

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

**ESTIMATED WATER USE IN THE
SOUTHWEST FLORIDA WATER MANAGEMENT
DISTRICT AND ADJACENT AREAS, 1980**

OPEN-FILE REPORT 81-1060

Prepared in cooperation with

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT



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By A. D. Duerr and J. T. Trommer

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Tallahassee, Florida

1981



UNITED STATES DEPARTMENT OF THE INTERIOR

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ESTIMATED WATER USE IN THE SOUTHWEST FLORIDA WATER
MANAGEMENT DISTRICT AND ADJACENT AREAS, 1980

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ABSTRACT

Water-use data for 1980 are summarized in this report for 16 counties in the Southwest Florida Water Management District. Data include total use of ground water and surface water for each of five water-use categories. The 1980 withdrawals for each category were as follows: 290 million gallons per day for public supply, 63 million gallons per day for rural, 325 million gallons per day for industrial, 416 million gallons per day for irrigation, and 6,605 million gallons per day for thermoelectric power generation of which 6,216 million gallons per day was saline water.

Withdrawals totaled 7,699 million gallons per day and included 983 million gallons per day of ground water and 6,716 million gallons per day of surface water. Excluding thermoelectric power generation, all water withdrawn was freshwater except 38 million gallons per day of saline ground water for industrial use in Hillsborough County.

INTRODUCTION

Florida has undergone rapid population growth during the last decade, increasing from 6.8 million to 9.7 million from 1970 to 1980 (University of Florida, 1981). This growth has increased the competition among users of water for all purposes. The 1970 and 1975 water-use inventories (Pride, 1973; Leach, 1978a) indicated a need for annual updates of water-use data. The need is particularly important in areas of rapidly increasing population where industries have been established or expanded, where agricultural irrigation has expanded, and where thermoelectric power generation has increased. Water-use data are used in quantitative investigations, such as predicting water-level declines, saltwater encroachment studies, and determining future demands for water.

In 1976, the Southwest Florida Water Management District entered into a cooperative agreement with the U.S. Geological Survey to collect water-use data annually within the water management district. Data for 1977 were included in a statewide report (Leach and Healy, 1980) and data for 1978 and 1979 are presently being prepared for similar publication. A separate report (Duerr and Trommer, 1981) presented 1979 water-use data for the Southwest Florida Water Management District.

The purpose of this report is to present 1980 data for each category of water used within the Southwest Florida Water Management District (fig. 1). Categories that are defined and discussed separately include public supply, rural, industrial, irrigation, and thermoelectric power generation. Data are presented for each county in the Southwest Florida Water Management District.

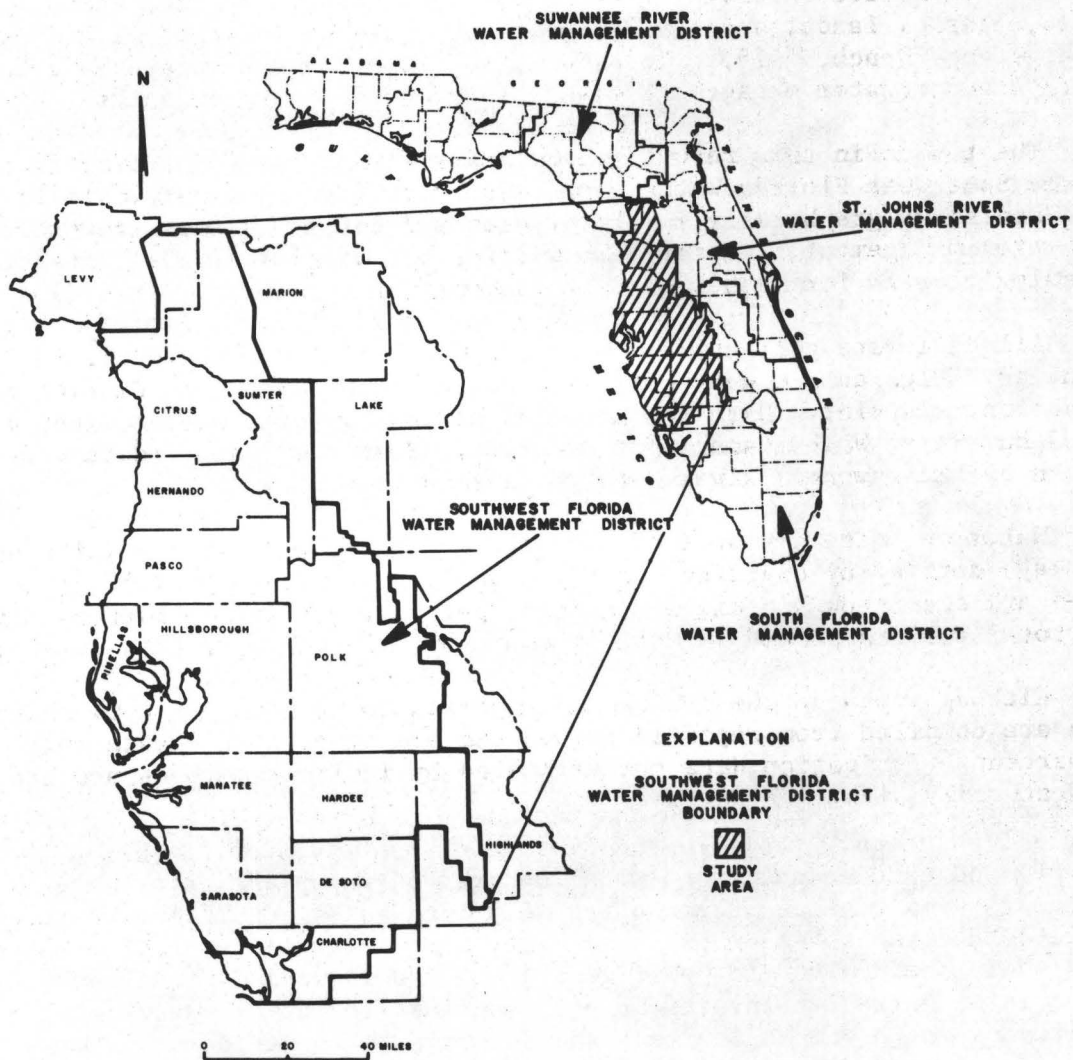


Figure 1.--Location of Southwest Florida Water Management District and adjacent water management districts.

For counties divided by two or more water management districts, subtotals for the Southwest Florida Water Management District are presented, as well as county totals. County water-use data are also segregated by hydrologic units or geographic areas that are designated as a basis for cataloging and processing hydrologic data and other information in the National Water Data Network.

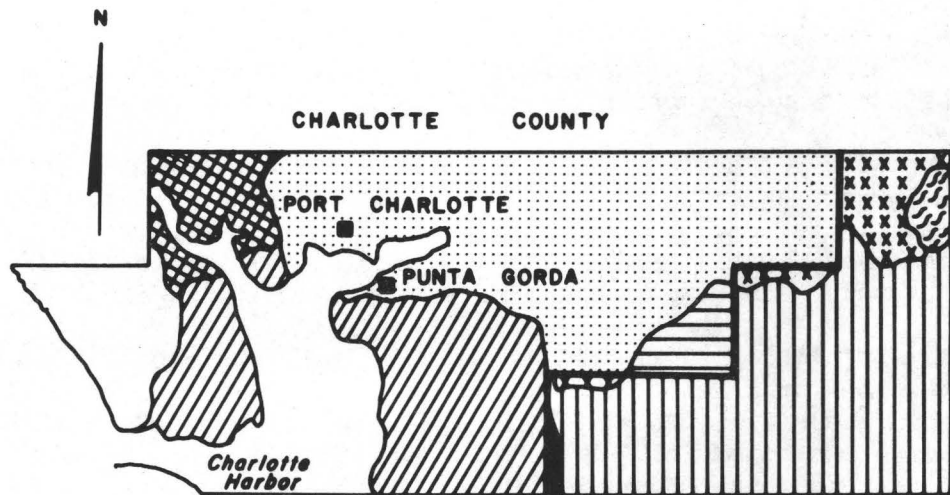
The boundaries of hydrologic units coincide with those of river basins, but also delineate intervening segments of drainage areas and islands, estuaries, coastal lands, and similar areas that are not part of river basins (Conover and Leach, 1975). Therefore, for each county, water-use data are segregated by water management districts and by hydrologic units.

The tables in this report include data for parts of counties that are not in the Southwest Florida Water Management District. However, data in the text and data shown graphically in the figures are for areas that are exclusively in the water management district. Boundaries for water management districts and hydrologic units for each county are shown in figures 2-17.

All data were collected by the U.S. Geological Survey except in four counties. Highlands County data were collected by the South Florida Water Management District. Data for Lake and Marion Counties were collected by the St. Johns River Water Management District. Some Levy County data were collected by the Suwannee River Water Management District.

Water-use data are presented as average daily rates (in million gallons per day) derived by dividing the total gallons pumped in 1980 by 366. Monthly rates are also shown in million gallons per day, but are derived by dividing the total gallons pumped in a given month by the number of days in that month.

Although data in the tables are reported to the nearest 0.01 Mgal/d, most data are compiled from reported values and are probably accurate only within 10 percent. Irrigation data are estimated by indirect methods and are probably accurate only within 25 percent.

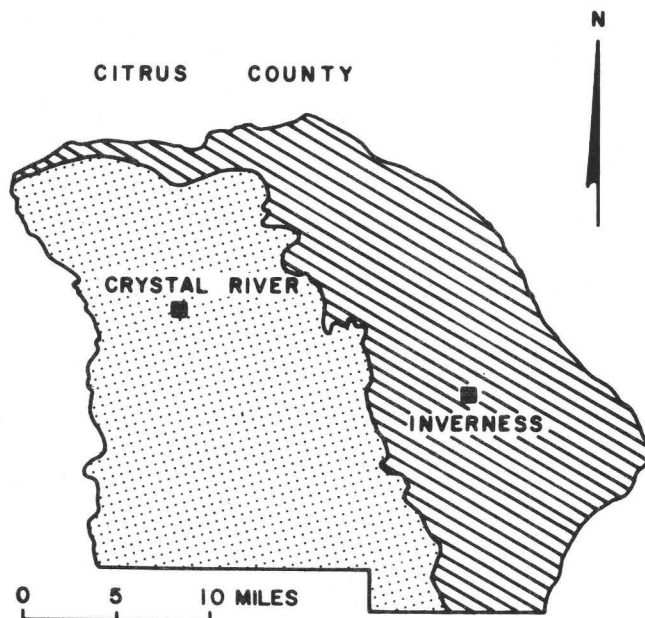


0 5 10 MILES

EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
	SOUTHWEST FLORIDA 03090205
	SOUTHWEST FLORIDA 03100101
	SOUTHWEST FLORIDA 03100102
	SOUTHWEST FLORIDA 03100103
	SOUTHWEST FLORIDA 03100201
	SOUTH FLORIDA 03090103
	SOUTH FLORIDA 03090205
	SOUTH FLORIDA 03100101
	SOUTH FLORIDA 03100103
	PUBLIC-SUPPLY SYSTEM
	WATER MANAGEMENT DISTRICT BOUNDARY
	HYDROLOGIC UNIT BOUNDARY

Figure 2.--Location of public-supply systems, water management districts, and hydrologic units in Charlotte County.



EXPLANATION





WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
 SOUTHWEST FLORIDA	03100207
 SOUTHWEST FLORIDA	03100208
 PUBLIC-SUPPLY SYSTEM	
 HYDROLOGIC UNIT BOUNDARY	

Figure 3.--Location of public-supply systems and hydrologic units in Citrus County.

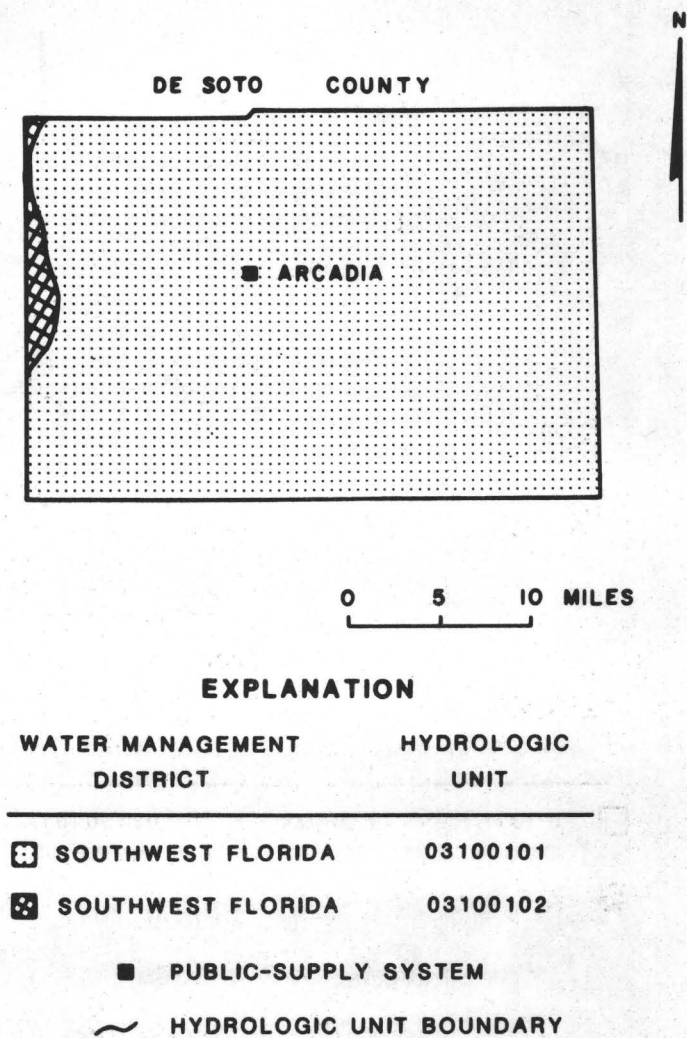
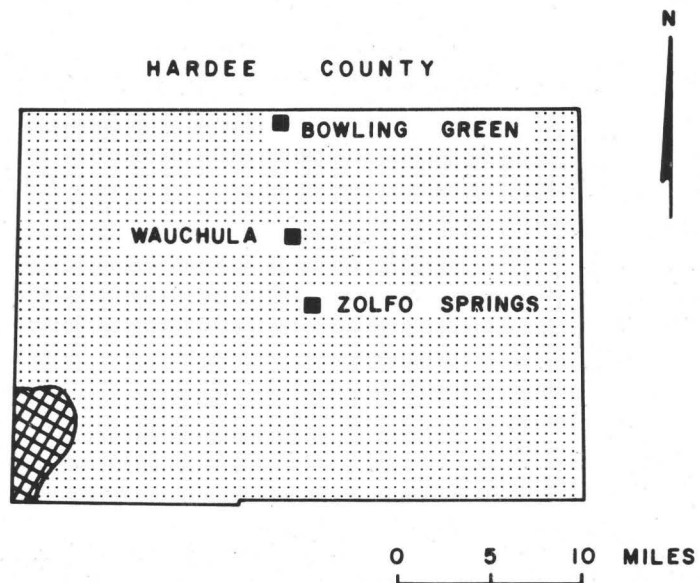


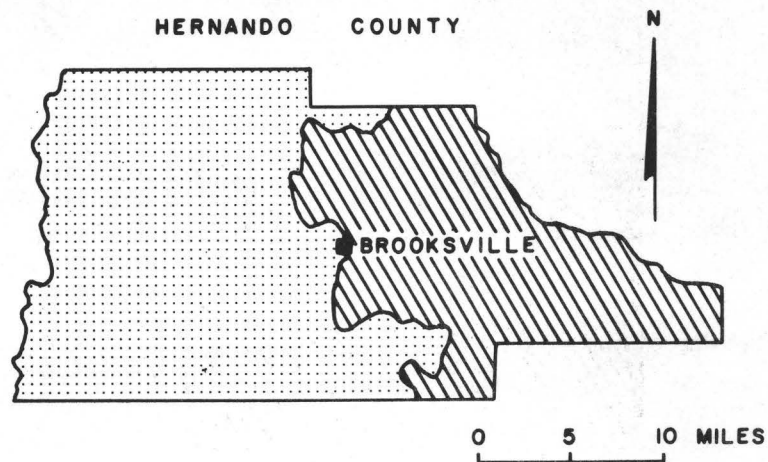
Figure 4.—Location of public-supply systems and hydrologic units in De Soto County.



EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
SOUTHWEST FLORIDA	03100101
SOUTHWEST FLORIDA	03100102
PUBLIC-SUPPLY SYSTEM	
HYDROLOGIC UNIT BOUNDARY	

Figure 5.--Location of public-supply systems and hydrologic units in Hardee County.



EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
SOUTHWEST FLORIDA	03100207
SOUTHWEST FLORIDA	03100208
PUBLIC-SUPPLY SYSTEM	
HYDROLOGIC UNIT BOUNDARY	

Figure 6.--Location of public-supply systems and hydrologic units in Hernando County.

