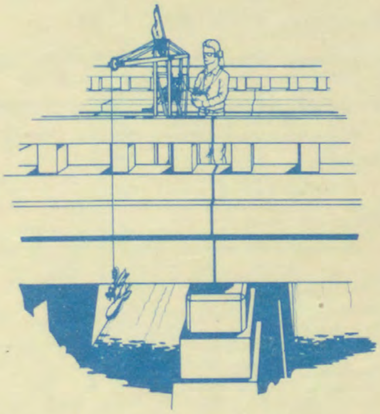
PUBLIC WATER SUPPLIES OF SELECTED MUNICIPALITIES IN FLORIDA, 1975



U.S. GEOLOGICAL SURVEY

Water-Resources Investigations 77-53

Prepared in cooperation with
FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
SUWANNEE RIVER WATER MANAGEMENT DISTRICT
NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
AND OTHER STATE, LOCAL, AND FEDERAL AGENCIES

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16. Abstracts The demand for freshwater for municipal use in Florida, which increased sharply during 1970-75, is summarized in a report on water use by 169 municipalities and 5 county water systems in Florida as of December 1975. Included in the report by city or system, are water use data, sewage data, and chemical analyses of raw and treated water. In addition, miscellaneous public supply data for 111 small communities and municipalities and historical public supply pumpage for selected municipalities for 1945, 1947, 1956, 1965 and 1970-74 are tabulated.

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July 1977

UNITED STATES DEPARTMENT OF THE INTERIOR

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PUBLIC WATER SUPPLIED OF SELECTED MUNICIPALITIES IN FLORIDA, 1975

by Henry G. Healy

SUMMARY OF WATER USE

In 1975, the 169 municipalities and 5 county water systems listed in this report supplied 1.037 million gallons of water each day, on the average to 77 percent of the population of the State of Florida. The quantity of water supplied represented 90 percent of the State's public water supply demand. Of the 169 municipalities and 5 county systems, 150 supplied 887 million gallons of ground water and 24 supplied 150 million gallons of surface water each day, on the average, representing 85 percent and 15 percent, respectively, of the total demand of the 174 water systems. Three of the 150 municipal ground-water suppliers are reported to have processed, that year, about 3.2 million gallons of water each day by desalination.

The 20 largest cities in the State, with an aggregate population of 3.72 million--44 percent of the State's population--used, on the average, 638 million gallons per day, 72 percent of the total municipal water supply of the 169 municipalities.

The demand for freshwater for municipal use in Florida increased sharply during 1970-75. Statewide ground-water use for municipal supply increased from 759 million gallons per day in 1970 (Pride, 1973) to 983 million gallons per day in 1975 and surface-water use has increased from 125 million gallons per day in 1970 (Pride, 1973) to 163 Mgal/d in 1975. The 29 percent increase in ground-water use and the 30 percent increase in surface-water use reflect the continuing rapid population growth and the accompanying expanding economic activity in the State. The increase in population and the total yearly water use for selected municipalities are shown on figure 1.

The population of Florida as of July 1, 1975 was estimated to be 8,485,230. The population served by the 169 municipalities and 5 county systems listed in this report is 6,537,913 or 77 percent of the total. Average daily per capita use of public water supplied ranged from 35 gal at Crawfordville in Wakulla County to 530 gal at Palm Beach in Palm Beach County. The average daily per capita use of the water supplied by the 174 systems was 158 gal, compared to an average per capita use of 168 gal based on total statewide daily municipal water use of 1,146 Mgal/d (table 1).

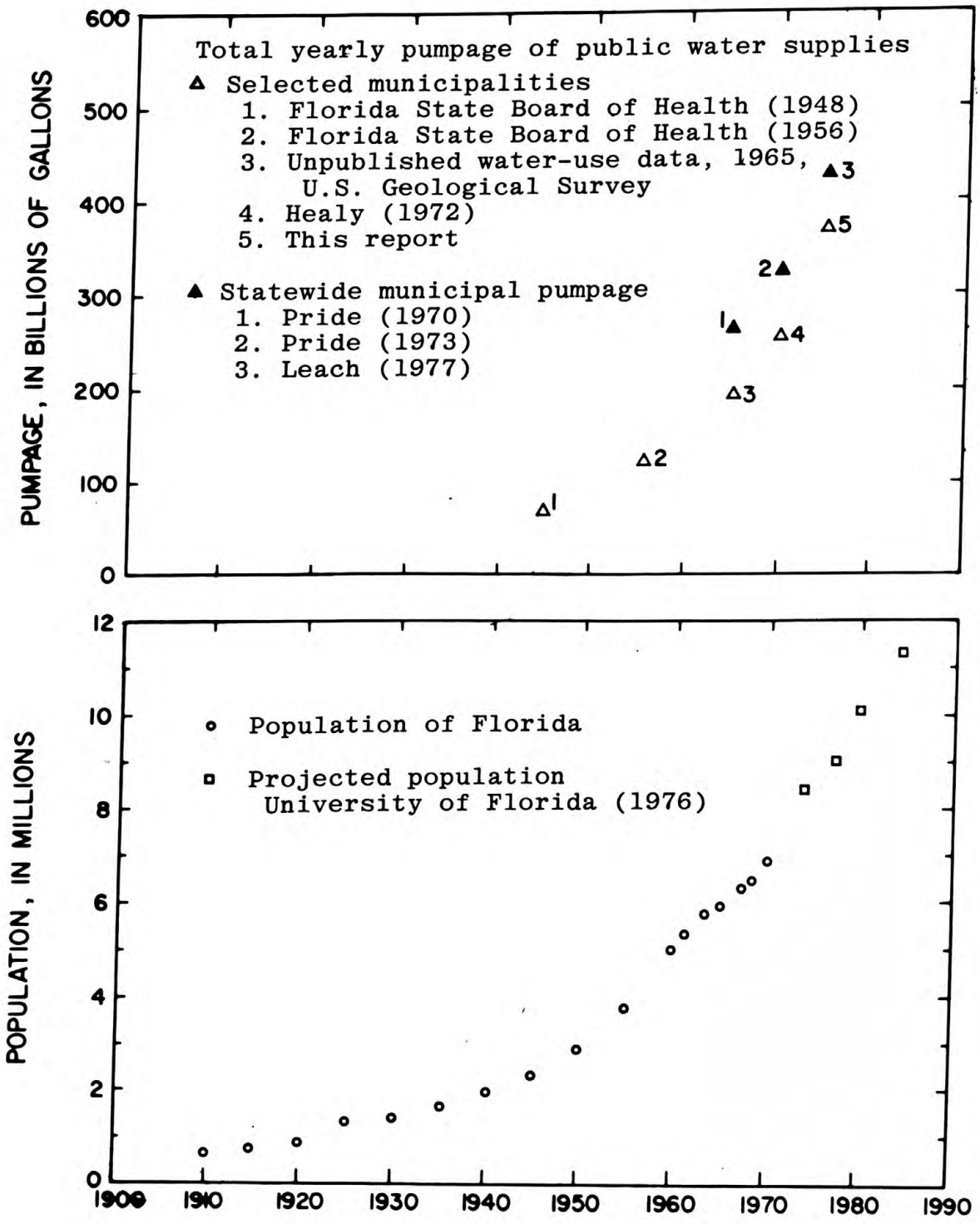

Figure 1.--Population of Florida, 1900-85, total quantity of public-supply water delivered by selected municipalities in Florida, 1947, 1956, 1965, 1970, and 1975, and total quantity of public-supply water delivered by all municipalities in Florida, 1965, 1970, and 1975.

Table 1.--Quantities of public-supply water delivered to users by 169 municipalities and 5 county water systems, by source, 1975

	Water supplied		Percentage of ground water supplied (by source)	Percentage ground and surface water supplied (Total use, all sources)
	For the year (Mgal)	Average daily (Mgal)		
Ground water (aquifers)				
Biscayne	147,254	403	45.6	38.8
Floridan	133,864	367	41.4	35.3
Sand-and-gravel	9,733	27	3.0	2.6
Shallow sand	26,659	73	8.2	7.0
Hawthorn and Tampa	2,872	8	.8	.8
Hawthorn	2,598	7	.8	.7
Key Largo Limestone	624	2	.2	.2
Total, ground water	322,604	887	100	85.4
Surface water				
Rivers	29,210	80	53.0	7.8
Lakes	13,620	37	24.7	3.6
Reservoir	11,806	32	21.4	3.1
Infiltration gallery	466	1	.9	.1
Total, surface water	55,103	150	100.1	14.6
Total, ground and surface water[1/]	378,707	1,037	population served:	6,537,913

1/ Constitutes 90.7 percent of the 418,290 Mgal supplied to a statewide user population of 6,820,600.

The principal aquifers being developed by the 169 municipalities and 5 county systems in 1975 are:

Aquifer	Average daily withdrawal (in million gallons)
Biscayne	403
Floridan	367
Sand-and-gravel	27
Shallow sand	73
Undifferentiated[a/]	17

More than half the surface-water supply, 80 million gallons per day was diverted from rivers, 37 millions gallons per day from lakes, and 32 million gallons per day from a reservoir. An infiltration gallery supplied 1 million gallons per day.

a/ Includes 2 Mgal/d supplied by Key Largo Limestone to Stock Island desalination plant at Key West.

Of the rivers, the Hillsborough supplied the most, 53 million gallons per day, to Tampa; and the Manatee, the least, 0.5 million gallons per day, to the city of Palmetto.

The areas where rapid growth of population and economic activity will have the greatest impact on water resources are: (1) the lower Gulf coastal area, from Sarasota to Naples; a rapidly developing vast retirement complex; (2) the Tampa-St. Petersburg area which includes Pinellas County, northern Hillsborough County and southern coastal Pasco County; (3) the southeastern coastal area in Martin, Palm Beach, Broward and Dade Counties, extending south from Stuart to well beyond Miami: an area whose population increased from 1,514, 031 in 1960 (Florida State Department of Commerce, 1971) to 2,389,766 in 1975 (University of Florida, 1975); (4) the Orlando area where the impact of Disney World is continuing to be felt; (5) the industrialized Jacksonville-Fernandina Beach area ; (6) the Tallahassee area; and (7) the Pensacola area.

In most of these areas, water for municipal supplies currently is adequate although shortages of fresh ground water and surface water will inevitably occur and may become critical in some areas with possible attendant deterioration in quality.

Average daily use of public supply water in 1975 exceeded the daily sewage discharge for 72 percent of the 169 municipalities reported. The daily use exceeded daily sewage discharge by less than 50 percent in 39 municipalities, between 50 to 100 percent in 27 municipalities, and between 100 to 200 percent in 31 municipalities. Of the remaining 25 municipalities, daily use exceeded daily sewage discharge between 200 to 350 percent in 12, and was greater than 350 percent in 13 municipalities.

PURPOSE AND SCOPE

In 1975, information on water use in Florida was collected as part of the periodic 5-year national and statewide survey of water resources by the U.S. Geological Survey. This report summarizes the water-use information obtained from 169 municipalities and five county water systems in Floridan and the data presented are current to December 1975.

In Florida, water-use information is collected by the Geological Survey as part of the statewide cooperative program with the State Department of Environmental Regulation, and as part of the programs for evaluating water resources in cooperation with many other governmental agencies. Among them are the Central and Southern Florida Flood Control District, the Northwest Florida Water Management District, the St. Johns River Water Management District, and the Suwannee River Water Management District.

The information was collected by personnel of the U.S. Geological Survey and the five Water Management Districts as part of an inventory extending from May 1975 through June 1976. The inventory was implemented by personal contact with water-plant superintendents, water managers, and city officials. Listed in the report are data for (1) all cities whose population in 1972 was 5,000 or more, (2) 111 municipalities and communities whose populations in 1975 were generally less than 5,000 (See table 5 at end of report) and (3) all county seats. Also included is information for three large unincorporated communities having an aggregate population served of 16,300 and three municipalities that use water for public supply derived partly or wholly from some type of desalination process. Historical public supply records are included in this report for selected municipalities for 1945, 1947, 1956, 1965, and 1970-74 (see table 6 at end of report).

This report is the second in a series of reports listing water-use characteristics for most of the public water suppliers in the State. In the report for 1970 (Healy, 1972) information was supplied for 138 suppliers, 36 less than those for which data are furnished in the present, report for 1975.

This report is divided into four sections, each representing a segment of the State, a division comparable to that used to systematically present ground-water data for 1971-72 (Healy, 1974), and for 1973-74 (Healy, 1976). The four segments of the State are (1) northwestern Florida, (2) northern, northeastern, and north-central Florida, (3) central Florida, and (4) southern and southeastern coastal Florida. Data for individual municipalities and selected communities are presented alphabetically in each of the four sections, and for the State as a whole in the index.

Of the cities listed in this report 20 are in the 14 SMSA's (Standard Metropolitan Statistical Area). An SMSA is defined by the Bureau of the Budget as a county or group of counties that contain at least one city of 50,000 inhabitants or twin cities whose combined populations is at least 50,000 (Schneider, 1968, p. 3). Included by area are: Daytona Beach, Fort Lauderdale-Hollywood, Fort Myers, Gainesville, Jaskconville, Lakeland-Winter Haven, Melbourne-Titusville-Cocoa, Miami, Orlando, Pensacola, Sarasota, Tallahassee, Tampa-St. Petersburg, and West Palm Beach-Boca Raton.

Included in the listing for the 169 municipalities and 5 county water suppliers are water-use data, sewage data, and chemical analyses of raw and treated water. Sewage data--for all municipalities having teratment plants if sewage records are available--include the types of sewage treatment, average daily sewage discharge, and the name of the water body receiving the waste water.

All the chemical analyses listed in this report except one were made by the U.S. Geological Survey. In 1975, 160 samples were analyzed and, early in 1976, 8 were analyzed. All except three of the 168 samples analyzed were of raw (untreated) water; 147 from wells and 18 from surface-water sources. The other three were of water processed by desalination, reverse osmosis, and electrodialysis.

Also included in this report is a list of reports published in 1970-75 relating to hydrology, geology, and water resources of the areas where cities are located. Reports published prior to 1970 are cited in Healy (1972). All the water use for Florida, only a small part of which is included in this report, will be available through the following publications: Leach (1977); Phelps (1977).

ACKNOWLEDGMENTS

Grateful acknowledgments is made to municipal waterworks officials for supplying and verifying records of water use and other information on their water- and sewage-treatment plants.

DIFFERENCES BETWEEN QUANTITIES OF WATER SUPPLIED, PER CAPITA USE, AND SEWAGE EFFLUENT

In general, for most of the water supplies tabulated, the per capita use correlated closely with the total amount of water being supplied to users, as does the quantity of water supplied and the quantity being discharged from the sewage treatment plants. For some water-supply systems, however, there is an apparent imbalance between input and output to the system. These apparent imbalances are discussed below.

Difference between water supplied and per capita use.--On the basis of the information obtained from the 169 municipalities and 5 county water suppliers, 1.037 million gallons of water was distributed each day to a

population of 6,537,913 (table 1). This represents a per capita use of 158 gallons per day, a rate not very different from the statewide per capita use of 168 gallons per day (Leach, 1977). Within the data presented for the 174 systems, however, is a range in per capita use that cannot be explained on the basis of difference in use characteristics from place to place within Florida. The range is considerable, from 35 gallons per day at Crawfordville in Wakulla County, to 530 gallons per day at Palm Beach in Palm Beach County. In general, when per capita use is obviously low, such as at Crawfordville, or at Gulfport, with a per capita use of 68 gallons per day, the discrepancy can be charged to incomplete records of water supplied. When the per capita use obviously is high, a significant part of the water supplied for public supply use is diverted for other purposes. For example, in some of the larger cities, major industries may be supplied with water for processing, and in rural or suburban communities, a considerable part of the public-supply water is used for watering lawns or for the irrigation of crops, for which the return or benefit is great enough to warrant the use of public-supply water. For these reasons, the per capita values listed in this report for individual systems should be accepted with caution. The scope of this report did not allow opportunity for a careful analysis of the precise per capita use in all instances.

Difference between amounts of water supplied and sewage effluent.--As discussed earlier, the daily sewage discharge was less than the input to the daily public-water supply for 72 percent of the municipalities and county systems reported. For some, nearly twice as much public-supply water supplied as was reported as effluent from the sewage treatment plant, as the following table shows:

Percentage of municipalities reported	Percentage of exceedance
39	less than 50
27	50-100
16	100-150
15	150-200
7	200-250
4	250-300
1	300-350
13	greater than 350

Less commonly, water supplied by the public-supply system in 1975 was less than the sewage effluent, by as much as 4,350 percent for 14 systems. The reasons for the anomaly and some examples of each are listed in the following table.

1. Water supplied greater than sewage effluent.

   a. Large percentages of septic tanks in operation; examples, Cross City, Hallandale, Jupiter and Melbourne.

   b. Municipal pumpage supplied to industry and industrial effluent not connected to municipal sewage system; example, Jacksonville.

   c. Municipal pumpage supplied to other municipalities, subdivisions and areas not connected to the sewage system of the municipality supplying the water; example, Boca Raton, Cocoa, and Miami.

   d. Consumptive use in appreciable.

2. Water supplied less than sewage effluent.

   a. Sewage effluent includes that of other municipalities; example, Hollywood, North Miami, or effluent includes that of industry; example, Port St. Joe.

   b. Ground-water seepage enters sewer lines. Possible examples are Azalea Park, Bonifay, Daytona Beach, Fort Myers, Plant City, and Starke.

DEFINITION OF TERMS

Most of the major headings that appear in the tabulation of individual municipalities are in common use; they need no definition. Some. however, require description and background information to make the data listed under those headings meaningful. These are listed and described below.

Type/Frequency of Analysis

This refers to the frequency at which the samples of untreated or treated water were collected in 1975, and the nature of the chemical analysis performed either by the water-supply agency or a private laboratory for the agency, or by the Florida State Board of Health. It does not refer to samples collected and analyzed by the U.S. Geological Survey.

River Basin

The State has been divided into 53 major and minor river basins (Conover and Leach, 1975). The river basins are designated by a hydrological unit code consisting of three pairs of digits after the name of the river basin. The first pair represents the Subregion as currently used by the U.S. Water Resources Council (1970) and the second and third pairs represent, respectively, the Accounting and Cataloging units in use by the U.S. Geological Survey for managing the National Water Data Network. The hydrologic unit code numbers provide a basic system of cataloging and processing the accumulating large volume of hydrologic information for electronic data storage and retrieval. The coding name designation, and areas in square miles are described and discussed by Conover and Leach (1975).

Water Treatment

Water-treatment and sewage-treatment processes are standard, differing little in principle. The only significant difference lies in the extent to which the standard processes must be modified to cope with differing degrees of contamination or to produce a finished water with the required chemical quality. Generally, in this report, the type of treatment given a public-supply water is described by listing the unit processes employed in producing a plant effluent capable of meeting specific water-quality standards. The definitions listed are taken from or modified after Fair and Geyer (1954, p. 527).

Gas exchange.--Gases escape from solution in water or go into solution by exposing the water to the air or to specific gases under various pressures. Treatment: Aeration, chlorination, and carbonation.

Screening.--Floating and suspended matter are removed from the water by straining the water through screens or racks. Treatment: Cutting screen (comminutor), screens, and trash racks.

Sedimentation.--Material in suspension in water is removed from water by reducing the flow of the water or by allowing the water to remain in settling tanks or ponds for specified lengths of time. Deposition of the material in suspension takes place by gravity only. Treatment: Grit chambers, settling and sedimentation.

Flotation.--Substances in solution are brought to the surface of the water by the use of flotation agents such as very small air bubbles or by chemicals. Treatment: Diffused air and skimming.

Chemical coagulation.--Settleable, or more particularly, nonsettleable material in suspension is removed from water by means of chemicals that form flocs heavy enough that they can settle by gravity. Treatment: Coagulation, flocculation, and softening.

Chemical precipitation.--Dissolved substances are removed from solution by combining them with chemicals in such a way that the substance formed is insoluble. Treatment: Flocculation, softening, precipitation, and mixing.

Ion exchange.--Certain ions in water are exchanged for complementary ions that are part of the complex of a solid exchange medium, such as zeolites or synthetic resins. Treatment: softening, deionization.

Physical adsorption and contact.--Substances are removed from solution by concentrating them on the surface of solid materials, making use of physical forces acting along the solid-liquid interface. Treatment: Filtration, and taste and odor control.

Biological flocculation and precipitation.--Putrescible substances are partly stabilized (converted to unobjectionable form--see "Stabilization") by transferring the substances to the interface between water and the slime of living organisms. Treatment: Filtration, activated sludge, contact stabilization, aeration, biofiltration, digestion, oxidation, polishing ponds, and septic tanks.

Filtration.--Suspended matter is removed from a liquid by forcing the liquid through beds of coke, sand, coal, either under gravity or under pressure greater than the gravitational force. Treatment: Filtration slow (gravity) rapid (vacuum), clarification, and septic tanks.

Disinfection.--Living microorganisms are killed by means of chemicals, heat, ultraviolet radiation, or other means. Treatment: Chlorination, algae control, incineration, and drying of sludge by air or heat for disposal.

Chemical Stabilization.--Objectionable substances are converted into unobjectionable substances by means of chemicals added to the water or effluent. The unobjectionable substances are not necessarily removed from solution or suspension by this unit process alone. Treatment: Chlorination, pH control, recarbonation, antiprecipitation and corrosion control, softening, and stabilization.

Sewage Treatment

Generally, in this report, type of sewage treatment is described by listing the overall type of treatment, such as primary, secondary, and tertiary--terms that refer to specific groups of unit processes in operation in the sewage treatment plant. These three overall types are described briefly below.

Primary Treatment.--Includes plain sedimentation, which is the removal by gravitational settling of suspended particles heavier than water. Settling occurs in basins or tanks. Chemical coagulation and digestion are also part of the primary treatment process. Primary treatment removes 40 to 50 percent of organic material.

Secondary Treatment.--Includes filtration either by high- or low-rate tricking filter, sedimentation or settling, activated sludge, and digestion. Secondary treatment removes 80 to 90 percent of the organic material from the raw sewage.

Tertiary Treatment.--Includes the use of oxidation ponds for purification of settled sludge by storage under climatic conditions that favor growth of algae. Chemical coagulation and ion exchange are a part of tertiary treatment.

SOURCES OF WATER

Ground water supplies 85 percent and surface water 15 percent of the total quantity of water used by the 169 municipalities and 5 county systems for which data are included in this report.

Ground water for municipal use is derived mainly from five principal aquifers: the Floridan aquifer, the Biscayne aquifer, the sand-and-gravel aquifer of northwest Florida, aquifers in the Hawthorn and Tampa Formations, and the "shallow sand aquifer" (fig. 2).

In many parts of the State, small to large quantities of water are pumped for public supply from near-surface aquifers consisting of clastic materials including sand, shell beds, and sandstone, in addition to limestone. These aquifers, not everywhere continuous, have various names, depending on the location. For convenience, all are grouped together on figure 2 under the name "shallow sand aquifer." The following table lists the county, the names of the near-surface aquifers of sufficient thickness and areal extent to supply quantities of water suitable for public supply, the range in depth from which water is obtained, and the number of municipalities supplied.

County	Aquifer name	Depth range (feet)	Number of municipalities supplied
Lee	Water-table aquifer in Pleistocene sand	16 - 44	1
	Sandstone aquifer in the Tamiami Formation	57 - 86	2
	Water-table aquifer	20 - 49	1
Flagler	Nonartesian aquifer	100 - 115	1
Palm Beach	Shallow aquifer	60 - 250	8
Collier	do.	60 - 100	1
Indian River	do.	90 - 100	1
Glades	Shallow aquifer in the Tamiami Formation	85 - 110	1
St. Johns	Shallow sand aquifer	45 - 96	1

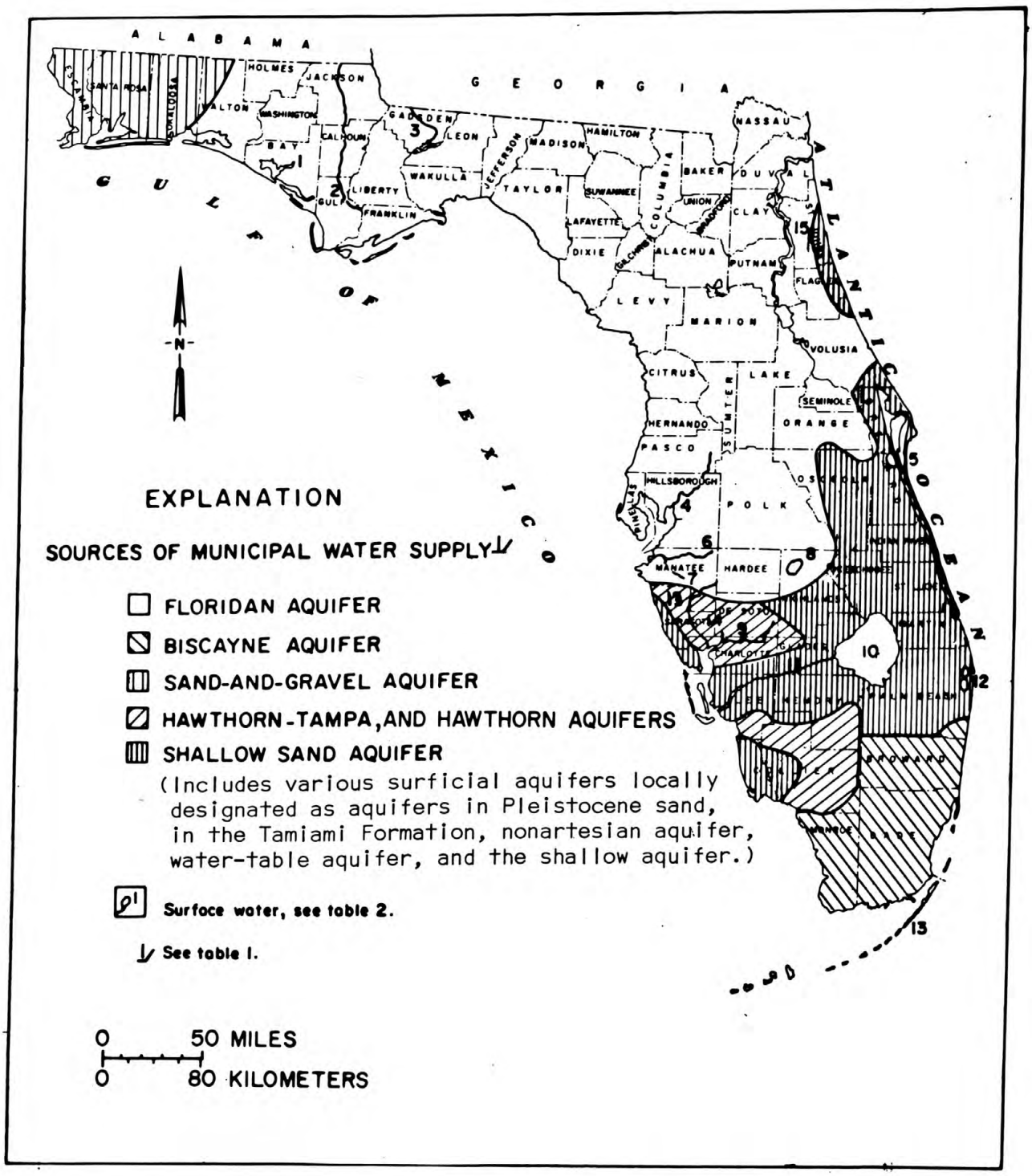

Figure 2.--Sources of water supply for municipal use.

County	Aquifer name	Depth range (feet)	Number of municipalities supplied
Brevard	Shallow sand aquifer	- -	1
Sarasota	Nonartesian aquifer	- -	1
	Nonartesian sand aquifer	40 - 90	1
St. Lucie	Shallow sand-and-gravel aquifer	80 - 120	1
Hendry	Shallow aquifer in the Tamiami Formation	16 - 40	1
Martin	Shallow sand aquifer	60 - 140	1

The Floridan aquifer is the principal source of water in north-central north, south-central, and most of northwest Florida (Klein, 1971). Total pumpage from the Floridan aquifer in 1975 by the 169 municipalities listed in this report averaged 367 Mgal/d, 41 percent of the total ground water pumped for public supply (table 1).

The Biscayne aquifer is the chief source of water for most of the cities in Broward and Dade Counties along the populous southeastern coast. The Biscayne, one of the most highly productive aquifers in the world, underlies about 3,300 mi^2 of Broward, Dade and southeast Palm Beach Counties. Pumpage from the Biscayne aquifer averaged 403 Mgal/d or 45 percent of the total ground water pumped for municipal supply.

The sand-and-gravel aquifer is the principal source of water for public supply in the extreme northwest part of Florida. Although this aquifer underlies about 3,500 mi^2 in Escambia, Okaloosa, Santa Rosa, and Walton Counties in Florida, it is the source of water supply only in Escambia and Santa Rosa Counties (fig. 2). Pumpage in 1975 averaged 27 Mgal/d (table 1).

The shallow sand aquifer supplied 73 Mgal/d for municipal use, and the Hawthorn-Tampa and Hawthorn aquifers supplied, on the average 15 Mgal/d for public supply in 1975.

In 1975, 2 Mgal/d of salty water was pumped each day, on the average, from wells that tap the Key Largo Limestone. The salty water, after treatment at the Stock Island desalination plant was used for public supply to the city of Key West.

Surface-water supplies for municipal use are diverted from rivers, lakes, and reservoirs (table 2). An infiltration gallery supplied the city of St. Augustine. The average pumpage of water from all sources, in 1975, was about 150 Mgal/d. Rivers contributed 80 Mgal/d of the water used; lakes, 37 Mgal/d. The remaining sources, a reservoir and infiltration gallery, supplied a total of 33 Mgal/d (table 1).

Table 2.--Quantity of water supplied by 22 municipalities, by source, 1975.

Source [1]	Municipality	Percentage supplied from source cited	Water supplied (Mgal)
1. Deer Point Reservoir	Callaway	100	105
	Panama City	100	1,737
	Panama City Beach	16	87
	Springfield	100	188
2. Chipola River	Port St. Joe	100	235
3. Quincy Creek	Quincy	100	432
4. Hillsborough River	Tampa	100	19,238
5. Lake Washington	Melbourne [2]	100	3,249
6. Manatee River	Palmetto	100	197
7. Braden River	Bradenton	100	1,397
8. Lake Sirena	Lake Placid	50	36
9. Shell Creek	Punta Gorda	100	666
10. Lake Okeechobee	Belle Glade	100	1,467
	Clewiston	100	424
	Okeechobee	100	380
	Pahokee	100	304
11. Caloosahatchee River	Ft. Myers	50	1,044
	Ft. Myers (suburban)	100	1,463
12. Lake Mangonia and Clear Lake	West Palm Beach [2]	100	7,760
13. Myakka-Hatchee River	N. Port Charlotte	100	359
14. Fordham Waterway	Port Charlotte	92	761
15. Infiltration gallery	St. Augustine	50	466
			41,995

[1]Numeral refers to figure 2.

[2]Includes other municipalities.

In 1975, five county water systems provided, on the average, 96 Mgal/d of public-supply water to a population of 595,980. Three of the five systems provided, in the aggregate, 54 Mgal/d of ground water, and two supplied 42 Mgal/d of surface water. The following table lists quantities of water supplied by all five.

County water System	Population served	Water Supplied: For the year (Mgal)	Water Supplied: Average daily (Mgal)	Source
Bay County	65,000	11,806.21	32.35[a/]	Deer Point Reservoir.
Broward County Utilities Dept.	136,000	7,081.0	19.40	Biscayne aquifer.
Manatee County	55,000	3,613.5	9.90	Manatee River
Okaloosa County	20,870	716.64	1.96	Floridan and sand-and-gravel aquifers.
Pinellas County	319.110	12,055.91	33.05	Floridan aquifer.
TOTAL	595,980	35,273.26	96.60	

a/ Includes 25.39 Mgal/d for industrial use.

Eighteen municipalities are supplied entirely from surface-water sources and four are supplied from both surface and ground-water sources. Of the four supplied by both, the surface-water supply ranged from 16 percent of total supply (Panama City Beach) to 92 percent of total supply (Port Charlotte) (table 2).

Table 3 lists the 20 largest municipal public supplies in the State for 1975. On the average, the municipalities listed pumped 638 Mgal/d or 72 percent of the total quantity of public-supply water reported and 56 percent of the entire public supply in the State. The aggregate population of the 20 cities listed is 57 percent of the population of the 169 municipalities listed in this report and 44 percent of the total population of Florida.

Table 3.--Quantity of public-supply water delivered to users by 20 municipalities, 1975.

Municipality	Source	Water Supplied: For the year (Mgal)	Water Supplied: Average daily (Mgal)	Population served	Average daily per capita use (gal)
Miami	GW	68,876	188	1,210,000	156
Jacksonville	GW	21,333	58	250,000	152
Tampa	SW	19,238	53	350,000	150
Ft. Lauderdale	GW	16,798	46	226,430	203
Orlando	GW	14,881	41	196,000	208
St. Petersburg	GW	12,796	35	253,000	209
North Miami Beach	GW	9,176	25	165,000	152
Pensacola	GW	8,318	23	144,435	102
West Palm Beach	SW	7,760	21	79,950	266
Boca Raton	GW	6,254	17	46,200	371
Lakeland	GW	6,224	17	82,000	208
Pompano Beach	GW	5,475	15	63,000	238
Hollywood	GW	5,293	15	100,000	145
Cocoa	GW	5,263	14	100,000	144
Tallahassee	GW	5,229	14	92,789	124
Gainesville	GW	5,048	14	80,000	173
Winter Park	GW	4,133	11	60,000	189
North Miami	GW	4,131	11	65,000	174
Daytona Beach	GW	4,062	11	62,300	179
Melbourne	SW	3,249	9	90,000	99
Total		233,537	638	3,716,104	

CHEMICAL ANALYSES

Chemical analyses of 168 water samples, collected from wells, lakes, streams, and a reservoir, all used as sources of public supply, are included in this report. The samples were collected in 1975 or early in 1976. Of the analyses listed, 165 are of raw water and 3 are of treated water.

Each analyses is identified by a site identification number which represents an individual station under which chemical analyses of water sampled at the station are stored in the Water Quality Data File of the U.S. Geological Survey. This site number is used to retrieve those chemical analyses from the file. The sampling point is identified either by a 15-digit number which represents wither a ground-water or a surface-water site or by an 8-digit number which signifies a surface-water site. If known the local well number also is included.

The analyses are of water samples collected from wells, lakes, streams and a reservoir used as sources of public supply. Chemical constituents are given in either milligrams or micrograms per liter. Physical constituents are given in the units shown. The major chemical and physical constituents, their safe standards, sources and significance with respect to public water supply are summarized in table 4. Complete treatment of the occurrence, interpretation, and distribution of chemical constituents in water is given in Water-Supply Paper 1473 (Hem, 1970).

In this report, analyses of raw water rather than of treated water used for public supply are listed, principally to provide a continuing series of analyses that can be utilized to evaluate any changes in the quality of source water with time. The periodic evaluation would indicate water quality trends in the source waters from which public supply is obtained. The quality of raw water, of course, reflects conditions in the hydrologic environment. The Department of Environmental Regulation, concerned with the quality of raw water (for epidemiology) and treated water (for effectiveness of treatment processes), analyzes both raw and treated water.

This report lists analyses of 168 samples of raw water, made by the U.S. Geological Survey. Of the total, 160 analyses represent water quality during 1975 and 8 analyses represent quality of water sampled in early 1976. Analyses of raw and treated waters for Pine Island, Sanibel and Key West are included.

For municipalities that have either more than one source of water (that is, both ground and surface water) or more than one well field, generally at least two water analyses are listed. For example, two or more water analyses are listed for raw water supplying Jacksonville, Lakeland, Lehigh Acres, Miami, North Miami Beach, Plant City, Pine Island, Quincy, and Sanibel.

TABLE 4.--Major chemical constituents in water--their sources concentrations, and effects upon useability of water for public supply in Florida, 1975
(Footnotes are at end of table)

Chemical constituent or physical property	Recommended Standards[1] (milligrams per liter)	Range in chemical physical properties[2] (milligrams per liter)	Source	Effect upon useability of water
Silica (SiO_2)	-	0.5-50	Present in almost all rocks and soil. Generally dissolves in concentrations of 1 to 50 mg/L. In alkaline waters concentration may be as high as 100 mg/L.	Scale formed in pipes and boilers. Effectiveness of water softeners reduced.
Calcium (Ca) and Magnesium (Mg)	-	Ca 0.6-180 Mg 0.5-46	Present in almost all rocks. Particularly abundant in limestone, dolomite, and gypsum. Readily dissolves from these rocks, usually in high concentrations. High in river water that drains humid areas.	Hardness and scale-forming properties are characteristic. Soap lathering difficult. Magnesium is an indicator of contamination of freshwater by seawater.
Sodium (Na) and Potassium (K)	-	Na 1.7-410 K 0.2-54	Present in almost all rocks. Particularly abundant in sedimentary rocks, from which Na readily dissolves, but K more slowly. Concentration of Na much higher than K in natural waters.	High concentrations give salty taste to water. Low to medium concentrations do not adversely affect usefulness of water for purposes other than stream generation and irrigation.

TABLE 4.--Major chemical constituents in water--their sources, concentrations, and effects upon useability of water for public supply in Florida, 1975 (Continued)
(Footnotes are at end of table)

Chemical constituent or physical property	Recommended Standards[1] (milligrams per liter)	Range in chemical or physical properties[2] (milligrams per liter)	Source	Effect upon useability of water
Bicarbonate (HCO_3)	-	1-438	Action of carbon dioxide in water on carbonate rocks such as limestone and dolomite.	Decomposes under heat and pressure to form scale and carbon dioxide (corrosive). Causes carbonate water hardness in combination with calcium and magnesium.
Chloride (Cl)[3]	0-250	2.4-360	Dissolved from rocks and soil. Important sources include evaporites, oceans, and brines.	Imparts salty taste to water. If present in large amounts, increases corrosiveness of water.
Fluoride (F)	[4]	0.1-5.0	Present in most igneous and sedimentary rocks.	Reduces tooth decay. Excessive fluoride causes mottling or permanent discoloration of teeth. Effect of fluoride depends on concentration, age of individual, susceptibility of individual and quantity of water consumed.

TABLE 4.--Major chemical constituents in water--their sources, concentrations, and effects upon useability of water for public supply in Florida, 1975 (Continued)
(Footnotes are at end of table)

Chemical constituent or physical property	Recommended Standards[1] (milligrams per liter)	Range in chemical or physical properties[2] (milligrams per liter)	Source	Effect upon useability of water
Nitrate (NO_3)	0-10	0.00-3.4	Leaching of irrigated soil. Decaying vegetable matter, animal wastes.	Indicates localized contamination if concentrations in water are higher than average. Concentrations of 45 mg/L can cause methemoglobinemia.
Iron (Fe) Manganese (Mn)	Fe 0-0.3 Mn 0-0.05	 0.00-7.5 0.00-0.14	Dissolved from all rocks and soils. Iron may go into solution from iron pipes, pumps, and other iron implements.	Oxidizes and precipitates as a reddish-brown sediment in water exposed to air. High concentrations in water stain enameled and porcelain fixtures and restrict water's use.
Hardness as $CaCO_3$	-	3-710	Present in almost all rocks. Particularly abundant in limestone, dolomite, and gypsum. Readily dissolves from these rocks usually in high concentrations. Also may result from high concentrations of metallic ions such as Cu, K, Na.	Forms scale in boilers, pipes, heating coils. Prevents or retards soap from lathering. Hardness scale; soft, 60 mg/L; moderately hard, 61-120 mg/L; hard, 121-180 mg/L; very hard, more than 180 mg/L.

TABLE 4.--Major chemical constituents in water--their sources, concentrations, and effects upon useability of water for public supply in Florida, 1975 (Continued)
(Footnotes are at end of table)

Chemical constituent or physical property	Recommended Standards[1] (milligrams per liter)	Range in chemical or physical properties[2] (milligrams per liter)	Source	Effect upon useability of water
Total dissolved solids (residue at 180° C)	0-500	12-3,510	Mineral content and organic content of water. Dissolved from rocks and soil.	Water with concentrations higher than 500 mg/L is unsuitable for many purposes.
Specific conductivity (micromhos/cm at 25° at 25° C)	-	17-4,460	Depends upon the concentrations and kind of minerals dissolved from rocks and soils.	Varies with temperature, concentration, and degree of ionization of constituents. May be used to determine the extent to which ground and surface water are contaminated by seawater.
Hydrogen ion pH (units)	5.0-9.0	4.7-8.5	Carbonate, bicarbonate, hydroxide, phosphate, silicate and borate raise the pH. Acids, acid-generating salts and free carbon dioxide lower the pH.	Water with low pH generally more corrosive than water with high pH. Strongly alkaline water may be corrosive. Neutral water has a pH of 7; acid water has a pH greater than 7 and alkaline water less than 7.

TABLE 4.--Major chemical constituents in water--their sources, concentrations, and effects upon useability of water for public supply in Florida, 1975 (Continued)
(Footnotes are at end of table)

Chemical constituents or physical property	Recommended Standards[1] (milligrams per liter)	Range in chemical[2] physical properties (milligrams per liter)	Source	Effect upon useability of water
Sulfate (SO_4)	0-250	0.1-350	Metallic sulfides in igneous and sedimentary rocks. Often concentrated in areas of economic importance. Extensive in evaporite sediments.	Imparts bad taste and has a laxative effect. Generally associated with the occurrence of hydrogen sulfide formed by the reduction of sulfate in water.
Temperature (°C)	-		Temperature of water reflects air temperature and temperature of soils and rock formations through which it moves. Generally, temperature of surface water more closely correlates to air temperature than to temperature of ground water.	To a large degree, temperature determines the purposes for which water might be used. Temperatures fluctuate seasonally--are greatest in shallow aquifers and streams. In water at moderate depths, temperature fluctuates through narrower ranges than in water at shallow depth.

TABLE 4.--Major chemical constituents in water--their sources, concentrations, and effects upon useability of water for public supply in Florida, 1975 (Continued)
(Footnotes are at end of table)

1/ National Academy of Sciences and National Academy of Engineering (1973).

2/ Ranges based on analyses listed in this report.

3/ Does not include waters with high chlorides used by desalination plants.

4/ Depends on annual averages of maximum daily air temperature.

Typically, the ground water in Florida is hard[a/] to very hard except in the extreme northwest part of the State, where water from the sand-and-gravel aquifer is very soft, low in bicarbonate and dissolved solids but is corrosive because of a high concentration of dissolved carbon dioxide. The use of lime, however, to stabilize the water, permits it to be used for public supply.

Of the samples of raw water collected in 1975-76 from wells tapping the Florida aquifer and used for public supply 72 percent were in the hard to very hard range, 24 percent were moderately hard, and about 4 percent soft. Water used for public supply from the Biscayne aquifer is a very hard high bicarbonate water, as in the water from the Hawthorn, Hawthorn-Tampa, and shallow sand aquifers. Water for public supply from Deer Point Lake Reservoir, the source of supply for the Panama City area, is soft. Waters from rivers and lakes generally range from soft to very hard.

NORTHWESTERN FLORIDA

The northwestern Florida section includes water-use data for municipalities in the Florida panhandle, an area of about 1,550 mi^2 extending from the Apalachicola River westward to the Florida-Alabama boundary (fig. 3).

The principal source of ground water for municipal supplies in Escambia and Santa Rosa Counties is the sand-and-gravel aquifer. The aquifer extends through Okaloosa and northern Walton Counties. In the rest of the northwestern Florida section, in Calhoun, Gulf, Holmes, Jackson, and Washington Counties, the Floridan aquifer is the chief source of water for public supply. In Bay County the chief source of supply is surface water. During 1975, 9,733 Mgal were withdrawn for municipal water supply from the sand-and-gravel aquifer and 4,810 Mgal were withdrawn from the Floridan aquifer. Surface-water supplies for municipal use totaled 2,489 Mgal. The three most populous areas, Fort Walton Beach, Panama City, and Pensacola, used 11,119 Mgal or 65 percent of the aggregate quantity of water supplied by the public water supply systems listed in this section.

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a/ Durfor and Becker (1964, p. 27) use the following classification hardness range:

Hardness range (mg/L of $CaCO_3$)	Description
0-60	Soft
61-120	Moderately hard
121-180	Hard
More than 180	Very hard

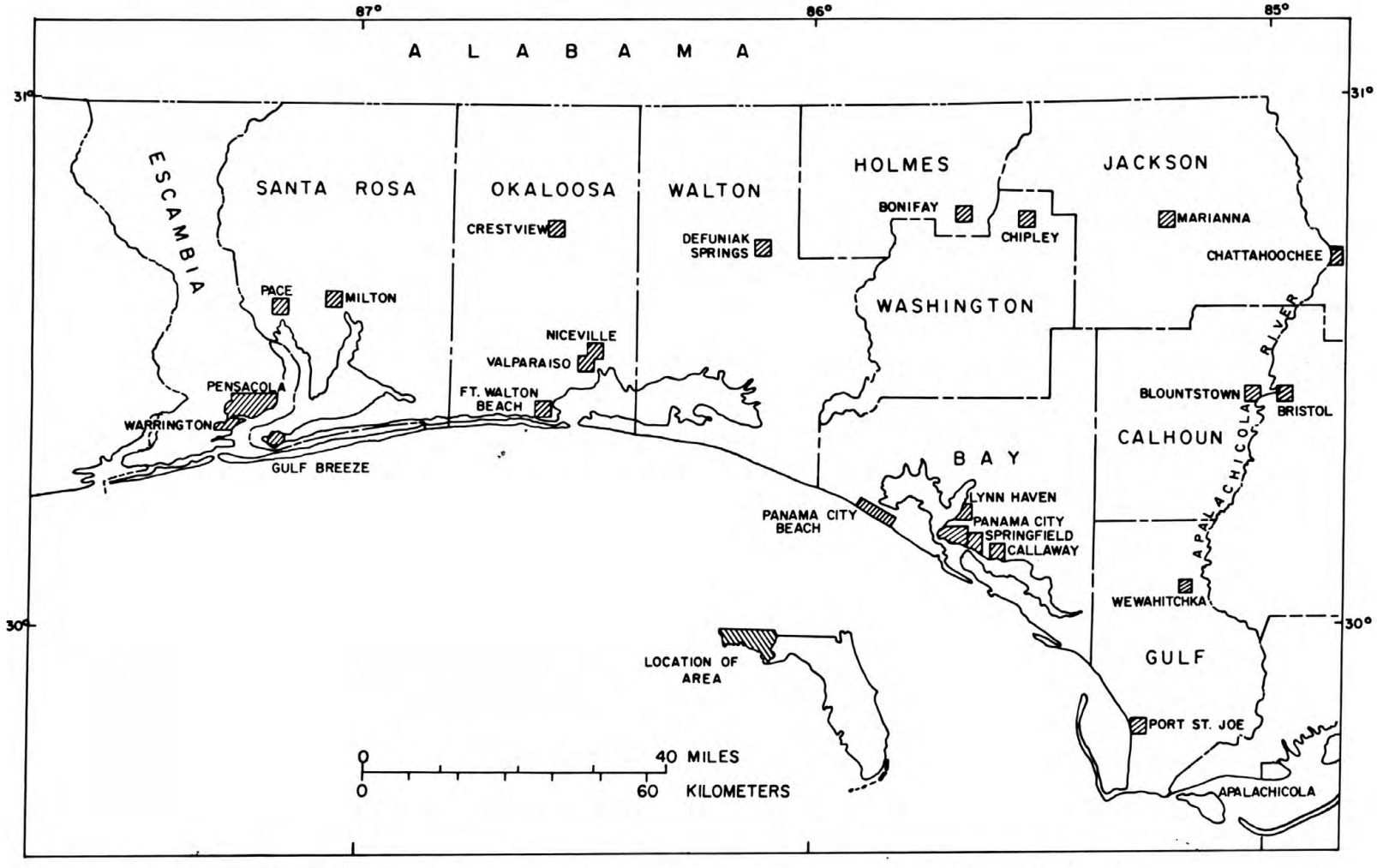

Figure 3.--Municipalities in northwestern Florida for which water-use data are given.

APALACHICOLA

County: Franklin **Population served:** 3,200
River basin: Apalachicola River (13 00 11)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells 275 to 350 feet deep; yield 200 to 700 gal/min

Rated plant capacity: 0.936 Mgal/d
Pumpage: Year—167.89 Mgal **Average daily**— 0.46[a/] Mgal
Highest month: July, 16.47 Mgal **Lowest month:** February, 9.36 Mgal

Per capita use: 144 gal/d
Finished-water storage: 0.3 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.50 Mgal/d
Sewage treatment: Secondary

Waste discharged to: Cool Springs, Scipio Creek, Apalachicola River

Remarks: City also supplies water to areas adjacent to city. Average daily pumpage increase from 0.20 Mgal/d in 1956 to 0.46 Mgal/d in 1975.
a/ Includes 0.138 Mgal/d commercial use.

CHEMICAL ANALYSIS [1/] (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: 294339084591901

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	760
Calcium (Ca)	74	Total hardness (as $CaCO_3$)	440
Magnesium (Mg)	60	Noncarbonate hardness (as $CaCO_3$)	170
Sodium (Na)	65	Alkalinity (as $CaCO_3$)	280
Potassium (K)	8	pH (units)	7.6
Strontium (Sr)	9.5	Specific conductance (μmhos/cm at 25°C)	1190
Bicarbonate (HCO_3)	337	Color (Pt-Co units)	5
Sulfate (SO_4)	170	Temperature (°C)	24
Chloride (Cl)	120	Turbidity (JTU)	2
Fluoride (F)	1.2	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.06		
Nitrogen (ammonia, total (NH_4-N))	.34		
Iron (Fe)	.01		
Phosphorus, total (P)	.2		

1/ Analysis of raw water unless otherwise noted.

BAY COUNTY WATER SYSTEM

County: Bay **Population served:** 65,000
River basin: St. Andrew Bay, inflow and coastal area (14 01 01)

Ownership of supply or system: Bay County
Source of water: Surface water, Deer Point Lake Reservoir

Rated plant capacity: 58.5 Mgal/d
Pumpage: Year— 11,806.21 Mgal **Average daily—** 32.35[a] Mgal
Highest month: October, 1,248.84 Mgal **Lowest month:** May, 865.47 Mgal
Per capita use: 96[b] gal/d
Finished-water storage: 3.0 Mgal
Treatment: Flocculation, filtration, pH control, chlorination

Type/Frequency of analysis: Bacteriological, chemical, color, and turbidity/daily

Sewage discharge: 21.33[c] Mgal/d
Sewage treatment: Aeration, primary, secondary, settling

Waste discharged to: St. Andrews Bay;[d] Mill Bayou[e]

Remarks: System supplies water to Callaway, Cedar Grove, Panama City, Panama City Beach, Parker, and Springfield (fig. 4) Foster (1972).
a/Includes 25.39 Mgal/d industrial use, 0.731 Mgal/d commercial use.
b/Based on pumpage for domestic use only.
c/Includes 21.26 Mgal/d industrial sewage, 0.075 Mgal/d waste water from water plant. d/Industrial sewage. e/Waste water from water plant.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: 301532085352400, Deer Point Lake at Williams Pumping Station

Silica (SiO_2)	1.5	Dissolved solids (residue at 180°C)	46
Calcium (Ca)	7.9	Total hardness (as $CaCO_3$)	26
Magnesium (Mg)	1.5	Noncarbonate hardness (as $CaCO_3$)	4
Sodium (Na)	4.6	Alkalinity (as $CaCO_3$)	22
Potassium (K)	.3	pH (units)	7
Strontium (Sr)	.1	Specific conductance (μmhos/cm at 25°C)	93
Bicarbonate (HCO_3)	27	Color (Pt-Co units)	75
Sulfate (SO_4)	2.4	Temperature (°C)	26
Chloride (Cl)	7.8	Turbidity (JTU)	3
Fluoride (F)	.2	Carbon, organic, total (C)	6
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01	SAR	.4
Nitrogen, organic (N)	.43		
Nitrogen (ammonia, total (NH_4-N))	.00		
Iron (Fe)	.14		
Phosphorus, total (P)	.01		
Carbon Dioxide (CO_2)	4.3		

BAY COUNTY WATER SYSTEM

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: Deer Point Lake at Williams Bayou Pumping Station

Trace Elements			
Arsenic (As)	0	Manganese (Mn)	10
Barium (Ba)	30	Mercury (Hg)	.1
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	10	Zinc (Zn)	10
Copper (Cu)	2		
Iron (Fe)	920	pH(units)	--
Lead (Pb)	16	Temperature (°C)	26

Pesticides			
Aldrin	.00	Heptachlor	.00
Chlordane	.00	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	--
Endrin	.00	Silvex	.01
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.00
Heptachlor epoxide	.00	2,4-DP	.00
Ethion	.00	2,4,5-T	.00

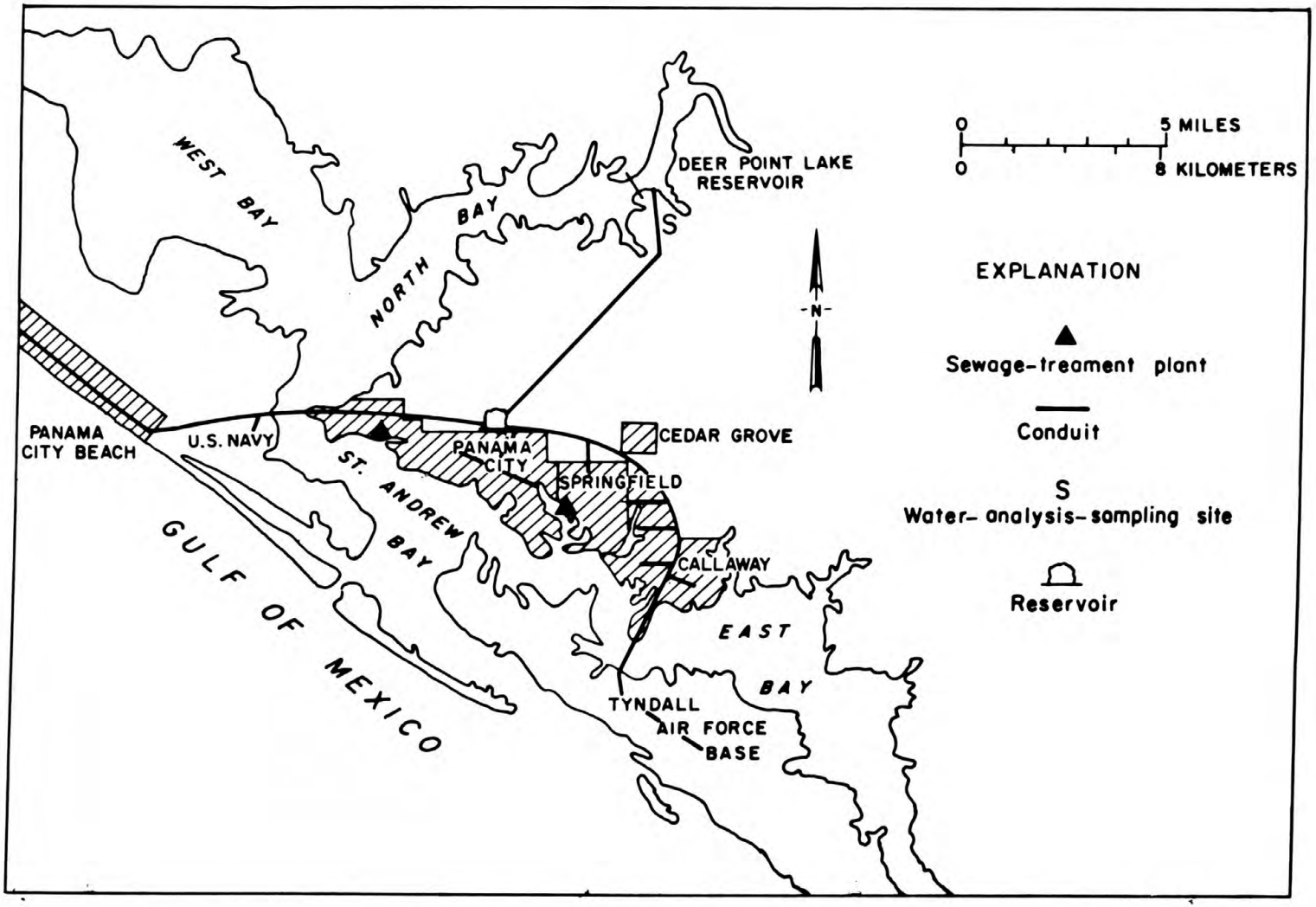

Figure 4.--Distribution systems of Bay County Water System, Panama City area.

BLOUNTSTOWN

County: Calhoun
Population served: 2,400
River basin: Apalachicola River (13 00 11)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells, 450 feet deep; yield 500 gal/min each well

Rated plant capacity: 1.44 Mgal/d
Pumpage: Year— 78.93 Mgal
Highest month: June, 8.1 Mgal
Average daily— 0.22[a/] Mgal
Lowest month: November, 5.8 Mgal

Per capita use: 90 gal/d
Finished-water storage: 0.18 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/weekly

Sewage discharge: 0.40 Mgal/d
Sewage treatment: Aeration

Waste discharged to: Sutton Creek, Old River, Apalachicola River

Remarks: Pumpage 0.20 Mgal/d in 1956, 0.16 Mgal/d in 1970.
a/ Includes 0.06 Mgal/d commercial use, 0.002 Mgal/d industrial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 302640085031101, Blountstown Well 2

Silica (SiO_2)	17	Dissolved solids (residue at 180°C)	268
Calcium (Ca)	30	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	16	Noncarbonate hardness (as $CaCO_3$)	3
Sodium (Na)	40	Alkalinity (as $CaCO_3$)	136
Potassium (K)	5.9	pH (units)	7.7
Strontium (Sr)	1.9	Specific conductance (μmhos/cm at 25°C)	465
Bicarbonate (HCO_3)	166	Color (Pt-Co units)	5
Sulfate (SO_4)	32	Temperature (°C)	23
Chloride (Cl)	44	Turbidity (JTU)	1
Fluoride (F)	.9	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.07		
Nitrogen (ammonia, total (NH_4-N))	.09		
Iron (Fe)	.03		
Phosphorus, total (P)	.01		

BONIFAY

County: Holmes **Population served:** 3,179
River basin: Choctawhatchee River below Pea River (14 02 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells, 197 to 250 feet deep; yield 500 gal/min each well

Rated plant capacity: 1.4 Mgal/d
Pumpage: Year— 54.75 Mgal **Average daily—** 0.15[a/] Mgal
Highest month: July, 4.6 Mgal **Lowest month:** January, 3.8 Mgal

Per capita use: 47 gal/d
Finished-water storage: 0.15 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/bimonthly; chemical, color, turbidity, and odor/annually
Sewage discharge: 0.20[b/] Mgal
Sewage treatment: Secondary

Waste discharged to: Camp Branch Creek, Holmes Creek

Remarks: Water supplied to fringe areas outside city. Per capita use estimated from average daily use of 0.15 Mgal/d .
a/ Includes 0.031 Mgal/d industrial use, 0.025 Mgal/d commercial use, and 0.002 Mgal/d air conditioning. Estimated pumpage.
b/ Estimated discharge.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 304709085471001, Bonifay well 3

Silica (SiO_2)	9	Dissolved solids (residue at 180°C)	132
Calcium (Ca)	43	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	2	Noncarbonate hardness (as $CaCO_3$)	10
Sodium (Na)	1.9	Alkalinity (as $CaCO_3$)	110
Potassium (K)	.3	pH (units)	7.7
Strontium (Sr)	.03	Specific conductance (µmhos/cm at 25°C)	228
Bicarbonate (HCO_3)	134	Color (Pt-Co units)	5
Sulfate (SO_4)	.3	Temperature (°C)	21
Chloride (Cl)	2	Turbidity (JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.38	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.04		

BRISTOL

County: Liberty
River basin: Apalachicola River (13 00 11)
Population served: 1,530

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 4 wells, 320 to 955 feet deep; yield 45 to 220 gal/min

Rated plant capacity: 0.6 Mgal/d
Pumpage: Year— 34.31 Mgal
Highest month: June, 4.2[b/] Mgal
Average daily— 0.094[a/] Mgal
Lowest month: February, 2.0 Mgal

Per capita use: 60 gal/d
Finished-water storage: 0.075 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Total service connections, 450. Average daily pumpage increased from 0.02 Mgal in 1956 to 0.16 Mgal in 1970 then decreased to 0.09 Mgal in 1975.
a/ Includes 0.011 Mgal/d agricultural use, 0.007 Mgal/d commercial use.
b/ Estimated.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 302602084585701

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	146
Calcium (Ca)	25	Total hardness (as $CaCO_3$)	100
Magnesium (Mg)	10	Noncarbonate hardness (as $CaCO_3$)	0
Sodium (Na)	4.4	Alkalinity (as $CaCO_3$)	112
Potassium (K)	1.7	pH (units)	7.9
Strontium (Sr)	.19	Specific conductance (μmhos/cm at 25°C)	250
Bicarbonate (HCO_3)	137	Color (Pt-Co units)	5
Sulfate (SO_4)	6.4	Temperature (°C)	23
Chloride (Cl)	.0	Turbidity(JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00	SAR	.2
Nitrogen, organic (N)	.02		
Nitrogen (ammonia, total (NH_4-N))	.03		
Iron (Fe)	.04		
Phosphorus, total (P)	.01		

CALLAWAY

County: Bay **Population served:** 6,000[a/]
River basin: St. Andrew Bay, inflow and coastal area (14 01 01)

Ownership of supply or system: Bay County Water System
Source of water: Surface water, Deer Point Lake Reservoir

Rated plant capacity: [b/]
Pumpage: Year— 104.94 Mgal **Average daily—** 0.29[c/] Mgal
Highest month: August, 12.3 Mgal **Lowest month:** January, 6.0 Mgal

Per capita use: 48[a/] gal/d
Finished-water storage: [b/]
Treatment: [a/]

Type/Frequency of analysis: [b/]

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: For chemical analysis see Bay county Water System.
[a/] Number of residents on Callaway water system not known.
[b/] See Bay County Water System (p. 27).
[c/] Includes 0.014 Mgal/d industrial use, 0.058 Mgal/d commercial use.

CHATTAHOOCHEE

County: Gadsden
Population served: 3,000
River basin: Apalachicola River (13 00 11)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 200 to 239 feet deep; yield 510 gal/min each well

Rated plant capacity: 1.4 Mgal/d
Pumpage: Year— 122.7 Mgal
Highest month: October, 12.4 Mgal
Average daily— 0.34 a/ Mgal
Lowest month: March, 7.7 Mgal

Per capita use: 113 gal/d
Finished-water storage: 0.15 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly b/; chemical/irregularly b/; chemical/daily c/
Sewage discharge: 0.275 Mgal/d
Sewage treatment: Primary, secondary, contact stabilization, chlorination

Waste discharged to: Mosquito Creek

Remarks: Average daily pumpage increased from 0.18 Mgal/d in 1956 to 0.33 Mgal/d in 1975.
a/ Includes 0.012 Mgal/d supplied to Rosedale Water Association and 0.07 Mgal/d commercial use.
b/ Raw water.
c/ Treated water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 3-19-75
SAMPLING POINT: 304139084502101, Well 2.

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	140
Calcium (Ca)	35	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	8	Noncarbonate hardness (as $CaCO_3$)	0
Sodium (Na)	2	Alkalinity (as $CaCO_3$)	128
Potassium (K)	.5	pH (units)	7.9
Strontium (Sr)	0	Specific conductance (μmhos/cm at 25°C)	265
Bicarbonate (HCO_3)	156	Color (Pt-Co units)	5
Sulfate (SO_4)	.6	Temperature (°C)	21
Chloride (Cl)	.6	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	2.0
Nitrate (NO_3-N)	.2	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.00	SAR	.1
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.02		
Phosphorus, total (P)	.02		
Carbon Dioxide (CO_2)	3.1		

CHIPLEY

County: Washington **Population served:** 4,000
River basin: Choctawhatchee River below Pea River (14 02 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 160 to 200 feet deep; yield 320 to 515 gal/min

Rated plant capacity: 1.20 Mgal/d
Pumpage: Year— 133.8 Mgal **Average daily—** 0.37 Mgal
Highest month: July, 15.0 Mgal **Lowest month:** February, 9.4 Mgal

Per capita use: 93 gal/d
Finished-water storage: 0.09 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological and chemical/annually[a/]

Sewage discharge: 0.3 Mgal/d
Sewage treatment: Aeration, secondary

Waste discharged to: Alligator Creek

Remarks: Average daily pumpage increased from 0.32 Mgal/d in 1956 to 0.75 Mgal/d in 1970.
a/ Treated water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 304652085321401, City well 2

Silica (SiO_2)	8	Dissolved solids (residue at 180°C)	104
Calcium (Ca)	36	Total hardness (as $CaCO_3$)	97
Magnesium (Mg)	1.7	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	1.7	Alkalinity (as $CaCO_3$)	98
Potassium (K)	.2	pH (units)	7.7
Strontium (Sr)	.01	Specific conductance (µmhos/cm at 25°C)	203
Bicarbonate (HCO_3)	120	Color (Pt-Co units)	5
Sulfate (SO_4)	.4	Temperature (°C)	20.5
Chloride (Cl)	2	Turbidity (JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.31	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.03		

CRESTVIEW

County: Okaloosa
River basin: Yellow River (14 01 03)
Population served: 9,142

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; three wells, 604 to 920 feet deep; yield 432 to 650 gal/min

Rated plant capacity: 2.0 Mgal/d
Pumpage: Year— 513.27 Mgal
Highest month: March, 51.03 Mgal
Average daily— 1.40[a/] Mgal
Lowest month: July, 39.69 Mgal

Per capita use: 153 gal/d
Finished-water storage: 0.8 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.45 Mgal/d
Sewage treatment: Primary, secondary, trickling filter, chlorination

Waste discharged to: Trammel Creek to Yellow River

Remarks: Service connections: domestic 2,689. City also supplies water to areas outside city limits. Average daily pumpage increased from 0.57 Mgal/d in 1956 to 1.40 Mgal/d in 1975.
a/ Includes 0.02 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-20-75
SAMPLING POINT: 104537086340601, Well 1

Silica (SiO_2)	14	Dissolved solids (residue at 180°C)	130
Calcium (Ca)	27	Total hardness (as $CaCO_3$)	110
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	4.3	Alkalinity (as $CaCO_3$)	110
Potassium (K)	1.7	pH (units)	7.9
Strontium (Sr)	.08	Specific conductance (µmhos/cm at 25°C)	240
Bicarbonate (HCO_3)	134	Color (Pt-Co units)	5
Sulfate (SO_4)	9.4	Temperature (°C)	24.5
Chloride (Cl)	2.8	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.08	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.04		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	--		
Phosphorus, total (P)	.01		

DE FUNIAK SPRINGS

County: Walton **Population served:** 6,460
River basin: Choctawhatchee River below Pea River (14 02 03)

Ownership of supply or system:
Source of water: Ground water, Floridan aquifer; 4 wells, 605 to 650 feet deep; yield 250 to 650 gal/min

Rated plant capacity: 2.88 Mgal
Pumpage: Year— 292 Mgal **Average daily—** 0.8 a/ Mgal
Highest month: June, 25 Mgal **Lowest month:** February, 19 Mgal

Per capita use: 124 gal/d
Finished-water storage: 0.38 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/intermittently

Sewage discharge: 0.35 Mgal/d
Sewage treatment: Secondary, grit chamber, settling, filtration, chlorination

Waste discharged to: Sandy Creek

Remarks: Water also supplied to Bingham subdivision and areas adjacent to city. Total service connections 2,250.
a/ Includes 0.024 Mgal/d industrial use, 0.16 Mgal/d commercial use, 0.016 Mgal/d air conditioning. All use figures are estimated.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 304310086070601, well 3

Silica (SiO_2)	9.6	Dissolved solids (residue at 180°C)	86
Calcium (Ca)	20	Total hardness (as $CaCO_3$)	74
Magnesium (Mg)	5.9	Noncarbonate hardness (as $CaCO_3$)	8
Sodium (Na)	2.1	Alkalinity (as $CaCO_3$)	66
Potassium (K)	.6	pH (units)	7.9
Strontium (Sr)	.07	Specific conductance (µmhos/cm at 25°C)	156
Bicarbonate (HCO_3)	81	Color (Pt-Co units)	5
Sulfate (SO_4)	5.9	Temperature (°C)	21.5
Chloride (Cl)	2.7	Turbidity (JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.36	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.03		

FT WALTON BEACH

County: Okaloosa **Population served:** 24,242
River basin: Choctawhatchee Bay, inflow and coastal area (14 01 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer, 9 wells; sand-and-gravel aquifer, 1 well; 120 to 938 feet deep; yield 250 to 900 gal/min

Rated plant capacity: 9.0 Mgal/d
Pumpage: Year— 1,063.95 Mgal **Average daily—** 2.91[a/] Mgal
Highest month: May, 109.26 Mgal **Lowest month:** February, 67.18 Mgal

Per capita use: 120 gal/d
Finished-water storage: 1.21 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly[b/]; chemical/annually[c/]

Sewage discharge: 2.90 Mgal/d
Sewage treatment: Secondary, trickling filter

Waste discharged to: Santa Rosa Sound

Remarks: Average daily pumpage increased from 0.55 Mgal/d in 1956 to 2.91 Mgal/d in 1975. Water also supplied to areas adjacent to city. Foster (1972,1971), Pascale (1974).
a/ Includes 0.16 Mgal/d agricultural use, 0.175 Mgal/d commercial use.
b/ Treated water.
c/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-14-75
SAMPLING POINT: 302419086363901, Ft. Walton Beach-1

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	398
Calcium (Ca)	6.4	Total hardness (as $CaCO_3$)	40
Magnesium (Mg)	5.2	Noncarbonate hardness (as $CaCO_3$)	0
Sodium (Na)	138	Alkalinity (as $CaCO_3$)	196
Potassium (K)	7.6	pH (units)	8.2
Strontium (Sr)	2	Specific conductance (μmhos/cm at 25°C)	723
Bicarbonate (HCO_3)	239	Color (Pt-Co units)	0
Sulfate (SO_4)	9.8	Temperature (°C)	26
Chloride (Cl)	95	Turbidity (JTU)	1
Fluoride (F)	1.2	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.07	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00	SAR	9.8
Nitrogen, organic (N)	.05		
Nitrogen (ammonia, total (NH_4-N))	.48		
Iron (Fe)	--		
Phosphorus, total (P)	.01		

FT WALTON BEACH

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-14-75
SAMPLING POINT: Ft. Walton Beach-1

Aluminum (Al)	2	Lead (Pb)	0
Arsenic (As)	300	Lithium (Li)	--
Barium (Ba)	460	Manganese (Mn)	10
Boron (B)	0	Mercury (Hg)	.1
Cadmium (Cd)	20	Molybdenum (Mo)	--
Chromium (Cr)	--	Nickel (Ni)	--
Chromium (Cr^{+6})	--	pH(units)	--
Cobalt (Co)	--	Selenium (Se)	0
Specific conductance (umhos/cm at 25°C)	--	Vanadium (V)	--
		Temperature (°C)	--
Copper (Cu)	4	Zinc (Zn)	7
Iron (Fe)	20	Uranium (U)	<.01

GULF BREEZE

County: Santa Rosa **Population served:** 4,981
River basin: Escambia Bay, inflow and coastal area (14 01 05)

Ownership of supply or system: Municipal and Midway Water Systems Inc.
Source of water: Ground water, sand-and-gravel aquifer, 7 wells, depth to 28 feet; yield to 100 gal/min. 94 percent of supply purchased from Midway Water Systems; source Floridan aquifer, one well, 1,152 ft deep; yield, 1,000 gal/min
Rated plant capacity: 0.7 Mgal/d
Pumpage: Year— 227.27 Mgal **Average daily—** a/ 0.62 Mgal
Highest month: July, 22.31 Mgal **Lowest month:** January, 15.42 Mgal

Per capita use: 125 gal/d
Finished-water storage: 0.1 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.25 Mgal/d
Sewage treatment: Aeration

Waste discharged to: Santa Rosa Sound

Remarks: Service connections: domestic 1,465; commercial 71.
a/ Includes 0.125 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 302417086521501, Midway Public Supply Well

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	344
Calcium (Ca)	2.8	Total hardness (as $CaCO_3$)	14
Magnesium (Mg)	1.6	Noncarbonate hardness (as $CaCO_3$)	0
Sodium (Na)	130	Alkalinity (as $CaCO_3$)	198
Potassium (K)	5.3	pH (units)	8.5
Strontium (Sr)	.44	Specific conductance (μmhos/cm at 25°C)	613
Bicarbonate (HCO_3)	239	Color (Pt-Co units)	5
Sulfate (SO_4)	6.1	Temperature (°C)	30
Chloride (Cl)	66	Turbidity (JTU)	1
Fluoride (F)	1	Carbon, organic, total (C)	0
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00	SAR	15
Nitrogen, organic (N)	.2		
Nitrogen (ammonia, total (NH_4-N))	.54		
Iron (Fe)	.01		
Phosphorus, total (P)	.02		

LYNN HAVEN

County: Bay **Population served:** 6,000
River basin: St. Andrew Bay, inflow and coastal area (14 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 500 to 600 feet deep; yield 600 to 1,000 gal/min

Rated plant capacity: 2.3 Mgal/d
Pumpage: Year— 183.59 Mgal **Average daily—** 0.50[a/] Mgal
Highest month: July, 17.97 Mgal **Lowest month:** February, 10.03 Mgal

Per capita use: 84 gal/d
Finished-water storage: 0.45 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical, spectrographic, color, turbidity/annually
Sewage discharge: 0.70 Mgal/d
Sewage treatment: Trickling filter

Waste discharged to: North Bay

Remarks: Average daily pumpage increased from 0.23 Mgal/d in 1956 to 0.50 Mgal/d in 1975. City also supplies water to fringe areas adjacent to city limits. The treatment, capacity, and site of discharge of the present sewage treatment plant will be improved by new plant currently being built.No chemical analysis available.

a/ Includes 0.025 Mgal/d commercial use.

MARIANNA

County: Jackson
River basin: Chipola River (13 00 12)

Population served: 8,160

Ownership of supply or system: Municipal[a/]
Source of water: Ground water, Floridan aquifer; 5 wells, 240 to 577 feet deep; yield 250 to 1,400 gal/min.

Rated plant capacity: 3.82 Mgal/d
Pumpage: Year— 315.2 Mgal
Highest month: May, 28.84 Mgal

Average daily— 0.86[b/] Mgal
Lowest month: February, 22.53 Mgal

Per capita use: 106 gal/d
Finished-water storage: 0.18 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly, chemical, color, turbidity/annually
Sewage discharge: 0.53 Mgal/d
Sewage treatment: Primary, secondary, trickling filter

Waste discharged to: Chipola River

Remarks: Average daily pumpage increased from 0.70 Mgal/d in 1956 to 1.0 Mgal/d in 1970 then decreased to 0.86 Mgal/d in 1975. Service connections: domestic, 2,202; commercial, 518. Water supplied to areas adjacent to city limits.
a/ System purchased from North Florida Water Company in 1975.
b/ Includes 0.12 Mgal/d industrial use, 0.285 Mgal/d commercial use, 0.008 Mgal/d air conditioning.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-9-75
SAMPLING POINT: 304633085131601, North Florida Water Company Well 5

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	214
Calcium (Ca)	48	Total hardness (as $CaCO_3$)	160
Magnesium (Mg)	9.7	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	15	Alkalinity (as $CaCO_3$)	170
Potassium (K)	.9	pH (units)	7.3
Strontium (Sr)	.14	Specific conductance (μmhos/cm at 25°C)	376
Bicarbonate (HCO_3)	108	Color (Pt-Co units)	5
Sulfate (SO_4)	4.8	Temperature (°C)	21
Chloride (Cl)	10	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.73	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.01		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.06		
Phosphorus, total (P)	.02		

MILTON

County: Santa Rosa **Population served:** 9,880
River basin: Blackwater River (14 01 04)

Ownership of supply or system: Municipal
Source of water: Ground water, sand-and-gravel aquifer, 5 wells, 90 to 250 feet deep; yield 300 to 700 gal/min.

Rated plant capacity: 3.5 Mgal/d
Pumpage: Year—348.7 Mgal **Average daily**— 0.95[a/] Mgal
Highest month: August, 33.6 Mgal **Lowest month:** January, 26.9 Mgal

Per capita use: 97 gal/d
Finished-water storage: 0.55 Mgal
Treatment: Chlorination, stabilization

Type/Frequency of analysis: Bacteriological/monthly; chemical, spectrographic, color, turbidity/annually
Sewage discharge: 1.25[b/] Mgal/d
Sewage treatment: Primary, secondary, trickling filter, digestion, settling, chlorination

Waste discharged to: Blackwater Bay

Remarks: Average daily pumpage increased from 0.25 Mgal/d in 1956 to 0.95 Mgal/d in 1975. Service connections: domestic 2,906; commercial 220

a/ Includes 0.048 Mgal/d commercial use, 0.019 Mgal/d agricultural use, and 0.11 Mgal/d to Capehart Naval Housing.
b/ Plant capacity 2.2 Mgal/d.

CHEMICAL ANALYSIS (milligrams per liter, except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: 303834087024801, Byron Street well

Silica (SiO_2)	6.7	Dissolved solids (residue at 180°C)	12
Calcium (Ca)	.6	Total hardness (as $CaCO_3$)	3
Magnesium (Mg)	.4	Noncarbonate hardness (as $CaCO_3$)	2
Sodium (Na)	1	Alkalinity (as $CaCO_3$)	1
Potassium (K)	.2	pH (units)	5.6
Strontium (Sr)	.02	Specific conductance (μmhos/cm at 25°C)	17
Bicarbonate (HCO_3)	1	Color (Pt-Co units)	.00
Sulfate (SO_4)	.2	Temperature (°C)	21.5
Chloride (Cl)	2.4	Turbidity (JTU)	1
Fluoride (F)	.0	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.25	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.02		
Nitrogen (ammonia, total (NH_4-N))	.00		
Iron (Fe)	.00		
Phosphorus, total (P)	.01		

NICEVILLE

County: Okaloosa **Population served:** 6,290
River basin: Choctawhatchee Bay, inflow and coastal area (14 01 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; three wells, 576 to 590 feet deep; yield 450 to 700 gal/min

Rated plant capacity: 1.9 Mgal/d
Pumpage: Year— 302.7 Mgal **Average daily—** 0.83 a/ Mgal
Highest month: May, 32.8 Mgal **Lowest month:** February, 17.9 Mgal

Per capita use: 131 gal/d
Finished-water storage: 0.36 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.54 Mgal/d
Sewage treatment: Primary, secondary, trickling filter, settling, chlorination

Waste discharged to: Boggy Bayou to Choctawhatchee Bay

Remarks: Average daily pumpage increased from 0.25 Mgal/d in 1956 to 0.83 Mgal/d in 1975. City supplies water to areas outside city limits. Service connections: domestic, 1,850; commercial, 150.

a/ Includes 0.001 Mgal/d industrial use, 0.219 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 303113086291501, 1

Silica (SiO_2)	14	Dissolved solids (residue at 180°C)	160
Calcium (Ca)	25	Total hardness (as $CaCO_3$)	125
Magnesium (Mg)	15	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	7.9	Alkalinity (as $CaCO_3$)	133
Potassium (K)	2.7	pH (units)	7.8
Strontium (Sr)	.22	Specific conductance (µmhos/cm at 25°C)	271
Bicarbonate (HCO_3)	163	Color (Pt-Co units)	.00
Sulfate (SO_4)	7.3	Temperature (°C)	24
Chloride (Cl)	3	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.09		
Nitrogen (ammonia, total (NH_4-N))	.03		
Iron (Fe)	.02		
Phosphorus, total (P)	.01		

OKALOOSA COUNTY WATER SYSTEM

County: Okaloosa **Population served:** 20,872
River basin: Choctawhatchee Bay, inflow and coastal area (14 01 02)

Ownership of supply or system: Okaloosa County
Source of water: Ground water, Floridan aquifer, 12 wells[a/], 605 to 734 feet deep; yield 400 to 1,000 gal/min

Rated plant capacity: 4.8 Mgal/d
Pumpage: **Year**—716.64 Mgal **Average daily**— 1.96[b/] Mgal
Highest month: May, 74.03 Mgal **Lowest month:** February, 43.59 Mgal

Per capita use: 94 gal/d
Finished-water storage: Not Reported
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually[c/]

Sewage discharge: 2.07[d/] Mgal/d
Sewage treatment: Contact stabilization

Waste discharged to: Irrigation field and Santa Rosa Sound

Remarks:
a/ Includes 6 wells from Okaloosa Island Authority.
b/ Includes 0.157 Mgal/d commercial use.
c/ Treated water.
d/ Includes 0.7 Mgal/d discharge from Okaloosa Island Plant to Santa Rosa Sound.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 302631086364402, New Castle well

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	304
Calcium (Ca)	1	Total hardness (as $CaCO_3$)	197
Magnesium (Mg)	.6	Noncarbonate hardness (as $CaCO_3$)	0
Sodium (Na)	110	Alkalinity (as $CaCO_3$)	197
Potassium (K)	5.6	pH (units)	8.3
Strontium (Sr)	.37	Specific conductance (µmhos/cm at 25°C)	534
Bicarbonate (HCO_3)	240	Color (Pt-Co units)	5
Sulfate (SO_4)	4.6	Temperature (°C)	26
Chloride (Cl)	45	Turbidity (JTU)	1
Fluoride (F)	1.1	Carbon, organic, total (C)	0.0
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.00	SAR	21
Nitrogen, organic (N)	.07		
Nitrogen (ammonia, total (NH_4-N))	.4		
Iron (Fe)	.01		
Phosphorus, total (P)	.02		

PACE

County: Santa Rosa **Population served:** 5,185
River basin: Escambia Bay, inflow and coastal area (14 01 05)

Ownership of supply or system: City of Pace
Source of water: Ground water, sand-and-gravel aquifer; two wells, 300 feet deep; yield 700 gal/min each well

Rated plant capacity: 2.0 Mgal/d
Pumpage: Year— 182.5 Mgal **Average daily—** 0.5 Mgal
Highest month: May, 15.23 Mgal **Lowest month:** February, 11.54 Mgal

Per capita use: 96 gal/d
Finished-water storage: 0.1 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: One additional well is currently being drilled, estimated yield 700 gal/min. Storage tank with a 0.3 Mgal capacity is under construction. No chemical analysis available.

