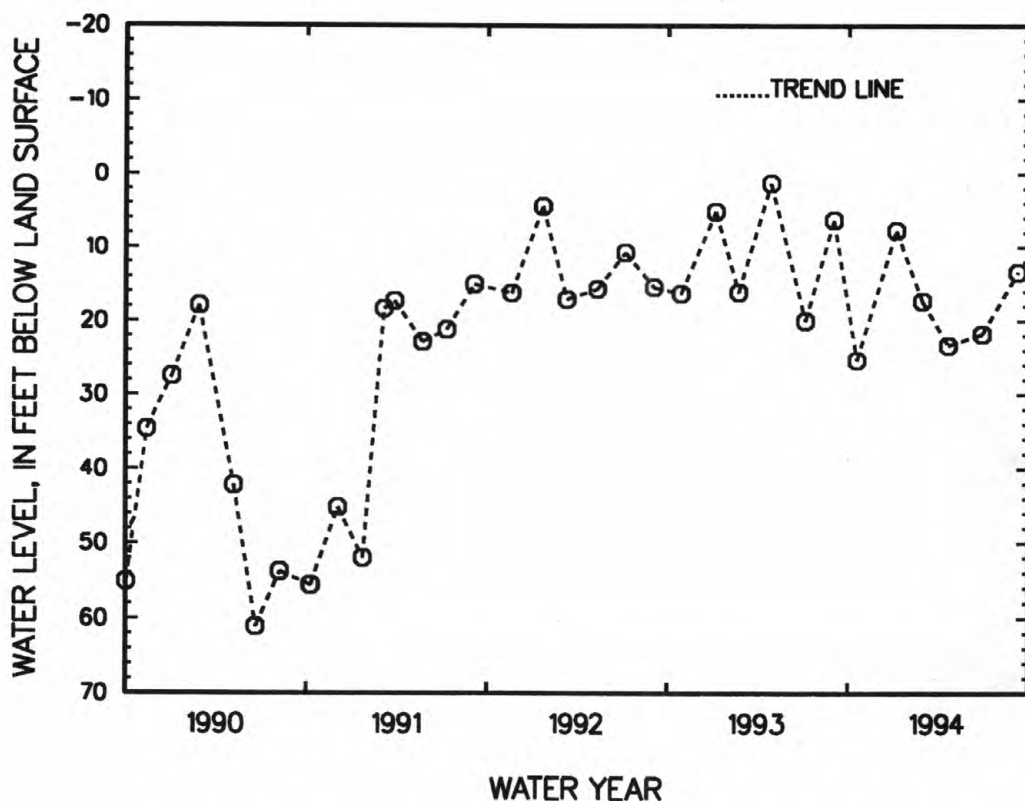
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.26 ft below land-surface datum, Apr. 28, 1993; lowest measured, 70.91 ft below land-surface datum, Dec. 18, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	25.32	JAN 06	7.70	FEB 28	17.30	APR 21	23.29	JUN 28	21.76	SEP 07	13.40
WATER YEAR 1994      HIGHEST    7.70    JAN 06, 1994      LOWEST    25.32    OCT 19, 1993											



## GROUND-WATER LEVELS

289

## NORTHAMPTON COUNTY

372705075555901. Local number, 63H 4 SOW 103C.

LOCATION.--Lat 37°27'06", long 75°55'59", Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 235 ft, screened 225 to 235 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Mar 1, 1988; 0.8 ft thereafter.

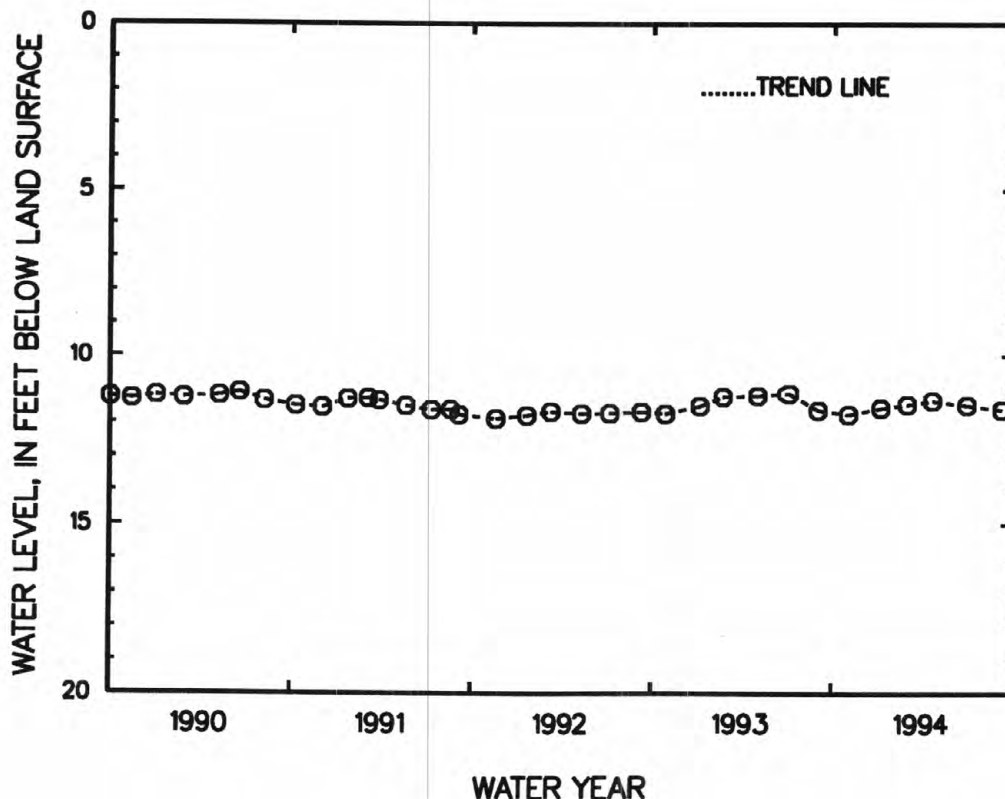
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.15 ft below land-surface datum, May 1, 1979; lowest measured, 12.56 ft below land-surface datum, Nov. 11, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	11.76	JAN 06	11.57	FEB 28	11.46	APR 20	11.35	JUN 28	11.48	SEP 06	11.62
WATER YEAR 1994		HIGHEST	11.35	APR 20, 1994	LOWEST	11.76	NOV 02, 1993				





## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

372705075555902. Local number, 63H 5 SOW 103B.

LOCATION.--Lat 37°27'05", long 75°55'59", Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 132 ft, screened 122 to 132 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 0.55 ft above land-surface datum prior to Mar. 1, 1988; 1.25 ft thereafter.

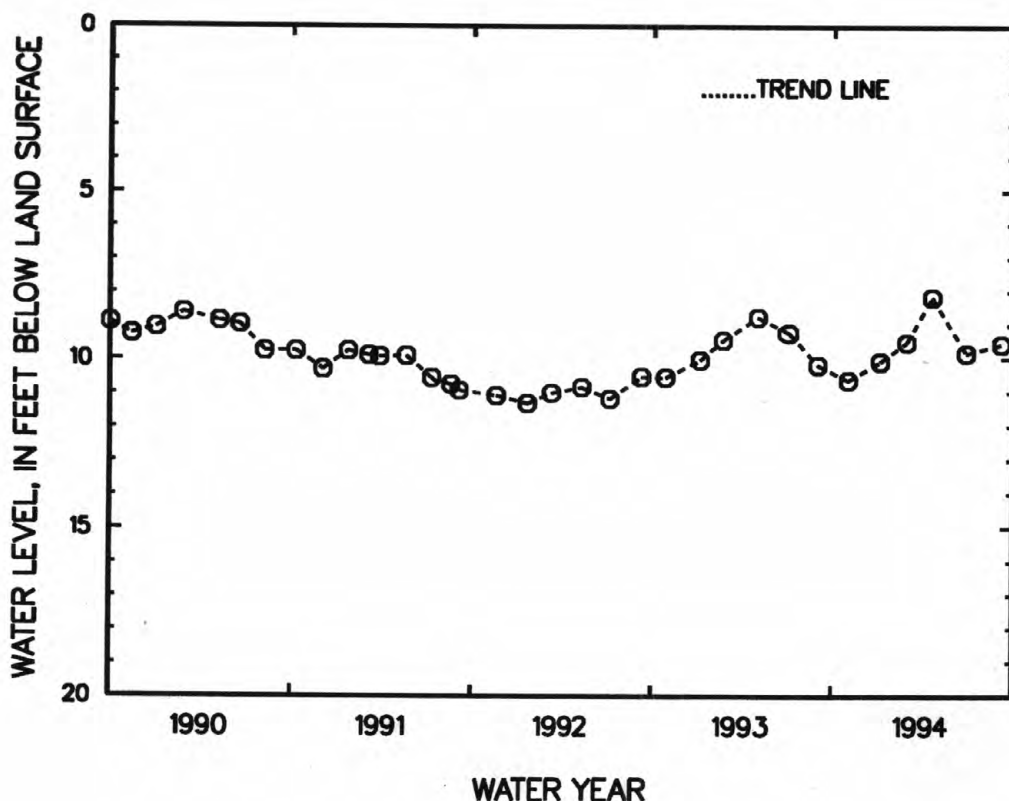
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.90 ft below land-surface datum, Feb. 1, 1979; lowest measured, 12.00 ft below land-surface datum, Jan. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	10.63	JAN 06	10.08	FEB 28	9.51	APR 20	8.16	JUN 28	9.84	SEP 06	9.57
WATER YEAR 1994		HIGHEST	8.16	APR 20, 1994	LOWEST	10.63	NOV 02, 1993				



## GROUND-WATER LEVELS

291

## NORTHAMPTON COUNTY

372705075555903. Local number, 63H 6 SOW 103A.

LOCATION.--Lat 37°27'05", long 75°55'59", Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

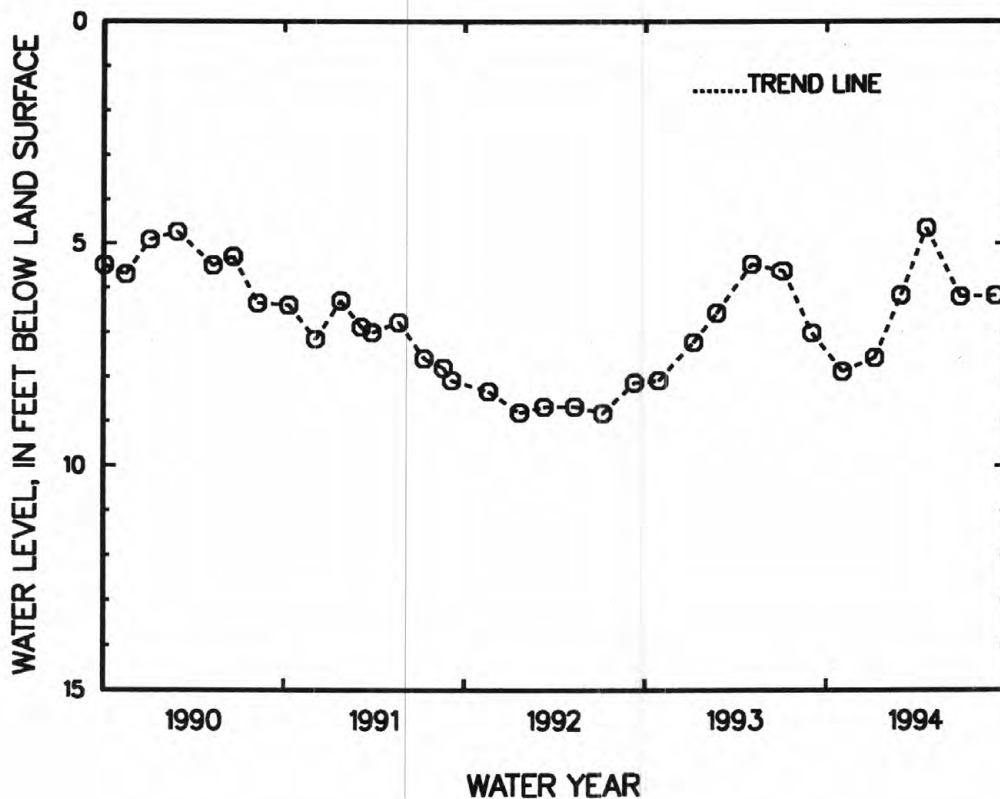
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.94 ft below land-surface datum, Aug. 2, 1979; lowest measured, 9.93 ft below land-surface datum, Jan. 9, 1989.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	7.89	JAN 06	7.58	FEB 28	6.17	APR 20	4.65	JUN 28	6.20	SEP 06	6.18
WATER YEAR 1994		HIGHEST	4.65	APR 20, 1994		LOWEST	7.89	NOV 02, 1993			



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

373230075541001. Local number, 63J 1 SOW 113A.

LOCATION.--Lat 37°32'16", long 75°54'07", Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.4 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 120 ft, screened 110 to 120 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above sea level, from topographic map. Measuring point: Top of casing, 1.32 ft above land-surface datum prior to Oct. 6, 1988; 1.5 ft thereafter.

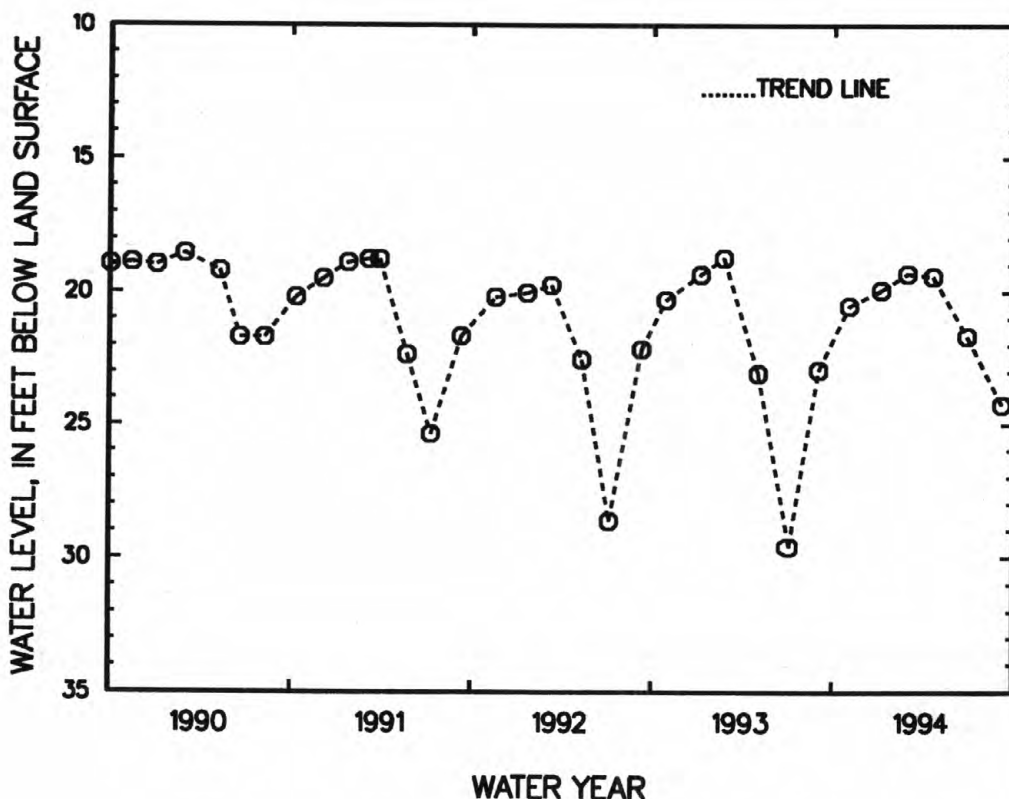
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.79 ft below land-surface datum, Apr. 21, 1983; lowest measured, 29.59 ft below land-surface datum, July 6, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	20.52	JAN 06	19.92	FEB 28	19.30	APR 20	19.41	JUN 28	21.65	SEP 06	24.25
WATER YEAR 1994      HIGHEST   19.30   FEB 28, 1994      LOWEST   24.25   SEP 06, 1994											



## GROUND-WATER LEVELS

293

## NORTHAMPTON COUNTY

373230075541002. Local number, 63J 2 SOW 113B.

LOCATION.--Lat 37°32'16", long 75°54'07", Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.40 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 225 ft, screened 215 to 225 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above sea level, from topographic map. Measuring point: Top of casing, 0.52 ft above land-surface datum prior to Oct. 6, 1988; 1.3 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

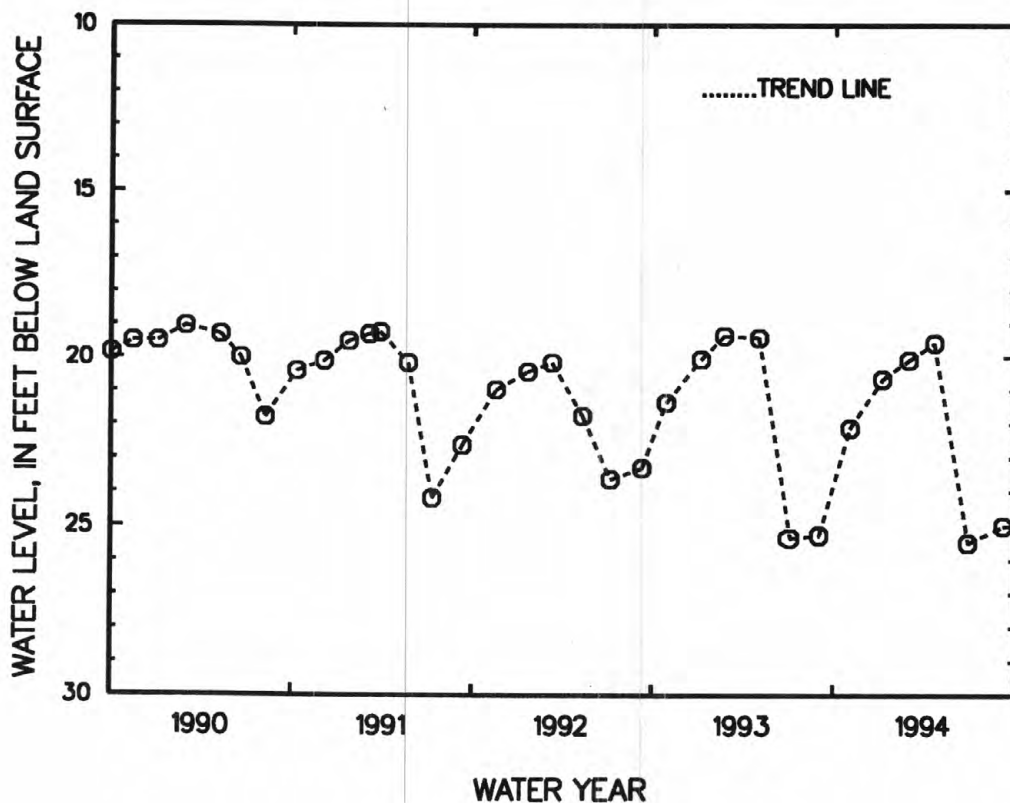
PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.20 ft below land-surface datum, Apr. 21, 1983; lowest measured, 25.49 ft below land-surface datum, June 28, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	22.11	JAN 06	20.64	FEB 28	20.07	APR 20	19.56	JUN 28	25.49	SEP 06	25.00

WATER YEAR 1994      HIGHEST    19.56    APR 20, 1994      LOWEST    25.49    JUN 28, 1994



## GROUND-WATER LEVELS

## NORTHAMPTON COUNTY

373230075541003. Local number, 63J 3 SOW 113C.

LOCATION.--Lat 37°32'16", long 75°54'07", Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.4 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 290 ft, screened 280 to 290 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above sea level, from topographic map. Measuring point: Top of casing, 1.44 ft above land-surface datum.

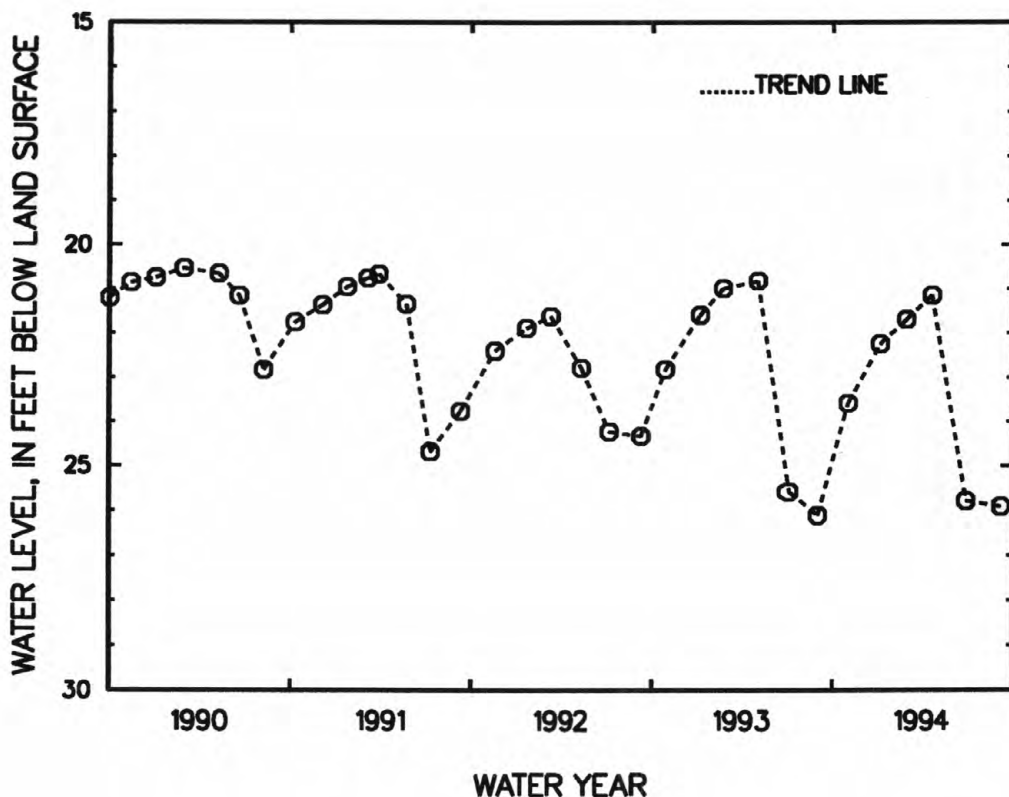
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.26 ft below land-surface datum, Apr. 21, 1983; lowest measured, 26.10 ft below land-surface datum, Sept. 2, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	23.58	JAN 06	22.24	FEB 28	21.69	APR 20	21.15	JUN 28	25.79	SEP 06	25.92
WATER YEAR 1994		HIGHEST	21.15	APR 20, 1994	LOWEST	25.92	SEP 06, 1994				



## GROUND-WATER LEVELS

295

## NORTHAMPTON COUNTY

373059075484501. Local number, 64J 9 SOW 112A.

LOCATION.--Lat 37°30'59", long 75°48'45", Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 660 and 600, and 0.3 mi west of Willis Wharf. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 135 ft, screened 125 to 135 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum prior to Feb. 29, 1988; 0.7 ft thereafter.

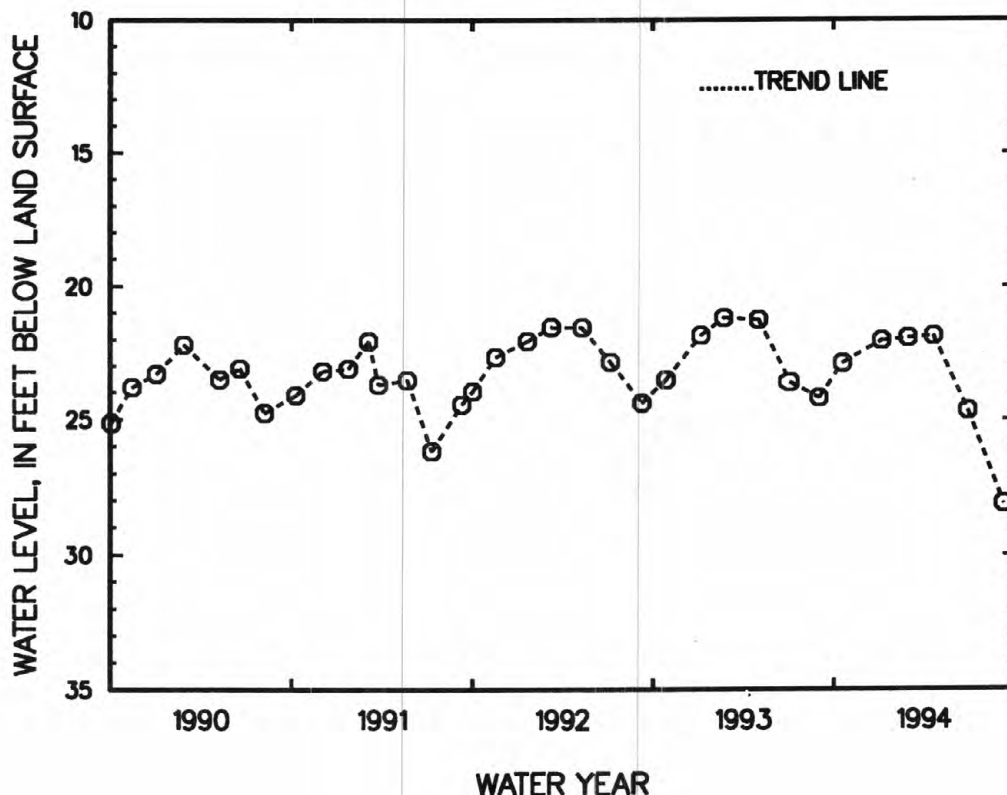
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.19 ft below land-surface datum, Feb. 22, 1993; lowest measured, 33.57 ft below land-surface datum, July 18, 1980.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	22.89	JAN 06	22.04	FEB 28	21.94	APR 20	21.87	JUN 28	24.67	SEP 07	28.12
WATER YEAR 1994		HIGHEST	21.87	APR 20, 1994	LOWEST	28.12	SEP 07, 1994				





## NORTHAMPTON COUNTY

373059075484502. Local number, 64J 10 SOW 112B.

LOCATION.--Lat 37°30'59", long 75°48'45", Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 600 and 660, and 0.3 mi west of Willis Wharf. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 210 ft, screened 200 to 210 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 30 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum prior to Aug. 12, 1987; 1.6 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage prior to October 1991; seasonal and tidal effects thereafter.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

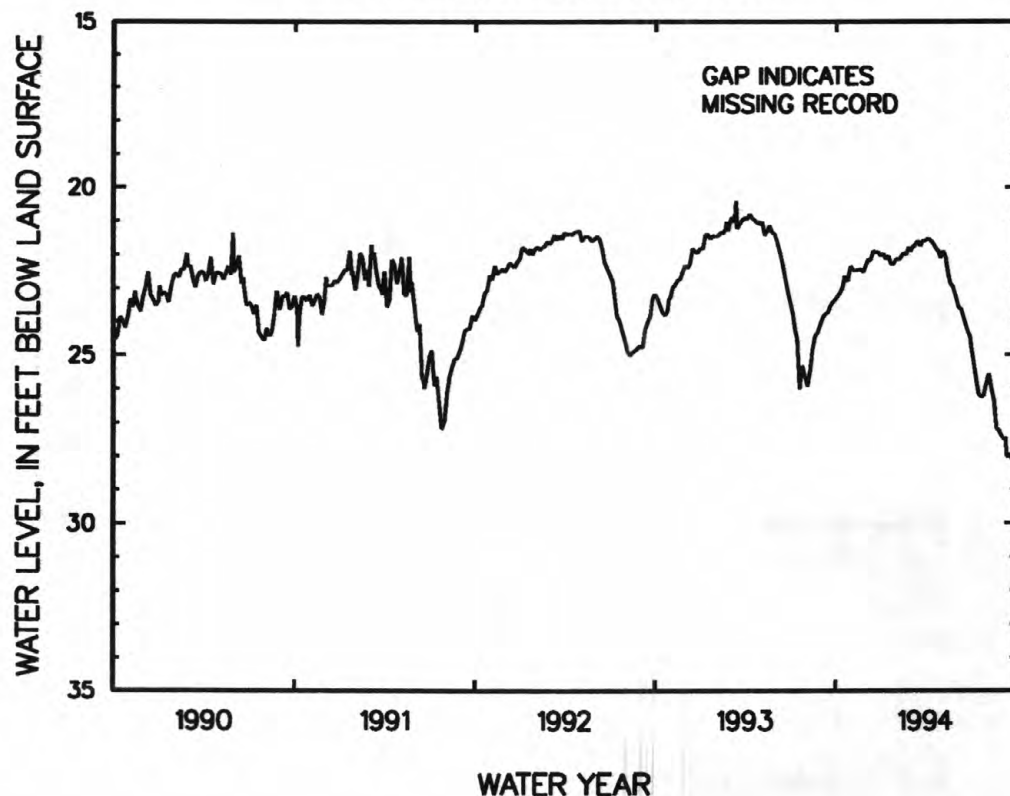
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 20.42 ft below land-surface datum, Mar. 13, 1993; lowest measured, 31.29 ft below land-surface datum, Oct. 1, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.24	22.47	22.14	21.97	22.16	21.78	21.53	21.90	23.59	25.20	25.58	27.52
10	23.14	22.49	22.19	22.14	22.06	21.70	21.58	22.08	23.64	25.70	26.02	28.05
15	22.97	22.46	21.89	22.05	21.96	21.60	21.67	22.57	23.88	26.17	26.37	27.95
20	22.76	22.45	21.95	22.29	22.00	21.74	21.80	22.88	24.15	26.25	27.20	28.10
25	22.78	22.53	21.92	22.29	21.78	21.60	21.88	22.98	24.37	26.25	27.25	27.77
EOY	22.35	22.33	22.05	22.14	21.89	21.58	22.11	23.29	24.74	25.83	27.44	27.83

WATER YEAR 1994      HIGHEST INSTANTANEOUS    21.05    MAR 03, 1994      LOWEST INSTANTANEOUS    28.40    SEP 17, 1994

## DAILY LOW-WATER LEVELS



GROUND-WATER LEVELS  
NORTHAMPTON COUNTY

297

373059075484503. Local number, 64J 11 SOW 112C.

LOCATION.--Lat 37°30'59", long 75°48'45", Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 600 and 660, and 0.3 mi west of Willis Wharf. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 313 ft, screened 303 to 313 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above sea level, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Apr. 27, 1987; 0.65 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

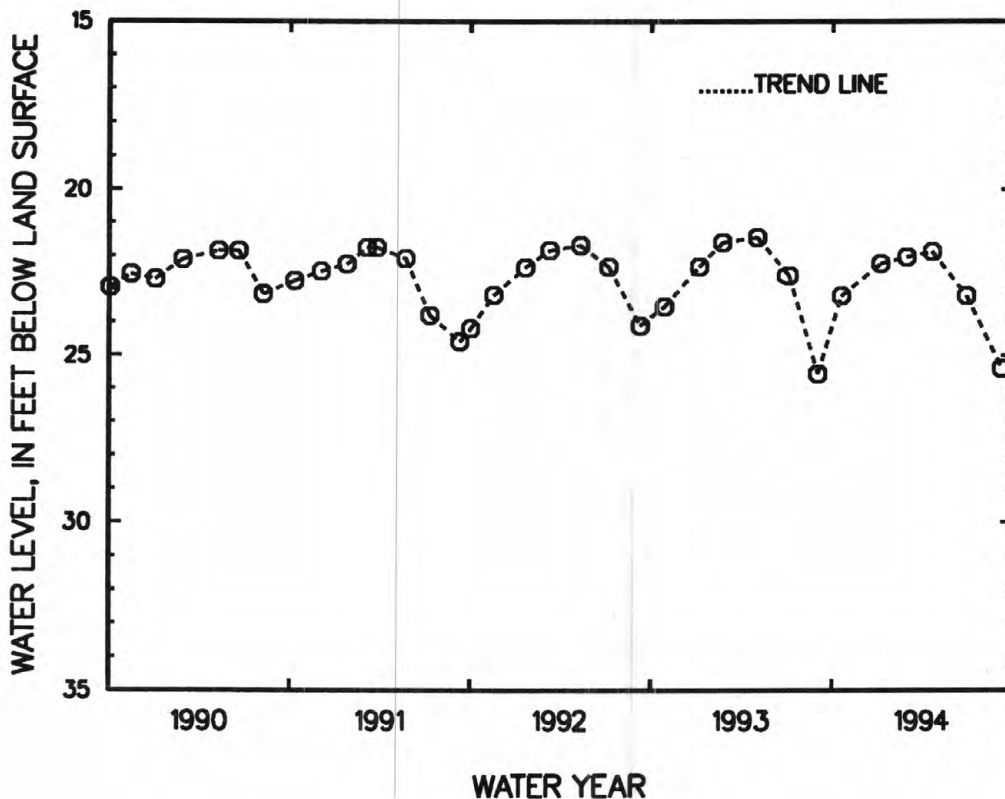
PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.78 ft below land-surface datum, Mar. 29, 1984; lowest measured, 35.70 ft below land-surface datum, Dec. 5, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	23.20	JAN 06	22.23	FEB 28	22.03	APR 20	21.87	JUN 28	23.20	SEP 07	25.39

WATER YEAR 1994      HIGHEST    21.87    APR 20, 1994      LOWEST    25.39    SEP 07, 1994



## NORTHAMPTON COUNTY

373046075482501. Local number, 64J 13 SOW 120.

LOCATION.--Lat 37°30'46", long 75°48'25", Hydrologic Unit 02080110, at American Original Corporation plant, 10 ft east of State Highway 603, 0.1 mi northeast of intersection of State Highways 603 and 660, and 0.3 mi south of Willis Wharf. Owner: American Original Corporation.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 105 ft, screened 95 to 105 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Aug. 31, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 7 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 0.7 ft above land-surface datum prior to Aug. 11, 1987; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage prior to October 1991; seasonal and tidal effects thereafter.

PERIOD OF RECORD.--August 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

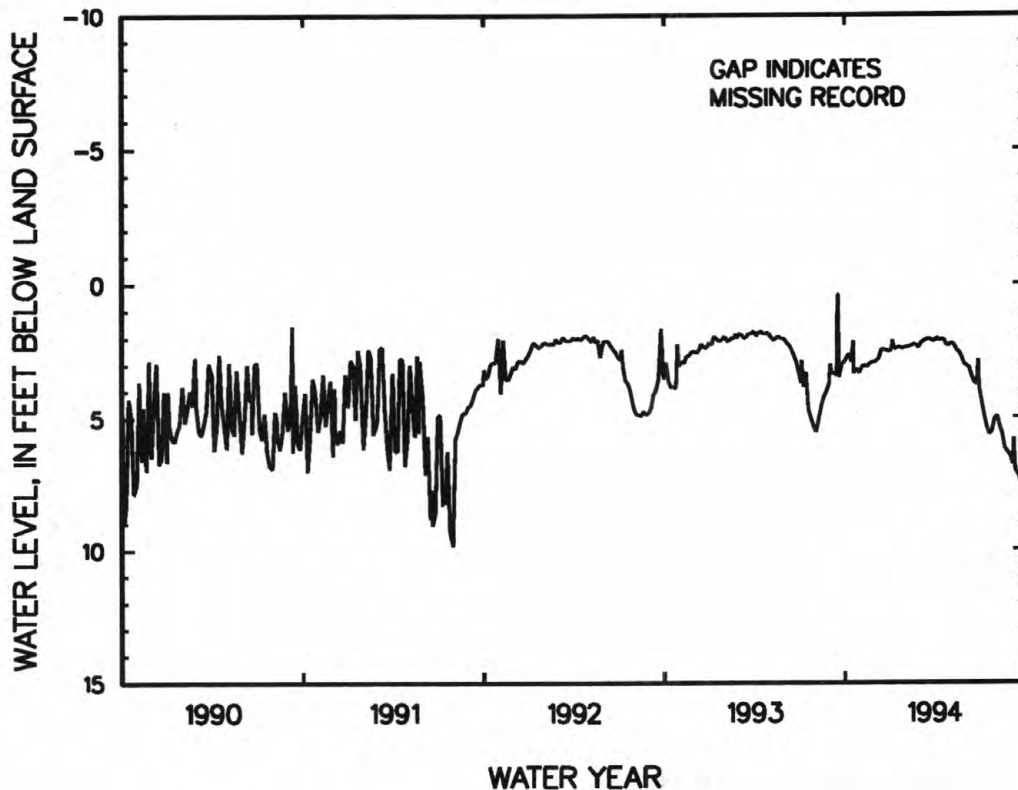
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.09 ft above land-surface datum, Sept. 25, 1992; lowest measured, 17.90 ft below land-surface datum, Dec. 1, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.76	3.10	2.88	2.40	2.35	2.21	2.03	2.22	3.07	4.43	4.97	6.80
10	2.61	3.03	2.75	2.44	2.34	2.14	2.12	2.30	3.15	4.95	5.38	7.05
15	2.89	3.09	2.44	2.39	2.30	2.10	2.08	2.46	3.47	5.37	5.66	7.15
20	3.33	2.99	2.46	2.37	2.26	2.05	2.10	2.54	3.70	5.66	6.21	7.45
25	3.16	2.93	2.47	2.41	2.33	2.10	2.30	2.72	3.77	5.57	6.33	7.04
EOM	3.33	2.90	2.52	2.38	2.38	2.16	2.30	3.00	3.91	5.06	6.48	7.15

WATER YEAR 1994      HIGHEST INSTANTANEOUS      0.13 MAR 03, 1994      LOWEST INSTANTANEOUS      7.45 SEP 20, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

299

## ORANGE COUNTY

381002078094201. Local number, 45P 1 SOW 030.

LOCATION.--Lat 38°10'02", long 78°09'42", Hydrologic Unit 02080106, off U.S. Highway 15, 2.3 mi north of Gordonsville. Owner: M. L. Johnson.

AQUIFER.--Phyllite of Evinston Group of Cambrian or Precambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 98 ft, length of casing unknown.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 480 ft above sea level, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction.

PERIOD OF RECORD.--February 1965 to current year.

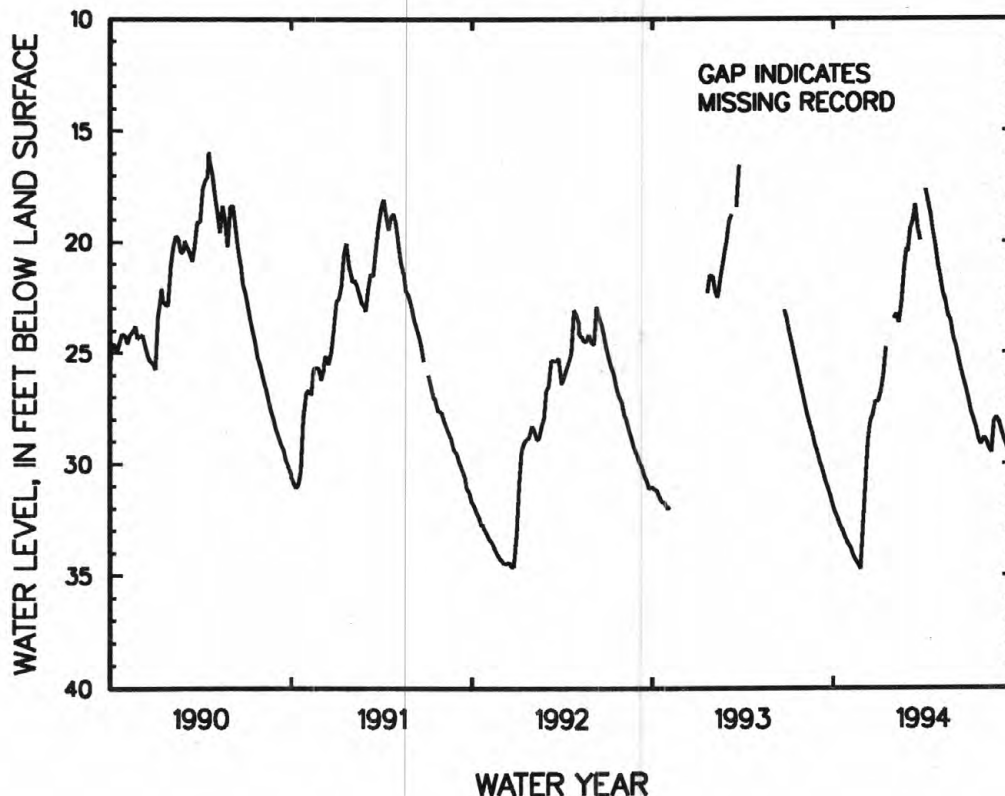
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.83 ft below land-surface datum, Apr. 10, 1973; lowest recorded, 35.90 ft below land-surface datum, Jan. 31, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.17	33.75	30.87	26.72	23.25	19.43	17.63	21.63	24.69	27.65	28.97	28.60
10	32.42	34.10	28.92	26.03	23.65	19.06	18.23	22.34	25.24	27.99	29.31	28.96
15	32.77	34.32	28.06	24.75	22.84	18.32	18.75	22.67	25.78	28.34	29.50	29.26
20	32.96	34.48	27.78	---	21.44	19.38	19.57	23.31	26.18	28.87	28.11	29.65
25	33.28	34.70	27.19	---	20.29	19.93	20.19	23.52	26.61	29.15	27.92	29.78
EOM	33.58	32.70	27.18	23.45	20.49	---	21.03	24.34	27.08	28.82	28.18	29.73

WATER YEAR 1994      HIGHEST INSTANTANEOUS    17.42    APR 06, 1994      LOWEST INSTANTANEOUS    34.70    NOV 25, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## PATRICK COUNTY

364732080070301. Local number, 30C 1 SOW 010.

LOCATION.--Lat 36°47'32", long 80°07'03", Hydrologic Unit 03010103, 300 ft west of State Highway 623, 1.0 mi northeast of intersection of State Highways 57 and 623, and 6.2 mi west of Philpott. Owner: Commonwealth of Virginia.

AQUIFER.--Lynchburg Group of Late Proterozoic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6.25 in., depth 250 ft, cased to 9 ft, open hole 9 to 250 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 1,060 ft above sea level, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

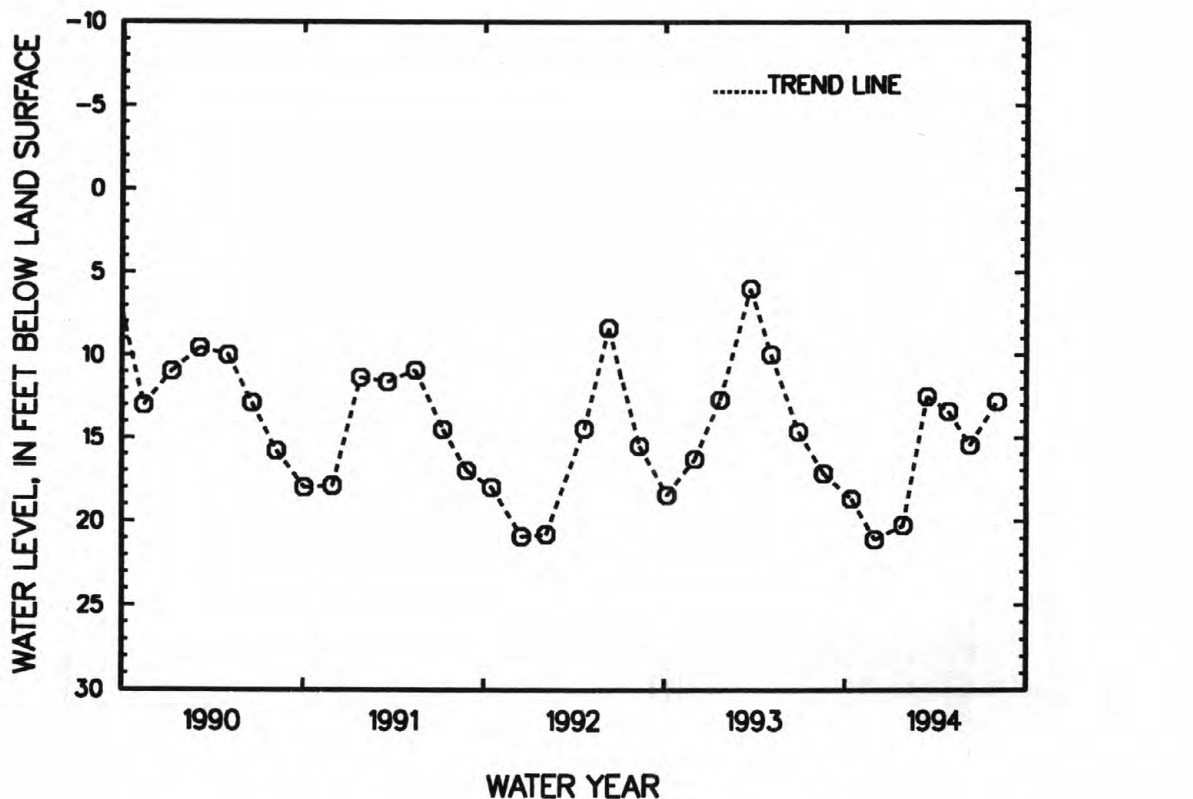
PERIOD OF RECORD.--May 1966 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.98 ft below land-surface datum, Mar. 23, 1993; lowest measured, 23.15 ft below land-surface datum, Jan. 10, 1989.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	18.66	JAN 26	20.25	MAR 15	12.48	APR 27	13.39	JUN 09	15.45	AUG 02	12.80
NOV 30	21.08										

WATER YEAR 1994      HIGHEST    12.48    MAR 15, 1994      LOWEST    21.08    NOV 30, 1993



## GROUND-WATER LEVELS

301

## CITY OF PORTSMOUTH

364823076181501. Local number, 60C 27.

LOCATION.--Lat 36°48'23", long 76°18'15", Hydrologic Unit 02080208, 100 ft east of State Highway 239 (Victory Boulevard), 0.1 mi south of the intersection of State Highway 239 (Victory Boulevard) and State Highway 337 (Elem Avenue) in the city of Portsmouth. Owner: U.S. Department of the Navy.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 908 ft, screened 903 to 908 ft.

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

DATUM.--Elevation of land-surface datum is 18 ft above sea level, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

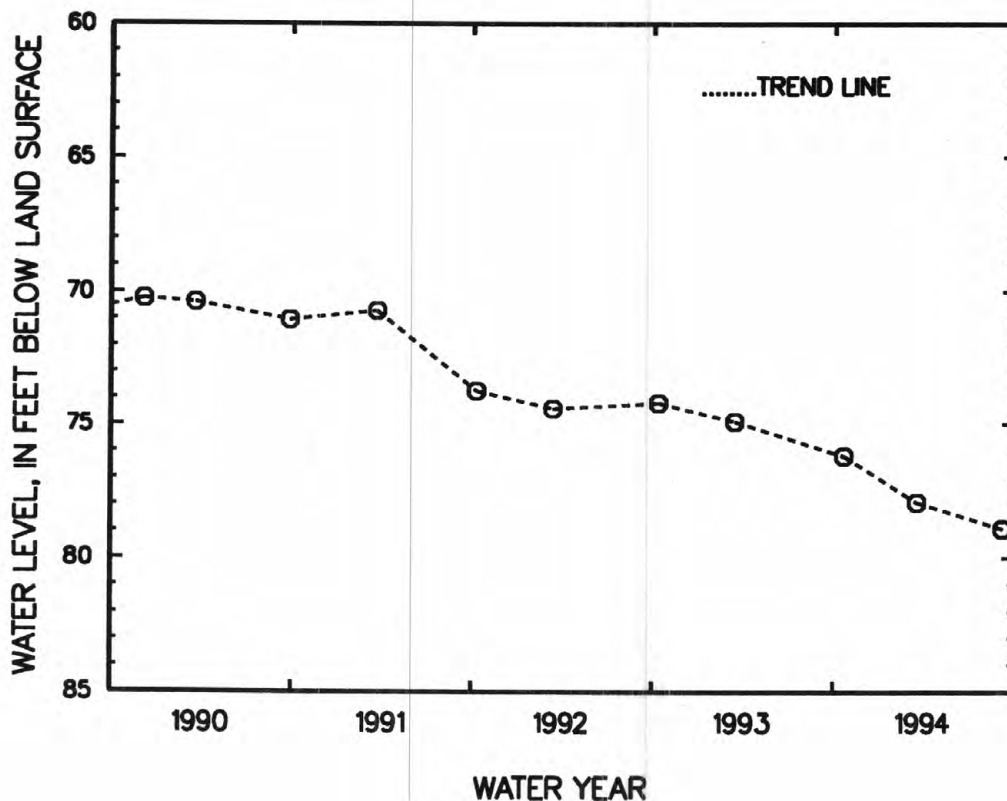
PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.65 ft below land-surface datum, June 19, 1985; lowest measured, 78.93 ft below land-surface datum, Sept. 7, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	76.20	MAR 18	77.95	SEP 07	78.93

WATER YEAR 1994      HIGHEST 76.20 OCT 22, 1993      LOWEST 78.93 SEP 07, 1994





## GROUND-WATER LEVELS

## CITY OF PORTSMOUTH

365313076215101. Local number, 60D 2.

LOCATION.--Lat 36°53'13", Long 76°21'51", Hydrologic Unit 02080208, 1.1 mi east of the main gate of the U.S. Naval Supply Center on Main Street in Building 285, 2.0 mi northwest of West Norfolk in the city of Portsmouth, and 2.25 mi north of the intersection of U.S. Highway 17 and Cedar Lane (Craney Island Road). Owner: U.S. Department of the Navy.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 170 ft, diameter 4 in. from 170 to 565 ft, depth 565 ft, screened 545 to 565 ft.

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

DATUM.--Elevation of land-surface datum is 12 ft above sea level, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

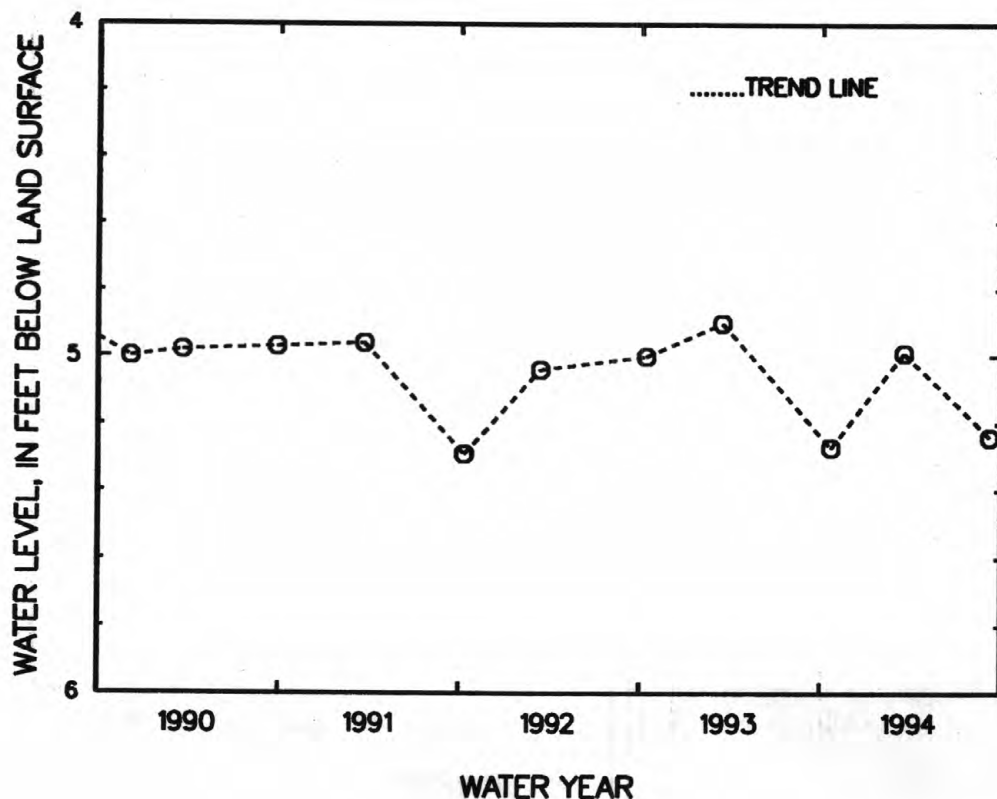
PERIOD OF RECORD.--January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.01 ft below land-surface datum, Sept. 18, 1985; lowest measured, 5.29 ft below land-surface datum, Oct. 10, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	5.27	MAR 18	4.99	SEP 07	5.24

WATER YEAR 1994      HIGHEST 4.99 MAR 18, 1994      LOWEST 5.27 OCT 22, 1993



## GROUND-WATER LEVELS

303

## PRINCE GEORGE COUNTY

371315077171901. Local number, 52F 1 SOW 038.

LOCATION.--Lat 37°13'15", long 77°17'19", Hydrologic Unit 03010202, 0.1 mi north of State Highway 106 in Prince George. Owner: Prince George County.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 180 ft, cased to 170 ft, open hole 170 to 180 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. May 25, 1974, to Oct. 9, 1985, occasional measurement with chalked tape. Jan. 31, 1971, to May 25, 1974, continuous strip-chart recorder. Prior to Jan. 31, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 132 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 3.4 ft above land-surface datum.

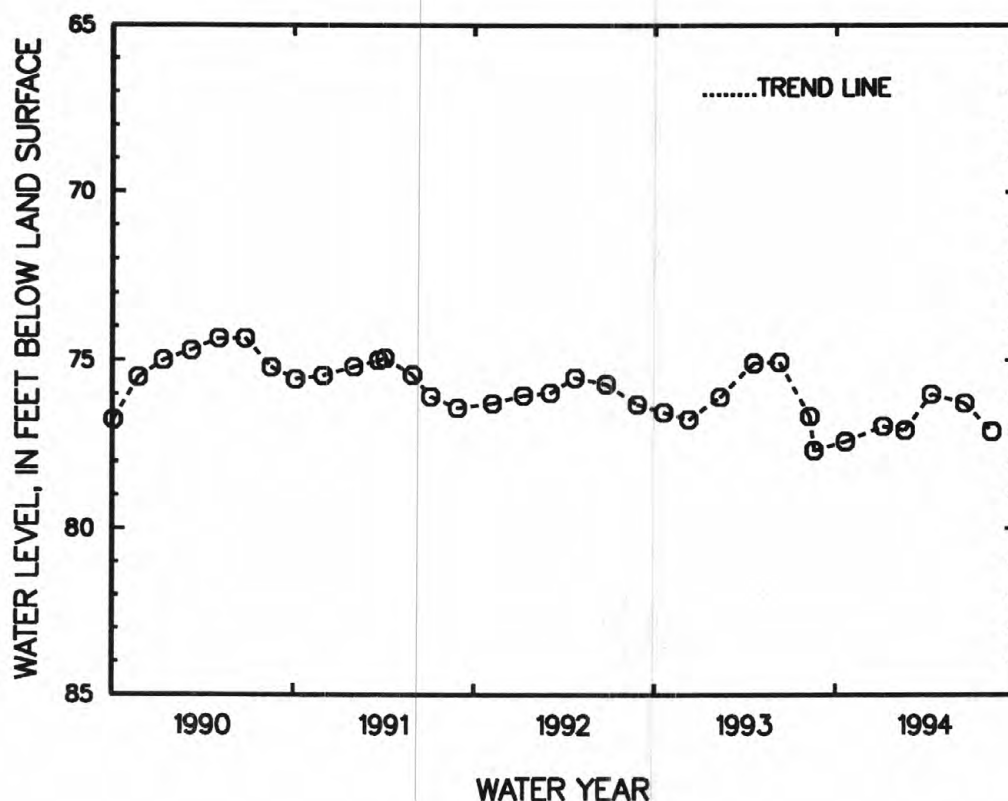
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.32 ft below land-surface datum, Feb. 4, 1980; lowest measured, 77.89 ft below land-surface datum, Sept. 20, 1988.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	77.40	JAN 04	76.95	FEB 17	77.07	APR 11	76.00	JUN 17	76.27	AUG 10	77.11
WATER YEAR 1994		HIGHEST	76.00	APR 11, 1994	LOWEST	77.40	OCT 21, 1993				



GROUND-WATER LEVELS  
PRINCE WILLIAM COUNTY

384931077420301. Local number, 49U 1.

LOCATION.--Lat 38°49'30", long 77°42'08", Hydrologic Unit 02070010, 500 ft north of State Highway 55, 0.8 mi east of Thoroughfare Gap, and 3.7 mi west of Haymarket. Owner: Virginia Department of Transportation.

AQUIFER.--Waterfall Formation of Early Jurassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in., depth 345 ft, cased to 20 ft, open hole 20 to 345 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. Prior to February 1980, continuous strip-chart recorder.

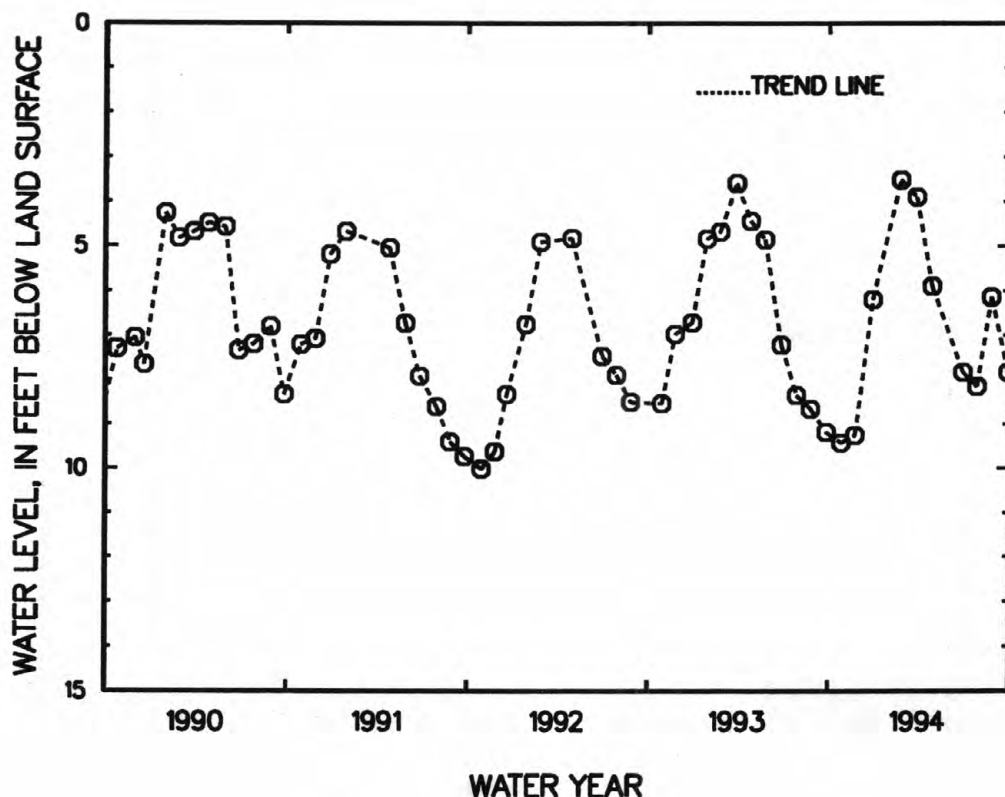
DATUM.--Elevation of land-surface datum is 383 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1968 to current year. Unpublished records available prior to May 1969 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.59 ft below land-surface datum, Mar. 19, 1975; lowest measured, 10.33 ft below land-surface datum, Oct. 14, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	9.42	DEC 30	6.19	MAR 28	3.90	JUN 29	7.83	AUG 25	6.14	SEP 27	7.84
NOV 24	9.25	FEB 24	3.52	APR 28	5.89	JUL 27	8.15				
WATER YEAR 1994		HIGHEST	3.52	FEB 24, 1994		LOWEST	9.42	OCT 27, 1993			



## GROUND-WATER LEVELS

305

## PRINCE WILLIAM COUNTY

385607077381101. Local number, 49V 1.

LOCATION.--Lat 38°56'07", Long 77°38'11", Hydrologic Unit 02070010, near intersection of State Highways 600 and 615, 2.8 mi south of Aldie. Owner: J. H. Hutchison.

AQUIFER.--Turkey Run Formation of Early Jurassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in., depth 165 ft, cased to 10 ft, open hole 10 to 165 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to June 19, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 420 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum. Readings from 1979 to 1981 should be 0.7 ft lower than previously published.

PERIOD OF RECORD.--November 1968 to current year.

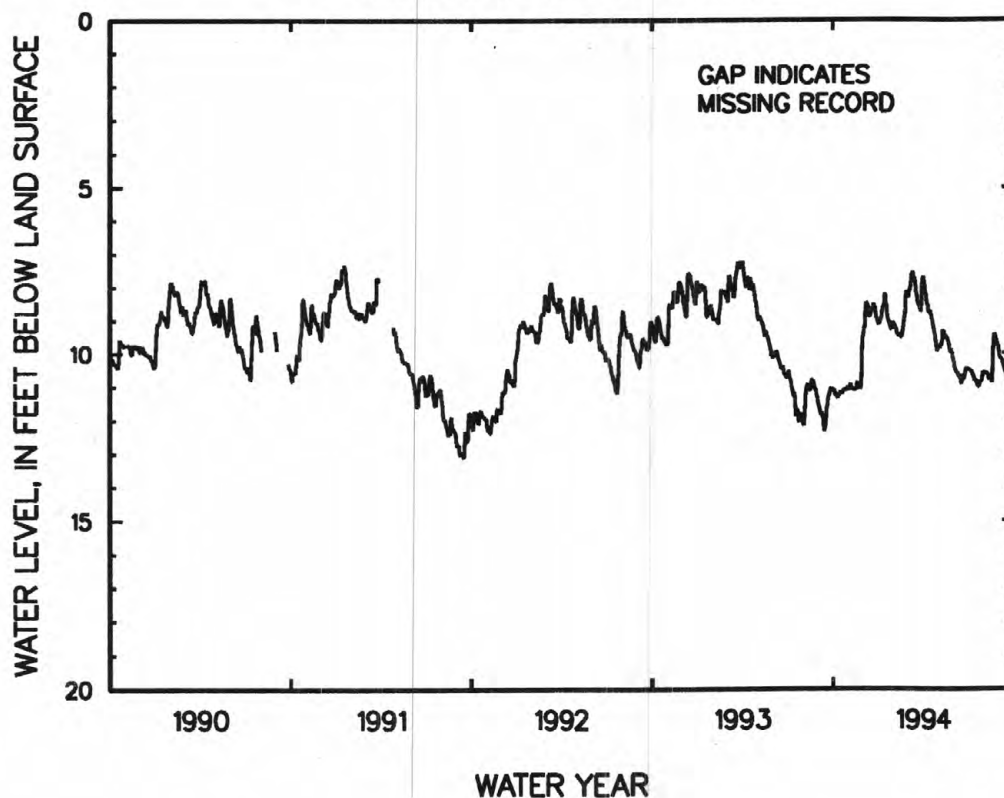
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.85 ft below land-surface datum, Oct. 12, 1979; lowest recorded, 13.09 ft below land-surface datum, Sept. 16, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.21	10.95	8.89	8.98	9.26	8.04	8.21	9.70	10.56	10.54	10.58	10.19
10	11.31	11.04	8.51	8.60	9.48	7.53	8.64	9.35	10.71	10.67	10.77	10.43
15	11.22	11.07	8.88	8.40	9.51	7.83	8.79	9.53	10.89	10.83	10.80	10.66
20	11.18	10.86	8.67	8.97	9.13	8.47	9.20	9.61	10.78	11.01	9.53	10.80
25	11.08	11.06	8.58	9.20	8.15	8.66	9.63	9.88	10.44	10.86	9.59	10.48
EOM	10.99	9.49	9.10	9.10	8.28	7.69	9.80	10.22	10.49	10.61	10.04	10.35

WATER YEAR 1994      HIGHEST INSTANTANEOUS    7.36    MAR 10, 1994      LOWEST INSTANTANEOUS    11.34    OCT 11, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## PRINCE WILLIAM COUNTY

383423077245901. Local number, 51S 7.

LOCATION.--Lat 38°34'23", long 77°24'59", Hydrologic Unit 02070011, in Prince William Forest Park, 700 ft north of State Highway 619, 0.7 mi southeast of Belfair Crossroads, and 4.6 mi south of Independent Hill. Owner: National Park Service.

AQUIFER.--Lunga Reservoir Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 490 ft, cased to 50 ft, open hole 50 to 490 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Recorder installed Dec. 21, 1982. Prior to Dec. 21, 1982, manual measurements with chalked tape by USGS personnel. Manual readings only published prior to 1985 water year. Recorded readings for 1985 water year published in addition to manual readings.

DATUM.--Elevation of land-surface datum is 295 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--September 1973 to November 1975, December 1977 to current year. Unpublished records available prior to December 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.00 ft above land-surface datum, Mar. 29, 1994; lowest recorded, 12.95 ft below land-surface datum, Nov. 16, 17, 1988.