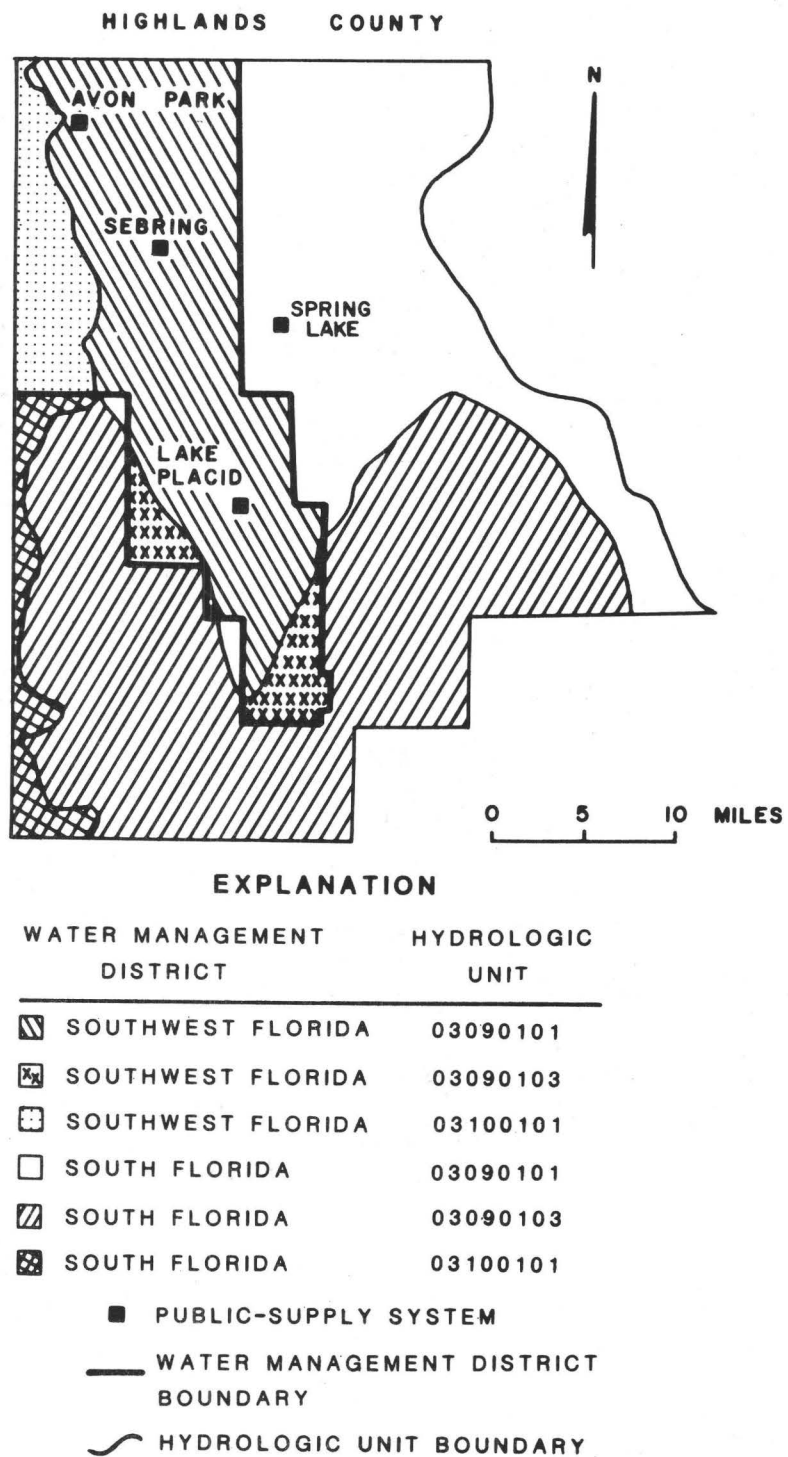
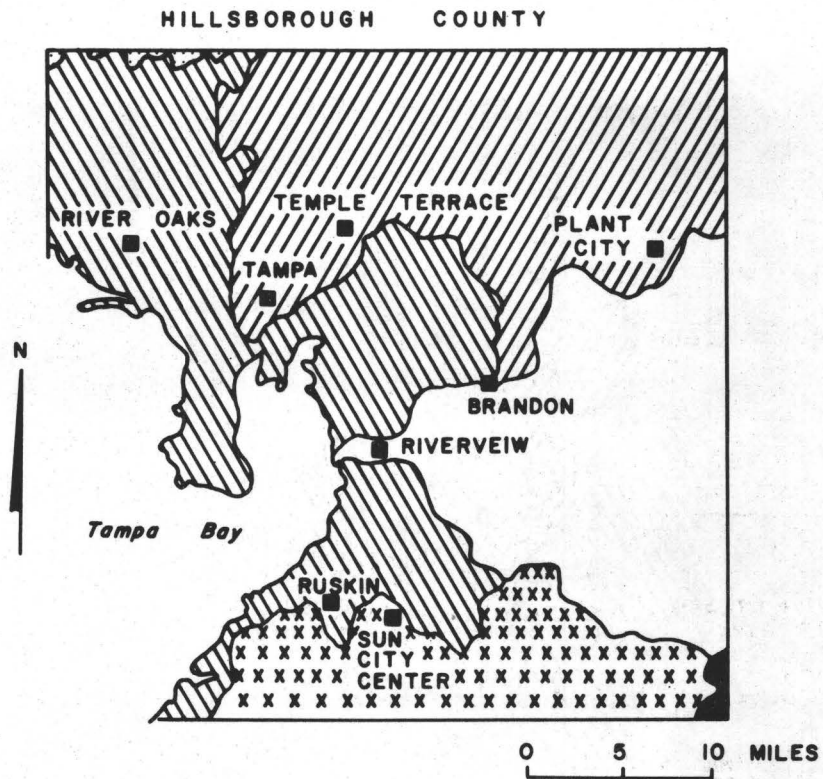


Figure 7.--Location of public-supply systems, water management districts, and hydrologic units in Highlands County.



EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
■	SOUTHWEST FLORIDA 03100101
▣	SOUTHWEST FLORIDA 03100203
□	SOUTHWEST FLORIDA 03100204
▤	SOUTHWEST FLORIDA 03100205
▥	SOUTHWEST FLORIDA 03100206
▦	SOUTHWEST FLORIDA 03100207
■	PUBLIC-SUPPLY SYSTEM
—	HYDROLOGIC UNIT BOUNDARY

Figure 8.--Location of public-supply systems and hydrologic units in Hillsborough County.

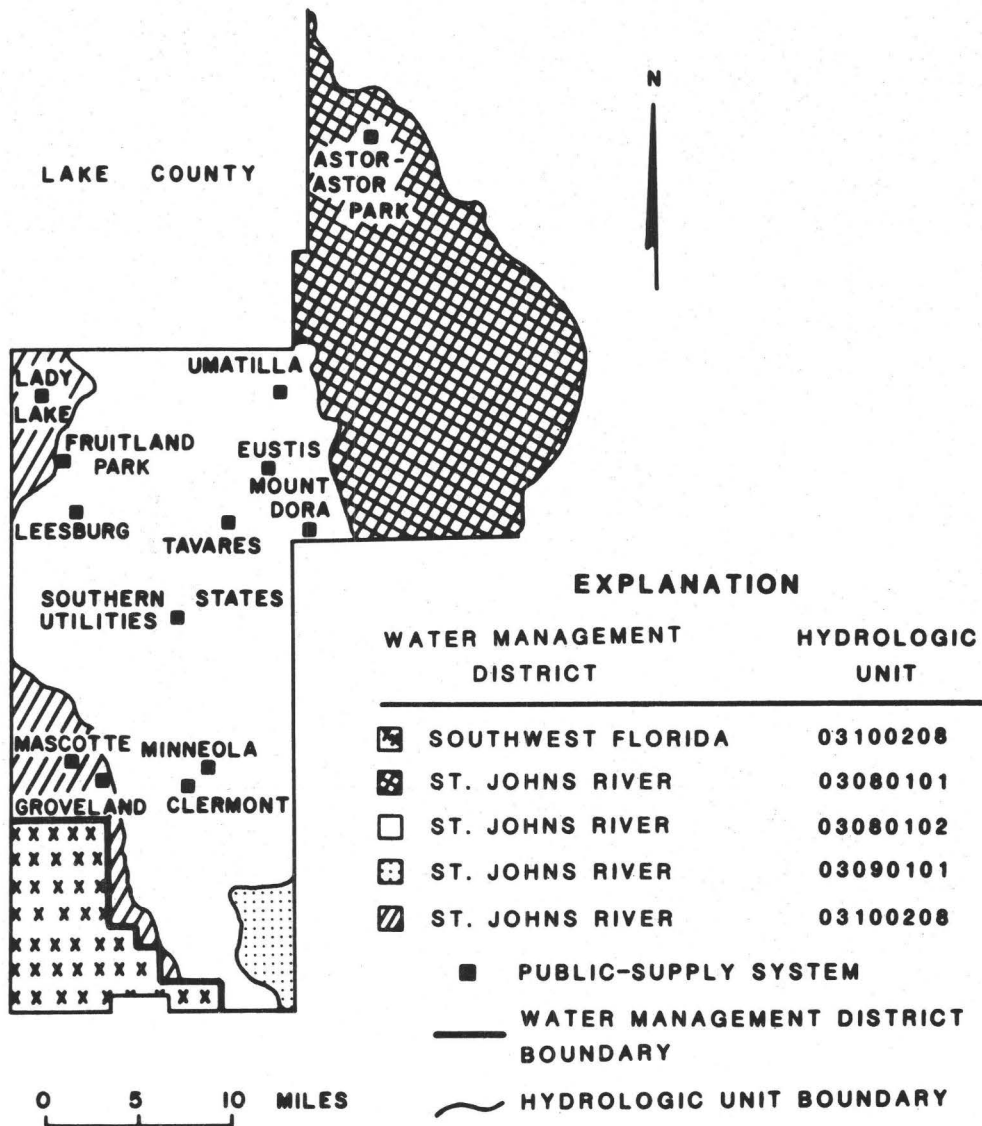
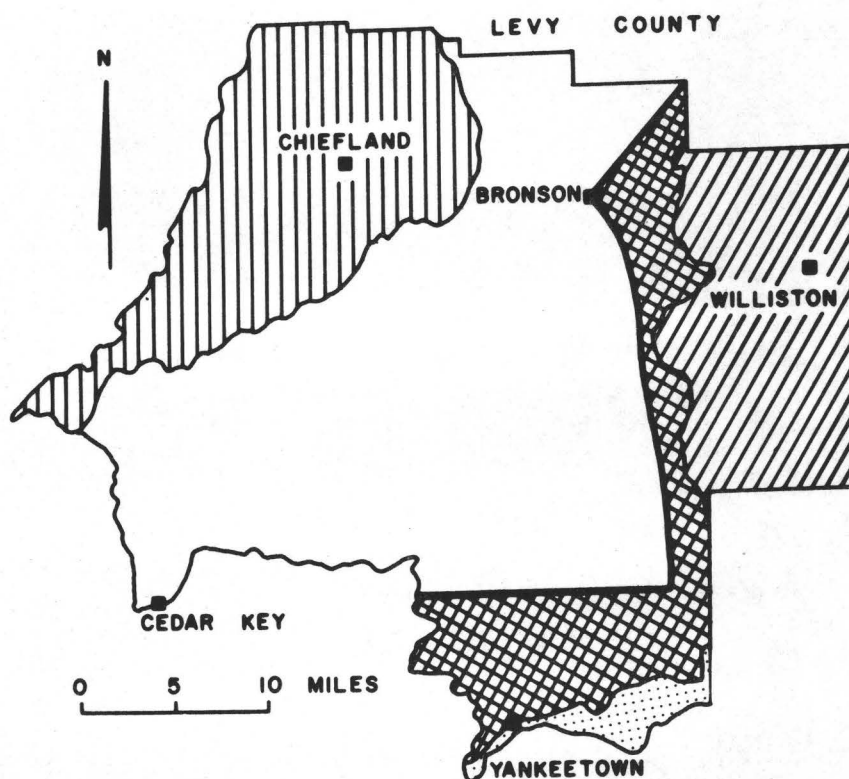


Figure 9.--Location of public-supply systems, water management districts, and hydrologic units in Lake County.



EXPLANATION









WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
 SOUTHWEST FLORIDA	03080102
 SOUTHWEST FLORIDA	03100208
 SOUTHWEST FLORIDA	03110101
 SUWANNEE RIVER	03110101
 SUWANNEE RIVER	03110205
 PUBLIC-SUPPLY SYSTEM	
 WATER MANAGEMENT DISTRICT BOUNDARY	
 HYDROLOGIC UNIT BOUNDARY	

Figure 10.--Location of public-supply systems, water management districts, and hydrologic units in Levy County.

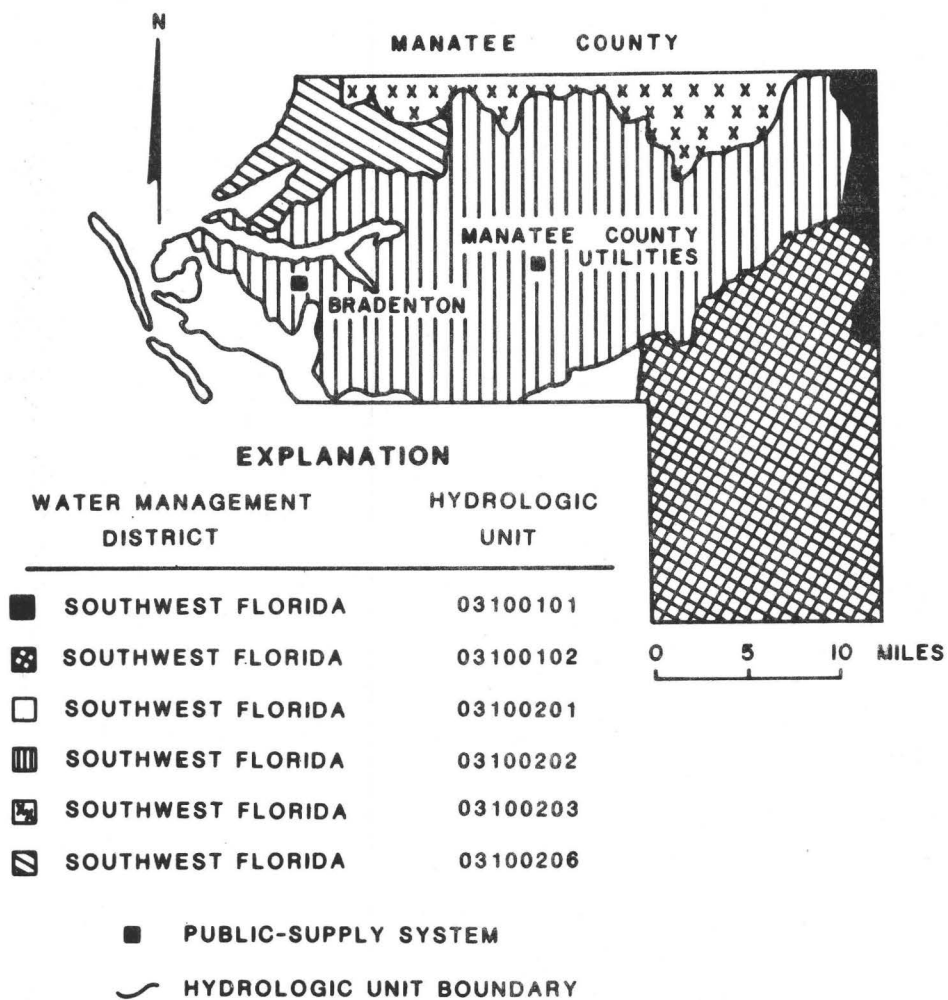
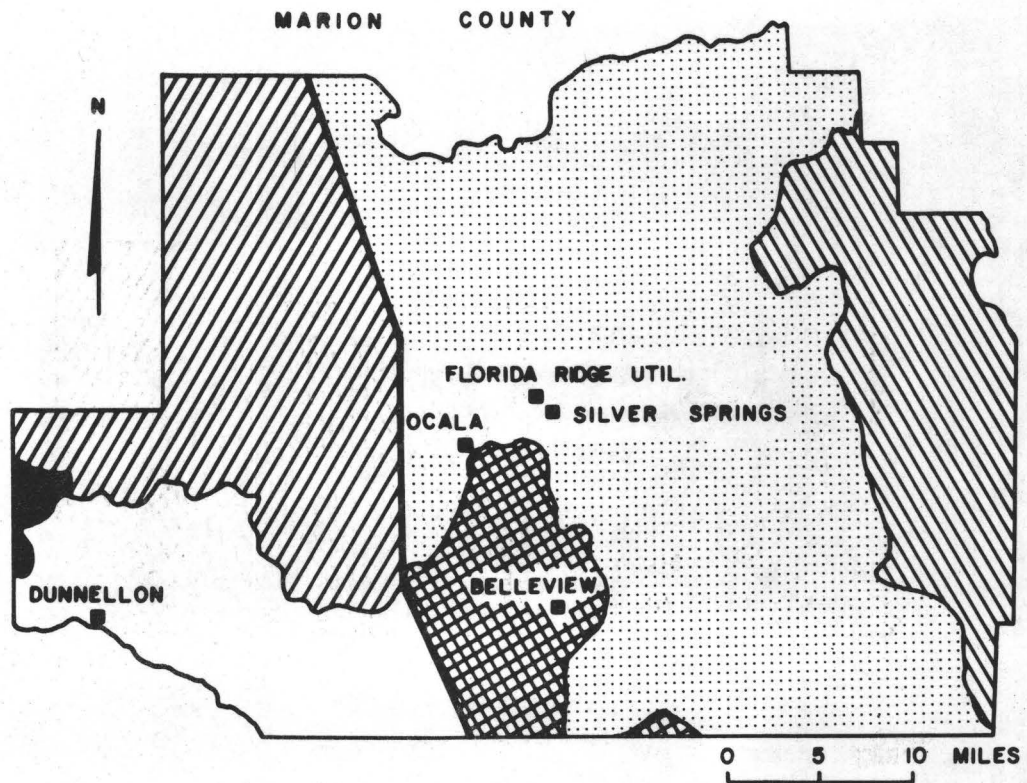


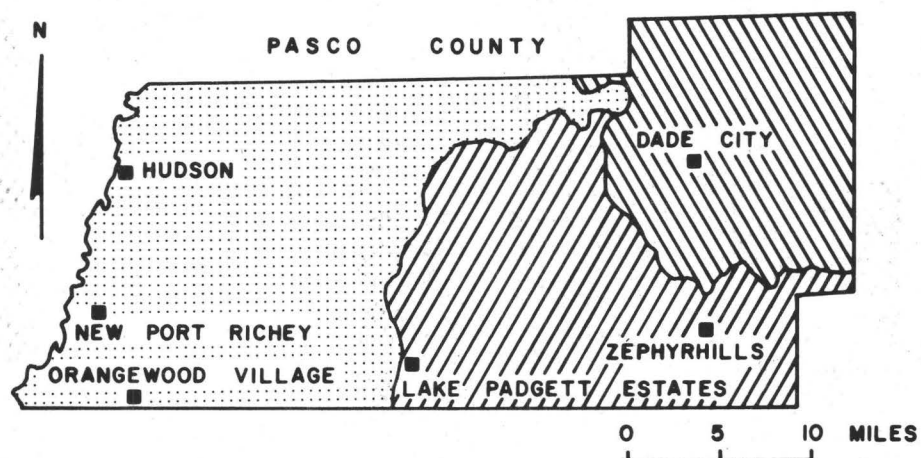
Figure 11.—Location of public-supply systems and hydrologic units in Manatee County.



EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
	SOUTHWEST FLORIDA 03080102
	SOUTHWEST FLORIDA 03100208
	SOUTHWEST FLORIDA 03110101
	ST. JOHNS RIVER 03080101
	ST. JOHNS RIVER 03080102
	ST. JOHNS RIVER 03100208
	PUBLIC-SUPPLY SYSTEM
	WATER MANAGEMENT DISTRICT BOUNDARY
	HYDROLOGIC UNIT BOUNDARY

Figure 12.--Location of public-supply systems, water management districts, and hydrologic units in Marion County.



EXPLANATION






WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
 SOUTHWEST FLORIDA	03100205
 SOUTHWEST FLORIDA	03100207
 SOUTHWEST FLORIDA	03100208
 PUBLIC-SUPPLY SYSTEM	
 HYDROLOGIC UNIT BOUNDARY	

Figure 13.--Location of public-supply systems and hydrologic units in Pasco County.

