

**TECHNICAL PUBLICATION SJ 85-7
ANNUAL WATER USE SURVEY: 1984**

By

Richard Marella

**Water Resources Department
St. Johns River Water Management District
Palatka, Florida**

August 1985

15/20 023 03

TABLE OF CONTENTS

	Page
Introduction.....	2
Water Use by Category	
Public Supply.....	4
Domestic Self-Supplied.....	7
Industrial Self-Supplied.....	9
Agricultural Irrigation.....	11
Thermoelectric Power Generation.....	14
Heat Pump/Air Conditioning.....	16
Free-Flowing Wells.....	16
Summary.....	19
Water Use by County.....	21
Water Use by Surface Water Basin.....	25
References.....	29
Appendix.....	30
Additional Water Use Information.....	113

LIST OF FIGURES

Figure	Page
1 St. Johns River Water Management District.....	1
2 County Population Within the SJRWMD	
Served by Public Supply - SJRWMD 1984.....	2
3 Acres Farmed and Irrigated by County - SJRWMD 1984.....	13
4 Generalized Area of Potential	
Free-Flowing Artesian Wells.....	18
5 1984 Water Use by Category.....	20
6 1984 Water Use by County.....	23
7 County Water Use by Source - SJRWMD 1984.....	24
8 1984 Water Use by Surface Water Basin.....	27
9 Surface Water Basin Map.....	28

LIST OF TABLES

Table	Page
1 Public Fresh Water Use (MGD): 1984.....	5
2 Domestic Self-Supplied Fresh Water Use (MGD): 1984.....	8
3 Industrial Self-Supplied Fresh Water Use (MGD): 1984....	10
4 Agricultural Irrigation Fresh Water Use (MGD): 1984.....	12
5 Thermoelectric Fresh Water Use (MGD): 1984.....	15
6 Free-Flowing Wells Water Use: 1984.....	17
7 Total Fresh Water Use (MGD) by Category: 1984.....	19
8 Total Fresh Water Use (MGD) by County: 1984.....	22
9 Total Fresh Water Use (MGD) by Surface Water Basin: 1984.....	26

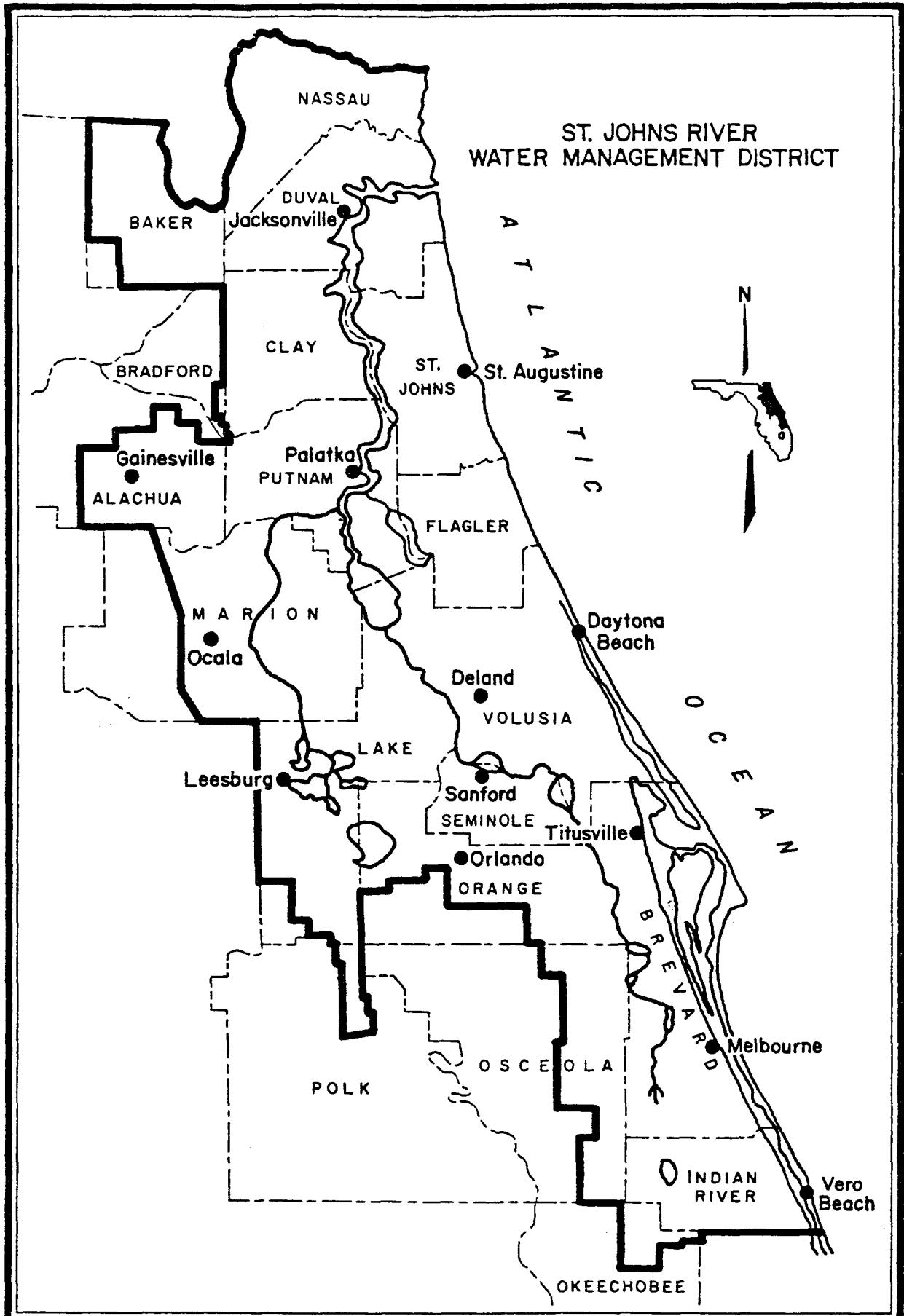


Figure 1 St. Johns River Water Management District

INTRODUCTION

Water use data is collected annually for the 19 counties within the St. Johns River Water Management District (Figure 1). As in past years (1978 thru 1983), the 1984 data has been published in a Technical Report. This report summarizes water use in the St. Johns River Water Management District (SJRWMD) for 1984.

Water use figures are in million gallons per day (MGD). Water use is shown for fresh ground and surface water sources along with total fresh water use. Reclaimed water use (Reuse) is also presented in this report. Water use is compiled for the following categories: public supply; domestic self-supplied; industrial self-supplied (including institutional/recreational self-supplied); agricultural irrigation (including livestock use); thermoelectric power generation; heat pump/air conditioning; and free-flowing wells. Water use is compiled for all of the following counties: Brevard, Clay, Duval, Flagler, Indian River, Nassau, Putnam, Seminole, St. Johns, and Volusia. Water use is also compiled for those portions of Alachua, Baker, Bradford, Lake, Marion, Okeechobee, Orange, Osceola, and Polk Counties which lie within District boundaries.

In addition to this report, a supplement report with detailed pumpage data is available. The supplement report shows pumpage for individual public suppliers, industries, institutions, and thermoelectric power plants. Pumpage data is shown in million gallons per month as well as total million gallons and MGD. This detailed

report (Technical Publication SJ 85-7: Supplement Data) is available through the Department of Water Resources of the St. Johns River Water Management District.

Data for public supplies (159), self-supplied industries (46), institutions (23), and thermoelectric power plants (11) is collected by the SJRWMD. Agricultural water use is estimated from the data provided by representatives of the Institute of Food and Agricultural Sciences (IFAS), the USDA Soil Conservation Service (SCS), and the USDA Agricultural Stabilization and Conservation Service (ASCS). Supplemental irrigation needs for crops in this report were computed using the modified Blaney-Criddle irrigation computer model(1) and the 30-year mean of rainfall and temperature. The heat pump/air conditioning figures are calculated from the Brevard County well inventory list 1975-77, the Volusia County Vol-Data File (USGS 11/20/80), and conversations with Heating Ventilation Air Conditioner (HVAC) dealers in Putnam County. This category is calculated for only three counties: Brevard, Volusia, and Putnam. Data for the remaining 16 counties is presently being inventoried. Data for the free-flowing well inventory is collected by the District as part of the Florida Water Quality Assurance Act of 1983. Water use from free-flowing wells is a new category in the 1984 report.

(1) SCS Technical Release NO. 21, "Irrigation Water Requirements"

WATER USE BY CATEGORY

Public Supply

The total fresh water use for public supply in 1984 amounted to 332.06 MGD, of which 318.85 MGD (96%) was ground water and 13.21 MGD (4%) surface water. The surface water was withdrawn from Lake Washington in Brevard County for the City of Melbourne's public supply. This was the only public supplier within the District to use surface water. The ground water total of 318.85 MGD includes 0.84 MGD saline ground water used for reverse osmosis (R/O). Orange (94.81 MGD) and Duval (77.55 MGD) were the counties with the largest public water use (Table 1). Total water withdrawn for public supply in Orange County totaled 120.22 MGD, of which 94.81 MGD was withdrawn in the St. Johns District and the remaining 25.41 was withdrawn in the South Florida District. Orange County's total also includes 20.34 MGD withdrawn for the City of Cocoa's (Brevard County) public supply. Duval County's total includes the District's single largest public supplier, the City of Jacksonville, which accounted for 54.05 MGD.

Duval (485,850) and Orange (400,560) Counties also have the largest number of people served by public supply systems (Figure 2). Total population served by the 159 public or private suppliers (utilities that serve 500 or more) accounted for 79% (2,037,833) of the District's population.

TABLE 1.--Public Fresh Water Use (MGD): 1984

COUNTY	GROUND	SURFACE	TOTAL	PERCENT
ALACHUA	18.23	-	18.23	5.5
BAKER	0.52	-	0.52	*
BRADFORD	-	-	-	-
BREVARD	8.46(1)	13.21	21.67(1)	6.5
CLAY	6.96	-	6.96	2
DUVAL	77.55	-	77.55	24
FLAGLER	1.77	-	1.77	*
INDIAN RIVER	8.08(2)	-	8.08(2)	3
LAKE	14.21	-	14.21	4
MARION	9.16	-	9.16	3
NASSAU	2.89	-	2.89	*
OKEECHOBEE	-	-	-	-
ORANGE	94.81	-	94.81	29
OSCEOLA	-	-	-	-
POLK	-	-	-	-
PUTNAM	2.80	-	2.80	*
SEMINOLE	31.85	-	31.85	10
ST. JOHNS	6.98	-	6.98	2
VOLUSIA	34.58(3)	-	34.58(3)	11
TOTALS	318.85(4)	13.21	332.06(4)	

* Less than 1.0%

(1) Includes 0.01 MGD saline ground water

(2) Includes 0.82 MGD saline ground water

(3) Includes 0.01 MGD saline ground water

(4) Includes 0.84 MGD saline ground water

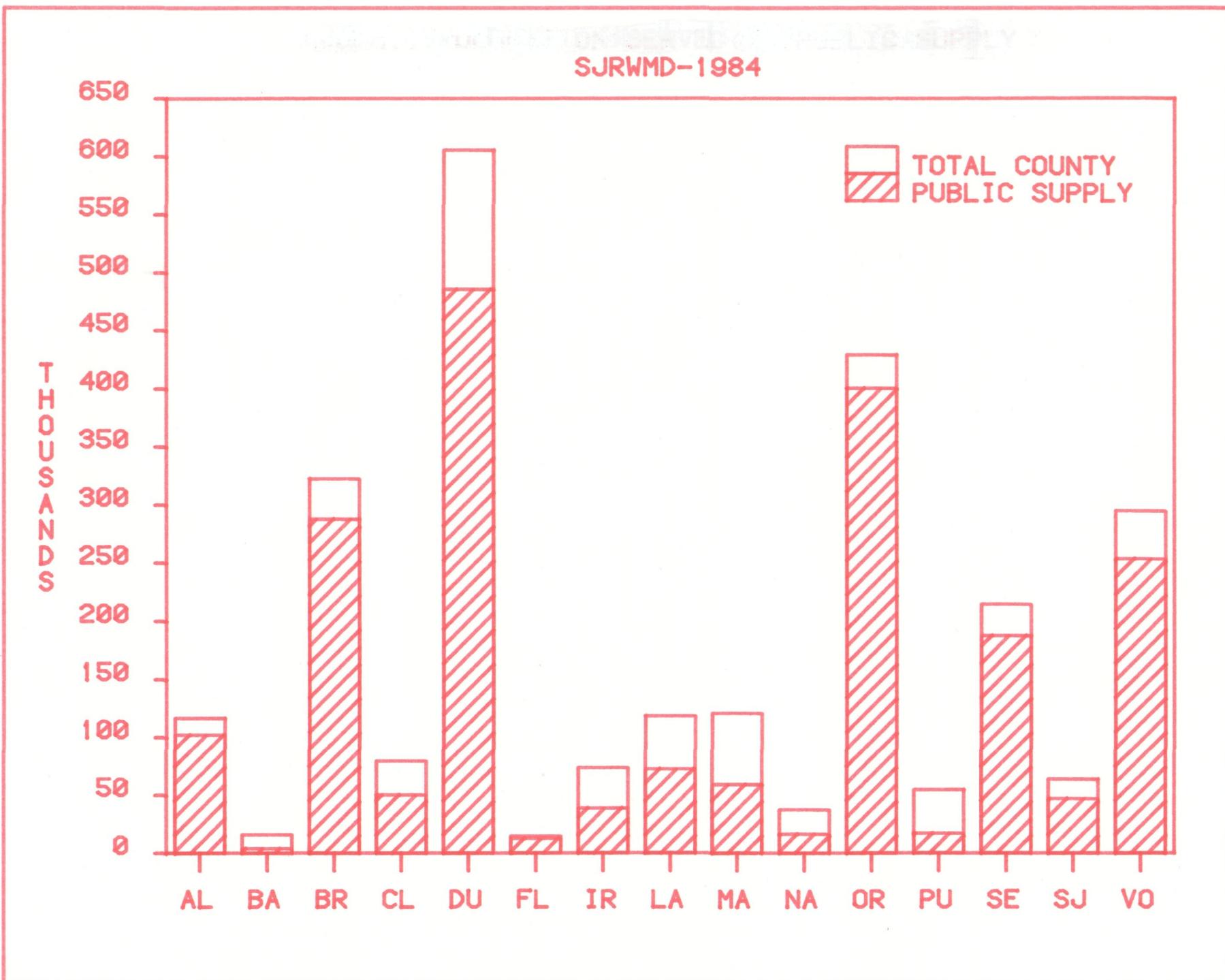


Figure 2.

County Population Served by Public Supply - SJRWMD 1984

Domestic Self-Supplied

Domestic self-supplied fresh water use in 1984 amounted to 87.72 MGD of ground water. An estimated 537,114 people were served by small utilities not inventoried, or were self-supplied. In order to calculate domestic water use, gallons per capita day (GPCD) were estimated for each county, then multiplied by the population not served by public supply. The District 1984 average GPCD was 163, although this figure accounted for public-supplied commercial and industrial water use as well as single family use. This figure also accounted for water used for fire fighting, system flushing, and lost to leakage. Although total per capita includes all uses, industry standards indicate that the actual per capita for indoor use is 60 to 80 gallons per person per day.

In addition to GPCD, total domestic self-supplied water use was calculated for each county (Table 2). Duval (19.17 MGD), Marion (9.58 MGD), Lake (8.93 MGD), and Indian River (7.34 MGD) were the counties with the largest domestic self-supplied water use for 1984.

TABLE 2.--Domestic Self-Supplied Fresh Water Use (MGD): 1984

COUNTY	GROUND	SURFACE	TOTAL	PERCENT
ALACHUA	2.47	-	2.47	2
BAKER	1.50	-	1.50	2
BRADFORD	0.27	-	0.27	*
BREVARD	5.09	-	5.09	6
CLAY	4.07	-	4.07	5
DUVAL	19.17	-	19.17	22
FLAGLER	0.29	-	0.29	*
INDIAN RIVER	7.34	-	7.34	9
LAKE	8.93	-	8.93	10
MARION	9.58	-	9.58	11
NASSAU	3.75	-	3.75	4
OKEECHOBEE	0.06	-	0.06	*
ORANGE	5.41	-	5.41	6
OSCEOLA	0.06	-	0.06	*
POLK	0.84	-	0.84	*
PUTNAM	6.09	-	6.09	7
SEMINOLE	4.62	-	4.62	5
ST. JOHNS	2.52	-	2.52	3
VOLUSIA	5.66	-	5.66	7
TOTALS	87.72	-	87.72	

* Less than 1.0%

Industrial Self-Supplied

Industrial self-supplied fresh water use for 1984 accounted for 150.24 MGD, of which 137.33 MGD (91%) was ground water and 12.91 MGD (9%) surface water. Industrial self-supplied use includes 9.14 MGD of institutional/recreational self-supplied water use. Duval (40.07 MGD), Putnam (38.84 MGD), and Nassau (36.0 MGD) were the counties with the largest industrial water use (Table 3). Pulp and paper processors were the major industrial water users in Duval, Putnam, and Nassau Counties. Fresh water use for pulp and paper processors in 1984 totaled 102.85 MGD, of which 87% (90.02 MGD) was ground water. Lake County (16.43 MGD) was the only other county with a substantial amount of industrial water use, with the primary industries being mining and citrus processing.

TABLE 3.--Industrial Self-Supplied Fresh Water Use (MGD): 1984

COUNTY	GROUND	SURFACE	TOTAL	PERCENT
ALACHUA	1.30	0.09	1.39	*
BAKER	0.18	-	0.18	*
BRADFORD	-	-	-	-
BREVARD	0.14	-	0.14	*
CLAY	5.42	-	5.42	4
DUVAL	40.07	-	40.07	27
FLAGLER	0.10	-	0.10	*
INDIAN RIVER	0.26	-	0.26	*
LAKE	16.43	-	16.43	11
MARION	0.22	-	0.22	*
NASSAU	36.00	-	36.00	24
OKEECHOBEE	-	-	-	-
ORANGE	5.29	-	5.29	4
OSCEOLA	-	-	-	-
POLK	-	-	-	-
PUTNAM	26.02	12.82	38.84	26
SEMINOLE	5.29	-	5.29	4
ST. JOHNS	0.06	-	0.06	*
VOLUSIA	0.55	-	0.55	*
TOTALS	137.33	12.91	150.24	

* Less than 1.0%

Agricultural Irrigation

Agricultural irrigation fresh water use, which includes livestock water use, was the largest water use category in 1984 accounting for 753.90 MGD. Total ground water withdrawn amounted to 492.58 MGD (65%), and the remaining 261.32 MGD (35%) was surface water. In addition to ground and surface water use, 6.26 MGD of reclaimed (reuse) water was used for irrigation purposes. Reclaimed water was used for irrigation on pasture, turf grass (golf courses), and sod production.

Indian River (263.03 MGD), Brevard (101.88 MGD), Lake (103.82 MGD), and Orange (77.55 MGD) were the counties with the largest agricultural irrigation water use (Table 4). Improved pasture and citrus were the largest water use crops in these four counties.

Total agricultural acreage for 1984 was 1,129,195 of which 34% was irrigated (382,056). Differences in irrigation acreage between 1983 and 1984 show gains in carrots (4,000) and potatoes (2,300) and losses in citrus (2,491). The citrus acreage shown in this report does not reflect the total acreage lost to the Christmas Day freeze of 1983. Agricultural agents and citrus growers are currently estimating losses from the freeze. Indian River (109,007), Lake (70,133), Orange (51,103), and Brevard (45,157) Counties accounted for 72% of the irrigated acres (Figure 3).

Pumpage data for selected crops is currently being inventoried through the Benchmark Farms program. This program will enable the District to evaluate actual water use for irrigation purposes and help in determining supplemental irrigation requirements.