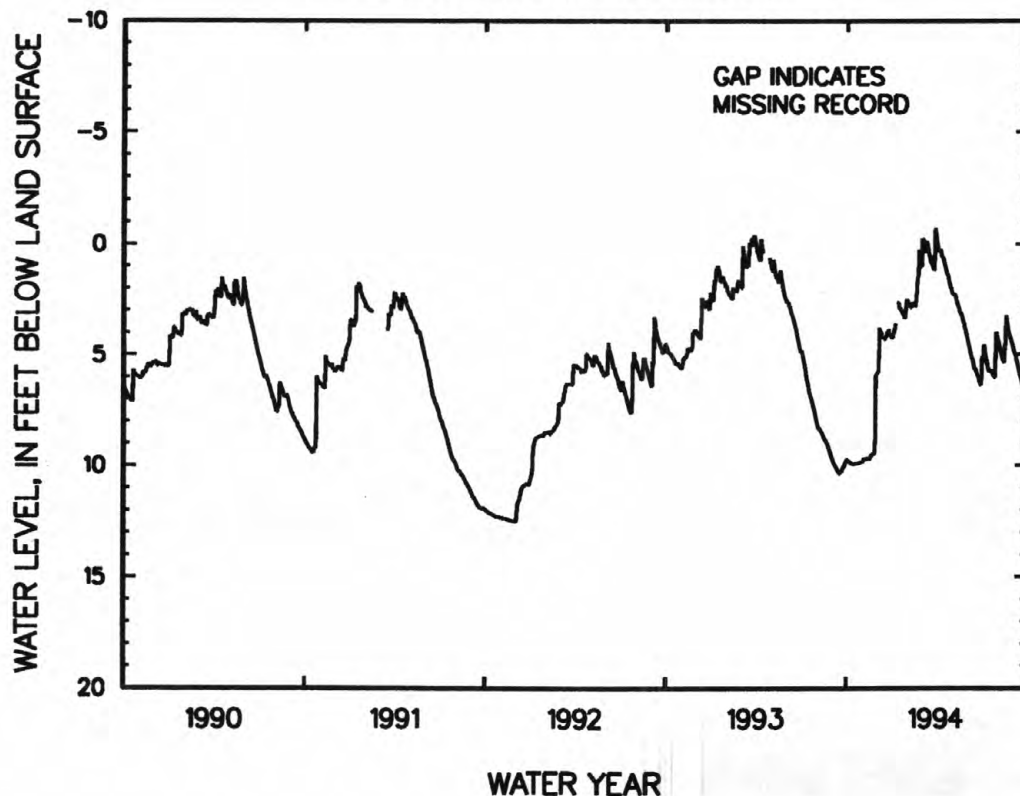
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.84	9.73	5.56	3.96	2.69	+1.17	.31	2.25	4.64	4.56	4.68	4.99
10	9.93	9.69	4.00	---	2.86	.24	.48	2.55	5.15	5.28	5.15	5.45
15	9.94	9.70	4.22	2.87	2.76	.26	.76	2.88	5.64	5.77	4.67	5.96
20	9.92	9.54	4.23	3.06	1.98	.86	1.27	3.18	5.85	5.81	3.60	6.35
25	9.91	9.49	3.87	3.27	.40	1.11	1.62	3.60	6.18	6.02	4.17	6.21
EOY	9.84	5.91	4.23	2.53	.94	+3.39	2.00	4.08	5.91	4.23	4.57	6.23

WATER YEAR 1994      HIGHEST INSTANTANEOUS    +1.00    MAR 29, 1994      LOWEST INSTANTANEOUS    9.95    OCT 19, 1993

+ Water level above land-surface datum.

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

307

## PRINCE WILLIAM COUNTY

383634077151301. Local number, 52S 4.

LOCATION.--Lat 38°36'34", long 77°15'13", Hydrologic Unit 02070010, 193 ft east of Richmond, Fredericksburg, and Potomac (RFP) railroad tracks, 1.1 mi southeast of the intersection of U.S. Highway 1 and State Highway 636 (Featherstone Road), 1.4 mi south of the intersection of State Highway 636 (Featherstone Road) and RFP railroad tracks, and near Woodbridge. Owner: District of Columbia Department of Sanitary Engineering.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in., depth 186 ft, screened 156 to 176 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Aug. 1, 1971, to July 10, 1978, continuous strip-chart recorder. Prior to Aug. 1, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point: Top of casing, 3.3 ft above land-surface datum prior to Aug. 28, 1978; 1.9 ft thereafter.

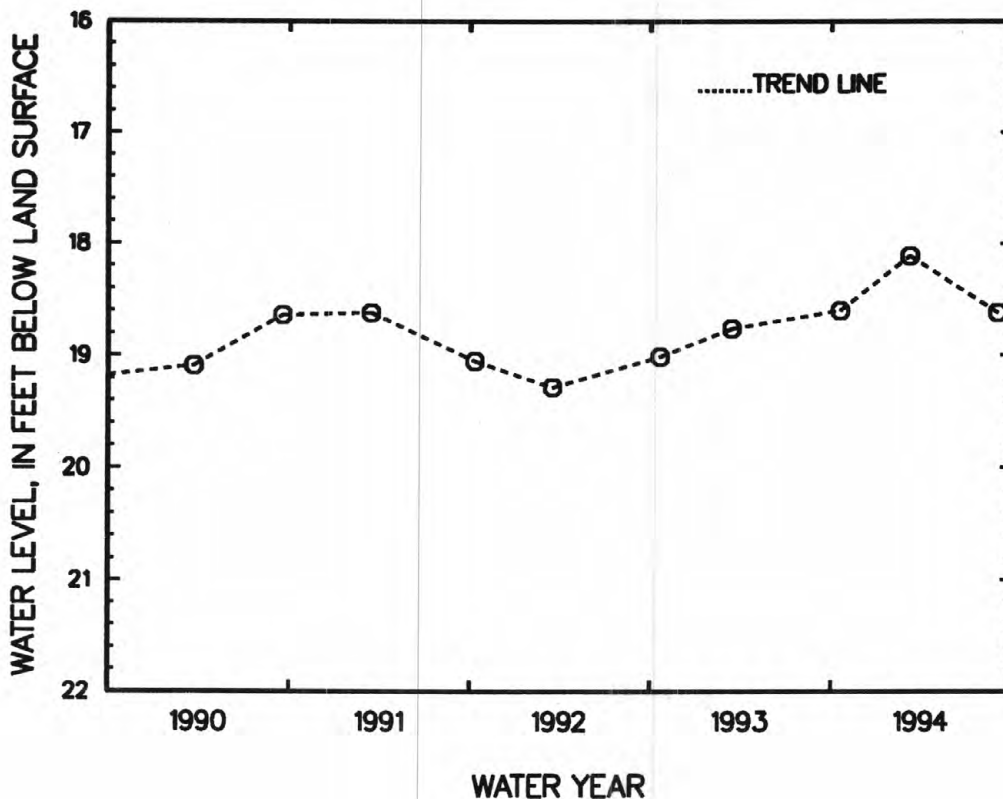
PERIOD OF RECORD.--June 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 17.17 ft below land-surface datum, Apr. 28, 1973; lowest measured, 22.17 ft below land-surface datum, July 1, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	18.60	MAR 08	18.11	AUG 31	18.62

WATER YEAR 1994      HIGHEST 18.11 MAR 08, 1994      LOWEST 18.62 AUG 31, 1994





## GROUND-WATER LEVELS

## PRINCE WILLIAM COUNTY

383634077151302. Local number, 52S 5.

LOCATION.--Lat 38°36'34", long 77°15'13", Hydrologic Unit 02070010, 193 ft east of Richmond, Fredericksburg, and Potomac (RFP) railroad tracks, 1.1 mi southeast of the intersection of U.S. Highway 1 and State Highway 636 (Featherstone Road), 1.4 mi south of the intersection of State Highway 636 (Featherstone Road) and RFP railroad tracks, and near Woodbridge. Owner: District of Columbia Department of Sanitary Engineering.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 114 ft, screened 95 to 105 ft.

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

DATUM.--Elevation of land-surface datum is 28 ft above sea level, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

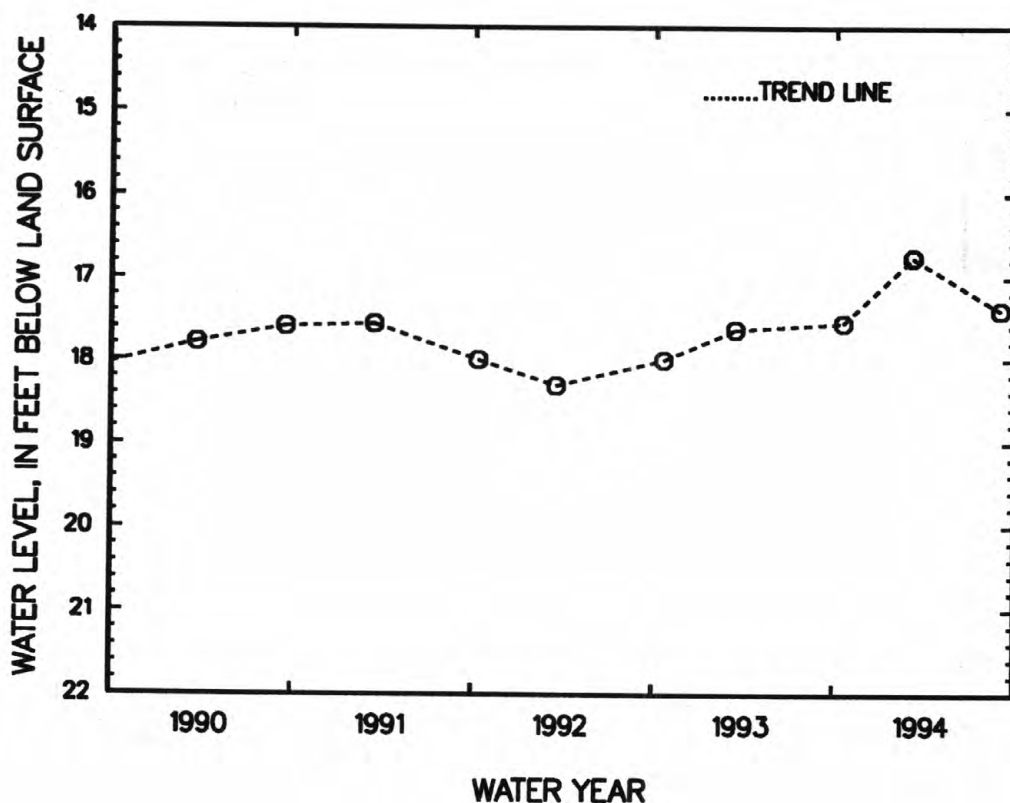
PERIOD OF RECORD.--July 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.44 ft below land-surface datum, Apr. 1, 1980; lowest measured, 19.62 ft below land-surface datum, Jan. 9, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	17.54	MAR 08	16.75	AUG 31	17.39

WATER YEAR 1994      HIGHEST 16.75 MAR 08, 1994      LOWEST 17.54 OCT 19, 1993



## GROUND-WATER LEVELS

309

## PRINCE WILLIAM COUNTY

383830077135502. Local number, 53T 2 SOW 029.

LOCATION.--Lat 38°38'30", long 77°13'55", Hydrologic Unit 02070010, at U.S. Army Woodbridge Research Facility, 1.5 mi east of Woodbridge. Owner: U.S. Department of the Army.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 162 ft, screened 130 to 156 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 25, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division..

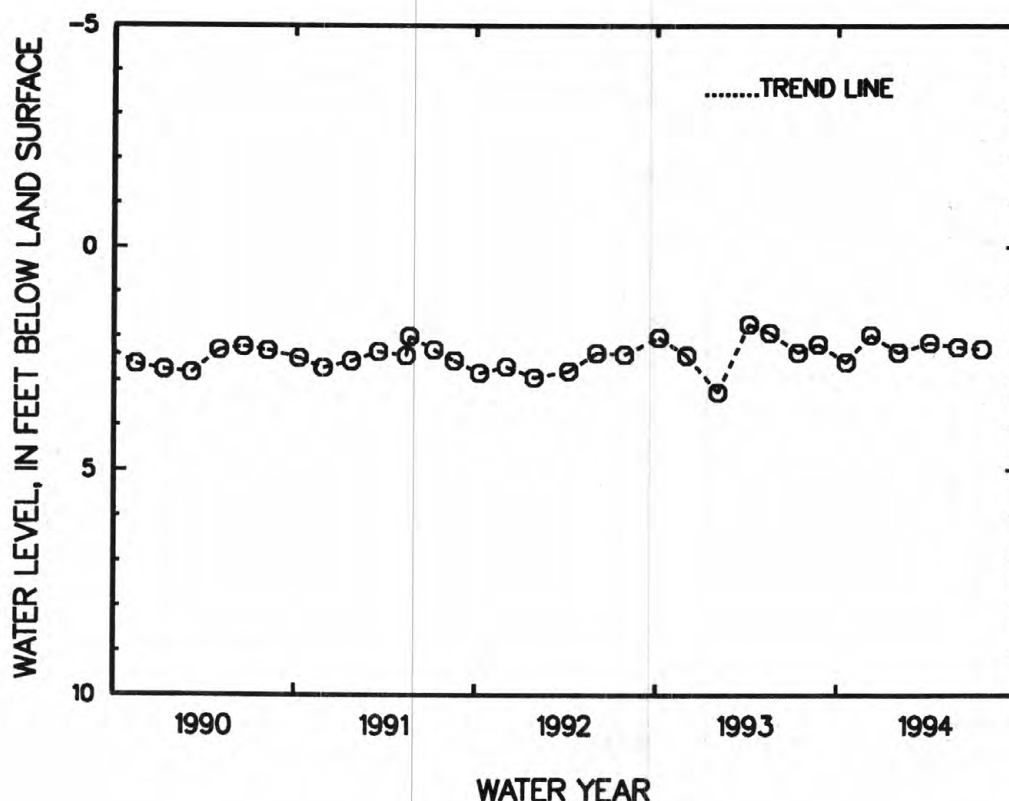
PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.60 ft below land-surface datum, Apr. 4, 1973; lowest measured, 10.35 ft below land-surface datum, Oct. 12, 1977.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	2.58	DEC 07	1.97	FEB 01	2.36	APR 05	2.15	JUN 01	2.25	JUL 19	2.29

WATER YEAR 1994      HIGHEST   1.97   DEC 07, 1993      LOWEST   2.58   OCT 19, 1993



## GROUND-WATER LEVELS

## PULASKI COUNTY

370254080374401. Local number, 25E 1 SOW 009.

LOCATION.--Lat 37°02'54", long 80°37'44", Hydrologic Unit 05050001, 300 ft east of State Highway 100, 0.3 mi south of intersection of State Highways 682 and 700, and 1.1 mi south of Dublin. Owner: Commonwealth of Virginia.

AQUIFER.--Elbrook Formation of Middle to Late Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 318 ft, cased to 56 ft, open hole 56 to 318 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 1,880 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

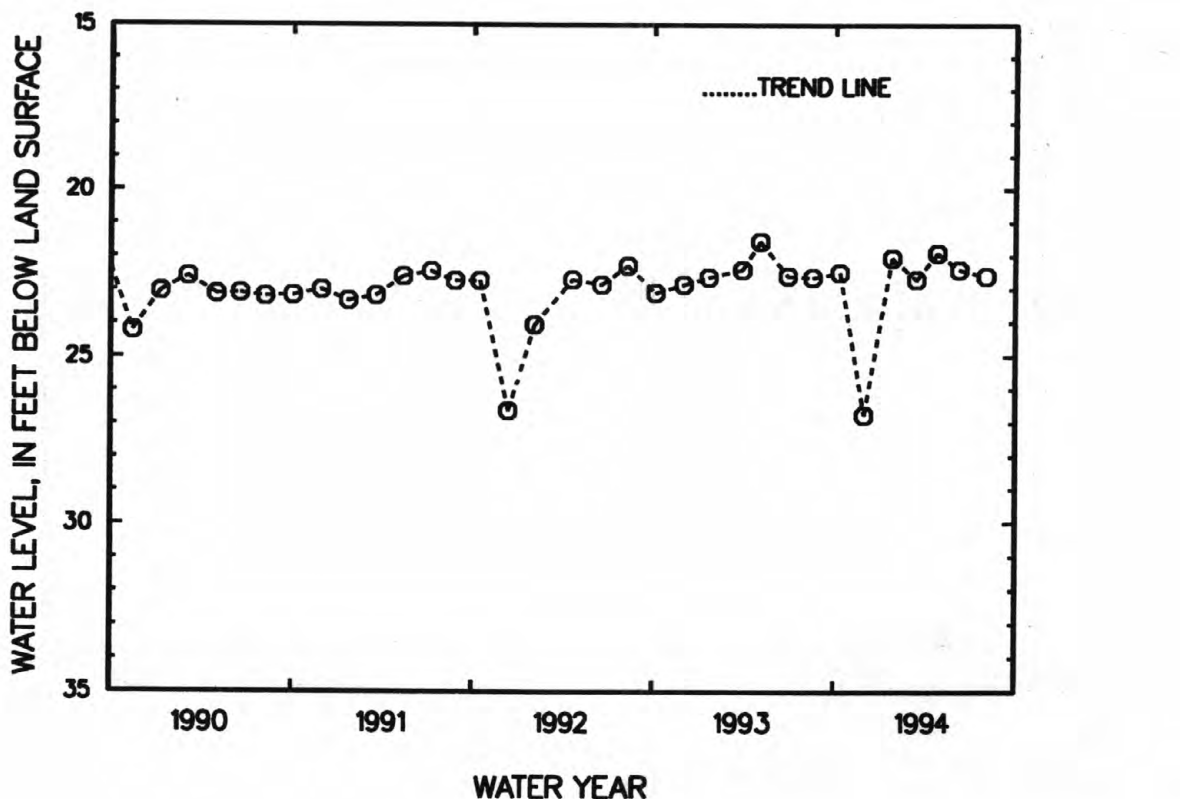
PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.15 ft below land-surface datum, Mar. 31, Apr. 30, 1975; lowest measured, 27.25 ft below land-surface datum, Dec. 13, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	22.49	JAN 25	22.05	MAR 15	22.70	APR 26	21.90	JUN 09	22.40	AUG 02	22.60
NOV 30	26.75										

WATER YEAR 1994      HIGHEST    21.90    APR 26, 1994      LOWEST    26.75    NOV 30, 1993



## GROUND-WATER LEVELS

311

## PULASKI COUNTY

370516080411501. Local number, 25E 2 SOW 059.

LOCATION.--Lat 37°05'16", long 80°41'15", Hydrologic Unit 05050001, 400 ft east of State Highway 100, 0.5 mi south of Dublin. Owner: Town of Dublin.

AQUIFER.--Conococheague Formation of Late Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 370 ft, length of casing unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. July 20, 1974, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to July 20, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 2,170 ft above sea level, from topographic map. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

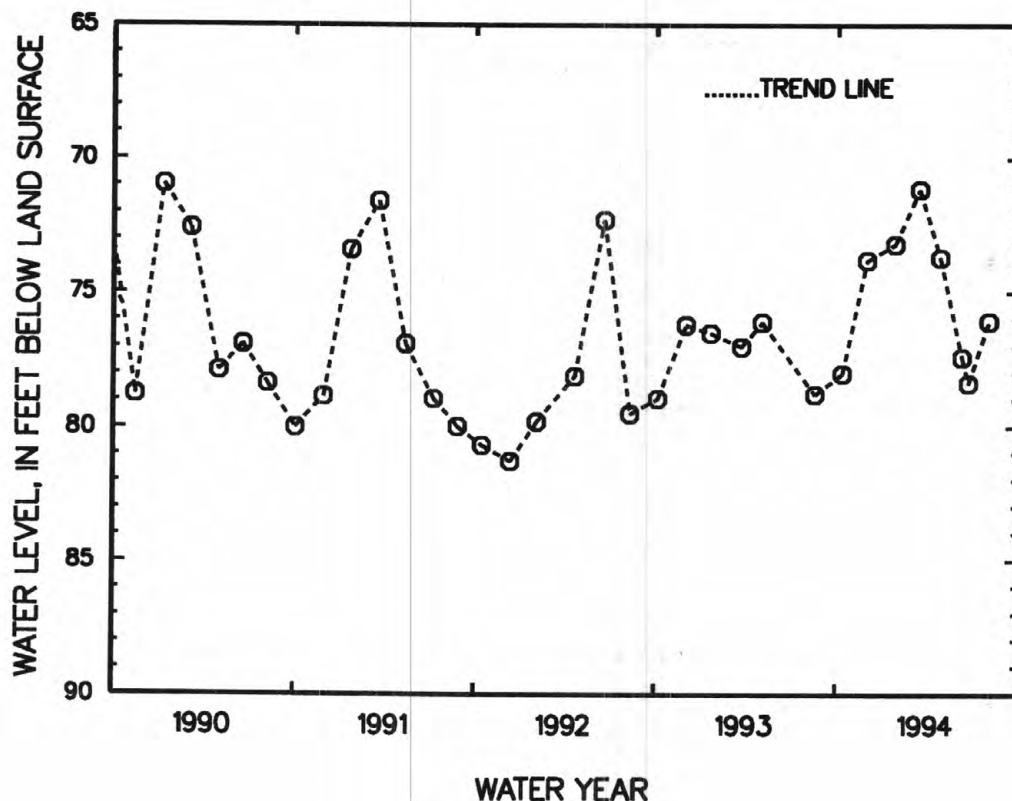
PERIOD OF RECORD.--April 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 60.00 ft below land-surface datum, Mar. 18, 1973; lowest measured, 82.50 ft below land-surface datum, Oct. 5, 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	78.00	JAN 25	73.20	APR 26	73.70	JUN 09	77.40	JUN 22	78.37	AUG 02	76.07
NOV 30	73.80	MAR 15	71.15								

WATER YEAR 1994      HIGHEST    71.15    MAR 15, 1994      LOWEST    78.37    JUN 22, 1994



## GROUND-WATER LEVELS

## CITY OF ROANOKE

371653079552101. Local number, 31G 1 SOW 008.

LOCATION.--Lat 37°16'53", long 79°55'21", Hydrologic Unit 03010101, 700 ft south of intersection of 10th Street and Orange Avenue in Roanoke. Owner: Nelson-Roanoke Corporation.

AQUIFER.--Rome Formation of Cambrian age. Prior to 1974, reported as Elbrook Formation.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 48 ft, length of casing unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. July 20, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to July 20, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 930 ft above sea level, from topographic map. Measuring point: Top of casing, 0.94 ft above land-surface datum.

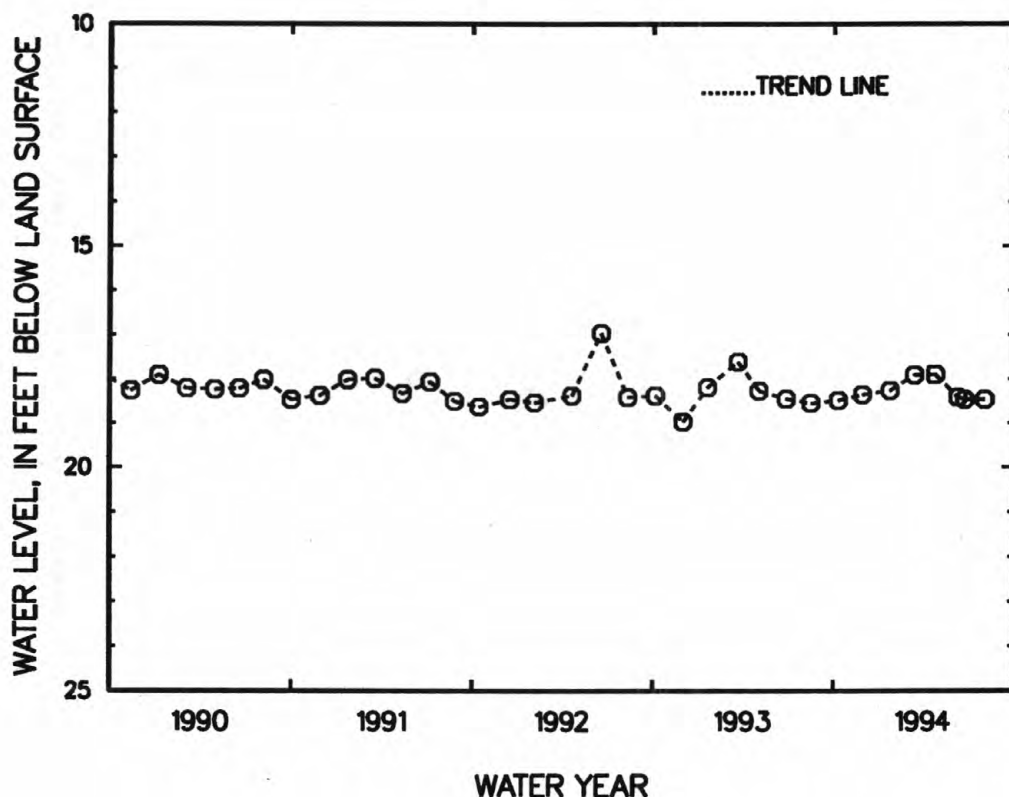
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--August 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.36 ft below land-surface datum, Feb. 18, 1986; lowest measured, 19.29 ft below land-surface datum, June 23, 1987.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	18.48	JAN 24	18.26	APR 25	17.90	JUN 09	18.41	JUN 23	18.46	AUG 02	18.46
NOV 29	18.35	MAR 14	17.91								
WATER YEAR 1994		HIGHEST	17.90	APR 25, 1994		LOWEST	18.48	OCT 11, 1993			



## ROCKBRIDGE COUNTY

373758079271601. Local number, 35K 1 SOW 063.

LOCATION.--Lat 37°37'58", long 79°27'16", Hydrologic Unit 02080202, 0.35 mi northwest of intersection of State Highways 130 and 684 in Glasgow. Owner: Town of Glasgow.

AQUIFER.--Rome Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 695 ft, cased to 101 ft, open hole from 101 to 695 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 745 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction.

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

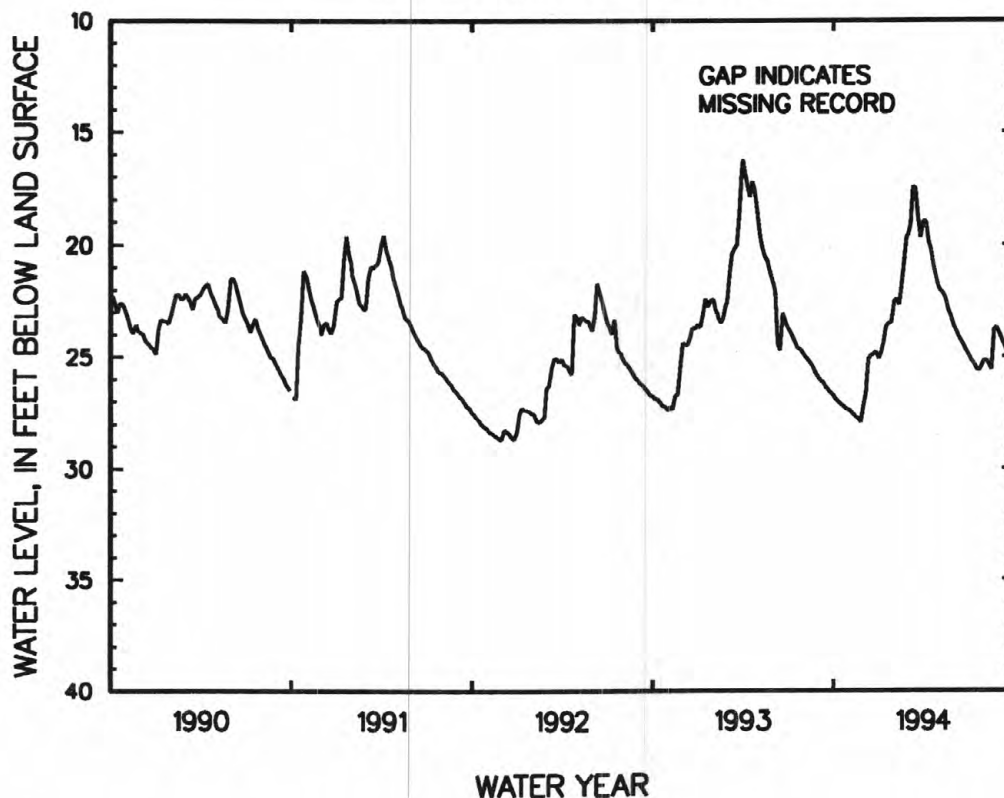
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 14.27 ft below land-surface datum, Apr. 29, 1987; lowest recorded, 29.13 ft below land-surface datum, Dec. 13, 14, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.89	27.47	26.63	24.80	22.42	19.15	18.97	22.06	23.84	25.13	25.18	24.25
10	27.00	27.59	25.09	24.30	22.67	17.43	19.83	22.18	24.10	25.30	25.37	24.50
15	27.12	27.71	24.95	23.60	21.80	17.53	20.23	22.41	24.30	25.50	25.58	24.75
20	27.20	27.76	24.88	23.49	20.75	18.78	20.92	22.88	24.50	25.63	23.82	---
25	27.32	27.91	24.79	23.48	19.65	19.68	21.41	23.16	24.73	25.50	23.68	---
EQM	27.37	27.19	25.07	22.52	19.59	18.97	21.86	23.60	24.92	25.16	23.99	25.62

WATER YEAR 1994      HIGHEST INSTANTANEOUS    17.31    MAR 13, 1994  
                              LOWEST INSTANTANEOUS    27.91    NOV 25, 26, 1993

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

## ROCKINGHAM COUNTY

382150078424001. Local number, 41Q 1.

LOCATION.--Lat 38°21'50", long 78°42'40", Hydrologic Unit 02070005, at Virginia Department of Transportation garage, 1.3 mi southeast of McGaheysville. Owner: U.S. Geological Survey.

AQUIFER.--Conococheague Formation of Late Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6.25 in., depth 310 ft, cased to 131 ft, open hole 131 to 310 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to June 27, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 1,105 ft above sea level, from topographic map. Measuring point: Top edge of recorder shelf, 3.5 ft above land-surface datum.

PERIOD OF RECORD.--August 1970 to current year.

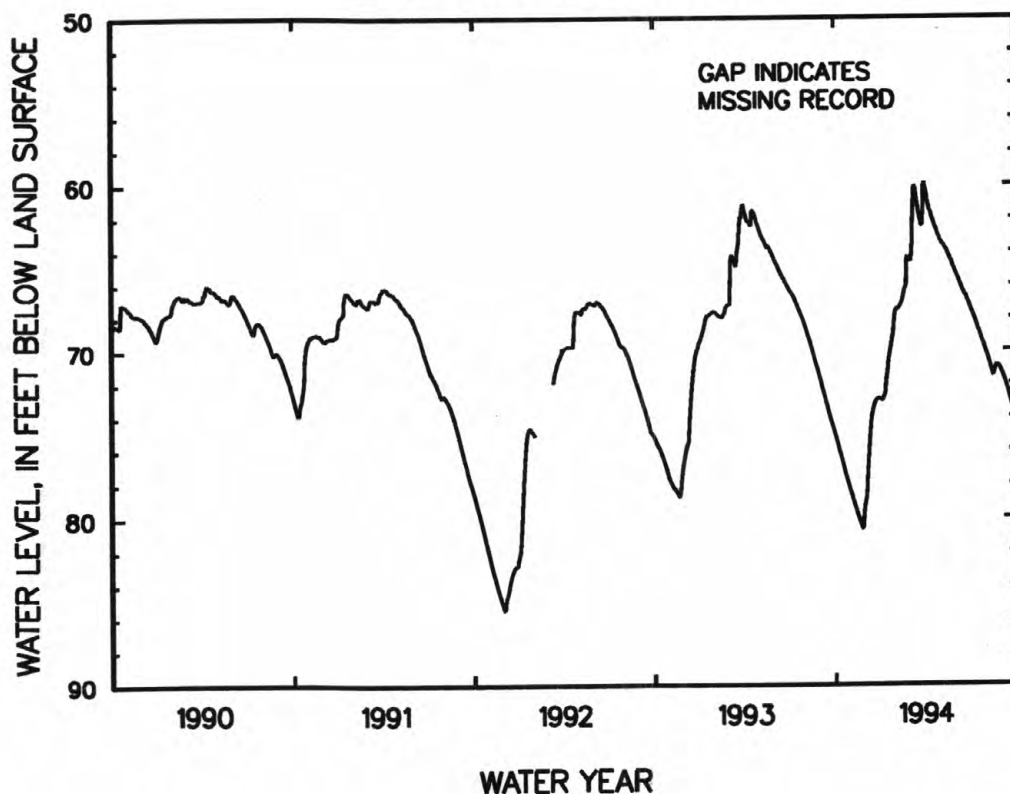
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 59.81 ft below land-surface datum, Mar. 31, 1994; lowest recorded, 88.08 ft below land-surface datum, Jan. 14, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.36	78.68	78.70	73.03	67.45	64.52	60.61	63.49	65.48	67.65	70.39	71.52
10	75.93	79.19	75.99	72.77	67.38	60.62	61.45	63.73	65.86	68.07	70.90	71.97
15	76.48	79.69	74.08	71.53	67.04	60.58	61.91	63.94	66.27	68.52	71.43	72.47
20	77.04	80.13	73.40	70.32	66.35	61.66	62.39	64.30	66.59	68.96	71.15	73.04
25	77.58	80.58	72.99	69.46	64.38	62.40	62.74	64.63	66.89	69.41	70.96	73.61
EOM	78.19	79.61	72.95	67.86	64.49	59.90	63.14	65.10	67.26	69.94	71.16	74.20

WATER YEAR 1994      HIGHEST INSTANTANEOUS    59.81    MAR 31, 1994      LOWEST INSTANTANEOUS    80.69    NOV 27, 1993

## DAILY LOW-WATER LEVELS



## SOUTHAMPTON COUNTY

364109077230701. Local number, 51B 3.

LOCATION.--Lat 36°41'09", long 77°23'07", Hydrologic Unit 03010201, 150 ft west of the intersection of State Highway 615 and U.S. Highway 58, 0.5 mi south of Adams Grove. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 175 ft (corrected), screened 165 to 175 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. July 1975 to July 1977, continuous strip-chart recorder.

Prior to July 1975, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 126 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 3.2 ft above land-surface datum.

REMARKS.--Water level may be affected by regional drawdown. The depth of the well was reported incorrectly at 253 ft for the period October 1981 to September 1993.

PERIOD OF RECORD.--October 1974 to current year. Unpublished records available prior to July 1975 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 54.21 ft below land-surface datum, Apr. 30, 1978; lowest recorded, 60.03 ft below land-surface datum, Oct. 24, 25, 1981.

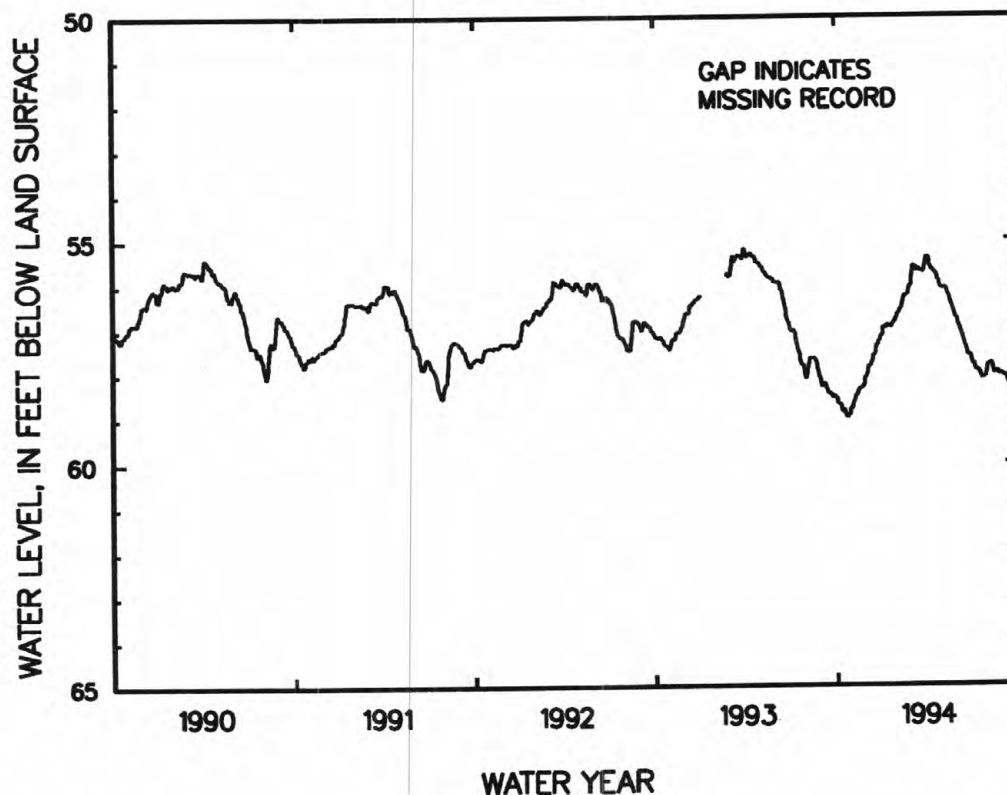
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.62	58.74	57.92	56.96	56.65	55.60	55.41	56.09	56.92	57.81	57.83	58.07
10	58.70	58.53	57.84	56.97	56.53	55.63	55.64	56.09	57.07	57.96	57.79	58.15
15	58.85	58.44	57.66	56.93	56.31	55.65	55.72	56.24	57.28	57.96	58.01	58.34
20	58.86	58.33	57.55	56.96	56.26	55.71	55.77	56.41	57.46	58.08	58.00	58.48
25	58.99	58.30	57.36	56.87	56.09	55.72	55.92	56.58	57.60	58.12	58.05	58.34
EOM	58.83	58.08	57.16	56.75	56.05	55.51	56.08	56.76	57.63	58.00	58.03	58.23

WATER YEAR 1994      HIGHEST INSTANTANEOUS      54.40      APR 01-03, 1994

LOWEST INSTANTANEOUS      58.99      OCT 25, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

363410077150801. Local number, 52A 1.

LOCATION.--Lat 36°34'10", Long 77°15'08", Hydrologic Unit 03010204, along Seaboard Coastline railroad, 0.15 mi northwest of intersection of State Highways 195 and 701 in Branchville. Owner: L. W. Grizzard.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 217 ft, screened 204 to 217 ft.

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

DATUM.--Elevation of land-surface datum is 44 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

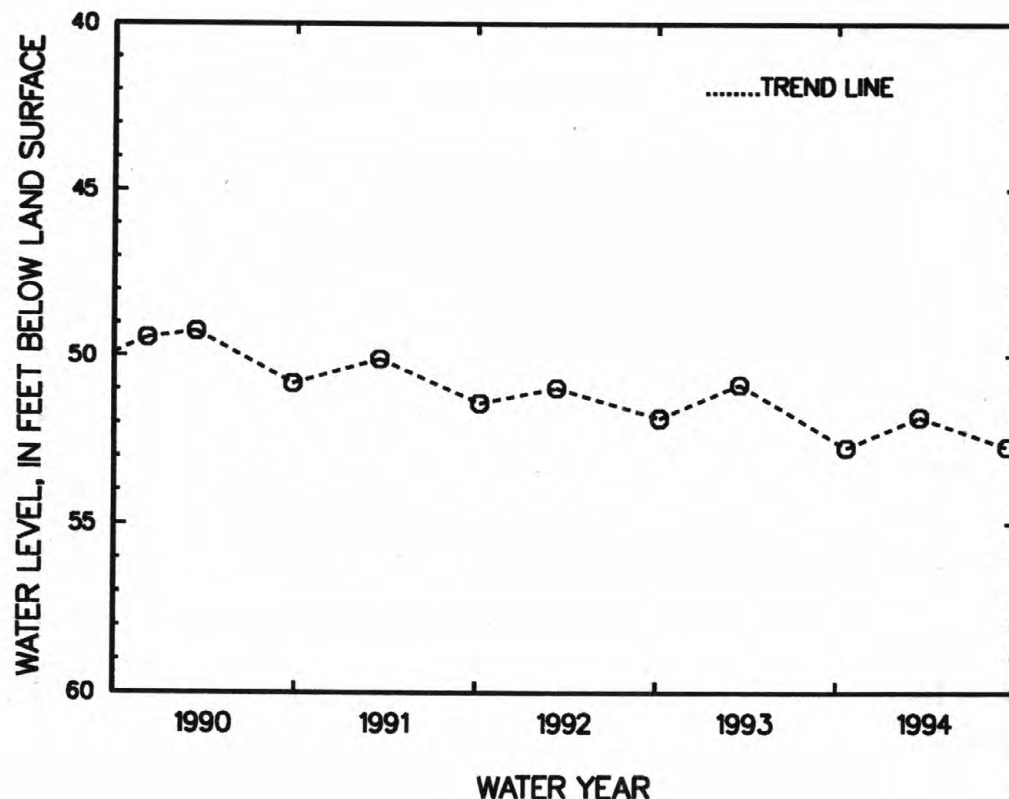
PERIOD OF RECORD.--September 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.85 ft below land-surface datum, Sept. 9, 1970; lowest measured, 52.73 ft below land-surface datum, Oct. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	52.73	MAR 17	51.83	SEP 09	52.72

WATER YEAR 1994      HIGHEST 51.83 MAR 17, 1994      LOWEST 52.73 OCT 21, 1993



## GROUND-WATER LEVELS

317

## SOUTHAMPTON COUNTY

363916077201001. Local number, 52B 8 SOW 178A.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of the intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 316 ft, screened 285 to 295 ft.

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

DATUM.--Elevation of land-surface datum is 120 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

REMARKS.--Water level may be affected by regional drawdown.

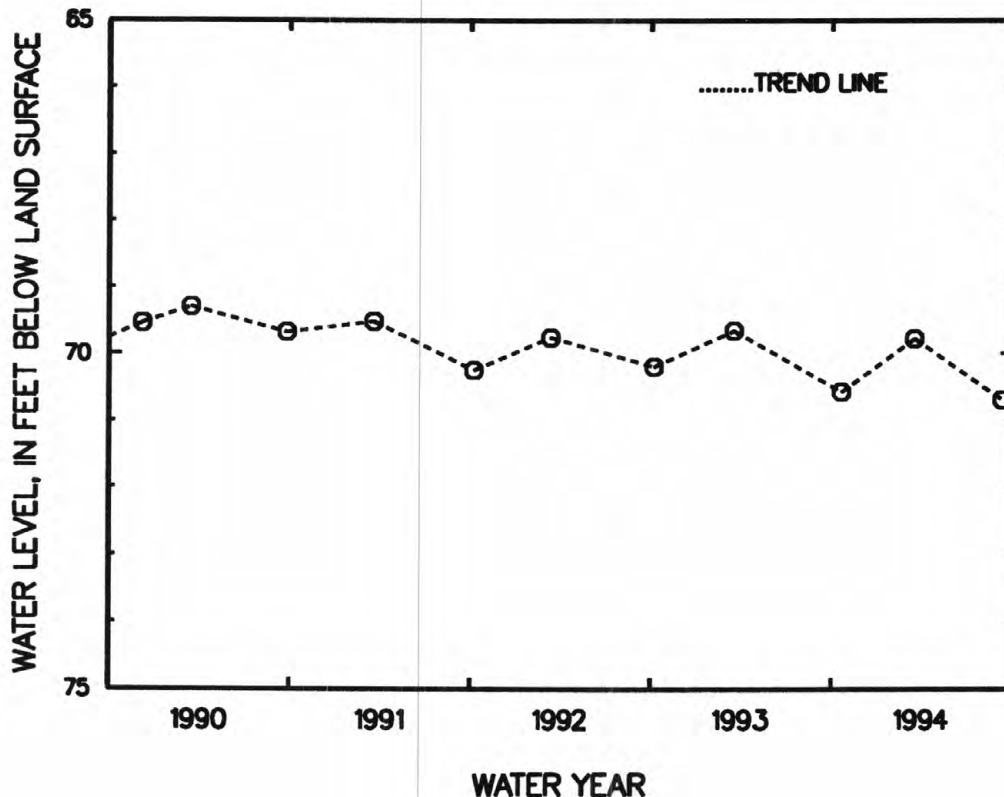
PERIOD OF RECORD.--March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.30 ft below land-surface datum, Mar. 15, 1990; lowest measured, 70.70 ft below land-surface datum, Sept. 9, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	70.58	MAR 17	69.78	SEP 09	70.70

WATER YEAR 1994      HIGHEST 69.78 MAR 17, 1994      LOWEST 70.70 SEP 09, 1994



## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

363916077201002. Local number, 52B 9 SOW 178B.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 329 ft, screened 298 to 308 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Water level may be affected by regional drawdown.

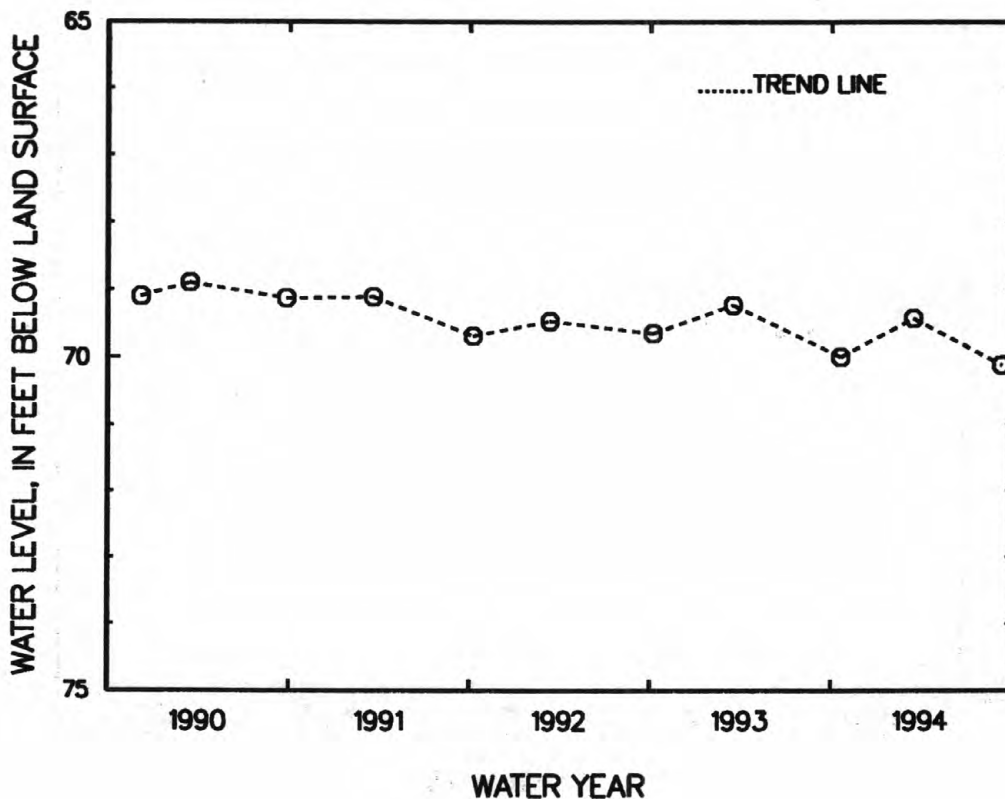
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.87 ft below land-surface datum, Mar. 7, 1988; lowest recorded, 70.44 ft below land-surface datum, Dec. 10-12, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	70.00	MAR 17	69.43	SEP 09	70.12

WATER YEAR 1994      HIGHEST 69.43 MAR 17, 1994      LOWEST 70.12 SEP 09, 1994



## GROUND-WATER LEVELS

319

## SOUTHAMPTON COUNTY

363916077201003. Local number, 52B 10 SOW 178C.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 233 ft, screened 218 to 228 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to November 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above sea level, from topographic map. Measuring point: Top of casing, 1.9 ft above land-surface datum.

REMARKS.--Water level may be affected by regional drawdown.

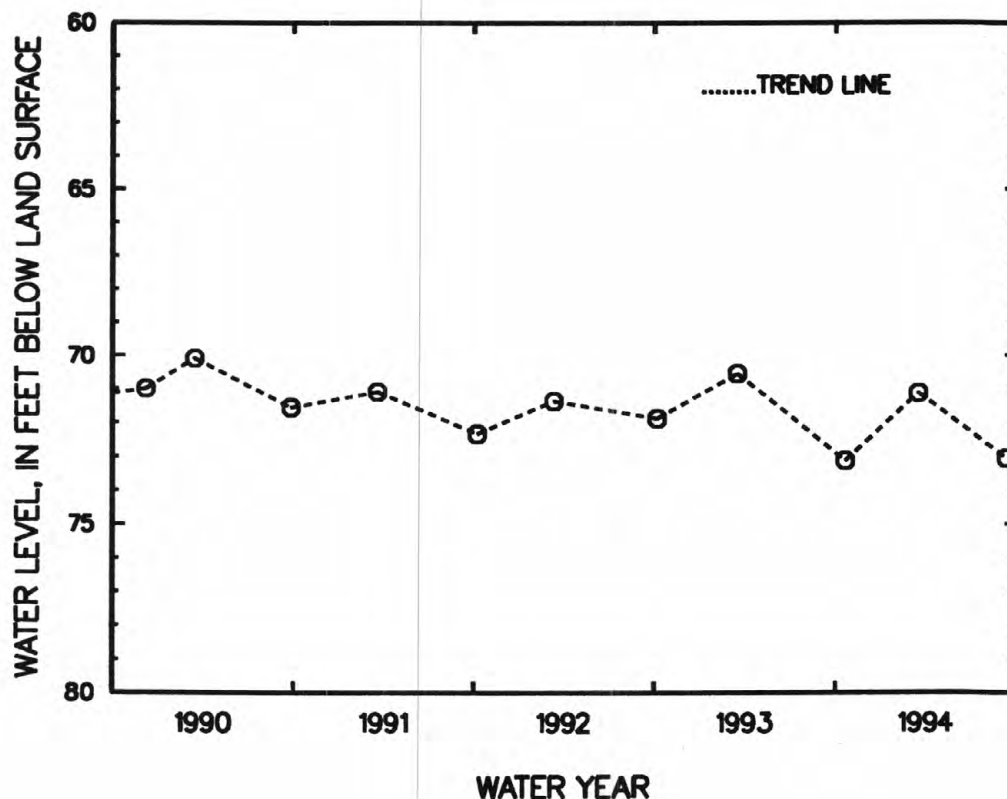
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 69.75 ft below land-surface datum, Apr. 16, 1987; lowest recorded, 73.13 ft below land-surface datum, Oct. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	73.13	MAR 17	71.13	SEP 09	73.07

WATER YEAR 1994      HIGHEST 71.13 MAR 17, 1994      LOWEST 73.13 OCT 21, 1993





## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

363916077201004. Local number, 52B 11 SOW 178D.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 190 ft, screened 160 to 170 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to November 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above sea level, from topographic map. Measuring point: Top of casing, 2.1 ft above land-surface datum.

REMARKS.--Water level may be affected by regional drawdown.

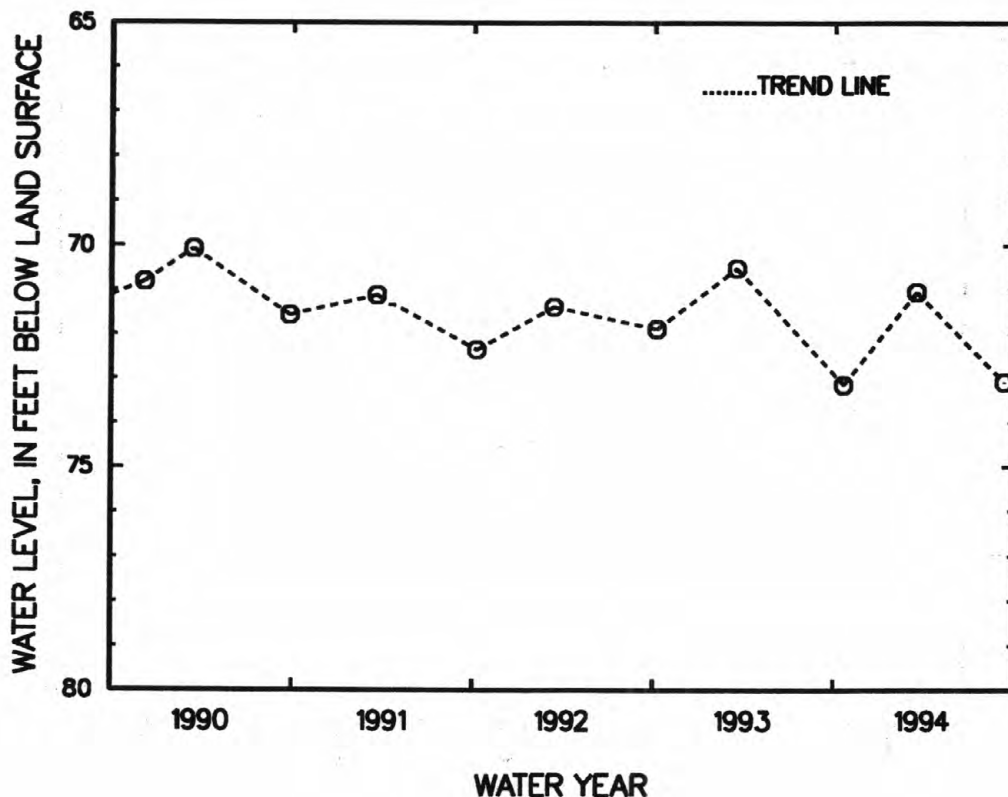
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 69.81 ft below land-surface datum, Apr. 16, 1987; lowest recorded, 73.14 ft below land-surface datum, Oct. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	73.14	MAR 17	71.05	SEP 09	73.09

WATER YEAR 1994      HIGHEST 71.05 MAR 17, 1994      LOWEST 73.14 OCT 21, 1993



## GROUND-WATER LEVELS

321

## SOUTHAMPTON COUNTY

363916077201005. Local number, 52B 12 SOW 178E.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 135 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to November 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above sea level, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

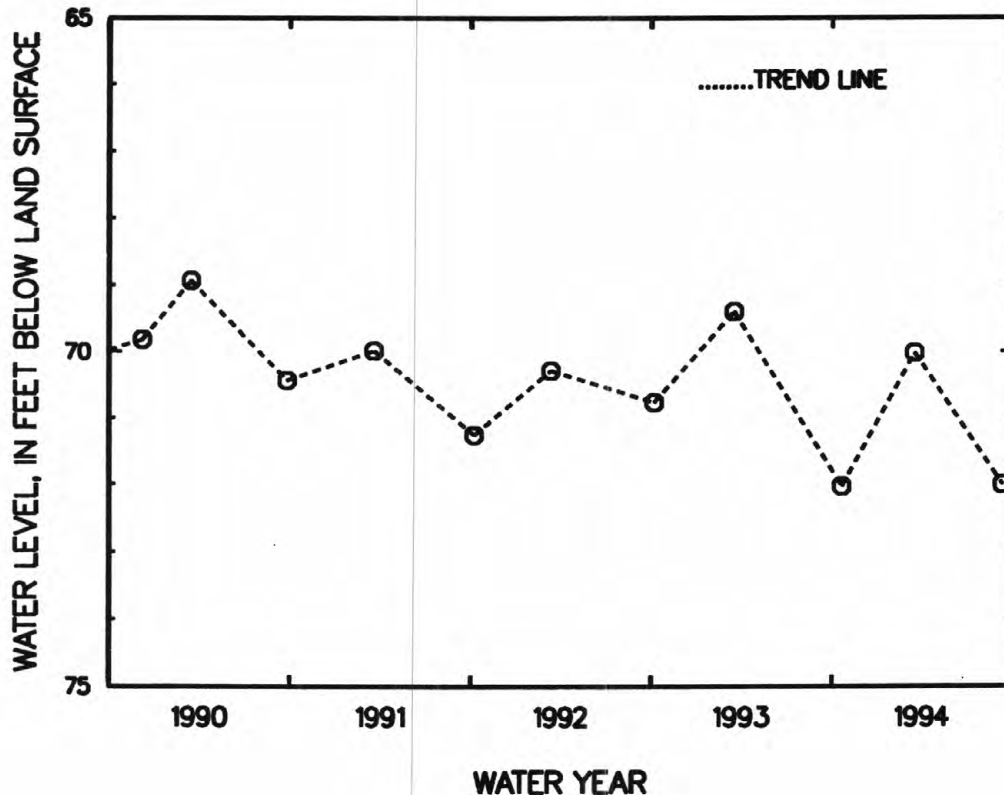
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 68.75 ft below land-surface datum, Apr. 16, 1987; lowest recorded, 72.03 ft below land-surface datum, Oct. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	72.03	MAR 17	70.02	SEP 09	72.00

WATER YEAR 1994      HIGHEST 70.02 MAR 17, 1994      LOWEST 72.03 OCT 21, 1993



## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

363916077201006. Local number, 52B 13 SOW 178F.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 65 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Occasional measurements with chalked tape by USGS personnel. Prior to November 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

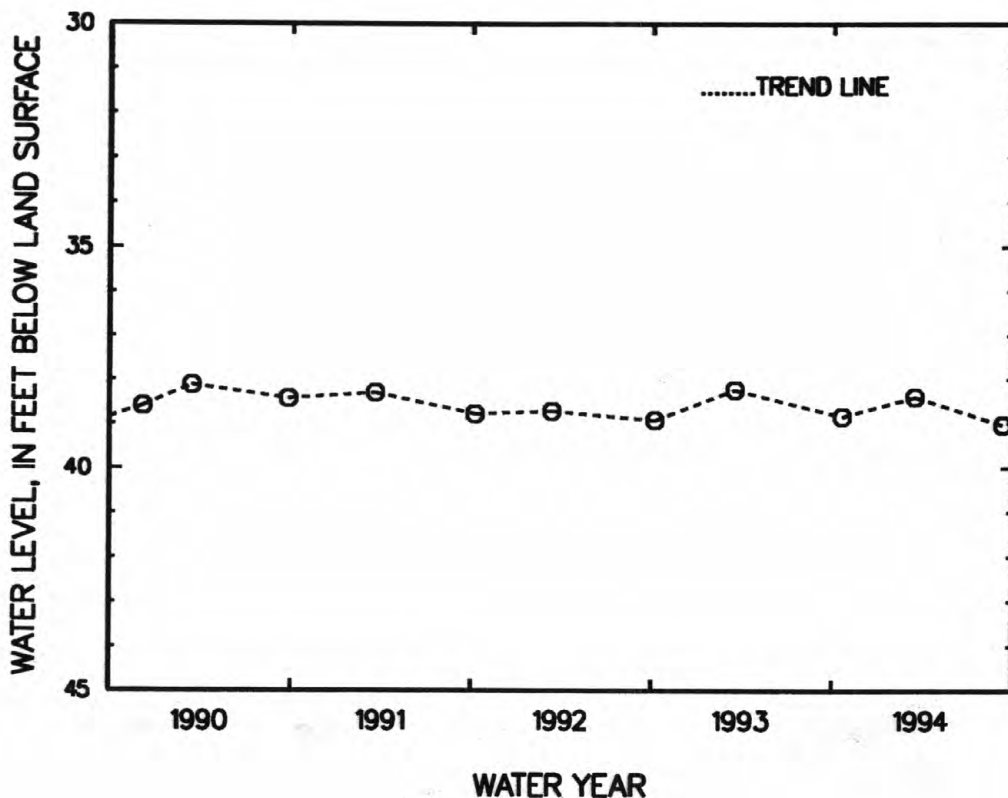
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 37.90 ft below land-surface datum, Apr. 29, 1987; lowest recorded, 43.77 ft below land-surface datum, Oct. 6-9, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	38.84	MAR 17	38.40	SEP 09	39.04

WATER YEAR 1994      HIGHEST 38.40 MAR 17, 1994      LOWEST 39.04 SEP 09, 1994



## GROUND-WATER LEVELS

323

## SOUTHAMPTON COUNTY

363722077014601. Local number, 54A 1.

LOCATION.--Lat 36°37'22", long 77°01'46", Hydrologic Unit 03010201, 100 ft west of State Highway 681, 0.5 mi north of intersection of State Highways 672 and 681, and 2.4 mi north of Sunbeam. Owner: William Britt.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 254 ft, screened 244 to 254 ft.

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

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.03 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

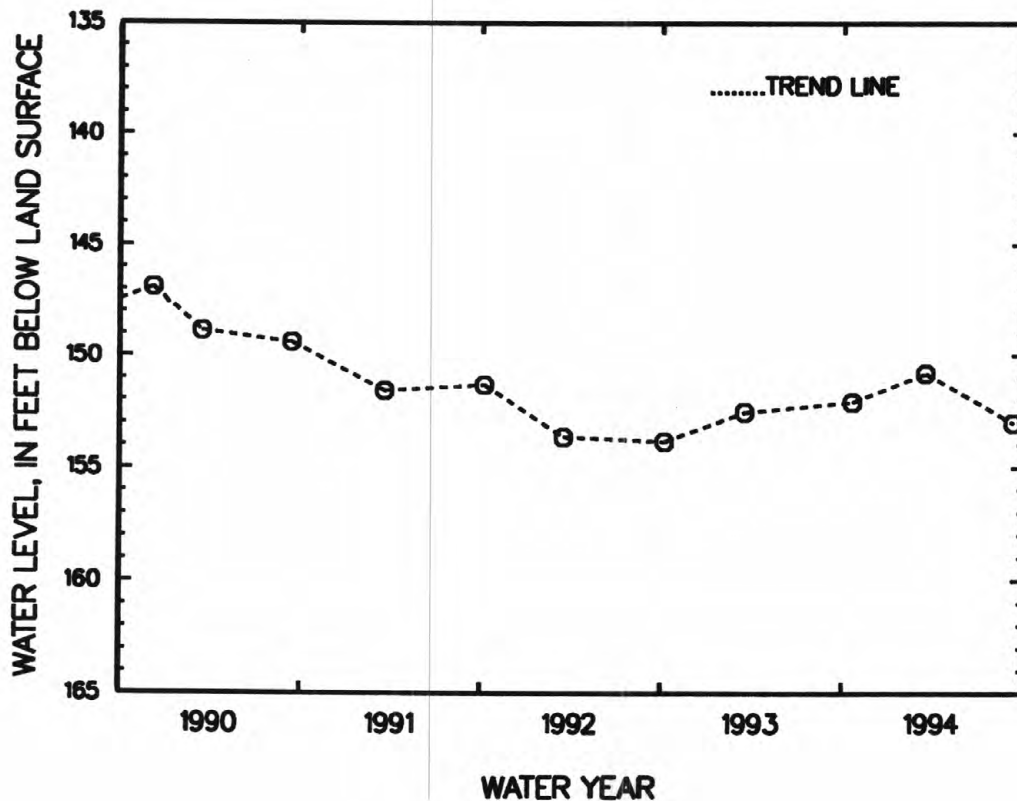
PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 113.40 ft below land-surface datum, Aug. 17, 1970; lowest measured, 153.85 ft below land-surface datum, Oct. 7, 1992.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	152.09	MAR 17	150.79	SEP 09	153.03

WATER YEAR 1994      HIGHEST 150.79 MAR 17, 1994      LOWEST 153.03 SEP 09, 1994



## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

364121077013701. Local number, 54B 24 SOW 034.

LOCATION.--Lat 36°41'21", long 77°01'37", Hydrologic Unit 03010201, off U.S. Highway 58, 1.7 mi southeast of Courtland. Owner: Clarence Pittman.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 71 ft, diameter 2 in. from 71 to 224 ft, depth 224 ft, screen depth unknown.

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

DATUM.--Elevation of land-surface datum is 29 ft above sea level, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

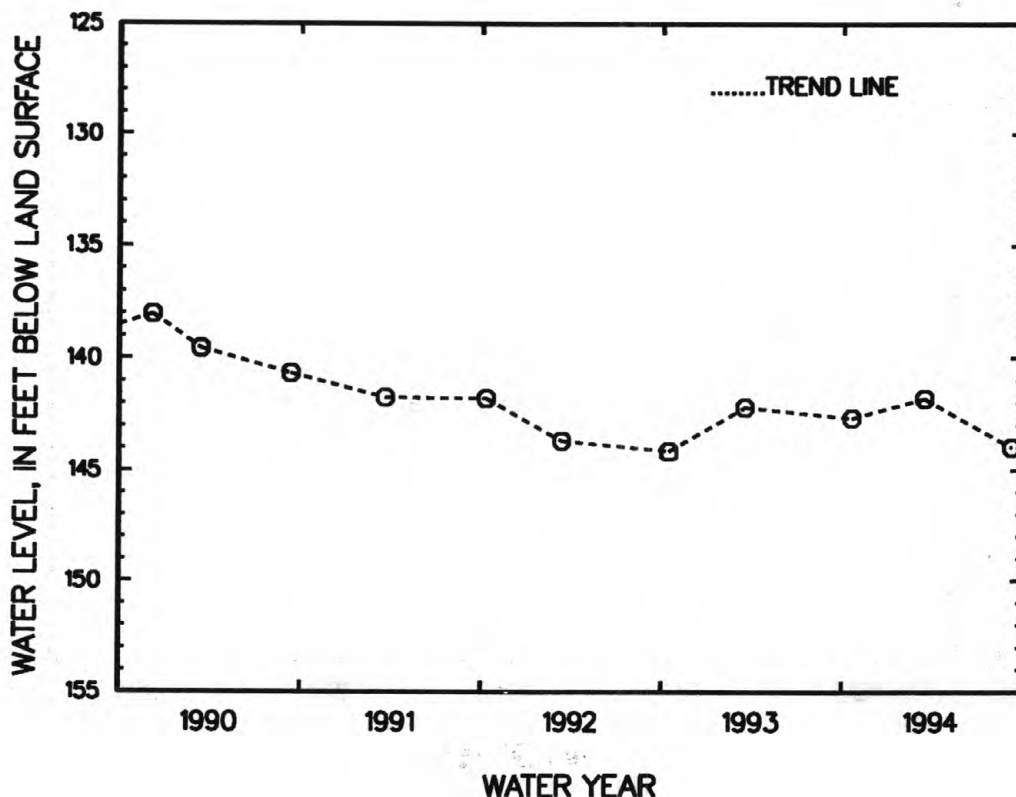
PERIOD OF RECORD.--September 1970 to August 1974, December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.82 ft below land-surface datum, Dec. 29, 1970; lowest measured, 144.13 ft below land-surface datum, Oct. 15, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	142.65	MAR 17	141.79	SEP 08	143.99

WATER YEAR 1994	HIGHEST	141.79	MAR 17, 1994	LOWEST	143.99	SEP 08, 1994
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## GROUND-WATER LEVELS

325

## SOUTHAMPTON COUNTY

364706077072301. Local number, 54C 1.

LOCATION.--Lat 36°47'06", long 77°07'23", Hydrologic Unit 03010201, 0.25 mi northwest of intersection of State Highways 35 and 713 in Sebrell. Owner: Norfolk and Western Railway.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 344 ft, screen depth unknown.