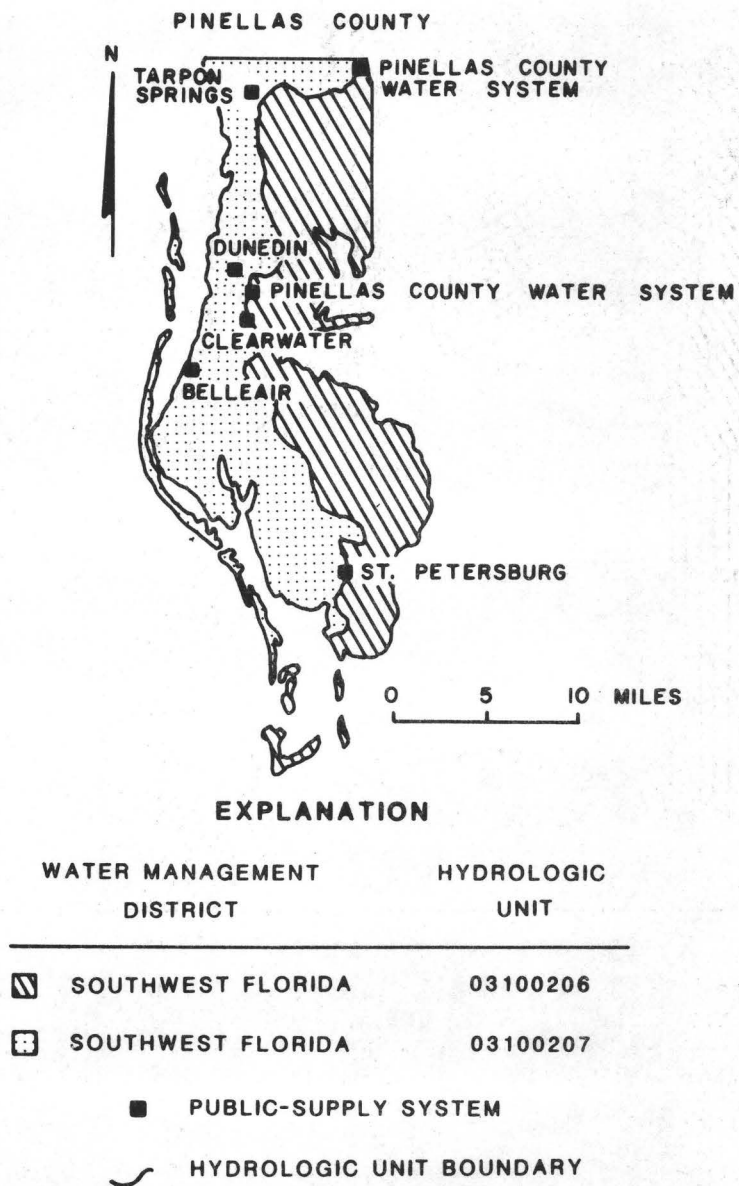
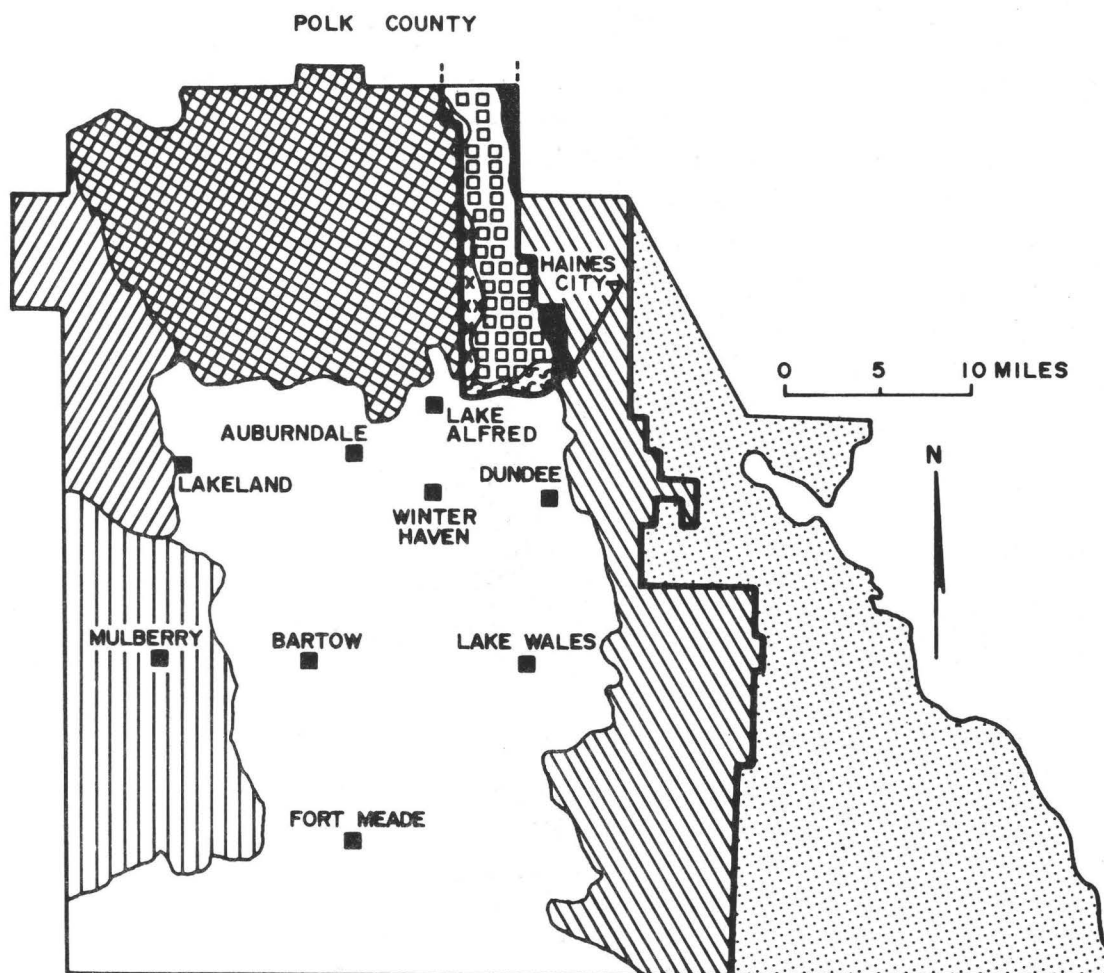


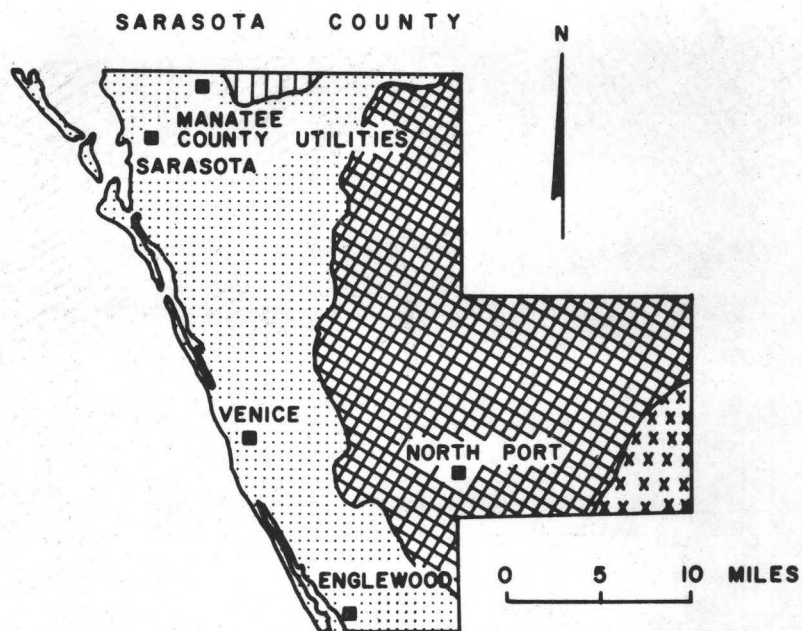
Figure 14.--Location of public-supply systems and hydrologic units in Pinellas County.



EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT	WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
SOUTHWEST FLORIDA	03090101	ST. JOHNS RIVER	03080102
SOUTHWEST FLORIDA	03100101	ST. JOHNS RIVER	03090101
SOUTHWEST FLORIDA	03100204	ST. JOHNS RIVER	03100101
SOUTHWEST FLORIDA	03100205	ST. JOHNS RIVER	03100208
SOUTHWEST FLORIDA	03100208	SOUTH FLORIDA	03090101
PUBLIC-SUPPLY SYSTEM			
WATER MANAGEMENT DISTRICT BOUNDARY			
HYDROLOGIC UNIT BOUNDARY			

Figure 15.--Location of public-supply systems, water management districts, and hydrologic units in Polk County.



EXPLANATION

WATER MANAGEMENT DISTRICT	HYDROLOGIC UNIT
SOUTHWEST FLORIDA	03100101
SOUTHWEST FLORIDA	03100102
SOUTHWEST FLORIDA	03100201
SOUTHWEST FLORIDA	03100202
PUBLIC-SUPPLY SYSTEM	
HYDROLOGIC UNIT BOUNDARY	

Figure 16.--Location of public-supply systems and hydrologic units in Sarasota County.

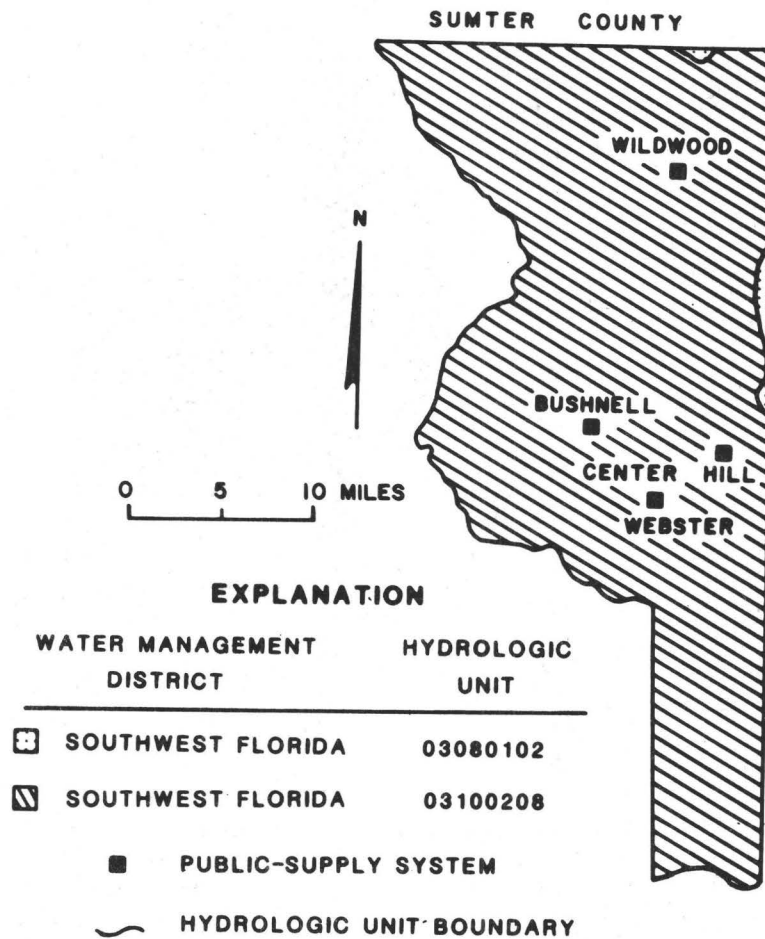


Figure 17.--Location of public-supply systems and hydrologic units in Sumter County.

TOTAL WATER USE

The total water use for all categories in 1980 in the Southwest Florida Water Management District averaged 7,699 Mgal/d. The tables in this report include data for parts of counties that are not in the Southwest Florida Water Management District. Water-use data discussed in the following sections of this report are exclusively for the Southwest Florida Water Management District. The largest use of water was for thermoelectric power generation, 6,605 Mgal/d. Of this, 6,216 Mgal/d was saline surface water used by powerplants near the Gulf Coast. Most of this water was used for once-through cooling with no recycling. A total of 1,094 Mgal/d was used for all other purposes. Of this total, 983 Mgal/d was ground water and 111 Mgal/d was surface water. Withdrawals for the other categories were as follows: 290 Mgal/d for public supply, 63 Mgal/d for rural, 325 Mgal/d for industrial, and 416 Mgal/d for irrigation (table 1). All water was freshwater except for 38 Mgal/d of saline ground water used by industry in Hillsborough County and the saline surface water used by powerplants. The principal sources of ground water were the highly productive limestone aquifers.

Freshwater use by counties for each use category, excluding thermoelectric power generation, is shown in figures 18-20. Figure 21 shows total freshwater use segregated into ground water and surface water by counties, excluding thermoelectric power generation. The largest user of freshwater was Polk County, withdrawing 307 Mgal/d, including 304 Mgal/d of ground water and 3 Mgal/d of surface water (fig. 21). Of the total water withdrawn in Polk County, 209 Mgal/d was used for industrial purposes (fig. 19, table 1).

PUBLIC-SUPPLY WATER USE

The public-supply water-use category includes all water distributed by public-supply water systems to households, industry, agriculture, and other users. Data were supplied by system operators. Table 2 lists the major public-supply systems by counties and by water management districts. Water withdrawn and population served are presented for each public-supply system. Locations of public-supply systems are shown in figures 2-17. Locations show approximate centers of water use but do not necessarily show withdrawal points.

Water withdrawn for public supply in the Southwest Florida Water Management District in 1980 averaged 290 Mgal/d (table 2). All water was freshwater and included 206 Mgal/d of ground water and 84 Mgal/d of surface water. The largest public-supply system was the city of Tampa, which used 15 Mgal/d of ground water and 50 Mgal/d of surface water. The largest county user for public supply was Pinellas County, using 103 Mgal/d.

Monthly and average daily pumpage for public supply from selected well fields in Hillsborough, Pasco, and Pinellas Counties are shown in table 3. Well-field locations are shown in figure 22. The largest average daily pumpage, 30 Mgal/d, was from the Cypress Creek well field operated by the West Coast Regional Water Supply Authority and located in Pasco County.

TABLE 1--TOTAL WATER USE BY COUNTIES AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 1980

****WATER MANAGEMENT**** ****DISTRICT CODES****		ALL WATER IS FRESHWATER EXCEPT AS NOTED: (a) INCLUDES 2.49 MGAL/D IMPORTED FROM DE SOTO COUNTY (b) IS ALL SALINE WATER (c) INCLUDES 0.14 MGAL/D OF SALINE WATER (d) INCLUDES 38.25 MGAL/D OF SALINE WATER (e) INCLUDES 23.44 MGAL/D IMPORTED FROM HILLSBOROUGH COUNTY AND 42.75 MGAL/D IMPORTED FROM PASCO COUNTY (f) INCLUDES 7.17 MGAL/D IMPORTED FROM MANATEE COUNTY											
SWM-SOUTHWEST FLORIDA SRM-SUWANNEE RIVER SFM-SOUTH FLORIDA SJM-ST JOHNS RIVER (WMDIST: WATER MANAGEMENT DISTRICT) (GW-GROUND WATER; SW-SURFACE WATER)													
		WATER WITHDRAWN FOR INDICATED PURPOSE IN MGAL/D											
COUNTY, WMDISTRICT, HYDROL. UNIT		PUBLIC SUPPLY		RURAL		INDUSTRIAL		IRRIGATION		POWER	SUBTOTAL		TOTAL
		GW	SW	GW	SW	GW	SW	GW	SW	SW	GW	SW	GW+SW
CHARLOTTE													
SFM-03090103		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
SFM-03090205		0.00	0.00	0.18	0.00	0.00	0.00	1.64	0.18	0.0	1.82	0.18	2.00
SFM-03100101		0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.0	0.07	0.00	0.07
SFM-03100103		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
SWM-03090205		0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.0	0.05	0.00	0.05
SWM-03100101		0.00	4.22	0.21	0.00	0.00	0.00	12.37	1.37	0.0	12.58	5.59	18.17
SWM-03100102		0.00	0.00	0.35	0.00	0.00	0.00	2.25	0.25	0.0	2.60	0.25	2.85
SWM-03100103		0.00	0.71	0.03	0.00	0.00	0.00	5.62	0.62	0.0	5.65	1.33	6.98
SWM-03100201		0.00	0.00	0.35	0.00	0.00	0.00	0.61	0.07	0.0	0.96	0.07	1.03
(SWM) SUBTOTAL		0.00	4.93 ^a	0.99	0.00	0.00	0.00	20.85	2.31	0.0	21.84	7.24	29.08
TOTAL		0.00	4.93	1.24	0.00	0.00	0.00	22.49	2.49	0.0	23.73	7.42	31.15
CITRUS													
SWM-03100207		0.91	0.00	2.92	0.00	0.33	0.21	1.34	0.00	1897.0 ^b	5.50	1897.21	1902.71
SWM-03100208		0.00	0.00	2.92	0.00	0.01	0.00	2.60	0.23	0.0	5.53	0.23	5.76
(SWM) SUBTOTAL		0.91	0.00	5.84	0.00	0.34	0.21	3.94	0.23	1897.0	11.03	1897.44	1908.47
TOTAL		0.91	0.00	5.84	0.00	0.34	0.21	3.94	0.23	1897.0	11.03	1897.44	1908.47
DE SOTO													
SWM-03100101		0.71	0.00	2.15	0.00	0.53	0.00	33.30	1.03	0.0	36.69	1.03	37.72
SWM-03100102		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
(SWM) SUBTOTAL		0.71	0.00	2.15	0.00	0.53	0.00	33.30	1.03	0.0	36.69	1.03	37.72
TOTAL		0.71	0.00	2.15	0.00	0.53	0.00	33.30	1.03	0.0	36.69	1.03	37.72

TABLE 1--TOTAL WATER USE BY COUNTIES AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 1980 --CONTINUED

WATER WITHDRAWN FOR INDICATED PURPOSE IN MGAL/D													
COUNTY, WMDISTRICT, HYDROL. UNIT	PUBLIC SUPPLY		RURAL		INDUSTRIAL		IRRIGATION		POWER	SUBTOTAL		TOTAL	
	GW	SW	GW	SW	GW	SW	GW	SW	SW	GW	SW	GW+SW	
HARDEE													
SWM-03100101	1.27	0.00	2.58	0.00	0.79	0.00	38.90	0.00	0.0	43.54	0.00	43.54	
SWM-03100102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	
(SWM) SUBTOTAL	1.27	0.00	2.58	0.00	0.79	0.00	38.90	0.00	0.0	43.54	0.00	43.54	
TOTAL	1.27	0.00	2.58	0.00	0.79	0.00	38.90	0.00	0.0	43.54	0.00	43.54	
HERNANDO													
SWM-03100207	0.57	0.00	2.94	0.06	31.60	0.00	2.43	0.00	0.0	37.54	0.06	37.60	
SWM-03100208	0.57	0.00	1.88	0.04	0.00	0.00	1.54	0.00	0.0	3.99	0.04	4.03	
(SWM) SUBTOTAL	1.14	0.00	4.82	0.10	31.60	0.00	3.97	0.00	0.0	41.53	0.10	41.63	
TOTAL	1.14	0.00	4.82	0.10	31.60	0.00	3.97	0.00	0.0	41.53	0.10	41.63	
HIGHLANDS													
SFM-03090101	0.15	0.00	3.71	0.87	0.34	0.00	7.78	0.86	0.0	11.98	1.73	13.71	
SFM-03090103	0.00	0.00	0.75	0.44	0.00	0.00	5.92	23.68	0.0	6.67	24.12	30.79	
SFM-03100101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	
SWM-03090101	4.80	0.00	0.22	0.00	0.08	0.00	38.43	4.27	90.1	43.53	94.37	137.90	
SWM-03090103	0.00	0.00	0.00	0.00	0.00	0.00	0.66	2.64	0.0	0.66	2.64	3.30	
SWM-03100101	0.00	0.00	0.16	0.15	0.00	0.00	3.30	0.00	0.0	3.46	0.15	3.61	
(SWM) SUBTOTAL	4.80	0.00	0.38	0.15	0.08	0.00	42.39	6.91	90.1	47.65	97.16	144.81	
TOTAL	4.95	0.00	4.84	1.46	0.42	0.00	56.09	31.45	90.1	66.30	123.01	189.31	
HILLSBOROUGH													
SWM-03100101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	
SWM-03100203	1.85	0.00	1.13	0.00	5.58	0.00	13.25	0.41	0.0	21.81	0.41	22.22	
SWM-03100204	2.48	0.00	1.55	0.00	6.00	6.23	20.84	0.64	0.0	30.87	6.87	37.74	
SWM-03100205	20.89	4.36	2.95	0.00	8.38 ^c	0.00	16.18	0.50	0.0	48.40	4.86	53.26	
SWM-03100206	9.61	45.51	4.59	0.00	38.97 ^d	0.00	20.40	0.63	2180.3 ^b	73.57	2226.44	2300.01	
SWM-03100207	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	
(SWM) SUBTOTAL	34.83	49.87	10.22	0.00	58.93	6.23	70.67	2.18	2180.3	174.65	2238.58	2413.23	
TOTAL	34.83	49.87	10.22	0.00	58.93	6.23	70.67	2.18	2180.3	174.65	2238.58	2413.23	