PANAMA CITY

County: Bay **Population served:** 39,100[a/]
River basin: St. Andrew Bay, inflow and coastal areas (14 01 01)

Ownership of supply or system: Bay County Water System
Source of water: Surface water, Deer Point Lake Reservoir. All water supplied by Bay County Water System.

Rated plant capacity: --
Pumpage: **Year**—1,737 Mgal **Average daily**— 4.76[b/] Mgal
Highest month: June, 198.55 Mgal **Lowest month:** March, 113.43 Mgal

Per capita use: 102[a/] gal/d
Finished-water storage: 1.0 (?) Mgal
Treatment: [c/]

Type/Frequency of analysis: [c/]

Sewage discharge: 3.5 Mgal/d (two plants)
Sewage treatment: Primary, secondary, trickling filter

Waste discharged to: St. Andrews Bay; Watson Bayou to St. Andrews Bay

Remarks: Average daily use increased from 2.68 Mgal/d in 1956 to 4.76 Mgal/d in 1975. Total yearly pumpage, 1944-75, is shown on figure 5. For chemical analysis of water see Bay County Water System.

a/ Estimated population and per capita figures not reported.
b/ Includes 0.05 Mgal/d industrial use, 0.7 Mgal/d commercial use.
c/ See Bay County Water System (p. 27).

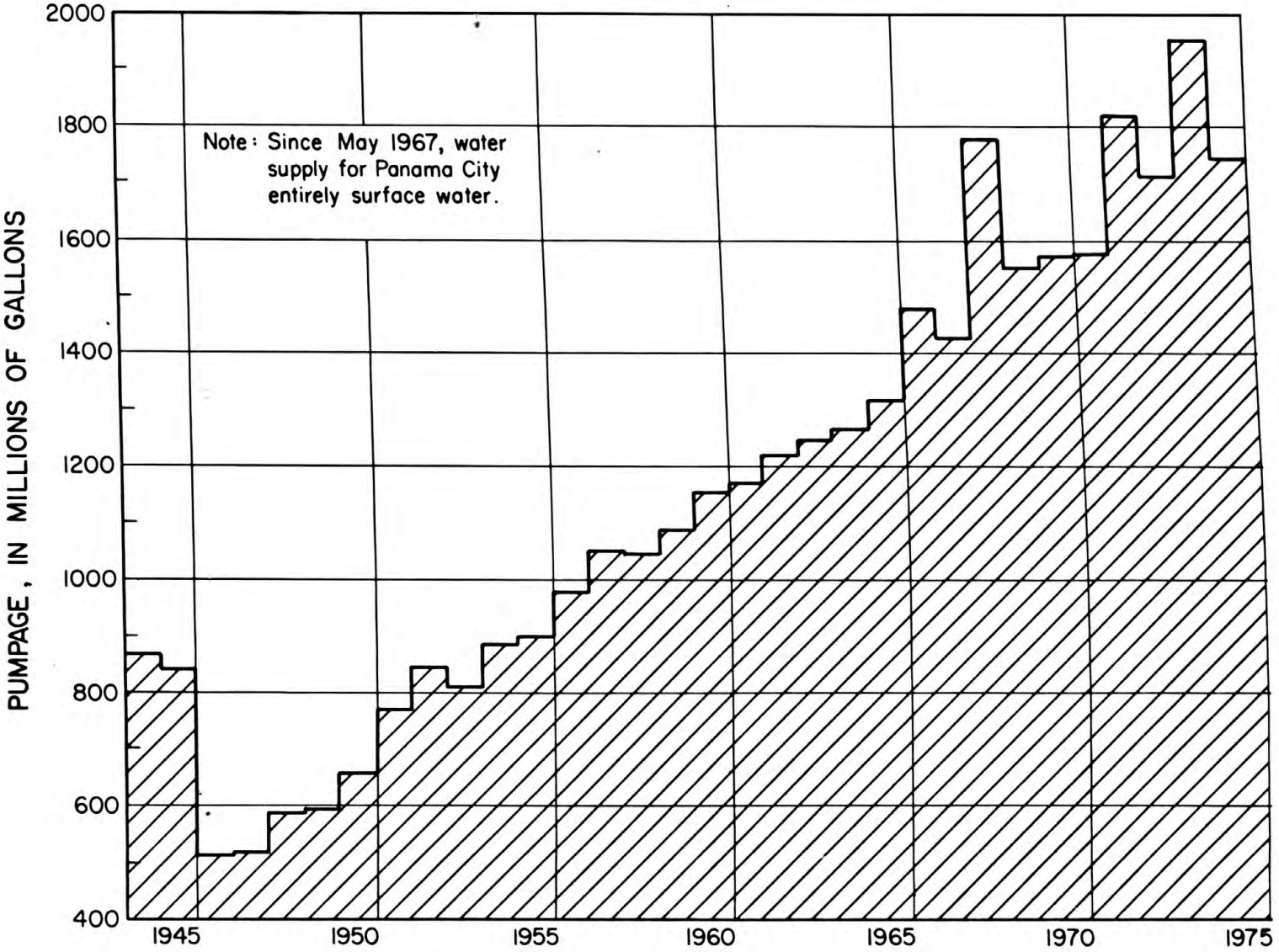

Figure 5.--Total yearly pumpage, Panama City.

PANAMA CITY BEACH

County: Bay **Population served:** 10,700
River basin: St. Andrew Bay, inflow and coastal area (14 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water (GW), Floridan aquifer; 84 percent of supply, 8 wells, 450 to 850 feet deep; yield 300 to 500 gal/min. Surface water (SW), Deer Point Lake Reservoir (Bay County Water System); 16 percent of supply.
Rated plant capacity: 5.2 Mgal/d
Pumpage: Year— 543.48 Mgal **Average daily—** 1.49[a/] Mgal
Highest month: July, 73.4 (GW) Mgal **Lowest month:** January, 1.6 (GW) Mgal
17.3 (SW) Mgal 0.05 (SW) Mgal
Per capita use: 139 gal/d
Finished-water storage: 0.6 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological, chemical, spectrographic, color, turbidity/monthly
Sewage discharge: 0.68 Mgal/d
Sewage treatment: Secondary, contact stabilization

Waste discharged to: West Bay

Remarks: See Bay County Water System for chemical analysis of surface water component of supply (p. 27).

a/ Includes 0.238 Mgal/d surface water.

PENSACOLA

County: Escambia **Population served:** 144,435
River basin: Escambia Bay, inflow and coastal area (14 01 05)

Ownership of supply or system: Municipal
Source of water: Ground water, sand-and-gravel aquifer; 22 wells, 230 to 265 feet deep; yield 500 to 2,000 gal/min

Rated plant capacity: 50.4 Mgal/d
Pumpage: Year—8,318.36 Mgal **Average daily**—22.79[a] Mgal
Highest month: May, 818.6 Mgal **Lowest month:** February, 505.4 Mgal

Per capita use: 157 gal/d
Finished-water storage: 4.6 Mgal
Treatment: Chlorination and pH control

Type/Frequency of analysis: Bacteriological/daily; chemical/weekly

Sewage discharge: 11.9 Mgal/d (Five sewage treatment plants)
Sewage treatment: Aeration, primary, secondary (trickling filter, activated sludge)

Waste discharged to: Escambia and Pensacola Bays (Fig. 6)

Remarks: Pumpage increased from 8.79 Mgal/d in 1956 to 22.79 Mgal/d in 1975 (for annual pumpage, see fig. 7). Service connections: Domestic, 41,561; commercial, 5,667. City supplies water to Santa Rosa Island Authority and Perdido Keys Utilities. Trapp (1971).

a/ Includes 8.0 Mgal/d commercial use, 0.836 Mgal/d supplied to Santa Rosa Island Authority and Perdido Keys Utilities.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 302514087140301, West Plant

Silica (SiO_2)	8.3	Dissolved solids (residue at 180°C)	44
Calcium (Ca)	1.3	Total hardness (as $CaCO_3$)	10
Magnesium (Mg)	1.6	Noncarbonate hardness (as $CaCO_3$)	9
Sodium (Na)	7.3	Alkalinity (as $CaCO_3$)	1
Potassium (K)	.3	pH (units)	4.7
Strontium (Sr)	.05	Specific conductance (μmhos/cm at 25°C)	70
Bicarbonate (HCO_3)	1	Color (Pt-Co units)	5
Sulfate (SO_4)	.3	Temperature (°C)	22
Chloride (Cl)	7.1	Turbidity (JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	3.4	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.00		

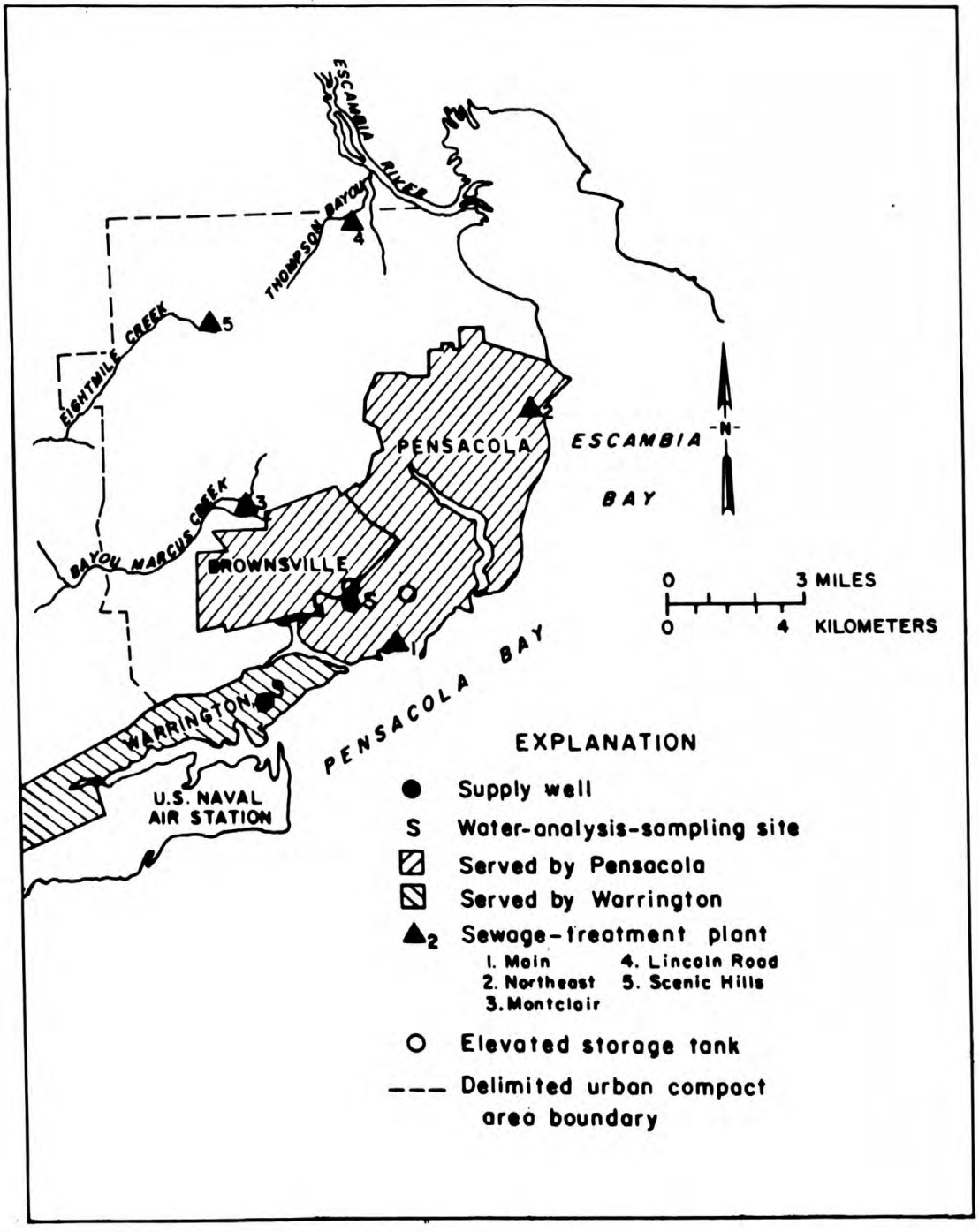

Figure 6.--Areas supplied by the city of Pensacola and the Peoples Water Company, Warrington.

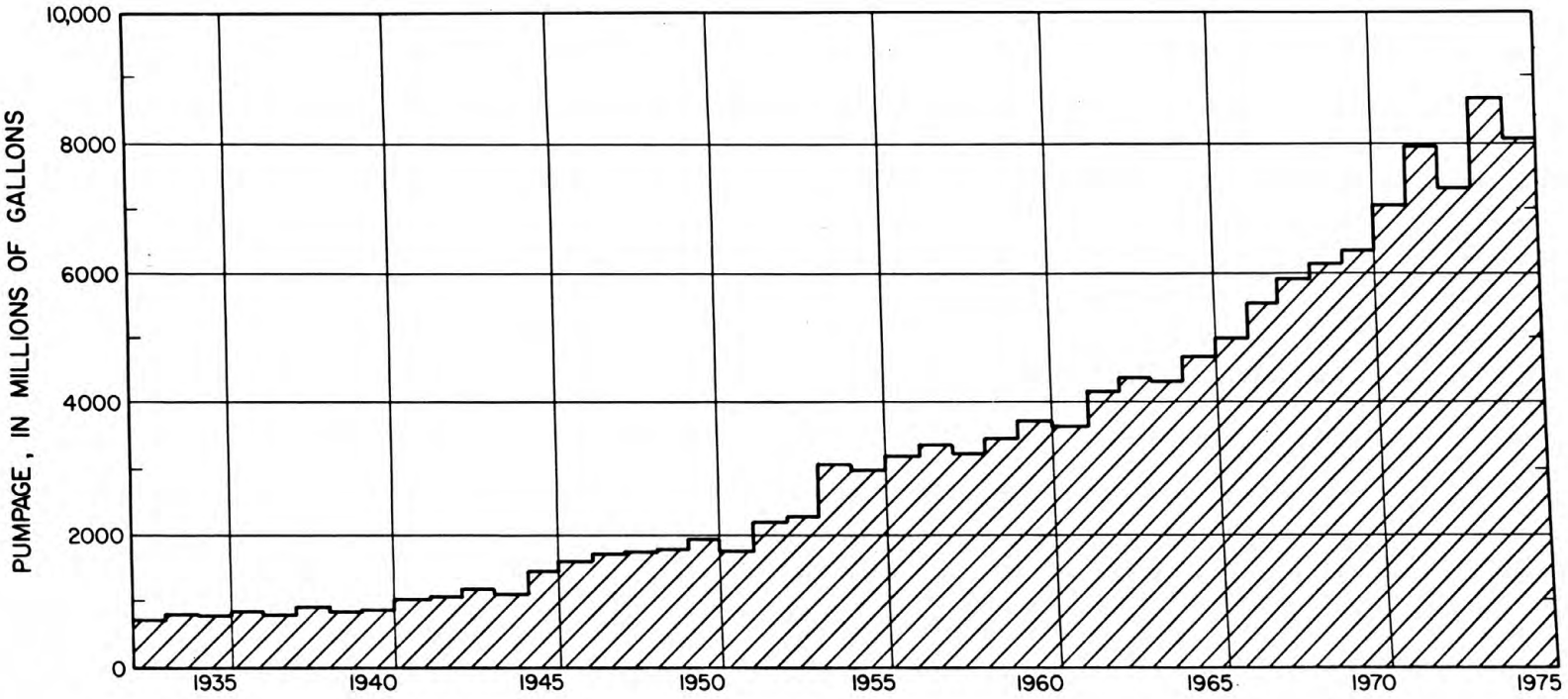

Figure 7.--Total yearly pumpage, city of Pensacola.

PORT ST. JOE

County: Gulf **Population served:** 4,720
River basin: St. Andrew Bay, inflow and coastal area (14 01 01)

Ownership of supply or system: City of Port St. Joe
Source of water: Surface water, Chipola River (fig. 8)

Rated plant capacity: 1.2 Mgal/d
Pumpage: Year— 234.71 Mgal **Average daily—** 0.64[a] Mgal
Highest month: May, 21.49 Mgal **Lowest month:** April, 18.09 Mgal

Per capita use: 77[b] gal/d
Finished-water storage: 0.6 Mgal
Treatment: Flocculation, softening, stabilization, filtration, chlorination, taste and odor control

Type/Frequency of analysis: Bacteriological, chemical/daily

Sewage discharge: 28.5[c] Mgal/d
Sewage treatment: Primary, secondary, aeration, tertiary

Waste discharged to: Gulf County Canal, St. Joseph Bay

Remarks: Average daily pumpage increased from 0.36 Mgal/d in 1956 to 0.64 Mgal/d in 1975.
a/ Includes 0.266 Mgal/d industrial use, 0.013 Mgal/d commercial use.
b/ Based on pumpage for domestic use only.
c/ Includes industrial waste.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: 295102085152400, tributary canal for water supply to City of Port St. Joe and St. Joe Paper Company

Silica (SiO_2)	5	Dissolved solids (residue at 180°C)	66
Calcium (Ca)	13	Total hardness (as $CaCO_3$)	39
Magnesium (Mg)	1.5	Noncarbonate hardness (as $CaCO_3$)	2.5
Sodium (Na)	3	Alkalinity (as $CaCO_3$)	36
Potassium (K)	.7	pH (units)	7.2
Strontium (Sr)	.02	Specific conductance (μmhos/cm at 25°C)	97
Bicarbonate (HCO_3)	44	Color (Pt-Co units)	5
Sulfate (SO_4)	3.8	Temperature (°C)	31
Chloride (Cl)	3.2	Turbidity (JTU)	170
Fluoride (F)	.2	Carbon, organic, total (C)	3
Nitrate (NO_3-N)	.11	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.01	SAR	.2
Nitrogen, organic (N)	2.3		
Nitrogen (ammonia, total (NH_4-N))	.04		
Iron (Fe)	.04		
Phosphorus, total (P)	.04		

PORT ST. JOE

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: Tributary canal to Chipola River Canal used for water supply to Port St. Joe and St. Joe Paper Company

Trace Elements

Arsenic (As)	0	Manganese (Mn)	140
Barium (Ba)	0	Mercury (Hg)	.0
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	<10	Zinc (Zn)	350
Copper (Cu)	19		
Iron (Fe)	2,300	pH(units)	--
Lead (Pb)	3	Temperature (°C)	--

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	--	PCN	--
Endrin	.00	Silvex	.00
Ethyl parathion	--	Toxaphene	0
Ethyl trithion	--	2,4-D	.01
Heptachlor epoxide	.00	2,4-DP	--
Parathion	.00	2,4,5-T	.00
Trithion	.00		

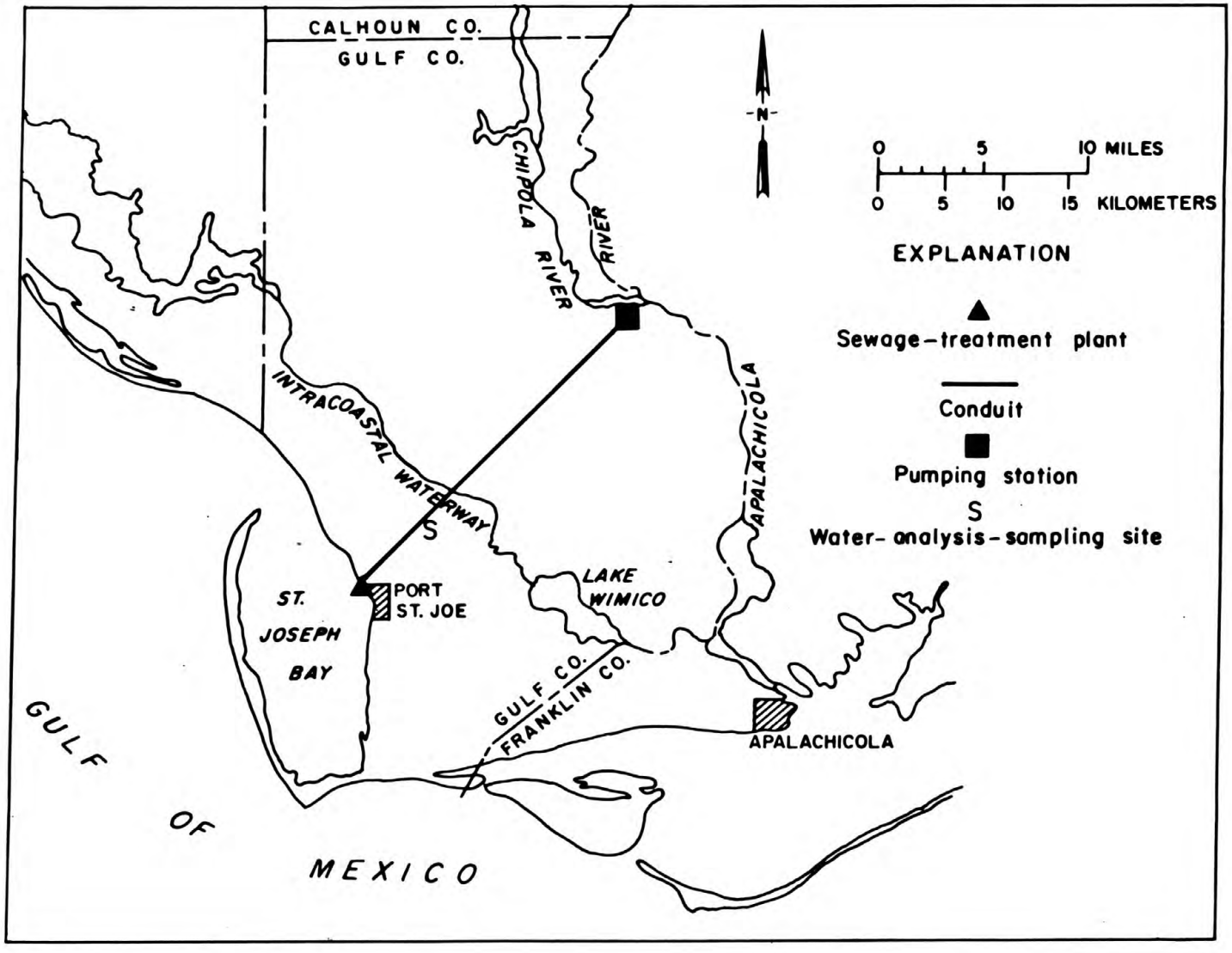

Figure 8.--Distribution system of St. Joe Paper Company, Port St. Joe.

SPRINGFIELD

County: Bay **Population served:** 7,100
River basin: St. Andrew Bay, inflow and coastal area (14 01 01)

Ownership of supply or system: Bay County Water System
Source of water: Surface water, Deer Point Lake Reservoir

Rated plant capacity: a/
Pumpage: Year— 187.82 Mgal **Average daily—** 0.51 b/ Mgal
Highest month: June, 20.05 Mgal **Lowest month:** September, 11.09 Mgal

Per capita use: 72 gal/d
Finished-water storage: a/
Treatment: a/

Type/Frequency of analysis: a/

Sewage discharge: Not Reported
Sewage treatment: Not Reported

Waste discharged to: Not Reported

Remarks: Service connections: domestic, 2,050; commercial, 102. For analysis of water see Bay County Water system.
a/ See Bay County Water System (p. 27).
b/ Includes 0.007 Mgal/d industrial use, 0.052 Mgal/d commercial use.

VALPARAISO

County: Okaloosa **Population served:** 3,808
River basin: Choctawhatchee Bay, inflow and coastal area (14 01 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; three wells, 425 to 600 feet deep; yield 400 to 800 gal/min.

Rated plant capacity: 2.6 Mgal/d
Pumpage: Year— 142.44 Mgal **Average daily—** 0.39[a/] Mgal
Highest month: June, 17.82 Mgal **Lowest month:** January, 8.96 Mgal

Per capita use: 102 gal/d
Finished-water storage: 0.1 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.28 Mgal/d
Sewage treatment: Primary, secondary, trickling filter, secondary settling, chlorination

Waste discharged to: Tom's Bayou

Remarks: Average daily pumpage increased from 0.08 Mgal/d in 1956 to 0.7 Mgal/d in 1970 then decreased to 0.39 Mgal/d in 1975. Service connections, domestic, 1,120.
a/ Includes 0.039 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 303055086295501, City Well 3

Silica (SiO_2)	14	Dissolved solids (residue at 180°C)	160
Calcium (Ca)	27	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	17	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	6.7	Alkalinity (as $CaCO_3$)	142
Potassium (K)	2.5	pH (units)	7.7
Strontium (Sr)	.16	Specific conductance (µmhos/cm at 25°C)	287
Bicarbonate (HCO_3)	173	Color (Pt-Co units)	10
Sulfate (SO_4)	8.4	Temperature (°C)	24
Chloride (Cl)	2.2	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.05		
Nitrogen (ammonia, total (NH_4-N))	.02		
Iron (Fe)	.01		
Phosphorus, total (P)	.01		

WARRINGTON

County: Escambia **Population served:** 25,194
River basin: Escambia Bay, inflow and coastal area (14 01 04), Perdido Bay, inflow and coastal area (14 01 07)
Ownership of supply or system: Peoples Water Services Co., Inc.
Source of water: Ground water, sand-and-gravel aquifer; 7 wells, 250 to 300 feet deep; yield 110 to 1,000 gal/min

Rated plant capacity: 4.0 Mgal/d
Pumpage: Year— 868.7 Mgal **Average daily—**2.38[a/] Mgal
Highest month: July, 90.5 Mgal **Lowest month:** February, 56.6 Mgal

Per capita use: 94 gal/d
Finished-water storage: 1.0 Mgal
Treatment: Chlorination, stabilization

Type/Frequency of analysis: Bacteriological/monthly[b/]; chemical/annually

Sewage discharge: Septic tanks[c/]
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 2.13 Mgal/d in 1956 to 2.38 Mgal/d in 1975.
a/ Includes 0.238 Mgal/d commercial use.
b/ Treated water.
c/ About 90 percent sewage to septic tanks, 10 percent sewage to West Florida Utilities Sewage System.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 302332087154101, Well 4, Fleet Road well

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	22
Calcium (Ca)	1	Total hardness (as $CaCO_3$)	5
Magnesium (Mg)	.5	Noncarbonate hardness (as $CaCO_3$)	3
Sodium (Na)	5.4	Alkalinity (as $CaCO_3$)	2
Potassium (K)	.4	pH (units)	5.4
Strontium (Sr)	.17	Specific conductance (µmhos/cm at 25°C)	41
Bicarbonate (HCO_3)	3	Color (Pt-Co units)	.00
Sulfate (SO_4)	1.3	Temperature (°C)	23
Chloride (Cl)	6.1	Turbidity(JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.83	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.07		
Phosphorus, total (P)	.00		

WEWAHITCHKA

County: Gulf
Population served: 1,292
River basin: Chipola River (13-00-12)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 200 to 578 feet deep; yield 200 to 565 gal/min

Rated plant capacity: 1.1 Mgal/d
Pumpage: **Year**— 17.52 Mgal
Average daily— 0.048a/Mgal
Highest month: August, 1.75 Mgal
Lowest month: March, 1.20 Mgal

Per capita use: 37 gal/d
Finished-water storage: 0.20 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/annually; chemical, spectrographic, color and turbidity/annually
Sewage discharge: Not reported
Sewage treatment: Aeration, chlorination, tertiary

Waste discharged to: Chipola River

Remarks: No chemical analysis available.

a/ Includes 0.001 Mgal, commercial use.

NORTHERN, NORTHEASTERN, AND NORTH-CENTRAL FLORIDA

The northern, northeastern, and north-central Florida section extends from the Apalachicola River eastward to the Atlantic Ocean and from the Georgia-Florida line southward to the latitude of Gainesville (Fig. 9).

The principal source of ground-water supply for municipal use in this section is the Floridan aquifer, except in coastal St. Johns and Flagler Counties where the shallow-sand aquifer supply water to St. Augustine, Bunnell, and beach communities. During 1975, a total of 38,000 Mgal was withdrawn for municipal supplies from the Floridan aquifer, and 546 Mgal was withdrawn from the nonartesian and shallow-sand aquifers and 466 Mgal from an infiltration gallery at St. Augustine. The three most populous areas: the Jacksonville-Fernandina Beach area, and the Gainesville and the Tallahassee areas pumped 32,323 Mgal or 85 percent of the total amount of water supplied by municipal systems in the section. Surface water supplied 899 Mgal or about one percent of the total amount of water supplied for municipal use.

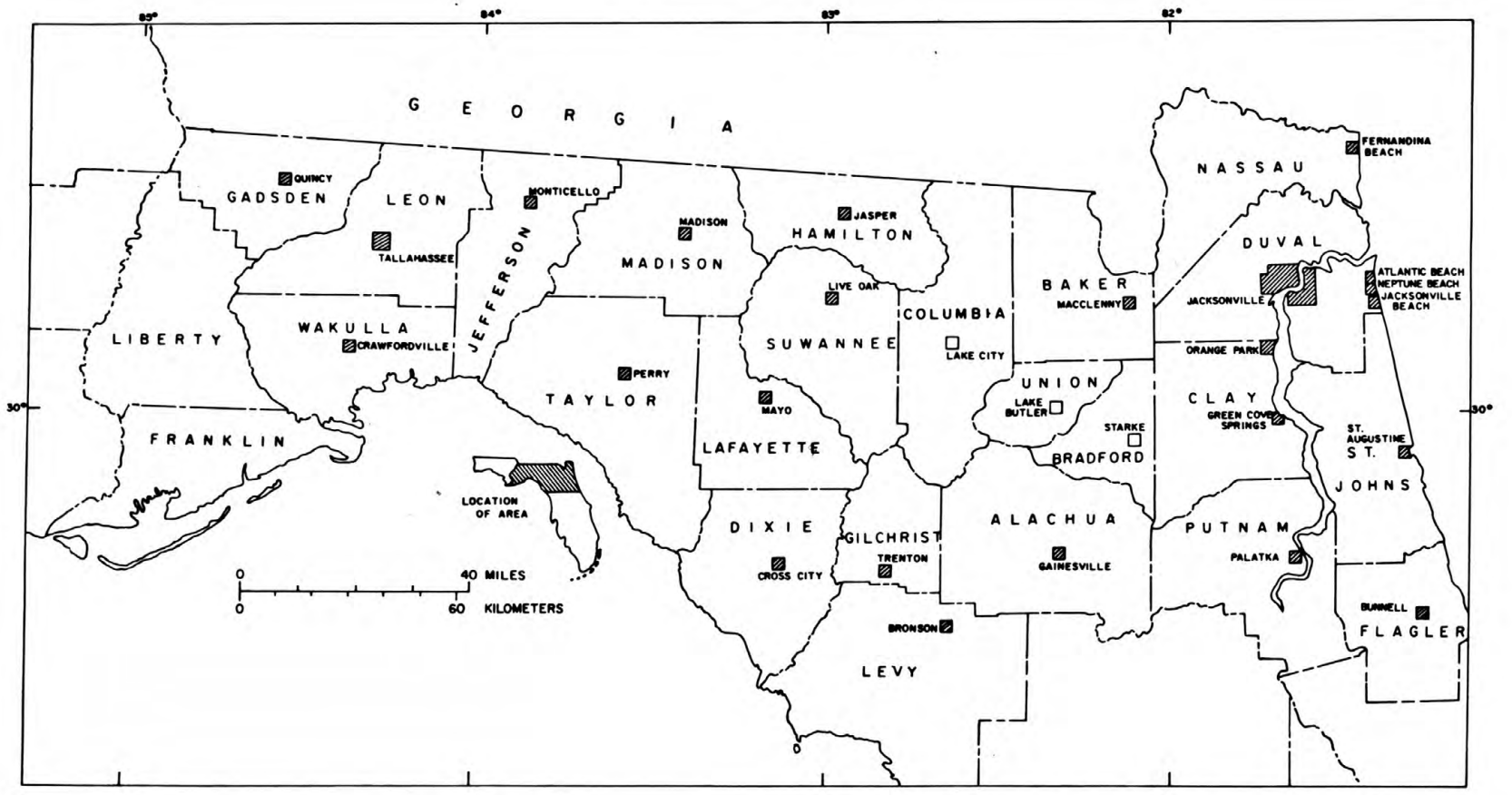

Figure 9.--Municipalities in northern, northeastern, and north-central Florida for which water-use data are given.

ATLANTIC BEACH

County: Duval **Population served:** 8,200
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells, 1,000 to 1,300 feet deep; yield 1,480 to 1,973 gal/min

Rated plant capacity: 2.6 Mgal/d
Pumpage: Year— 445.59 Mgal **Average daily—** 1.22 Mgal
Highest month: May, 46.87 Mgal **Lowest month:** February, 27.27 Mgal

Per capita use: 149 gal/d
Finished-water storage: 0.5 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; odor and turbidity/biannually

Sewage discharge: 0.92 Mgal/d
Sewage treatment: Contact stabilization

Waste discharged to: Intracoastal Waterway

Remarks: Average daily pumpage increased from 0.15 Mgal/d in 1956 to 1.22 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 302008081242101, D-307

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	444
Calcium (Ca)	61	Total hardness (as $CaCO_3$)	300
Magnesium (Mg)	36	Noncarbonate hardness (as $CaCO_3$)	180
Sodium (Na)	12	Alkalinity (as $CaCO_3$)	125
Potassium (K)	2.4	pH (units)	8.3
Strontium (Sr)	2	Specific conductance (μmhos/cm at 25°C)	627
Bicarbonate (HCO_3)	153	Color (Pt-Co units)	5
Sulfate (SO_4)	170	Temperature (°C)	--
Chloride (Cl)	17	Turbidity (JTU)	--
Fluoride (F)	.8	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	--	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	--		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	--		
Iron (Fe)	.04		
Phosphorus, total (P)	--		

BRONSON

County: Levy **Population served:** 500
River basin: Waccasassa River and coastal area between the Withlacoochee and Suwannee Rivers (11 01 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; one well 267 feet deep; yield 485 gal/min (estimated from rated plant capacity).

Rated plant capacity: 0.7 Mgal/d
Pumpage: Year— 20.06 Mgal **Average daily—** 0.05[a/] Mgal
Highest month: June, 2.5 Mgal **Lowest month:** December, 1.3[b/] Mgal

Per capita use: 100 gal/d
Finished-water storage: 0.10 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical semiannually

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks:
a/ Includes 0.01 Mgal/d commercial use.
b/ Also January and February .

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 2-19-75
SAMPLING POINT: 292109082422901, Town well

Silica (SiO_2)	4	Dissolved solids (residue at 180°C)	78
Calcium (Ca)	23	Total hardness (as $CaCO_3$)	67
Magnesium (Mg)	2.2	Noncarbonate hardness (as $CaCO_3$)	9
Sodium (Na)	3.5	Alkalinity (as $CaCO_3$)	57
Potassium (K)	.2	pH (units)	7.7
Strontium (Sr)	.07	Specific conductance (µmhos/cm at 25°C)	140
Bicarbonate (HCO_3)	70	Color (Pt-Co units)	0
Sulfate (SO_4)	.3	Temperature (°C)	22.5
Chloride (Cl)	4.9	Turbidity (JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.75	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00	SAR	.2
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

BUNNELL

County: Flagler **Population served:** 2,000
River basin: St. Johns River below the Oklawaha River (08 01 03)

Ownership of supply or system: Municipal
Source of water: Ground water, nonartesian aquifer; 2 wells, 100 to 115 feet deep; yield 375 gal/min

Rated plant capacity: 0.65 Mgal/d
Pumpage: **Year**—80.30 Mgal **Average daily**— 0.22 Mgal
Highest month: May, 7.5 Mgal **Lowest month:** February, 5.8 Mgal

Per capita use: 110 gal/d
Finished-water storage: 0.26 Mgal
Treatment: Chlorination, filtration, softening, pH control

Type/Frequency of analysis: Bacteriological/annually; chemical/daily; chloride occasionally during dry season.
Sewage discharge: 0.018 Mgal/d
Sewage treatment: Filtration

Waste discharged to: Pond and ground

Remarks: Average daily pumpage increased from 0.18 Mgal/d in 1956 to 0.22 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-11-75
SAMPLING POINT: 292826081145801, F-122

Silica (SiO_2)	22	Dissolved solids (residue at 180°C)	516
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	310
Magnesium (Mg)	8.5	Noncarbonate hardness (as $CaCO_3$)	23
Sodium (Na)	49	Alkalinity (as $CaCO_3$)	288
Potassium (K)	1.5	pH (units)	7.4
Strontium (Sr)	.64	Specific conductance (μmhos/cm at 25°C)	850
Bicarbonate (HCO_3)	350	Color (Pt-Co units)	10
Sulfate (SO_4)	6.9	Temperature (°C)	--
Chloride (Cl)	95	Turbidity (JTU)	8
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.36
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.03		
Nitrogen (ammonia, total (NH_4-N))	.33		
Iron (Fe)	.81		
Phosphorus, total (P)	.39		

CRAWFORDVILLE

County: Wakulla **Population served:** 459
River basin: St. Marks and Wakulla Rivers and coastal area between the Aucilla and Ochlockonee Rivers (12 00 01)
Ownership of supply or system: Crawfordville Water System Inc.
Source of water: Ground water, Floridan aquifer; one well, 170 feet deep; maximum yield 200 gal/min

Rated plant capacity: 0.288 Mgal/d
Pumpage: Year— 5.86 Mgal **Average daily—** 0.016 Mgal
Highest month: August, 0.501 Mgal **Lowest month:** January & April, 0.480 Mgal

Per capita use: 35 gal/d
Finished-water storage: 0.01 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Chemical/annually

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Pumpage and per capita use low because of large number of private wells being used for lawn sprinkling, gardens, etc.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 3-15-76
SAMPLING POINT: 301028084223802, Crawfordville 6-inch well

Silica (SiO_2)	8.5	Dissolved solids (residue at 180°C)	155
Calcium (Ca)	46	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	3.2	Noncarbonate hardness (as $CaCO_3$)	18
Sodium (Na)	3.6	Alkalinity (as $CaCO_3$)	122
Potassium (K)	5.1	pH (units)	7.6
Strontium (Sr)	.2	Specific conductance (μmhos/cm at 25°C)	300
Bicarbonate (HCO_3)	149	Color (Pt-Co units)	.00
Sulfate (SO_4)	10	Temperature (°C)	21
Chloride (Cl)	6	Turbidity(JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	31
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.02		
Iron (Fe)	.00		
Phosphorus, total (P)	--		

CROSS CITY

County: Dixie **Population served:** 3,060
River basin: Coastal area between Suwannee and Aucilla Rivers (11 01 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 105 and 144 feet deep; yield 400 to 500 gal/min

Rated plant capacity: 1.296 Mgal/d
Pumpage: Year— 134.4 Mgal **Average daily—** 0.37[a] Mgal
Highest month: May, 13.3 Mgal **Lowest month:** September, 9.2 Mgal

Per capita use: 120 gal/d
Finished-water storage: 0.15 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological and chemical/monthly

Sewage discharge: 0.08[b] Mgal
Sewage treatment: Secondary

Waste discharged to: Drainage ditch tributary to unnamed creek

Remarks: City supplies water to fringe areas outside city limits. Average daily pumpage increased from 0.21 Mgal/d in 1956 to 0.42 Mgal/d in 1970 then decreased to 0.37 Mgal/d in 1975.
a/ Includes 0.018 Mgal/d commercial use.
b/ 50 service connections on sewerage, 850 connections on septic tanks.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-25-75
SAMPLING POINT: 293815083073301

Silica (SiO_2)	4.2	Dissolved solids (residue at 180°C)	308
Calcium (Ca)	97	Total hardness (as $CaCO_3$)	280
Magnesium (Mg)	10	Noncarbonate hardness (as $CaCO_3$)	11
Sodium (Na)	8.2	Alkalinity (as $CaCO_3$)	269
Potassium (K)	.9	pH (units)	7.0
Strontium (Sr)	.13	Specific conductance (μmhos/cm at 25°C)	555
Bicarbonate (HCO_3)	328	Color (Pt-Co units)	5
Sulfate (SO_4)	4.5	Temperature (°C)	23.5
Chloride (Cl)	12	Turbidity (JTU)	--
Fluoride (F)	.0	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.11		
Iron (Fe)	2.4		
Phosphorus, total (P)	--		

FERNANDINA BEACH

County: Nassau
River basin: St. Marys River (07 02 04)
Population served: 3,000

Ownership of supply or system: Florida Public Utilities Co.
Source of water: Ground water, Floridan aquifer; 7 well, 750 to 1,215 feet deep; yield 265 to 1,680 gal/min

Rated plant capacity: 5.04 M gal/d
Pumpage: Year— 711.75 Mgal
Highest month: June, 81.2 Mgal
Average daily— 1.95[a] Mgal
Lowest month: November, 43.8 Mgal

Per capita use: 330 gal/d
Finished-water storage: 0.075 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/trimonthly[b]; Bacteriological/monthly[c]

Sewage discharge: Not reported
Sewage treatment: Primary

Waste discharged to: Amelia River

Remarks: Average daily pumpage increased from 0.71 Mgal/d in 1956 to 1.95 Mgal/d in 1975.
a/ Includes 0.70 Mgal/d industrial use, 0.25 Mgal/d commercial use.
b/ Treated water.
c/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 304020081272005, well N-7

Silica (SiO_2)	33	Dissolved solids (residue at 180°C)	578
Calcium (Ca)	76	Total hardness (as $CaCO_3$)	350
Magnesium (Mg)	39	Noncarbonate hardness (as $CaCO_3$)	200
Sodium (Na)	26	Alkalinity (as $CaCO_3$)	151
Potassium (K)	2.3	pH (units)	7.9
Strontium (Sr)	.93	Specific conductance (μmhos/cm at 25°C)	760
Bicarbonate (HCO_3)	184	Color (Pt-Co units)	.00
Sulfate (SO_4)	170	Temperature (°C)	--
Chloride (Cl)	56	Turbidity(JTU)	--
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.23		
Iron (Fe)	.02		
Phosphorus, total (P)	--		

GAINESVILLE

County: Alachua
River basin: Oklawaha River (08 01 02)
Population served: 80,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 8 wells 673 to 735 feet deep; yield 2,400 to 27,800 gal/min

Rated plant capacity: 30 Mgal/d
Pumpage: Year— 5,048.31 Mgal **Average daily—**13.83 Mgal
Highest month: April, 485.93 **Lowest month:** September, 213.29 Mgal

Per capita use: 173 gal/d
Finished-water storage: 11.5 Mgal
Treatment: Chlorination, filtration, fluoridation, recarbonation, softening

Type/Frequency of analysis: Bacteriological/hourly[a/], and 10 times monthly[b/]; chemical/monthly; color, turbidity/daily
Sewage discharge: 8.01 Mgal /d (2 plants)
Sewage treatment: Biofiltration, chlorination, digestion, comminution, grit chambers-Plant 1. Activated sludge, chlorination, digestion, comminution-Plant 2.

Waste discharged to: Paynes Praire

Remarks: Average daily pumpage increased from 3.57 Mgal/d in 1956 to 13.83 Mgal/d in 1975. Total service connections 22,596.
a/Treated water.
b/Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 6-75
SAMPLING POINT: 294209082173101, Gainesville Water Plant 7

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	330
Calcium (Ca)	81	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	17	Noncarbonate hardness (as $CaCO_3$)	76
Sodium (Na)	8.9	Alkalinity (as $CaCO_3$)	194
Potassium (K)	1	pH (units)	8.1
Strontium (Sr)	.36	Specific conductance (µmhos/cm at 25°C)	555
Bicarbonate (HCO_3)	236	Color (Pt-Co units)	5
Sulfate (SO_4)	70	Temperature (°C)	--
Chloride (Cl)	12	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	.04		
Nitrogen (ammonia, total (NH_4-N))	.37		
Iron (Fe)	--		
Phosphorus, total (P)	.05		

GREEN COVE SPRINGS

County: Clay **Population served:** 3,400
River basin: St. Johns River below the Oklawaha River (08 01 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 4 wells, 765 to 1,140 feet deep; yield 300 to 1,750 gal/min

Rated plant capacity: 4.5 Mgal/d
Pumpage: Year— 136.91 Mgal **Average daily—** 0.39[a] Mgal
Highest month: May, 15.7 Mgal **Lowest month:** April, 9.4 Mgal

Per capita use: 114 gal/d
Finished-water storage: 0.53 Mgal/d
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/4 times monthly[b]; chemical, color, turbindity/annually
Sewage discharge: 0.31[c] Mgal/d
Sewage treatment: Contact stabilization

Waste discharged to: St. Johns River

Remarks: Average daily pumpage decreased from 0.42 Mgal/d in 1956 to 0.38 Mgal/d in 1975.
a/ Includes 0.039 Mgal/d commercial use and 0.02 Mgal/d air conditioning.
b/ Treated water only.
c/ New plant. Discharge for September only.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 11- 3-75
SAMPLING POINT: 300022081415002, Well C-103

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	112
Calcium (Ca)	21	Total hardness (as $CaCO_3$)	98
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	18
Sodium (Na)	3.6	Alkalinity (as $CaCO_3$)	80
Potassium (K)	1.3	pH (units)	7.9
Strontium (Sr)	.53	Specific conductance (µmhos/cm at 25°C)	205
Bicarbonate (HCO_3)	98	Color (Pt-Co units)	5
Sulfate (SO_4)	15	Temperature (°C)	--
Chloride (Cl)	5	Turbidity (JTU)	1
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.06		
Iron (Fe)	.01		
Phosphorus, total (P)	.02		

JACKSONVILLE

County: Duval **Population served:** 250,000
River basin: St. Johns River Basin below the Oklawaha River (08 01 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 90 wells, 600 to 1,400 feet deep; yield 1,500 to 3,500 gal/min

Rated plant capacity: 118 Mgal/d
Pumpage: Year— 21,333.15 Mgal **Average daily—** 58.45[a] Mgal
Highest month: November, 1,956.0 Mgal **Lowest month:** February, 1392.0Mgal

Per capita use: 152 gal/d
Finished-water storage: 28 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly[b]; chemical, color, and turbidity/semiannually. Bacteriological/triannually; chemical/once every 3 yr.[c]
Sewage discharge: 30 Mgal/d
Sewage treatment: Aeration, chlorination, clarification, grit chambers, diffused air, oxidation, polishing ponds, activated sludge, contact stabilization*

Waste discharged to: St. Johns River

Remarks: Average daily pumpage increased from 34.33 Mgal/d in 1956 to 58.45 Mgal/d in 1975. City supplies water to subdivisions (fig. 10). Total yearly pumpage is shown of Figure 11. Anderson (1973), Fairchild (1972).
a/ Includes estimated 20 Mgal/d air conditioning and Industrial use.
b/ Treated water. c/ Raw water.
* Settling, primary, secondary, tertiary.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 6-75
SAMPLING POINT: 301842081422002, Well D-50A

Silica (SiO_2)	41	Dissolved solids (residue at 180°C)	392
Calcium (Ca)	65	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	25	Noncarbonate hardness (as $CaCO_3$)	140
Sodium (Na)	10	Alkalinity (as $CaCO_3$)	125
Potassium (K)	2.4	pH (units)	8.3
Strontium (Sr)	3.7	Specific conductance (μmhos/cm at 25°C)	573
Bicarbonate (HCO_3)	152	Color (Pt-Co units)	.00
Sulfate (SO_4)	150	Temperature (°C)	--
Chloride (Cl)	11	Turbidity (JTU)	--
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.15		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-16-75
SAMPLING POINT: 301839081392101, D-198

Silica (SiO_2)	21	Dissolved solids (residue at 180°C)	526
Calcium (Ca)	66	Total hardness (as $CaCO_3$)	280
Magnesium (Mg)	28	Noncarbonate hardness (as $CaCO_3$)	150
Sodium (Na)	11	Alkalinity (as $CaCO_3$)	130
Potassium (K)	2.5	pH (units)	8.3
Strontium (Sr)	3.8	Specific conductance (μmhos/cm at 25°C)	593
Bicarbonate (HCO_3)	159	Color (Pt-Co units)	.00
Sulfate (SO_4)	160	Temperature (°C)	--
Chloride (Cl)	14	Turbidity (JTU)	--
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.16		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 302130081411802, D-46A, C-33

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	400
Calcium (Ca)	67	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	23	Noncarbonate hardness (as $CaCO_3$)	120
Sodium (Na)	12	Alkalinity (as $CaCO_3$)	138
Potassium (K)	2	pH (units)	8.4
Strontium (Sr)	2.7	Specific conductance (μmhos/cm at 25°C)	563
Bicarbonate (HCO_3)	163	Color (Pt-Co units)	5
Sulfate (SO_4)	130	Temperature (°C)	--
Chloride (Cl)	14	Turbidity (JTU)	--
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.17		
Iron (Fe)	.20		
Phosphorus, total (P)	--		
Carbonate (CO_3)	2.0		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 6-75
SAMPLING POINT: 302015081384501, D-335

Silica (SiO_2)	25	Dissolved solids (residue at 180°C)	384
Calcium (Ca)	63	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	24	Noncarbonate hardness (as $CaCO_3$)	110
Sodium (Na)	13	Alkalinity (as $CaCO_3$)	147
Potassium (K)	2	pH (units)	8.3
Strontium (Sr)	3.2	Specific conductance (μmhos/cm at 25°C)	544
Bicarbonate (HCO_3)	180	Color (Pt-Co units)	5
Sulfate (SO_4)	110	Temperature (°C)	--
Chloride (Cl)	17	Turbidity (JTU)	--
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.19		
Iron (Fe)	--		
Phosphorus, total (P)	--		

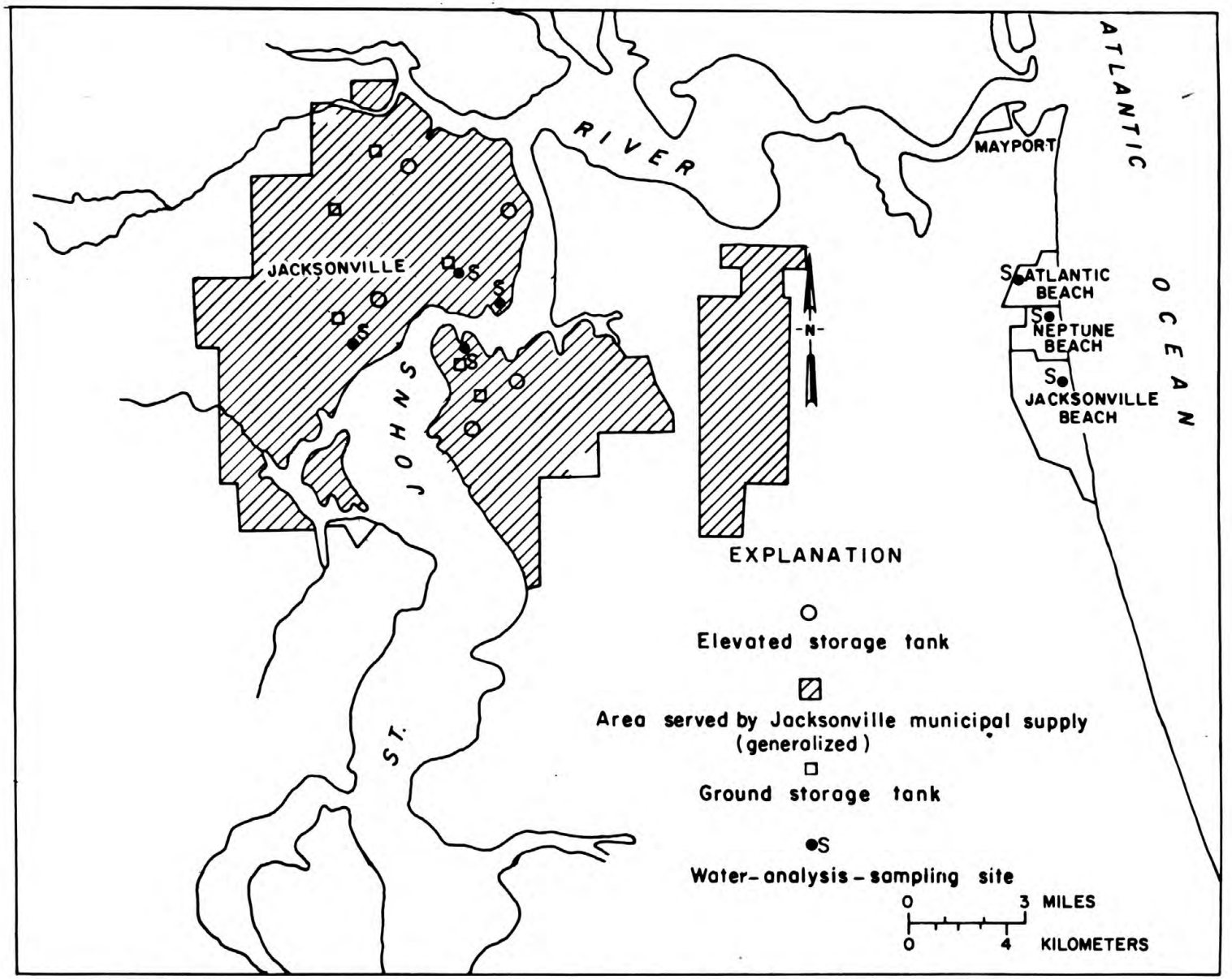

Figure 10.--Areas supplied water by the city of Jacksonville.

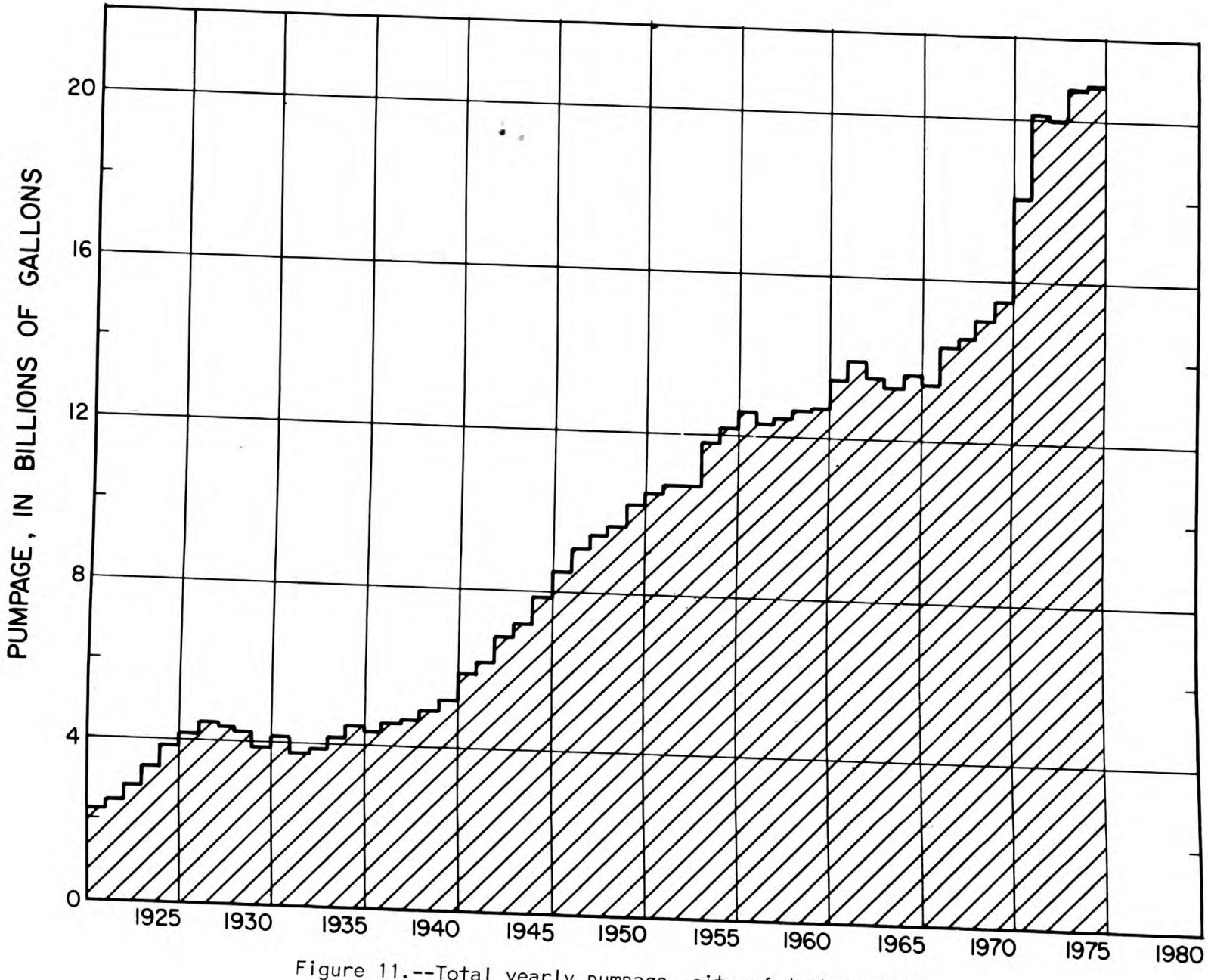

Figure 11.--Total yearly pumpage, city of Jacksonville

JACKSONVILLE BEACH

County: Duval **Population served:** 15,800
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 800 to 1,200 feet deep; yield 800 to 2,600 gal/min

Rated plant capacity: 5.0 Mgal/d
Pumpage: Year— 642.40 Mgal **Average daily—** 1.76[a/] Mgal
Highest month: August, 63.5 Mgal **Lowest month:** March, 39.5 Mgal

Per capita use: 111 gal/d
Finished-water storage: 1.3 Mgal
Treatment: Aeration, chlorination, detention

Type/Frequency of analysis: Bacteriological/monthly; chemical, spectrographic, color, turbidity/annually
Sewage discharge: 1.72 Mgal/d
Sewage treatment: Aeration, activated sludge, diffused air

Waste discharged to: Pablo Creek Canal, Intracoastal Waterway

Remarks: Average daily pumpage increased from 1.30 Mgal/d in 1956 to 1.76 Mgal/d in 1975.
a/ Includes 0.5 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 301714081233301, D-72

Silica (SiO_2)	21	Dissolved solids (residue at 180°C)	460
Calcium (Ca)	64	Total hardness (as $CaCO_3$)	320
Magnesium (Mg)	38	Noncarbonate hardness (as $CaCO_3$)	190
Sodium (Na)	14	Alkalinity (as $CaCO_3$)	128
Potassium (K)	2.9	pH (units)	8.4
Strontium (Sr)	2.1	Specific conductance (μmhos/cm at 25°C)	637
Bicarbonate (HCO_3)	152	Color (Pt-Co units)	5
Sulfate (SO_4)	180	Temperature (°C)	--
Chloride (Cl)	14	Turbidity(JTU)	--
Fluoride (F)	.8	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	--	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	--		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	--		
Iron (Fe)	--		
Phosphorus, total (P)	30		
Carbonate	2.0		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 9-19-75
SAMPLING POINT: 301704081233401, D-484

Silica (SiO_2)	29	Dissolved solids (residue at 180°C)	544
Calcium (Ca)	74	Total hardness (as $CaCO_3$)	320
Magnesium (Mg)	32	Noncarbonate hardness (as $CaCO_3$)	170
Sodium (Na)	40	Alkalinity (as $CaCO_3$)	151
Potassium (K)	2.4	pH (units)	7.8
Strontium (Sr)	1.6	Specific conductance (μmhos/cm at 25°C)	830
Bicarbonate (HCO_3)	184	Color (Pt-Co units)	5
Sulfate (SO_4)	130	Temperature (°C)	--
Chloride (Cl)	92	Turbidity (JTU)	5
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.04		
Nitrogen (ammonia, total (NH_4-N))	.27		
Iron (Fe)	.02		
Phosphorus, total (P)	.00		

JASPER

County: Hamilton **Population served:** 4,063
River basin: Suwannee River above the Withlacoochee River excluding the Alapaha River (11 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 3 wells, 345 to 740 feet deep; yield 200 to 600 gal/min

Rated plant capacity: 1.0 Mgal/d
Pumpage: Year— 184.80 Mgal **Average daily—** 0.51[a/] Mgal
Highest month: May, 18.5 Mgal **Lowest month:** February, 12.6 Mgal

Per capita use: 126 gal/d
Finished-water storage: 0.40 Mgal
Treatment: Chlorination, softening, coagulation, filtration

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.42 Mgal/d
Sewage treatment: Primary, secondary, activated sludge, settling, chlorination

Waste discharged to: Aeration ponds to Sugar Creek during high water

Remarks: Average daily pumpage increased from 0.20 Mgal/d in 1956 to 0.51 Mgal/d in 1975
a/ Includes 0.018 Mgal/d industrial use, 0.025 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 2-18-75
SAMPLING POINT: 303123082564201, Well 3

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	541
Calcium (Ca)	92	Total hardness (as $CaCO_3$)	420
Magnesium (Mg)	45	Noncarbonate hardness (as $CaCO_3$)	220
Sodium (Na)	5.7	Alkalinity (as $CaCO_3$)	197
Potassium (K)	1.2	pH (units)	7.3
Strontium (Sr)	.52	Specific conductance (µmhos/cm at 25°C)	755
Bicarbonate (HCO_3)	240	Color (Pt-Co units)	--
Sulfate (SO_4)	210	Temperature (°C)	22
Chloride (Cl)	8.4	Turbidity (JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.08		
Iron (Fe)	.14		
Phosphorus, total (P)	--		

LAKE BUTLER

County: Union
River basin: Santa Fe River (11 02 06)

Population served: 5,560[a/]

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells, 357 to 402 feet deep; yield, maximum, 416 gal/min

Rated plant capacity: 0.6 Mgal
Pumpage: Year— 201.84 Mgal
Highest month: August, 18.5 Mgal

Average daily— 0.553[b/] Mgal
Lowest month: February, 10.7 Mgal

Per capita use: 100 gal/d
Finished-water storage: 0.40 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Chemical/irregularly

Sewage discharge: 0.27 Mgal/d
Sewage treatment: Digestion

Waste discharged to: Silver Run Creek

Remarks: Average daily pumpage increased from 0.10 Mgal/d in 1956 to 0.55 Mgal/d in 1975.
a/ Includes Prisoners.
b/ Includes 0.055 Mgal/d commerical use and 0.299 Mgal/d industrial use (Prison Hospital).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 2-19-76
SAMPLING POINT: 300108082204301, City Well

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	204
Calcium (Ca)	40	Total hardness (as $CaCO_3$)	160
Magnesium (Mg)	15	Noncarbonate hardness (as $CaCO_3$)	10
Sodium (Na)	7	Alkalinity (as $CaCO_3$)	150
Potassium (K)	1.1	pH (units)	7.8
Strontium (Sr)	1.3	Specific conductance (µmhos/cm at 25°C)	355
Bicarbonate (HCO_3)	183	Color (Pt-Co units)	.00
Sulfate (SO_4)	16	Temperature (°C)	24
Chloride (Cl)	8	Turbidity (JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.07		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

LAKE CITY

County: Columbia **Population served:** 15,500
River basin: Suwannee River above Withlacoochee River excluding Alapaha River (11 02 06)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 250 to 300 feet deep; yields, 400 to 900 gal/min

Rated plant capacity: 4.9 Mgal/d
Pumpage: Year— 605.62 Mgal **Average daily—** 1.66[a/] Mgal
Highest month: June, 58.43 Mgal **Lowest month:** January, 41.55 Mgal

Per capita use: 107 gal/d
Finished-water storage: 1.25 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 2.0 Mgal/d
Sewage treatment: Primary, secondary, trickling filter, settling, chlorination

Waste discharged to: Big Lake

Remarks: Average daily pumpage increased from 1.00 Mgal/d in 1956 to 1.66 Mgal/d in 1975.
a/ Includes 0.166 Mgal/d industrial use, 0.498 Mgal/d commercial and air conditioning use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 2-18-76
SAMPLING POINT: 301108082372401, City Well 2

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	187
Calcium (Ca)	40	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	13	Noncarbonate hardness (as $CaCO_3$)	3
Sodium (Na)	8	Alkalinity (as $CaCO_3$)	147
Potassium (K)	1	pH (units)	7.7
Strontium (Sr)	.1	Specific conductance (μmhos/cm at 25°C)	325
Bicarbonate (HCO_3)	180	Color (Pt-Co units)	10
Sulfate (SO_4)	3.1	Temperature (°C)	21.5
Chloride (Cl)	11	Turbidity(JTU)	--
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.49		
Iron (Fe)	.00		
Phosphorus, total (P)			

LIVE OAK

County: Suwannee **Population served:** 7,500
River basin: Suwannee River above Withlacoochee River excluding Alapaha River (11 02 05)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 6 wells, 290 to 1,145 feet deep

Rated plant capacity: 2.02 Mgal/d
Pumpage: Year— 342.95 Mgal/d **Average daily—**0.94[a/] Mgal
Highest month: July, 35.02 Mgal **Lowest month:** February, 24.41 Mgal

Per capita use: 125 gal/d
Finished-water storage: 1.52 Mgal
Treatment: Aeration, filtration, chlorination

Type/Frequency of analysis: Bacteriological and chemical/monthly

Sewage discharge: 0.32[b/] Mgal/d
Sewage treatment: Primary, filtration, tertiary

Waste discharged to: Suwannee River

Remarks: Average daily pumpage increased from 0.50 Mgal/d in 1956 to 0.94 Mgal/d in 1975.
a/ Includes 0.032 Mgal/d industrial use, 0.170 Mgal/d commercial use.
b/ New sewage treatment plant completed, May 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 2-18-75
SAMPLING POINT: 301742082382901

Silica (SiO_2)	6.8	Dissolved solids (residue at 180°C)	179
Calcium (Ca)	56	Total hardness (as $CaCO_3$)	160
Magnesium (Mg)	3.9	Noncarbonate hardness (as $CaCO_3$)	10
Sodium (Na)	3.4	Alkalinity (as $CaCO_3$)	150
Potassium (K)	.2	pH (units)	7.7
Strontium (Sr)	.8	Specific conductance (μmhos/cm at 25°C)	320
Bicarbonate (HCO_3)	182	Color (Pt-Co units)	20
Sulfate (SO_4)	5	Temperature (°C)	20.5
Chloride (Cl)	4.6	Turbidity (JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.39	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.00		
Phosphorus, total (P)	--		

MACCLENNY

County: Baker
River basin: St. Marys River (07 02 04)

Population served: 3,900

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 700 to 750 feet deep; yields 750 to 1500 gal/min

Rated plant capacity: 2.16 Mgal/d
Pumpage: Year— 197.83
Highest month: April, 17.98 Mgal

Average daily—0.54[a/] Mgal
Lowest month: July, 12.76 Mgal

Per capita use: 138 gal/d
Finished-water storage: 0.06 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological, chemical, color, turbidity, pH/monthly
Sewage discharge: 0.48-0.50 Mgal/d
Sewage treatment: Chlorination, holding pond, three polishing ponds

Waste discharged to: Turkey Creek, St. Marys River

Remarks: Average daily pumpage increased from 0.195 Mgal/d in 1956 to 0.54 Mgal.d in 1975.

a/ Includes 0.078 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-14-75
SAMPLING POINT: 301655082075501, B-13

Silica (SiO_2)	18	Dissolved solids (residue at 180°C)	204
Calcium (Ca)	38	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	19
Sodium (Na)	9.8	Alkalinity (as $CaCO_3$)	131
Potassium (K)	1.7	pH (units)	8.3
Strontium (Sr)	.7	Specific conductance (µmhos/cm at 25°C)	335
Bicarbonate (HCO_3)	159	Color (Pt-Co units)	.00
Sulfate (SO_4)	24	Temperature (°C)	--
Chloride (Cl)	12	Turbidity (JTU)	--
Fluoride (F)	5	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.05		
Iron (Fe)	.03		
Phosphorus, total (P)	--		

MADISON

County: Madison
River basin: Aucilla River (11 01 03)
Population served: 4,760

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; three wells, 119 to 260 feet deep; yield 400 to 1,200 gal/min

Rated plant capacity: 2.736 Mgal/d
Pumpage: Year— 303.19 Mgal
Highest month: May, 29.47 Mgal
Average daily—0.83[a/] Mgal
Lowest month: February, 21.53 Mgal

Per capita use: 174 gal/d
Finished-water storage: 0.10 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.50 Mgal/d
Sewage treatment: Primary, secondary, trickling filter, secondary settling, chlorination

Waste discharged to: Pond (plant), ground (septic tanks)

Remarks: Average daily pumpage increased from 0.33 Mgal/d in 1956 to 0.83 Mgal/d in 1975. A number of residents use septic tanks.

a/ Includes 0.298 Mgal/d industrial use, 0.042 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 12-8-75
SAMPLING POINT: 302821082243601

Silica (SiO_2)	8.9	Dissolved solids (residue at 180°C)	164
Calcium (Ca)	45	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	7.7	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	4	Alkalinity (as $CaCO_3$)	144
Potassium (K)	.6	pH (units)	7.7
Strontium (Sr)	.03	Specific conductance (μmhos/cm at 25°C)	280
Bicarbonate (HCO_3)	176	Color (Pt-Co units)	.00
Sulfate (SO_4)	3.3	Temperature (°C)	21
Chloride (Cl)	3.0	Turbidity (JTU)	--
Fluoride (F)	.02	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.22	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.04		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.07		
Iron (Fe)	.00		
Phosphorus, total (P)	--		

MAYO

County: Lafayette **Population served:** 1,020
River basin: Suwannee River below Withlacoochee River excluding Santa Fe River (11 02 05)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, to 175 feet deep; yield 200 to 350 gal/min

Rated plant capacity: 0.792 Mgal/d
Pumpage: Year— 52.54 Mgal **Average daily—**0.144[a/] Mgal
Highest month: June, 5.88 Mgal **Lowest month:** February, 3.16 Mgal

Per capita use: 141 gal/d
Finished-water storage: 0.10 Mgal
Treatment: Aeration, chlorination, stabilization

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.06 Mgal/d in 1956 to 0.14 Mgal/d in 1975.

a/ Includes 0.032 Mgal/d commercial use, 0.026 Mgal/d air conditioning.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-25-75
SAMPLING POINT: 300334083101801

Silica (SiO_2)	5.8	Dissolved solids (residue at 180°C)	116
Calcium (Ca)	26	Total hardness (as $CaCO_3$)	100
Magnesium (Mg)	8.4	Noncarbonate hardness (as $CaCO_3$)	21
Sodium (Na)	3.1	Alkalinity (as $CaCO_3$)	79
Potassium (K)	.3	pH (units)	7.8
Strontium (Sr)	.34	Specific conductance (µmhos/cm at 25°C)	210
Bicarbonate (HCO_3)	96	Color (Pt-Co units)	.00
Sulfate (SO_4)	12	Temperature (°C)	23
Chloride (Cl)	5.6	Turbidity (JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.07	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.02		
Phosphorus, total (P)	--		

MONTICELLO

County: Jefferson
River basin: Aucilla River (11 01 03)
Population served: 3,000

Ownership of supply or system: Distribution system, city; wells and pumps, Fla. Power Corp
Source of water: Ground water, Floridan aquifer; three wells, 220 to 312 feet deep; yield 350 to 750 gal/min

Rated plant capacity: 2.09 Mgal/d
Pumpage: **Year**—158.98 Mgal **Average daily**— 0.43[a/] Mgal
Highest month: July, 15.5 Mgal **Lowest month:** February, 8.4 Mgal

Per capita use: 145 gal/d
Finished-water storage: 0.15 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly[b/]; chemical, color, turbidity, metals/annually[c/]
Sewage discharge: 0.30 Mgal/d
Sewage treatment: Primary, secondary, chlorination

Waste discharged to: Rocky Branch Creek

Remarks: Average daily pumpage increased from 0.30 Mgal/d in 1956 to 0.43 Mgal/d in 1975. Service connections: domestic, 1,000; undifferentiated, 75. City supplies water to areas adjacent to city (0.03 Mgal/d).
a/ Includes 0.022 Mgal/d agricultural, 0.009 Mgal/d industrial use, 0.022 Mgal/d commercial use, 0.004 Mgal/d air conditioning.
b/ Raw water. c/ Treated water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 1-8-76
SAMPLING POINT: 303254083520901

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	166
Calcium (Ca)	47	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	6.7	Noncarbonate hardness (as $CaCO_3$)	3
Sodium (Na)	2.9	Alkalinity (as $CaCO_3$)	141
Potassium (K)	.4	pH (units)	7.4
Strontium (Sr)	.08	Specific conductance (µmhos/cm at 25°C)	250
Bicarbonate (HCO_3)	172	Color (Pt-Co units)	--
Sulfate (SO_4)	3	Temperature (°C)	21
Chloride (Cl)	4	Turbidity(JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.22	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.02		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

NEPTUNE BEACH

County: Duval **Population served:** 4,800
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 4 wells, 800 to 1,200 feet deep; yield 500 to 2,000 gal/min

Rated plant capacity: 2.5 Mgal/d
Pumpage: Year— 255.50 Mgal **Average daily—** 0.70 Mgal
Highest month: May, 28 Mgal **Lowest month:** February, 19 Mgal

Per capita use: 146 gal/d
Finished-water storage: 0.80 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/annually

Sewage discharge: 0.54 Mgal/d
Sewage treatment: Contact stabilization

Waste discharged to: Intracoastal Waterway

Remarks: Average daily pumpage increased from about 0.23 Mgal/d in 1956 to 0.70 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 301852081240301, Well D-605

Silica (SiO_2)	24	Dissolved solids (residue at 180°C)	424
Calcium (Ca)	62	Total hardness (as $CaCO_3$)	310
Magnesium (Mg)	37	Noncarbonate hardness (as $CaCO_3$)	180
Sodium (Na)	12	Alkalinity (as $CaCO_3$)	131
Potassium (K)	2.3	pH (units)	8.3
Strontium (Sr)	1.2	Specific conductance (μmhos/cm at 25°C)	627
Bicarbonate (HCO_3)	160	Color (Pt-Co units)	5
Sulfate (SO_4)	170	Temperature (°C)	--
Chloride (Cl)	14	Turbidity(JTU)	--
Fluoride (F)	.8	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.2		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

ORANGE PARK

County: Clay **Population served:** 9,000
River basin: St. Johns River below Oklawaha River (08 01 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; one well, 862 feet deep; yield 2,500 gal/min

Rated plant capacity: 2.5 Mgal/d
Pumpage: Year— 438.0 Mgal **Average daily—** 1.2[a] Mgal
Highest month: August, 1.7 Mgal **Lowest month:** February, 0.7 Mgal

Per capita use: 133 gal/d
Finished-water storage: 0.5 Mgal
Treatment: Not Reported

Type/Frequency of analysis: Bacteriological/twice monthly[b]; chemical, color, turbidity/biannually; Bacteriological/monthly[c]
Sewage discharge: 0.9 Mgal/d
Sewage treatment: Activated sludge

Waste discharged to: St. Johns River

Remarks: Average daily pumpage increased from 0.9 Mgal/d in 1970 to 1.2 Mgal/d in 1975.

a/ Includes 0.06 Mgal/d industrial use, 0.06 Mgal/d air conditioning, 0.18 Mgal/d commercial use.
b/ Treated water. c/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 11-3-75
SAMPLING POINT: 301058081423801, Well C-93

Silica (SiO_2)	15	Dissolved solids (residue at 180°C)	228
Calcium (Ca)	33	Total hardness (as $CaCO_3$)	170
Magnesium (Mg)	20	Noncarbonate hardness (as $CaCO_3$)	72
Sodium (Na)	6.9	Alkalinity (as $CaCO_3$)	98
Potassium (K)	2.3	pH (units)	7.7
Strontium (Sr)	2.3	Specific conductance (µmhos/cm at 25°C)	366
Bicarbonate (HCO_3)	120	Color (Pt-Co units)	.00
Sulfate (SO_4)	73	Temperature (°C)	--
Chloride (Cl)	6.6	Turbidity (JTU)	1
Fluoride (F)	.8	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.14		
Iron (Fe)	.03		
Phosphorus, total (P)	.01		

PALATKA

County: Putnam **Population served:** 10,000
River basin: St. Johns River below Oklawaha River (08 01 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer, 8 wells, 400 to 500 feet deep; yield 500 to 1,650 gal/min

Rated plant capacity: 3.8 Mgal/d
Pumpage: Year— 730.0 Mgal **Average daily—** 2.0 Mgal
Highest month: May 69.1 Mgal **Lowest month:** February 39.2 Mgal

Per capita use: 200 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Aeration, chlorination, filtration, stabilization, fluoridation

Type/Frequency of analysis: Bacteriological/monthly; chemical/3 times daily

Sewage discharge: 1.4 Mgal/d
Sewage treatment: Contact stabilization[a/]

Waste discharged to: St. Johns River

Remarks: Average daily pumpage increased from 1.35 Mgal/d in 1956 to 2.25 Mgal/d in 1975. City supplies water to Junior College, College Park, and Rolling Hills. Snell and Anderson (1970).

a/ Operational as of April 1973. Formerly primary treatment.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-11-75
SAMPLING POINT: 293805081382901, Palatka City well 7

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	530
Calcium (Ca)	79	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	28	Noncarbonate hardness (as $CaCO_3$)	140
Sodium (Na)	75	Alkalinity (as $CaCO_3$)	115
Potassium (K)	2.4	pH (units)	7.6
Strontium (Sr)	1.6	Specific conductance (μmhos/cm at 25°C)	945
Bicarbonate (HCO_3)	141	Color (Pt-Co units)	.00
Sulfate (SO_4)	55	Temperature (°C)	--
Chloride (Cl)	190	Turbidity(JTU)	1
Fluoride (F)	.3	Carbon, organic, total (C)	
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.48		
Iron (Fe)	.01		
Phosphorus, total (P)	.01		

PERRY

County: Taylor **Population served:** 8,497
River basin: Coastal area between the Suwannee and Aucilla Rivers (11 01 02)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; four wells, 80 to 365 feet deep; yield 450 to 1,000 gal/min

Rated plant capacity: 4.25 Mgal/d
Pumpage: Year— 442.38 Mgal **Average daily—** 1.21[a/] Mgal
Highest month: May, 45.94 Mgal **Lowest month:** December 32.22 Mgal

Per capita use: 143 gal/d
Finished-water storage: 0.66 Mgal
Treatment: Aeration, chlorination, filtration

Type/Frequency of analysis: Bacteriological/monthly, chemical, color, turbidity/daily
Sewage discharge: 0.74 Mgal/d
Sewage treatment: Filtration, chlorination

Waste discharged to: Rocky Creek, Fenholloway River, Gulf of Mexico

Remarks: Average daily pumpage increased from 0.61 Mgal/d in 1956 to 1.21 Mgal/d in 1975. City supplies water to subdivisions adjacent to city.

a/ Includes 0.242 Mgal/d commercial use, 0.036 Mgal/d air conditioning.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-25-75
SAMPLING POINT: 300710083350501, Well 3

Silica (SiO_2)	6.4	Dissolved solids (residue at 180°C)	206
Calcium (Ca)	49	Total hardness (as $CaCO_3$)	180
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	11
Sodium (Na)	4.7	Alkalinity (as $CaCO_3$)	170
Potassium (K)	1	pH (units)	7.4
Strontium (Sr)	.3	Specific conductance (μmhos/cm at 25°C)	369
Bicarbonate (HCO_3)	206	Color (Pt-Co units)	5
Sulfate (SO_4)	6.8	Temperature (°C)	21
Chloride (Cl)	7.6	Turbidity (JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.08		
Iron (Fe)	.02		
Phosphorus, total (P)	--		

QUINCY

County: Gadsden
River basin: Ochlockonee River (12 00 03)
Population served: 10,870

Ownership of supply or system: Municipal
Source of water: Surface water, Quincy Creek, 100 percent of supply. Ground water, Floridan aquifer; stand by well, 1,354 feet deep; yield 400 gal/min.
Rated plant capacity: 2.5 Mgal/d
Pumpage: **Year**—432.64 Mgal **Average daily**— 1.18[a/] Mgal
Highest month: July, 43.26 Mgal **Lowest month:** April, 28.99 Mgal

Per capita use: 107 gal/d
Finished-water storage: 2.3 Mgal
Treatment: Chlorination, coagulation, filtration, flocculation, taste and odor control

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually; color, turbidity, pH, alkalinity/daily[b/]
Sewage discharge: 0.49 Mgal/d
Sewage treatment: Primary, secondary, contact stabilization, chlorination

Waste discharged to: Quincy Creek

Remarks: Average daily pumpage increased from 0.70 Mgal/d in 1956 to 1.40 Mgal/d in 1970 then decreased to 1.18 Mgal/d in 1975. Total service connections: domestic, 3,197; undifferentiated, 780. Water supplied to areas adjacent to city.
a/ Includes 0.04 Mgal/d commercial use.
b/ Treated water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 02329534, Quincy Creek at S-267

Silica (SiO_2)	4.5	Dissolved solids (residue at 180°C)	44
Calcium (Ca)	4.9	Total hardness (as $CaCO_3$)	18
Magnesium (Mg)	1.4	Noncarbonate hardness (as $CaCO_3$)	4
Sodium (Na)	2.8	Alkalinity (as $CaCO_3$)	14
Potassium (K)	.8	pH (units)	6.5
Strontium (Sr)	.02	Specific conductance (μmhos/cm at 25°C)	57
Bicarbonate (HCO_3)	17	Color (Pt-Co units)	140
Sulfate (SO_4)	.9	Temperature (°C)	--
Chloride (Cl)	9.5	Turbidity (JTU)	50
Fluoride (F)	.2	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.27	Orthophosphate total (PO_4-P)	.08
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	.55		
Nitrogen (ammonia, total (NH_4-N))	.04		
Iron (Fe)	.12		
Phosphorus, total (P)	.11		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-9-75
SAMPLING POINT: 303554084344801

Silica (SiO_2)	16
Calcium (Ca)	28
Magnesium (Mg)	16
Sodium (Na)	82
Potassium (K)	4.9
Strontium (Sr)	2
Bicarbonate (HCO_3)	155
Sulfate (SO_4)	42
Chloride (Cl)	110
Fluoride (F)	.8
Nitrate (NO_3-N)	.01
Nitrite (NO_2-N)	.00
Nitrogen, organic (N)	.05
Nitrogen (ammonia, total (NH_4-N))	.09
Iron (Fe)	.03
Phosphorus, total (P)	.01

Dissolved solids (residue at 180°C)	378
Total hardness (as $CaCO_3$)	140
Noncarbonate hardness (as $CaCO_3$)	13
Alkalinity (as $CaCO_3$)	127
pH (units)	7.8
Specific conductance (μmhos/cm at 25°C)	693
Color (Pt-Co units)	.00
Temperature (°C)	21.5
Turbidity(JTU)	1
Carbon, organic, total (C)	--
Orthophosphate total (PO_4-P)	.01

ST. AUGUSTINE

County: St. Johns **Population served:** 20,000
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, shallow sand aquifers; 15 wells, 45 to 96 feet deep; yield 200 to 250 gal/min; North and South well fields. Surface water, infiltration gallery, 50 percent of supply.
Rated plant capacity: 5.0 Mgal/d
Pumpage: Year— 932.48 Mgal **Average daily—**2.55[a/] Mgal
Highest month: May, 85.70 Mgal **Lowest month:** February, 65.19 Mgal

Per capita use: 173 gal/d
Finished-water storage: 1.65 Mgal
Treatment: Chlorination, softening, coagulation, flocculation, filtration, carbonation, taste and odor control, algae control

Type/Frequency of analysis: Bacteriological/weekly; chemical (pH, chloride)/ daily; color, turbidity, alkalinity/weekly
Sewage discharge: 2.5 Mgal/d
Sewage treatment: Activated sludge, secondary (both plants)

Waste discharged to: South Matanzas River

Remarks: Average daily pumpage increased from 1.50 Mgal/d in 1956 to 2.55 Mgal/d in 1975. Supplies water to beach communities through Anastasia Sanitary District (fig. 12).
a/ Includes 0.1 Mgal/d industrial use, 0.65 Mgal/d other public supply.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-11-75
SAMPLING POINT: 295357081211801, Well 1A

Silica (SiO_2)	7.2	Dissolved solids (residue at 180°C)	622
Calcium (Ca)	180	Total hardness (as $CaCO_3$)	460
Magnesium (Mg)	3.4	Noncarbonate hardness (as $CaCO_3$)	130
Sodium (Na)	18	Alkalinity (as $CaCO_3$)	325
Potassium (K)	2.4	pH (units)	7.3
Strontium (Sr)	.93	Specific conductance (μmhos/cm at 25°C)	910
Bicarbonate (HCO_3)	397	Color (Pt-Co units)	90
Sulfate (SO_4)	140	Temperature (°C)	--
Chloride (Cl)	25	Turbidity (JTU)	20
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.15
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.20		
Nitrogen (ammonia, total (NH_4-N))	.46		
Iron (Fe)	3.9		
Phosphorus, total (P)	.17		

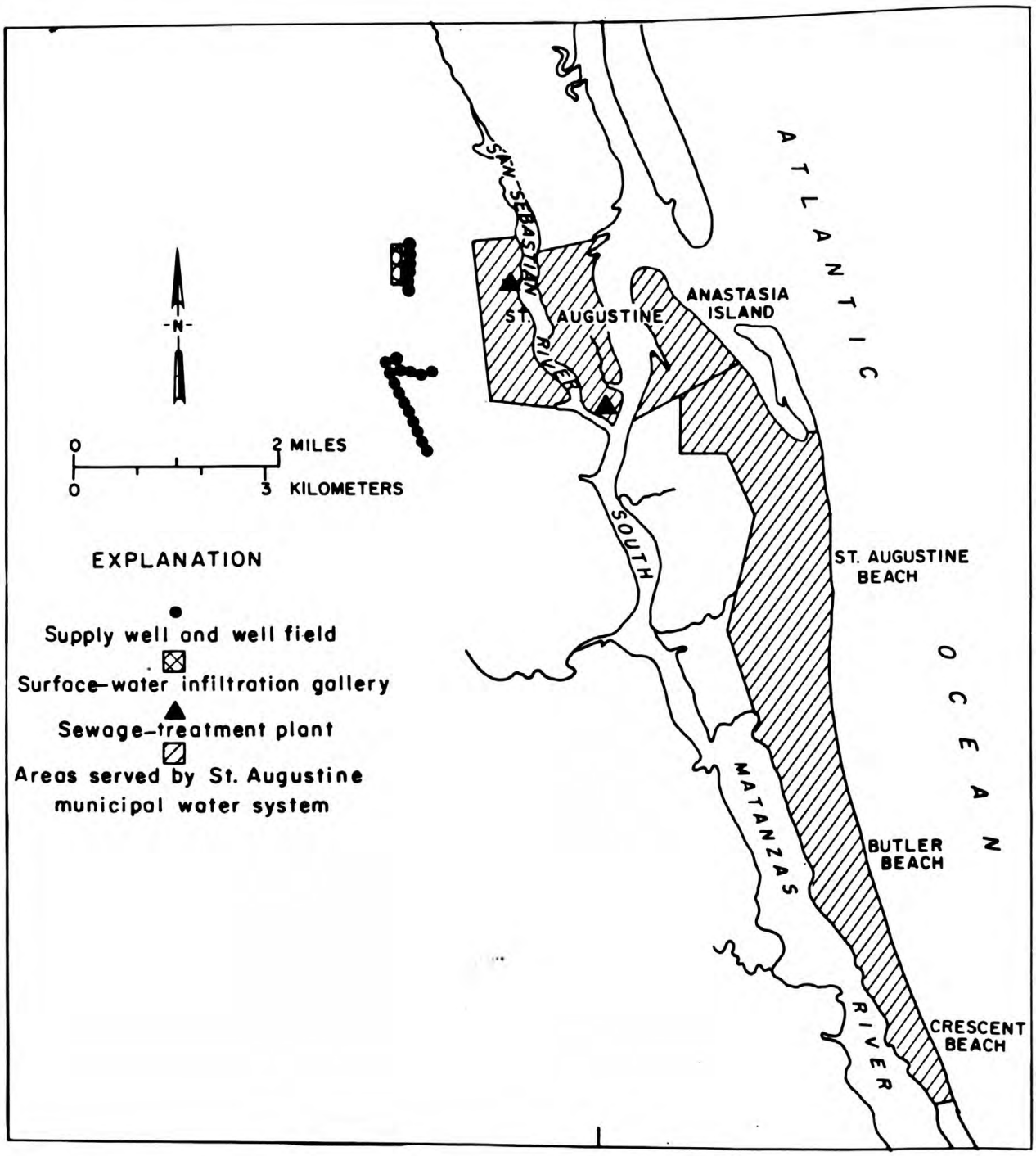

Figure 12.--Areas supplied water by the city of St. Augustine

STARKE

County: Bradford
River basin: Santa Fe River (11 02 06)
Population served: 6,800

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; four wells, 503 to 600 feet deep.