TABLE 4.--Agricultural Irrigation Fresh Water Use (MGD): 1984

COUNTY	GROUND	SURFACE	REUSE	TOTAL	PERCENT
ALACHUA	9.80	1.33	-	11.13	2
BAKER	2.29	1.05	-	3.34	*
BRADFORD	0.10	-	-	0.10	*
BREVARD	85.43	16.45	0.46	101.88(1)	14
CLAY	2.00	1.40	-	3.40	*
DUVAL	4.62	2.37	1.56	6.99(1)	1
FLAGLER	6.13	0.48	-	6.21	1
INDIAN RIVER	88.63	174.40	0.51	263.03(1)	35
LAKE	85.81	18.60	2.52	103.82	14
MARION	13.31	2.45	0.13	15.76(1)	2
NASSAU	1.30	0.87	0.19	2.17(1)	*
OKEECHOBEE	14.27	1.78	-	16.05	2
ORANGE	47.33	30.22	-	77.55	10
OSCEOLA	7.54	0.87	-	8.41	1
POLK	13.61	1.51	-	15.12	2
PUTNAM	21.42	1.10	-	22.52	3
SEMINOLE	31.49	0.75	0.28	32.24(1)	4
ST. JOHNS	34.49	1.43	0.61	35.92(1)	5
VOLUSIA	23.01	4.85	-	27.86	4
TOTALS	492.58	261.32	6.26	753.90(1)	

* Less than 1.0%

(1) Reuse is not included in Total MGD

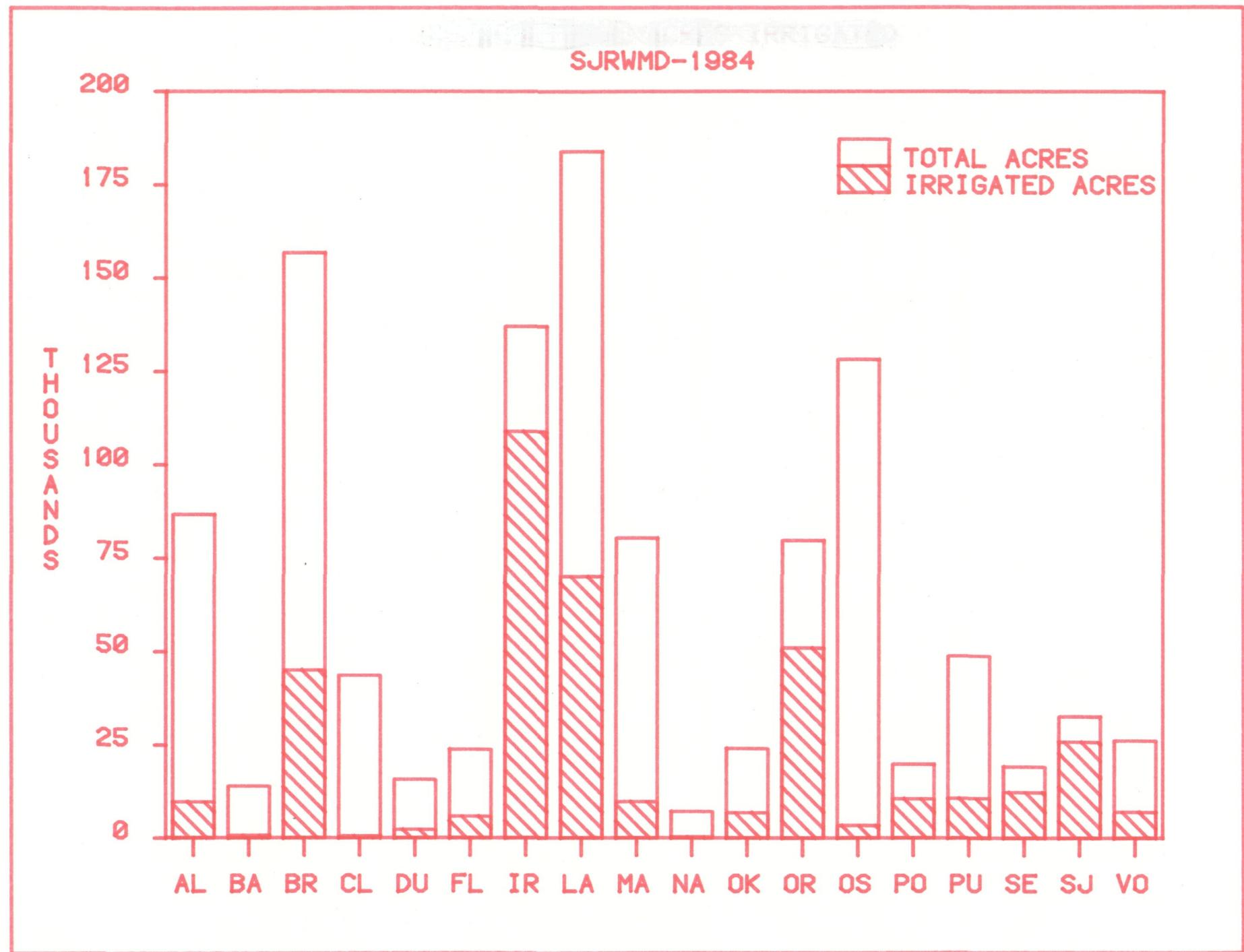


Figure 3.

Acres Farmed and Irrigated by County - SJRWMD 1984

Thermoelectric Power Generation

Thermoelectric power generation fresh water use in 1984 amounted to 7.12 MGD. Ground water use totaled 4.55 MGD (64%) while surface water use totaled 2.57 MGD (36%). Duval (2.79 MGD) and Putnam (2.39 MGD) were the two counties with a significant fresh water use in 1984 (Table 5).

The total fresh water use from the 11 power plants within the District represents less than 1.0% of the total water use for this category. The majority of water use for thermoelectric power generation is saline surface water (not accounted for in this report). In 1984, total saline surface water use for this category amounted to 1,397.45 MGD.

TABLE 5.--Thermoelectric Fresh Water Use (MGD): 1984

COUNTY	GROUND	SURFACE	TOTAL	PERCENT
ALACHUA	0.30	-	0.30	4
BAKER	-	-	-	-
BRADFORD	-	-	-	-
BREVARD	0.28	-	0.28	4
CLAY	-	-	-	-
DUVAL	2.79	-	2.79	39
FLAGLER	-	-	-	-
INDIAN RIVER	0.31	-	0.31	4
LAKE	-	-	-	-
MARION	-	-	-	-
NASSAU	-	-	-	-
OKEECHOBEE	-	-	-	-
ORANGE	-	-	-	-
OSCEOLA	-	-	-	-
POLK	-	-	-	-
PUTNAM	0.62	1.77	2.39	34
SEMINOLE	-	-	-	-
ST. JOHNS	-	-	-	-
VOLUSIA	0.25	0.80	1.05	15
TOTALS	4.55	2.57	7.12	

* Less than 1.0%

Heat Pump/Air Conditioning

Heat pump/air conditioning (HP/AC) water use data were collected for three counties: Brevard, Putnam, and Volusia. Total water use for this category in 1984 amounted to 149.96 MGD. Each county's estimated totals are as follows:

Brevard: 16,175 HP/AC units - 141.51 MGD

Putnam: 500 HP/AC units - 2.29 MGD

Volusia: 1,346 HP/AC units - 6.16 MGD

Data for the remaining 16 counties is being inventoried.

Free-Flowing Wells

Uncontrolled free-flowing wells are those wells that are flowing unused water or are abandoned with leaking or broken control devices. Many of these wells are old wells drilled for domestic, agricultural, mosquito control, or test purposes. The Florida Legislature enacted the Water Quality Assurance Act of 1983 which addresses free-flowing wells. As part of this legislation, each water management district was directed to prepare an inventory of these wells.

Estimated flows from the 357 wells inventoried as of January 1985 amounted to 26.05 MGD. It is estimated that this represents approximately 35% to 40% of the free-flowing wells within the District. In Brevard County, 215 wells have been inventoried and estimated flow from the wells is 19.06 MGD (Table 6). Other counties with substantial water use for flowing wells are Marion (1.71 MGD) and Volusia (1.03 MGD). Due to hydrologic conditions, only portions of the District have the potential for free-flowing artesian wells. These areas are shown on Figure 4.

TABLE 6.--Free-Flowing Wells Water Use: 1984

COUNTY	NUMBER OF WELLS INVENTORIED	ESTIAMTED PERCENTAGE OF WELLS INVENTORIED	TOTAL MGD	PERCENT
ALACHUA	-	-	-	-
BAKER	0	0	0.0	-
BRADFORD	-	-	-	-
BREVARD	215	80	19.06	73
CLAY	9	30	0.79	3
DUVAL	13	50	0.51	2
FLAGLER	16	50	0.47	2
INDIAN RIVER	11	50	0.49	2
LAKE	3	50	0.49	2
MARION	10	50	1.71	7
NASSAU	2	40	0.02	*
OKEECHOBEE	0	0	0.0	-
ORANGE	1	20	0.02	*
OSCEOLA	0	0	0.0	-
POLK	-	-	-	-
PUTNAM	26	50	0.55	2
SEMINOLE	4	50	0.04	*
ST. JOHNS	25	50	0.87	3
VOLUSIA	22	50	1.03	4
TOTALS	357	40	26.05	

* Less than 1.0%

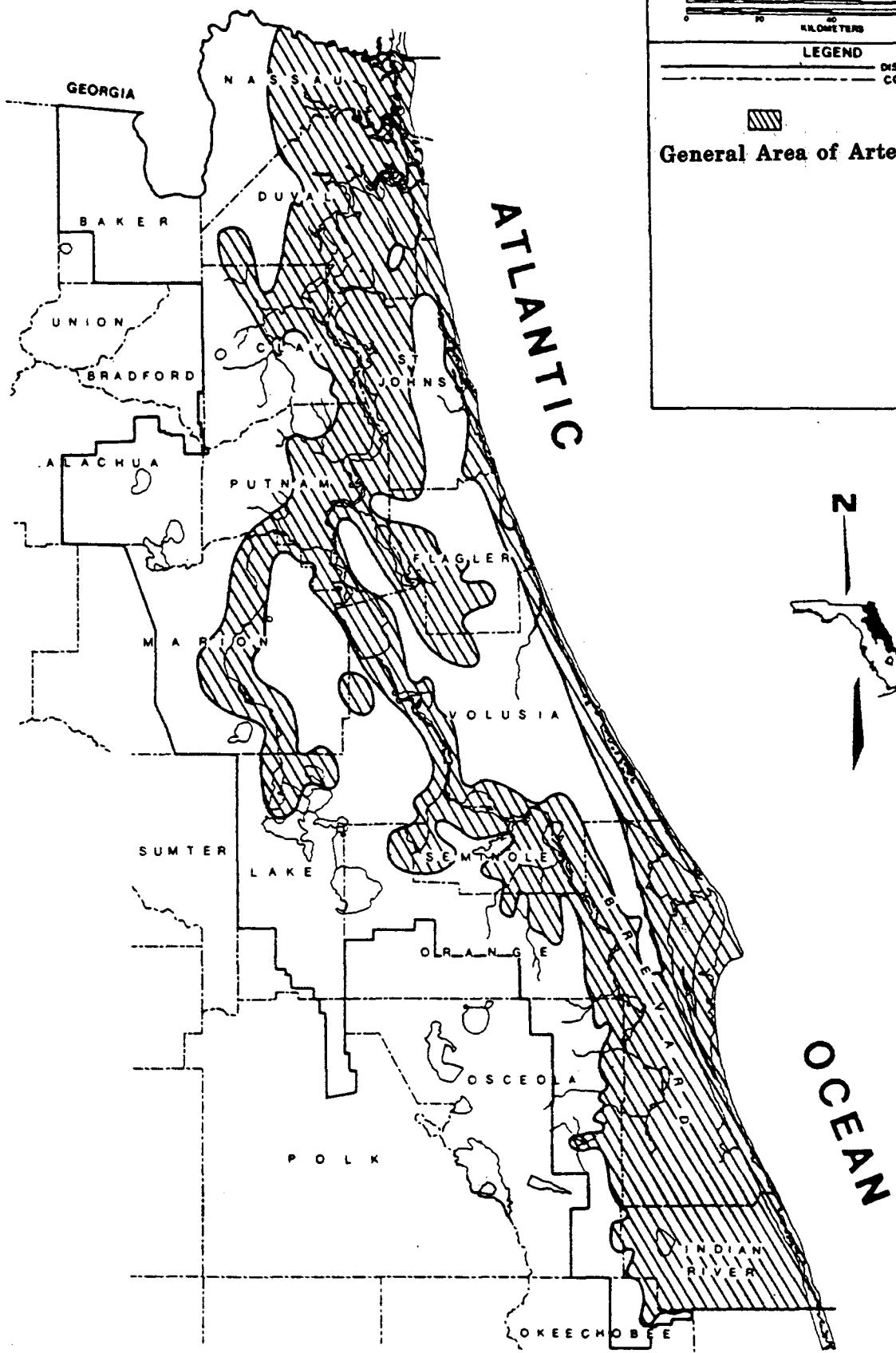
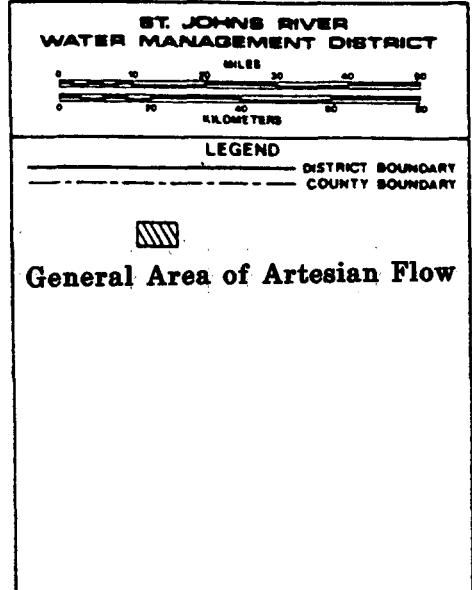


Figure 4. Generalized Area of Potential Free-Fowing Artesian Wells,

Summary

Agricultural irrigation was the largest fresh water use category for 1984 (Table 7). This category accounted for 40% of the ground water and 90% of the total fresh surface water used within the District (Figure 5). The second largest category was public supply using 26% of the total fresh ground water and 5% of the total fresh surface water. Other categories with substantial amounts of ground water use were heat pump/air conditioning (12%), industrial self-supplied (11%), and domestic self-supplied (7%). free-flowing wells accounted for 2%, and thermoelectric power generation accounted for less than 1% (0.4%) of the total ground water used in 1984.

The major fresh surface water use category in 1984 was agricultural irrigation, accounting for 90% of the total surface water use. Public supply, Industrial self-supplied, and Thermoelectric Power Generation accounted for the remaining 10% of total fresh surface water use.

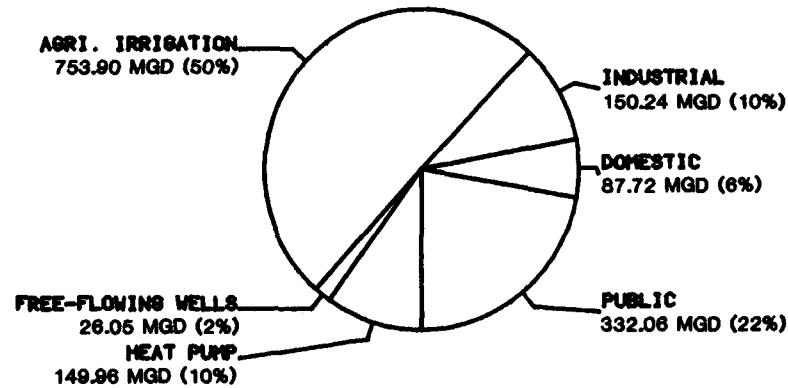
TABLE 7.--Total Fresh Water Use (MGD) by Category: 1984

	GROUND	SURFACE	REUSE	TOTAL
Public	318.85(1)	13.21	-	332.06
Domestic	87.72	-	-	87.72
Industrial	137.33	12.91	-	150.24
Agr. Irrigation	492.58	261.32	6.26	753.90(2)
Thermoelectric	4.55	2.57	-	7.12
Heat Pump/AC	149.96	-	-	149.96
Free-Flowing Wells	26.05	-	-	26.05
TOTAL	1,217.04(1)	290.01	6.26	1,507.05(2)

(1) Includes 0.84 MGD saline ground water

(2) Does not include reuse water in totals

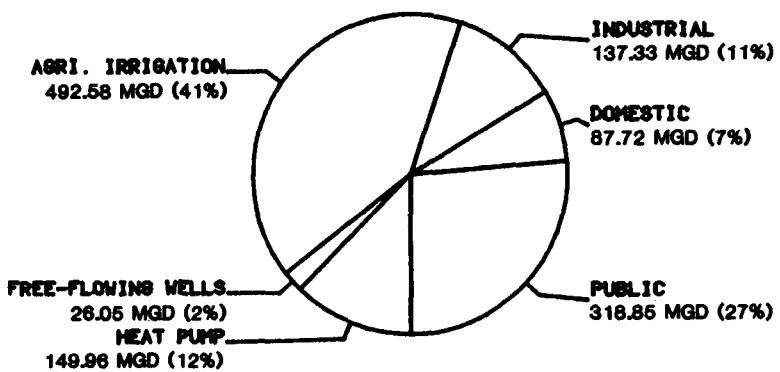
FRESH WATER USE (MGD) BY CATEGORY 1984



NOTE: THERMOELECTRIC (7.12 MGD) IS TOO SMALL TO DEPICT
(LESS THAN 1.0%).

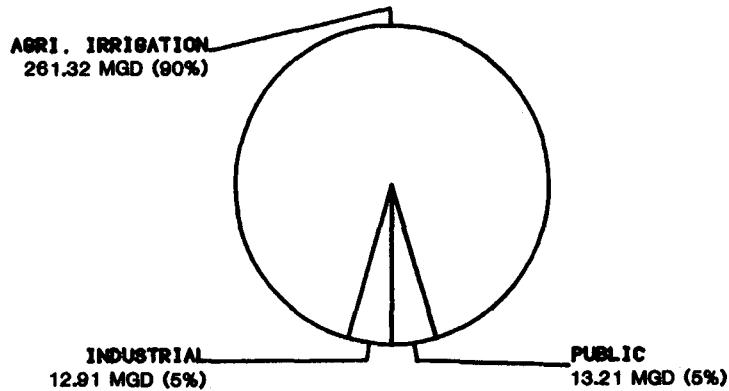
20

FRESH GROUND WATER USE (MGD) BY CATEGORY 1984



NOTE: THERMOELECTRIC (4.55 MGD) IS TOO SMALL TO DEPICT
(LESS THAN 1.0%).

FRESH SURFACE WATER USE (MGD) BY CATEGORY 1984



NOTE: THERMOELECTRIC (2.57 MGD) IS TOO SMALL TO DEPICT
(LESS THAN 1.0%).

Figure 5,

1984 Water Use by Category

WATER USE BY COUNTY

Brevard and Indian River Counties were the largest users of fresh water for 1984 (Table 8), accounting for 289.63 MGD (19%) and 279.51 MGD (18.5%), respectively. Orange (183.08 MGD), Duval (148.37 MGD), and Lake (143.88 MGD) were the next three largest fresh water use counties. These five counties accounted for 69% of the total fresh water use (Figure 6).

Brevard County, the largest fresh ground water use county in 1984, accounted for 259.97 MGD (21%). Other counties which withdrew over 100 MGD of fresh ground water were Orange (152.86 MGD), Duval (144.71 MGD), Lake (125.87 MGD), and Indian River (105.11 MGD). Indian River and Brevard Counties' totals include 0.82 MGD and 0.01 MGD, respectively, of saline ground water used for reverse osmosis.

Indian River County was the largest fresh surface water use county in 1984, accounting for 174.40 MGD (60%). Other counties using substantial amounts of surface water were Orange (30.22 MGD), Brevard (29.66 MGD), and Lake (18.01 MGD). Lake (2.52 MGD) and Duval (1.56 MGD) Counties used the largest amount of reuse water (65%).

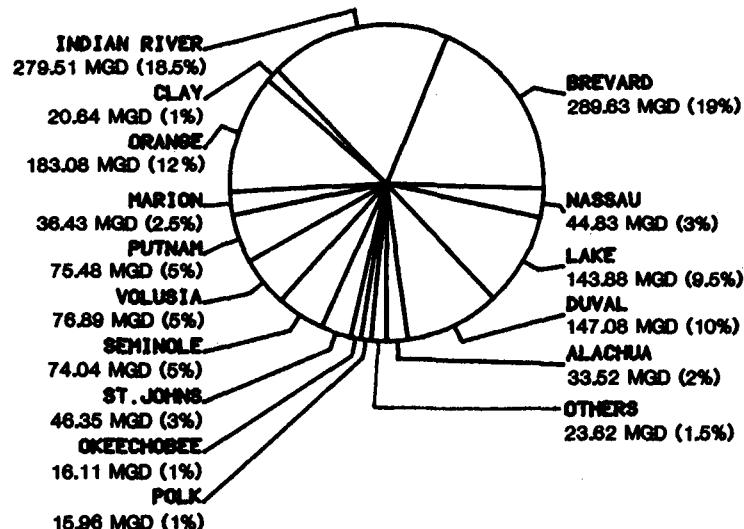
Figure 7 shows each county's fresh water use by source (refer to Table 9 for actual values). Water use shown for those counties partially within the SJRWMD (Alachua, Baker, Bradford, Lake, Marion, Okeechobee, Orange, Osceola, and Polk) represents the data from the St. Johns portion only. The remaining portions of those counties are not accounted for in this report.

TABLE 8.--Total Fresh Water Use (MGD) by County: 1984

COUNTY	GROUND	SURFACE	REUSE	TOTAL	PERCENT
ALACHUA	32.10	1.42	-	33.52	2
BAKER	4.49	1.05	-	5.54	*
BRADFORD	0.37	-	-	0.37	*
BREVARD	259.97	29.66	0.46	289.63	19
CLAY	19.24	1.40	-	20.64	1
DUVAL	144.71	2.37	1.56	147.08	10
FLAGLER	8.76	0.48	*	9.24	*
INDIAN RIVER	105.11	174.40	0.51	279.51	18.5
LAKE	125.87	18.01	2.52	143.88	9.5
MARION	33.98	2.45	0.13	36.43	2.5
NASSAU	43.96	0.87	0.19	44.83	3
OKEECHOBEE	14.33	1.78	-	16.11	1
ORANGE	152.86	30.22	-	183.08	12
OSCEOLA	7.60	0.87	-	8.47	*
POLK	14.45	1.51	-	15.96	1
PUTNAM	59.79	15.69	-	75.48	5
SEMINOLE	73.29	0.75	0.28	74.04	5
ST. JOHNS	44.92	1.43	0.61	46.35	3
VOLUSIA	71.24	5.65	-	76.89	5
TOTALS	1,217.04	290.01	6.26	1,507.05	

* Less than 1.0%, the combined total of these equals the remaining 1.5 percent.

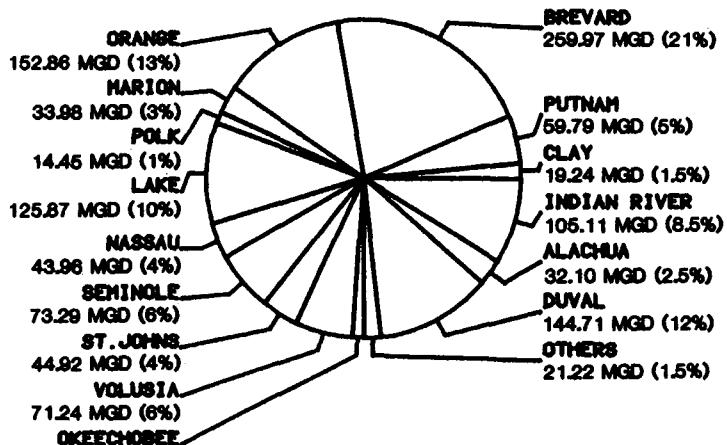
FRESH WATER USE (MGD) BY COUNTY - 1984



NOTE: OTHERS INCLUDE BAKER (5.54 MGD), BRADFORD (8.37 MGD), FLAGLER (8.24 MGD), OSCEOLA (8.47 MGD) COUNTIES.