TABLE 1--TOTAL WATER USE BY COUNTIES AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 1980--CONTINUED

COUNTY, WMDISTRICT, HYDROL. UNIT	WATER WITHDRAWN FOR INDICATED PURPOSE IN MGAL/D											
	PUBLIC SUPPLY		RURAL		INDUSTRIAL		IRRIGATION		POWER	SUBTOTAL		TOTAL
	GW	SW	GW	SW	GW	SW	GW	SW	SW	GW	SW	GW+SW
LAKE												
SJM-03080101	0.16	0.00	0.27	0.17	0.00	0.00	0.79	0.09	0.0	1.22	0.26	1.48
SJM-03080102	10.58	0.00	5.38	0.18	6.58	0.00	53.83	5.98	0.0	76.37	6.16	82.53
SJM-03090101	0.00	0.00	0.02	0.00	0.00	0.00	4.82	0.54	0.0	4.84	0.54	5.38
SJM-03100208	0.65	0.00	0.29	0.04	1.05	0.00	5.33	0.59	0.0	7.32	0.63	7.95
SWM-03100208	0.00	0.00	0.10	0.01	0.00	0.00	0.12	0.01	0.0	0.22	0.02	0.24
(SWM) SUBTOTAL	0.00	0.00	0.10	0.01	0.00	0.00	0.12	0.01	0.0	0.22	0.02	0.24
TOTAL	11.39	0.00	6.06	0.40	7.63	0.00	64.89	7.21	0.0	89.97	7.61	97.58
LEVY												
SRM-03110101	0.17	0.00	0.39	0.23	0.00	0.00	0.00	0.00	0.0	0.56	0.23	0.79
SRM-03110205	0.36	0.00	0.37	0.06	0.18	0.00	0.72	0.24	0.0	1.63	0.30	1.93
SWM-03080102	0.37	0.00	0.34	0.14	0.04	0.00	0.44	0.16	0.0	1.19	0.30	1.49
SWM-03100208	0.03	0.00	0.16	0.02	0.00	0.00	0.07	0.02	0.0	0.26	0.04	0.30
SWM-03110101	0.08	0.00	0.27	0.22	0.00	0.00	0.10	0.00	0.0	0.45	0.22	0.67
(SWM) SUBTOTAL	0.48	0.00	0.77	0.38	0.04	0.00	0.61	0.18	0.0	1.90	0.56	2.46
TOTAL	1.01	0.00	1.53	0.67	0.22	0.00	1.33	0.42	0.0	4.09	1.09	5.18
MANATEE												
SWM-03100101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
SWM-03100102	0.00	0.00	1.63	0.15	0.00	0.00	14.67	0.15	0.0	16.30	0.30	16.60
SWM-03100201	0.00	4.80	0.60	0.02	0.00	0.00	0.00	0.00	0.0	0.60	4.82	5.42
SWM-03100202	0.00	9.65	1.16	0.02	0.19	0.00	29.05	0.29	0.0	30.40	9.96	40.36
SWM-03100203	0.00	1.61	0.82	0.06	0.00	0.00	12.69	0.13	3.6	13.51	5.40	18.91
SWM-03100206	0.00	4.80	0.87	0.05	0.00	0.00	8.51	0.09	0.0	9.38	4.94	14.32
(SWM) SUBTOTAL	0.00	20.86	5.08	0.30	0.19	0.00	64.92	0.66	3.6	70.19	25.42	95.61
TOTAL	0.00	20.86	5.08	0.30	0.19	0.00	64.92	0.66	3.6	70.19	25.42	95.61
MARION												
SJM-03080101	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.0	0.06	0.00	0.06
SJM-03080102	5.01	0.00	7.27	0.05	0.66	0.00	13.12	0.69	0.0	26.06	0.74	26.80
SJM-03100208	1.53	0.00	0.64	0.01	0.00	0.00	1.23	0.06	0.0	3.40	0.07	3.47
SWM-03080102	0.00	0.00	0.83	0.02	0.00	0.00	2.79	0.15	0.0	3.62	0.17	3.79
SWM-03100208	0.24	0.00	0.22	0.01	0.00	0.00	1.36	0.07	0.0	1.82	0.08	1.90
SWM-03110101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00

TABLE 1--TOTAL WATER USE BY COUNTIES AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 1980--CONTINUED

	WATER WITHDRAWN FOR INDICATED PURPOSE IN MGAL/D											
COUNTY, WMDISTRICT, HYDROL. UNIT	PUBLIC SUPPLY		RURAL		INDUSTRIAL		IRRIGATION		POWER	SUBTOTAL		TOTAL
	GW	SW	GW	SW	GW	SW	GW	SW	SW	GW	SW	GW+SW
(SWM) SUBTOTAL	0.24	0.00	1.05	0.03	0.00	0.00	4.15	0.22	0.0	5.44	0.25	5.69
TOTAL	6.78	0.00	9.02	0.09	0.66	0.00	18.50	0.97	0.0	34.96	1.06	36.02
PASCO												
SWM-03100205	1.08	0.00	1.31	0.00	0.03	0.00	8.78	0.18	0.0	11.20	0.18	11.38
SWM-03100207	9.54	0.00	4.60	0.00	0.01	0.00	4.33	0.54	1339.0 ^b	18.48	1339.54	1358.02
SWM-03100208	1.30	0.00	1.80	0.00	15.79	0.00	6.18	0.06	0.0	25.07	0.06	25.13
(SWM) SUBTOTAL	11.92	0.00	7.71	0.00	15.83	0.00	19.29	0.78	1339.0	54.75	1339.78	1394.53
TOTAL	11.92	0.00	7.71	0.00	15.83	0.00	19.29	0.78	1339.0	54.75	1339.78	1394.53
PINELLAS												
SWM-03100206	35.41	0.00	1.70	0.00	0.00	0.00	3.20	0.17	0.0	40.31	0.17	40.48
SWM-03100207	67.44	0.00	1.69	0.00	0.89	0.00	5.55	0.29	800.0	75.57	800.29	875.86
(SWM) SUBTOTAL	102.85 ^e	0.00	3.39	0.00	0.89	0.00	8.75	0.46	800.0	115.88	800.46	916.34
TOTAL	102.85	0.00	3.39	0.00	0.89	0.00	8.75	0.46	800.0	115.88	800.46	916.34
POLK												
SFM-03090101	0.00	0.00	2.47	0.00	0.00	0.00	3.03	0.23	0.0	5.50	0.23	5.73
SJM-03080102	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.0	0.47	0.00	0.47
SJM-03090101	0.97	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.0	1.32	0.00	1.32
SJM-03100101	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.0	0.01	0.00	0.01
SJM-03100208	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
SWM-03090101	2.97	0.00	2.23	0.00	20.26	0.00	11.91	0.90	0.0	37.37	0.90	38.27
SWM-03100101	25.70	0.00	7.13	0.00	143.97	0.00	28.17	2.12	295.0	204.97	297.12	502.09
SWM-03100204	0.00	0.00	1.65	0.00	44.34	0.00	1.45	0.00	0.0	47.44	0.00	47.44
SWM-03100205	5.90	0.00	0.83	0.00	0.00	0.00	1.85	0.02	0.0	8.58	0.02	8.60
SWM-03100208	0.00	0.00	0.87	0.00	0.13	0.00	4.76	0.25	0.0	5.76	0.25	6.01
(SWM) SUBTOTAL	34.57	0.00	12.71	0.00	208.70	0.00	48.14	3.29	295.0	304.12	298.29	602.41
TOTAL	35.54	0.00	16.00	0.00	208.71	0.00	51.17	3.52	295.0	311.42	298.52	609.94
SARASOTA												
SWM-03100101	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.0	0.04	0.00	0.04
SWM-03100102	0.00	1.30	0.48	0.03	0.00	0.00	7.13	0.15	0.0	7.61	1.48	9.09
SWM-03100201	11.07	7.17	1.01	0.02	0.10	0.00	13.25	0.27	0.0	25.43	7.46	32.89
SWM-03100202	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.0	0.06	0.00	0.06

TABLE 1--TOTAL WATER USE BY COUNTIES AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 1980--CONTINUED

COUNTY, WMDISTRICT, HYDROL. UNIT	WATER WITHDRAWN FOR INDICATED PURPOSE IN MGAL/D											
	PUBLIC SUPPLY		RURAL		INDUSTRIAL		IRRIGATION		POWER	SUBTOTAL		TOTAL
	GW	SW	GW	SW	GW	SW	GW	SW	SW	GW	SW	GW+SW
(SWM)SUBTOTAL	11.07	8.47 ^f	1.59	0.05	0.10	0.00	20.38	0.42	0.0	33.14	8.94	42.08
TOTAL	11.07	8.47	1.59	0.05	0.10	0.00	20.38	0.42	0.0	33.14	8.94	42.08
SUMTER												
SWM-03080102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
SWM-03100208	1.02	0.00	2.57	0.00	1.14	0.00	16.33	0.33	0.0	21.06	0.33	21.39
(SWM)SUBTOTAL	1.02	0.00	2.57	0.00	1.14	0.00	16.33	0.33	0.0	21.06	0.33	21.39
TOTAL	1.02	0.00	2.57	0.00	1.14	0.00	16.33	0.33	0.0	21.06	0.33	21.39
SWM TOTAL	205.81	84.13	61.95	1.02	319.16	6.44	396.71	19.01	6605.0	983.63	6715.60	7699.23
GRAND TOTAL	225.39	84.13	84.64	3.07	327.98	6.44	494.92	52.15	6605.0	1132.93	6750.79	7883.72

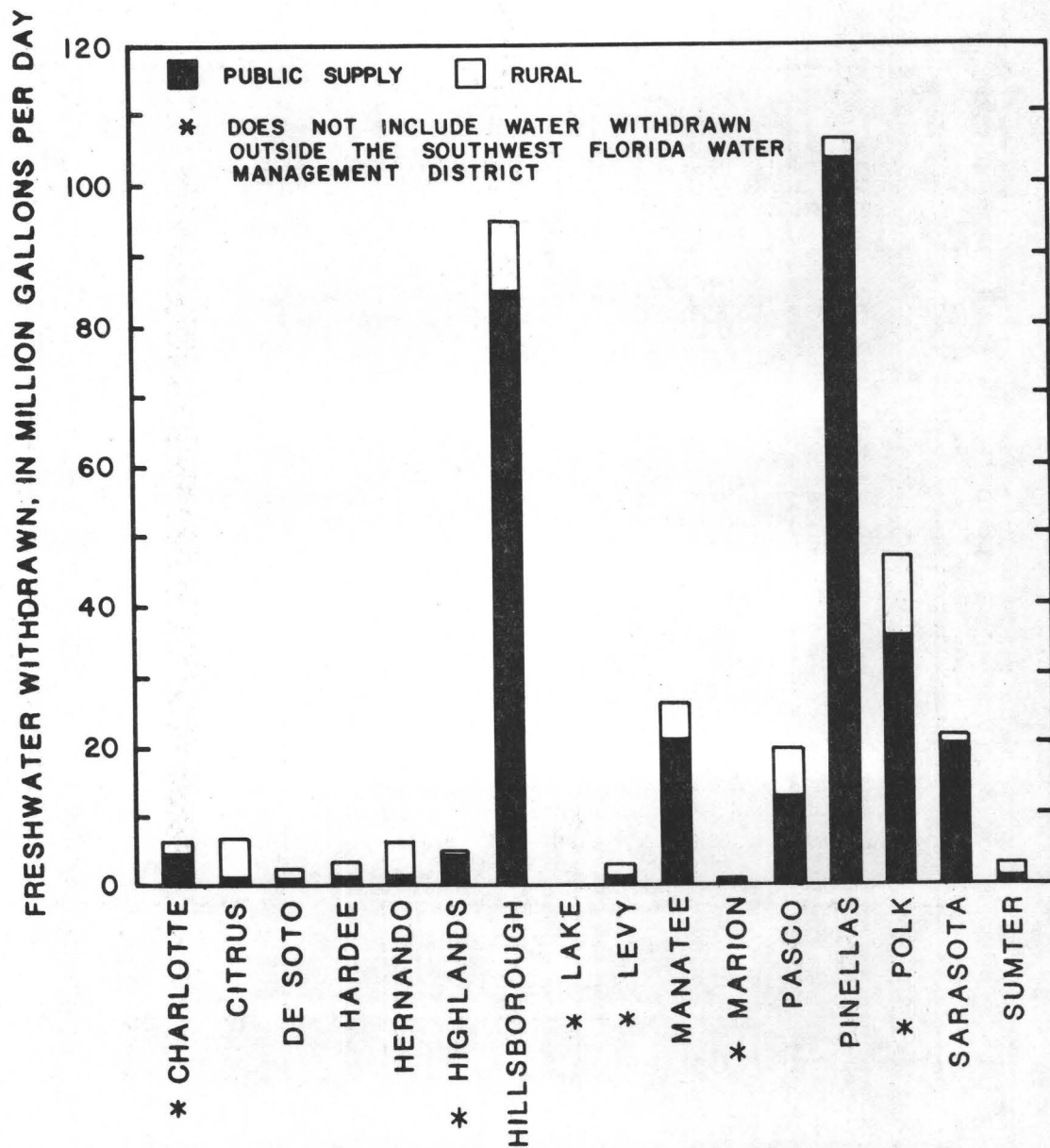


Figure 18.--Public supply and rural freshwater use in the Southwest Florida Water Management District by counties, 1980.

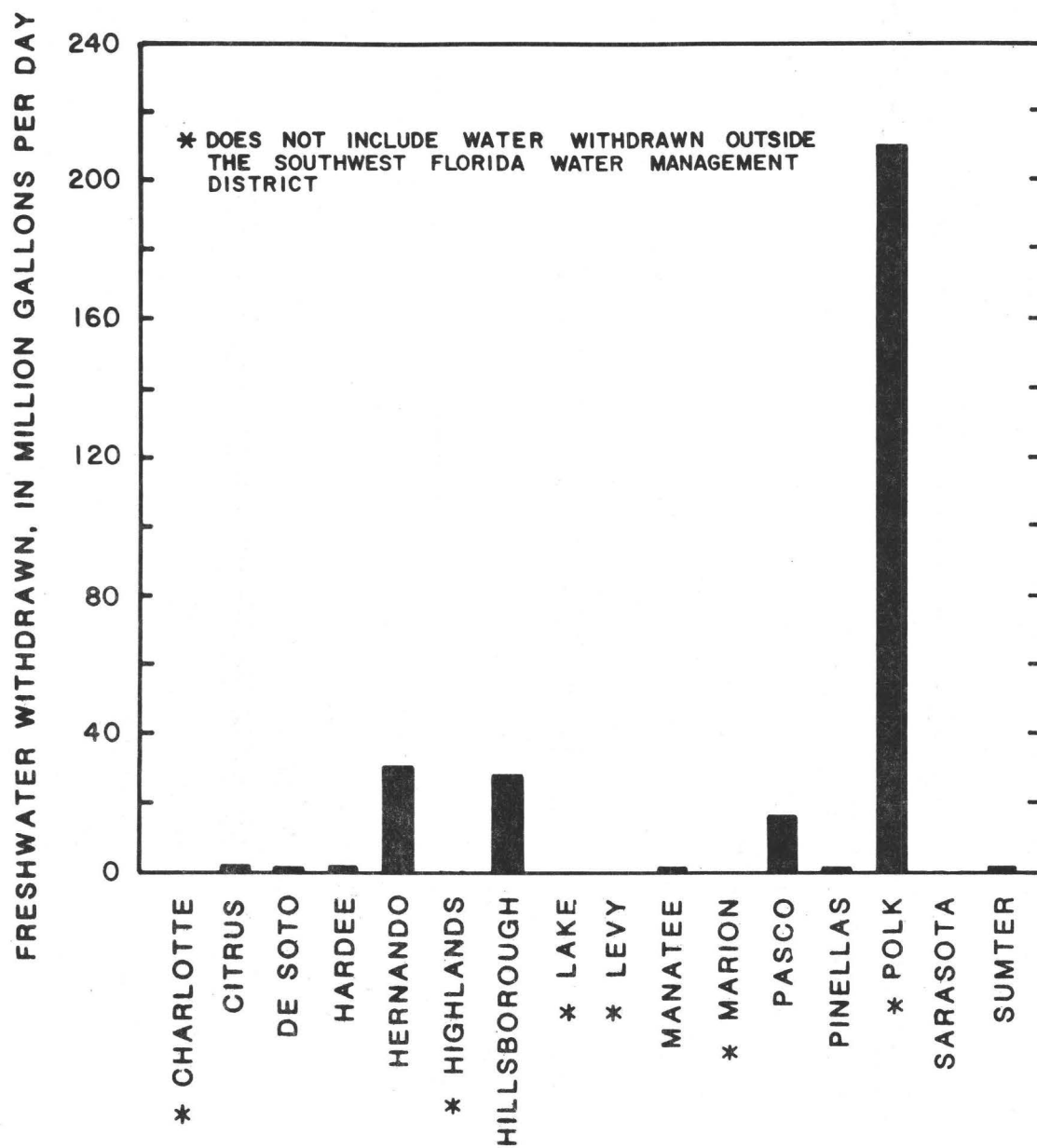


Figure 19.--Industrial freshwater use in the Southwest Florida Water Management District by counties, 1980.

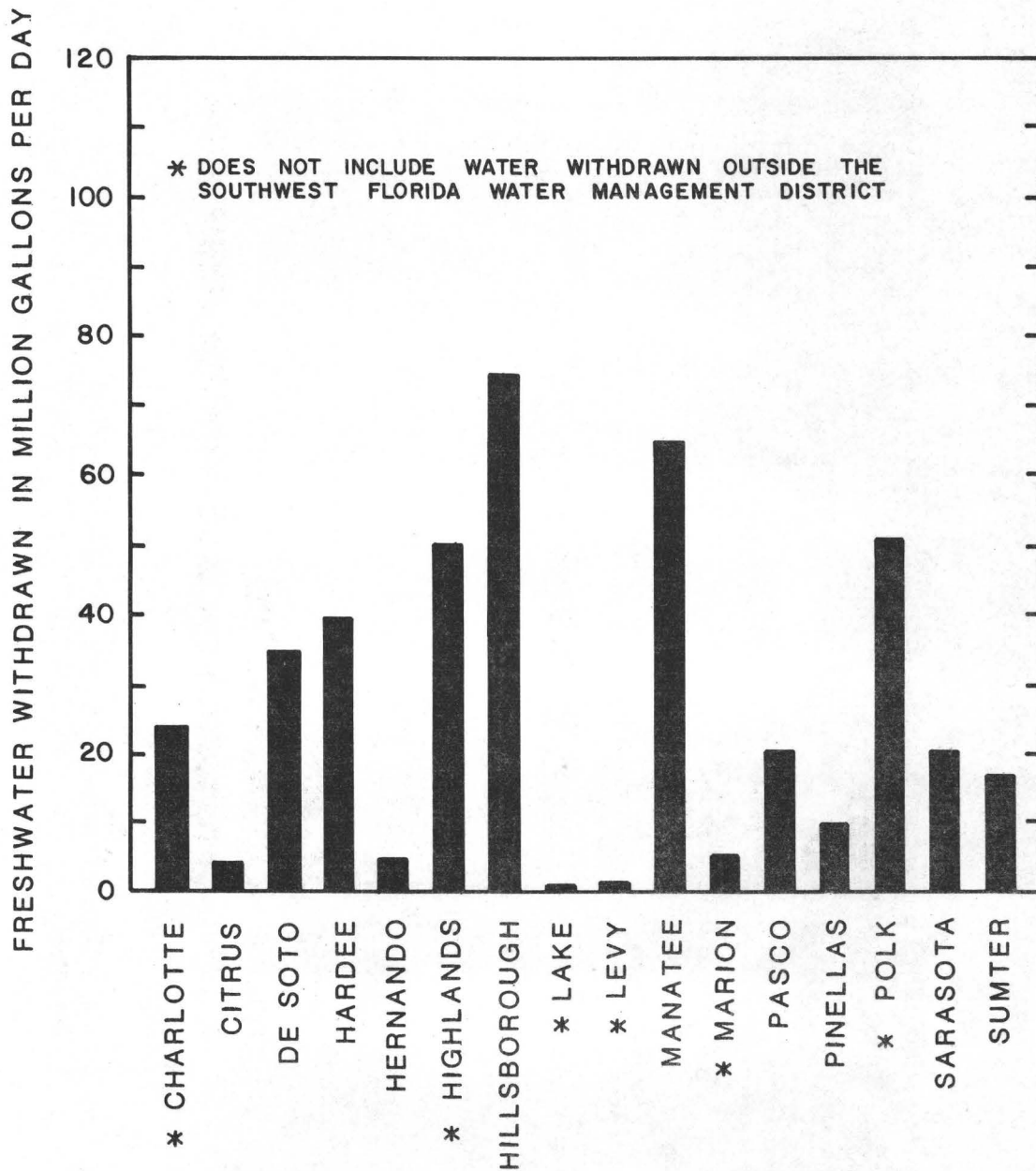


Figure 20.--Irrigation freshwater use in the Southwest Florida Water Management District by counties, 1980.