Rated plant capacity: 3.0 Mgal/d
Pumpage: Year— 252.9 Mgal
Highest month: Not reported
Average daily— 0.693[a/] Mgal
Lowest month: not reported

Per capita use: 102 gal/d
Finished-water storage: 0.35 Mgal
Treatment: Softening, stabilization, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.75 Mgal/d
Sewage treatment: Secondary, chlorination, activated sludge, contact stabilization, settling

Waste discharged to: Alligator Creek to Rowell Lake

Remarks: Average daily pumpage increased from 0.42 Mgal/d in 1956 to 0.69 Mgal/d in 1975.

a/ Includes 0.160 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 12-16-75
SAMPLING POINT: 295633082062701, Power Plant Well

Silica (SiO_2)	28	Dissolved solids (residue at 180°C)	236
Calcium (Ca)	44	Total hardness (as $CaCO_3$)	180
Magnesium (Mg)	18	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	16	Alkalinity (as $CaCO_3$)	192
Potassium (K)	1.1	pH (units)	7.4
Strontium (Sr)	.2	Specific conductance (µmhos/cm at 25°C)	380
Bicarbonate (HCO_3)	234	Color (Pt-Co units)	5
Sulfate (SO_4)	3.3	Temperature (°C)	22
Chloride (Cl)	14	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.03	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.08		
Iron (Fe)	.10		
Phosphorus, total (P)	--		

TALLAHASSEE

County: Leon **Population served:** 92,789
River basin: Ochlockonee River and St. Marks and Wakulla Rivers and coastal areas between the Aucilla and Ochlockonee Rivers (12 00 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 15 wells, 350 to 450 deep; yield 1,500 to 3,200 gal/min

Rated plant capacity: 35.4 Mgal/d
Pumpage: Year—5,229.06 Mgal **Average daily**—14.33[a/] Mgal
Highest month: June, 524.13 Mgal **Lowest month:** May, 383.91 Mgal

Per capita use: 154 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/4 times daily; chemical/annually

Sewage discharge: 10.86 Mgal/d
Sewage treatment: Primary, secondary, high rate trickling filter, activated sludge, secondary settling, chlorination

Waste discharged to: Lake Munson, ground and spray irrigation

Remarks: Average daily pumpage increased from 5.57 Mgal/d in 1956 to 14.33 Mgal/d in 1975. Total yearly pumpage, 1933-75 is shown on figure 13. Total service connections, differentiated, 27,291. City also supplies water to Woodville and subdivisions adjacent to city.
a/Includes estimated 2.86 Mgal/d, commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 1-8-76
SAMPLING POINT: 302722084184101, City well 13

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	172
Calcium (Ca)	43	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	10	Noncarbonate hardness (as $CaCO_3$)	2
Sodium (Na)	3.5	Alkalinity (as $CaCO_3$)	147
Potassium (K)	.4	pH (units)	7.3
Strontium (Sr)	.11	Specific conductance (μmhos/cm at 25°C)	280
Bicarbonate (HCO_3)	179	Color (Pt-Co units)	13
Sulfate (SO_4)	5.4	Temperature (°C)	20.5
Chloride (Cl)	5.8	Turbidity (JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.39	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.02		
Iron (Fe)	.01		
Phosphorus, total (P)	--		

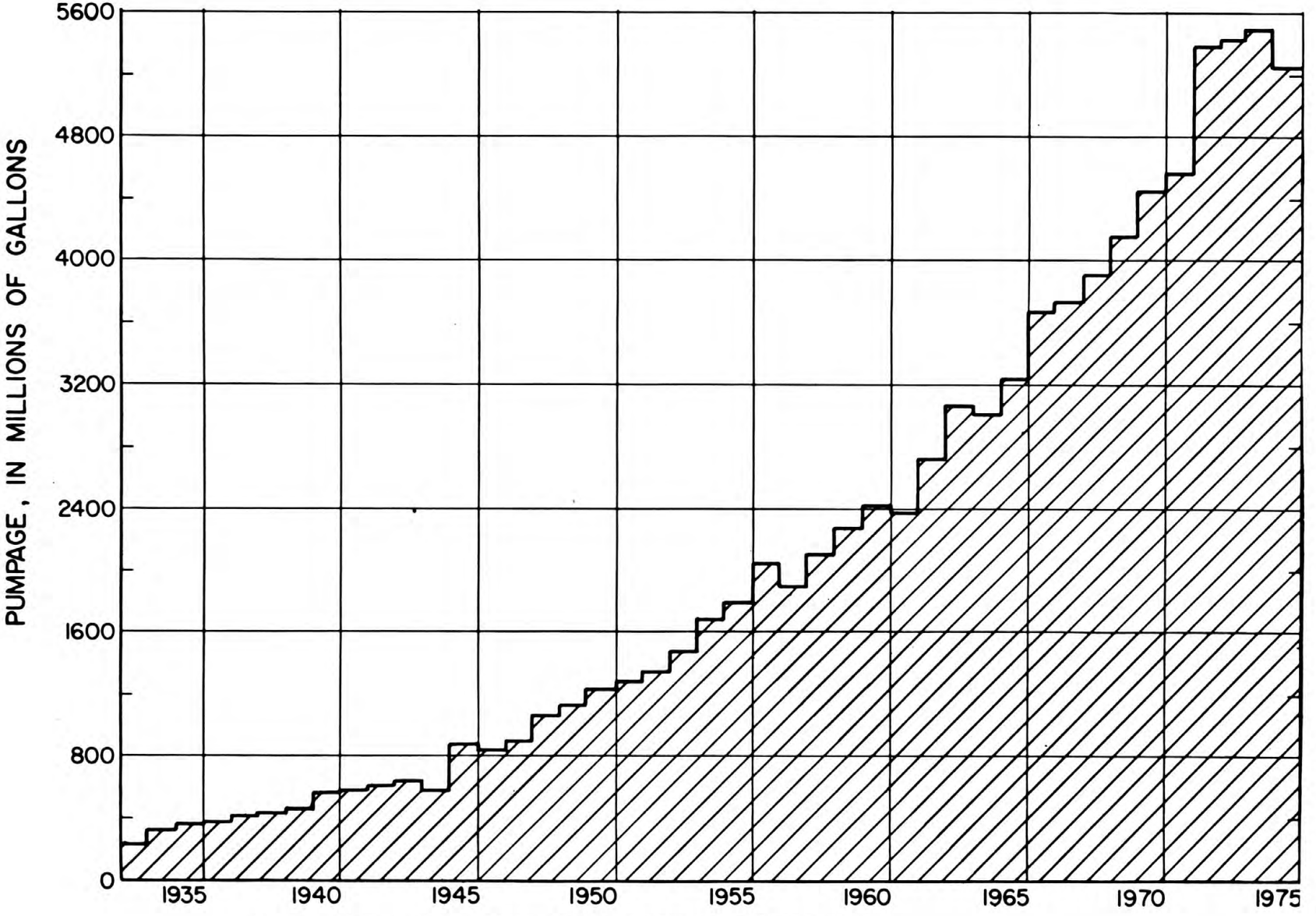

Figure 13.--Total yearly pumpage, city of Tallahassee.

TRENTON

County: Gilchrist **Population served:** 1,250
River basin: Suwannee River below Withlacoochee River excluding Santa Fe River (11 02 05)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; three wells, 90 to 525 feet deep; yield 250 to 320 gal/min

Rated plant capacity: 0.8[a] Mgal/d
Pumpage: Year— 126.66 Mgal **Average daily—**0.35 Mgal
Highest month: April, 22.0 Mgal **Lowest month:** September, 6.1 Mgal

Per capita use: 280 gal/d
Finished-water storage: 0.08 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/intermittently

Sewage discharge: 0.05[b] Mgal/d
Sewage treatment: Aeration

Waste discharged to: Evaporation ponds

Remarks: Average daily pumpage increased from 0.10 Mgal/d in 1956 to 0.35 Mgal/d in 1975.

a/ Estimated.
b/ 50 percent of population use septic tanks.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 2-19-76
SAMPLING POINT: 293653082493202

Silica (SiO_2)	4.7	Dissolved solids (residue at 180°C)	242
Calcium (Ca)	78	Total hardness (as $CaCO_3$)	210
Magnesium (Mg)	4.4	Noncarbonate hardness (as $CaCO_3$)	20
Sodium (Na)	5.5	Alkalinity (as $CaCO_3$)	190
Potassium (K)	.8	pH (units)	7.1
Strontium (Sr)	.11	Specific conductance (μmhos/cm at 25°C)	350
Bicarbonate (HCO_3)	231	Color (Pt-Co units)	.00
Sulfate (SO_4)	16	Temperature (°C)	19.5
Chloride (Cl)	10	Turbidity (JTU)	--
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.22	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.02		
Phosphorus, total (P)	--		

CENTRAL FLORIDA

The central Florida section of this report includes data for 17 counties and covers about 14,300 mi^2 extending southward from the northern boundary of Marion County to the east-west line forming the northern boundaries of St. Lucie, Okeechobee, Highlands, Hardee and Manatee Counties. The extent of this section and locations of municipalities for which water-use data are given are shown in figure 14.

The principal sources of municipal ground-water supplies are the Floridan aquifer and the shallow-sand aquifer. During 1975, 89,239 Mgal were pumped from the Floridan aquifer and 2,702 Mgal from the shallow-sand aquifer. Surface water sources, the Hillsborough River and Lake Washington, supplied 22,486 Mgal or 20 percent of the total water used for public supply. Water supplied for municipal use in the Tampa-St. Petersburg and the Orlando areas was 58,970 Mgal or 52 percent of the total water reported supplied in the section and 66 percent of the water pumped from the Floridan aquifer.

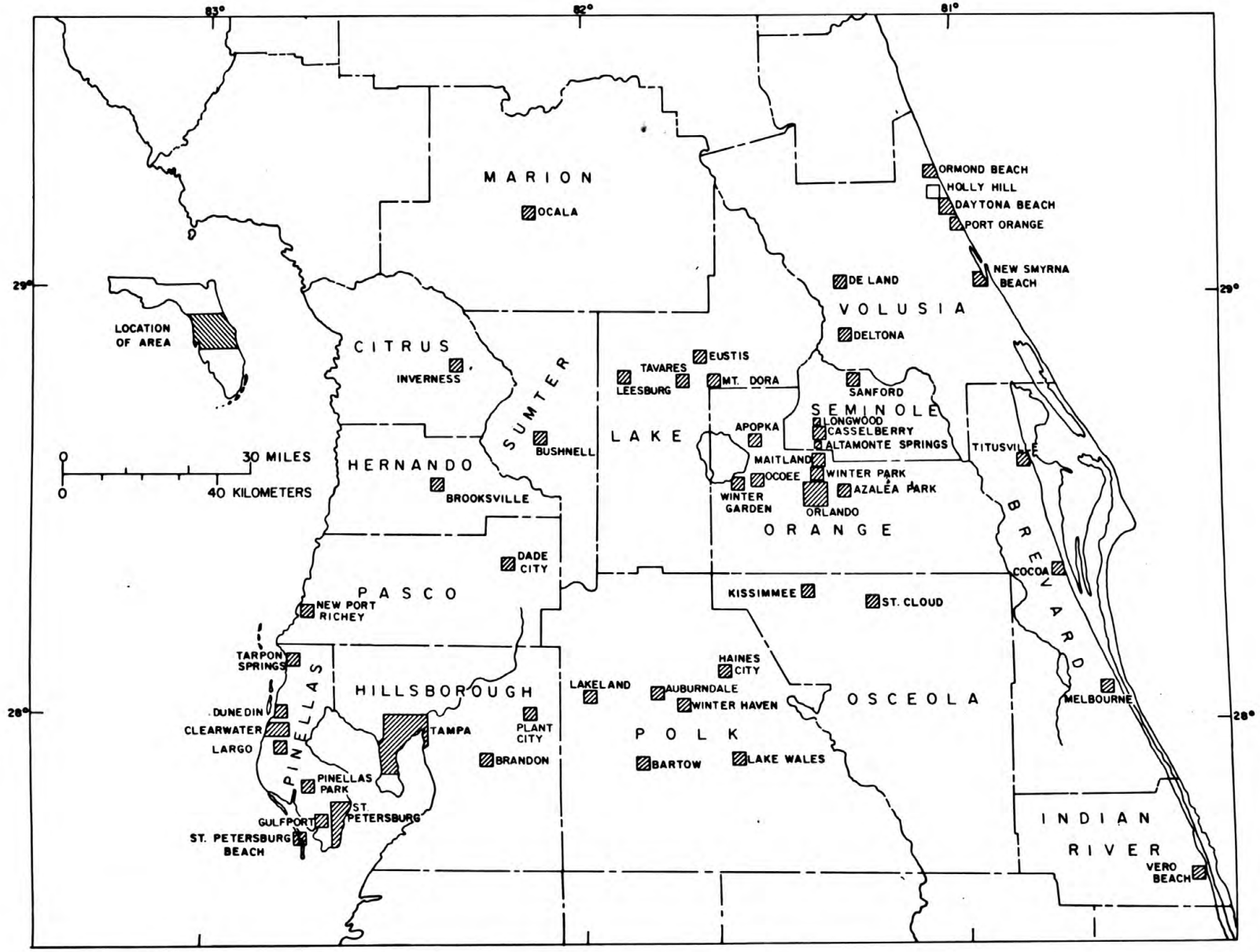

Figure 14.--Municipalities in central Florida for which water-use data are given.

ALTAMONTE SPRINGS

County: Seminole **Population served:** 16,710
River basin: St. Johns River above Oklawaha River (08 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 8 wells, 382 to 572 feet deep; yield 500 to 1,670 gal/min

Rated plant capacity: 10.0 Mgal/d
Pumpage: Year— 1,314.0 Mgal **Average daily—** 3.6[a/] Mgal
Highest month: May, 134.6 Mgal **Lowest month:** June, 99.2 Mgal

Per capita use: 215 gal/d
Finished-water storage: 2.4 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: Not Reported
Sewage treatment: Activated sludge

Waste discharged to: Not Reported

Remarks: Only 6 wells in operation at time reported.
a/ Includes 0.396 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 283949081213301

Silica (SiO_2)	9.6	Dissolved solids (residue at 180°C)	126
Calcium (Ca)	30	Total hardness (as $CaCO_3$)	110
Magnesium (Mg)	8.1	Noncarbonate hardness (as $CaCO_3$)	8
Sodium (Na)	5.1	Alkalinity (as $CaCO_3$)	102
Potassium (K)	1.1	pH (units)	8.2
Strontium (Sr)	.1	Specific conductance (µmhos/cm at 25°C)	225
Bicarbonate (HCO_3)	124	Color (Pt-Co units)	.0
Sulfate (SO_4)	2.2	Temperature (°C)	25.5
Chloride (Cl)	7.3	Turbidity (JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.10		
Nitrogen (ammonia, total (NH_4-N))	.12		
Iron (Fe)	.01		
Phosphorus, total (P)	.06		

APOPKA

County: Orange
River basin: Oklawaha River (08 01 02)
Population served: 12,012

Ownership of supply or system: City of Apopka
Source of water: Ground water, Floridan aquifer; 4 wells, 230 to 705 feet deep; yield 500 to 1,200 gal/min

Rated plant capacity: 3 Mgal/d
Pumpage: Year— 576.70 Mgal
Average daily— 1.58 Mgal
Highest month: April, 67.20 Mgal
Lowest month: February, 39.48 Mgal

Per capita use: 132 gal/d
Finished-water storage: 0.5 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/4 times weekly; chemical/daily

Sewage discharge: 0.35 Mgal/d
Sewage treatment: Secondary, aeration, activated sludge

Waste discharged to: Spray field one mile south of city limit.

Remarks: No chemical analysis available. Average daily pumpage increased from 0.35 Mgal/d in 1956 to 1.58 Mgal/d in 1975.

AUBURNDALE

County: Polk
River basin: Peace River (10 01 01)
Population served: 12,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, two on standby, 155 to 633 feet deep; yield of one well 1,140 gal/min

Rated plant capacity: 5.0 Mgal/d
Pumpage: Year— 474.25 Mgal
Highest month: April, 60.7 Mgal
Average daily— 1.30[a/] Mgal
Lowest month: December, 26.2 Mgal

Per capita use: 108 gal/d
Finished-water storage: 0.46 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: 0.51 Mgal/d
Sewage treatment: Trickling filter, coagulation

Waste discharged to: Lake Hancock

Remarks: Average daily pumpage increased from 0.75 Mgal/d in 1956 to 1.30 Mgal/d in 1975. Supplies water to areas adjacent to the city. Robertson (1971, 1973).
a/ Includes 0.14 Mgal/d industrial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-24-75
SAMPLING POINT: 280346081473700, composite 2 wells

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	142
Calcium (Ca)	30	Total hardness (as $CaCO_3$)	100
Magnesium (Mg)	6	Noncarbonate hardness (as $CaCO_3$)	.0
Sodium (Na)	5.9	Alkalinity (as $CaCO_3$)	100
Potassium (K)	1	pH (units)	8
Strontium (Sr)	.04	Specific conductance (μmhos/cm at 25°C)	235
Bicarbonate (HCO_3)	122	Color (Pt-Co units)	5
Sulfate (SO_4)	2.9	Temperature (°C)	--
Chloride (Cl)	8.4	Turbidity(JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.2		
Nitrogen (ammonia, total (NH_4-N))	.16		
Iron (Fe)	.06		
Phosphorus, total (P)	.04		

AZALEA PARK

County: Orange **Population served:** 5,500
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: First Florida Utilities
Source of water: Ground water, Floridan aquifer; 2 wells, 1,300 to 1,350 feet deep

Rated plant capacity: 2.52 Mgal/d
Pumpage: Year— 222.65 Mgal **Average daily—** 0.61 Mgal
Highest month: April, 25.30 Mgal **Lowest month:** January, 14.87 Mgal

Per capita use: 111 gal/d
Finished-water storage: 0.25 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/4 times weekly; chemical/biannually[a/]

Sewage discharge: 1.0 Mgal/d
Sewage treatment: Contact stabilization

Waste discharged to: Azalea Park outfall canal

Remarks: First Florida Utilities sold to Orange County, December 1975.
No chemical analysis available.
a/ Treated water. Chemical analysis of chlorine content made daily.

BARTOW

County: Polk
River basin: Peace River (10 01 01)
Population served: 17,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 10 wells, 285 to 765 feet deep; yield 350 to 2,300 gal/min

Rated plant capacity: 4.1 Mgal/d
Pumpage: Year— 1237.3 Mgal
Average daily— 3.39 a/ Mgal
Highest month: April, 154.5 Mgal
Lowest month: September, 77.9 Mgal

Per capita use: 191 gal/d
Finished-water storage: 0.9 Mgal
Treatment: Aeration, filtration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical irregularly

Sewage discharge: 1.34 Mgal/d
Sewage treatment: Primary, secondary, filtration, chlorination

Waste discharged to: Peace River

Remarks: Average daily pumpage increased from 1.50 Mgal/d in 1956 to 3.24 Mgal/d in 1975. Robertson (1971, 1973), Robertson and Mills (1974).
a/ Includes 0.5 Mgal/d industrial use, 1.0 Mgal/d agricultural use, and 0.4 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-21-75
SAMPLING POINT: 275352081494301, composite

Silica (SiO_2)	17	Dissolved solids (residue at 180°C)	464
Calcium (Ca)	86	Total hardness (as $CaCO_3$)	310
Magnesium (Mg)	23	Noncarbonate hardness (as $CaCO_3$)	160
Sodium (Na)	8.6	Alkalinity (as $CaCO_3$)	151
Potassium (K)	1.1	pH (units)	7.8
Strontium (Sr)	1.9	Specific conductance (μmhos/cm at 25°C)	673
Bicarbonate (HCO_3)	184	Color (Pt-Co units)	0
Sulfate (SO_4)	170	Temperature (°C)	--
Chloride (Cl)	9.6	Turbidity (JTU)	3
Fluoride (F)	.5	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.04	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.27		
Nitrogen (ammonia, total (NH_4-N))	.21		
Iron (Fe)	.04		
Phosphorus, total (P)	.05		

BRANDON

County: Hillsborough
River basin: Hillsborough River (10 02 05)
Population served: 25,000

Ownership of supply or system: HCUD (Hillsborough County Utility Department)
Source of water: Ground water, Floridan aquifer, 20 wells

Rated plant capacity: 14 Mgal/d
Pumpage: Year— 1,460 Mgal
Highest month: Not reported
Average daily— 4[a/] Mgal
Lowest month: Not reported

Per capita use: 160 gal/d
Finished-water storage: Not reported
Treatment: Not reported

Type/Frequency of analysis: Not reported

Sewage discharge: Not reported
Sewage treatment: b/

Waste discharged to: Not reported

Remarks: Average daily pumpage increased from 0.01 Mgal/d in 1956 to an estimated 4 Mgal/d in 1975. The Brandon Water Company was purchased by the HCUD, August 1975.
a/ Estimated from water use 1970-74.
b/ Sewage treated by HCUD since 1972.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-28-75
SAMPLING POINT: 275638082163100, composite

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	204
Calcium (Ca)	53	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	4.5	Noncarbonate hardness (as $CaCO_3$)	47
Sodium (Na)	6.1	Alkalinity (as $CaCO_3$)	103
Potassium (K)	.5	pH (units)	8.1
Strontium (Sr)	.52	Specific conductance (μmhos/cm at 25°C)	338
Bicarbonate (HCO_3)	126	Color (Pt-Co units)	5
Sulfate (SO_4)	39	Temperature (°C)	--
Chloride (Cl)	9.4	Turbidity(JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	2.2	Orthophosphate total (PO_4-P)	.06
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.2		
Nitrogen (ammonia, total (NH_4-N))	.04		
Iron (Fe)	.01		
Phosphorus, total (P)	.06		

BROOKSVILLE

County: Hernando
Population served: 5,000
River basin: Withlacoochee River (11 02 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 3 wells, 251 to 757 deep; yield of one well, 220 gal/min

Rated plant capacity: 2.5 Mgal/d
Pumpage: Year—272.53 Mgal
Average daily— 0.75 Mgal
Highest month: December, 30.15 Mgal
Lowest month: July, 15.92 Mgal

Per capita use: 150 gal/d
Finished-water storage: 0.63 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/once every 5 years.

Sewage discharge: 0.56 Mgal/d
Sewage treatment: Extended aeration, trickling filter

Waste discharged to: Man-made lake (Cone Quarry)

Remarks: Average daily pumpage increased from 0.28 Mgal/d in 1956 to 0.75 Mgal/d in 1975. Cherry and others (1970).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-23-75
SAMPLING POINT: 28341008222900, composite 3 wells

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	222
Calcium (Ca)	65	Total hardness (as $CaCO_3$)	200
Magnesium (Mg)	9.5	Noncarbonate hardness (as $CaCO_3$)	21
Sodium (Na)	5.1	Alkalinity (as $CaCO_3$)	178
Potassium (K)	.4	pH (units)	8.2
Strontium (Sr)	.16	Specific conductance (μmhos/cm at 25°C)	390
Bicarbonate (HCO_3)	218	Color (Pt-Co units)	5
Sulfate (SO_4)	14	Temperature (°C)	--
Chloride (Cl)	9.2	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.33	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.08		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.03		

BUSHNELL

County: Sumter
Population served: 926
River basin: Withlacoochee River (11 02 03)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells, 610 to 620 feet deep; yield 350 gal/min

Rated plant capacity: 0.5 Mgal/d
Pumpage: Year— 49.03 Mgal
Average daily— 0.13[a/] Mgal
Highest month: June, 5.42 Mgal
Lowest month: April, 3.62 Mgal

Per capita use: 140 gal/d
Finished-water storage: 0.175 Mgal
Treatment: Chlorination, aeration, coagulation, corrosion control

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.07 Mgal/d in 1956 to 0.13 Mgal/d in 1975. City supplies water to 50 persons outside city limits.
a/ Includes 0.062 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 8-75
SAMPLING POINT: 284002082064201, Bushell water plant

Silica (SiO_2)	15	Dissolved solids (residue at 180°C)	282
Calcium (Ca)	68	Total hardness (as $CaCO_3$)	210
Magnesium (Mg)	10	Noncarbonate hardness (as $CaCO_3$)	55
Sodium (Na)	5.8	Alkalinity (as $CaCO_3$)	155
Potassium (K)	1.1	pH (units)	7.9
Strontium (Sr)	1.1	Specific conductance (µmhos/cm at 25°C)	450
Bicarbonate (HCO_3)	189	Color (Pt-Co units)	.0
Sulfate (SO_4)	54	Temperature (°C)	--
Chloride (Cl)	8.6	Turbidity (JTU)	1
Fluoride (F)	.5	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.01		
Nitrogen (ammonia, total (NH_4-N))	.05		
Iron (Fe)	.04		
Phosphorus, total (P)	.02		

CASSELBERRY

County: Seminole **Population served:** 14,429
River basin: St. John River above Oklawaha River (08 01 01)

Ownership of supply or system: City of Casselberry
Source of water: Ground water, Floridan aquifer; three wells, 213 to 500 feet deep; yield 600 to 700 gal/min

Rated plant capacity: Not reported
Pumpage: Year— 475.23 Mgal **Average daily—** 1.30 Mgal
Highest month: April, 55.38 Mgal **Lowest month:** November, 33.33 Mgal

Per capita use: 90 gal/d
Finished-water storage: 0.26 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Chemical/intermittently

Sewage discharge: 0.83 Mgal/d
Sewage treatment: Aeration, chlorination, trickling filter, polishing pond.

Waste discharged to: Gee Creek to Lake Jessup to St. Johns River

Remarks: Average daily pumpage increased from 0.17 Mgal/d in 1956 to 1.30 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 283910081194901

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	146
Calcium (Ca)	33	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	8.7	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	5.6	Alkalinity (as $CaCO_3$)	126
Potassium (K)	1	pH (units)	8.3
Strontium (Sr)	.2	Specific conductance (µmhos/cm at 25°C)	249
Bicarbonate (HCO_3)	154	Color (Pt-Co units)	5
Sulfate (SO_4)	3.5	Temperature (°C)	--
Chloride (Cl)	7	Turbidity (JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.13		
Nitrogen (ammonia, total (NH_4-N))	.21		
Iron (Fe)	.00		
Phosphorus, total (P)	.06		

CLEARWATER

County: Pinellas **Population served:** 73,310
River basin: Coastal area from Tampa Bay to the Withlacoochee River (10 02 07)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 19 wells, 157 to 360 feet deep; yield 200 to 600 gal/min

Rated plant capacity: 14.0 Mgal/d
Pumpage: Year— 4091.40[a/] Mgal **Average daily—** 11.21[b/] Mgal
Highest month: April, 241.66 Mgal **Lowest month:** December, 188.49 Mgal

Per capita use: 153 gal/d
Finished-water storage: 3.0 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: 11.14 Mgal/d
Sewage treatment: Activated sludge, polishing pond

Waste discharged to: Tampa Bay and Gulf of Mexico

Remarks: City supplies water to areas adjacent to city limits.Cherry and others (197
a/ Includes 1,423.34 Mgal purchased from Pinellas County Water System.
b/ Includes 0.153 Mgal/d industrial use, 0.376 Mgal/d agricultural use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 3-75
SAMPLING POINT: 275635082463301

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	372
Calcium (Ca)	68	Total hardness (as $CaCO_3$)	210
Magnesium (Mg)	9.8	Noncarbonate hardness (as $CaCO_3$)	44
Sodium (Na)	24	Alkalinity (as $CaCO_3$)	166
Potassium (K)	1.2	pH (units)	7.6
Strontium (Sr)	.51	Specific conductance (µmhos/cm at 25°C)	568
Bicarbonate (HCO_3)	203	Color (Pt-Co units)	5
Sulfate (SO_4)	1.9	Temperature (°C)	--
Chloride (Cl)	71	Turbidity (JTU)	3
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.12		
Nitrogen (ammonia, total (NH_4-N))	.24		
Iron (Fe)	.12		
Phosphorus, total (P)	.03		

COCOA

County: Brevard **Population served:** 100,000
River basin: Coastal area between Ponce de Leon Inlet and Sebastian Inlet (08 02 02)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 22 wells, 115 to 794 feet deep; yield 500 to 1,950 gal/min

Rated plant capacity: 40 Mgal/d
Pumpage: Year— 5,262.66 Mgal **Average daily—** 14.41[a/] Mgal
Highest month: August, 523.2 Mgal **Lowest month:** November, 387.5 Mgal

Per capita use: 144 gal/d
Finished-water storage: 16.8 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/4 times weekly; chemical/weekly

Sewage discharge: 1.4 Mgal/d
Sewage treatment: Primary, trickling filter, chlorination, sludge thickening, digestion

Waste discharged to: Indian River

Remarks: Average daily pumpage increased from 2.08 Mgal/d (surface water) in 1956 to 14.41 Mgal/d (ground water) in 1975. Water supplied to Cape Canaveral, Cocoa Beach, Cape Kennedy, Merritt Island, Rockledge, and Districts 2 and 4 Military-Patrick Air Force Base. Total yearly pumpage is shown on figure 15. Knochenmus (1974), Lichtler (1972).
a/ Includes 12.9 Mgal/d supplied other municipalities.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-12-75
SAMPLING POINT: 282531081075601, Cocoa 13

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	556
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	330
Magnesium (Mg)	13	Noncarbonate hardness (as $CaCO_3$)	91
Sodium (Na)	45	Alkalinity (as $CaCO_3$)	239
Potassium (K)	2.0	pH (units)	--
Strontium (Sr)	1.1	Specific conductance (µmhos/cm at 25°C)	--
Bicarbonate (HCO_3)	291	Color (Pt-Co units)	0
Sulfate (SO_4)	85	Temperature (°C)	24.5
Chloride (Cl)	77	Turbidity(JTU)	--
Fluoride (F)	..3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	--	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	--	SAR	1.1
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	--		
Iron (Fe)	--		
Phosphorus, total (P)	--		

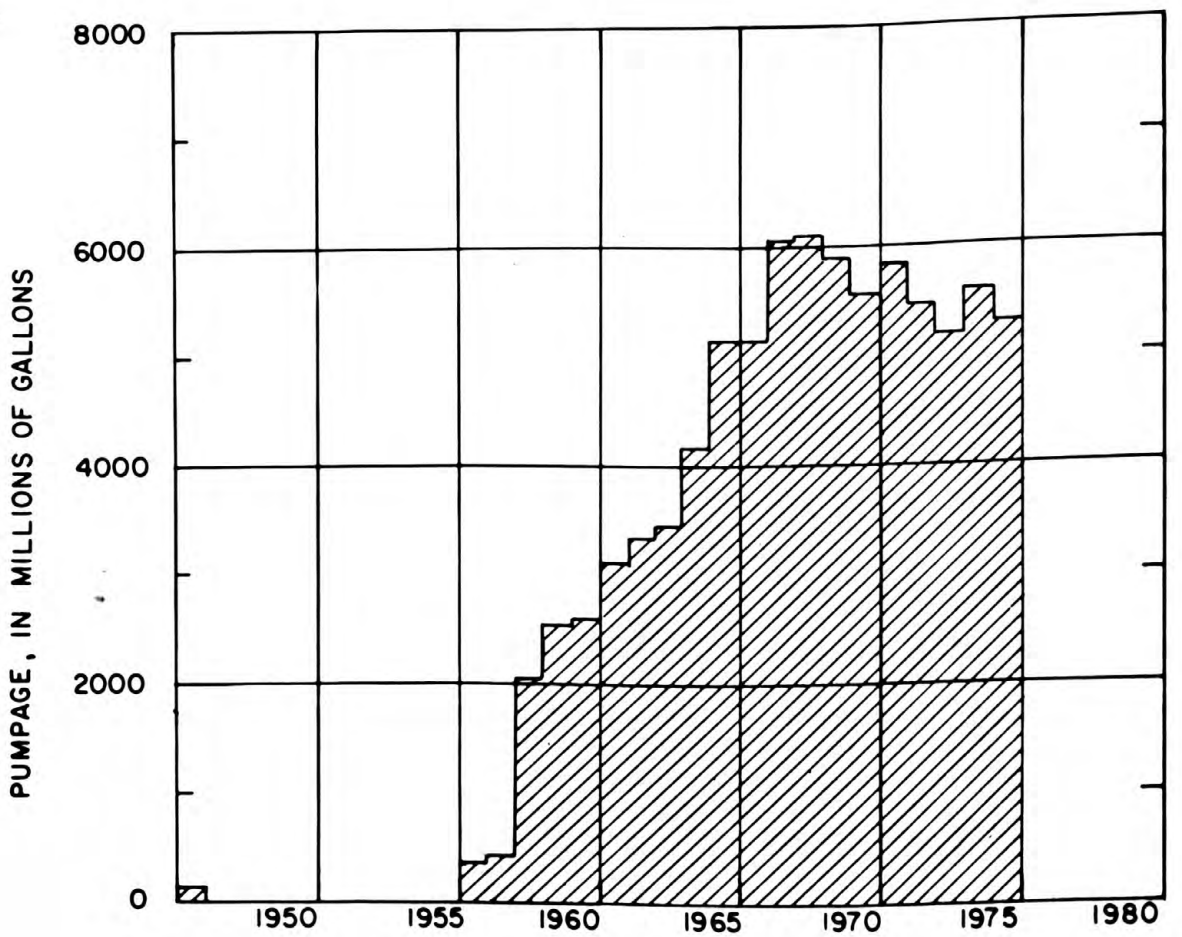

Figure 15.--Total yearly pumpage, city of Cocoa.

DADE CITY

County: Pasco **Population served:** 9,000
River basin: Withlacoochee River (10 02 08)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 4 wells, 116 to 200 feet deep; yield 500 to 850 gal/min

Rated plant capacity: 4 Mgal/d
Pumpage: Year— 386.9 Mgal **Average daily—** 1.06[a/] Mgal
Highest month: May, 41.05 Mgal **Lowest month:** December, 23.37 Mgal

Per capita use: 118 gal/d
Finished-water storage: 0.42 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.42 Mgal/d
Sewage treatment: Primary, activated sludge

Waste discharged to: Canals to Withlacoochee River

Remarks: Average daily pumpage increased from 0.68 Mgal/d in 1957 to 1.06 Mgal/d in 1975. Total service connections 2,890. Total yearly pumpage (1957-75) is shown on figure 16.
a/ Includes 0.1 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-23-75
SAMPLING POINT: 282148082122900, composite, 2 wells

Silica (SiO_2)	9	Dissolved solids (residue at 180°C)	176
Calcium (Ca)	49	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	5.2	Noncarbonate hardness (as $CaCO_3$)	18
Sodium (Na)	4.7	Alkalinity (as $CaCO_3$)	122
Potassium (K)	.3	pH (units)	8.1
Strontium (Sr)	.18	Specific conductance (μmhos/cm at 25°C)	294
Bicarbonate (HCO_3)	149	Color (Pt-Co units)	5
Sulfate (SO_4)	15	Temperature (°C)	--
Chloride (Cl)	6.8	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.84	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.11		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.0		
Phosphorus, total (P)	.03		

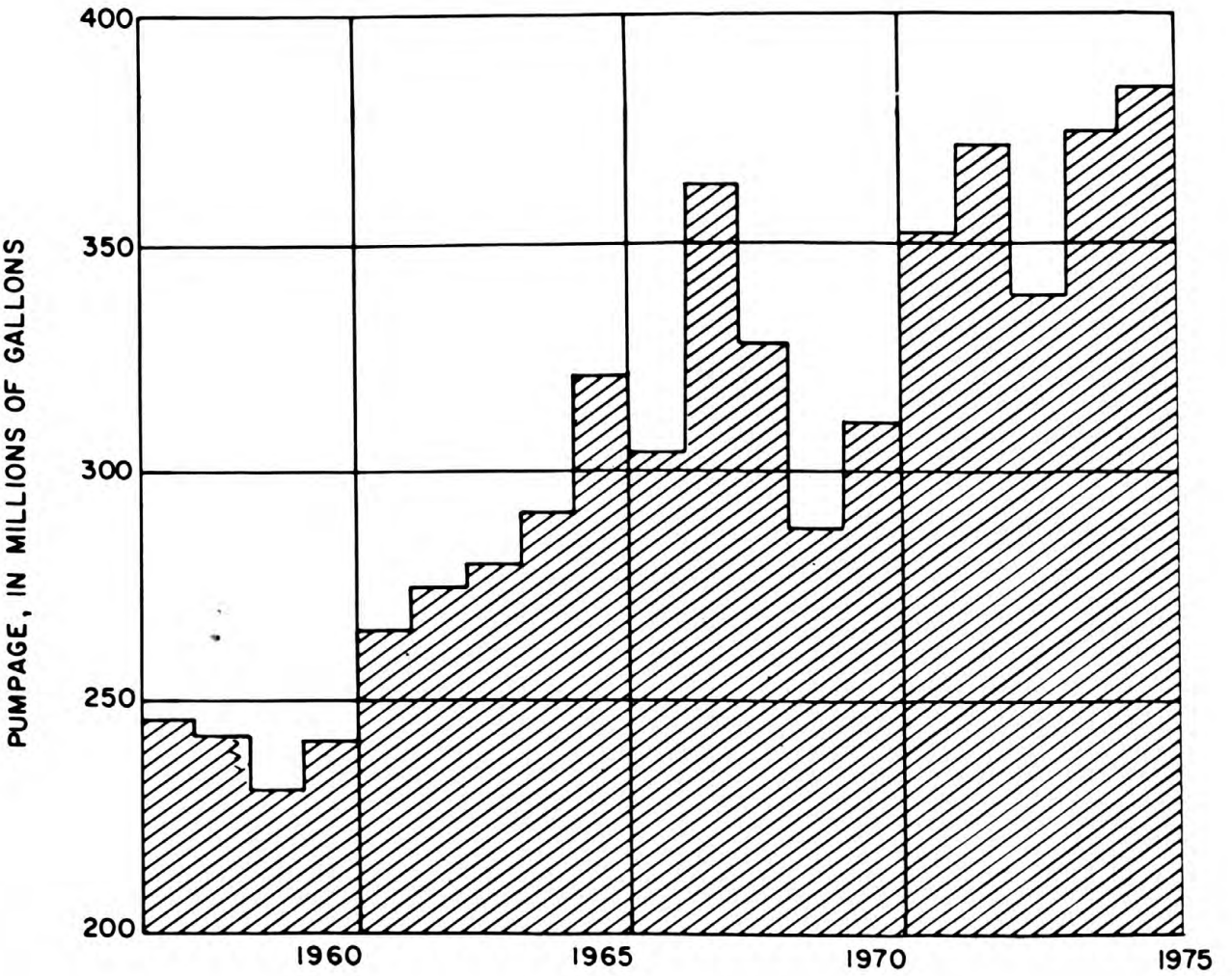

Figure 16.--Total yearly pumpage, Dade City.

DAYTONA BEACH

County: Volusia **Population served:** 62,300
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 14 wells, 160 to 485 feet deep; yield 700 to 1,400 gal/min. Two plants.

Rated plant capacity: 22 Mgal/d
Pumpage: Year— 4,062.45 Mgal **Average daily—** 11.13 a/ Mgal
Highest month: March, 392 Mgal **Lowest month:** January, 287 Mgal

Per capita use: 179 gal/d
Finished-water storage: 6 Mgal
Treatment: Chlorination, softening, coagulation, fluoridation, algae control, clarification, filtration, flocculation, pH control, taste and odor control
Type/Frequency of analysis: Bacteriological/weekly; chemical/daily; color and turbidity/monthly
Sewage discharge: 12 Mgal/d
Sewage treatment: Aeration, activated sludge, chlorination, clarification, comminution, diffused air, digestion, filtration, grit chambers, skimming, secondary
Waste discharged to: Halifax River

Remarks: Average daily pumpage increased from 4.00 Mgal/d in 1956 to 11.13 Mgal/d in 1975. Total service connections 18,321. Knochenmus and Beard (1971), Lichtler (1972).
a/ Includes 1.8 Mgal/d supplied South Daytona and Daytona Beach Shores.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 2-75
SAMPLING POINT: 291228081013001

Silica (SiO_2)	19	Dissolved solids (residue at 180°C)	404
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	310
Magnesium (Mg)	8.8	Noncarbonate hardness (as $CaCO_3$)	18
Sodium (Na)	26	Alkalinity (as $CaCO_3$)	292
Potassium (K)	1.4	pH (units)	7.4
Strontium (Sr)	.47	Specific conductance (µmhos/cm at 25°C)	699
Bicarbonate (HCO_3)	356	Color (Pt-Co units)	20
Sulfate (SO_4)	.2	Temperature (°C)	--
Chloride (Cl)	42	Turbidity (JTU)	2
Fluoride (F)	.6	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.15
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.21		
Nitrogen (ammonia, total (NH_4-N))	.39		
Iron (Fe)	.2		
Phosphorus, total (P)	.17		

DE LAND

County: Volusia **Population served:** 18,000
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 7 wells, 275 to 511 feet deep; yield 200 to 1,100 gal/min

Rated plant capacity: 8.0 Mgal/d
Pumpage: Year— 1,164.40 Mgal **Average daily—** 3.19[a] Mgal
Highest month: April, 125.2 Mgal **Lowest month:** February, 81.4 Mgal

Per capita use: 177 gal/d
Finished-water storage: 0.90 Mgal
Treatment: Chlorination, softening, stabilization, pH control

Type/Frequency of analysis: Bacteriological/monthly, chemical, spectrographic, color, and turbidity/intermittently
Sewage discharge: 1.5 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, clarification, comminution, digestion, drying, grit chambers, polishing pond, secondary

Waste discharged to: Aeration lagoons, St. Johns River

Remarks: Average daily pumpage increased from 1.60 Mgal/d in 1956 to 3.19 Mgal/d in 1975. Total service connections 6,488. Water supplied to areas adjacent to city. Knochenmus and Beard (1971), Lichtler (1972).
a/ Includes 0.25 Mgal/d industrial use, 0.25 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 2-75
SAMPLING POINT: 290156081183301

Silica (SiO_2)	7.7	Dissolved solids (residue at 180°C)	208
Calcium (Ca)	50	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	4	Noncarbonate hardness (as $CaCO_3$)	4
Sodium (Na)	10	Alkalinity (as $CaCO_3$)	136
Potassium (K)	2	pH (units)	7.7
Strontium (Sr)	.16	Specific conductance (μmhos/cm at 25°C)	350
Bicarbonate (HCO_3)	166	Color (Pt-Co units)	.00
Sulfate (SO_4)	13	Temperature (°C)	--
Chloride (Cl)	17	Turbidity (JTU)	1
Fluoride (F)	.4	Carbon, organic, total (C)	3
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.06
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.03		
Nitrogen (ammonia, total (NH_4-N))	.18		
Iron (Fe)	.02		
Phosphorus, total (P)	.06		

DELTONA

County: Volusia **Population served:** 12,000
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: Deltona Utility Co.
Source of water: Ground water, Florida aquifer; 11 wells, 230 to 330 feet deep; yield 250 to 500 gal/min

Rated plant capacity: 8.6 Mgal/d
Pumpage: Year— 584.0 Mgal **Average daily—** 1.6 Mgal
Highest month: April, 83.1 Mgal **Lowest month:** January, 38.8 Mgal

Per capita use: 133 gal/d
Finished-water storage: 1.0 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.5 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, drying,clarification, contact stabilization, digestion, polishing pond, settling, secondary

Waste discharged to: Lake Monroe

Remarks: Total service connections 4,600. No chemical analysis available. Knochenmus and Beard (1971).

DUNEDIN

County: Pinellas **Population served:** 25,000
River basin: Coastal area from Tampa Bay to Withlacoochee River (10 02 07)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 15 wells, 96 to 332 feet deep; yield to 500 gal/min

Rated plant capacity: 6.25 Mgal/d
Pumpage: Year— 1,299.03 Mgal **Average daily—** 3.56[a/] Mgal
Highest month: May, 142 Mgal **Lowest month:** September, 71 Mgal

Per capita use: 142 gal/d
Finished-water storage: Not reported
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical annually

Sewage discharge: 2.54 Mgal/d
Sewage treatment: Aeration, chlorination, digestion, clarification, activated sludge, contact stabilization, primary

Waste discharged to: St. Joseph Sound, Gulf of Mexico

Remarks: Average daily pumpage increase from 0.85 Mgal/d in 1956 to 3.56 Mgal/d in 1975. Total service connections 8,200. Cherry and others (1970).
a/ Includes 0.178 Mgal/d industrial use, 0.355 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 3-75
SAMPLING POINT: 280123082454701

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	474
Calcium (Ca)	78	Total hardness (as $CaCO_3$)	240
Magnesium (Mg)	12	Noncarbonate hardness (as $CaCO_3$)	63
Sodium (Na)	53	Alkalinity (as $CaCO_3$)	177
Potassium (K)	3.6	pH (units)	7.9
Strontium (Sr)	.52	Specific conductance (µmhos/cm at 25°C)	765
Bicarbonate (HCO_3)	216	Color (Pt-Co units)	5
Sulfate (SO_4)	36	Temperature (°C)	--
Chloride (Cl)	100	Turbidity(JTU)	5
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	.23
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.12		
Nitrogen (ammonia, total (NH_4-N))	.24		
Iron (Fe)	.14		
Phosphorus, total (P)	.49		

EUSTIS

County: Lake
River basin: Oklawaha River (08 01 02)
Population served: 10,812

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 3 wells, 2 in use, 300 to 1,000 feet deep; yield 800 to 4,000 gal/min

Rated plant capacity: 7 Mgal/d
Pumpage: Year— 623.50 Mgal
Highest month: April, 74.59 Mgal
Average daily—1.71[a] Mgal
Lowest month: September, 38.43 Mgal

Per capita use: 158 gal/d
Finished-water storage: 125 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.84 Mgal/d
Sewage treatment: [b] Activated sludge, chlorination, clarification, filtration, primary

Waste discharged to: Swamp to Trout Lake

Remarks: Average daily pumpage increased from 0.90 Mgal/d in 1956 to 1.71 Mgal/d in 1975. Total service connections 4,080. Water supplied to Three Lake and Lake Louise subdivisions and areas adjacent to city. Knochenmus (1971).
a/ Includes 0.17 Mgal/d industrial use (citrus concentration).
b/ Small package treatment plant in operation at Pine Meadows.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 285104081404701, Well 850-140-111

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	102
Calcium (Ca)	22	Total hardness (as $CaCO_3$)	87
Magnesium (Mg)	7.8	Noncarbonate hardness (as $CaCO_3$)	5
Sodium (Na)	5.1	Alkalinity (as $CaCO_3$)	82
Potassium (K)	1	pH (units)	8.2
Strontium (Sr)	.1	Specific conductance (µmhos/cm at 25°C)	189
Bicarbonate (HCO_3)	100	Color (Pt-Co units)	.00
Sulfate (SO_4)	3.7	Temperature (°C)	--
Chloride (Cl)	7	Turbidity (JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.02		
Nitrogen (ammonia, total (NH_4-N))	.09		
Iron (Fe)	.01		
Phosphorus, total (P)	.04		

GULFPORT

County: Pinellas **Population served:** 12,000
River basin: Coastal area from Tampa Bay to the Withlacoochee River (10 02 07)

Ownership of supply or system: City of St. Petersburg
Source of water: a/ Ground water, Floridan aquifer

Rated plant capacity: a/
Pumpage: **Year—** 299.0 Mgal **Average daily—** 0.82 Mgal
Highest month: April, 32.98 Mgal **Lowest month:** January, 21.41 Mgal

Per capita use: 68 gal/d
Finished-water storage: a/
Treatment: a/

Type/Frequency of analysis: a/

Sewage discharge: 1.32 Mgal/d
Sewage treatment: a/

Waste discharged to: St. Petersburg sewage system, southwest treatment plant, Boca Ciega Bay
Remarks: Average daily pumpage increased from 0.40 Mgal/d in 1956 to 0.82 Mgal/d in 1975. Unincorporated areas near Gulfport supplied 0.09 Mgal/d by St. Petersburg. For chemical analysis of water see St. Petersburg.
a/ See St. Petersburg (p. 148).

HAINES CITY

County: Polk **Population served:** 13,000
River basin: Peace River (10 01 01), Kissimmee River (09 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 6 wells, 490 to 950 feet deep; yield 900 to 1,763 gal/min

Rated plant capacity: 6.0 Mgal/d
Pumpage: Year— 608.0 Mgal **Average daily—** 1.67 Mgal
Highest month: April, 73 Mgal **Lowest month:** September, 35 Mgal

Per capita use: 128 gal/d
Finished-water storage: 1.3 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/intermittently

Sewage discharge: 0.69 Mgal/d
Sewage treatment: Aeration, trickling filter, digestion, primary

Waste discharged to: Lake Marion

Remarks: Average daily pumpage increased from 0.96 Mgal/d in 1956 to 1.66 Mgal/d in 1975. Robertson (1971, 1973), Robertson and Mills (1974).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-25-75
SAMPLING POINT: 280637081374200, composite 4 wells

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	208
Calcium (Ca)	49	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	7.1	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	10	Alkalinity (as $CaCO_3$)	156
Potassium (K)	1.4	pH (units)	8.1
Strontium (Sr)	.06	Specific conductance (μmhos/cm at 25°C)	358
Bicarbonate (HCO_3)	190	Color (Pt-Co units)	5
Sulfate (SO_4)	4.5	Temperature (°C)	--
Chloride (Cl)	13	Turbidity (JTU)	3
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.18		
Nitrogen (ammonia, total (NH_4-N))	.54		
Iron (Fe)	.03		
Phosphorus, total (P)	.06		

HOLLY HILL

County: Volusia **Population served:** 8,599
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 220 to 230 feet deep; yield 350 to 450 gal/min

Rated plant capacity: 2.3 Mgal/d
Pumpage: Year— 333.46 Mgal **Average daily—** 0.91[a/] Mgal
Highest month: August, 30.64 Mgal **Lowest month:** January, 25.81 Mgal

Per capita use: 106 gal/d
Finished-water storage: 1.23 Mgal
Treatment: Aeration, algae control, anti-precipitation and corrosion control chlorination, clarification, coagulation, softening, filtration, pH control, recarbonation*
Type/Frequency of analysis: Bacteriological/weekly

Sewage discharge: 0.73 Mgal/d
Sewage treatment: Aeration, chlorination, activated sludge, comminution, clarification, digestion, drying, settling, skimming, secondary

Waste discharged to: Halifax River

Remarks: Average daily pumpage increased from 0.40 Mgal/d in 1956 to 0.91 Mgal/d in 1975. Snell and Anderson (1970), Knochenmus and Beard (1971).
* Sedimentation, stabilization, taste and odor control.
a/ Includes 0.1 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5- 2-75
SAMPLING POINT: 291402081024401

Silica (SiO_2)	21	Dissolved solids (residue at 180°C)	484
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	320
Magnesium (Mg)	12	Noncarbonate hardness (as $CaCO_3$)	21
Sodium (Na)	43	Alkalinity (as $CaCO_3$)	298
Potassium (K)	1.9	pH (units)	8.3
Strontium (Sr)	.45	Specific conductance (µmhos/cm at 25°C)	800
Bicarbonate (HCO_3)	364	Color (Pt-Co units)	20
Sulfate (SO_4)	.2	Temperature (°C)	--
Chloride (Cl)	76	Turbidity(JTU)	1
Fluoride (F)	.7	Carbon, organic, total (C)	7
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.12
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.07		
Nitrogen (ammonia, total (NH_4-N))	.51		
Iron (Fe)	.02		
Phosphorus, total (P)	.14		

INVERNESS

County: Citrus
Population served: 2,900
River basin: Withlacoochee River (10 02 08)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 2 wells, 272 to 277 feet deep; yield 520 gal/min[a/]

Rated plant capacity: 1.5 Mgal/d
Pumpage: Year— 120.4 Mgal **Average daily—** 0.33[b/] Mgal
Highest month: April, 14.19 Mgal **Lowest month:** November, 8.31 Mgal

Per capita use: 114 gal/d
Finished-water storage: 0.1 Mgal
Treatment: Aeration, chlorination, filtration, softening, coagulation

Type/Frequency of analysis: Bacteriological/monthly; chemical/semiannually

Sewage discharge: 0.24 Mgal/d
Sewage treatment: Secondary, trickling filter

Waste discharged to: Lake Voight

Remarks: Average daily pumpage increased from 0.12 Mgal/d in 1956 to 0.33 Mgal/d in 1975. Cherry and others (1970).
a/ Estimated from plant capacity.
b/ Includes 0.19 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 8-23-75
SAMPLING POINT: 284948082191801, Public Supply Well

Silica (SiO_2)	5.1	Dissolved solids (residue at 180°C)	216
Calcium (Ca)	59	Total hardness (as $CaCO_3$)	160
Magnesium (Mg)	3	Noncarbonate hardness (as $CaCO_3$)	16
Sodium (Na)	6.3	Alkalinity (as $CaCO_3$)	144
Potassium (K)	.5	pH (units)	8.2
Strontium (Sr)	.08	Specific conductance (μmhos/cm at 25°C)	332
Bicarbonate (HCO_3)	175	Color (Pt-Co units)	20
Sulfate (SO_4)	5.7	Temperature (°C)	--
Chloride (Cl)	12.0	Turbidity(JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.04	Orthophosphate total (PO_4-P)	.08
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.35		
Nitrogen (ammonia, total (NH_4-N))	.47		
Iron (Fe)	.07		
Phosphorus, total (P)	.08		

KISSIMMEE

County: Osceola
River basin: Kissimmee River (09 01 01)
Population served: 11,848

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 6 wells, 398 to 1,200 feet deep; yield, maximum, 2,000 gal/min

Rated plant capacity: 13.5 Mgal/d
Pumpage: Year— 830.45 Mgal
Highest month: April, 88.4 Mgal
Average daily— 2.27[a/] Mgal
Lowest month: September, 56.3 Mgal

Per capita use: 192 gal/d
Finished-water storage: 2.5 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Chemical/irregularly

Sewage discharge: 1.7 Mgal/d
Sewage treatment: Secondary, chlorination

Waste discharged to: Lake Tohopekaliga

Remarks: Average daily pumpage increased from 0.85 Mgal/d in 1956 to 2.27 Mgal/d in 1975. City of Kissimmee purchased the Kissimmee Highlands well field from the General Waterworks Corp. in Dec. 1975. Highlands well field-source of water, Floridan aquifer; 2 wells, 375 to 467 ft. deep; yield 495 to 500 gal/min; population served 750; average daily pumpage 0.2 Mgal/d. Lichtler (1972).
a/ Includes 0.227 Mgal/d industrial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: 281725081242501

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	116
Calcium (Ca)	30	Total hardness (as $CaCO_3$)	99
Magnesium (Mg)	5.7	Noncarbonate hardness (as $CaCO_3$)	6
Sodium (Na)	4.1	Alkalinity (as $CaCO_3$)	93
Potassium (K)	.9	pH (units)	8.2
Strontium (Sr)	.18	Specific conductance (µmhos/cm at 25°C)	206
Bicarbonate (HCO_3)	113	Color (Pt-Co units)	--
Sulfate (SO_4)	3.7	Temperature (°C)	--
Chloride (Cl)	5.5	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	4
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.04		
Nitrogen (ammonia, total (NH_4-N))	.1		
Iron (Fe)	.01		
Phosphorus, total (P)	.04		

LAKELAND

County: Polk
River basin: Peace River (10 01 01)
Population served: 82,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 3 plants, 34 wells, 252 to 1,216 feet deep; yield 150 to 5,000 gal/min

Rated plant capacity: 38 Mgal/d
Pumpage: Year— 6,224.27 Mgal
Average daily— 17.05 Mgal
Highest month: April, 754.98 Mgal
Lowest month: February, 432.11 Mgal

Per capita use: 208 gal/d
Finished-water storage: 1.6 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 5.62 Mgal/d
Sewage treatment: Primary, secondary, trickling filter

Waste discharged to: Banana Lake then to Peace River

Remarks: Average daily pumpage increased from 6.61 Mgal/d in 1956 to 17.05 Mgal/d in 1975. Water also supplied (0.25 Mgal/d) to Polk City and Highland City. Total yearly pumpage 1928-75 is shown on Figure 17. Robertson (1971, 1973), Robertson and Mills (1974).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-24-75
SAMPLING POINT: 280331081572601, Oconee plant well

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	228
Calcium (Ca)	62	Total hardness (as $CaCO_3$)	200
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	9
Sodium (Na)	5.3	Alkalinity (as $CaCO_3$)	191
Potassium (K)	.8	pH (units)	8.1
Strontium (Sr)	.1	Specific conductance (μmhos/cm at 25°C)	390
Bicarbonate (HCO_3)	232	Color (Pt-Co units)	10
Sulfate (SO_4)	.7	Temperature (°C)	--
Chloride (Cl)	7.4	Turbidity (JTU)	2
Fluoride (F)	.3	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.1
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.29		
Nitrogen (ammonia, total (NH_4-N))	1.0		
Iron (Fe)	.08		
Phosphorus, total (P)	.1		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-24-75
SAMPLING POINT: 280151081572901, Dixieland plant well

Silica (SiO_2)	17	Dissolved solids (residue at 180°C)	178
Calcium (Ca)	40	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	12	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	6.5	Alkalinity (as $CaCO_3$)	154
Potassium (K)	.8	pH (units)	8.0
Strontium (Sr)	.04	Specific conductance (μmhos/cm at 25°C)	330
Bicarbonate (HCO_3)	188	Color (Pt-Co units)	5
Sulfate (SO_4)	.5	Temperature (°C)	--
Chloride (Cl)	8.2	Turbidity (JTU)	2
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.19		
Nitrogen (ammonia, total (NH_4-N))	.9		
Iron (Fe)	.02		
Phosphorus, total (P)	.05		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-24-75
SAMPLING POINT: 275731081570302, Southside plant well

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	264
Calcium (Ca)	54	Total hardness (as $CaCO_3$)	200
Magnesium (Mg)	15	Noncarbonate hardness (as $CaCO_3$)	64
Sodium (Na)	5.7	Alkalinity (as $CaCO_3$)	136
Potassium (K)	.7	pH (units)	8.1
Strontium (Sr)	.31	Specific conductance (μmhos/cm at 25°C)	394
Bicarbonate (HCO_3)	166	Color (Pt-Co units)	5
Sulfate (SO_4)	57	Temperature (°C)	--
Chloride (Cl)	6.8	Turbidity (JTU)	2
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.04	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.11		
Nitrogen (ammonia, total (NH_4-N))	.21		
Iron (Fe)	.02		
Phosphorus, total (P)	.04		

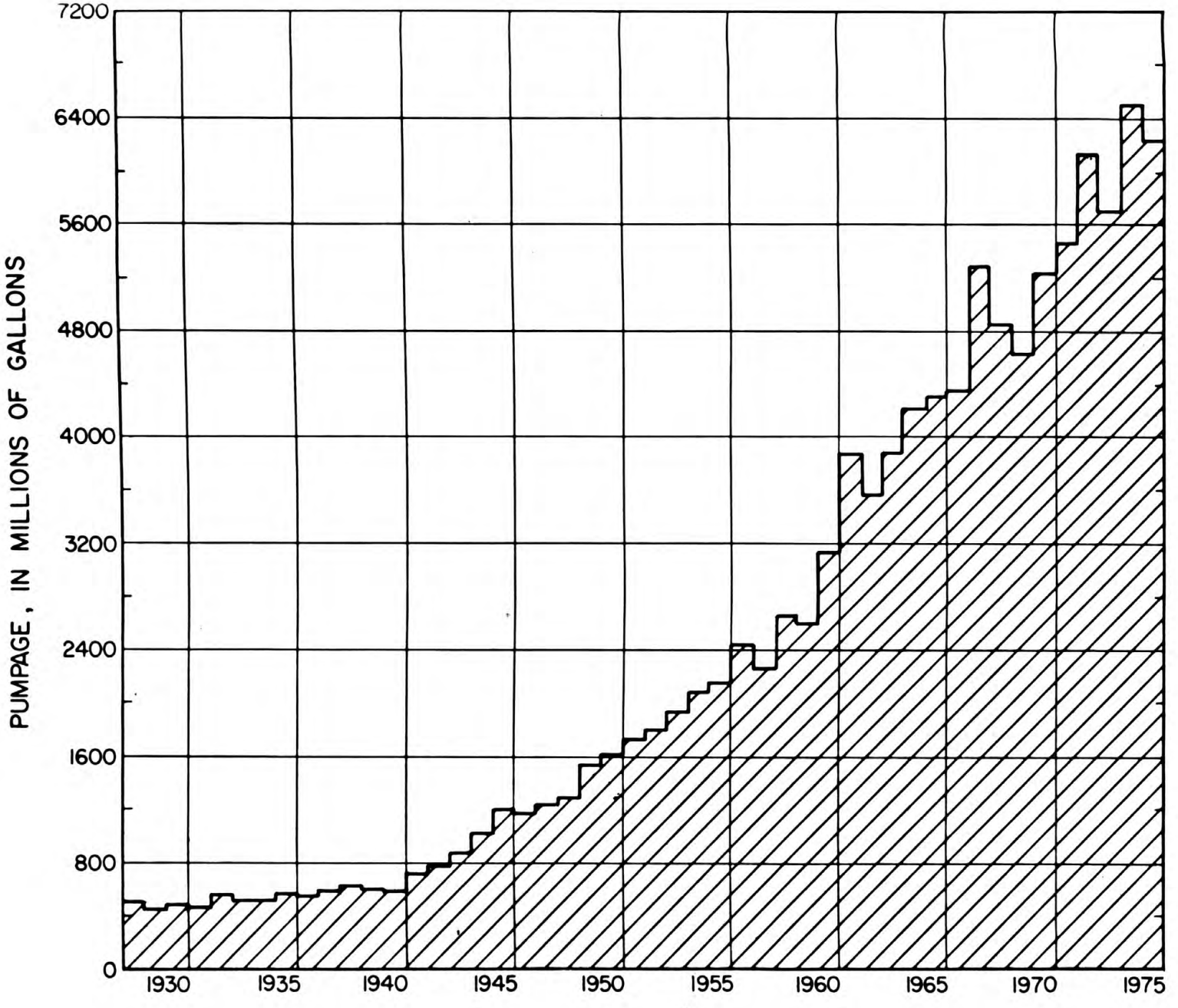

Figure 17.--Total yearly pumpage, city of Lakeland

LAKE WALES

County: Polk
River basin: Kissimmee River (09 01 01)
Population served: 14,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 809 to 1,056 feet deep; yield 1,400 to 1,600 gal/d

Rated plant capacity: 9.2 Mgal/d
Pumpage: Year— 860.73 Mgal
Highest month: April, 122.27 Mgal
Average daily— 2.36[a/] Mgal
Lowest month: September, 48.31 Mgal

Per capita use: 169 gal/d
Finished-water storage: 1.15 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/trimonthly; chemical/intermittently

Sewage discharge: 0.86 Mgal/d
Sewage treatment: Trickling filter

Waste discharged to: Lake Effie to Peace Creek drainage canal.

Remarks: Average daily pumpage increased from 1.33 Mgal/d in 1956 to 2.36 Mgal/d in 1975.
a/ Includes 0.2 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-22-75
SAMPLING POINT: 275417081351800, composite, 5 wells

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	154
Calcium (Ca)	35	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	7.7	Noncarbonate hardness (as $CaCO_3$)	12
Sodium (Na)	5.9	Alkalinity (as $CaCO_3$)	108
Potassium (K)	1.5	pH (units)	8.0
Strontium (Sr)	.38	Specific conductance (μmhos/cm at 25°C)	270
Bicarbonate (HCO_3)	132	Color (Pt-Co units)	.00
Sulfate (SO_4)	13	Temperature (°C)	--
Chloride (Cl)	9	Turbidity (JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.11	Orthophosphate total (PO_4-P)	.06
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	.19		
Nitrogen (ammonia, total (NH_4-N))	.14		
Iron (Fe)	.02		
Phosphorus, total (P)	.06		

LARGO

County: Pinellas **Population served:** 46,415
River basin: Coastal area from Tampa Bay to the Withlacoochee River (10 02 07)

Ownership of supply or system: a/
Source of water: Ground water, Floridan aquifer

Rated plant capacity: a/
Pumpage: Year— Not reported **Average daily—** Not reported
Highest month: Not reported **Lowest month:** Not reported

Per capita use: 69 b/ gal/d
Finished-water storage: a/
Treatment: a/

Type/Frequency of analysis: a/

Sewage discharge: 5.17 Mgal/d
Sewage treatment: Activated sludge, contact stabilization

Waste discharged to: Northeast end of Cross Bayou

Remarks: Per capita use based on estimated average, 1970-74
a/ Pinellas County Water System (p. 142).
b/ Estimated.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 3-75
SAMPLING POINT: 275511082471701

Silica (SiO_2)	35	Dissolved solids (residue at 180°C)	306
Calcium (Ca)	55	Total hardness (as $CaCO_3$)	190
Magnesium (Mg)	12	Noncarbonate hardness (as $CaCO_3$)	30
Sodium (Na)	18	Alkalinity (as $CaCO_3$)	160
Potassium (K)	1	pH (units)	7.8
Strontium (Sr)	.51	Specific conductance (μmhos/cm at 25°C)	472
Bicarbonate (HCO_3)	195	Color (Pt-Co units)	5
Sulfate (SO_4)	4.6	Temperature (°C)	--
Chloride (Cl)	51	Turbidity (JTU)	1
Fluoride (F)	.6	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	.09		
Nitrogen (ammonia, total (NH_4-N))	.20		
Iron (Fe)	.04		
Phosphorus, total (P)	.07		

LEESBURG

County: Lake
River basin: Oklawaha River (09 01 02)
Population served: 14,200

Ownership of supply or system: City of Leesburg
Source of water: Ground water, Floridan aquifer; 9 wells, 94 to 936 feet deep; yield 544 to 1,590 gal/min

Rated plant capacity: 13.86 Mgal/d
Pumpage: Year—1,415.17
Highest month: April, 162.55 Mgal
Average daily—3.88[a/] Mgal
Lowest month: February, 91.50 Mgal

Per capita use: 273 gal/d
Finished-water storage: 2.2 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological and chemical/monthly[b/]

Sewage discharge: 2.02 Mgal/d
Sewage treatment: Activated sludge, chlorination, clarification, digestion, drying, primary, secondary

Waste discharged to: Ponds, and direct to Lake Griffin

Remarks: Average daily pumpage increased from 1.72 Mgal/d in 1956 to 4.64 Mgal/d in 1970. Pumpage decreased 0.76 Mgal/d from 1970 through 1975.
a/ Includes 0.2 Mgal/d industrial use, 2.2 Mgal/d commercial use.
b/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 284822081523201, Leesburg 11

Silica (SiO_2)	15	Dissolved solids (residue at 180°C)	174
Calcium (Ca)	48	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	6.6	Noncarbonate hardness (as $CaCO_3$)	7
Sodium (Na)	6	Alkalinity (as $CaCO_3$)	143
Potassium (K)	1.3	pH (units)	8.2
Strontium (Sr)	.11	Specific conductance (μmhos/cm at 25°C)	204
Bicarbonate (HCO_3)	174	Color (Pt-Co units)	.00
Sulfate (SO_4)	1.3	Temperature (°C)	--
Chloride (Cl)	9.5	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	3
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.06
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.07		
Nitrogen (ammonia, total (NH_4-N))	.03		
	.03		
Iron (Fe)	.12		
Phosphorus, total (P)	.07		

LONGWOOD

County: Seminole **Population served:** 4,000
River basin: St. Johns River above Oklawaha River (08 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer, two wells, 372 to 390 feet deep; yield 500 to 700 gal/min

Rated plant capacity: 1.9 Mgal/d
Pumpage: Year— 228.5 Mgal **Average daily—** 0.64 Mgal
Highest month: April 27.73 Mgal **Lowest month:** December, 12.16 Mgal

Per capita use: 160 gal/d
Finished-water storage: 0.76 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical, spectrographic, color, turbidity/annually
Sewage discharge: 0.07 Mgal/d
Sewage treatment: Activated sludge

Waste discharged to: Ponds

Remarks: Average daily pumpage increased from 0.05 Mgal/d in 1956 to 0.69 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 284238081212201

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	146
Calcium (Ca)	35	Total hardness (as $CaCO_3$)	130
Magnesium (Mg)	9.8	Noncarbonate hardness (as $CaCO_3$)	8
Sodium (Na)	4.8	Alkalinity (as $CaCO_3$)	122
Potassium (K)	1	pH (units)	8.3
Strontium (Sr)	.13	Specific conductance (μmhos/cm at 25°C)	263
Bicarbonate (HCO_3)	149	Color (Pt-Co units)	.00
Sulfate (SO_4)	.9	Temperature (°C)	25
Chloride (Cl)	7.1	Turbidity(JTU)	2
Fluoride (F)	.3	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.06
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.16		
Nitrogen (ammonia, total (NH_4-N))	.12		
Iron (Fe)	.02		
Phosphorus, total (P)	.06		

MAITLAND

County: Orange **Population served:** 8,325
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: City of Maitland
Source of water: Ground water, Floridan aquifer, 6 wells

Rated plant capacity: 7.7 Mgal/d
Pumpage: Year— 527.78 Mgal **Average daily—**1.44 Mgal
Highest month: April, 75.21 Mgal **Lowest month:** August, 33.22 Mgal

Per capita use: 173 gal/d
Finished-water storage: 0.8 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 1.1 Mgal/d
Sewage treatment: Secondary, polishing ponds

Waste discharged to: Lake Howell

Remarks: Average daily pumpage increased from 0.18 Mgal/d in 1956 to 1.44 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-30-75
SAMPLING POINT: 283743081214501, 837-121-01

Silica (SiO_2)	8.7	Dissolved solids (residue at 180°C)	168
Calcium (Ca)	41	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	5.4	Noncarbonate hardness (as $CaCO_3$)	25
Sodium (Na)	11	Alkalinity (as $CaCO_3$)	95
Potassium (K)	1.4	pH (units)	7.7
Strontium (Sr)	.32	Specific conductance (μmhos/cm at 25°C)	252
Bicarbonate (HCO_3)	115	Color (Pt-Co units)	.00
Sulfate (SO_4)	14	Temperature (°C)	--
Chloride (Cl)	15	Turbidity(JTU)	3
Fluoride (F)	.2	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.1		
Nitrogen (ammonia, total (NH_4-N))	.07		
Iron (Fe)	.02		
Phosphorus, total (P)	.02		

MELBOURNE

County: Brevard **Population served:** 90,000
River basin: Coastal area between Ponce de Leon and Sebastian Inlets (08 02 02)
Ownership of supply or system: Municipal, Melbourne/Eau Gallie
Source of water: Surface water, Lake Washington

Rated plant capacity: 12 Mgal/d
Pumpage: **Year**— 3,248.5 Mgal **Average daily**— 8.9 Mgal
Highest month: April, 360 Mgal **Lowest month:** June, 186 Mgal

Per capita use: 99 gal/d
Finished-water storage: 7.6 Mgal
Treatment: Chlorination, coagulation, filtration, flocculation, clarification fluoridation, pH control, sedimentation, softening

Type/Frequency of analysis: Bacteriological and chemical/daily, color and turbidity/hourly[a]; Bacteriological/weekly, chemical, color, turbidity/daily[b]
Sewage discharge: 4.51[c] Mgal/d (4 plants)
Sewage treatment: Aeration, chlorination, comminution, contact stabilization, diffused air, digestion, drying, skimming, primary, secondary

Waste discharged to: Indian River

Remarks: Average daily pumpage increased from 0.70 Mgal/d (ground water) in 1956 to 10.8 Mgal/d in 1975 (surface water). City also supplies all water to West Melbourne, Melbourne Village, Melbourne Beach, Satellite Beach, Indialantic, Indian Harbor Beach, Eau Gallie and partial supply to Palm Bay and Patrick AFB.
a/ Treated water. b/ Raw water.
c/ Septic tanks and small independent sewage treatment systems in operation.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-3-75
SAMPLING POINT: 02232100, Lake Washington near Eau Gallie

Silica (SiO_2)	.5	Dissolved solids (residue at 180°C)	640
Calcium (Ca)	70	Total hardness (as $CaCO_3$)	240
Magnesium (Mg)	16	Noncarbonate hardness (as $CaCO_3$)	140
Sodium (Na)	86	Alkalinity (as $CaCO_3$)	95
Potassium (K)	2.7	pH (units)	7.9
Strontium (Sr)	2.7	Specific conductance (μmhos/cm at 25°C)	921
Bicarbonate (HCO_3)	116	Color (Pt-Co units)	130
Sulfate (SO_4)	57	Temperature (°C)	--
Chloride (Cl)	200	Turbidity (JTU)	7
Fluoride (F)	.6	Carbon, organic, total (C)	42
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.6		
Nitrogen (ammonia, total (NH_4-N))	.01		
	.01		
Iron (Fe)	.03		
Phosphorus, total (P)	.02		

MELBOURNE

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-3-75
SAMPLING POINT: 02232100, Lake Washington near Eau Gallie

Trace Elements

Arsenic (As)	1	Manganese (Mn)	20
Barium (Ba)	0	Mercury (Hg)	.0
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	<10	Zinc (Zn)	20
Copper (Cu)	1		
Iron (Fe)	120	pH(units)	--
Lead (Pb)	7	Temperature (°C)	--

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.03
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.00
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

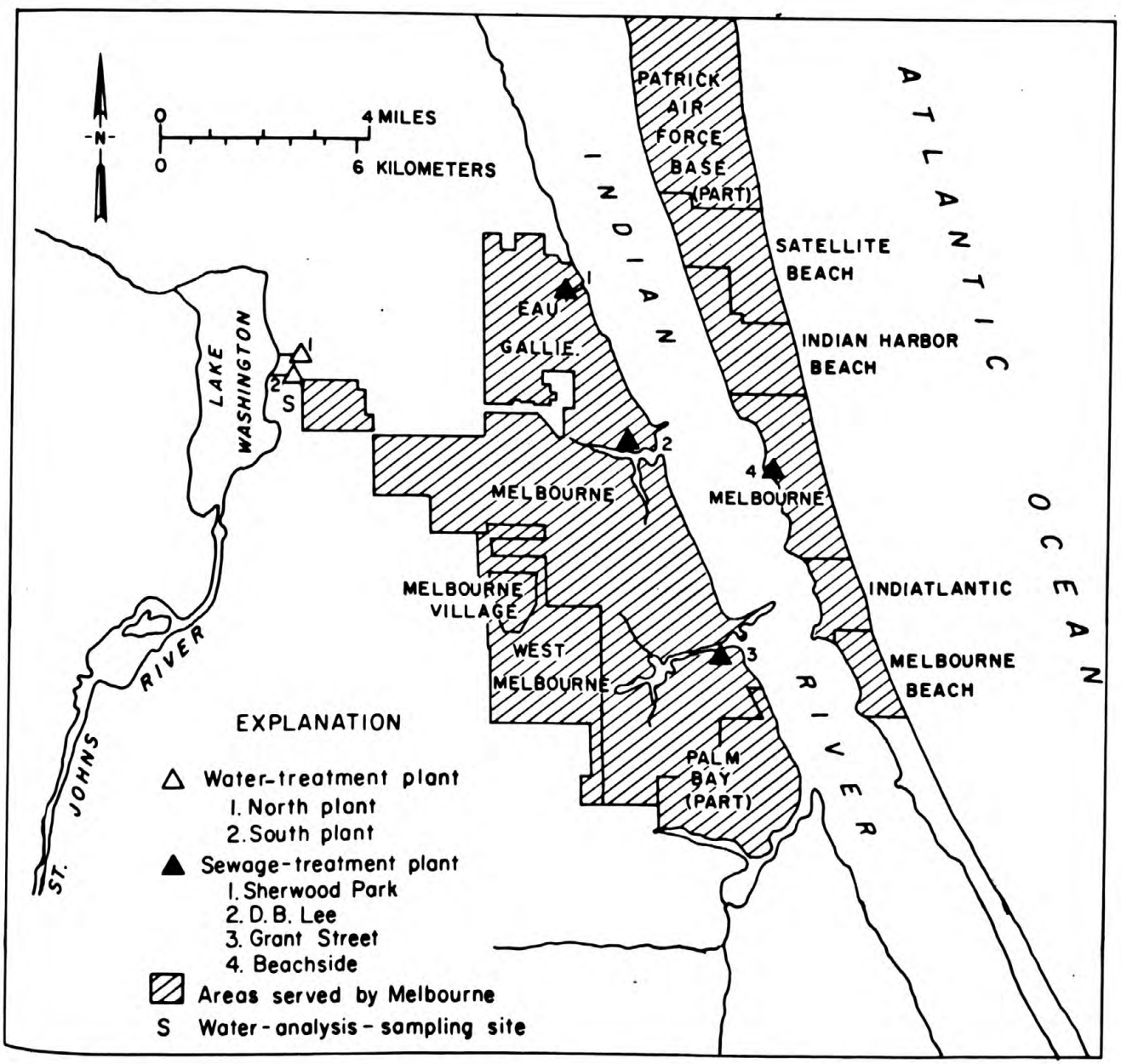

Figure 18.--Areas supplied water by the city of Melbourne.