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

DATUM.--Elevation of land-surface datum is 58.4 ft above sea level. Measuring point: Top of casing, at land-surface datum.

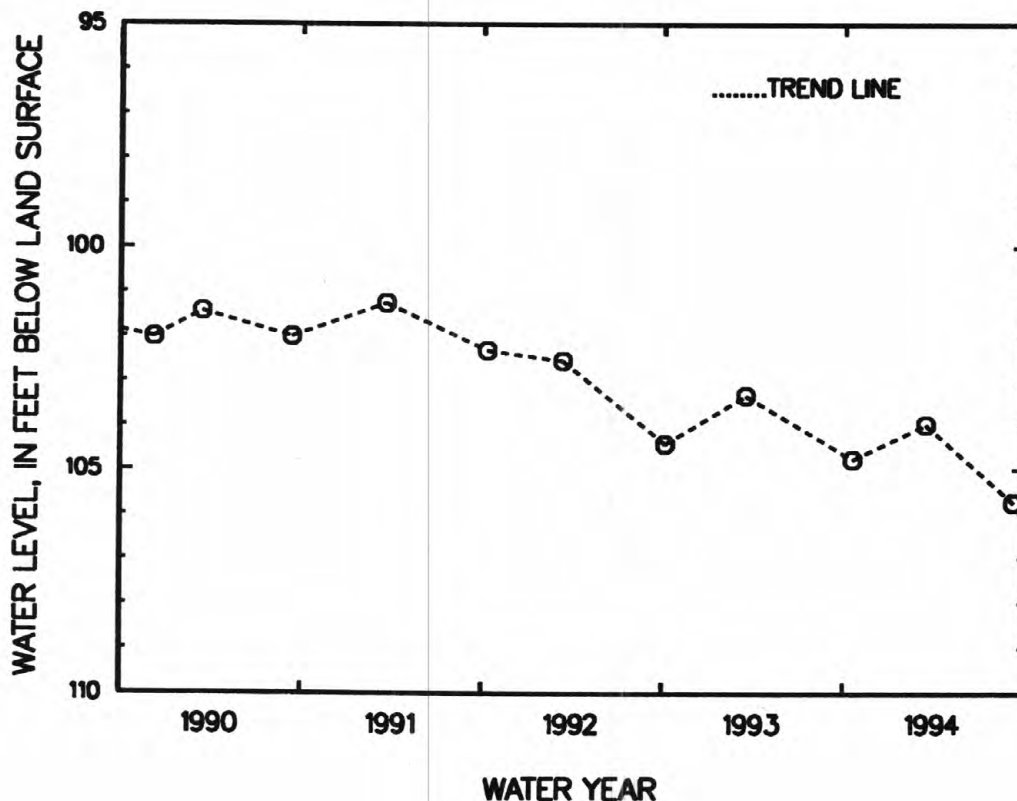
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--1907, July 1938, April 1940 to December 1946, October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.00 ft below land-surface datum, 1907; lowest measured, 105.75 ft below land-surface datum, Sept. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	OCT 20	104.77	MAR 16	103.99	SEP 08	105.75
WATER YEAR 1994	HIGHEST	103.99	MAR 16, 1994	LOWEST	105.75	SEP 08, 1994





## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

363632076580101. Local number, 55A 3 SOW 086.

LOCATION.--Lat 36°36'32", long 76°58'01", Hydrologic Unit 03010201, 0.1 mi southeast of intersection of State Highways 687 and 689, 4.0 mi southwest of Franklin. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 745 ft, screened 714 to 724 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 18 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 11, 1988; 1.3 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 7, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

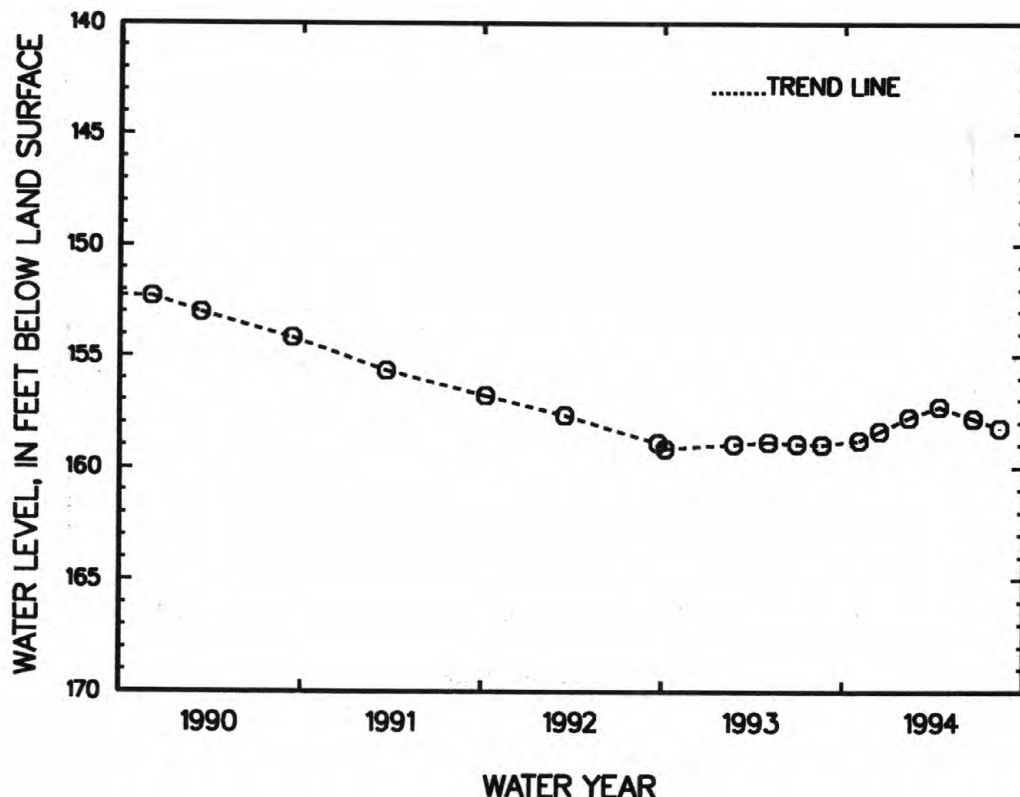
PERIOD OF RECORD.--March 1977, October 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.00 ft below land-surface datum, Mar. 18, 1977; lowest measured, 159.15 ft below land-surface datum, Oct. 7, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	158.77	DEC 14	158.36	FEB 11	157.75	APR 13	157.29	JUN 20	157.81	AUG 12	158.23

WATER YEAR 1994      HIGHEST    157.29    APR 13, 1994      LOWEST    158.77    NOV 03, 1993



## GROUND-WATER LEVELS

327

## SOUTHAMPTON COUNTY

365120076585101. Local number, 55C 10.

LOCATION.--Lat 36°51'20", long 76°58'51", Hydrologic Unit 03010202, 100 ft west of State Highway 616, 0.3 mi south of Berlin. Owner: R. L. Hurrup.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 326 ft, screened 316 to 326 ft.

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

DATUM.--Elevation of land-surface datum is 65 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

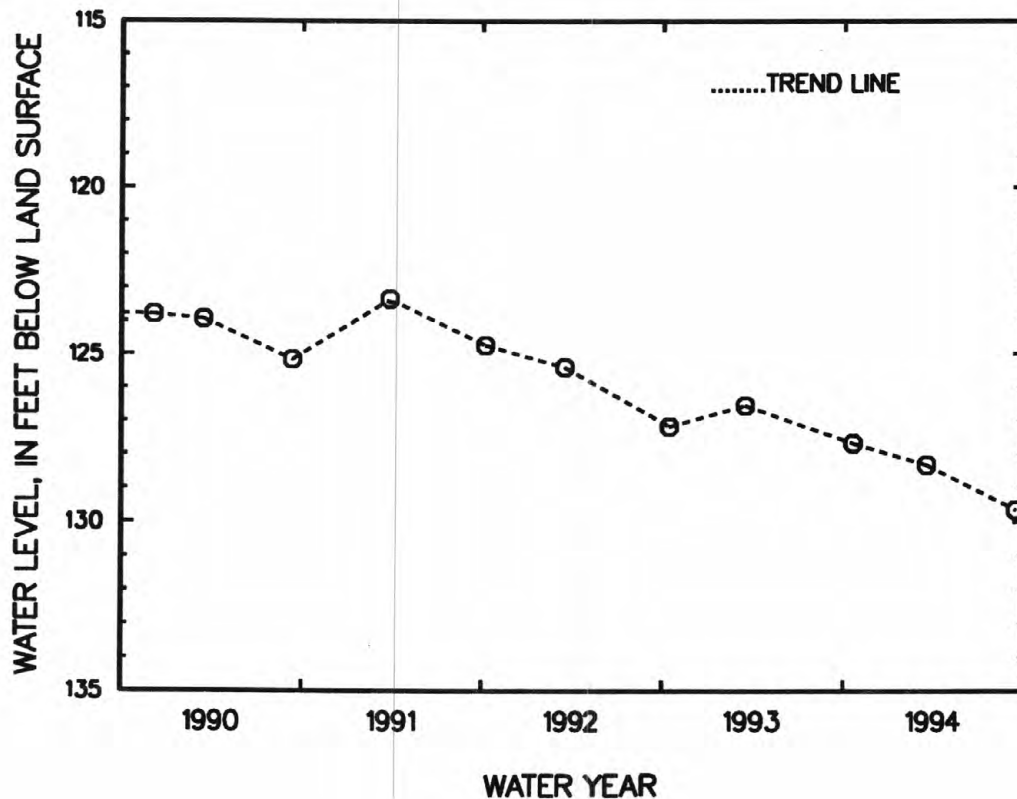
PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 94.62 ft below land-surface datum, Aug. 21, 1970; lowest measured, 129.65 ft below land-surface datum, Sept. 12, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	127.69	MAR 17	128.32	SEP 12	129.65

WATER YEAR 1994      HIGHEST 127.69 OCT 20, 1993      LOWEST 129.65 SEP 12, 1994



## GROUND-WATER LEVELS

## SOUTHAMPTON COUNTY

365415076535201. Local number, 55D 5.

LOCATION.--Lat 36°54'15", long 76°53'20", Hydrologic Unit 03010202, off State Highway 616, 0.25 mi southwest of intersection of State Highway 616 and U.S. Highway 460 in Ivor. Owner: Town of Ivor.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 8 in., depth 450 ft, screened 384 to 394 ft, 425 to 440 ft.

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

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of water-level access line, 1.75 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

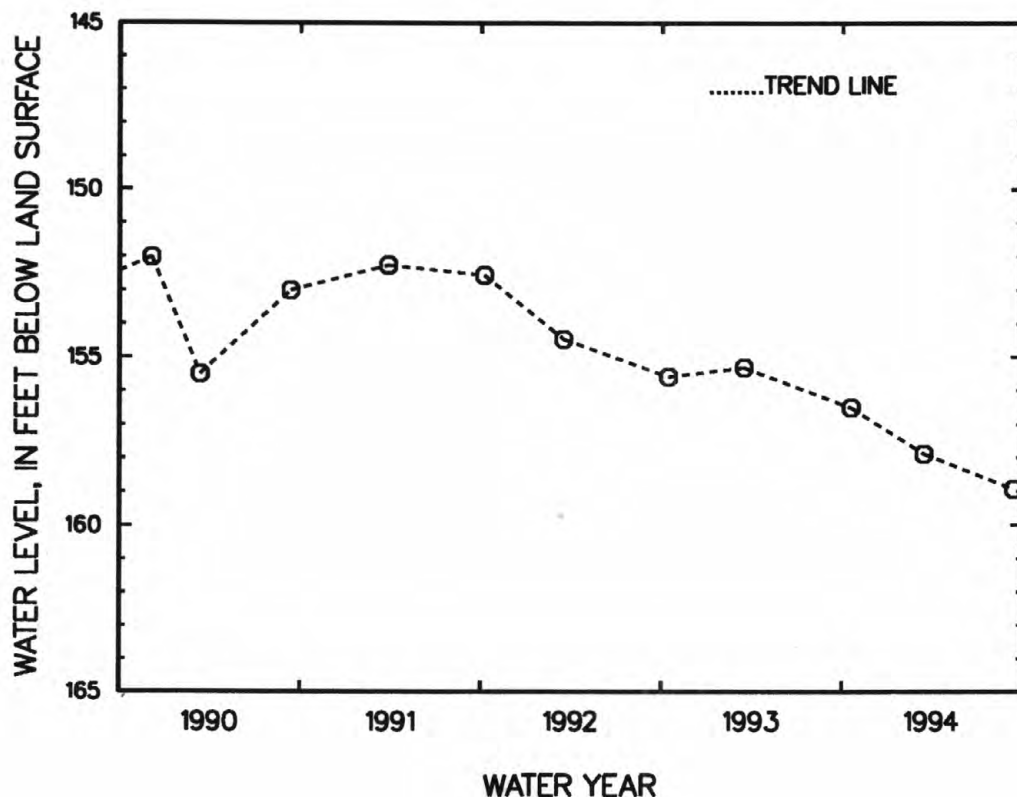
PERIOD OF RECORD.--October 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 120.47 ft below land-surface datum, Nov. 2, 1970; lowest measured, 158.94 ft below land-surface datum, Sept. 12, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	156.49	MAR 16	157.87	SEP 12	158.94

WATER YEAR 1994	HIGHEST	156.49	OCT 20, 1993	LOWEST	158.94	SEP 12, 1994
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## GROUND-WATER LEVELS

329

## CITY OF SUFFOLK

363625076522601. Local number, 56A 9 SOW 076A.

LOCATION.--Lat 36°36'25", long 76°52'26", Hydrologic Unit 03010203, 700 ft west of State Highway 615, 8.1 mi south of Holland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper, middle, and lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,015 ft, screened 452 to 457 ft, 500 to 505 ft, 610 to 615 ft, 743 to 748 ft, 812 to 817 ft, 988 to 993 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 80 ft above sea level, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum prior to Jan. 12, 1988; 2.0 ft thereafter.

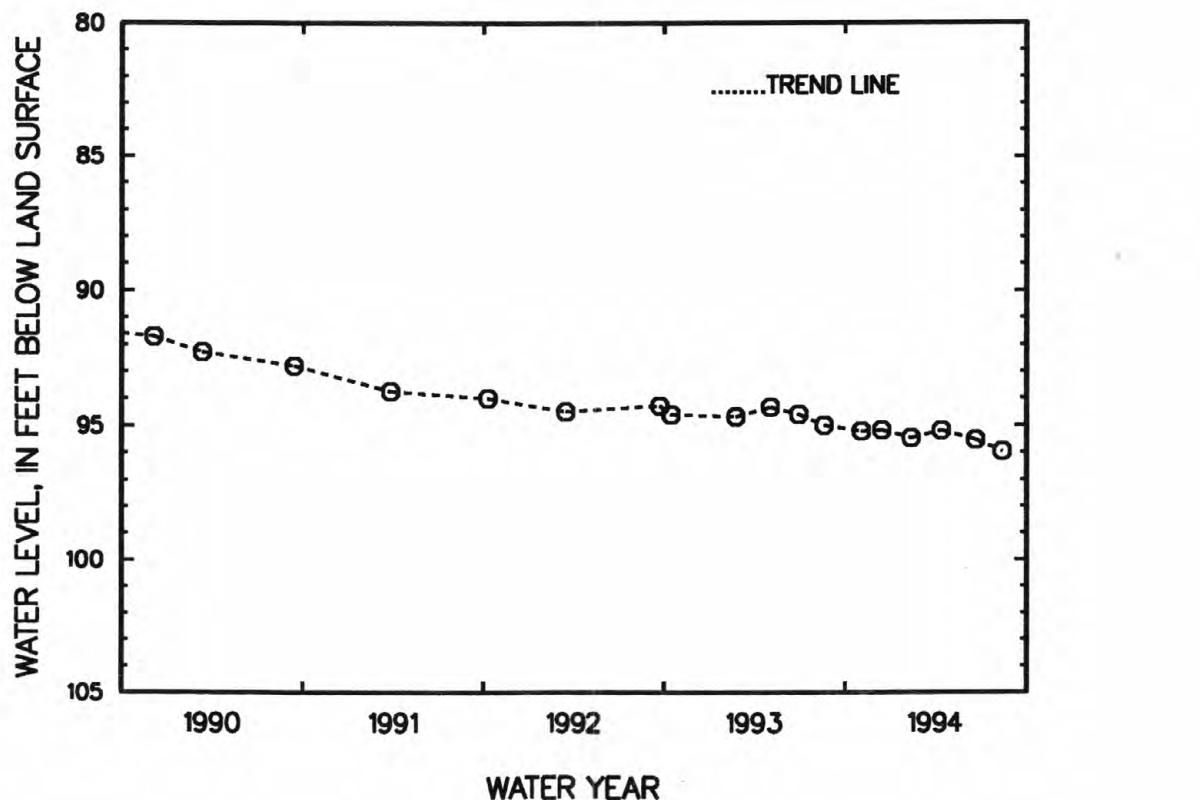
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Plugged at 520 ft below land surface in 1977; water levels thereafter are questionable.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.99 ft below land-surface datum, Jan. 8, 1979; lowest measured, 95.97 ft below land-surface datum, Aug. 12, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	95.22	DEC 14	95.18	FEB 11	95.47	APR 13	95.19	JUN 20	95.54	AUG 12	95.97
WATER YEAR 1994		HIGHEST	95.18	DEC 14, 1993	LOWEST	95.97	AUG 12, 1994				



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363345076470201. Local number, 56A 10 SOW 088A.

LOCATION.--Lat 36°33'45", long 76°47'02", Hydrologic Unit 03010203, 0.1 mi north of intersection of State Highways 668 and 669, 1.9 mi west of Somerton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,060 ft, screened 1,050 to 1,060 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.3 ft thereafter.

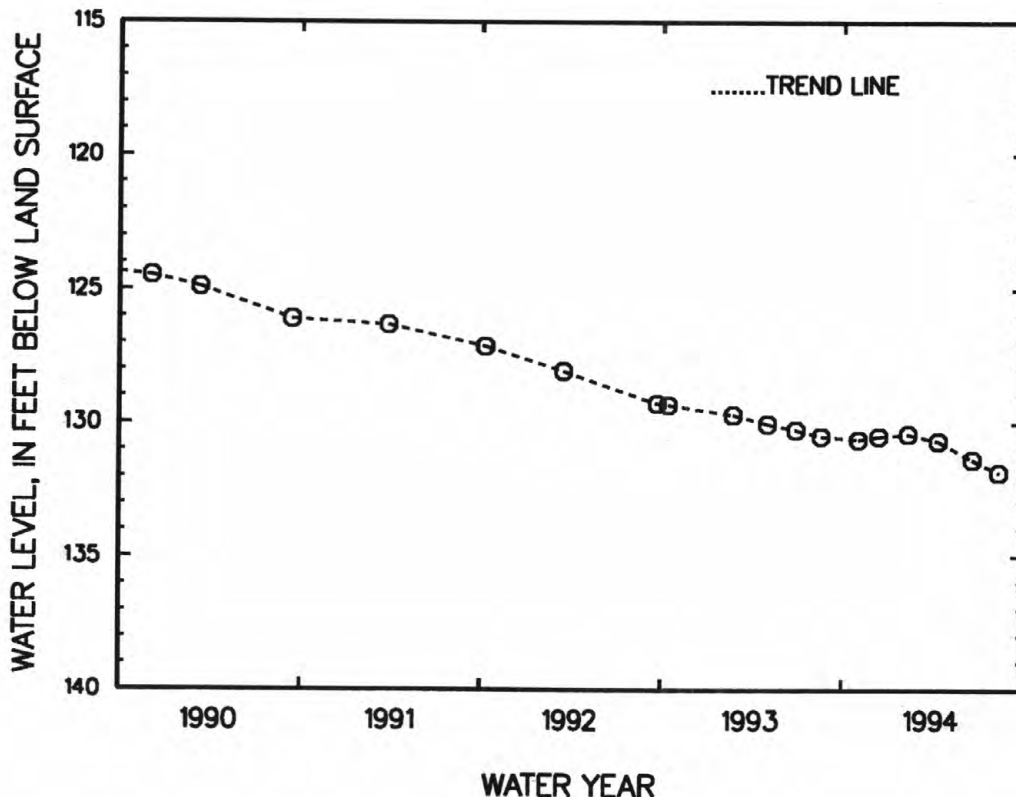
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 104.70 ft below land-surface datum, June 30, 1980; lowest measured, 131.85 ft below land-surface datum, Aug. 12, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	130.60	DEC 14	130.48	FEB 11	130.40	APR 13	130.67	JUN 20	131.36	AUG 12	131.85
WATER YEAR 1994		HIGHEST	130.40	FEB 11, 1994	LOWEST	131.85	AUG 12, 1994				



## CITY OF SUFFOLK

363653076455401. Local number, 56A 11 SOW 089.

LOCATION.--Lat 36°36'53", long 76°45'54", Hydrologic Unit 03010203, off State Highway 616, 1.1 mi east of Holy Neck Church, and 3.4 mi north of Somerton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 861 ft, screened 830 to 840 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 79 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Nov. 18, 1987; 0.6 ft Nov. 18, 1987, to Jan. 12, 1988; 1.3 ft thereafter.

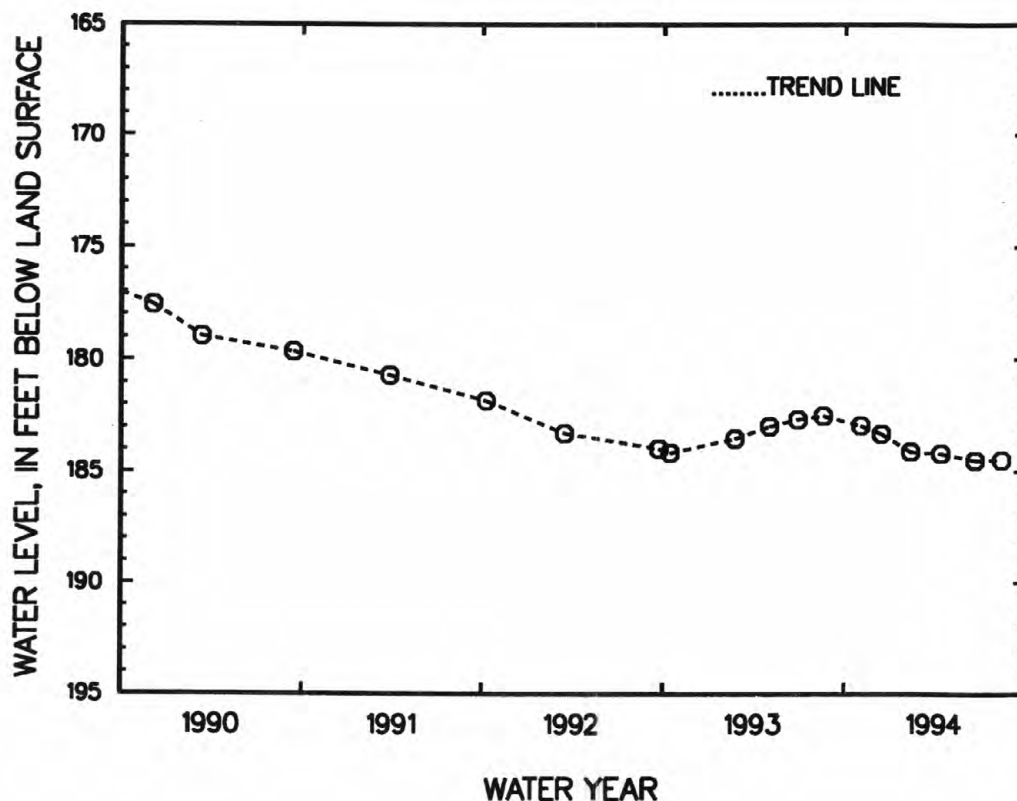
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1977 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 154.00 ft below land-surface datum, Aug. 9, 1977; lowest measured, 184.50 ft below land-surface datum, June 20, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	182.96	DEC 14	183.32	FEB 11	184.12	APR 13	184.20	JUN 20	184.50	AUG 12	184.49
WATER YEAR 1994		HIGHEST	182.96	NOV 03, 1993		LOWEST	184.50	JUN 20, 1994			





## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363345076470202. Local number, 56A 12 SOW 088B.

LOCATION.--Lat 36°33'45", long 76°47'02", Hydrologic Unit 03010203, 0.1 mi north of intersection of State Highways 668 and 669, 1.9 mi west of Somerton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 580 ft, screened 570 to 580 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 7, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 8, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.3 ft thereafter.

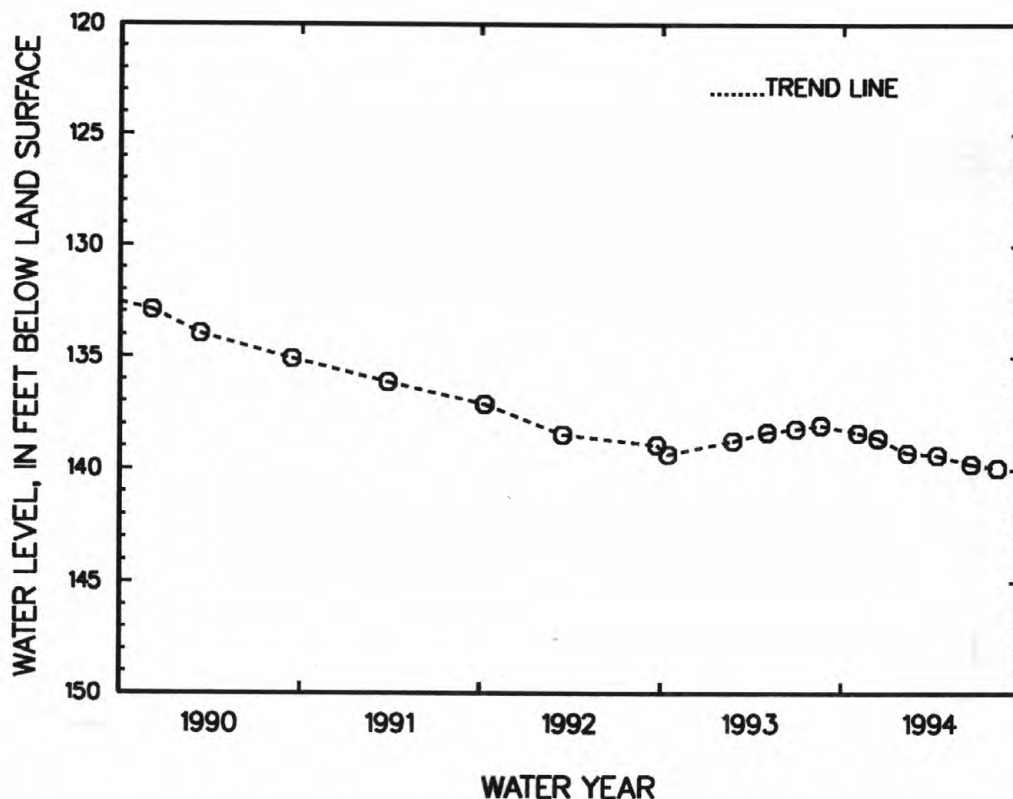
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 7, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1977 to November 1982, June 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 103.00 ft below land-surface datum, June 30, 1977; lowest measured, 139.93 ft below land-surface datum, Aug. 12, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	138.35	DEC 14	138.60	FEB 11	139.25	APR 13	139.35	JUN 20	139.75	AUG 12	139.93
WATER YEAR 1994		HIGHEST	138.35	NOV 03, 1993		LOWEST	139.93	AUG 12, 1994			



## CITY OF SUFFOLK

363625076522602. Local number, 56A 13 SOW 076B.

LOCATION.--Lat 36°36'25", long 76°52'26", Hydrologic Unit 03010203, 700 ft west of State Highway 615, 0.5 mi southwest of Olive Branch Church, and 8.1 mi south of Holland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 807 ft, screened 797 to 802 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 75 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Jcn. 12, 1988; 0.8 ft thereafter.

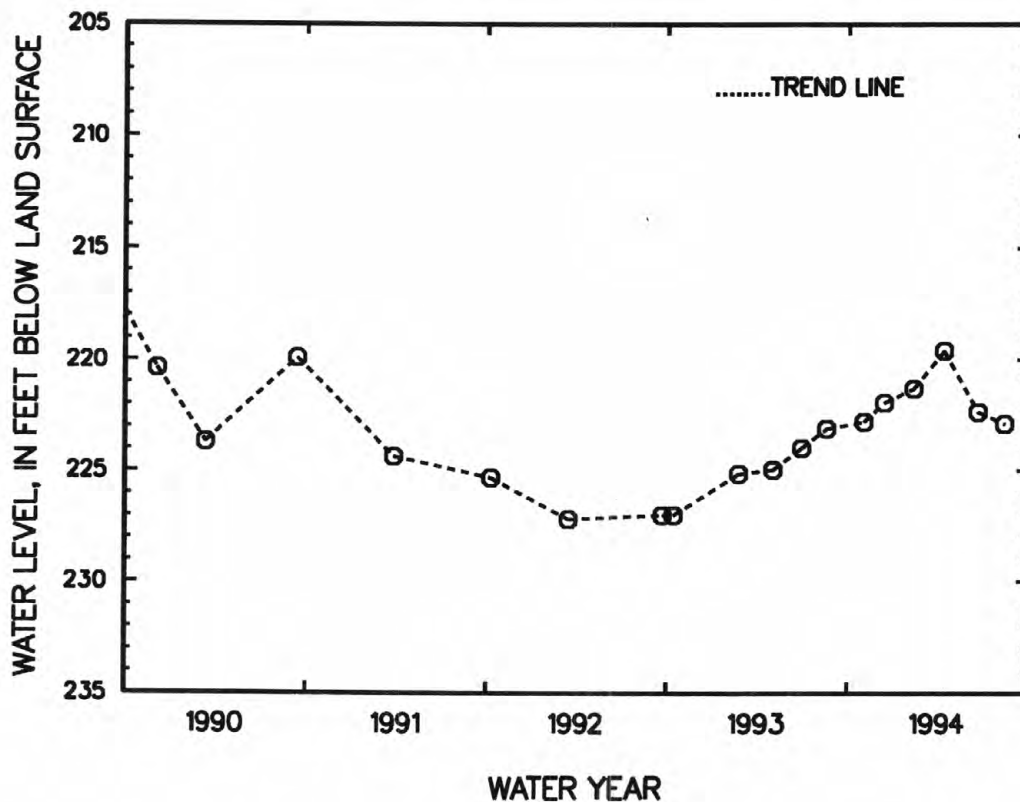
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--May 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 204.34 ft below land-surface datum, Oct. 26, 1982; lowest measured, 227.19 ft below land-surface datum, Mar. 16, 1992.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	222.80	DEC 14	221.94	FEB 11	221.30	APR 13	219.59	JUN 20	222.36	AUG 12	222.90
WATER YEAR 1994		HIGHEST	219.59	APR 13, 1994		LOWEST	222.90	AUG 12, 1994			



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363625076522603. Local number, 56A 14 SOW 076C.

LOCATION.--Lat 36°36'25", Long 76°52'26", Hydrologic Unit 03010203, 700 ft west of State Highway 615, 0.5 mi southwest of Olive Branch Church, and 8.1 mi south of Holland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 735 ft, screened 730 to 735 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 75 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.2 ft thereafter.

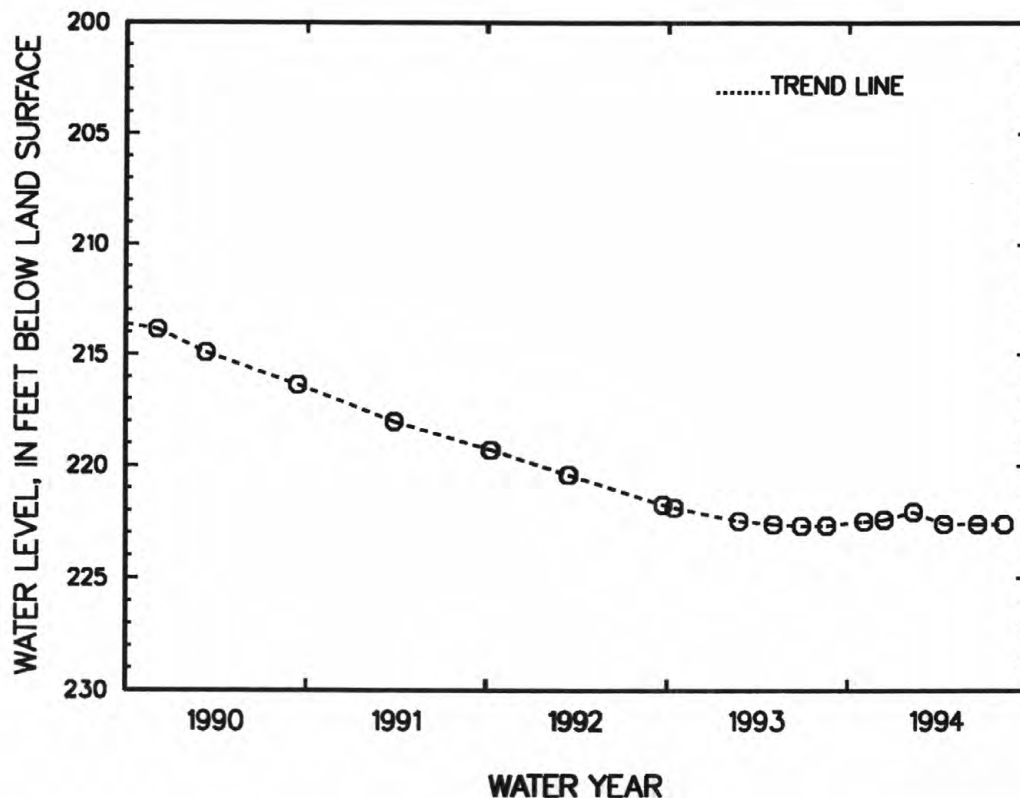
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--March 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 205.62 ft below land-surface datum, Mar. 7, 1979; lowest measured, 222.68 ft below land-surface datum, June 30, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	222.47	DEC 14	222.40	FEB 11	222.05	APR 13	222.58	JUN 20	222.60	AUG 12	222.60
WATER YEAR 1994		HIGHEST	222.05	FEB 11, 1994	LOWEST	222.60	JUN 20, AUG 12, 1994				



## GROUND-WATER LEVELS

335

## CITY OF SUFFOLK

364013076434601. Local number, 57B 1.

LOCATION.--Lat 36°40'13", long 76°43'46", Hydrologic Unit 03010202, at the Virginia Swine Evaluation Station, 0.2 mi east of State Highway 610, and 2.3 mi southwest of Lummis. Owner: Virginia Cooperative Extension Service.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 496 ft, screened 472 to 496 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 65 ft above sea level, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

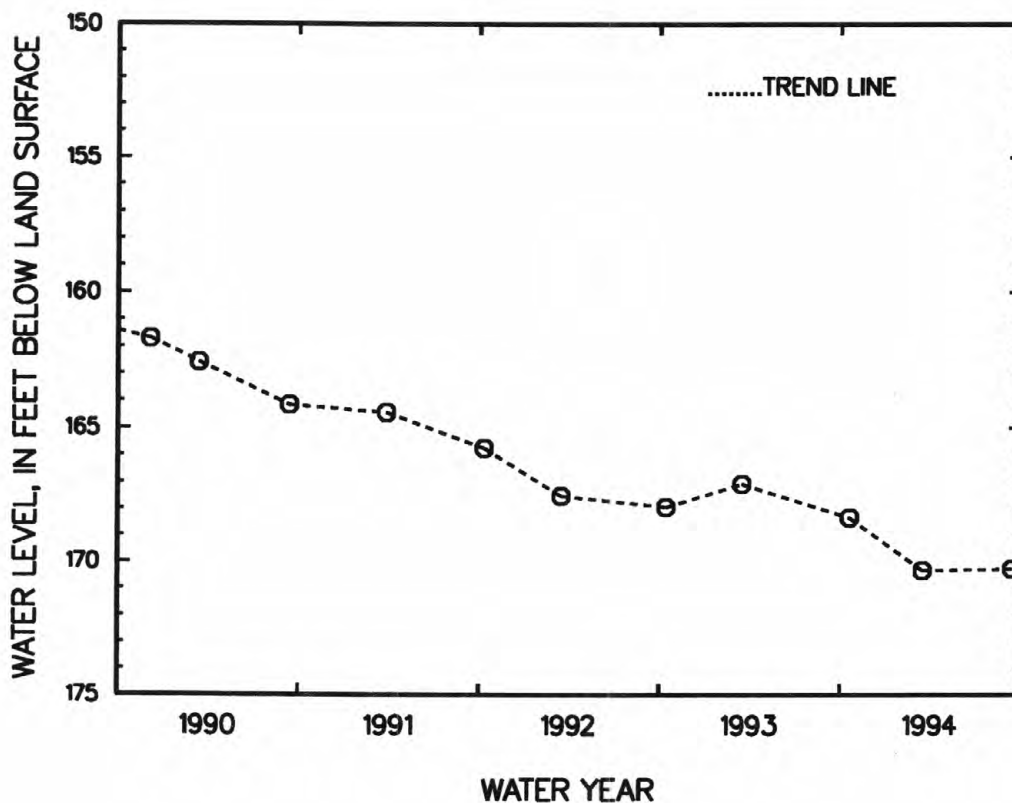
PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 127.09 ft below land-surface datum, Aug. 26, 1970; lowest measured, 170.35 ft below land-surface datum, Mar. 16, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	168.35	MAR 16	170.35	SEP 12	170.30

WATER YEAR 1994	HIGHEST	168.35	OCT 20, 1993	LOWEST	170.35	MAR 16, 1994
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## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363834076382301. Local number, 57B 8.

LOCATION.--Lat 36°38'27", long 76°38'05", Hydrologic Unit 03010205, 0.3 mi southwest of State Highway 664, 0.8 mi southeast of U.S. Highway 13, and 1.1 mi south of Nurneysville. Owner: Soren F. Andresen.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled flowing water well, diameter 2 in., depth 65 ft, screened 50 to 65 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with a manometer. Prior to Dec. 1, 1988, bimonthly measurement with a manometer.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: At land-surface datum.

PERIOD OF RECORD.--March 1975, November 1977 to current year. Unpublished records available March 1975 in files of the Geological Survey.

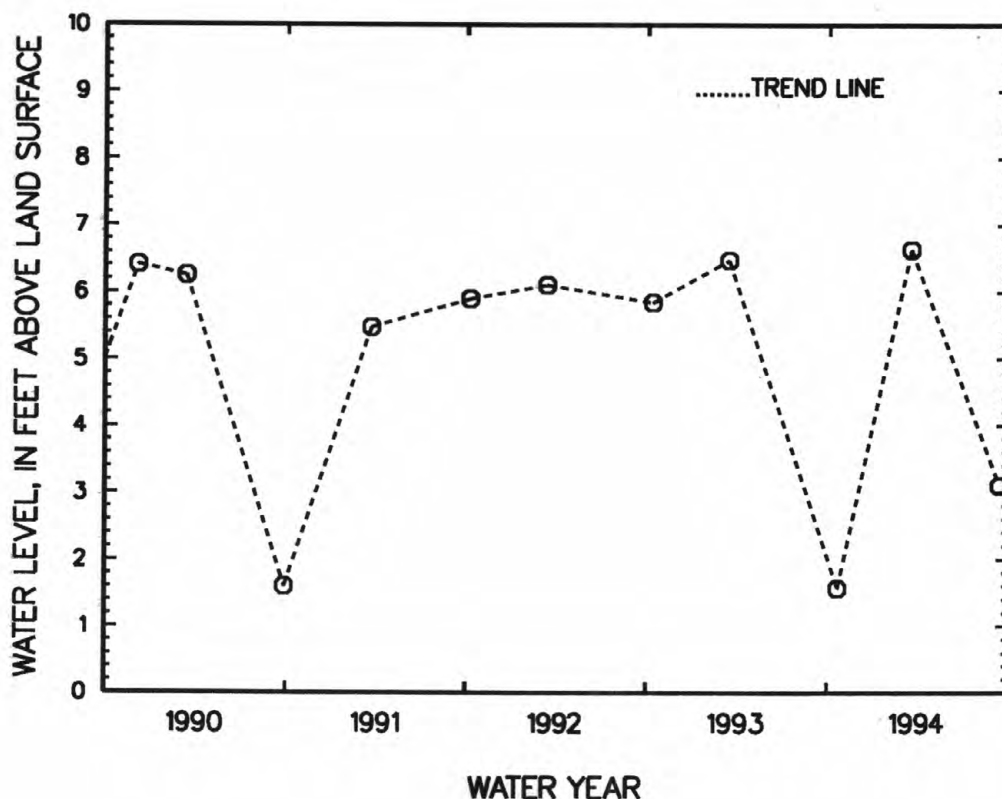
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.64 ft above land-surface datum, Mar. 18, 1994; lowest measured, at land-surface datum, Sept. 26, 1980.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	1.57	MAR 18	6.64	SEP 12	3.10

WATER YEAR 1994      HIGHEST 6.64 MAR 18, 1994      LOWEST 1.57 OCT 22, 1993

NOTE.--Flowing well; readings are above land-surface datum.



## GROUND-WATER LEVELS

337

## CITY OF SUFFOLK

364703076383701. Local number, 57C 21 SOW 099A.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 248 ft, screened 238 to 248 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Jan. 12, 1988; 1.1 ft thereafter.

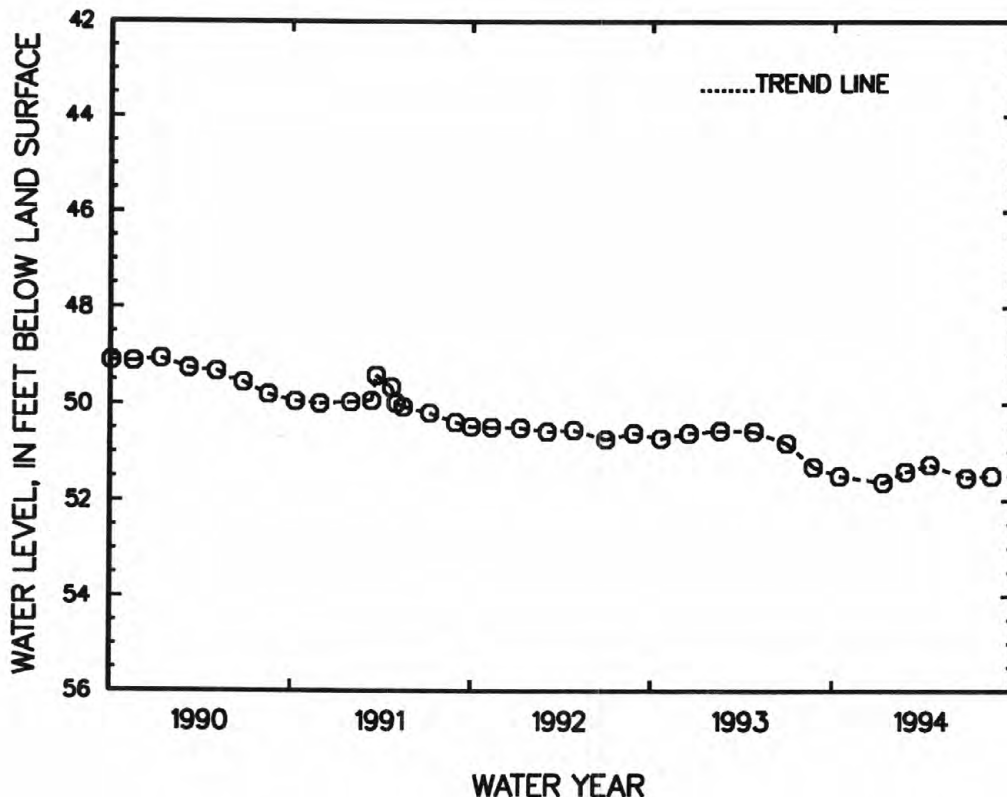
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--September 1983 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.32 ft below land-surface datum, Apr. 19, 1984; lowest measured, 51.62 ft below land-surface datum, Jan. 11, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	51.49	JAN 11	51.62	FEB 25	51.40	APR 15	51.26	JUN 27	51.52	AUG 17	51.49
WATER YEAR 1994		HIGHEST	51.26	APR 15, 1994	LOWEST	51.62	JAN 11, 1994				





## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364703076383702. Local number, 57C 22 SOW 099B.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 694 ft, screened 684 to 694 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Aug. 5, 1981, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 72 ft above sea level, from topographic map. Measuring point:

Top of recorder shelf, 2.0 ft above land-surface datum prior to July 14, 1987; 1.7 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--February 1980 to current year. Unpublished records available prior to August 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.24 ft below land-surface datum, Feb. 18, 1980; lowest recorded, 188.19 ft below land-surface datum, Dec. 27, 28, 1993.

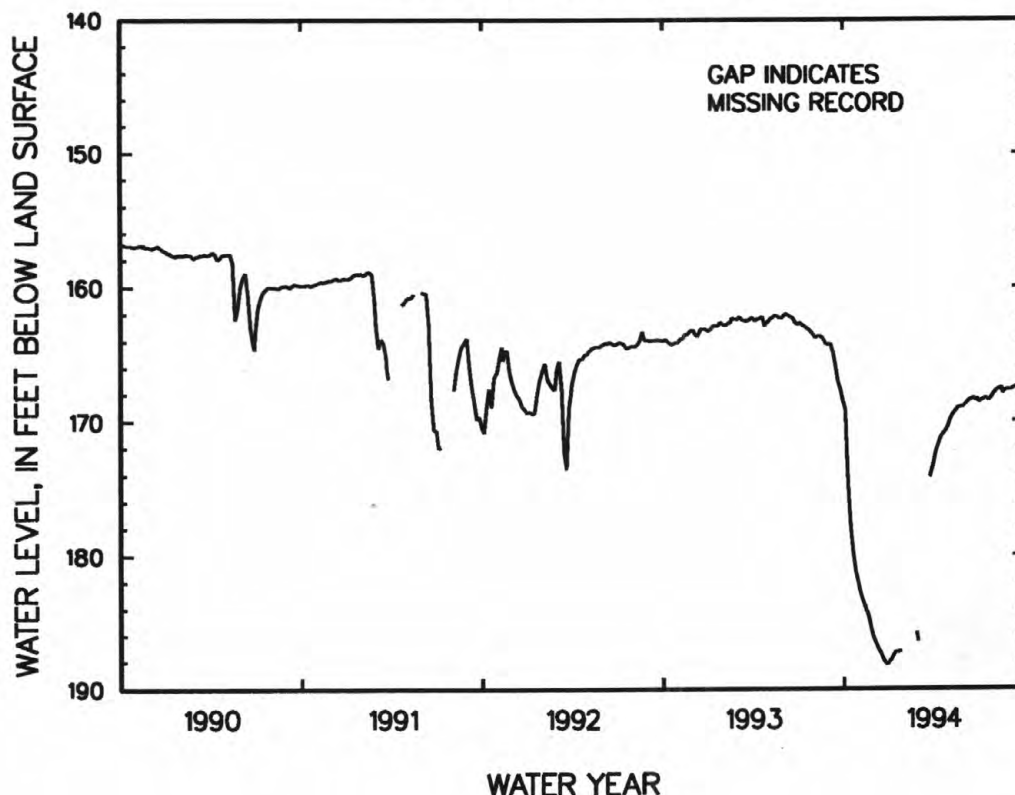
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	169.19	183.01	186.62	187.85	---	---	172.36	169.83	168.73	168.50	167.73	167.66
10	174.50	183.56	187.07	---	---	---	171.80	169.50	168.52	168.40	167.64	167.52
15	177.79	184.08	187.38	187.25	---	---	171.25	169.25	168.40	168.30	167.51	167.46
20	179.78	184.56	187.87	187.23	---	---	170.95	169.02	168.30	168.47	167.80	167.73
25	181.22	185.43	188.14	187.22	185.76	174.08	170.75	168.98	168.48	168.30	167.70	167.40
EOM	182.20	186.18	188.06	---	186.47	173.26	170.36	168.92	168.64	167.96	167.70	167.33

WATER YEAR 1994      HIGHEST INSTANTANEOUS      167.24      SEP 29, 1994

LOWEST INSTANTANEOUS      188.19      DEC 27, 28, 1993

## DAILY LOW-WATER LEVELS



## CITY OF SUFFOLK

364703076383703. Local number, 57C 23 SOW 099C.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 478 ft, screened 468 to 478 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Feb. 15, 1986, to Sept. 30, 1988, continuous strip-chart recorder. Prior to Feb. 15, 1986, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above sea level, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

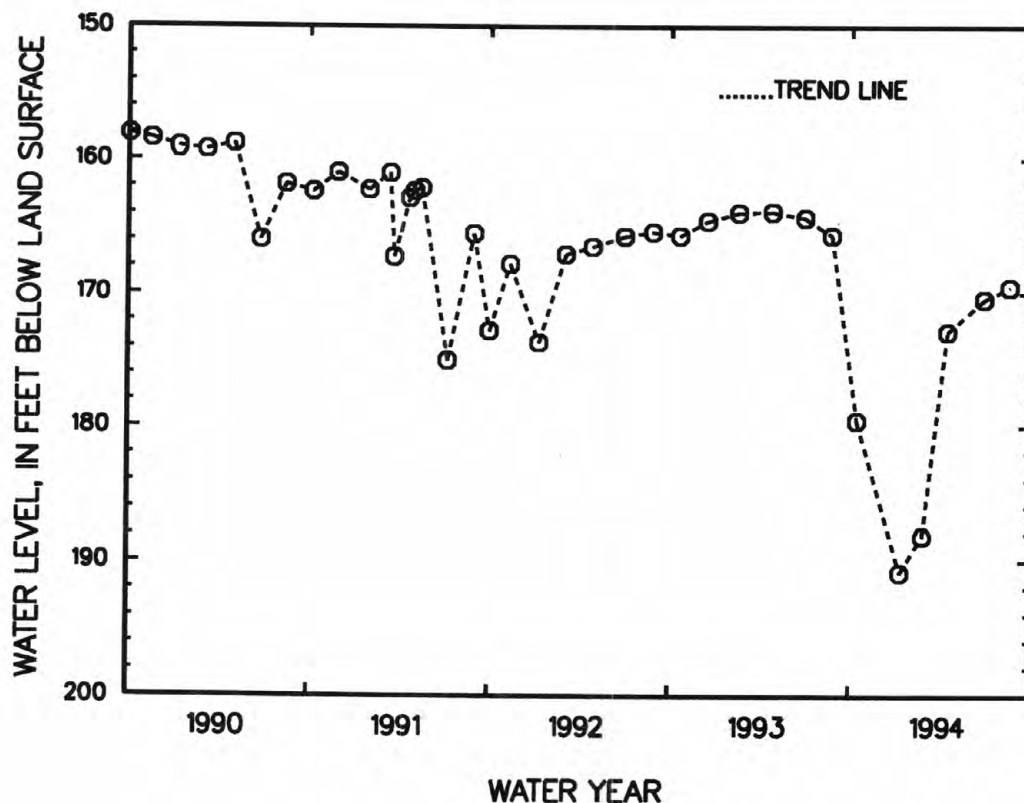
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--February 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 147.67 ft below land-surface datum, Nov. 5, 1984; lowest recorded, 190.83 ft below land-surface datum, Jan. 11, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	179.58	JAN 11	190.83	FEB 25	188.10	APR 15	172.88	JUN 27	170.44	AUG 17	169.54
WATER YEAR 1994		HIGHEST	169.54	AUG 17, 1994		LOWEST	190.83	JAN 11, 1994			



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364703076383704. Local number, 57C 24 SOW 099D.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 20 to 25 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above sea level, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Mar. 25, 1987; 2.0 ft Mar. 25, 1987, to Jan. 12, 1988; 1.3 ft Jan. 13, 1988, to June 24, 1990; 0.3 ft June 25 to Aug. 15, 1990; 1.8 ft thereafter.

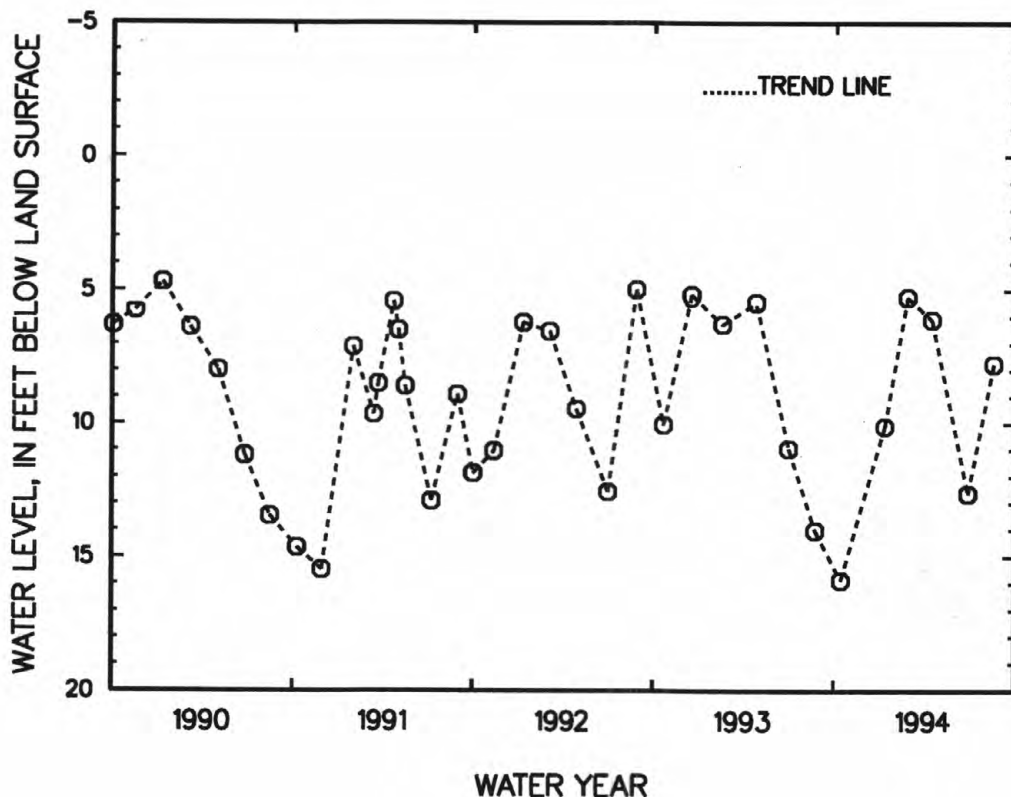
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1983 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.90 ft below land-surface datum, Mar. 14, 1989; lowest measured, 15.87 ft below land-surface datum, Oct. 15, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	15.87	JAN 11	10.10	FEB 25	5.25	APR 15	6.09	JUN 27	12.64	AUG 17	7.75
WATER YEAR 1994		HIGHEST	5.25	FEB 25, 1994	LOWEST	15.87	OCT 15, 1993				



## GROUND-WATER LEVELS

341

## CITY OF SUFFOLK

363303076330201. Local number, 58A 75 SOW 170.

LOCATION.--Lat 36°33'03", long 76°33'02", Hydrologic Unit 03010205, 100 ft north of North Carolina State line, 0.4 mi east of Desert Road, and 5.0 mi southeast of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 535 ft, screened 525 to 535 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 14, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 15, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 40 ft above mean sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

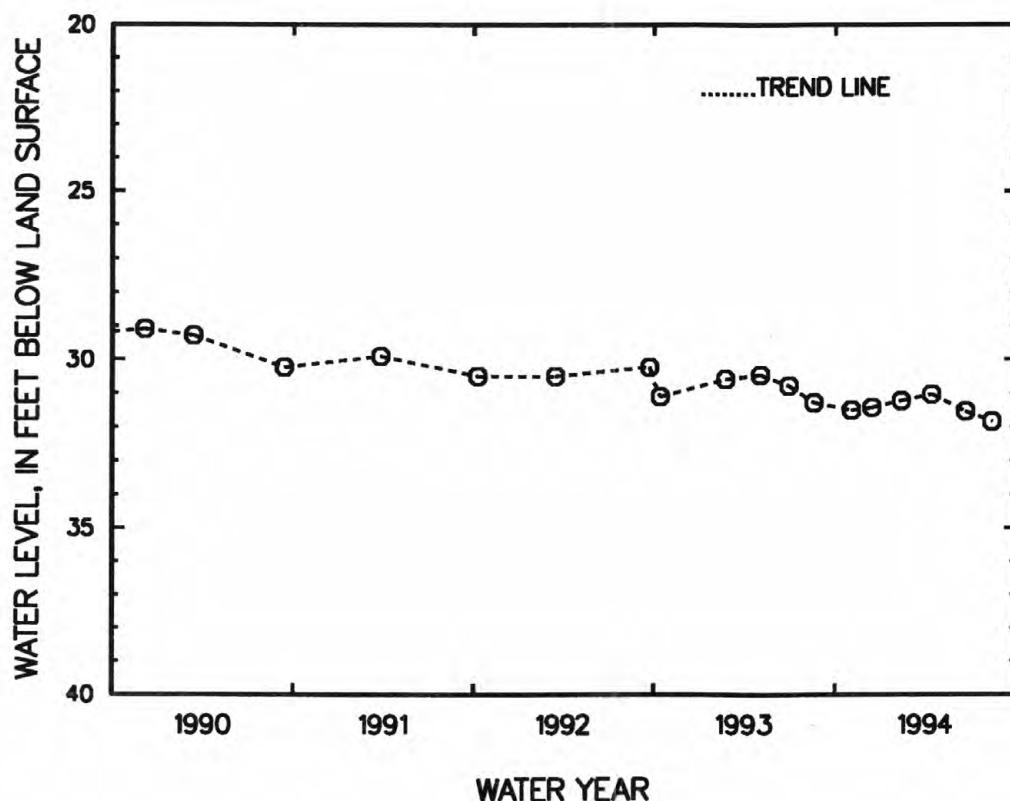
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 14, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.52 ft below land-surface datum, July 11, 1985; lowest measured, 31.84 ft below land-surface datum, Aug. 12, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	31.50	DEC 14	31.42	FEB 11	31.22	APR 13	31.03	JUN 20	31.54	AUG 12	31.84
WATER YEAR 1994      HIGHEST    31.03    APR 13, 1994      LOWEST    31.84    AUG 12, 1994											



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363655076332002. Local number, 58A 77 SOW 180A.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,158 ft, diameter 3 in. from 1,136 to 1,209 ft, depth 1,209 ft, screened 1,199 to 1,209 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 34.02 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

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

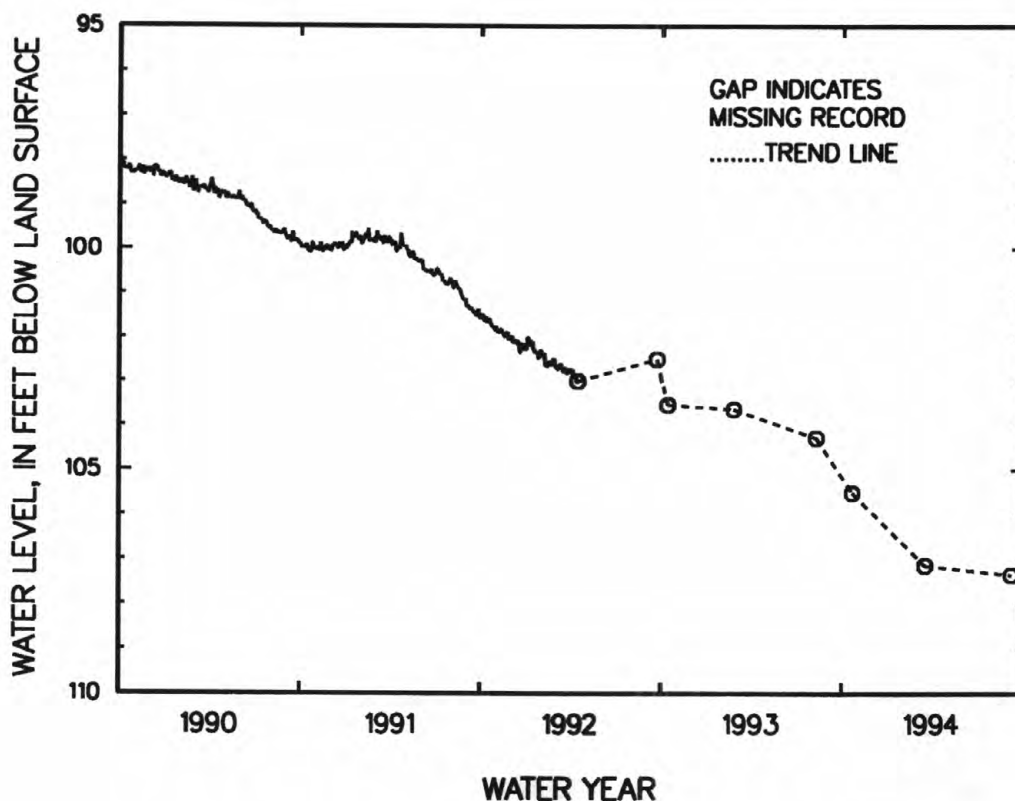
REVISED RECORDS.--WDR VA-89-1: 1987.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 96.83 ft below land-surface datum, Sept. 30, 1987; lowest measured, 107.35 ft below land-surface datum, Sept. 7, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	105.52	MAR 18	107.15	SEP 07	107.35

WATER YEAR 1994	HIGHEST	105.52	OCT 22, 1993	LOWEST	107.35	SEP 07, 1994
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## GROUND-WATER LEVELS

343

## CITY OF SUFFOLK

363655076332003. Local number, 58A 78 SOW 180B.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 811 ft, diameter 2 in. from 766 to 880 ft, depth 880 ft, screened 850 to 860 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 34.02 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

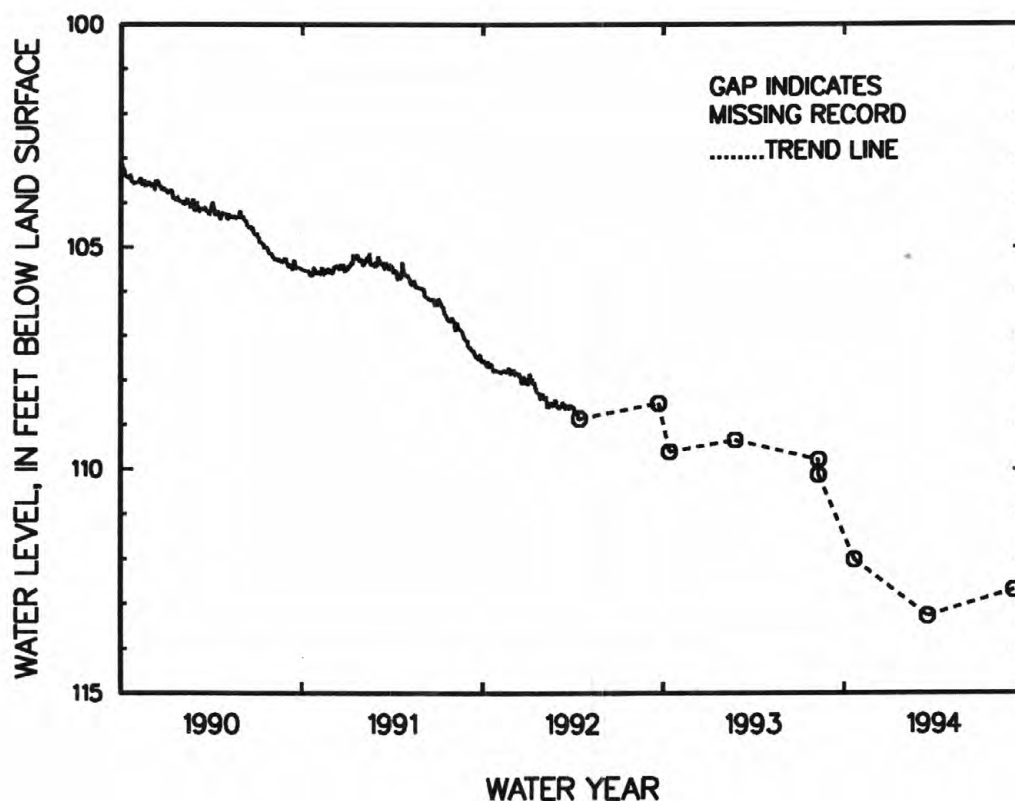
PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 102.14 ft below land-surface datum, June 5, 27, 1987; lowest measured, 113.27 ft below land-surface datum, Mar. 18, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	112.01	MAR 18	113.27	SEP 07	112.69

WATER YEAR 1994	HIGHEST	112.01	OCT 22, 1993	LOWEST	113.27	MAR 18, 1994
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## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363655076332004. Local number, 58A 79 SOW 180C.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 670 ft, diameter 2 in. from 657 to 710 ft, depth 710 ft, screened 700 to 710 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 33.97 ft above sea level. Measuring point: Top of casing, 2.4 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown and occasional pumpage from water-quality sampling.