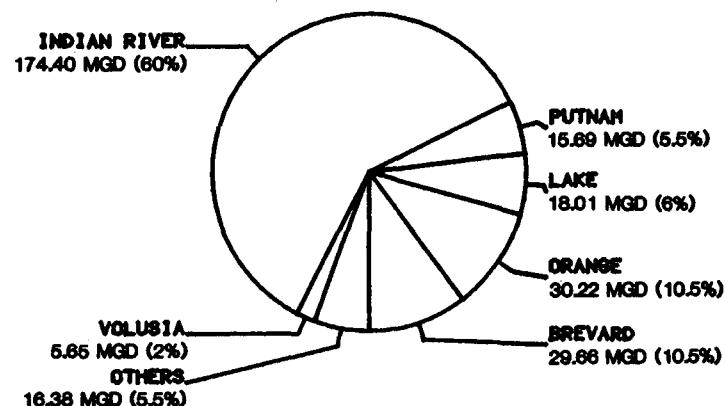
23

FRESH GROUND WATER USE (MGD) BY COUNTY - 1984



NOTE: OTHERS INCLUDE BAKER (4.49 MGD), BRADFORD (8.37 MGD), FLAGLER (8.76 MGD), AND OSCEOLA (7.68 MGD) COUNTIES.

FRESH SURFACE WATER USE (MGD) BY COUNTY - 1984



NOTE: OTHERS INCLUDE ALACHUA (1.42 MGD), BAKER (1.85 MGD), CLAY (1.48 MGD), DUVAL (2.37 MGD), FLAGLER (8.48 MGD), MARION (2.46 MGD), NASSAU (8.67 MGD), OKEECHOBEE (1.76 MGD), OSCEOLA (8.87 MGD), POLK (1.51 MGD), SEMINOLE (8.75 MGD), AND ST. JOHNS (1.43 MGD) COUNTIES.

Figure 6:

1984 Water Use by County

SJRWMD-1984

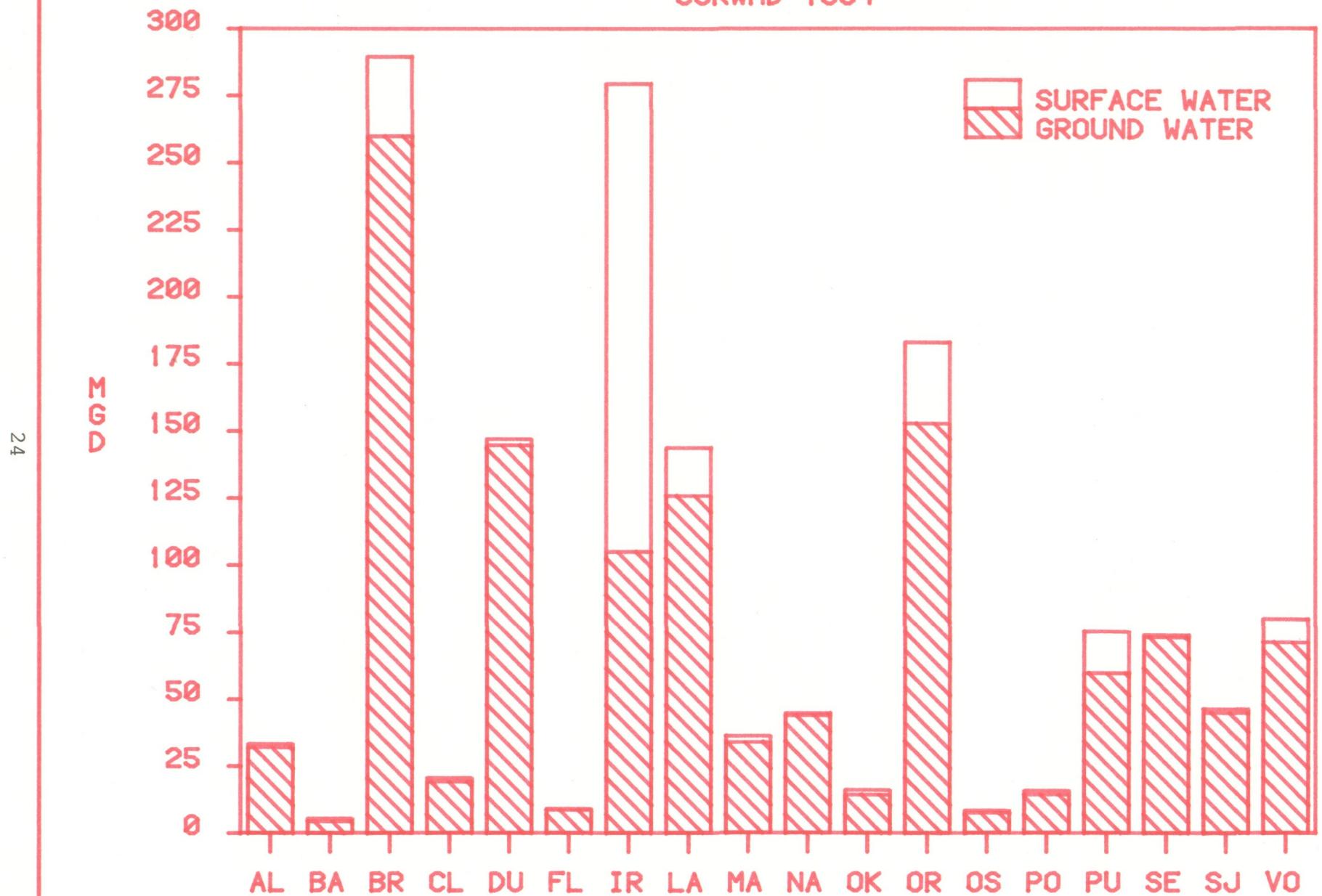


Figure 7.

County Water Use by Source - SJRWMD 1984

WATER USE BY SURFACE WATER BASIN

The Upper St. Johns River Basin was the largest fresh water use basin (402.31 MGD) for 1984 (Table 9). This basin accounted for 61% (175.37 MGD) of the total fresh surface water used in 1984 (Figure 8). The Lower Coastal Basin (38.88 MGD), Oklawaha River Basin (28.96 MGD), Middle St. Johns River Basin (21.80 MGD), and the Lower St. Johns River Basin (21.18 MGD) were the only other significant users of fresh surface water.

The Lower St. Johns River Basin (250.03 MGD), Oklawaha River Basin (234.24 MGD), Upper St. Johns River Basin (226.94 MGD), and the Middle St. Johns River Basin (187.67 MGD) were the largest fresh ground water use basins in 1984. These four basins account for 74% of the ground water withdrawals (refer to Figure 9 for surface water basin locations).

TABLE 9.--Total Fresh Water Use (MGD)
by Surface Water Basin: 1984

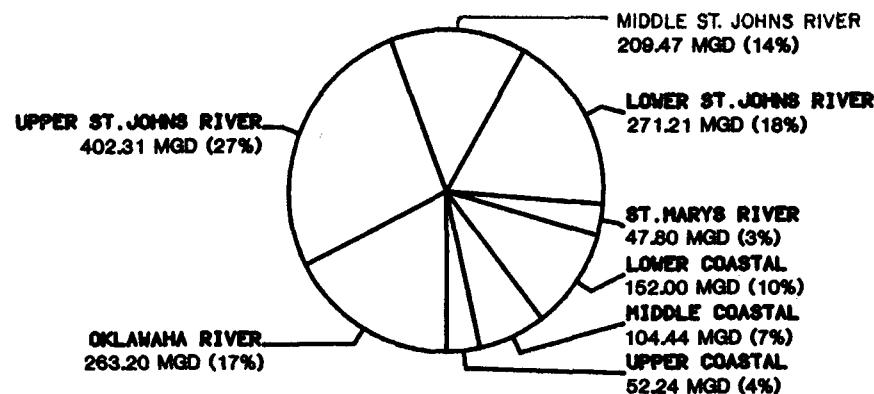
SURFACE WATER BASIN	GROUND %	SURFACE %	TOTAL %
Nassau R.	3.56 *	0.82 *	4.38 *
St. Marys R.	46470 4	1.33 *	47.80 3
Lower St. Johns R.	250.03 21	21.18 7	271.21 18
Middle St. Johns R.	187.67 15	21.80 7	209.47 14
Upper St. Johns R.	226.94 19	175.37 6	402.31 27
Oklawaha R.	234.24 19	28.96 10	263.20 17
Upper Coastal	51.24 4	1.00 *	52.24 4
Middle Coastal	103.77(1) 9	0.67 *	104.44 7
Lower Coastal	113.12(2) 9	38.88 14	152.43 10
TOTAL	1,217.04	290.01	1,507.05

* Less than 1.0%

(1) Includes 0.02 MGD saline ground water

(2) Includes 0.82 MGD saline ground water

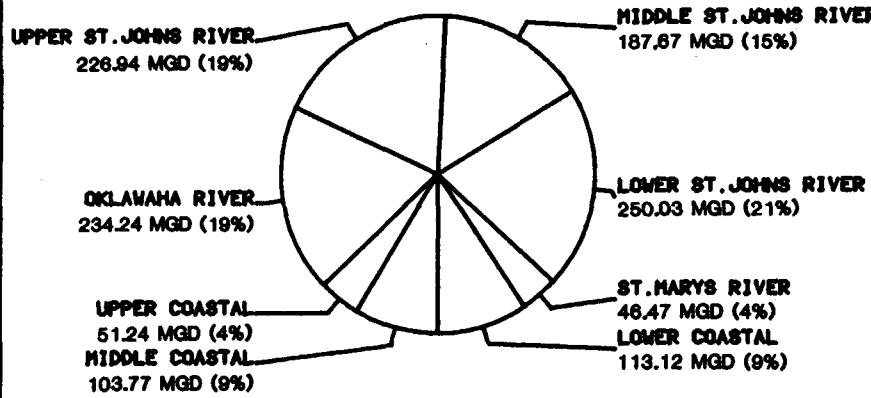
FRESH WATER USE (MGD) BY SURFACE WATER BASIN, 1984



NOTE: NASSAU RIVER BASIN (4.38 MGD) IS TOO SMALL TO DEPICT (LESS THAN 1.0%).

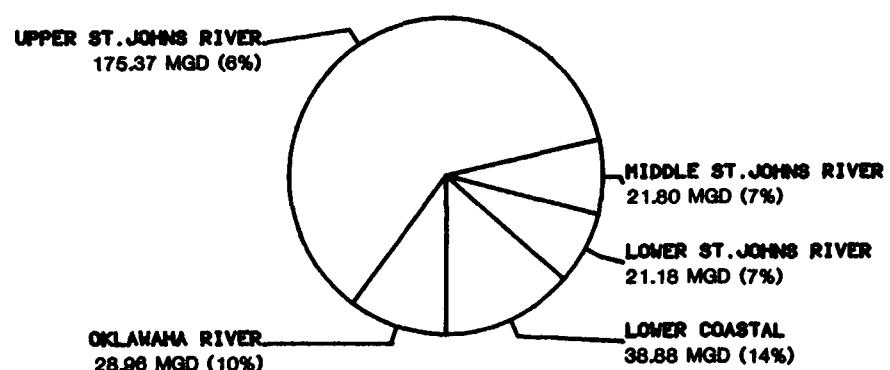
27

FRESH GROUND WATER USE (MGD) BY SURFACE WATER BASIN, 1984



NOTE: NASSAU RIVER BASIN (3.58 MGD) IS TOO SMALL TO DEPICT (LESS THAN 1.0%).

FRESH SURFACE WATER USE (MGD) BY SURFACE WATER BASIN, 1984



NOTE: ST. MARYS RIVER (1.93 MGD), NASSAU RIVER (0.82 MGD), UPPER COASTAL (1.80 MGD) AND MIDDLE COASTAL (0.87 MGD) BASINS ARE TOO SMALL TO DEPICT (LESS THAN 1.0%).

Figure 8.

1984 Water Use by Surface Water Basin

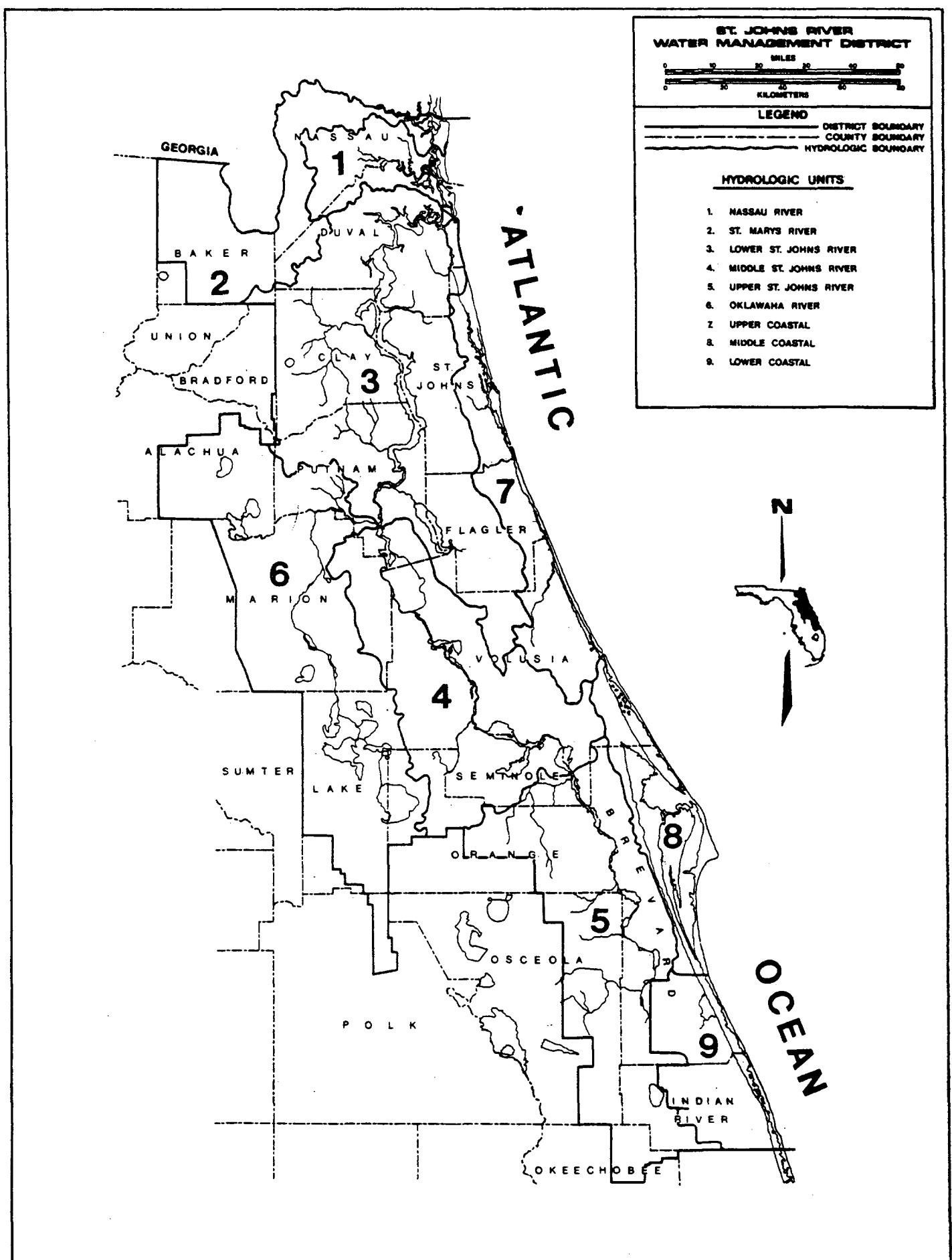


Figure 9.

Surface Water Basin Map

REFERENCES

- Edwards, Scott, Jr., Report on Uncontrolled Free Flowing Artesian Wells, Technical Publication, St, Johns River Water Management District, Palatka, FL, December 1984.
- Florida Estimates of Population: 1984, University of Florida, Bureau of Economic and Business Research, April 1985.
- Healy, H. G., Appraisal of Uncontrolled Free Flowing Artesian Wells in Florida, U. S. Geological Survey WRI78-95, Tallahassee, FL, 1978
- Irrigation Water Requirements; Technical Release No. 21, United States Department of Agricultural-Soil Conservation Service, Washington, D.C., 1971.
- Marella, R. L., and Ford, B. A., Current and Projected Population of the St. Johns River Water Management District, 1980, Technical Publication SJ83-2, St. Johns River Water Management District, Palatka, FL, 1983.
- Mark Hurd, Aerial Photos, 1972. University of Florida, Gainesville, FL, 1983.
- Steward, Joel. An Environmental Evaluation of Water Reuse in the St. Johns River Water Management District, Technical Publication SJ85-2, St. Johns River Water Management District, Palatka, FL, July 1985.
- The 1983-84 Florida Almanac, Gretna, Louisiana: Pelican Publishing Company, 1983.

APPENDIX

	Pages
St. Johns River Water Management District Data.....	31, 32, 33, 34, 35, 36
Alachua County.....	37, 38, 39, 40
Baker County.....	41, 42, 43, 44
Bradford County.....	45, 46, 47, 48
Brevard County.....	49, 50, 51, 52
Clay County.....	53, 54, 55, 56
Duval County.....	57, 58, 59, 60
Flagler County.....	61, 62, 63, 64
Indian River County.....	65, 66, 67, 68
Lake County.....	69, 70, 71, 72
Marion County.....	73, 74, 75, 76
Nassau County.....	77, 78, 79, 80
Okeechobee County.....	81, 82, 83, 84
Orange County.....	85, 86, 87, 88
Osceola County.....	89, 90, 91, 92
Polk County.....	93, 94, 95, 96
Putnam County.....	97, 98, 99, 100
Seminole County.....	101, 102, 103, 104
St. Johns County.....	105, 106, 107, 108
Volusia County.....	109, 110, 111, 112
Additional Water Use Information.....	113

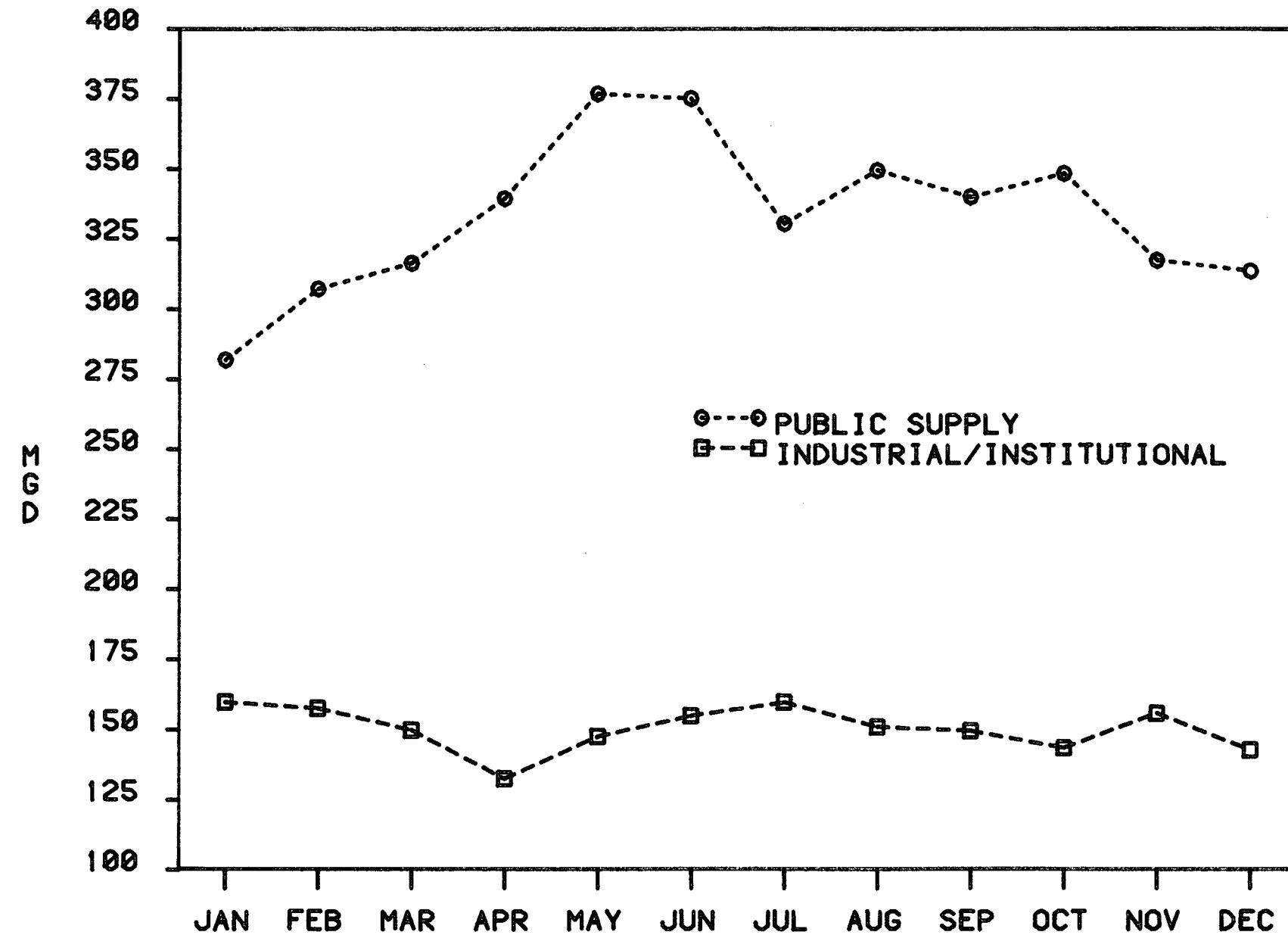


FIGURE A-1 MONTHLY FRESH WATER USE IN ST. JOHNS RIVER W.M.D. FOR 1984

FLORIDA - 1984

Total Population: 10,930,389

Total Land Area: 58,560 sq. mi. (37,478,400 acres)

St. Johns River Water Management Portion

Population: 2,574,947

Population Public Supply: 2,037,833

Population Domestic Self-Supplied: 537,114

Gallons Per Capita Day: 163

Area: 12,344 sq. miles (7,900,060 acres)