MT DORA

County: Lake
River basin: Oklawaha River (08 01 02)
Population served: 6,200

Ownership of supply or system: City of Mt. Dora
Source of water: Ground water, Floridan aquifer; four wells, about 725 feet deep; yield 200 to 3,000 gal/min

Rated plant capacity: 10 Mgal/d
Pumpage: **Year**— 600.88 Mgal
Highest month: April, 78.56 Mgal
Average daily—1.65[a/] Mgal
Lowest month: October, 41.32 Mgal

Per capita use: 266 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Not reported

Sewage discharge: 1.0 Mgal/d
Sewage treatment: Activated sludge, chlorination, digestion, primary, secondary

Waste discharged to: ponds to Lake Dora

Remarks: Average daily pumpage increased from 0.55 Mgal/d in 1956 to 1.65 Mgal/d in 1975. Water supplied to suburbs adjacent to city. Knochenmus (1971). No chemical analysis available.

a/ Includes 0.082 Mgal/d commercial use.

NEW PORT RICHEY

County: Pasco **Population served:** 17,300
River basin: Coastal area from Tampa Bay to Withlacoochee River (10 02 07)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 12 wells, 93 to 550 feet deep; yield 250 to 500 gal/min

Rated plant capacity: 4.8 Mgal/d
Pumpage: Year— 697.15Mgal **Average daily—** 1.91 Mgal
Highest month: April, 76.84 Mgal **Lowest month:** February, 42.86 Mgal

Per capita use: 110 gal/d
Finished-water storage: 1.1 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological and chemical/monthly

Sewage discharge: 0.81 Mgal/d
Sewage treatment: Primary, clarification, filtration

Waste discharged to: Gulf of Mexico

Remarks: Average daily pumpage increased from 0.33 Mgal/d in 1956 to 1.91 Mgal/d in 1975. Three wells abandoned because of high chloride and iron in water. Total service connections, 5,182. City supplies water (0.81 Mgal/d) to Port Richey and Gulf Harbors. Cherry and others (1970).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-5-75
SAMPLING POINT: 281500082384501

Silica (SiO_2)	8.4	Dissolved solids (residue at 180°C)	170
Calcium (Ca)	57	Total hardness (as $CaCO_3$)	150
Magnesium (Mg)	2.9	Noncarbonate hardness (as $CaCO_3$)	10
Sodium (Na)	4.2	Alkalinity (as $CaCO_3$)	144
Potassium (K)	.4	pH (units)	7.8
Strontium (Sr)	.12	Specific conductance (μmhos/cm at 25°C)	309
Bicarbonate (HCO_3)	176	Color (Pt-Co units)	10
Sulfate (SO_4)	6	Temperature (°C)	--
Chloride (Cl)	5.6	Turbidity(JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.05	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.01	SAR	.01
Nitrogen, organic (N)	.16		
Nitrogen (ammonia, total (NH_4-N))	.45		
Iron (Fe)	.02		
Phosphorus, total (P)	.12		
Carbon Dioxide (CO_2)	4.5		

NEW SMYRNA BEACH

County: Volusia **Population served:** 13,500
River basin: Coastal area between Ponce de Leon Inlet and Sebastian Inlet (08 02 02)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 200 to 220 feet deep; yield 600 to 700 gal/min

Rated plant capacity: 3 Mgal/d
Pumpage: Year—907.74 Mgal **Average daily**— 2.42[a/] Mgal
Highest month: April, 86.8 Mgal **Lowest month:** September, 65.4 Mgal

Per capita use: 179 gal/d
Finished-water storage: 2.15 Mgal
Treatment: Aeration, chlorination, pH control, softening

Type/Frequency of analysis: Bacteriological, color/monthly; chemical/daily

Sewage discharge: 1.4 Mgal/d
Sewage treatment: Activated sludge, chlorination, clarification, digestion, grit chambers, settling, skimming, primary, secondary

Waste discharged to: Indian River

Remarks: Average daily pumpage increased from 1.25 Mgal/d in 1956 to 2.45 Mgal/d in 1975. Total service connections: undifferentiated, 5,705. Knochenmus and Beard (1971).

a/ Includes 0.03 Mgal/d industrial use (power generating station).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-2-75
SAMPLING POINT: 290103080552301, composite

Silica (SiO_2)	22	Dissolved solids (residue at 180°C)	486
Calcium (Ca)	120	Total hardness (as $CaCO_3$)	340
Magnesium (Mg)	8.8	Noncarbonate hardness (as $CaCO_3$)	28
Sodium (Na)	39	Alkalinity (as $CaCO_3$)	312
Potassium (K)	1.7	pH (units)	8.5
Strontium (Sr)	.61	Specific conductance (µmhos/cm at 25°C)	800
Bicarbonate (HCO_3)	360	Color (Pt-Co units)	50
Sulfate (SO_4)	.1	Temperature (°C)	--
Chloride (Cl)	68	Turbidity(JTU)	90
Fluoride (F)	.6	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.23		
Nitrogen (ammonia, total (NH_4-N))	.57		
Iron (Fe)	7.5		
Phosphorus, total (P)	.2		

OCALA

County: Marion
River basin: Oklawaha River (08 01 02)
Population served: 30,975

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 187 to 265 feet deep; yield 700 to 4,200 gal/min

Rated plant capacity: 6.0 Mgal/d
Pumpage: **Year**—1858.84 Mgal
Average daily—5.09 Mgal
Highest month: May, 203.49 Mgal
Lowest month: February, 127.57 Mgal

Per capita use: 170 gal/d
Finished-water storage: 3.5 Mgal
Treatment: Chlorination, anti-precipitation and corrosion control, coagulation, filtration, fluoridation, stabilization, softening

Type/Frequency of analysis: Bacteriological/weekly; chemical/intermittently

Sewage discharge: 2.6 Mgal/d (2 plants)
Sewage treatment: Aeration, chlorination, diffused air, contact stabilization, grit chambers, filtration, digestion, polishing pond, secondary, clarification, comminution, skimming, drying, settling
Waste discharged to: Lagoon area

Remarks: Average daily pumpage increased from 1.82 Mgal/d in 1956 to 5.09 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-24-76
SAMPLING POINT: 291215082051401, City 2

Silica (SiO_2)	9.5	Dissolved solids (residue at 180°C)	317
Calcium (Ca)	78	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	13	Noncarbonate hardness (as $CaCO_3$)	56
Sodium (Na)	10	Alkalinity (as $CaCO_3$)	194
Potassium (K)	.9	pH (units)	7.9
Strontium (Sr)	1	Specific conductance (μmhos/cm at 25°C)	490
Bicarbonate (HCO_3)	236	Color (Pt-Co units)	10
Sulfate (SO_4)	78	Temperature (°C)	--
Chloride (Cl)	.0	Turbidity (JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.49	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.05		
Phosphorus, total (P)	--		

OCOEE

County: Orange **Population served:** 5,600
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: City of Ocoee
Source of water: Ground water, Floridan aquifer, two wells, 400 to 600 feet deep; yield 700 to 1,800 gal/min

Rated plant capacity: 0.9 Mgal/d
Pumpage: **Year**—255.5 Mgal **Average daily**— 0.7 Mgal
Highest month: May, 23.87 Mgal **Lowest month:** March, 19.84 Mgal

Per capita use: 125 gal/d
Finished-water storage: 1.25 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/4 times weekly. chemical/biannually[a/]; Chemical/daily[b/]
Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.10 Mgal/d in 1956 to 0.7 Mgal/d in 1975. No chemical analysis available.
a/ Raw water.
b/ Treated water.

ORLANDO

County: Orange **Population served:** 196,000
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 21 wells, 450 to 1,500 feet deep; yield, maximum, 5,500 gal/min

Rated plant capacity: 105 Mgal/d
Pumpage: Year— 14,881.05 Mgal **Average daily—** 40.77 Mgal
Highest month: April, 1,682.7 Mgal **Lowest month:** February, 1,061.3 Mgal

Per capita use: 208 gal/d
Finished-water storage: 20 Mgal
Treatment: Aeration, chlorination, fluoridation

Type/Frequency of analysis: Bacteriological/weekly; chemical, spectrographic/annually
Sewage discharge: 19.05 Mgal/d
Sewage treatment: Biofiltration (two plants)

Waste discharged to: Little Econolockhatchee River and Shingle Creek near Turkey Lake
Remarks: Average daily pumpage increased from 15.03 Mgal/d in 1956 to 40.97 Mgal/d in 1975. Total yearly pumpage, 1941-75, is shown on figure 19. Knochenmus (1974), Lichtler (1972).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-30-75
SAMPLING POINT: 283353081222401, Ivanhoe 2

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	148
Calcium (Ca)	34	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	8.2	Noncarbonate hardness (as $CaCO_3$)	23
Sodium (Na)	6.6	Alkalinity (as $CaCO_3$)	97
Potassium (K)	1	pH (units)	7.6
Strontium (Sr)	.39	Specific conductance (μmhos/cm at 25°C)	267
Bicarbonate (HCO_3)	138	Color (Pt-Co units)	5
Sulfate (SO_4)	5	Temperature (°C)	--
Chloride (Cl)	8.2	Turbidity(JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.11		
Nitrogen (ammonia, total (NH_4-N))	.34		
Iron (Fe)	.02		
Phosphorus, total (P)	.05		

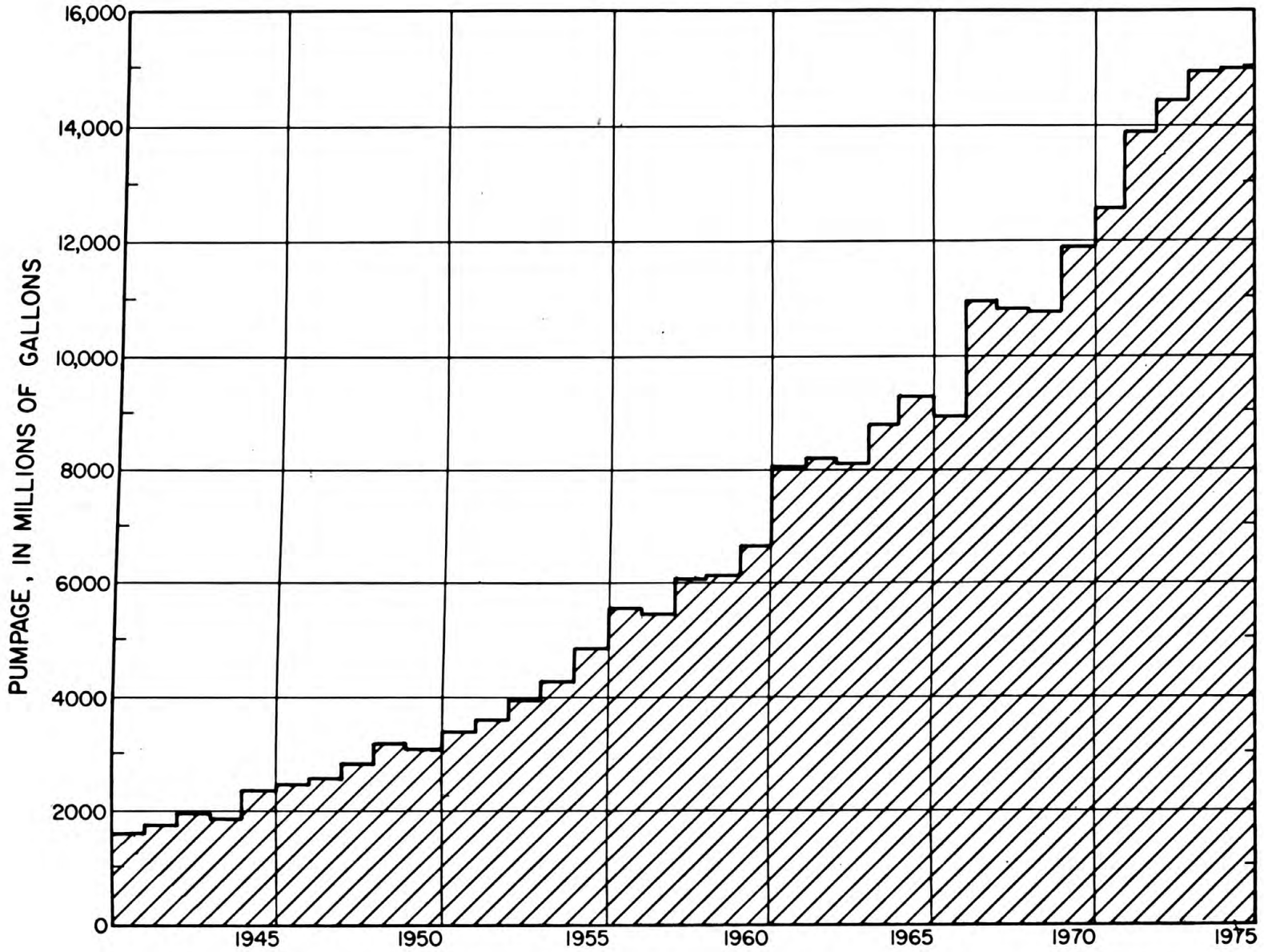

Figure 19.--Total yearly pumpage, city of Orlando.

ORMOND BEACH

County: Volusia **Population served:** 25,668
River basin: Coastal area between St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 16 wells, 180 to 220 feet deep; yield 150 to 300 gal/min

Rated plant capacity: 3 Mgal/d
Pumpage: **Year**—1,204.5 Mgal **Average daily**— 3.3 Mgal
Highest month: July, 108.1 Mgal **Lowest month:** January, 92.5 Mgal

Per capita use: 129 gal/d
Finished-water storage: 1.8 Mgal
Treatment: Aeration, chlorination, coagulation, filtration, fluoridation, softening

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 2.53 Mgal/d
Sewage treatment: Aeration, chlorination, grit chambers, filtration, contact stabilization, drying

Waste discharged to: Halifax River

Remarks: Average daily pumpage increased from 0.90 Mgal/d in 1956 to 3.3 Mgal/d in 1975. Total service connections: undifferentiated, 10,267. Knochenmus and Beard (1971), Lichtler, (1972).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-2-75
SAMPLING POINT: 291645081034701

Silica (SiO_2)	21	Dissolved solids (residue at 180°C)	620
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	340
Magnesium (Mg)	17	Noncarbonate hardness (as $CaCO_3$)	60
Sodium (Na)	72	Alkalinity (as $CaCO_3$)	280
Potassium (K)	2.4	pH (units)	8.3
Strontium (Sr)	.62	Specific conductance (μmhos/cm at 25°C)	1,040
Bicarbonate (HCO_3)	341	Color (Pt-Co units)	20
Sulfate (SO_4)	7	Temperature (°C)	--
Chloride (Cl)	160	Turbidity(JTU)	1
Fluoride (F)	.7	Carbon, organic, total (C)	7
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.11
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.21		
Nitrogen (ammonia, total (NH_4-N))	.52		
Iron (Fe)	.03		
Phosphorus, total (P)	.12		

PINELLAS COUNTY WATER SYSTEM

County: Pinellas **Population served:** 319,110*
River basin: Tampa Bay and coastal area (10 02 06)

Ownership of supply or system: Pinellas County Water System
Source of water: Ground water, Floridan aquifer; 47 wells, 140 to 503 feet deep; yield 230 to 2,800 gal/min (Eldridge-Wilde well field)

Rated plant capacity: 55 Mgal/d
Pumpage: Year—12,055.91[a/] Mgal **Average daily**— 33.05[b/] Mgal
Highest month: April, 1,087.22[c/] Mgal **Lowest month:** September, 760.48[c/] Mga

Per capita use: 96 gal/d
Finished-water storage: Not reported
Treatment: Aeration, chlorination, fluoridation

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 13.56 Mgal/d (6 plants)
Sewage treatment: Not reported

Waste discharged to: Not reported

Remarks: Total service connections, 60,000. Water supplied to Clearwater, Pinellas Park, Safety Harbor, Tarpon Springs, Largo, St. Petersburg Beach.
a/ Includes 818.48 Mgal, East Lake well field.
b/ Includes 2.24 Mgal/d, East Lake well field.
c/ Figure shown for Eldridge-Wilde well field. East Lake well field: highest month, April 132.24 Mgal; lowest, November 17.0 Mgal (pump test in November).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-4-75
SAMPLING POINT: 280905082402501, Water Plant 1

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	228
Calcium (Ca)	75	Total hardness (as $CaCO_3$)	210
Magnesium (Mg)	5	Noncarbonate hardness (as $CaCO_3$)	13
Sodium (Na)	6.2	Alkalinity (as $CaCO_3$)	196
Potassium (K)	.9	pH (units)	--
Strontium (Sr)	.15	Specific conductance (μmhos/cm at 25°C)	404
Bicarbonate (HCO_3)	240	Color (Pt-Co units)	10
Sulfate (SO_4)	5.2	Temperature (°C)	--
Chloride (Cl)	8.4	Turbidity (JTU)	2
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.17		
Nitrogen (ammonia, total (NH_4-N))	.39		
Iron (Fe)	.04		
Phosphorus, total (P)	.06		

* Includes 33,000 population served in Hillsborough County, 172,000 population served in Pinellas County, and populations of municipalities listed under "Remarks" which includes partial and complete supply.

PINELLAS PARK

County: Pinellas **Population served:** 29,230
River basin: Tampa Bay and coastal areas (10 02 06)

Ownership of supply or system: Pinellas County Water System
Source of water: All water purchased from Pinellas County Water System

Rated plant capacity: a/
Pumpage: **Year**— 970.90 Mgal **Average daily**— 2.66 Mgal
Highest month: April, 92.6 Mgal **Lowest month:** February, 74.7 Mgal

Per capita use: 91 gal/d
Finished-water storage: a/
Treatment: Chlorination

Type/Frequency of analysis: a/

Sewage discharge: 2.66 Mgal/d
Sewage treatment: Aeration, activated sludge

Waste discharged to: Cross Bayou Canal

Remarks: Average daily pumpage increased from 0.12 Mgal/d in 1956 to 2.66 Mgal/d in 1975. For analysis of water see Pinellas County Water System.

a/ See Pinellas County Water System (p. 142).

PLANT CITY

County: Hillsborough
River basin: Hillsborough River (10 02 05)
Population served: 18,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 5 wells, 367 to 1,200 feet deep; yield, each well, 1,200 gal/min

Rated plant capacity: 8.6 Mgal/d
Pumpage: Year— 675.87 Mgal **Average daily—**1.85 a/ Mgal
Highest month: April, 80.87 Mgal **Lowest month:** September, 53.11 Mgal

Per capita use: 103 gal/d
Finished-water storage: 1.38 Mgal
Treatment: Chlorination, stabilization

Type/Frequency of analysis: Bacteriological/biweekly; chemical/biannually

Sewage discharge: 2.7 Mgal/d
Sewage treatment: Activated sludge, aeration

Waste discharged to: Canal 31, Lake Tohopekaliga sludge to landfill

Remarks: Average daily pumpage increased from 1.13 Mgal/d in 1956 to 1.85 Mgal/d in 1975. Well yield estimated from plant capacity. Robertson (1971, 1973), Robertson and Mills (1974).

a/ Includes 0.45 Mgal/d industrial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-21-75
SAMPLING POINT: 280109082071901, City well 1

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	242
Calcium (Ca)	57	Total hardness (as $CaCO_3$)	180
Magnesium (Mg)	10	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	9.4	Alkalinity (as $CaCO_3$)	193
Potassium (K)	.8	pH (units)	8.1
Strontium (Sr)	.07	Specific conductance (μmhos/cm at 25°C)	401
Bicarbonate (HCO_3)	236	Color (Pt-Co units)	.00
Sulfate (SO_4)	.7	Temperature (°C)	--
Chloride (Cl)	13	Turbidity(JTU)	1
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.2		
Nitrogen (ammonia, total (NH_4-N))	.21		
Iron (Fe)	.04		
Phosphorus, total (P)	.11		

PLANT CITY

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-21-75
SAMPLING POINT: 280110082071701, City Well 2

Silica (SiO_2)	25	Dissolved solids (residue at 180°C)	204
Calcium (Ca)	43	Total hardness (as $CaCO_3$)	170
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	1
Sodium (Na)	9	Alkalinity (as $CaCO_3$)	169
Potassium (K)	.7	pH (units)	7.9
Strontium (Sr)	.03	Specific conductance (μmhos/cm at 25°C)	356
Bicarbonate (HCO_3)	206	Color (Pt-Co units)	5
Sulfate (SO_4)	3.8	Temperature (°C)	--
Chloride (Cl)	9.8	Turbidity (JTU)	2
Fluoride (F)	.5	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.09
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.08		
Nitrogen (ammonia, total (NH_4-N))	.19		
Iron (Fe)	.04		
Phosphorus, total (P)	.1		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-21-75
SAMPLING POINT: 280108082071601, City well 3

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	246
Calcium (Ca)	53	Total hardness (as $CaCO_3$)	180
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	9.2	Alkalinity (as $CaCO_3$)	189
Potassium (K)	.8	pH (units)	8.1
Strontium (Sr)	.06	Specific conductance (μmhos/cm at 25°C)	394
Bicarbonate (HCO_3)	230	Color (Pt-Co units)	5
Sulfate (SO_4)	1.7	Temperature (°C)	--
Chloride (Cl)	1.2	Turbidity (JTU)	3
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.07
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.2		
Nitrogen (ammonia, total (NH_4-N))	.25		
Iron (Fe)	.02		
Phosphorus, total (P)	.07		

PORT ORANGE

County: Volusia **Population served:** 10,562
River basin: Coastal between the St. Johns River and Ponce de Leon Inlet (08 02 01)
Ownership of supply or system: City of Port Orange
Source of water: Ground water, Floridan aquifer; 5 wells, 160 feet deep; yield, each well, 350 gal/min

Rated plant capacity: 3.0 Mgal/d
Pumpage: Year— 637.08 Mgal **Average daily—** 1.75 Mgal
Highest month: April, 65.5 Mgal **Lowest month:** December, 43.9 Mgal

Per capita use: 166 gal/d
Finished-water storage: 0.4 Mgal
Treatment: Chlorination, clarification, filtration, pH control, recarbonation, softening, stabilization, taste and odor control

Type/Frequency of analysis: Bacteriological/monthly; chemical (pH, turbidity, chlorine, hardness, alkalinity)/hourly
Sewage discharge: 0.45 Mgal/d
Sewage treatment: Aeration, contact, stabilization, diffused air, drying, skimming

Waste discharged to: Halifax River

Remarks: Average daily pumpage increased from 0.206 Mgal/d in 1956 to 1.75 Mgal/d in 1975. Total service connections: undifferentiated, 4,653. City also supplies water to Allendale, Harbor Oaks, Ponce Inlet, and Wilbur-by the-sea. Knochenmus and Beard (1971).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-2-75
SAMPLING POINT: 290755080592701

Silica (SiO_2)	21	Dissolved solids (residue at 180°C)	464
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	300
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	21
Sodium (Na)	49	Alkalinity (as $CaCO_3$)	279
Potassium (K)	2.4	pH (units)	8.2
Strontium (Sr)	.6	Specific conductance (μmhos/cm at 25°C)	799
Bicarbonate (HCO_3)	340	Color (Pt-Co units)	20
Sulfate (SO_4)	3.3	Temperature (°C)	--
Chloride (Cl)	79	Turbidity (JTU)	1
Fluoride (F)	.7	Carbon, organic, total (C)	7
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.1
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.13		
Nitrogen (ammonia, total (NH_4-N))	.5		
Iron (Fe)	.02		
Phosphorus, total (P)	.1		

ST. CLOUD

County: Osceola
River basin: Kissimmee River (09 01 01)
Population served: 6,345

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; three wells, 670 to 680 feet deep; yield 2,300 to 3,000 gal/min

Rated plant capacity: 10 Mgal/d
Pumpage: **Year**—432.84 Mgal
Highest month: May, 43.61 Mgal
Average daily— 1.18[a/] Mgal
Lowest month: August, 29.00 Mgal

Per capita use: 186 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Aeration, chlorination, fluoridation

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: 1.0 Mgal/d
Sewage treatment: Chlorination, digestion, filtration, primary, secondary

Waste discharged to: Flood Control District Canal 31, to Lake Tohopekaliga

Remarks: Average daily pumpage increased from 1.09 Mgal/d in 1956 to 1.36 in 1970 then decreased to 1.18 Mgal/d in 1976.
a/ Includes 0.118 Mgal/d industrial use. No chemical analysis available.

ST. PETERSBURG

County: Pinellas **Population served:** 253,000
River basin: Tampa Bay and coastal areas (10 02 06)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 34 wells, 297 to 728 feet deep; yield 525 to 7,700 gal/min. Three well fields: (a)Cosme-Odessa; (b) Section 21 in Hillsborough County; (c) Section 34 in Pasco County[a/]
Rated plant capacity: 44 Mgal/d
Pumpage: **Year**—12,796.17[b/] Mgal **Average daily**— 35.06 Mgal
Highest month: (a) April, 396.99 Mgal **Lowest month:** (a) December, 180.79 Mg.
(b) December, 348.93 Mgal (c) April, 627.33 Mgal (b) October, 199.52 Mga
(c) August 413.85 Mgal
Per capita use: 139 gal/d
Finished-water storage: 17 Mgal
Treatment: Chlorination, aeration, softening, coagulation, fluoridation, filtration, stabilization. All water treated at Cosme-Odessa Plant.

Type/Frequency of analysis: Bacteriological, chemical/daily

Sewage discharge: 36.22 Mgal/d
Sewage treatment: Contact stabilization, activated sludge

Waste discharged to: Boca Ciega Bay, Tampa Bay and Upper Tampa Bay

Remarks: Average daily pumpage increased from 19.6 Mgal/d in 1956 to 35.05 Mgal/d in 1975. Areas served: Gulf Port, Oldsmar and South Pasadena.
a/ Cyress Creek well field not operational, 7 wells 600 to 700 feet deep, Floridan aquifer.
b/ Total pumpage, 3 well fields. Includes 1.083 Mgal/d supplied to Gulfport and Oldsmar.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-5-75
SAMPLING POINT: 280547082354801, Cosme Water Works

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	234
Calcium (Ca)	74	Total hardness (as $CaCO_3$)	200
Magnesium (Mg)	3.8	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	5.5	Alkalinity (as $CaCO_3$)	201
Potassium (K)	.7	pH (units)	7.7
Strontium (Sr)	.11	Specific conductance (µmhos/cm at 25°C)	401
Bicarbonate (HCO_3)	245	Color (Pt-Co units)	10
Sulfate (SO_4)	.6	Temperature (°C)	--
Chloride (Cl)	8.4	Turbidity(JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.14		
Nitrogen (ammonia, total (NH_4-N))	.54		
Iron (Fe)	.06		
Phosphorus, total (P)	.05		

ST. PETERSBURG BEACH

County: Pinellas **Population served:** 10,580
River basin: Coastal area from Tampa Bay to Withlacoochee River (10 02 07)

Ownership of supply or system: Pinellas County Water System
Source of water: All water purchased from the Pinellas County Water System

Rated plant capacity: a/
Pumpage: Year— b/ **Average daily—** b/
Highest month: b/ **Lowest month:** b/

Per capita use: b/
Finished-water storage: b/
Treatment: Chlorination

Type/Frequency of analysis: a/

Sewage discharge: b/
Sewage treatment: Activated sludge, contact stabilization, aerobic digestion

Waste discharged to: Boca Ciega Bay (St. Petersburg Sewer System)

Remarks: For analysis of water see Pinellas County Water System (p. 142).
a/ See Pinellas County Water System.
b/ Not reported.

SANFORD

County: Seminole **Population served:** 22,636
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; Plant 1, 8 wells, 80 to 226 feet deep; yield 200 to 450 gal/min. Plant 2, 6 wells, 360 to 444 feet deep; yield 600 to 800 gal/min
Rated plant capacity: 7.01[a] Mgal
Pumpage: Year— [a] 1,595.05 Mgal **Average daily**—4.37[a] Mgal
Highest month: [a] April, 154.2 Mgal **Lowest month:** (1) November 18.1 Mgal (2) October, 99.6 Mgal

Per capita use: 193 gal/d
Finished-water storage: 3.8 Mgal
Treatment: Aeration, chlorination, fluoridation

Type/Frequency of analysis: Bacteriological and chemical/monthly; fluoride daily
Sewage discharge: 4.65 Mgal/d
Sewage treatment: Secondary, mixing, activated sludge

Waste discharged to: Lake Monroe (St. Johns River)

Remarks: Average daily pumpage increased from 1.25 Mgal/d in 1956 to 4.37 Mgal/d in 1975. Water also supplied to Sunland Estates. Lichtler (1972).
[a] Total, both plants.
[b] Includes 0.524 Mgal/d, commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 284705081192001

Silica (SiO_2)	8.9	Dissolved solids (residue at 180°C)	166
Calcium (Ca)	44	Total hardness (as $CaCO_3$)	140
Magnesium (Mg)	7.5	Noncarbonate hardness (as $CaCO_3$)	14
Sodium (Na)	7.2	Alkalinity (as $CaCO_3$)	126
Potassium (K)	1.1	pH (units)	8.4
Strontium (Sr)	.0	Specific conductance (μmhos/cm at 25°C)	302
Bicarbonate (HCO_3)	100	Color (Pt-Co units)	.00
Sulfate (SO_4)	8.5	Temperature (°C)	24.5
Chloride (Cl)	15	Turbidity(JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.52	Orthophosphate total (PO_4-P)	.07
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.14		
Nitrogen (ammonia, total (NH_4-N))	.05		
Iron (Fe)	.00		
Phosphorus, total (P)	.07		

TAMPA

County: Hillsborough **Population served:** 350,000
River basin: Tampa Bay and coastal areas (10 02 06)

Ownership of supply or system: Municipal
Source of water: Surface water, Hillsborough River

Rated plant capacity: 96 Mgal/d
Pumpage: Year— 19,237.51 Mgal **Average daily—**52.71 Mgal
Highest month: April, 1,834.0 Mgal **Lowest month:** February, 1,382.6 Mgal

Per capita use: 150 gal/d
Finished-water storage: 12 Mgal
Treatment: Chlorination, coagulation, filtration, flocculation, sedimentation, pH control, stabilization; taste, odor, and algae control.

Type/Frequency of analysis: Bacteriological, chemical/daily

Sewage discharge: 45.60[a/] Mgal/d
Sewage treatment: Primary, secondary, chlorination

Waste discharged to: Hillsborough Bay (Hooker Point Plant)

Remarks: Average daily pumpage increased from 22 Mgal/d in 1956 to 52.71 Mgal/d in 1975. Total service connections, 100,000. Total year pumpage, 1961-75 is shown on figure 20. Cherry and others (1970).

a/ Sewage plant capacity increased to 96 Mgal/d.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-16-75
SAMPLING POINT: 02304500,Hillsborough River at Tampa

Silica (SiO_2)	29	Dissolved solids (residue at 180°C)	288
Calcium (Ca)	54	Total hardness (as $CaCO_3$)	160
Magnesium (Mg)	6	Noncarbonate hardness (as $CaCO_3$)	33
Sodium (Na)	21	Alkalinity (as $CaCO_3$)	128
Potassium (K)	2.2	pH (units)	8.1
Strontium (Sr)	.0	Specific conductance (μmhos/cm at 25°C)	412
Bicarbonate (HCO_3)	155	Color (Pt-Co units)	30
Sulfate (SO_4)	30	Temperature (°C)	--
Chloride (Cl)	35	Turbidity(JTU)	4
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.35
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.88		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.42		

TAMPA

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-16-75
SAMPLING POINT: 02304500, Hillsborough River at Tampa

Trace Elements

Arsenic (As)	0	Manganese (Mn)	20
Barium (Ba)	10	Mercury (Hg)	.1
Cadmium (Cd)	0	Selenium (Se)	--
Chromium (Cr)	10	Zinc (Zn)	20
Copper (Cu)	210		
Iron (Fe)	560	pH(units)	--
Lead (Pb)	10	Temperature (°C)	--

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.1	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.01
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

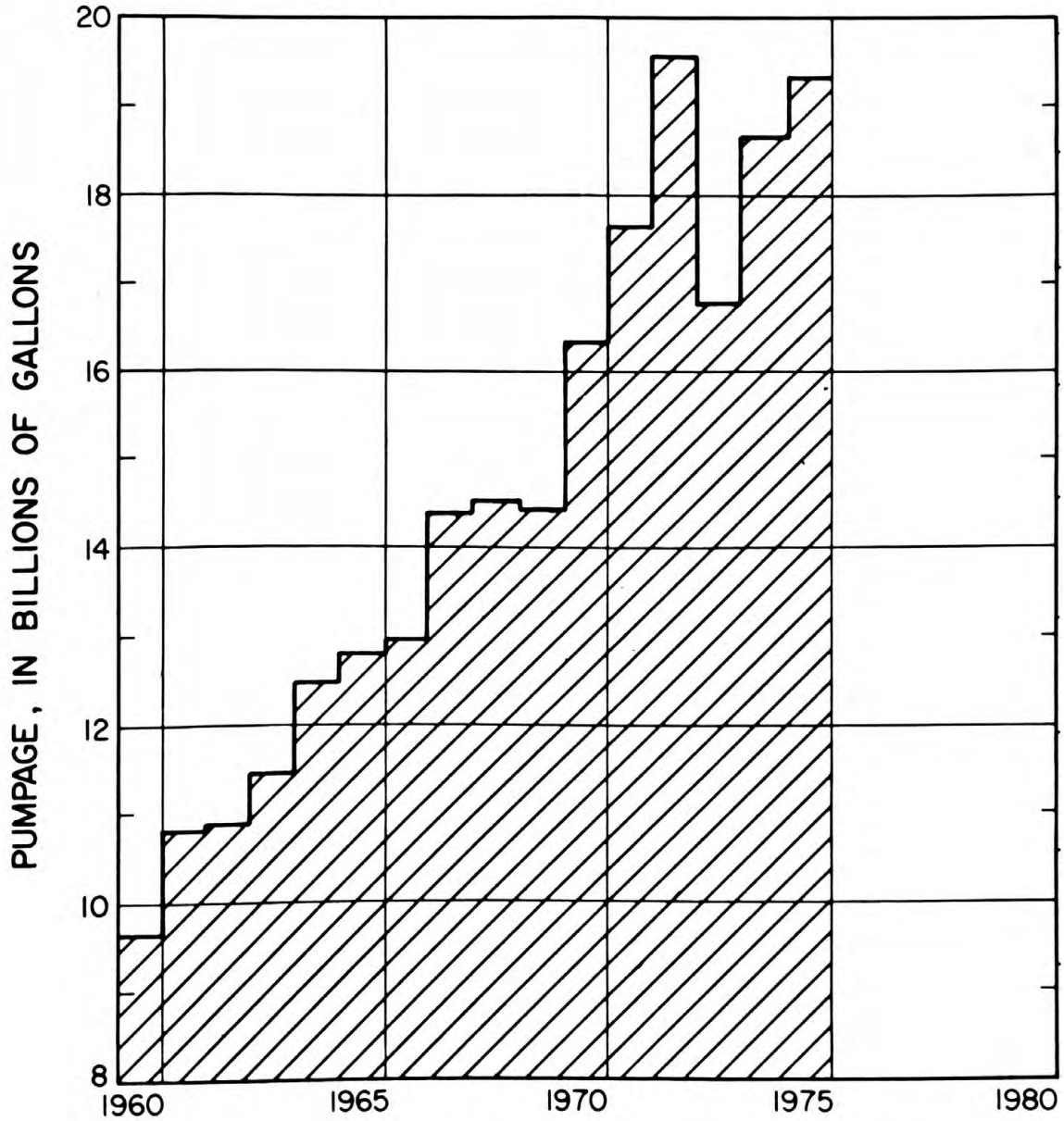

Figure 20.--Total yearly pumpage, city of Tampa.

TARPON SPRINGS

County: Pinellas **Population served:** 10,910
River basin: Coastal area from Tampa Bay to the Withlacoochee River (10 02 07)
Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; four wells, 100 to 125 feet deep

Rated plant capacity: Not reported
Pumpage: Year— 652.74 Mgal **Average daily—** 1.788[a/] Mgal
Highest month: April, 11.24 Mgal **Lowest month:** September, 7.48 Mgal

Per capita use: 164 gal/d
Finished-water storage: Not reported
Treatment: Chlorination

Type/Frequency of analysis: Not reported

Sewage discharge: 1.0 Mgal/d
Sewage treatment: Primary, secondary

Waste discharged to: Anclote River

Remarks: Average daily pumpage increased from 0.35 Mgal/d in 1956 to 1.788 Mgal/d in 1975. Total service connections, 3,086. Cherry and others (1970)

a/ Includes 1.517 Mgal/d purchased from Pinellas County Water System and 0.317 Mgal/d industrial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-5-75
SAMPLING POINT: 280847082440401, Tarpon Avenue well

Silica (SiO_2)	8.1	Dissolved solids (residue at 180°C)	160
Calcium (Ca)	37	Total hardness (as $CaCO_3$)	110
Magnesium (Mg)	3.4	Noncarbonate hardness (as $CaCO_3$)	19
Sodium (Na)	17	Alkalinity (as $CaCO_3$)	91
Potassium (K)	.9	pH (units)	7.9
Strontium (Sr)	.05	Specific conductance (μmhos/cm at 25°C)	299
Bicarbonate (HCO_3)	111	Color (Pt-Co units)	5
Sulfate (SO_4)	10	Temperature (°C)	--
Chloride (Cl)	26	Turbidity(JTU)	2
Fluoride (F)	.1	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	1.5	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.08		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	--		
Phosphorus, total (P)	.04		

TARPON SPRINGS

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-5-75
SAMPLING POINT: 280843082451001, Tarpon Springs Water Works

Silica (SiO_2)	8.7	Dissolved solids (residue at 180°C)	382
Calcium (Ca)	52	Total hardness (as $CaCO_3$)	180
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	62
Sodium (Na)	72	Alkalinity (as $CaCO_3$)	118
Potassium (K)	3.5	pH (units)	8.0
Strontium (Sr)	.14	Specific conductance (μmhos/cm at 25°C)	696
Bicarbonate (HCO_3)	144	Color (Pt-Co units)	.00
Sulfate (SO_4)	28	Temperature (°C)	--
Chloride (Cl)	120	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	2.3	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.13		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	--		
Phosphorus, total (P)	.05		

TAVARES

County: Lake
River basin: Oklawaha River (08 01 02)
Population served: 3,976

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 3 wells, 223, 417, and 494 feet deep, yield about 1,000 gal/min each; 4th well not in service, 447 feet deep, test pumped at 1,600 gal/min
Rated plant capacity: 2.3 Mgal/d
Pumpage: **Year**—227.00 Mgal **Average daily**— 0.62[a/] Mgal
Highest month: April, 27.9 Mgal **Lowest month:** September, 14.9 Mgal

Per capita use: 156 gal/d
Finished-water storage: 0.25 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly[b/]

Sewage discharge: Septic tanks serve 62 percent of the population
Sewage treatment: Aeration, chlorination, clarification, diffused air, activated sludge, skimming, contact stabilization, settling, primary, secondary

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.40 Mgal/d in 1956 to 0.45 Mgal/d in 1970 then increased to 0.62 Mgal/d in 1975. Total service connections: undifferentiated, 1,400. Knochenmus (1971), Lichtler (1972).
a/ Includes 0.012 Mgal/d commercial use.
b/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 2848081432810, City of Tavares 3

Silica (SiO_2)	15	Dissolved solids (residue at 180°C)	162
Calcium (Ca)	32	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	9.4	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	5.9	Alkalinity (as $CaCO_3$)	122
Potassium (K)	1	pH (units)	7.3
Strontium (Sr)	.1	Specific conductance (µmhos/cm at 25°C)	257
Bicarbonate (HCO_3)	148	Color (Pt-Co units)	5
Sulfate (SO_4)	.0	Temperature (°C)	--
Chloride (Cl)	7.8	Turbidity(JTU)	3
Fluoride (F)	.2	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.04		
Nitrogen (ammonia, total (NH_4-N))	.06		
Iron (Fe)	.02		
Phosphorus, total (P)	.03		

TITUSVILLE

County: Brevard **Population served:** 33,094
River basin: Coastal area between Ponce de Leon Inlet and Sebastian Inlet (08 02 02)
Ownership of supply or system: Municipal
Source of water: Ground water, 48 wells in shallow sand aquifer, one deep well in Floridan aquifer

Rated plant capacity: 16 Mgal/d
Pumpage: **Year**—1,274.58 Mgal **Average daily**— 3.5 Mgal
Highest month: April, 134.22 **Lowest month:** February, 84.65 Mgal

Per capita use: 106 gal/d
Finished-water storage: 2.9 Mgal
Treatment: Chlorination, softening

Type/Frequency of analysis: Bacteriological/weekly; chemical/hourly

Sewage discharge: 2.3 Mgal/d
Sewage treatment: Secondary, high rate activated sludge

Waste discharged to: Indian River (2 plants) and South Lake (1 plant)

Remarks: Average daily pumpage increased from 0.32 Mgal/d in 1956 to 3.4 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-3-75
SAMPLING POINT: 283832080513301

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	382
Calcium (Ca)	96	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	4.2	Noncarbonate hardness (as $CaCO_3$)	87
Sodium (Na)	28	Alkalinity (as $CaCO_3$)	173
Potassium (K)	.9	pH (units)	8.0
Strontium (Sr)	.35	Specific conductance (µmhos/cm at 25°C)	632
Bicarbonate (HCO_3)	211	Color (Pt-Co units)	5
Sulfate (SO_4)	62	Temperature (°C)	--
Chloride (Cl)	54	Turbidity (JTU)	8
Fluoride (F)	.1	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.12	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.15		
Nitrogen (ammonia total (NH_4-N))	.03		
Iron (Fe)	.61		
Phosphorus, total (P)	.05		

VERO BEACH

County: Indian River **Population served:** 15,500
River basin: Coastal area Sebastian Inlet to St. Lucie River (08 02 03)
Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer; 10 wells, 90 to 100 feet; Total yield 5,550 gal/min

Rated plant capacity: 6.0 Mgal/d
Pumpage: Year— 1,427.50 Mgal **Average daily—** 3.91 Mgal
Highest month: April, 141.5 Mgal **Lowest month:** July, 94.0 Mgal

Per capita use: 252 gal/d
Finished-water storage: 6.0 Mgal
Treatment: Carbonation, chlorination, coagulation, filtration, pH control, softening, stabilization, taste and odor control.

Type/Frequency of analysis: Bacteriological/weekly; chemical, partial/daily; chemical, complete/annually
Sewage discharge: 2.35[a/] Mgal/d
Sewage treatment: Activated sludge, aeration

Waste discharged to: Indian River

Remarks: Average daily pumpage increased from 1.40 Mgal/d in 1956 to 3.91 Mgal/d in 1975. City also supplies water to the Moorings, Indian River Shores, and John's Island (fig. 21). Crain (1975), Lichtler (1972)
a/ Estimated on basis of 1974 sewage discharge. New plant in operation, March 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-9-75
SAMPLING POINT: 273907080241901, City Well 2

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	504
Calcium (Ca)	120	Total hardness (as $CaCO_3$)	330
Magnesium (Mg)	6.5	Noncarbonate hardness (as $CaCO_3$)	66
Sodium (Na)	42	Alkalinity (as $CaCO_3$)	264
Potassium (K)	1.3	pH (units)	7.7
Strontium (Sr)	.59	Specific conductance (µmhos/cm at 25°C)	681
Bicarbonate (HCO_3)	322	Color (Pt-Co units)	110
Sulfate (SO_4)	55	Temperature (°C)	--
Chloride (Cl)	68	Turbidity (JTU)	8
Fluoride (F)	.2	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.2	Orthophosphate total (PO_4-P)	.15
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.49		
Nitrogen (ammonia, total (NH_4-N))	.33		
Iron (Fe)	.9		
Phosphorus, total (P)	.16		

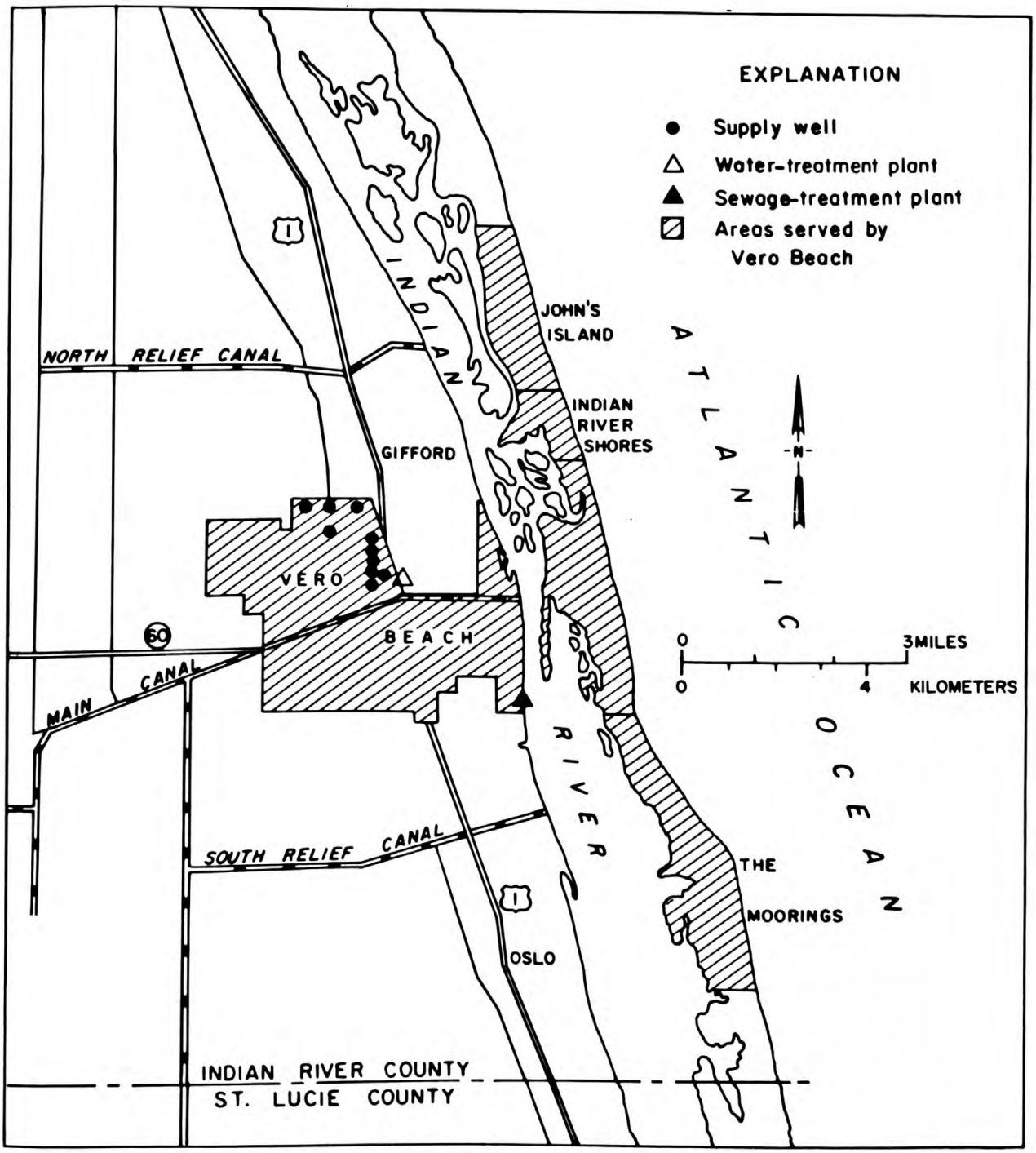

Figure 21.--Areas supplied water by the city of Vero Beach.

WINTER GARDEN

County: Orange
River basin: Oklawaha River (08 01 02)
Population served: 7,500

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; two wells, 1,200 feet deep; yield 700 gal/min

Rated plant capacity: 1.5 Mgal/d
Pumpage: Year— 365.0 Mgal **Average daily—** 1.0 Mgal
Highest month: December, 42.78 Mgal **Lowest month:** February, 19.88 Mgal

Per capita use: 133 gal/d
Finished-water storage: 0.34 Mgal
Treatment: Aeration, chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.72 Mgal/d
Sewage treatment: Secondary, trickling filter

Waste discharged to: Lake Apopka

Remarks: Average daily pumpage increased from 0.60 Mgal/d in 1956 to 1.0 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-19-75
SAMPLING POINT: 283348081351201, City well 1

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	144
Calcium (Ca)	32	Total hardness (as $CaCO_3$)	110
Magnesium (Mg)	7.5	Noncarbonate hardness (as $CaCO_3$)	11
Sodium (Na)	5.1	Alkalinity (as $CaCO_3$)	99
Potassium (K)	1.5	pH (units)	8.2
Strontium (Sr)	.2	Specific conductance (μmhos/cm at 25°C)	243
Bicarbonate (HCO_3)	120	Color (Pt-Co units)	.00
Sulfate (SO_4)	13	Temperature (°C)	--
Chloride (Cl)	8	Turbidity (JTU)	1
Fluoride (F)	.1	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.06		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.00		
Phosphorus, total (P)	.05		

WINTER HAVEN

County: Polk
River basin: Peace River (10 01 01)
Population served: 45,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 12 wells, 593 to 743 feet deep; yield 350 to 1,500 gal/min

Rated plant capacity: 9.6 Mgal/d
Pumpage: Year— 1,981.46 Mgal
Average daily— 5.43[a/] Mgal
Highest month: April, 234.85 Mgal
Lowest month: September, 130.55 Mgal

Per capita use: 121 gal/d
Finished-water storage: 2.5 Mgal
Treatment: Aeration and chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/intermittently

Sewage discharge: 3.5 Mgal/d
Sewage treatment: Secondary, trickling filter, activated sludge

Waste discharged to: Lake Lulu

Remarks: Average daily pumpage increased from 3.00 Mgal/d in 1956 to 5.43 Mgal/d in 1975. Robertson (1971, 1973), Robertson and Mills (1974).
a/ Includes 0.35 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-24-75
SAMPLING POINT: 280209081430600, Fairfax Plant - composite

Silica (SiO_2)	14	Dissolved solids (residue at 180°C)	160
Calcium (Ca)	37	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	7.8	Noncarbonate hardness (as $CaCO_3$)	.00
Sodium (Na)	6.7	Alkalinity (as $CaCO_3$)	120
Potassium (K)	1.3	pH (units)	8.4
Strontium (Sr)	.07	Specific conductance (μmhos/cm at 25°C)	280
Bicarbonate (HCO_3)	139	Color (Pt-Co units)	5
Sulfate (SO_4)	9.9	Temperature (°C)	--
Chloride (Cl)	8.2	Turbidity (JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.14		
Nitrogen (ammonia, total (NH_4-N))	.23		
Iron (Fe)	.02		
Phosphorus, total (P)	.04		

WINTER PARK

County: Orange **Population served:** 60,000
River basin: St. Johns River above the Oklawaha River (08 01 01)

Ownership of supply or system: General Water Works Corp.
Source of water: Ground water, Floridan aquifer; 7 wells, 400 to 1,350 feet deep; yield, maximum, 5,500 gal/min

Rated plant capacity: 27.8 Mgal/d
Pumpage: Year— 4,133.35 Mgal **Average daily—** 11.32 Mgal
Highest month: April, 527.6 Mgal **Lowest month:** July, 289.9 Mgal

Per capita use: 189 gal/d
Finished-water storage: 0.3 Mgal
Treatment: Aeration and chlorination

Type/Frequency of analysis: Bacteriological/daily; chemical/annually

Sewage discharge: 3.25 Mgal/d
Sewage treatment: Extended aeration, contact stabilization, trickling filter

Waste discharged to: Howell Branch Creek, Waumpi, Lake Howell

Remarks: Average daily pumpage increased from 3.13 Mgal/d in 1956 to 11.32 Mgal/d in 1975. Total yearly pumpage, 1971-75, is shown on figure 22.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-30-75
SAMPLING POINT: 283547081181401, well 835-118-1

Silica (SiO_2)	9.7	Dissolved solids (residue at 180°C)	154
Calcium (Ca)	35	Total hardness (as $CaCO_3$)	120
Magnesium (Mg)	7.7	Noncarbonate hardness (as $CaCO_3$)	8
Sodium (Na)	6.3	Alkalinity (as $CaCO_3$)	112
Potassium (K)	1.1	pH (units)	7.6
Strontium (Sr)	.5	Specific conductance (μmhos/cm at 25°C)	264
Bicarbonate (HCO_3)	136	Color (Pt-Co units)	5
Sulfate (SO_4)	5.8	Temperature (°C)	--
Chloride (Cl)	8.6	Turbidity(JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.07
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.51		
Nitrogen (ammonia, total (NH_4-N))	.36		
Iron (Fe)	.01		
Phosphorus, total (P)	.07		

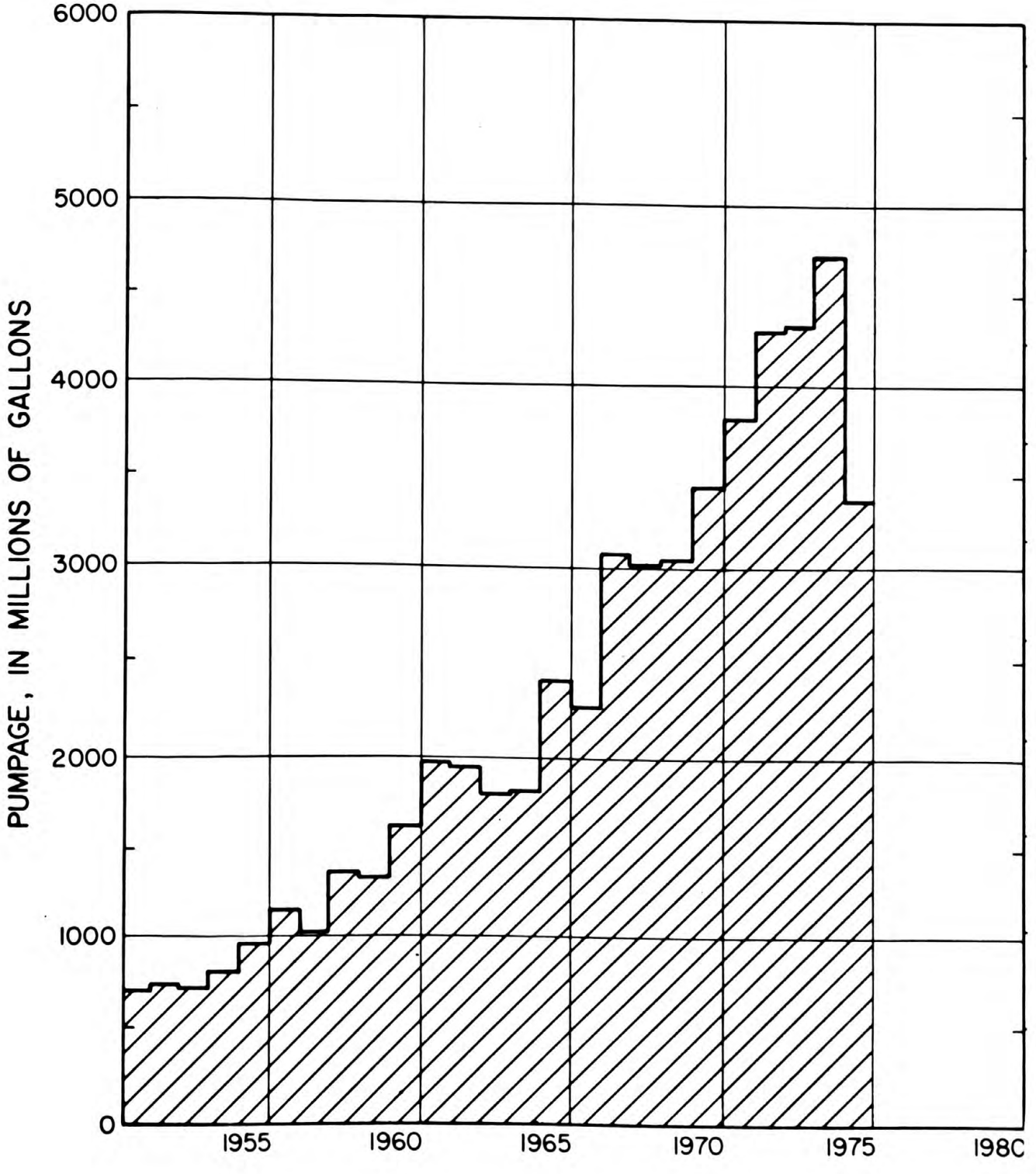

Figure 22.--Total yearly pumpage, city of Winter Park

SOUTHERN AND SOUTHEASTERN COASTAL FLORIDA

The southern Florida section of this report includes the counties south of an east-west line forming the northern boundaries of St. Lucie, Okeechobee, Highlands, Hardee and Manatee Counties--an area of about 17,200 mi^2. The municipalities listed in this section that are included in the water-use inventory are shown on figure 23. The section includes the rapidly developing areas in Broward, Dade, and Palm Beach Counties in southeastern coastal Florida and the rapidly growing Fort Myers-Naples area on the lower west coast of the State.

During 1975, total ground-water pumpage of municipalities in the section for municipal supply was 177,024 Mgal, of which 147,255 Mgal or 83 percent of the total ground-water pumpage and 75 percent of the total pumpage, all sources, was supplied by the Biscayne aquifer. Of the remaining 29,769 Mgal, the shallow-sand aquifer supplied 19,765 Mgal and the Floridan, Hawthorn and Hawthorn-Tampa aquifers supplied 7,320 Mgal for public supply.

Surface-water supply for municipal use totaled 19,712 Mgal of which 10,408 Mgal were pumped from natural man-made lakes and 9,304 Mgal was pumped from rivers and creeks. Desalination processes converted 1,174 Mgal of salty ground water to freshwater for public supply.

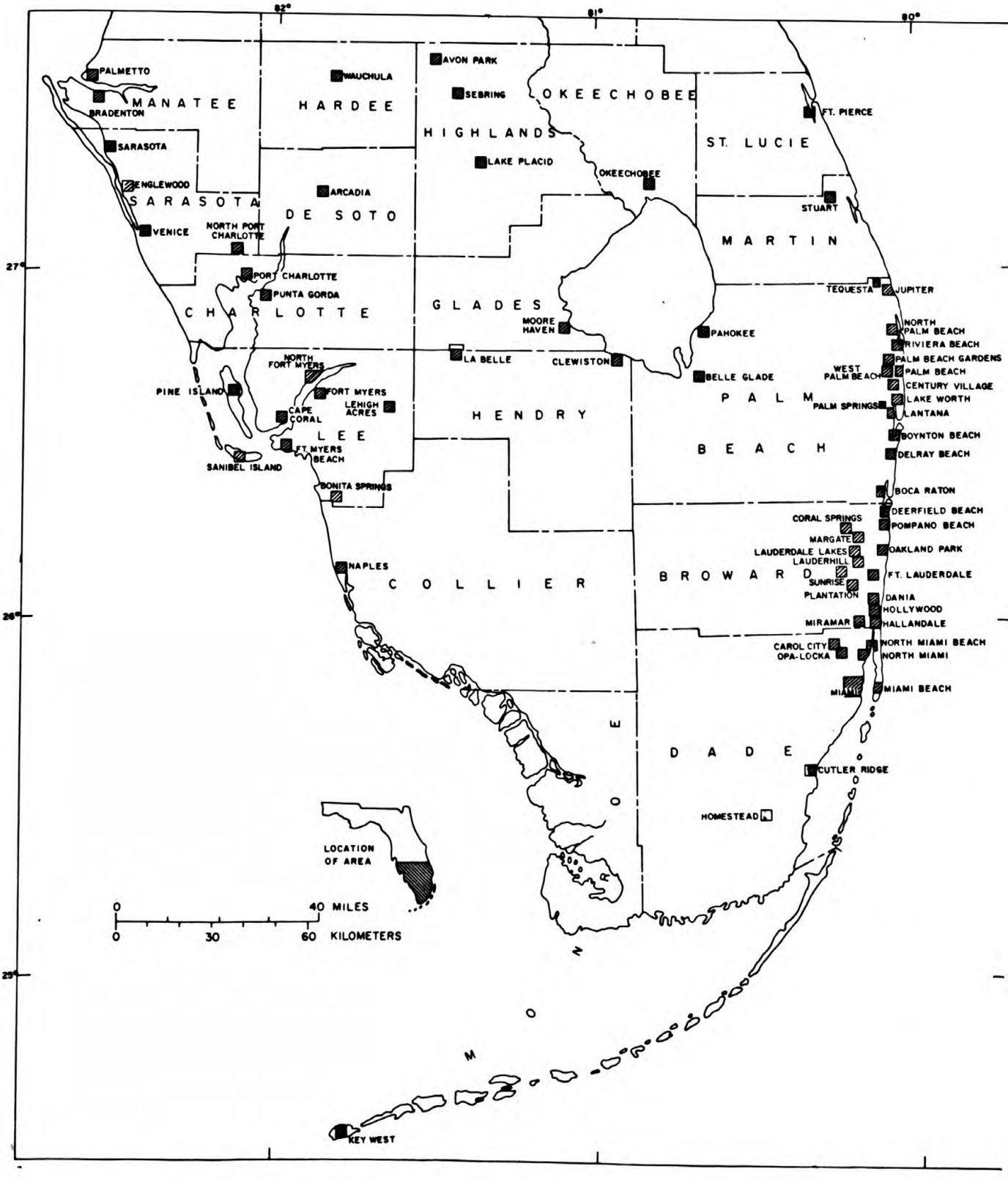

Figure 23.--Municipalities in southern and southeastern coastal Florida for which water-use data are given.

ARCADIA

County: De Soto
Population served: 7,000
River basin: Peace River (10 01 01)

Ownership of supply or system: Municipal
Source of water: Ground water, aquifer in the Hawthorn and Tampa formations; 5 wells, 255 to 324 feet deep; total yield 1,735 gal/min (estimated from rated plant capacity)
Rated plant capacity: 2.5 Mgal/d
Pumpage: **Year—** 277.03 Mgal **Average daily—** 0.76[a/] Mgal
Highest month: November, 29.8 Mgal **Lowest month:** August, 17.0 Mgal

Per capita use: 109 gal/d
Finished-water storage: 0.33 Mgal
Treatment: Chlorination, softening, coagulation, filtration, sedimentation, stabilization

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.39 Mgal/d
Sewage treatment: Secondary, filtration, chlorination

Waste discharged to: Peace River

Remarks: Total service connections 2,775. Supplies water to a few homes outside city limits. Average daily pumpage increased from 0.70 Mgal/d in 1956 to 0.76 Mgal/d in 1975. Robertson and Mills (1974).
a/ Includes 0.05 Mgal/d industrial use, 0.035 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-21-75
SAMPLING POINT: 271253081502901

Silica (SiO_2)	50	Dissolved solids (residue at 180°C)	384
Calcium (Ca)	53	Total hardness (as $CaCO_3$)	240
Magnesium (Mg)	27	Noncarbonate hardness (as $CaCO_3$)	6
Sodium (Na)	25	Alkalinity (as $CaCO_3$)	234
Potassium (K)	2	pH (units)	7.9
Strontium (Sr)	1.2	Specific conductance (μmhos/cm at 25°C)	594
Bicarbonate (HCO_3)	285	Color (Pt-Co units)	5
Sulfate (SO_4)	12	Temperature (°C)	--
Chloride (Cl)	41	Turbidity(JTU)	4
Fluoride (F)	3.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.2		
Nitrogen (ammonia, total (NH_4-N))	.7		
Iron (Fe)	.01		
Phosphorus, total (P)	.01		

AVON PARK

County: Highlands
River basin: Kissimmee River (09 01 01)
Population served: 9,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; 4 wells, 1,250 to 1,500 feet deep; yield to 2,800 gal/min

Rated plant capacity: 6.3 Mgal/d
Pumpage: Year— 401.50 Mgal
Average daily— 1.10 Mgal
Highest month: May, 60.5 Mgal
Lowest month: August, 19.5 Mgal

Per capita use: 122 gal/d
Finished-water storage: 0.20 Mgal
Treatment: None

Type/Frequency of analysis: Bacteriological/monthly; chemical annually

Sewage discharge: 0.30[a/] Mgal/d
Sewage treatment: Secondary, chlorination

Waste discharged to: Lake Glenada to Lakes Lelia and Lotela

Remarks: Average daily pumpage for Avon Park public supply increased from 0.70 Mgal/d in 1956 to 1.10 Mgal/d in 1975.
a/ Estimated.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 273607081302801

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	112
Calcium (Ca)	20	Total hardness (as $CaCO_3$)	76
Magnesium (Mg)	6.2	Noncarbonate hardness (as $CaCO_3$)	6
Sodium (Na)	4.3	Alkalinity (as $CaCO_3$)	70
Potassium (K)	.5	pH (units)	7.2
Strontium (Sr)	.48	Specific conductance (μmhos/cm at 25°C)	171
Bicarbonate (HCO_3)	86	Color (Pt-Co units)	5
Sulfate (SO_4)	3.8	Temperature (°C)	--
Chloride (Cl)	5.8	Turbidity(JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.13	Orthophosphate total (PO_4-P)	.05
Nitrite (NO_2-N)	.05		
Nitrogen, organic (N)	.23		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.05		

BELLE GLADE

County: Palm Beach **Population served:** 20,750
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Surface water, Lake Okeechobee

Rated plant capacity: 6.0 Mgal/d
Pumpage: Year— 1,466.93 Mgal **Average daily—** 4.02[a/] Mgal
Highest month: October, 135.5 Mgal **Lowest month:** May, 100.5 Mgal

Per capita use: 194 gal/d
Finished-water storage: 2.4 Mgal
Treatment: Coagulation, sedimentation, filtration, chlorination

Type/Frequency of analysis: Bacteriological/twice weekly; chemical/annually; color and turbidity/daily
Sewage discharge: 1.5 Mgal/d
Sewage treatment: Secondary, digestion, chlorination

Waste discharged to: Hillsboro Canal

Remarks: City supplies water to Okeechobee Labor Camp, State Correctional Institution, Prewitt Village, Sugar Cane Growers No. 3, Runyon Sugar Corporation, and to U.S. Agricultural Experiment Station. Population served includes farm and sugar mill workers. Average daily pumpage increased from 1.0 Mgal/d in 1956 to 4.02 Mgal/d in 1975.
a/ Includes 1.0 Mgal/d industrial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 6-75
SAMPLING POINT: 264125080404300

Silica (SiO_2)	16	Dissolved solids (residue at 180°C)	566
Calcium (Ca)	51	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	29	Noncarbonate hardness (as $CaCO_3$)	78
Sodium (Na)	80	Alkalinity (as $CaCO_3$)	172
Potassium (K)	6.3	pH (units)	7.9
Strontium (Sr)	1.6	Specific conductance (μmhos/cm at 25°C)	840
Bicarbonate (HCO_3)	210	Color (Pt-Co units)	90
Sulfate (SO_4)	85	Temperature (°C)	27.5
Chloride (Cl)	110	Turbidity (JTU)	1
Fluoride (F)	.7	Carbon, organic, total (C)	27
Nitrate (NO_3-N)	.05	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	2		
Nitrogen (ammonia, total (NH_4-N))	.02		
Iron (Fe)	.03		
Phosphorus, total (P)	.01		

BOCA RATON

County: Palm Beach **Population served:** 46,200
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 35 wells; 100 to 120 feet deep; yield 500 to 1,200 gal/min

Rated plant capacity: 57.0 Mgal/d
Pumpage: **Year**—6,254.27 Mgal **Average daily**— 17.14 Mgal
Highest month: December, 693.4 Mgal **Lowest month:** November, 405.4 Mgal

Per capita use: 371 gal/d
Finished-water storage: 4.25 Mgal
Treatment: Softening, filtration, chlorination

Type/Frequency of analysis: Bacteriological[a/]; chemical/biannually; turbidity/daily biannually
Sewage discharge: 4.03 Mgal/d
Sewage treatment: Secondary, chlorination

Waste discharged to: Atlantic Ocean

Remarks: Average daily pumpage increased from 0.72 Mgal/d in 1956 to 17.14 Mgal/d in 1975. City supplies water to subdivisions. Land and others (1973), McCoy and Hardee (1970), Rodis (1973), Sherwood and others (1973).

a/ Raw water/monthly; finished water/daily.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 262145080052701

Silica (SiO_2)	7.5	Dissolved solids (residue at 180°C)	320
Calcium (Ca)	80	Total hardness (as $CaCO_3$)	210
Magnesium (Mg)	2.1	Noncarbonate hardness (as $CaCO_3$)	36
Sodium (Na)	18	Alkalinity (as $CaCO_3$)	174
Potassium (K)	1.4	pH (units)	7
Strontium (Sr)	.75	Specific conductance (μmhos/cm at 25°C)	500
Bicarbonate (HCO_3)	212	Color (Pt-Co units)	7.5
Sulfate (SO_4)	26	Temperature (°C)	28
Chloride (Cl)	34	Turbidity (JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.31		
Iron (Fe)	.08		
Phosphorus, total (P)	--		

BONITA SPRINGS

County: Lee **Population served:** 11,000
River basin: Big Cypress Swamp and southwestern coastal area (09 02 04)

Ownership of supply or system: Municipal
Source of water: Ground water, sandstone aquifer in the Tamiami formation; 7 wells, 61 to 76 feet deep

Rated plant capacity: 0.5 Mgal/d
Pumpage: Year— 112.30 Mgal **Average daily—** 0.30 Mgal
Highest month: December, 11.9 Mgal **Lowest month:** August, 7.5 Mgal

Per capita use: 45 gal/d
Finished-water storage: 0.2 Mgal
Treatment: Aeration, softening, chlorination

Type/Frequency of analysis: Not Reported

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Total service connections, 2,000. City also supplies area northward to Estero River.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 8-11-75
SAMPLING POINT: 262042081455101, Bonita Springs Water Plant

Silica (SiO_2)	50	Dissolved solids (residue at 180°C)	499
Calcium (Ca)	62	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	24	Noncarbonate hardness (as $CaCO_3$)	2
Sodium (Na)	71	Alkalinity (as $CaCO_3$)	253
Potassium (K)	8	pH (units)	7.3
Strontium (Sr)	.55	Specific conductance (μmhos/cm at 25°C)	780
Bicarbonate (HCO_3)	308	Color (Pt-Co units)	15
Sulfate (SO_4)	50	Temperature (°C)	26
Chloride (Cl)	77	Turbidity(JTU)	2
Fluoride (F)	.7	Carbon, organic, total (C)	7
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.33		
Nitrogen (ammonia, total (NH_4-N))	.33		
Iron (Fe)	--		
Phosphorus, total (P)	.01		

BONITA SPRINGS

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey
SAMPLING POINT: Raw water intake
COLLECTION DATE: 8-11-75

Aluminum (Al)	20	Lead (Pb)	0
Arsenic (As)	0	Lithium (Li)	6
Barium (Ba)	100	Manganese (Mn)	0
Boron (B)	210	Mercury (Hg)	.1
Cadmium (Cd)	0	Molybdenum (Mo)	0
Chromium (Cr)	0	Nickel (Ni)	0
Chromium (Cr^{+6})	0	pH(units)	7.3
Cobalt (Co)	0	Selenium (Se)	0
Specific conductance (umhos/cm at 25°C)	780	Vanadium (V)	.0
Copper (Cu)	0	Temperature (°C)	26
Iron (Fe)	0	Zinc (Zn)	10
Carbon Dioxide (as $CaCo_3$)	25	SAR	1.9
Carbonate	0	Sodium (Na) percent	37

BOYNTON BEACH

County: Palm Beach **Population served:** 36,800
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer; 11 wells, 60 to 110 feet deep; yield 650 to 800 gal/min

Rated plant capacity: 12 Mgal/d
Pumpage: Year— 2,573.25 Mgal **Average daily—** 7.05 Mgal
Highest month: April, 271.3 Mgal **Lowest month:** July, 177.7 Mgal

Per capita use: 192 gal/d
Finished-water storage: 2.6 Mgal
Treatment: Aeration, sedimentation, filtration, chlorination

Type/Frequency of analysis: Bacteriological/weekly; chemical/biannually; color/dail

Sewage discharge: 2.6 Mgal/d
Sewage treatment: Secondary, digestion

Waste discharged to: Intracoastal Waterway

Remarks: City also supplies water to Ocean Ridge and Briny Breeze. Average daily pumpage increased from 0.90 Mgal/d in 1956 to 7.05 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 263048080034801

Silica (SiO_2)	6.1	Dissolved solids (residue at 180°C)	320
Calcium (Ca)	86	Total hardness (as $CaCO_3$)	226
Magnesium (Mg)	2.4	Noncarbonate hardness (as $CaCO_3$)	48
Sodium (Na)	12	Alkalinity (as $CaCO_3$)	177
Potassium (K)	2.6	pH (units)	7.5
Strontium (Sr)	.68	Specific conductance (μmhos/cm at 25°C)	460
Bicarbonate (HCO_3)	216	Color (Pt-Co units)	20
Sulfate (SO_4)	40	Temperature (°C)	27
Chloride (Cl)	21	Turbidity (JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.04	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.30		
Iron (Fe)	.8		
Phosphorus, total (P)	--		

BRADENTON

County: Manatee **Population served:** 25,000
River basin: Manatee River (10 02 02)

Ownership of supply or system: Municipal and Manatee County Water System
Source of water: Surface water, Braden River (Ward's Lake), one well at plant used as standby

Rated plant capacity: 4.0 Mgal/d
Pumpage: Year— 1,397.59[a]/Mgal **Average daily—**[b]/3.83 Mgal
Highest month: December, 132.1 Mgal **Lowest month:** July, 102.6 Mgal

Per capita use: 153 gal/d
Finished-water storage: 1.35 Mgal
Treatment: Chlorination, softening, coagulation, filtration, taste and odor control.

Type/Frequency of analysis: Bacteriological and chemical/daily

Sewage discharge: 3.41 Mgal/d
Sewage treatment: Contact stabilization

Waste discharged to: Robinson Creek to Manatee River

Remarks: Average daily pumpage increased from 1.75 Mgal/d in 1956 to 3.83 Mgal/d in 1975.
a/ Includes 261.67 Mgal purchased from Manatee County Water System.
b/ Includes 1.0 Mgal/d industrial.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 272935082212000, Raw intake, Bradenton water plant

Silica (SiO_2)	2.5	Dissolved solids (residue at 180°C)	746
Calcium (Ca)	98	Total hardness (as $CaCO_3$)	450
Magnesium (Mg)	46	Noncarbonate hardness (as $CaCO_3$)	340
Sodium (Na)	26.4	Alkalinity (as $CaCO_3$)	105
Potassium (K)	.4	pH (units)	7.6
Strontium (Sr)	13	Specific conductance (μmhos/cm at 25°C)	941
Bicarbonate (HCO_3)	128	Color (Pt-Co units)	25
Sulfate (SO_4)	330	Temperature (°C)	29
Chloride (Cl)	39	Turbidity (JTU)	2
Fluoride (F)	.8	Carbon, organic, total (C)	9
Nitrate (NO_3-N)	.08	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.63		
Nitrogen (ammonia, total (NH_4-N))	.00		
Iron (Fe)	.02		
Phosphorus, total (P)	.04		

BRADENTON

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: Raw intake, Bradenton water plant.

Trace Elements

Arsenic (As)	0	Manganese (Mn)	20
Barium (Ba)	0	Mercury (Hg)	.0
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	10	Zinc (Zn)	20
Copper (Cu)	15		
Iron (Fe)	410	pH(units)	--
Lead (Pb)	10	Temperature (°C)	29

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	.00
Ethyl trithion	.00	2,4-D	.08
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

BROWARD COUNTY UTILITIES DEPARTMENT

County: Broward **Population served:** 136,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Broward County Utilities Department
Source of water: Ground water, Biscayne aquifer; 8 well fields, 37 wells, 57 to 178 feet deep; yield 150 to 2,600 gal/min

Rated plant capacity: 33.2 Mgal/d
Pumpage: Year— 7,081.0[a] Mgal **Average daily—** 19.4 Mgal
Highest month: Not reported **Lowest month:** Not reported

Per capita use: 143 gal/d
Finished-water storage: 12.17 Mgal
Treatment: Aeration, algae control, anti-precipitation and corrosion control, chlorination, clarification, coagulation, filtration, flocculation, fluoridation, sedimentation, softening [b]
Type/Frequency of analysis: Bacteriological/weekly; chemical, color, and turbidity/weekly; spectrographic/annually.
Sewage discharge: 10.9 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, clarification, comminution, drying, secondary, settling, skimming

Waste discharged to: Atlantic Ocean

Remarks: Supplies water to Hollywood (partial), Welwyn Pk., Lighhouse Point (partial, 47,800 residents, 7.17 Mgal/d), Brentwood and Collier Estates, Lauderdale Lakes, Broward County areas. No chemical analysis available. Sherwood and others (1973.)

a/ Includes 1095.0 Mgal supplied to Lauderdale Lakes.

b/ Also includes stabilization, taste and odor control.

c/ Broward County Utilities Dept. regional plant. This plant, discharges after treatment, an additional 1.024 Mgal/d to a percolation pond and to Canal C-11.

CAPE CORAL

County: Lee **Population served:** 22,000
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Municipal
Source of water: Ground water, aquifer in the upper Hawthorn Formation, 3 well fields, 20 wells, 94 to 281 feet deep; yield 100 to 260 gal/min

Rated plant capacity: 2.0 Mgal/d
Pumpage: Year— 730.85 Mgal **Average daily—** 2.00 Mgal
Highest month: April, 72.6 Mgal **Lowest month:** September, 48.5 Mgal

Per capita use: 91 gal/d
Finished-water storage: 3.7 Mgal
Treatment: Aeration, coagulation, filtration, softening, chlorination

Type/Frequency of analysis: Bacteriological/15 times monthly; chemical/3 times daily

Sewage discharge: 1.56 Mgal/d
Sewage treatment: Aeration, contact stabilization

Waste discharged to: Caloosahatchee River

Remarks: Domestic service connections, 7,003. A reverse osmosis desalination plant is under construction. The source of water for the plant will be the aquifer in the lower Hawthorn Formation. Estimated plant completion, March 1977.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: 263444081575001

Silica (SiO_2)	48	Dissolved solids (residue at 180°C)	532
Calcium (Ca)	56	Total hardness (as $CaCO_3$)	300
Magnesium (Mg)	39	Noncarbonate hardness (as $CaCO_3$)	97
Sodium (Na)	62	Alkalinity (as $CaCO_3$)	203
Potassium (K)	12	pH (units)	7.9
Strontium (Sr)	2.5	Specific conductance (μmhos/cm at 25°C)	910
Bicarbonate (HCO_3)	248	Color (Pt-Co units)	.00
Sulfate (SO_4)	15	Temperature (°C)	26
Chloride (Cl)	150	Turbidity(JTU)	8
Fluoride (F)	1.2	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.13		
Nitrogen (ammonia, total (NH_4-N))	.47		
Iron (Fe)	--		
Phosphorus, total (P)	.01		

CAPE CORAL

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: 263444081575001

Aluminum (Al)	30	Lead (Pb)	7
Arsenic (As)	0	Lithium (Li)	30
Barium (Ba)	--	Manganese (Mn)	10
Boron (B)	--	Mercury (Hg)	--
Cadmium (Cd)	1	Molybdenum (Mo)	5
Chromium (Cr)	1	Nickel (Ni)	0
Chromium (Cr^{+6})	0	pH(units)	7.3
Cobalt (Co)	0	Selenium (Se)	--
Specific conductance (umhos/cm at 25°C)	845	Vanadium (V)	4.8
		Temperature (°C)	26
Copper (Cu)	0	Zinc (Zn)	0
Iron (Fe)	10		

CAROL CITY

County: Dade **Population served:** 32,165
River basin: Everglades and southeastern coast area (09-02-02)

Ownership of supply or system: Carol City Utilities
Source of water: Ground water, Biscayne aquifer; 7 wells, 70 feet deep; yield total, 5,700 gal/min

Rated plant capacity: 4.0 Mgal
Pumpage: Year— 1,507.50 Mgal/d **Average daily—** 4.13 Mgal
Highest month: April, 158 Mgal **Lowest month:** June, 120 Mgal

Per capita use: 128 gal/d
Finished-water storage: 0.6 Mgal
Treatment: Aeration, chlorination, softening, coagulation, filtration

Type/Frequency of analysis: Chemical/daily

Sewage discharge: 3.5 Mgal/d
Sewage treatment: Activated sludge

Waste discharged to: Carol City Canal

Remarks: Average daily pumpage increased from 0.34 Mgal/d in 1956 to 4.13 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 6-75
SAMPLING POINT: 255615080154301, Carol City Water Plant

Silica (SiO_2)	9.5	Dissolved solids (residue at 180°C)	300
Calcium (Ca)	84	Total hardness (as $CaCO_3$)	230
Magnesium (Mg)	4.7	Noncarbonate hardness (as $CaCO_3$)	32
Sodium (Na)	11	Alkalinity (as $CaCO_3$)	197
Potassium (K)	.9	pH (units)	7.7
Strontium (Sr)	.4	Specific conductance (μmhos/cm at 25°C)	470
Bicarbonate (HCO_3)	241	Color (Pt-Co units)	60
Sulfate (SO_4)	29	Temperature (°C)	--
Chloride (Cl)	16	Turbidity (JTU)	--
Fluoride (F)	.5	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.87		
Iron (Fe)	1.0		
Phosphorus, total (P)	--		

CENTURY VILLAGE

County: Palm Beach **Population served:** 15,000
River basin: Lake Okeechobee and Everglades (09 02 02)

Ownership of supply or system: Private
Source of water: Ground water, Biscayne aquifer; 3 wells, 155 to 160 feet deep; yield 900 to 1,000 gal/min

Rated plant capacity: 2.0 Mgal/d
Pumpage: Year— 365.0 Mgal **Average daily—** 1.0 Mgal
Highest month: December, 36.3 Mgal **Lowest month:** June, 26.2 Mgal

Per capita use: 66 gal/d
Finished-water storage: 0.7 Mgal
Treatment: Chlorination, filtration, softening

Type/Frequency of analysis: Bacteriological/weekly[a]; chemical/biannually; color and turbidity/daily; Bacteriological, color, turbidity, chemical/weekly[b]
Sewage discharge: 0.70 Mgal/d
Sewage treatment: Secondary, polishing ponds

Waste discharged to: Drainage ditch

Remarks: Total service connections: 7,780. No chemical analysis available.
a/ Treated water.
b/ Raw water.