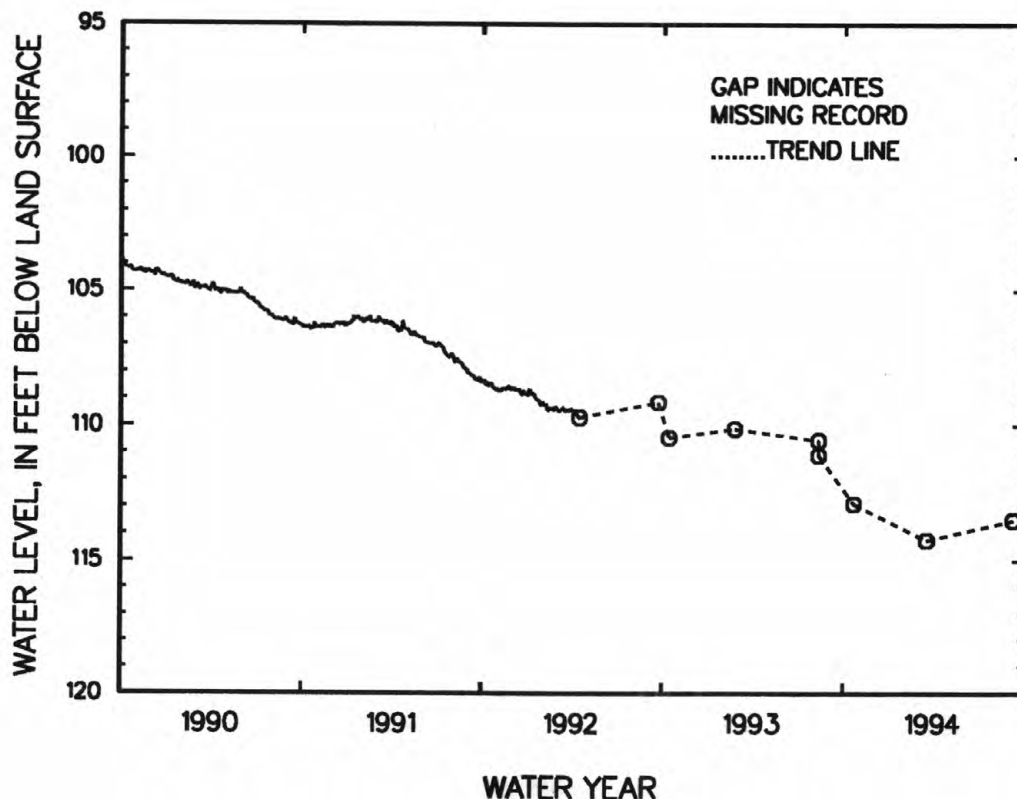
PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 102.72 ft below land-surface datum, May 11, 1987; lowest measured, 114.23 ft below land-surface datum, Mar. 18, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	112.88	MAR 18	114.23	SEP 07	113.50

WATER YEAR 1994      HIGHEST 112.88 OCT 22, 1993      LOWEST 114.23 MAR 18, 1994



## CITY OF SUFFOLK

363655076332005. Local number, 58A 80 SOW 180D.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 397 ft, diameter 2 in. from 388 to 440 ft, depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 27, 1991, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 34.26 ft above sea level. Measuring point: Top of casing, 2.3 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown and occasional pumpage for water-quality samples.

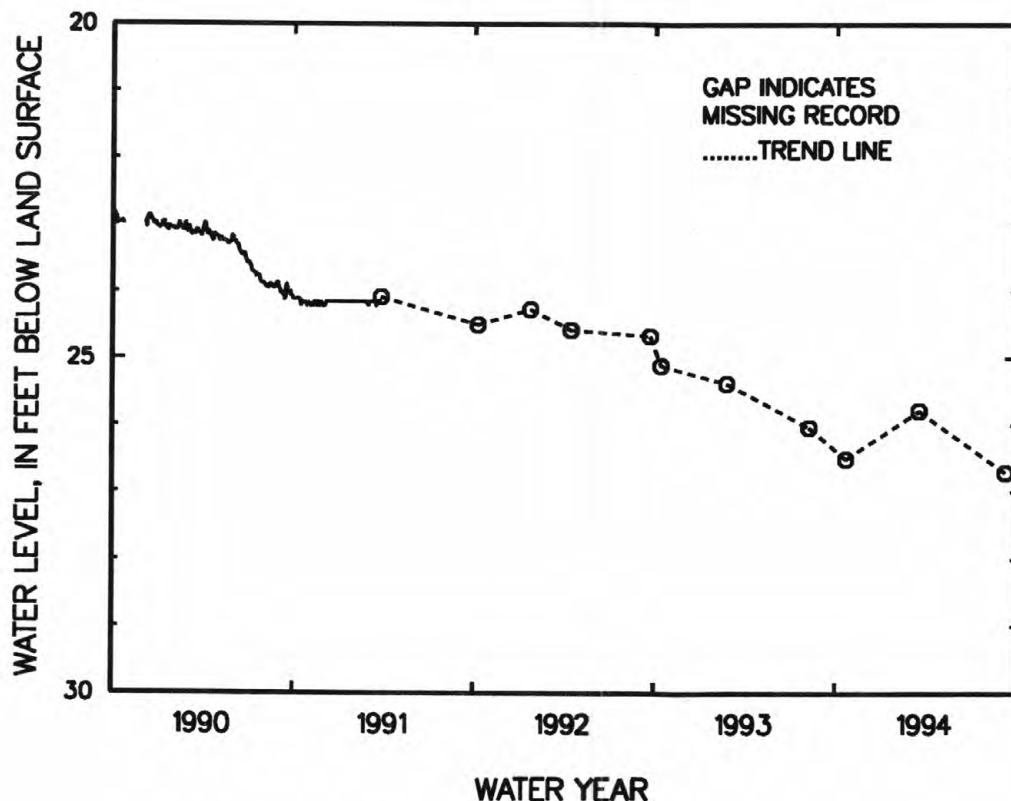
PERIOD OF RECORD.--June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.55 ft below land-surface datum, June 17, 1987; lowest measured, 26.71 ft below land-surface datum, Sept. 7, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	26.51	MAR 18	25.79	SEP 07	26.71

WATER YEAR 1994      HIGHEST 25.79 MAR 18, 1994      LOWEST 26.71 SEP 07, 1994



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363655076332006. Local number, 58A 81 SOW 180E.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 309 ft, diameter 2 in. from 298 to 329 ft, depth 329 ft, screened 319 to 329 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 34.00 ft above sea level. Measuring point: Top of casing, 2.4 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

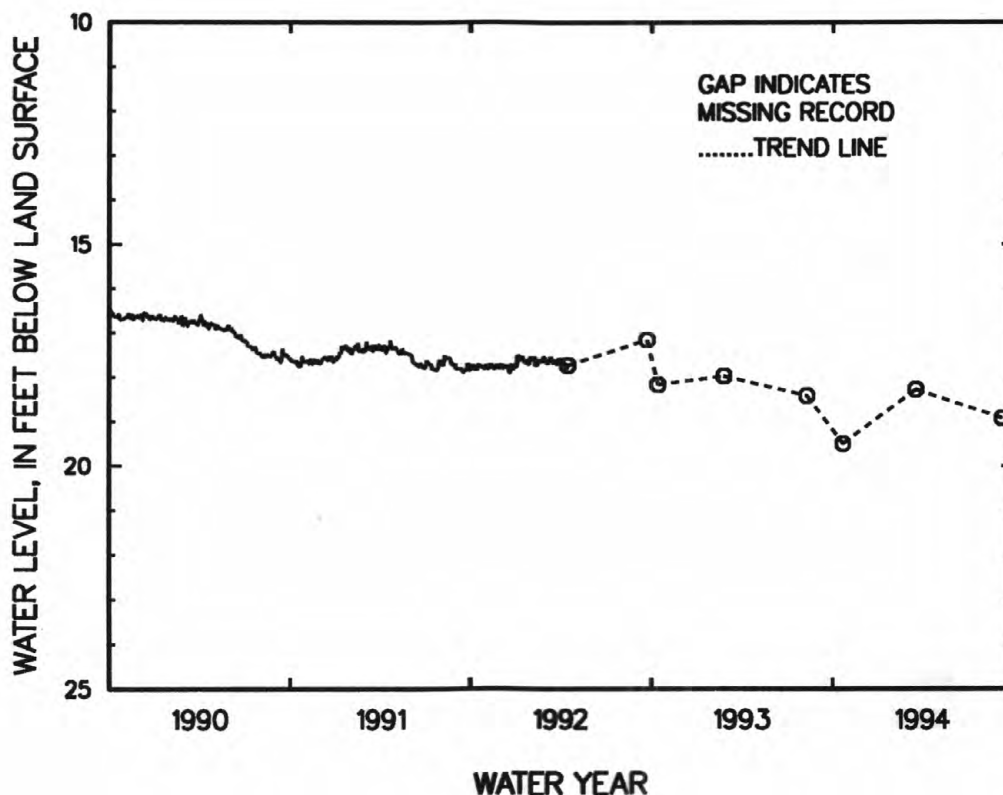
PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 15.07 ft below land-surface datum, Feb. 23, 1987; lowest measured, 19.49 ft below land-surface datum, Oct. 22, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	19.49	MAR 18	18.27	SEP 07	18.92

WATER YEAR 1994      HIGHEST 18.27 MAR 18, 1994      LOWEST 19.49 OCT 22, 1993



## GROUND-WATER LEVELS

347

## CITY OF SUFFOLK

363655076332007. Local number, 58A 82 SOW 180F.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 274 ft, diameter 2 in. from 262 to 306 ft, depth 306 ft, screened 286 to 306 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 33.87 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown and occasional pumpage for water-quality samples.

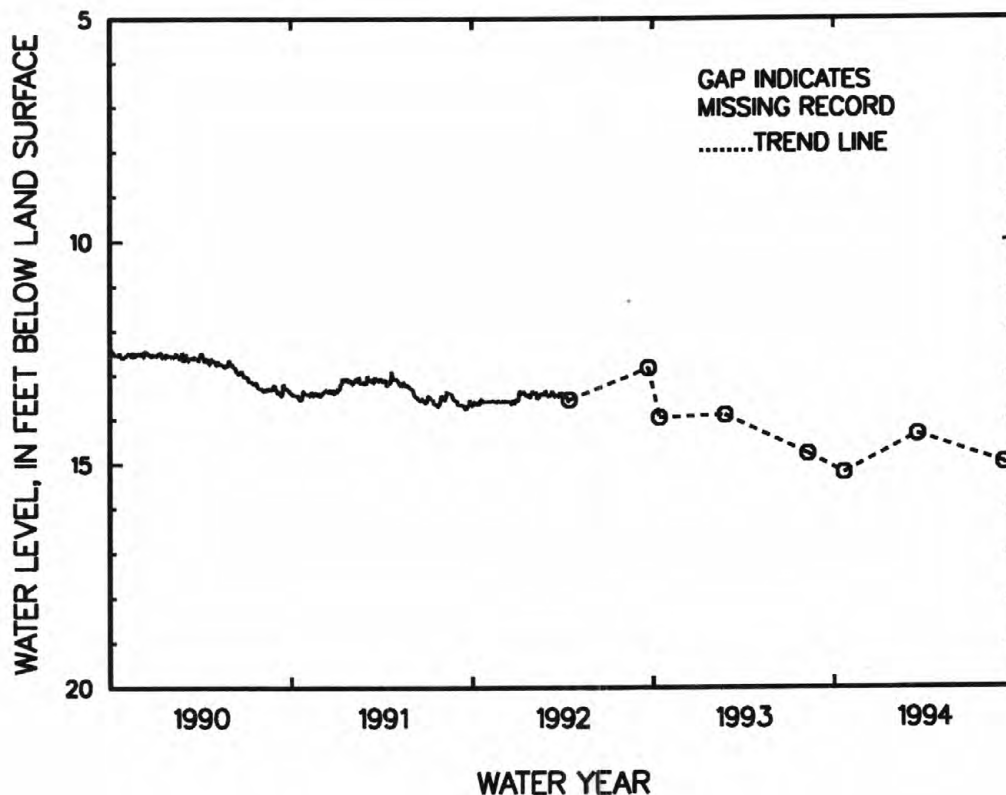
PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.12 ft below land-surface datum, Apr. 13, 1987; lowest measured, 15.19 ft below land-surface datum, Oct. 22, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	15.19	MAR 18	14.34	SEP 07	14.98

WATER YEAR 1994      HIGHEST 14.34 MAR 18, 1994      LOWEST 15.19 OCT 22, 1993



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363655076332008. Local number, 58A 83 SOW 180G.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 145 ft, diameter 2 in. from 135 to 165 ft, depth 165 ft, screened 155 to 165 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 33.84 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Low-water levels in April 1987 were caused by pumping of well for water-quality samples.

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

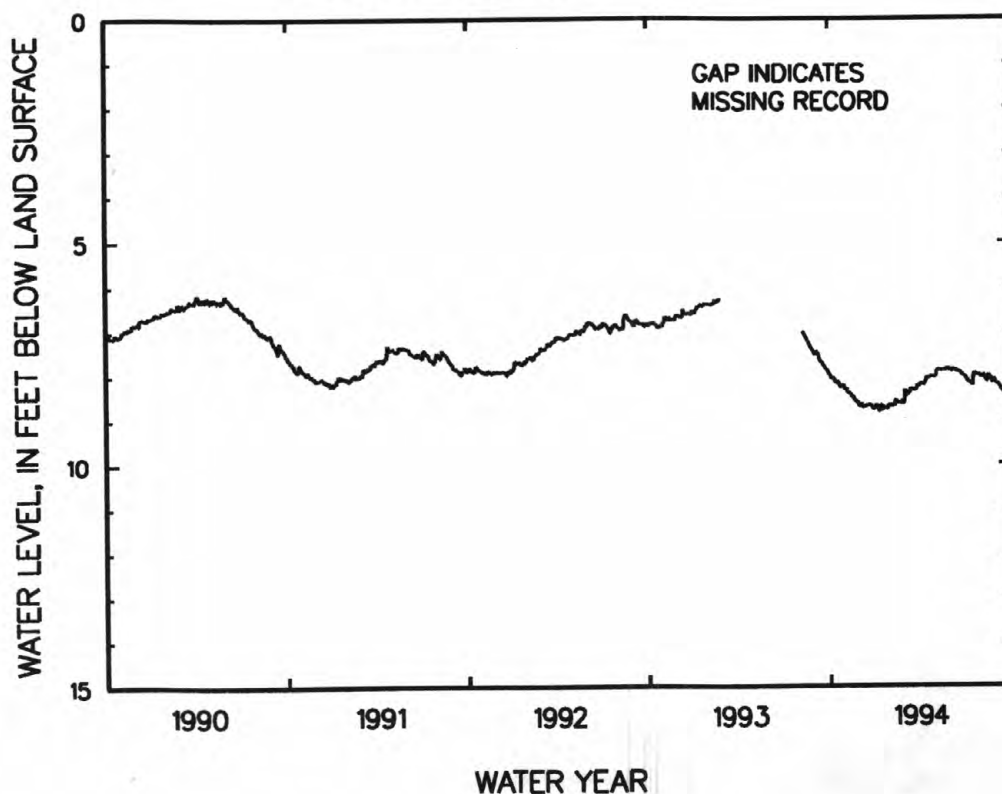
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.09 ft below land-surface datum, May 29, 1990; lowest recorded, 8.90 ft below land-surface datum, Feb. 16, 17, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.06	8.31	8.63	8.73	8.70	8.43	8.19	7.90	7.91	8.12	8.04	8.21
10	8.08	8.38	8.72	8.82	8.70	8.39	8.18	7.89	7.89	8.17	8.08	8.30
15	8.17	8.45	8.70	8.71	8.59	8.30	8.06	7.90	7.92	8.22	8.14	8.38
20	8.17	8.50	8.71	8.73	8.63	8.34	8.06	7.89	7.94	7.96	8.06	8.47
25	8.27	8.61	8.67	8.73	8.59	8.32	8.02	7.88	7.99	8.00	8.18	8.38
EOM	8.21	8.68	8.77	8.68	8.65	8.25	8.05	7.88	8.03	8.02	8.17	8.48

WATER YEAR 1994      HIGHEST INSTANTANEOUS    7.79    MAY 26, 27, 1994  
                               LOWEST INSTANTANEOUS    8.82    JAN 10, 11, 1994

## DAILY LOW-WATER LEVELS



## CITY OF SUFFOLK

363655076332009. Local number, 58A 84 SOW 180H.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 33.87 ft above sea level. Measuring point: Top of casing, 2.5 ft above land-surface datum.

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

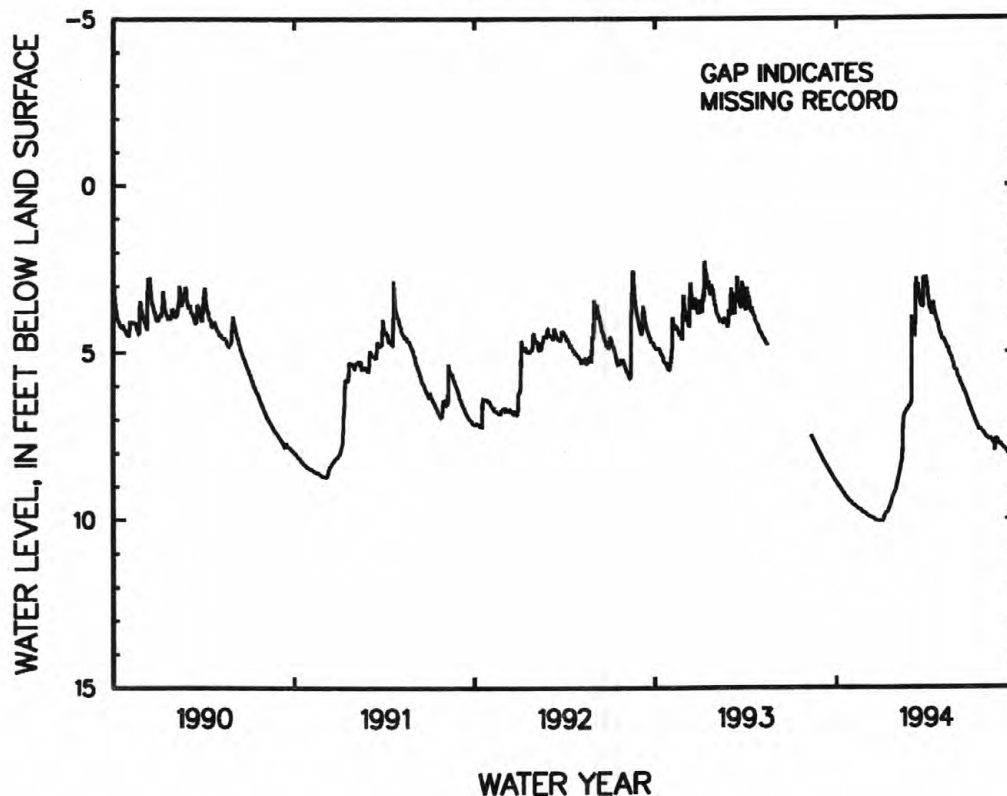
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.47 ft below land-surface datum, Mar. 24, 1989; lowest recorded, 10.06 ft below land-surface datum, Dec. 25-31, 1993, Jan. 1, 2, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.97	9.57	9.90	9.95	8.65	4.41	3.36	4.62	5.78	6.93	7.64	7.89
10	9.08	9.63	9.95	9.81	8.27	3.52	3.77	4.77	5.97	7.12	7.65	7.99
15	9.19	9.69	9.98	9.69	6.91	2.95	3.55	4.86	6.15	7.30	7.73	8.09
20	9.30	9.73	10.03	9.47	6.75	3.58	3.98	5.12	6.32	7.34	7.60	8.20
25	9.40	9.79	10.06	9.24	6.66	3.65	4.19	5.32	6.56	7.43	7.76	8.28
EOM	9.48	9.84	10.06	8.98	6.59	2.79	4.44	5.53	6.74	7.55	7.81	8.39

WATER YEAR 1994      HIGHEST INSTANTANEOUS    1.57    MAR 10, 1994  
                               LOWEST INSTANTANEOUS    10.06    DEC 25-31, 1993, JAN 01, 02, 1994

## DAILY LOW-WATER LEVELS





## GROUND-WATER LEVELS

## CITY OF SUFFOLK

363928076332901. Local number, 58B 13.

LOCATION.--Lat 36°39'28", long 76°33'29", Hydrologic Unit 03010205, 700 ft east of State Highway 642, 4.0 mi south of Suffolk. Owner: Melvin Brinkley.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 22 in., depth 15 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. October 1993 to February 1994, occasional measurement with chalked tape by USGS personnel. Jan. 24, 1981, to Sept. 30, 1993, digital recorder--60-minute punch. Prior to Jan. 23, 1981, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 40 ft above sea level, from topographic map. Measuring point:

Top of recorder shelf, 1.9 ft above land-surface datum.

REMARKS.--Recorder removed for repair to shelter September 1993; reinstalled February 1994.

PERIOD OF RECORD.--March 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.95 ft below land-surface datum, May 25, 1979; lowest recorded, 13.44 ft below land-surface datum, Jan. 23-26, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1993 TO FEBRUARY 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	11.42	DEC 01	11.92	JAN 05	12.27	JAN 25	11.14	FEB 25	7.95

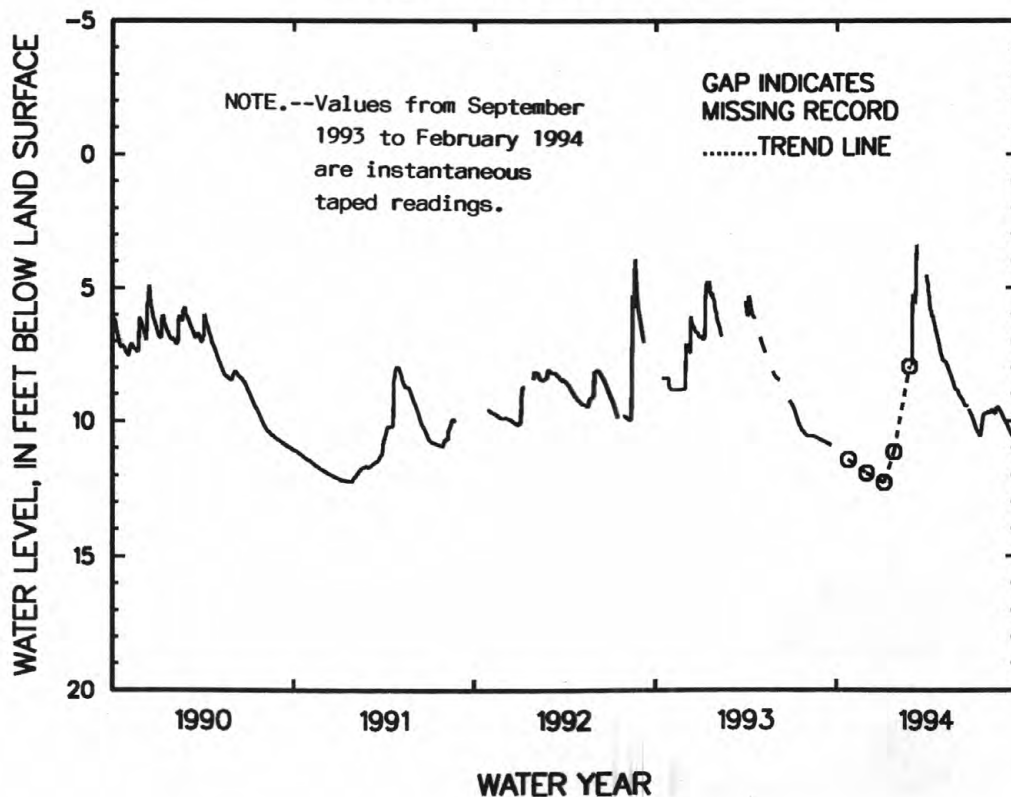
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	5.33	5.24	7.72	9.05	10.07	9.70	10.01
10	---	---	---	---	---	4.68	5.89	7.86	9.18	10.34	9.60	10.21
15	---	---	---	---	---	---	6.29	8.08	9.39	10.52	9.73	10.41
20	---	---	---	---	---	---	6.70	8.35	9.44	10.16	9.50	10.57
25	---	---	---	---	---	---	7.08	8.64	9.62	9.74	9.61	10.69
EOM	---	---	---	---	---	4.53	7.53	8.85	9.81	9.70	9.84	10.81

WATER YEAR 1994      HIGHEST INSTANTANEOUS    2.78    MAR 10, 1994

LOWEST INSTANTANEOUS    10.81    SEP 30, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

351

## CITY OF SUFFOLK

364318076365501. Local number, 58B268 SOW 169A.

LOCATION.--Lat 36°43'18", long 76°36'55", Hydrologic Unit 02080208, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quarternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 12 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

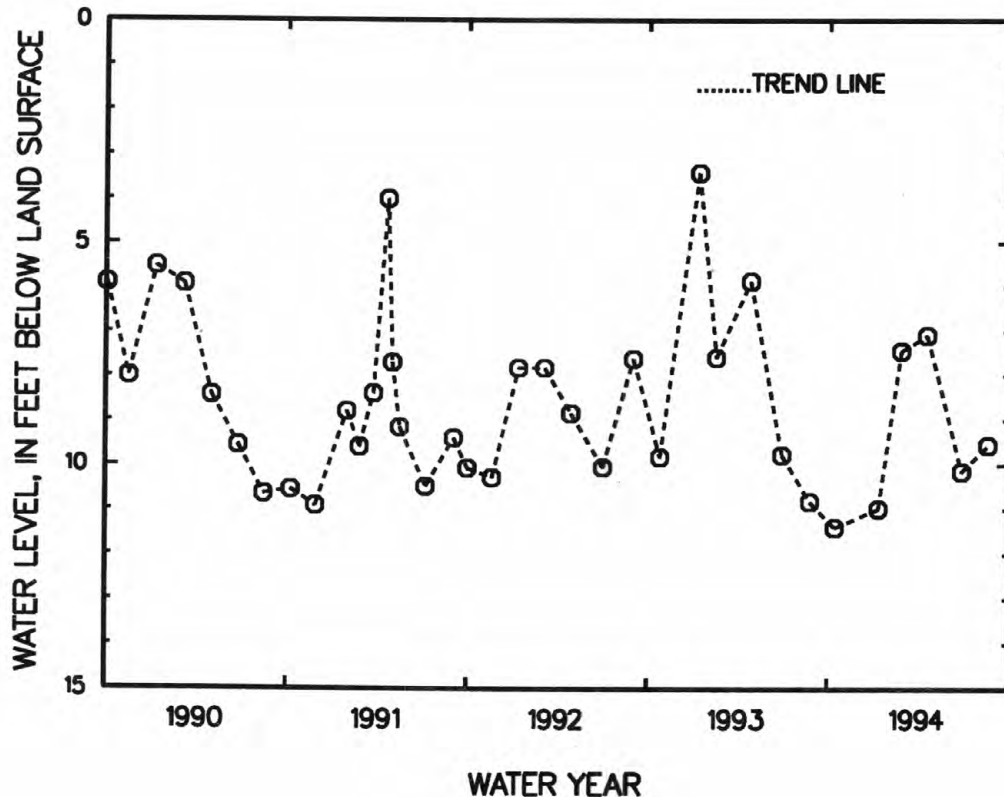
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.42 ft below land-surface datum, Jan. 12, 1993; lowest measured, 11.40 ft below land-surface datum, Oct. 15, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	11.40	JAN 11	10.98	FEB 25	7.43	APR 18	7.08	JUN 27	10.15	AUG 18	9.56
WATER YEAR 1994		HIGHEST	7.08	APR 18, 1994	LOWEST	11.40	OCT 15, 1993				



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364318076365502. Local number, 58B269 SOW 169B.

LOCATION.--Lat 36°43'18", long 76°36'55", Hydrologic Unit 02080202, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 360 ft, screened 350 to 360 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

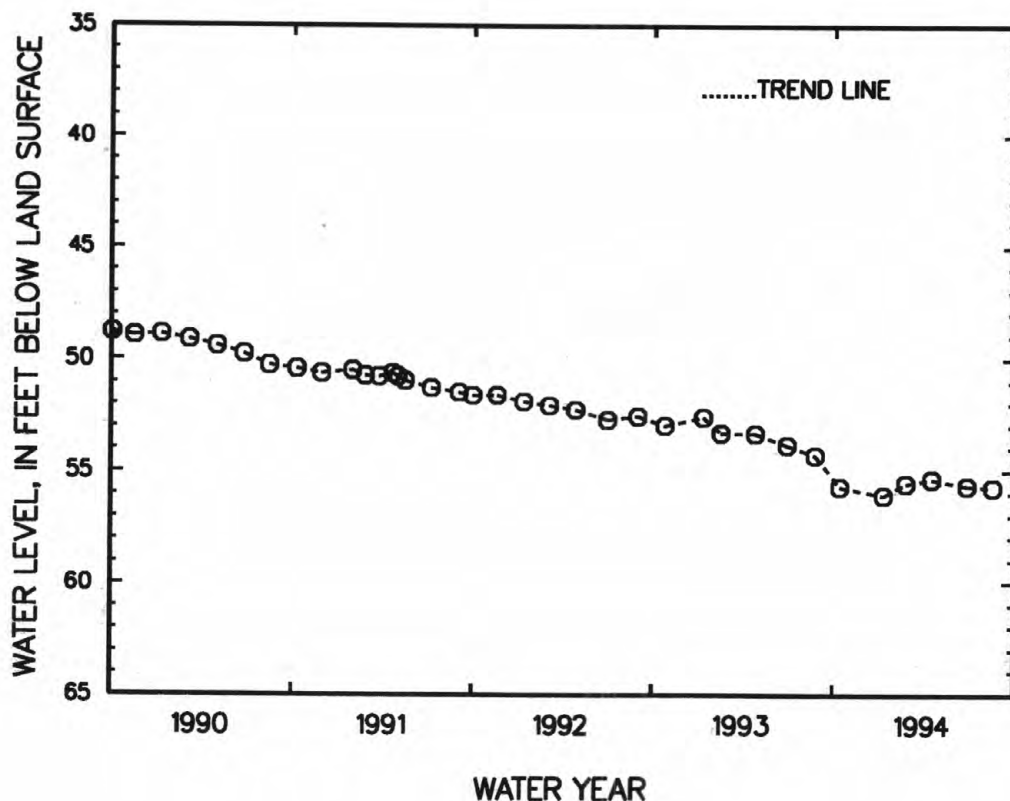
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.06 ft below land-surface datum, July 8, 1985; lowest measured, 56.06 ft below land-surface datum, Jan. 11, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	55.67	JAN 11	56.06	FEB 25	55.53	APR 18	55.34	JUN 27	55.64	AUG 18	55.72
WATER YEAR 1994		HIGHEST	55.34	APR 18, 1994	LOWEST	56.06	JAN 11, 1994				



## CITY OF SUFFOLK

364318076365503. Local number, 58B270 SOW 169C.

LOCATION.--Lat 36°43'18", long 76°36'55", Hydrologic Unit 02080208, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 500 ft, screened 490 to 500 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 35 ft above sea level, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

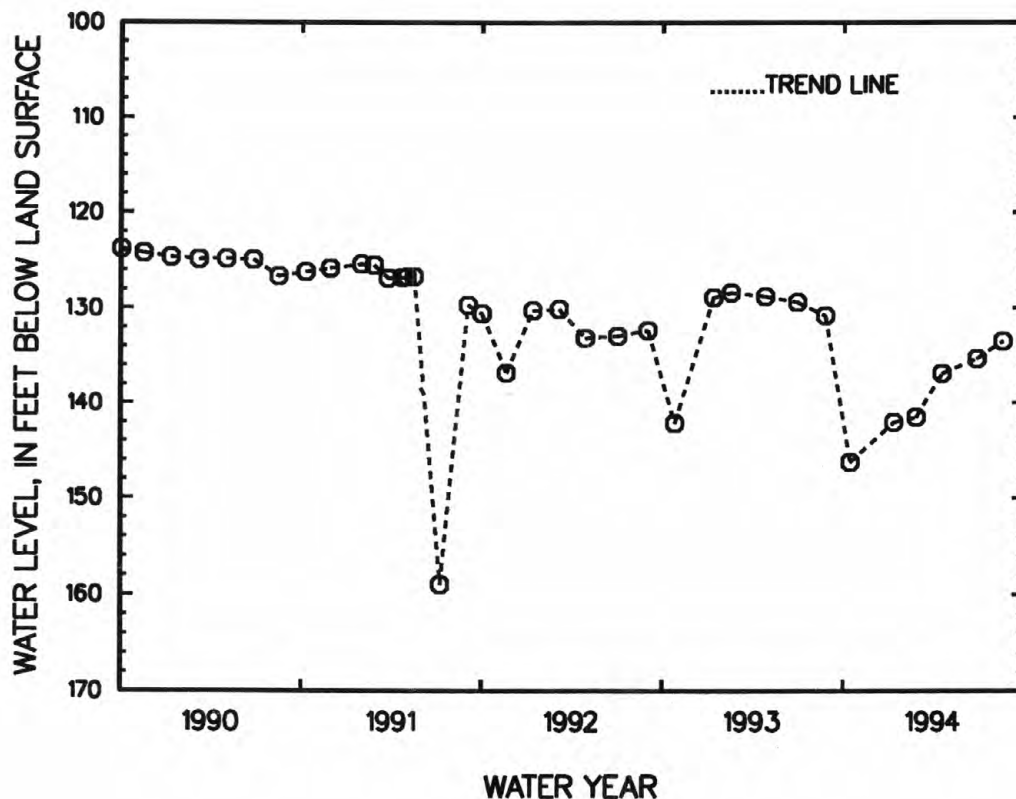
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.59 ft below land-surface datum, Feb. 25, 1986; lowest measured, 159.00 ft below land-surface datum, July 9, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	146.21	JAN 11	142.01	FEB 25	141.47	APR 18	136.85	JUN 27	135.30	AUG 18	133.49
WATER YEAR 1994		HIGHEST	133.49	AUG 18, 1994		LOWEST	146.21	OCT 15, 1993			



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364317076363501. Local number, 58B271 SOW 169D.

LOCATION.--Lat 36°43'17", long 76°36'35", Hydrologic Unit 02080208, 200 ft south of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 710 ft, screened 501 to 506 ft, 632 to 637 ft, 700 to 710 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Nov. 5, 1986, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 29 ft above sea level, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.70 ft below land-surface datum, Feb. 25, 1986; lowest recorded, 156.96 ft below land-surface datum, Dec. 5, 1993.

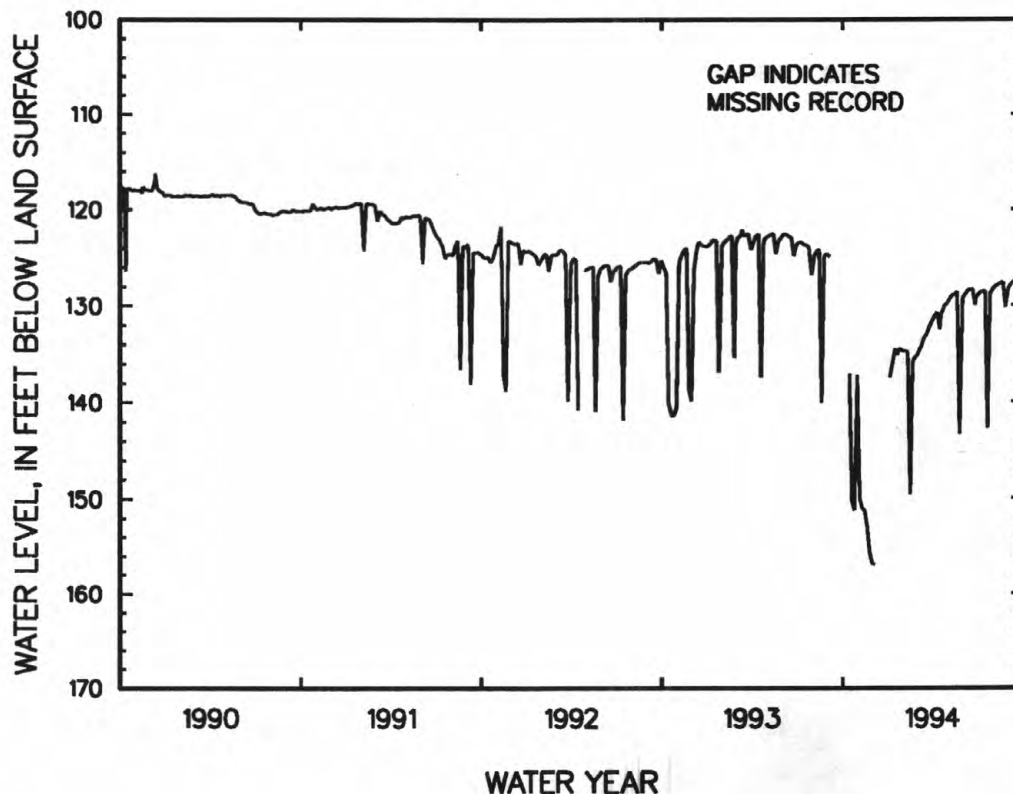
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	150.04	156.96	137.47	134.70	134.63	131.10	129.35	128.84	128.63	128.00	127.80
10	---	151.09	---	136.07	134.84	134.14	130.75	128.94	128.47	128.55	127.83	127.60
15	137.05	151.27	---	134.48	149.60	133.32	132.48	128.83	128.35	128.50	127.73	127.38
20	150.25	153.03	---	135.10	135.85	133.00	130.70	128.56	128.32	142.68	127.61	127.31
25	151.23	155.73	---	134.45	135.33	132.26	130.00	143.27	129.97	128.77	130.20	127.06
EOM	137.18	156.83	---	134.70	135.27	131.61	129.77	129.23	128.94	128.25	128.18	128.77

WATER YEAR 1994      HIGHEST INSTANTANEOUS      126.96      SEP 27, 1994

LOWEST INSTANTANEOUS      156.96      DEC 05, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

355

## CITY OF SUFFOLK

364319076365501. Local number, 58B272 SOW 169E.

LOCATION.--Lat 36°43'19", long 76°36'55", Hydrologic Unit 02080208, 400 ft south of Norfolk and Western Railroad near Lake Kilby, 0.6 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 733 ft, screened 498 to 508 ft, 550 to 555 ft, 702 to 712 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 41 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

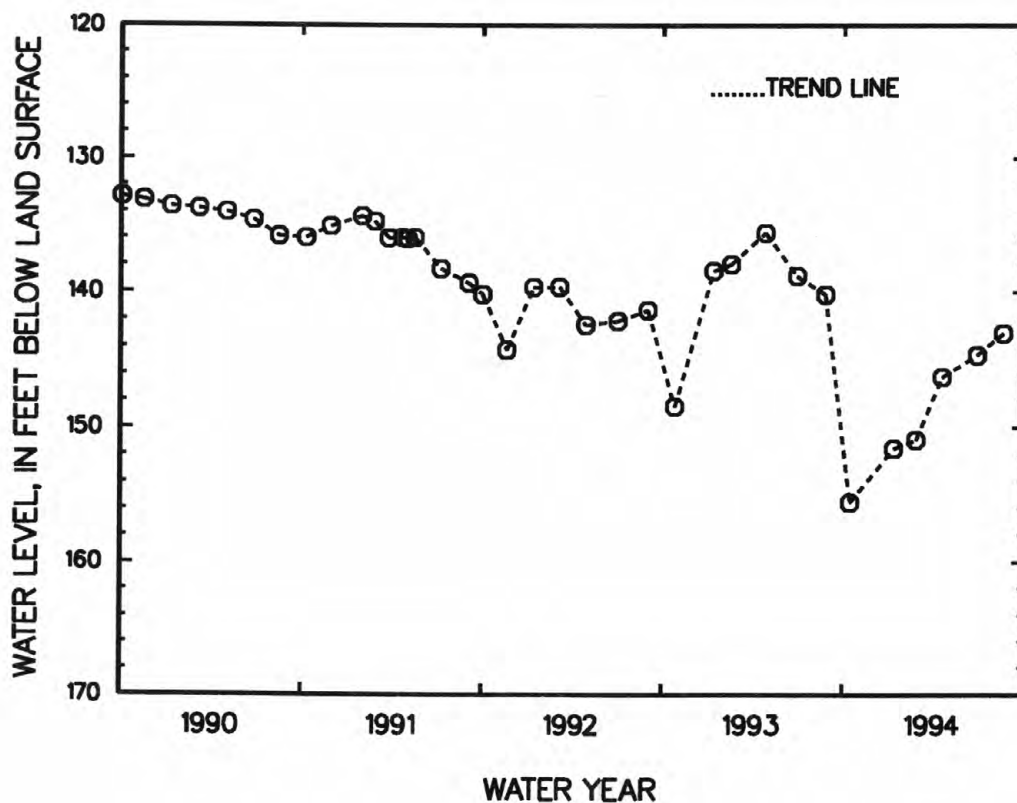
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.54 ft below land-surface datum, Feb. 25, 1986; lowest measured, 155.58 ft below land-surface datum, Oct. 15, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	155.58	JAN 11	151.57	FEB 25	150.93	APR 18	146.25	JUN 27	144.63	AUG 18	143.04
WATER YEAR 1994      HIGHEST    143.04    AUG 18, 1994      LOWEST    155.58    OCT 15, 1993											





## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364348076363201. Local number, 58B273 SOW 169F.

LOCATION.--Lat 36°43'48", long 76°36'32", Hydrologic Unit 02080208, 100 ft south of U.S. Highway 58 near Lake Kilby, 0.2 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 661 ft, screened 541 to 546 ft, 567 to 572 ft, 635 to 640 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Nov. 5, 1986, to Oct. 1, 1992, continuous strip-chart recorder. Prior to Nov. 5, 1986, bimonthly measurement with chalked tape..

DATUM.--Elevation of land-surface datum is 26 ft above sea level, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

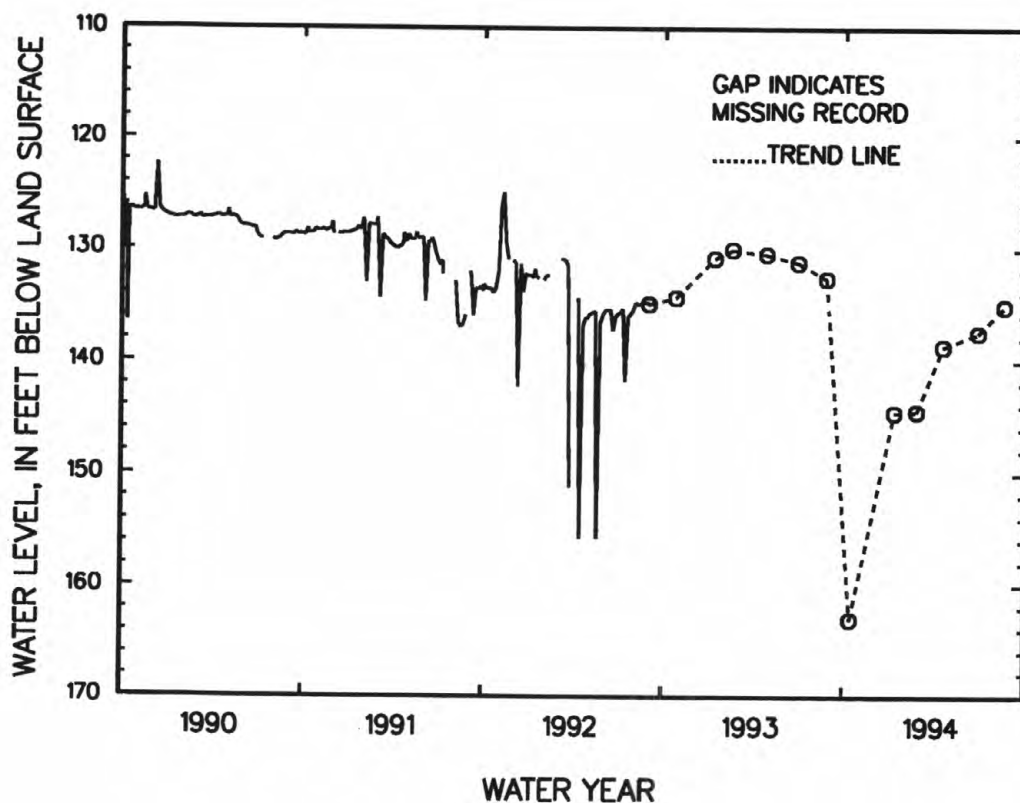
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 111.00 ft below land-surface datum, July 18, 1991; lowest recorded, 162.99 ft below land-surface datum, Oct. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	162.99	JAN 11	144.52	FEB 25	144.40	APR 18	138.60	JUN 27	137.38	AUG 18	135.04
WATER YEAR 1994      HIGHEST    135.04    AUG 18, 1994      LOWEST    162.99    OCT 15, 1993											



## CITY OF SUFFOLK

364512076343705. Local number, 58C 56 SOW 162D.

LOCATION.--Lat 36°45'12", long 76°34'37", Hydrologic Unit 02080208, 750 ft northeast of Virginia Department of Transportation fuel storage area, 2,000 ft east of U.S. Highway 460, and 0.8 mi southeast of Elephant Fork.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 567 ft, screened 557 to 567 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point:  
Top of casing, 3.35 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 77.24 ft below land-surface datum, Oct. 1, 1984;  
lowest recorded, 115.30 ft below land-surface datum, Dec. 20, 1993.

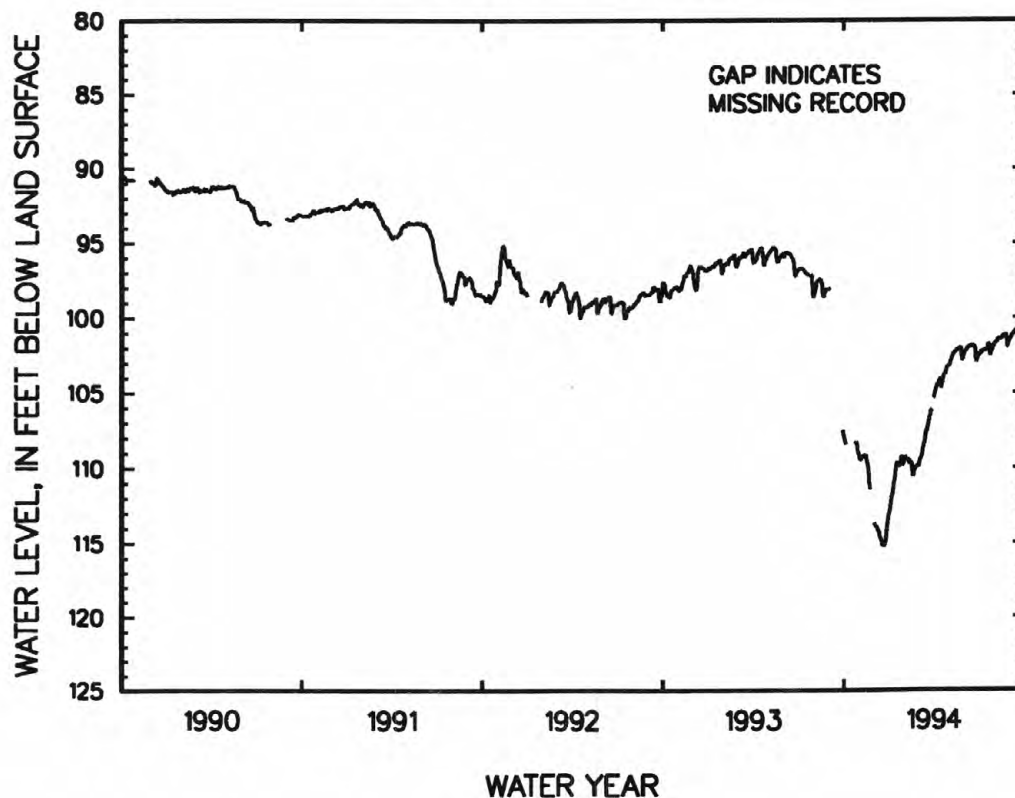
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	108.46	109.51	113.94	111.92	109.50	109.35	104.71	102.81	102.16	102.21	101.59	101.21
10	---	109.16	114.29	111.02	109.78	108.62	104.34	102.37	102.04	102.27	101.38	100.93
15	---	109.27	114.78	109.73	109.85	107.64	104.72	102.26	101.91	102.15	101.41	100.70
20	---	110.40	115.30	109.93	110.17	107.05	103.86	102.09	101.91	101.81	101.23	100.67
25	108.41	---	114.49	109.26	109.93	106.25	103.49	102.12	102.88	102.22	101.94	100.45
EOM	109.10	---	113.03	109.46	109.92	105.33	103.20	102.40	102.37	101.73	101.44	101.29

WATER YEAR 1994      HIGHEST INSTANTANEOUS    99.53    SEP 22, 1994

LOWEST INSTANTANEOUS    115.30    DEC 20, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

365133076351201. Local number, 58C 57 SOW 141A.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 122 ft, screened 112 to 122 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 52 ft above sea level, from topographic map. Measuring point:  
Top of casing, 0.5 ft above land-surface datum prior to Jan. 12, 1988; 1.0 ft Jan. 12, 1988, to Nov. 12, 1991;  
2.4 ft thereafter.

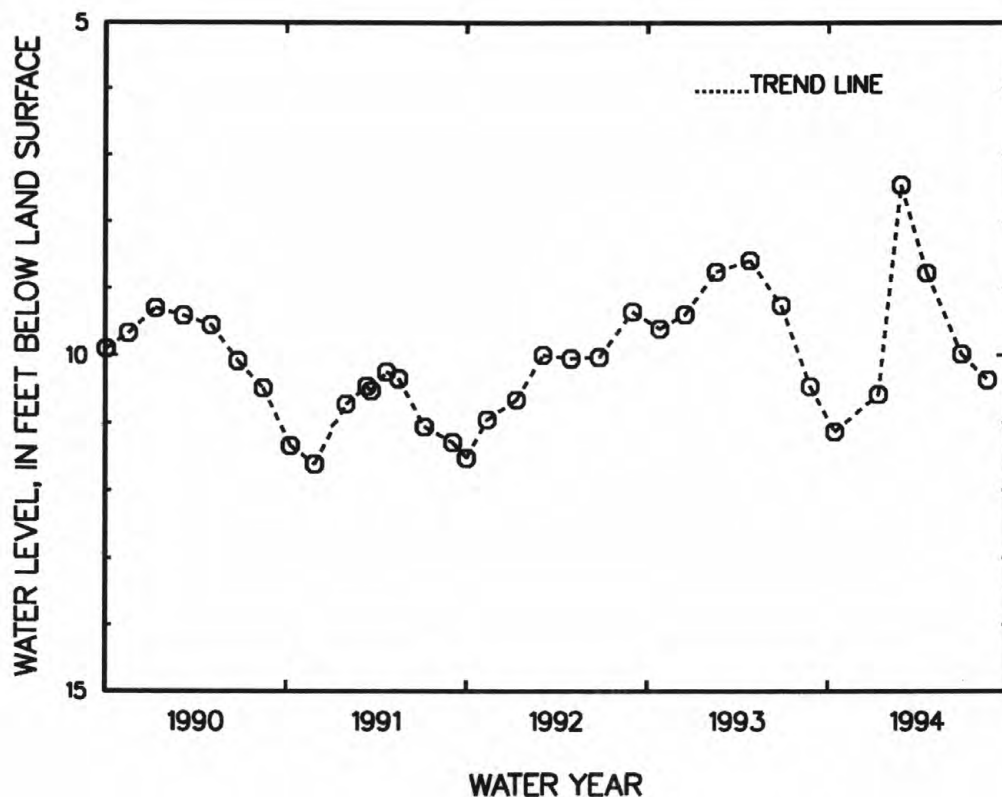
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.45 ft below land-surface datum, Feb. 25, 1994;  
lowest measured, 11.65 ft below land-surface datum, Nov. 26, 1980.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	11.13	JAN 11	10.57	FEB 25	7.45	APR 18	8.77	JUN 27	9.98	AUG 18	10.36
WATER YEAR 1994		HIGHEST	7.45	FEB 25, 1994	LOWEST	11.13	OCT 15, 1993				



## CITY OF SUFFOLK

365133076351202. Local number, 58C 58 SOW 141B.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 605 ft, screened 595 to 605 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 52 ft above sea level, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Jan. 12, 1988; 1.5 ft thereafter.

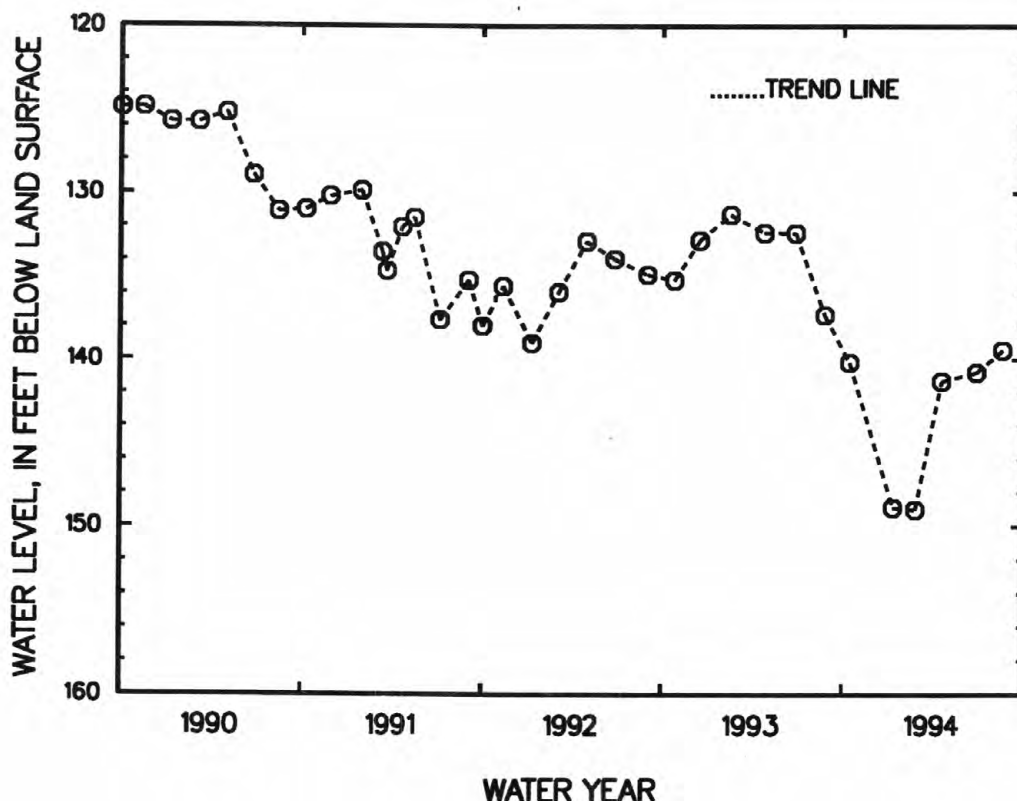
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.60 ft below land-surface datum, Apr. 24, 1980; lowest measured, 148.99 ft below land-surface datum, Feb. 25, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	140.18	JAN 11	148.87	FEB 25	148.99	APR 18	141.30	JUN 27	140.78	AUG 18	139.44
WATER YEAR 1994		HIGHEST	139.44	AUG 18, 1994		LOWEST	148.99	FEB 25, 1994			



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

365133076351203. Local number, 58C 59 SOW 141C.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 447 ft, screened 437 to 447 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to May 5, 1981, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 52 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.80 ft below land-surface datum, June 30, 1980; lowest recorded, 151.00 ft below land-surface datum, Feb. 17, 1994.

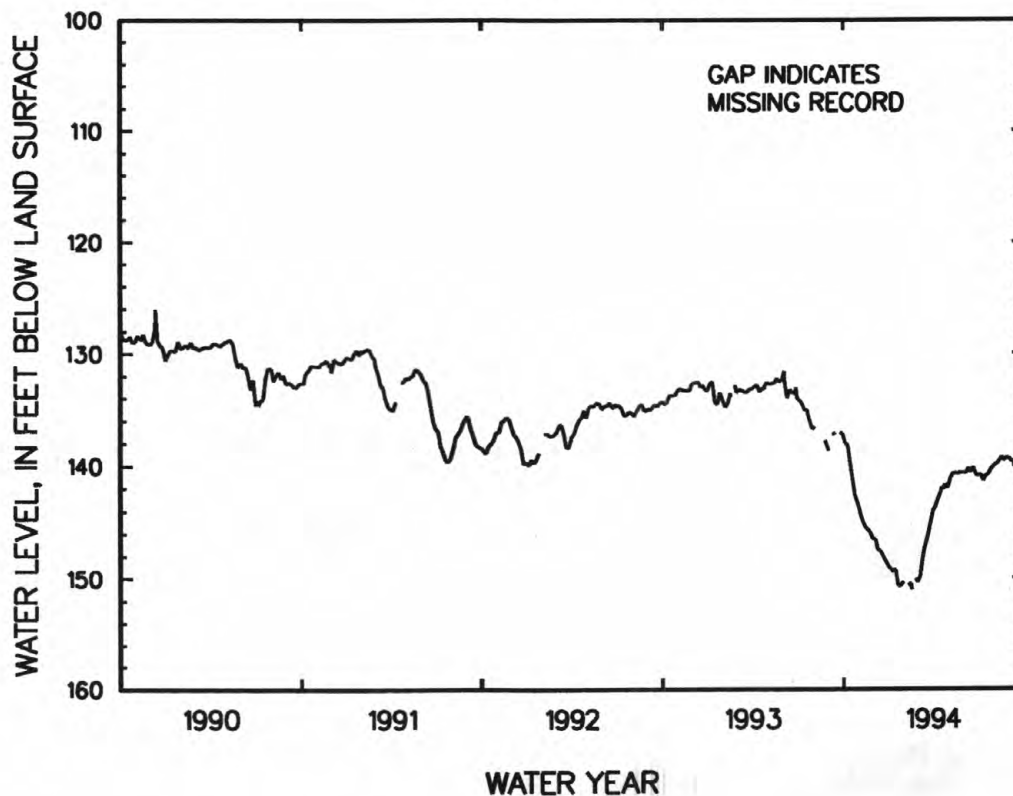
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	137.96	144.23	146.47	149.18	---	149.90	143.61	141.17	140.68	140.81	139.86	139.64
10	138.12	144.91	147.43	149.40	150.64	148.25	142.94	140.71	140.22	141.34	139.67	139.63
15	139.70	145.43	147.54	149.23	150.45	147.06	142.40	140.68	140.61	140.87	139.29	140.44
20	141.20	145.37	147.96	150.67	---	146.34	142.11	140.73	140.17	140.78	139.59	140.42
25	142.60	145.93	148.40	150.66	150.05	145.24	141.68	140.63	140.81	140.34	139.30	140.32
ECM	143.38	146.46	148.90	150.32	150.33	144.02	141.97	140.63	140.85	140.03	139.40	140.33

WATER YEAR 1994      HIGHEST INSTANTANEOUS      137.06      OCT 02, 1993

LOWEST INSTANTANEOUS      151.00      FEB 17, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

361

## CITY OF SUFFOLK

365133076351204. Local number, 58C 60 SOW 141D.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Jan 12, 1988; 1.0 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

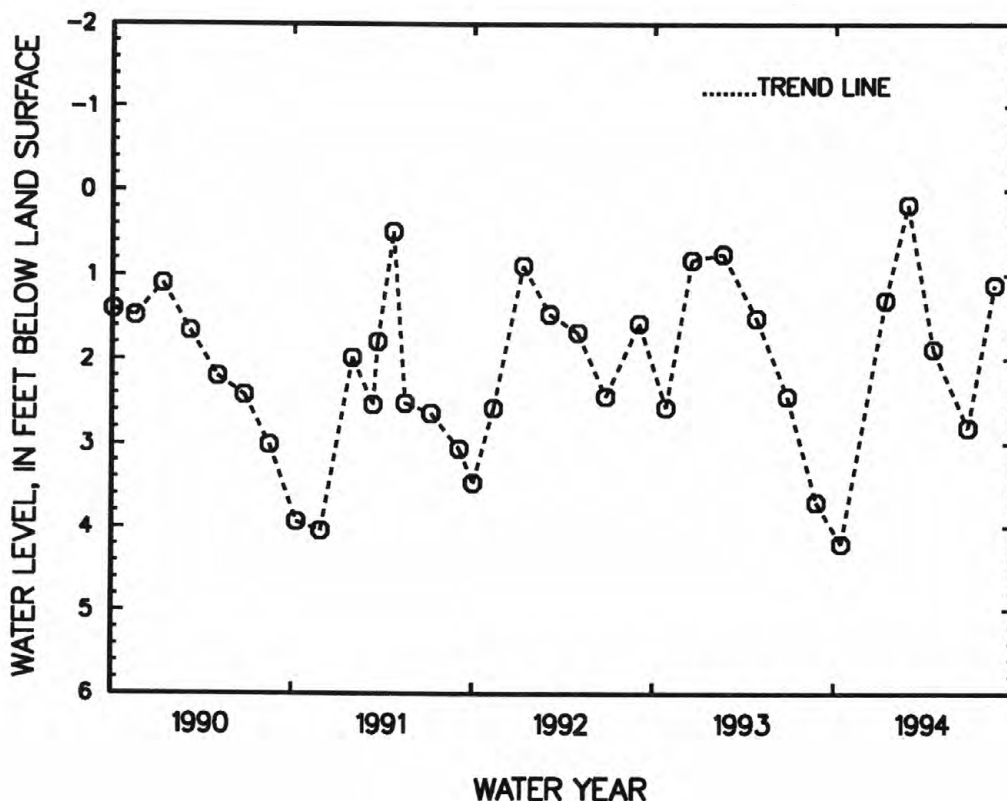
PERIOD OF RECORD.--February 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.17 ft below land-surface datum, Feb. 25, 1994; lowest measured, 4.20 ft below land-surface datum, Oct. 15, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	4.20	JAN 11	1.30	FEB 25	0.17	APR 18	1.88	JUN 27	2.81	AUG 18	1.12

WATER YEAR 1994      HIGHEST    0.17    FEB 25, 1994      LOWEST    4.20    OCT 15, 1993





## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364731076355501. Local number, 58C 61 SOW 159A.

LOCATION.--Lat 36°47'31", long 76°35'55", Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 20 to 25 ft, sounded to 17.50 ft on July 8, 1985, redrilled to 25 ft on May 15, 1990.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 40 ft above sea level, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum prior to June 25, 1990; 1.55 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Well reported dry several days in 1985-1990.