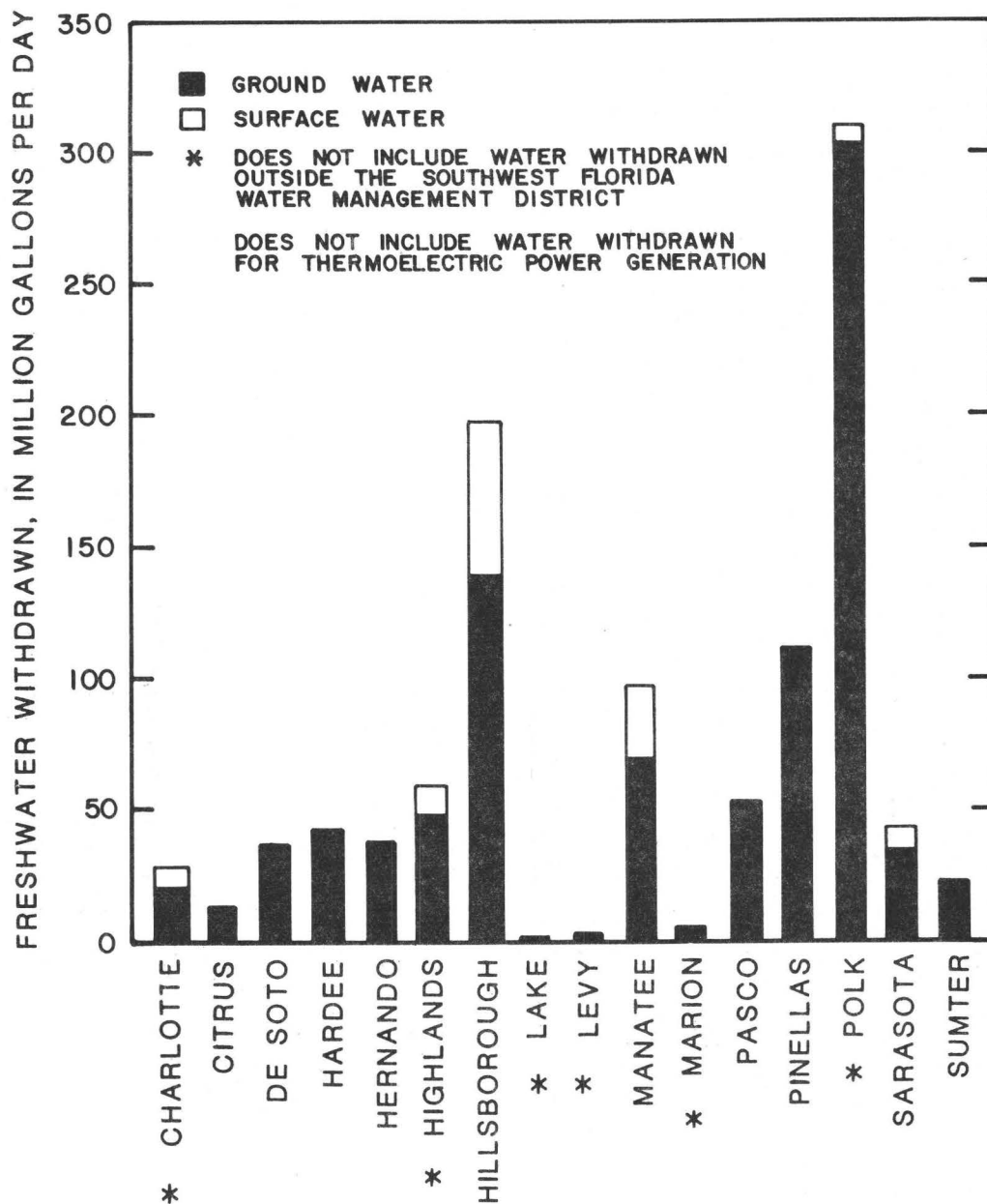


Figure 21.--Total freshwater use in the Southwest Florida Water Management District by counties, 1980.

TABLE 2.--PUBLIC-SUPPLY WATER USE BY COUNTIES, 1980

POPULATION SERVED (GW-GROUND WATER) (SW-SURFACE WATER)				
WATER MANAGEMENT				
DISTRICT CODES		WATER WITHDRAWN (GW-GROUND WATER) (SW-SURFACE WATER)		
SWM-SOUTHWEST FLORIDA		(a) INCLUDES 2.49 MGAL/D IMPORTED FROM DE SOTO		
SFM-SOUTH FLORIDA		COUNTY. (b) INCLUDES 23.44 MGAL/D IMPORTED FROM		
SRM-SUWANNEE RIVER		HILLSBOROUGH COUNTY AND 42.75 MGAL/D IMPORTED		
SJM-ST JOHNS RIVER		FROM PASCO COUNTY. (c) INCLUDES 7.17 MGAL/D IM- PORTED FROM MANATEE COUNTY.		
<hr/>				
COUNTY, WATER MANAGEMENT DISTRICT, SYSTEM NAME	POPULATION SERVED (THOUSANDS)		WATER WITHDRAWN IN MGAL/D	
	GW	SW	GW	SW
<hr/>				
CHARLOTTE				
SWM-PORT CHARLOTTE	0.0	37.0	0.00	2.91 ^a
SWM-PUNTA GORDA	0.0	14.4	0.00	2.02
(SWM) SUBTOTAL	0.0	51.4	0.00	4.93
TOTAL FOR CHARLOTTE	0.0	51.4	0.00	4.93
<hr/>				
CITRUS				
SWM-CRYSTAL RIVER	3.1	0.0	0.39	0.00
SWM-INVERNESS	4.3	0.0	0.52	0.00
(SWM) SUBTOTAL	7.4	0.0	0.91	0.00
TOTAL FOR CITRUS	7.4	0.0	0.91	0.00
<hr/>				
DE SOTO				
SWM-ARCADIA	7.0	0.0	0.71	0.00
(SWM) SUBTOTAL	7.0	0.0	0.71	0.00
TOTAL FOR DE SOTO	7.0	0.0	0.71	0.00
<hr/>				
HARDEE				
SWM-BOWLING GREEN	1.7	0.0	0.35	0.00
SWM-WAUCHULA	4.5	0.0	0.82	0.00
SWM-ZOLFO SPRINGS	1.3	0.0	0.10	0.00

TABLE 2.--PUBLIC-SUPPLY WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WATER MANAGEMENT DISTRICT, SYSTEM NAME	POPULATION SERVED (THOUSANDS)		WATER WITHDRAWN IN MGAL/D	
	GW	SW	GW	SW
(SWM) SUBTOTAL	7.5	0.0	1.27	0.00
TOTAL FOR HARDEE	7.5	0.0	1.27	0.00
HERNANDO				
SWM-BROOKSVILLE	6.6	0.0	1.14	0.00
(SWM) SUBTOTAL	6.6	0.0	1.14	0.00
TOTAL FOR HERNANDO	6.6	0.0	1.14	0.00
HIGHLANDS				
SFM-SPRING LAKE	0.9	0.0	0.15	0.00
SWM-AVON PARK	8.5	0.0	1.35	0.00
SWM-LAKE PLACID	1.0	0.0	0.15	0.00
SWM-SEBRING	15.5	0.0	3.30	0.00
(SWM) SUBTOTAL	25.0	0.0	4.80	0.00
TOTAL FOR HIGHLANDS	25.9	0.0	4.95	0.00
HILLSBOROUGH				
SWM-BRANDON	34.0	0.0	6.43	0.00
SWM-HILLS CO MISC UTIL'S	15.0	0.0	2.78	0.00
SWM-PLANT CITY	22.0	0.0	2.87	0.00
SWM-RIVER OAKS	8.5	0.0	1.27	0.00
SWM-RIVERVIEW	10.0	0.0	1.45	0.00
SWM-RUSKIN	3.8	0.0	0.39	0.00
SWM-SUN CITY CENTER	7.3	0.0	2.26	0.00
SWM-TAMPA	111.0	364.0	15.25	49.87
SWM-TEMPLE TERRACE	12.2	0.0	2.13	0.00
(SWM) SUBTOTAL	223.8	364.0	34.83	49.87
TOTAL FOR HILLSBOROUGH	223.8	364.0	34.83	49.87
LAKE				
SJM-ASTOR-ASTOR PARK	2.2	0.0	0.16	0.00
SJM-CLERMONT	5.4	0.0	1.02	0.00
SJM-EUSTIS	10.0	0.0	1.94	0.00
SJM-FRUITLAND PARK	2.8	0.0	0.38	0.00
SJM-GROVELAND	2.2	0.0	0.39	0.00
SJM-LADY LAKE	1.2	0.0	0.10	0.00
SJM-LEESBURG	16.6	0.0	3.47	0.00

TABLE 2.--PUBLIC-SUPPLY WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WATER MANAGEMENT DISTRICT, SYSTEM NAME	POPULATION SERVED (THOUSANDS)		WATER WITHDRAWN IN MGAL/D	
	GW	SW	GW	SW
SJM-MASCOTTE	1.6	0.0	0.16	0.00
SJM-MINNEOLA	0.9	0.0	0.10	0.00
SJM-MOUNT DORA	6.5	0.0	2.21	0.00
SJM-SOUTHERN STATES UTIL	3.3	0.0	0.22	0.00
SJM-TVARES	5.0	0.0	0.83	0.00
SJM-UMATILLA	1.9	0.0	0.41	0.00
TOTAL FOR LAKE	59.6	0.0	11.39	0.00
LEVY				
SRM-BRONSON	0.4	0.0	0.04	0.00
SRM-CEDAR KEY	1.2	0.0	0.13	0.00
SRM-CHIEFLAND	1.9	0.0	0.36	0.00
SWM-BRONSON	0.5	0.0	0.04	0.00
SWM-WILLISTON	2.1	0.0	0.37	0.00
SWM-YANKEETOWN	0.6	0.0	0.07	0.00
(SWM) SUBTOTAL	3.2	0.0	0.48	0.00
TOTAL FOR LEVY	6.7	0.0	1.01	0.00
MANATEE				
SWM-BRADENTON	0.0	24.3	0.00	4.85
SWM-MANATEE CO UTILITIES	0.0	100.0	0.00	16.01
(SWM) SUBTOTAL	0.0	124.3	0.00	20.86
TOTAL FOR MANATEE	0.0	124.3	0.00	20.86
MARION				
SJM-BELLEVUE	1.9	0.0	0.28	0.00
SJM-FLORIDA RIDGE UTIL	8.3	0.0	1.19	0.00
SJM-OCALA	37.2	0.0	5.00	0.00
SJM-SILVER SPRINGS	0.4	0.0	0.07	0.00
SWM-DUNNELLON	1.4	0.0	0.24	0.00
(SWM) SUBTOTAL	1.4	0.0	0.24	0.00
TOTAL FOR MARION	49.2	0.0	6.78	0.00
PASCO				
SWM-DADE CITY	11.4	0.0	1.30	0.00
SWM-HUDSON	4.5	0.0	0.54	0.00
SWM-LAKE PADGETT ESTATES	1.1	0.0	0.18	0.00
SWM-NEW PORT RICHEY	18.3	0.0	2.90	0.00

TABLE 2.--PUBLIC-SUPPLY WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WATER MANAGEMENT DISTRICT, SYSTEM NAME	POPULATION SERVED (THOUSANDS)		WATER WITHDRAWN IN MGAL/D	
	GW	SW	GW	SW
SWM-ORANGEWOOD VILLAGE	1.4	0.0	0.25	0.00
SWM-PINELLAS CO WATER SYS	90.0	0.0	5.85	0.00
SWM-ZEPHYRHILLS	10.0	0.0	0.90	0.00
(SWM) SUBTOTAL	136.7	0.0	11.92	0.00
TOTAL FOR PASCO	136.7	0.0	11.92	0.00
PINELLAS				
SWM-BELLEAIR	3.7	0.0	0.81	0.00
SWM-CLEARWATER	55.0	0.0	7.53	0.00
SWM-DUNEDIN	30.0	0.0	3.92	0.00
SWM-PINELLAS CO WATER SYS	353.7	0.0	52.24	0.00
SWM-ST PETERSBURG	257.0	0.0	38.08	0.00
SWM-TARPON SPRINGS	1.8	0.0	0.27	0.00
(SWM) SUBTOTAL	701.2	0.0	102.85 ^b	0.00
TOTAL FOR PINELLAS	701.2	0.0	102.85	0.00
POLK				
SJM-HAINES CITY	6.2	0.0	0.97	0.00
SWM-AUBURNDALE	6.2	0.0	0.79	0.00
SWM-BARTOW	15.0	0.0	2.62	0.00
SWM-DUNDEE	2.4	0.0	0.40	0.00
SWM-FORT MEADE	6.0	0.0	0.84	0.00
SWM-HAINES CITY	6.2	0.0	0.97	0.00
SWM-LAKE ALFRED	3.4	0.0	0.59	0.00
SWM-LAKE WALES	12.4	0.0	4.00	0.00
SWM-LAKELAND	91.0	0.0	18.43	0.00
SWM-MULBERRY	2.7	0.0	0.37	0.00
SWM-WINTER HAVEN	32.0	0.0	5.56	0.00
(SWM) SUBTOTAL	177.3	0.0	34.57	0.00
TOTAL FOR POLK	183.5	0.0	35.54	0.00
SARASOTA				
SWM-ENGLEWOOD	26.5	0.0	1.46	0.00
SWM-MANATEE CO UTILITIES	0.0	85.0	0.00	7.17
SWM-NORTH PORT	0.0	13.0	0.00	1.30
SWM-SARASOTA	54.0	0.0	7.87	0.00
SWM-VENICE	13.0	0.0	1.74	0.00

TABLE 2.--PUBLIC-SUPPLY WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WATER MANAGEMENT DISTRICT, SYSTEM NAME	POPULATION SERVED (THOUSANDS)		WATER WITHDRAWN IN MGAL/D	
	GW	SW	GW	SW
(SWM) SUBTOTAL	93.5	98.0	11.07	8.47 ^c
TOTAL FOR SARASOTA	93.5	98.0	11.07	8.47
SUMTER				
SWM-BUSHNELL	1.0	0.0	0.16	0.00
SWM-CENTERHILL	0.7	0.0	0.09	0.00
SWM-WEBSTER	0.9	0.0	0.20	0.00
SWM-WILDWOOD	2.8	0.0	0.57	0.00
(SWM) SUBTOTAL	5.4	0.0	1.02	0.00
TOTAL FOR SUMTER	5.4	0.0	1.02	0.00
SWM TOTAL	1396.0	637.7	205.81	84.13
GRAND TOTAL	1514.0	637.7	225.39	84.13

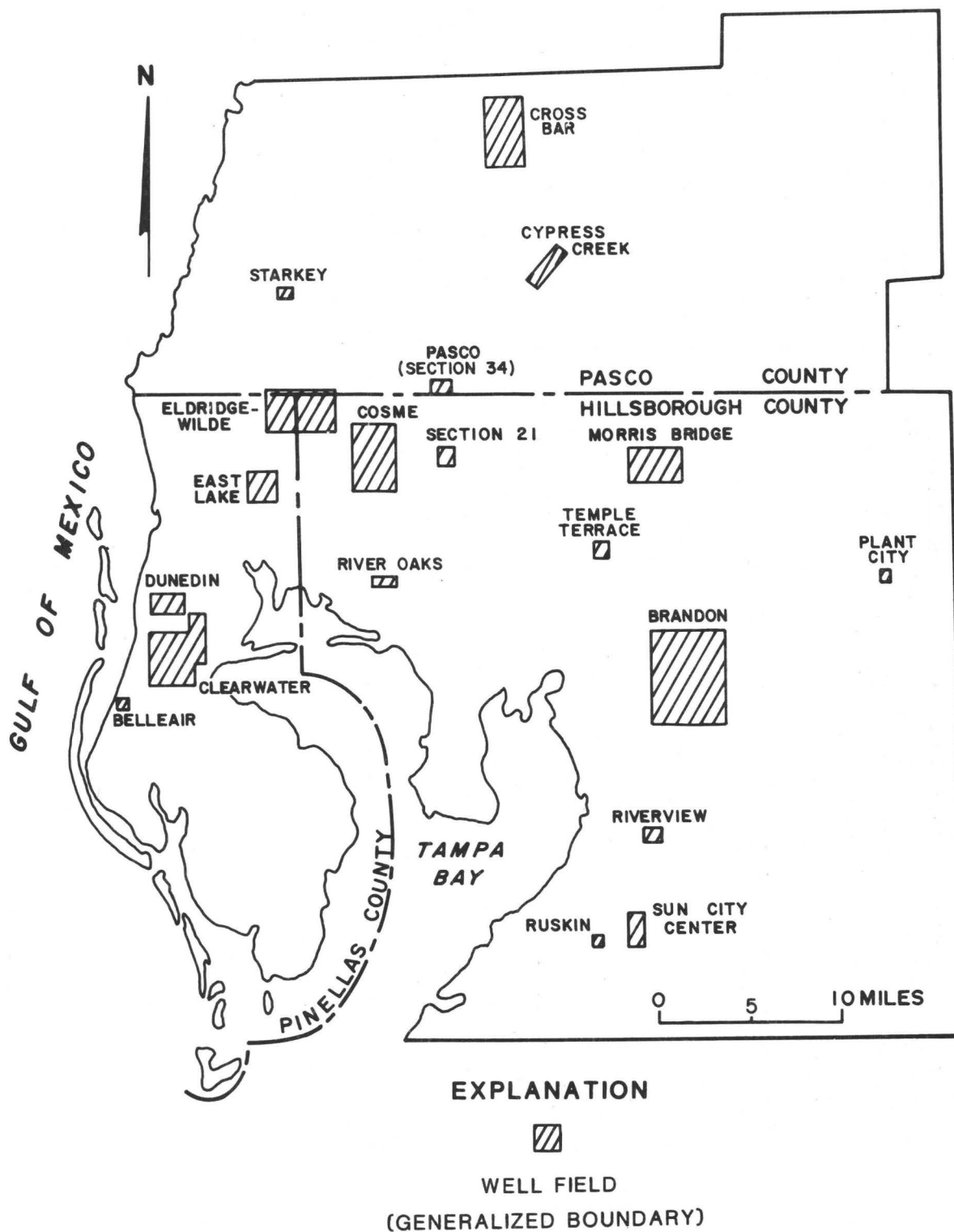


Figure 22.--Location of selected well fields in Hillsborough, Pasco, and Pinellas Counties.

Table 3.--Monthly pumpage in selected well fields in Hillsborough, Pasco, and Pinellas Counties, 1980

Operating agency: WCRWSA, West Coast Regional Water Supply Authority, distributes water to Pinellas County Water System and St. Petersburg.

County: H, Hillsborough; Pa, Pasco, Pi, Pinellas.

Average daily: Total pumpage divided by 366.