CLEWISTON

County: Hendry
Population served: 6,900
River basin: Lake Okeechobee (09 02 01)

Ownership of supply or system: U.S. Sugar Corporation
Source of water: Surface water, Lake Okeechobee

Rated plant capacity: 4.0 Mgal/d
Pumpage: Year— 424.52 Mgal **Average daily—** 1.16 Mgal
Highest month: May, 38.94 Mgal **Lowest month:** June, 30.58 Mgal

Per capita use: 168 gal/d
Finished-water storage: 2.9 Mgal
Treatment: Chlorination, softening, coagulation, filtration, fluoridation

Type/Frequency of analysis: Bacteriological/semi-weekly; chemical, color, turbidity/daily; spectrographic/intermittently
Sewage discharge: 0.14 Mgal/d
Sewage treatment: Extended aeration, contact stabilization

Waste discharged to: Polishing pond to canal to Lake Okeechobee

Remarks: Average daily pumpage increased from 0.78 Mgal/d in 1970 to 1.16 Mgal/d in 1975. Total domestic service connections, 2,322.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 264417080560701

Silica (SiO_2)	5	Dissolved solids (residue at 180°C)	392
Calcium (Ca)	48	Total hardness (as $CaCO_3$)	190
Magnesium (Mg)	17	Noncarbonate hardness (as $CaCO_3$)	59
Sodium (Na)	57	Alkalinity (as $CaCO_3$)	132
Potassium (K)	4.6	pH (units)	8.7
Strontium (Sr)	1.3	Specific conductance (μmhos/cm at 25°C)	649
Bicarbonate (HCO_3)	150	Color (Pt-Co units)	35
Sulfate (SO_4)	59	Temperature (°C)	--
Chloride (Cl)	85	Turbidity(JTU)	3
Fluoride (F)	.3	Carbon, organic, total (C)	13
Nitrate (NO_3-N)	.04	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.1		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.02		
Phosphorus, total (P)	.03		

CORAL SPRINGS

County: Broward **Population served:** 17,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 8 wells, 55 to 140 feet deep; yield about 500 gal/min

Rated plant capacity: 5.3 Mgal
Pumpage: Year— 620.50 Mgal **Average daily—** 1.70[a/] Mgal
Highest month: August, 58 Mgal **Lowest month:** February, 44 Mgal

Per capita use: 100 gal/d
Finished-water storage: 1.0 Mgal
Treatment: Aeration, chlorination, coagulation, filtration, pH control

Type/Frequency of analysis: Bacteriological/daily; chemical/daily[b/]

Sewage discharge: 1.67 Mgal/d
Sewage treatment: Contact stabilization, activated sludge, drying, aeration, filtration, grit chambers, primary, secondary, tertiary

Waste discharged to: Containment area, land disposal of dried sludge

Remarks:

a/ Includes 0.17 Mgal/d commercial use.
b/ Treated and raw water. Chemical analysis made annually of raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 261634080142401, Coral Springs Water Plant

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	548
Calcium (Ca)	150	Total hardness (as $CaCO_3$)	390
Magnesium (Mg)	4.3	Noncarbonate hardness (as $CaCO_3$)	30
Sodium (Na)	30	Alkalinity (as $CaCO_3$)	359
Potassium (K)	1.7	pH (units)	7.5
Strontium (Sr)	2.1	Specific conductance (µmhos/cm at 25°C)	878
Bicarbonate (HCO_3)	438	Color (Pt-Co units)	30
Sulfate (SO_4)	39	Temperature (°C)	--
Chloride (Cl)	48	Turbidity(JTU)	--
Fluoride (F)	.5	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.43		
Iron (Fe)	.52		
Phosphorus, total (P)	--		

CUTLER RIDGE

County: Dade **Population served:** 45,500
River basin: Everglades and southeastern coastal areas (09 02 02)

Ownership of supply or system: Florida Water and Utilities
Source of water: Ground water, Biscayne aquifer; 20 wells, 50 to 80 feet deep; total yield about 12,600 gal/min from 7 well fields[a/]

Rated plant capacity: 12.2 Mgal/d
Pumpage: Year— 3,445.60 Mgal **Average daily—** 9.44 Mgal
Highest month: April, 336.46 Mgal **Lowest month:** February, 247.72 Mgal

Per capita use: 207 gal/d
Finished-water storage: 0.27 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological, chemical/monthly; chemical annually[b/]

Sewage discharge: 3.36[c/] Mgal/d
Sewage treatment: Aeration

Waste discharged to: Black Creek Canal (C-1)

Remarks: Average daily pumpage increased from 1.276 Mgal/d in 1965 to 9.44 Mgal/d in 1975. Supplies water to 9 subdivisions.
a/ Coral Reef, Fairway Park, Green Hills, Kings Bay, Perrine Industrial, Pine Meadows, Cutler Ridge.
b/ Raw water.
c/ Population served 26,250.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 6-75
SAMPLING POINT: 253448080211601, Cutler Ridge water plant

Silica (SiO_2)	4.1	Dissolved solids (residue at 180°C)	326
Calcium (Ca)	97	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	2.5	Noncarbonate hardness (as $CaCO_3$)	33
Sodium (Na)	16	Alkalinity (as $CaCO_3$)	217
Potassium (K)	3.3	pH (units)	7.5
Strontium (Sr)	.96	Specific conductance (μmhos/cm at 25°C)	565
Bicarbonate (HCO_3)	265	Color (Pt-Co units)	5
Sulfate (SO_4)	30	Temperature (°C)	--
Chloride (Cl)	28	Turbidity(JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.11	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.04		
Phosphorus, total (P)	--		

DANIA

County: Broward **Population served:** 11,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; two wells, 80 to 100 feet deep; yield from 790 to 810 gal/min

Rated plant capacity: 3.02 Mgal/d
Pumpage: Year— 543.85 Mgal **Average daily—** 1.49[a] Mgal
Highest month: March, 72.59 Mgal **Lowest month:** July, 36.54 Mgal

Per capita use: 135 gal/d
Finished-water storage: 0.5 Mgal
Treatment: Chlorination, coagulation, filtration, softening, algae control, odor and taste control.

Type/Frequency of analysis: Bacteriological/twice monthly; chemical/daily; chemical/annually[b]
Sewage discharge: 1.5 Mgal
Sewage treatment: [c]

Waste discharged to: Hollywood regional plant (Broward County Utilities Department).

Remarks: Average daily pumpage increased from 0.50 Mgal/d in 1956 to 1.49 Mgal/d in 1975. Dania sewage treatment plant phased out August 1975. Sherwood and others (1973).
[a] Includes 0.373 Mgal/d commercial and industrial use.
[b] Raw water.
[c] No treatment by Dania.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 260251080091001, Dania water plant

Silica (SiO_2)	7.8	Dissolved solids (residue at 180°C)	572
Calcium (Ca)	120	Total hardness (as $CaCO_3$)	320
Magnesium (Mg)	4	Noncarbonate hardness (as $CaCO_3$)	82
Sodium (Na)	43	Alkalinity (as $CaCO_3$)	238
Potassium (K)	1.3	pH (units)	7.6
Strontium (Sr)	1.1	Specific conductance (μmhos/cm at 25°C)	833
Bicarbonate (HCO_3)	290	Color (Pt-Co units)	35
Sulfate (SO_4)	15	Temperature (°C)	--
Chloride (Cl)	110	Turbidity (JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.67		
Iron (Fe)	.56		
Phosphorus, total (P)	--		

DEERFIELD BEACH

County: Broward **Population served:** 31,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 15 wells, 90 to 120 feet deep; total yield 11,800 gal/min

Rated plant capacity: 12 Mgal/d
Pumpage: Year—1,861.50 Mgal **Average daily**— 5.1 Mgal
Highest month: April, 257.1 Mgal **Lowest month:** November, 152.3 Mgal

Per capita use: 165 gal/d
Finished-water storage: 1.3[a/] Mgal
Treatment: Chlorination, filtration, softening, coagulation, aeration

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: 2.0 Mgal/d
Sewage treatment: Contact stabilization, digestion, grit chambers, chlorination

Waste discharged to: Hillsboro Canal

Remarks: Average daily pumpage increased from 0.50 Mgal/d in 1956 to 5.10 Mgal/d in 1975. McCoy (1970), Sherwood and others (1973).
a/ A 4.0 Mgal storage facility under construction.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 261910080062001, Deerfield water plant

Silica (SiO_2)	6.4	Dissolved solids (residue at 180°C)	270
Calcium (Ca)	75	Total hardness (as $CaCO_3$)	200
Magnesium (Mg)	1.9	Noncarbonate hardness (as $CaCO_3$)	5
Sodium (Na)	14	Alkalinity (as $CaCO_3$)	195
Potassium (K)	2.4	pH (units)	7.6
Strontium (Sr)	.86	Specific conductance (μmhos/cm at 25°C)	451
Bicarbonate (HCO_3)	238	Color (Pt-Co units)	55
Sulfate (SO_4)	11	Temperature (°C)	--
Chloride (Cl)	20	Turbidity(JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.03		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.91		
Iron (Fe)	1.3		
Phosphorus, total (P)	--		

DELRAY BEACH

County: Palm Beach **Population served:** 31,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer; 18 wells, 90 to 105 feet deep; yield 400 to 1,000 gal/min

Rated plant capacity: 12 Mgal/d
Pumpage: Year— 3,179.15 Mgal **Average daily—** 8.71 Mgal
Highest month: April, 318.30 Mgal **Lowest month:** June, 224.70 Mgal

Per capita use: 281 gal/d
Finished-water storage: 5.63 Mgal
Treatment: Aeration, sedimentation, filtration, chlorination

Type/Frequency of analysis: Chemical/biannually; color and turbidity/daily; Bacteriological/monthly[a/]
Sewage discharge: 3.60 Mgal/d
Sewage treatment: Aeration, comminution, chlorination

Waste discharged to: Atlantic Ocean

Remarks: Average daily pumpage increased from 2.90 Mgal/d in 1956 to 8.71 Mgal/d in 1975.
a/ Treated water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 262709080042801

Silica (SiO_2)	18	Dissolved solids (residue at 180°C)	322
Calcium (Ca)	90	Total hardness (as $CaCO_3$)	230
Magnesium (Mg)	2.5	Noncarbonate hardness (as $CaCO_3$)	13
Sodium (Na)	22	Alkalinity (as $CaCO_3$)	217
Potassium (K)	1.9	pH (units)	7.3
Strontium (Sr)	.29	Specific conductance (μmhos/cm at 25°C)	510
Bicarbonate (HCO_3)	265	Color (Pt-Co units)	55
Sulfate (SO_4)	.0	Temperature (°C)	28
Chloride (Cl)	40	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.5		
Iron (Fe)	.11		
Phosphorus, total (P)	--		

ENGLEWOOD

County: Sarasota **Population served:** 10,000
River basin: Coastal area between Myakka and Manatee Rivers (10 02 01)

Ownership of supply or system: Englewood Water District
Source of water: Ground water, nonartesian sand aquifer, Pleistocene and upper Miocene aquifers; well depths 40 to 90 feet, yield 30 to 100 gal/min

Rated plant capacity: 3.0 Mgal/d
Pumpage: Year— 367.39 Mgal **Average daily—** 1.01 Mgal
Highest month: March, 42.34 Mgal **Lowest month:** September, 21.44 Mgal

Per capita use: 100 gal/d
Finished-water storage: 0.6 Mgal
Treatment: Aeration, chlorination, softening, filtration

Type/Frequency of analysis: Chemical/daily

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.52 Mgal/d in 1970 to 1.01 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 2651713082205601, composite

Silica (SiO_2)	14	Dissolved solids (residue at 180°C)	546
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	330
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	87
Sodium (Na)	60	Alkalinity (as $CaCO_3$)	243
Potassium (K)	1	pH (units)	7.8
Strontium (Sr)	.9	Specific conductance (μmhos/cm at 25°C)	902
Bicarbonate (HCO_3)	296	Color (Pt-Co units)	55
Sulfate (SO_4)	14	Temperature (°C)	--
Chloride (Cl)	130	Turbidity(JTU)	2
Fluoride (F)	.4	Carbon, organic, total (C)	11
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.27
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.66		
Nitrogen (ammonia, total (NH_4-N))	.61		
Iron (Fe)	.18		
Phosphorus, total (P)	.27		

FORT LAUDERDALE

County: Broward **Population served:** 226,430
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 59 wells, 75 to 189 feet deep; yield 400 to 2,100 gal/min

Rated plant capacity: 60 Mgal/d
Pumpage: Year— 16,798.39 Mgal **Average daily—** 46.02[a/] Mgal
Highest month: April, 1,822.2 Mgal **Lowest month:** October, 1,172.3 Mgal

Per capita use: 203 gal/d
Finished-water storage: 20 Mgal
Treatment: Aeration, chlorination, coagulation, filtration, flocculation, pH control, softening, taste and odor control

Type/Frequency of analysis: Bacteriological, chemical, color, and turbidity/daily; spectrographic/30 times yearly
Sewage discharge: 16.97 Mgal/d (5 sewage treatment plants)
Sewage treatment: Chlorination, clarification, comminution (all); activated sludge, drying, grit chamber, skimming (2); aeration, digestion (3); contact stabilization, incineration (1)
Waste discharged to: North Fork New River Canal; Intracoastal Waterway (2); South Fork New River; North Fork Middle River
Remarks: Average daily pumpage increased from 17.10 Mgal/d in 1956 to 46.0 Mgal/d in 1975. City supplied at total of 6.576 mgd to Wilton Manors, Oakland Pk, Lazy Lake and Tamarac. City also supplies Lauderdale-by-the-sea, Sea Ranch Lake, Ft. Lauderdale-Hollywood airport and Port Everglades. Supplementary supply for Dania, Plantation and Broward County Utilities Dept. (fig 24). Leach and others (1972), Sherwood and others (1973). a/ Combined pumpage, Dixie and Prospect Well Fields.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 261044080092001, Prospect water plant

Silica (SiO_2)	9.7	Dissolved solids (residue at 180°C)	388
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	2.8	Noncarbonate hardness (as $CaCO_3$)	15
Sodium (Na)	19	Alkalinity (as $CaCO_3$)	245
Potassium (K)	1.5	pH (units)	7.4
Strontium (Sr)	.78	Specific conductance (μmhos/cm at 25°C)	619
Bicarbonate (HCO_3)	299	Color (Pt-Co units)	45
Sulfate (SO_4)	26	Temperature (°C)	--
Chloride (Cl)	33	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.63		
Iron (Fe)	1.8		
Phosphorus, total (P)	--		

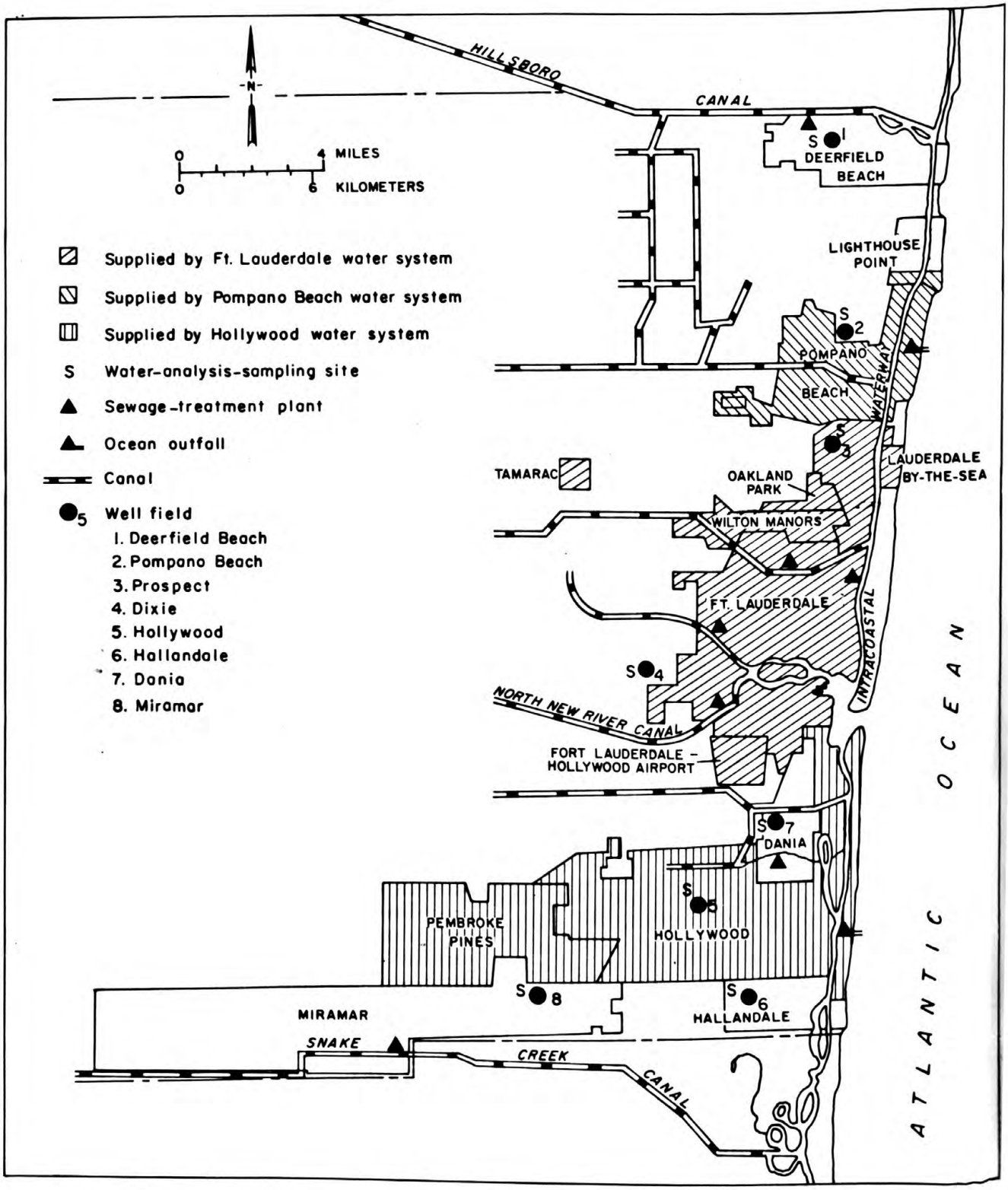

Figure 24.--Areas supplied water by individual and composite water systems, Broward County.

FORT MYERS

County: Lee **Population served:** 38,000
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Municipal
Source of water: Ground water, water-table aquifer in Pleistocene sand, 50 percent of supply; 11 wells 16 to 44 feet deep; yield 300 to 750 gal/min; surface water, Caloosahatchee River, 50 percent of supply
Rated plant capacity: 8.3 Mgal/d
Pumpage: Year— 2089 Mgal **Average daily—** 5.7[a/] Mgal
Highest month: May, 208 Mgal **Lowest month:** September, 148 Mgal

Per capita use: 150 gal/d
Finished-water storage: 2 Mgal
Treatment: Chlorination, filtration, coagulation, aeration, fluoridation, recarbonation, softening

Type/Frequency of analysis: Bacteriological/weekly; chemical/daily; color, turbidity/monthly
Sewage discharge: 6.65 Mgal/d (2 plants)
Sewage treatment: High rate trickling filter-Central Plant; contact stabilization-South Plant

Waste discharged to: Caloosahatchee River (Fig. 25)

Remarks: Average daily pumpage increased from 2.50 Mgal/d in 1956 to 5.72 Mgal/d in 1975. Service connections: domestic, 10,374; commercial 1,153. Boggess (1970), Sproul and others (1972),O'Donnell (1977).
a/ Includes 2.85 Mgal/d pumped from the Caloosahatchee River to recharge the aquifer at the well field.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: 263824081513702, Ft. Myers Water Plant, composite

Silica (SiO_2)	5.2	Dissolved solids (residue at 180°C)	566
Calcium (Ca)	81	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	73
Sodium (Na)	81	Alkalinity (as $CaCO_3$)	187
Potassium (K)	4.1	pH (units)	7.2
Strontium (Sr)	1	Specific conductance (μmhos/cm at 25°C)	850
Bicarbonate (HCO_3)	217	Color (Pt-Co units)	100
Sulfate (SO_4)	49	Temperature (°C)	24.5
Chloride (Cl)	136	Turbidity(JTU)	5
Fluoride (F)	.3	Carbon, organic, total (C)	61
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.72		
Nitrogen (ammonia, total (NH_4-N))	.22		
Iron (Fe)	1.6		
Phosphorus, total (P)	.02		

FORT MYERS

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-13-75
SAMPLING POINT: Ft. Myers Water Plant, Raw composite

Aluminum (Al)	8	Lead (Pb)	1
Arsenic (As)	3	Lithium (Li)	4
Barium (Ba)	--	Manganese (Mn)	10
Boron (B)	--	Mercury (Hg)	.1
Cadmium (Cd)	0	Molybdenum (Mo)	4
Chromium (Cr)	1	Nickel (Ni)	0
Chromium (Cr^{+6})	0	pH(units)	7.5
Cobalt (Co)	0	Selenium (Se)	--
Specific conductance (umhos/cm at 25°C)	850	Vanadium (V)	8.7
		Temperature (°C)	24.5
Copper (Cu)	0	Zinc (Zn)	3
Iron (Fe)	--		

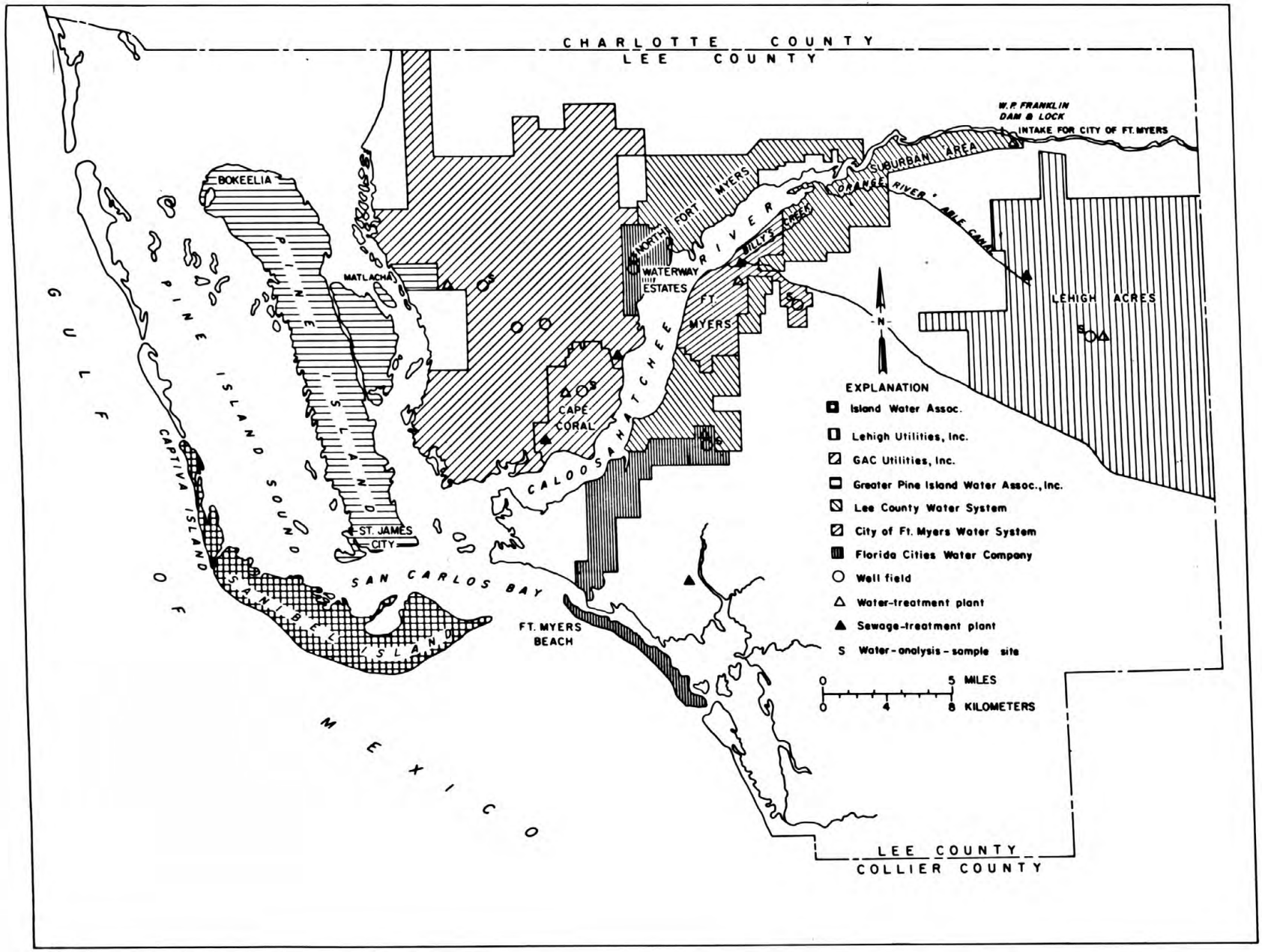

Figure 25.--Well fields, treatment plants, and service areas of public and private water-supply systems in the Ft. Myers area.

FT MYERS BEACH

County: Lee **Population served:** 30,000
River basin: Big Cypress Swamp and the southwestern coastal area (09 02 04)

Ownership of supply or system: Florida Cities Water Company
Source of water: Ground water, aquifer in the upper Hawthorn Formation; 14 wells, 115 to 266 feet deep; yield 55 to 125 gal/min

Rated plant capacity: 5.0 Mgal/d
Pumpage: Year— 812.50 Mgal **Average daily—** 2.23 Mgal
Highest month: January, 77.5 Mgal **Lowest month:** November, 52.9 Mgal

Per capita use: 74 gal/d
Finished-water storage: 2.1 Mgal
Treatment: Aeration, chlorination, coagulation, softening, stabilization

Type/Frequency of analysis: Bacteriological/twice weekly; chemical/daily

Sewage discharge: 0.412 Mgal/d
Sewage treatment: Contact stabilization to February 1975. Currently extended aeration

Waste discharged to: Spray irrigation, Myer Leigh and Cypress Lake golf courses.

Remarks: Average daily pumpage increased from 0.12 Mgal/d in 1956 to 2.23 Mgal/d in 1975. Service connections: domestic 4,165; commercial 463. Water also supplied to south central Lee County along SR 867 and Estero Island. O'Donnell (1977), Sproul and others (1972).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 263316081524401, Florida Cities Water Plant

Silica (SiO_2)	23	Dissolved solids (residue at 180°C)	470
Calcium (Ca)	45	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	34	Noncarbonate hardness (as $CaCO_3$)	40
Sodium (Na)	74	Alkalinity (as $CaCO_3$)	215
Potassium (K)	7.3	pH (units)	7.9
Strontium (Sr)	2.1	Specific conductance (μmhos/cm at 25°C)	838
Bicarbonate (HCO_3)	262	Color (Pt-Co units)	5
Sulfate (SO_4)	15	Temperature (°C)	26
Chloride (Cl)	120	Turbidity (JTU)	5
Fluoride (F)	2.9	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.11		
Nitrogen (ammonia, total (NH_4-N))	.21		
Iron (Fe)	.05		
Phosphorus, total (P)	.00		

FT MYERS BEACH

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 263316081524401, Florida Cities Water Plant

Aluminum (Al)	0	Lead (Pb)	5
Arsenic (As)	0	Lithium (Li)	70
Barium (Ba)	10	Manganese (Mn)	0
Boron (B)	--	Mercury (Hg)	.1
Cadmium (Cd)	0	Molybdenum (Mo)	0
Chromium (Cr)	0	Nickel (Ni)	1
Chromium (Cr^{+6})	0	pH(units)	7.5
Cobalt (Co)	0	Selenium (Se)	0
Specific conductance (umhos/cm at 25°C)	805	Vanadium (V)	.0
		Temperature (°C)	26
Copper (Cu)	0	Zinc (Zn)	0
Iron (Fe)	10		

FT MYERS (SUBURBAN AREAS)

County: Lee **Population served:** 35,000
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Lee County Water System
Source of water: Surface water, Caloosahatchee River

Rated plant capacity: 5.0 Mgal/d
Pumpage: Year— 1,463.80 Mgal **Average daily—** 4.01 Mgal
Highest month: January, 150.5 Mgal **Lowest month:** November, 103.3 Mgal

Per capita use: 115 gal/d
Finished-water storage: 1.8 Mgal
Treatment: Aeration, chlorination, softening, coagulation, filtration, flocculation stabilization

Type/Frequency of analysis: Bacteriological/biweekly; chemical, color, turbidity/ every 3 hours
Sewage discharge: 0.20 Mgal/d
Sewage treatment: Aeration, contact stabilization

Waste discharged to: Spray irrigation (golf course), Caloosahatchee River

Remarks: Average daily pumpage increased from 1.63 Mgal/d in 1970 to 4.01 Mgal/d in 1975. Pumpage includes water supplied to North Fort Myers (Fig. 25), (except Waterway Estates, see p. 224), East Fort Myers and area south of Ft. Myers. Service connections: domestic, 13,732; commercial, 876. Boggess (1970), O'Donnell (1977).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-12-75
SAMPLING POINT: 264308081410102, Caloosahatchee River at Lee County Water Plant

Silica (SiO_2)	4.3	Dissolved solids (residue at 180°C)	480
Calcium (Ca)	62	Total hardness (as $CaCO_3$)	230
Magnesium (Mg)	17	Noncarbonate hardness (as $CaCO_3$)	76
Sodium (Na)	62	Alkalinity (as $CaCO_3$)	154
Potassium (K)	4.8	pH (units)	8.3
Strontium (Sr)	1.2	Specific conductance (μmhos/cm at 25°C)	730
Bicarbonate (HCO_3)	188	Color (Pt-Co units)	40
Sulfate (SO_4)	57	Temperature (°C)	29.2
Chloride (Cl)	96	Turbidity(JTU)	8
Fluoride (F)	.7	Carbon, organic, total (C)	37
Nitrate (NO_3-N)	.03	Orthophosphate total (PO_4-P)	.08
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	1.1		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.03		
Phosphorus, total (P)	.09		

FT MYERS (SUBURBAN AREAS)

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-12-75
SAMPLING POINT: Caloosahatchee River at Lee County Water Plant

Trace Elements

Arsenic (As)	--	Manganese (Mn)	--
Barium (Ba)	--	Mercury (Hg)	--
Cadmium (Cd)	--	Selenium (Se)	--
Chromium (Cr)	--	Zinc (Zn)	--
Copper (Cu)	--		
Iron (Fe)	--	pH(units)	8.7
Lead (Pb)	0	Temperature (°C)	29.2

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.00	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.00
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-12-75
SAMPLING POINT: Caloosahatchee River at Lee County Water Plant

Aluminum (Al)	20	Lead (Pb)	0
Arsenic (As)	1	Lithium (Li)	3
Barium (Ba)	--	Manganese (Mn)	10
Boron (B)	--	Mercury (Hg)	.1
Cadmium (Cd)	0	Molybdenum (Mo)	3
Chromium (Cr)	0	Nickel (Ni)	1
Chromium (Cr^{+6})	0	pH (Pt-Co units)	8.7
Cobalt (Co)	0	Selenium (Se)	--
Specific conductance		Vanadium (V)	2.7
(umhos/cm at 25°C)	710	Temperature (°C)	29.2
Copper (Cu)	1	Zinc (Zn)	20
Iron (Fe)	--	Oxygen	6.7

FORT PIERCE

County: St. Lucie **Population served:** 35,000
River basin: Coastal area Sebastian Inlet to St. Lucie River (08 02 03)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow sand-and-gravel aquifer; 24 wells, 80 to 120 feet deep; yield 300 to 695 gal/min

Rated plant capacity: 10.0 Mgal/d
Pumpage: Year— 2,007.50 Mgal **Average daily—** 5.50 Mgal
Highest month: April, 202 Mgal **Lowest month:** September, 148 Mgal

Per capita use: 157 gal/d
Finished-water storage: 4.5 Mgal
Treatment: Chlorination, anti-precipitation and corrosion control, coagulation, filtration, softening, fluoridation

Type/Frequency of analysis: Bacteriological, color, turbidity/daily; chemical/ annually
Sewage discharge: 3.2 Mgal/d
Sewage treatment: Activated sludge

Waste discharged to: Indian River

Remarks: Average daily pumpage increased from 1.80 Mgal/d in 1956 to 5.50 Mgal/d in 1975. City supplies water to North Beach Water Co. Bearden (1971).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 6-75
SAMPLING POINT: 272507080190201

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	480
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	300
Magnesium (Mg)	6.5	Noncarbonate hardness (as $CaCO_3$)	54
Sodium (Na)	38	Alkalinity (as $CaCO_3$)	246
Potassium (K)	2.2	pH (units)	7.2
Strontium (Sr)	.91	Specific conductance (µmhos/cm at 25°C)	730
Bicarbonate (HCO_3)	300	Color (Pt-Co units)	30
Sulfate (SO_4)	46	Temperature (°C)	28
Chloride (Cl)	65	Turbidity (JTU)	--
Fluoride (F)	.6	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.45		
Iron (Fe)	.7		
Phosphorus, total (P)	--		

HALLANDALE

County: Broward **Population served:** 50,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer, 8 wells, 68 to 85 feet deep; yield 800 to 2,775 gal/min

Rated plant capacity: 7.7 Mgal/d
Pumpage: Year— 1,971.00 Mgal **Average daily—** 5.40 Mgal
Highest month: April, 195 Mgal **Lowest month:** September, 140 Mgal

Per capita use: 108 gal/d
Finished-water storage: 2.8 Mgal
Treatment: Chlorination, coagulation, softening, filtration

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 3.40[a/] Mgal/d
Sewage treatment: Sewage processed by Hollywood

Waste discharged to: Hollywood waste treatment plant

Remarks: Average daily pumpage increased from 0.75 Mgal/d in 1956 to 5.40 Mgal/d in 1975. Bearden (1971, 1972), Sherwood and others (1973).
a/ Septic tanks in use in part of Hallandale.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 255918080091702, Hallandale water plant

Silica (SiO_2)	6	Dissolved solids (residue at 180°C)	358
Calcium (Ca)	94	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	3.2	Noncarbonate hardness (as $CaCO_3$)	11
Sodium (Na)	21	Alkalinity (as $CaCO_3$)	239
Potassium (K)	4.1	pH (units)	7.6
Strontium (Sr)	1	Specific conductance (μmhos/cm at 25°C)	608
Bicarbonate (HCO_3)	291	Color (Pt-Co units)	30
Sulfate (SO_4)	24	Temperature (°C)	--
Chloride (Cl)	32	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	1.2		
Iron (Fe)	.34		
Phosphorus, total (P)	--		

HOLLYWOOD

County: Broward **Population served:** 100,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal and Broward County Utilities Dept.a/
Source of water: Ground water, Biscayne aquifer; 19 wells, 65 to 150 feet deep; yield 1,000 to 1,200 gal/min

Rated plant capacity: 20 Mgal/d
Pumpage: Year— 5,292.50 Mgal **Average daily—** 14.50 Mgal
Highest month: March, 532 Mgal **Lowest month:** September, 391 Mgal

Per capita use: 145 gal/d
Finished-water storage: 13.5 Mgal
Treatment: Chlorination, algae control, softening, filtration, coagulation, taste and odor control

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 20 Mgal/d
Sewage treatment: Primary, settling, grit chamber

Waste discharged to: Atlantic Ocean

Remarks: Average daily pumpage increased from 5.20 Mgal.d in 1956 to 14.50 Mgal/d in 1975. Bearden (1974), Sherwood and others (1973).
a/ Broward County Utilities Department supplies 2.7 Mgal/d to 18,000 residents of Hollywood.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 260039080104301, Hollywood water plant

Silica (SiO_2)	6.5	Dissolved solids (residue at 180°C)	372
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	4.2	Noncarbonate hardness (as $CaCO_3$)	26
Sodium (Na)	19	Alkalinity (as $CaCO_3$)	244
Potassium (K)	2.6	pH (units)	7.4
Strontium (Sr)	1	Specific conductance (μmhos/cm at 25°C)	622
Bicarbonate (HCO_3)	298	Color (Pt-Co units)	20
Sulfate (SO_4)	34	Temperature (°C)	--
Chloride (Cl)	28	Turbidity (JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.75		
Iron (Fe)	1.0		
Phosphorus, total (P)	--		

HOMESTEAD

County: Dade **Population served:** 21,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 4 wells, 55 to 60 feet deep; total yield 6,400 gal/min

Rated plant capacity: 6.14 Mgal/d
Pumpage: Year— 1,734.51 Mgal **Average daily—** 4.75[a/] Mgal
Highest month: February, 188.45 Mgal **Lowest month:** June, 112.66 Mgal

Per capita use: 226 gal/d
Finished-water storage: 0.10 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/twice weekly; chemical/annually

Sewage discharge: 1.25 Mgal/d
Sewage treatment: Activated sludge

Waste discharged to: Canal 103S

Remarks: Average daily pumpage increased from 0.65 Mgal/d in 1945 to 4.75 Mgal/d in 1975.
a/ Includes water supplied for crop watering and for fruit and vegetable washing.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 6-75
SAMPLING POINT: 252810080283501, Homestead water plant

Silica (SiO_2)	3.3	Dissolved solids (residue at 180°C)	338
Calcium (Ca)	96	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	2.9	Noncarbonate hardness (as $CaCO_3$)	77
Sodium (Na)	14	Alkalinity (as $CaCO_3$)	176
Potassium (K)	4.1	pH (units)	7.6
Strontium (Sr)	.82	Specific conductance (μmhos/cm at 25°C)	565
Bicarbonate (HCO_3)	215	Color (Pt-Co units)	5
Sulfate (SO_4)	39	Temperature (°C)	--
Chloride (Cl)	22	Turbidity(JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	2.5	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.03		
Phosphorus, total (P)	--		

JUPITER

County: Palm Beach **Population served:** 7,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Private (Tri-Southern Utilities)
Source of water: Ground water, shallow aquifer; 7 wells, 135 to 140 feet deep; yield, average, 250 gal/min

Rated plant capacity: 1.0 Mgal/d
Pumpage: Year— 317.55 Mgal **Average daily—** 0.87 Mgal
Highest month: April, 30.4 Mgal **Lowest month:** June, 19.7 Mgal

Per capita use: 124 gal/d
Finished-water storage: 1.7 Mgal
Treatment: Softening

Type/Frequency of analysis: Bacteriological/monthly; chemical/semiannually

Sewage discharge: a/ 0.1 Mgal/d
Sewage treatment: Secondary, no digestion

Waste discharged to: Percolation pond

Remarks: Average daily pumpage increased from 0.045 Mgal/d in 1956 to 0.87 Mgal/d in 1975. Part of Jupiter supplied by Tequesta. Land and others (1973), Rodis (1973). No chemical analysis available.
a/ Septic tanks in use west of U. S. Highway 1.

KEY WEST

County: Monroe **Population served:** 30,000
River basin: Florida Bay and Florida Keys (09 02 03)

Ownership of supply or system: US Navy & Florida Keys Aqueduct Authority
Source of water: Ground water, Biscayne aquifer; 7 wells, 52 to 60 ft. deep; US Navy well field at Florida City. Stock Island desalination plant uses multistage flash evaporation process, converts salty water from wells tapping the Key Largo limestone.
Rated plant capacity: 7.0, 2.62a/
Pumpage: Year— 751.90, 624.28 Mgal **Average daily—** 2.06, 1.71 Mgal
Highest month: November, 36.20 Mgal **Lowest month:** April, 14.64 Mgal
April, 71.47 Mgal October, 34.80 Mgal
Per capita use: 126 gal/d
Finished-water storage: 15 Mgal
Treatment: Softening, filtration, chlorination, stabilization, fluoridation, aeration

Type/Frequency of analysis: Bacteriological/daily; chemical/annually

Sewage discharge: Not reported
Sewage treatment: Not reported

Waste discharged to: Safe Harbor then to Atlantic Ocean

Remarks: Key West is supplied from the U.S. Navy-owned well field at Florida City about 30 miles southwest of Miami. Water is sold and supplied to the Florida Keys Aqueduct Authority which in turn supplies public and private systems on the Keys including Key West.
a/ Stock Island desalination plant at Key West.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 6-75
SAMPLING POINT: 252619080310202, U. S. Navy Well Field Florida City

Silica (SiO_2)	3.2	Dissolved solids (residue at 180°C)	356
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	3.8	Noncarbonate hardness (as $CaCO_3$)	76
Sodium (Na)	13	Alkalinity (as $CaCO_3$)	194
Potassium (K)	5.7	pH (units)	7.5
Strontium (Sr)	1.1	Specific conductance (µmhos/cm at 25°C)	569
Bicarbonate (HCO_3)	236	Color (Pt-Co units)	5
Sulfate (SO_4)	62	Temperature (°C)	--
Chloride (Cl)	23	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.29		
Phosphorus, total (P)	--		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 243337081440501, Supply well, Stock Island desalination plant

Silica (SiO_2)	3.9	Dissolved solids (residue at 180°C)	38,100
Calcium (Ca)	460	Total hardness (as $CaCO_3$)	6,500
Magnesium (Mg)	1,300	Noncarbonate hardness (as $CaCO_3$)	6,300
Sodium (Na)	11,400	Alkalinity (as $CaCO_3$)	151
Potassium (K)	400	pH (units)	7.2
Strontium (Sr)	7.8	Specific conductance (μmhos/cm at 25°C)	56,000
Bicarbonate (HCO_3)	184	Color (Pt-Co units)	5
Sulfate (SO_4)	3,000	Temperature (°C)	26.5
Chloride (Cl)	21,000	Turbidity(JTU)	--
Fluoride (F)	1.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.0	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.0		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.53		
Iron (Fe)	.18		
Phosphorus, total (P)	--		

CHEMICAL ANALYSIS (milligrams per liter except as indicated

ANALYSIS BY: Stock Island plant **COLLECTION DATE:** 5-17-76
SAMPLING POINT: 243337081440502, composite, treated water Stock Island desalination plant.

Silica (SiO_2)	.1	Dissolved solids (residue at 180°C)	225
Calcium (Ca)	5.6	Total hardness (as $CaCO_3$)	50
Magnesium (Mg)	--	Noncarbonate hardness (as $CaCO_3$)	24
Sodium (Na)	--	Alkalinity (as $CaCO_3$)	26
Potassium (K)	--	pH (units)	9.2
Strontium (Sr)	--	Specific conductance (μmhos/cm at 25°C)	--
Bicarbonate (HCO_3)	--	Color (Pt-Co units)	0
Sulfate (SO_4)	20	Temperature (°C)	--
Chloride (Cl)	122	Turbidity(JTU)	0
Fluoride (F)	0.0	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.1
Nitrite (NO_2-N)	--	Copper (Cu)	.1
Nitrogen, organic (N)	--	Carbonate alkalinity ($CaCo_3$)	12
Nitrogen (ammonia, total (NH_4-N))	--		
Iron (Fe)	.05		
Phosphorus, total (P)	--		
Manganese (Mn)	0.0		
Bicarbonate alkalinity ($CaCo_3$)	14		

LA BELLE

County: Hendry **Population served:** 3,200
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer in Tamiami Formation; 3 wells, 16 to 40 feet deep; yield 115 to 250 gal/min

Rated plant capacity: 0.36 Mgal/d
Pumpage: Year— 92.30 Mgal **Average daily—**0.25 Mgal
Highest month: December, 8.87 Mgal **Lowest month:** June, 6.30 Mgal

Per capita use: 78 gal/d
Finished-water storage: 0.51 Mgal
Treatment: Chlorination, filtration, coagulation, softening

Type/Frequency of analysis: Bacteriological/monthly; a/ chemical and color/8 times daily
Sewage discharge: 0.083 Mgal/d
Sewage treatment: Contact stabilization, aeration

Waste discharged to: Caloosahatchee River

Remarks: Total service connections, 800. Average daily pumpage increased from 0.07 Mgal/d in 1956 to 0.55 Mgal/d in 1975. In 1956, supply was from the Floridan aquifer.
a/ Treated water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 264527081262201, La Belle water plant

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	702
Calcium (Ca)	190	Total hardness (as $CaCO_3$)	500
Magnesium (Mg)	5.5	Noncarbonate hardness (as $CaCO_3$)	240
Sodium (Na)	22	Alkalinity (as $CaCO_3$)	262
Potassium (K)	2.7	pH (units)	7.5
Strontium (Sr)	1.3	Specific conductance (μmhos/cm at 25°C)	980
Bicarbonate (HCO_3)	320	Color (Pt-Co units)	65
Sulfate (SO_4)	230	Temperature (°C)	--
Chloride (Cl)	28	Turbidity(JTU)	65
Fluoride (F)	.2	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.45		
Nitrogen (ammonia, total (NH_4-N))	.49		
Iron (Fe)	.92		
Phosphorus, total (P)	.03		

LA BELLE

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-11-75
SAMPLING POINT: 264527081262201, La Belle water plant

Aluminum (Al)	0	Lead (Pb)	22
Arsenic (As)	NA	Lithium (Li)	0
Barium (Ba)	8	Manganese (Mn)	40
Boron (B)	NA	Mercury (Hg)	0.0
Cadmium (Cd)	3	Molybdenum (Mo)	16
Chromium (Cr)	2	Nickel (Ni)	4
Chromium (Cr^{+6})	0	pH(units)	7.0
Cobalt (Co)	1	Selenium (Se)	0
Specific conductance (umhos/cm at 25°C)	1,060	Vanadium (V)	2.7
		Temperature (°C)	24.5
Copper (Cu)	3	Zinc (Zn)	40
Iron (Fe)	5,800		

LAKE PLACID

County: Highlands
River basin: Kissimmee River (09 01 01)
Population served: 1,400

Ownership of supply or system: Municipal
Source of water: Surface water, Lake Sirena; ground water, Florida aquifer; 1 well, 1,680 feet deep; yield 3,000 gal/min; ground water 50 percent of supply

Rated plant capacity: 0.8 Mgal/d
Pumpage: Year— 73.0 Mgal **Average daily—** 0.2 Mgal
Highest month: Not reported **Lowest month:** Not reported

Per capita use: 143 gal/d
Finished-water storage: 0.1 Mgal
Treatment: Chlorination, stabilization, softening

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.15 Mgal/d in 1956 to 0.6 Mgal/d in 1970 then decreased to 0.2 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-22-75
SAMPLING POINT: 02270900, Lake Sirena at Lake Placid

Silica (SiO_2)	.8	Dissolved solids (residue at 180°C)	102
Calcium (Ca)	8.5	Total hardness (as $CaCO_3$)	47
Magnesium (Mg)	6.2	Noncarbonate hardness (as $CaCO_3$)	42
Sodium (Na)	7.6	Alkalinity (as $CaCO_3$)	5
Potassium (K)	4.1	pH (units)	7.5
Strontium (Sr)	.3	Specific conductance (μmhos/cm at 25°C)	168
Bicarbonate (HCO_3)	6	Color (Pt-Co units)	.00
Sulfate (SO_4)	38	Temperature (°C)	32
Chloride (Cl)	13	Turbidity (JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.39		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.01		
Phosphorus, total (P)	.02		

LAKE PLACID

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-22-75
SAMPLING POINT: Lake Sirena at Lake Placid

Trace Elements

Arsenic (As)	0	Manganese (Mn)	10
Barium (Ba)	0	Mercury (Hg)	.0
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	<10	Zinc (Zn)	40
Copper (Cu)	1		
Iron (Fe)	10	pH(units)	7.5
Lead (Pb)	3	Temperature (°C)	32

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.26
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

LAKE WORTH

County: Palm Beach **Population served:** 34,200
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer, 14 wells, 90 to 250 feet deep; yield 392 to 1,461 gal/min

Rated plant capacity: 20 Mgal/d
Pumpage: Year— 2,098.75 Mgal **Average daily—** 5.75 Mgal
Highest month: April, 203.20 **Lowest month:** October, 150.80 Mgal

Per capita use: 168 gal/d
Finished-water storage: 5.9 Mgal
Treatment: Chlorination, coagulation, sedimentation, softening

Type/Frequency of analysis: Bacteriological/monthly; chemical/semiannually; color/daily

Sewage discharge: 3.80[a/] Mgal/d
Sewage treatment: Aeration[b/]

Waste discharged to: Atlantic Ocean

Remarks: Average daily pumpage increased from 3.50 Mgal/d in 1956 to 5.75 Mgal/d in 1975.
a/Includes 1.78 Mgal/d from Lantana, Palm Springs, Atlantis, South Palm Beach, and Palm Beach Junior College.
b/New process. Formerly reported comminution and chlorination.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6- 9-75
SAMPLING POINT: 263640080040601

Silica (SiO_2)	6.5	Dissolved solids (residue at 180°C)	296
Calcium (Ca)	82	Total hardness (as $CaCO_3$)	220
Magnesium (Mg)	2.6	Noncarbonate hardness (as $CaCO_3$)	42
Sodium (Na)	14	Alkalinity (as $CaCO_3$)	174
Potassium (K)	2.3	pH (units)	7.6
Strontium (Sr)	.56	Specific conductance (μmhos/cm at 25°C)	460
Bicarbonate (HCO_3)	212	Color (Pt-Co units)	35
Sulfate (SO_4)	32	Temperature (°C)	28
Chloride (Cl)	22	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.48		
Iron (Fe)	.04		
Phosphorus, total (P)	--		

LANTANA

County: Palm Beach **Population served:** 8,900
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer; 4 wells, 60 to 80 feet deep; yield 620 to 980 gal/min

Rated plant capacity: 4.0 Mgal/d
Pumpage: Year— 580.35 Mgal **Average daily—** 1.59 Mgal
Highest month: April, 59.0 Mgal **Lowest month:** July, 37.7 Mgal

Per capita use: 179 gal/d
Finished-water storage: 1.7 Mgal
Treatment: Aeration, sedimentation, filtration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical, color, turbidity/semiannually
Sewage discharge: 0.59 Mgal/d
Sewage treatment: a/

Waste discharged to: City of Lake Worth plant

Remarks: Average daily pumpage increased from 0.35 Mgal/d in 1956 to 1.59 Mgal/d in 1975.
a/ See Lake Worth (p. 207).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 263457080032201

Silica (SiO_2)	5.3	Dissolved solids (residue at 180°C)	242
Calcium (Ca)	74	Total hardness (as $CaCO_3$)	190
Magnesium (Mg)	1.7	Noncarbonate hardness (as $CaCO_3$)	28
Sodium (Na)	12	Alkalinity (as $CaCO_3$)	162
Potassium (K)	2.1	pH (units)	7.6
Strontium (Sr)	.62	Specific conductance (μmhos/cm at 25°C)	440
Bicarbonate (HCO_3)	198	Color (Pt-Co units)	5
Sulfate (SO_4)	30	Temperature (°C)	27
Chloride (Cl)	19	Turbidity (JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.34		
Iron (Fe)	.88		
Phosphorus, total (P)	--		

LAUDERDALE LAKES

County: Broward **Population served:** 24,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Broward County Utility Department
Source of water: Ground water, Biscayne aquifer; 5 wells, 100 to 150 feet deep; yield 1,010 to 2,600 gal/min

Rated plant capacity: 4.53 Mgal/d
Pumpage: Year— 1,095.0 Mgal **Average daily—** 3.5[a/] Mgal
Highest month: April, 136 Mgal **Lowest month:** September, 81 Mgal

Per capita use: 125 gal/d
Finished-water storage: 2.5 Mgal
Treatment: Aeration, chlorination, filtration, coagulation, flocculation, taste and odor control, fluoridation, algae control, clarification, sedimentation softening, stabilization
Type/Frequency of analysis: Bacteriological/monthly; chemical, color, turbidity/ daily; spectrographic/annually
Sewage discharge: 2.5 Mgal/d
Sewage treatment: Activated sludge, chlorination, drying, primary, secondary

Waste discharged to: Regional waste water treatment plant

Remarks: No chemical analysis available.
a/ Includes 0.15 Mgal/d commercial use.

LAUDERHILL

County: Broward **Population served:** 26,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 6 wells, 120 to 150 feet deep; yield 1,000 to 2,800 gal/min

Rated plant capacity: 11 Mgal/d
Pumpage: Year— 1,277.50 Mgal **Average daily—** 3.50[a/] Mgal
Highest month: April, 150.0 Mgal **Lowest month:** October, 77.5 Mgal

Per capita use: 135 gal/d
Finished-water storage: 4.25 Mgal
Treatment: Chlorination, filtration, fluoridation, softening, taste and odor control

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: 3.0 Mgal/d
Sewage treatment: Primary, secondary, chlorination, activated sludge, comminution, digestion, grit chambers

Waste discharged to: Canal to evaporation - percolation ponds. Dried sludge is land disposed.
Remarks:
a/ Includes 0.10 Mgal/d industrial use, 0.42 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 260909080130401, Lauderhill water plant

Silica (SiO_2)	9.4	Dissolved solids (residue at 180°C)	358
Calcium (Ca)	98	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	1.8	Noncarbonate hardness (as $CaCO_3$)	11
Sodium (Na)	15	Alkalinity (as $CaCO_3$)	239
Potassium (K)	.8	pH (units)	7.6
Strontium (Sr)	.7	Specific conductance (μmhos/cm at 25°C)	565
Bicarbonate (HCO_3)	291	Color (Pt-Co units)	110
Sulfate (SO_4)	12	Temperature (°C)	--
Chloride (Cl)	27	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	1.7		
Phosphorus, total (P)	--		

LEHIGH ACRES

County: Lee **Population served:** 13,500
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Lehigh Utilities, Inc.
Source of water: Ground water, sandstone aquifer in Tamiami Formation, 9 wells, 57 to 86 feet deep

Rated plant capacity: 1.8 Mgal/d
Pumpage: Year— 213.60 Mgal **Average daily—**0.59 Mgal
Highest month: March, 20.7 Mgal **Lowest month:** August, 15.1 Mgal

Per capita use: 44 gal/d
Finished-water storage: 1 Mgal
Treatment: Softening, aeration, filtration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical, color/daily

Sewage discharge: 0.58 Mgal/d
Sewage treatment: Contact stabilization, retention ponds

Waste discharged to: Retention ponds

Remarks: Average daily pumpage increased from 0.38 Mgal/d in 1970 to 0.59 Mgal/d in 1975. Service connections: domestic 4,037; undifferentiated 406. O'Donnell (1975, 1977).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 263624081380602, Lehigh Acres Water plant 2

Silica (SiO_2)	17	Dissolved solids (residue at 180°C)	486
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	330
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	30
Sodium (Na)	41	Alkalinity (as $CaCO_3$)	302
Potassium (K)	1.3	pH (units)	7.7
Strontium (Sr)	.45	Specific conductance (μmhos/cm at 25°C)	835
Bicarbonate (HCO_3)	368	Color (Pt-Co units)	35
Sulfate (SO_4)	10	Temperature (°C)	--
Chloride (Cl)	76	Turbidity(JTU)	2
Fluoride (F)	.2	Carbon, organic, total (C)	8
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01	SAR	.84
Nitrogen, organic (N)	.35		
Nitrogen (ammonia, total (NH_4-N))	.42		
Iron (Fe)	--		
Phosphorus, total (P)	.02		

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 263624081380602, Water Plant 2

Aluminum (Al)	0	Lead (Pb)	1
Arsenic (As)	2	Lithium (Li)	1
Barium (Ba)	--	Manganese (Mn)	10
Boron (B)	--	Mercury (Hg)	.1
Cadmium (Cd)	1	Molybdenum (Mo)	0
Chromium (Cr)	0	Nickel (Ni)	1
Chromium (Cr^{+6})	0	pH(units)	7.1
Cobalt (Co)	0	Selenium (Se)	--
Specific conductance (umhos/cm at 25°C)	830	Vanadium (V)	1.3
Copper (Cu)	0	Temperature (°C)	25.5
Iron (Fe)	220	Zinc (Zn)	8

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: 263624081380601, Lehigh Acres Water Plant 1 well

Silica (SiO_2)	18	Dissolved solids (residue at 180°C)	786
Calcium (Ca)	130	Total hardness (as $CaCO_3$)	430
Magnesium (Mg)	24	Noncarbonate hardness (as $CaCO_3$)	130
Sodium (Na)	110	Alkalinity (as $CaCO_3$)	301
Potassium (K)	2.4	pH (units)	7.7
Strontium (Sr)	5.2	Specific conductance (μmhos/cm at 25°C)	1300
Bicarbonate (HCO_3)	367	Color (Pt-Co units)	20
Sulfate (SO_4)	68	Temperature (°C)	---
Chloride (Cl)	220	Turbidity(JTU)	5
Fluoride (F)	.2	Carbon, organic, total (C)	5
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.32		
Nitrogen (ammonia, total (NH_4-N))	.32		
	.5		
Iron (Fe)	.43		
Phosphorus, total (P)	.02		

LEHIGH ACRES

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-20-75
SAMPLING POINT: Lehigh Acres Water Plant 1 well

Aluminum (Al)	0	Lead (Pb)	8
Arsenic (As)	2	Lithium (Li)	4
Barium (Ba)	0	Manganese (Mn)	10
Boron (B)	--	Mercury (Hg)	.1
Cadmium (Cd)	1	Molybdenum (Mo)	1
Chromium (Cr)	0	Nickel (Ni)	1
Chromium (Cr^{+6})	0	pH(units)	7.2
Cobalt (Co)	0	Selenium (Se)	--
Specific conductance (umhos/cm at 25°C)	1280	Vanadium (V)	6.7
		Temperature (°C)	25
Copper (Cu)	0	Zinc (Zn)	5
Iron (Fe)	520		

MANATEE COUNTY WATER SYSTEM

County: Manatee **Population served:** 55,000
River basin: Little Manatee River Basin (10 02 03)

Ownership of supply or system: Manatee County
Source of water: Surface water, Manatee River

Rated plant capacity: 27 Mgal/d
Pumpage: Year— 3,613.5 Mgal **Average daily—**9.9[a/] Mgal
Highest month: May, 418.50 Mgal **Lowest month:** August, 261.49 Mgal

Per capita use: 180 gal/d
Finished-water storage: Not reported
Treatment: Not reported

Type/Frequency of analysis: Not reported

Sewage discharge: 4.5[b/] Mgal/d
Sewage treatment: Not reported

Waste discharged to: Not reported

Remarks: County system supplies all water to: Palmetto; Holmes Beach; Longboat Key; Anna Maria; Bradenton Beach. City of Bradenton partially supplied by the Manatee County Water System (p. 173).

a/ Additional 6.0 Mgal/d supplied for industrial use (Borden Chemical Co.)
b/ New 9 Mgal/d sewage treatment plant in operation, November 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 272935082212000, Lake Manatee, raw intake SE

Silica (SiO_2)	1.6	Dissolved solids (residue at 180°C)	138
Calcium (Ca)	15	Total hardness (as $CaCO_3$)	72
Magnesium (Mg)	8.3	Noncarbonate hardness (as $CaCO_3$)	36
Sodium (Na)	8	Alkalinity (as $CaCO_3$)	36
Potassium (K)	3	pH (units)	7.0
Strontium (Sr)	.65	Specific conductance (μmhos/cm at 25°C)	198
Bicarbonate (HCO_3)	44	Color (Pt-Co units)	60
Sulfate (SO_4)	31	Temperature (°C)	--
Chloride (Cl)	14	Turbidity(JTU)	5
Fluoride (F)	.4	Carbon, organic, total (C)	9
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.11
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.01		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.08		
Phosphorus, total (P)	.16		

MANATEE COUNTY WATER SYSTEM

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 272935082212000, Lake Manatee, raw intake SE

Trace Elements

Arsenic (As)	0	Manganese (Mn)	30
Barium (Ba)	0	Mercury (Hg)	.0
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	20	Zinc (Zn)	10
Copper (Cu)	5		
Iron (Fe)	730	pH(units)	7.4
Lead (Pb)	12	Temperature (°C)	30

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.00
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

MARGATE

County: Broward **Population served:** 25,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer, 8 wells, average 100 feet deep; yield 800 to 1,500 gal/min.

Rated plant capacity: 10 Mgal/d
Pumpage: **Year**—2,190.0 Mgal **Average daily**— 6.0[a] Mgal
Highest month: April, 203 Mgal **Lowest month:** June, 135 Mgal

Per capita use: 240 gal/d
Finished-water storage: 3 Mgal
Treatment: Chlorination, clarification, filtration, softening, pH control

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 3.5 Mgal/d
Sewage treatment: Activated sludge, chlorination, comminution, filtration, grit chamber, settling, primary, secondary.

Waste discharged to: Ground, deep injection well (3,300 feet deep)

Remarks: Water supplied to Collier County (partial) and Coconut Creek south of Parkway.

a/ Includes 0.12 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 261424080124402

Silica (SiO_2)	10	Dissolved solids (residue at 180°C)	480
Calcium (Ca)	130	Total hardness (as $CaCO_3$)	340
Magnesium (Mg)	2.3	Noncarbonate hardness (as $CaCO_3$)	42
Sodium (Na)	30	Alkalinity (as $CaCO_3$)	297
Potassium (K)	.9	pH (units)	7.7
Strontium (Sr)	1.6	Specific conductance (μmhos/cm at 25°C)	765
Bicarbonate (HCO_3)	363	Color (Pt-Co units)	35
Sulfate (SO_4)	28	Temperature (°C)	--
Chloride (Cl)	53	Turbidity (JTU)	--
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.53		
Iron (Fe)	.47		
Phosphorus, total (P)	--		

MIAMI

County: Dade **Population served:** 1,210,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Miami-Dade Water and Sewer Authority
Source of water: Ground water, Biscayne aquifer, 50 wells, 55 to 110 feet deep; yield 4,000 to 7,000 gal/min. Three plants (well fields) Orr, Preston, and Hialeah.
Rated plant capacity: 230 Mgal/d (3 plants)
Pumpage: **Year—** 68,875.5 Mgal **Average daily—** 188.7 Mgal
Highest month: April, 6,393 Mgal **Lowest month:** February, 5,341.3 Mgal

Per capita use: 156 gal/d
Finished-water storage: 33 Mgal
Treatment: Chlorination, filtration, stabilization, fluoridation, softening, recarbonation and pH control

Type/Frequency of analysis: Bacteriological, color, turbidity/weekly[a/]; Pesticides, herbicides, radio-chemical, nutrients/semiannually
Sewage discharge: 64.7 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, digestion, grit chambers, primary, secondary.

Waste discharged to: Atlantic Ocean

Remarks: Water supplied to Bay Harbor Islands, Coral Gables, Hialeah, El Portal Key Biscayne, Miami Shores, Medley, Indian Creek Village, Miami International Airport, Miami Springs, North Bay Village, South Miami, Surfside, Virginia Gardens, Sweetwater, West Miami, parts of unincorporated areas in Dade Co. (fig. 26). Total yearly pumpage 1940-75 is shown on fig. 27. Leach and others (1972).
a/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 254950080171201, Preston Water Plant

Silica (SiO_2)	7	Dissolved solids (residue at 180°C)	394
Calcium (Ca)	90	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	5.4	Noncarbonate hardness (as $CaCO_3$)	27
Sodium (Na)	38	Alkalinity (as $CaCO_3$)	223
Potassium (K)	3	pH (units)	7.6
Strontium (Sr)	.87	Specific conductance (μmhos/cm at 25°C)	663
Bicarbonate (HCO_3)	272	Color (Pt-Co units)	55
Sulfate (SO_4)	28	Temperature (°C)	--
Chloride (Cl)	57	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)			
Nitrogen (ammonia, total (NH_4-N))	1.1		
Iron (Fe)	1.1		
Phosphorus, total (P)	.90		
	--		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 254231080201001, Orr Water Plant

Silica (SiO_2)	4.3	Dissolved solids (residue at 180°C)	322
Calcium (Ca)	92	Total hardness (as $CaCO_3$)	240
Magnesium (Mg)	3.2	Noncarbonate hardness (as $CaCO_3$)	28
Sodium (Na)	16	Alkalinity (as $CaCO_3$)	212
Potassium (K)	1.7	pH (units)	7.5
Strontium (Sr)	.74	Specific conductance (μmhos/cm at 25°C)	540
Bicarbonate (HCO_3)	259	Color (Pt-Co units)	5
Sulfate (SO_4)	28	Temperature (°C)	--
Chloride (Cl)	25	Turbidity	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.25	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.03		
Phosphorus, total (P)	--		

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 261044080092001, Prospect Water Plant

Silica (SiO_2)	9.7	Dissolved solids (residue at 180°C)	388
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	2.8	Noncarbonate hardness (as $CaCO_3$)	15
Sodium (Na)	19	Alkalinity (as $CaCO_3$)	245
Potassium (K)	1.5	pH (units)	7.4
Strontium (Sr)	.78	Specific conductance (μmhos/cm at 25°C)	619
Bicarbonate (HCO_3)	299	Color (Pt-Co units)	45
Sulfate (SO_4)	26	Temperature (°C)	--
Chloride (Cl)	33	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.63		
Iron (Fe)	1.8		
Phosphorus, total (P)	--		

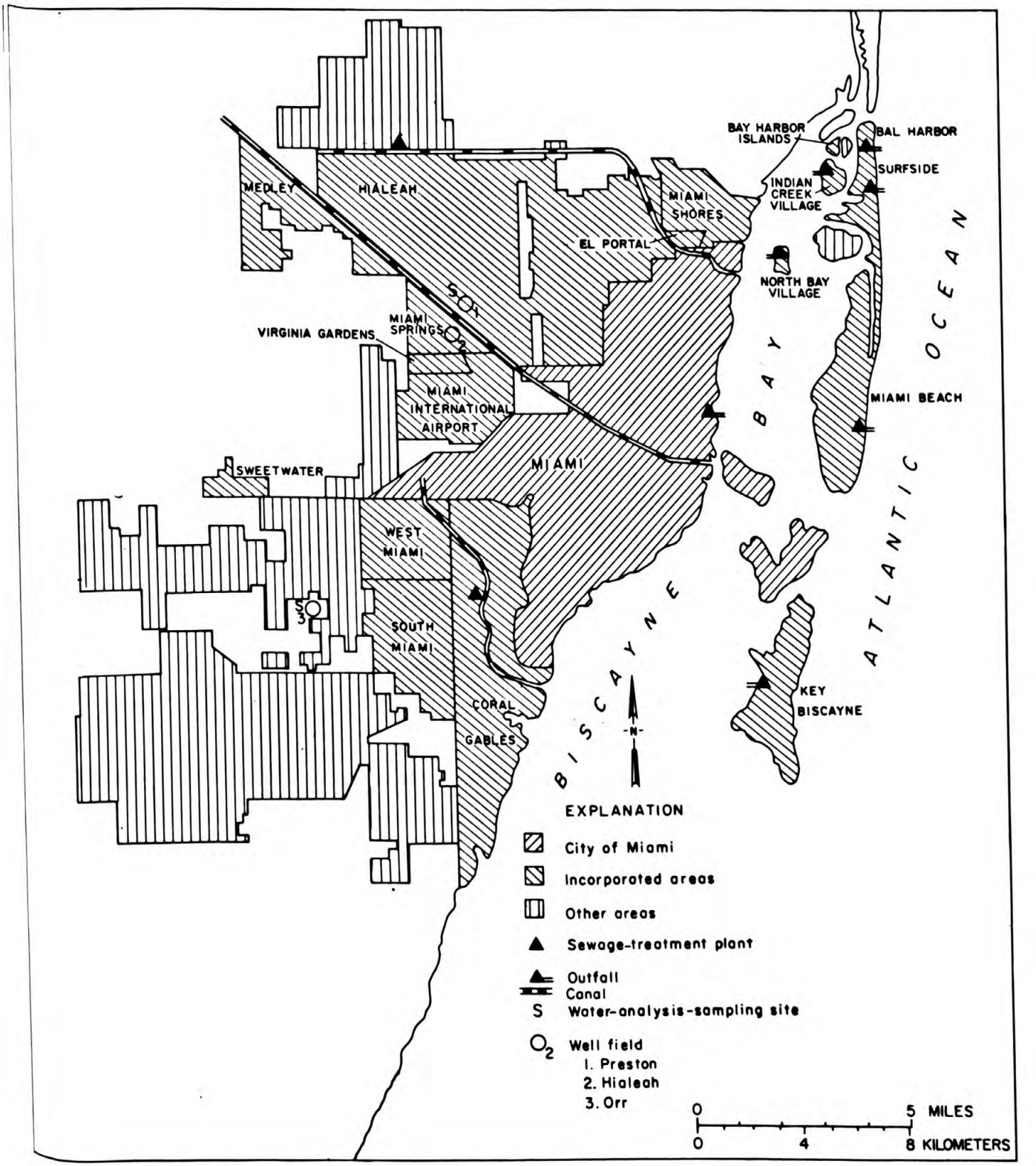

Figure 26.--Municipalities served by the Miami-Dade Water and Sewer Authority.

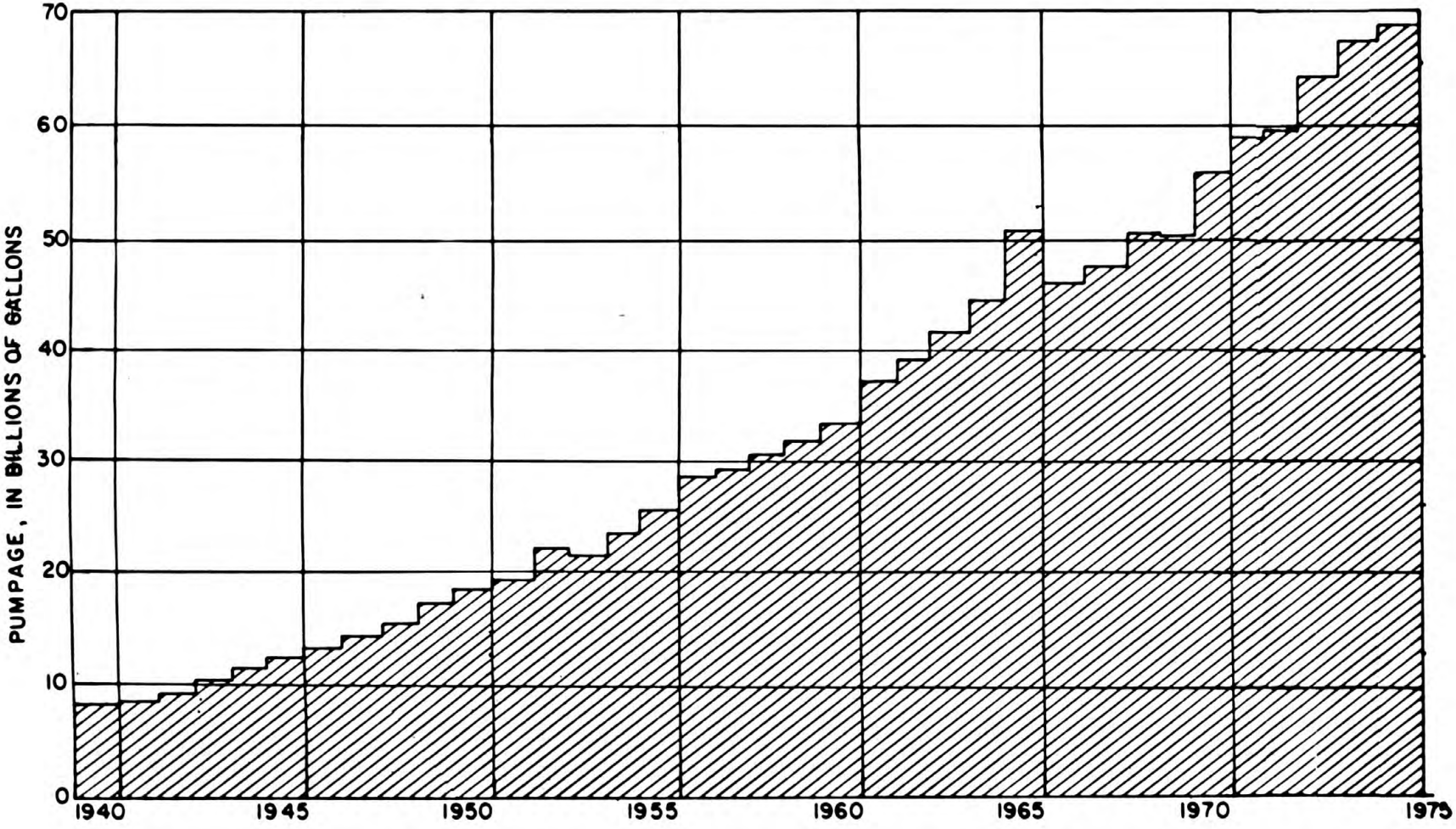

Figure 27.--Total yearly pumpage, Miami-Dade Water and Sewer Authority.

MIRAMAR

County: Broward **Population served:** 33,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 9 wells, 110 to 120 feet deep; yield 400 to 1,250 gal/min.

Rated plant capacity: 6.3 Mgal/d
Pumpage: Year— 1,277.50 Mgal **Average daily—**3.50 Mgal
Highest month: March, 94.8 Mgal **Lowest month:** September, 69.9 Mgal

Per capita use: 106 gal/d
Finished-water storage: 1.57 Mgal
Treatment: Chlorination, coagulation, filtration, softening

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 3.25 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, drying, filtration, grit chamber, primary, secondary, settling, polishing pond.