Acres Farmed: 1,129,195

Acres Irrigated: 382,056

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	318.85	13.21	-	332.06(1)
Domestic	87.72	0.0	-	87.72
Industrial	137.33	12.91	-	150.24
Agr. Irrigation	492.58	261.32	6.26	753.90(2)
Thermoelectric	4.55	2.57	-	7.12
Heat Pump/air cond.	149.96	0.0	-	149.96
Free flowing wells	26.05	0.0	-	26.05
 TOTALS	 1,217.04	 290.01	 6.26(2)	 1,507.05(1)(2)

(1) Includes 0.84 MGD saline ground water used for reverse osmosis (R/O)

(2) Reuse is not included in Total

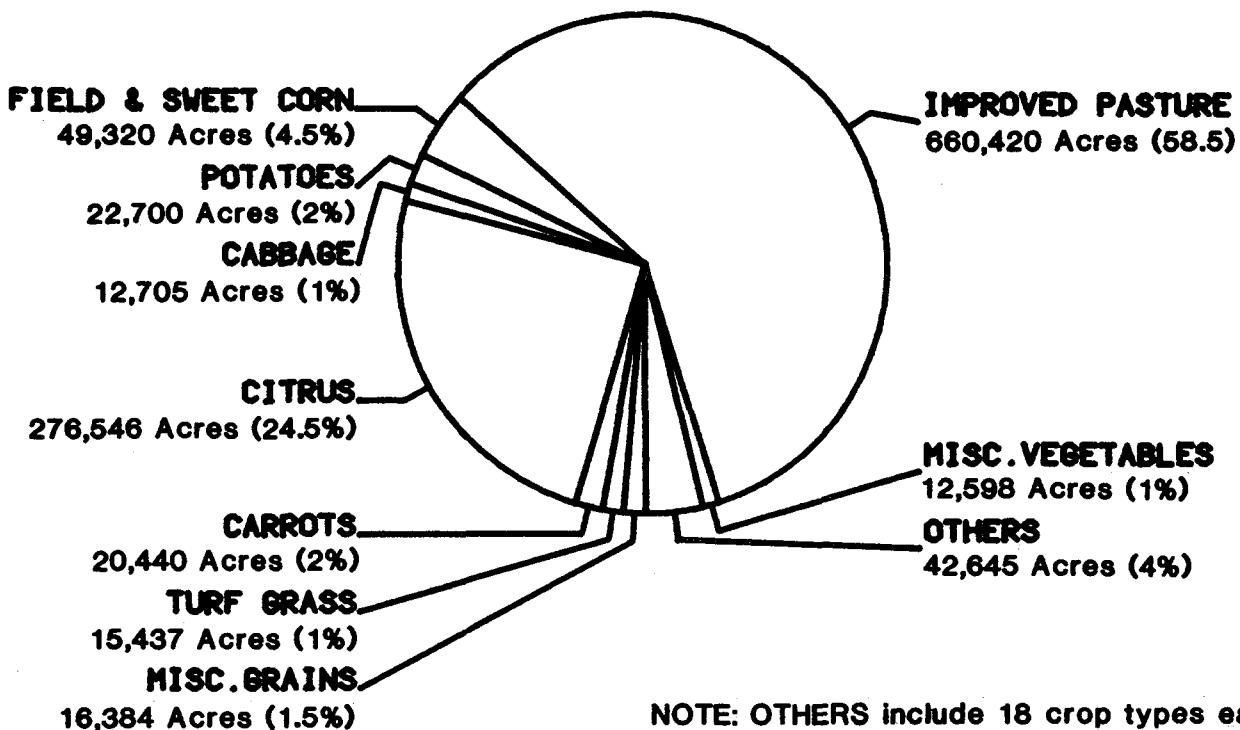
SJRWMD - 1984

TABLE A-1 TOTAL DISTRICT ACRES FARMED AND IRRIGATED

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
WATER RESOURCES DEPARTMENT - RESOURCE EVALUATION DIVISION
1984 CALENDAR YEAR

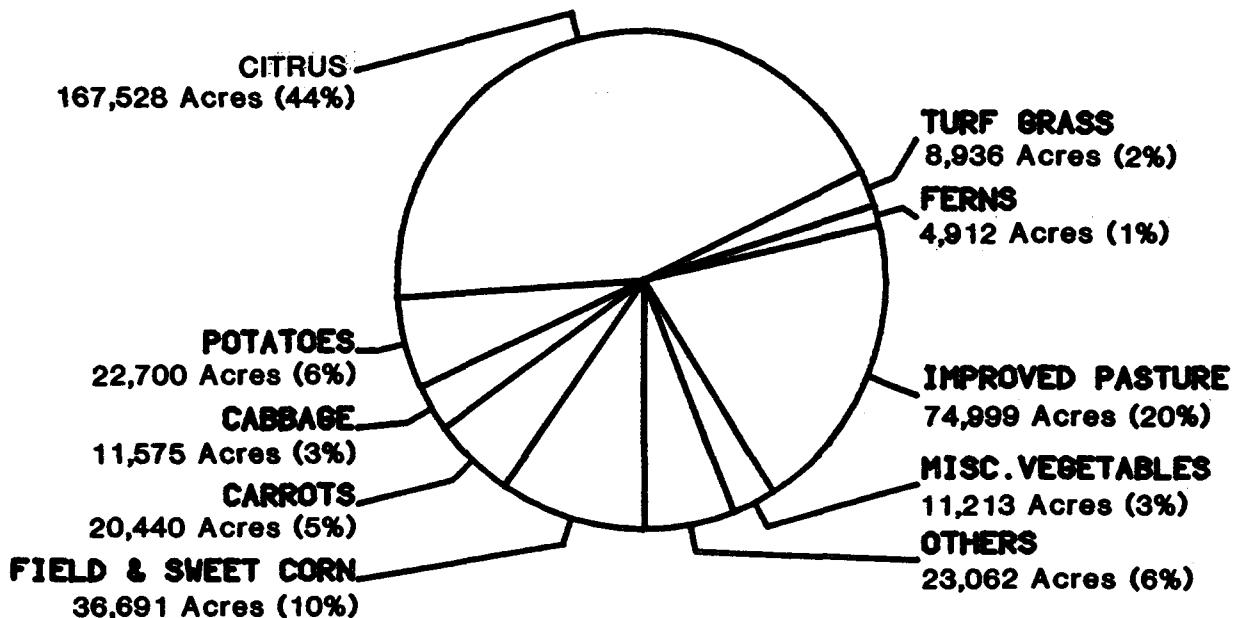
CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES	PRESS ACRES
CABBAGE	12,705	11,575	1,525	5,800	4,250	0	0
CARROTS	20,440	20,440	0	0	20,440	0	0
CUCUMBERS	2,980	2,750	130	1,650	970	0	0
POTATOES	22,700	22,700	0	16,000	6,700	0	0
SWEET CORN	18,040	17,940	0	540	17,400	0	0
WATERCRESS	150	150	0	0	150	0	0
MISC. VEGETABLES	12,598	11,213	5,538	1,373	4,302	0	0
BLUEBERRIES	484	417	153	15	2	247	0
CITRUS	276,546	167,528	80,893	240	47,916	38,479	0
GRAPES	119	106	77	0	0	29	0
PEACHES	50	40	40	0	0	0	0
PEANUTS	2,250	100	100	0	0	0	0
PECANS	3,100	240	0	0	0	240	0
WATERMELONS	4,205	2,463	2,463	0	0	0	0
MISC. FRUIT	35	35	25	0	0	10	0
FIELD CORN	31,280	18,751	2,425	9,000	7,326	0	0
RICE	80	80	0	0	80	0	0
SORGHUM	7,890	5,140	700	0	4,440	0	0
SOYBEANS	6,839	2,765	2,225	40	500	0	0
TOBACCO	282	160	160	0	0	0	0
MISC. GRAINS	16,384	1,050	1,050	0	0	0	0
WHEAT	100	100	0	0	100	0	0
FERNS	5,537	4,912	4,912	0	0	0	0
FLOWERS & FOLIAGE	1,604	1,604	1,139	10	220	235	0
IMPROVED PASTURE	660,420	74,999	4,435	1,000	69,564	0	0
WOODY ORNAMENTALS	4,035	3,232	3,192	0	20	20	0
SOD	2,905	2,630	2,230	0	400	0	0
TURF GRASS	15,437	8,936	8,936	0	0	0	0
<hr/>							
	1,129,195	382,056	122,348	35,668	184,780	39,260	

ACRES FARMED IN THE ST. JOHNS RIVER WMD
1984



NOTE: OTHERS include 18 crop types each less than 1% of the total acres farmed.

ACRES IRRIGATED IN THE ST. JOHNS RIVER WMD
1984

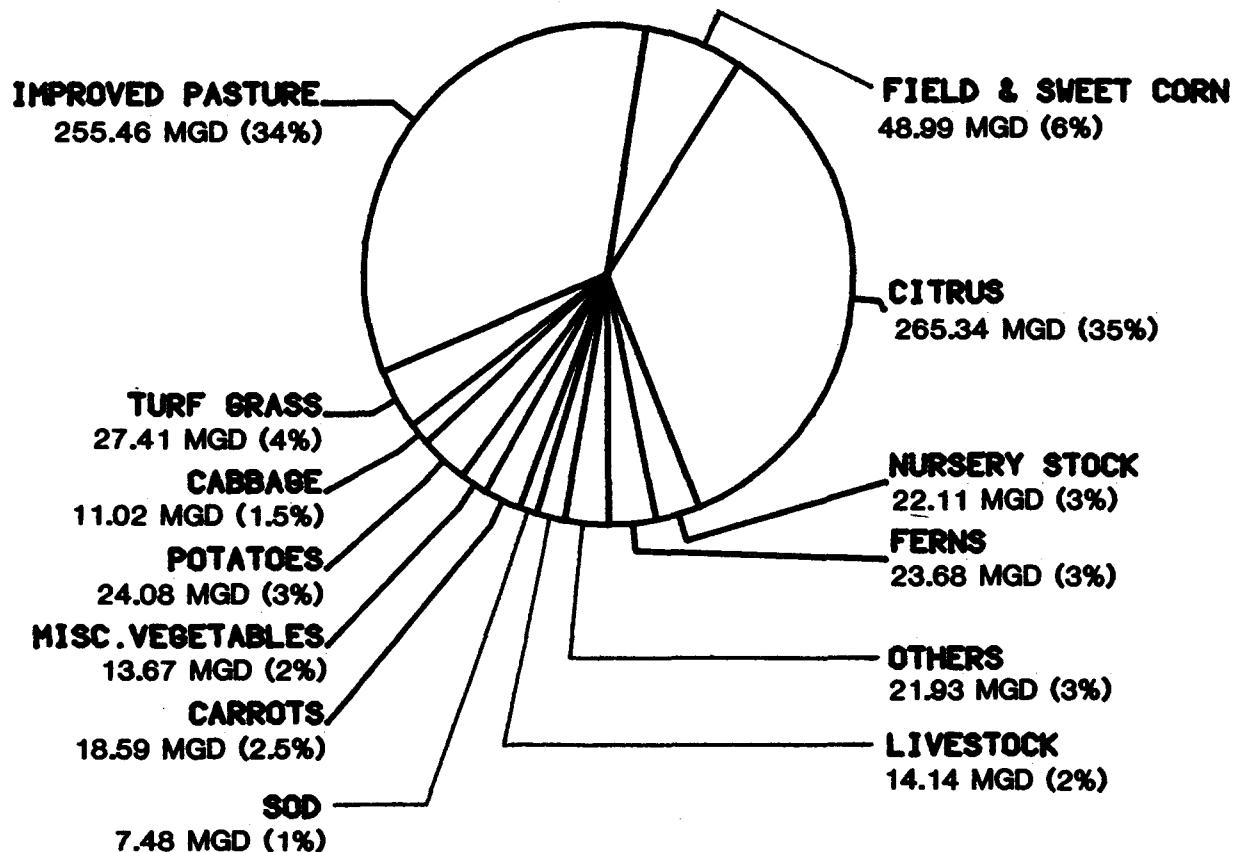


NOTE: OTHERS include 18 crop types each less than 1% of the total acres irrigated.

TABLE A-2 IRRIGATION WATER USE
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
WATER RESOURCES DEPARTMENT - RESOURCE EVALUATION DIVISION
1984 CALENDAR YEAR

CROP TYPE	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	12362	11.02	0.00	0.00	11.02
CARROTS	20881	7.54	11.05	0.00	18.59
CUCUMBERS	2333	2.07	0.00	0.00	2.07
POTATOES	27038	24.08	0.00	0.00	24.08
SWEET CORN	23244	6.18	14.51	0.00	20.69
WATERCRESS	8750	7.79	0.00	0.00	7.79
MISC. VEGETABLES	15353	12.70	0.97	0.00	13.67
BLUEBERRIES	452	0.41	0.00	0.00	0.41
CITRUS	298029	156.49	108.85	0.00	265.34
GRAPES	198	0.19	0.00	0.00	0.19
PEACHES	115	0.08	0.02	0.00	0.10
PEANUTS	62	0.05	0.01	0.00	0.06
PECANS	114	0.10	0.00	0.00	0.10
WATERMELONS	1896	1.55	0.14	0.00	1.69
MISC. FRUIT	39	0.04	0.00	0.00	0.04
FIELD CORN	31758	14.91	13.39	0.00	28.30
RICE	173	0.00	0.15	0.00	0.15
SORGHUM	6673	2.94	3.00	0.00	5.94
SOYBEANS	2980	2.29	0.37	0.00	2.66
TOBACCO	152	0.07	0.07	0.00	0.14
MISC. GRAINS	612	0.44	0.11	0.00	0.55
WHEAT	47	0.04	0.00	0.00	0.04
FERNS	26603	20.16	3.52	0.00	23.68
FLOWERS & FOLIAGE	8292	6.60	0.77	0.00	7.37
IMPROVED PASTURE	289771	166.72	88.74	2.52	255.46
WOODY ORNAMENTALS	16560	14.35	0.39	0.00	14.74
SOD	10157	7.48	0.00	1.56	7.48
TURF GRASS	33230	18.88	8.53	2.18	27.41
LIVESTOCK	15885	7.41	6.73	0.00	14.14
<hr/>					
	653,759	492.58	261.32	6.26	753.90

**IRRIGATED WATER USE IN THE ST. JOHNS RIVER WMD
1984**



NOTE: OTHERS include 15 crop types each less than 1% of the total use.

Figure A-3

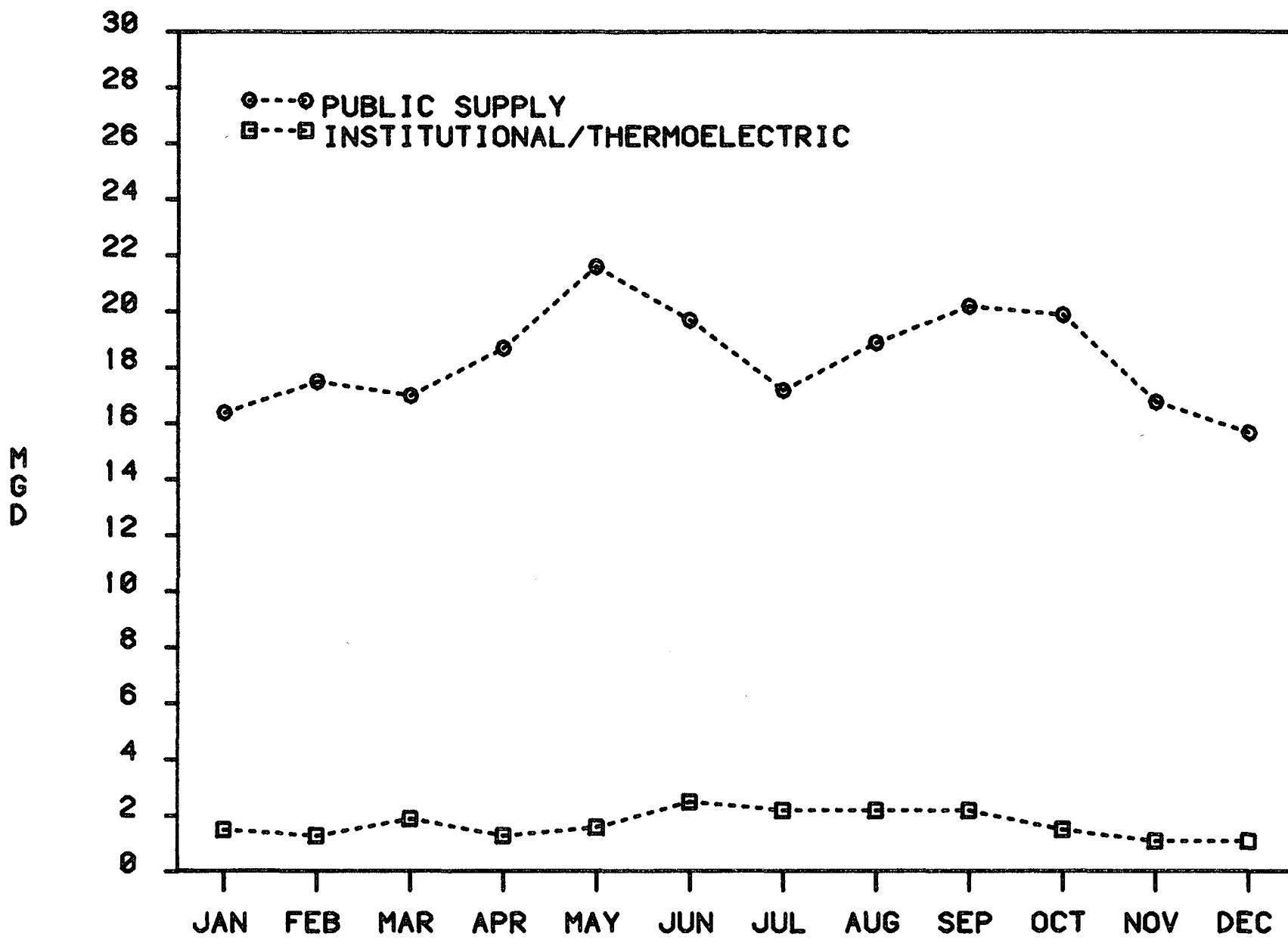


FIGURE A-4

MONTHLY FRESH WATER USE IN ALACHUA COUNTY FOR 1984

COUNTY: Alachua - 1984

Total Population: 168,243

Total Land Area: 961 sq. miles

St. Johns River Water Management Portion

Population: 116,834

Population Public Supply: 102,488(1)

Population Domestic Self-Supplied: 14,346

Gallons Per Capita Day: 172

Area: 482 sq. miles (308,480 acres)

Acres Farmed: 86,780

Acres Irrigated: 9,701

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	18.23	0.0	-	18.23
Domestic	2.47	0.0	-	2.47
Industrial	1.30	0.09	-	1.39
Agr. Irrigation	9.80	1.33	-	11.13
Thermoelectric	0.30	0.0	-	0.30
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.0	0.0	-	0.0
TOTALS	32.10	1.42	0.0	33.52

(1) Does not include 3,606 population served by Public Supply in SJRWMD who live in SRWMD

TABLE A-3 ACRES FARMED AND IRRIGATED

CROP TYPE	ALACHUA	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES	LOW PRESS ACRES
<hr/>							
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	2,626	2,626	2,626	0	0	0	0
BLUEBERRIES	250	250	83	0	0	167	0
CITRUS	0	0	0	0	0	0	0
GRAPES	20	20	0	0	0	0	20
PEACHES	50	40	40	0	0	0	0
PEANUTS	200	100	100	0	0	0	0
PECANS	3,000	200	0	0	0	0	200
WATERMELONS	1,250	813	813	0	0	0	0
MISC. FRUIT	25	25	15	0	0	0	10
FIELD CORN	7,000	900	900	0	0	0	0
SORGHUM	0	0	0	0	0	0	0
SOYBEANS	4,000	2,025	2,025	0	0	0	0
TOBACCO	100	80	80	0	0	0	0
MISC. GRAINS	10,500	1,050	1,050	0	0	0	0
FERNS	1	1	1	0	0	0	0
FLOWERS & FOLIAGE	3	3	3	0	0	0	0
IMPROVED PASTURE	57,000	1,200	1,200	0	0	0	0
WOODY ORNAMENTALS	100	100	95	0	0	0	5
SOD	250	0	0	0	0	0	0
TURF GRASS	405	268	268	0	0	0	0
<hr/>							
	86,780	9,701	9,299	0	0	402	

TABLE A-4 IRRIGATION WATER USE

ALACHUA COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	11.70	0.00	0.00	2,560	2.28	0.00	0.00	2.28
BLUEBERRIES	10.00	0.00	8.00	180	0.16	0.00	0.00	0.16
CITRUS	17.19	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	19.33	32	0.03	0.00	0.00	0.03
PEACHES	34.70	0.00	30.83	115	0.08	0.02	0.00	0.10
PEANUTS	7.50	0.00	0.00	62	0.05	0.01	0.00	0.06
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	9.66	0.00	0.00	654	0.47	0.12	0.00	0.59
MISC. FRUIT	18.00	0.00	0.00	22	0.02	0.00	0.00	0.02
FIELD CORN	15.85	0.00	0.00	1,188	0.85	0.21	0.00	1.06
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	12.20	0.00	0.00	2,058	1.47	0.37	0.00	1.84
TOBACCO	11.54	0.00	0.00	76	0.07	0.00	0.00	0.07
MISC. GRAINS	7.00	0.00	0.00	612	0.44	0.11	0.00	0.55
FERNS	65.00	0.00	0.00	5	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	65.00	0.00	48.00	16	0.01	0.00	0.00	0.01
IMPROVED PASTURE	27.61	0.00	0.00	2,761	1.97	0.49	0.00	2.46
WOODY ORNAMENTALS	65.00	0.00	0.00	514	0.46	0.00	0.00	0.46
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	36.28	0.00	0.00	810	0.72	0.00	0.00	0.72
LIVESTOCK	0.00	0.00	0.00	810	0.72	0.00	0.00	0.72
					12,475	9.80	1.33	11.13