Well field	Operating agency	County	Ground water withdrawn, in Mgal/d												
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average daily
Belleair	Belleair	Pi	0.68	0.81	0.78	0.84	1.05	1.10	0.69	0.84	0.67	0.85	0.74	0.67	0.81
Clearwater	Clearwater	Pi	7.16	6.86	6.86	6.92	6.52	7.89	8.02	8.10	8.21	8.89	7.88	7.05	7.53
Dunedin	Dunedin	Pi	3.60	3.72	3.91	4.13	4.50	4.69	3.82	3.54	3.51	4.10	3.76	3.76	3.92
East Lake	Pinellas Co.	Pi	.16	1.08	3.11	2.81	1.49	2.07	2.15	2.13	2.12	1.89	.66	1.33	1.75
Eldridge-Wilde	Pinellas Co.	Pi	7.95	8.33	9.58	8.84	9.59	9.94	6.41	5.86	4.41	6.04	5.57	7.00	7.46
Eldridge-Wilde	Pinellas Co.	H	23.85	24.99	28.74	26.53	28.75	29.83	19.21	17.58	13.24	18.12	16.72	21.00	22.38
Eldridge-Wilde	Pinellas Co.	Pi & H	31.80	33.32	38.32	35.37	38.34	39.77	25.62	23.44	17.65	24.16	22.29	28.00	29.84
Cosme	St. Petersburg	H	6.16	6.67	8.58	7.46	8.94	10.12	6.13	8.77	6.93	8.42	4.29	6.09	7.38
Section 21	St. Petersburg	H	7.42	7.38	8.96	10.23	9.27	10.24	9.53	7.04	7.25	8.58	9.61	7.69	8.60
Temple Terrace	Temple Terrace	H	1.99	1.65	1.92	2.16	2.23	2.79	2.21	2.19	2.02	2.36	2.11	1.93	2.13
Plant City	Plant City	H	2.45	2.80	2.85	2.89	3.23	3.17	2.83	2.81	2.75	3.06	2.80	2.80	2.87
Morris Bridge	Tampa	H	15.02	12.33	13.66	15.40	16.76	15.83	15.72	13.84	15.76	16.06	16.39	16.23	15.25
Brandon	Hillsborough Co.	H	5.38	5.47	5.98	6.86	7.90	8.30	6.19	6.20	5.88	7.34	6.23	5.43	6.43
Riverview	Hillsborough Co.	H	.86	.99	1.47	1.43	1.52	1.93	1.50	1.80	1.26	1.64	1.61	1.39	1.45
Ruskin	Hillsborough Co.	H	.35	.37	.44	.39	.42	.42	.47	.31	.34	.40	.40	.37	.39
Sun City Center	Hillsborough Co.	H	1.78	1.75	2.15	2.02	2.58	2.51	2.26	2.23	1.78	2.89	2.68	2.49	2.26
River Oaks	Hillsborough Co.	H	1.02	1.07	1.37	1.33	1.44	1.52	1.30	1.22	1.17	1.33	1.30	1.17	1.27
Starkey	New Port Richey	Pa	2.60	2.50	2.90	2.90	3.20	3.50	2.90	2.80	2.80	3.10	2.90	2.70	2.90
Pasco (Section 34)	St. Petersburg	Pa	12.06	12.11	12.06	11.62	13.10	11.81	11.86	12.13	12.07	11.96	12.19	12.23	12.10
Cross Bar	WCRWSA	Pa	0	0	0	2.49	7.20	7.18	10.03	10.78	11.60	13.14	12.40	3.18	6.50
Cypress Creek	WCRWSA	Pa	30.13	30.08	29.65	30.15	30.04	30.03	29.99	29.97	30.02	29.63	29.94	30.37	30.00

RURAL WATER USE

The rural water-use category includes both domestic and livestock freshwater use. In this report, domestic water use includes all water used by households that are not supplied by a public-supply water system listed in table 2. This includes households having their own water supply and households that are supplied by small public-supply systems. All domestic water was assumed to be fresh ground water and was estimated based on population and an average per capita water use of 100 gal/d per person. The rural population was assumed to be the difference between total population and population served by a public-supply system.

Livestock water use includes drinking and washing water for commercially raised animals. Water use was estimated on the basis of a fixed rate of water use per head for each kind of animal. Rates ranged from 0.1 gal/d for chickens to 150 gal/d, including 120 gal/d wash-up water, for dairy cows (University of Florida, 1979). Estimates of livestock populations were obtained from the County Extension Service.

Water withdrawn for rural use in the Southwest Florida Water Management District in 1980 averaged 63 Mgal/d (table 4). All water was freshwater and included 62 Mgal/d of ground water and about 1 Mgal/d of surface water. Rural water use and population data are listed by county, water management district, and hydrologic unit in table 4. The largest user of rural water in the Southwest Florida Water Management District was Polk County, which used 13 Mgal/d.

INDUSTRIAL WATER USE

The industrial water-use category includes water used by industries that supply their own water. Data do not include water sold to industry by a public-supply system. Data were collected by inventory of individual water users.

Water withdrawn for each major industrial classification is shown in table 5. The major industrial classifications include limerock mining, chemical processing, phosphate mining, citrus processing, food processing, and air conditioning. Data are listed by county, water management district, and hydrologic unit.

The total water used by industry in the Southwest Florida Water Management District in 1980 averaged 325 Mgal/d. All water withdrawn was freshwater except for 38 Mgal/d of saline ground water withdrawn in Hillsborough County for chemical processing. The total water withdrawn included 319 Mgal/d of ground water and 6 Mgal/d of surface water (table 1). Phosphate mining used 147 Mgal/d and was the largest industrial water user. Of this total, 129 Mgal/d was used in Polk County. Polk County was also the largest user, 209 Mgal/d, of industrial water by all industrial categories.

TABLE 4.--RURAL WATER USE BY COUNTIES, 1980

****WATER MANAGEMENT**** ****DISTRICT CODES**** SWM-SOUTHWEST FLORIDA SRM-SUWANNEE RIVER SFM-SOUTH FLORIDA SJM-ST JOHNS RIVER (WM DISTRICT:WATER MANAGEMENT DISTRICT) (GW-GROUND WATER;SW-SURFACE WATER)									
RURAL POPULATION--DIFFERENCE BETWEEN TOTAL POPULATION AND POPULATION SERVED BY PUBLIC-SUPPLY SYSTEMS.									
COUNTY, WM DISTRICT, HYDROLOGIC UNIT	RURAL POPULATION (THOUSANDS)	***FRESHWATER WITHDRAWN IN MGAL/D***							
		DOMESTIC USE		LIVESTOCK USE		SUBTOTAL		TOTAL	
		GW	SW	GW	SW	GW	SW	GW+SW	
CHARLOTTE									
SFM-03090103	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SFM-03090205	1.0	0.11	0.00	0.07	0.00	0.18	0.00	0.18	
SFM-03100101	0.3	0.04	0.00	0.03	0.00	0.07	0.00	0.07	
SFM-03100103	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03090205	0.2	0.02	0.00	0.03	0.00	0.05	0.00	0.05	
SWM-03100101	1.2	0.14	0.00	0.07	0.00	0.21	0.00	0.21	
SWM-03100102	2.5	0.29	0.00	0.06	0.00	0.35	0.00	0.35	
SWM-03100103	0.0	0.00	0.00	0.03	0.00	0.03	0.00	0.03	
SWM-03100201	2.5	0.29	0.00	0.06	0.00	0.35	0.00	0.35	
(SWM)SUBTOTAL	6.4	0.74	0.00	0.25	0.00	0.99	0.00	0.99	
TOTAL FOR CHARLOTTE	7.7	0.89	0.00	0.35	0.00	1.24	0.00	1.24	
CITRUS									
SWM-03100207	23.6	2.60	0.00	0.32	0.00	2.92	0.00	2.92	
SWM-03100208	23.7	2.60	0.00	0.32	0.00	2.92	0.00	2.92	
(SWM)SUBTOTAL	47.3	5.20	0.00	0.64	0.00	5.84	0.00	5.84	
TOTAL FOR CITRUS	47.3	5.20	0.00	0.64	0.00	5.84	0.00	5.84	
DE SOTO									
SWM-03100101	12.0	1.20	0.00	0.95	0.00	2.15	0.00	2.15	
SWM-03100102	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
(SWM)SUBTOTAL	12.0	1.20	0.00	0.95	0.00	2.15	0.00	2.15	
TOTAL FOR DE SOTO	12.0	1.20	0.00	0.95	0.00	2.15	0.00	2.15	

TABLE 4.--RURAL WATER USE BY COUNTIES, 1980 --CONTINUED

COUNTY, WM DISTRICT, HYDROLOGIC UNIT	RURAL POPULATION (THOUSANDS)	***FRESHWATER WITHDRAWN IN MGAL/D***							
		DOMESTIC USE		LIVESTOCK USE		SUBTOTAL		TOTAL	
		GW	SW	GW	SW	GW	SW	GW+SW	
HARDEE									
SWM-03100101	11.9	1.19	0.00	1.39	0.00	2.58	0.00	2.58	
SWM-03100102	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
(SWM) SUBTOTAL	11.9	1.19	0.00	1.39	0.00	2.58	0.00	2.58	
TOTAL FOR HARDEE	11.9	1.19	0.00	1.39	0.00	2.58	0.00	2.58	
HERNANDO									
SWM-03100207	22.7	2.37	0.00	0.57	0.06	2.94	0.06	3.00	
SWM-03100208	15.2	1.52	0.00	0.36	0.04	1.88	0.04	1.92	
(SWM) SUBTOTAL	37.9	3.89	0.00	0.93	0.10	4.82	0.10	4.92	
TOTAL FOR HERNANDO	37.9	3.89	0.00	0.93	0.10	4.82	0.10	4.92	
HIGHLANDS									
SFM-03090101	18.2	2.84	0.00	0.87	0.87	3.71	0.87	4.58	
SFM-03090103	2.0	0.31	0.00	0.44	0.44	0.75	0.44	1.19	
SFM-03100101	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03090101	1.4	0.22	0.00	0.00	0.00	0.22	0.00	0.22	
SWM-03090103	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03100101	0.0	0.00	0.00	0.16	0.15	0.16	0.15	0.31	
(SWM) SUBTOTAL	1.4	0.22	0.00	0.16	0.15	0.38	0.15	0.53	
TOTAL FOR HIGHLANDS	21.6	3.37	0.00	1.47	1.46	4.84	1.46	6.30	
HILLSBOROUGH									
SWM-03100101	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03100203	2.6	0.26	0.00	0.87	0.00	1.13	0.00	1.13	
SWM-03100204	2.6	0.26	0.00	1.29	0.00	1.55	0.00	1.55	
SWM-03100205	18.8	1.88	0.00	1.07	0.00	2.95	0.00	2.95	
SWM-03100206	35.2	3.52	0.00	1.07	0.00	4.59	0.00	4.59	
SWM-03100207	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
(SWM) SUBTOTAL	59.2	5.92	0.00	4.30	0.00	10.22	0.00	10.22	
TOTAL FOR HILLSBOROUGH	59.2	5.92	0.00	4.30	0.00	10.22	0.00	10.22	

TABLE 4.--RURAL WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WM DISTRICT, HYDROLOGIC UNIT	RURAL POPULATION (THOUSANDS)	***FRESHWATER WITHDRAWN IN MGAL/D***							
		DOMESTIC USE		LIVESTOCK USE		SUBTOTAL		TOTAL	
		GW	SW	GW	SW	GW	SW	GW+SW	
LAKE									
SJM-03080101	0.8	0.10	0.00	0.17	0.17	0.27	0.17	0.44	
SJM-03080102	41.6	5.20	0.00	0.18	0.18	5.38	0.18	5.56	
SJM-03090101	0.2	0.02	0.00	0.00	0.00	0.02	0.00	0.02	
SJM-03100208	2.0	0.25	0.00	0.04	0.04	0.29	0.04	0.33	
SWM-03100208	0.7	0.09	0.00	0.01	0.01	0.10	0.01	0.11	
(SWM) SUBTOTAL	0.7	0.09	0.00	0.01	0.01	0.10	0.01	0.11	
TOTAL FOR LAKE	45.3	5.66	0.00	0.40	0.40	6.06	0.40	6.46	
LEVY									
SRM-03110101	3.2	0.32	0.00	0.07	0.23	0.39	0.23	0.62	
SRM-03110205	3.5	0.35	0.00	0.02	0.06	0.37	0.06	0.43	
SWM-03080102	3.0	0.30	0.00	0.04	0.14	0.34	0.14	0.48	
SWM-03100208	1.5	0.15	0.00	0.01	0.02	0.16	0.02	0.18	
SWM-03110101	2.0	0.20	0.00	0.07	0.22	0.27	0.22	0.49	
(SWM) SUBTOTAL	6.5	0.65	0.00	0.12	0.38	0.77	0.38	1.15	
TOTAL FOR LEVY	13.2	1.32	0.00	0.21	0.67	1.53	0.67	2.20	
MANATEE									
SWM-03100101	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03100102	3.0	0.30	0.00	1.33	0.15	1.63	0.15	1.78	
SWM-03100201	4.7	0.47	0.00	0.13	0.02	0.60	0.02	0.62	
SWM-03100202	10.3	1.03	0.00	0.13	0.02	1.16	0.02	1.18	
SWM-03100203	1.4	0.14	0.00	0.68	0.06	0.82	0.06	0.88	
SWM-03100206	4.7	0.47	0.00	0.40	0.05	0.87	0.05	0.92	
(SWM) SUBTOTAL	24.1	2.41	0.00	2.67	0.30	5.08	0.30	5.38	
TOTAL FOR MANATEE	24.1	2.41	0.00	2.67	0.30	5.08	0.30	5.38	
MARION									
SJM-03080101	0.6	0.06	0.00	0.00	0.00	0.06	0.00	0.06	
SJM-03080102	63.4	6.34	0.00	0.93	0.05	7.27	0.05	7.32	
SJM-03100208	4.7	0.47	0.00	0.17	0.01	0.64	0.01	0.65	
SWM-03080102	3.0	0.30	0.00	0.53	0.02	0.83	0.02	0.85	
SWM-03100208	1.6	0.16	0.00	0.06	0.01	0.22	0.01	0.23	

TABLE 4.--RURAL WATER USE BY COUNTIES,1980--CONTINUED

COUNTY, WM DISTRICT, HYDROLOGIC UNIT	RURAL POPULATION (THOUSANDS)	***FRESHWATER WITHDRAWN IN MGAL/D***							
		DOMESTIC USE		LIVESTOCK USE		SUBTOTAL		TOTAL	
		GW	SW	GW	SW	GW	SW	GW+SW	
MARION									
SWM-03110101	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
(SWM)SUBTOTAL	4.6	0.46	0.00	0.59	0.03	1.05	0.03	1.08	
TOTAL FOR MARION	73.3	7.33	0.00	1.69	0.09	9.02	0.09	9.11	
PASCO									
SWM-03100205	5.4	0.54	0.00	0.77	0.00	1.31	0.00	1.31	
SWM-03100207	40.0	4.00	0.00	0.60	0.00	4.60	0.00	4.60	
SWM-03100208	12.0	1.20	0.00	0.60	0.00	1.80	0.00	1.80	
(SWM)SUBTOTAL	57.4	5.74	0.00	1.97	0.00	7.71	0.00	7.71	
TOTAL FOR PASCO	57.4	5.74	0.00	1.97	0.00	7.71	0.00	7.71	
PINELLAS									
SWM-03100206	13.6	1.36	0.00	0.34	0.00	1.70	0.00	1.70	
SWM-03100207	13.6	1.36	0.00	0.33	0.00	1.69	0.00	1.69	
(SWM)SUBTOTAL	27.2	2.72	0.00	0.67	0.00	3.39	0.00	3.39	
TOTAL FOR PINELLAS	27.2	2.72	0.00	0.67	0.00	3.39	0.00	3.39	
POLK									
SFM-03090101	21.3	2.15	0.00	0.32	0.00	2.47	0.00	2.47	
SJM-03080102	4.1	0.41	0.00	0.06	0.00	0.47	0.00	0.47	
SJM-03090101	3.0	0.30	0.00	0.05	0.00	0.35	0.00	0.35	
SJM-03100101	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SJM-03100208	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03090101	19.1	1.91	0.00	0.32	0.00	2.23	0.00	2.23	
SWM-03100101	61.6	6.16	0.00	0.97	0.00	7.13	0.00	7.13	
SWM-03100204	14.3	1.43	0.00	0.22	0.00	1.65	0.00	1.65	
SWM-03100205	7.2	0.72	0.00	0.11	0.00	0.83	0.00	0.83	
SWM-03100208	7.0	0.76	0.00	0.11	0.00	0.87	0.00	0.87	
(SWM)SUBTOTAL	109.8	10.98	0.00	1.73	0.00	12.71	0.00	12.71	
TOTAL FOR POLK	138.2	13.84	0.00	2.16	0.00	16.00	0.00	16.00	

TABLE 4.--RURAL WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WM DISTRICT, HYDROLOGIC UNIT	RURAL POPULATION (THOUSANDS)	***FRESHWATER WITHDRAWN IN MGAL/D***							
		DOMESTIC USE		LIVESTOCK USE		SUBTOTAL		TOTAL	
		GW	SW	GW	SW	GW	SW	GW+SW	
SARASOTA									
SWM-03100101	0.2	0.02	0.00	0.02	0.00	0.04	0.00	0.04	
SWM-03100102	1.7	0.17	0.00	0.31	0.03	0.48	0.03	0.51	
SWM-03100201	8.6	0.86	0.00	0.15	0.02	1.01	0.02	1.03	
SWM-03100202	0.3	0.03	0.00	0.03	0.00	0.06	0.00	0.06	
(SWM) SUBTOTAL	10.8	1.08	0.00	0.51	0.05	1.59	0.05	1.64	
TOTAL FOR SARASOTA	10.8	1.08	0.00	0.51	0.05	1.59	0.05	1.64	
SUMTER									
SWM-03080102	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SWM-03100208	18.9	1.89	0.00	0.68	0.00	2.57	0.00	2.57	
(SWM) SUBTOTAL	18.9	1.89	0.00	0.68	0.00	2.57	0.00	2.57	
TOTAL FOR SUMTER	18.9	1.89	0.00	0.68	0.00	2.57	0.00	2.57	
SWM TOTAL	436.1	44.38	0.00	17.57	1.02	61.95	1.02	62.97	
GRAND TOTAL	606.0	63.65	0.00	20.99	3.07	84.64	3.07	87.71	

TABLE 5.--INDUSTRIAL WATER USE BY COUNTIES,1980

WATER MANAGEMENT
 DISTRICT CODES

SWM-SOUTHWEST FLORIDA SRM-SUWANNEE RIVER
 SFM-SOUTH FLORIDA SJM-ST JOHNS RIVER
 (WM DISTRICT:WATER MANAGEMENT DISTRICT)

ABBREVIATIONS OF MAJOR CLASSIFICATIONS
 LM RK-LIME ROCK, CHEML PROC-CHEMICAL PROCESSING,
 PHSPHT-PHOSPHATE, A/C-AIR CONDITIONING

ALL WATER IS FRESH GROUND WATER EXCEPT:
 CITRUS COUNTY-0.21 MGAL/D OF FRESH SURFACE
 WATER IN HYDROLOGIC UNIT 03100207.
 HILLSBOROUGH COUNTY-0.14 MGAL/D OF SALINE
 GROUND WATER IN HYDROLOGIC UNIT 03100205,
 38.25 MGAL/D OF SALINE GROUND WATER IN HYDRO-
 LOGIC UNIT 03100206, AND 6.23 MGAL/D OF FRESH
 SURFACE WATER IN HYDROLOGIC UNIT 03100204.