Waste discharged to: Aeration ponds, Turnpike Canal, Snake Creek Canal. Dried sludge is land disposed.
Remarks: Average daily pumpage increased from 0.06 Mgal/d in 1956 to 3.50 Mgal/d in 1975. Septic tanks in use. Sherwood and others (1973).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 255918080131701, Mirimar Water Plant

Silica (SiO_2)	8.3	Dissolved solids (residue at 180°C)	350
Calcium (Ca)	94	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	5.2	Noncarbonate hardness (as $CaCO_3$)	30
Sodium (Na)	14	Alkalinity (as $CaCO_3$)	230
Potassium (K)	1.3	pH (units)	7.8
Strontium (Sr)	.79	Specific conductance (μmhos/cm at 25°C)	549
Bicarbonate (HCO_3)	280	Color (Pt-Co units)	80
Sulfate (SO_4)	22	Temperature (°C)	--
Chloride (Cl)	22	Turbidity(JTU)	--
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	1.0		
Iron (Fe)	1.2		
Phosphorus, total (P)	--		

MOORE HAVEN

County: Glades **Population served:** 1,200
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer in Tamiami Formation; four wells, 85 to 110 feet deep; yield to 100 gal/min

Rated plant capacity: 0.6 Mgal/d
Pumpage: Year—52.93 Mgal **Average daily**— 0.14[a/] Mgal
Highest month: December, 6.90 Mgal **Lowest month:** May, 3.68 Mgal

Per capita use: 117 gal/d
Finished-water storage: 0.1 Mgal
Treatment: Aeration, chlorination, filtration, softening, taste and odor control, stabilization, pH control, algae control, anti-precipitation and corrosion control

Type/Frequency of analysis: Bacteriological/monthly; chemical/intermittently

Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage increased from 0.09 Mgal/d in 1956 to 0.16 Mgal/d in 1970. During 1970-75, pumpage decreased 0.02 Mgal/d.

a/ Includes 0.02 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-22-75
SAMPLING POINT: 265030081053001

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	674
Calcium (Ca)	120	Total hardness (as $CaCO_3$)	350
Magnesium (Mg)	13	Noncarbonate hardness (as $CaCO_3$)	58
Sodium (Na)	56	Alkalinity (as $CaCO_3$)	292
Potassium (K)	6	pH (units)	6.8
Strontium (Sr)	1	Specific conductance (μmhos/cm at 25°C)	1,040
Bicarbonate (HCO_3)	326	Color (Pt-Co units)	120
Sulfate (SO_4)	110	Temperature (°C)	--
Chloride (Cl)	71	Turbidity(JTU)	5
Fluoride (F)	.3	Carbon, organic, total (C)	23
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.8		
Nitrogen (ammonia, total (NH_4-N))	2.0		
Iron (Fe)	1.2		
Phosphorus, total (P)	.04		

NAPLES

County: Collier
Population served: 45,192
River basin: Big Cypress Swamp and southwestern coastal area (09 02 04)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow sand aquifers, 41 wells, 60 to 100 feet deep; yield 350 gal/min

Rated plant capacity: 23 Mgal/d
Pumpage: **Year**—3,624.79 Mgal
Average daily— 9.98[a/] Mgal
Highest month: March, 383 Mgal
Lowest month: September, 207 Mgal

Per capita use: 220 gal/d
Finished-water storage: 5.75 Mgal
Treatment: Chlorination, softening, coagulation, filtration, sedimentation, stabilization, flocculation, fluoridation

Type/Frequency of analysis: Bacteriological/weekly; chemical, spectrographic, color, turbidity/quarterly
Sewage discharge: 2.9 Mgal/d
Sewage treatment: Activated sludge, extended aeration, chlorination, drying, clarification, polishing pond, comminution, digestion, grit chambers, settling, skimming
Waste discharged to: Polishing ponds, Naples Bay

Remarks: Average daily pumpage increased from 0.70 Mgal/d in 1956 to 9.93 Mgal/d in 1975. Total service connections, 12,912. City supplied water to North Naples, East Naples, and Lely Estates. Klein (1972), McCoy (1972, 1973, 1974, 1975).

a/ Includes 2.5 Mgal/d, lawn sprinkling, 0.025 Mgal/d each industrial, commercial, and air conditioning use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-5-75
SAMPLING POINT: 261002081475201, Naples Water Plant

Silica (SiO_2)	11	Dissolved solids (residue at 180°C)	586
Calcium (Ca)	120	Total hardness (as $CaCO_3$)	340
Magnesium (Mg)	9	Noncarbonate hardness (as $CaCO_3$)	110
Sodium (Na)	63	Alkalinity (as $CaCO_3$)	231
Potassium (K)	2	pH (units)	7.6
Strontium (Sr)	.31	Specific conductance (μmhos/cm at 25°C)	927
Bicarbonate (HCO_3)	281	Color (Pt-Co units)	25
Sulfate (SO_4)	47	Temperature (°C)	25
Chloride (Cl)	130	Turbidity(JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.43		
Iron (Fe)	.38		
Phosphorus, total (P)	--		

NORTH FT. MYERS
(WATERWAY ESTATES)

County: Lee **Population served:** 5,300
River basin: Caloosahatchee River (09 02 05)

Ownership of supply or system: Florida Cities Water Company
Source of water: Ground water, water-table aquifer, 6 wells, 20 to 49 feet deep; yield 20 gal/min each well; aquifer in the Hawthorn Formation; 3 wells, 119 to 236 feet deep
Rated plant capacity: 0.7 Mgal/d
Pumpage: Year— 176.30 Mgal **Average daily—** 0.48 Mgal
Highest month: April, 18.4 Mgal **Lowest month:** August, 11.9 Mgal

Per capita use: 91 gal/d
Finished-water storage: 0.17 Mgal
Treatment: Aeration, chlorination, filtration, sedimentation, softening, coagulation, stabilization

Type/Frequency of analysis: Bacteriological/biweekly; chemical/daily; fecal coliforms, total solids, BOD/quarterly
Sewage discharge: 0.32 Mgal/d
Sewage treatment: Activated sludge, chlorination, aeration, digestion, settling

Waste discharged to: Pond to Caloosahatchee River

Remarks: Service connections: domestic, 1,515; commercial, 30. Boggess (1970), O'Donnell (1977).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 8-11-75
SAMPLING POINT: 263857081550201, composite, Waterway Estates Plant, Raw water intake

Silica (SiO_2)	14	Dissolved solids (residue at 180°C)	506
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	310
Magnesium (Mg)	14	Noncarbonate hardness (as $CaCO_3$)	86
Sodium (Na)	44	Alkalinity (as $CaCO_3$)	222
Potassium (K)	1.5	pH (units)	7.0
Strontium (Sr)	.41	Specific conductance (μmhos/cm at 25°C)	760
Bicarbonate (HCO_3)	271	Color (Pt-Co units)	75
Sulfate (SO_4)	35	Temperature (°C)	27.5
Chloride (Cl)	91	Turbidity(JTU)	8
Fluoride (F)	.4	Carbon, organic, total (C)	7
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.04
Nitrite (NO_2-N)	.00	SAR	1.1
Nitrogen, organic (N)	.4		
Nitrogen (ammonia, total (NH_4-N))	.27		
Iron (Fe)	.94		
Phosphorus, total (P)	.04		

NORTH FT. MYERS
(WATERWAY ESTATES)

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey
SAMPLING POINT: Raw water intake
COLLECTION DATE: 8-11-75

Aluminum (Al)	20	Lead (Pb)	12
Arsenic (As)	0	Lithium (Li)	4
Barium (Ba)	100	Manganese (Mn)	10
Baron (B)	90	Mercury (Hg)	.1
Cadmium (Cd)	1	Molybdenum (Mo)	0
Chromium (Cr)	1	Nickel (Ni)	0
Chromium (Cr^{+6})	0	pH(units)	7
Cobalt (Co)	0	Selenium (Se)	0
Specific conductance (umhos/cm at 25°C)	--	Vanadium (V)	6.9
		Temperature (°C)	27.5
Copper (Cu)	1	Zinc (Zn)	10
Iron (Fe)	--		
Carbon Dioxide	43		

NORTH MIAMI

County: Dade **Population served:** 65,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 15 wells, 50 to 100 feet deep; (1) Eastside plant and (2) westside plant; total yield about 9,230 gal/min
Rated plant capacity: 10 Mgal/d
Pumpage: **Year**—4,131.80 Mgal **Average daily**— 11.32 Mgal
Highest month: (1) May, 187.27 Mgal **Lowest month:** (1) June 150.0 Mgal
(2) March, 208.0 Mgal (2) July, 170.5 Mgal
Per capita use: 174 gal/d
Finished-water storage: 1.66 Mgal
Treatment: Aeration, chlorination, softening, coagulation, filtration, fluoridation

Type/Frequency of analysis: Bacteriological/weekly; chemical/hourly; photometric/daily
Sewage discharge: 33.3[a/] Mgal/d
Sewage treatment: Primary

Waste discharged to: Ocean

Remarks: Average daily pumpage increased from 4.50 Mgal/d in 1956 to 11.32 Mgal/d in 1975.

a/ Includes sewage discharge from North Miami Beach.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 255306080150401, West Side Plant

Silica (SiO_2)	5.5	Dissolved solids (residue at 180°C)	334
Calcium (Ca)	92	Total hardness (as $CaCO_3$)	240
Magnesium (Mg)	2.7	Noncarbonate hardness (as $CaCO_3$)	32
Sodium (Na)	20	Alkalinity (as $CaCO_3$)	208
Potassium (K)	2.6	pH (units)	7.8
Strontium (Sr)	.75	Specific conductance (μmhos/cm at 25°C)	572
Bicarbonate (HCO_3)	254	Color (Pt-Co units)	35
Sulfate (SO_4)	42	Temperature (°C)	--
Chloride (Cl)	29	Turbidity (JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.23		
Iron (Fe)	1.2		
Phosphorus, total (P)	--		

NORTH MIAMI BEACH

County: Dade **Population served:** 165,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 36 wells, 50 to 141 feet deep; Total yield 33,720 gal/min. three water plants and well fields: (1) Myrtle Grove; (2) Norwood (Oeffler); (3) Sunny Isles
Rated plant capacity: 29.6 Mgal/d
Pumpage: **Year**—9,176.10 Mgal **Average daily**— 25.14[a/] Mgal
Highest month: (1) May, 174 [b/] Mgal **Lowest month:** (1) January, 84.3 Mgal
(2) March, 361.7 Mgal (2) August, 211.4 Mgal
Per capita use: 152 gal/d
Finished-water storage: 6.2 Mgal
Treatment: Chlorination, filtration, coagulation, softening, recarbonation, sedimentation

Type/Frequency of analysis: Bacteriological/monthly; chemical/daily; spectrographic annually
Sewage discharge: Unmetered
Sewage treatment:[c/]

Waste discharged to: North Miami sewer system

Remarks: Average daily pumpage increased from 2.80 Mgal.d in 1956 to 25.14 Mgal/d in 1975.
a/ Pumpage: Myrtle Grove, 5.09 Mgal/d; Norwood, 9.19 Mgal/d; Sunny Isles, 10.86 Mgal/d.
b/ Highest (3) April, 373.2 Mgal. Lowest (3) October, 304.4 Mgal.
c/ No treatment by North Miami Beach.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 255710080124902, Norwood Water Plant

Silica (SiO_2)	7	Dissolved solids (residue at 180°C)	330
Calcium (Ca)	92	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	4.1	Noncarbonate hardness (as $CaCO_3$)	35
Sodium (Na)	22	Alkalinity (as $CaCO_3$)	215
Potassium (K)	2.2	pH (units)	7.6
Strontium (Sr)	.45	Specific conductance (μmhos/cm at 25°C)	549
Bicarbonate (HCO_3)	262	Color (Pt-Co units)	55
Sulfate (SO_4)	26	Temperature (°C)	--
Chloride (Cl)	32	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.41		
Iron (Fe)	.47		
Phosphorus, total (P)	--		

NORTH MIAMI BEACH

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 255521080092502, Sunny Isles Water Plant

Silica (SiO_2)	7	Dissolved solids (residue at 180°C)	366
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	4	Noncarbonate hardness (as $CaCO_3$)	40
Sodium (Na)	24	Alkalinity (as $CaCO_3$)	230
Potassium (K)	.7	pH (units)	7.6
Strontium (Sr)	.36	Specific conductance (µmhos/cm at 25°C)	613
Bicarbonate (HCO_3)	281	Color (Pt-Co units)	55
Sulfate (SO_4)	32	Temperature (°C)	--
Chloride (Cl)	37	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.70		
Iron (Fe)	1.1		
Phosphorus, total (P)	--		

NORTH PALM BEACH

County: Palm Beach **Population served:** 22,700
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Palm Beach County Utilities, Inc.
Source of water: Ground water, Biscayne aquifer; 17 wells, 60 to 196 feet deep; yield 300 to 700 gal/min. Two well fields

Rated plant capacity: 9 Mgal/d
Pumpage: Year—1,850.55 Mgal **Average daily**—5.07 Mgal
Highest month: August, 207.1 Mgal **Lowest month:** June, 119.2 Mgal

Per capita use: 223 gal/d
Finished-water storage: 1.55 Mgal
Treatment: Aeration, coagulation, filtration, sedimentation, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/semiannually; chemical (partial analysis), color, turbidity/daily
Sewage discharge: 3.1 Mgal/d
Sewage treatment: Secondary

Waste discharged to: Earman River

Remarks: Average daily pumpage increased from 3.78 Mgal/d in 1970 to 5.07 Mgal/d in 1975. Water supplies to Juno Isles, Lake Park, Lost Tree Village. Treats part of Lake Park sewage.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 264850080045701

Silica (SiO_2)	13	Dissolved solids (residue at 180°C)	408
Calcium (Ca)	98	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	6.1	Noncarbonate hardness (as $CaCO_3$)	10
Sodium (Na)	36	Alkalinity (as $CaCO_3$)	260
Potassium (K)	1.2	pH (units)	7.4
Strontium (Sr)	1.4	Specific conductance (μmhos/cm at 25°C)	650
Bicarbonate (HCO_3)	317	Color (Pt-Co units)	30
Sulfate (SO_4)	5.4	Temperature (°C)	25.5
Chloride (Cl)	60	Turbidity(JTU)	--
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	1.2		
Iron (Fe)	.2		
Phosphorus, total (P)	--		

NORTH PORT CHARLOTTE

County: Sarasota
River basin: Myakka River (10 01 02)

Population served: 5,000

Ownership of supply or system: General Development Utilities, Inc.
Source of water: Surface water, Myakka-Hatchee River (Big Slough)

Rated plant capacity: 4.4 Mgal/d
Pumpage: **Year**—359.11 Mgal
Highest month: April, 53.53 Mgal

Average daily— 0.98[a/] Mgal
Lowest month: August, 18.87 Mgal

Per capita use: 196 gal/d
Finished-water storage: 0.2 Mgal
Treatment: Chlorination, softening, coagulation, filtration, taste and odor control, pH control

Type/Frequency of analysis: Bacteriological/weekly, chemical/monthly[b/]; Bacteriological/bimonthly[c/]
Sewage discharge: 0.37 Mgal/d
Sewage treatment: Contact stabilization, polishing ponds

Waste discharged to: Drainfield, irrigation system

Remarks: Average daily pumpage increased from 0.25 Mgal/d in 1970 to 0.98 Mgal/d in 1975. Water supplied to Harbor Cove Trailer Park and El Jobean. Sutcliffe (1975).

a/ Includes 0.132 Mgal/d commercial use 0.094 Mgal/d other public supply.
b/ Treated water.
c/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: 270242082142401, composite raw water

Silica (SiO_2)	3	Dissolved solids (residue at 180°C)	420
Calcium (Ca)	64	Total hardness (as $CaCO_3$)	210
Magnesium (Mg)	12	Noncarbonate hardness (as $CaCO_3$)	110
Sodium (Na)	37	Alkalinity (as $CaCO_3$)	94
Potassium (K)	1.2	pH (units)	7.7
Strontium (Sr)	.92	Specific conductance (μmhos/cm at 25°C)	639
Bicarbonate (HCO_3)	115	Color (Pt-Co units)	75
Sulfate (SO_4)	99	Temperature (°C)	--
Chloride (Cl)	68	Turbidity (JTU)	25
Fluoride (F)	.4	Carbon, organic, total (C)	9
Nitrate (NO_3-N)	.04	Orthophosphate total (PO_4-P)	.12
Nitrite (NO_2-N)	.02		
Nitrogen, organic (N)	.87		
Nitrogen (ammonia, total (NH_4-N))	.16		
Iron (Fe)	.14		
Phosphorus, total (P)	.15		

NORTH PORT CHARLOTTE

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: Composite raw water

Trace Elements

Arsenic (As)	3	Manganese (Mn)	10
Barium (Ba)	0	Mercury (Hg)	.1
Cadmium (Cd)	1	Selenium (Se)	0
Chromium (Cr)	<10	Zinc (Zn)	180
Copper (Cu)	78		
Iron (Fe)	950	pH(units)	--
Lead (Pb)	4	Temperature (°C)	--

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.02
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

OAKLAND PARK

County: Broward **Population served:** 29,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: All water purchased from Ft. Lauderdale Five Ash water plant; ground water, Biscayne aquifer

Rated plant capacity: a/
Pumpage: **Year**—1,277.50 Mgal **Average daily**— 3.50 b/ Mgal
Highest month: Not reported **Lowest month:** Not reported

Per capita use: 121 gal/d
Finished-water storage: a/
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 3.2 Mgal/d
Sewage treatment: Aeration, chlorination, activated sludge, clarification, filtration, drying, settling, primary, secondary

Waste discharged to: Canal C-14 (Middle River). Sludge is vacuum dried and land disposed
Remarks: Average daily pumpage increased from 0.16 Mgal/d in 1956 to 3.50 Mgal/d in 1975. City supplies water to North Andrews and Prospect Gardens. For chemical analysis of water supplied, see Ft. Lauderdale.

a/ See Ft. Lauderdale (p. 187).
b/ Includes 1.05 Mgal/d commercial use.

OKEECHOBEE

County: Okeechobee **Population served:** 8,225
River basin: Taylor Creek and inflow to Lake Okeechobee from north (09 01 02)
Ownership of supply or system: Municipal
Source of water: Surface water, Lake Okeechobee

Rated plant capacity: 2.88 Mgal/d
Pumpage: Year—380.44 Mgal **Average daily**— 1.04[a/] Mgal
Highest month: April, 37.6 Mgal **Lowest month:** July, 27.8 Mgal

Per capita use: 126 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Aeration, chlorination, clarification, coagulation, filtration, flocculation, pH control, sedimentation, softening

Type/Frequency of analysis: Bacteriological/monthly; chemical, color, turbidity/ daily
Sewage discharge: 0.12 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, clarification, contact stabilization, diffused air, digestion, grit chambers, settling, primary, secondary
Waste discharged to: Taylor Creek

Remarks: Average daily pumpage increased from 0.26 Mgal/d in 1956 to 1.04 Mgal/d in 1975. Water supplied to Okeechobee Beach Water Association.

a/ Includes 0.104 Mgal/d commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-22-75
SAMPLING POINT: 02276400

Silica (SiO_2)	1.3	Dissolved solids (residue at 180°C)	294
Calcium (Ca)	32	Total hardness (as $CaCO_3$)	130
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	46
Sodium (Na)	37	Alkalinity (as $CaCO_3$)	84
Potassium (K)	3.4	pH (units)	8.5
Strontium (Sr)	.96	Specific conductance (µmhos/cm at 25°C)	450
Bicarbonate (HCO_3)	102	Color (Pt-Co units)	110
Sulfate (SO_4)	39	Temperature (°C)	30
Chloride (Cl)	58	Turbidity(JTU)	7
Fluoride (F)	.4	Carbon, organic, total (C)	21
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.4		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.02		
Phosphorus, total (P)	.04		

OKEECHOBEE

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-22-75
SAMPLING POINT: 02276400

Trace Elements

Arsenic (As)	1	Manganese (Mn)	10
Barium (Ba)	0	Mercury (Hg)	.1
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	<10	Zinc (Zn)	30
Copper (Cu)	2		
Iron (Fe)	200	pH(units)	8.5
Lead (Pb)	1	Temperature (°C)	30

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.16
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

OPA-LOCKA

County: Dade **Population served:** 16,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer, 6 wells, 50 to 100 feet deep; total yield 4,750 gal/min

Rated plant capacity: 2.5 Mgal/d
Pumpage: **Year**—1,200.85 Mgal **Average daily**— 3.29 Mgal
Highest month: October, 120.9 Mgal **Lowest month:** January, 84.6 Mgal

Per capita use: 206 gal/d
Finished-water storage: 0.9 Mgal
Treatment: Aeration, chlorination, softening, coagulation, filtration, stabilization, taste and odor control

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 1.5 Mgal/d
Sewage treatment: Chlorination

Waste discharged to: Ocean outfall, North Miami

Remarks: Average daily pumpage increased from 0.75 Mgal/d in 1956 to 3.29 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 255403080150001, Opa-Locka Water Plant

Silica (SiO_2)	8.7	Dissolved solids (residue at 180°C)	392
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	6	Noncarbonate hardness (as $CaCO_3$)	48
Sodium (Na)	28	Alkalinity (as $CaCO_3$)	222
Potassium (K)	2	pH (units)	7.7
Strontium (Sr)	.45	Specific conductance (μmhos/cm at 25°C)	637
Bicarbonate (HCO_3)	271	Color (Pt-Co units)	45
Sulfate (SO_4)	70	Temperature (°C)	--
Chloride (Cl)	36	Turbidity (JTU)	--
Fluoride (F)	.8	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.03	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.72		
Iron (Fe)	.9		
Phosphorus, total (P)	--		

PAHOKEE

County: Palm Beach **Population served:** 9,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Surface water, Lake Okeechobee

Rated plant capacity: 1.8 Mgal/d
Pumpage: **Year**—303.68 Mgal **Average daily**— 0.83 Mgal
Highest month: December 28.3 Mgal **Lowest month:** February, 22.4 Mgal

Per capita use: 92 gal/d
Finished-water storage: 0.4 Mgal
Treatment: Aeration, coagulation, sedimentation, filtration, chlorination, taste and odor control

Type/Frequency of analysis: Bacteriological/monthly; chemical/biannually; color/daily[a]; color/monthly[b]
Sewage discharge: 0.7 Mgal/d
Sewage treatment: Secondary, digestion, polishing pond

Waste discharged to: Polishing pond to canal to Lake Okeechobee, when drainage pumps are operating.
Remarks: Average daily pumpage increased from 0.45 Mgal/d in 1956 to 0.83 Mgal/d in 1975. Water supplied to Canal Point, Pahokee Housing Authority, and Streamline Camp.

a/ Treated water. b/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 26492708039580, intake from Lake Okeechobee

Silica (SiO_2)	6.6	Dissolved solids (residue at 180°C)	442
Calcium (Ca)	52	Total hardness (as $CaCO_3$)	205
Magnesium (Mg)	18	Noncarbonate hardness (as $CaCO_3$)	59
Sodium (Na)	59	Alkalinity (as $CaCO_3$)	146
Potassium (K)	4.8	pH (units)	8.3
Strontium (Sr)	1.3	Specific conductance (μmhos/cm at 25°C)	690
Bicarbonate (HCO_3)	178	Color (Pt-Co units)	45
Sulfate (SO_4)	64	Temperature (°C)	30
Chloride (Cl)	89	Turbidity(JTU)	10
Fluoride (F)	.5	Carbon, organic, total (C)	18
Nitrate (NO_3-N)	.29	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.06		
Nitrogen, organic (N)	1.8		
Nitrogen (ammonia, total (NH_4-N))	.05		
Iron (Fe)	.02		
Phosphorus, total (P)	.05		

PALM BEACH

County: Palm Beach **Population served:** 10,030
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: All water purchased from West Palm Beach

Rated plant capacity: a/
Pumpage: **Year**—1,941.80 Mgal **Average daily**—5.32 Mgal
Highest month: Not Reported **Lowest month:** Not Reported

Per capita use: 530 gal/d
Finished-water storage: a/
Treatment: a/

Type/Frequency of analysis: a/

Sewage discharge: 3.25 Mgal/d
Sewage treatment: Chlorination, comminution

Waste discharged to: Atlantic Ocean

Remarks: For chemical analyses of water see West Palm Beach.
a/ See West Palm Beach (p. 260).

PALM BEACH GARDENS

County: Palm Beach **Population served:** 9,300
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Palm Beach Utilities, Inc.
Source of water: Ground water, shallow aquifer; 7 wells, 85 to 155 feet deep; yield 150 to 1,200 gal/min

Rated plant capacity: 4 Mgal/d
Pumpage: Year—934.40 Mgal **Average daily**— 2.56 Mgal
Highest month: April, 105.4 Mgal **Lowest month:** September, 62.3 Mgal

Per capita use: 275 gal/d
Finished-water storage: 2.2 Mgal
Treatment: Aeration, coagulation, sedimentation, filtration, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/biannually; color, turbidity/daily[a]; color, turbidity/every 2 days[b]
Sewage discharge: 0.99 Mgal/d
Sewage treatment: Secondary, digestion

Waste discharged to: Percolation ponds

Remarks: Average daily pumpage increased from 1.62 Mgal/d in 1970 to 2.56 Mgal/d in 1975. Total service connections, 2,801. Water supplied to RCA plant.

a/ Treated water. b/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 264938080055401

Silica (SiO_2)	17	Dissolved solids (residue at 180°C)	514
Calcium (Ca)	120	Total hardness (as $CaCO_3$)	320
Magnesium (Mg)	5.1	Noncarbonate hardness (as $CaCO_3$)	25
Sodium (Na)	49	Alkalinity (as $CaCO_3$)	295
Potassium (K)	1.3	pH (units)	7.4
Strontium (Sr)	1.4	Specific conductance (μmhos/cm at 25°C)	830
Bicarbonate (HCO_3)	360	Color (Pt-Co units)	45
Sulfate (SO_4)	18	Temperature (°C)	26
Chloride (Cl)	84	Turbidity(JTU)	--
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.05	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.94		
Iron (Fe)	.04		
Phosphorus, total (P)	--		

PALMETTO

County: Manatee
River basin: Manatee River (10 02 02)
Population served: 8,500

Ownership of supply or system: Manatee County Water System
Source of water: Surface water, Manatee River. All water purchased from Manatee County Water System

Rated plant capacity: --
Pumpage: **Year**— 196.86 Mgal
Highest month: May, 20.01 Mgal
Average daily—0.54 Mgal
Lowest month: September, 13.88 Mgal

Per capita use: 64 gal/d
Finished-water storage: 4.75 Mgal
Treatment: Softening

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.59 Mgal/d
Sewage treatment: Chlorination, secondary

Waste discharged to: Terra Ceia Bay to Gulf of Mexico

Remarks: Average daily pumpage increased from 0.49 Mgal/d (ground water) in 1956 to 0.54 Mgal/d (surface water) in 1975. For chemical analysis of water see Manatee County Water System (p. 214).

PALM SPRINGS

County: Palm Beach **Population served:** 13,100
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer; 7 wells, 170 to 200 feet deep; yield 300 to 600 gal/min

Rated plant capacity: 4 Mgal/d
Pumpage: **Year**—635.10 Mgal **Average daily**— 1.74 Mgal
Highest month: April, 83.9 Mgal **Lowest month:** January, 41.3 Mgal

Per capita use: 133 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Softening, filtration, chlorination

Type/Frequency of analysis: Bacteriological/4 times weekly; chemical/biannually; color/daily[a]; color/5 times weekly[b]
Sewage discharge: 1.0 Mgal/d
Sewage treatment: see Lake Worth, page

Waste discharged to: Lake Worth Sewage Treatment plant

Remarks: Total service connections, 2,539. No chemical analysis available.
a/ Treated.
b/ Untreated water.

PINE ISLAND

County: Lee **Population served:** 3,300
River basin: Charlotte Harbor and coastal area (10 01 03)

Ownership of supply or system: Greater Pine Island Water Assoc., Inc.
Source of water: Ground water, aquifers in the lower and upper Hawthorn Formations and Suwannee Formation; 13 wells (Upper Hawthorn Formation) 280 to 300 feet deep; yield 80 to 180 gal/min; one well (lower Hawthorn and Suwannee Formation) 850 feet deep.
Rated plant capacity: 1.7 Mgal/d
Pumpage: **Year**—113.16 Mgal **Average daily**— 0.31 Mgal
Highest month: March, 22.91 Mgal **Lowest month:** September, 4.79 Mgal

Per capita use: 94[a/] gal/d
Finished-water storage: 0.78 Mgal
Treatment: Aeration, coagulation, filtration, softening, chlorination

Type/Frequency of analysis: Bacteriological/monthly; chemical/daily; color, turbidity/intermittently
Sewage discharge: Septic tanks; pond, drainage canal, Pine Island Sound[b/]
Sewage treatment: None

Waste discharged to: Ground

Remarks: Average daily pumpage decreased from 0.53 Mgal/d in 1970 to 0.31 Mgal/d in 1975. Pine Island formerly supplied water to Sanibel and Captiva Islands. Water presently supplied to Matlacha, Bokeelia, and St. James City (fig. 25). Reverse osmosis desalination plant in operation; source, brackish water, lower Hawthorn and Suwannee Formations. O'Donnell (1977).

a/ Estimated from permanent population of 3,300, including tourists 9,000.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: 263814082020702, Pine Island Water Plant, Raw composite. Reverse osmosis.

Silica (SiO_2)	17	Dissolved solids (residue at 180°C)	2,020
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	670
Magnesium (Mg)	91	Noncarbonate hardness (as $CaCO_3$)	510
Sodium (Na)	410	Alkalinity (as $CaCO_3$)	154
Potassium (K)	19	pH (units)	8.1
Strontium (Sr)	18	Specific conductance (μmhos/cm at 25°C)	3,280
Bicarbonate (HCO_3)	188	Color (Pt-Co units)	.00
Sulfate (SO_4)	250	Temperature (°C)	28.5
Chloride (Cl)	780	Turbidity (JTU)	9
Fluoride (F)	1.2	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.08		
Nitrogen (ammonia, total (NH_4-N))	.29		
Iron (Fe)	--		
Phosphorus, total (P)	.01		

b/ from reverse osmosis desalination plant.

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-15-75
SAMPLING POINT: Pine Island water plant, raw, composite

Aluminum (Al)	0	Lead (Pb)	6
Arsenic (As)	0	Lithium (Li)	30
Barium (Ba)	-	Manganese (Mn)	10
Boron (B)	-	Mercury (Hg)	-
Cadmium (Cd)	0	Molybdenum (Mo)	3
Chromium (Cr)	2	Nickel (Ni)	0
Chromium (Cr^{+6})	0	pH(units)	7.5
Cobalt (Co)	0	Selenium (Se)	-
Specific conductance (umhos/cm at 25°C)	3,230	Vanadium (V)	24
		Temperature (°C)	28.5
Copper (Cu)	0	Zinc (Zn)	3
Iron (Fe)	10		

CHEMICAL ANALYSIS[a/] (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-17-75
SAMPLING POINT: 263814082020702, Pine Island Water plant

Silica (SiO_2)	3.5	Dissolved solids (residue at 180°C)	158
Calcium (Ca)	2.8	Total hardness (as $CaCO_3$)	20
Magnesium (Mg)	2.9	Noncarbonate hardness (as $CaCO_3$)	19
Sodium (Na)	44	Alkalinity (as $CaCO_3$)	1
Potassium (K)	2.8	pH (units)	5.1
Strontium (Sr)	.05	Specific conductance (μmhos/cm at 25°C)	295
Bicarbonate (HCO_3)	1	Color (Pt-Co units)	0
Sulfate (SO_4)	4.3	Temperature (°C)	30.0
Chloride (Cl)	78	Turbidity(JTU)	1
Fluoride (F)	.0	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.04		
Nitrogen (ammonia, total (NH_4-N))	.1		
Iron (Fe)	.03		
Phosphorus, total (P)	.03		
Carbon Dioxide (CO_2)	13		

a/ Treated water

PLANTATION

County: Broward **Population served:** 35,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 8 wells, 74 to 95 feet deep; yield 525 to 750 gal/min

Rated plant capacity: 7 Mgal/d
Pumpage: **Year**—1,892.89 Mgal **Average daily**— 5.19[a] Mgal
Highest month: March, 210.5 Mgal **Lowest month:** October, 129.9 Mgal

Per capita use: 148 gal/d
Finished-water storage: 1.85 Mgal
Treatment: Aeration, chlorination, filtration, softening, fluoridation

Type/Frequency of analysis: Bacteriological daily[b]; chemical, color, turbidity/ annually; bacteriological/twice weekly[c]
Sewage discharge: 2.0 Mgal/d
Sewage treatment: Activated sludge, aeration, chlorination, contact stabilization, drying, polishing pond, secondary

Waste discharged to: Holloway Canal

Remarks: Average daily pumpage increased from 0.05 Mgal/d in 1956 to 5.19 Mgal/d in 1975.

a/ Includes 0.726 Mgal/d commercial use.
b/ Treated water.
c/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 260738080140701, Plantation Water Plant

Silica (SiO_2)	8.6	Dissolved solids (residue at 180°C)	416
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	287
Magnesium (Mg)	2.8	Noncarbonate hardness (as $CaCO_3$)	38
Sodium (Na)	27	Alkalinity (as $CaCO_3$)	249
Potassium (K)	.8	pH (units)	7.5
Strontium (Sr)	.89	Specific conductance (μmhos/cm at 25°C)	668
Bicarbonate (HCO_3)	304	Color (Pt-Co units)	95
Sulfate (SO_4)	24	Temperature (°C)	--
Chloride (Cl)	48	Turbidity(JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.9		
Iron (Fe)	1.9		
Phosphorus, total (P)	--		

POMPANO BEACH

County: Broward **Population served:** 63,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 16 wells, 90 to 193 feet deep; yield 900 to 2,500 gal/min

Rated plant capacity: 30 Mgal/d
Pumpage: Year— 5,475 Mgal **Average daily**—15 Mgal
Highest month: April, 670 Mgal **Lowest month:** June, 384 Mgal

Per capita use: 238 gal/d
Finished-water storage: 8 Mgal
Treatment: Chlorination, filtration

Type/Frequency of analysis: Bacteriological/weekly; chemical/annually

Sewage discharge: 9 Mgal/d
Sewage treatment: a/

Waste discharged to: North Regional Broward County Treatment plant, Atlantic Ocean

Remarks: Average daily pumpage increased from 2.0 Mgal/d in 1956 to 15 Mgal/d in 1975. City also supplies Palm Aire and South End of Lighthouse Point (see Broward County Utilities Department (p.175). Sherwood and others (1973).

a/ No treatment by Pompano Beach.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-12-75
SAMPLING POINT: 261437080071401, Pompano Beach Water Plant

Silica (SiO_2)	8	Dissolved solids (residue at 180°C)	306
Calcium (Ca)	86	Total hardness (as $CaCO_3$)	220
Magnesium (Mg)	2.3	Noncarbonate hardness (as $CaCO_3$)	32
Sodium (Na)	12	Alkalinity (as $CaCO_3$)	188
Potassium (K)	1.4	pH (units)	7.5
Strontium (Sr)	.75	Specific conductance (μmhos/cm at 25°C)	510
Bicarbonate (HCO_3)	229	Color (Pt-Co units)	15
Sulfate (SO_4)	36	Temperature (°C)	--
Chloride (Cl)	18	Turbidity (JTU)	--
Fluoride (F)	.4	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.43	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.04		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.22		
Iron (Fe)	.18		
Phosphorus, total (P)	--		

PORT CHARLOTTE

County: Charlotte **Population served:** 22,000
River basin: Charlotte Harbor and coastal area (10 01 03)

Ownership of supply or system: General Development Utilities, Inc.
Source of water: Ground water (GW), Hawthorn Formation; 8 percent of supply; 6 wells; 133 to 232 feet deep; yield 125 to 300 gal/min. Surface water (SW), Fordham Waterway; 92 percent of supply.
Rated plant capacity: 1.73 Mgal/d (GW), 2.22 Mgal/d (SW)
Pumpage: **Year**—827.63 Mgal **Average daily**— 2.27 a/ Mgal
Highest month: April, 107.71 Mgal **Lowest month:** July, 40.14 Mgal

Per capita use: 103 gal/d
Finished-water storage:
Treatment: Chlorination, algae control, filtration, taste and odor control, coagulation, softening, stabilization

Type/Frequency of analysis: Bacteriological/weekly and chemical/daily b/; bacteriological/bimonthly c/
Sewage discharge: 1.02 Mgal/d
Sewage treatment: Extended aeration, digestion, filtration, polishing ponds

Waste discharged to: Spray irrigation system

Remarks: Average daily pumpage increased from 1.46 Mgal/d in 1970 to 2.27 Mgal/d in 1975. Total service connections, 8,230. Water also supplied to Charlotte Harbor Water District, Kings Lake Estates, Port Charlotte Village. Sutcliffe (1975)
a/ Includes 0.441 Mgal/d commercial use, 0.118 Mgal/d other public supply.
b/ Treated water.
c/ Raw water.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: 265924082044701, Port Charlotte Plant 2

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	462
Calcium (Ca)	82	Total hardness (as $CaCO_3$)	250
Magnesium (Mg)	10	Noncarbonate hardness (as $CaCO_3$)	90
Sodium (Na)	42	Alkalinity (as $CaCO_3$)	156
Potassium (K)	1.1	pH (units)	7.9
Strontium (Sr)	.74	Specific conductance (μmhos/cm at 25°C)	669
Bicarbonate (HCO_3)	191	Color (Pt-Co units)	55
Sulfate (SO_4)	59	Temperature (°C)	--
Chloride (Cl)	77	Turbidity (JTU)	6
Fluoride (F)	.6	Carbon, organic, total (C)	17
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.21
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.1		
Nitrogen (ammonia, total (NH_4-N))	.24		
Iron (Fe)	.25		
Phosphorus, total (P)	.23		

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: 265924082044701, Port Charlotte Plant 2

Trace Elements			
Arsenic (As)	3	Manganese (Mn)	20
Barium (Ba)	0	Mercury (Hg)	.1
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	10	Zinc (Zn)	20
Copper (Cu)	140		
Iron (Fe)	870	pH(units)	--
Lead (Pb)	0	Temperature (°C)	--

Pesticides			
Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.05
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

PUNTA GORDA

County: Charlotte **Population served:** 10,000
River basin: Charlotte Harbor and coastal area (10 01 03)

Ownership of supply or system: Municipal
Source of water: Surface water, Shell Creek

Rated plant capacity: 4.3 Mgal/d
Pumpage: Year—666.30 Mgal **Average daily**— 1.84 Mgal
Highest month: April, 71.97 Mgal **Lowest month:** August, 40.56 Mgal

Per capita use: 184 gal/d
Finished-water storage: 1.0 Mgal
Treatment: Chlorination, softening, coagulation, filtration, taste and odor control

Type/Frequency of analysis: Bacteriological/weekly; chemical/daily

Sewage discharge: 1.0[a/] Mgal/d
Sewage treatment: Primary, secondary, trickling filter

Waste discharged to: Canals to Peace River

Remarks: Average daily pumpage increased from 0.25 Mgal/d in 1956 to 1.84 Mgal/d in 1975. Total service connections: Undifferentiated, 3,750. Sutcliffe (1975).
a/ Estimated.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: 265904081560901, Shell Creek

Silica (SiO_2)	6.1	Dissolved solids (residue at 180°C)	672
Calcium (Ca)	68	Total hardness (as $CaCO_3$)	270
Magnesium (Mg)	23	Noncarbonate hardness (as $CaCO_3$)	180
Sodium (Na)	99	Alkalinity (as $CaCO_3$)	92
Potassium (K)	5.4	pH (units)	7.5
Strontium (Sr)	8.8	Specific conductance (μmhos/cm at 25°C)	1,040
Bicarbonate (HCO_3)	112	Color (Pt-Co units)	90
Sulfate (SO_4)	94	Temperature (°C)	--
Chloride (Cl)	200	Turbidity(JTU)	5
Fluoride (F)	.5	Carbon, organic, total (C)	15
Nitrate (NO_3-N)	.05	Orthophosphate total (PO_4-P)	.12
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.1		
Nitrogen (ammonia, total (NH_4-N))	.14		
Iron (Fe)	.19		
Phosphorus, total (P)	.13		

PUNTA GORDA

CHEMICAL ANALYSIS (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-24-75
SAMPLING POINT: Shell Creek

Trace Elements

Arsenic (As)	1	Manganese (Mn)	60
Barium (Ba)	0	Mercury (Hg)	.1
Cadmium (Cd)	0	Selenium (Se)	0
Chromium (Cr)	10	Zinc (Zn)	10
Copper (Cu)	1		
Iron (Fe)	200	pH(units)	--
Lead (Pb)	1	Temperature (°C)	--

Pesticides

Aldrin	.00	Heptachlor	.00
Chlordane	.0	Lindane	.00
DDD	.00	Malathion	.00
DDE	.00	Methyl parathion	.00
DDT	.00	Methyl trithion	.00
Diazinon	.00	PCB	.0
Dieldrin	.00	PCN	.0
Endrin	.00	Silvex	.00
Ethyl parathion	.00	Toxaphene	0
Ethyl trithion	.00	2,4-D	.03
Heptachlor epoxide	.00	2,4-DP	.00
		2,4,5-T	.00

RIVIERA BEACH

County: Palm Beach **Population served:** 30,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer, 20 wells, 60 to 240 feet deep; yield 250 to 500 gal/min

Rated plant capacity: 14 Mgal/d
Pumpage: **Year**—2,157.15 Mgal **Average daily**—5.91 Mgal
Highest month: August, 224.9 Mgal **Lowest month:** June, 151.4 Mgal

Per capita use: 197 gal/d
Finished-water storage: 3.0 Mgal
Treatment: Aeration, coagulation, filtration, softening, chlorination

Type/Frequency of analysis: Bacteriological/bimonthly; chemical/biannually

Sewage discharge: 2.7 Mgal/d
Sewage treatment: Secondary

Waste discharged to: Earman River

Remarks: Average daily pumpage increased from 0.90 Mgal/d in 5.91 Mgal/d in 1975. Water supplied to Palm Beach Shores and Holiday Trailer Park. Land and others (1973).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 264700080040201

Silica (SiO_2)	9.5	Dissolved solids (residue at 180°C)	258
Calcium (Ca)	77	Total hardness (as $CaCO_3$)	200
Magnesium (Mg)	1.7	Noncarbonate hardness (as $CaCO_3$)	10
Sodium (Na)	10	Alkalinity (as $CaCO_3$)	190
Potassium (K)	.8	pH (units)	7.4
Strontium (Sr)	.89	Specific conductance (μmhos/cm at 25°C)	410
Bicarbonate (HCO_3)	232	Color (Pt-Co units)	15
Sulfate (SO_4)	5.8	Temperature (°C)	25
Chloride (Cl)	14	Turbidity(JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.25		
Iron (Fe)	.18		
Phosphorus, total (P)	--		

SANIBEL

County: Lee **Population served:** 6,000[a/]
River basin: Charlotte Harbor and coastal area (10 01 03)

Ownership of supply or system: Island Water Association, Inc.
Source of water: Ground water, aquifer in the lower Hawthorn Formation, 9 wells, 495 to 620 feet deep; yield, each well, 350 gal/min

Rated plant capacity: 1.8 Mgal/d
Pumpage: Year—437.51 Mgal **Average daily**— 1.19 Mgal
Highest month: June, 43.48 Mgal **Lowest month:** February, 24.14 Mgal

Per capita use: 198 gal/d
Finished-water storage: 2.37 Mgal (3 facilities)
Treatment: Aeration, softening, filtration[b/]

Type/Frequency of analysis: Bacteriological, color, turbidity/intermittently; chemical/daily
Sewage discharge: Septic tanks
Sewage treatment: None

Waste discharged to: Ground (septic tanks); Gulf of Mexico (from electro-dialysis plant)
Remarks: Service connections: domestic 1,480; air conditioning (mostly motels) 2,320. Water also supplied to Captiva Island. Pine Island supplies water during periods of large demand. Boggess (1974, O'Donnell (1977).
a/ Population: permanent 6,000; maximum including tourists 12,000.
b/ Electro-dialysis water treatment plant in operation since November 1973.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-21-75
SAMPLING POINT: 262627082061802, composite, Sanibel Water Plant

Silica (SiO_2)	32	Dissolved solids (residue at 180°C)	3,510
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	710
Magnesium (Mg)	110	Noncarbonate hardness (as $CaCO_3$)	530
Sodium (Na)	850	Alkalinity (as $CaCO_3$)	180
Potassium (K)	54	pH (units)	7.6
Strontium (Sr)	9.7	Specific conductance (μmhos/cm at 25°C)	4,460
Bicarbonate (HCO_3)	219	Color (Pt-Co units)	0
Sulfate (SO_4)	350	Temperature (°C)	26.5
Chloride (Cl)	1,500	Turbidity(JTU)	--
Fluoride (F)	.7	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	--	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	--	SAR	14
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	--		
Iron (Fe)	--		
Phosphorus, total (P)	--		
Carbon Dioxide (CO_2)	8.8		

SANIBEL

CHEMICAL ANALYSIS a/ (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-21-75
SAMPLING POINT: 262627082061803, Sanibel Island Water Plant

Silica (SiO_2)	34	Dissolved solids (residue at 180°C)	610
Calcium (Ca)	8.4	Total hardness (as $CaCO_3$)	67
Magnesium (Mg)	11	Noncarbonate hardness (as $CaCO_3$)	11
Sodium (Na)	180	Alkalinity (as $CaCO_3$)	57
Potassium (K)	4.8	pH (units)	6.8
Strontium (Sr)	.77	Specific conductance (μmhos/cm at 25°C)	1,090
Bicarbonate (HCO_3)	69	Color (Pt-Co units)	0
Sulfate (SO_4)	120	Temperature (°C)	28.0
Chloride (Cl)	210	Turbidity(JTU)	1
Fluoride (F)	.4	Carbon, organic, total (C)	1
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00	SAR	9.6
Nitrogen, organic (N)	.00		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	0		
Phosphorus, total (P)	.00		
Carbon Dioxide (CO_2)	18		
Carbonate (CO_3)	0		

CHEMICAL ANALYSIS a/ (micrograms per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 4-21-75
SAMPLING POINT: 262627082061803, Sanibel Island Water Plant

Aluminum (Al)	0	Lead (Pb)	2
Arsenic (As)	5	Lithium (Li)	10
Barium (Ba)	-	Manganese (Mn)	10
Boron (B)	750	Mercury (Hg)	.2
Cadmium (Cd)	0	Molybdenum (Mo)	0
Chromium (Cr)	0	Nickel (Ni)	0
Chromium (Cr^{+6})	0	pH(units)	6.8
Cobalt (Co)	0	Selenium (Se)	-
Specific conductance (umhos/cm at 25°C)	1,090	Vanadium (V)	3.2
Copper (Cu)	22	Temperature (°C)	28.0
Iron (Fe)	0	Zinc (Zn)	6

a/ Treated water.

SARASOTA

County: Sarasota **Population served:** 60,000
River basin: Coastal area between Myakka and Manatee Rivers (10 02 01)

Ownership of supply or system: Municipal
Source of water: Ground water, aquifers in Hawthorn and Tampa Formations; 42 wells, 100 to 720 feet deep; yield 190 to 584 gal/min

Rated plant capacity: 12.7 Mgal/d
Pumpage: **Year**—2,595.15 Mgal **Average daily**— 7.11 Mgal
Highest month: April, 252 Mgal **Lowest month:** February, 192 Mgal

Per capita use: 119 gal/d
Finished-water storage: 2.85 Mgal
Treatment: Aeration, chlorination, filtration, softening (ion exchange)

Type/Frequency of analysis: Bacteriological/weekly; chemical (partial)/daily, and (complete/annually
Sewage discharge: 6.02 Mgal/d
Sewage treatment: Contact stabilization, aerobic digestion, chlorination

Waste discharged to: Whittaker Bayou at Highway 41

Remarks: Average daily pumpage increased from 2.45 Mgal/d in 1956 to 7.11 Mgal/d in 1975.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 272252082175401, composite

Silica (SiO_2)	34	Dissolved solids (residue at 180°C)	730
Calcium (Ca)	110	Total hardness (as $CaCO_3$)	510
Magnesium (Mg)	52	Noncarbonate hardness (as $CaCO_3$)	340
Sodium (Na)	21	Alkalinity (as $CaCO_3$)	174
Potassium (K)	3	pH (units)	7.9
Strontium (Sr)	16	Specific conductance (μmhos/cm at 25°C)	995
Bicarbonate (HCO_3)	212	Color (Pt-Co units)	5
Sulfate (SO_4)	320	Temperature (°C)	--
Chloride (Cl)	25	Turbidity(JTU)	3
Fluoride (F)	1.8	Carbon, organic, total (C)	2
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	.27		
Nitrogen (ammonia, total (NH_4-N))	.27		
Iron (Fe)	.07		
Phosphorus, total (P)	.01		

SEBRING

County: Highlands
River basin: Kissimmee River (09 01 01)
Population served: 14,000

Ownership of supply or system: Sebring Utilities Commission
Source of water: Ground water, Floridan aquifer; 5 wells, 1,200 to 1,400 feet deep; yield 400 to 2,800 gal/min

Rated plant capacity: 13.1 Mgal/d
Pumpage: Year— 1,117.34 Mgal
Highest month: April, 131.28 Mgal
Average daily— 3.06[a/] Mgal
Lowest month: September, 65.38 Mgal

Per capita use: 219 gal/d
Finished-water storage: 0.8 Mgal
Treatment: Aeration, chlorination, taste and odor control

Type/Frequency of analysis: Bacteriological and chemical/monthly

Sewage discharge: 0.8 Mgal/d
Sewage treatment: Activated sludge, diffused air, filtration, primary, chlorination, clarification, contact stabilization, drying, grit chambers, skimming, polishing ponds, secondary
Waste discharged to: Polishing Ponds

Remarks: Average daily pumpage increased from 1.50 Mgal/d in 1956 to 3.06 Mgal/d in 1975. City supplies water to Sebring Hills, Sebring Shores, Avacado Park and to a few houses outside the city limits.
a/ Includes 0.306 Mgal/d, commercial use.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 5-22-75
SAMPLING POINT: 272920081260300, well 4

Silica (SiO_2)	9.9	Dissolved solids (residue at 180°C)	88
Calcium (Ca)	16	Total hardness (as $CaCO_3$)	64
Magnesium (Mg)	5.4	Noncarbonate hardness (as $CaCO_3$)	6
Sodium (Na)	3.9	Alkalinity (as $CaCO_3$)	57
Potassium (K)	.6	pH (units)	7.5
Strontium (Sr)	1.4	Specific conductance (μmhos/cm at 25°C)	153
Bicarbonate (HCO_3)	70	Color (Pt-Co units)	.00
Sulfate (SO_4)	6	Temperature (°C)	--
Chloride (Cl)	4.6	Turbidity(JTU)	1
Fluoride (F)	.2	Carbon, organic, total (C)	.00
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.02
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.1		
Nitrogen (ammonia, total (NH_4-N))	.02		
Iron (Fe)	.01		
Phosphorus, total (P)	.03		

STUART

County: Martin **Population served:** 10,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow sand aquifer; 22 wells, 60 to 140 feet deep; yield 50 to 225 gal/min

Rated plant capacity: 6 Mgal/d
Pumpage: Year— 1,095.0 Mgal **Average daily—** 3.0[a] Mgal
Highest month: April, 108 Mgal **Lowest month:** July, 69 Mgal

Per capita use: 300 gal/d
Finished-water storage: 2.5 Mgal
Treatment: Chlorination

Type/Frequency of analysis: Bacteriological/monthly[b]; chemical, color, turbidity/ biannually
Sewage discharge: 1.0 Mgal/d
Sewage treatment: Aeration, secondary, trickling filter

Waste discharged to: St. Lucie River

Remarks: Average daily pumpage increased from 0.25 Mgal/d in 1956 to 3.0 Mgal/d in 1975. City also supplies water to Hutchinson Island and Sewalls Point. Yearly pumpage, 1941-75 shown on figure 28.
a/ Includes 90 percent for public supply.
b/ Treated water only.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 271120080141501

Silica (SiO_2)	12	Dissolved solids (residue at 180°C)	324
Calcium (Ca)	100	Total hardness (as $CaCO_3$)	260
Magnesium (Mg)	2.6	Noncarbonate hardness (as $CaCO_3$)	16
Sodium (Na)	17	Alkalinity (as $CaCO_3$)	244
Potassium (K)	1.3	pH (units)	7.2
Strontium (Sr)	.34	Specific conductance (μmhos/cm at 25°C)	570
Bicarbonate (HCO_3)	298	Color (Pt-Co units)	5
Sulfate (SO_4)	19	Temperature (°C)	28
Chloride (Cl)	24	Turbidity (JTU)	--
Fluoride (F)	.3	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.02	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.25		
Iron (Fe)	.32		
Phosphorus, total (P)	--		

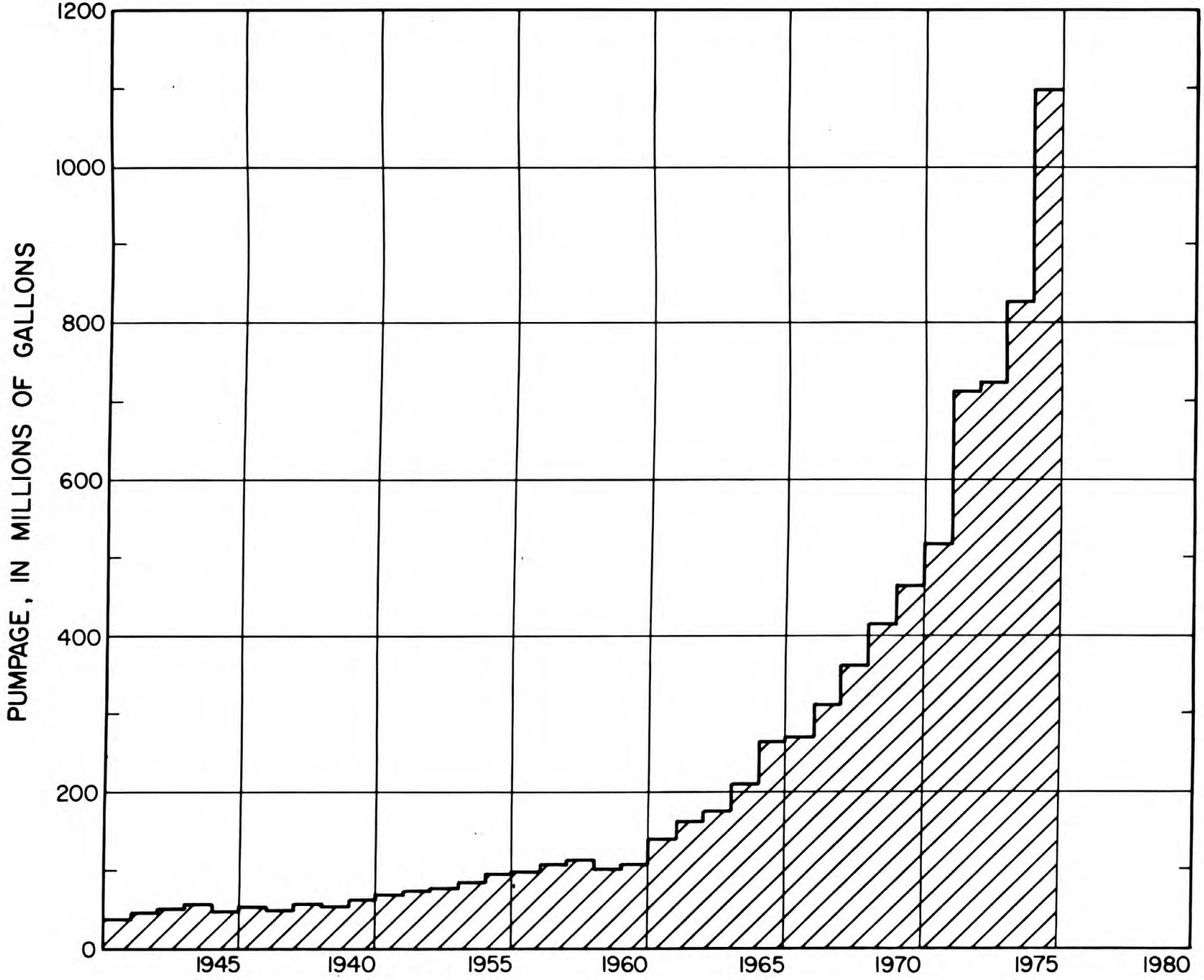

Figure 28.--Total yearly pumpage, city of Stuart.

SUNRISE

County: Broward **Population served:** 26,000
River basin: Everglades and southeastern Coastal areas (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, Biscayne aquifer; 22 wells, 60 to 200 feet deep; yield 700 to 1,000 gal/min; two water treatment plants.

Rated plant capacity: 13.5 Mgal/d
Pumpage: Year— 1,679.0 Mgal **Average daily—**4.6 Mgal
Highest month: April, 175 Mgal **Lowest month:** October, 107 Mgal

Per capita use: 177 gal/d
Finished-water storage: 4.5 Mgal
Treatment: Chlorination, filtration, softening, (plants 1 and 2); pH control, clarification, (plant 1)

Type/Frequency of analysis: Bacteriological/monthly; chemical/annually

Sewage discharge: 5.4 Mgal/d (two plants)
Sewage treatment: Aeration, chlorination, primary (plants 1 and 2); comminution, filtration, grit chambers, secondary, settling (plant 1); clarification,contact stabilization, digestion (plant 2)
Waste discharged to: Spring Tree Golf Course and Feeder Canal (plant 1); golf course (plant 2)
Remarks: City also supplies water (0.6 Mgal/d) to Alpine Woods, Isla Merita, Park City, Pine Island Ridge, and Valencia. No chemical analysis available.

TEQUESTA

County: Palm Beach **Population served:** 5,000
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Ground water, shallow aquifer; 22 wells, 45 to 88 feet deep; yield 50 to 200 gal/min

Rated plant capacity: 3.7 Mgal/d
Pumpage: Year— 562.10 Mgal **Average daily—**1.54[a] Mgal
Highest month: August, 67.47 Mgal **Lowest month:** June, 32.67 Mgal

Per capita use: 308 gal/d
Finished-water storage: 1.06 Mgal
Treatment: Aeration, chlorination, filtration

Type/Frequency of analysis: Bacteriological/monthly; chemical, color, turbidity/biannually[b]
Sewage discharge: 0.25 Mgal/d
Sewage treatment: Secondary

Waste discharged to: Loxahatchee River Environmental Control District Plant

Remarks: Two wells not in use because of salt water intrusion. City also supplies part of Jupiter, Jupiter Inlet Colony and outlying areas including 7 condominiums.

a/ Includes 0.108 Mgal/d commercial use, 0.631 Mgal/d other public supply.

b/ All analyses of treated water only.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-10-75
SAMPLING POINT: 265722080051101, faucet on line by well

Silica (SiO_2)	5.3	Dissolved solids (residue at 180°C)	258
Calcium (Ca)	62	Total hardness (as $CaCO_3$)	170
Magnesium (Mg)	2.5	Noncarbonate hardness (as $CaCO_3$)	31
Sodium (Na)	21	Alkalinity (as $CaCO_3$)	139
Potassium (K)	1.9	pH (units)	7.3
Strontium (Sr)	.39	Specific conductance (μmhos/cm at 25°C)	435
Bicarbonate (HCO_3)	170	Color (Pt-Co units)	.00
Sulfate (SO_4)	16	Temperature (°C)	26
Chloride (Cl)	40	Turbidity(JTU)	--
Fluoride (F)	.2	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	1.1	Orthophosphate total (PO_4-P)	--
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	--		
Nitrogen (ammonia, total (NH_4-N))	.03		
Iron (Fe)	.02		
Phosphorus, total (P)	--		

VENICE

County: Sarasota **Population served:** 17,000
River basin: Coastal area between the Myakka and Manatee Rivers (10 02 01)
Ownership of supply or system: Municipal
Source of water: Ground water, aquifer in Hawthorn Formation, 50 wells; nonartesian aquifer, three wells; aquifers in Pleistocene and Hawthorn formations, two wells; aquifers in Hawthorn and Tampa Formations, one well; yields 25 to 2,500 gal/min.
Rated plant capacity: 4 Mgal/d
Pumpage: Year— 438 Mgal **Average daily—** 1.2 Mgal
Highest month: March, 51.3 Mgal **Lowest month:** July, 29.1 Mgal

Per capita use: 71 gal/d
Finished-water storage: 1.5 Mgal
Treatment: Aeration, chlorination, coagulation, filtration, softening, desalination[a/]

Type/Frequency of analysis: Chemical/3 times monthly

Sewage discharge: 1.1 Mgal/d
Sewage treatment: Secondary, comminution

Waste discharged to: Red Lake and Inland Waterway

Remarks: Average daily pumpage increased from 0.30 Mgal/d in 1956 to 1.2 Mgal/d in 1975. Desalination plant effluent discharged to WCIND* Canal.
a/ Reverse osmosis water treatment process in operation, 2 Mgal/d capacity, currently processing 1 Mgal/d.
*West Coast Inland Navigation District.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-17-75
SAMPLING POINT: 270601082261401, composite

Silica (SiO_2)	21	Dissolved solids (residue at 180°C)	990
Calcium (Ca)	170	Total hardness (as $CaCO_3$)	610
Magnesium (Mg)	44	Noncarbonate hardness (as $CaCO_3$)	380
Sodium (Na)	64	Alkalinity (as $CaCO_3$)	228
Potassium (K)	2.9	pH (units)	7.6
Strontium (Sr)	3	Specific conductance (μmhos/cm at 25°C)	1,320
Bicarbonate (HCO_3)	278	Color (Pt-Co units)	45
Sulfate (SO_4)	350	Temperature (°C)	--
Chloride (Cl)	100	Turbidity (JTU)	9
Fluoride (F)	.7	Carbon, organic, total (C)	10
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.03
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.51		
Nitrogen (ammonia, total (NH_4-N))	.35		
Iron (Fe)	.5		
Phosphorus, total (P)	.04		

WAUCHULA

County: Hardee
River basin: Peace River (10 01 01)
Population served: 4,000

Ownership of supply or system: Municipal
Source of water: Ground water, Floridan aquifer; four wells, 629 to 1,152 feet deep; yield 550 to 2,000 gal/min

Rated plant capacity: 4.8 Mgal/d
Pumpage: **Year**—331.7 Mgal **Average daily**— 0.91 Mgal
Highest month: April, 41.0 Mgal **Lowest month:** June, 24.3 Mgal

Per capita use: 228 gal/d
Finished-water storage: 0.55 Mgal
Treatment: Aeration, chlorination, anti-precipitation and corrosion control

Type/Frequency of analysis: Bacteriological/monthly

Sewage discharge: 0.77 Mgal/d
Sewage treatment: Griffin Oxinite process

Waste discharged to: Peace River

Remarks: Average daily pumpage increased from 0.40 Mgal/d in 1956 to 0.91 Mgal/d in 1975. Water supplied to Riverview Subdivision and areas north, south, and west of city limits. Robertson and Mills (1974).

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 7-21-75
SAMPLING POINT: 273249081480501, Wauchula Public Supply 3

Silica (SiO_2)	18	Dissolved solids (residue at 180°C)	590
Calcium (Ca)	78	Total hardness (as $CaCO_3$)	370
Magnesium (Mg)	36	Noncarbonate hardness (as $CaCO_3$)	250
Sodium (Na)	8.5	Alkalinity (as $CaCO_3$)	124
Potassium (K)	2	pH (units)	7.8
Strontium (Sr)	26	Specific conductance (μmhos/cm at 25°C)	818
Bicarbonate (HCO_3)	151	Color (Pt-Co units)	.00
Sulfate (SO_4)	250	Temperature (°C)	--
Chloride (Cl)	11	Turbidity (JTU)	2
Fluoride (F)	.6	Carbon, organic, total (C)	--
Nitrate (NO_3-N)	.00	Orthophosphate total (PO_4-P)	.00
Nitrite (NO_2-N)	.00		
Nitrogen, organic (N)	.16		
Nitrogen (ammonia, total (NH_4-N))	.25		
Iron (Fe)	.02		
Phosphorus, total (P)	.00		

WEST PALM BEACH

County: Palm Beach **Population served:** 79,950
River basin: Everglades and southeastern coastal area (09 02 02)

Ownership of supply or system: Municipal
Source of water: Surface water, Clear Lake, Lake Mangonia and catchment area

Rated plant capacity: 36 Mgal/d
Pumpage: Year— 7,759.90 Mgal **Average daily—** 21.26[a/] Mgal
Highest month: April, 735.9 Mgal **Lowest month:** February, 536.1 Mgal

Per capita use: 266 gal/d
Finished-water storage: 11 Mgal
Treatment: Coagulation, filtration, sedimentation, softening, chlorination

Type/Frequency of analysis: Bacteriological, color, turbidity/daily; chemical/monthly
Sewage discharge: 9.1 Mgal/d
Sewage treatment: Secondary

Waste discharged to: Intracoastal Waterway, Atlantic Ocean

Remarks: Average daily pumpage increased from 10.50 Mgal/d in 1956 to 21.26 Mgal/d in 1975. Total service connections 23,000. City supplies Palm Beach and South Palm Beach. Leach and others (1973), Rodis (1973).

a/ Includes 5.32 Mgal/d supplied to Palm Beach.

CHEMICAL ANALYSIS (milligrams per liter except as indicated)

ANALYSIS BY: U.S. Geological Survey **COLLECTION DATE:** 6-6-75
SAMPLING POINT: 264255080035000, Intake at Water plant

Silica (SiO_2)	4.5	Dissolved solids (residue at 180°C)	388
Calcium (Ca)	48	Total hardness (as $CaCO_3$)	171
Magnesium (Mg)	12	Noncarbonate hardness (as $CaCO_3$)	48
Sodium (Na)	63	Alkalinity (as $CaCO_3$)	131
Potassium (K)	4	pH (units)	8.5
Strontium (Sr)	.92	Specific conductance (μmhos/cm at 25°C)	640
Bicarbonate (HCO_3)	150	Color (Pt-Co units)	35
Sulfate (SO_4)	45	Temperature (°C)	29.5
Chloride (Cl)	95	Turbidity (JTU)	2
Fluoride (F)	.4	Carbon, organic, total (C)	9
Nitrate (NO_3-N)	.01	Orthophosphate total (PO_4-P)	.01
Nitrite (NO_2-N)	.01		
Nitrogen, organic (N)	1.2		
Nitrogen (ammonia, total (NH_4-N))	.01		
Iron (Fe)	.02		
Phosphorus, total (P)	.01		

TABLE 5.--Public water supplies of 111 communities and municipalities of generally less than 5,000 population, 1975.

(Pumpage: Includes water supplied for agricultural, industrial, commercial, air conditioning uses as well as domestic use. Plant capacity: Based on reported plant capacity or upon well output if known. Source (aquifer): B, Biscayne; F, Floridan; SG, sand-and-gravel aquifer in northwest Florida; S shallow aquifer (sand-and-shell aquifer in Palm Beach County); Water treatment: A, aeration; C, chlorination; D,flocculation; F, filtration; G, coagulation; T, stabilization; V, softening; X, pH control.)

County Municipality	Pumpage Mgal/d	Plant capacity	Population served	Source (aquifer)	Water treatment
Alachua					
Alachua	0.016	--	1,000	F	C
High Springs	.30	0.3	3,000	F	C, V
Bay					
Mexico Beach	0.20	1.0	1,000	F	A, C, V
Bradford					
Brooker	0.022	0.36	425	F	--
Hampton	.04	.09	422	F	--
Calhoun					
Altha	0.056	0.43	561	F	--
Clay					
Keystone Heights	0.33	--	723	F	C
Kingsley	1.83	4.3	15,000	F	A, C
Penney Farms	.038	--	350	F	C
Dixie					
Horseshoe Beach	0.05	0.7	500	F	C, D, X
Duval					
Baldwin	0.166	0.43	2,100	F	C
Escambia					
Beulah	0.096	--	1,241	SG	C, X
Bratt/Davisville	.213	0.576	2,138	SG	C, X
Cottage Hill	.130	.36	1,598	SG	C, X
Farm Hill	.10	.18	1,380	SG	C, X
Gonzalez	.167	.217	1,527	SG	C
Molino	.20	.576	2,686	SG	C
Walnut Hill	.20	.504	1,779	SG	C, X
South Flomaton	.15	.504	2,937	SG	C, X

TABLE 5.--Public water supplies of 111 communities and municipalities of generally less than 5,000 population, 1975. (Continued)

County Municipality	Pumpage Mgal/d	Plant capacity	Population served	Source (aquifer)	Water treatment
Flagler					
Flagler Beach	0.16	1.0	1,500	S	C, V
Franklin					
Carrabelle	0.250	0.72	1,400	F	C
East Point	.125	--	1,258	F	C
Lanark Village	.06	--	600	F	C
Gadsden					
Greensboro	0.100	0.43	720	F	C
Gretna	.088	.75	1,100	F	C
Havana	.37	1.44	2,995	F	C
Gulf					
Highland View	0.06	--	646	F	C
Hamilton					
Jennings	0.05	0.60	707	F	C
White Springs	.04	.10	1,085	F	A, C
Holmes					
Esto	0.013	0.216	408	F	C
Jackson					
Alford	0.024	--	480	F	--
Campbellton	.033	--	326	F	C
Cottondale	.089	2.3	886	F	C
Graceville	.353	1.15	2,775	F	C
Grand Ridge	.044	0.3	620	F	C
Greenwood	.038	.432	480	F	C
Sneads	.150	--	1,807	F	C
Lake					
Clermont	0.83	4.0	4,850	F	--
Minneola	.10	3.0	1,000	F	C
Umatilla	.27	2.0	2,000	F	A, C
Levy					
Cedar Key	0.11	--	889	F	C, G, V
Chiefland	.24	0.5	2,000	--	C
Williston	.43	--	2,100	F	C
Yankeetown	.07	--	720	--	C, T

TABLE 5.--Public water supplies of 111 communities and municipalities of generally less than 5,000 population, 1975. (Continued)

County Municipality	Pumpage Mgal/d	Plant capacity	Population served	Source (aquifer)	Water treatment
Madison					
Cherry Lake	0.036	0.36	500	F	--
Greenville	.20	.7	1,496	F	C, G, T
Marion					
Belleview	0.13	--	1,500	F	C
Dunnellon	.18	--	1,200	F	C, X
Nassau					
Callahan	0.067	--	350	F	--
Hilliard	.105	1.0	1,560	F	--
Okaloosa					
Auburn	0.173	0.792	2,840	F	C
Baker	.068	.936	1,213	F	C
Destin	.94	2.46	4,039	F	C
Holt	.037	0.175	642	F	C
Laurel Hill	.032	.216	485	F	C
Mary Ester	.336	1.3	3,400	F	C
Milligan	.037	2.6	782	F	C
Orange					
Dr. Phillips	0.79	7.9	1,860	F	A, C
Eatonville	.28	1.75	2,180	F	C
Oakland	.04	0.45	700	F	C
Taft	.14	1	2,200	F	A, C
Tangerine	.07	0.504	500	F	C
Zellwood	.08	1.1	600	F	C
Palm Beach					
Atlantis	0.46	1.4	2,500	S	A, C
Greenacres City	.23	1.01	2,500	S	C, F, V
Golf Village	.15	0.5	1,000	S	C, F, V
Gulf Stream	.65	1.87	2,000	S	C
Highland Beach	.52	1.89	3,500	S	C, F, V
Juno Beach	.29	0.79	1,500	S	A, C
Lake Clark Shores	.23	1.2	1,500	S	C
Manalapan	.62	2.2	1,500	S	C
Mangonia Park	.22	0.5	3,000	S	C
Royal Palm Beach Village	.43	1.0	7,000	S	A, C, F, V

TABLE 5.--Public water supplies of 111 communities and municipalities of generally less than 5,000 population, 1975. (Continued)

County Municipality	Pumpage Mgal/d	Plant capacity	Population served	Source (aquifer)	Water treatment
Putnam					
Cresent City	0.25	1.73	2,300	F	A, C
Interlachen	.095	.5	185	F	C
Santa Rosa					
Avalon Beach	0.085	0.75	782	SG	C
Bagdad/Garcon	.14	.36	1,893	SG	C
Berrydale	.10	.72	1,000	SG	C
Chumuckla	.065	.1	850	SG	C
Holley Navarre	.058	1.2	1,445	F	C
Jay	.144	0.59	1,710	SG	C
Mount Carmel	.10	1.10	1,798	SG	C
Midway 1/	.133	1.44	1,615	F	A, C
Seminole					
Oviedo	0.25	1.5	2,500	F	C
Winter Springs	.3	3.938	3,450	F	A, C
Sumter					
Center Hill	0.083	--	670	F	C
Lake Panasoffkee	.10	0.28	1,570	F	C
Webster	.07	--	700	F	C
Wildwood	.216	0.5	3,700	F	C
Suwannee					
Branford	0.150	1.08	870	F	C
Wellborn	.012	0.432	452	F	C
Taylor					
Dekle Beach	0.010	--	187	F	C
Keaton Beach	.017	--	367	F	C
Steinhatchee	.112	--	1,122	F	C
Volusia					
DeBary	0.07	0.55	780	F	A, C.
Edgewater	.35	.5	4,219	F	A, C, V
Lake Helen	.2	1.4	2,038	F	C
Orange City	.4	2.3	2,215	F	C
Wakulla					
Panacea	0.08	0.749	1,530	F	C
St. Marks	.048	.144	394	F	C, D, X
Sopchoppy	.035	.403	720	F	A, C

1/ See Gulf Breeze, p. 39.

TABLE 5.--Public water supplies of 111 communities and municipalities of generally less than 5,000 population, 1975. (Continued)

County Municipality	Pumpage Mgal/d	Plant capacity	Population served	Source (aquifer)	Water treatment
Walton					
Argyle	0.014	0.18	340	F	C
Choctaw Beach	.019	--	326	F	C
Freeport	.046	0.936	880	F	C
Grayton Beach	.01	.144	105	F	C
Inlet Beach	.011	.187	357	F	C
Paxton	.066	.432	1,139	F	C
Villa Tasso	.022	.144	221	F	C
Washington					
Caryville	0.067	0.43	875	F	C
Vernon	.07	.18	795	F	C
Wausau	.016	.14	272	F	C

Table 6 follows.

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.

EXPLANATION OF SYMBOLS

COUNTY (CO.): 01, ALACHUA; 02, BAKER; 03, BAY; 04, BRADFORD; 05, BREVARD; 06, BROWARD; 07, CALHOUN; 08, CHARLOTTE; 09, CITRUS; 10, CLAY; 11, COLLIER; 12, COLUMBIA; 13, DADE; 14, DESOTO; 15, DIXIE; 16, DUVAL; 17, ESCAMBIA; 18, FLAGLER; 19, FRANKLIN; 20, GADSDEN; 21, GILCHRIST; 22, GLADES; 23, GULF; 24, HAMILTON; 25, HARDEE; 26, HENDRY; 27, HERNANDO; 28, HIGHLANDS; 29, HILLSBOROUGH; 30, HOLMES; 31, INDIAN RIVER; 32, JACKSON; 33, JEFFERSON; 34, LAFAYETTE; 35, LAKE; 36, LEE; 37, LEON; 38, LEVY; 39, LIBERTY; 40, MADISON; 41, MANATEE; 42, MARION; 43, MARTIN; 44, MONROE; 45, NASSAU; 46, OKALOOSA; 47, OKEECHOBEE; 48, ORANGE; 49, OSCEOLA; 50, PALM BEACH; 51, PASCO; 52, PINELLAS; 53, POLK; 54, PUTNAM; 55, ST. JOHNS; 56, ST. LUCIE; 57, SANTA ROSA; 58, SARASOTA; 59, SEMINOLE; 60, SUMTER; 61, SUWANNEE; 62, TAYLOR; 63, UNION; 64, VOLUSIA; 65, WAKULLA; 66, WALTON; 67, WASHINGTON.

SOURCES OF WATER (S): G, GROUND WATER; S, SURFACE WATER; X, GROUND AND SURFACE WATER.

MONTH OF HIGHEST PUMPAGE: 1-9, JANUARY-SEPTEMBER; O, OCTOBER; N, NOVEMBER; D, DECEMBER.

PUMPAGE HIGHEST AND LOWEST MONTH: N/R = NOT REPORTED.

WATER TREATMENT: A, AERATION; C, CHLORINATION; D, FLOCCULATION; E, ALGAE CONTROL; F, FILTRATION; G, COAGULATION; H, TASTE AND ODOR CONTROL; I, CARBONATION; J, SOFTENING AND FILTRATION; K, DETENTION; L, CLARIFICATION; M, COAGULATION, FLOCCULATION, SEDIMENTATION, STABILIZATION AND CLARIFICATION; N, NONE; O, COAGULATION AND SOFTENING; P, ANTI-PRECIPITATION AND CORROSION CONTROL; Q, SEDIMENTATION AND SOFTENING; R, RECARBONATION; S, SEDIMENTATION; T, STABILIZATION; U, FLUORIDATION; V, SOFTENING; X, PH CONTROL; Z, CHLORINATION AND FLUORIDATION.

TYPE OF ANALYSIS: B, BACTERIOLOGICAL; C, CHEMICAL; P, PHOTOMETRIC; S, SPECTROGRAPHIC.

FREQUENCY OF ANALYSIS: SAME AS TYPE ANALYSIS: I.E. FREQUENCY MI, M APPLIES TO B AND I APPLIES TO C UNDER TYPE ANALYSIS. A, ANNUALLY; D, DAILY; H, HOURLY; I, INTERMITTENTLY; M, MONTHLY; Q, QUARTERLY; S, SEMIANNUALLY; W, WEEKLY; X, SEMIMONTHLY.

SEWAGE TREATMENT: A, AERATION; B, BIOFILTRATION; C, CHLORINATION; D, DIGESTION; E, CLARIFICATION; F, FILTRATION; G, GRIT CHAMBERS; H, DIFFUSED AIR; I, INCINERATION; J, DRYING; L, NOT REPORTED; M, OXIDATION; N, NONE; O, COMMINUTION; P, POLISHING POND; Q, SKIMMING; R, SPIRO VORTEX; S, ACTIVATED SLUDGE; T, SEPTIC TANKS; U, CONTACT STABILIZATION; V, SETTLING; X, PRIMARY; Y, SECONDARY; Z, TERTIARY.

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
							1945[a]									
[illegible]	19	4,000	G	1.2	36.50	.10	N/R	N/R	N/R	N/R	AC	BC		25	CY	.32
[illegible]	14	3,500	S	.5	146.00	.40	N/R	N/R	N/R	N/R	ACORFO			114	N	.00
AUBURNDALE	53	1,800	G	1.4	62.05	.17	N/R	N/R	N/R	N/R	N			94		.00
AVON PARK	28	2,625	G	1.6	109.50	.30	N/R	N/R	N/R	N/R	N			114	STV	.12
BARTOW	53	6,000	G	1.9	237.25	.65	N/R	N/R	N/R	N/R	N			109	SDV	.00
BELLE GLADE	50	4,000	S	.2	.00	.00	N/R	N/R	N/R	N/R	AFC	C				.00
BOCA RATON	50	950	G	1.0	109.50	.30	N/R	N/R	N/R	N/R	AFVR			315		.00
BONIFAY	30	1,120	G		27.37	.07	N/R	N/R	N/R	N/R	N			63	V	.05
BOYNTON BCH	50				.00	.00	N/R	N/R	N/R	N/R						.00
BRADENTON	41				.00	.00	N/R	N/R	N/R	N/R						.00
BRANDON	29				.00	.00	N/R	N/R	N/R	N/R						.00
BRISTOL	39				.00	.00	N/R	N/R	N/R	N/R						.00
BRONSON	38				.00	.00	N/R	N/R	N/R	N/R						.00
BROOKSVILLE	27				.00	.00	N/R	N/R	N/R	N/R						.00
BUNNELL	18				.00	.00	N/R	N/R	N/R	N/R						.00
BUSHNELL	60				.00	.00	N/R	N/R	N/R	N/R						.00
CAPE CORAL	36				.00	.00	N/R	N/R	N/R	N/R						.00
CARYL CITY	13				.00	.00	N/R	N/R	N/R	N/R						.00
CASSELBERRY	59				.00	.00	N/R	N/R	N/R	N/R						.00
CHATTAHOOCHE	20				.00	.00	N/R	N/R	N/R	N/R						.00
CHIPLEY	67				.00	.00	N/R	N/R	N/R	N/R						.00
CLEARWATER	52				.00	.00	N/R	N/R	N/R	N/R						.00
CLEWISTON	26				.00	.00	N/R	N/R	N/R	N/R						.00
COCOA	05				.00	.00	N/R	N/R	N/R	N/R						.00
CRAWFORDVILLE	65	150	G	.0	4.38	.01	N/R	N/R	N/R	N/R	N			67		.00
CRESTVIEW	46	1,700	G	.2	51.10	.14	N/R	N/R	N/R	N/R	N			82	V	.00
CROSS CITY	15	1,250	G	.3	36.50	.10	N/R	N/R	N/R	N/R	AFSO			80		.00
CUTLER RIDGE	13				.00	.00	N/R	N/R	N/R	N/R						.00
DADE CITY	51	2,500	G	.2	58.40	.16	N/R	N/R	N/R	N/R	N			64	V	.00
DANIA	06	2,900	G	1.0	91.25	.25	N/R	N/R	N/R	N/R	C			86		.00
DAYTONA BCH	64	25,000	G	4.0	730.00	2.00	N/R	N/R	N/R	N/R	AOSRFC	BC		80	C	.00
DEERFLD BCH	06	1,850	G	.4	25.55	.07	N/R	N/R	N/R	N/R	N			37		.00
DE FUNAK SPR	66	2,700	G	.4	54.75	.15	N/R	N/R	N/R	N/R	C			55	N	.00
DE LAND	64	10,000	G	5.3	365.00	1.00	N/R	N/R	N/R	N/R	N			100	VDS	1.00
DELRAY BCH	50	3,600	G	1.5	182.50	.50	N/R	N/R	N/R	N/R	N			138	VD	.00
DUNEDIN	52	2,000	G	1.8	73.00	.20	N/R	N/R	N/R	N/R	N			100	V	.00
ENGLEWOOD	58				.00	.00	N/R	N/R	N/R	N/R						.00
EUSTIS	35	4,000	G	1.3	51.10	.14	N/R	N/R	N/R	N/R	N			35	V	.00
FERNANDNA BC	45	1,800	G	2.1	101.18	.27	6	9.41	1	7.30	C			150	N	.00
FT LAUDEDALE	06	45,000	G	6.0	1460.00	4.00	N/R	N/R	N/R	N/R	COFA	BC		88	DCUS	.00

[a] See footnotes at end of table.