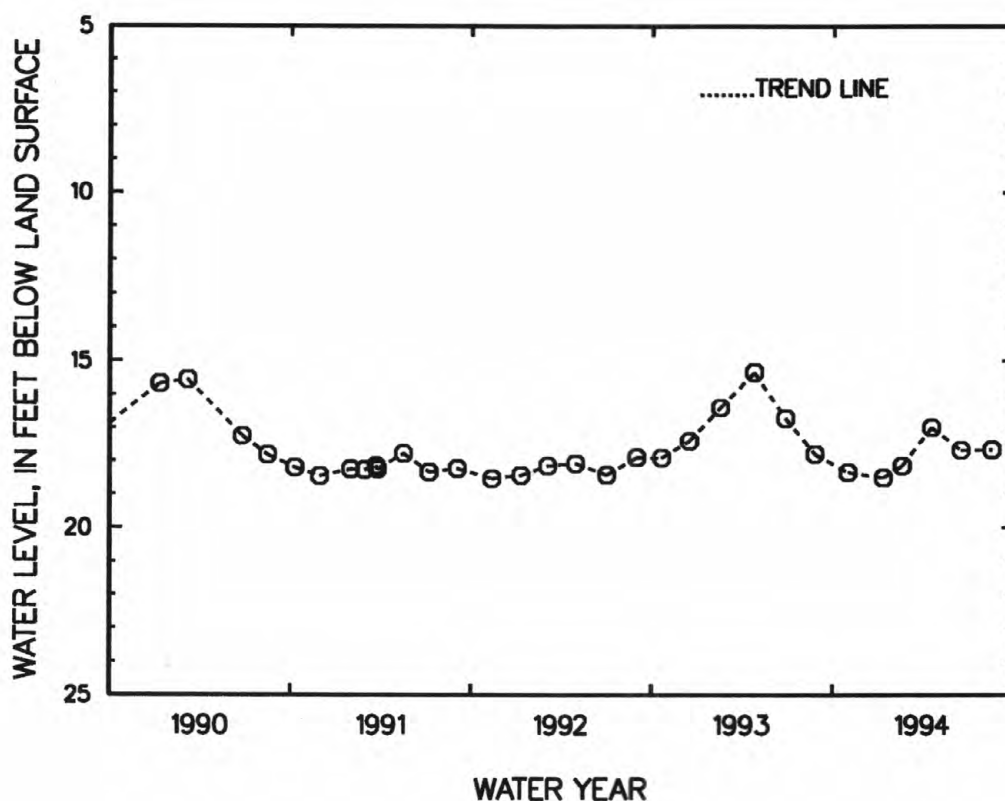
PERIOD OF RECORD.--June 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.95 ft below land-surface datum, Apr. 19, 1984; lowest measured, 18.53 ft below land-surface datum, Nov. 12, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	18.34	JAN 11	18.50	FEB 18	18.14	APR 18	16.99	JUN 16	17.68	AUG 17	17.67

WATER YEAR 1994      HIGHEST    16.99    APR 18, 1994      LOWEST    18.50    JAN 11, 1994



## CITY OF SUFFOLK

364731076355502. Local number, 58C 62 SOW 159B.

LOCATION.--Lat 36°47'31", long 76°35'55", Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 575 ft, screened 555 to 575 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 40 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

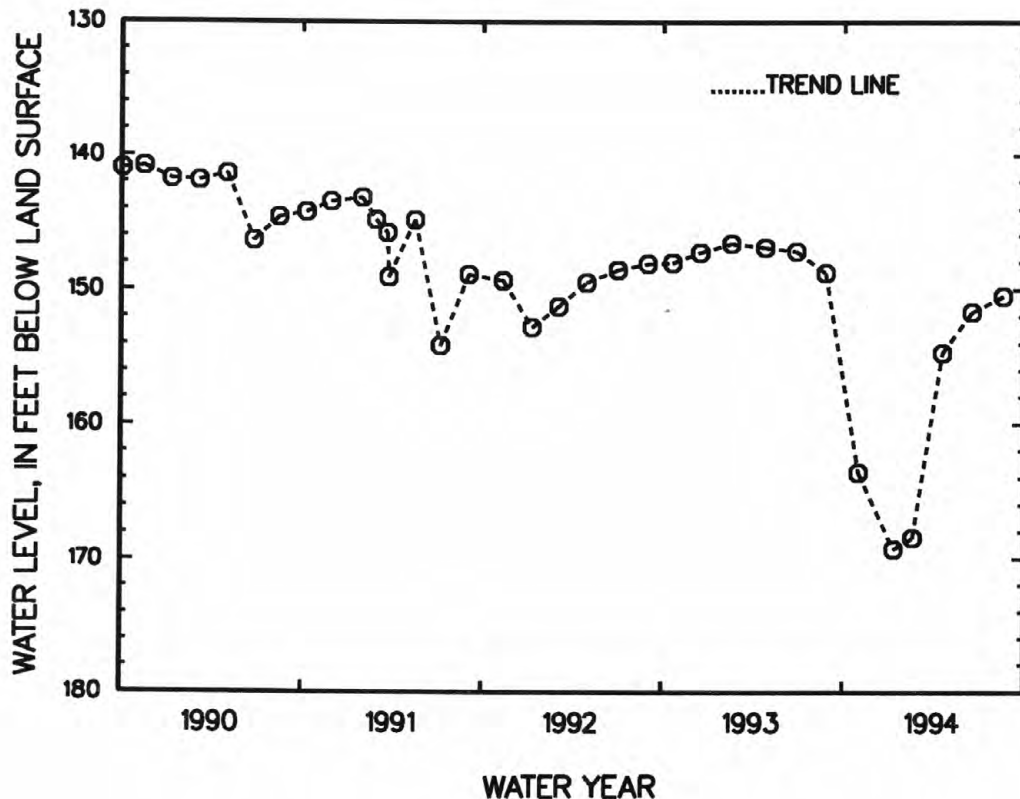
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--June 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 129.90 ft below land-surface datum, Aug. 28, 1984; lowest measured, 169.26 ft below land-surface datum, Jan. 11, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	163.59	JAN 11	169.26	FEB 18	168.42	APR 18	154.70	JUN 16	151.66	AUG 17	150.49
WATER YEAR 1994		HIGHEST	150.49	AUG 17, 1994	LOWEST	169.26	JAN 11, 1994				



## GROUND-WATER LEVELS

## CITY OF SUFFOLK

364731076355503. Local number, 58C 63 SOW 159C.

LOCATION.--Lat 36°47'31", long 76°35'55", Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 650 ft, screened 630 to 650 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 40 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

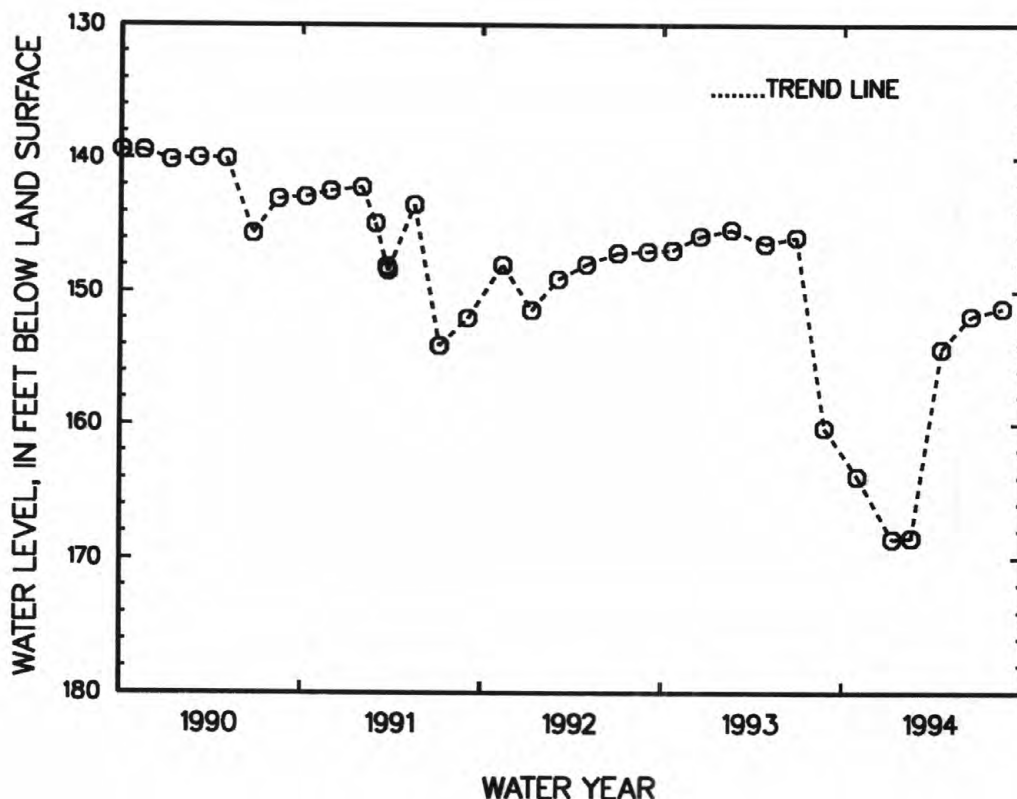
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--May 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 127.75 ft below land-surface datum, Dec. 23, 1981; lowest measured, 182.80 ft below land-surface datum, July 1, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	163.87	JAN 11	168.55	FEB 18	168.48	APR 18	154.30	JUN 16	151.80	AUG 17	151.22
WATER YEAR 1994		HIGHEST	151.22	AUG 17, 1994		LOWEST	168.55	JAN 11, 1994			



## SURRY COUNTY

370408076460101. Local number, 56E 1.

LOCATION.--Lat 37°04'08", long 76°40'01", Hydrologic Unit 03010202, off State Highway 617, 3.2 mi southwest of Bacons Castle. Owner: Buster E. Cox.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 18 in. to 360 ft, diameter 8 in. from 333.5 to 705 ft, depth 705 ft, screened 401 to 411 ft, 431 to 441 ft, 463 to 473 ft, 495 to 505 ft, 540 to 555 ft, 700 to 705 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Aug. 7, 1969, to June 7, 1977, continuous strip-chart recorder. Occasional measurement with chalked tape by USGS personnel March 1942, April, July, and August 1969.

DATUM.--Elevation of land-surface datum is 93 ft above sea level, from topographic map. Measuring point: Top edge of recorder shelf, 3.6 ft above land-surface datum.

PERIOD OF RECORD.--March 1942, April 1969 to current year.

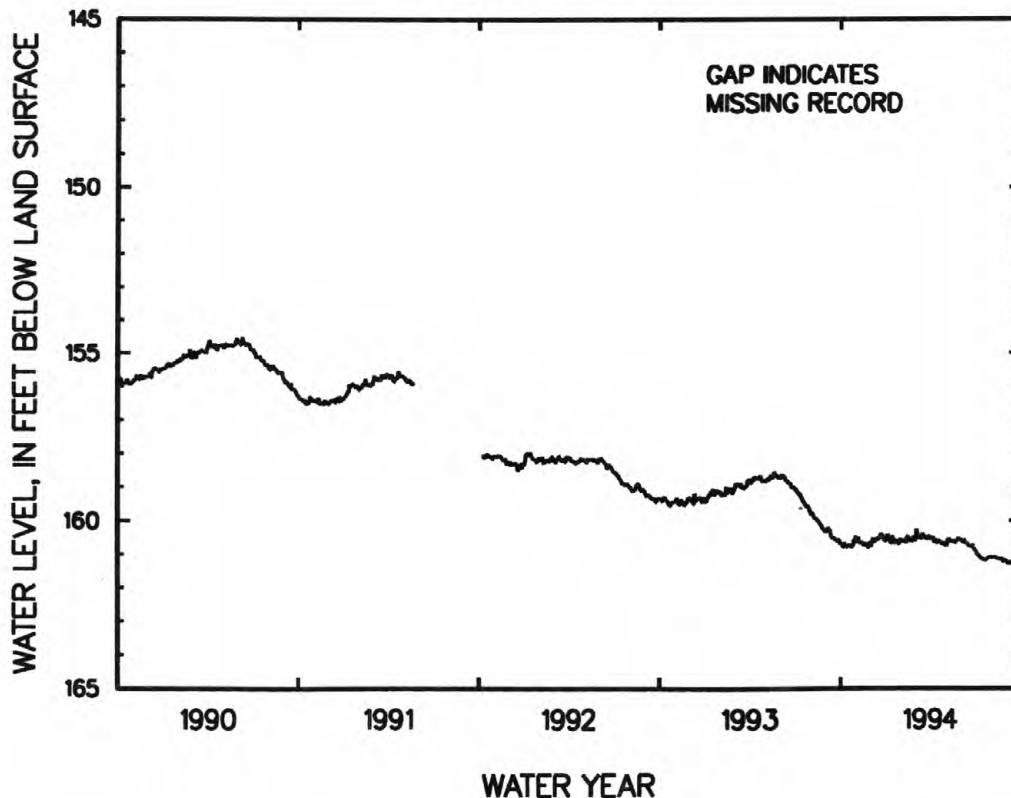
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.52 ft below land-surface datum, Mar. 10, 1942; lowest recorded, 161.38 ft below land-surface datum, Sept. 20, 21, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	160.73	160.56	160.51	160.53	160.58	160.44	160.51	160.57	160.65	161.04	161.10	161.29
10	160.74	160.63	160.61	160.66	160.66	160.45	160.59	160.60	160.66	161.09	161.11	161.26
15	160.77	160.64	160.49	160.61	160.50	160.39	160.60	160.61	160.72	161.15	161.12	161.31
20	160.72	160.68	160.46	160.63	160.59	160.51	160.64	160.65	160.76	161.19	161.14	161.38
25	160.74	160.79	160.41	160.61	160.48	160.50	160.64	160.57	160.78	161.12	161.23	161.17
EOM	160.45	160.75	160.59	160.58	160.60	160.54	160.71	160.59	160.90	161.10	161.23	161.22

WATER YEAR 1994      HIGHEST INSTANTANEOUS    160.13    MAR 02, 1994  
                               LOWEST INSTANTANEOUS    161.38    SEP 20, 21, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## SURRY COUNTY

370800076500701. Local number, 56F 2 SOW 039.

LOCATION.--Lat 37°08'00", long 76°50'07", Hydrologic Unit 02080206, off State Highway 10, at Surry County Administration building in Surry. Owner: Town of Surry.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 367 ft, screened 350 to 362 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Jan. 10, 1976, to Oct. 7, 1985, occasional measurement with chalked tape. Mar. 15, 1971, to Jan. 10, 1976, continuous strip-chart recorder. Prior to Mar. 15, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 122 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

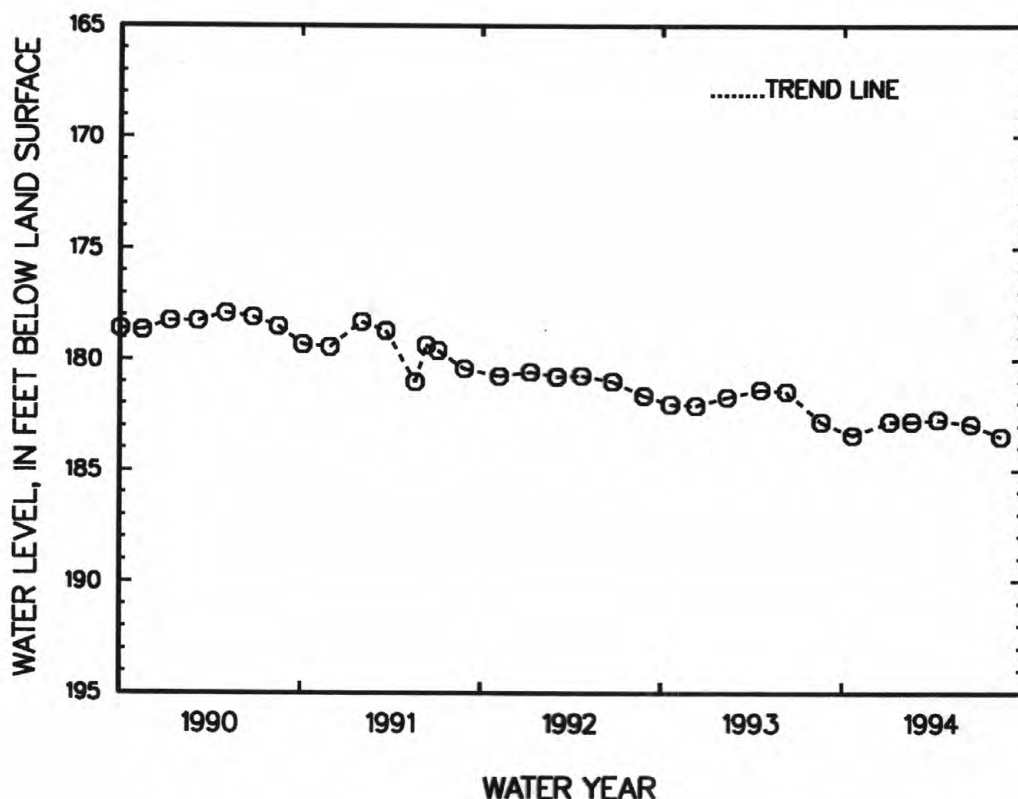
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 146.43 ft below land-surface datum, Mar. 25, 1971; lowest measured, 183.47 ft below land-surface datum, Aug. 15, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	183.41	JAN 04	182.79	FEB 17	182.79	APR 11	182.70	JUN 16	182.92	AUG 15	183.47
WATER YEAR 1994		HIGHEST	182.70	APR 11, 1994		LOWEST	183.47	AUG 15, 1994			



## GROUND-WATER LEVELS

367

## SURRY COUNTY

370712076413201. Local number, 57E 11 SOW 094A.

LOCATION.--Lat 37°07'12", long 76°41'32", Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 605 ft, screened 595 to 605 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

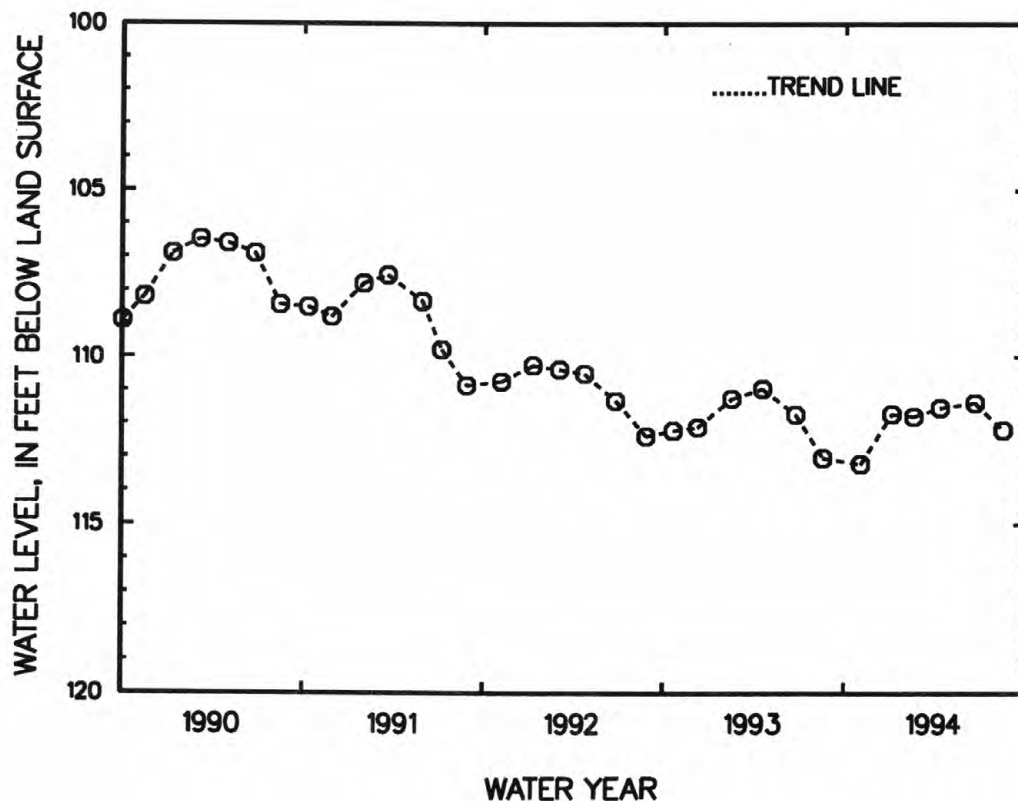
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.19 ft below land-surface datum, July 24, 1980; lowest measured, 113.21 ft below land-surface datum, Nov. 3, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	113.21	JAN 04	111.72	FEB 17	111.79	APR 11	111.53	JUN 20	111.38	AUG 15	112.20
WATER YEAR 1994		HIGHEST	111.38	JUN 20, 1994	LOWEST	113.21	NOV 03, 1993				





## GROUND-WATER LEVELS

## SURRY COUNTY

370712076413202. Local number, 57E 12 SOW 094B.

LOCATION.--Lat 37°07'12", long 76°41'32", Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 430 ft, diameter 3 in. from 430 to 440 ft, depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

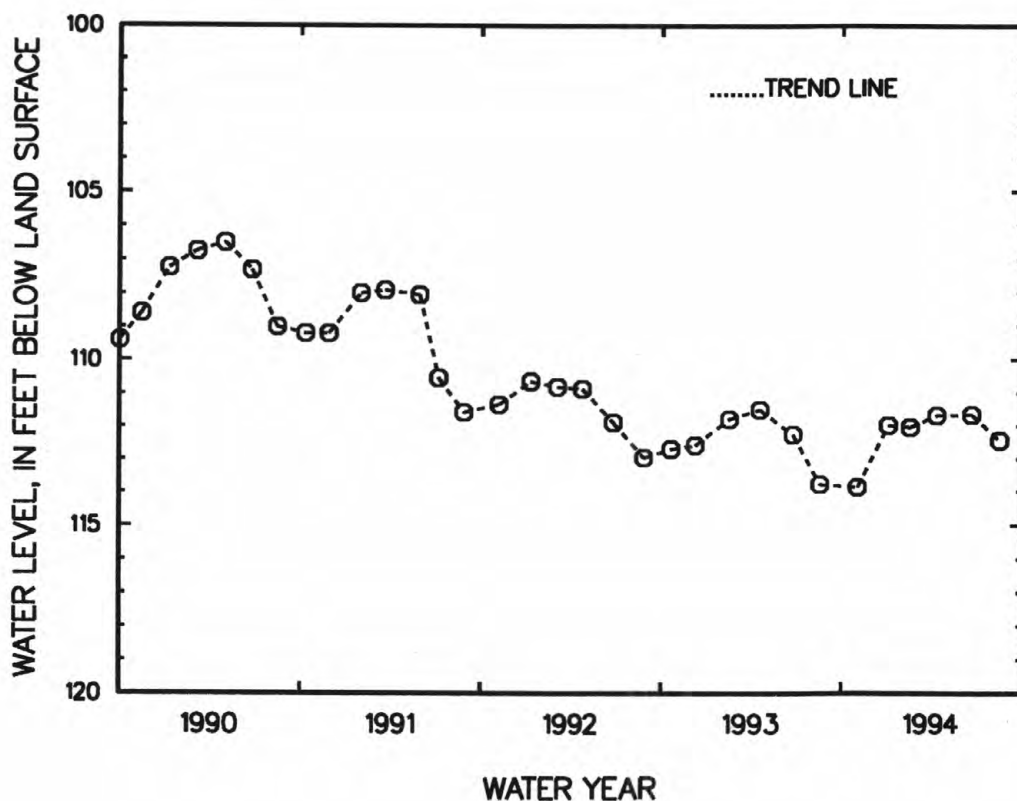
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.90 ft below land-surface datum, May 29, 1980; lowest measured, 113.85 ft below land-surface datum, Nov. 3, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	113.85	JAN 04	111.98	FEB 17	112.04	APR 11	111.68	JUN 20	111.66	AUG 15	112.44
WATER YEAR 1994		HIGHEST	111.66	JUN 20, 1994	LOWEST	113.85	NOV 03, 1993				



## GROUND-WATER LEVELS

369

## SURRY COUNTY

370712076413203. Local number, 57E 13 SOW 094C.

LOCATION.--Lat 37°07'12", long 76°41'32", Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 41 ft, diameter 3 in. from 41 to 46 ft, depth 46 ft, screened 41 to 46 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

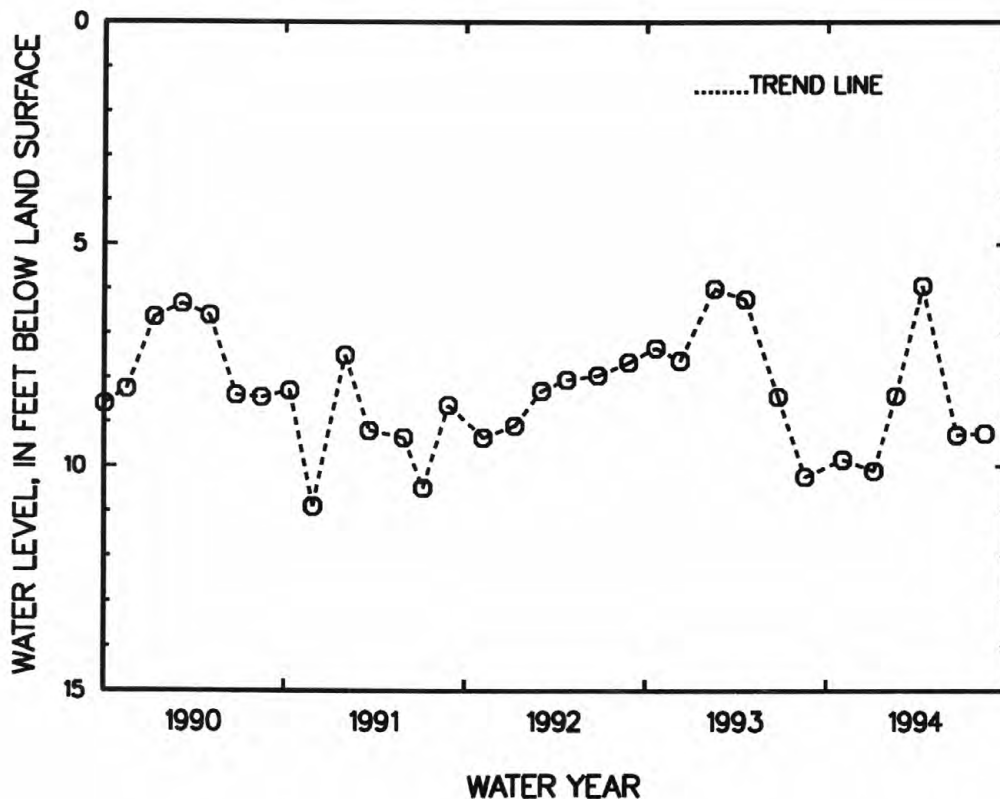
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.90 ft below land-surface datum, May 29, 1980; lowest measured, 11.17 ft below land-surface datum, Dec. 13, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	9.85	JAN 04	10.10	FEB 17	8.42	APR 11	5.94	JUN 20	9.30	AUG 15	9.26
WATER YEAR 1994		HIGHEST	5.94	APR 11, 1994	LOWEST	10.10	JAN 04, 1994				



## GROUND-WATER LEVELS

## SURRY COUNTY

371132076405501. Local number, 57F 16 SOW 087A.

LOCATION.--Lat 37°11'32", long 76°40'55", Hydrologic Unit 02080206, at the end of State Highway 650 in Homewood, 7.6 mi northeast of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,206 ft, screened 1,170 to 1,185 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

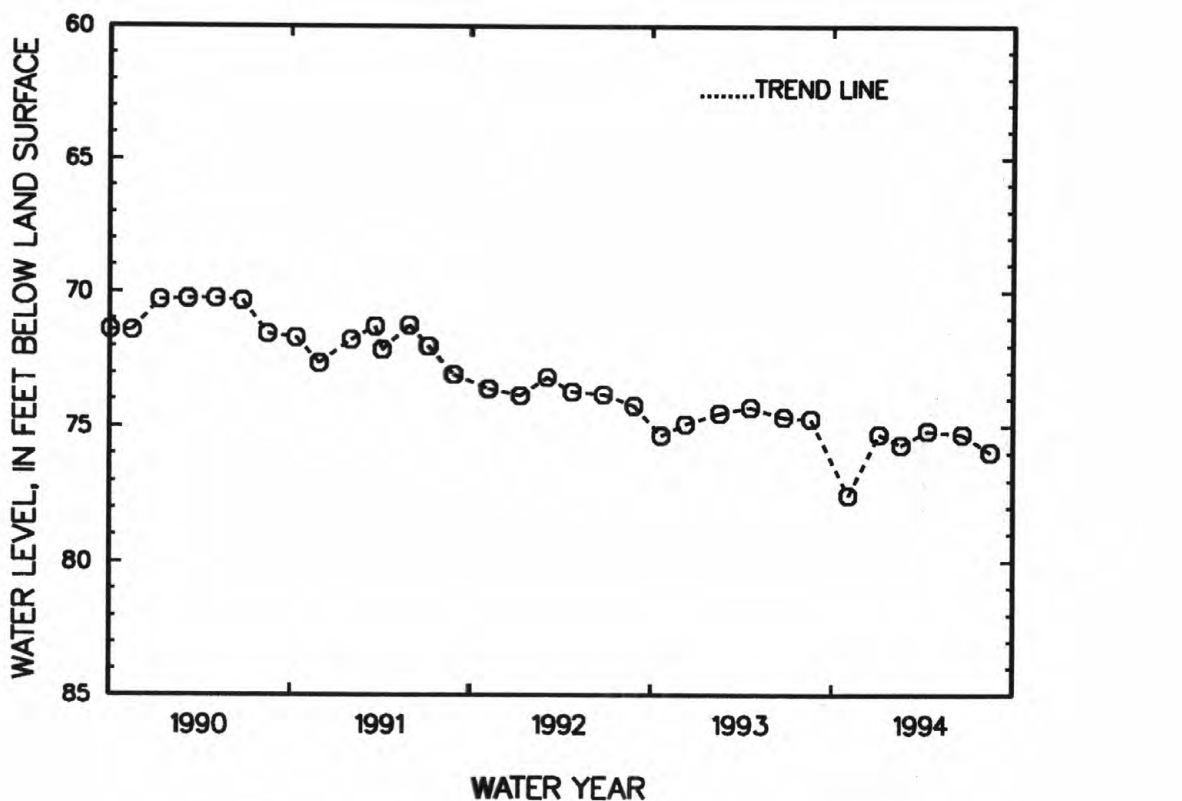
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.22 ft below land-surface datum, July 20, 1978; lowest measured, 77.55 ft below land-surface datum, Nov. 3, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	77.55	JAN 04	75.29	FEB 17	75.68	APR 11	75.16	JUN 20	75.29	AUG 15	75.95
WATER YEAR 1994      HIGHEST    75.16    APR 11, 1994      LOWEST    77.55    NOV 03, 1993											



## GROUND-WATER LEVELS

371

## SURRY COUNTY

371132076405502. Local number, 57F 24 SOW 087B.

LOCATION.--Lat 37°11'32", long 76°40'55", Hydrologic Unit 02080206, at the end of State Highway 650 in Homewood, 7.6 mi northeast of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 520 ft, screened 510 to 520 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

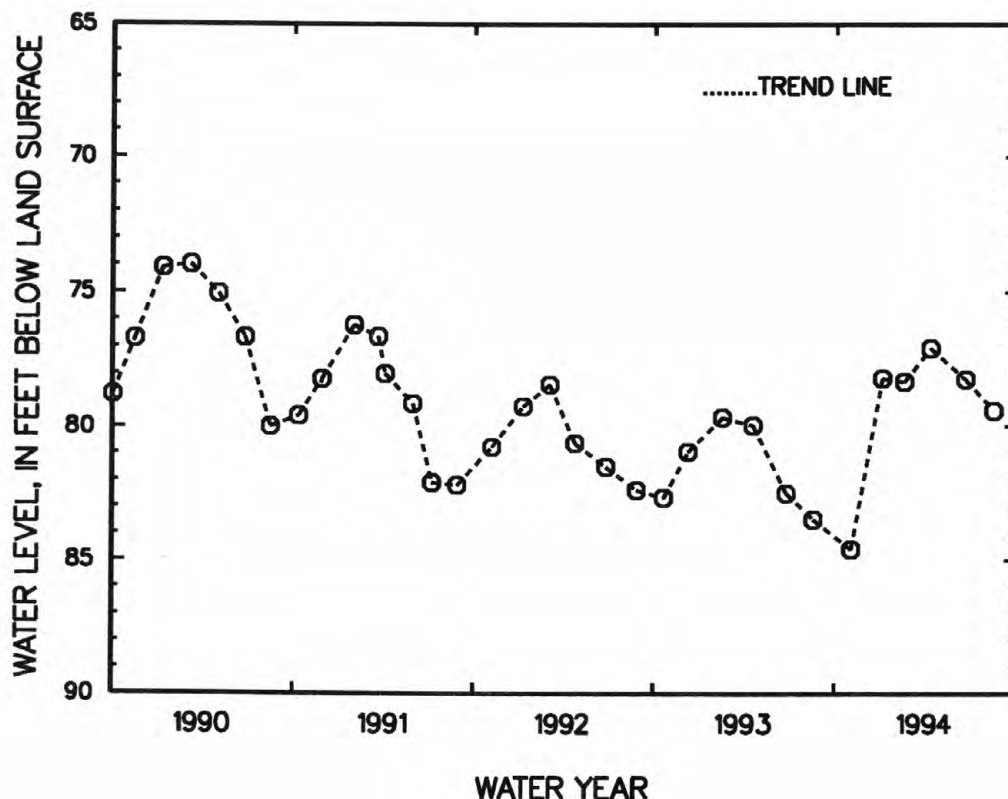
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.17 ft below land-surface datum, Aug. 17, 1982; lowest measured, 84.60 ft below land-surface datum, Nov. 3, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	84.60	JAN 04	78.20	FEB 17	78.32	APR 11	77.08	JUN 20	78.24	AUG 15	79.42
WATER YEAR 1994      HIGHEST    77.08    APR 11, 1994      LOWEST    84.60    NOV 03, 1993											



## GROUND-WATER LEVELS

## SUSSEX COUNTY

365843077090201. Local number, 53D 3 SOW 048.

LOCATION.--Lat 36°58'43", long 77°09'02", Hydrologic Unit 03010201, off State Highway 40, 2.4 mi northeast of Homeville, and 5.5 mi south of Waverly. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle and lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 554 ft, screened 279 to 284 ft, 358 to 363 ft, 439 to 444 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 2.6 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey thereafter. Water level affected by regional drawdown.

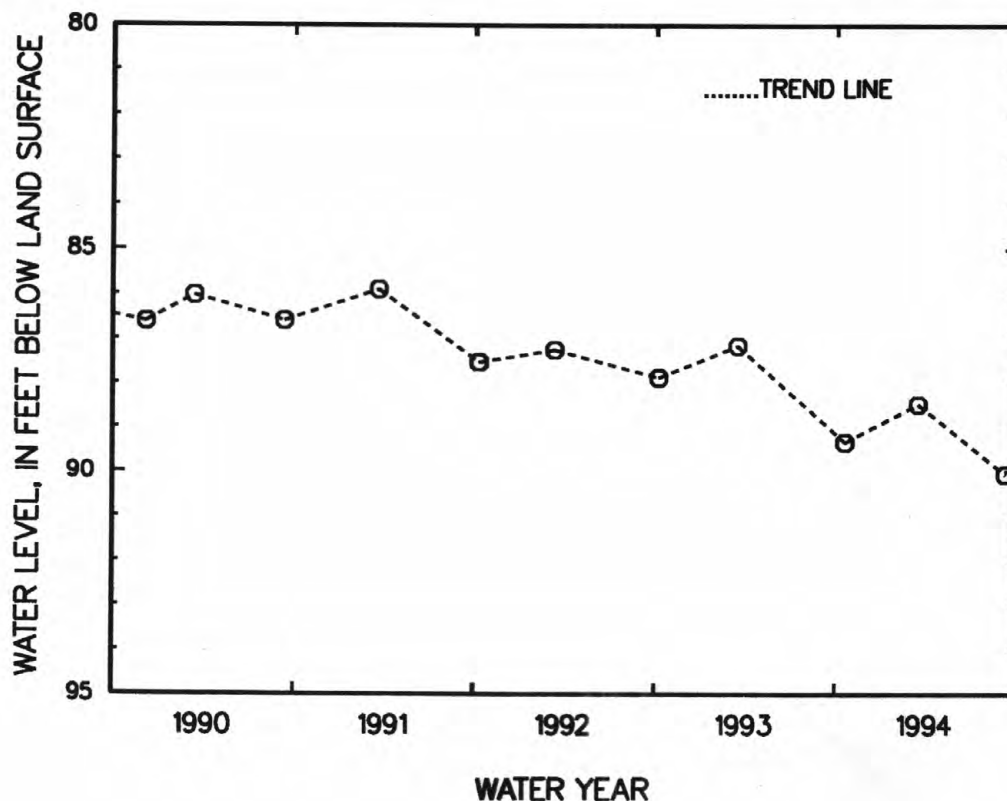
PERIOD OF RECORD.--August 1971 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.39 ft below land-surface datum, May 15, 1972; lowest measured, 90.08 ft below land-surface datum, Sept. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	89.35	MAR 16	88.49	SEP 08	90.08

WATER YEAR 1994      HIGHEST 88.49 MAR 16, 1994      LOWEST 90.08 SEP 08, 1994



## GROUND-WATER LEVELS

373

## SUSSEX COUNTY

365530077104002. Local number, 53D 6 SOW 179A

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 470 ft, screened 460 to 470 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

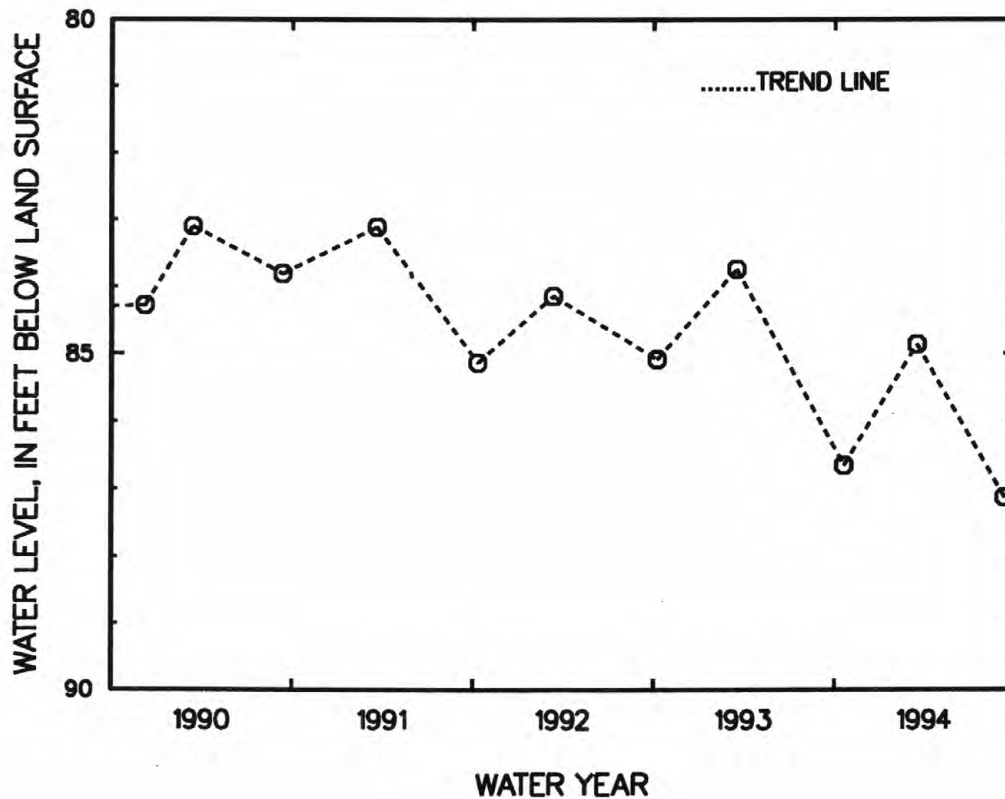
PERIOD OF RECORD.--November 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 78.50 ft below land-surface datum, Feb. 12, 1988; lowest measured, 87.13 ft below land-surface datum, Sept. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	86.65	MAR 16	84.86	SEP 08	87.13

WATER YEAR 1994      HIGHEST 84.86 MAR 16, 1994      LOWEST 87.13 SEP 08, 1994





## GROUND-WATER LEVELS

## SUSSEX COUNTY

365530077104003. Local number, 53D 7 SOW 179B.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 398 ft, diameter 2 in. from 394 to 425 ft, depth 425 ft, screened 415 to 425 ft.

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

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

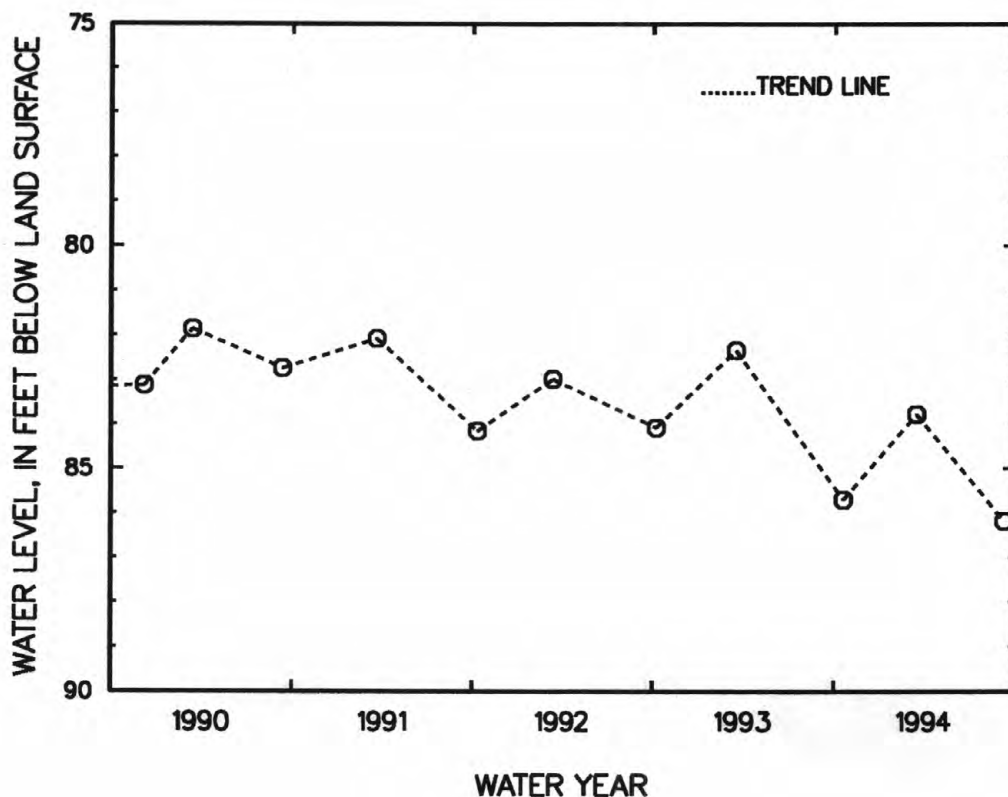
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 79.47 ft below land-surface datum, Dec. 17, 1985; lowest measured, 86.19 ft below land-surface datum, Sept. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	85.70	MAR 16	83.78	SEP 08	86.19

WATER YEAR 1994      HIGHEST 83.78 MAR 16, 1994      LOWEST 86.19 SEP 08, 1994



## GROUND-WATER LEVELS

375

## SUSSEX COUNTY

365530077104005. Local number, 53D 9 SOW 179D.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 185 ft, diameter 2 in. from 178 to 209 ft, depth 209 ft, screened 199 to 209 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

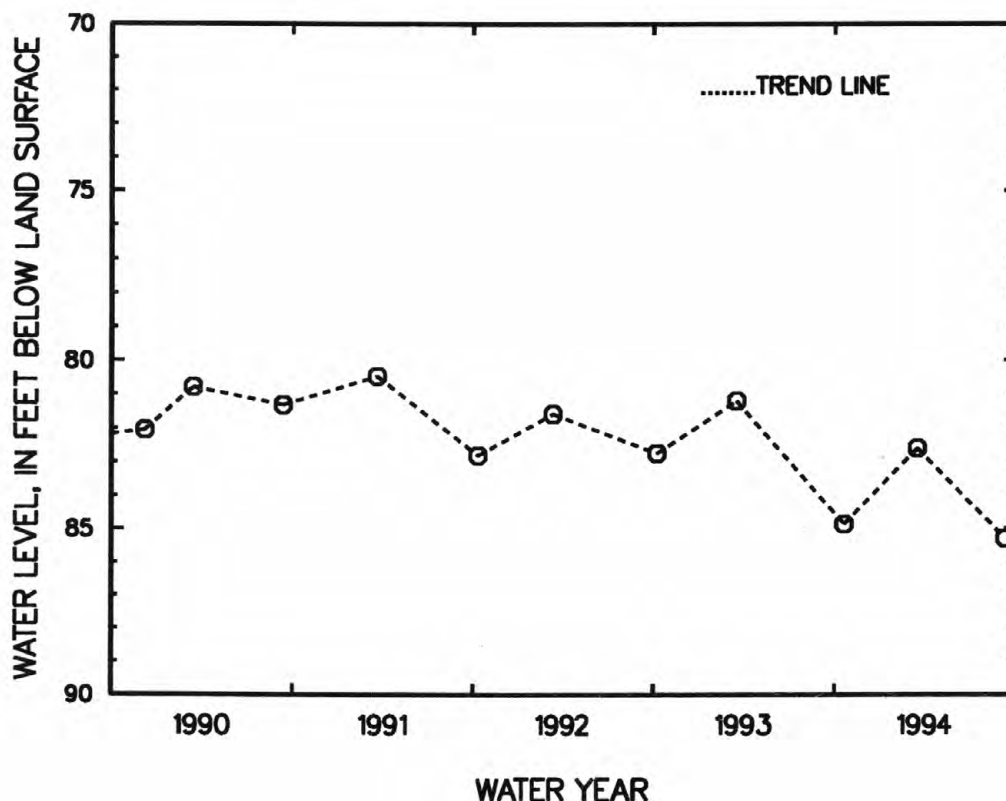
PERIOD OF RECORD.--December 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 76.51 ft below land-surface datum, Apr. 17, 1987; lowest recorded, 85.30 ft below land-surface datum, Sept. 8, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	84.86	MAR 16	82.61	SEP 08	85.30

WATER YEAR 1994      HIGHEST 84.86 OCT 20, 1993      LOWEST 85.30 SEP 08, 1994



## GROUND-WATER LEVELS

## SUSSEX COUNTY

365530077104006. Local number, 53D 10 SOW 179E.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 130 ft, diameter 4 in. from 140 to 145 ft, depth 145 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage and regional drawdown.

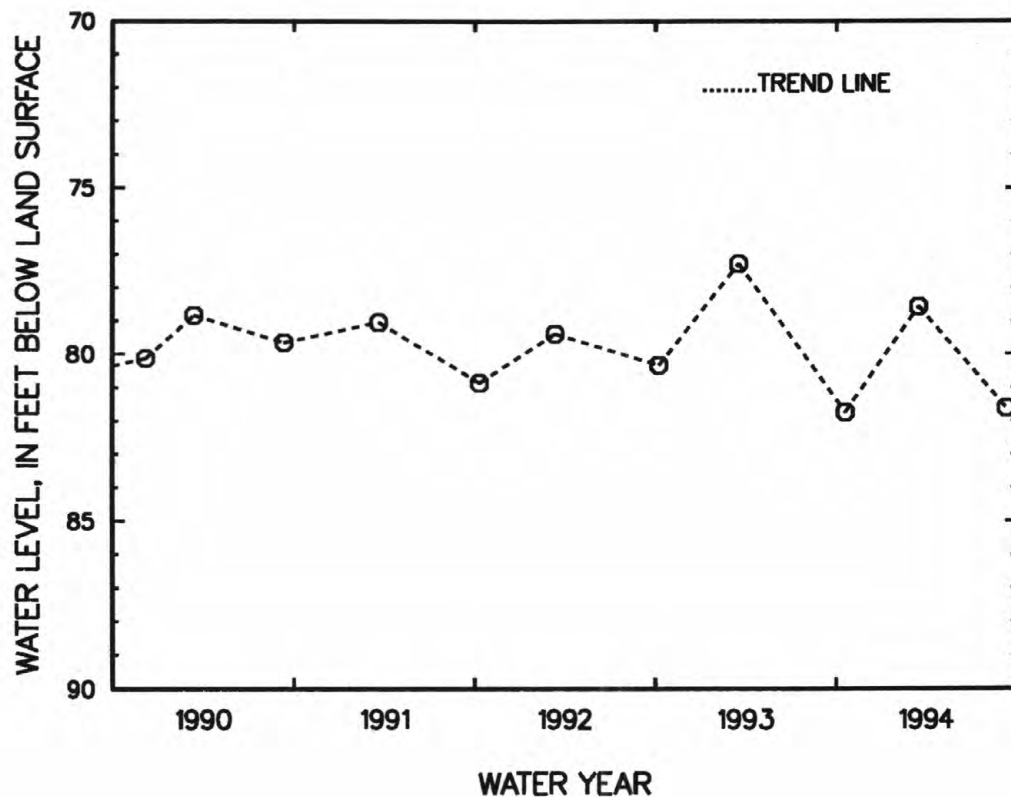
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 76.25 ft below land-surface datum, Apr. 24, 1987; lowest measured, 81.73 ft below land-surface datum, Oct. 20, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	81.73	MAR 16	78.56	SEP 08	81.62

WATER YEAR 1994      HIGHEST 78.56 MAR 16, 1994      LOWEST 81.73 OCT 20, 1993



## GROUND-WATER LEVELS

377

## SUSSEX COUNTY

365530077104007. Local number, 53D 11 SOW 179F.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 82 ft, diameter 4 in. from 92 to 97 ft, depth 97 ft, screened 82 to 92 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage.

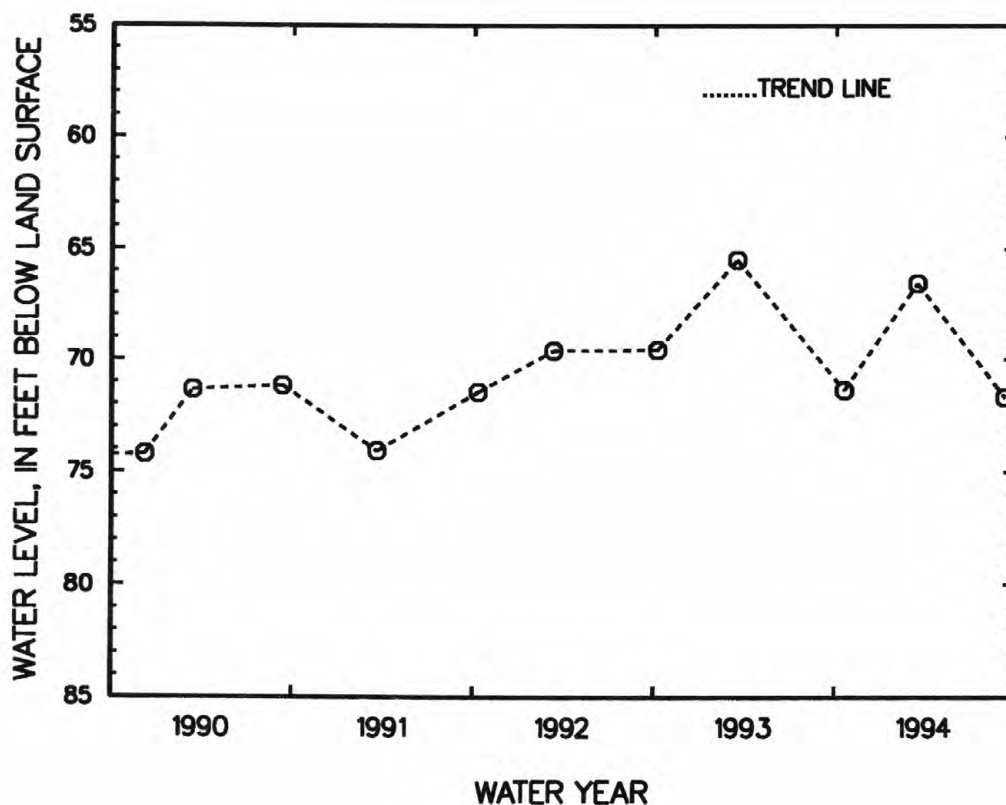
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.49 ft below land-surface datum, Mar. 18, 1993; lowest recorded, 77.16 ft below land-surface datum, Nov. 28 to Dec. 1, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	71.37	MAR 16	66.55	SEP 08	71.71

WATER YEAR 1994      HIGHEST 66.55 MAR 16, 1994      LOWEST 71.71 SEP 08, 1994



## GROUND-WATER LEVELS

## SUSSEX COUNTY

365530077104008. Local number, 53D 12 SOW 179G.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi south of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 47 ft, diameter 4 in. from 47 to 67 ft, depth 67 ft, screened 47 to 57 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by local pumpage.

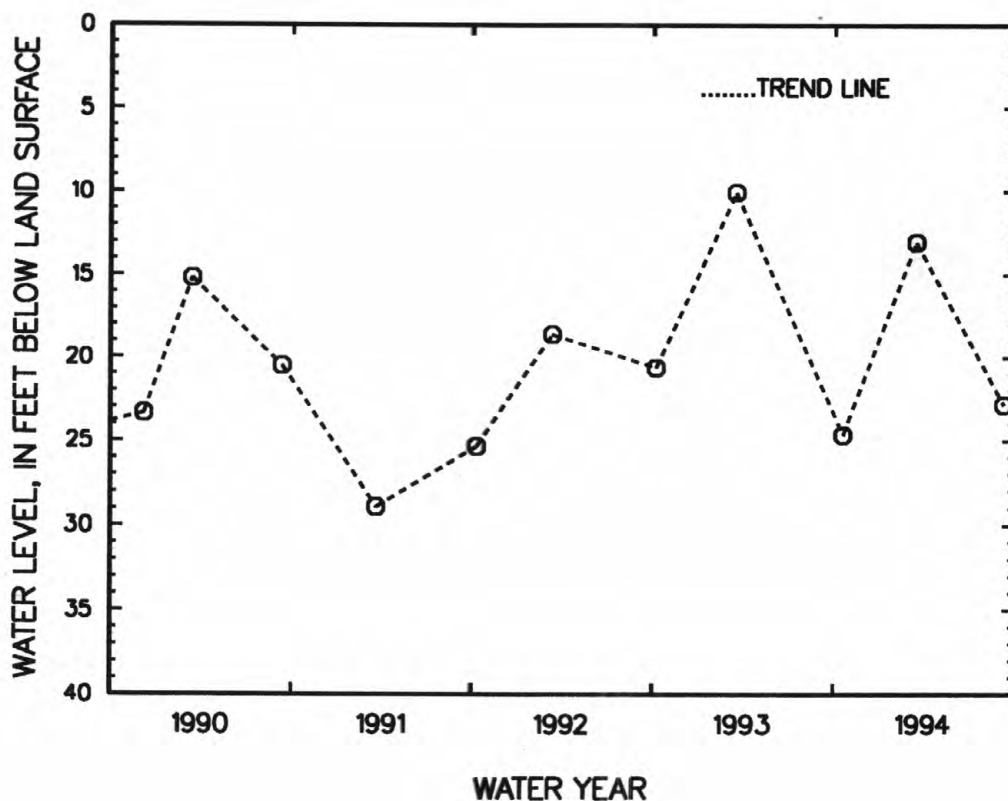
PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.06 ft below land-surface datum, Mar. 18, 1993; lowest measured, 28.89 ft below land-surface datum, Mar. 21, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	24.62	MAR 16	13.03	SEP 08	22.85

WATER YEAR 1994      HIGHEST 13.03 MAR 16, 1994      LOWEST 24.62 OCT 20, 1993



## GROUND-WATER LEVELS

379

## SUSSEX COUNTY

365235077150501. Local number, 53E 5 SOW 045.

LOCATION.--Lat 37°02'37", long 77°11'30", Hydrologic Unit 03010201, 400 ft northeast of State Highway 625, 2.5 mi north of Newville. Owner: Butler Lumber Company.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 172 ft, screened 162 to 172 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 126.65 ft above sea level. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 8, 1988; 1.2 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey thereafter. Water level affected by local pumpage and regional drawdown.

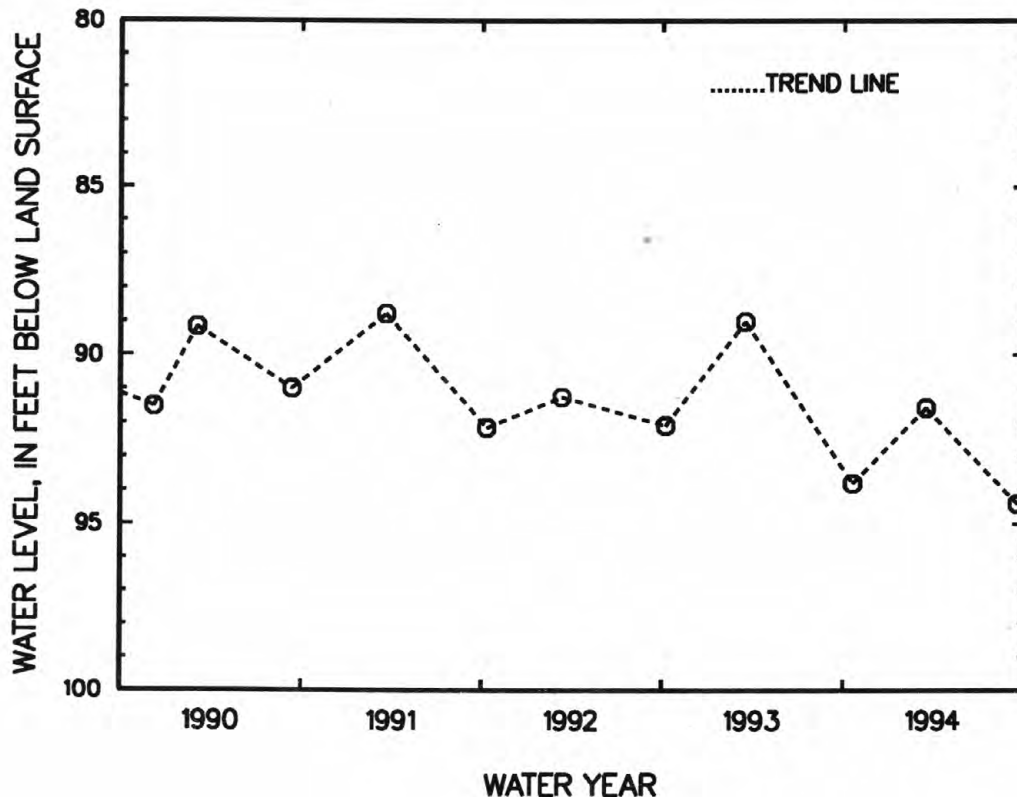
PERIOD OF RECORD.--September 1971, October 1974 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.90 ft below land-surface datum, Mar. 16, 1976; lowest measured, 94.41 ft below land-surface datum, Sept. 15, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	93.80	MAR 16	91.57	SEP 15	94.41

WATER YEAR 1994      HIGHEST 91.57 MAR 16, 1994      LOWEST 94.41 SEP 15, 1994





## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364850076120701. Local number, 61C 23 SOW 129.

LOCATION.--Lat 36°48'50", long 76°12'07", Hydrologic Unit 02080208, at Woodstock Elementary School in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in. to 68 ft, diameter 6 in. from 68 to 78 ft, depth 78 ft, screened 68 to 73 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.1 ft above land-surface datum.

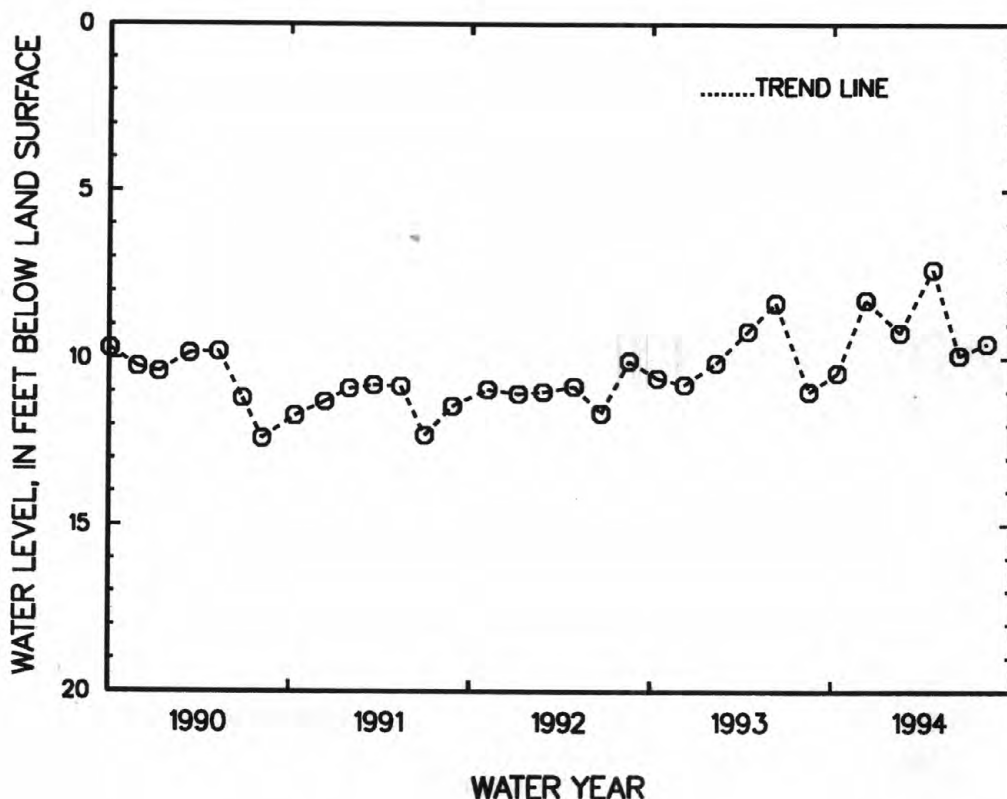
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.34 ft below land-surface datum, Apr. 22, 1994; lowest measured, 17.77 ft below land-surface datum, Aug. 26, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	10.42	DEC 08	8.25	FEB 15	9.22	APR 22	7.34	JUN 14	9.90	AUG 09	9.55
WATER YEAR 1994		HIGHEST	7.34	APR 22, 1994	LOWEST	10.42	OCT 12, 1993				



GROUND-WATER LEVELS  
CITY OF VIRGINIA BEACH

381

364920076093601. Local number, 61C 25 SOW 130.

LOCATION.--Lat 36°49'20", long 76°09'36", Hydrologic Unit 02080208, at Kempsville Elementary School in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 71 ft, screened 61 to 66 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.12 ft above land-surface datum.

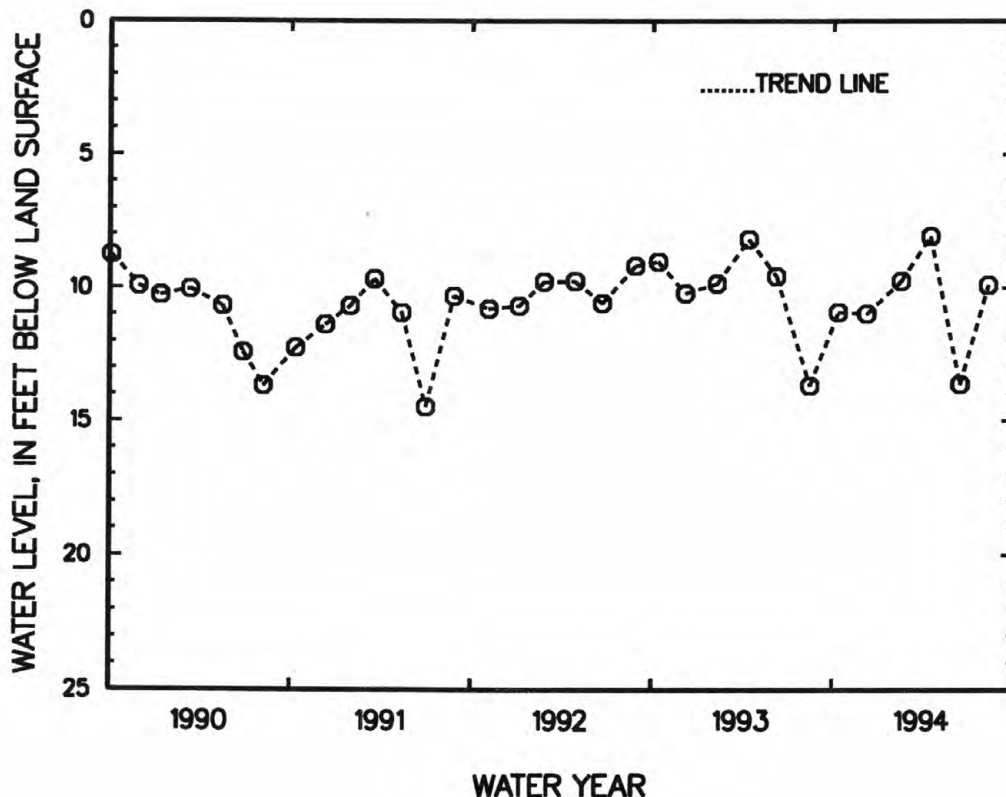
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.12 ft below land-surface datum, Feb. 20, 1980; lowest measured, 17.76 ft below land-surface datum, July 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	10.92	DEC 08	10.98	FEB 15	9.76	APR 15	8.08	JUN 14	13.63	AUG 09	9.91
WATER YEAR 1994		HIGHEST	8.08	APR 15, 1994	LOWEST	13.63	JUN 14, 1994				



GROUND-WATER LEVELS  
CITY OF VIRGINIA BEACH

364920076093201. Local number, 61C 27 SOW 174A.

LOCATION.--Lat 36°49'20", long 76°09'32", Hydrologic Unit 02080208, at Kempsville High School in Virginia Beach.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 175 ft, screened 160 to 170 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point:  
Top of casing, 0.8 ft above land-surface datum.

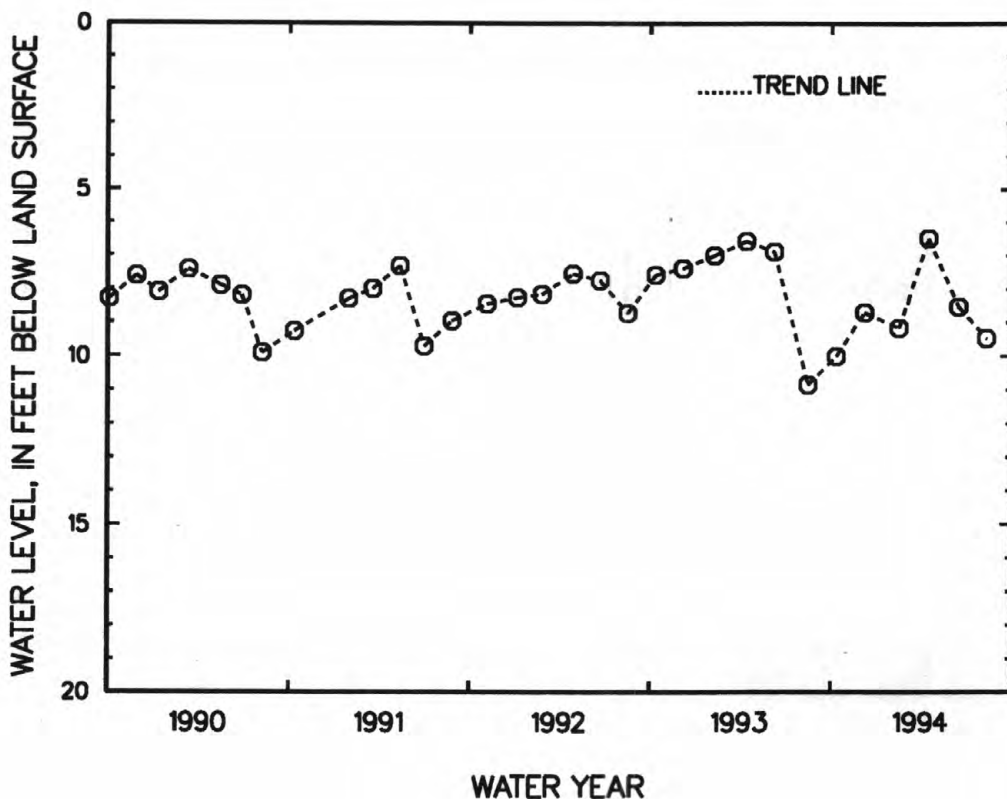
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.09 ft below land-surface datum, Apr. 25, 1984;  
lowest measured, 11.73 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	9.99	DEC 08	8.70	FEB 15	9.16	APR 15	6.47	JUN 14	8.52	AUG 09	9.47
WATER YEAR 1994		HIGHEST	6.47	APR 15, 1994		LOWEST	9.99	OCT 12, 1993			



## GROUND-WATER LEVELS

383

## CITY OF VIRGINIA BEACH

364920076093202. Local number, 61C 28 SOW 174B.

LOCATION.--Lat 36°49'20", long 76°09'32", Hydrologic Unit 02080208, at Kempsville High School in Virginia Beach.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 80 ft, screened 65 to 75 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point:  
Top of casing, 1.2 ft above land-surface datum.