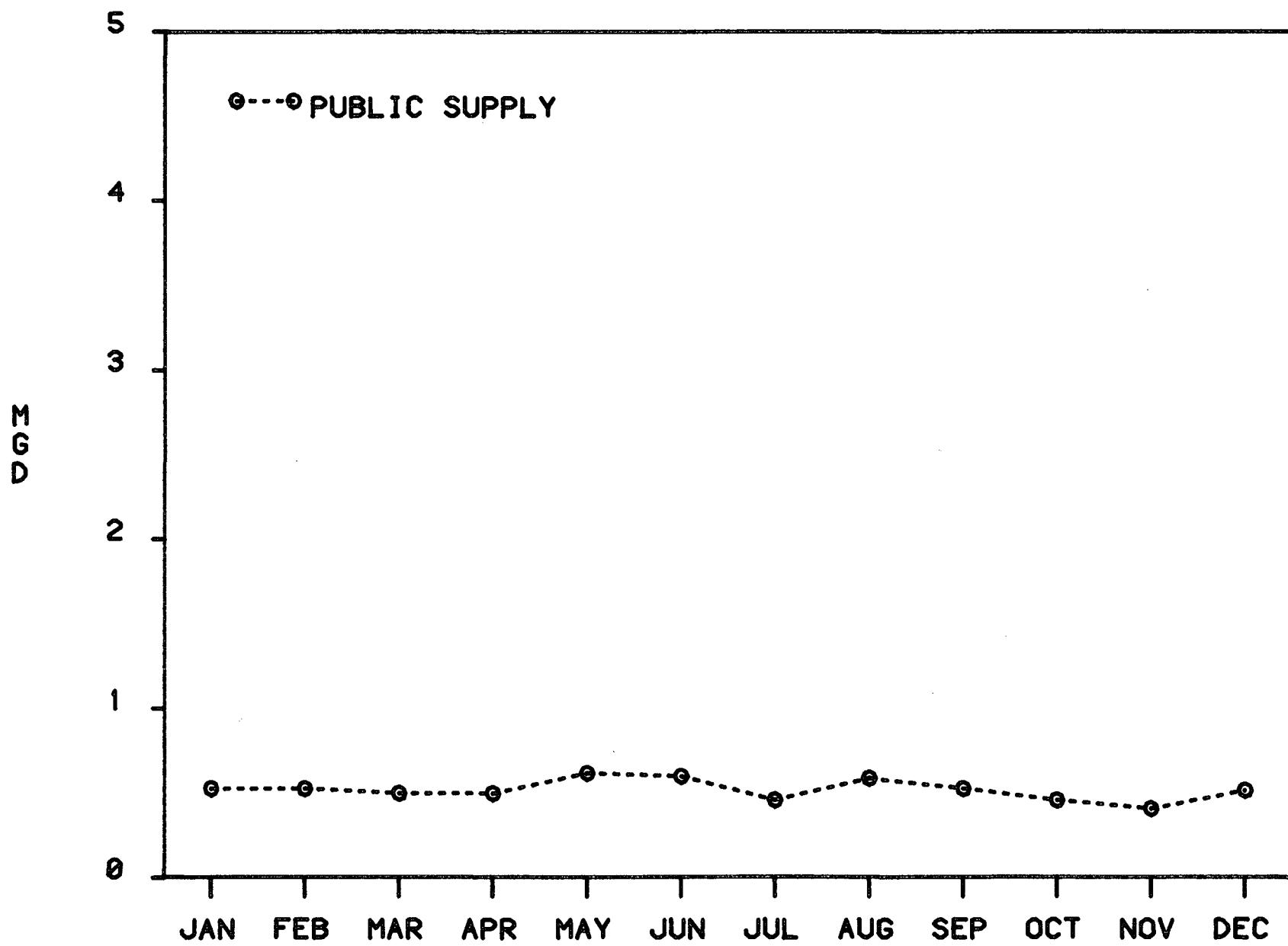


FIGURE A-5

MONTHLY FRESH WATER USE IN BAKER COUNTY FOR 1984

COUNTY: BAKER - 1984

Total Population: 17,048

Total Land Area: 588 sq. miles

St. Johns River Water Management Portion

Population: 16,200

Population Public Supply: 4,184

Population Domestic Self-Supplied: 12,016

Gallons Per Capita Day: 125

Area: 536 sq. miles (343,040 acres)

Acres Farmed: 14,000

Acres Irrigated: 680

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	0.52	0.0	-	0.52
Domestic	1.50	0.0	-	1.50
Industrial	0.18	0.0	-	0.18
Agr. Irrigation	2.29	1.05	-	3.34
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.0	0.0	-	0.0
 TOTALS	 4.49	 1.05	 0.0	 5.54

TABLE A-5 ACRES FARMED AND IRRIGATED

CROP TYPE	BAKER	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES	LOW PRESS ACRES
<hr/>							
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	100	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	100	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	522	100	100	0	0	0	0
BLUEBERRIES	25	0	0	0	0	0	0
CITRUS	0	0	0	0	0	0	0
GRAPES	0	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	50	0	0	0	0	0	0
PECANS	50	0	0	0	0	0	0
WATERMELONS	400	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	600	0	0	0	0	0	0
SORGHUM	0	0	0	0	0	0	0
SOYBEANS	599	0	0	0	0	0	0
TOBACCO	145	80	80	0	0	0	0
MISC. GRAINS RYE	1,584	0	0	0	0	0	0
FERNS	0	0	0	0	0	0	0
FLOWERS & FOLIAGE	0	0	0	0	0	0	0
IMPROVED PASTURE	8,500	0	0	0	0	0	0
WOODY ORNAMENTALS	1,200	400	400	0	0	0	0
SOD	0	0	0	0	0	0	0
TURF GRASS	125	100	100	0	0	0	0
<hr/>							
	14,000	680	680	0	0	0	0

TABLE A-6 IRRIGATION WATER USE

BAKER COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	11.70	0.00	0.00	97	0.09	0.00	0.00	0.09
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	11.54	0.00	0.00	76	0.00	0.07	0.00	0.07
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
IMPROVED PASTURE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WOODY ORNAMENTALS	65.00	0.00	0.00	2,166	1.54	0.39	0.00	1.93
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	33.23	0.00	0.00	276	0.25	0.00	0.00	0.25
LIVESTOCK	0.00	0.00	0.00	1,123	0.41	0.59	0.00	1.00
				3,738	2.29	1.05	0.00	3.34

THE PUBLIC AND INDUSTRIAL PUMPAGE IN BRADFORD COUNTY
WITHIN THE ST.JOHNS RIVER WATER MANAGEMENT DISTRICT
FOR 1984 WAS TOO SMALL TO DEPICT.

COUNTY: BRADFORD - 1984

Total Population: 22,996

Total Land Area: 305 sq. miles

St. Johns River Water Management Portion

Population: 1,665

Population Public Supply: -0-

Population Domestic Self-Supplied: 1,665

Gallons Per Capita Day: 163 - District average

Land Area: 6 sq. miles (3,840 acres)

Acres Farmed: 40

Acres Irrigated: 40

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	0.0	0.0	-	0.0
Domestic	0.27	0.0	-	0.27
Industrial	0.0	0.0	-	0.0
Agr. Irrigation	0.10	0.0	-	0.10
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.0	0.0	-	0.0
 TOTALS	0.37	0.0	0.0	0.37

TABLE A-7 ACRES FARMED AND IRRIGATED

BRADFORD COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	0	0	0	0	0	0
BLUEBERRIES	0	0	0	0	0	0
CITRUS	0	0	0	0	0	0
GRAPES	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	0	0	0	0	0	0
SORGHUM	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	0	0	0	0	0	0
FLOWERS & FOLIAGE	0	0	0	0	0	0
IMPROVED PASTURE	0	0	0	0	0	0
WOODY ORNAMENTALS	0	0	0	0	0	0
SOD	0	0	0	0	0	0
TURF GRASS	40	40	40	0	0	0
	40	40	40	0	0	0

TABLE A-8 IRRIGATION WATER USE

BRADFORD COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
IMPROVED PASTURE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	35.28	0.00	0.00	117	0.10	0.00	0.00	0.10
LIVESTOCK	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
				117	0.10	0.00	0.00	0.10

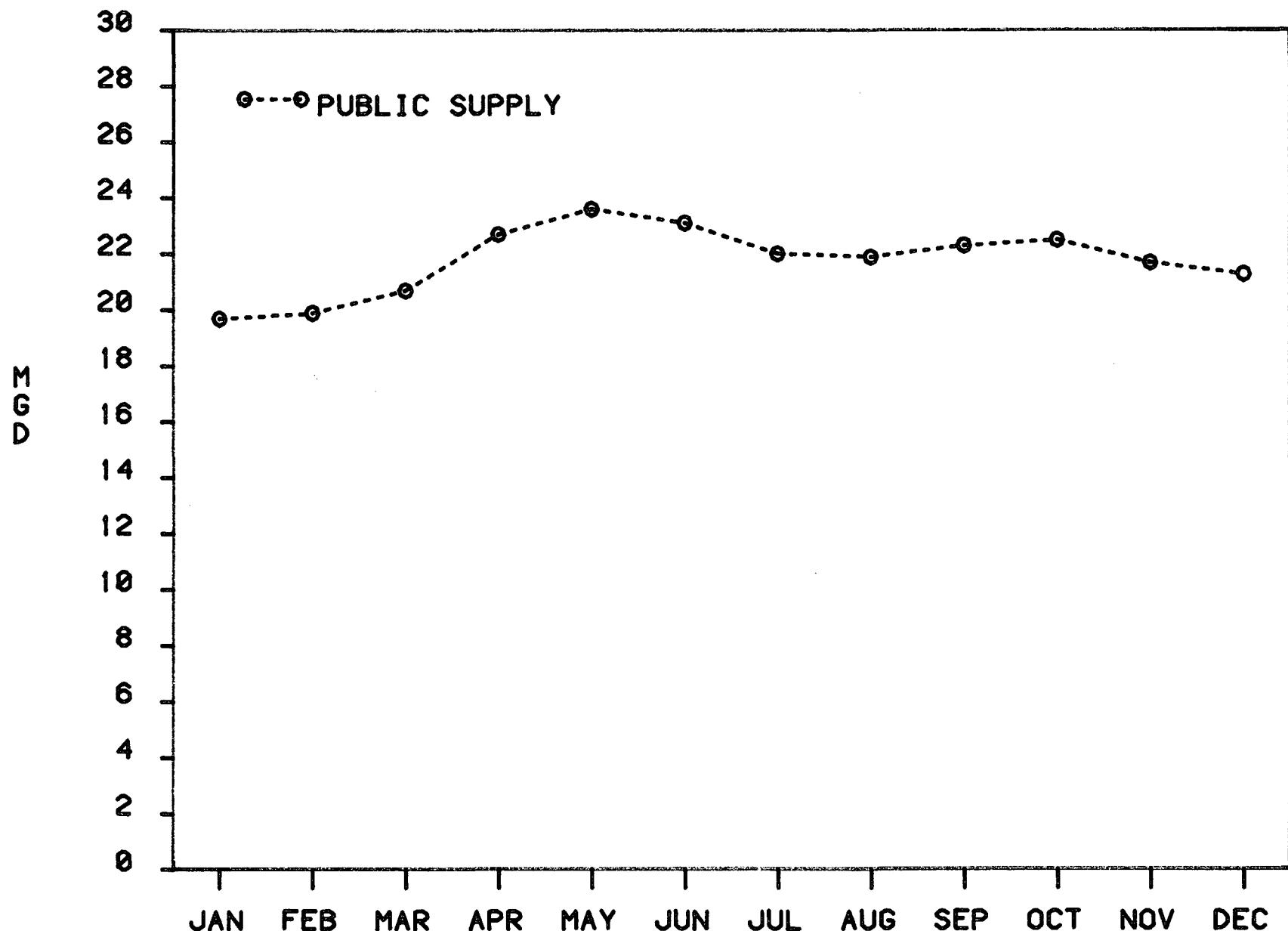


FIGURE A-6 MONTHLY FRESH WATER USE IN BREVARD COUNTY FOR 1984

COUNTY: Brevard - 1984

Total Population: 323,055

Total Land Area: 1,310 sq. miles

St. Johns River Water Management Portion

Population: 323,055

Population Public Supply: 288,225

Population Domestic Self-Supplied: 34,830

Gallons Per Capita Day: 146

Land Area: 1,310 sq. miles (636,800 acres)

Acres Farmed: 156,903

Acres Irrigated: 45,157

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	8.46(1)	13.21	-	21.67(1)
Domestic	5.09	0.0	-	5.09
Industrial	0.14	0.0	-	0.14
Agr. Irrigation	85.43	16.45	0.46	101.88(2)
Thermoelectric	0.28	0.0	-	0.28
Heat Pump/air cond.	141.51	0.0	-	141.51
Free-flowing wells	19.06	0.0	-	19.06
 TOTALS	 259.97(1)	 29.66	 0.46	 289.63(1)(2)

(1) Includes 0.01 MGD saline ground water used for R/O

(2) Reuse is not included in Total

TABLE A-9 ACRES FARMED AND IRRIGATED

CROP TYPE	BREVARD	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES	LOW PRESS ACRES
CABBAGE	0	0	0	0	0	0	0
CARROTS	4,000	4,000	0	0	4,000	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	300	300	0	0	300	0	0
SWEET CORN	800	800	0	0	800	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	200	150	50	0	100	0	0
BLUEBERRIES	0	0	0	0	0	0	0
CITRUS	23,000	17,599	8,448	0	8,271	880	
GRAPES	0	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0	0
PECANS	0	0	0	0	0	0	0
WATERMELONS	150	150	150	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	2,200	2,200	0	0	2,200	0	
SORGHUM	1,800	1,800	0	0	1,800	0	
SOYBEANS	0	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0	0
FERNS	1	1	1	0	0	0	0
FLOWERS & FOLIAGE	10	10	10	0	0	0	0
IMPROVED PASTURE	121,700	15,834	0	0	15,834	0	
WOODY ORNAMENTALS	190	190	190	0	0	0	
SOD	1,000	1,000	1,000	0	0	0	
TURF GRASS	1,552	1,123	1,123	0	0	0	
	156,903	45,157	10,972	0	33,305	880	

TABLE A-10 IRRIGATION WATER USE

BREVARD COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	12.26	0.00	4,086	3.64	0.00	0.00	3.64
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	14.21	0.00	355	0.32	0.00	0.00	0.32
SWEET CORN	0.00	15.23	0.00	1,015	0.90	0.00	0.00	0.90
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	13.81	22.10	0.00	241	0.15	0.06	0.00	0.21
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	17.46	27.93	15.52	32,680	23.28	5.82	0.00	29.10
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	9.97	0.00	0.00	124	0.09	0.02	0.00	0.11
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	20.21	0.00	3,705	3.30	0.00	0.00	3.30
SORGHUM	0.00	13.80	0.00	2,070	1.84	0.00	0.00	1.84
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	5	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	65.00	0.00	0.00	54	0.05	0.00	0.00	0.05
IMPROVED PASTURE	0.00	46.11	0.00	60,842	46.04	8.13	0.00	54.17
WOODY ORNAMENTALS	42.61	0.00	0.00	674	0.60	0.00	0.00	0.60
SOD	45.76	0.00	0.00	3,813	3.39	0.00	0.00	3.39
TURF GRASS	45.76	0.00	0.00	4,282	1.30	2.06	0.46	3.36
LIVESTOCK	0.00	0.00	0.00	1,000	0.53	0.36	0.00	0.89
					114,946	85.43	16.45	0.46
								101.88

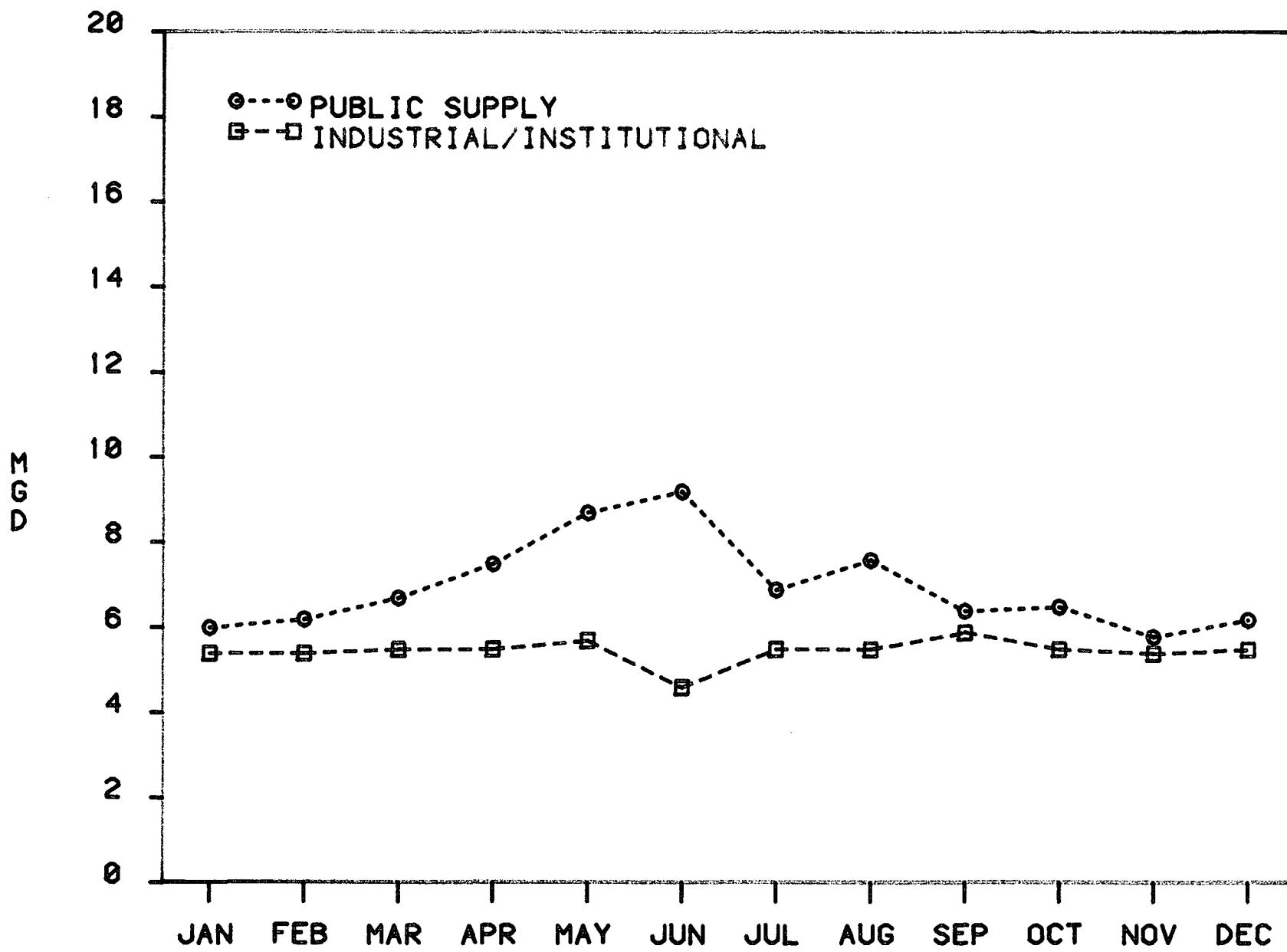


FIGURE A-7

MONTHLY FRESH WATER USE IN CLAY COUNTY FOR 1984

COUNTY: CLAY - 1984

Total Population: 79,886

Total Land Area: 644 sq. miles

St. Johns River Water Management Portion

Population: 79,886

Population Public Supply: 50,410

Population Domestic Self-Supplied: 29,476

Gallons Per Capita Day: 138

Land Area: 643 sq. miles (411,520 acres)

Acres Farmed: 43,779

Acres Irrigated: 518

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	6.96	0.0	-	6.96
Domestic	4.07	0.0	-	4.07
Industrial	5.42	0.0	-	5.42
Agr. Irrigation	2.00	1.40	-	3.40
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.79	0.0	-	0.79
 TOTALS	19.24	1.40	0.0	20.64

CLAY

TABLE A-11 ACRES FARMED AND IRRIGATED

CROP TYPE	CLAY	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES	
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	200	50	50	0	0	0	0
BLUEBERRIES	15	13	0	10	0	0	3
CITRUS	0	0	0	0	0	0	0
GRAPES	0	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0	0
PECANS	0	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	500	0	0	0	0	0	0
SORGHUM	0	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0	0
MISC. GRAINS	2,800	0	0	0	0	0	0
FERNS	0	0	0	0	0	0	0
FLOWERS & FOLIAGE	50	50	50	0	0	0	0
IMPROVED PASTURE	40,000	275	100	0	175	0	0
WOODY ORNAMENTALS	0	0	0	0	0	0	0
SOD	0	0	0	0	0	0	0
TURF GRASS	214	130	130	0	0	0	0
	43,779	518	330	10	175	3	

TABLE A-12 IRRIGATION WATER USE

CROP TYPE	SPRINKLER INCHES PER/YR	CLAY		TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
		SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR					
1984 CALENDAR YEAR								
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	18.92	0.00	0.00	78	0.07	0.00	0.00	0.07
BLUEBERRIES	0.00	16.00	12.00	16	0.01	0.00	0.00	0.01
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	65.00	0.00	0.00	270	0.24	0.00	0.00	0.24
IMPROVED PASTURE	26.46	0.00	0.00	220	0.20	0.00	0.00	0.20
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	35.28	0.00	0.00	382	0.21	0.13	0.00	0.34
LIVESTOCK	0.00	0.00	0.00	2,842	1.27	1.27	0.00	2.54
					3,808	2.00	1.40	3.40



FIGURE A-8

MONTHLY FRESH WATER USE IN DUVAL COUNTY FOR 1984

COUNTY: DUVAL - 1984

Total Population: 605,680

Total Land Area: 840 sq. miles

St. Johns River Water Management Portion

Population: 605,680

Population Public Supply: 485,850

Population Domestic Self-Supplied: 119,830

Gallons Per Capita Day: 160

Land Area: 840 sq. miles (537,600 acres)