FT MYERS	36	11,000	G	2.0	328.50	.90	N/R	N/R	N/R	N/R	ACFSV	C	82	N	.00
FT MYERS BCH	36				.00	.00	N/R	N/R	N/R	N/R					.00
FT MYER SUBN	36				.00	.00	N/R	N/R	N/R	N/R					.00
FT PIERCE	56	10,000	X	2.0	547.50	1.50	N/R	N/R	N/R	N/R	AORPTC	BC	150	N	.00
FT WALTN BCH	46	1,500	G	.7	36.50	.10	N/R	N/R	N/R	N/R	AC		66	CVS	.20
GAINESVILLE	01	16,000	X	4.8	511.00	1.40	N/R	N/R	N/R	N/R	C		87	VS	3.25
GRN COVE SPR	10	2,000	G	1.4	73.00	.20	N/R	N/R	N/R	N/R	N		100	N	.00
GULFPORT	52	1,200	G		.00	.00	N/R	N/R	N/R	N/R					.00
HAINES CITY	53	3,400	G	2.9	146.00	.40	N/R	N/R	N/R	N/R	N		117	FDS	.00
HALLANDALE	06				.00	.00	N/R	N/R	N/R	N/R					.00
HOLLY HILL	64				.00	.00	N/R	N/R	N/R	N/R					.00
HOLLYWOOD	06	2,810	G	1.0	255.50	.70	N/R	N/R	N/R	N/R	AFC		98	C	.00
HOMESTEAD	13	3,200	G	2.2	237.25	.65	N/R	N/R	N/R	N/R	N		203	X	.00
INVERNESS	09	1,200	G	1.0	43.80	.12	N/R	N/R	N/R	N/R	N		100	X	.07
JACKSONVILLE	16	135,000	G	24.0	7998.41	21.91	3	774.91	2	551.69	AC	B	110	N	.00
JACKSNVLE BC	16	15,000	G	1.2	.00	.00	N/R	N/R	N/R	N/R	N			N	.00
JASPER	24	1,200	G	.8	47.45	.13	N/R	N/R	N/R	N/R	N			N	.00
KEY WEST	44	25,000	G		.00	.00	N/R	N/R	N/R	N/R	C			CDSDF	2.62
KISSIMMEE	49	3,200	G	2.2	146.00	.40	N/R	N/R	N/R	N/R	A		125	FV	.00
LA BELLE	26	600	G		.00	.00	N/R	N/R	N/R	N/R	N			FV	.00
LAKE BUTLER	63	350	G	.7	36.50	.10	N/R	N/R	N/R	N/R	N		28	FV	.05
LAKE CITY	12	9,000	G	1.5	365.00	1.00	N/R	N/R	N/R	N/R	AORFS	C	110	VFCDS	.37
LAKELAND	53	22,100	G	5.7	1200.00	3.28	N/R	N/R	N/R	N/R	AC		67	GOVFAD	2.00
LAKE PLACID	28	500	S	1.0	36.50	.10	N/R	N/R	N/R	N/R	N		200		.00
LAKE WALES	53	5,020	G	1.4	127.75	.35	N/R	N/R	N/R	N/R	AC		70	V	.00
LAKE WORTH	50	6,500	G	4.0	730.00	2.00	N/R	N/R	N/R	N/R	C		307	V	.00
LANTANA	50	235	G	.7	65.70	.01	N/R	N/R	N/R	N/R	N		70	V	.02
LARGO	52	1,000	G	.2	65.70	.18	N/R	N/R	N/R	N/R	N		180	V	.00
LEESBURG	35	4,700	G	1.2	182.50	.50	N/R	N/R	N/R	N/R	N		106	CVODS	.25
LEHIGH ACRES	36				.00	.00	N/R	N/R	N/R	N/R					.00
LIVE OAK	61	2,700	G	.5	62.05	.17	N/R	N/R	N/R	N/R	AOSFC		63	GV	.09
MACCLENNY	02				.00	.00	N/R	N/R	N/R	N/R					.00
MADISON	40	2,200	G	.6	70.36	.19	6	7.93	2	4.42	N		77		500.00
MAITLAND	48	450	G	.7	18.25	.05	N/R	N/R	N/R	N/R	N		110		.00
MARIANNA	32	5,500	G	.9	73.00	.20	N/R	N/R	N/R	N/R	C		36	OVCS	.00
MAYO	34	450	G	.1	.00	.00	N/R	N/R	N/R	N/R	N				.00
MELBOURNE	05	3,800	G	.2	51.10	.14	N/R	N/R	N/R	N/R	ARFCSO		37	V	.00
MIAMI	13	213,400	G	30.0	12639.00	34.63	N/R	N/R	N/R	N/R	ACOSR	BC	103	N	.00
MILTON	57	1,800	G	.3	36.50	.10	N/R	N/R	N/R	N/R	N			CVS	.00
MIRAMAR	06				.00	.00	N/R	N/R	N/R	N/R					.00
MONTICELLO	33	1,000	G	.7	36.50	.10	N/R	N/R	N/R	N/R	N		100	V	.00
MOORE HAVEN	22	750	S	.2	14.60	.04	N/R	N/R	N/R	N/R	ACOSFP		53		.00
NAPLES	11	750	G	1.1	25.55	.07	N/R	N/R	N/R	N/R	N		93		.00
NEW PT RICHY	51	1,000	G	.7	91.25	.25	N/R	N/R	N/R	N/R	N		250	V	.00
NEW SMYRNA B	64	4,700	G	1.0	182.50	.50	N/R	N/R	N/R	N/R	ACF		106	N	.00
NICEVILLE	46				.00	.00	N/R	N/R	N/R	N/R					.00
NORTH MIAMI	13				.00	.00	N/R	N/R	N/R	N/R					.00
NO MIAMI BCH	13	300	G	1.4	29.20	.08	N/R	N/R	N/R	N/R	ASO		267		.00
NO PALM BCH	50				.00	.00	N/R	N/R	N/R	N/R					.00
N PT CHARLOT	58				.00	.00	N/R	N/R	N/R	N/R					.00

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1945--CONTINUED																
OAKLAND PARK	06		G		.00	.00	N/R	N/R	N/R	N/R						.00
OCALA	42	9,000	G	2.1	328.50	.90	N/R	N/R	N/R	N/R	C			100	GOVS	.39
OKEECHOBEE	47	2,000	S	2.8	51.10	.14	N/R	N/R	N/R	N/R	AOSF			70	V	.00
OPA-LOCKA	13	1,000	G	.2	21.90	.06	N/R	N/R	N/R	N/R	C			60		.00
ORLANDO	48	36,700	X	13.0	2314.29	6.34	N/R	N/R	N/R	N/R	AOSFCH			270	V	.00
ORMOND BCH	64	5,000	G	2.7	146.00	.40	N/R	N/R	N/R	N/R	AOS			80		.00
PAHOKEE	50	4,500	G	.4	54.75	.15	N/R	N/R	N/R	N/R	AOSFCH			33		.00
PALATKA	54	6,400	S	2.2	310.25	.85	N/R	N/R	N/R	N/R	CFSO			132	V	.00
PALM BEACH	50	3,750			.00	.00	N/R	N/R	N/R	N/R						.00
PALM BCH GDN	50				.00	.00	N/R	N/R	N/R	N/R						.00
PALMETTO	41	3,300	G	2.0	135.05	.37	N/R	N/R	N/R	N/R	N			112	V	.00
PANAMA CITY	03	40,000	G	5.0	836.00	2.29	6	83.66	D	47.01	C			57	V	.00
PENSACOLA	17	65,000	G		1489.40	4.08	6	156.00	2	92.10	AP			62	SGCDVO	.00
PERRY	62	2,700	G		102.20	.28	N/R	N/R	N/R	N/R	AOFSC			103	N	.00
PINELLAS PK	52	600	G	.7	18.25	.05	N/R	N/R	N/R	N/R	N			83		.00
PINE ISLAND	36				.00	.00	N/R	N/R	N/R	N/R						.00
PLANT CITY	29	6,000	G	3.7	164.25	.45	N/R	N/R	N/R	N/R	N			75	V	.00
POMPANO BCH	06				.00	.00	N/R	N/R	N/R	N/R						.00
PT CHARLOTTE	08				.00	.00	N/R	N/R	N/R	N/R						.00
PORT ST JOE	23	2,000	G	1.0	45.65	.12	N/R	N/R	N/R	N/R	N			63	OVFOS	.35
PUNTA GORDA	08	1,080	S	1.4	36.50	.10	N/R	N/R	N/R	N/R	AOHSC	C		92	V	.00
QUINCY	20		G		.00	.00	N/R	N/R	N/R	N/R	N				V	.00
RIVIERA BCH	50				.00	.00	N/R	N/R	N/R	N/R						.00
ST AUGUSTINE	55	12,000	G	2.0	365.00	1.00	N/R	N/R	N/R	N/R	AOHSFC	C		83	V	.00
ST CLOUD	49	3,000	G	2.5	284.70	.78	N/R	N/R	N/R	N/R	AF			260	V	.00
ST PETERBURG	52	150,000	G	12.0	1825.00	5.00	N/R	N/R	N/R	N/R	AOFCSH			33	VCO	20.00
ST PETE BCH	52				.00	.00	N/R	N/R	N/R	N/R						.00
SANFORD	59	15,000	G	2.4	255.50	.70	N/R	N/R	N/R	N/R	AC			47	N	.00
SARASOTA	58	12,000	G	1.0	255.50	.70	N/R	N/R	N/R	N/R	AFC			58	N	.00
SEBRING	28	3,000	G	2.0	142.35	.39	N/R	N/R	N/R	N/R	N			130	OFV	.00
STARKE	04	5,000	G		.00	.00	N/R	N/R	N/R	N/R	CTP				OGDCV	.40
STUART	43	2,440	G	.5	42.00	.11	3	4.25	7	3.02	AF			29	V	.00
TALLAHASSEE	37	20,000		21.0	8491.30	23.26	N/R	788.19	N/R	656.00				116	CVFOS	2.50
TAMPA	29	125,000	S	15.0	4745.00	13.00	N/R	N/R	N/R	N/R	CFMR			104	N	.00
TARPON SPRS	52	3,800	G	2.1	98.55	.27	N/R	N/R	N/R	N/R	N			70	V	.00
TAVARES	35	1,550	G	.9	.00	.00	N/R	N/R	N/R	N/R	N					.00
TITUSVILLE	05	1,800	G	.3	43.80	.12	N/R	N/R	N/R	N/R				66	V	.00
TRENTON	21	600	G	.5	14.60	.04	N/R	N/R	N/R	N/R	N			66		.00
VALPARAISO	46	300	G		10.95	.03	N/R	N/R	N/R	N/R	N			100		.00
VENICE	58	500	G	.8	36.50	.10	N/R	N/R	N/R	N/R	N			20		.00

VERO BEACH	31	3,050	G	.1	182.50	.50	N/R	N/R	N/R	N/R	FSO		164	OVDS	.40
WARRINGTON	17	1,200	G	.2	.00	.00	N/R	N/R	N/R	N/R	OF				.00
WAUCHULA	25	2,500	G	1.0	54.75	.15	N/R	N/R	N/R	N/R	N		60	V	.00
WEST PALM BC	50	100,000	X	20.0	2190.00	6.00	N/R	N/R	N/R	N/R	CAFO	BC	60	V	.00
WINTER GARDN	48	1,500	G	.5	54.75	.15	N/R	N/R	N/R	N/R	C		100		.00
WINTER HAVEN	53	7,000	G	3.3	240.90	.66	N/R	N/R	N/R	N/R	C		94	V	.00
WINTER PARK	48	6,215	G	2.6	127.75	.35	N/R	N/R	N/R	N/R	N		56	SV	.00

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APALACHICOLA	19	4,000	G	1.2	36.50	.10	N/R	N/R	N/R	N/R	ASC		25		.00
ARCADIA	14	4,000	S	1.0	164.70	.45	N/R	N/R	N/R	N/R	ACFSC	BC	113	N	.00
AUBURNDALE	53	5,000	G	1.6	182.50	.50	N/R	N/R	N/R	N/R	N		100		.00
AVON PARK	28	4,700	X	2.3	116.80	.32	N/R	N/R	N/R	N/R	N		68		.00
BARTOW	53	10,000	G	4.5	365.00	1.00	N/R	N/R	N/R	N/R	N		100		.00
BELLE GLADE	50	8,000	S	3.0	255.50	.70	N/R	N/R	N/R	N/R	AGRFC	BC	88		.00
BOCA RATON	50	2,500	G	.5	273.75	.75	N/R	N/R	N/R	N/R	AGSFRC	C	300		.00
BONIFAY	30	2,000	G	.4	.00	.00	N/R	N/R	N/R	N/R	N				.00
BOYNTON BCH	50	2,250	G	.9	109.50	.30	N/R	N/R	N/R	N/R	N		133		.00
BRADENTON	41	12,000	S	2.1	474.50	1.30	N/R	N/R	N/R	N/R	AGSCFT	BC	108		.00
BRANDON	29				.00	.00	N/R	N/R	N/R	N/R					.00
BRISTOL	39				.00	.00	N/R	N/R	N/R	N/R					.00
BRONSON	38	175	G		7.30	.02	N/R	N/R	N/R	N/R	N				.00
BROOKSVILLE	27	2,200	G	1.3	62.05	.17	N/R	N/R	N/R	N/R	N		77		.00
BUNNELL	18	1,100	G	.3	18.25	.05	N/R	N/R	N/R	N/R	ACS		45	NT	.00
BUSHNELL	60	700	G	.4	73.00	.20	N/R	N/R	N/R	N/R	N		286		.00
CAPE CORAL	36				.00	.00	N/R	N/R	N/R	N/R					.00
CAROL CITY	13				.00	.00	N/R	N/R	N/R	N/R					.00
CASSELBERRY	59				.00	.00	N/R	N/R	N/R	N/R					.00
CHATTAHOOCHE	20	4,000	G	.4	29.20	.08	N/R	N/R	N/R	N/R	C		20		.00
CHIPLEY	67	2,200	G	.6	40.15	.11	N/R	N/R	N/R	N/R	N		50		.00
CLEARWATER	52	25,000	G	4.0	547.50	1.50	N/R	N/R	N/R	N/R	N		60		.00
CLEWISTON	26	5,000	S		102.20	.28	N/R	N/R	N/R	N/R	CAGFST	C	56		.00
COCOA	05	6,500	S	.7	127.75	.35	N/R	N/R	N/R	N/R	GSTFC	C	54		.00
CRAWFORDVILLE	65	100	G	.0	3.65	.01	N/R	N/R	N/R	N/R	N		100	NT	.00
CRESTVIEW	46	4,500	G	.7	131.40	.36	N/R	N/R	N/R	N/R	N		80		.00
CROSS CITY	15	1,200	G	.2	54.75	.15	N/R	N/R	N/R	N/R	ASFC		125		.00
CUTLER RIDGE	13				.00	.00	N/R	N/R	N/R	N/R					.00
DADE CITY	51	3,500	G	2.2	83.95	.23	N/R	N/R	N/R	N/R	N		66		.00
DANIA	06	3,500	G	1.3	146.00	.40	N/R	N/R	N/R	N/R	ASC		114		.00
DAYTONA BCH	64	35,000	G	5.0	1095.00	3.00	N/R	N/R	N/R	N/R	AGSRFC	BC	86		.00
DEERFLD BCH	06	2,000	G	.8	54.75	.15	N/R	N/R	N/R	N/R	A		75		.00
DE FUNAK SPR	66	3,000	G	.4	109.50	.30	N/R	N/R	N/R	N/R	C		100		.00
DE LAND	64	10,000	G	5.0	365.00	1.00	N/R	N/R	N/R	N/R	CG		100		.00
DELRAY BCH	50	7,750	G	3.1	365.00	1.00	N/R	N/R	N/R	N/R	AS		129		.00

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1947--CONTINUED																
DUNEDIN	52	3,000	G	2.2	120.45	.33	N/R	N/R	N/R	N/R	N			110		.00
ENGLEWOOD	58				.00	.00	N/R	N/R	N/R	N/R						.00
EUSTIS	35	5,300	G	1.4	146.00	.40	N/R	N/R	N/R	N/R	AS			75		.00
FERNANDNA BC	45		G		113.15	.31	6	10.82	3	8.02						.00
FT LAUDEDALE	06	50,500	G	5.6	1460.00	4.00	N/R	N/R	N/R	N/R	AGJSTC	BC		79		.00
FT MYERS	36	16,000	S	2.0	438.00	1.20	N/R	N/R	N/R	N/R	C			75		.00
FT MYERS BCH	36	1,500	G	.0	3.65	.01	N/R	N/R	N/R	N/R	N					.00
FT MYER SUBN	36				.00	.00	N/R	N/R	N/R	N/R						.00
FT PIERCE	56	7,500	X	3.0	547.50	1.50	N/R	N/R	N/R	N/R	AGTSC	BC		200		.00
FT WALTN BCH	46	1,200	G	.6	.00	.00	N/R	N/R	N/R	N/R	AC					.00
GAINESVILLE	01	22,000	X	4.8	751.90	2.06	N/R	N/R	N/R	N/R	C	C		94		.00
GRN COVE SPR	10	3,000	G	1.4	73.00	.20	N/R	N/R	N/R	N/R	N			66	MT	.00
GULFPORT	52	2,443	G		.00	.00	N/R	N/R	N/R	N/R						.00
HAINES CITY	53	5,200	G	2.9	182.50	.50	N/R	N/R	N/R	N/R	N			96		.00
HALLANDALE	06				.00	.00	N/R	N/R	N/R	N/R						.00
HOLLY HILL	64	5,000	G	.5	91.25	.25	N/R	N/R	N/R	N/R	AGSFC	C		50		.00
HOLLYWOOD	06	12,000	G	2.0	511.00	1.40	N/R	N/R	N/R	N/R	AFC			117		.00
HOMESTEAD	13	5,000	G	2.4	620.50	1.70	N/R	N/R	N/R	N/R	N			340		.00
INVERNESS	09	1,000	G	.7	65.70	.18	N/R	N/R	N/R	N/R	N			180		.00
JACKSONVILLE	16	225,700	G	68.6	9076.66	24.86	5	872.84	2	623.91	ASC			97		.00
JACKSNVLE BC	16	20,000	G	2.5	.00	.00	N/R	N/R	N/R	N/R	ASC					.00
JASPER	24	1,800	G	.8	54.75	.15	N/R	N/R	N/R	N/R	N			83		.00
KEY WEST	44	20,000	G		.00	.00	N/R	N/R	N/R	N/R	C					.00
KISSIMMEE	49	4,000	G	1.4	262.80	.72	N/R	N/R	N/R	N/R	ACS			180		.00
LA BELLE	26	650	G		.00	.00	N/R	N/R	N/R	N/R	N					.00
LAKE BUTLER	63	750	G	1.4	36.50	.10	N/R	N/R	N/R	N/R	N			134		.00
LAKE CITY	12	6,000	G	1.5	306.60	.84	N/R	N/R	N/R	N/R	ACGRF	BC		140		.00
LAKE PLACID	28	500	X	1.8	58.40	.16	N/R	N/R	N/R	N/R	C			320		.00
LAKELAND	53	35,000	G	6.9	1095.00	3.00	N/R	N/R	N/R	N/R	ASC			86		.00
LAKE WALES	53	7,000	G	3.0	273.75	.75	N/R	N/R	N/R	N/R	N			107		.00
LAKE WORTH	50	10,000	G	8.0	1825.00	5.00	N/R	N/R	N/R	N/R	C			500		.00
LANTANA	50	700	G	.8	36.50	.10	N/R	N/R	N/R	N/R	N			143		.00
LARGO	52	2,700	G	.8	65.70	.18	N/R	N/R	N/R	N/R	N			67		.00
LEESBURG	35	6,000	G	2.6	219.00	.60	N/R	N/R	N/R	N/R	N			100		.00
LEHIGH ACRES	36				.00	.00	N/R	N/R	N/R	N/R						.00
LIVE OAK	61	5,000	G	.5	109.50	.30	N/R	N/R	N/R	N/R	C			60		.00
MACCLENNY	02	1,300	G	.4	21.90	.06	N/R	N/R	N/R	N/R	C			46		.00
MADISON	40	2,500	G	1.2	81.64	.22	3	8.18	D	5.63	N			92		.00
MAITLAND	48				.00	.00	N/R	N/R	N/R	N/R						.00
MARIANNA	32	8,000	G	1.7	219.00	.60	N/R	N/R	N/R	N/R	C			75		.00

MAYO	34	630	G	.1	.00	.00	N/R	N/R	N/R	N/R	N			NT .00
MELBOURNE	05	5,700	S	.3	73.00	.20	N/R	N/R	N/R	N/R	AGCF		35	.00
MIAMI	13	233,000	G	60.0	13140.00	36.00	N/R	N/R	N/R	N/R	GCSF	BC	155	.00
MILTON	57	2,000	G	.9	36.50	.10	N/R	N/R	N/R	N/R	C		50	.00
MIRAMAR	06				.00	.00	N/R	N/R	N/R	N/R				.00
MONTICELLO	33	2,300	G	1.0	61.58	.17	8	6.55	2	3.65	N		74	.00
MOORE HAVEN	22	1,300	S		58.40	.16	N/R	N/R	N/R	N/R	ACGFST	C	123	.00
NAPLES	11	1,000	G	.4	36.50	.10	N/R	N/R	N/R	N/R	ACGFT	C	100	.00
NEW PT RICHY	51	1,000	G	.7	65.70	.18	N/R	N/R	N/R	N/R	N		180	.00
NEW SMYRNA B	64	6,000	G	1.3	408.80	1.12	N/R	N/R	N/R	N/R	AFTC	C	187	.00
NICEVILLE	46				.00	.00	N/R	N/R	N/R	N/R				.00
NORTH MIAMI	13	2,500	G	1.6	127.75	.35	N/R	N/R	N/R	N/R	AGSFC		140	.00
NO MIAMI BCH	13	1,500	G	2.2	47.45	.13	N/R	N/R	N/R	N/R	AGSC		86	.00
NC PALM BCH	50				.00	.00	N/R	N/R	N/R	N/R				.00
N PT CHARLOT	58				.00	.00	N/R	N/R	N/R	N/R				.00
OAKLAND PARK	06				.00	.00	N/R	N/R	N/R	N/R				.00
OCALA	42	10,000	G	4.9	547.50	1.50	N/R	N/R	N/R	N/R	C		150	.00
OKEECHOBEE	47	1,800	S	.7	54.75	.15	N/R	N/R	N/R	N/R	AGFTC	C	94	.00
OPA-LOCKA	13	1,500	G	.6	51.10	.14	N/R	N/R	N/R	N/R	ACGST	C	93	.00
ORLANDO	48	65,000	S	8.0	2491.60	6.82	N/R	N/R	N/R	N/R	AGCFS	BC	108	.00
ORMOND BCH	64	2,000	G	1.0	182.50	.50	N/R	N/R	N/R	N/R	AGFC		250	.00
PAHOKEE	50	9,500	S	.4	146.00	.40	N/R	N/R	N/R	N/R	AFSC		42	.00
PALATKA	54	7,500	S	1.7	313.90	.86	N/R	N/R	N/R	N/R	CSFT		115	.00
PALM BEACH	50		S		.00	.00	N/R	N/R	N/R	N/R				.00
PALM BCH GDN	50				.00	.00	N/R	N/R	N/R	N/R				.00
PALMETTO	41	2,500	G	1.3	69.35	.19	N/R	N/R	N/R	N/R	AC		76	.00
PANAMA CITY	03	27,000	G	4.4	519.15	1.42	7	55.76	2	32.48	ACSFG	BC	53	.00
PENSACOLA	17	40,600	S	8.4	1723.20	4.72	7	180.60	2	112.90	ASC		116	.00
PERRY	62	6,000	G	1.1	167.63	.46	1	18.93	D	10.60	ACFS		76	.00
PINELLAS PK	52		G		.00	.00	N/R	N/R	N/R	N/R				.00
PINE ISLAND	36				.00	.00	N/R	N/R	N/R	N/R				.00
PLANT CITY	29	8,800	G	2.8	219.00	.60	N/R	N/R	N/R	N/R	N		68	.00
POMPANO BCH	06	5,400		1.1	109.50	.30	N/R	N/R	N/R	N/R	A		56	.00
PT CHARLOTTE	08				.00	.00	N/R	N/R	N/R	N/R				.00
PORT ST JOE	23	2,500	G	.4	47.45	.13	N/R	N/R	N/R	N/R	AFTC		52	.00
PUNTA GORDA	08	2,000	S	.5	91.25	.25	N/R	N/R	N/R	N/R	ACGSFT	BC	125	.00
QUINCY	20	5,500	G	1.7	182.50	.50	N/R	N/R	N/R	N/R	N		91	.00
RIVIERA BCH	50	2,000	G	.3	76.65	.21	N/R	N/R	N/R	N/R	N		105	.00
ST AUGUSTINE	55	17,500	S	2.0	456.25	1.25	N/R	N/R	N/R	N/R	ACGSFT	BC	71	.00
ST CLOUD	49	3,500	G	2.2	375.95	1.03	N/R	N/R	N/R	N/R	ASCT		294	.00
ST PETERBURG	52	107,400	G	12.0	2591.50	7.10	N/R	N/R	N/R	N/R	ACGFS		66	.00
ST PETE BCH	52				.00	.00	N/R	N/R	N/R	N/R				.00
SANFORD	59	10,800	G	1.6	292.00	.80	N/R	N/R	N/R	N/R	AC		74	.00
SARASOTA	58	17,500	G	2.0	456.25	1.25	N/R	N/R	N/R	N/R	AFSC		71	.00
SEBRING	28	6,250	X	5.5	273.75	.75	N/R	N/R	N/R	N/R	AC		120	.00
STARKE	04	4,500	G	1.3	109.50	.30	N/R	N/R	N/R	N/R	C		66	.00
STUART	43	5,500	G	.6	42.47	.12	1	4.14	9	310.00	AFS		218	.00
TALLAHASSEE	37	23,675	G	10.8	865.12	2.37	3	60.43	7	81.65	C		100	.00
TAMPA	29	193,200	X	36.7	6040.75	16.55	N/R	N/R	N/R	N/R	GFSRC	BC	85	.00
TARPON SPRS	52	4,000	G	2.2	73.00	.20	N/R	N/R	N/R	N/R	N		50	.00

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPUL-ATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREAT-MENT	TYPE ANAL-YSIS	FREQ-ANAL-YSIS	PER CAP USE	SEWAGE TREAT-MENT	SEWAGE DISCH MGAL/D
1947 --CONTINUED																
TAVARES	35	1,700	G	.6	47.45	.13	N/R	N/R	N/R	N/R	N			76		.00
TITUSVILLE	05	2,500	S	.1	10.95	.03	N/R	N/R	N/R	N/R	N			120		.00
TRENTON	21	700	G	.4	18.25	.05	N/R	N/R	N/R	N/R	N			72		.00
VALPARAISO	46	1,500	G	.3	.00	.00	N/R	N/R	N/R	N/R	N					.00
VENICE	58	2,000	G	1.1	36.50	.10	N/R	N/R	N/R	N/R	AC			50		.00
VERO BEACH	31	3,600	G	1.0	219.00	.60	N/R	N/R	N/R	N/R	AGFTC			166		.00
WAUCHULA	25	2,400	G	1.7	109.50	.30	N/R	N/R	N/R	N/R	N			125		.00
WARRINGTON	17	12,388	S	3.0	273.75	.75	N/R	N/R	N/R	N/R	GFC			60		.00
WEST PALM BC	50	40,557	S	20.0	2920.00	8.00	N/R	N/R	N/R	N/R	AGSCFT	BC		197		.00
WINTER GARDN	48	3,400	G	.9	73.00	.20	N/R	N/R	N/R	N/R	AC			58		.00
WINTER HAVEN	53	13,000	G	2.8	365.00	1.00	N/R	N/R	N/R	N/R	AC			77		.00
WINTER PARK	48	10,000	G	5.0	365.00	1.00	N/R	N/R	N/R	N/R	AC			100		.00
1956[e]																
APALACHICOLA	19	2,600	G	1.1	73.20	.20	N/R	N/R	N/R	N/R	ACS			77		.00
ARCADIA	14	4,500	S	1.0	256.20	.70	N/R	N/R	N/R	N/R	CSHTFG	BC		155		.00
AUBURNDALE	53	7,500	G	5.1	274.50	.75	N/R	N/R	N/R	N/R	N			100		.00
AVON PARK	28	6,500	G	1.8	256.20	.70	N/R	N/R	N/R	N/R	N			108		.00
BARTOW	53	11,200	G	5.6	549.00	1.50	N/R	N/R	N/R	N/R	AOSRFC	BC		134		.00
BELLE GLADE	50	7,000	S	2.2	366.00	1.00	N/R	N/R	N/R	N/R		BC		143		.00
BLOUNTSTOWN	07	2,500	G	.7	73.20	.20	N/R	N/R	N/R	N/R	N			80		.00
BOCA RATON	50	3,260	G	1.0	263.52	.72	N/R	N/R	N/R	N/R	ACORFS	C		306		.00
BONIFAY	30	2,260	G	.6	80.52	.22	N/R	N/R	N/R	N/R	C			100		.00
BOYNTON BCH	50	5,500	G	3.4	329.40	.90	N/R	N/R	N/R	N/R	CPT			264		.00
BRADENTON	41	20,000	S	4.0	640.50	1.75	N/R	N/R	N/R	N/R	HCOTAF	BC		87		.00
BRANDON	29	100		.6	36.60	.01	N/R	N/R	N/R	N/R	C			100		.00
BRISTOL	39	100	G	.2	36.60	.01	N/R	N/R	N/R	N/R	N			62	NT	.00
BRONSON	38				.00	.00	N/R	N/R	N/R	N/R						.00
BROOKSVILLE	27	2,500	G	1.8	102.48	.28	N/R	N/R	N/R	N/R	AS			112		.00
BUNNELL	18	1,027	G	1.0	65.88	.18	N/R	N/R	N/R	N/R	ACPTS			175		.00
BUSHNELL	36	700		.9	25.62	.07	N/R	N/R	N/R	N/R	N			100		.00
CAPE CORAL	36				.00	.00	N/R	N/R	N/R	N/R						.00
CAROL CITY	13	2,500	G	1.0	124.44	.34	N/R	N/R	N/R	N/R	AGSFC	C		136		.00
CASSELBERRY	59	1,250	G	.8	62.22	.17	N/R	N/R	N/R	N/R	ASCPTX			136		.00
CHATTAHOOCHE	20	4,000	G	1.1	65.88	.18	N/R	N/R	N/R	N/R	C			45		.00
CHIPLEY	67	3,300	G	1.0	118.95	.32	N/R	N/R	N/R	N/R	C			97		.00
CLEARWATER	52	35,000	G	17.2	2013.00	5.50	N/R	N/R	N/R	N/R	ADPTS			157		.00
CLEWISTON	26	2,600	S	2.8	366.00	1.00	N/R	N/R	N/R	N/R	ZFOHPT	BC		384		.00
COCOA	05	9,500	S	1.5	370.84	2.08	N/R	N/R	N/R	N/R	AGVSFT	BC		210		.00

CRAWFORDVILLE	65	100	G	.0	2.93	.00	N/R	N/R	N/R	N/R	N		80		.00
CRESTVIEW	46	8,000	G	2.6	208.62	.57	N/R	N/R	N/R	N/R	C		71		.00
CROSS CITY	15	1,700	G	1.7	76.86	.21	N/R	N/R	N/R	N/R	ACF		123		.00
CUTLER RIDGE	13				.00	.00	N/R	N/R	N/R	N/R					.00
DADE CITY	51				.00	.00	N/R	N/R	N/R	N/R					.00
DANIA	06	6,500	G	1.8	183.00	.50	N/R	N/R	N/R	N/R	ACS		77		.00
DAYTONA BCH	64	61,000	G	5.0	1464.00	4.00	N/R	N/R	N/R	N/R	AOSRFC		66		.00
DEERFLD BCH	06	3,500	G	2.8	183.00	.50	N/R	N/R	N/R	N/R	ACTSP		142		.00
DE FUNAK SPR	66	5,500	G	2.0	219.60	.60	N/R	N/R	N/R	N/R	C		109		.00
DELRAY BCH	50	10,300	G	7.2	1061.40	2.90	N/R	N/R	N/R	N/R	ACSF		281		.00
DE LAND	64	13,500	G	6.7	585.60	1.60	N/R	N/R	N/R	N/R	CPTX		118		.00
DUNEDIN	52	6,000	G	3.7	311.10	.85	N/R	N/R	N/R	N/R	N		141		.00
ENGLEWOOD	58				.00	.00	N/R	N/R	N/R	N/R					.00
EUSTIS	35	7,800	G	2.8	329.40	.90	N/R	N/R	N/R	N/R	AS		115		.00
FERNANDNA BC	45	6,500	G	3.3	259.86	.71	8	32.36	2	15.57	ADS		109	Y	.00
FT LAUDEDALE	06	85,000	G	22.0	6258.60	17.10	N/R	N/R	N/R	N/R	ACGQHF	BC	201		.00
FT MYERS	36	18,000	G	6.0	915.00	2.50	N/R	N/R	N/R	N/R	AORCFS	BC	169		.00
FT MYERS BCh	36	1,800	G	.5	43.92	.12	N/R	N/R	N/R	N/R	AOSFCT	C	166		.00
FT MYER SUBN	36				.00	.00	N/R	N/R	N/R	N/R					.00
FT PIERCE	56	21,000	X	3.0	658.80	1.80	N/R	N/R	N/R	N/R	AJHCST		86		.00
FT WALTN BCH	46	9,000	G	2.0	201.30	.55	N/R	N/R	N/R	N/R	ACS		61		.00
GAINESVILLE	01	29,000	G	3.0	1306.62	3.57	N/R	N/R	N/R	N/R	ACGVSF	C	123		.00
GRN COVE SPR	10	4,200	G	1.8	153.72	.42	N/R	N/R	N/R	N/R	N		100	NT	.00
GULFPORT	52	7,500	G		146.40	.40	N/R	N/R	N/R	N/R		BC	53		.00
HALLANDALE	06	6,700	G	2.0	274.50	.75	N/R	N/R	N/R	N/R	ACVG	BC	111		.00
HAINES CITY	53	8,500	G	5.2	351.69	.96	N/R	N/R	N/R	N/R	N		147		.00
HOLLY HILL	64	6,650	G	1.1	146.40	.40	N/R	N/R	N/R	N/R	AOSFCT		60		.00
HOLLYWOOD	06	40,000	G	12.0	1903.20	5.20	N/R	N/R	N/R	N/R	ACFTS	C	130		.00
HOMESTEAD	13	6,800	G	4.1	.00	.00	N/R	N/R	N/R	N/R	N				.00
INVERNESS	09	1,200	G	1.6	43.92	.12	N/R	N/R	N/R	N/R	N		100		.00
JACKSONVILLE	16	247,000		67.6	12532.46	34.33	5	1275.90	2	801.34	ACF	B	139		.00
JACKSNVLE BC	16	10,500	G	5.9	475.80	1.30	N/R	N/R	N/R	N/R	ACFGS	C	123		.00
JASPER	24	2,000	G	1.4	73.20	.20	N/R	N/R	N/R	N/R	C		100		.00
JUPITER	50	150	G	.3	16.43	.04	N/R	N/R	N/R	N/R	C		150		.00
KEY WEST	44		G		.00	.00	N/R	N/R	N/R	N/R					.00
KISSIMMEE	49	6,000	G	2.5	311.10	.85	N/R	N/R	N/R	N/R	ACS		141		.00
LA BELLE	26	650	G		25.62	.07	N/R	N/R	N/R	N/R	N		107		.00
LAKE BUTLER	63	870	G	1.3	36.60	.10	N/R	N/R	N/R	N/R	C		115		.00
LAKE CITY	12	8,600	G	2.0	366.00	1.00	N/R	N/R	N/R	N/R	ACOSF	B	116		.00
LAKELAND	53	40,000	G	23.7	2412.09	6.61	6	248.00	9	139.00	ACS		164		.00
LAKE PLACID	28	1,100	S	1.6	54.90	.15	N/R	N/R	N/R	N/R	C		136		.00
LAKE WALES	53	9,000	G	4.6	484.87	1.33	N/R	N/R	N/R	N/R	ASC		110		.00
LAKE WORTH	50	16,000	G	18.3	1281.00	3.50	N/R	N/R	N/R	N/R	C		219		.00
LANTANA	50	1,720	G	2.1	128.10	.35	N/R	N/R	N/R	N/R	N		203		.00
LARGO	52	5,500	G	1.9	219.60	.60	N/R	N/R	N/R	N/R	N		109		.00
LEESBURG	35	13,000	G	6.7	629.52	1.72	N/R	N/R	N/R	N/R	C		132		.00
LEHIGH ACRES	36				.00	.00	N/R	N/R	N/R	N/R					.00
LIVE OAK	61	6,120	G	1.3	183.00	.50	N/R	N/R	N/R	N/R	ACSPTX		81		.00
LONGWOOD	59	1,150	G	.4	18.25	.05	N/R	N/R	N/R	N/R	N		43		.00
LYNN HAVEN	03	2,300	G	.5	83.95	.23	N/R	N/R	N/R	N/R	ASC		100		.00

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1956--CONTINUED																
MACCLENNY	02	1,750	G	1.0	69.54	.19	N/R	N/R	N/R	N/R	CPT	C		108	XD	.00
MADISON	40	3,320	G	1.4	123.28	.33	6	12.69	2	7.76	N			100		.00
MAITLAND	48	1,400		.8	65.88	.18	N/R	N/R	N/R	N/R	CPT			128		.00
MARIANNA	32	7,500	G	3.4	256.20	.70	N/R	N/R	N/R	N/R	COSF			93		.00
MAYO	34	600	G	.3	21.96	.06	N/R	N/R	N/R	N/R	CPT			100		.00
MELBOURNE	05	8,500	G	1.5	256.20	.70	N/R	N/R	N/R	N/R	AGVPTC	BC		82		.00
MIAMI	13	508,000		100.0	28548.00	78.00	N/R	N/R	N/R	N/R	ZOFSR	BC		153		.00
MILTON	57	3,400	G	.6	91.50	.25	N/R	N/R	N/R	N/R	CPTX			73		.00
MIRAMAR	06	300	G	1.0	21.96	.06	N/R	N/R	N/R	N/R	ACTPS	C		200		.00
MONTICELLO	33	3,000	G	2.1	111.18	.30	N/R	N/R	N/R	N/R	N			100		.00
MOORE HAVEN	22	700	G	.4	32.94	.09	N/R	N/R	N/R	N/R	AJSC	C		128		.00
MT DORA	35	7,000	G	8.6	200.75	.55	N/R	N/R	N/R	N/R	ASC			78		.00
NAPLES	11	5,000	G	2.7	256.20	.70	N/R	N/R	N/R	N/R	AZGFSR	BC		140		.00
NEPTUNE BCH	16	2,300	G	2.3	83.95	.23	N/R	N/R	N/R	N/R	ASC			100		.00
NEW PT RICHY	51	4,230	G	.9	120.78	.33	N/R	N/R	N/R	N/R	N			78		.00
NEW SMYRNA B	64	8,420	G	3.3	457.50	1.25	N/R	N/R	N/R	N/R	ASFTXC			148		.00
NICEVILLE	46	4,200	G	.7	91.50	.25	N/R	N/R	N/R	N/R	C			60		.00
NORTH MIAMI	13	38,500	G	8.0	1647.00	4.50	N/R	N/R	N/R	N/R	AJCSG	BC		117		.00
NO MIAMI BCH	13	59,000	G	7.1	1024.80	2.80	N/R	N/R	N/R	N/R	ACS	C		47		.00
NO PALM BCH	50				.00	.00	N/R	N/R	N/R	N/R						.00
N PT CHARLOT	58				.00	.00	N/R	N/R	N/R	N/R						.00
OAKLAND PARK	06	2,500	G	.5	58.56	.16	N/R	N/R	N/R	N/R	CVTSF	C		64		.00
OCALA	42	14,500	G	4.0	667.58	1.82	N/R	N/R	N/R	N/R	COSRFU	BC		125		.00
OCOEE	48	1,120	G	.8	36.50	.10	N/R	N/R	N/R	N/R	C			89		.00
OKEECHOBEE	47	3,000	S	1.2	95.16	.26	N/R	N/R	N/R	N/R	ACQHFT	C		86		.00
OPA-LOCKA	13	9,000	G	1.3	274.50	.75	N/R	N/R	N/R	N/R	GSCF	C		83		.00
ORLANDO	48	90,000	X	34.0	5500.65	15.03	N/R	N/R	N/R	N/R	ACOSTF	BC		167		.00
ORMOND BCH	64	6,000	G	1.0	329.40	.90	N/R	N/R	N/R	N/R	AOSFC			150		.00
PAHOKEE	50	4,817	S	.9	164.70	.45	N/R	N/R	N/R	N/R	CHOFS			93		.00
PALATKA	54	10,500	G	4.6	494.10	1.35	N/R	N/R	N/R	N/R	CSFPT			128		.00
PALM BEACH	50				.00	.00	N/R	N/R	N/R	N/R						.00
PALM BCH GDN	50				.00	.00	N/R	N/R	N/R	N/R						.00
PALMETTO	41	4,700	G	3.2	182.26	.49	N/R	N/R	N/R	N/R	ACS			104		.00
PANAMA CITY	03	35,000	G	7.9	981.37	2.68	5	112.15	2	57.89	CASTP	BC		77		.00
PENSACOLA	17	68,000	G	24.9	3209.20	8.79	5	362.20	2	199.90	ASCTP			129		.00
PERRY	62	4,825		1.3	223.80	.61	6	26.09	2	13.49	ASCF	C		126		.00
PINELLAS PK	52	3,500	G		43.92	.12	N/R	N/R	N/R	N/R						.00
PINE ISLAND	36				.00	.00	N/R	N/R	N/R	N/R						.00
PLANT CITY	29	12,000	G	3.0	413.58	1.13	N/R	N/R	N/R	N/R	N			94		.00
PLANTATION	06	500	G	.5	18.25	.05	N/R	N/R	N/R	N/R	ACJTP			100		.00

POMPANO BCH	06	14,000	G	4.9	732.00	2.00	N/R	N/R	N/R	N/R	ACS		143		.00
PORT ORANGE	64	3,000	G	1.1	76.65	.21	N/R	N/R	N/R	N/R			70		.00
PT CHARLOTTE	08				.00	.00	N/R	N/R	N/R	N/R					.00
PT ST JOE	23	3,200	S	.6	131.76	.36	N/R	N/R	N/R	N/R	COPTS	C	112		.00
PUNTA GORDA	08	4,500	S	.5	91.50	.25	N/R	N/R	N/R	N/R	ACHSGT	C	55		.00
QUINCY	20	8,000	S	1.5	256.20	.70	N/R	N/R	N/R	N/R	COSFTP	BC	88		.00
RIVIERA BCH	50	8,026	G	2.9	329.40	.90	N/R	N/R	N/R	N/R	C		112		.00
ST AUGUSTINE	55	19,500	G	4.5	549.00	1.50	N/R	N/R	N/R	N/R	OHSRSF	BC	77		.00
ST CLOUD	49	4,500	G	5.3	398.94	1.09	N/R	N/R	N/R	N/R	ADS		242		.00
ST PETERBURG	52	156,000	G	19.6	7139.40	19.56	N/R	N/R	N/R	N/R	ASOZRF	BC	125		.00
ST PETE BCH	52				.00	.00	N/R	N/R	N/R	N/R					.00
SANFORD	59	20,000	G	3.0	457.50	1.25	N/R	N/R	N/R	N/R	ACS		62		.00
SARASOTA	58	41,000	G	8.8	896.70	2.45	N/R	N/R	N/R	N/R	ASFC	BC	60		.00
SEBRING	28	8,500	G	5.4	549.00	1.50	N/R	N/R	N/R	N/R	ASC		176		.00
STARKE	04	4,240		1.3	153.72	.42	N/R	N/R	N/R	N/R	C		100		.00
STUART	43	3,500	G	.8	91.89	.25	D	9.32	9	6.78	ATFC	C	70		.00
TALLAHASSEE	37	45,000	G	19.9	2041.61	5.57	3	210.49	0	135.64	C		123		.00
TAMPA	29	220,000	S	27.7	8052.00	22.00	N/R	N/R	N/R	N/R	CJSRG	BC	100		.00
TARPON SPRS	52	5,300	G	3.0	128.10	.35	N/R	N/R	N/R	N/R	N		66		.00
TAVARES	35	2,600	G	2.3	146.40	.40	N/R	N/R	N/R	N/R	N		153	NT	.00
TITUSVILLE	05	3,500	G	1.3	117.12	.32	N/R	N/R	N/R	N/R	C		91		.00
TRENTON	21	700	G	1.2	36.50	.10	N/R	N/R	N/R	N/R	CXP		143		.00
VALPARAISO	46	2,200	G	.9	31.11	.08	N/R	N/R	N/R	N/R	C		36		.00
VENICE	58	2,050	G	2.1	109.80	.30	N/R	N/R	N/R	N/R	ASC		146		.00
VERO BEACH	31	11,000		2.0	512.40	1.40	N/R	N/R	N/R	N/R	AORFC	BC	127		.00
WAUCHULA	25	3,100	G	1.3	146.40	.40	N/R	N/R	N/R	N/R	ACS		129		.00
WARRINGTON	17	22,300	G	3.8	779.58	2.13	N/R	N/R	N/R	N/R	CPT		96	T	.00
WEST PALM BC	50	55,600	S	25.0	3843.00	10.50	N/R	N/R	N/R	N/R	AHOSKT	BC	189		.00
WINTER GARDN	48	5,370	G	2.4	219.60	.60	N/R	N/R	N/R	N/R	ACS		111		.00
WINTER HAVEN	53	22,500	G	8.5	1022.64	2.80	N/R	N/R	N/R	N/R	ACS		133		.00
WINTER PARK	48	28,000	G	14.6	1145.70	3.13	3	140.62	0	59.11	ACS	BC	98		.00

1965 [d]

APALACHICOLA	19	3,200	G	1.4	146.00	.40	N/R	N/R	N/R	N/R	AC	C	125	CFXY	.35
ARCADIA	14	6,500	X	1.1	262.80	.72	5	27.40	2	17.70	AC	C	110	F	.60
AUBURNDALE	53	10,000	G	5.0	350.40	.96	5	45.60	6	18.30	AC	C	96	Y	.00
AVON PARK	28	6,073	G	5.1	365.00	1.00	N/R	N/R	N/R	N/R	N		165	F	.00
BARTOW	53	18,000	G	4.1	828.55	2.27	5	122.00	2	53.70	ACF	C	126	Y	.00
BELLE GLADE	50	15,000	S	3.0	730.00	2.00	4	75.00	7	36.00	ACFS	C	133	S	.40
BLOUNTSTOWN	07	2,500	G	.7	80.30	.22	N/R	N/R	N/R	N/R	AC	C	88	CT	.00
BOCA RATON	50	12,000	G	8.0	1095.00	3.00	5	256.00	2	123.00	C	C	250	S	.00
BONIFAY	30	2,222	G	1.2	73.00	.20	N/R	N/R	N/R	N/R	C	C	90	CT	.00
BOYNTON BCH	50	14,000	G	12.0	1095.00	3.00	5	132.70	9	73.00	ACGU	C	214	F	.60
BRADENTON	41	22,000	S	4.0	963.60	2.64	N/R	87.06	N/R	70.50	CGT	C	120	XYFD	3.50
BRANDON	29	4,305	G	3.7	292.00	.80	5	53.69	1	16.77	C		185		.00
BRISTOL	39	1,000	G	.2	36.50	.10	N/R	N/R	N/R	N/R	C	C	100	T	.00
BRONSON	38				.00	.00	N/R	N/R	N/R	N/R					.00
BROOKSVILLE	27	5,000	G	.7	182.50	.50	N/R	N/R	N/R	N/R	AC	C	100	Y	.33

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1965--CONTINUED																
BUNNELL	18	1,832	G		63.86	.17	N/R	N/R	N/R	N/R	C			92		.00
BUSHNELL	60	640	G	1.0	29.20	.08	N/R	N/R	N/R	N/R	ACGP	C		80	NT	.00
CAPE CORAL	36		G		140.70	.38	5	14.00	6	9.30						.00
CAROL CITY	13	14,820	G	4.0	533.03	1.46	N/R	60.05	N/R	32.13	ACFV	C		99	S	1.41
CASSELBERRY	59	3,500	G		146.00	.40	N/R	N/R	N/R	N/R				125		.00
CHATTAHOOCHE	20	4,000	G	.4	116.80	.32	5	11.71	9	6.39	C	C		77	CDVX	.10
CHIPLEY	67	3,800	G	1.1	120.45	.33	N/R	13.80	N/R	3.00	C	C		79	CX	.00
CLEARWATER	52	53,500	G	14.0	1022.00	2.80	N/R	N/R	N/R	N/R	C	C		134	S	.00
CLEWISTON	26				.00	.00	N/R	N/R	N/R	N/R						.00
COCOA	05	58,000	G	28.7	5146.50	14.10	8	545.84	1	307.91	ASTZ			97	DFS	1.35
CRAWFORDVILLE	65				.00	.00	N/R	N/R	N/R	N/R						.00
CRESTVIEW	46	8,500	G	1.5	576.70	1.58	8	N/R	N/R	N/R	C	BC	CM	185	X	.60
CROSS CITY	15	2,500	G	.7	146.00	.40	N/R	21.00	N/R	12.00	ACF	C		160	TN	.00
CUTLER RIDGE	13	9,786	G	3.9	467.20	1.28	N/R	50.97	N/R	28.59	C	C		130	S	1.60
DADE CITY	51	8,260	G	2.5	322.46	.88	5	46.74	2	21.52	N	C		120	Y	.34
DANIA	06	7,500	G	3.0	365.00	1.00	N/R	N/R	N/R	N/R	ACFV	C		133		.00
DAYTONA BCH	64	51,000	G	14.0	1963.70	5.38	5	229.70	1	144.30	CGV	C		106	S	6.00
DEERFLD BCH	06	15,200	G	5.0	949.00	2.60	4	113.30	2	55.90	ACFV	C		171	CDFGOV	.20
DE FUNAK SPR	66	5,200	G	3.3	346.02	.95	6	N/R	1	N/R	C	C		182	XYFC	.00
DE LAND	64	16,000	G	12.0	912.50	2.50	5	145.70	1	36.20	CVX	C		149	SDC	.80
DELRAY BCH	50	15,000	G	15.0	1095.00	3.00	5	212.00	0	100.00	AC	C		200		.51
DUNEDIN	52	18,000	G		748.25	2.05	N/R	123.23	N/R	42.39	C	C		113	YS	.00
ENGLEWOOD	58	2,800	G	1.0	51.10	.14	N/R	.19	N/R	.13	CGTVX	C		49	NT	.00
EUSTIS	35	10,200	G	9.4	730.00	2.00	N/R	N/R	N/R	N/R	C			196	XY	.40
FERNANDNA BC	45	7,500	G	7.0	365.00	1.00	5	49.47	2	23.07	AC	BC		133	Y	.00
FT LAUDEDALE	06	116,700	G	60.0	10439.00	28.60	N/R	N/R	N/R	N/R	ACFV	C		245	ADV	5.45
FT MYERS	36				.00	.00	N/R	N/R	N/R	N/R						.00
FT MYERS BCH	36				.00	.00	N/R	N/R	N/R	N/R						.00
FT MYER SUBN	36				.00	.00	N/R	N/R	N/R	N/R						.00
FT PIERCE	56	29,000	G		1095.00	3.00	N/R	N/R	N/R	N/R				103		.00
FT WALTN BCH	46	15,000	G	4.0	850.45	2.33	5	3.73	1	1.63	AC			155	F	.00
GAINESVILLE	01	65,000	G	15.0	2833.49	7.76	N/R	N/R	N/R	N/R	K	BC	DM	120	AF	5.00
GRN COVE SPR	10	4,800	G	1.8	156.95	.43	N/R	N/R	N/R	N/R	C			90	NT	.00
GULFPORT	52				.00	.00	N/R	N/R	N/R	N/R						.00
HAINES CITY	53	10,500	G	4.3	639.97	1.75	5	94.00	7	32.70	C	C		167	Y	.00
HALLANDALE	06	17,000	G	3.0	657.00	1.80	5	60.80	5	41.20	ACFV	C		105	R	.56
HOLLY HILL	64	7,800	G	1.1	226.30	.62	5	25.70	0	12.00	CGV	C		80	AS	.17
HOLLYWOOD	06	72,200	G	16.0	2555.00	7.00	5	336.00	0	166.50	ACV	C		97	DFS	5.60
HOMESTEAD	13	10,750	G	12.0	1074.49	2.94	N/R	114.73	N/R	76.20	C	C		274	F	1.25
INVERNESS	09	2,700	G	1.7	76.65	.21	5	10.71	6	2.99	AC			77	Y	.15
JACKSONVILLE	16	262,215	G	94.3	13415.90	36.75	5	1610.70	2	855.30	AC	C		137		.00
JACKSNVLE BC	16	12,500	G	5.0	686.20	1.88	N/R	84.50	N/R	39.40	ACV	C		150		.00
JASPER	24	2,500	G	.9	62.05	.17	N/R	7.00	N/R	3.50	C			67	CFV	.10
KEY WEST	44				.00	.00	N/R	N/R	N/R	N/R						.00
KISSIMMEE	49				.00	.00	N/R	N/R	N/R	N/R						.00

LA BELLE	26	1,540	G		.00	.00	N/R	N/R	N/R	N/R					.00
LAKE BUTLER	63	1,450	G	1.4	36.50	.10	N/R	N/R	N/R	N/R				71	U	.00
LAKE CITY	12	10,000	G	3.0	430.70	1.18	N/R	44.90	N/R	26.20	CAS	B		118	F	1.50
LAKELAND	53	64,340	G	38.0	4358.00	11.93	5	657.00	2	270.00	C	C	A	102	Y	.00
LAKE PLACID	28	830	S	1.5	219.00	.60	N/R	N/R	N/R	N/R	F				TN	.00
LAKE WALES	53	11,400		9.2	609.55	1.67	5	95.90	D	34.30	AC	C		146	Y	.00
LAKE WORTH	50	25,000	S	12.0	1241.00	3.40	5	155.00	N	85.00	CDS	C		136		1.16
LANTANA	50	5,000	G	3.6	730.00	2.00	N/R	N/R	N/R	N/R	ACG	C		400		.00
LARGO	52	11,588	G		.00	.00	N/R	N/R	N/R	N/R						.00
LEESBURG	35	12,700	G	18.0	1204.50	3.30	5	210.00	2	76.00	Z			260	X	1.60
LEHIGH ACRES	36				.00	.00	N/R	N/R	N/R	N/R						.00
LIVE OAK	61	7,000	G	1.5	219.00	.60	N/R	22.50	N/R	15.00	CFV			86	XYFC	.42
MACCLENNY	02	2,060	G	1.3	71.66	.19	5	7.86	2	4.45	CV			92	VDMJX	.00
MADISON	40	5,000	G	.6	193.45	.53	7	26.71	D	11.47	N	C		106	XYVFC	.00
MAITLAND	48	5,000	G	4.5	219.00	.60	N/R	53.00	N/R	17.00	C	C		120	YFPDC	.26
MARIANNA	32	10,176	G	2.7	357.70	.98	N/R	38.71	N/R	23.66	C	C		96	DFC	.00
MAYO	34	950	G	.5	36.50	.10	N/R	N/R	N/R	N/R	CTH	C		105	T	.00
MELBOURNE	05	40,000	S	8.0	1314.00	3.60	N/R	N/R	N/R	N/R	C	BC		90	CDFOV	1.00
MIAMI	13		G	180.0	50278.75	137.75	5	5150.86	2	3643.79	CFUV	BC			S	37.50
MILTON	57	5,000	G	1.4	292.00	.80	N/R	N/R	N/R	N/R	C	C		160	XYFDC	.00
MIRAMAR	06	13,900	G	5.2	438.00	1.20	5	34.50	0	28.60	ACFV	C		86	CDFGOV	1.70
MONTICELLO	33	2,500	G	.8	116.07	.32	6	14.45	3	7.24	N	C		126	CFGXYV	.00
MOORE HAVEN	22	1,000	G	.7	51.10	.14	N/R	N/R	N/R	N/R	CMT			140		.00
NAPLES	11				.00	.00	N/R	N/R	N/R	N/R						.00
NEW PT RICHY	51	8,000	G	2.9	237.25	.65	5	38.00	9	16.00	C	C		81	YT	.00
NEW SMYRNA B	64	14,000	G	3.6	638.75	1.75	6	2.85	1	1.20	CVGX	C		122	S	.50
NICEVILLE	46	9,000	G	.7	219.00	.60	8	N/R	2	N/R	C	BC		70	YF	.40
NORTH MIAMI	13	55,270	G	15.0	2317.75	6.35	N/R	282.43	N/R	156.37	ACFV	C		115	S	6.45
NO MIAMI BCH	13	92,906	G	19.0	4149.71	11.37	N/R	470.80	N/R	285.83	CFV	C		122	S	1.83
NO PALM BCH	50				.00	.00	N/R	N/R	N/R	N/R						.00
N PT CHARLOT	58	1,500	S	1.0	73.00	.20	N/R	9.00	N/R	3.00	CVTX	C		133	D	.00
OAKLAND PARK	06	7,800			.00	.00	N/R	N/R	N/R	N/R						.00
OCALA	42	18,500	G	4.0	912.50	2.50	5	152.00	2	91.00	CFOT	C		135	XY	2.50
OKEECHOBEE	47	3,500	S	1.9	328.50	.90	7	31.00	0	18.00	COF	C	I	260	S	.17
OPA-LOCKA	13	13,200	G	3.5	431.43	1.18	N/R	49.04	N/R	30.47	ACFV	C		90		.00
ORLANDO	48	144,216	G	71.0	9275.11	25.41	5	1402.29	2	591.76	ACU	C		176	YF	11.00
ORMOND BCH	64	22,000	G	3.0	554.80	1.52	5	66.00	D	36.00	CGUVX	C		70	F	.77
PAHOKEE	50	12,000	S	1.4	255.50	.70	1	25.00	9	17.90	C	C		58	T	.00
PALATKA	54	12,000	G		.00	.00	N/R	N/R	N/R	N/R						.00
PALM BEACH	50				.00	.00	N/R	N/R	N/R	N/R						.00
PALM BCH GDN	50	3,000	G	.4	54.75	.15	N/R	N/R	N/R	N/R	ACF			189	F	.00
PALMETTO	41	5,900	G	20.0	149.65	.41	5	18.90	9	12.10	CS	C		69	YP	.72
PANAMA CITY	03	38,000	G	4.0	1324.66	3.63	5	172.07	2	80.55	ACV	C	A	100	FS	.00
PENSACOLA	17	98,300	G	44.0	4723.00	12.93	N/R	474.00	N/R	270.00	CT	C		131		.00
PERRY	62	9,500	G	1.5	357.70	.98	5	48.35	2	22.89	CF	C	A	103	XYFVC	.55
PINELLAS PK	52	16,500	G		408.80	1.12	N/R	N/R	N/R	N/R				68		.00
PINE ISLAND	36				.00	.00	N/R	N/R	N/R	N/R						.00
PLANT CITY	29	18,000	G	4.5	562.10	1.54	N/R	80.08	N/R	32.88	CD			86		.00
POMPANO BCH	06	25,000	G	12.0	2971.10	8.14	5	393.20	0	177.00	AC	C		197	FV	1.50
PT CHARLOTTE	08	12,500	X	2.1	397.85	1.09	5	51.00	8	19.50	ACFV	C		85	AM	.47

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1965--CONTINUED																
PT ST JOE	23	4,800	S	1.0	118.63	.33	N/R	N/R	N/R	N/R	CMT			68	XC	.00
PUNTA GORDA	08	6,000	S	2.4	182.50	.50	4	21.60	1	3.80	ACFV			84	F	.00
QUINCY	20	10,100	S	1.5	423.61	1.16	5	47.33	2	25.96	CGT	C		115	ACDFO	.75
RIVIERA BCH	50	14,000	G	3.5	912.50	2.50	5	115.00	N	61.00	ZS	C		179	F	1.20
ST AUGUSTINE	55		X	5.0	.00	.00	N/R	N/R	N/R	N/R	CEHIKS	BC			X	.00
ST CLOUD	49	5,000	G	8.8	900.35	2.47	5	147.56	7	39.66	AC			494	YF	.00
ST PETERBURG	52	255,000	G		8468.80	23.20	N/R	966.41	N/R	615.33	ACFV	C		91	SU	.00
ST PETE BCH	52				.00	.00	N/R	N/R	N/R	N/R						.00
SANFORD	59	20,500	G	7.4	866.61	2.30	6	90.85	2	51.95	AZ	C		136	S	.00
SARASOTA	58	40,000	G	6.5	1408.90	3.86	5	145.30	2	96.10	ACQ	C		97	FCD	6.00
SEBRING	28	10,000	G	12.7	1241.00	3.40	9	401.40	5	59.72	C			340	A	.00
STARKE	04	3,400	G	3.0	109.50	.30	N/R	N/R	N/R	N/R						.00
STUART	43	4,800	G		259.22	.71	5	28.31	2	16.39	FCVG	C		148	F	.00
TALLAHASSEE	37	60,000	G	15.0	3244.85	8.89	5	371.01	2	217.96	C	C		148	CDFOSV	5.50
TAMPA	29	271,000	X		12753.00	34.94	5	1499.00	N/R	864.00				150	XYC	.00
TARPON SPRS	52	7,700	G		40.21	.11	N/R	N/R	N/R	N/R	C			84	XY	.00
TAVARES	35	3,900	G	4.3	146.00	.40	N/R	N/R	N/R	N/R	C	C		102	T	.00
TEMPLE TERR	29	5,300	G	1.1	262.80	.72	N/R	25.00	N/R	10.69	C			135		.00
TITUSVILLE	05	20,000	G	6.0	1460.00	4.00	N/R	N/R	N/R	N/R	C			200	YS	.78
TRENTON	21	1,160	G	1.7	43.80	.12	6	9.36	1	1.80	N			103	TM	.00
VALPARAISO	46	5,960	G	2.4	730.00	2.00	N/R	2.50	N/R	1.20	C	C	M	103	XYFVC	.32
VENICE	58	7,000	G	1.5	195.00	.60	N/R	36.00	N/R	12.00	COTSX	C		86	Y	.31
VERO BEACH	31	12,500	G	6.0	547.50	1.50	N/R	60.00	N/R	30.00	ACDV	C		120	YF	1.50
WAUCHULA	25	4,800	G	3.2	248.20	.68	5	26.70	7	14.70	AC	C		141	Y	.60
WARRINGTON	17	26,000	G	5.2	1277.50	3.50	5	100.30	2	46.71	CT	C		135	T	.00
WEST PALM BC	50	70,000	S	26.0	4745.00	13.00	5	608.80	2	344.50	CF	C		186	S	6.79
WINTER GARDN	48	8,000	G	1.5	277.40	.76	N/R	35.00	N/R	13.00	AC	C		95	YF	.67
WINTER HAVEN	53	30,000	G	9.6	1339.12	3.67	N/R	N/R	N/R	N/R	AC	C		122	Y	.00
WINTER PARK	48	46,094	G	27.8	2391.54	6.55	5	456.15	2	138.19	AC	C		121	YF	2.10
1970																
APALACHICOLA	19	3,000	G	1.2	130.00	.35	N/R	N/R	N/R	N/R	AC	BC	MI	117	XYC	.38
ARCADIA	14	6,000	G	2.5	183.90	.50	D	20.00	6	12.00	CVGFST	BC	MI	084	YFC	.17
AUBURNDALE	53	14,000	G	5.0	510.00	1.40	N/R	N/R	N/R	N/R	AC	BC	MA	100	F	.30
AVON PARK	28	8,500	G	6.3	360.00	.98	5	52.00	7	21.00	N	BC	MA	115	YC	.16
BARTOW	53	15,000	G	4.1	865.00	2.37	5	122.00	1	52.00	ACF	BC	MI	158	XYFC	1.03
BELLE GLADE	50	18,500	S	6.0	988.04	2.71	D	102.00	9	55.00	CVGFU	BC	PD	146	Y	.98
BLOUNTSTOWN	07	2,700	G	1.4	59.00	.16	N/R	N/R	N/R	N/R	C	BC	MI	060	XYC	.20
BOCA RATON	50	35,000	G	37.0	3945.00	10.81	4	440.00	6	230.00	CVGFT	BC	MS	309	X	2.17
BONIFAY	30	2,200	G	1.0	82.00	.22	N/R	N/R	N/R	N/R	C	BC	MI	100	XCT	.12
BOYNTON BCH	50	19,000	G	12.0	1309.00	3.59	5	142.00	0	75.00	CF	BC	MD	190	FUJ	1.50
BRADENTON	41	22,500	S	4.0	1228.80	1.35	5	118.00	N	93.00	CVGFH	BC	DD	153	U	2.69
BRANDON	29	10,000	G	5.5	415.09	1.14	5	69.00	1	21.00	C	BC	MI	114	Y	.02
BRISTOL	39	1,600	G	.2	58.00	.16	N/R	N/R	N/R	N/R	C	BC	MI	100	NT	.00
BRONSON	38	812	G	.7	29.20	.08	5	3.90	0	2.00	AC	BC	MI	098	NT	.00
BROOKSVILLE	27	5,000	G	2.5	202.15	.55	7	1.44	1	1.00	AC	BC	MP	110	AF	.14

BUNNELL	18	1,554	G	.6	66.00	.18	7	6.00	1	4.00	CFVX	BC	MD	116	NT	.00
BUSHNELL	60	700	G	1.0	44.00	.12	5	7.30	1	N/R	AC	BC	MI	172	NT	.00
CAPE CORAL	36	12,500	G	2.0	415.50	1.14	5	45.00	9	28.00	ACVGFT	BC	PD	080	UF	.66
CAROL CITY	13	15,556	G	4.0	845.80	2.32	D	85.00	2	54.00	ACFGV	C	D	149	S	1.84
CASSELBERRY	59	9,450	G	2.8	358.00	.98	5	48.00	3	18.00	AC	C	I	104	ACFP	.50
CHATTAHOOCHE	20	2,878	G	.5	111.00	.30	6	11.90	2	7.40	AC	BC	MI	105	XYSC	.21
CHIPLEY	67	4,000	G	1.2	273.00	.75	N/R	N/R	N/R	N/R	C	BC	MI	117	XC	.25
CLEARWATER	52	52,047	G	14.0	*e* 966.00	2.60	5	149.00	2	58.00	AC	BC	MA	173	S	7.10
CLEWISTON	26	4,700	S	3.0	*f* 283.00	.78	5	30.00	7	20.00	CFGVU	BC	PD	165	U	.60
COCOA	05	100,000	G	40.0	5595.60	15.30	5	597.00	N	389.00	ACV	BC	WP	153	CDFSX	1.20
CRAWFRDVILLE	65	100	G	.0	4.00	.01	N/R	N/R	N/R	N/R	N	BC	AI	110	NT	.00
CRESTVIEW	46	10,000	G	2.0	400.00	1.10	N/R	N/R	N/R	N/R	C	BC	MI	110	CFXY	.40
CROSS CITY	15	2,000	G	.8	153.00	.42	N/R	N/R	N/R	N/R	ACFT	BC	MM	210	CSTVXY	.02
CUTLER RIDGE	13	12,170	G	3.9	619.88	1.69	5	63.00	2	29.00	C	BC	MA	138	A	2.30
DADE CITY	51	8,500	G	4.0	310.50	.85	5	41.00	2	20.00	N	BC	MI	100	XY	.40
DANIA	06	8,800	G	3.0	607.32	1.66	D	58.00	2	40.00	ACDFSV	BC	MD	193	FRS	.72
DAYTONA BCH	64	56,606	G	10.8	3498.00	9.58	5	366.00	2	192.00	ACFGUV	BC	MD	170	UD	11.00
DEERFLD BCH	06	16,500	G	15.7	1494.66	4.10	N/R	N/R	N/R	N/R	CFGTV	BC	MM	248	CS	.75
DE FUNAK SPR	66	6,850	G	1.4	228.40	.60	4	25.40	2	15.80	C	BC	MI	091	CFXY	.37
DE LAND	64	16,691	G	12.0	895.82	2.45	5	106.00	2	55.00	CTV	BC	WI	147	S	.85
DELRAY BCH	50	20,000	G	16.4	1970.00	5.40	4	235.00	6	122.00	ACSV	BC	MA	270	C	2.30
DUNEDIN	52	17,639	G	6.2	908.82	2.40	5	125.00	3	59.00	C	BC	MA	130	SY	1.32
ENGLEWOOD	58	10,000	G	2.0	192.02	.52	D	20.00	9	11.00	ACFV	C	D	053	NT	.00
EUSTIS	35	9,122	G	8.8	714.00	1.96	5	86.00	2	39.00	AC	B	M	215	FY	.61
FERNANDNA BC	45	6,844	G	7.0	711.91	1.95	5	72.48	2	42.21	AC	BC	MI	284	X	.50
FT LAUDEDALE	06	186,715	G	60.0	14866.54	40.73	4	1424.00	6	270.00	ACDFQT	BCS	DDA	218	CFSU	9.57
FT LAUDEDALE	06		G		.00	.00	5	1126.00	2	729.00						.00
FT MYERS	36	27,000	X	8.0	1256.00	3.44	5	132.00	2	84.00	CFGV	BC	WD	094	FU	8.60
FT MYERS BCH	36	8,000	G	1.6	322.90	.88	D	36.00	9	21.00	AC	BC	MD	094	U	.11
FT MYER SUBN	36	26,000	S	5.0	594.70	1.63	D	72.00	6	41.00	ACFOTH	BC	MD	052	NT	.00
FT PIERCE	56	29,000	G	9.0	1352.20	3.63	5	145.00	2	90.00	DFGLQZ	BC	DD	125	ACDS	3.40
FT WALTN BCH	46	19,949	G	4.1	1012.00	2.80	N/R	N/R	N/R	N/R	AC	BC	MI	140	CFVXY	2.00
GAINESVILLE	01	70,000	G	15.0	3975.00	10.90	0	400.00	D	280.00	AGTVXZ	BC	WM	155	AF	6.30
GRN COVE SPR	10	3,857	G	1.8	141.00	.39	N/R	N/R	N/R	N/R	C	BC	MI	100	NT	.00
GULFPORT *g*	52	9,730	G		250.20	.69	5	24.00	1	19.00	C			072		1.40
HAINES CITY	53	13,000	G	4.3	553.69	1.52	5	75.00	2	32.00	AC	BC	MI	117	AF	.75
HALLANDALE	06	27,000	G	7.8	1226.31	3.36	D	126.00	6	77.00	ADFOTZ	BC	PQ	124		1.20
HOLLY HILL	64	8,191	G	1.1	264.96	.73	3	24.00	2	19.00	ACDIJX	BC	MD	090	AS	.50
HOLLYWOOD	06	100,000	G	20.0	4974.00	13.62	4	532.00	6	321.00	CFGTV	BC	WD	136	AGSX	12.40
HOMESTEAD	13	13,432	G	12.0	1237.50	3.39	5	116.00	2	86.00	C	BC	PA	253	S	.90
INVERNESS	09	2,500	G	1.5	86.78	.24	5	13.00	2	4.70	C	BC	MS	096	FY	.20
JACKSNVILLE	16	190,000	G	110.0	15521.80	44.00	5	1615.00	2	1042.00	AC	BC	DQ	132	AISX	25.00
JACKSNVLE BC	16	12,600	G	5.9	730.00	2.00	5	79.00	0	53.00	ACV	BC	MA	150	U	1.80
JASPER	24	3,034	G	1.0	161.00	.44	0	15.00	D	12.00	CFGV	BC	MI	142	CUVXY	.30
KEY WEST	44	27,500	G	2.6	*h* 576.70	1.58	2	61.96	0	23.88		BC	DA			.00
KEY WEST	44	27,500	G	7.0	970.90	2.66	N/R	N/R	N/R	N/R	FPTVXZ	BC	DA	097	L	.30
KISSIMMEE	49	8,000	G	13.5	498.50	1.36	N/R	51.00	N/R	31.00	AC	C	I	100	CY	.99
LA BELLE	26	1,787	G	.5	58.24	.16	D	5.71	2	3.83	CFGV	BC	MD	082	CDPU	.05
LAKE BUTLER	63	1,598	G	1.4	37.00	.10	N/R	N/R	N/R	N/R	C	C	I	068	U	.30
LAKE CITY	12	16,600	G	4.9	625.00	1.72	5	69.00	2	32.00	C	B	M	104	CFVXY	1.20

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPUL-ATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREAT-MENT	TYPE ANAL-YSIS	FREQ-ANAL-YSIS	PER CAP USE	SEWAGE TREAT-MENT	SEWAGE DISCH MGAL/D
1970--CONTINUED																
LAKELAND	53	81,500	G	38.0	5237.00	14.30	5	700.00	2	295.00	AC	BC	WA	175	FXY	6.50
LAKE PLACID	28	750	S	.8	219.00	.60	N/R	N/R	N/R	N/R	CV	BC	MD	092	NT	.00
LAKE WALES	53	14,000	G	9.2	653.40	1.80	5	94.00	2	39.00	AC	BC	PI	128	F	.72
LAKE WORTH	50	26,000	G	16.0	1569.00	4.30	4	183.00	6	103.00	CGSV	BC	MD	165	CO	2.67
LANTANA	50	7,000	G	3.0	489.60	1.34	5	55.00	2	29.00	ACFSV	BC	MP	192		.72
LARGO	52	22,031	G	.4	146.00	.40	3	14.00	2	12.00	C	BC	MS	061	SU	2.30
LEESBURG	35	11,869	G	18.0	1693.00	4.64	5	219.00	2	82.00	Z	BC	MD	390	AXY	2.00
LEHIGH ACRES	36	9,500	G	.5	138.90	.38	4	13.00	9	9.90	CFGV	BC	MD	037	U	.43
LIVE OAK	61	7,000	G	2.7	219.00	.60	N/R	N/R	N/R	N/R	ACF	BC	MM	086	CFXY	.43
MACCLENNY	02	2,648	G	1.0	109.50	.30	N/R	N/R	N/R	N/R	CV	BC	MI	113	DJMVX	.10
MADISON	40	5,000	G	3.2	197.00	.54	0	20.00	2	14.00	C	BC	MI	108	CFTVXY	.28
MAITLAND	48	7,500	G	7.7	481.00	1.30	5	74.00	2	25.00	AC	BC	MI	176	PY	.83
MARIANNA	32	7,200	G	2.0	394.00	1.10	9	37.00	4	28.00	C	BC	MI	150	CXY	.55
MAYO	34	900	G	.2	39.10	.11	6	.15	D	.08	ACT	BC	MI	119	NT	.00
MELBOURNE	05	63,464	S	14.0	2818.00	7.72	8	294.00	2	178.00	CDFHUV	BC	WD	121	XZ	3.30
MIAMI	13	789,644	G	220.0	55879.40	153.10	5	5259.00	2	3991.00	FILQTZ	BCS	DDP	220	S	49.90
MILTON	57	9,000	G	2.3	310.00	.85	N/R	N/R	N/R	N/R	CT	BC	MI	157	CDFXY	1.20
MIRAMAR	06	26,500	G	6.0	742.00	2.03	5	76.00	2	31.00	ACFGTV	BC	MP	077	Y	2.14
MONTICELLO	33	2,700	G	.8	132.00	.36	5	17.00	1	7.00	C	C	M	134	CFXY	.18
MOORE HAVEN	22	1,200	G	.7	59.00	.16	2	3.10	3	2.80	ACFGTV	BC	MI	133	NT	.00
NAPLES	11	26,500	G	16.0	1606.00	4.40	5	187.00	9	92.00	CFORST	BC	WS	166	APS	1.80
NEW PT RICHY	51	12,960	G	2.8	342.60	.94	5	44.00	2	20.00	C	BC	MM	075	EFX	.39
NEW SMYRNA B	64	10,580	G	3.6	625.60	1.71	5	67.00	2	40.00	ACTV	BC	MI	161	AS	1.20
NICEVILLE	46	6,770	G	1.4	250.00	.70	N/R	N/R	N/R	N/R	C	BC	MI	103	CFVXY	.00
NORTH MIAMI	13	55,000	G	10.0	3441.50	9.42	5	333.00	2	237.00	ACFGUV	BCP	WHD	171	X	7.00
NO MIAMI BCH	13	95,000	G	26.0	6529.80	17.89	5	663.00	2	430.00	CFGRSV	BCS	MDA	188	S	2.50
NC PALM BCH	50	16,900	G	7.0	1381.00	3.78	5	144.00	2	84.00	ACFGTV	C	I	224	AF	1.80
N PT CHARLOT	58	2,500	S	2.2	92.90	.25	5	13.00	9	5.60	CFGHVX	BC	WD	102	PU	.27
OAKLAND PARK	06	16,200	G		*i* 892.10	2.44	6	92.00	5	58.00	C			150	SY	1.20
OCALA	42	25,000	G	4.0	1305.00	3.34	5	145.00	2	84.00	CRTUV	BC	DI	143	CDFSUY	3.49
OKEECHOBEE	47	4,500	S	1.9	222.00	.61	5	22.00	2	13.00	CDEHV	C	I	136	S	.49
OPA-LOCKA	13	14,000	G	2.5	826.04	2.26	5	83.00	2	56.00	ACFGTV	BC	QD	160	C	4.20
ORLANDO	48	175,000	G	125.0	11825.00	32.40	5	1453.00	2	699.00	ACU	BCS	WAA	185	B	13.50
ORMOND BCH	64	25,565	G	3.0	731.96	2.01	5	71.00	2	49.00	ADEOXZ	BC	MD	079	F	1.39
PAHOKEE	50	10,000	S	1.9	229.69	.63	D	23.00	9	16.00	ACFGHT	BC	WD	063	S	.55
PALATKA	54	12,000	G	3.5	807.00	2.21	5	81.00	2	51.00	ACFTU	BC	MA	184	X	.06
PALM BEACH	50	8,488	S		.00	.00	N/R	N/R	N/R	N/R	N	BC	DD	175	N	.00
PALM BCH GDN	50	6,000	G	4.0	591.30	1.62	5	67.00	1	34.00	CGSV	BC	MA	270	F	.75
PALMETTO	41	7,500	S	12.0	*j* 203.06	.56	5	22.23	0	13.89				074	YC	.00
PANAMA CITY	03	30,916	S		*k* 1566.00	4.30	N/R	N/R	N/R	N/R	CFGTV	BC	MI	139	FXY	3.90

					1.92	N/R	N/R	N/R	N/R	C			086	AS	1.80
PLANT CITY	29	18,000	G	8.6	641.30	1.76	5	80.00	2	41.00	CT	BC	PS	100	S	.78
POMPANO BCH	06	50,000	G	24.0	5116.00	14.02	4	541.00	6	326.00	ACFG	BC	WA	280	DQV	3.36
PT CHARLOTTE	08	22,000	X	1.7	534.30	1.46	5	66.00	9	36.00	CEFHOT	BC	WD	066	AFP	.50
PORT ST JOE	23	4,500	S	.4	163.00	.40	1	16.60	2	10.50	CDFHTV	BC	DD	099	CX	.10
PUNTA GORDA	08	8,500	S	2.4	364.80	1.00	D	32.00	6	27.00	CFGHV	BC	WD	118	FXY	.75
QUINCY	20	10,100	X	1.5	512.18	1.40	N/R	57.13	2	35.31	ACFGT	BC	MI	138	CFSXY	.93
RIVIERA BCH	50	23,000	G	14.0	1335.00	3.66	5	147.00	0	74.00	ACFGTV	BC	WD	160	MZ	1.80
ST AUGUSTINE	55	12,352	X	5.0	684.10	1.90	8	69.00	2	43.00	CEHIKS	BC	DP	152	X	.36
ST CLOUD	49	6,500	G	10.0	496.80	1.36	5	64.00	2	36.00	AC	C	I	200	DEFXY	1.04
ST PETERBURG	52	250,000	G	44.0	10204.50	28.00	5	1079.00	2	705.00	AFOTZ	BC	DD	130	SU	29.00
ST PETE BCH	52	8,024	G		321.20	.88	N/R	N/R	N/R	N/R	C			110	DSU	2.00
SANFORD	59	22,400	G	5.0	975.00	2.70	5	100.00	2	66.00	ACU	BC	MX	121	CEX	3.00
SARASOTA	58	42,000	G	10.0	2075.70	5.70	5	199.00	2	152.00	ACFV	BC	WD	130	CDU	6.40
SEBRING	28	8,300	G	12.6	1132.00	3.10	5	97.00	2	38.00	AC	BC	AS	390	AS	.20
STARKE	04	5,500	G	3.0	245.00	.60	N/R	N/R	N/R	N/R	CTV	C	I	120	CY	.60
STUART	43	8,000	G	2.4	472.20	1.29	8	48.00	2	30.00	CFGV	BC	MQ	162	F	.42
TALLAHASSEE	37	77,700	G	33.6	4393.34	12.00	5	519.00	D	295.00	C	BC	WI	155	CFSVXY	8.10
TAMPA	29	307,000	S	65.0	16265.00	44.60	5	1807.00	2	1027.00	CEFHMX	BC	DD	116	CXY	40.00
TARPON SPRS	52	7,118	G		284.70	.78	3	37.00	2	17.00	C			109	XY	.75
TAVARES	35	3,842	G	2.3	163.00	.45	5	19.00	1	9.40	C	BC	MI	117	NT	.00
TITUSVILLE	05	30,515	G	16.0	1273.40	3.49	5	170.00	2	86.00	CV	BC	WH	114	SY	2.14
TRENTON	21	1,200	G	.4	54.80	.15	N/R	N/R	N/R	N/R	N	BC	WI	120	AY	.08
VALPARAISO	46	6,000	G	2.4	255.00	.70	N/R	N/R	N/R	N/R	C	BC	MI	117	CFVXY	.50
VENICE	58	10,000	G	3.0	371.83	1.02	5	38.00	9	25.00	ACFGV	C	P	102	DY	.75
VERO BEACH	31	16,000	G	6.0	971.66	2.66	5	111.00	0	59.00	ACDV	BC	WA	166	CDFXY	1.66
WAUCHULA	25	4,000	G	4.8	236.60	.50	5	30.00	2	15.00	ACP	BC	MI	162	L	.22
WARRINGTON	17	24,750	G	6.4	873.00	2.40	5	101.00	N	44.00	CT	BC	MI	096	T	.00
WEST PALM BC	50	66,000	S	36.0	5430.00	14.87	5	562.00	2	348.00	CFGISV	BC	DD	259	AD	12.00
WINTER GRDN	48	9,000	G	1.5	398.70	1.10	4	45.00	3	24.00	AC	BC	MI	121	FY	.68
WINTER HAVEN	53	18,000	G	9.6	1685.00	4.62	5	217.00	2	103.00	AC	BC	MI	148	ESY	3.10
WINTER PARK	48	53,809	G	27.8	3454.79	9.46	5	477.00	2	185.00	AC	BC	PA	175	AFU	.30

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ALTMONTE SPR	59	4,400	G	4.0	285.20	.78	5	35.00	8	15.00	AC	B	M	177	S	.80
APALACHICOLA	19	3,000	G	1.2	160.00	.43	6	19.86	2	9.80	AC	BC	MI	117	XYC	.40
ARCADIA	14	6,000	G	2.5	227.28	.62	5	24.61	9	16.76	CVGFST	BC	MI	84	YFC	.50
AUBURNDALE	53	14,000	G	5.0	510.00	1.40	N/R	N/R	N/R	N/R	AC	BC	MA	100	F	.30
AVON PARK	28	8,500	G	6.3	385.93	1.06	5	46.93	9	25.64	N	BC	MA	115	YC	.16
BARTOW	53	15,000	G	4.1	926.54	2.54	4	106.19	8	64.87	ACF	BC	MI	158	XYFC	1.30
BELLE GLADE	50	18,500	S	6.0	1102.00	3.02	1	111.00	8	63.00	CVGFU	BC	PD	146	Y	1.10
BLOUNTSTOWN	07	2,700	G	1.4	72.00	.19	8	6.75	2	4.50	C	BC	MI	60	XYC	.20
BOCA RATON	50	35,000	G	37.0	4019.00	11.01	4	441.00	9	258.00	CVGFT	BC	MS	309	X	2.20
BONIFAY	30	2,200	G	1.0	91.00	.25	8	8.00	2	4.00	C	BC	MI	100	XCT	.14
BOYNTON BCH	50	19,000	G	12.0	1607.00	4.40	4	172.00	9	112.00	CF	BC	MD	190	FUJ	1.60
BRADENTON	41	22,500	S	4.0	1302.56	3.56	3	122.43	8	89.99	CVGFH	BC	DD	153	U	2.96
BRANDON	29	12,000	G	5.5	581.37	1.59	5	82.64	9	26.01	C	BC	MI	132	Y	.02
BRISTOL	39	1,600	G	.2	58.40	.16	7	.18	2	.12	C	BC	MI	100	NT	.00
BRONSON	38	812	G	.7	29.20	.08	5	3.90	0	2.00	AC	BC	MI	98	NT	.00

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPUL-ATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREAT-MENT	TYPE ANAL-YSIS	FREQ-ANAL-YSIS	PER CAP USE	SEWAGE TREAT-MENT	SEWAGE DISCH MGAL/D
						1971--CONTINUED										
BROOKSVILLE	27	5,000	G	2.5	203.16	.56	N/R	N/R	N/R	N/R	AC	BC	MP	110	AF	.33
BUNNELL	18	1,554	G	.6	84.55	.27	5	8.38	D	5.92	CVFX	BC	MD	116	NT	.00
BUSHNELL	60	700	G	1.0	49.47	.13	5	6.57	2	2.58	AC	BC	MI	172	NT	.00
CAPE CORAL	36	12,500	G	2.0	437.40	1.20	4	45.51	8	29.98	ACVGFT	BC	PD	80	UF	.66
CAROL CITY	13	15,556	G	4.0	1036.10	2.80	3	104.11	9	77.68	ACVGF	C	D	180	S	2.57
CASSELBERRY	59	9,450	G	2.8	439.26	1.20	5	45.48	1	24.82	AC	C	I	127	ACFP	.52
CHATTAHOOCHE	20	2,878	G	.5	101.44	.27	1	10.26	N	7.10	AC	BC	MI	105	XYSC	.21
CHIPLEY	67	4,000	G	1.2	250.00	.68	D	30.20	9	10.60	C	BC	MI	117	XC	.20
CLEARWATER	52	62,000	G	14.0	1324.40	3.60	5	131.90	7	93.10	AC	BC	MA	171	S	7.10
CLEWISTON	26	4,700	S	3.0	*f* 304.88	.84	4	29.57	N	23.28	CFGUV	BC	PD	178	U	.12
COCOA	05	100,000	G	40.0	5847.10	16.00	5	656.90	D	379.90	AVC	BC	WP	153	XSFCD	1.20
CRAWFRDVILLE	65	100	G	.0	4.00	.01	5	.50	1	.30	N	BC	AI	110	NT	.00
CRESTVIEW	46	10,000	G	2.0	412.40	1.13	N/R	N/R	N/R	N/R	C	BC	MI	110	XYFC	.43
CROSS CITY	15	2,000	G	.8	128.50	.35	5	14.88	D	10.62	ACFT	BC	MM	210	TXYSVC	.02
CUTLER RIDGE	13	12,170	G	3.9	1765.88	4.84	4	186.58	6	129.92	C	BC	MA	138	A	2.40
DADE CITY	51	8,500	G	4.0	352.66	.97	5	44.20	2	25.01	N	BC	MI	100	XY	.44
DANIA	06	8,800	G	3.0	501.08	1.37	2	55.53	0	35.48	ACDFSV	BC	MD	155	RSF	.80
DAYTONA BCH	64	56,606	G	10.8	3536.90	9.69	7	338.24	2	246.11	ACVGFU	BC	MD	170	UD	11.30
DE FUNAK SPR	66	6,850	G	1.4	234.14	.64	0	21.93	2	15.84	C	BC	MI	91	XYFC	.32
DE LAND	64	16,691	G	12.0	956.08	2.62	5	106.06	2	65.78	CVT	BC	WI	147	S	1.00
DEERFLD BCH	06	16,500	G	15.7	1475.36	4.04	3	157.26	9	92.62	CVGFT	BC	MM	248	SC	.89
DELRAY BCH	50	20,000	G	16.4	1890.00	5.18	4	215.00	9	174.00	ACSV	BC	MA	270	C	2.50
DUNEDIN	52	17,639	G	6.2	1022.53	2.80	5	133.67	9	49.61	C	BC	MA	130	YS	2.00
ENGLEWOOD WD	58	10,000	G	2.0	224.97	.61	3	25.21	9	12.68	ACVF	C	D	53	NT	.00
EUSTIS	35	9,122	G	8.8	688.38	1.89	5	80.20	9	46.04	AC	B	M	215	YF	.60
FERNANDNA BC	45	6,844	G	7.0	709.00	1.94	6	82.00	1	43.00	AC	BC	MI	250	X	.00
FT LAUDEDALE	06	186,715	X	60.0	14688.75	40.24	3	1509.91	9	967.06	ACQDFT	BCS	DDA	218	CSFU	12.26
FT MYERS	36	27,000	X	8.0	1775.07	4.42	5	154.86	9	113.50	CVGF	BC	WD	163	FU	5.40
FT MYERS BCH	36	8,000	G	1.6	422.52	1.16	4	47.45	9	24.08	AC	BC	MD	94	U	.19
FT MYER SUBN	36	26,000	S	5.0	953.50	2.61	5	98.11	9	68.25	ACOFTH	BC	MD	100	MT	.00
FT PIERCE	56	29,000	G	9.0	1415.99	3.88	4	141.27	0	99.72	ZDFGQL	BC	DD	125	SADC	2.62
FT WALTN BCH	46	19,949	G	4.1	1075.00	2.94	5	114.10	1	64.30	AC	BC	MI	147	XYFVC	2.10
GAINESVILLE	01	70,000	G	15.0	4485.01	12.29	5	459.62	2	316.00	AZVGTX	BC	WM	175	FA	5.12
GRN COVE SPR	10	3,857	G	1.8	122.00	.33	6	12.38	N	7.15	C	BC	MI	100	NT	.00
GULFPORT *g*	52	9,730	G		.00	.00	N/R	N/R	N/R	N/R	C			72		.00
HAINES CITY	53	13,000	G	4.3	437.59	1.19	5	52.77	2	24.22	AC	BC	MI	117	AF	.80
HALLANDALE	06	27,000	G	7.8	1398.01	3.83	3	142.80	6	91.16	AZDFOT	BC	PQ	124		1.20
HOLLY HILL	64	8,191	G	1.1	276.00	.76	8	26.23	1	20.16	ACJDIX	BC	MD	90	AS	.50
HOLLYWOOD	06	100,000	G	20.0	5165.74	14.15	3	530.12	9	252.58	CVGFT	BC	WD	141	XSGA	13.90
HOMESTEAD	13	13,432	G	12.0	1551.45	4.25	4	143.66	2	103.55	C	BC	PA	316	S	.98
INVERNESS	09	2,500	G	1.5	104.00	.29	5	12.11	2	4.93	C	BC	MS	96	YF	.25
JACKSNVILLE	16	190,000	G	110.0	18172.46	49.78	8	1701.24	2	1186.26	AC	BC	DQ	132	XASI	30.80
JACKSNVLE BC	16	12,600	G	5.9	647.67	1.80	5	62.56	2	42.40	ACV	BC	MA	143	U	2.70
JASPER	24	3,034	G	1.0	173.40	.48	0	18.30	2	9.90	CVGF	BC	MI	142	XYUVC	.30
KEY WEST	44		G	2.6	*h* 357.70	.98	1	43.31	2	17.38		BC	DA			.00