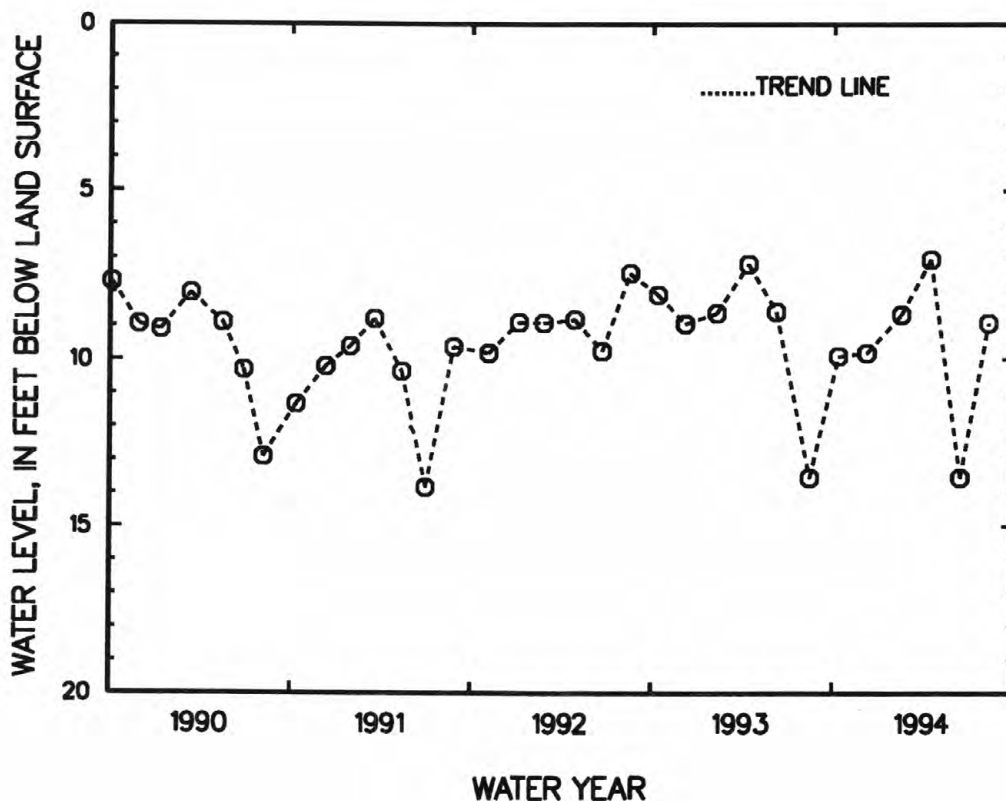
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.51 ft below land-surface datum, Apr. 25, 1984;  
lowest measured, 17.99 ft below land-surface datum, July 18, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	9.90	DEC 08	9.80	FEB 15	8.67	APR 15	7.04	JUN 14	13.54	AUG 09	8.93
WATER YEAR 1994		HIGHEST	7.04	APR 15, 1994	LOWEST	13.54	JUN 14, 1994				



## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

365325076114001. Local number, 61D 4 SOW 154.

LOCATION.--Lat 36°53'25", long 76°11'40", Hydrologic Unit 02080108, 200 ft west of Barrs Road, 0.4 mi north of Burton Station Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 200 ft, diameter 4 in. from 200 to 1,130 ft, depth 1,130 ft, screened 1,000 to 1,010 ft, 1,020 to 1,070 ft, 1,080 to 1,120 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 24 ft above sea level, from topographic map. Measuring point: Top of casing, 2.17 ft above land-surface datum.

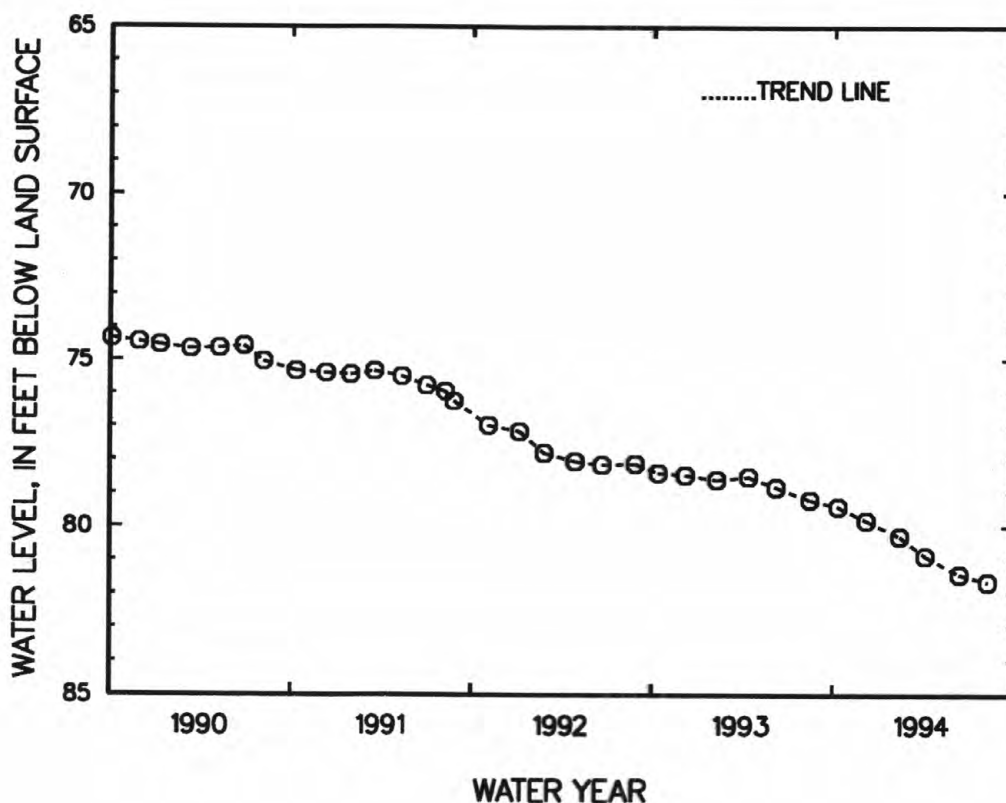
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.47 ft below land-surface datum, Mar. 20, 1981; lowest measured, 81.65 ft below land-surface datum, Aug. 9, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	79.39	DEC 08	79.80	FEB 14	80.28	APR 06	80.87	JUN 13	81.42	AUG 09	81.65
WATER YEAR 1994      HIGHEST    79.39    OCT 12, 1993      LOWEST    81.65    AUG 09, 1994											



GROUND-WATER LEVELS  
CITY OF VIRGINIA BEACH

385

365425076105001. Local number, 61D 5 SOW 155.

LOCATION.--Lat 36°54'25", long 76°10'50", Hydrologic Unit 02080108, 100 ft east of Ferry Road, 0.3 mi northwest of Diamond Springs Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 12 in. to 102 ft, diameter 6 in. from 102 to 150 ft, diameter 4 in. from 150 to 1,380 ft, depth 1,380 ft, screened 1,207 to 1,229 ft, 1,250 to 1,264 ft, 1,286 to 1,306 ft, 1,345 to 1,367 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above sea level, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

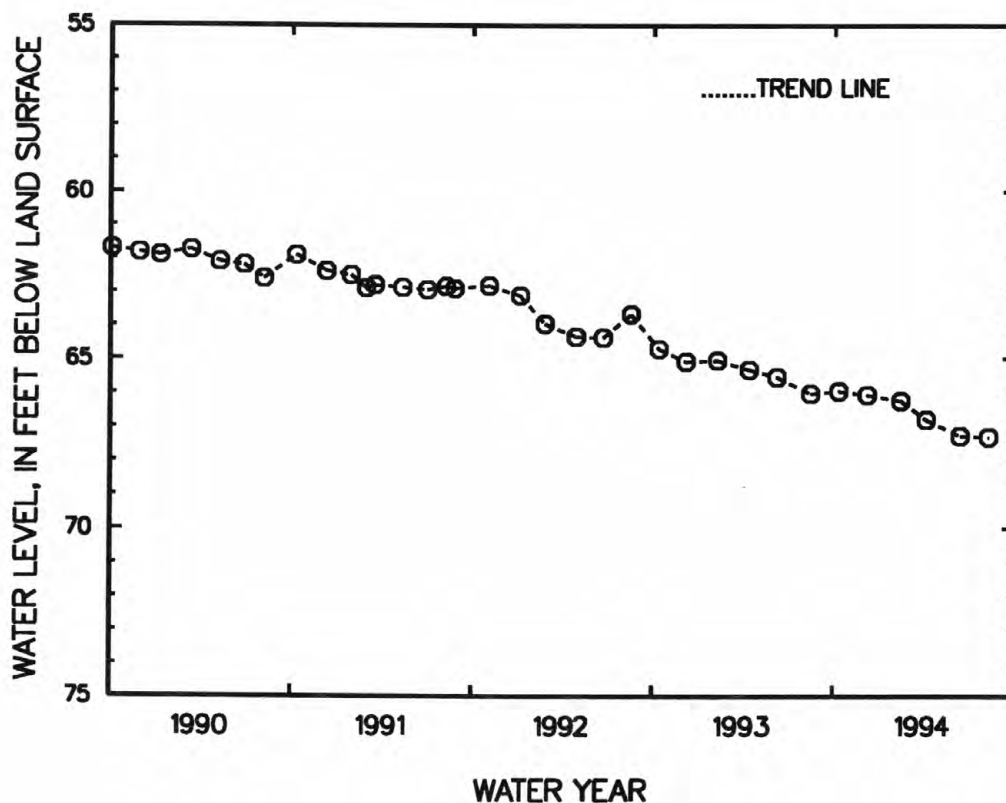
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.75 ft below land-surface datum, Dec. 17, 1980; lowest measured, 67.31 ft below land-surface datum, Aug. 9, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	65.95	DEC 08	66.06	FEB 14	66.24	APR 06	66.80	JUN 13	67.27	AUG 09	67.31
WATER YEAR 1994		HIGHEST	65.95	OCT 12, 1993	LOWEST	67.31	AUG 09, 1994				





## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

365327076080501. Local number, 61D 6 SOW 124.

LOCATION.--Lat 36°53'27", long 76°08'05", Hydrologic Unit 02080108, at Thoroughgood School in Virginia Beach.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in. to 25 ft, diameter 6 in. from 25 to 40 ft, depth 40 ft, screened 25 to 30 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 25 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

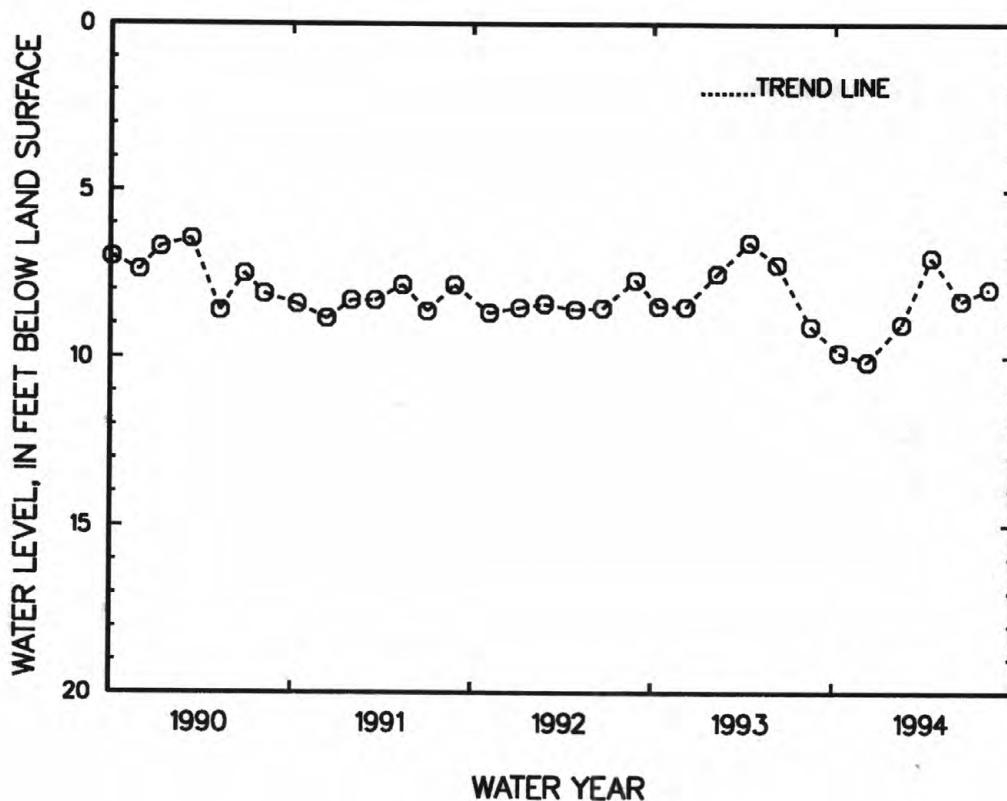
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.85 ft below land-surface datum, Apr. 27, 1984; lowest measured, 10.72 ft below land-surface datum, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	9.84	DEC 08	10.12	FEB 15	8.99	APR 15	7.00	JUN 14	8.29	AUG 09	7.95
WATER YEAR 1994		HIGHEST	7.00	APR 15, 1994	LOWEST	10.12	DEC 08, 1993				



## GROUND-WATER LEVELS

387

## CITY OF VIRGINIA BEACH

363537076061001. Local number, 62A 2 SOW 097A.

LOCATION.--Lat 36°33'54", long 76°06'14", Hydrologic Unit 03010205, 0.2 mi south of Baum Road, 0.25 mi west of Crag Causeway in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 76 ft, screened 66 to 76 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Aug. 3, 1988; at land-surface datum Aug. 3, 1988, to Mar. 13, 1989; 0.65 ft Mar. 13, 1989, to Apr. 1, 1991; 1.65 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

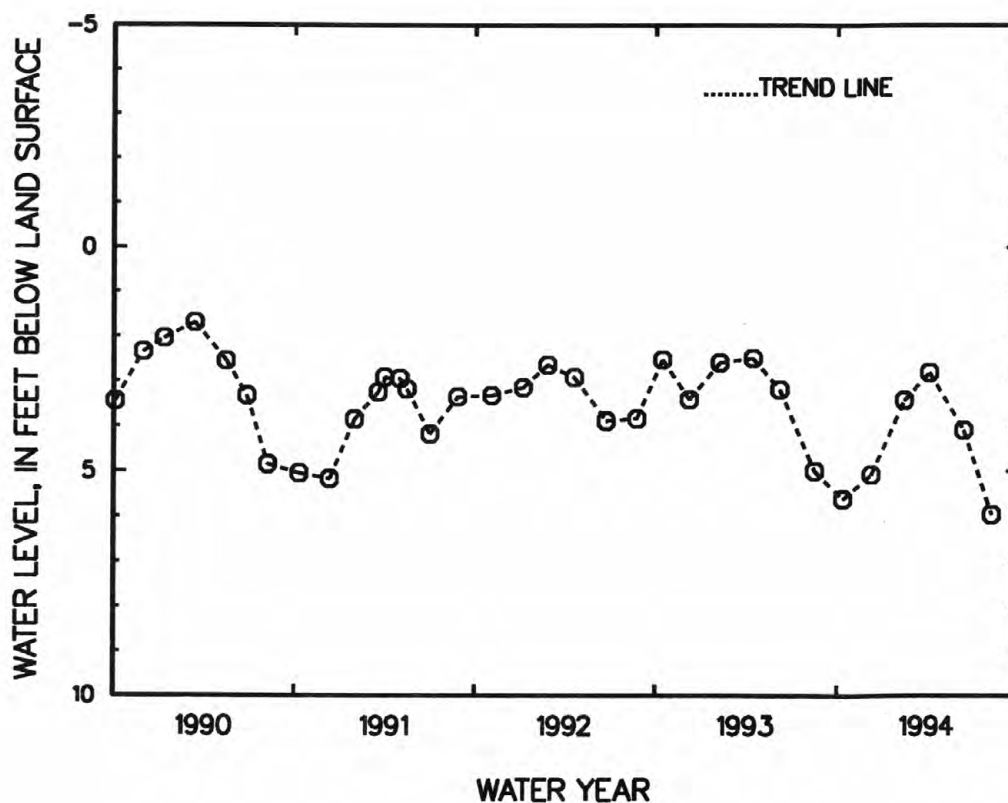
PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.18 ft below land-surface datum, Apr. 30, 1980; lowest measured, 6.68 ft below land-surface datum, Nov. 28, 1983.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	5.62	DEC 09	5.08	FEB 14	3.43	APR 05	2.81	JUN 13	4.09	AUG 08	5.97

WATER YEAR 1994	HIGHEST	2.81	APR 05, 1994	LOWEST	5.97	AUG 08, 1994
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## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

363537076061002. Local number, 62A 3 SOW 097B.

LOCATION.--Lat 36°33'54", Long 76°06'14", Hydrologic Unit 03010205, 0.2 mi south of Baum Road, 0.25 mi west of Craggs Causeway in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 24 ft, screened 20 to 24 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

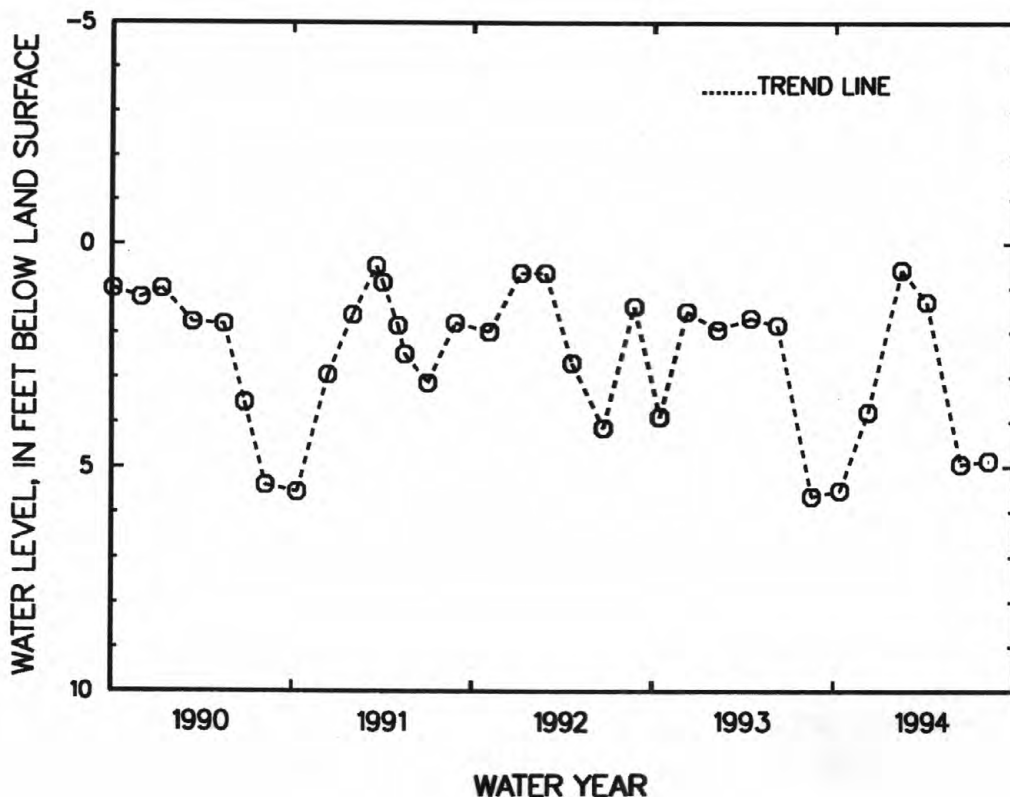
PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.50 ft below land-surface datum, Mar. 19, 1991; lowest measured, 6.50 ft below land-surface datum, Oct. 17, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	5.52	DEC 09	3.78	FEB 14	0.59	APR 05	1.31	JUN 13	4.94	AUG 08	4.87

WATER YEAR 1994      HIGHEST   0.59   FEB 14, 1994      LOWEST   5.52   OCT 13, 1993



## GROUND-WATER LEVELS

389

## CITY OF VIRGINIA BEACH

364126076003501. Local number, 62B 1 SOW 098A.

LOCATION.--Lat 36°41'26", long 76°00'35", Hydrologic Unit 03010205, on north side of Pleasant Ridge Road at the Virginia Beach Mosquito Control shop, 0.9 mi east of Pleasant Ridge in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 24 ft, screened 20 to 24 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 2, 1988; 1.05 ft thereafter.

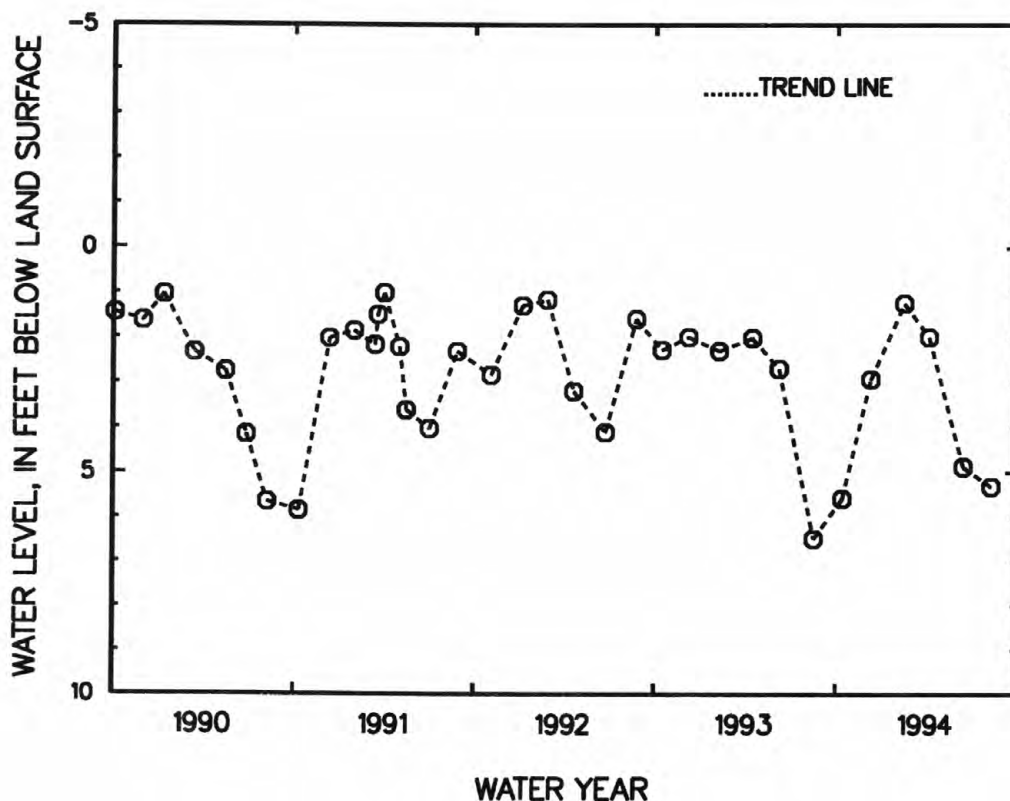
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.02 ft below land-surface datum, Apr. 1, 1991; lowest measured, 11.95 ft below land-surface datum, Sept. 16, 1980.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	5.59	DEC 09	2.93	FEB 14	1.24	APR 05	1.99	JUN 13	4.88	AUG 08	5.32
WATER YEAR 1994		HIGHEST	1.24	FEB 14, 1994	LOWEST	5.59	OCT 13, 1993				



## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364126076003502. Local number, 62B 2 SOW 098B.

LOCATION.--Lat 36°41'26", long 76°00'35", Hydrologic Unit 03010205, on north side of Pleasant Ridge Road at the Virginia Beach Mosquito Control shop, 0.9 mi east of Pleasant Ridge in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 98 ft, screened 88 to 98 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 2, 1988; 1.2 ft above land-surface datum Mar. 3, 1988, to Dec. 9, 1994; 0.8 ft thereafter.

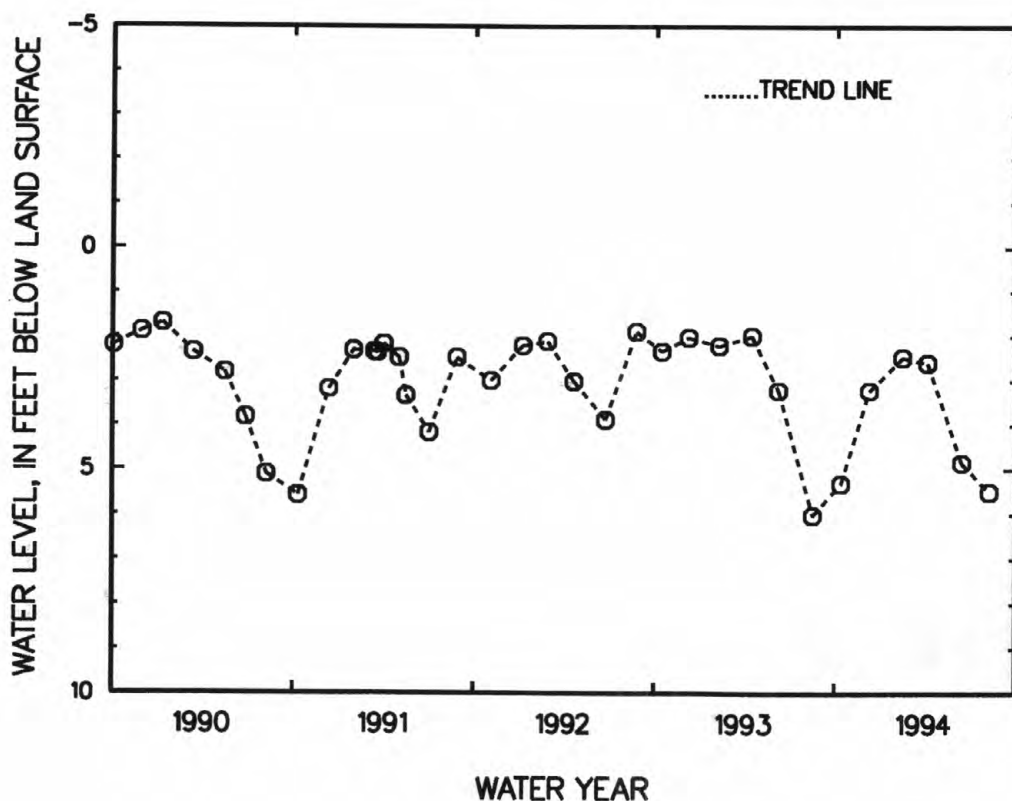
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.70 ft below land-surface datum, Mar. 13, 1989, Jan. 10, 1990; lowest measured, 11.76 ft below land-surface datum, Sept. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	5.31	DEC 09	3.22	FEB 14	2.47	APR 05	2.59	JUN 13	4.84	AUG 08	5.50
WATER YEAR 1994		HIGHEST	2.47	FEB 14, 1994	LOWEST	5.50	AUG 08, 1994				



## GROUND-WATER LEVELS

391

## CITY OF VIRGINIA BEACH

364713076030701. Local number, 62C 2 SOW 092A.

LOCATION.--Lat 36°47'15", long 76°03'08", Hydrologic Unit 03010205, at entrance to Oceana Naval Air Station on London Bridge Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 102 ft, screened 97 to 102 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.08 ft above land-surface datum prior to Mar. 2, 1988; 0.7 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

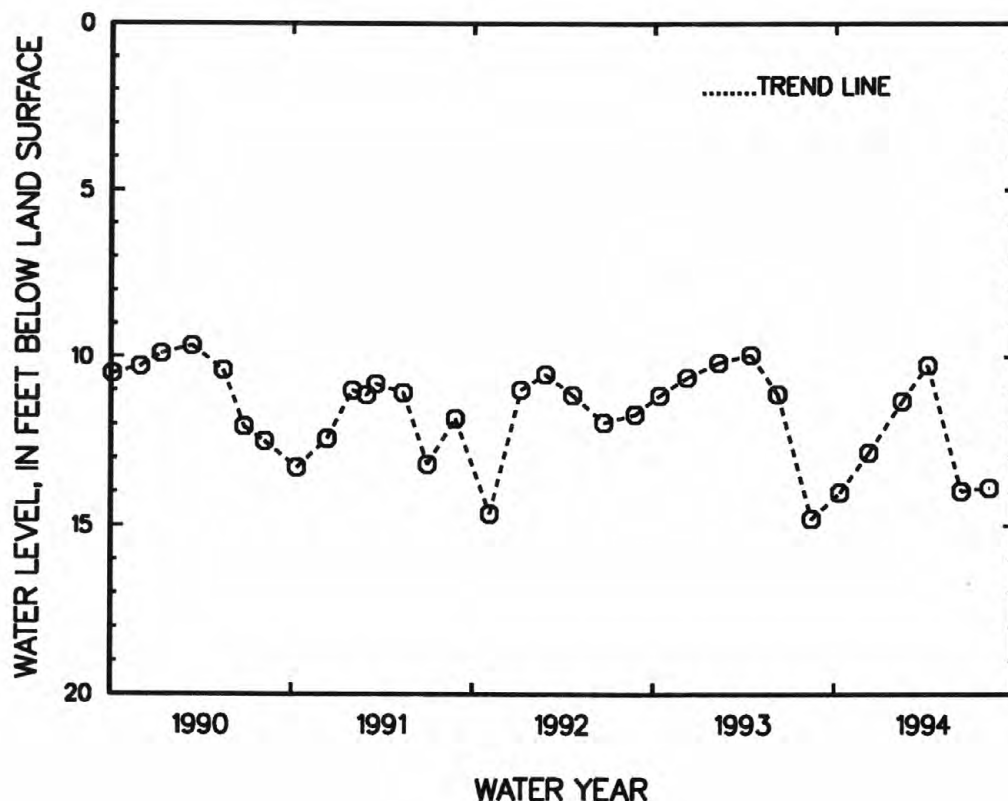
PERIOD OF RECORD.--December 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land-surface datum, Dec. 1, 1977; lowest measured, 15.29 ft below land-surface datum, July 17, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	14.02	DEC 09	12.84	FEB 14	11.32	APR 06	10.25	JUN 13	13.97	AUG 08	13.88

WATER YEAR 1994      HIGHEST    10.25    APR 06, 1994      LOWEST    14.02    OCT 12, 1993





## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364715076030801. Local number, 62C 3 SOW 092B.

LOCATION.--Lat 36°47'15", long 76°03'08", Hydrologic Unit 03010205, at entrance to Oceana Naval Air Station on London Bridge Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 58 ft, screened 53 to 58 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 1.05 ft above land-surface datum prior to Mar. 2, 1988; 0.9 ft thereafter.

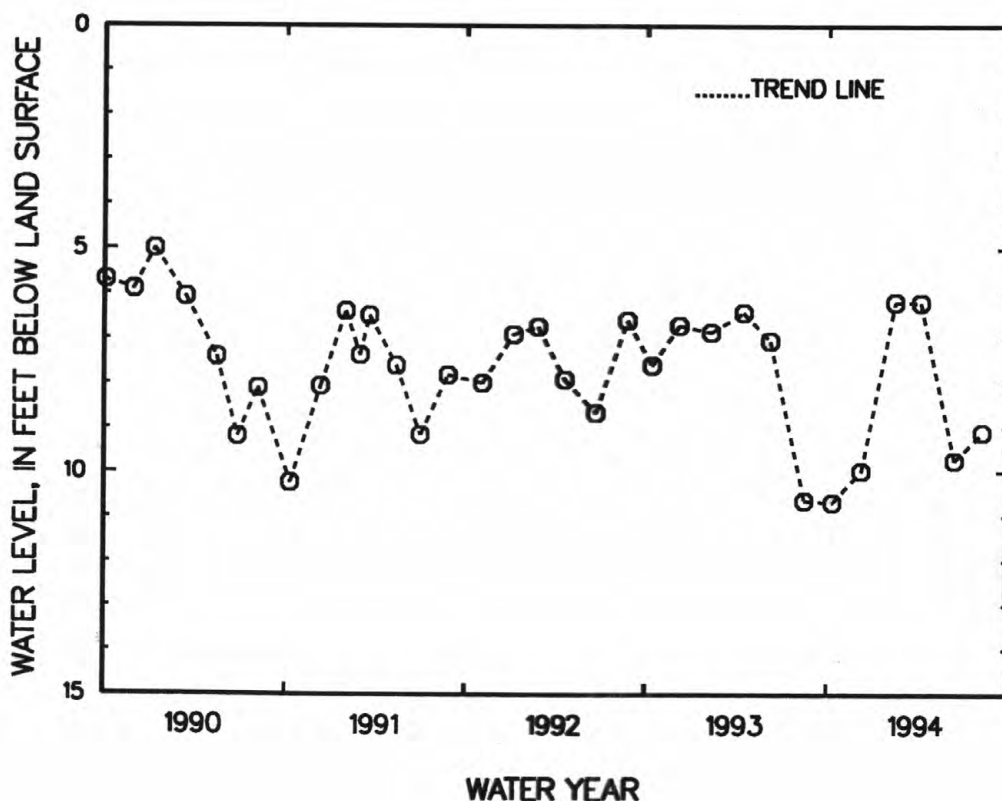
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.36 ft below land-surface datum, Feb. 16, 1983; lowest measured, 11.07 ft below land-surface datum, Aug. 6, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	10.68	DEC 09	9.98	FEB 14	6.19	APR 06	6.20	JUN 13	9.74	AUG 08	9.11
WATER YEAR 1994		HIGHEST	6.19	FEB 14, 1994	LOWEST	10.68	OCT 12, 1993				



## GROUND-WATER LEVELS

393

## CITY OF VIRGINIA BEACH

364504076031301. Local number, 62C 5 SOW 093.

LOCATION.--Lat 36°45'04", long 76°03'13", Hydrologic Unit 03010205, 200 ft southeast of intersection of State Highways 149 and 165 in Princess Anne, in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 65 ft, screened 60 to 65 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 7 ft above sea level, from topographic map. Measuring point: Top of casing, 0.91 ft above land-surface datum prior to Mar. 2, 1988; 0.6 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

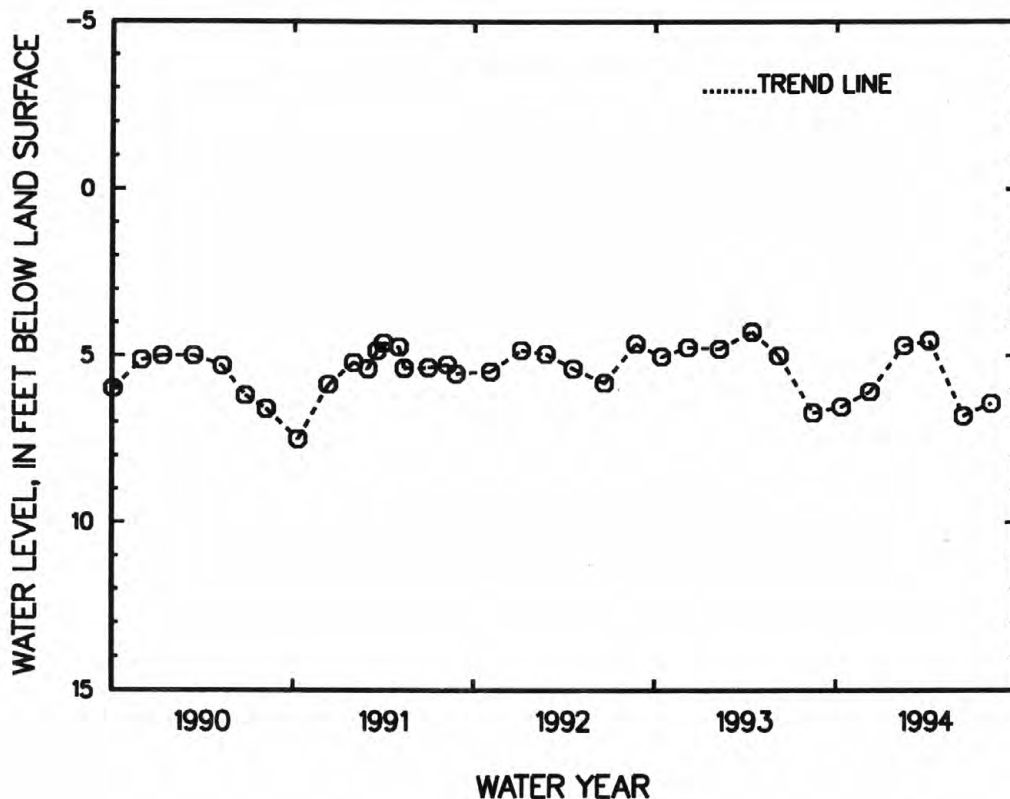
PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.84 ft below land-surface datum, Feb. 8, 1978; lowest measured, 7.88 ft below land-surface datum, Nov. 12, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	6.54	DEC 08	6.08	FEB 14	4.68	APR 06	4.54	JUN 13	6.81	AUG 08	6.44

WATER YEAR 1994	HIGHEST	4.54	APR 06, 1994	LOWEST	6.81	JUN 13, 1994
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## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

365158076030401. Local number, 62C 6 SOW 125.

LOCATION.--Lat 36°51'58", long 76°03'04", Hydrologic Unit 02080108, at Trantwood Elementary School in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 57 ft, screened 52 to 57 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.1 ft above land-surface datum.

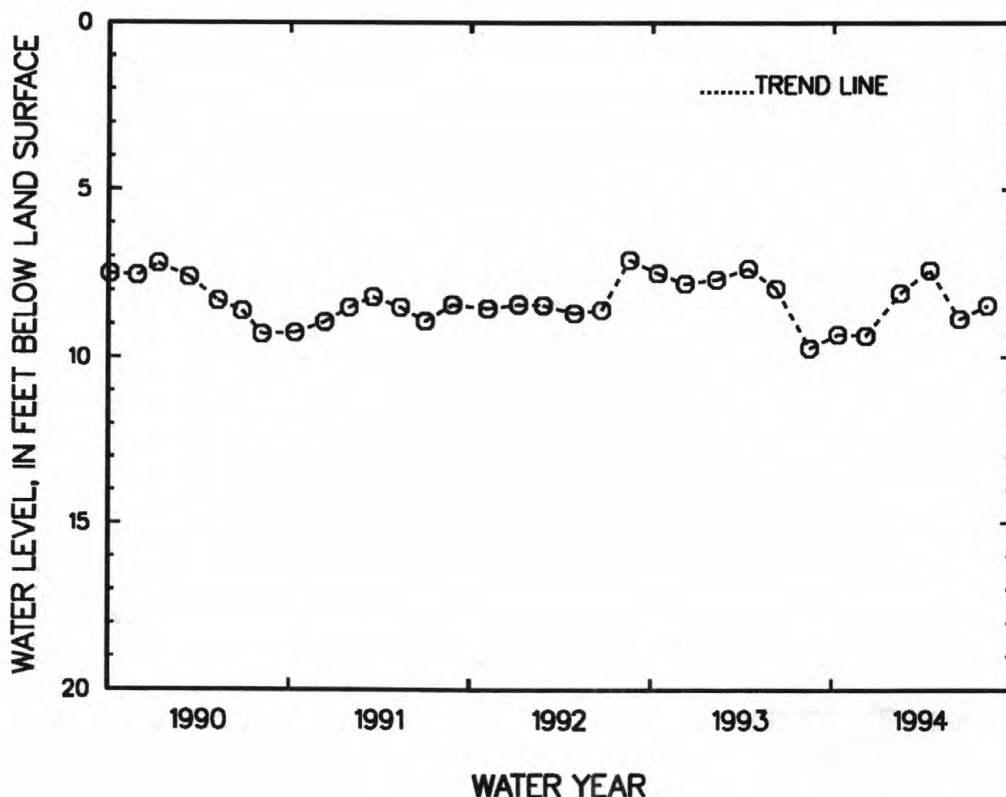
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.86 ft below land-surface datum, Feb. 28, 1979; lowest measured, 11.19 ft below land-surface datum, July 17, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	9.32	DEC 08	9.35	FEB 15	8.08	APR 15	7.40	JUN 14	8.85	AUG 09	8.45
WATER YEAR 1994		HIGHEST	7.40	APR 15, 1994	LOWEST	9.35	DEC 08, 1993				



GROUND-WATER LEVELS  
CITY OF VIRGINIA BEACH

395

364906076043901. Local number, 62C 7 SOW 126.

LOCATION.--Lat 36°49'06", long 76°04'39", Hydrologic Unit 02080108, at Plaza Elementary School in Virginia Beach.  
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 67 ft, screened 55 to 60 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above sea level, from topographic map. Measuring point:  
Top of casing, 0.1 ft above land-surface datum.

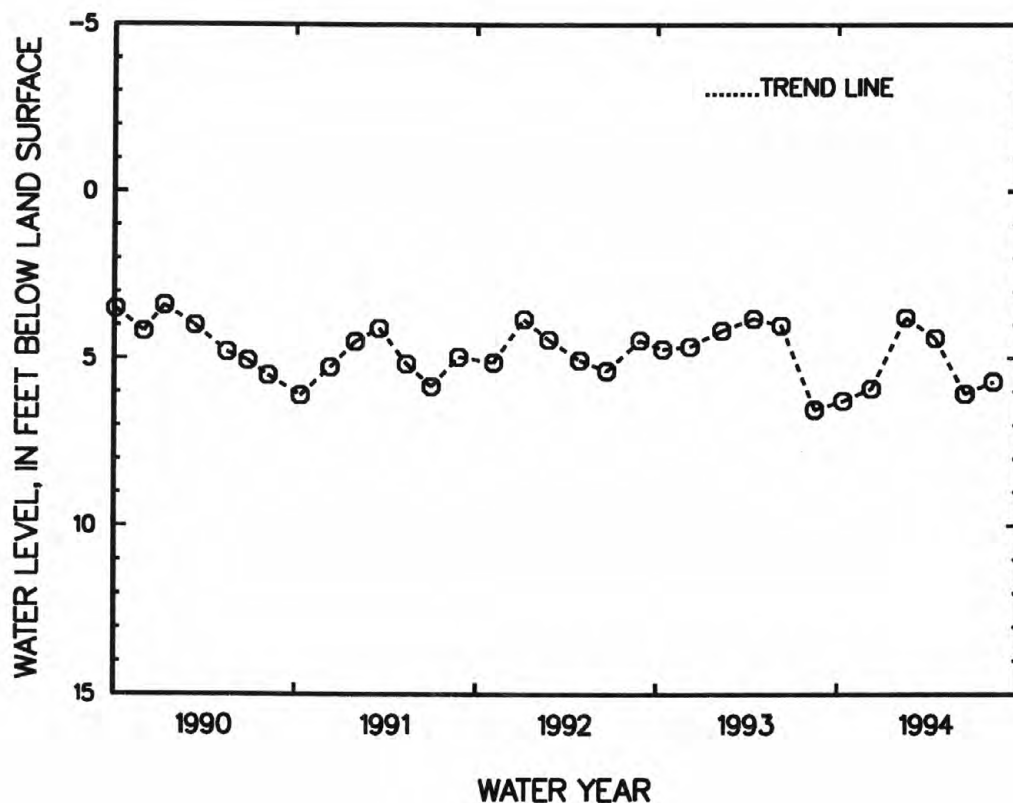
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.84 ft below land-surface datum, Feb. 16, 1983;  
lowest measured, 7.32 ft below land-surface datum, July 17, 1986, Nov. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	6.27	DEC 08	5.90	FEB 15	3.77	APR 15	4.39	JUN 14	6.06	AUG 09	5.70
WATER YEAR 1994		HIGHEST	3.77	FEB 15, 1994	LOWEST	6.27	OCT 12, 1993				



## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364745076004301. Local number, 62C 9 SOW 172A.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 170 ft, screened 155 to 165 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

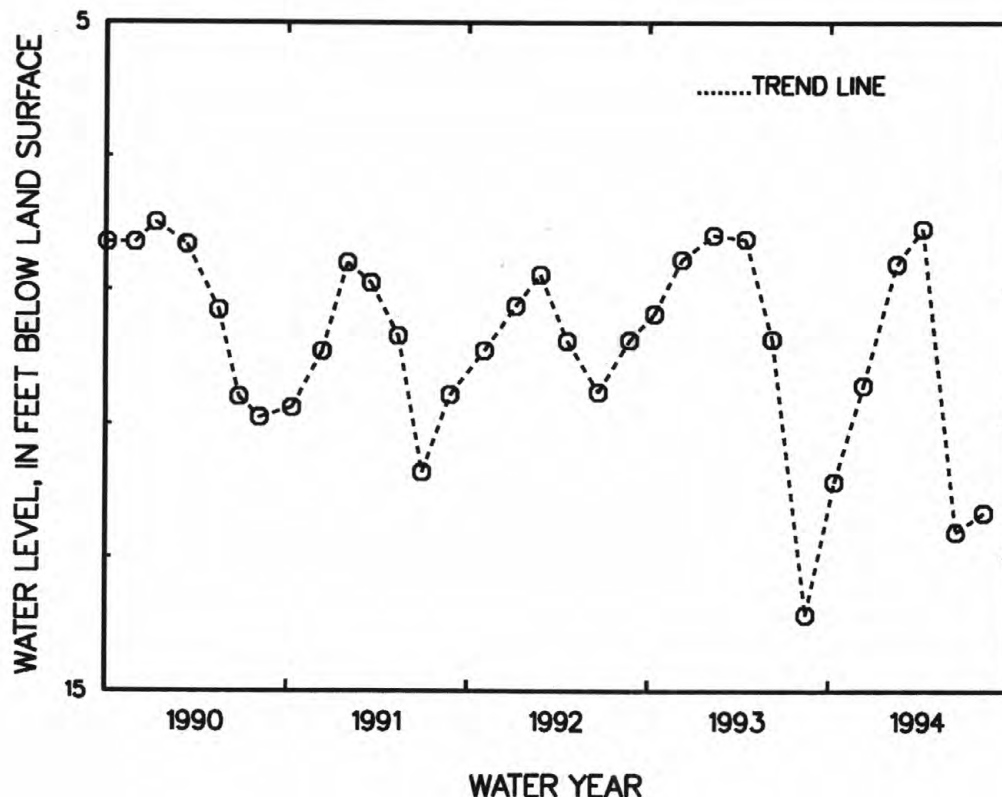
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.46 ft below land-surface datum, Apr. 25, 1984; lowest measured, 13.87 ft below land-surface datum, Aug. 16, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	11.87	DEC 09	10.42	FEB 14	8.62	APR 06	8.09	JUN 13	12.62	AUG 08	12.33
WATER YEAR 1994		HIGHEST	8.09	APR 06, 1994	LOWEST	12.62	JUN 13, 1994				



## GROUND-WATER LEVELS

397

## CITY OF VIRGINIA BEACH

364745076004302. Local number, 62C 10 SOW 172B.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

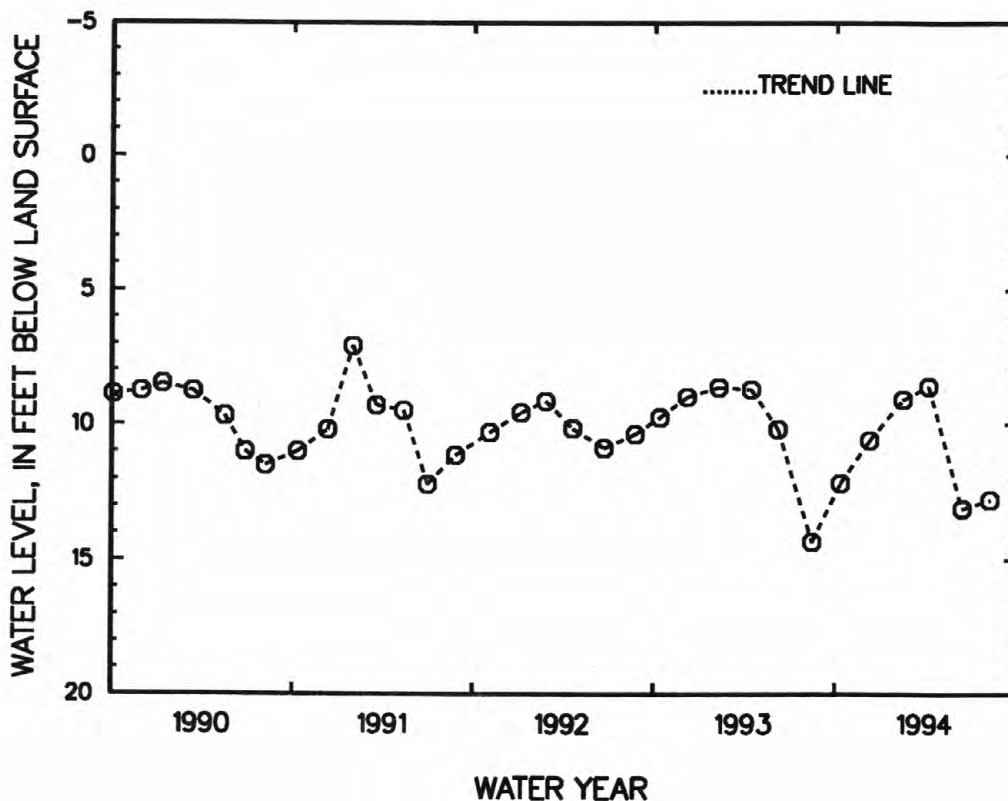
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.10 ft below land-surface datum, Jan. 30, 1991; lowest measured, 14.33 ft below land-surface datum, Aug. 16, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	12.15	DEC 09	10.59	FEB 14	9.09	APR 06	8.59	JUN 13	13.11	AUG 08	12.79
WATER YEAR 1994		HIGHEST	8.59	APR 06, 1994	LOWEST	13.11	JUN 13, 1994				





## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364745076004303. Local number, 62C 11 SOW 172C.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 35 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

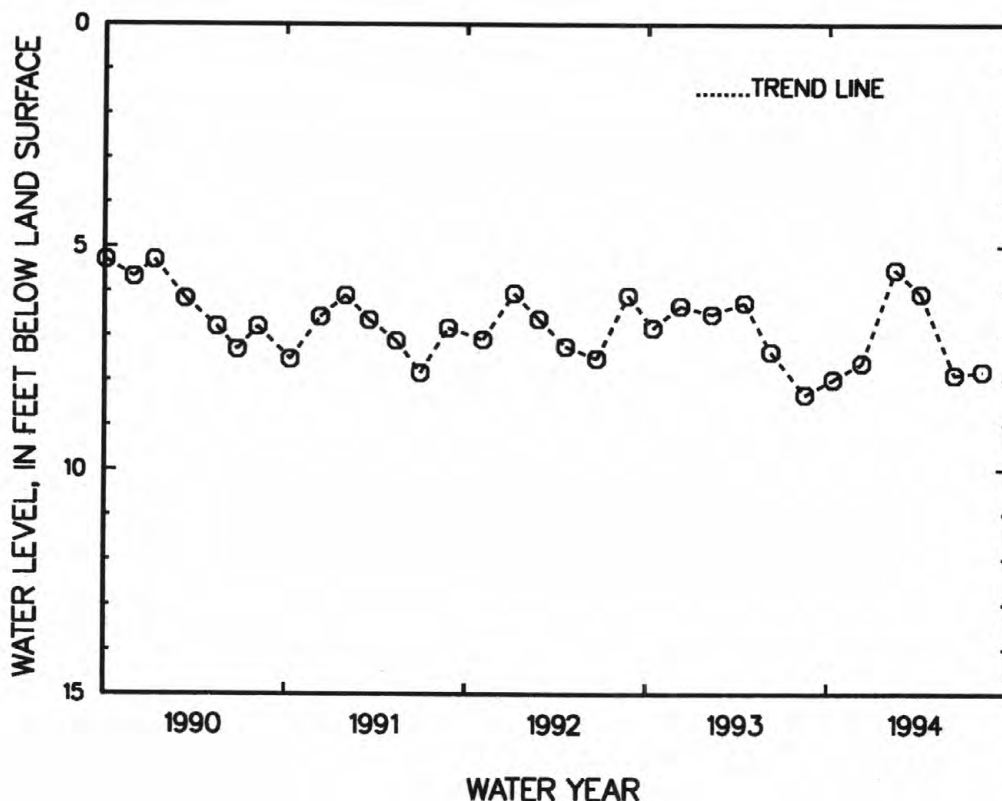
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1984 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.89 ft below land-surface datum, Feb. 28, 1985; lowest measured, 8.32 ft below land-surface datum, Aug. 16, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	7.98	DEC 09	7.62	FEB 14	5.52	APR 06	6.06	JUN 13	7.89	AUG 08	7.81
WATER YEAR 1994		HIGHEST	5.52	FEB 14, 1994	LOWEST	7.98	OCT 12, 1993				



## CITY OF VIRGINIA BEACH

364745076004304. Local number, 62C 12 SOW 172D.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 75 ft, screened 60 to 70 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

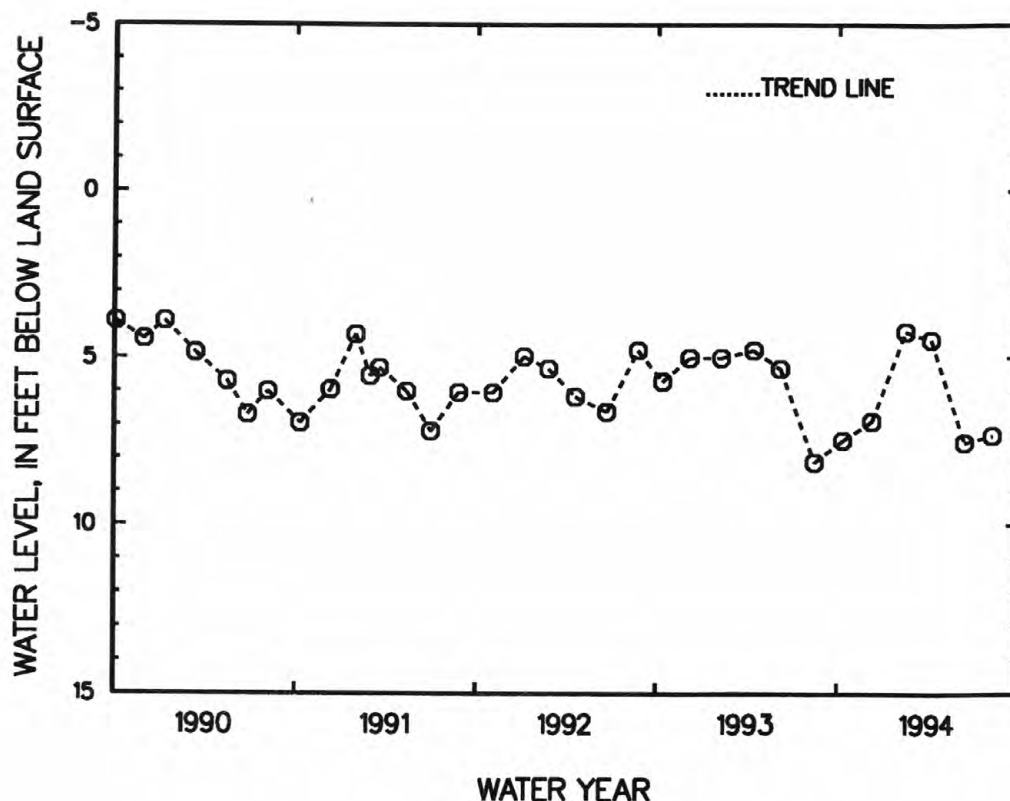
PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.56 ft below land-surface datum, Apr. 25, 1984; lowest measured, 8.12 ft below land-surface datum, Aug. 16, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	7.46	DEC 09	6.89	FEB 14	4.20	APR 06	4.45	JUN 13	7.53	AUG 08	7.32

WATER YEAR 1994      HIGHEST    4.20    FEB 14, 1994      LOWEST    7.53    JUN 13, 1994



## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364613075583201. Local number, 63C 2 SOW 100B.

LOCATION.--Lat 36°46'13", long 75°58'32", Hydrologic Unit 03010205, at Hampton Roads Sanitary District sludge disposal site off Old Dam Neck Road, 1.7 mi southeast of intersection of Oceana Boulevard and Old Dam Neck Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 1.25 in., depth 54 ft, screened 49 to 54 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above sea level, from topographic map. Measuring point: Top of casing, 2.85 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

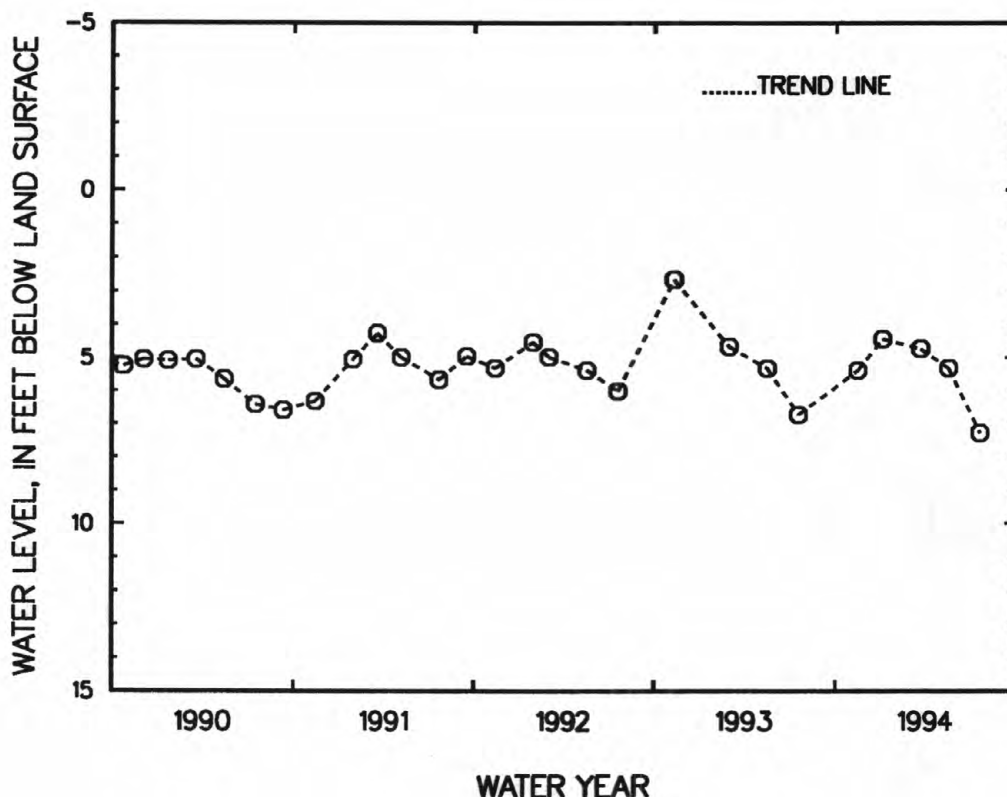
PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.66 ft below land-surface datum, Nov. 10, 1992; lowest measured, 10.58 ft below land-surface datum, Mar. 20, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	5.38	JAN 04	4.43	MAR 21	4.73	MAY 16	5.32	JUL 18	7.29

WATER YEAR 1994      HIGHEST    4.43    JAN 04, 1994      LOWEST    7.29    JUL 18, 1994



## GROUND-WATER LEVELS

401

## CITY OF VIRGINIA BEACH

364613075583202. Local number, 63C 3 SOW 100C.

LOCATION.--Lat 36°46'13", long 75°58'32", Hydrologic Unit 03010205, at Hampton Roads Sanitary District sludge disposal site off Old Dam Neck Road, 1.7 mi southeast of intersection of Oceana Boulevard and Old Dam Neck Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 1.25 in., depth 35 ft, screened 30 to 35 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above sea level, from topographic map. Measuring point: Top of casing, 2.63 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

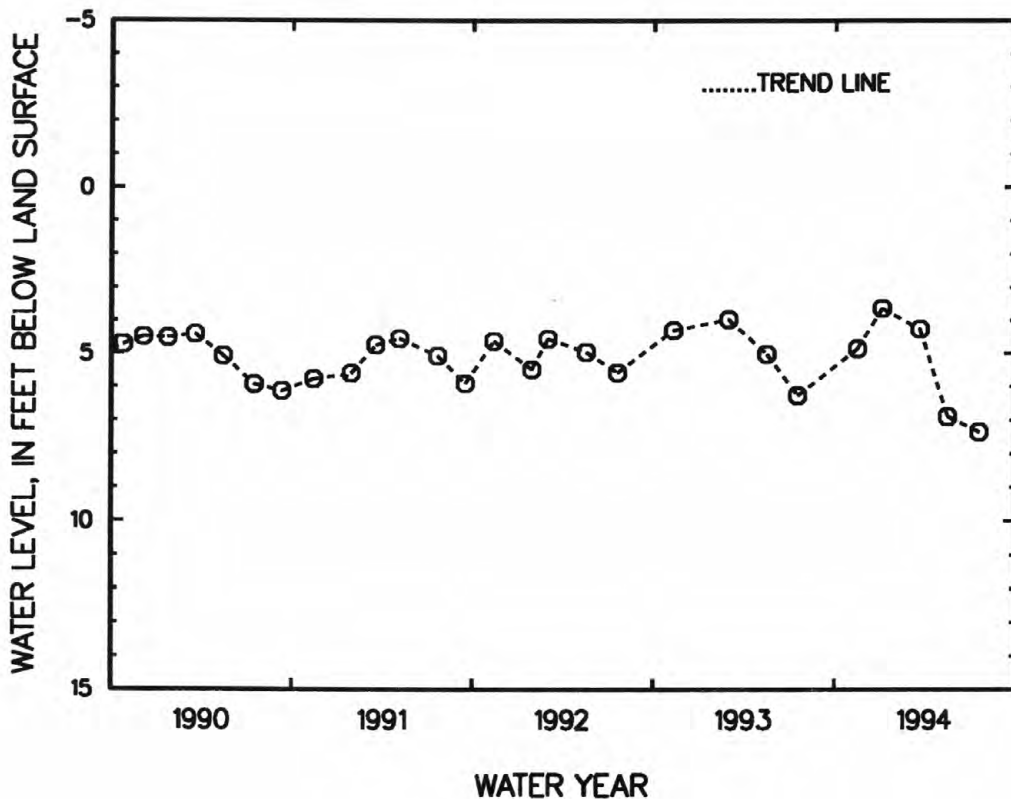
PERIOD OF RECORD.--April 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.63 ft below land-surface datum, Jan. 4, 1994; lowest measured, 12.35 ft below land-surface datum, Apr. 20, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	4.85	JAN 04	3.63	MAR 21	4.26	MAY 16	6.89	JUL 18	7.35

WATER YEAR 1994      HIGHEST   3.63   JAN 04, 1994      LOWEST   7.35   JUL 18, 1994



## GROUND-WATER LEVELS

## CITY OF VIRGINIA BEACH

364722075591801. Local number, 63C 4 SOW 173A.

LOCATION.--Lat 36°47'22", long 75°59'18", Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 291 ft, screened 281 to 291 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above sea level, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

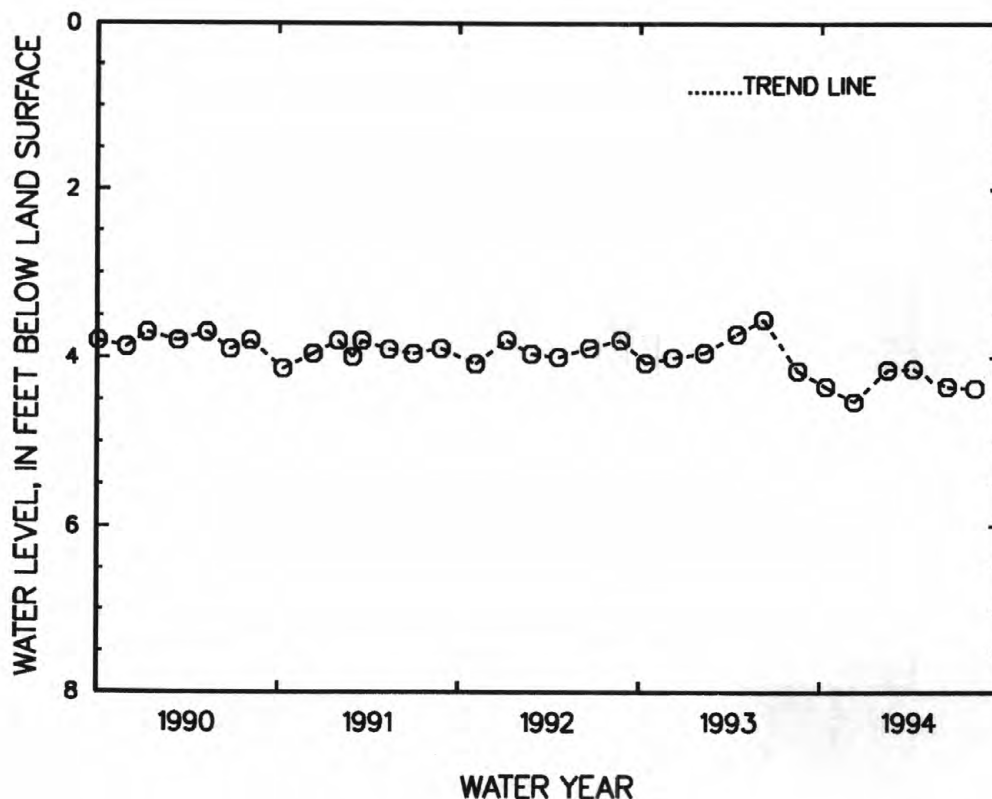
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.10 ft below land-surface datum, June 21, 1989; lowest measured, 4.63 ft below land-surface datum, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	4.34	DEC 08	4.52	FEB 14	4.14	APR 06	4.13	JUN 13	4.34	AUG 08	4.36
WATER YEAR 1994		HIGHEST	4.13	APR 06, 1994		LOWEST	4.52	DEC 08, 1993			



## GROUND-WATER LEVELS

403

## CITY OF VIRGINIA BEACH

364722075591802. Local number, 63C 5 SOW 173B.

LOCATION.--Lat 36°47'22", long 75°59'18", Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 95 ft, screened 80 to 90 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 9 ft above sea level, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

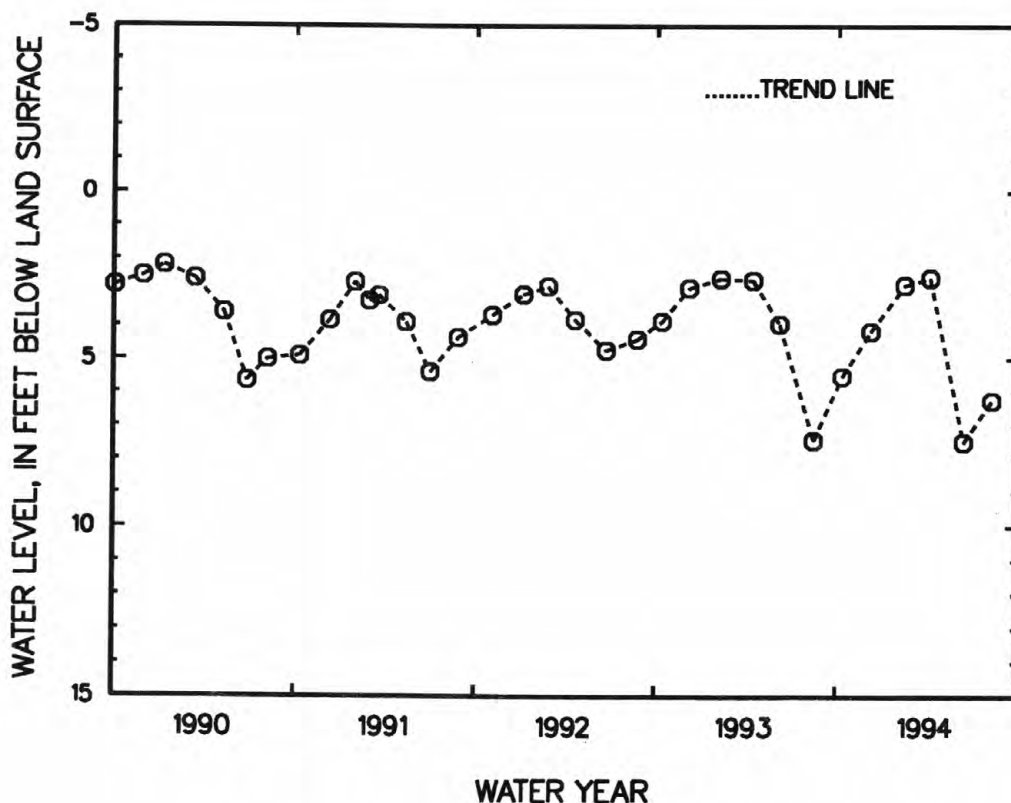
PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, Apr. 20, 1989; lowest measured, 7.63 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	5.51	DEC 08	4.16	FEB 14	2.78	APR 06	2.57	JUN 13	7.49	AUG 08	6.25

WATER YEAR 1994      HIGHEST    2.57    APR 06, 1994      LOWEST    7.49    JUN 13, 1994





## GROUND-WATER LEVELS

## WESTMORELAND COUNTY

381110076550501. Local number, 55P 5.

LOCATION.--Lat 38°11'10", long 76°55'05", Hydrologic Unit 02070011, behind craft shop at George Washington Birthplace National Monument, 3.8 mi southeast of Colonial Beach. Owner: National Park Service.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 471 ft, screened 451 to 466 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to Apr. 24, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 24 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 3.0 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--June 1974 to current year.