Acres Farmed: 15,798

Acres Irrigated: 2,316

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	77.55	0.0	-	77.55
Domestic	19.17	0.0	-	19.17
Industrial	40.07	0.0	-	40.07
Agr. Irrigation	4.62	2.37	1.56	6.99(1)
Thermoelectric	2.79	0.0	-	2.79
Heat Pump/air cond.	0.0	0.0	-	0.0
Free flowing wells	0.51	0.0	-	0.51
 TOTALS	 144.71	 2.37	 1.56	 147.08(1)

(1) Reuse is not included in Total

TABLE A-13 ACRES FARMED AND IRRIGATED

CROP TYPE	DUVAL	COUNTY				
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	200	4	4	0	0	0
BLUEBERRIES	24	19	15	0	0	4
CITRUS	0	0	0	0	0	0
GRAPES	10	7	0	0	0	7
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	200	1	1	0	0	0
SORGHUM	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	0	0	0	0	0	0
FLOWERS & FOLIAGE	15	15	0	0	0	15
IMPROVED PASTURE	12,000	500	460	0	40	0
WOODY ORNAMENTALS	57	57	42	0	0	15
SOD (1)	300	300	300	0	0	0
TURF GRASS	2,992	1,413	1,413	0	0	0
	15,798	2,316	2,235	0	40	41

TABLE A-14 IRRIGATION WATER USE

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND	SURFACE	RE-USED	TOTAL WATER M G D
					WATER M G D	WATER M G D	WATER M G D	
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	6.98	0.00	0.00	2	0.00	0.00	0.00	0.00
BLUEBERRIES	16.40	0.00	10.00	23	0.02	0.00	0.00	0.02
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	19.83	11	0.01	0.00	0.00	0.01
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	15.65	0.00	0.00	1	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	30.00	37	0.03	0.00	0.00	0.03
IMPROVED PASTURE	27.39	43.82	0.00	1,196	0.88	0.18	0.00	1.06
WOODY ORNAMENTALS	60.00	0.00	49.00	270	0.24	0.00	0.00	0.24
SOD	70.00	0.00	0.00	1,750	0.00	0.00	1.56	0.00
TURF GRASS	35.28	0.00	0.00	4,154	2.96	0.74	0.00	3.70
LIVESTOCK	0.00	0.00	0.00	2,179	0.48	1.45	0.00	1.93
					9,623	4.62	2.37	6.99

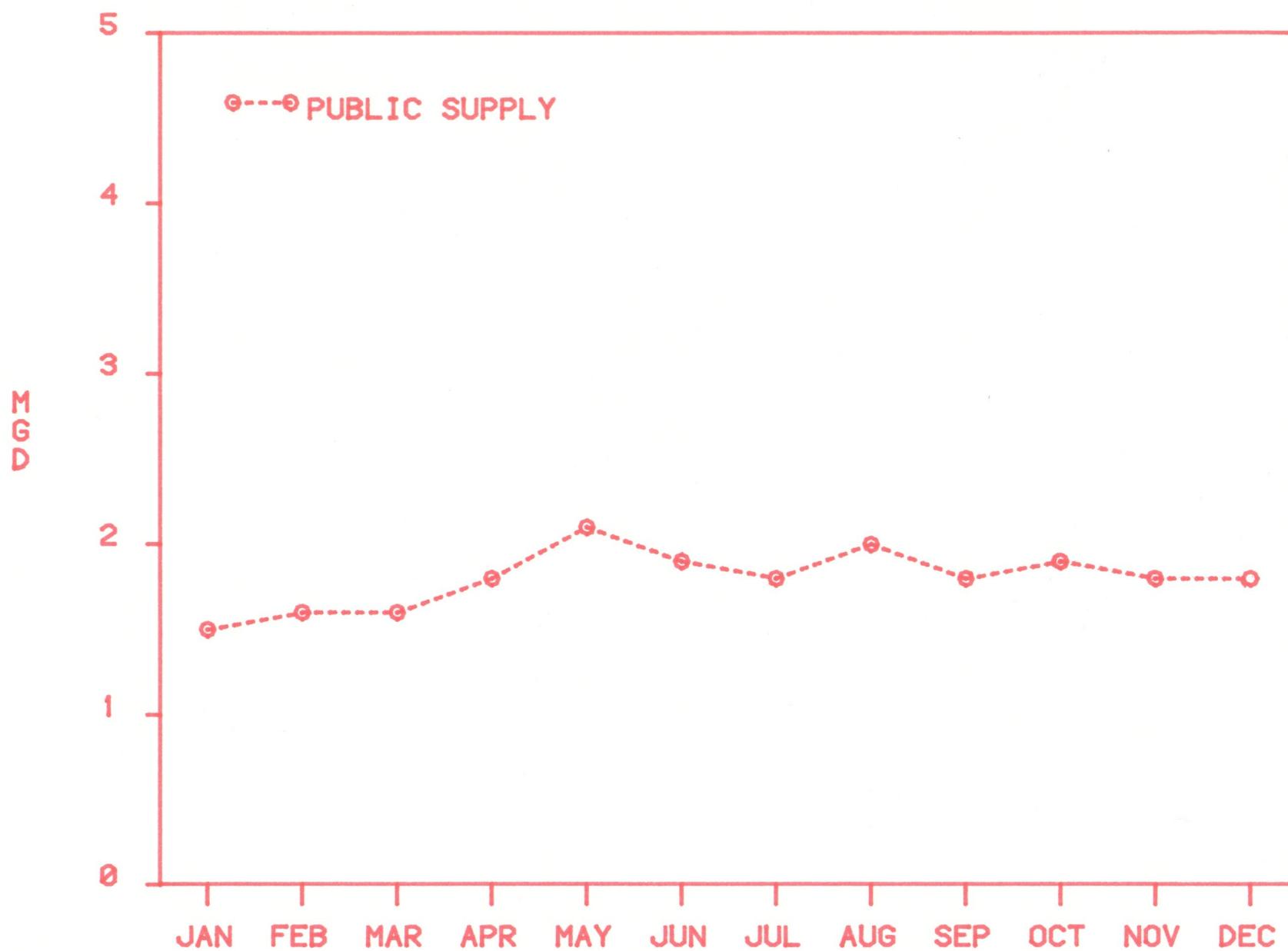


FIGURE A-9

MONTHLY FRESH WATER USE IN FLAGLER COUNTY FOR 1984

COUNTY: FLAGLER - 1984

Total Population: 14,811

Total Land Area: 504 sq. miles

St. Johns River Water Management Portion

Population: 14,811

Population Public Supply: 12,746

Population Domestic Self-Supplied: 2,065

Gallons Per Capita Day: 139

Land Area: 504 sq. miles (322,560 acres)

Acres Farmed: 23,916

Acres Irrigated: 5,928

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	1.77	0.0	-	1.77
Domestic	0.29	0.0	-	0.29
Industrial	0.10	0.0	-	0.10
Agr. Irrigation	6.13	0.48	-	6.61
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.47	0.0	-	0.47
 TOTALS	 8.76	 0.48	 0.0	 9.24

FLAGLER

TABLE A-15 ACRES FARMED AND IRRIGATED

FLAGLER COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	2,000	2,000	1,200	0	800	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0
POTATOES	1,800	1,800	0	0	1,800	0
SWEET CORN	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	1,000	1,000	1,000	0	0	0
BLUEBERRIES	0	0	0	0	0	0
CITRUS	145	145	0	0	145	0
GRAPES	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	200	200	200	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	500	500	0	0	500	0
SORGHUM	1,500	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	0	0	0	0	0	0
FLOWERS & FOLIAGE	0	0	0	0	0	0
IMPROVED PASTURE	16,500	100	0	0	100	0
WOODY ORNAMENTALS	0	0	0	0	0	0
SOD	0	0	0	0	0	0
TURF GRASS	271	183	183	0	0	0
	23,916	5,928	2,583	0	3,345	0

TABLE A-16 IRRIGATION WATER USE

FLAGLER COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	11.72	18.76	0.00	2,422	2.16	0.00	0.00	2.16
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	14.21	0.00	2,131	1.90	0.00	0.00	1.90
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	3.02	0.00	0.00	251	0.22	0.00	0.00	0.22
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	0.00	26.25	0.00	317	0.28	0.00	0.00	0.28
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	9.66	0.00	0.00	161	0.14	0.00	0.00	0.14
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	25.53	0.00	1,063	0.95	0.00	0.00	0.95
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
IMPROVED PASTURE	0.00	42.83	0.00	356	0.32	0.00	0.00	0.32
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	38.34	0.00	0.00	584	0.09	0.43	0.00	0.52
LIVESTOCK	0.00	0.00	0.00	135	0.07	0.05	0.00	0.12
				7,420	6.13	0.48	0.00	6.61

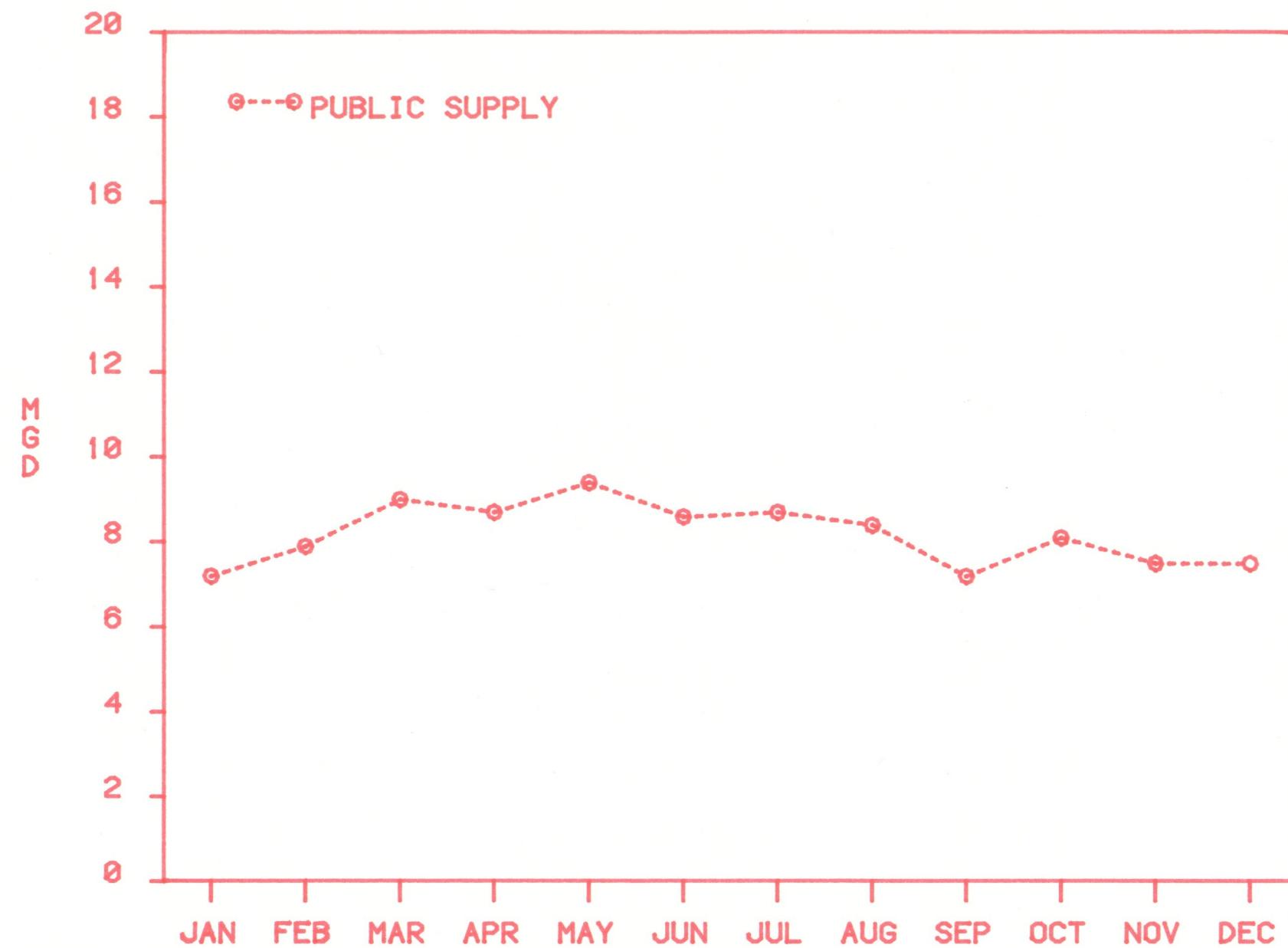


FIGURE A-10 MONTHLY FRESH WATER USE IN INDIAN RIVER COUNTY FOR 1984

COUNTY: INDIAN RIVER - 1984

Total Population: 74,162

Total Land Area: 549 sq. miles

St. Johns River Water Management Portion

Population: 74,162

Population Public Supply: 38,879

Population Domestic Self-Supplied: 35,283

Gallons Per Capita Day: 208

Land Area: 549 sq. miles (351,360 acres)

Acres Farmed: 137,113

Acres Irrigated: 109,007

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	8.08(1)	0.0	-	8.08(1)
Domestic	7.34	0.0	-	7.34
Industrial	0.26	0.0	-	0.26
Agr. Irrigation	88.63	174.40	0.51	263.03(2)
Thermoelectric	0.31	0.0	-	0.31
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.49	0.0	-	0.49
 TOTALS	 105.11(1)	 174.40	 0.51	 279.51(1)(2)

(1) Includes 0.82 MGD saline ground water used for R/O

(2) Reuse is not included in Total

TABLE A-17 ACRES FARMED AND IRRIGATED

INDIAN RIVER COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	0	0	0	0	0	0
BLUEBERRIES	0	0	0	0	0	0
CITRUS	63,510	60,500	95	0	37,020	23,385
GRAPES	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	8,000	8,000	0	6,000	2,000	0
RICE	ONE YEAR	80	80	0	80	0
SORGHUM		2,000	2,000	0	2,000	0
SOYBEANS		0	0	0	0	0
TOBACCO		0	0	0	0	0
MISC. GRAINS		0	0	0	0	0
FERNS		0	0	0	0	0
FLOWERS & FOLIAGE		0	0	0	0	0
IMPROVED PASTURE	62,208	37,475	0	0	37,475	0
WOODY ORNAMENTALS		0	0	0	0	0
SOD		80	80	0	0	0
TURF GRASS	1,235	872	872	0	0	0
	137,113	109,007	1,047	6,000	78,575	23,385

TABLE A-18 IRRIGATION WATER USE

INDIAN RIVER COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	19.06	30.50	16.94	127,255	28.32	84.97	0.00	113.29
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	26.21	0.00	13,473	0.00	12.00	0.00	12.00
RICE	0.00	26.00	0.00	173	0.00	0.15	0.00	0.15
SORGHUM	0.00	20.21	0.00	3,368	0.00	3.00	0.00	3.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
IMPROVED PASTURE	0.00	47.48	0.00	148,276	59.40	72.61	0.00	132.01
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	29.91	0.00	0.00	199	0.18	0.00	0.00	0.18
TURF GRASS	39.48	0.00	0.00	2,868	0.64	1.40	0.51	2.04
LIVESTOCK	0.00	0.00	0.00	404	0.09	0.27	0.00	0.36
					296,016	88.63	174.40	0.51
								263.03

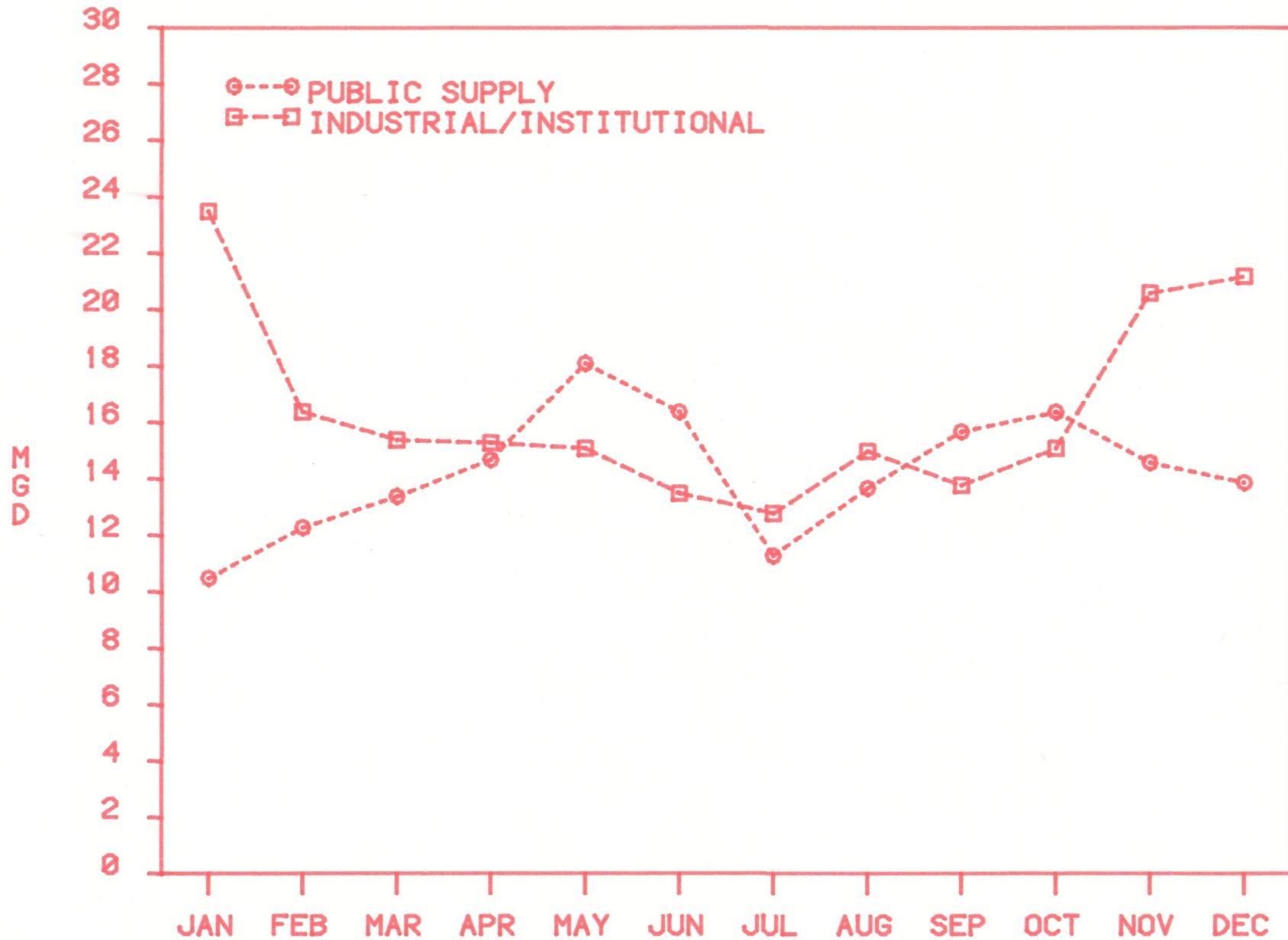


FIGURE A-11.