KEY WEST	44	27,500	G	7.0	1069.45	2.93	4	188.60	9	154.40	FPTVXZ	BC	DA	106	L	.30
KISSIMMEE	49	8,000	G	13.5	738.40	2.00	D	106.70	3	40.80	AC	C	I	100	YC	1.20
LA BELLE	26	1,787	G	.5	60.46	.16	5	6.38	8	4.42	CFGV	BC	MD	82	UDCP	.05
LAKE BUTLER	63	1,598	G	1.4	106.80	.32	6	.40	2	.21	C	C	I	68	U	.33
LAKE CITY	12	16,600	G	4.9	609.52	1.67	5	64.09	2	35.88	C	B	M	104	XYFVC	2.20
LAKELAND	53	81,500	G	38.0	5441.50	14.91	5	663.00	2	376.00	AC	BC	WA	183	XYF	6.00
LAKE PLACID	28	750	S	.8	292.00	.80	8	6.00	5	3.50	CV	BC	MD	106	MT	.00
LAKE WALES	53	14,000	G	9.2	708.80	1.90	5	93.00	8	46.10	AC	BC	PI	128	F	.75
LAKE WORTH	50	26,000	G	16.0	1936.00	5.30	4	203.00	6	135.00	CGSV	BC	MD	203	OC	1.82
LANTANA	50	7,000	G	3.0	493.00	1.36	4	55.10	9	34.10	ACFSV	BC	MP	192		1.00
LARGO	52	22,031	G	.4	228.07	.62	0	23.26	2	10.43	C	BC	MS	61	US	3.00
LEESBURG	35	11,869	G	18.0	1649.92	4.52	5	219.40	D	117.70	Z	BC	MD	390	XAY	3.00
LEHIGH ACRES	36	9,500	G	.5	169.06	.46	3	18.12	9	11.24	CFGV	BC	MD	37	U	.47
LIVE OAK	61	7,000	G	2.7	310.00	.85	9	30.11	D	26.42	ACF	BC	MM	86	XYFC	.45
MACCLENNY	02	2,648	G	1.0	109.50	.30	N/R	.60	N/R	.25	CV	BC	MI	113	XVDJM	.30
MADISON	40	5,000	G	3.2	233.00	.64	0	24.10	1	14.20	C	BC	MI	108	XYFVCT	.38
MAITLAND	48	7,500	G	7.7	542.76	1.48	5	68.99	7	30.96	AC	BC	MI	176	YP	1.09
MANTE CO UTL	41	36,000	S	12.0	1908.30	5.23	5	201.61	8	122.59	CFGHV	B	M	118		.00
MARIANNA	32	7,200	G	2.0	408.90	1.12	0	.37	2	.29	C	BC	MI	150	XYC	.55
MAYO	34	900	G	.2	37.90	.10	6	.14	1	.07	CCT	BC	MI	119	NT	.00
MELBOURNE	05	63,464	S	14.0	2975.42	8.15	5	293.78	2	203.74	CVDFUH	BC	WD	121	XZ	3.45
MIAMI	13	789,644	G	220.0	58730.20	159.10	4	5550.10	6	4385.12	ZFQTLI	BCS	DDP	201	S	48.50
MILTON	57	5,400	G	2.3	330.00	.90	8	3.75	4	1.75	CT	BC	MI	157	XYFDC	1.30
MIRAMAR	06	26,500	G	6.0	733.53	2.01	4	74.69	9	49.18	ACVGFT	BC	MP	77	Y	2.21
MONTICELLO	33	2,700	G	.8	138.95	.38	6	16.49	1	8.54	C	C	M	134	XYFC	.18
MOORE HAVEN	22	1,200	G	.7	57.29	.16	4	5.78	7	3.97	ACVGFT	BC	MI	133	NT	.00
NAPLES	11	26,500	G	16.0	2189.30	5.99	4	253.28	9	109.43	COFSTR	BC	WS	166	SAP	.14
NEW PT RICHY	51	12,960	G	2.8	368.58	1.00	5	40.28	2	24.51	C	BC	MM	75	XEF	.45
NEW SMYRNA B	64	10,580	G	3.6	531.38	1.46	8	57.12	2	39.05	ACVT	BC	MI	161	AS	1.10
NICEVILLE	46	6,770	G	1.4	272.00	.74	7	26.50	2	16.50	C	BC	MI	103	XYFVC	.35
NORTH MIAMI	13	55,000	G	10.0	3313.66	9.08	9	247.51	3	330.28	ACVGFU	BCP	WHD	165	X	11.60
NO MIAMI BCH	13	95,000	G	26.0	7064.63	19.36	3	729.38	9	520.74	CVGFSR	BCS	MDA	204	S	2.40
NO PALM BCH	50	16,900	G	7.0	1507.00	4.13	4	158.60	6	95.10	ACVGFT	C	I	224	AF	2.37
N PT CHARLOT	58	2,500	S	2.2	166.99	.46	6	15.81	9	6.25	CFGHVX	BC	WD	102	UP	.18
OAKLAND PRK	06	16,200	G		i 842.00	2.30	4	86.00	5	58.00	C			150	YS	3.08
OCALA	42	25,000	G	4.0	1444.43	3.96	5	153.99	2	97.02	CVUTR	BC	DI	158	YFSCDU	3.54
OKEECHOBEE	47	4,500	S	1.9	262.14	.72	5	25.92	9	19.61	CVDHE	C	I	136	S	.19
OPA-LOCKA	13	14,000	G	2.5	759.08	2.07	4	75.68	9	50.10	ACVGFT	BC	QD	160	C	1.07
ORLANDO	48	175,000	G	125.0	12457.39	34.10	5	1069.54	2	858.42	ACU	BCS	WAA	185	B	11.38
ORMOND BCH	64	25,565	G	3.0	762.18	2.09	8	72.77	2	52.59	AZODXE	BC	MD	79	F	1.50
PAHOKEE	50	10,000	S	1.9	233.00	.64	5	21.80	7	16.50	ACGFTH	BC	WD	63	S	.70
PALATKA	54	12,000	G	3.5	751.00	2.06	5	91.70	D	47.10	ACFTU	BC	MA	171	X	1.70
PALM BCH GDN	50	6,000	G	4.0	712.00	1.95	4	86.90	N	48.40	CGSV	BC	MA	270	F	.80
PALM BEACH	50	8,488	S	36.0	1941.00	5.32	4	227.00	9	112.00	N	BC	DD	175	N	3.40
PALMETTO	41	7,500	S		j 250.00	.68	N/R	N/R	N/R	N/R				090	YC	.79
PANAMA CITY	03	30,916	S		k1574.44	4.32	6	189.04	3	97.36	CGVFT	BC	MI	139	XYF	3.34
PENSACOLA	17	125,000	G	36.0	7053.92	19.32	5	816.83	2	438.40	ACT	BC	MI	154	XYFSC	9.86
PERRY	62	9,580	G	1.5	351.94	.96	6	46.04	1	22.88	ACF	BC	MI	112	XYFVC	.78
PIN CTY WTR	52	112,000	G	55.0	10464.32	29.55	6	1207.65	1	642.69	ACTF	BC	MI	234	N	500.00
PINE ISLAND	36	5,000	G	1.2	228.85	.62	3	23.81	9	12.95	ACVGFT	BC	MD	91	NT	.00

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPUL-ATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREAT-MENT	TYPE ANAL-YSIS	FREQ-ANAL-YSIS	PER CAP USE	SEWAGE TREAT-MENT	SEWAGE DISCH MGAL/D
1971--CONTINUED																
PINELLAS PK	52	22,300	G		l 831.05	2.28	6	80.04	1	56.34	C			086	AS	1.80
PLANT CITY	29	18,000	G	8.6	670.89	1.83	5	68.28	2	46.99	CT	BC	PS	100	S	1.80
POMPANO BCH	06	50,000	G	24.0	5420.51	14.85	4	645.57	9	319.04	ACGF	BC	WA	297	QVO	3.50
PORT ST JOE	23	4,500	S	.4	158.80	.44	6	17.00	2	10.50	COFHTV	BC	DD	099	XC	.10
PT CHARLOTTE	08	22,000	X	1.7	600.27	1.64	5	79.03	4	24.64	COFTHE	BC	WD	66	AFP	.55
PUNTA GORDA	08	8,500	S	2.4	443.86	1.22	5	47.92	9	26.80	CVGFH	BC	WD	118	XYF	.70
QUINCY	20	10,100	X	1.5	546.84	1.49	6	57.72	2	33.94	ACGFT	BC	MI	130	XYFSC	.90
RIVIERA BCH	50	23,000	G	14.0	1676.00	4.59	3	186.00	N	107.00	ACVGFT	BC	WD	160	ZM	2.00
ST AUGUSTNE	55	12,352	X	5.0	997.74	2.73	7	76.86	2	57.19	CKSIHE	BC	DP	221	X	1.24
ST CLOUD	49	6,500	G	10.0	477.34	1.30	D	47.34	1	33.28	AC	C	I	200	XYFED	.70
ST PETERBURG	52	250,000	G	44.0	m 6517.00	17.90	5	633.00	3	381.30	AZOFT	BC	DD	130	US	8.50
ST PETERBURG	52		G		n 4425.30	12.10	3	576.90	9	190.10	AZOFT	BC	DD			.00
ST PETE BCH	52	8,024	G		l .00	.00	N/R	N/R	N/R	N/R	C			110	SUD	1.90
SANFORD	59	22,400	G	5.0	1027.81	2.82	5	105.14	2	69.25	ACU	BC	MX	126	XEC	2.86
SARASOTA	58	42,000	G	10.0	2525.90	6.92	5	229.17	2	183.01	ACVF	BC	WD	130	UDC	5.87
SEBRING	28	8,300	G	12.6	707.62	1.94	5	85.44	7	39.49	AC	BC	AS	390	SA	.25
STARKE	04	5,500	G	3.0	245.57	.67	N/R	N/R	N/R	N/R	CVT	C	I	120	YC	.67
STUART	43	8,000	G	2.4	512.54	1.40	4	48.40	9	37.96	CVGF	BC	MQ	162	F	.43
TALLAHASSEE	37	77,700	G	33.6	4511.58	12.36	5	417.33	1	318.76	C	BC	WI	159	XYFSVC	8.44
TAMPA	29	307,000	S	65.0	17599.46	48.21	5	1851.60	2	1224.21	CEMFXH	BC	DD	116	XYC	38.00
TARPON SPRS	52	7,118	G		l 443.28	1.18	N/R	N/R	N/R	N/R	C			109	XY	.96
TAVARES	35	3,842	G	2.3	171.52	.47	5	20.62	1	10.56	C	BC	MI	117	NT	.00
TITUSVILLE	05	30,515	G	16.0	1349.62	3.69	5	157.54	N	93.16	CV	BC	WH	114	YS	1.74
TRENTON	21	1,200	G	.4	54.80	.15	N/R	N/R	N/R	N/R	N	BC	WI	117	AY	.09
VALPARAISO	46	6,000	G	2.4	114.55	.31	5	13.45	N	3.34	C	BC	MI	117	XYFVC	.15
VENICE	58	10,000	G	3.0	385.93	1.06	4	36.32	7	25.26	ACVGF	C	P	102	YD	.97
VERO BEACH	31	16,000	G	6.0	996.74	2.76	8	98.51	N	74.02	ACVD	BC	WA	173	XYFDC	1.96
WARRINGTON	17	24,750	G	6.4	974.00	2.66	5	111.00	2	61.00	CT	BC	MI	96	T	.00
WAUCHULA	25	4,000	G	4.8	266.66	.73	4	31.27	8	18.25	ACP	BC	MI	162	L	.82
WEST PALM BC	50	66,000	S	36.0	6606.50	18.01	D	476.00	4	288.00	CFGISV	BC	DD	260	AD	11.80
WINTER GRDN	48	9,000	G	1.5	431.44	1.18	4	47.42	2	28.56	AC	BC	MI	121	YF	.72
WINTER HAVEN	53	18,000	G	9.6	1770.00	4.80	5	212.00	7	122.00	AC	BC	MI	148	YFS	3.00
WINTER PARK	48	53,809	G	27.8	3848.18	10.54	5	473.84	1	260.74	AC	BC	PA	195	AUF	3.10
1972																
ALTAMONTE SPR	59	8,203	G	6.5	400.00	1.10	4	38.00	2	21.00	AC	B	M	134	S	.90
APALACHICOLA	19	3,000	G	1.2	178.82	.49	7	18.66	2	10.47	AC	BC	MI	163	XYC	.48
ATLANTIC BCH	16	8,200	G	3.5	363.51	.99	8	38.71	2	22.83	AC			125	XU	.00
ARCADIA	14	6,000	G	2.5	222.81	.61	5	20.82	3	15.86	CFGSTV	BC	MI	100	YFC	.70
AUBURNDALE	53	14,000	G	5.0	360.00	1.00	4	46.00	0	20.00	AC	BC	MA	071	F	.45

AVON PARK	28	8,500	G	6.3	370.00	1.01	4	43.00	8	24.00	N	BC	MA	117	YC	.24
BARTOW	53	15,000	G	4.1	1000.80	2.74	4	103.60	2	59.90	ACF	BC	MI	183	CFXY	1.40
BELLE GLADE	50	18,500	S	6.0	1212.20	3.32	3	114.00	9	65.80	CFGUV	BC	PD	146	Y	1.09
BLOUNTSTOWN	07	2,700	G	1.4	73.00	.19	8	6.77	D	4.56	C	BC	MI	70	XYC	.20
BOCA RATON	50	35,000	G	37.0	4234.00	11.60	0	436.80	6	232.50	CFGTV	BC	MS	309	X	2.61
BONIFAY	30	2,200	G	1.0	91.50	.25	8	8.20	2	4.00	C	BC	MI	113	XCT	.14
BOYNTON BCH	50	19,000	G	12.0	1641.00	4.49	0	170.80	6	100.50	CF	BC	MD	190	FJU	1.18
BRADENTON	41	22,500	S	4.0	1128.00	3.10	3	118.00	6	89.00	CFGHV	BC	DD	138	V	2.75
BRANDON	29	12,000	G	5.5	500.00	1.37	7	115.00	N	40.00	C	BC	MI	114	Y	.66
BRISTOL	39	1,600	G	.2	58.40	.16	7	.18	2	.12	C	BC	MI	100	NT	.00
BRONSON	38	812	G	.7	17.00	.04	8	2.00	1	1.00	AC	BC	MI	049	NT	.00
BROOKSVILLE	27	5,000	G	2.5	213.00	.58	1	19.64	7	16.62	AC	BC	MP	116	AF	.45
BUNNELL	18	1,554	G	.6	81.76	.22	5	10.00	N	5.00	CFVX	BC	MD	142	NT	.00
BUSHNELL	60	700	G	1.0	47.00	.12	5	5.00	2	3.00	AC	BC	MI	171	NT	.00
CAPE CORAL	36	16,000	G	2.0	500.78	1.37	N/R	47.84	9	36.50	ACFGTV	BC	PD	90	UF	.77
CAROL CITY	13	15,556	G	4.0	1207.64	3.31	8	114.29	2	79.97	ACVGF	C	D	212	S	2.30
CASSELBERRY	59	12,150	G	2.8	545.68	1.49	7	50.99	2	31.45	AC	C	I	122	ACFP	.66
CHATTAHOOCHE	20	2,878	G	.5	101.90	.28	6	10.90	3	6.50	AC	BC	MI	097	XYSC	.20
CHIPLEY	67	4,000	G	1.2	182.50	.50	6	37.40	1	7.10	C	BC	MI	125	XC	.21
CLEARWATER	52	62,000	G	14.0	1775.50	4.86	5	177.40	2.	101.30	AC	BC	MA	195	S	8.75
CLEWISTON	26	4,700	S	o 3.0	p 321.48	.88	N/R	N/R	N/R	N/R	CFGUV	BC	PD	187	U	.17
COCOA	05	100,000	G	40.0	5437.30	14.89	8	521.48	2	317.98	ACV	BC	WP	148	CDFSX	1.25
CORAL SPRNGS	06	6,715	G	1.0	203.00	.56	7	22.00	9	11.00	ACKX	BC	MD	83	ACDEJP	.21
CRAWFRDVILLE	65	288	G	q	4.02	.01	7	.38	2	.28	C	BC	AI	038	NT	.00
CRESTVIEW	46	10,000	G	2.0	420.00	1.15	N/R	N/R	N/R	N/R	C	BC	MI	115	XYFC	.43
CROSS CITY	15	2,000	G	.8	128.50	.35	5	14.80	D	10.60	ACFT	BC	MM	175	TXYSVC	.02
CUTLER RIDGE	13	12,170	G	3.9	1780.42	4.88	4	186.50	6	129.93	C	BC	MA	400	A	2.34
DADE CITY	51	8,500	G	4.0	370.00	1.01	4	39.90	D	23.30	N	BC	MI	119	XY	.45
DANIA	06	9,660	G	3.1	546.94	1.49	D	58.64	5	21.15	ACDFSV	BC	MD	154	FRS	1.14
DAYTONA BCH	64	56,606	G	10.8	3669.64	10.05	7	353.91	N	254.79	ACFGUV	BC	MD	176	UD	12.23
DEERFLD BCH	06	16,500	G	15.7	1534.68	4.19	8	161.81	6	94.40	CFGTV	BC	MM	254	SC	1.06
DE FUNAK SPR	66	6,850	G	1.4	284.70	.78	5	22.00	2	16.00	C	BC	MI	113	XYFC	.29
DE LAND	64	16,691	G	12.0	944.22	2.58	9	94.94	2	61.56	CTV	BC	WP	154	S	1.20
DELRAY BCH	50	20,000	G	16.4	2326.00	6.37	0	265.00	6	140.20	ACSV	BC	MA	270	C	2.68
DUNEDIN	52	17,639	G	6.2	1116.00	3.06	5	142.00	2	76.00	C	BC	MA	173	SY	3.30
ENGLEWOOD	58	10,000	G	2.0	260.08	.71	4	28.21	9	15.99	ACFV	C	D	071	NT	.00
EUSTIS	35	9,122	G	8.8	807.24	2.21	6	87.02	2	48.22	AC	B	M	242	YF	.85
FERNANDNA BC	45	6,844	G	7.0	822.61	2.25	4	80.99	1	53.73	AC	BC	MI	328	Y	25.13
FT LAUDEDALE	06	196,000	G	60.0	14709.30	40.18	8	1416.90	6	1022.17	ACDFQT	BCS	DDA	205	CFSU	15.07
FT MYERS	36	27,000	X	8.0	1852.30	5.07	4	170.91	2	140.68	CFGV	BC	WD	187	FU	5.50
FT MYERS BCH	36	8,000	G	1.6	441.80	1.21	3	50.06	9	25.08	AC	BC	MD	094	U	.23
FT MYER SUBN	36	26,000	S	5.0	1065.98	2.92	N	101.69	2	73.07	ACFHOT	BC	MD	112	NT	.00
FT PIERCE	56	29,000	G	9.0	1453.21	3.97	3	133.52	2	105.26	DFGLQZ	BC	DD	137	ADCS	2.98
FT WALTN BCH	46	19,949	G	4.1	1139.79	3.12	7	136.49	D	64.48	AC	BC	MI	156	XYFVC	2.50
GAINESVILLE	01	70,000	G	15.0	4754.79	12.56	9	456.39	D	327.79	CGTVXZ	BC	DM	179	FA	7.66
GULFPORT g	52	9,730	G		.00	.00	N/R	N/R	N/R	N/R	C			072		r .00
GRN COVE SPR	10	3,857	G	1.8	108.49	.29	6	11.07	3	7.86	C	BC	MI	075	NT	.00
HAINES CITY	53	13,000	G	4.3	620.66	1.70	4	85.50	D	38.60	AC	BC	MI	130	AFXD	1.00
HALLANDALE	06	27,000	G	7.6	1532.59	4.18	8	143.62	6	103.72	ADFOTZ	BC	PQ	155		.00
HOLLY HILL	64	8,191	G	1.2	284.00	.77	7	27.00	D	20.00	ACDIJX	BC	MD	098	AS	.57

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1972--CONTINUED																
HOLLYWOOD	06	100,000	G	20.0	4960.66	13.55	3	480.09	6	363.27	CFGTV	BC	WD	135	AGSX	s16.74
HOMESTEAD	13	13,432	G	12.0	1639.62	4.49	8	144.78	6	130.84	C	BC	PA	334	S	1.10
INVERNESS	09	2,500	G	1.5	126.35	.35	6	12.30	2	7.60	C	BC	MS	140	YF	.24
JACKSONVILLE	16	190,000	G	110.0	20145.61	55.19	9	1945.00	2	1376.00	AC	BC	DQ	290	AISX	19.30
JACKSNVLE BC	16	12,600	G	5.9	665.26	1.82	8	65.42	2	44.82	ACV	BC	MA	144	U	2.67
JASPER	24	3,034	G	1.0	174.90	.48	6	17.00	1	12.10	CVGF	BC	MI	158	XYUVC	.30
KEY WEST	44	27,500	G	7.0	t1051.20	2.88	2	178.85	7	163.40	FPTVXZ	BC	DA	105	L	.80
KEY WEST	44		G	2.6	h 424.92	1.16	4	54.94	0	15.51		BC	DA			.00
KISSIMMEE	49	9,935	G	13.5	u 846.30	2.32	1	104.50	N	51.70	AC	C	I	166	YC	.96
LA BELLE	26	1,787	G	.5	67.10	.18	5	6.40	2	4.77	CFGV	BC	MD	100	CDPU	.06
LAKE BUTLER	63	1,598	G	1.4	182.50	.50	N/R	N/R	N/R	N/R	C	C	I	068	U	.35
LAKE CITY	12	16,600	G	4.9	645.12	1.76	9	66.78	2	43.62	C	B	M	106	XYFVC	2.20
LAKE PLACID	28	750	S	.8	71.00	.19	8	7.00	5	4.00	CV	BC	MD	210	NT	.00
LAKELAND	53	81,500	G	38.0	6121.24	16.70	4	677.10	2	345.60	AC	BC	WA	204	FXY	5.76
LAKE WALES	53	14,000	G	9.2	793.00	2.17	9	82.84	0	53.86	AC	BC	PI	155	F	.75
LARGO	52	22,031	G	.4	l 744.88	2.04	0	72.07	1	55.78	C	BC	MS	093	SU	3.00
LAKE WORTH	50	26,000	G	16.0	1780.00	4.86	3	182.30	6	111.90	CGSV	BC	MD	187	OC	v1.95
LANTANA	50	7,000	G	3.0	471.70	1.29	3	48.60	6	28.70	ACFSV	BC	MP	184		.78
LEESBURG	35	11,869	G	18.0	1763.54	4.02	9	206.39	2	86.04	Z	BC	MD	338	XAY	1.93
LEHIGH ACRES	36	9,500	G	1.7	196.92	.54	0	19.08	6	14.25	ACFGV	BC	MD	057	U	.50
LIVE OAK	61	7,000	G	2.7	367.36	1.00	6	35.66	2	25.32	ACF	BC	MM	143	XYFC	.50
MACCLENNY	02	2,648	G	1.0	129.33	.35	5	14.61	1	7.87	CV	BC	MI	132	DJMVX	.33
MADISON	40	5,000	G	3.2	251.90	.69	9	27.33	3	19.13	C	BC	MI	138	XYFVCT	.41
MAITLAND	48	7,500	G	7.7	594.24	1.63	6	68.08	2	29.98	AC	BC	MI	217	U	1.50
MARIANNA	32	7,200	G	2.0	355.47	.97	0	34.16	5	17.81	C	BC	MI	134	XYC	.55
MAYO	34	900	G	.2	37.30	.10	7	.15	2	.08	ACT	BC	MI	111	NT	.00
MELBOURNE	05	63,464	S	14.0	2893.79	7.93	4	277.96	2	203.56	CDFHUV	BC	WD	125	XZ	5.00
MIAMI	13	789,644	G	220.0	59557.80	162.73	8	5384.80	2	4513.70	FILQTZ	BCS	DDP	204	S	56.80
MILTON	57	9,000	G	2.3	282.60	.77	6	38.20	9	12.70	CT	BC	MI	086	XYFDC	1.30
MIRAMAR	06	26,500	G	6.0	820.00	2.24	4	76.38	6	59.52	ACFGTV	BC	MP	084	Y	2.31
MONTICELLO	33	2,700	G	.8	156.37	.43	0	16.44	3	9.83	C	C	M	159	XYFC	.16
MOORE HAVEN	22	1,200	G	.7	57.00	.16	4	6.00	7	4.00	ACFGTV	BC	MI	133	NT	.00
NAPLES	11	26,500	G	16.0	2480.00	6.80	3	8.30	9	5.00	COFSTR	BC	WS	239	APS	1.90
NEW PT RICHY	51	12,960	G	2.8	465.10	1.27	4	45.70	2	28.80	C	BC	MM	097	EFX	.53
NEW SMYRNA B	64	10,580	G	3.6	590.00	1.62	8	60.00	1	40.00	ACTV	BC	MI	142	AS	2.00
NICEVILLE	46	7,000	G	1.4	511.00	1.40	8	68.00	N	36.00	C	BC	MI	200	XYFVC	.37
NORTH MIAMI	13	55,000	G	10	w 3747.47	10.27	0	336.35	2	245.85	ACFGUV	BCP	WHD	187	X	8.60
NO MIAMI BCH	13	95,000	G	26.0	7399.43	20.27	4	653.58	N	539.61	CFGRSV	BCS	MDA	213	S	2.40
NO PALM BCH	50	16,900	G	7.0	1559.30	4.26	7	158.70	6	95.60	ACFGTV	C	I	252	AF	2.90
N PT CHARLOT	58	2,500	S	2.2	156.32	.43	0	16.48	2	9.83	CFGHVX	BC	WD	172	UP	.25
OAKLAND PARK	06	16,200	G		i 877.00	2.40	N	83.00	1	56.00	C			148	YS	x2.35
OCALA	42	25,000	G	6.8	1636.66	4.48	5	153.30	2	106.66	CRTUV	BC	DI	158	FCDSUY	3.48
OKEECHOBEE	47	4,500	S	1.9	240.90	.66	7	23.00	1	17.00	CDEHV	C	I	146	S	.17
OPA-LOCKA	13	14,000	G	2.5	570.18	1.56	3	67.43	9	32.18	ACFGTV	BC	QD	110	C	1.60
ORLANDO	48	175,000	G	125.0	13781.34	37.75	6	1353.54	2	810.75	ACU	BCS	WAA	216	B	16.00

ORMOND BCH	64	25,565	G	3.0	864.00	2.36	7	86.00	5	60.00	ADEOXZ	BC	MD	092	F	1.75
PAHOKEE	50	10,000	S	1.9	250.80	.69	3	24.40	8	19.00	ACFGHT	BC	WD	069	S	.86
PALATKA	54	12,000	G	3.5	620.20	1.69	7	61.10	2	42.50	ACFTU	BC	MA	141	XY	1.70
PALM BEACH	50	8,488	S	36.0	*y* 2134.90	5.83	8	221.30	6	105.50	N	BC	DD	175	N	3.37
PALM BCH GDN	50	6,000	G	4.0	767.10	2.10	3	82.20	6	49.50	CGSV	BC	MA	350	F	.73
PALMETTO	41	7,500	S		*j* 345.00	.95	N/R	N/R	N/R	N/R					YC	2.50
PANAMA CITY	03	30,916	S		*k* 1812.05	4.96	8	211.12	3	101.55	CGVFT	BC	MI	160	XYF	2.60
PENSACOLA	17	125,000	G	36.0	7994.51	21.90	7	881.61	2	453.72	ACT	BC	MI	175	XYFSC	9.34
PERRY	62	9,580	G	1.5	362.17	.99	6	46.52	2	21.72	ACF	BC	MI	103	XYFVC	.65
PINELLAS PK	52	22,300	G	.0	*l* 1006.18	2.80	N/R	N/R	N/R	N/R	C			125	AS	3.40
PINE ISLAND	36	5,000	G	1.2	256.00	.70	3	25.76	9	16.55	ACFGTV	BC	MD	091	NT	.00
PLANT CITY	29	18,000	G	8.6	738.80	2.02	6	80.88	N	46.48	CT	BC	PS	112	S	2.50
POMPANO BCH	06	50,000	G	25.7	5051.94	13.84	0	492.23	6	334.14	ACGF	BC	WA	276	OQV	4.36
PT CHARLOTTE	08	22,000	X	*s* 1.7	733.33	2.01	4	86.01	8	50.20	CEFHOT	BC	WD	091	AFP	.97
PT ST JOE	23	4,500	S	.4	242.95	.66	6	19.37	2	14.12	CVDFTH	BC	DD	146	XC	.50
PUNTA GORDA	08	8,500	S	2.4	484.20	1.33	4	48.70	9	34.00	CFGHV	BC	WD	156	FXYZ	*aa* .64
QUINCY	20	10,100	X	1.5	505.59	1.38	6	52.79	2	33.63	ACGFT	BC	MI	138	XYFSC	1.00
RIVIERA BCH	50	23,000	G	14.0	1604.70	4.38	7	161.10	6	105.20	ACFGTV	BC	WD	190	ZM	2.17
ST AUGUSTINE	55	12,352	X	5.0	870.28	2.38	8	86.16	2	56.60	CKSIHE	BC	DP	193	X	2.00
ST CLOUD	49	6,500	G	10.0	506.24	1.38	N	43.03	6	30.52	AC	C	I	210	DEFXY	.77
ST PETERBURG	52	250,000	G	44.0	*m* 5858.25	16.05	8	574.43	2	320.45	AFOTZ	BC	DD	135	US	38.00
ST PETERBURG	52		G		*n* 6522.55	17.87	8	608.84	D	509.02	AFOTZ	BC	DD			.00
ST PETE BCH	52	8,024	G		*l* .00	.00	N/R	N/R	N/R	N/R	C				SDU	1.80
SANFORD	59	22,400	G	5.0	1116.81	3.06	9	106.47	2	46.82	ACU	BC	MX	136	ECX	3.00
SARASOTA	58	42,000	G	12.7	2568.60	7.04	0	234.40	2	187.00	ACFV	BC	WD	167	CDU	6.40
SEBRING	28	8,300	G	12.7	794.00	2.00	5	81.00	2	48.00	AC	BC	AS	240	AS	.25
STARKE	04	5,500	G	3.0	284.70	.78	N/R	N/R	N/R	N/R	CTV	C	I	140	CY	.83
STUART	43	8,000	G	4.2	713.06	1.95	8	83.94	1	46.46	CFGV	BC	MQ	244	F	.50
TALLAHASSEE	37	78,000	G	33.6	5348.92	14.66	0	583.72	2	358.69	C	BC	WI	188	XYFSVC	8.91
TAMPA	29	307,000	S	65.0	19499.00	53.42	4	1819.61	2	1322.73	CEFHMX	BC	DD	174	CXY	33.68
TARPON SPRS	52	7,118	G		*bb* 526.83	1.49	0	1.76	9	.74	C			209	XY	.99
TAVARES	35	3,842	G	2.3	205.29	.56	N	19.56	2	11.35	C	BC	MI	145	NT	.00
TITUSVILLE	05	30,515	G	16.0	1232.48	3.38	4	114.18	2	87.34	CV	BC	WH	110	SY	2.05
TRENTON	21	1,200	G	.4	58.40	.16	7	N/R	D	N/R	N	BC	WI	125	AY	.25
VALPARAISO	46	6,000	G	2.4	135.31	.37	6	18.80	2	7.29	C	BC	MI	062	XYFVC	.14
VENICE	58	10,000	G	3.0	418.19	1.15	D	44.30	9	24.99	ACFGV	C	P	115	DY	.84
VERO BEACH	31	16,000	G	6.0	1152.66	3.16	8	111.60	2	73.92	ACDV	BC	WA	197	CDFXY	2.20
WARRINGTON	17	24,750	G	7.1	995.45	2.73	7	112.00	N	60.29	CT	BC	MI	110	T	.00
WAUCHULA	25	4,000	G	4.8	272.00	.74	4	26.00	2	19.00	ACP	BC	MI	185	L	.71
WEST PALM BC	50	66,000	S	36.0	*cc* 6124.00	26.70	3	594.00	6	399.00	CFGISV	BC	DD	253	AD	12.55
WINTER GARDN	48	9,000	G	1.5	425.37	1.16	6	42.68	N	12.11	AC	BC	MI	128	FY	.67
WINTER HAVEN	53	18,000	G	9.6	1942.43	5.32	4	205.30	2	131.50	AC	BC	MI	295	FSY	3.19
WINTER PARK	48	53,809	G	27.8	4318.81	11.83	4	440.59	2	251.69	AC	BC	PA	219	AFU	3.00

1973

ALTAMONTE SPR	59	11,200	G	7.8	510.00	14.05	N/R	450.02	N/R	320.01	C B M 1			255		14.00
APALACHICOLA	19	3,127	G	1.2	174.53	.47	6	19.11	2	10.99	AC	BC	MI	150	XYC	.43
ARCADIA	14	7,000	G	2.5	215.00	.80	D	21.20	9	14.11	CFGSTV	BC	MI	114	YFC	.40
ATLANTIC BCH	16	8,000	G	3.5	378.24	1.03	7	41.90	2	21.32	AC			130	XU	.73
AUBURNDALE	53	12,000	G	5.0	301.48	1.40	6	68.07	8	18.75	AC	BC	MA	117	F	.50

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1973--CONTINUED																
AVON PARK	28	8,500	G	6.3	354.49	.96	6	43.61	8	17.76	N	BC	MA	113	YC	.30
BARTOW	53	17,000	G	4.1	940.39	2.58	5	108.14	2	59.09	ACF	BC	MI	151	CFXY	1.40
BELLE GLADE	50	22,000	S	6.0	1268.50	3.48	5	119.90	9	78.60	CFGUV	BC	PD	158	YC	1.05
BLOUNTSTOWN	07	2,400	G	1.4	74.00	.20	8	7.02	D	4.56	C	BC	MI	83	CXY	.30
BOCA RATON	50	45,000	G	37.0	4778.43	13.09	4	504.50	9	311.10	CFGTV	BC	MS	290	AS	4.50
BONIFAY	30	2,500	G	1.0	68.40	.18	7	6.20	2	2.80	C	BC	MI	72	CTX	.15
BOYNTON BCH	50	24,000	G	12.0	2077.57	5.69	4	214.01	2	147.09	CF	BC	MD	237	FJU	2.40
BRADENTON	41	25,000	S	4.0	1341.36	3.67	5	126.58	2	96.08	CFGHV	BC	DD	146	U	3.00
BRANDON	29	18,000	G	5.5	1380.00	3.00	-	165.00	-	90.00	C	BC	MI	166	Y	.00
BRISTOL	39	1,600	G	.2	58.40	.16	7	.18	2	.12	C	BC	MI	100	NT	.00
BRONSON	38	812	G	.7	17.00	.04	8	2.00	1	1.00	AC	BC	MI	49	NT	.00
BROOKSVILLE	27	5,000	G	2.5	145.00	.39	5	15.00	9	9.00	AC	BC	MP	79	AF	.52
BUNNELL	18	1,900	G	.6	75.83	.20	5	7.51	1	5.76	CFVX	BC	MD	105	NT	.18
BUSHNELL	60	800	G	1.0	49.00	.13	D	6.00	3	2.50	AC	BC	MI	162	NT	.00
CAPE CORAL	36	16,000	G	2.0	546.40	1.50	5	56.51	2	38.79	ACFGTV	BC	PD	94	UF	.77
CAROL CITY	13	15,556	G	4.0	1580.08	4.33	4	164.70	1	110.52	ACFGV	C	D	278	S	3.30
CASSELBERRY	59	14,300	G	2.8	512.00	1.40	5	50.00	D	35.00	AC	C	I	94	ACFP	.97
CHATTAHOOCHE	20	3,000	G	.5	104.50	.28	7	11.20	D	7.00	AC	BC	MI	93	CSXY	.15
CHIPLEY	67	4,500	G	1.2	134.90	.37	2	20.00	3	8.50	C	BC	MI	82	CX	.36
CLEARWATER	52	62,000	G	14.0	2155.00	5.90	5	453.00	9	262.00	AC	BC	MA	183	S	10.25
CLEWISTON	26	4,700	S	o 3.0	f 377.00	1.03	N/R	N/R	N/R	N/R	CFGUV	BC	PD	219	U	.20
COCOA	05	125,000	G	40.0	5135.17	14.07	5	548.39	D	340.47	ACV	BC	WP	112	CDFSX	1.50
CORAL SPRNGS	06	6,700	G	1.2	360.00	1.00	D	44.00	7	33.00	ACKX	BC	MD	150	ACDEJP	1.00
CRAWFRDVILLE	65	288	G	q .0	5.70	.02	D	.55	D	.43	C	BC	AI	69	NT	.00
CRESTVIEW	46	10,000	G	2.0	495.33	1.36	N/R	N/R	N/R	N/R	C	BC	MI	136	CFXY	.45
CROSS CITY	15	2,200	G	.8	129.00	.35	N/R	N/R	N/R	N/R	ACFT	BC	MM	159	CSTVXY	.03
CUTLER RIDGE	13	14,500	G	3.9	2323.78	6.37	4	243.78	2	141.87	C	BC	MA	439	A	2.93
DADE CITY	51	8,500	G	4.0	338.00	.90	5	36.36	2	24.63	N	BC	MI	105	XY	.60
DANIA	06	9,600	G	3.1	647.96	1.78	3	61.65	9	50.97	ACDFSV	BC	MD	184	FGRS	1.35
DAYTONA BCH	64	63,000	G	10.8	3499.90	9.58	7	341.43	D	261.47	ACFGUV	BC	MD	152	DU	12.50
DEERFLD BCH	06	20,000	G	15.7	1680.96	4.61	4	180.18	9	112.83	CFGTV	BC	MM	230	SC	1.60
DE FUNAK SPR	66	6,850	G	1.4	274.60	.75	6	21.70	2	16.20	C	BC	MI	109	CFXY	.30
DE LAND	64	18,000	G	12.0	870.40	2.38	5	100.40	2	64.60	CTV	BC	WI	132	ADS	2.00
DELRAY BCH	50	23,700	G	16.4	2565.34	7.03	D	309.23	1	154.00	ACSV	BC	MA	296	AC	3.19
DUNEDIN	52	21,000	G	6.2	1206.91	3.45	5	142.16	2	79.29	C	BC	MA	164	SY	2.96
ENGLEWOOD	58	10,000	G	2.0	304.59	.90	5	33.33	9	19.17	ACFV	C	D	90	NT	.00
EUSTIS	35	9,500	G	8.8	839.77	2.30	6	91.02	2	51.02	AC	B	M	242	FY	.85
FERNANDNA BC	45	7,100	G	7.0	873.30	2.39	8	3.55	3	1.19	AC	BC	MI	336	Y	.00
FT LAUDEDALE	06	205,000	G	60.0	15600.67	42.74	4	1600.68	6	1166.06	ACDFQT	BCS	DDA	208	CFSU	16.57
FT MYERS	36	30,850	X	8.0	2057.00	5.64	5	196.30	2	149.50	CFGV	BC	WD	146	FU	5.80
FT MYERS BCH	36	8,000	G	2.6	554.80	1.52	N	53.75	7	37.11	AC	BC	MD	190	U	.32
FT MYER SUBN	36	26,000	S	5.0	1178.60	3.23	5	124.40	9	83.90	ACFHOT	BC	MD	124	NT	.00
FT PIERCE	56	31,550	G	15.0	1648.52	4.52	5	166.26	2	107.91	DFGLQZ	BC	DD	143	ADCS	3.37
FT WALTN BCH	46	21,800	G	4.1	1149.38	3.15	7	127.86	2	66.71	AC	BC	MI	144	CFVXY	2.51
GAINESVILLE	01	80,000	G	15.0	5617.35	15.39	8	642.01	D	302.93	CGTVXZ	BC	DM	192	AF	8.31

GRN COVE SPR	10	3,837	G	1.8	126.79	.35	9	11.95	2	8.71	C	BC	MI	91	NT	.00
GULFPORT *g*	52	9,730	G		.00	.00	N/R	N/R	N/R	N/R	C					*r* .00
HAINES CITY	53	13,000	G	4.3	565.81	1.55	5	65.42	9	36.24	AC	BC	MI	120	ADFX	.90
HALLANDALE	06	30,850	G	7.6	1663.30	4.56	3	171.83	9	106.92	ADFOTZ	BC	PQ	148		.00
HOLLYWOOD	06	134,000	G	20.0	4802.00	13.50	4	456.00	9	360.00	CFGTV	BC	WD	100	AGSX	*s* 18.62
HOLLY HILL	64	8,700	G	1.2	291.33	.79	7	27.69	2	18.97	ACDIJX	BC	MD	91	AS	.65
HOMESTEAD	13	17,500	G	12.0	1884.30	5.16	D	166.60	2	128.90	C	BC	PA	294	S	.99
INVERNESS	09	2,900	G	1.5	114.86	.31	5	13.91	9	6.49	C	BC	MS	106	FY	.17
JACKSONVILLE	16	250,000	G	110.0	20010.58	54.54	5	1918.96	2	1432.12	AC	BC	DQ	114	AISX	.00
JACKSNVLE BC	16	13,400	G	5.9	643.56	1.75	7	62.50	2	43.05	ACV	BC	MA	130	U	2.20
JASPER	24	3,034	G	1.0	167.70	.46	7	19.10	2	11.10	CFGV	BC	MI	152	CUVXYS	.30
KEY WEST	44	27,500	G	7.0	*t* 1100.00	3.00	N/R	N/R	N/R	N/R	FPTVXZ	BC	DA			.80
KEY WEST	44		G	2.6	*h* 584.80	1.60	4	64.76	0	33.02		BCD	A			.00
KISSIMMEE	49	13,000	G	13.5	*u* 757.63	2.07	5	70.67	N	58.20	AC	C	I	159	CY	1.43
LA BELLE	26	2,200	G	.5	76.78	.21	0	8.26	2	5.00	CFGV	BC	MD	095	CDPU	.07
LAKE BUTLER	63	1,645	G	1.4	182.00	.52	N/R	N/R	N/R	N/R	C	C	I	-	U	.38
LAKE CITY	12	14,000	G	4.9	631.39	1.73	5	70.57	2	41.55	C	B	M	123	CFVXY	2.00
LAKELAND	53	81,500	G	38.0	5703.53	15.63	5	711.95	2	350.59	AC	BC	WA	192	FXY	6.70
LAKE PLACID	28	750	S	.8	72.88	.19	8	?.00	1	?.00	CV	BC	MD	253	NT	.00
LAKE WALES	53	14,000	G	9.2	766.66	2.10	5	93.20	2	46.90	AC	BC	PI	150	F	.81
LARGO	52	32,300	G	.4	*l* 747.80	2.00	N	80.50	9	51.20	C	BC	MS	62	SU	4.76
LAKE WORTH	50	26,000	G	16.0	1717.96	4.71	4	172.06	9	129.19	CGSV	BC	MD	187	OC	*v* 3.70
LANTANA	50	7,650	G	3.0	514.95	1.41	4	57.08	2	35.30	ACFSV	BC	MP	184		.77
LAUDERHILL	06	13,500	G	15.0	1236.90	3.38	D	153.30	2	71.10	J			250		2.16
LEESBURG	35	12,960	G	18.0	1464.30	4.06	5	161.90	2	96.70	Z	BC	MD	325	AXY	2.20
LEHIGH ACRES	36	9,500	G	1.7	202.39	.55	N	18.54	8	14.77	ACFGV	BC	MD	58	U	.52
LIVE OAK	61	7,000	G	2.7	357.08	.97	D	36.26	2	23.53	ACF	BC	MM	139	CFXY	.34
MACCLENNY	02	3,400	G	1.0	128.00	.35	N/R	N/R	N/R	N/R	CV	BC	MI	102	DJMVX	.34
MADISON	40	5,500	G	3.2	296.10	.81	3	27.40	1	21.30	C	BC	MI	147	CFTVXY	.30
MAITLAND	48	8,051	G	7.7	538.38	1.47	5	70.03	2	33.41	AC	BC	MI	182	U	1.20
MARIANNA	32	7,200	G	2.0	356.28	.97	8	37.81	D	18.54	C	BC	MI	120	CXY	.55
MANTEE CTY *h*	41				471.50	7.00	5	325.00	8	178.00						2.50
MAYO	34	900	G	.2	40.21	.11	D	5.18	N	2.33	ACT	BC	MI	122	NT	.00
MELBOURNE	05	66,700	S	14.0	3123.10	8.57	5	289.78	2	212.92	CDFHUV	BC	WD	128	XZ	5.65
MIAMI	13	844,050	G	220.0	64683.30	177.21	5	5808.70	2	4636.30	FILQTZ	BCS	DDP	209	S	63.05
MILTON	57	10,000	G	2.3	354.00	.97	9	33.20	2	26.50	CT	BC	MI	97	XYFDC	1.20
MIRAMAR	06	23,000	G	6.0	878.00	2.40	4	94.00	7	63.00	ACFGTV	BC	MP	89	YA	2.60
MONTICELLO	33	3,800	G	.8	142.08	.39	N	13.45	3	9.71	C	C	M	102	CFXY	.35
MOORE HAVEN	22	1,200	G	.7	61.40	.20	4	5.47	1	3.57	ACFGTV	BC	MI	166	NT	.00
NAPLES	11	42,000	G	16.0	2890.49	7.92	5	307.87	8	151.46	CFOSTR	BC	MS	188	APS	2.10
NEPTUNE BCH	16	4,730	G	2.5	239.81	.65	5	24.53	9	16.15				137		.50
NEW PT RICHY	51	12,960	G	2.8	553.80	1.51	5	56.10	2	33.59	C	BC	MM	116	EFX	.63
NEW SMYRNA B	64	12,100	G	3.6	780.91	2.14	7	78.31	2	52.75	ACTV	BC	MI	176	AS	1.20
NICEVILLE	46	7,000	G	1.4	445.40	1.22	8	42.10	4	30.80	C	BC	MI	174	CFVXY	.39
NORTH MIAMI	13	55,000	G	10.0	*dd* 3705.61	10.15	4	227.85	9	148.00	AC	BCP	WHD	184	X	13.42
NO MIAMI BCH	13	95,000	G	26.0	8499.85	23.28	4	815.13	1	629.95	CFGRSV	BCS	MDA	245		.00
NO PALM BCH	50	16,900	G	7.0	1626.32	4.46	4	180.00	9	100.00	ACFGTV	C	I		AF	2.84
N PT CHARLOT	58	2,837	S	2.2	259.29	.71	N	35.93	9	12.10	CFGHVX	BC	WD	250	UP	.35
OAKLAND PARK	06	19,000	G		*i* 946.00	2.59	N/R	N/R	N/R	N/R	C			136	YS	*x* 2.72
OCALA	42	25,500	G	6.8	1636.69	4.48	5	180.35	2	110.99	CRTUV	BC	DI	175	CDFSUY	3.78

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1973--CONTINUED																
OKEECHOBEE	47	4,500	S	1.9	356.34	.97	D	36.73	2	25.01	CDEHV	C	I	215	SEF	.12
OPA-LOCKA	13	14,000	G	2.5	762.85	2.09	0	71.17	2	48.50	ACFGTV	BC	QD	149	C	.00
ORLANDO	48	190,000	G	125.0	14332.31	39.26	5	69.50	1	39.89	ACU	BCS	WAA	206	B	.00
ORMOND BCH	64	27,600	G	3.0	1019.73	2.79	6	101.28	N	58.73	ADEOXZ	BC	MD	101	F	2.04
PAHOKEE	50	10,000	S	1.9	257.36	.71	2	25.48	8	15.42	ACFGHT	BC	WD	71	S	.77
PALATKA	54	12,000	G	3.5	728.20	1.99	5	80.60	2	42.00	ACFTU	BC	MA	165	XYU	1.50
PALM BEACH	50	10,000	S	36.0	*y* 1946.37	5.33	N/R	N/R	N/R	N/R	N	BC	DD	175	N	3.30
PALM BCH GDN	50	7,600	G	4.0	728.36	2.00	4	86.98	9	48.29	CGSV	BC	MA	263	F	.78
PALMETTO	41	8,500	S		*j* 256.25	.70	3	26.34	8	15.42				82	CY	.65
PANAMA CITY	03	35,000	S		*k* 1665.33	4.56	N	158.79	3	105.51	CGVFT	BC	MI	130	FXY	3.29
PENSACOLA	17	170,000	G	36.0	7388.20	20.24	5	785.60	D	488.60	ACT	BC	MI	119	CFSXY	8.00
PERRY	62	9,580	G	1.5	430.92	1.18	0	56.86	2	23.27	ACF	BC	MI	123	CFVXY	.95
PIN CTY WT S	52		G		12260.31	33.58	5	1305.50	9	807.54						.00
PINELLAS PK	52	27,100	G		*l* 925.81	2.53	6	90.60	D	70.30	C			93	AS	2.50
PINE ISLAND	36	5,000	G	1.2	234.40	.64	3	24.50	9	11.91	ACFGTV	BC	MD	91	NT	.00
PLANT CITY	29	18,000	G	8.6	711.16	1.95	5	80.86	2	47.28	CT	BC	PS	108	S	3.10
POMPANO BCH	06	58,740	G	25.7	5466.56	14.98	4	582.83	9	395.95	ACGF	BC	WA	255	OQV	5.03
PORT ORANGE	64	5,270	G		369.38	1.01	0	36.96	1	23.83				194	N	.70
PORT ST JOE	23	4,500	S	.4	214.77	.59	9	19.85	2	14.91	CDFHTV	BC	DD	131	CX	.50
PT CHARLOTTE	08	22,000	X	1.7	*z* 809.17	2.22	5	123.93	7	47.74	CEFHOT	BC	WD	100	AFP	1.10
PUNTA GORDA	08	8,500	S	2.4	501.12	1.37	5	53.71	6	31.92	CFGHV	BC	WD	161	FXYZ	.00
QUINCY	20	10,100	X	1.5	499.50	1.37	5	62.21	2	32.35	ACFGT	BC	MI	135	CFSXY	2.00
RIVIERA BCH	50	25,190	G	14.0	1685.67	4.62	4	173.85	2	105.60	ACFGTV	BC	WD	183	MZ	2.20
ST AUGUSTINE	55	12,800	X	5.0	931.06	2.55	7	96.85	2	62.40	CEHIKS	BC	DP	199	X	2.75
ST CLOUD	49	6,500	G	10.0	451.18	1.23	5	45.81	2	32.23	AC	C	I	189	DEFXY	.86
ST PETERBURG	52	250,000	G	44.0	*m* 4774.20	13.08	3	593.65	7	225.68	AFOTZ	BC	DD	142	US	42.50
ST PETERBURG	51				*ee* 4226.70	11.58	7	583.73	N/R	N/R						.00
ST PETERBURG	52		G		*n* 3934.70	10.78	1	510.26	9	183.60	AFOTZ	BC	DD			.00
ST PETE BCH	52	8,024	G		*i* .00	.00	N/R	N/R	N/R	N/R	C					.00
SANFORD	59	25,000	G	5.0	1591.20	4.35	4	149.71	9	120.66	ACU	BC	MX	174	CEXS	3.00
SARASOTA	58	50,000	G	12.7	2825.83	7.74	5	277.50	9	198.10	ACFV	BC	WD	154	CDU	6.11
SEBRING	28	13,000	G	12.7	948.59	2.60	5	117.05	9	56.22	AC	BC	AS	200	AS	.28
STARKE	04	5,500	G	3.0	274.00	.75	N/R	N/R	N/R	N/R	CTV	C	I	136	CY	.87
STUART	43	8,000	G	4.8	724.08	1.98	4	76.93	9	51.77	CFGV	BC	MQ	248	F	.60
TALLAHASSEE	37	81,640	G	33.6	5065.33	14.70	5	514.33	D	371.59	C	BC	WI	180	CFSVXY	9.38
TAMPA	29	350,000	S	65.0	16779.69	45.97	5	1802.19	9	1074.93	CEFHMX	BC	DD	131	CXY	39.44
TARPON SPRS	52	8,800	G		*ff* .00	.00	N/R	N/R	N/R	N/R	C				XY	1.01
TAVARES	35	3,842	G	2.3	204.62	.56	5	24.38	9	13.35	C	BC	MI	147	NT	.00
TITUSVILLE	05	34,000	G	16.0	1391.00	3.81	5	159.20	2	95.50	CV	BC	WH	112	SY	2.25
TRENTON	21	1,200	G	.4	148.00	.45	0	19.60	1	9.50	N	BC	WI	375	AY	.05
VALPARAISO	46	6,600	G	2.4	109.97	.30	7	13.13	D	7.17	C	BC	MI	45	CFVXY	.17
VENICE	58	15,000	G	3.0	485.47	1.33	3	50.66	9	30.69	ACFGV	C	P	88	DY	.88
VERO BEACH	31	16,000	G	6.0	1247.25	3.40	7	115.88	2	94.15	ACDV	BC	WA	212	CDFXY	2.12
WAUCHULA	25	4,000	G	4.8	287.00	.78	5	32.00	2	20.00	ACP	BC	MI	195		.68
WARRINGTON	17	24,750	G	7.1	929.00	2.55	8	102.60	2	57.70	CT	BC	MI	103	NT	.00

WEST PALM BC	50	69,662	S	36.0	6577.98	18.02	5	670.88	2	457.22	CFGISV	BC	DD	258	AD	11.00
WINTER GARDN	48	9,000	G	1.5	458.00	1.30	5	51.00	2	25.00	AC	BC	MI	144	FY	.00
WINTER HAVEN	53	45,000	G	9.6	1861.70	5.10	5	214.06	9	129.05	AC	BC	MI	113	FSY	1.90
WINTER PARK	48	53,809	G	27.8	4338.25	11.88	5	474.61	2	261.52	AC	BC	PA	220	AFU	2.94

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ALTAMONTE SP	59	15,400	G	6.9	990.10	2.70	4	103.50	9	81.30	AC	B	M	175	S	2.00
APALACHICOLA	19	3,127	G	1.2	171.27	.46	8	16.26	2	10.65	AC	BC	MI	147	XYC	.43
ARCADIA	14	7,000	G	2.5	302.54	.79	5	33.65	8	18.53	CFGSTV	BC	MI	112	YFC	.42
ATLANTIC BCH	16	8,000	G	3.5	449.39	1.25	5	45.56	2	28.02	AC	BC	MQ	156	XU	.82
AUBURNDALE	53	12,000	G	5.0	512.93	1.41	4	60.65	2	18.02	AC	BC	MA	117	F	.55
AVON PARK	28	8,500	G	6.3	418.69	1.16	4	58.95	9	20.09	N	BC	MA	136	YC	gg .30
BARTOW	53	17,000	G	4.1	1136.63	3.11	4	114.58	2	77.19	ACF	BC	MI	151	CFXY	1.50
BAY CTY WTR	03	31,000	S		hh12493.97	34.23	0	1126.51	9	934.86	CVFU			110	AP	.00
BELLE GLADE	50	22,000	S	6.0	1260.84	3.45	3	119.29	0	90.95	CFGUV	BC	PD	158	YCP	1.20
BLOUNTSTOWN	07	2,400	G	1.4	82.51	.23	0	7.75	4	5.56	C	BC	MI	83	CXY	.30
BOCA RATON	50	45,000	G	37.0	5704.00	15.63	3	612.00	8	396.50	CFGTV	BC	MS	347	AS	4.60
BONIFAY	30	2,500	G	1.0	68.60	.19	N/R	N/R	N/R	N/R	C	BC	MI	72	CTX	.16
BONITA SPRS	36	11,000	G	.5	129.00	.35	3	.43	9	.24	ACV			32		.00
BOYNTON BCH	50	24,000	G	12.0	2407.83	6.60	3	234.08	7	180.15	CF	BC	MD	275	FJU	2.80
BRADENTON	41	25,000	S	4.0	1357.80	3.72	4	123.57	9	94.39	CFGHV	BC	DD	166	U	3.05
BRANDON	29	25,000	G	5.5	1720.00	3.50	N/R	210.00	N/R	130.00	C	BC	MI	166	Y	ii .00
BRISTOL	39	1,600	G	.2	51.00	.14	7	.16	2	.11	C	BC	MI	87	NT	.00
BRONSON	38	551	G	.7	18.50	.05	jj6	2.00	1	1.30	AC	BC	MI	93	NT	.00
BROOKSVILLE	27	5,000	G	2.5	228.00	.62	0	21.43	8	17.17	AC	BC	MP	79	AF	.51
BUNNELL	18	1,900	G	.6	80.53	.22	5	8.07	2	5.95	CFVX	BC	MD	115		.17
BUSHNELL	60	800	G	1.0	48.30	.13	6	5.42	8	2.91	AC	BC	MI	162	NT	.00
CAPE CORAL	36	22,000	G	2.0	659.44	1.81	4	67.26	7	43.61	ACFGTV	BC	PD	82	UF	1.14
CAROL CITY	13	15,556	G	4.0	1595.90	4.40	N/R	N/R	N/R	N/R	ACFGV	C	D	283	S	3.40
CASSELBERRY	59	14,800	G	2.8	511.43	1.40	4	58.88	0	33.31	AC	C	I	94	ACFP	.86
CHATTAHOOCHE	20	3,000	G	.5	113.90	.31	7	11.90	1	7.30	AC	BC	MI	100	CSXY	.25
CHIPLEY	67	4,500	G	1.2	135.60	.37	7	16.20	2	8.10	C	BC	MI	82	CX	.36
CLEARWATER	52	62,000	G	14.0	2415.99	6.62	4	405.00	2	301.00	AC	BC	MA	182	SP	11.58
CLEWISTON	26	4,700	S	3.0	397.84	1.09	N/R	N/R	N/R	N/R	CFGUV	BC	PD	231	U	.17
COCOA	05	125,000	G	40.0	kk5505.93	15.08	3	497.64	2	394.78	ACV	BC	WP	120	CDFSX	1.50
CORAL SPRING	06	6,800	G	1.2	592.20	1.40	4	59.40	6	45.00	ACKX	BC	MD	205	ACDEJP	1.40
CRAWFRDVILLE	65	288	G	q .0	6.90	.02	N/R	N/R	N/R	N/R	C	BC	AI	69	NT	.00
CRESTVIEW	46	10,000	G	2.0	495.33	1.36	8	47.17	2	39.31	C	BC	MI	136	CFXY	.50
CROSS CITY	15	2,300	G	.8	162.00	.44	8	N/R	1	N/R	ACFT	BC	MM	190	CSTVXY	.06
CUTLER RIDGE	13	14,500	G	3.9	2920.50	ll 8.00	5	262.80	2	165.03	C	BC	MA	439	A	mm 3.20
DADE CITY	51	8,500	G	4.0	372.87	1.02	5	39.11	2	25.17	N	BC	MI	120	XY	.41
DANIA	06	9,700	G	3.7	638.00	1.75	3	74.00	6	27.00	ACDFSV	BC	MD	180	FGRS	1.30
DAYTONA BCH	64	63,000	G	12.5	3683.51	10.09	5	345.25	D	262.37	CFGUV	BC	DD	160	DU	12.00
DEERFLD BCH	06	20,000	G	15.7	2060.01	5.64	3	219.35	1	130.58	CFGTV	BC	MM	282	SC	1.50
DE FUNAK SPG	66	6,850	G	2.3	288.30	.79	6	22.80	2	17.00	C	BC	MI	115	CFXY	.31
DELAND	64	18,000	G	12.0	1176.90	3.22	4	116.90	2	85.10	CTV	BC	WI	134	ADS	1.50
DELRAY BCH	50	27,000	G	16.4	3062.90	8.39	1	316.90	6	198.10	ACSV	BC	MA	310	AC	3.50
DUNEDIN	52	26,600	G	6.2	1275.64	3.49	5	143.88	8	82.57	C	BC	MA	131	ACDESY	2.66
ENGLEWOOD	58	10,000	G	2.0	371.16	1.01	3	42.83	9	21.25	ACFV	C	D	100	NT	.00
EUSTIS	35	9,500	G	8.8	776.00	2.13	6	78.00	9	51.00	AC	B	M	224	FY	.92
FERNANDNA BC	45	7,100	G	7.0	896.81	2.46	5	86.47	2	61.47	AC	BC	MI	346	Y	.85

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1974--CONTINUED																
FT LAUDEDALE	06	205,000	G	60.0	17107.53	46.87	4	1746.39	6	1244.45	ACDFQT	BCS	DDA	228	CFSU	16.58
FT MYERS	36	38,000	X	8.3	2077.00	5.69	0	192.20	9	155.00	CFGV	BC	WD	150	FU	5.96
FT MYERS BCH	36	30,000	G	4.5	659.61	1.81	3	71.88	8	37.37	AC	BC	MD	260	U	.38
FT MYER SUBN	36	35,000	S	5.0	1311.65	3.59	D	161.04	2	70.50	ACFHOT	BC	MD	103	NT	nn .19
FT PIERCE	56	32,000	G	15.0	1913.89	5.25	3	184.07	2	139.63	DFGLQZ	BC	DD	164	ADCS	3.87
FT WALTN BCH	46	22,000	G	4.1	1210.78	3.32	6	144.03	2	68.42	AC	BC	MI	150	CFVXY	2.68
GAINESVILLE	01	80,000	G	15.0	5720.56	15.67	5	580.65	2	394.62	CGTVXZ	BC	DM	236	AF	8.00
GRN COVE SPR	10	3,837	G	1.8	143.01	3.92	5	15.57	4	9.74	AC oo	BC	MI	102	NT pp	.00
GULF BREEZE	57	5,200	G		qq 193.55	.53	7	22.37	2	12.99	AC	C	I	102	ACZ	.18
GULFPORT g	52	9,730	G		.00	.00	N/R	N/R	N/R	N/R	C					r .00
HAINES CITY	53	13,000	G	4.3	597.86	1.64	3	70.42	8	37.85	AC	BC	MI	126	ADFX	rr .90
HALLANDALE	06	31,000	G	12.0	1787.41	4.90	3	177.57	6	119.01	ADFQTZ	BC	PQ	158		.00
HOLLYWOOD	06	134,000	G	27.4	5155.00	14.12	3	492.00	9	389.00	CFGTV	BC	WD	105	AGSXss	s 20.34
HOLLY HILL	64	8,700	G	1.2	319.42	.87	3	28.63	D	24.76	ACDIJX	BC	MD	100	AS	.65
HOMESTEAD	13	17,500	G	12.0	2026.50	5.60	9	188.60	1	169.30	C	BC	IA	320	S	1.20
INVERNESS	09	2,900	G	1.5	123.06	.34	0	14.05	2	6.67	C	BC	MS	117	FY	.25
JACKSONVILLE	16	250,000	G	110.0	21000.00	57.00	N	1956.00	2	1269.00	AC	BC	DQ	115	AISX	20.00
JACKSNVLE BC	16	13,400	G	5.9	681.71	1.86	7	2.64	2	1.77	ACV	BC	MA	138	U	2.05
JASPER	24	3,034	G	1.0	179.40	.49	5	17.50	2	11.60	CFGV	BC	MI	161	CUVXYS	.40
KEY WEST	44	27,500	G	7.0	t 1425.30	3.90	N/R	N/R	N/R	N/R	FPTVXZ	BC	DA	141		.00
KEY WEST	44		G	2.6	h 573.31	1.50	4	61.50	6	31.30		BC	DA			.00
KISSIMMEE	49	13,000	G	13.5	811.20	2.22	5	80.20	2	60.00	AC	C	I	170	CYAP	1.14
LA BELLE	26	2,200	G	.5	78.38	.22	4	7.97	8	5.68	CFGV	BC	MD	100	CDPU	.08
LAKE BUTLER	63	1,645	G	1.4	212.67	.58	N/R	N/R	N/R	N/R	C	C	I	352	U	.58
LAKE CITY	12	14,000	G	4.9	623.83	1.71	5	63.49	2	42.81	C	B	M	122	CFVXY	2.50
LAKELAND	53	81,500	G	38.0	6544.00	17.92	4	711.00	2	398.00	AC	BC	WA	220	FXY	5.95
LAKE PLACID	28	750	S	.8	63.55	.17	4	6.39	7	3.72	CV	BC	MD	226	NT	.00
LAKE WALES	53	14,000	G	9.2	884.80	2.40	4	108.50	8	52.60	AC	BC	PI	170	F	.84
LAKE WORTH	50	26,000	G	16.0	1750.80	4.79	3	191.59	6	122.86	CGSV	BC	MD	184	OC	v 3.70
LANTANA	50	7,650	G	3.0	558.26	1.50	3	60.58	1	39.47	ACFSV	BC	MS	196	tt	.80
LARGO	52	32,300	G	.4	uu 813.00	2.23	5	87.10	9	52.80		BC	MS	69	SU	5.30
LAUDERHILL	06	13,500	G	23.0	1346.77	3.69	4	142.79	6	91.20	J			273	SP	2.56
LAUDEDALE LK	06	18,400	G		vv .00	.00	N/R	N/R	N/R	N/R						.00
LEESBURG	35	12,960	G	18.0	1521.29	4.16	4	158.86	D	102.07	Z	BC	MD	320	AXY	2.06
LEHIGH ACRES	36	13,100	G	1.8	210.10	.58	1	20.80	8	14.30	ACFGY	BC	MD	46	U	.52
LIVE OAK	61	7,000	G	2.7	368.48	1.01	0	38.46	2	23.32	ACF	BC	MM	144	CFXY	.35
LONGWOOD	59	4,900	G	2.0	215.19	.58	5	22.13	6	15.30	AC	B	M	118	NT	.00
MACCLENNY	02	3,400	G	1.0	184.00	.50	9	18.25	1	10.81	CV	BC	MI	147	DJMVX	.50
MADISON	40	5,500	G	3.2	305.94	.83	5	28.77	2	20.28	C	BC	MI	150	CFTVXY	.87
MAITLAND	48	8,051	G	7.7	575.97	1.58	5	35.70	7	.90	AC	BC	MI	196	U	1.20
MANTEE CTY h	41	10,000	S		3552.85	9.73	4	366.51	8	234.79						.00
MARGATE	06	13,500	G		1574.09	4.31	4	167.58	0	70.91				310		3.17
MARIANNA	32	7,200	G	2.0	355.87	.97	7	33.67	5	22.72	C	BC	MI	134	CXY	.45
MAYO	34	900	G	.2	40.94	.11	6	4.88	1	2.57	ACT	BC	MI	122	NT	.00
MELBOURNE	05	66,700	S	14.0	3402.63	9.32	3	316.54	D	253.21	CDFHUV	BC	WD	139	XZ	4.80

MIAMI	13	844,050	G	220.0	67415.50	184.70	4	6512.70	6	5726.80	FILQTZ	BCS	DDP	239	S	62.00
MILTON	57	10,000	G	2.3	354.00	.97	8	35.22	3	22.72	CT	BC	MI	97	XYFDC	1.26
MIRAMAR	06	23,000	G	6.0	944.91	2.59	3	91.94	6	69.75	ACFGTV	BC	MP	113	AY	2.64
MONTICELLO	33	3,800	G	.8	155.08	.43	8	15.25	4	10.59	C	C	M	113	CFXY	.30
MOORE HAVEN	22	1,200	G	.7	54.68	.15	3	6.05	6	4.26	ACFGTV	BC	MI	125	NT	.00
NAPLES	11	42,000	G	16.0	3263.00	8.90	4	368.00	9	170.00	CFOSTR	BC	WS	211	APS	2.30
NEPTUNE BCH	16	5,000	G	2.5	254.64	.69	3	23.29	0	13.76	AC	BC	IM	138	A	.60
NEW PT RICHY	51	13,000	G	4.8	611.25	1.67	5	62.48	9	43.06	C	BC	MM	128	EFX	.70
NEW SMYRNA B	64	12,100	G	3.6	822.50	2.25	5	75.85	2	57.73	ACTV	BC	MI	185	AS	1.40
NICEVILLE	46	7,000	G	1.4	331.30	.91	6	44.30	1	16.95	C	BC	MI	130	CFVXY	.40
NORTH FTMYER	36	5,300	G	.7	165.00	.45	4	19.20	7	9.92	AOFTVC			75		.00
NORTH MIAMI	13	55,000	G	10.0	3365.50	8.20	0	350.40	6	185.60	AC	BCP	WHD	149	X	20.00
NO MIAMI BCH	13	95,000	G	26.0	8438.10	24.90	5	835.80	0	709.30	CFGRSV	BCS	MDA	262		ww .00
NO PALM BCH	50	16,900	G	7.0	1851.92	5.07	3	187.81	1	132.59	ACFGTV	C	I	300	AF	2.66
N PT CHARLOT	58	2,900	S	2.2	319.18	.87	4	46.20	8	3.60	CFGHVX	BC	WD	300	UP	.35
OAKLAND PARK	06	19,000	G		i 1106.94	3.03	N/R	N/R	N/R	N/R	C			159	SY	3.00
OCALA	42	25,500	G	6.8	1818.36	4.98	0	189.14	2	126.95	CRTUV	BC	DI	195	CDFSUY	3.25
OKEECHOBEE	47	4,500	S	1.9	386.47	1.05	3	39.84	8	27.06	CDEHV	C	I	233	SEF	1.20
OPA-LOCKA	13	14,000	G	2.5	984.66	2.70	0	119.10	6	64.40	ACFGTV	BC	QD	192	C	ww .00
ORANGE PARK	10	3,950	G	1.5	295.83	.81	0	30.54	2	8.26	AC	BC	QI	90	UP	.80
ORLANDO	48	190,000	G	125.0	14952.00	41.00	4	1512.00	2	1047.00	ACU	BCS	WAA	215	B	17.00
ORMOND BCH	64	27,600	G	3.0	900.32	2.47	9	86.14	0	61.91	ADEOXZ	BC	MD	89	F	1.92
PAHOKEE	50	10,000	S	1.9	298.01	.82	5	27.95	0	24.19	ACFGHT	BC	WD	82	S	.75
PALATKA	54	12,000	G	3.5	763.30	2.09	5	79.70	2	50.30	ACFTU	BC	MA	174	XYU	1.50
PALM BEACH	50	10,000	S	36.0	y 2115.87	5.80	4	233.60	1	141.60	N	BC	DD	175	N	3.08
PALM BCH GDN	50	7,600	G	4.0	837.34	2.29	5	92.54	7	54.28	CGSV	BC	MA	301	F	.78
PALMETTO	41	8,500	S		j 206.61	.60	5	20.16	8	13.89					CY	.75
PANAMA CITY	03	35,000	S		k 1954.33	5.35	7	236.97	2	121.28	CGVFT	BC	MI	153	FXY	4.00
PENSACOLA	17	170,000	G	36.0	8700.71	23.84	7	1011.45	2	468.08	ACT	BC	MI	140	CFSXY	11.39
PERRY	62	9,580	G	1.5	434.38	1.19	5	46.31	2	24.98	ACF	BC	MI	124	CFVXY	.96
PIN CTY WT S	52	140,000	G	55.0	12221.11	33.48	0	1199.04	2	887.80	ACU	B	M	110		.00
PINELLAS PK	52	27,100	G		l 1017.80	2.80	5	106.80	2	74.10	C			103	AS	2.50
PINE ISLAND	36	5,000	G	1.2	246.78	.68	1	11.03	7	4.11	ACFGTV	BC	MD	46	NT	.00
PLANTATION	06	37,500	G	8.5	1983.00	5.40	4	204.00	6	139.00	V	BC	WA	144	CSM	2.00
PLANT CITY	29	18,000	G	8.6	772.28	2.11	4	81.36	2	50.46	CT	BC	PS	117	S	1.80
POMPANO BCH	06	59,000	G	31.0	6094.75	16.70	3	630.82	1	444.63	ACGF	BC	WA	283	DQV	5.56
PT CHARLOTTE	08	22,000	X	1.7	900.85	2.47	4	107.65	9	51.71	CEFHOT	BC	WD	112	AFP	1.10
PORT ORANGE	64	5,300	G	2.5	513.00	1.40	4	52.26	7	28.17	ACJ	B	M	264	U	.60
PORT ST JOE	23	4,500	S	.4	229.96	.63	5	21.40	2	15.52	CDFHTV	BC	DD	140	CX	.50
PUNTA GORDA	08	8,500	S	2.4	641.15	1.70	4	70.21	8	34.53	CFGHV	BC	WD	200	FXYZ	.00
QUINCY	20	10,100	X	1.5	453.12	1.24	7	51.37	2	30.72	ACFGT	BC	MI	122	CUSXY	.00
RIVIERA BCH	50	25,200	G	14.0	1905.54	5.22	3	193.86	6	131.02	ACFGTV	BC	WD	207	MZ	2.30
ST AUGUSTINE	55	12,800	X	5.0	952.25	2.61	5	89.96	2	63.84	CEHIKS	BC	DP	203	Y	2.61
ST CLOUD	49	6,500	G	10.0	484.23	1.33	4	48.88	0	35.00	AC	C	I	204	DEFXY	.98
ST PETERBURG	52	250,000	G	44.0	m 3244.85	8.90	N	308.22	9	204.18	AFOTZ	BC	DD	138	US	.00
ST PETERBURG	52		G		n 3124.40	8.57	4	339.14	8	195.86	AFOTZ	BC	DD			.00
ST PETERBURG	51		G		ee 6193.68	16.98	5	626.79	2	418.04						.00
ST PETE BCH	52	8,024	G		i .00	.00	N/R	N/R	N/R	N/R	C					r .00
SANFORD	59	25,000	G	5.0	1599.49	4.38	5	151.95	7	122.08	ACU	BC	MX	175	CEXS	4.00
SARASOTA	58	50,000	G	12.7	2661.00	7.20	4	236.00	8	200.00	ACFV	BC	WD	144	CDU	6.60

TABLE 6.--WATER USE BY SELECTED MUNICIPALITIES, 1945, 1947, 1956, 1965, 1970-74.--CONTINUED

MUNICIPALITY	CO	POPULATION SERVED	S	RATED PLANT CAP.	PUMPAGE MGAL/Y	PUMPAGE MGAL/D	MNTH HIGH PUMP	PUMP HIGH MNTH	MNTH LOW PUMP	PUMP LOW MNTH	WATER TREATMENT	TYPE ANALYSIS	FREQ-ANALYSIS	PER CAP USE	SEWAGE TREATMENT	SEWAGE DISCH MGAL/D
1974--CONTINUED																
SEBRING	28	13,000	G	12.7	1141.87	3.13	3	142.29	8	65.12	AC	BC	AS	241	AS	.00
SPRINGFIELD	03	7,000	S		*k* 213.20	.58	7	25.59	D	13.20				82		.00
STARKE	04	5,500	G	3.0	283.00	.77	N/R	N/R	N/R	N/R	CTV	C	I	140	CY	.80
STUART	43	8,000	G	4.8	823.98	2.25	4	86.64	7	53.22	CFGV	BC	MQ	281	F	.60
TALLAHASSEE	37	82,000	G	33.6	5452.12	14.94	5	517.38	2	374.67	C	BC	WI	182	CFSVXU	9.50
TAMPA	29	350,000	S	65.0	18700.70	51.23	0	1885.87	1	1230.73	CEFHMX	BC	DD	146	CXY	40.20
TARPON SPRS	52	8,800	G		*xx* 573.98	1.57	N	60.46	2	30.38	C				XY	.80
TAVARES	35	3,900	G	2.3	225.11	.62	4	24.25	7	12.46	C	BC	MI	159	NT	.45
TITUSVILLE	05	34,000	G	16.0	1336.19	3.66	4	137.95	8	96.67	CV	BC	WH	107	SY	2.25
TRENTON	21	1,200	G	.4	196.70	.54	5	22.00	N	11.20	N	BC	WI	450	AY	.05
VALPARAISO	46	6,600	G	2.4	147.08	.40	7	14.95	2	7.17	C	BC	MI	60	CFVXY	.19
VENICE	58	15,000	G	3.0	529.43	1.45	3	55.74	7	35.44	ACFGV	C	P	96	DY	1.00
VERO BEACH	31	16,000	G	6.0	1386.87	3.80	5	135.30	1	90.23	ACDV	BC	WA	237	CDFXY	2.34
WARRINGTON	17	24,750	G	7.1	994.60	2.70	7	120.10	D	62.70	CT	BC	MI	109	NT	.00
WATERWAY EST	36	4,200	G	2.6	*yy* 165.64	.45	4	19.23	7	9.98	AC	BC	MD	100		.30
WAUCHULA	25	4,000	G	4.8	317.00	.87	4	34.00	7	20.00	ACP	BC	MI	217	*zz*	.70
WEST PALM BC	50	70,000	S	36.0	7008.85	19.20	4	702.16	1	493.88	CFGISV	BC	DD	274	AD	8.32
WINTER GARDN	48	9,000	G	1.5	439.10	1.20	7	53.50	D	23.80	AC	BC	MI	133	FY	.76
WINTER HAVEN	53	45,000	G	9.6	2044.64	5.60	4	212.63	9	139.53	AC	BC	MI	124	FSY	3.90
WINTER PARK	48	53,900	G	27.8	4758.45	13.01	4	662.05	8	321.17	AC	BC	PA	241	AFU	3.00

a Source: Inventory of water and sewage facilities in the United States, 1945: Federal Security Agency, Public Health Service, Cincinnati, Ohio, 1948.
b Source: Tabulation of water supply data, Jan. 1, 1948: Florida State Board of Health, Bureau of Sanitary Engineering, Jacksonville, Florida.
c Source: Inventory of public water supplies in Florida, 1956: Florida State Board of Health, Bureau of Sanitary Engineering, Jacksonville 1,1949. Florida,1957.
d Source: Water use records, 1965, 1970-1974, U.S.Geological Survey, Water Resources Division, Tallahassee, Florida.
e Additional 2,320.60 Mgal (million gallons); 2,554.90 Mgal (1971); 2,664.50 Mgal (1972); 1,998.00 Mgal (1973); 1715.50 Mgal (1974)purchased from Pinellas County Water System.
f Supplied by U.S. Sugar Corporation.
g Supplied by the city of St. Petersburg.
h Supplied by Stock Island desalination plant.
i Supplied by the city of Ft. Lauderdale.
j Supplied by Manatee County Utilities System.
k Supplied by Bay County Water System.
l Supplied by Pinellas County Water System.
m Section 21 well field.
n Cosme well field.
o U.S. Sugar Corporation water supply plant.
p Purchased from U.S. Sugar Corporation.
q Plant capacity, 30,000 gal/d (gallons per day).
r Sewage discharged to city of St. Petersburg sewer system.
s Includes sewage from the city of Hallandale.
t Supplied by the U.S. Navy at Florida City.
u Includes cooling for electric generating plant.
v Includes sewage from the municipalities of Atlantis, Lantana, Palm Springs, and Palm Beach Jr. College.
w Includes 834.73 Mgal purchased from the city of Miami.
x Includes sewage from Wilton Manors.
y Purchased from West Palm Beach.
z Supplied by General Development Utilities.

FOOTNOTES TO TABLE 6, CONTINUED.

aa Estimated from 5-month daily average.
bb Includes 517.5 Mgal from Pinellas County Water System.
cc Includes water supplied to the municipalities of Palm Beach and South Palm Beach.
dd Includes 1,572.4 Mgal purchased from Miami.
ee Section 34 well field, Pasco County.
ff Not reported. All water supplied by Pinellas County Water System.
gg Estimated.
hh Period of record: October, 1973-September, 1974.
ii Sewage treated by Hillsborough County Utility Department.
jj Also July.
kk Additional 1,708.51 Mgal purchased from Pinellas County Water System.
ll Includes 9 subdivisions.
mm Cutler Ridge only.
nn Five new 0.510 Mgal capacity package plants began operation in 1974.
oo New plant in operation, August, 1974; capacity 2.16 Mgal/d (million gallons per day).
pp Plant capacity, 0.5 Mgal/d, in operation August, 1974.
qq Supplied by Midway Water Company.
rr Processed by Hollywood.
ss Hydrogen peroxide used for odor control.
tt Sewage treated by Lake Worth plant.
uu Includes 66.7 Mgal pumped by Largo.
vv Supplied by Broward County Utilities Department.
ww Discharged to Atlantic Ocean through city of North Miami outfall.
xx Supplied by Pinellas County Water System, includes 14.2 Mgal pumped by Tarpon Springs.
yy Supplied by Florida Cities Water Company.
zz Griffin Oxinite Process.

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