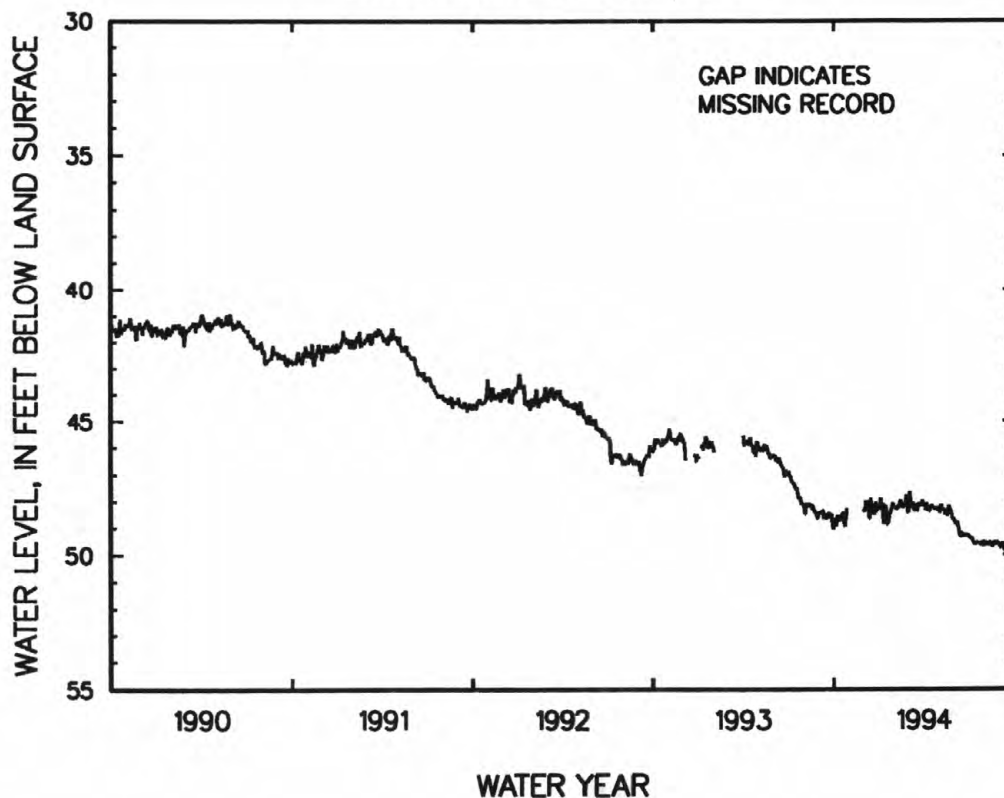
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.05 ft below land-surface datum, June 24, 1974; lowest recorded, 52.23 ft below land-surface datum, Feb. 23, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.87	---	47.99	48.14	48.29	48.02	48.24	48.13	48.81	49.39	49.52	49.55
10	48.70	---	47.99	48.81	48.23	48.03	48.23	48.32	49.17	49.56	49.55	49.85
15	48.73	---	47.88	48.60	48.11	48.10	48.19	48.40	49.19	49.55	49.72	49.89
20	48.50	---	48.48	48.73	48.16	48.17	48.28	48.16	49.35	49.61	49.58	49.88
25	48.67	---	48.03	48.33	47.91	48.08	48.31	48.36	49.26	49.66	49.57	49.64
EOM	---	---	48.25	48.22	48.42	48.09	48.26	48.72	49.32	49.64	49.63	49.93

WATER YEAR 1994      HIGHEST INSTANTANEOUS    47.12    MAR 03, 1994      LOWEST INSTANTANEOUS    49.95    SEP 14, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

405

## WESTMORELAND COUNTY

381132076551001. Local number, 55P 9.

LOCATION.--Lat 38°11'32", long 76°55'10", Hydrologic Unit 02070011, at George Washington Birthplace National Monument, 500 ft east of park road, 0.6 mi north of the end of State Highway 204, and 3.4 mi southeast of Colonial Beach. Owner: National Park Service.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 36 in., depth 22.6 ft.

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

DATUM.--Elevation of land-surface datum is 17 ft above sea level, from topographic map. Measuring point: Top of concrete lip on casing, 1.65 ft above land-surface datum.

PERIOD OF RECORD.--July 1977 to current year.

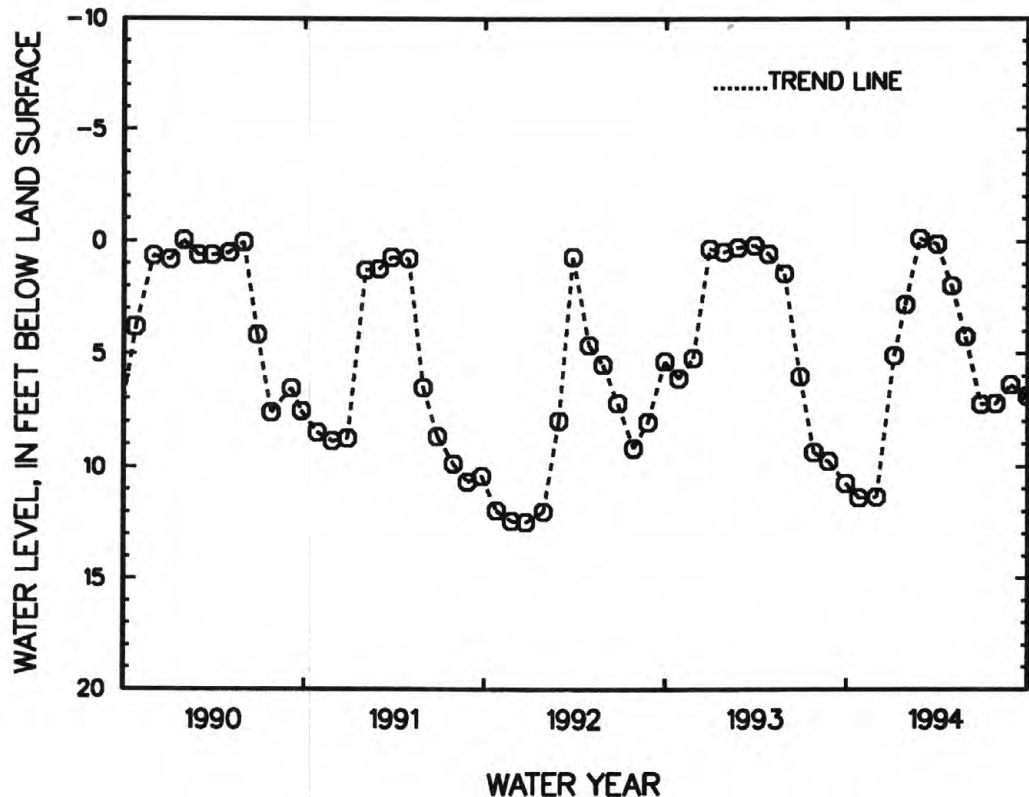
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.13 ft above land-surface datum, Feb. 24, 1994; lowest measured, 12.80 ft below land-surface datum, Dec. 27, 1988.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	11.38	JAN 04	5.08	FEB 24	+0.13	APR 29	1.98	JUN 27	7.24	AUG 26	6.39
NOV 30	11.33	26	2.82	MAR 31	.11	MAY 27	4.25	JUL 27	7.22	SEP 28	6.89

WATER YEAR 1994      HIGHEST    +0.13    FEB 24, 1994      LOWEST    11.38    OCT 26, 1993

+ Water level above land-surface datum.



## GROUND-WATER LEVELS

## WESTMORELAND COUNTY

381530076584401. Local number, 55Q 2.

LOCATION.--Lat 38°15'30", long 76°58'44", Hydrologic Unit 02070011, 200 ft southwest of State Highway 205 (McKinney Boulevard) at Colonial Beach and 0.3 mi northwest of the intersection of State Highways 205 (McKinney Boulevard) and 632. Owner: Darl Concrete and Contracting Company.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 890 ft, depth 890 ft, screened 844 to 874 ft.

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

DATUM.--Elevation of land-surface datum is 24 ft above sea level, from topographic map. Measuring point: Top of 0.75 in. nipple in top of casing, 2.8 ft above land-surface datum. Prior to Dec. 10, 1974, measuring point was top of casing, 2.2 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

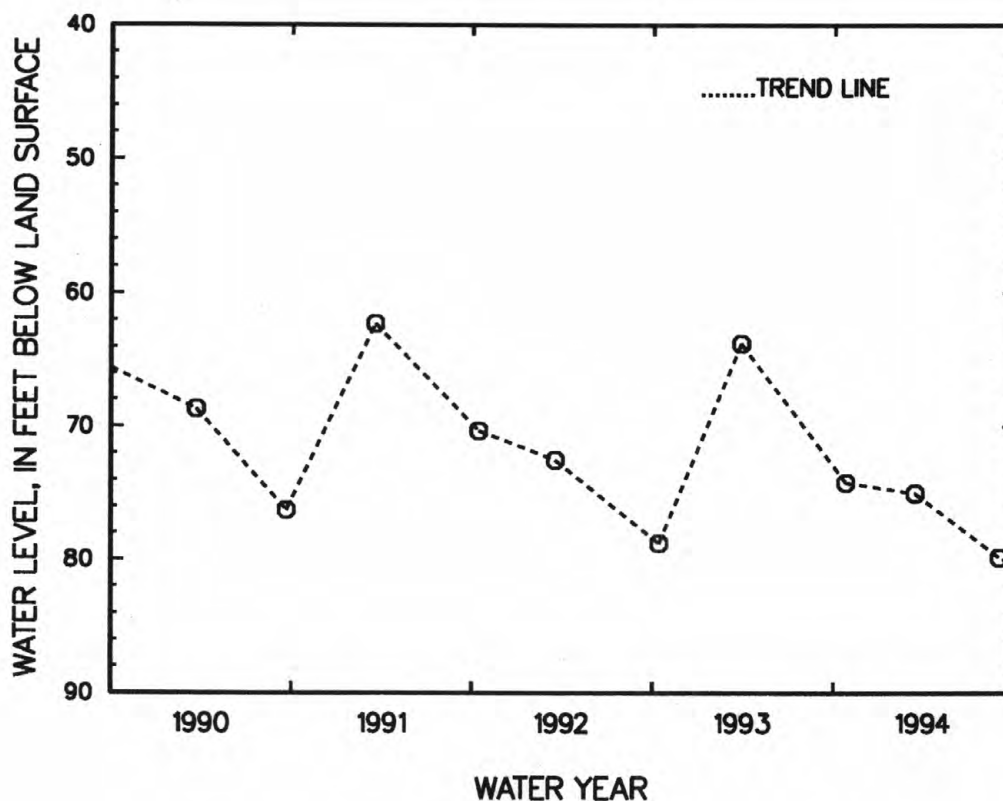
PERIOD OF RECORD.--December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.37 ft below land-surface datum, Dec. 10, 1971; lowest measured, 79.86 ft below land-surface datum, Aug. 31, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	74.20	MAR 15	75.01	AUG 31	79.86

WATER YEAR 1994      HIGHEST 74.20 OCT 26, 1993      LOWEST 79.86 AUG 31, 1994



## GROUND-WATER LEVELS

407

## WESTMORELAND COUNTY

380538076490801. Local number, 56N 1 SOW 016.

LOCATION.--Lat 38°05'38", long 76°49'08", Hydrologic Unit 02080104, at Washington and Lee School, 0.5 mi east of Montross. Owner: Westmoreland County Public Schools.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in. to 189 ft, diameter 2 in. from 189 to 641 ft, depth 641 ft, screened 608 to 628 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 31, 1979, to Oct. 2, 1985, occasional measurement with chalked tape. Prior to Mar. 31, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 149 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

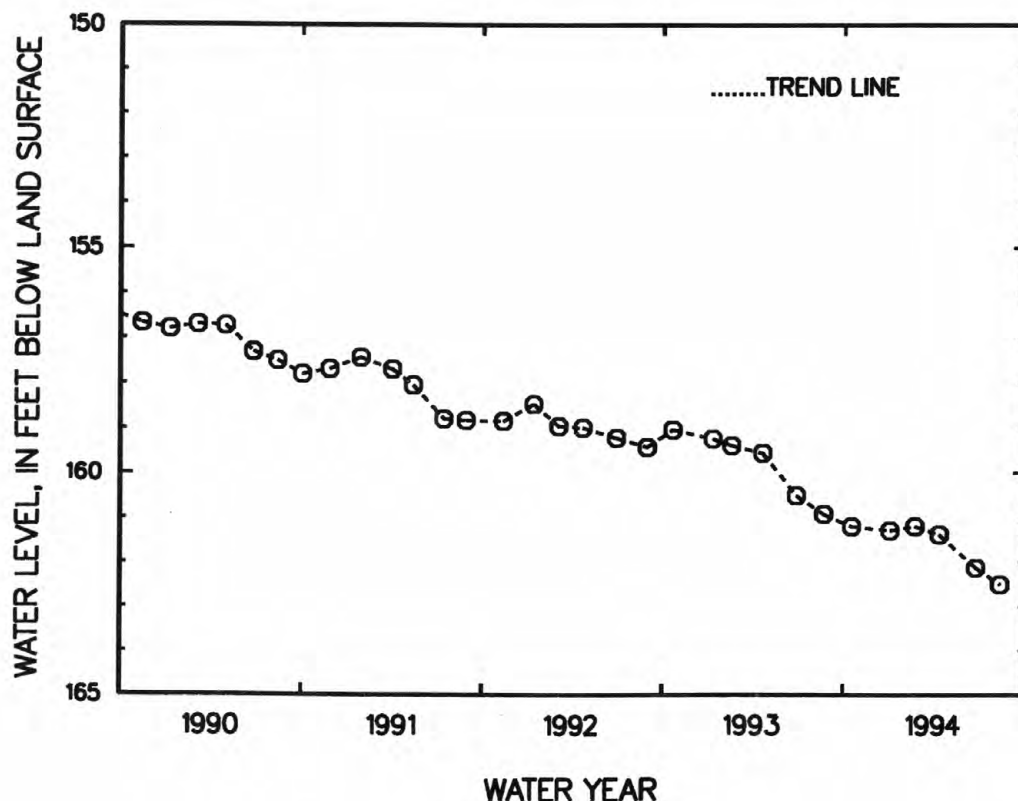
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 133.47 ft below land-surface datum, Aug. 28, 1967; lowest measured, 162.51 ft below land-surface datum, Aug. 11, 1994.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	161.20	JAN 03	161.29	FEB 22	161.20	APR 12	161.38	JUN 24	162.13	AUG 11	162.51
WATER YEAR 1994		HIGHEST	161.20	OCT 18, 1993, FEB 22, 1994		LOWEST	162.51	AUG 11, 1994			



## GROUND-WATER LEVELS

## YORK COUNTY

371916076375901. Local number, 57G 2.

LOCATION.--Lat 37°19'16", long 76°37'59", Hydrologic Unit 02080107, at Building 3101 on Camp Peary Naval Reservation, 3.3 mi northeast of Williamsburg. Owner: U.S. Department of the Navy.

AQUIFER.--Sand and gravel of undifferentiated Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 352 ft, diameter 8 in. from 352 to 387 ft, depth 387 ft, screen depth unknown.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 15 ft above sea level, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

PERIOD OF RECORD.--January 1968 to current year.

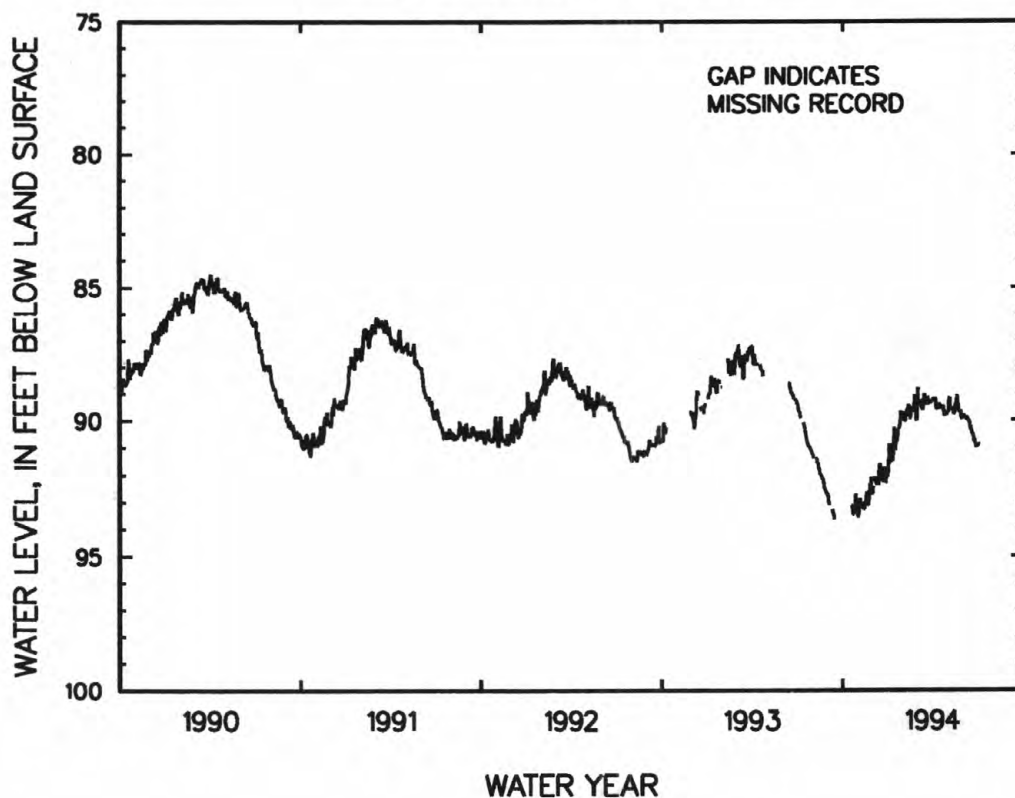
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 43.09 ft below land-surface datum, Mar. 7, 1968; lowest recorded, 93.65 ft below land-surface datum, Sept. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	93.02	---	91.48	90.04	---	89.29	89.15	89.88	---	---	---
10	---	93.07	92.39	91.48	89.63	89.26	89.53	89.53	89.97	---	---	---
15	---	93.26	91.67	90.74	89.97	89.18	89.45	89.76	90.22	---	---	---
20	93.13	92.65	91.93	90.72	89.66	89.21	89.54	89.06	90.53	---	---	---
25	93.31	92.63	91.71	90.14	89.48	89.28	89.86	89.69	90.85	---	---	---
EOM	92.94	92.65	92.06	89.82	90.03	89.34	89.68	89.89	90.95	---	---	92.06

WATER YEAR 1994      HIGHEST INSTANTANEOUS    87.63    MAR 03, 1994      LOWEST INSTANTANEOUS    93.58    NOV 02, 1993

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

409

## YORK COUNTY

371654076401601. Local number, 57G 17 SOW 068.

LOCATION.--Lat 37°16'54", long 76°40'16", Hydrologic Unit 02080107, 250 ft east of State Highway 716 at Parkway Estates, 0.5 mi east of Williamsburg. Owner: Sydnor Hydrodynamics.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 452.3 ft, screened 411 to 426 ft, 442.2 to 452.3 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Apr. 30, 1978, to Sept. 30, 1985, occasional measurement with chalked tape. Jan. 15, 1974, to Apr. 30, 1978, continuous strip-chart recorder. Prior to Jan. 15, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 60 ft above sea level, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

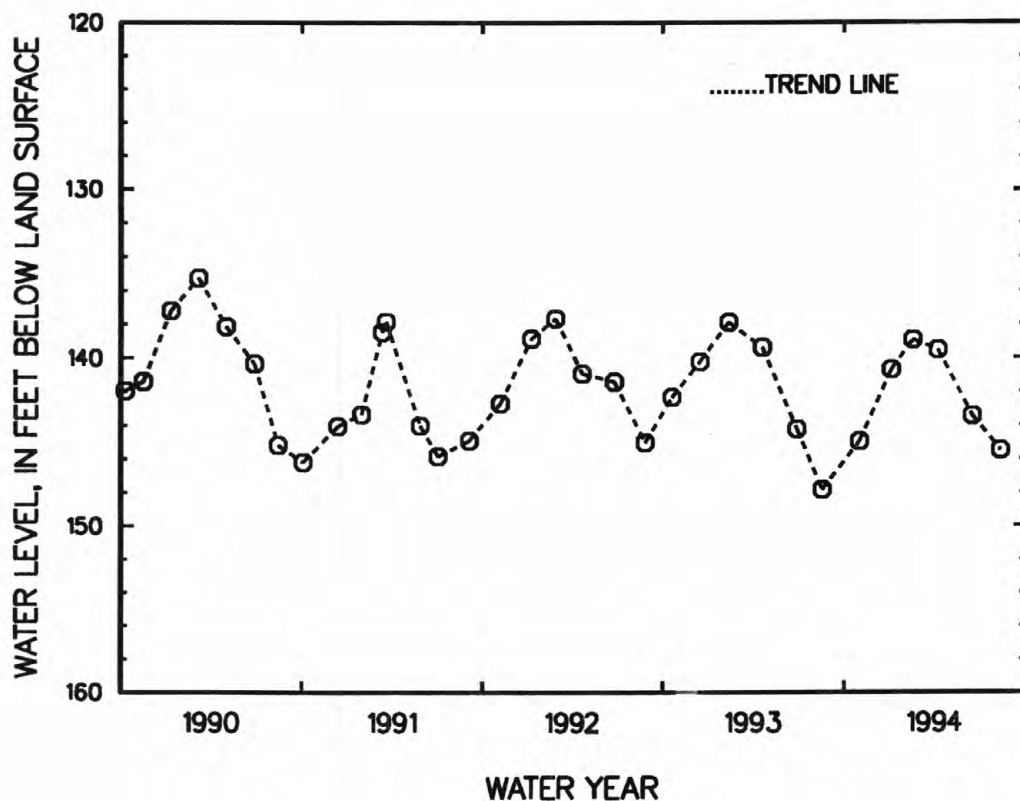
PERIOD OF RECORD.--November 1972 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.09 ft below land-surface datum, Nov. 22, 1972; lowest measured, 148.26 ft below land-surface datum, Aug. 11, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	144.95	JAN 04	140.69	FEB 16	138.93	APR 07	139.52	JUN 15	143.45	AUG 10	145.50

WATER YEAR 1994      HIGHEST    138.93    FEB 16, 1994      LOWEST    145.50    AUG 10, 1994





## GROUND-WATER LEVELS

## YORK COUNTY

371735076391501. Local number, 57G 19 SOW 069.

LOCATION.--Lat 37°17'35", long 76°39'15", Hydrologic Unit 02080107, 250 ft east of State Highway 716 at Queens Lake Subdivision, 1.6 mi east of Williamsburg. Owner: Sydnor Hydrodynamics.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 515 ft, screened 420 to 430 ft, 445 to 460 ft, 505 to 515 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Apr. 30, 1979, to Sept. 30, 1985, occasional measurement with chalked tape. July 31, 1974, to Apr. 30, 1979, continuous strip-chart recorder. Prior to July 31, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 64 ft above sea level, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum prior to Aug. 14, 1990; 2.05 ft thereafter.

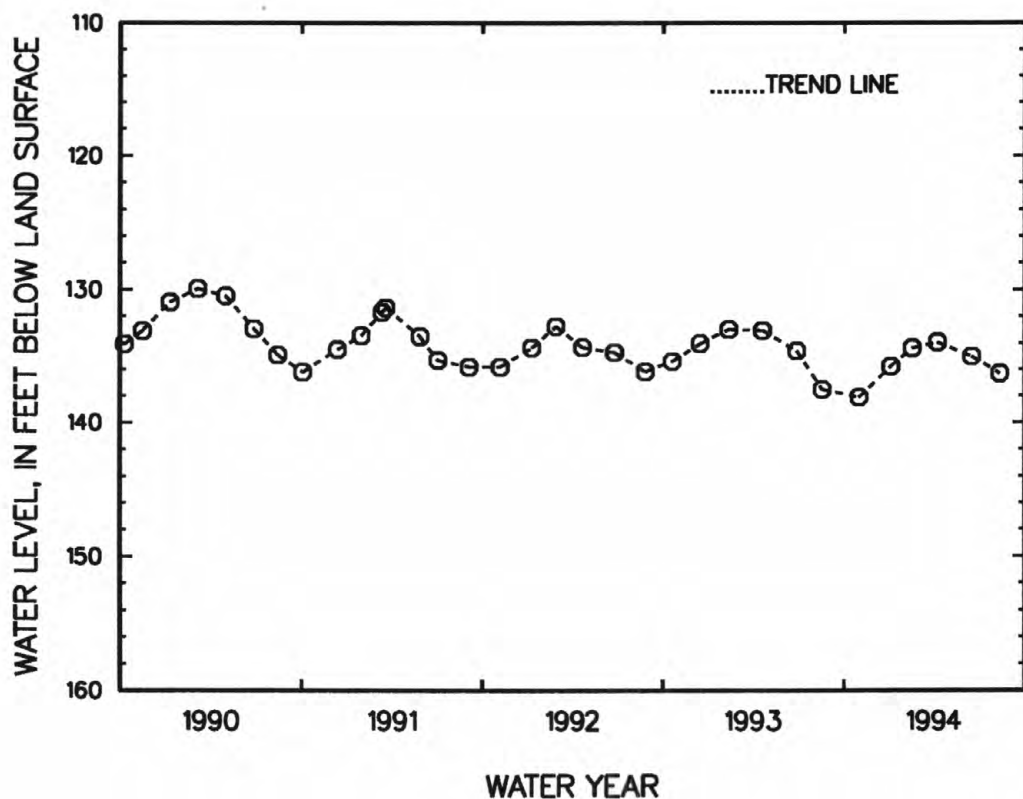
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--November 1972 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.95 ft below land-surface datum, Nov. 29, 1972; lowest measured, 138.08 ft below land-surface datum, Nov. 1, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	138.08	JAN 04	135.75	FEB 16	134.38	APR 07	133.95	JUN 15	135.02	AUG 10	136.31
WATER YEAR 1994      HIGHEST    133.95    APR 07, 1994      LOWEST    138.08    NOV 01, 1993											



## GROUND-WATER LEVELS

411

## YORK COUNTY

371045076310702. Local number, 58F 62 SOW 187A.

LOCATION.--Lat 37°10'45", long 76°31'07", Hydrologic Unit 02080206, 300 ft north of State Highway 105, 1.8 mi east of intersection of State Highways 105 and 143, and 3.1 mi southeast of Lee Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Eastover-Calvert confining unit of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 140 ft, screened 120 to 140 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

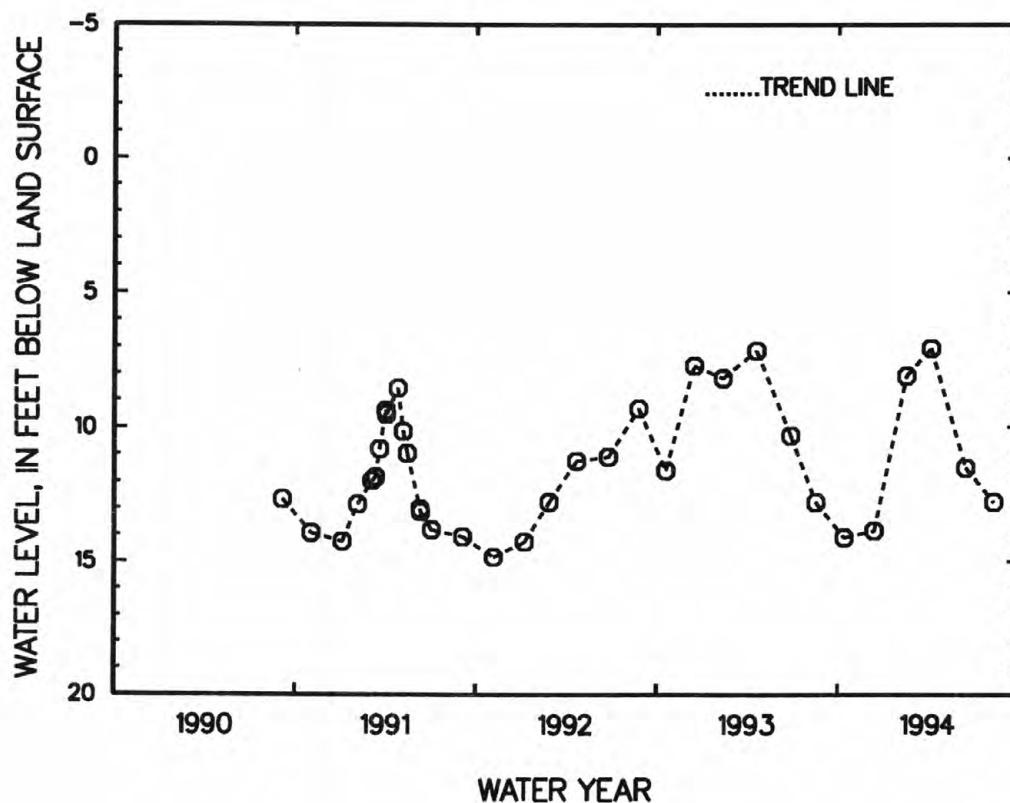
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.08 ft below land-surface datum, Apr. 6, 1994; lowest measured, 14.83 ft below land-surface datum, Nov. 6, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	14.10	DEC 13	13.85	FEB 16	8.10	APR 06	7.08	JUN 15	11.52	AUG 10	12.79
WATER YEAR 1994      HIGHEST    7.08    APR 06, 1994      LOWEST    14.10    OCT 14, 1993											



## GROUND-WATER LEVELS

## YORK COUNTY

371045076310703. Local number, 58F 63 SOW 187B.

LOCATION.--Lat 37°10'45", long 76°31'07", Hydrologic Unit 02080206, 300 ft north of State Highway 105, 1.8 mi east of intersection of State Highways 105 and 143, and 3.1 mi southeast of Lee Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 28 ft, screened 18 to 28 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

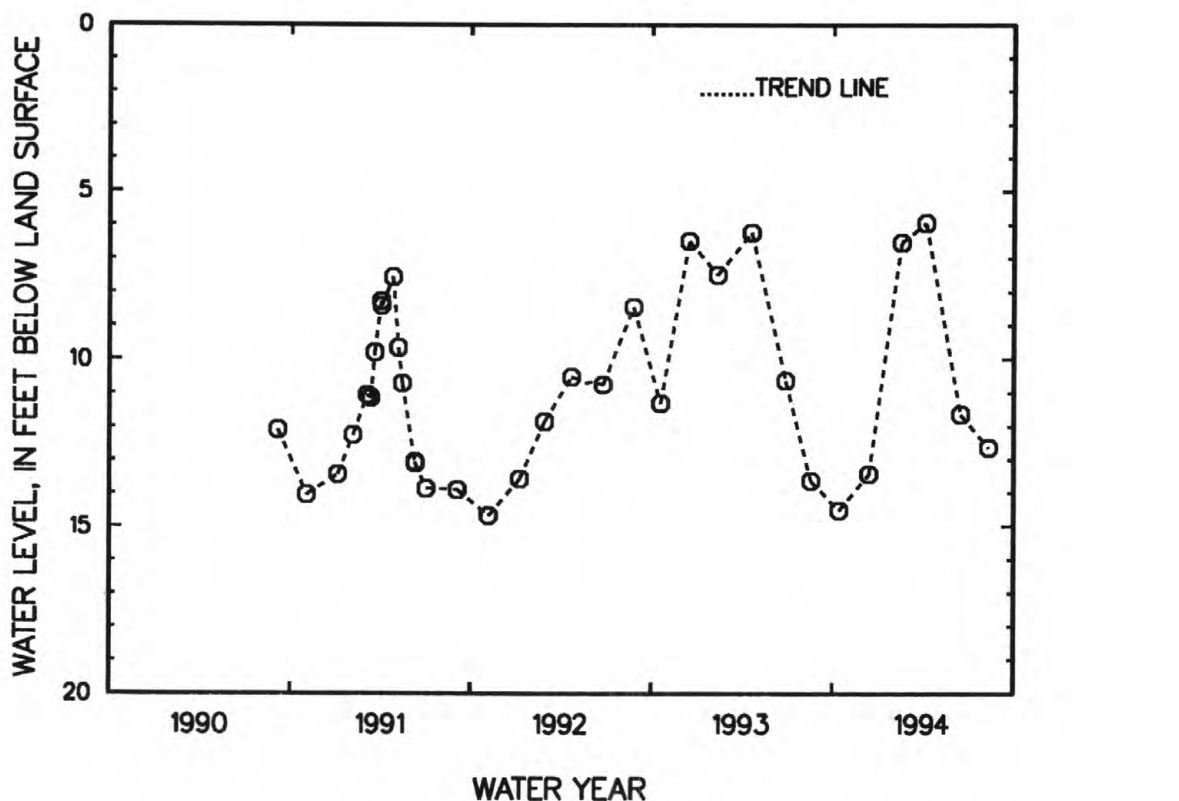
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.94 ft below land-surface datum, Apr. 6, 1994; lowest measured, 14.68 ft below land-surface datum, Nov. 6, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	14.51	DEC 13	13.42	FEB 16	6.52	APR 06	5.94	JUN 15	11.64	AUG 10	12.63
WATER YEAR 1994		HIGHEST	5.94	APR 06, 1994	LOWEST	14.51	OCT 14, 1993				



## YORK COUNTY

371250076300502. Local number, 58F 65 SOW 191A.

LOCATION.--Lat 37°12'05", long 76°30'05", Hydrologic Unit 02080107, 300 ft east of State Highway 704, 1.2 mi north of intersection of State Highway 704 and U.S. Highway 17, and 1.5 mi south of Yorktown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--York County shallow aquifer system (undivided) of Miocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 110 ft, screened 90 to 110 ft.

INSTRUMENTATION.--Continuous strip-chart recorder since May 7, 1991. Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point:

Top of casing, 1.8 ft above land-surface datum prior to May 7, 1991; 1.70 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction.

PERIOD OF RECORD.--November 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.17 ft below land-surface datum, June 4, 5, 1993; lowest recorded, 38.38 ft below land-surface datum, Mar. 13, 1992.

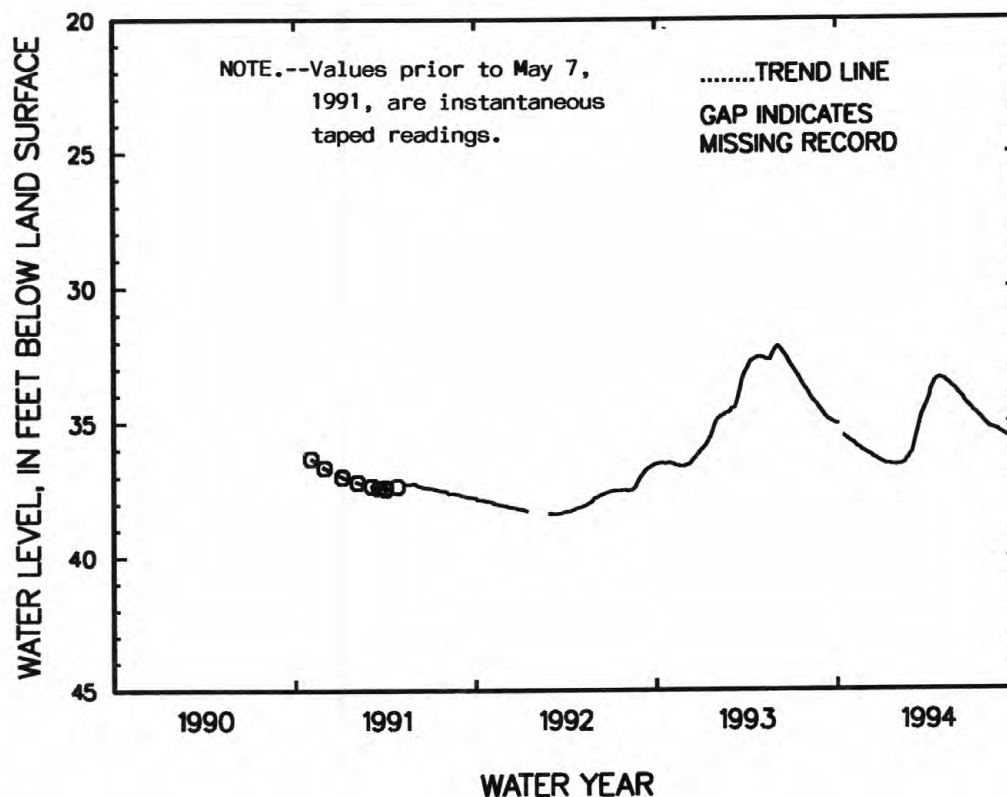
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
LOWEST DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.06	35.78	36.18	36.53	36.57	35.78	34.01	33.43	34.01	34.66	35.22	35.52
10	---	35.90	36.23	36.55	36.54	35.42	33.69	33.53	34.11	34.73	35.25	35.58
15	35.50	35.94	36.31	36.55	36.50	35.05	33.48	33.58	34.28	34.84	35.28	35.65
20	35.57	36.02	36.35	36.58	36.36	34.72	33.41	33.70	34.37	34.94	35.31	35.74
25	35.65	36.08	36.42	36.58	36.19	34.52	33.37	33.76	34.46	35.04	35.40	35.77
EOM	35.73	36.13	36.48	36.57	36.15	34.29	33.41	33.91	34.57	35.17	35.46	35.83

WATER YEAR 1994      HIGHEST INSTANTANEOUS      33.37      APR 25, 26, 1994

LOWEST INSTANTANEOUS      36.59      JAN 27, 1994

## DAILY LOW-WATER LEVELS



## GROUND-WATER LEVELS

## YORK COUNTY

371601076343501. Local number, 58G 2.

LOCATION.--Lat 37°16'01", long 76°34'35", Hydrologic Unit 02080107, 3.2 mi northwest of the intersection of State Highway 238 and Main Road at Gate 1 on the Yorktown Naval Weapons Station in Lackey. Owner: U.S. Department of the Navy.

AQUIFER.--Aquia aquifer (?) of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 18 in., depth 445 ft, screen depth unknown.

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

DATUM.--Elevation of land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown.

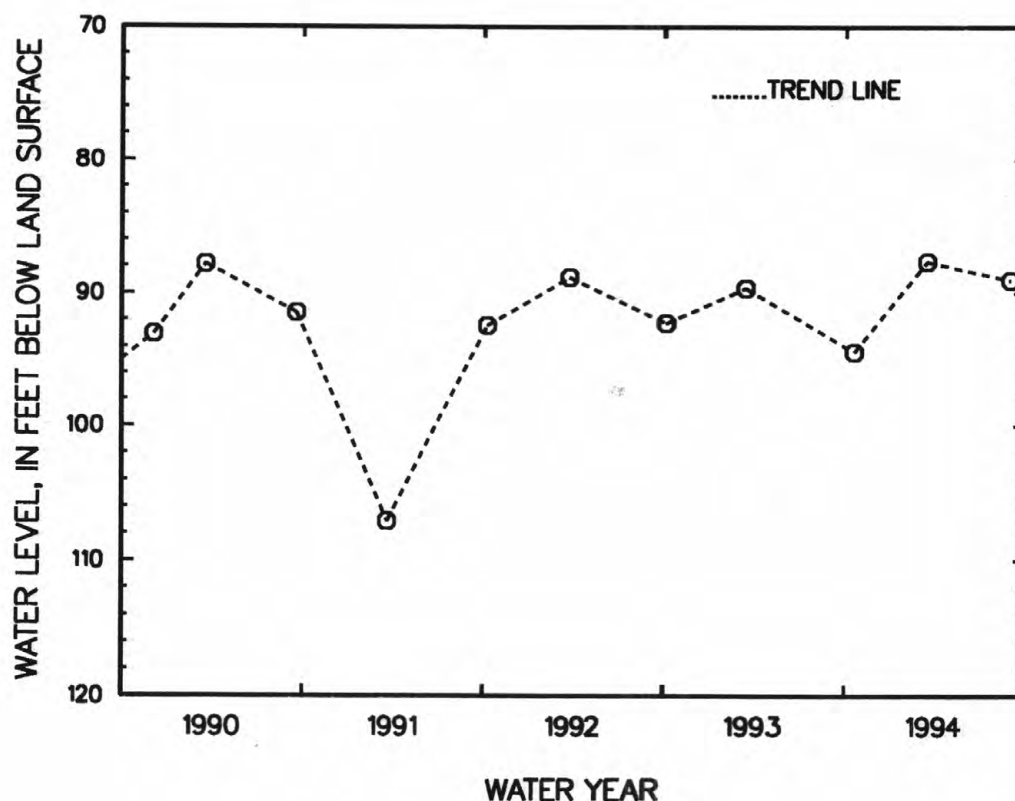
PERIOD OF RECORD.--August 1918, December 1971, December 1983 to July 1985, February 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.41 ft below land-surface datum, Dec. 7, 1971; highest reported, 2 ft above land-surface datum, Aug. 1, 1918; lowest measured, 107.08 ft below land-surface datum, Mar. 20, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	94.41	MAR 16	87.66	AUG 30	89.04

WATER YEAR 1994      HIGHEST 87.66 MAR 16, 1994      LOWEST 94.41 OCT 20, 1993



## GROUND-WATER LEVELS

415

## YORK COUNTY

371535076373501. Local number, 59F 1 SOW 027.

LOCATION.--Lat 37°13'04", long 76°29'19", Hydrologic Unit 02080107, at U.S. Naval Supply Center, 1.6 mi southeast of Yorktown. Owner: U.S. Naval Supply Center.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 446 ft, screened 421 to 446 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 10, 1971, to Oct. 10, 1985, occasional measurement with chalked tape. Apr. 10, 1970, to Sept. 10, 1971, continuous strip-chart recorder. Prior to Apr. 10, 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above sea level, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

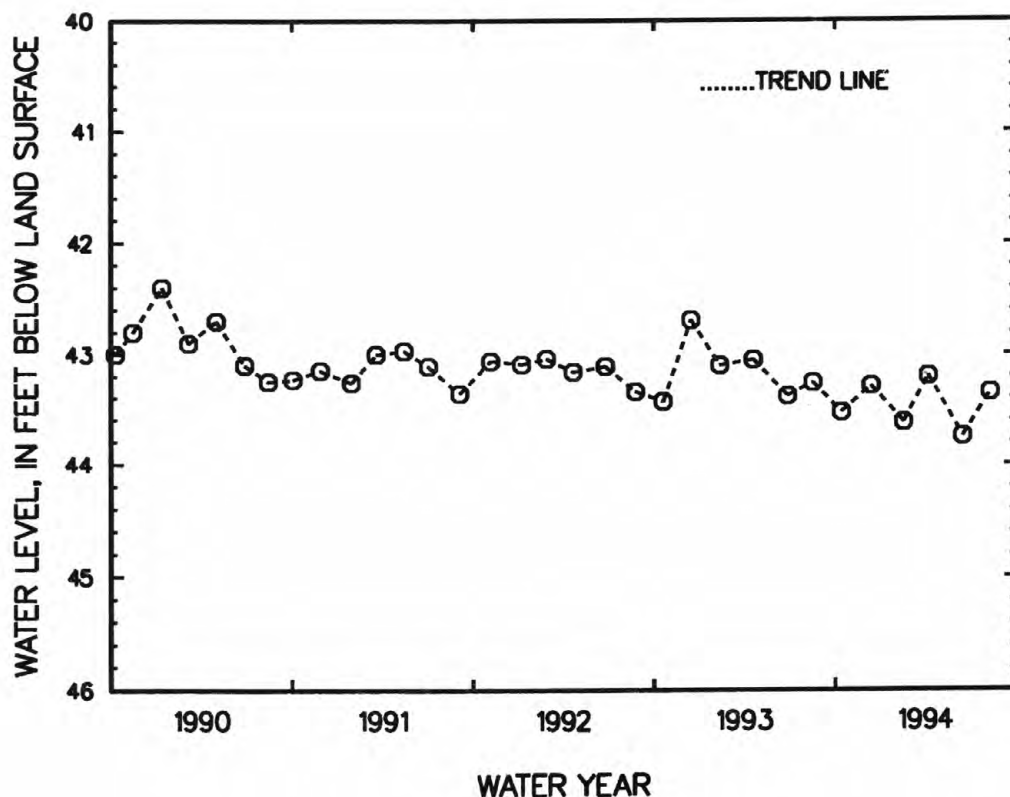
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.00 ft below land-surface datum, Oct. 27, 1969; lowest measured, 44.69 ft below land-surface datum, July 9, 1981.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	43.53	DEC 13	43.29	FEB 16	43.62	APR 07	43.20	JUN 15	43.75	AUG 09	43.35
WATER YEAR 1994		HIGHEST	43.20	APR 07, 1994		LOWEST	43.75	JUN 15, 1994			





## GROUND-WATER LEVELS

## YORK COUNTY

370841076275202. Local number, 59F 72 SOW 184A.

LOCATION.--Lat 37°08'41", long 76°27'52", Hydrologic Unit 02080108, 800 ft south of State Highway 620, 0.4 mi southwest of intersection of State Highway 620 and U.S. Highway 17, and 2.2 mi southwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 98 ft, diameter 3.5 in. from 98 to 131 ft, depth 131 ft, screened 121 to 131 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 12, 1991, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 42 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.8 ft above land-surface datum prior to Nov. 6, 1991; top of casing, 1.80 ft thereafter.

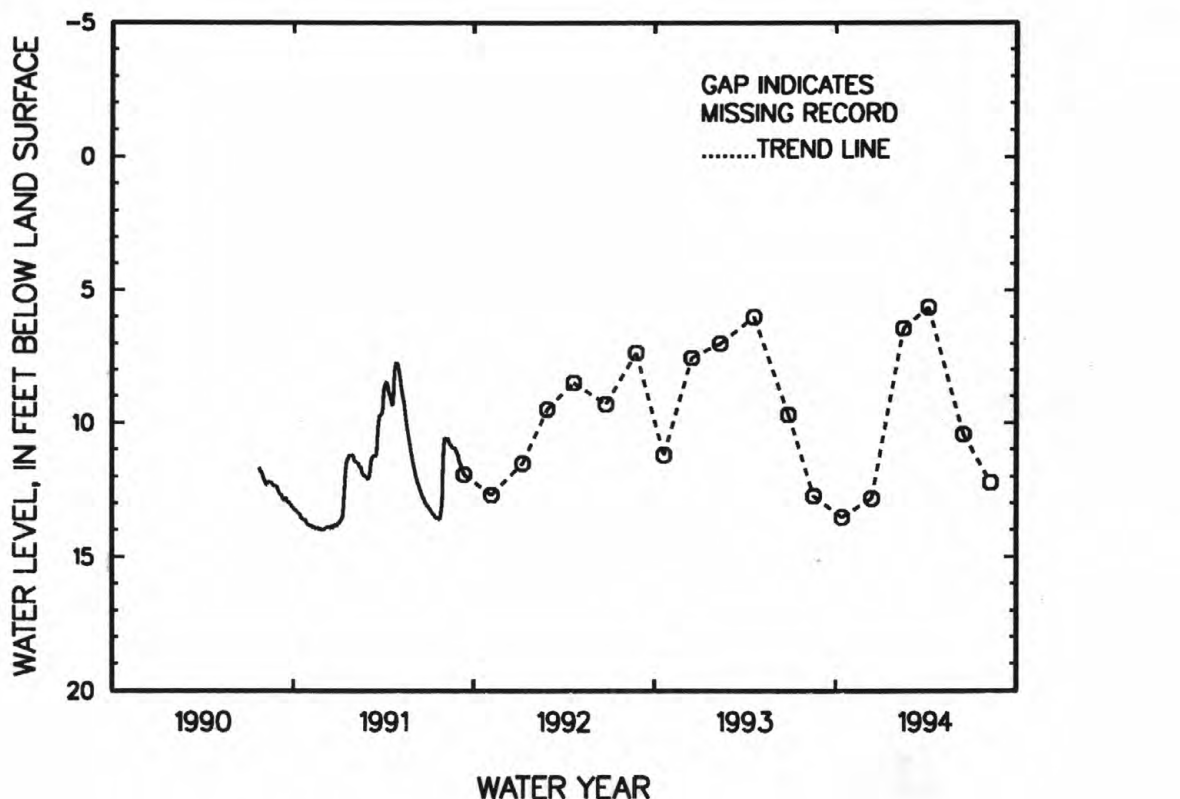
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 5.64 ft below land-surface datum, Apr. 6, 1994; lowest recorded, 13.99 ft below land-surface datum, Nov. 27, 30, Dec. 1, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	13.52	DEC 13	12.82	FEB 15	6.43	APR 06	5.64	JUN 15	10.43	AUG 09	12.23
WATER YEAR 1994		HIGHEST	5.64	APR 06, 1994	LOWEST	13.52	OCT 14, 1993				



## GROUND-WATER LEVELS

417

## YORK COUNTY

370841076275203. Local number, 59F 73 SOW 184B.

LOCATION.--Lat 37°08'41", long 76°27'52", Hydrologic Unit 02080108, 800 ft south of State Highway 620, 0.4 mi southwest of intersection of State Highway 620 and U.S. Highway 17, and 2.2 mi southwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 39 ft, diameter 2.0 in. from 39 to 60 ft, depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 42 ft above sea level, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

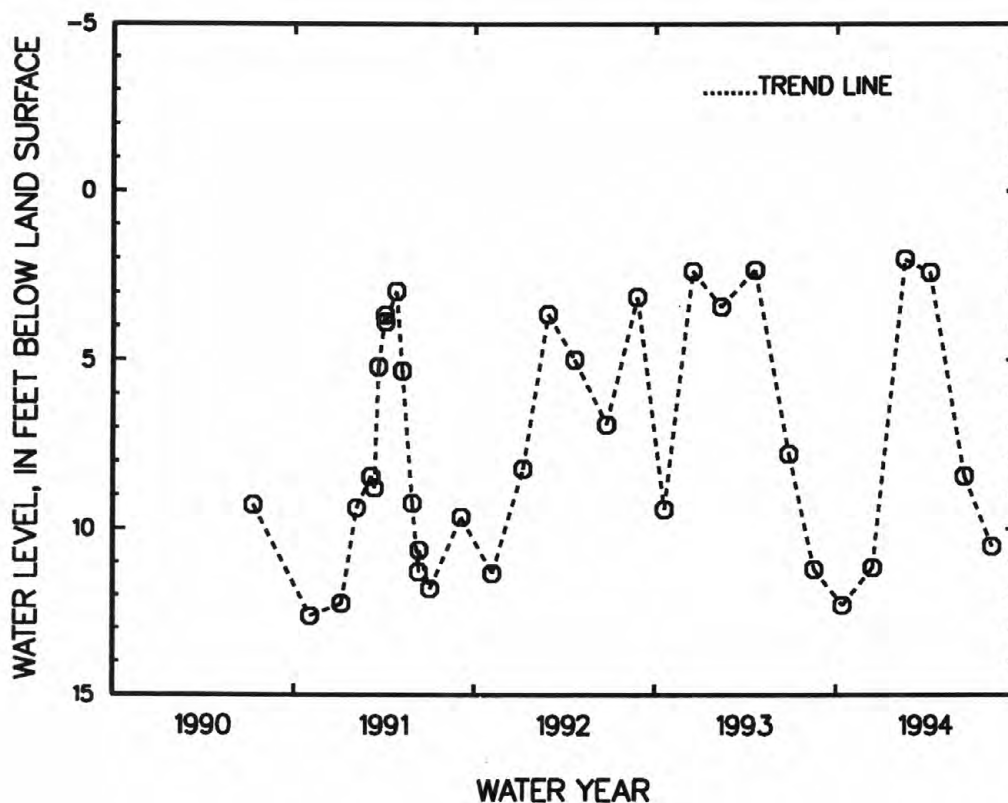
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.03 ft below land-surface datum, Feb. 15, 1994; lowest measured, 12.62 ft below land-surface datum, Nov. 2, 1990.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	12.30	DEC 13	11.16	FEB 15	2.03	APR 06	2.42	JUN 15	8.43	AUG 09	10.52
WATER YEAR 1994		HIGHEST	2.03	FEB 15, 1994	LOWEST	12.30	OCT 14, 1993				



## GROUND-WATER LEVELS

## YORK COUNTY

370841076275204. Local number, 59F 74 SOW 184C.

LOCATION.--Lat 37°08'41", long 76°27'52", Hydrologic Unit 02080108, 800 ft south of State Highway 620, 0.4 mi southwest of intersection of State Highway 620 and U.S. Highway 17, and 2.2 mi southwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 12, 1991, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 42 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.8 ft above land-surface datum prior to Nov. 6, 1991; top of casing, 1.80 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

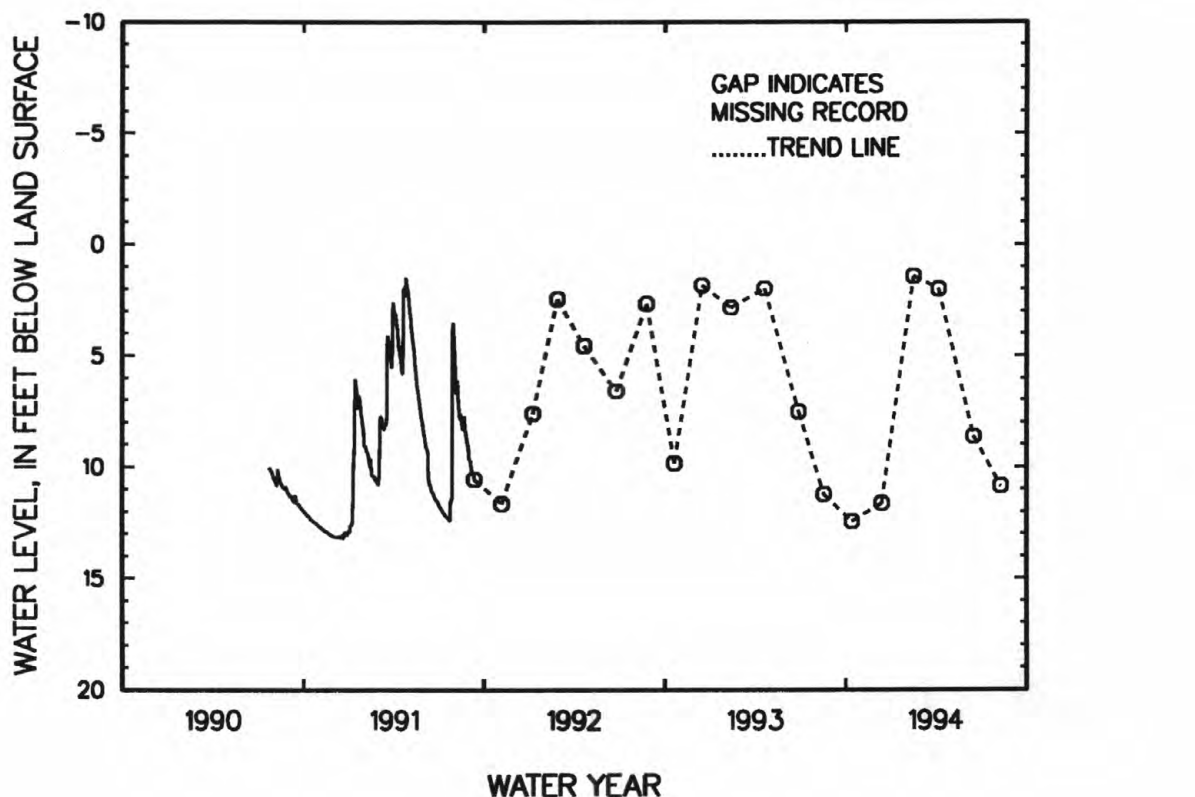
PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.32 ft below land-surface datum, Apr. 25, 1991; lowest recorded, 13.20 ft below land-surface datum, Dec. 14, 15, 20, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	12.44	DEC 13	11.62	FEB 15	1.42	APR 06	2.00	JUN 15	8.64	AUG 09	10.85

WATER YEAR 1994      HIGHEST    1.42    FEB 15, 1994      LOWEST    12.44    OCT 14, 1993



## GROUND-WATER LEVELS

419

## YORK COUNTY

370934076251402. Local number, 59F 76 SOW 185A.

LOCATION.--Lat 37°09'34", long 76°25'14", Hydrologic Unit 02080108, 300 ft west of Kings Grant Road, 0.2 mi south of intersection of Kings Grant Road and State Highway 621, and 1.2 mi southeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 120 ft, screened 100 to 120 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 3, 1991, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 9.79 ft above sea level. Measuring point: Top of recorder shelf, 3.0 ft above land-surface datum prior to Nov. 6, 1991; top of casing, 1.80 ft thereafter. Readings from July 1990 to August 1991 should be 3.0 ft lower than previously published.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

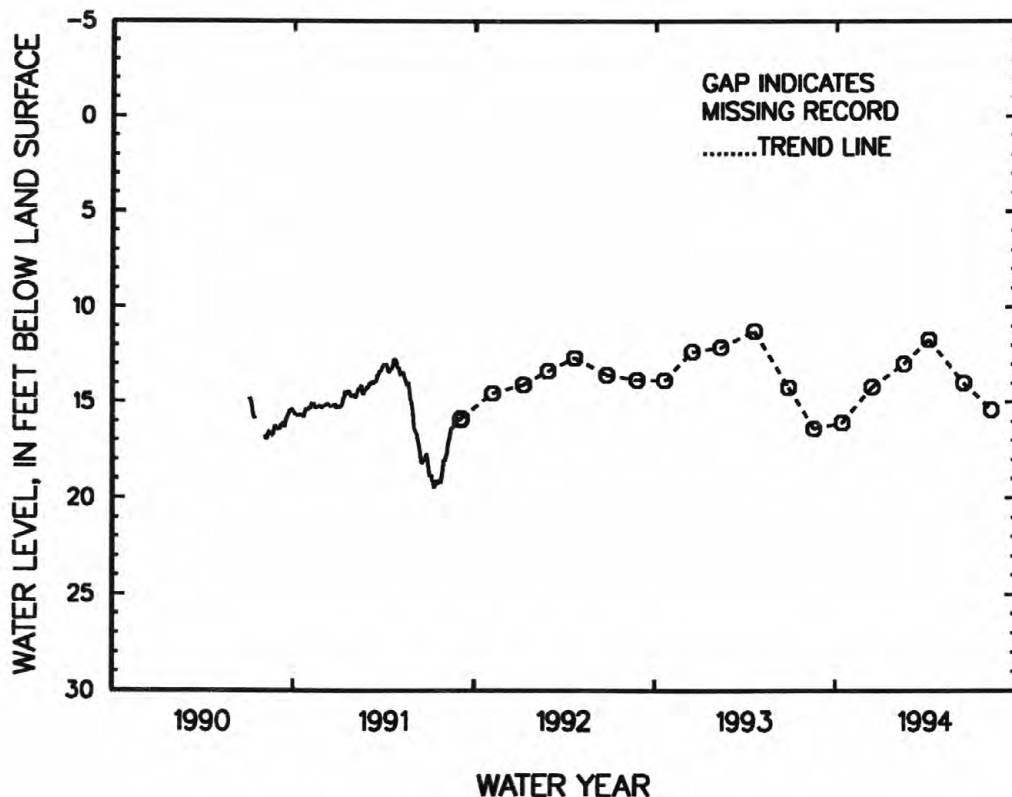
PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.26 ft below land-surface datum, Apr. 20, 1993; lowest recorded, 22.45 ft below land-surface datum, July 12, 1991.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	16.07	DEC 13	14.20	FEB 15	12.98	APR 06	11.71	JUN 15	13.99	AUG 09	15.41

WATER YEAR 1994      HIGHEST    11.71    APR 06, 1994      LOWEST    16.07    OCT 14, 1993



## GROUND-WATER LEVELS

## YORK COUNTY

370934076251403. Local number, 59F 77 SOW 185B.

LOCATION.--Lat 37°09'34", long 76°25'14", Hydrologic Unit 02080108, 300 ft west of Kings Grant Road, 0.2 mi south of intersection of Kings Grant Road and State Highway 621, and 1.2 mi southeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2.0 in., depth 120 ft, screened 110 to 120 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10.05 ft above sea level. Measuring point: Top of casing, 1.3 ft above land-surface datum.

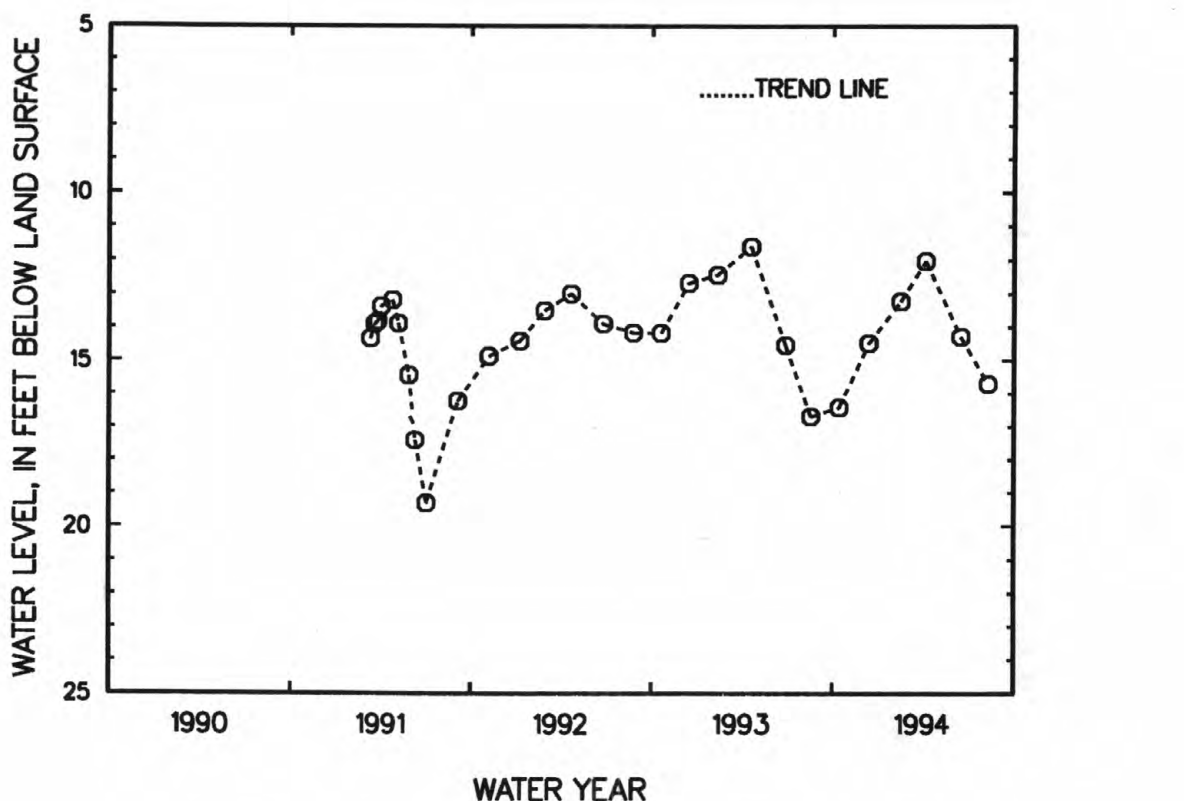
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--January 1991 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.59 ft below land-surface datum, Apr. 20, 1993; lowest measured, 19.31 ft below land-surface datum, July 3, 1991.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	16.41	DEC 13	14.48	FEB 15	13.22	APR 06	12.02	JUN 15	14.28	AUG 09	15.70
WATER YEAR 1994		HIGHEST	12.02	APR 06, 1994	LOWEST	16.41	OCT 14, 1993				



## GROUND-WATER LEVELS

421

## YORK COUNTY

370934076251404. Local number, 59F 78 SOW 185C.

LOCATION.--Lat 37°09'34", 76°25'14", Hydrologic Unit 02080108, 300 ft west of Kings Grant Road, 0.2 mi south of intersection of Kings Grant Road and State Highway 621, and 1.2 mi southeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 50 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 9.88 ft above sea level. Measuring point: Top of casing, 1.8 ft above land-surface datum.