MONTHLY FRESH WATER USE IN LAKE COUNTY FOR 1984

COUNTY: LAKE - 1984

Total Population: 119,902

Total Land Area: 1,163 sq. miles

St. Johns River Water Management Portion

Population: 118,703

Population Public Supply: 72,907

Population Domestic Self-Supplied: 45,796

Gallons Per Capita Day: 195

Land Area: 1,059 sq. miles (677,760 acres)

Acres Farmed: 183,930

Acres Irrigated: 70,130

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	14.21	0.0	-	14.21
Domestic	8.93	0.0	-	8.93
Industrial	16.43	0.0	-	16.43
Agr. Irrigation	85.81	18.01	2.52	103.82(1)
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.49	0.0	-	0.49
 TOTALS	 125.87	 18.01	 2.52	 143.88(1)

(1) Reuse is not included in Total

LAKE

TABLE A-19 ACRES FARMED AND IRRIGATED

CROP TYPE	LAKE	COUNTY				
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	125	125	50	0	75	0
CARROTS	2,940	2,940	0	0	2,940	0
CUCUMBERS	200	200	130	0	70	0
POTATOES	100	100	0	0	100	0
SWEET CORN	3,000	3,000	0	0	3,000	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	1,764	1,764	100	0	1,664	0
BLUEBERRIES	5	5	0	0	2	3
CITRUS	122,777	49,000	42,000	0	430	6,570
GRAPES	9	9	7	0	0	2
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	40	40	0	0	0	40
WATERMELONS	700	700	700	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	1,500	1,500	1,050	0	450	0
SORGHUM	1,400	1,300	700	0	600	0
SOYBEANS	500	500	0	0	500	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
WHEAT	100	100	0	0	100	0
FERNS	250	250	250	0	0	0
FLOWERS & FOLIAGE	100	100	0	0	0	100
IMPROVED PASTURE	47,320	7,820	2,320	0	5,500	0
WOODY ORNAMENTALS	150	150	150	0	0	0
SOD	0	0	0	0	0	0
TURF GRASS	950	530	530	0	0	0
	183,930	70,133	47,987	0	15,431	6,715

TABLE A-20 IRRIGATION WATER USE

CROP TYPE	SPRINKLER INCHES PER/YR	LAKE		TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
		SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR					
1984 CALENDAR YEAR								
CABBAGE	0.00	12.07	0.00	75	0.07	0.00	0.00	0.07
CARROTS	0.00	12.26	0.00	3,003	2.67	0.00	0.00	2.67
CUCUMBERS	0.00	12.07	0.00	70	0.06	0.00	0.00	0.06
POTATOES	0.00	12.66	0.00	105	0.09	0.00	0.00	0.09
SWEET CORN	0.00	15.39	0.00	3,847	2.74	0.68	0.00	3.42
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	15.42	24.67	0.00	3,549	3.16	0.00	0.00	3.16
BLUEBERRIES	0.00	25.00	20.34	9	0.01	0.00	0.00	0.01
CITRUS	17.68	28.28	15.71	71,494	50.92	12.73	0.00	63.65
GRAPES	24.16	0.00	20.34	17	0.02	0.00	0.00	0.02
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	34.26	114	0.10	0.00	0.00	0.10
WATERMELONS	9.07	0.00	0.00	529	0.47	0.00	0.00	0.47
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	15.39	15.23	0.00	1,917	1.37	0.34	0.00	1.71
SORGHUM	9.68	12.50	0.00	1,189	1.06	0.00	0.00	1.06
SOYBEANS	0.00	14.35	0.00	597	0.53	0.00	0.00	0.53
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WHEAT	0.00	5.74	0.00	47	0.04	0.00	0.00	0.04
FERNS	65.00	0.00	0.00	1,354	1.21	0.00	0.00	1.21
FLOWERS & FOLIAGE	0.00	0.00	39.26	327	0.29	0.00	0.00	0.29
IMPROVED PASTURE	34.08	47.37	0.00	28,300	19.40	3.28	2.52	22.68
WOODY ORNAMENTALS	28.14	0.00	0.00	351	0.31	0.00	0.00	0.31
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	39.17	0.00	0.00	1,730	0.92	0.62	0.00	1.54
LIVESTOCK	0.00	0.00	0.00	820	0.37	0.36	0.00	0.73
119,444				85.81	18.01	2.52	103.82	

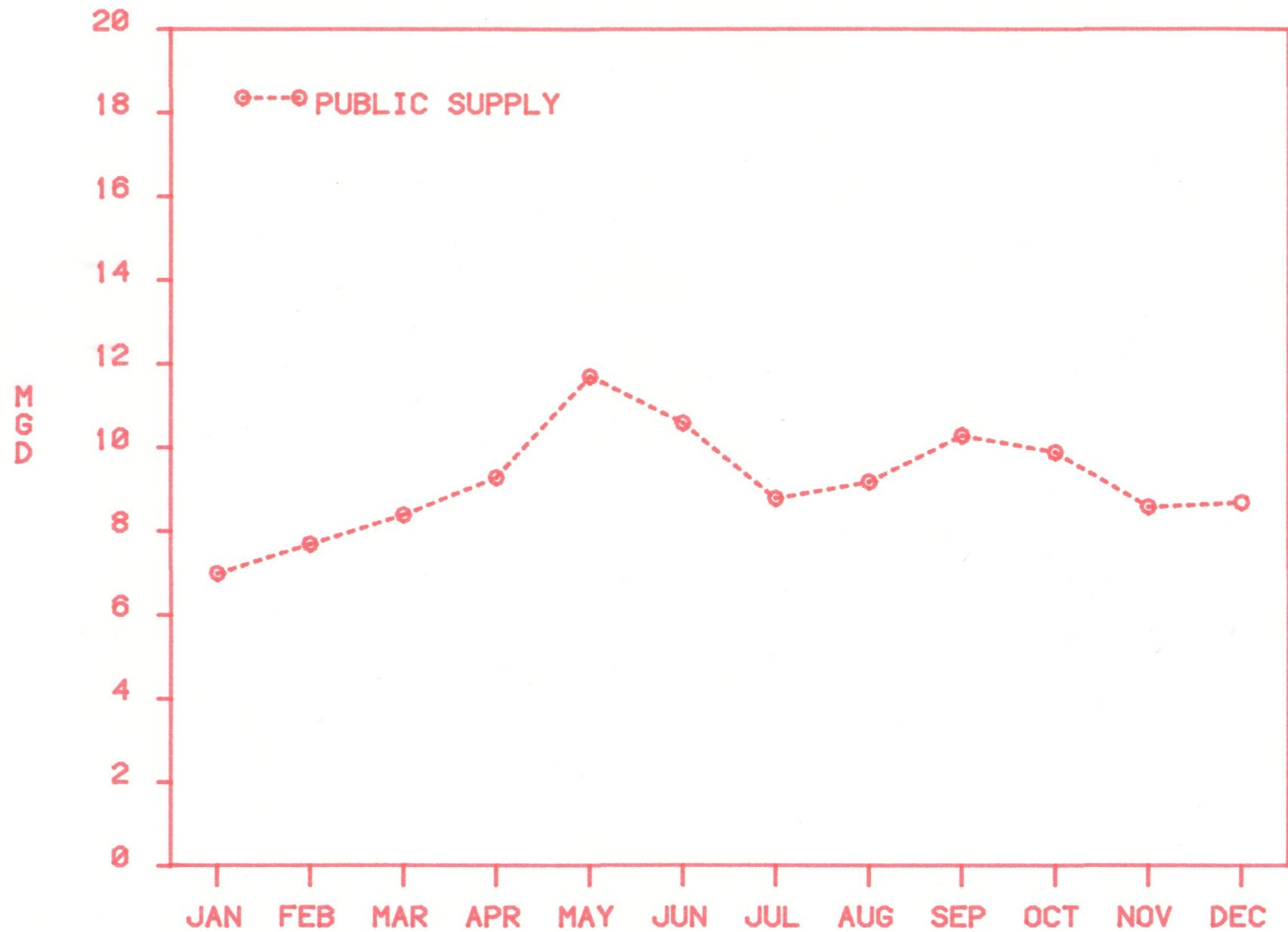


FIGURE A-12

MONTHLY FRESH WATER USE IN MARION COUNTY FOR 1984

COUNTY: MARION - 1984

Total Population: 148,864

Total Land Area: 1,652 sq. miles

St. Johns River Water Management Portion

Population: 121,067

Population Public Supply: 59,240

Population Domestic Self-Supplied: 61,827

Gallons Per Capita Day: 155

Land Area: 1,194 sq. miles (764,160 acres)

Acres Farmed: 80,490

Acres Irrigated: 9,750

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	9.16	0.0	-	9.16
Domestic	9.58	0.0	-	9.58
Industrial	0.22	0.0	-	0.22
Agr. Irrigation	13.31	2.45	0.13	15.76(1)
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	1.71	0.0	-	1.71
TOTALS	33.98	2.45	0.13	36.43(1)

(1) Reuse is not included in Total

TABLE A-21 ACRES FARMED AND IRRIGATED

CROP TYPE	MARION		COUNTY		TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES				
<hr/>							
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	1,600	1,220	1,220	0	0	0	0
BLUEBERRIES	50	50	40	0	0	0	10
CITRUS	9,000	5,000	4,500	0	0	0	500
GRAPES	70	60	60	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	2,000	0	0	0	0	0	0
PECANS	10	0	0	0	0	0	0
WATERMELONS	1,150	600	600	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	3,000	1,320	224	0	1,096	0	0
SORGHUM	150	0	0	0	0	0	0
SOYBEANS	500	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0	0
MISC. GRAINS	WH RYE OATS	1,500	0	0	0	0	0
FERNS	20	15	15	0	0	0	0
FLOWERS & FOLIAGE	10	10	10	0	0	0	0
IMPROVED PASTURE	59,230	275	0	0	275	0	0
WOODY ORNAMENTALS	50	50	50	0	0	0	0
SOD	650	650	650	0	0	0	0
TURF GRASS	1,500	500	500	0	0	0	0
<hr/>		80,490	9,750	7,869	0	1,371	510

TABLE A-22 IRRIGATION WATER USE

MARION COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	8.13	0.00	0.00	826	0.74	0.00	0.00	0.74
BLUEBERRIES	24.16	0.00	20.34	97	0.09	0.00	0.00	0.09
CITRUS	18.41	0.00	16.36	7,585	5.40	1.35	0.00	6.75
GRAPES	23.71	0.00	0.00	118	0.11	0.00	0.00	0.11
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	8.56	0.00	0.00	428	0.38	0.00	0.00	0.38
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	15.33	24.52	0.00	2,525	1.80	0.45	0.00	2.25
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	81	0.07	0.00	0.00	0.07
FLOWERS & FOLIAGE	70.00	0.00	0.00	58	0.05	0.00	0.00	0.05
IMPROVED PASTURE	0.00	46.90	0.00	1,074	0.76	0.19	0.00	0.95
WOODY ORNAMENTALS	70.00	0.00	0.00	291	0.26	0.00	0.00	0.26
SOD	36.28	0.00	0.00	1,965	1.75	0.00	0.00	1.75
TURF GRASS	36.28	0.00	0.00	1,511	0.81	0.40	0.13	1.21
LIVESTOCK	0.00	0.00	0.00	1,292	1.09	0.06	0.00	1.15
				17,851	13.31	2.45	0.13	15.76

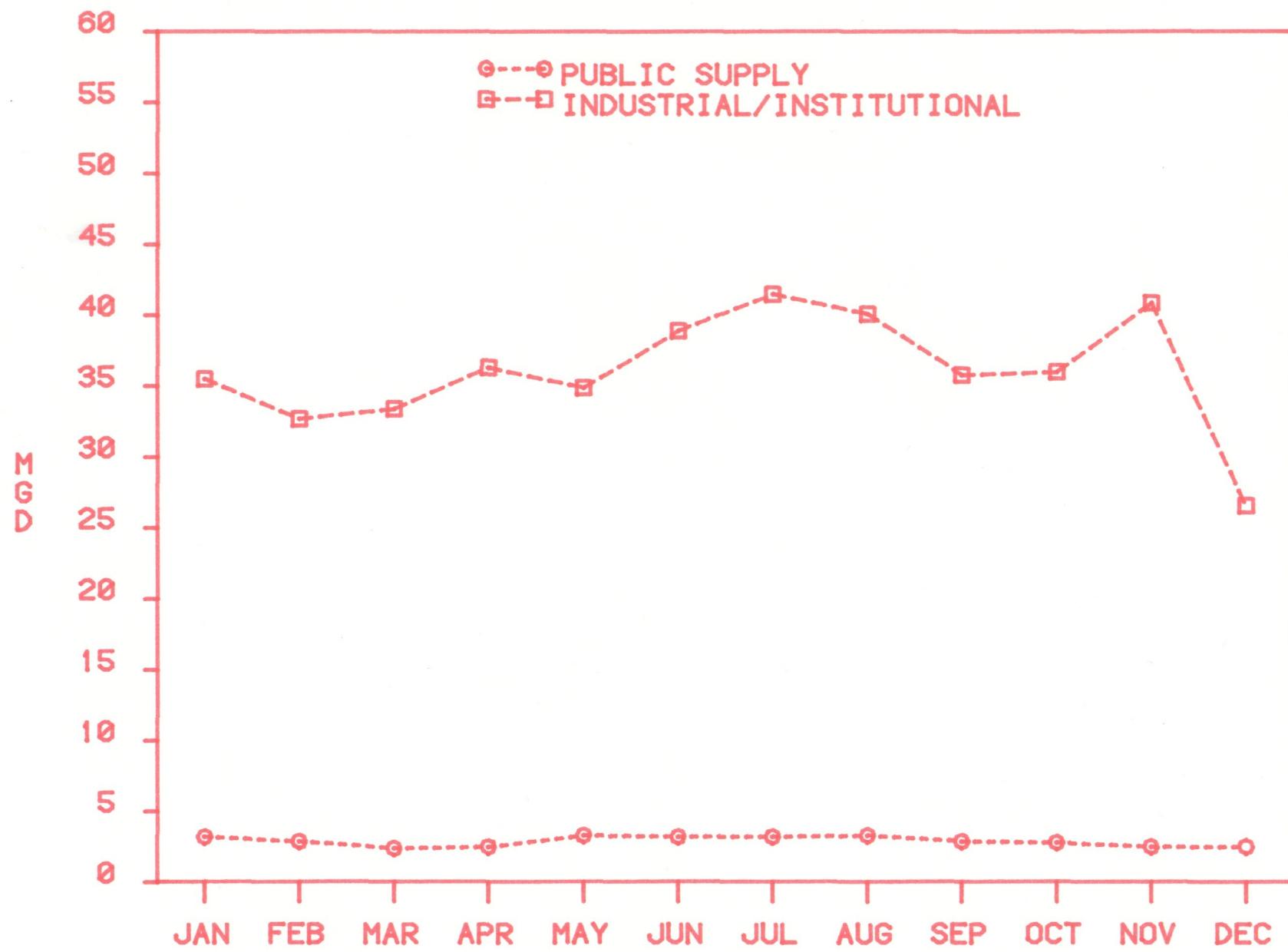


FIGURE A-13

MONTHLY FRESH WATER USE IN NASSAU COUNTY FOR 1984

COUNTY: NASSAU - 1984

Total Population: 37,690

Total Land Area: 671 sq. miles

St. Johns River Water Management Portion

Population: 37,690

Population Public Supply: 16,390

Population Domestic Self-Supplied: 21,300

Gallons Per Capita Day: 176

Land Area: 671 sq. miles (429,440 acres)

Acres Farmed: 7,186

Acres Irrigated: 307

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	2.89	0.0	-	2.89
Domestic	3.75	0.0	-	3.75
Industrial	36.00	0.0	-	36.00
Agr. Irrigation	1.30	0.87	0.19	2.17(1)
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.02	0.0	-	0.02
TOTALS	43.96	0.87	0.19	44.83(1)

(1) Reuse use is not included in Total

TABLE A-23: ACRES FARMED AND IRRIGATED

CROP TYPE	NASSAU	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES	LOW PRESS ACRES
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	100	0	0	0	0	0	0
BLUEBERRIES	30	15	15	0	0	0	0
CITRUS	0	0	0	0	0	0	0
GRAPES	0	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0	0
PECANS	0	0	0	0	0	0	0
WATERMELONS	5	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	500	50	50	0	0	0	0
SORGHUM	1,000	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0	0
TOBACCO	37	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0	0
FERNS	0	0	0	0	0	0	0
FLOWERS & FOLIAGE	20	20	20	0	0	0	0
IMPROVED PASTURE	5,000	0	0	0	0	0	0
WOODY ORNAMENTALS	3	0	0	0	0	0	0
SOD	0	0	0	0	0	0	0
TURF GRASS	491	222	222	0	0	0	0
	7,186	307	307	0	0	0	0

TABLE A-24 IRRIGATION WATER USE

NASSAU COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
BLUEBERRIES	16.40	0.00	0.00	20	0.02	0.00	0.00	0.02
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	16.84	0.00	0.00	70	0.06	0.00	0.00	0.06
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	65.00	0.00	0.00	108	0.10	0.00	0.00	0.10
IMPROVED PASTURE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	31.71	0.00	0.00	586	0.29	0.04	0.19	0.33
LIVESTOCK	0.00	0.00	0.00	1,865	0.83	0.83	0.00	1.66
				2,649	1.30	0.87	0.19	2.17

THE PUBLIC AND INDUSTRIAL PUMPAGE IN OKEECHOBEE COUNTY
WITHIN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FOR 1984 WAS TOO SMALL TO DEPICT.

COUNTY: OKEECHOBEE - 1984

Total Population: 23,878

Total Land Area: 780 sq. miles

St. Johns River Water Management Portion

Population: 390

Population Public Supply: -0-

Population Domestic Self-Supplied: 390

Gallons Per Capita Day: 163 - District Average

Land Area: 103 sq. miles (65,920 acres)

Acres Farmed: 24,084

Acres Irrigated: 6,866

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	0.0	0.0	-	0.0
Domestic	0.06	0.0	-	0.06
Industrial	0.0	0.0	-	0.0
Agr. Irrigation	14.27	1.78	-	16.05
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.0	0.0	-	0.0
 TOTALS	 14.33	 1.78	 0.0	 16.11

TABLE A-25 ACRES FARMED AND IRRIGATED

OKEECHOBEE COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	0	0	0	0	0	0
BLUEBERRIES	0	0	0	0	0	0
CITRUS	4,084	4,084	0	0	50	4,034
GRAPES	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	0	0	0	0	0	0
SORGHUM	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	0	0	0	0	0	0
FLOWERS & FOLIAGE	0	0	0	0	0	0
IMPROVED PASTURE	20,000	2,782	0	0	2,782	0
WOODY ORNAMENTALS	0	0	0	0	0	0
SOD	0	0	0	0	0	0
TURF GRASS	0	0	0	0	0	0
	24,084	6,866	0	0	2,832	4,034

TABLE A-26 IRRIGATION WATER USE

OKEECHOBEE COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	0.00	29.39	16.33	5,612	5.00	0.00	0.00	5.00
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
IMPROVED PASTURE	0.00	49.52	0.00	11,480	8.69	1.53	0.00	10.22
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
LIVESTOCK	0.00	0.00	0.00	932	0.58	0.25	0.00	0.83
					18,024	14.27	1.78	16.05

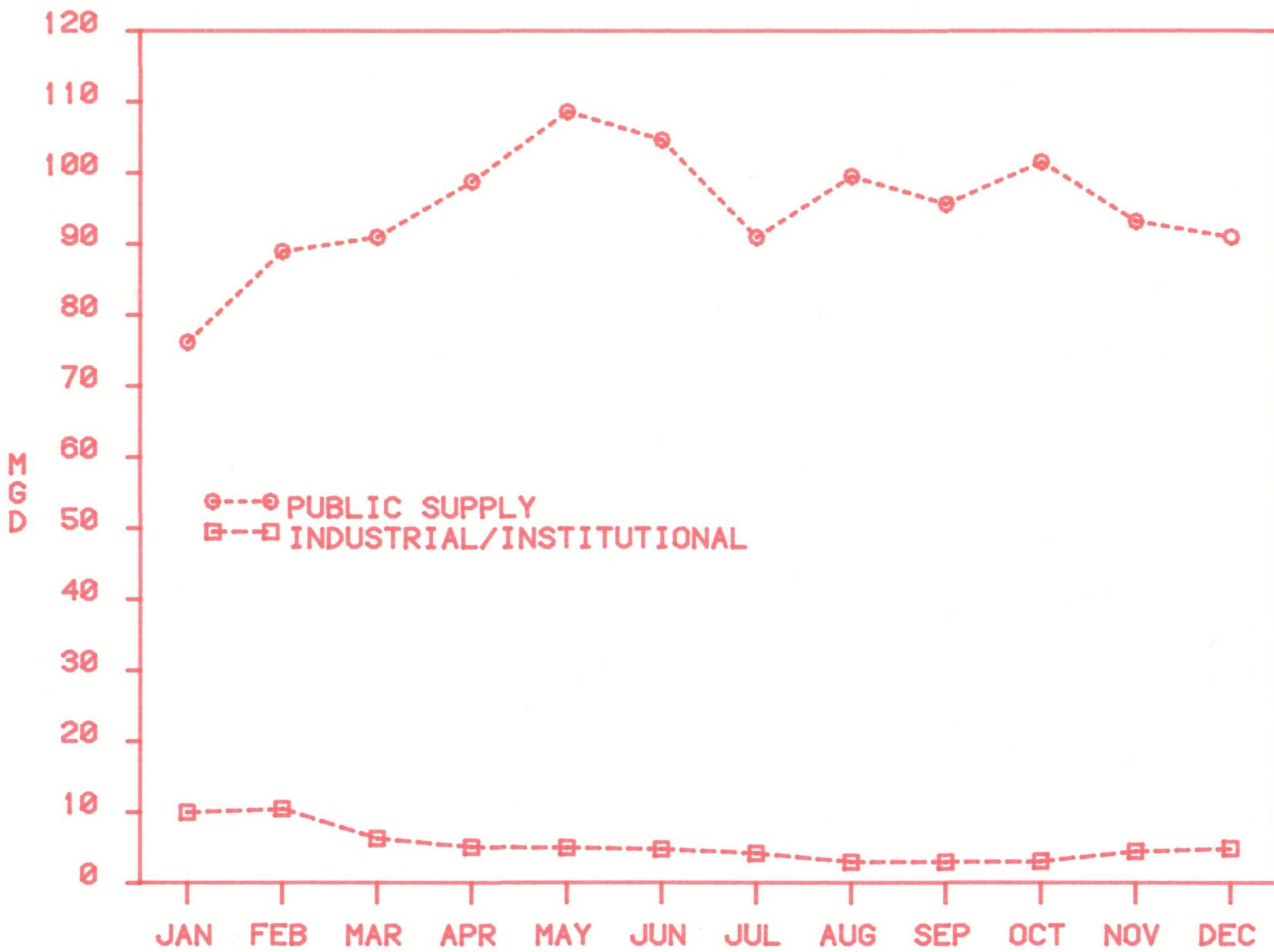


FIGURE A-14

MONTHLY FRESH WATER USE IN ORANGE COUNTY FOR 1984

COUNTY: ORANGE - 1984

Total Population: 530,424

Total Land Area: 1,003 sq. miles

St. Johns River Water Management Portion

Population: 429,644

Population Public Supply: 400,560

Population Domestic Self-Supplied: 29,084

Gallons Per Capita Day: 186

Land Area: 744 sq. miles (476,160 acres)

Acres Farmed: 79,901

Acres Irrigated: 51,103

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	94.81(1)	0.0	-	94.81(1)
Domestic	5.41	0.0	-	5.41
Industrial	5.29	0.0	-	5.29
Agr. Irrigation	47.33	30.22	-	77.55
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.02	0.0	-	0.02
 TOTALS	 152.86(1)	 30.22	 0.0	 183.08(1)

(1) Includes 20.34 MGD withdrawn in Orange County for use in Brevard County.

ORANGE

TABLE A-27 ACRES FARMED AND IRRIGATED

ORANGE COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	1,400	1,400	125	0	1,275	0
CARROTS	13,500	13,500	0	0	13,500	0
CUCUMBERS	150	150	0	0	150	0
POTATOES	0	0	0	0	0	0
SWEET CORN	13,600	13,600	0	0	13,600	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	2,425	2,425	388	0	2,037	0
BLUEBERRIES	0	0	0	0	0	0
CITRUS	25,580	14,400	12,950	0	0	1,450
GRAPES	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	150	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	200	200	200	0	0	0
SORGHUM	0	0	0	0	0	0
SOYBEANS	200	200	200	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	40	40	40	0	0	0
FLOWERS & FOLIAGE	581	581	581	0	0	0
IMPROVED PASTURE	18,562	1,688	355	0	1,333	0
WOODY ORNAMENTALS	2,000	2,000	2,000	0	0	0
SOD	100	100	0	0	100	0
TURF GRASS	1,413	819	819	0	0	0
	79,901	51,103	17,658	0	31,995	1,450

TABLE A-28 IRRIGATION WATER USE

ORANGE COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	12.07	0.00	1,282	1.14	0.00	0.00	1.14
CARROTS	0.00	12.26	0.00	13,792	1.23	11.05	0.00	12.28
CUCUMBERS	0.00	12.07	0.00	150	0.13	0.00	0.00	0.13
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	15.23	0.00	17,260	1.54	13.83	0.00	15.37
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	15.42	24.67	0.00	4,686	3.34	0.83	0.00	4.17
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	20.71	0.00	19.03	24,649	19.75	2.19	0.00	21.94
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	15.39	0.00	0.00	256	0.23	0.00	0.00	0.23
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	14.98	0.00	0.00	249	0.22	0.00	0.00	0.22
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	216	0.19	0.00	0.00	0.19
FLOWERS & FOLIAGE	65.00	0.00	50.00	3,147	2.24	0.56	0.00	2.80
IMPROVED PASTURE	34.08	54.53	0.00	7,065	5.03	1.26	0.00	6.29
WOODY ORNAMENTALS	65.00	0.00	0.00	10,833	9.64	0.00	0.00	9.64
SOD	0.00	38.41	0.00	320	0.28	0.00	0.00	0.28
TURF GRASS	38.41	0.00	0.00	2,621	2.10	0.23	0.00	2.33
LIVESTOCK	0.00	0.00	0.00	606	0.27	0.27	0.00	0.54
				87,132	47.33	30.22	0.00	77.55

THE PUBLIC AND INDUSTRIAL PUMPAGE IN OSCEOLA COUNTY
WITHIN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FOR 1984 WAS TOO SMALL TO DEPICT.