INDUSTRIAL WATER USE BY MAJOR CLASSIFICATIONS IN MGAL/D

COUNTY,WM DISTRICT, HYDROLOGIC UNIT	LM RK MINING	CHEML PROC	PHSPHT MINING	CITRUS PROC	FOOD PROC	A/C	OTHER	TOTAL
CITRUS								
SWM-03100207	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.54
SWM-03100208	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
(SWM) SUBTOTAL	0.54	0.00	0.00	0.00	0.00	0.00	0.01	0.55
TOTAL FOR CITRUS	0.54	0.00	0.00	0.00	0.00	0.00	0.01	0.55
DE SOTO								
SWM-03100101	0.00	0.00	0.00	0.28	0.00	0.00	0.25	0.53
(SWM) SUBTOTAL	0.00	0.00	0.00	0.28	0.00	0.00	0.25	0.53
TOTAL FOR DE SOTO	0.00	0.00	0.00	0.28	0.00	0.00	0.25	0.53
HARDEE								
SWM-03100101	0.00	0.00	0.66	0.12	0.00	0.00	0.01	0.79
(SWM) SUBTOTAL	0.00	0.00	0.66	0.12	0.00	0.00	0.01	0.79
TOTAL FOR HARDEE	0.00	0.00	0.66	0.12	0.00	0.00	0.01	0.79
HERNANDO								
SWM-03100207	31.58	0.00	0.00	0.02	0.00	0.00	0.00	31.60
(SWM) SUBTOTAL	31.58	0.00	0.00	0.02	0.00	0.00	0.00	31.60
TOTAL FOR HERNANDO	31.58	0.00	0.00	0.02	0.00	0.00	0.00	31.60

TABLE 5.--INDUSTRIAL WATER USE BY COUNTIES,1980--CONTINUED

****INDUSTRIAL WATER USE BY MAJOR CLASSIFICATIONS IN MGAL/D****								
COUNTY,WM DISTRICT, HYDROLOGIC UNIT	LM RK MINING	CHEML PROC	PHSPHT MINING	CITRUS PROC	FOOD PROC	A/C	OTHER	TOTAL
HIGHLANDS								
SFM-03090101	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34
SWM-03090101	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.08
(SWM) SUBTOTAL	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.08
TOTAL FOR HIGHLANDS	0.00	0.00	0.00	0.01	0.00	0.00	0.41	0.42
HILLSBOROUGH								
SWM-03100203	0.00	0.00	5.58	0.00	0.00	0.00	0.00	5.58
SWM-03100204	0.00	6.23	5.36	0.00	0.59	0.05	0.00	12.23
SWM-03100205	0.00	0.14	6.48	0.27	1.06	0.01	0.42	8.38
SWM-03100206	0.01	38.25	0.00	0.00	0.10	0.20	0.41	38.97
(SWM) SUBTOTAL	0.01	44.62	17.42	0.27	1.75	0.26	0.83	65.16
TOTAL FOR HILLSBOROUGH	0.01	44.62	17.42	0.27	1.75	0.26	0.83	65.16
LAKE								
SJM-03080102	0.00	0.00	0.00	4.76	0.31	0.00	1.51	6.58
SJM-03100208	0.00	0.00	0.00	1.05	0.00	0.00	0.00	1.05
TOTAL FOR LAKE	0.00	0.00	0.00	5.81	0.31	0.00	1.51	7.63
LEVY								
SRM-03110205	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
SWM-03080102	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04
(SWM) SUBTOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04
TOTAL FOR LEVY	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
MANATEE								
SWM-03100202	0.00	0.00	0.00	0.00	0.00	0.15	0.04	0.19
(SWM) SUBTOTAL	0.00	0.00	0.00	0.00	0.00	0.15	0.04	0.19
TOTAL FOR MANATEE	0.00	0.00	0.00	0.00	0.00	0.15	0.04	0.19

TABLE 5.--INDUSTRIAL WATER USE BY COUNTIES,1980--CONTINUED

****INDUSTRIAL WATER USE BY MAJOR CLASSIFICATIONS IN MGAL/D****								
COUNTY,WM DISTRICT, HYDROLOGIC UNIT	LM RK MINING	CHEML PROC	PHSPHT MINING	CITRUS PROC	FOOD PROC	A/C	OTHER	TOTAL
MARION								
SJM-03080102	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.66
TOTAL FOR MARION	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.66
PASCO								
SWM-03100205	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
SWM-03100207	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
SWM-03100208	0.00	0.00	0.00	15.45	0.00	0.00	0.34	15.79
(SWM)SUBTOTAL	0.00	0.00	0.00	15.45	0.00	0.00	0.38	15.83
TOTAL FOR PASCO	0.00	0.00	0.00	15.45	0.00	0.00	0.38	15.83
PINELLAS								
SWM-03100207	0.00	0.23	0.00	0.20	0.00	0.00	0.46	0.89
(SWM)SUBTOTAL	0.00	0.23	0.00	0.20	0.00	0.00	0.46	0.89
TOTAL FOR PINELLAS	0.00	0.23	0.00	0.20	0.00	0.00	0.46	0.89
POLK								
SJM-03100101	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
SWM-03090101	0.00	6.03	10.31	2.81	0.00	0.00	1.11	20.26
SWM-03100101	0.30	36.64	94.75	9.40	2.28	0.00	0.60	143.97
SWM-03100204	0.00	20.12	24.22	0.00	0.00	0.00	0.00	44.34
SWM-03100208	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13
(SWM)SUBTOTAL	0.30	62.79	129.28	12.21	2.28	0.00	1.84	208.70
TOTAL FOR POLK	0.30	62.79	129.28	12.22	2.28	0.00	1.84	208.71
SARASOTA								
SWM-03100201	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
(SWM)SUBTOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
TOTAL FOR SARASOTA	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10

TABLE 5.--INDUSTRIAL WATER USE BY COUNTIES, 1980--CONTINUED

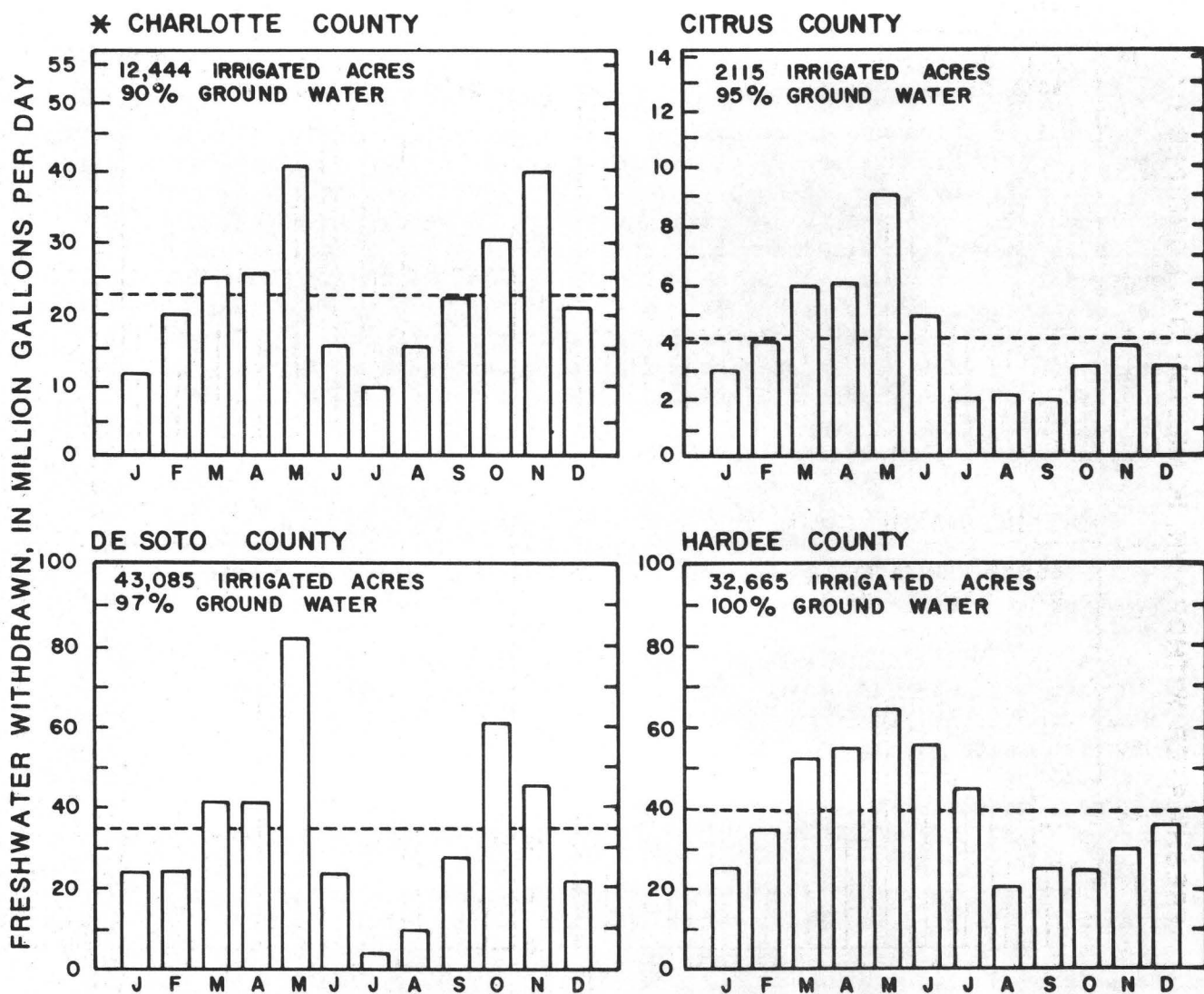
****INDUSTRIAL WATER USE BY MAJOR CLASSIFICATIONS IN MGAL/D****									
COUNTY, WM DISTRICT, HYDROLOGIC UNIT	LM RK MINING	CHEML PROC	PHSPHT MINING	CITRUS PROC	FOOD PROC	A/C	OTHER	TOTAL	
SUMTER									
SWM-03100208	1.10	0.00	0.00	0.01	0.00	0.00	0.03	1.14	
(SWM) SUBTOTAL	1.10	0.00	0.00	0.01	0.00	0.00	0.03	1.14	
TOTAL FOR SUMTER	1.10	0.00	0.00	0.01	0.00	0.00	0.03	1.14	
SWM TOTAL	33.53	107.64	147.36	28.57	4.03	0.41	4.06	325.60	
GRAND TOTAL	33.53	107.64	147.36	34.39	4.34	0.41	6.75	334.42	

IRRIGATION WATER USE

The irrigation water-use category includes water used by the irrigators that is derived from ground-water or surface-water sources. It does not include water supplied by a public-supply system. Irrigation water-use data are not easily obtained and are the least accurate of all water-use categories. One reason is that water withdrawn for irrigation is not required to be metered or reported to the Southwest Florida Water Management District, whereas industrial and public-supply water withdrawals must be reported. Another reason is variability in use seasonally and areally depending on weather and soil conditions. Irrigation water-use data presented in this report were estimated from the most accurate available sources. Irrigation water includes water applied to citrus, melons, truck-farming crops, pasture, corn, turf, and other. These are designated as crop types and are listed and explained in table 6.

Freshwater withdrawn and acres irrigated for each crop type are given in table 6 by county, water management district, and hydrologic unit. Figures 23-26 show monthly irrigation use and total acres irrigated for each county. Estimates of acres irrigated were obtained from the U.S. Soil Conservation Service, County Extension Services, Southwest Florida Water Management District, Florida Crop and Livestock Reporting Service, and field observations. Water withdrawn and applied to each crop type was computed from water-use data obtained from irrigation monitored at 74 test sites as well as from consumptive use files at the Southwest Florida Water Management District. The test sites were monitored by the U.S. Geological Survey. Data were collected for citrus, pasture, tomatoes, strawberries, ornamentals, fish farms, sod, and golf courses.

The total water withdrawn for irrigation in the Southwest Florida Water Management District in 1980 averaged 416 Mgal/d, of which 397 Mgal/d was ground water and 19 Mgal/d was surface water (table 6). The total acres irrigated in the water management district were 353,504. Citrus, truck farming, and turf ranked one, two, and three in number of acres irrigated. Polk County irrigated the most acres, 88,458. Hillsborough County withdrew the most water, 73 Mgal/d and also withdrew the most water during any one month, 152 Mgal/d in May (fig. 24).



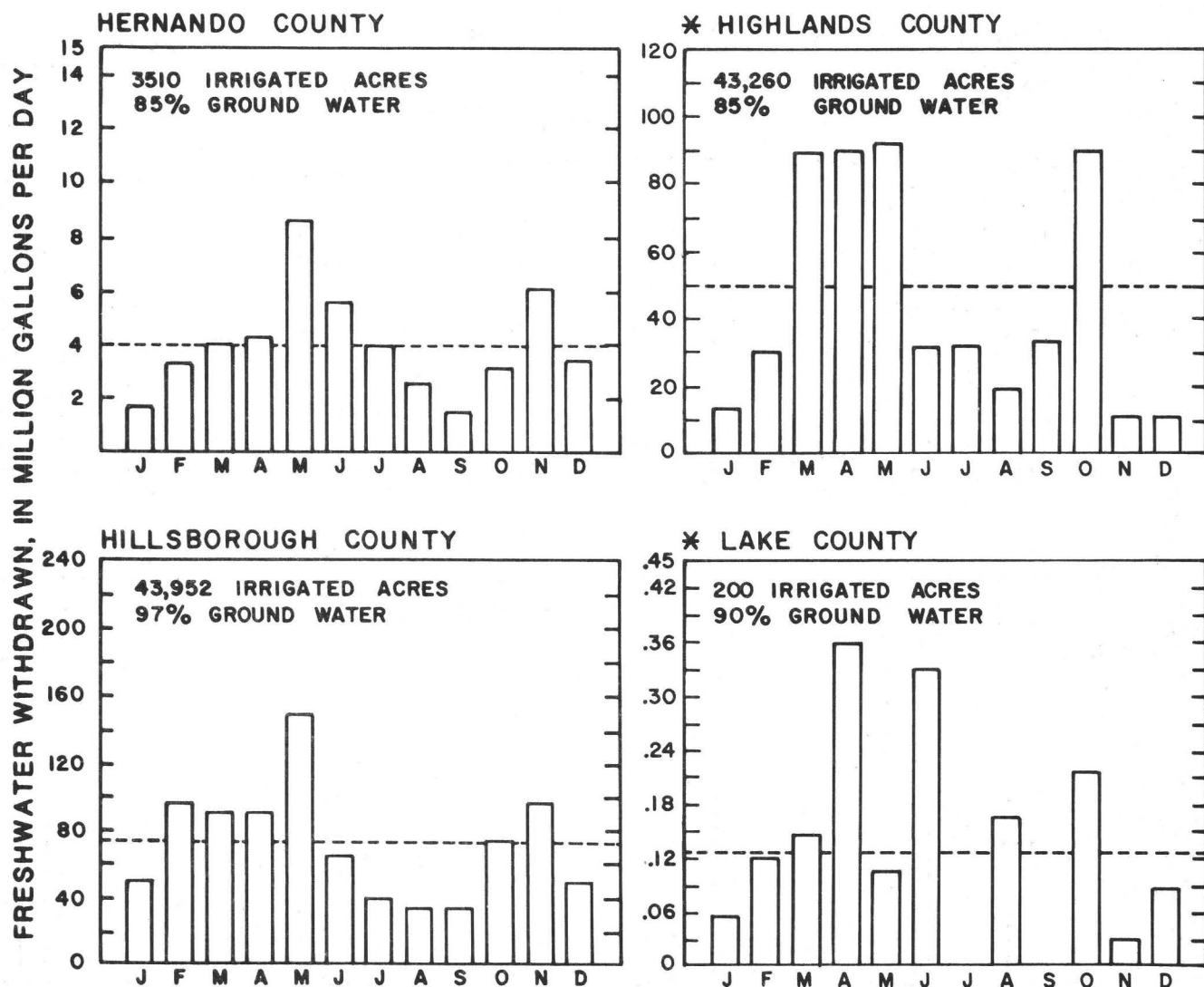
EXPLANATION

AVERAGE DAILY WITHDRAWAL
(TOTAL WITHDRAWAL / 366)

*

DOES NOT INCLUDE WATER WITHDRAWN
OUTSIDE THE SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT

Figure 23.--Monthly irrigation freshwater use and total irrigated acres in the Southwest Florida Water Management District in Charlotte, Citrus, De Soto, and Hardee Counties, 1980.



EXPLANATION

 AVERAGE DAILY WITHDRAWAL
 (TOTAL WITHDRAWAL / 366)

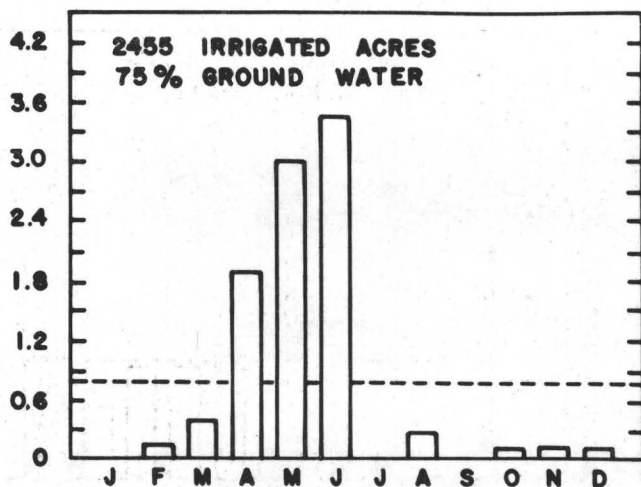
*

DOES NOT INCLUDE WATER WITHDRAWN
 OUTSIDE THE SOUTHWEST FLORIDA
 WATER MANAGEMENT DISTRICT

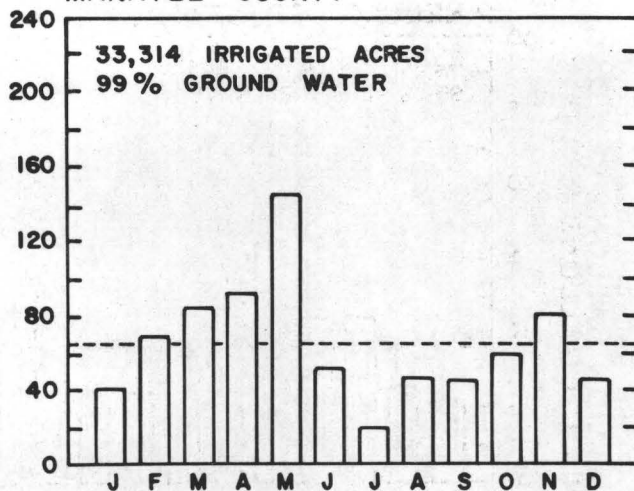
Figure 24.--Monthly irrigation freshwater use and total irrigated acres in the Southwest Florida Water Management District in Hernando, Highlands, Hillsborough, and Lake Counties, 1980.