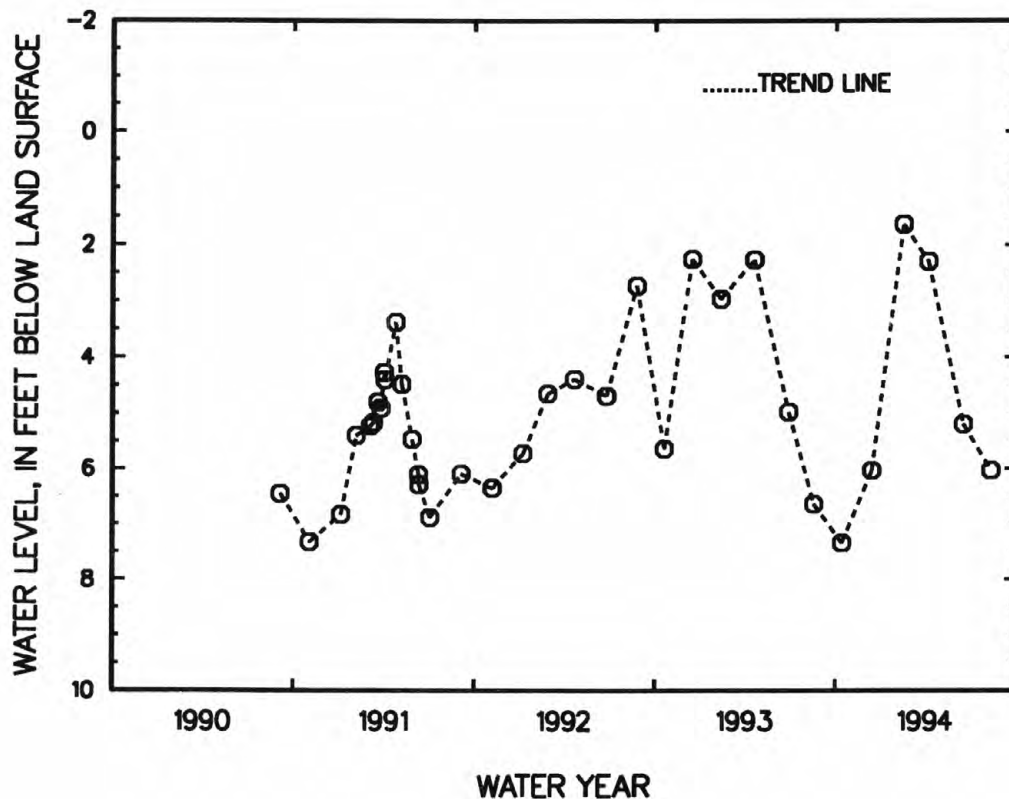
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.64 ft below land-surface datum, Feb. 15, 1994; lowest measured, 7.34 ft below land-surface datum, Oct. 14, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	7.34	DEC 13	6.04	FEB 15	1.64	APR 06	2.30	JUN 15	5.20	AUG 09	6.04
WATER YEAR 1994      HIGHEST    1.64    FEB 15, 1994      LOWEST    7.34    OCT 14, 1993											





## GROUND-WATER LEVELS

## YORK COUNTY

370934076251405. Local number, 59F 79 SOW 185D.

LOCATION.--Lat 37°09'34", long 76°25'14", Hydrologic Unit 02080108, 300 ft west of Kings Grant Road, 0.2 mi south of intersection of Kings Grant Road and State Highway 621, and 1.2 mi southeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 15 ft, screened 5 to 15 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 3, 1991, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 9.70 ft above sea level. Measuring point: Top of recorder shelf, 3.2 ft above land-surface datum prior to Nov. 6, 1991; top of casing, 1.80 ft thereafter. Readings from July 1990 to August 1991 should be 3.2 ft lower than previously published.

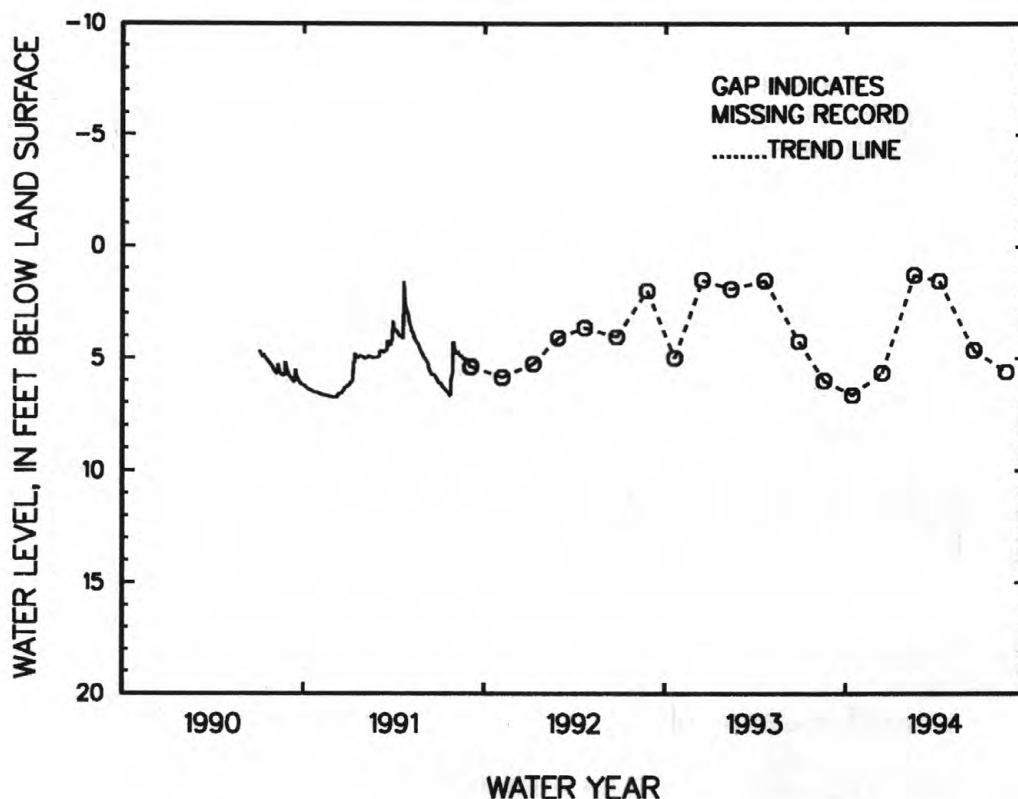
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.27 ft below land-surface datum, Feb. 15, 1994; lowest recorded, 9.94 ft below land-surface datum, Dec. 6-8, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	6.64	DEC 13	5.64	FEB 15	1.27	APR 06	1.54	JUN 15	4.62	AUG 19	5.60
WATER YEAR 1994      HIGHEST    1.27    FEB 15, 1994      LOWEST    6.64    OCT 14, 1993											



## YORK COUNTY

370958076291502. Local number, 59F 81 SOW 186A.

LOCATION.--Lat 37°09'58", long 76°29'15", Hydrologic Unit 02080108, 100 ft south of State Highway 173, 0.8 mi southwest of intersection of U.S. Highway 17 and State Highway 173, and 2.8 mi west of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 132 ft, screened 112 to 132 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 50.77 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

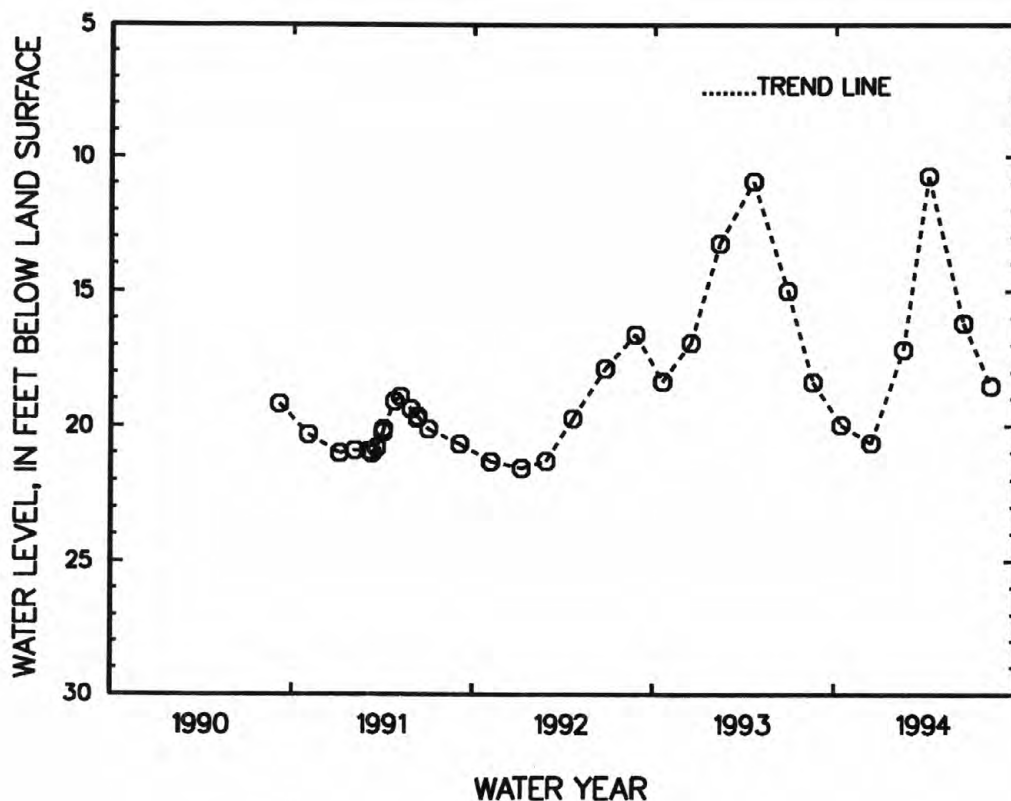
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.73 ft below land-surface datum, Apr. 6, 1994; lowest measured, 21.55 ft below land-surface datum, Jan. 8, 1992.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	19.96	DEC 13	20.64	FEB 15	17.18	APR 06	10.73	JUN 15	16.19	AUG 09	18.52
WATER YEAR 1994		HIGHEST	10.73	APR 06, 1994	LOWEST	20.64	DEC 13, 1993				



## GROUND-WATER LEVELS

## YORK COUNTY

371207076265502. Local number, 59F 86 SOW 188A.

LOCATION.--Lat 37°12'07", long 76°26'55", Hydrologic Unit 02080107, 200 ft north of State Highway 718, 0.3 mi east of intersection of State Highways 173 and 718, and 2.3 mi northwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--York County shallow aquifer system (undivided) of Miocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 99 ft, screened 79 to 99 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 7 ft above sea level, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

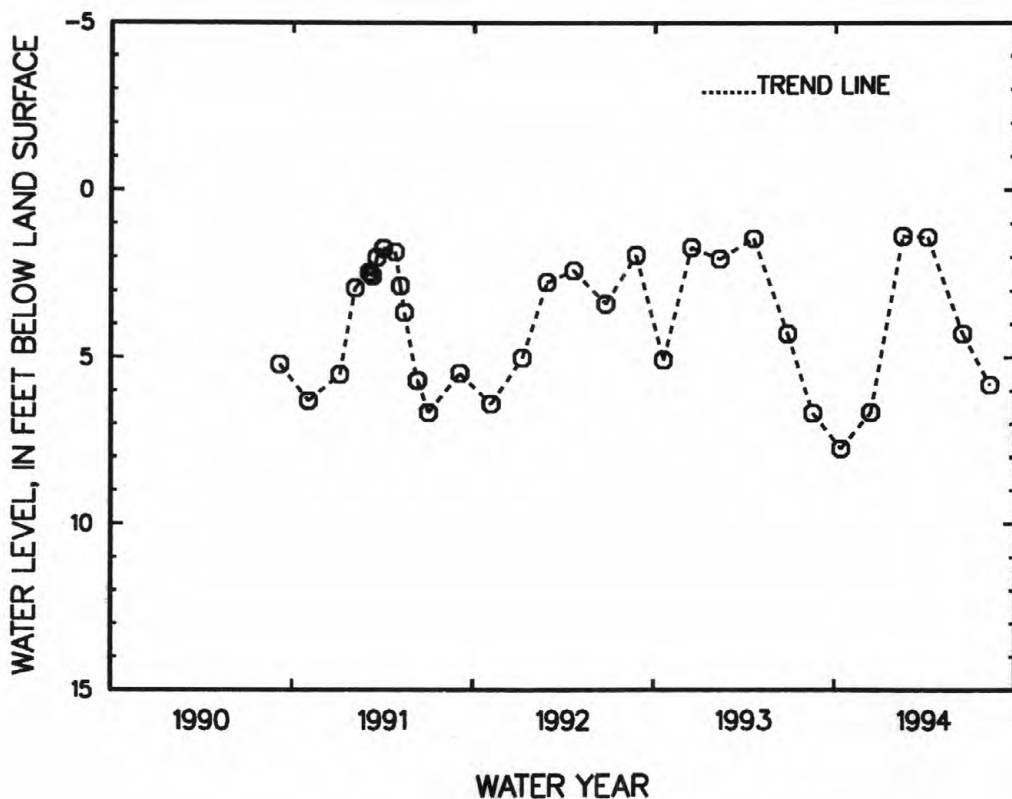
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.37 ft below land-surface datum, Feb. 15, 1994; lowest measured, 7.73 ft below land-surface datum, Oct. 14, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	7.73	DEC 13	6.64	FEB 15	1.37	APR 06	1.40	JUN 15	4.28	AUG 09	5.81
WATER YEAR 1994		HIGHEST	1.37	FEB 15, 1994	LOWEST	7.73	OCT 14, 1993				



## YORK COUNTY

371207076265503. Local number, 59F 87 SOW 188B.

LOCATION.--Lat 37°12'07", long 76°26'55", Hydrologic Unit 02080107, 200 ft north of State Highway 718, 0.3 mi east of intersection of State Highways 173 and 718, and 2.3 mi northwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--York County shallow aquifer system (undivided) of Miocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 7 ft above sea level, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

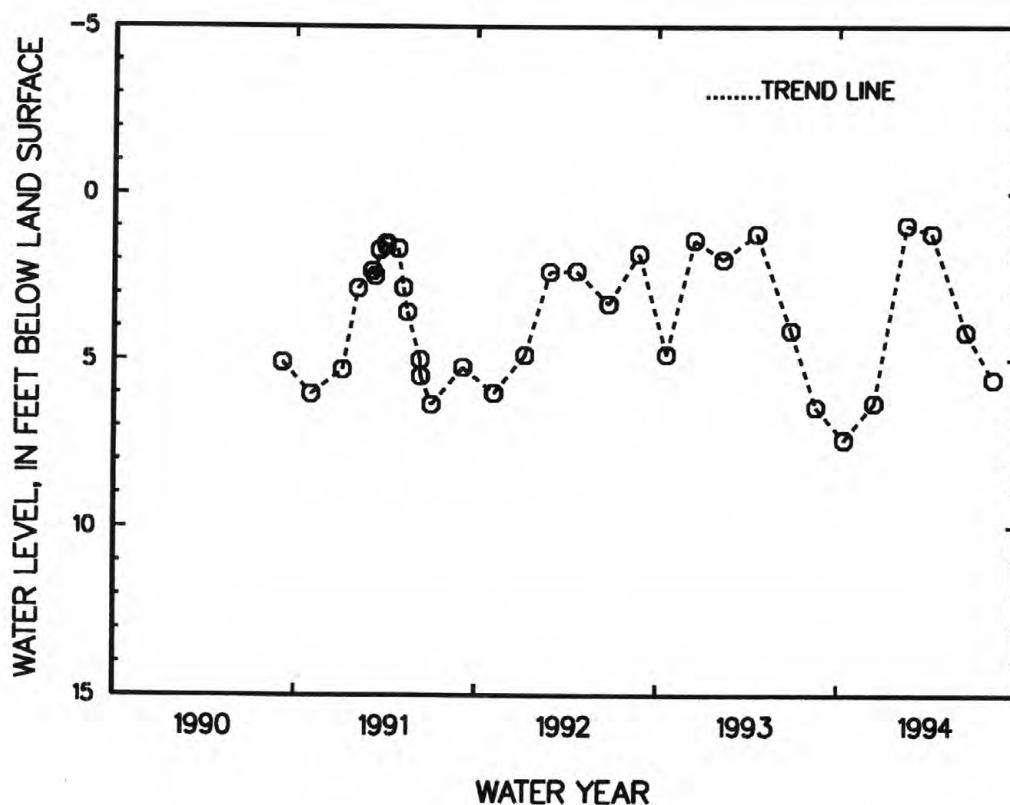
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.95 ft below land-surface datum, Feb. 15, 1994; lowest measured, 7.40 ft below land-surface datum, Oct. 14, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	7.40	DEC 13	6.30	FEB 15	0.95	APR 06	1.20	JUN 15	4.17	AUG 09	5.59
WATER YEAR 1994		HIGHEST	0.95	FEB 15, 1994	LOWEST	7.40	OCT 14, 1993				



## GROUND-WATER LEVELS

## YORK COUNTY

371053076252202. Local number, 59F 89 SOW 189A.

LOCATION.--Lat 37°10'53", long 76°25'22", Hydrologic Unit 02080108, 500 ft north of State Highway 617, 0.6 mi northeast of intersection of State Highways 620 and 617, and 1.3 mi northeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 97 ft, screened 77 to 97 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 4.63 ft above sea level. Measuring point: Top of casing, 1.5 ft above land-surface datum.

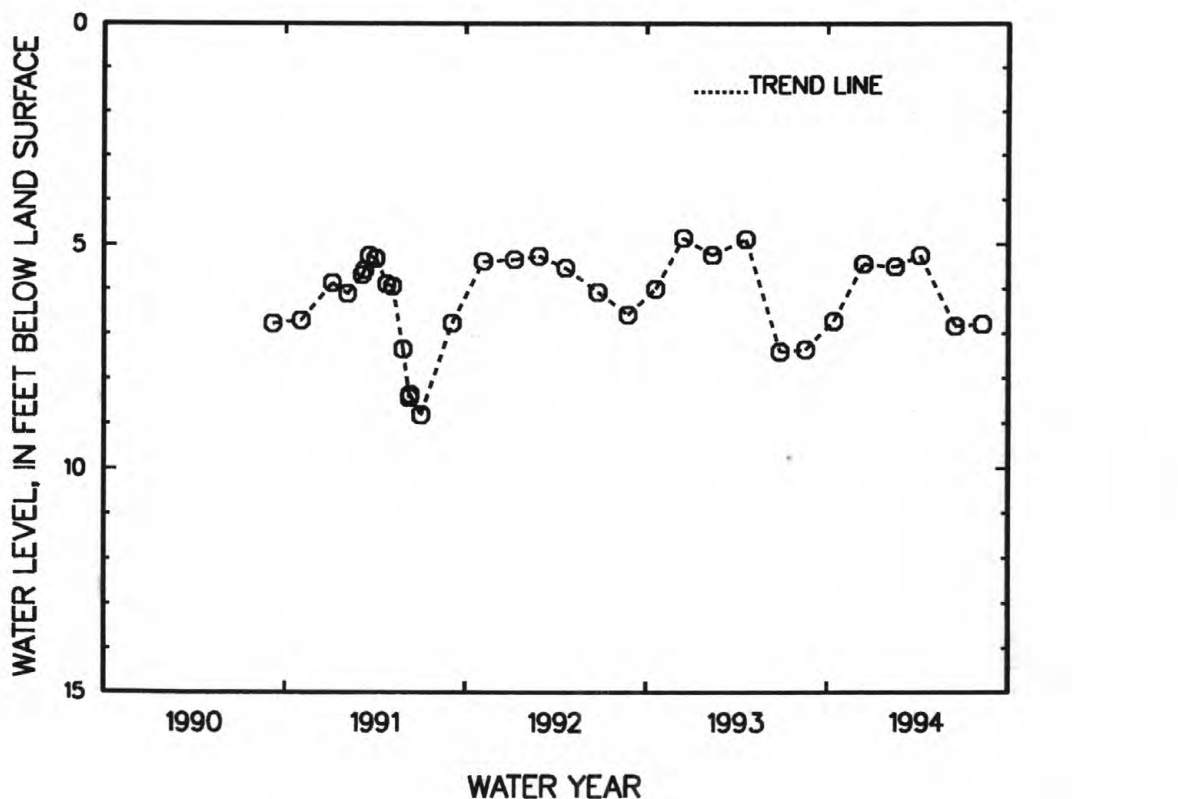
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.86 ft below land-surface datum, Dec. 15, 1992; lowest measured, 8.82 ft below land-surface datum, July 3, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	6.72	DEC 13	5.44	FEB 15	5.50	APR 06	5.25	JUN 15	6.83	AUG 09	6.79
WATER YEAR 1994		HIGHEST	5.25	APR 06, 1994		LOWEST	6.83	JUN 15, 1994			



## GROUND-WATER LEVELS

427

## YORK COUNTY

371053076252203. Local number, 59F 96 SOW 189B.

LOCATION.--Lat 37°10'53", long 76°25'22", Hydrologic Unit 02080108, 500 ft north of State Highway 617, 0.6 mi northeast of intersection of State Highways 620 and 617, and 1.3 mi northeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 15 ft, screened 5 to 15 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 4.77 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

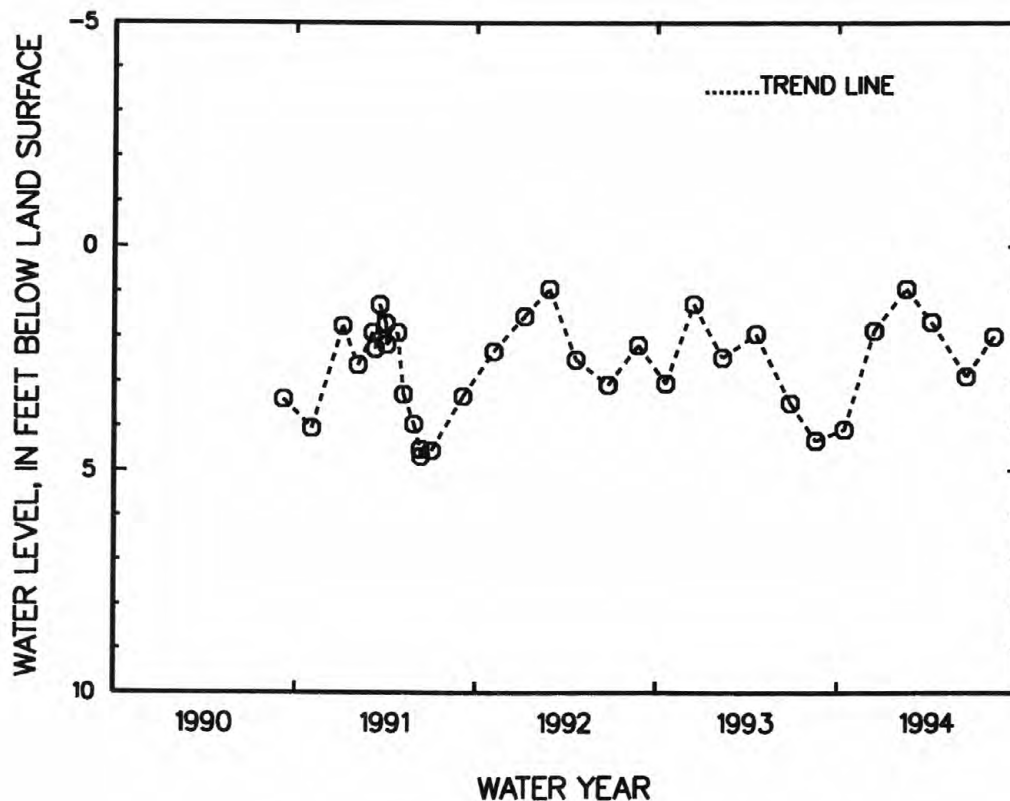
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.94 ft below land-surface datum, Feb. 27, 1992, Feb. 15, 1994; lowest measured, 4.68 ft below land-surface datum, June 11, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	4.08	DEC 13	1.87	FEB 15	0.94	APR 06	1.68	JUN 15	2.89	AUG 09	2.00
WATER YEAR 1994      HIGHEST    0.94    FEB 15, 1994      LOWEST    4.08    OCT 14, 1993											





## GROUND-WATER LEVELS

## YORK COUNTY

371314076252202. Local number, 59F 98 SOW 190A.

LOCATION.--Lat 37°13'13", long 76°25'25", Hydrologic Unit 02080107, 50 ft north of State Highway 629, 0.8 mi northeast of intersection of State Highways 173 and 629, and 1.8 mi north of Seaford. Owner: Virginia Department of Environmental Quality.

AQUIFER.--York County shallow aquifer system (undivided) of Miocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 100 ft, screened 80 to 100 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 3.35 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

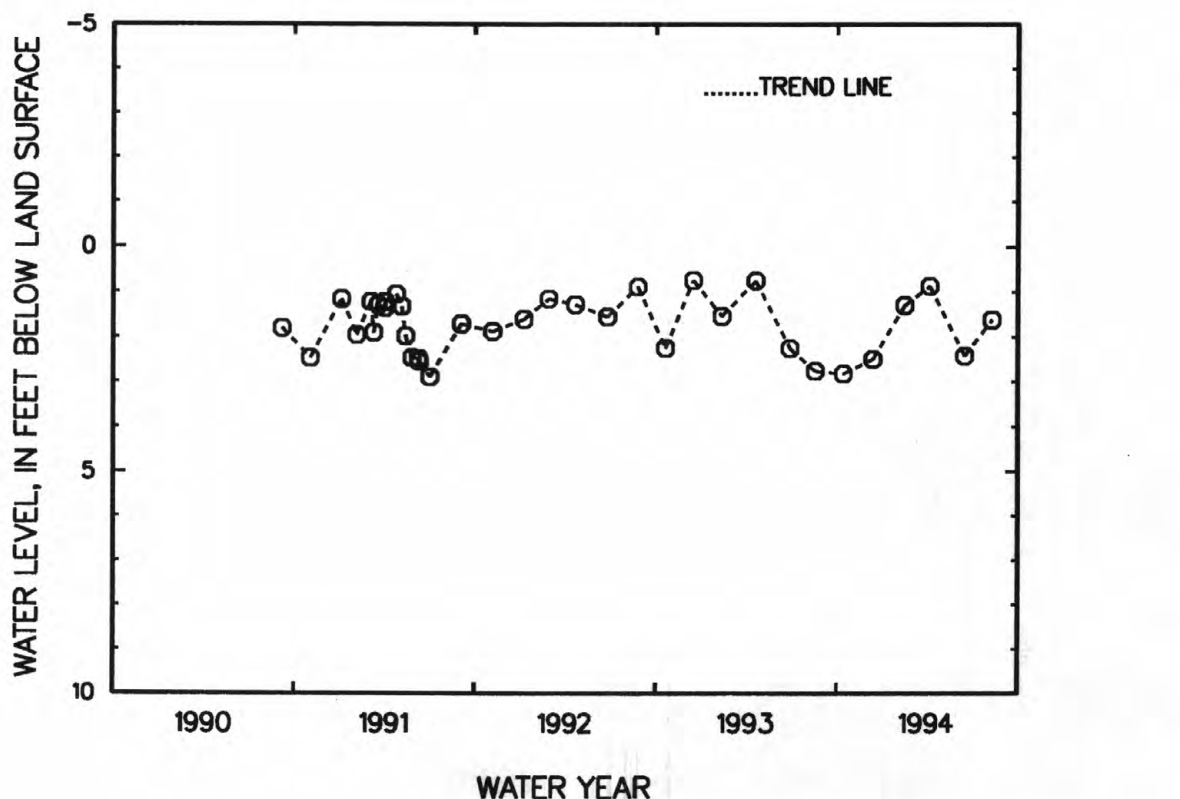
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.74 ft below land-surface datum, Dec. 15, 1992; lowest measured, 2.90 ft below land-surface datum, July 3, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	2.82	DEC 13	2.49	FEB 15	1.30	APR 06	0.87	JUN 15	2.42	AUG 09	1.62
WATER YEAR 1994		HIGHEST	0.87	APR 06, 1994	LOWEST	2.82	OCT 14, 1993				



## GROUND-WATER LEVELS

429

## YORK COUNTY

371314076252203. Local number, 59F 99 SOW 190B.

LOCATION.--Lat 37°13'13", long 76°25'25", Hydrologic Unit 02080107, 50 ft north of State Highway 629, 0.8 mi northeast of intersection of State Highways 173 and 629, and 1.8 mi north of Seaford. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 15 ft, screened 5 to 15 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 3.49 ft above sea level. Measuring point: Top of casing, 1.5 ft above land-surface datum.

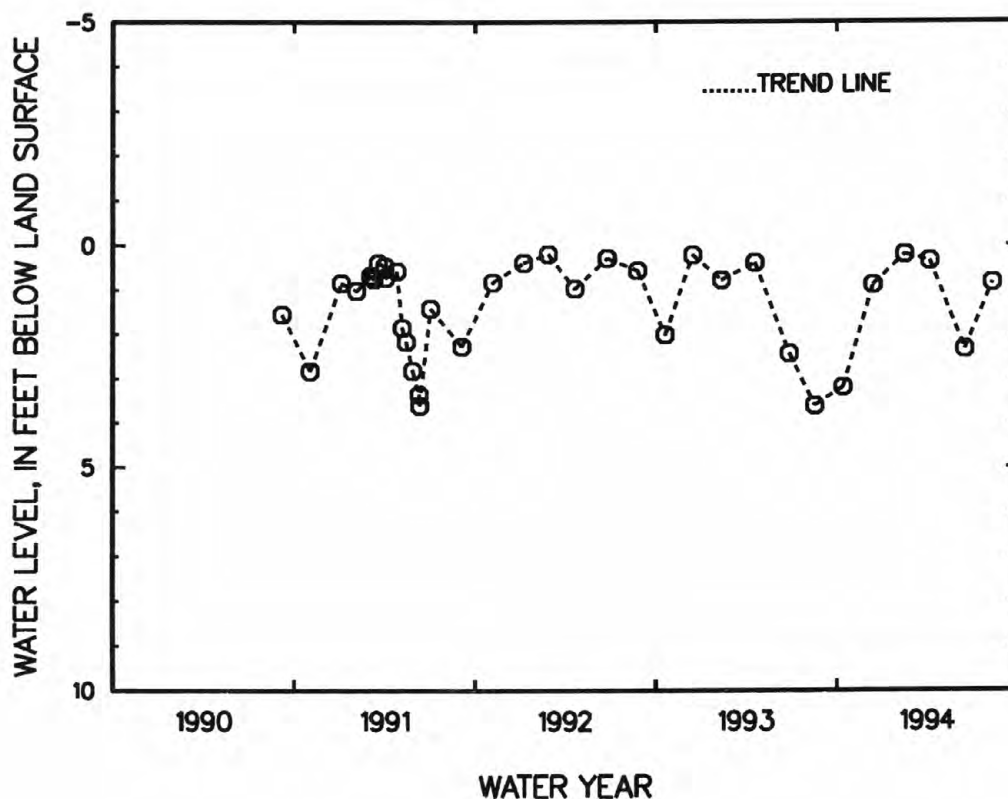
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.20 ft below land-surface datum, Feb. 27, 1992, Feb. 15, 1994; lowest measured, 3.62 ft below land-surface datum, June 11, 1991, Aug. 18, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	3.20	DEC 13	0.89	FEB 15	0.20	APR 06	0.35	JUN 15	2.34	AUG 09	0.84
WATER YEAR 1994		HIGHEST	0.20	FEB 15, 1994	LOWEST	3.20	OCT 14, 1993				



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## GROUND-WATER-QUALITY RECORDS

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

PRINTED OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

### Dissolved Trace-Element Concentrations

NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols will take place during the 1995 water year.

### Change in National Trends Network procedures

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

## QUALITY OF GROUND WATER

The following water-quality samples have been collected as part of a hydrogeologic study conducted at the Explosive Experimental Area (EEA) of the Naval Surface Warfare Center, Dahlgren Laboratory (NSWCDL) in Dahlgren, Virginia.

## WATER QUALITY DATA (EEA-NSWCDL HYDROGEOLOGIC STUDY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	STATION NUMBER	GEO- LOGIC UNIT (*)	DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)
KING GEORGE COUNTY									
54Q 73	381725077024501	110QRNR	06-24-94	31.30	25.1	88	750	6.0	12.5
54Q 75	381729077021001	110QRNR	06-28-94	33.20	23.1	143	758	5.9	12.0
54Q 74	381732077021201	110QRNR	06-28-94	19.50	12.7	63	758	6.0	14.0
54Q 76	381734077014501	110QRNR	06-15-94	19.60	22.2	103	765	5.0	12.0
54Q 77	381736077013801	110QRNR	06-15-94	25.20	21.7	215	765	4.5	12.0
54Q 55	381737077024601	112PLSC	06-22-94	70.40	24.4	338	757	6.4	15.0
54Q 56	381737077024602	110QRNR	06-22-94	24.70	24.5	225	757	5.9	14.0
54Q 57	381746077020001	124NNJM	06-27-94	63.90	17.8	535	755	7.9	15.0
54Q 58	381746077020002	110QRNR	06-27-94	16.80	17.9	65	755	5.0	14.5
54Q 63	381758077023001	124NNJM	06-30-94	62.20	22.4	620	755	8.1	14.0
54Q 63	381758077023001	124NNJM	06-30-94	62.20	22.4	620	755	8.1	14.0
54Q 64	381758077023002	110QRNR	06-29-94	13.30	22.0	151	755	5.2	15.0
54Q 59	381759077011401	112PLSC	06-14-94	95.20	8.2	600	762	6.9	15.0
54Q 60	381759077011402	110QRNR	06-14-94	32.60	8.4	7600	762	6.4	13.0
54Q 72	381759077025701	110QRNR	06-20-94	15.60	24.8	680	761	6.8	13.0
54Q 78	381812077015201	110QRNR	06-16-94	20.00	16.3	88	765	5.0	13.5
54Q 61	381814077030301	124NNJM	07-05-94	68.00	23.9	575	764	6.9	15.0
54Q 62	381814077030302	110QRNR	07-05-94	12.50	23.8	300	764	6.3	16.0
54Q 80	381817077023101	110QRNR	06-21-94	14.70	15.2	197	758	6.3	13.0
54Q 81	381820077024501	110QRNR	06-21-94	12.20	13.2	616	758	6.3	15.0
54Q 79	381825077021101	110QRNR	06-16-94	16.60	11.4	56	765	5.6	13.5
54Q 67	381829077040101	124NNJM	06-30-94	68.70	12.6	1330	--	6.6	--
54Q 68	381829077040102	110QRNR	06-30-94	20.20	12.5	258	--	6.0	--
54Q 82	381830077024501	110QRNR	06-24-94	22.30	11.8	48	750	5.2	14.0
54Q 71	381830077031801	110QRNR	06-20-94	20.20	21.2	315	761	6.5	13.5
54Q 65	381835077015601	112PLSC	06-17-94	106.50	14.2	595	764	6.6	15.0
54Q 65	381835077015601	112PLSC	06-17-94	106.50	14.2	592	764	6.5	15.0
54Q 66	381835077015602	110QRNR	06-17-94	19.70	14.1	566	764	6.6	14.0
54Q 69	381857077032701	112PLSC	06-23-94	84.10	16.1	552	756	6.6	14.5
54Q 70	381857077032702	110QRNR	06-23-94	17.70	16.2	169	756	4.2	14.0
54Q 70	381857077032702	110QRNR	06-23-94	17.70	16.2	170	756	4.2	14.0

\* 110QRNR Columbia aquifer.  
 \* 112PLSC Upper confined aquifer.  
 \* 124NNJM Nanjemoy-Marlbore confining unit.

QUALITY OF GROUND WATER

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WATER QUALITY DATA (EEA-NSWCDL HYDROGEOLOGIC STUDY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- IFIER	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
KING GEORGE COUNTY--Continued										
54Q 73	0.3	3	17	5.3	0.82	3.1	1.0	29	0.60	3.0
54Q 75	0.2	2	45	14	2.5	2.9	1.3	29	15	6.1
54Q 74	3.8	37	16	4.8	0.91	1.8	0.40	16	8.4	2.9
54Q 76	0.9	8	32	9.2	2.1	2.3	1.0	6	32	3.4
54Q 77	7.2	67	56	17	3.4	4.9	2.7	6	41	27
54Q 55	0.3	3	76	19	7.0	34	10	146	1.7	3.6
54Q 56	4.3	42	49	13	3.9	9.3	2.7	31	51	7.3
54Q 57	0.3	3	100	33	5.3	76	11	252	7.9	2.3
54Q 58	5.8	57	16	3.4	1.8	2.2	<0.10	5	12	3.7
54Q 63	6.0	59	82	19	8.5	97	16	278	8.7	4.8
54Q 63	6.0	59	90	21	9.0	100	18	280	8.7	4.6
54Q 64	5.2	52	26	6.7	2.2	14	0.60	4	31	16
54Q 59	0.5	5	130	30	14	66	12	251	2.5	20
54Q 60	0.1	1	1200	220	160	1100	27	489	130	2100
54Q 72	16.1	153	180	44	16	82	2.9	278	81	4.1
54Q 78	3.0	29	8	1.4	1.1	11	1.6	4	16	6.9
54Q 61	2.3	23	150	34	15	65	12	285	19	3.0
54Q 62	1.8	18	120	46	2.1	8.4	2.8	11	30	4.6
54Q 80	7.7	73	78	27	2.5	6.2	1.9	75	11	3.0
54Q 81	5.6	56	260	96	5.3	3.8	6.2	315	1.0	2.1
54Q 79	9.0	86	10	2.6	0.86	4.2	0.60	4	11	2.0
54Q 67	--	--	590	140	59	57	30	198	510	4.4
54Q 68	--	--	47	17	1.2	24	4.0	15	54	20
54Q 82	0.6	6	8	1.5	0.97	3.0	1.2	6	6.9	1.9
54Q 71	8.2	79	120	44	3.5	9.3	4.6	105	31	3.1
54Q 65	0.2	2	140	39	11	66	10	267	0.40	12
54Q 65	0.2	2	140	39	11	66	10	267	0.50	11
54Q 66	6.2	60	260	100	3.1	5.5	3.7	266	16	4.2
54Q 69	0.5	5	96	27	6.9	78	7.7	279	<0.10	9.7
54Q 70	7.4	73	42	12	3.0	6.2	3.7	5	40	9.5
54Q 70	7.4	73	42	12	3.0	6.1	3.8	5	40	9.3

< Actual value is known to be less than the value shown.



## QUALITY OF GROUND WATER

WATER QUALITY DATA (EEA-NSWCDL HYDROGEOLOGIC STUDY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
KING GEORGE COUNTY--Continued									
54Q 73	0.70	40	89	75	30	9600	110	0.7	--
54Q 75	0.10	18	99	77	20	1500	59	1.0	0.1
54Q 74	<0.10	11	51	39	20	3500	85	1.3	1.1
54Q 76	0.50	9.9	68	62	550	9	27	1.0	0.7
54Q 77	1.5	41	150	145	1700	970	89	1.9	1.3
54Q 55	0.60	42	210	218	<10	1900	58	3.9	0.1
54Q 56	0.40	28	141	136	20	13000	160	2.4	0.8
54Q 57	1.3	17	304	319	40	41	3	7.7	0.3
54Q 58	<0.10	13	44	--	100	12	10	0.6	0.2
54Q 63	0.80	32	382	382	10	28	5	5.7	0.2
54Q 63	0.70	32	392	389	10	27	5	5.4	3.5
54Q 64	0.50	15	92	89	530	280	35	1.4	0.3
54Q 59	0.50	38	353	353	10	2300	98	4.5	0.3
54Q 60	0.10	16	4510	4060	10	40000	550	14	0.6
54Q 72	1.0	46	442	445	<10	170	72	3.5	0.1
54Q 78	<0.10	24	72	66	60	19	22	1.4	0.4
54Q 61	0.30	57	387	378	20	110	18	4.1	0.9
54Q 62	<0.10	30	198	191	<10	180	45	3.0	2.2
54Q 80	0.10	20	116	111	<10	28	34	1.2	0.9
54Q 81	<0.10	21	342	308	20	12000	730	14	5.0
54Q 79	<0.10	18	47	43	50	800	98	1.6	3.4
54Q 67	0.20	31	1010	972	10	19	22	3.8	2.3
54Q 68	0.20	39	175	171	30	150	23	2.7	0.9
54Q 82	<0.10	16	37	35	--	350	110	1.3	1.1
54Q 71	0.10	32	204	202	20	150	47	2.2	0.9
54Q 65	0.40	48	368	358	10	2600	220	2.5	0.2
54Q 65	0.40	48	374	357	20	2700	220	2.7	0.3
54Q 66	0.10	10	334	289	10	230	100	1.3	>3.3
54Q 69	0.70	43	317	--	10	3800	190	--	--
54Q 70	<0.10	13	96	90	150	470	82	1.1	0.2
54Q 70	<0.10	14	95	90	150	350	81	1.0	0.2

&lt; Actual value is known to be less than the value shown.

&gt; Actual value is known to be greater than the value shown.

# QUALITY OF GROUND WATER

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The following water-quality samples have been collected as part of the North Landing River wetlands study.

WATER QUALITY DATA (NORTH LANDING RIVER WETLANDS STUDY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	STATION NUMBER	GEO- LOGIC UNIT	DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)
CITY OF VIRGINIA BEACH									
62A 13	363725076043101	--	08-08-94	5.00	1230	5.0	--	--	120
62A 13	363725076043101	--	08-08-94	5.00	1150	5.0	21.5	0.2	120
62A 13	363725076043101	--	08-08-94	5.00	1230	5.0	--	--	110
62A 14	363725076043102	--	08-08-94	12.05	1800	6.2	14.5	0.2	280
62A 10	363728076042002	--	08-09-94	20.30	9960	7.1	12.5	0.1	1200
62A 12	363725076041402	--	08-09-94	16.50	7240	6.8	3.0	0.1	840
62A 11	363725076041401	--	08-09-94	5.00	377	3.8	18.5	1.3	34
62A 7	363727076040301	--	08-09-94	5.00	349	4.2	16.5	0.1	36
62B 6	363731076033902	--	08-10-94	17.16	7350	6.8	15.5	0.4	950
62B 5	363731076033901	--	08-10-94	5.00	2410	6.2	22.0	0.5	240
62A 9	363728076042001	--	08-09-94	5.00	344	4.0	19.5	0.2	27
62A 9	363728076042001	--	08-09-94	5.00	344	4.0	18.5	0.2	27
62A 9	363728076042001	--	08-09-94	5.00	344	4.0	18.5	0.2	27
62A 15	363728076035201	--	08-09-94	5.00	731	3.5	17.5	1.1	87
62A 8	363727076040302	--	08-09-94	24.00	14200	6.7	13.0	0.1	1800
CITY OF CHESAPEAKE									
62A 16	363725076042501	--	08-08-94	5.00	790	3.7	17.5	2.0	95
62A 17	363738076053101	--	08-10-94	5.00	388	5.7	24.0	1.5	66

## QUALITY OF GROUND WATER

WATER QUALITY DATA (NORTH LANDING RIVER WETLANDS STUDY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
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## CITY OF VIRGINIA BEACH--Continued

62A 13	16	20	170	9.0	--	1.9	350	<0.10	9.5	--
62A 13	15	19	150	8.9	8	2.4	320	<0.10	9.6	538
62A 13	14	19	160	9.0	--	2.0	340	<0.10	9.3	--
62A 14	22	55	220	15	334	4.8	370	0.20	33	935
62A 10	78	240	1700	60	1150	2.2	2800	0.20	26	5620
62A 12	54	170	1200	42	945	13	1800	0.50	30	3900
62A 11	2.4	6.7	39	2.0	0	0.30	81	<0.10	4.4	--
62A 7	4.0	6.2	47	1.7	0	0.80	85	<0.10	5.5	--
62B 6	83	180	1200	54	774	78	2000	0.20	38	4110
62B 5	24	44	350	15	150	28	660	0.20	19	1230
62A 9	1.6	5.6	35	1.7	--	0.30	69	<0.10	3.3	--
62A 9	1.6	5.5	35	2.1	0	0.20	67	<0.10	3.3	--
62A 9	1.6	5.5	34	1.4	--	0.30	73	<0.10	3.3	--
62A 15	5.1	18	79	2.2	0	0.50	180	<0.10	3.7	--
62A 8	120	370	2500	74	1520	5.8	4100	0.10	39	8140

## CITY OF CHESAPEAKE--Continued

62A 16	9.9	17	90	5.9	0	1.4	200	<0.10	5.3	--
62A 17	18	5.0	41	2.2	52	25	52	<0.10	5.8	214

&lt; Actual value is known to be less than the value shown..

QUALITY OF GROUND WATER

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WATER QUALITY DATA (NORTH LANDING RIVER WETLANDS STUDY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
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CITY OF VIRGINIA BEACH--Continued

62A 13	0.008	0.001	0.009	1.40	2.5	0.122	0.103	7900	300
62A 13	0.008	0.00	0.005	0.186	2.8	0.130	0.050	7900	300
62A 13	0.008	--	<0.005	1.40	2.6	0.121	0.101	7800	290
62A 14	0.021	0.00	0.005	8.20	11	1.50	1.40	270	35
62A 10	0.004	0.008	0.012	15.0	19	1.70	2.00	10	20
62A 12	0.044	0.00	0.008	15.0	20	3.00	3.10	<10	10
62A 11	0.012	0.00	0.005	0.195	1.6	0.049	0.034	520	9
62A 7	0.030	0.00	0.005	0.866	2.3	0.089	0.065	1700	13
62B 6	0.003	--	<0.005	8.80	11	1.20	1.20	20	20
62B 5	0.060	0.00	0.029	0.057	4.8	0.419	0.005	240	110
62A 9	0.017	--	<0.005	0.055	1.2	0.014	0.004	330	2
62A 9	0.015	0.00	0.005	0.102	1.4	0.013	0.004	320	2
62A 9	0.016	--	<0.005	0.062	1.2	0.014	0.005	320	2
62A 15	0.004	0.001	0.005	0.104	1.0	0.065	0.004	1500	18
62A 8	0.005	--	<0.005	13.0	17	2.40	2.60	<10	120

CITY OF CHESAPEAKE--Continued

62A 16	0.007	--	<0.005	0.551	1.8	0.051	0.039	850	110
62A 17	0.028	7.57	7.60	0.008	<0.20	0.001	0.003	6	10

< Actual value is known to be less than the value shown.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in more than one-third of the study units and ultimately will be conducted in 60 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 will be 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 a basis for decision making on the use of water resources within the study units and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	DATE	TIME	STATION NUMBER	GEO- LOGIC UNIT (*)	SAM- PLING METHOD, CODES (82398)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
FAIRFAX COUNTY								
53U 45	06-28-94	0945	385059077145001	--	a4040	49.22	105.00	105
52V 22	06-29-94	1015	385255077182501	--	a4040	40.11	125.00	125
53V 14	07-13-94	1100	385357077144801	--	a4040	21.54	81.30	81
51V 138	08-29-94	1130	385345077251201	231NWRK	a4040	--	147.00	147
52U 5	08-31-94	1000	384609077202201	377SKVL	a4040	12.36	107.00	107
FAUQUIER COUNTY								
50S 10	06-15-94	1215	383035077351501	--	a4040	22.89	175.00	175
50S 11	06-21-94	1200	383540077365701	231NWRK	a4040	24.21	97.00	97
47V 1	06-22-94	0900	385534077543401	--	a4040	34.17	71.30	71
49U 80	06-27-94	1330	384507077421201	231DIBS	a4040	24.99	277.30	277
48U 24	07-12-94	1430	384723077492001	400CTCN	a4040	74.45	222.00	222
LOUDOUN COUNTY								
49V 90	06-22-94	1315	385851077390201	400CTCN	a4040	36.95	162.40	162
50V 91	07-05-94	1030	385724077303001	231DIBS	a4040	--	160.00	160
50V 90	07-11-94	1130	385924077352501	231NWRK	a4040	--	326.00	326
50V 92	07-13-94	1000	385728077355001	231NWRK	a4040	7.04	104.00	104
49W 11	07-13-94	1330	390437077430601	--	a4040	23.81	124.00	124
49Y 2	07-19-94	1130	391930077375101	--	a4040	12.46	156.00	156
51W 23	07-21-94	1200	390402077280401	231NWRK	a4040	63.06	96.30	96
48X 19	08-02-94	1100	390946077461001	--	a4040	27.20	200.00	200
52W 13	08-04-94	1145	390111077222201	231NWRK	a4040	50.98	325.00	325
51W 24	08-23-94	1100	390258077294901	231NWRK	a4040	--	--	--
PRINCE WILLIAM COUNTY								
50U 138	07-12-94	1000	384506077335101	231NWRK	a4040	--	105.00	105
51T 178	07-12-94	1200	384022077235601	--	a4040	30.11	134.00	134
51T 177	07-14-94	1100	384259077292401	231NWRK	a4040	81.79	320.00	320
50T 84	07-27-94	1045	383955077343401	231NWRK	a4040	33.31	132.00	132
50T 85	08-22-94	1130	384133077324201	231NWRK	a4040	--	--	--
STAFFORD COUNTY								
51R 6	08-31-94	1200	382706077285801	--	a4040	--	365.00	365

- \* 231DIBS Diabase Dikes and Sills.
- \* 231NWRK Newark Group.
- \* 377SKVL Sykesville Formation.
- \* 400CTCN Catoctin Formation.
- a Submersible pump.

## QUALITY OF GROUND WATER

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WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- IFIER	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
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## FAIRFAX COUNTY--Continued

53U 45	330	85	3.8	171	5.5	14.5	25.0	755	7.4	73
52V 22	380	65	4.3	160	6.1	14.0	30.5	745	8.5	84
53V 14	425	75	4.0	58	6.2	14.0	29.5	749	8.7	86
51V 138	330	96	4.6	341	7.5	15.0	24.5	752	6.0	60
52U 5	330	93	3.0	180	6.5	18.5	22.5	756	2.9	31

## FAUQUIER COUNTY--Continued

50S 10	410	160	4.0	75	6.3	14.5	33.5	757	--	--
50S 11	240	105	4.0	500	7.2	18.0	32.0	756	6.1	65
47V 1	565	55	3.8	152	5.6	14.5	28.0	748	7.2	72
49U 80	405	225	4.3	291	6.8	15.0	29.0	745	4.9	50
48U 24	750	120	6.0	149	6.6	14.0	32.0	739	6.3	63

## LOUDOUN COUNTY--Continued

49V 90	410	85	4.7	255	6.3	14.0	33.0	750	6.0	59
50V 91	280	120	3.8	480	7.1	15.0	29.0	745	4.1	42
50V 90	420	127	7.5	180	7.4	14.5	28.0	751	0.1	1
50V 92	400	52	5.0	357	7.7	16.0	27.5	756	0	0
49W 11	440	65	4.7	206	7.1	14.0	31.5	754	0	0
49Y 2	430	130	3.2	232	7.0	14.0	32.0	757	0.2	2
51W 23	300	100	1.1	400	7.2	15.0	31.0	760	3.8	38
48X 19	655	106	5.0	356	6.8	13.5	28.0	749	0	0
52W 13	280	168	5.6	494	7.1	15.0	34.5	757	1.9	19
51W 24	270	143	4.3	458	7.2	14.5	29.0	761	2.9	29

## PRINCE WILLIAM COUNTY--Continued

50U 138	235	40	13	752	7.1	14.5	28.0	761	0.2	2
51T 178	402	102	3.0	77	6.0	15.0	35.0	756	6.8	68
51T 177	240	133	7.0	241	7.6	15.0	34.5	757	6.4	64
50T 84	250	91	3.3	515	7.4	15.0	24.0	755	0.1	1
50T 85	210	104	4.3	630	7.3	15.0	23.0	755	3.8	38

## STAFFORD COUNTY--Continued

51R 6	270	175	2.2	317	7.5	17.0	26.5	757	--	--
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## QUALITY OF GROUND WATER

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3 (00419)	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3 (00450)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
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## FAIRFAX COUNTY--Continued

53U 45	7.2	8.5	10	0.90	28	34	<0.10	35	<0.10	0.12
52V 22	15	7.8	3.7	0.30	44	54	1.3	7.8	<0.10	0.030
53V 14	1.6	4.5	4.3	1.4	27	33	0.70	1.8	0.10	0.020
51V 138	51	6.7	9.4	0.70	142	173	15	4.0	<0.10	0.030
52U 5	20	5.3	9.7	1.5	88	107	0.80	2.5	<0.10	0.030

## FAUQUIER COUNTY--Continued

50S 10	8.0	1.3	5.9	0.20	35	41	0.40	1.0	<0.10	0.020
50S 11	58	19	14	0.60	192	234	8.3	18	<0.10	0.050
47V 1	12	4.6	6.5	2.4	20	24	8.2	16	<0.10	0.010
49U 80	33	7.1	12	0.50	145	177	2.5	3.2	0.20	0.080
48U 24	18	5.4	4.6	1.5	65	79	5.8	1.3	0.10	<0.010

## LOUDOUN COUNTY--Continued

49V 90	20	16	6.5	0.60	104	127	15	2.6	<0.10	0.030
50V 91	71	12	12	0.60	219	267	14	10	0.20	0.050
50V 90	28	2.5	8.7	0.50	87	106	4.3	3.6	0.20	0.020
50V 92	27	19	19	0.60	172	210	8.5	2.4	0.20	0.030
49W 11	17	8.9	5.8	5.3	77	94	12	6.1	0.30	0.12
49Y 2	29	6.5	5.2	4.7	100	121	13	4.5	0.20	0.060
51W 23	40	19	17	2.2	118	144	39	20	0.30	0.060
48X 19	35	13	9.7	1.8	106	129	28	27	0.30	0.040
52W 13	62	13	19	0.60	231	282	6.1	17	<0.10	0.17
51W 24	71	10	12	0.60	226	276	4.9	22	0.10	0.090

## PRINCE WILLIAM COUNTY--Continued

50U 138	110	16	23	0.90	185	226	180	19	0.20	0.10
51T 178	3.7	3.6	6.4	0.80	37	45	0.80	1.1	<0.10	0.020
51T 177	37	4.4	6.8	0.50	111	135	0.50	1.8	<0.10	0.030
50T 84	53	23	15	0.80	191	233	33	16	0.10	0.040
50T 85	58	29	32	1.1	269	328	20	24	0.20	<0.010

## STAFFORD COUNTY--Continued

51R 6	34	11	16	2.5	123	150	36	2.4	0.10	<0.010
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&lt; Actual value is known to be less than the value shown.

QUALITY OF GROUND WATER

441

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
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FAIRFAX COUNTY--Continued

53U 45	25	126	--	<0.010	0.480	0.480	0.010	<0.20	<0.010	<0.010
52V 22	24	115	109	<0.010	5.00	5.00	0.030	<0.20	0.060	0.030
53V 14	20	50	53	<0.010	0.470	0.470	<0.010	<0.20	0.010	<0.010
51V 138	25	210	210	<0.010	2.90	2.90	0.010	<0.20	0.050	0.050
52U 5	34	112	127	<0.010	0.110	0.110	<0.010	<0.20	<0.010	0.020

FAUQUIER COUNTY--Continued

50S 10	31	73	69	<0.010	0.082	0.082	0.040	<0.20	0.090	0.090
50S 11	27	292	289	<0.010	6.50	6.50	0.020	<0.20	0.020	0.020
47V 1	23	115	103	<0.010	4.10	4.10	0.010	<0.20	0.030	0.030
49U 80	42	193	189	<0.010	--	<0.050	0.070	<0.20	0.090	0.080
48U 24	25	116	103	<0.010	0.460	0.460	0.030	<0.20	0.040	0.040

LOUDOUN COUNTY--Continued

49V 90	55	185	184	<0.010	1.40	1.40	0.010	<0.20	0.040	0.030
50V 91	21	281	278	<0.010	1.30	1.30	0.020	<0.20	<0.010	<0.010
50V 90	49	144	149	<0.010	--	<0.050	0.020	<0.20	<0.010	0.020
50V 92	19	201	199	<0.010	--	<0.050	<0.010	<0.20	<0.010	<0.010
49W 11	41	144	144	<0.010	--	<0.050	0.050	<0.20	0.030	<0.010
49Y 2	35	165	158	<0.010	--	<0.050	0.020	<0.20	<0.010	<0.010
51W 23	42	292	285	<0.010	7.70	7.70	0.020	<0.20	0.120	0.130
48X 19	35	232	218	<0.010	--	<0.050	0.090	<0.20	0.010	0.010
52W 13	21	291	279	<0.010	0.430	0.430	0.020	<0.20	0.020	<0.010
51W 24	22	253	281	<0.010	0.640	0.640	0.020	<0.20	<0.010	0.010

PRINCE WILLIAM COUNTY--Continued

50U 138	26	494	490	<0.010	0.820	0.820	0.020	<0.20	<0.010	<0.010
51T 178	33	83	72	<0.010	--	<0.050	0.030	<0.20	0.050	0.040
51T 177	32	164	152	<0.010	0.490	0.490	<0.010	<0.20	0.030	0.040
50T 84	20	295	279	<0.010	0.860	0.860	<0.010	<0.20	<0.010	<0.010
50T 85	28	373	367	<0.010	3.10	3.10	0.010	<0.20	0.010	0.010

STAFFORD COUNTY--Continued

51R 6	22	197	198	<0.010	--	<0.050	0.020	<0.20	<0.010	<0.010
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< Actual value is known to be less than the value shown.

## QUALITY OF GROUND WATER

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L) (75990)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	TRITIUM TOTAL (PCI/L) (07000)	HARD- NESS TOTAL AS CACO3) (00900)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)
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## FAIRFAX COUNTY--Continued

53U 45	260	39	5600	72	0.1	<1.0	99	53	0.3	<0.01
52V 22	4	3	1200	60	0.1	<1.0	55	70	0.2	<0.01
53V 14	61	4	1700	40	0.1	<1.0	11	23	0.6	<0.01
51V 138	<3	<1	1100	32	0.2	<1.0	--	150	0.4	<0.01
52U 5	62	4	3500	60	0.2	<1.0	--	72	0.3	<0.01

## FAUQUIER COUNTY--Continued

50S 10	5	<1	3900	71	0.1	<1.0	18	25	0.1	<0.01
50S 11	<3	2	3000	60	1.2	3.7	8.0	220	0.3	<0.01
47V 1	10	<1	770	31	0.1	<1.0	46	49	0.9	<0.01
49U 80	970	290	200	21	0.1	<1.0	44	110	0.3	<0.01
48U 24	9	3	87	17	0.1	<1.0	58	67	0.3	<0.01

## LOUDOUN COUNTY--Continued

49V 90	5	1	130	19	0.1	<1.0	59	120	3.6	<0.01
50V 91	<3	<1	1600	62	0.5	1.5	36	230	0.4	<0.01
50V 90	160	12	470	24	0.3	<1.0	31	80	0.3	<0.01
50V 92	130	8	250	21	0.2	<1.0	<1.0	150	0.3	<0.01
49W 11	1200	160	340	22	0.1	<1.0	13	79	0.3	<0.01
49Y 2	470	270	190	19	0.1	<1.0	45	99	1.9	<0.01
51W 23	4	<1	2600	45	0.2	<1.0	59	180	0.6	<0.01
48X 19	4300	430	1100	33	0.1	<1.0	38	140	0.7	<0.01
52W 13	<3	<1	1800	39	1.5	4.9	14	210	0.7	<0.01
51W 24	<3	<1	1800	40	0.8	2.4	14	220	0.6	<0.01

## PRINCE WILLIAM COUNTY--Continued

50U 138	5	130	1400	36	1.0	3.1	21	340	0.4	<0.01
51T 178	94	17	4200	57	0.1	<1.0	3.0	24	0.3	<0.01
51T 177	<3	<1	1300	46	0.2	<1.0	2.0	110	1.0	<0.01
50T 84	<3	3	890	31	1.3	4.3	13	230	0.6	<0.01
50T 85	<3	<1	440	24	1.2	3.6	11	260	0.5	<0.01

## STAFFORD COUNTY--Continued

51R 6	6	2	140	19	0.1	<1.0	--	130	0.3	<0.01
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&lt; Actual value is known to be less than the value shown.

QUALITY OF GROUND WATER

443

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
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FAIRFAX COUNTY--Continued

53U 45	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
52V 22	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
53V 14	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
51V 138	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
52U 5	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00

FAUQUIER COUNTY--Continued

50S 10	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
50S 11	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
47V 1	<0.01	0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
49U 80	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
48U 24	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00

LOUDOUN COUNTY--Continued

49V 90	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
50V 91	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
50V 90	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
50V 92	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
49W 11	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
49Y 2	<0.01	0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
51W 23	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
48X 19	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
52W 13	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
51W 24	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00

PRINCE WILLIAM COUNTY--Continued

50U 138	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
51T 178	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
51T 177	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
50T 84	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
50T 85	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00

STAFFORD COUNTY--Continued

51R 6	<0.01	<0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.00
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< Actual value is known to be less than the value shown.

## QUALITY OF GROUND WATER

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DIMETH- OATE WATER FLTRD 0.7 U GG, REC (UG/L) (82662)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
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## FAIRFAX COUNTY--Continued

53U 45	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01
52V 22	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01
53V 14	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
51V 138	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
52U 5	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01

## FAUQUIER COUNTY--Continued

50S 10	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
50S 11	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01
47V 1	0.07	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
49U 80	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01
48U 24	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01

## LOUDOUN COUNTY--Continued

49V 90	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
50V 91	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01
50V 90	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
50V 92	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
49W 11	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
49Y 2	0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
51W 23	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
48X 19	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
52W 13	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
51W 24	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01

## PRINCE WILLIAM COUNTY--Continued

50U 138	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
51T 178	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
51T 177	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
50T 84	<0.01	<0.01	<0.01	<0.02	<0.01	<0.005	<0.01	<0.01	<0.01
50T 85	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01

## STAFFORD COUNTY--Continued

51R 6	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01
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&lt; Actual value is known to be less than the value shown.

## QUALITY OF GROUND WATER

445

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)
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## FAIRFAX COUNTY--Continued

53U 45	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01
52V 22	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01
53V 14	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
51V 138	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
52U 5	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01

## FAUQUIER COUNTY--Continued

50S 10	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
50S 11	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01
47V 1	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
49U 80	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01
48U 24	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01

## LOUDOUN COUNTY--Continued \*

49V 90	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
50V 91	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01
50V 90	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
50V 92	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
49W 11	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
49Y 2	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
51W 23	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
48X 19	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
52W 13	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
51W 24	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01

## PRINCE WILLIAM COUNTY--Continued

50U 138	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
51T 178	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
51T 177	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
50T 84	<0.01	<0.04	<0.01	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01
50T 85	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01

## STAFFORD COUNTY--Continued

51R 6	<0.01	<0.04	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01
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&lt; Actual value is known to be less than the value shown.



## QUALITY OF GROUND WATER

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P, P' DDE DISSOLV (UG/L) (34653)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)

## FAIRFAX COUNTY--Continued

53U 45	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
52V 22	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
53V 14	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
51V 138	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
52U 5	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02

## FAUQUIER COUNTY--Continued

50S 10	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
50S 11	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
47V 1	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
49U 80	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
48U 24	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02

## LOUDOUN COUNTY--Continued

49V 90	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
50V 91	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
50V 90	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
50V 92	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
49W 11	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
49Y 2	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
51W 23	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
48X 19	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
52W 13	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
51W 24	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02

## PRINCE WILLIAM COUNTY--Continued

50U 138	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
51T 178	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
51T 177	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
50T 84	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
50T 85	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02

## STAFFORD COUNTY--Continued

51R 6	<0.02	<0.02	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02
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&lt; Actual value is known to be less than the value shown.

QUALITY OF GROUND WATER

447

WATER QUALITY DATA (NATIONAL WATER-QUALITY ASSESSMENT PROGRAM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LOCAL IDENT- I- FIER	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, FLTRD DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
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FAIRFAX COUNTY--Continued

53U 45	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
52V 22	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
53V 14	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
51V 138	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
52U 5	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01

FAUQUIER COUNTY--Continued

50S 10	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
50S 11	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
47V 1	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
49U 80	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
48U 24	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01

LOUDOUN COUNTY--Continued

49V 90	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
50V 91	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
50V 90	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
50V 92	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
49W 11	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
49Y 2	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
51W 23	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
48X 19	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
52W 13	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
51W 24	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01

PRINCE WILLIAM COUNTY--Continued

50U 138	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
51T 178	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
51T 177	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
50T 84	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
50T 85	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01

STAFFORD COUNTY--Continued

51R 6	<0.02	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
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< Actual value is known to be less than the value shown.

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton

*Sea level:* In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.



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