FRESHWATER WITHDRAWN, IN MILLION GALLONS PER DAY

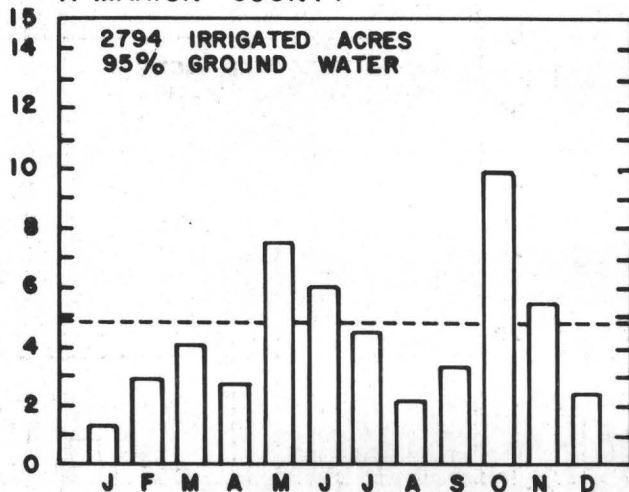
* LEVY COUNTY



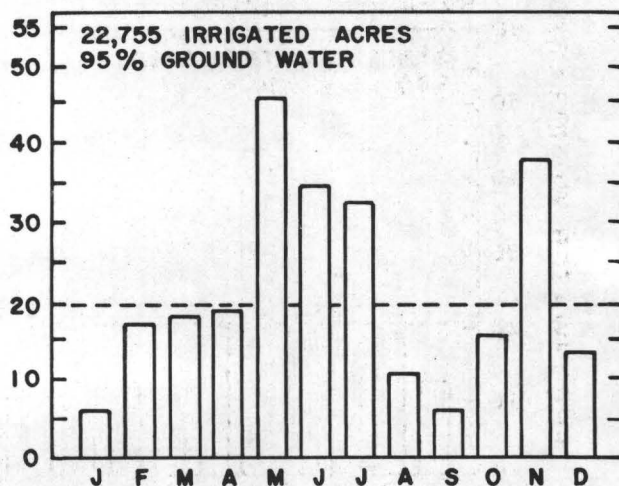
MANATEE COUNTY



* MARION COUNTY



PASCO COUNTY



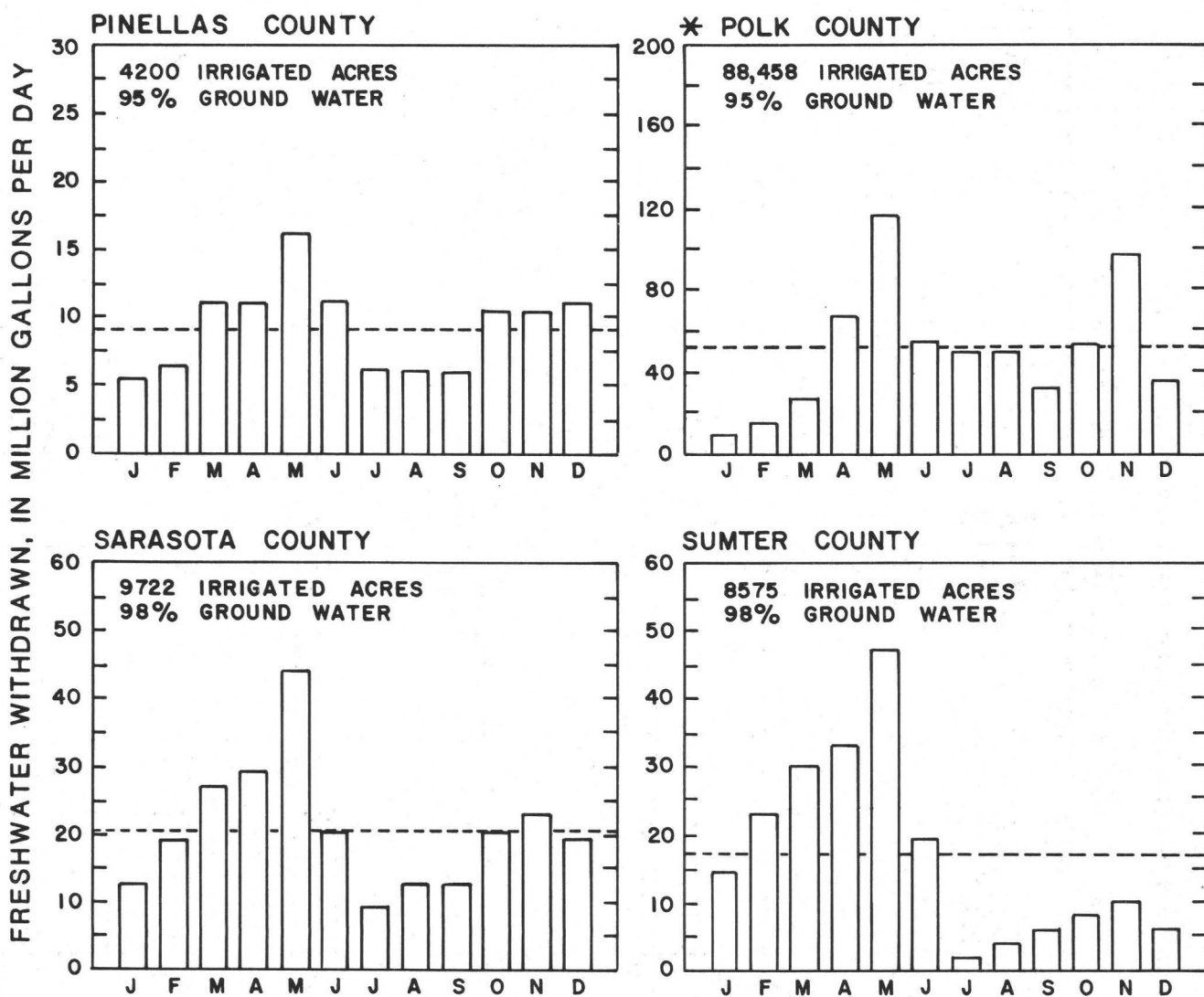
EXPLANATION

AVERAGE DAILY WITHDRAWAL
(TOTAL WITHDRAWAL / 366)

*

DOES NOT INCLUDE WATER WITHDRAWN
OUTSIDE THE SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT

Figure 25.--Monthly irrigation freshwater use and total irrigated acres in the Southwest Florida Water Management District in Levy, Manatee, Marion, and Pasco Counties, 1980.



EXPLANATION

AVERAGE DAILY WITHDRAWAL
(TOTAL WITHDRAWAL / 366)

*

DOES NOT INCLUDE WATER WITHDRAWN
OUTSIDE THE SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT

Figure 26.--Monthly irrigation freshwater use and total irrigated acres in the Southwest Florida Water Management District in Pinellas, Polk, Sarasota, and Sumter Counties, 1980.

TABLE 6.--IRRIGATION WATER USE AND IRRIGATED ACRES BY COUNTIES,1980

****WATER MANAGEMENT****			TRUCK FARMING--INCLUDES TOMATOES,PEPPERS,CUCUMBERS,STRAWBERRIES, CANTALOPES AND OTHER VEGETABLES. ACREAGE HARVESTED AND REPLANTED TO THE SAME CROP IS COUNTED TWICE.							
****DISTRICT CODES****			PASTURE--INCLUDES UNIMPROVED GRAZING GRASS,HAY,CLOVER AND RYE.							
SWM-SOUTHWEST FLORIDA SRM-SUWANNEE RIVER			TURF--INCLUDES SOD,LAWNS,PARKS,CEMETERIES AND GOLF COURSES.							
SFM-SOUTH FLORIDA SJM-ST JOHNS RIVER			OTHER INCLUDES ORNAMENTALS,PEACHES AND FISH FARMS.							
(GW-GROUND WATER;SW-SURFACE WATER)										
			*****IRRIGATED ACRES BY CROP TYPE*****							
COUNTY, WATER MANAGEMENT DIS- TRICT,HYDROLOGIC UNIT	FRESHWATER WITHDRAWN (MGAL/D)		CITRUS	MELONS	TRUCK FARMING	PASTURE	CORN	TURF	OTHER	TOTAL
	GW	SW								
CHARLOTTE										
SFM-03090205	1.64	0.18	400	150	405	160	30	0	0	1145
SWM-03100101	12.37	1.37	2200	825	2230	880	165	990	184	7474
SWM-03100102	2.25	0.25	400	150	405	160	30	180	35	1360
SWM-03100103	5.62	0.62	1000	375	1010	400	75	450	85	3395
SWM-03100201	0.61	0.07	0	0	0	0	0	180	35	215
(SWM)SUBTOTAL	20.85	2.31	3600	1350	3645	1440	270	1800	339	12444
TOTAL FOR CHARLOTTE	22.49	2.49	4000	1500	4050	1600	300	1800	339	13589
CITRUS										
SWM-03100207	1.34	0.00	10	60	15	50	50	450	5	640
SWM-03100208	2.60	0.23	90	240	65	150	200	680	50	1475
(SWM)SUBTOTAL	3.94	0.23	100	300	80	200	250	1130	55	2115
TOTAL FOR CITRUS	3.94	0.23	100	300	80	200	250	1130	55	2115
DE SOTO										
SWM-03100101	33.30	1.03	31000	2000	2640	1500	4000	1830	115	43085
(SWM)SUBTOTAL	33.30	1.03	31000	2000	2640	1500	4000	1830	115	43085
TOTAL FOR DE SOTO	33.30	1.03	31000	2000	2640	1500	4000	1830	115	43085
HARDEE										
SWM-03100101	38.90	0.00	26000	1500	2640	2000	30	435	60	32665

TABLE 6.--IRRIGATION WATER USE AND IRRIGATED ACRES BY COUNTIES,1980--CONTINUED

COUNTY, WATER MANAGEMENT DIS- TRICT, HYDROLOGIC UNIT	FRESHWATER WITHDRAWN (MGAL/D)		*****IRRIGATED ACRES BY CROP TYPE*****							
	GW	SW	CITRUS	MELONS	TRUCK FARMING	PASTURE	CORN	TURF	OTHER	TOTAL
(SWM) SUBTOTAL	38.90	0.00	26000	1500	2640	2000	30	435	60	32665
TOTAL FOR HARDEE	38.90	0.00	26000	1500	2640	2000	30	435	60	32665
HERNANDO										
SWM-03100207	2.43	0.00	540	80	0	80	40	620	385	1745
SWM-03100208	1.54	0.00	1260	120	0	120	10	110	145	1765
(SWM) SUBTOTAL	3.97	0.00	1800	200	0	200	50	730	530	3510
TOTAL FOR HERNANDO	3.97	0.00	1800	200	0	200	50	730	530	3510
HIGHLANDS										
SFM-03090101	7.78	0.86	1500	0	0	8640	0	0	1000	11140
SFM-03090103	5.92	23.68	0	0	600	43200	0	0	0	43800
SWM-03090101	38.43	4.27	28100	0	0	2160	0	5000	600	35860
SWM-03090103	0.66	2.64	3700	0	0	0	0	0	0	3700
SWM-03100101	3.30	0.00	3700	0	0	0	0	0	0	3700
(SWM) SUBTOTAL	42.39	6.91	35500	0	0	2160	0	5000	600	43260
TOTAL FOR HIGHLANDS	56.09	31.45	37000	0	600	54000	0	5000	1600	98200
HILLSBOROUGH										
SWM-03100203	13.25	0.41	3900	60	2745	300	30	185	222	7442
SWM-03100204	20.84	0.64	10400	50	3725	400	25	555	440	15595
SWM-03100205	16.18	0.50	5200	20	1635	150	10	1850	430	9295
SWM-03100206	20.40	0.63	6500	70	3445	150	35	1110	310	11620
(SWM) SUBTOTAL	70.67	2.18	26000	200	11550	1000	100	3700	1402	43952
TOTAL FOR HILLSBOROUGH	70.67	2.18	26000	200	11550	1000	100	3700	1402	43952
LAKE										
SJM-03080101	0.79	0.09	0	0	0	1000	0	50	29	1079
SJM-03080102	53.83	5.98	48000	1000	5085	700	6000	900	522	62207
SJM-03090101	4.82	0.54	6000	0	0	0	0	0	0	6000
SJM-03100208	5.33	0.59	6000	0	215	150	0	50	31	6446
SWM-03100208	0.12	0.01	0	0	50	150	0	0	0	200

TABLE 6.--IRRIGATION WATER USE AND IRRIGATED ACRES BY COUNTIES, 1980--CONTINUED

COUNTY, WATER MANAGEMENT DIS- TRICT, HYDROLOGIC UNIT	FRESHWATER WITHDRAWN (MGAL/D)		*****IRRIGATED ACRES BY CROP TYPE*****							
	GW	SW	CITRUS	MELONS	TRUCK FARMING	PASTURE	CORN	TURF	OTHER	TOTAL
(SWM) SUBTOTAL	0.12	0.01	0	0	50	150	0	0	0	200
TOTAL FOR LAKE	64.89	7.21	60000	1000	5350	2000	6000	1000	582	75932
LEVY										
SRM-03110205	0.72	0.24	0	150	0	430	1600	0	1120	3300
SWM-03080102	0.44	0.16	0	90	0	270	1000	0	700	2060
SWM-03100208	0.07	0.02	0	15	0	40	140	0	95	290
SWM-03110101	0.10	0.00	0	15	0	30	60	0	0	105
(SWM) SUBTOTAL	0.61	0.18	0	120	0	340	1200	0	795	2455
TOTAL FOR LEVY	1.33	0.42	0	270	0	770	2800	0	1915	5755
MANATEE										
SWM-03100102	14.67	0.15	450	250	2090	1750	1350	1530	144	7564
SWM-03100202	29.05	0.29	7200	200	4180	3750	1350	1155	445	18280
SWM-03100203	12.69	0.13	450	50	3135	0	300	380	150	4465
SWM-03100206	8.51	0.09	900	0	1045	0	0	765	295	3005
(SWM) SUBTOTAL	64.92	0.66	9000	500	10450	5500	3000	3830	1034	33314
TOTAL FOR MANATEE	64.92	0.66	9000	500	10450	5500	3000	3830	1034	33314
MARION										
SJM-03080102	13.12	0.69	6600	17	427	125	520	120	1091	8900
SJM-03100208	1.23	0.06	0	52	122	27	200	30	362	793
SWM-03080102	2.79	0.15	0	176	427	96	400	122	605	1826
SWM-03100208	1.36	0.07	0	105	244	27	200	30	362	968
(SWM) SUBTOTAL	4.15	0.22	0	281	671	123	600	152	967	2794
TOTAL FOR MARION	18.50	0.97	6600	350	1220	275	1320	302	2420	12487
PASCO										
SWM-03100205	8.78	0.18	9000	340	525	200	0	190	90	10345
SWM-03100207	4.33	0.54	3000	40	60	300	0	710	65	4175
SWM-03100208	6.18	0.06	8000	20	30	0	0	50	135	8235

TABLE 6.--IRRIGATION WATER USE AND IRRIGATED ACRES BY COUNTIES,1980--CONTINUED

COUNTY, WATER MANAGEMENT DIS- TRICT, HYDROLOGIC UNIT	FRESHWATER WITHDRAWN (MGAL/D) GW SW		*****IRRIGATED ACRES BY CROP TYPE*****							
			CITRUS	MELONS	TRUCK FARMING	PASTURE	CORN	TURF	OTHER	TOTAL
(SWM) SUBTOTAL	19.29	0.78	20000	400	615	500	0	950	290	22755
TOTAL FOR PASCO	19.29	0.78	20000	400	615	500	0	950	290	22755
PINELLAS										
SWM-03100206	3.20	0.17	375	0	0	0	0	1280	20	1675
SWM-03100207	5.55	0.29	125	0	0	0	0	2370	30	2525
(SWM) SUBTOTAL	8.75	0.46	500	0	0	0	0	3650	50	4200
TOTAL FOR PINELLAS	8.75	0.46	500	0	0	0	0	3650	50	4200
POLK										
SFM-03090101	3.03	0.23	4350	75	120	700	7	170	35	5457
SWM-03090101	11.91	0.90	21750	100	160	0	10	700	140	22860
SWM-03100101	28.17	2.12	47850	225	360	700	22	2090	420	51667
SWM-03100204	1.45	0.00	1740	25	40	0	3	170	14	1992
SWM-03100205	1.85	0.02	2610	25	40	0	3	170	16	2864
SWM-03100208	4.76	0.25	8700	50	80	0	5	170	70	9075
(SWM) SUBTOTAL	48.14	3.29	82650	425	680	700	43	3300	660	88458
TOTAL FOR POLK	51.17	3.52	87000	500	800	1400	50	3470	695	93915
SARASOTA										
SWM-03100102	7.13	0.15	120	200	1345	1500	320	410	10	3905
SWM-03100201	13.25	0.27	1080	50	335	500	80	3690	82	5817
(SWM) SUBTOTAL	20.38	0.42	1200	250	1680	2000	400	4100	92	9722
TOTAL FOR SARASOTA	20.38	0.42	1200	250	1680	2000	400	4100	92	9722
SUMTER										
SWM-03100208	16.33	0.33	1000	2000	4655	300	250	350	20	8575
(SWM) SUBTOTAL	16.33	0.33	1000	2000	4655	300	250	350	20	8575
TOTAL FOR SUMTER	16.33	0.33	1000	2000	4655	300	250	350	20	8575

TABLE 6.--IRRIGATION WATER USE AND IRRIGATED ACRES BY COUNTIES, 1980--CONTINUED

COUNTY, WATER MANAGEMENT DIS- TRICT, HYDROLOGIC UNIT	FRESHWATER WITHDRAWN (MGAL/D)		*****IRRIGATED ACRES BY CROP TYPE*****							
	GW	SW	CITRUS	MELONS	TRUCK FARMING	PASTURE	CORN	TURF	OTHER	TOTAL
SWM TOTAL	396.71	19.01	238350	9526	39356	18113	10193	30957	7009	353504
GRAND TOTAL	494.92	52.15	311200	10970	46330	73245	18550	32277	11199	503771

THERMOELECTRIC POWER GENERATION WATER USE

The thermoelectric power generation water-use category includes water used for condenser cooling and for the generation of electrical power. All water is self-supplied surface water except for very small quantities of ground water used for other purposes at powerplants. Most of this ground water is purchased from public-supply systems.

Table 7 shows the total water withdrawn and the total power generated in each county in 1980. Water management districts and hydrologic units are also designated. Table 7 shows that 6,605 Mgal/d of surface water, 389 Mgal/d of which was freshwater, was used in the generation of 36,668 million kilowatt hours of electrical power in the Southwest Florida Water Management District in 1980. The largest county user, Hillsborough County, used 2,180 Mgal/d of saline surface water in the production of 12,607 million kilowatt hours of electrical power. The largest county user of freshwater was Polk County, using 295 Mgal/d in the production of 1,364 million kilowatt hours of electrical power.

TABLE 7.--THERMOELECTRIC POWER GENERATION WATER USE BY COUNTIES,1980

WMDIST-WATER MANAGEMENT DISTRICT (SWM-SOUTHWEST FLORIDA, SFM-SOUTH FLORIDA); KWH-KILOWATT-HOUR.			
COUNTY, WMDIST, HYDROLOGIC UNIT	SURFACE WATER WITHDRAWN IN MGAL/D		ANNUAL POWER GENERATION IN MILLION KWH
	FRESH	SALINE	
CITRUS			
SWM-03100207	0.0	1897.0	8336
(SWM)SUBTOTAL	0.0	1897.0	8336
TOTAL FOR CITRUS	0.0	1897.0	8336
HIGHLANDS			
SWM-03090101	90.1	0.0	278
(SWM)SUBTOTAL	90.1	0.0	278
TOTAL FOR HIGHLANDS	90.1	0.0	278
HILLSBOROUGH			
SWM-03100206	0.0	2180.3	12607
(SWM)SUBTOTAL	0.0	2180.3	12607
TOTAL FOR HILLSBOROUGH	0.0	2180.3	12607
MANATEE			
SWM-03100203	3.6	0.0	6119
(SWM)SUBTOTAL	3.6	0.0	6119
TOTAL FOR MANATEE	3.6	0.0	6119
PASCO			
SWM-03100207	0.0	1339.0	5180
(SWM)SUBTOTAL	0.0	1339.0	5180
TOTAL FOR PASCO	0.0	1339.0	5180

TABLE 7.--THERMOELECTRIC POWER GENERATION WATER USE BY COUNTIES, 1980--CONTINUED

COUNTY, WMDIST, HYDROLOGIC UNIT	SURFACE WATER WITHDRAWN IN MGAL/D		ANNUAL POWER GENERATION IN MILLION KWH
	FRESH	SALINE	
PINELLAS			
SWM-03100207	0.0	800.0	2784
(SWM) SUBTOTAL	0.0	800.0	2784
TOTAL FOR PINELLAS	0.0	800.0	2784
POLK			
SWM-03100101	295.0	0.0	1364
(SWM) SUBTOTAL	295.0	0.0	1364
TOTAL FOR POLK	295.0	0.0	1364
SWM TOTAL	388.7	6216.3	36668
GRAND TOTAL	388.7	6216.3	36668

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