COUNTY: OSCEOLA - 1984

Total Population: 69,955

Total Land Area: 1,467 sq. miles

St. Johns River Water Management Portion

Population: 394

Population Public Supply: -0-

Population Domestic Self-Supplied: 394

Gallons Per Capita Day: 163 - District average

Land Area: 542 sq. miles (346,880 acres)

Acres Farmed: 128,251

Acres Irrigated: 3,351

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	0.0	0.0	-	0.0
Domestic	0.06	0.0	-	0.06
Industrial	0.0	0.0	-	0.0
Agr. Irrigation	7.54	0.87	-	8.41
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.0	0.0	-	0.0
 TOTALS	7.60	0.87	0.0	8.47

TABLE A-29 ACRES FARMED AND IRRIGATED

CROP TYPE	OSCEOLA	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES	LOW PRESS ACRES
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	201	201	0	0	201	0	0
BLUEBERRIES	0	0	0	0	0	0	0
CITRUS	2,250	2,000	0	0	2,000	0	0
GRAPES	0	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0	0
PECANS	0	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	0	0	0	0	0	0	0
SORGHUM	0	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0	0
FERNS	0	0	0	0	0	0	0
FLOWERS & FOLIAGE	0	0	0	0	0	0	0
IMPROVED PASTURE	125,300	1,150	0	0	1,150	0	0
WOODY ORNAMENTALS	0	0	0	0	0	0	0
SOD	0	0	0	0	0	0	0
TURF GRASS	0	0	0	0	0	0	0
	128,251	3,351	0	0	3,351	0	0

TABLE A-30 IRRIGATION WATER USE

OSCEOLA COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	22.10	0.00	370	0.25	0.08	0.00	0.33
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	0.00	27.93	0.00	4,655	4.14	0.00	0.00	4.14
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
IMPROVED PASTURE	0.00	46.11	0.00	4,418	3.15	0.79	0.00	3.94
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
LIVESTOCK	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
				9,443	7.54	0.87	0.00	8.41

THE PUBLIC AND INDUSTRIAL PUMPAGE IN POLK COUNTY
WITHIN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FOR 1984 WAS TOO SMALL TO DEPICT.

COUNTY: POLK - 1984

Total Population: 355,413

Total Land Area: 2,048 sq. miles

St. Johns River Water Management Portion

Population: 5,150

Population Public Supply: -0-

Population Domestic Self-Supplied: 5,150

Gallons Per Capita Day: 163 - District Average

Land Area: 63 sq. miles (40,320 acres)

Acres Farmed: 19,955

Acres Irrigated: 10,555

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	0.0	0.0	-	0.0
Domestic	0.84	0.0	-	0.84
Industrial	0.0	0.0	-	0.0
Agr. Irrigation	13.61	1.51	-	15.12
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free flowing wells	0.0	0.0	-	0.0
 TOTALS	 14.45	 1.51	 0.0	 15.96

POLK

TABLE A-31 ACRES FARMED AND IRRIGATED

CROP TYPE	POLK	COUNTY					
	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES	
CABBAGE	0	0	0	0	0	0	0
CARROTS	0	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0	0
POTATOES	0	0	0	0	0	0	0
SWEET CORN	0	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0	0
MISC. VEGETABLES	0	0	0	0	0	0	0
BLUEBERRIES	0	0	0	0	0	0	0
CITRUS	15,400	10,400	9,400	0	0	1,000	
GRAPES	0	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0	0
PECANS	0	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0	0
FIELD CORN	0	0	0	0	0	0	0
SORGHUM	0	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0	0
FERNS	0	0	0	0	0	0	0
FLOWERS & FOLIAGE	5	5	5	0	0	0	0
IMPROVED PASTURE	4,500	100	0	0	100	0	
WOODY ORNAMENTALS	50	50	50	0	0	0	0
SOD	0	0	0	0	0	0	0
TURF GRASS	0	0	0	0	0	0	0
	19,955	10,555	9,455	0	100	1,000	

TABLE A-32 IRRIGATION WATER USE

POLK COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	18.82	0.00	16.73	16,136	12.93	1.44	0.00	14.37
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FLOWERS & FOLIAGE	65.00	0.00	0.00	27	0.02	0.00	0.00	0.02
IMPROVED PASTURE	0.00	49.73	0.00	414	0.29	0.07	0.00	0.36
WOODY ORNAMENTALS	100.00	0.00	0.00	416	0.37	0.00	0.00	0.37
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
LIVESTOCK	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
					16,993	13.61	1.51	0.00
								15.12

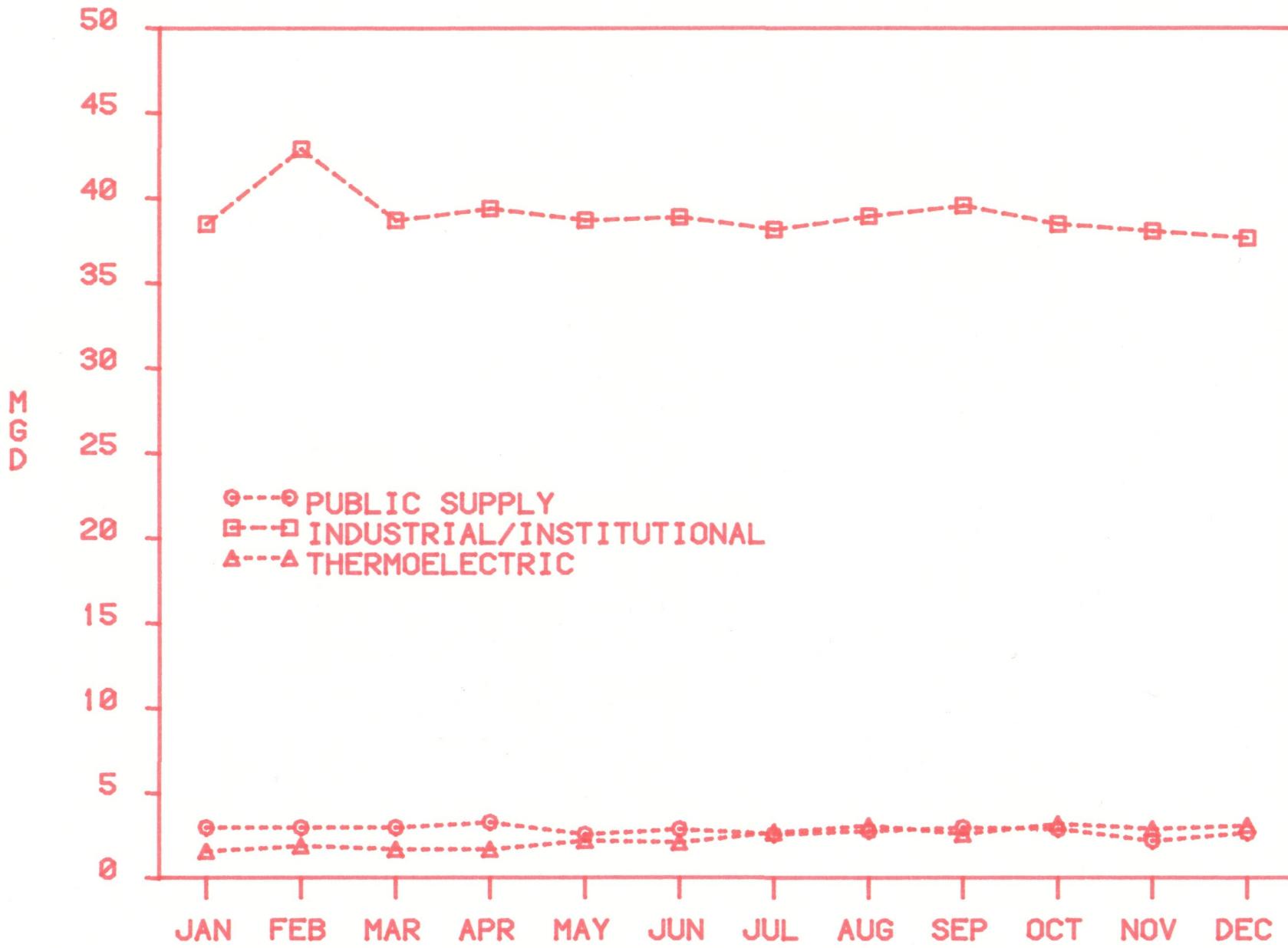


FIGURE A-15

MONTHLY FRESH WATER USE IN PUTNAM COUNTY FOR 1984

COUNTY: PUTNAM - 1984

Total Population: 55,235

Total Land Area: 879 sq. miles

St. Johns River Water Management Portion

Population: 55,235

Population Public Supply: 17,426

Population Domestic Self-Supplied: 37,809

Gallons Per Capita Day: 161

Land Area: 879 sq. miles (562,460 acres)(1)

Acres Farmed: 48,983

Acres Irrigated: 10,743

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	2.80	0.0	-	2.80
Domestic	6.09	0.0	-	6.09
Industrial	26.02	12.82	-	38.84
Agr. Irrigation	21.42	1.10	-	22.52
Thermoelectric	0.62	1.77	-	2.39
Heat Pump/air cond.	2.29	0.0	-	2.29
Free-flowing wells	0.55	0.0	-	0.55
 TOTALS	 59.79	 15.69	 0.0	 75.48

(1) There is less than one square mile (100 acres) of land area in Putnam County that is not within the SJRWMD.

TABLE A-33 ACRES FARMED AND IRRIGATED

PUTNAM COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	1,500	1,500	150	0	1,350	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	0	0	0	0	0	0
POTATOES	4,500	4,500	0	0	4,500	0
SWEET CORN	0	0	0	0	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	200	200	0	0	200	0
BLUEBERRIES	75	55	0	0	0	55
CITRUS	500	0	0	0	0	0
GRAPES	10	10	10	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	200	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	3,000	1,000	0	0	1,000	0
SORGHUM	0	0	0	0	0	0
SOYBEANS	1,000	0	0	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	700	700	700	0	0	0
FLOWERS & FOLIAGE	220	220	0	0	220	0
IMPROVED PASTURE	37,000	2,500	0	0	2,500	0
WOODY ORNAMENTALS	0	0	0	0	0	0
SOD	0	0	0	0	0	0
TURF GRASS	78	58	58	0	0	0
	48,983	10,743	918	0	9,770	55

TABLE A-34 IRRIGATION WATER USE

PUTNAM COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	12.36	0.00	1,390	1.24	0.00	0.00	1.24
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
POTATOES	0.00	14.67	0.00	5,501	4.90	0.00	0.00	4.90
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	30.27	0.00	504	0.45	0.00	0.00	0.45
BLUEBERRIES	0.00	0.00	21.47	98	0.09	0.00	0.00	0.09
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	24.16	0.00	0.00	20	0.02	0.00	0.00	0.02
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	26.39	0.00	2,199	1.57	0.39	0.00	1.96
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	3,791	3.04	0.34	0.00	3.38
FLOWERS & FOLIAGE	0.00	65.00	0.00	1,191	0.85	0.21	0.00	1.06
IMPROVED PASTURE	0.00	47.63	0.00	9,922	8.83	0.00	0.00	8.83
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	41.05	0.00	0.00	198	0.18	0.00	0.00	0.18
LIVESTOCK	0.00	0.00	0.00	461	0.25	0.16	0.00	0.41
				25,275	21.42	1.10	0.00	22.52



FIGURE A-16

MONTHLY FRESH WATER USE IN SEMINOLE COUNTY FOR 1984

COUNTY: SEMINOLE - 1984

Total Population: 214,870

Total Land Area: 352 sq. miles

St. Johns River Water Management Portion

Population: 214,870

Population Public Supply: 187,672

Population Domestic Self-Supplied: 27,198

Gallons Per Capita Day: 170

Land Area: 352 sq. miles (225,280 acres)

Acres Farmed: 19,168

Acres Irrigated: 12,341

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	31.85	0.0	-	31.85
Domestic	4.62	0.0	-	4.62
Industrial	5.29	0.0	-	5.29
Agr. Irrigation	31.49	0.75	0.28	32.24(1)
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.04	0.0	-	0.04
TOTALS	73.29	0.75	0.28	74.04(1)

(1) Reuse is not included in Total

TABLE A-35 ACRES FARMED AND IRRIGATED

CROP TYPE	SEMINOLE COUNTY		TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
	TOTAL AC FARMED	IRRIGATED ACRES			
CABBAGE	1,800	1,800	0	1,800	0
CARROTS	0	0	0	0	0
CUCUMBERS	1,600	1,600	0	1,600	0
POTATOES	0	0	0	0	0
SWEET CORN	40	40	0	40	0
WATERCRESS	150	150	0	0	150
MISC. VEGETABLES	960	873	0	873	0
BLUEBERRIES	5	5	0	5	0
CITRUS	5,200	4,000	3,200	240	560
GRAPES	0	0	0	0	0
PEACHES	0	0	0	0	0
PEANUTS	0	0	0	0	0
PECANS	0	0	0	0	0
WATERMELONS	0	0	0	0	0
MISC. FRUIT	10	10	10	0	0
FIELD CORN	80	80	0	0	80
SORGHUM	40	40	0	0	40
SOYBEANS	40	40	0	40	0
TOBACCO	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0
FERNS	20	20	20	0	0
FLOWERS & FOLIAGE	560	560	440	0	120
IMPROVED PASTURE	7,000	2,000	0	0	2,000
WOODY ORNAMENTALS	160	160	140	0	20
SOD	300	300	0	0	300
TURF GRASS	1,203	663	663	0	0
	19,168	12,341	4,473	4,598	2,590
					680

TABLE A-36 IRRIGATION WATER USE

SEMINOLE COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	9.03	0.00	1,354	1.21	0.00	0.00	1.21
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	9.03	0.00	1,204	1.07	0.00	0.00	1.07
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	17.58	0.00	58	0.05	0.00	0.00	0.05
WATERCRESS	0.00	700.00	0.00	8,750	7.79	0.00	0.00	7.79
MISC. VEGETABLES	0.00	13.33	0.00	969	0.86	0.00	0.00	0.86
BLUEBERRIES	0.00	15.23	0.00	6	0.01	0.00	0.00	0.01
CITRUS	20.83	33.32	18.51	7,084	5.99	0.32	0.00	6.31
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	20.83	0.00	0.00	17	0.02	0.00	0.00	0.02
FIELD CORN	0.00	24.61	0.00	164	0.15	0.00	0.00	0.15
SORGHUM	0.00	13.80	0.00	46	0.04	0.00	0.00	0.04
SOYBEANS	0.00	23.08	0.00	76	0.07	0.00	0.00	0.07
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	108	0.10	0.00	0.00	0.10
FLOWERS & FOLIAGE	65.00	0.00	50.00	2,883	2.57	0.00	0.00	2.57
IMPROVED PASTURE	0.00	52.52	0.00	8,753	7.79	0.00	0.00	7.79
WOODY ORNAMENTALS	50.00	15.23	0.00	608	0.54	0.00	0.00	0.54
SOD	0.00	51.00	0.00	1,275	1.14	0.00	0.00	1.14
TURF GRASS	51.00	0.00	0.00	2,817	1.91	0.33	0.28	2.24
LIVESTOCK	0.00	0.00	0.00	315	0.18	0.10	0.00	0.28
				36,487	31.49	0.75	0.28	32.24

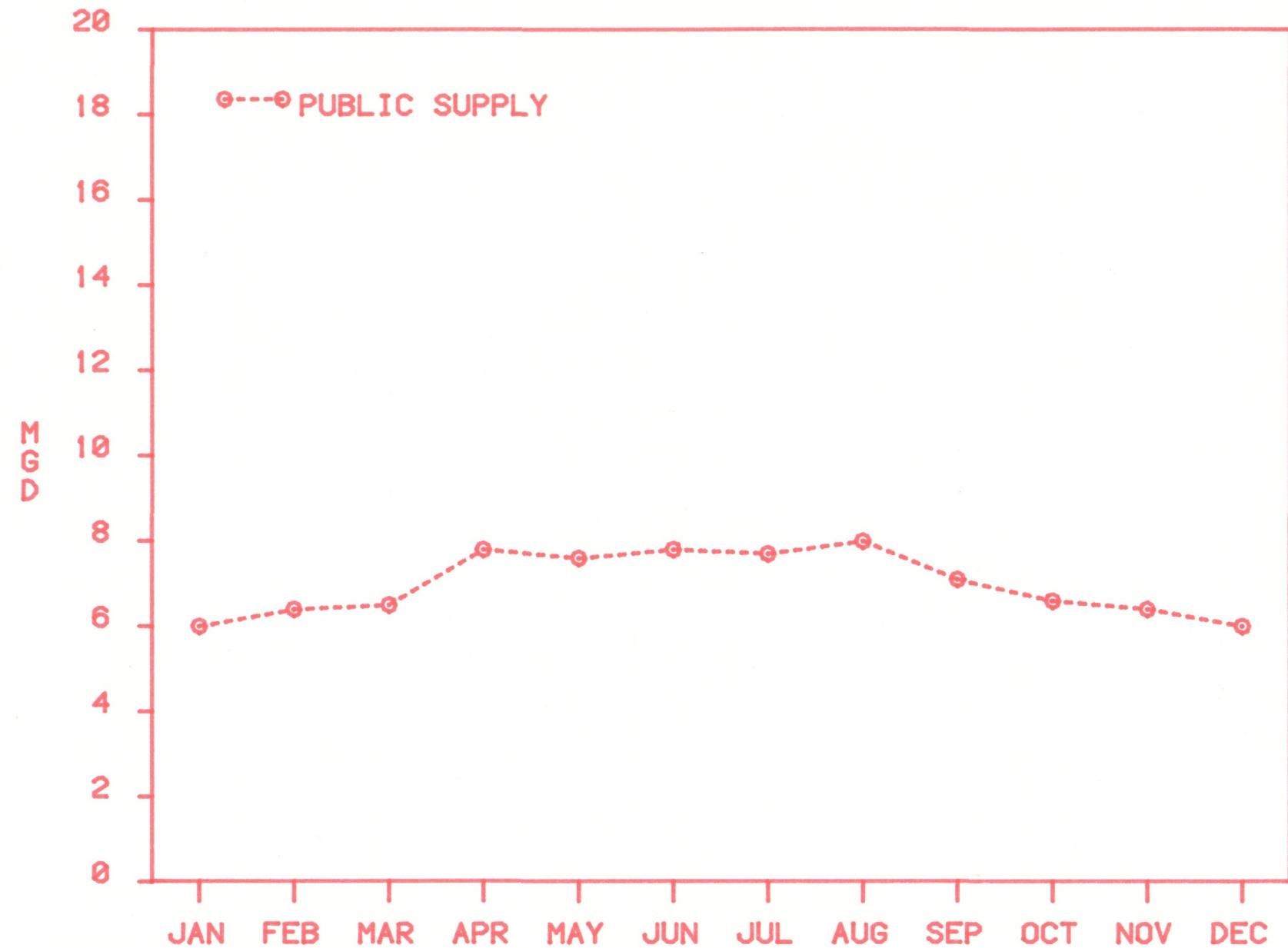


FIGURE A-17

MONTHLY FRESH WATER USE IN ST. JOHNS COUNTY FOR 1984

COUNTY: ST. JOHNS - 1984

Total Population: 64,143

Total Land Area: 660 sq. miles

St. Johns River Water Management Portion

Population: 64,143

Population Public Supply: 47,116

Population Domestic Self-Supplied: 17,027

Gallons Per Capita Day: 148

Land Area: 660 sq. miles (422,400 acres)

Acres Farmed: 32,721

Acres Irrigated: 25,947

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	6.98	0.0	-	6.98
Domestic	2.52	0.0	-	2.52
Industrial	0.06	0.0	-	0.06
Agr. Irrigation	34.49	1.43	0.61	35.92(1)
Thermoelectric	0.0	0.0	-	0.0
Heat Pump/air cond.	0.0	0.0	-	0.0
Free-flowing wells	0.87	0.0	-	0.87
 TOTALS	 44.92	 1.43	 0.61	 46.35(1)

(1) Reuse is not included in Total water use.

ST. JOHNS

TABLE A-37 ACRES FARMED AND IRRIGATED

ST. JOHNS COUNTY

1984 CALENDAR YEAR

CROP TYPE	TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW PRESS LOW VOL ACRES
CABBAGE	5,000	4,000	0	4,000	0	0
CARROTS	0	0	0	0	0	0
CUCUMBERS	50	50	0	50	0	0
POTATOES	16,000	16,000	0	16,000	0	0
SWEET CORN	500	500	0	500	0	0
WATERCRESS	0	0	0	0	0	0
MISC. VEGETABLES	500	500	0	500	0	0
BLUEBERRIES	5	5	0	0	0	5
CITRUS	0	0	0	0	0	0
GRAPES	0	0	0	0	0	0
PEACHES	0	0	0	0	0	0
PEANUTS	0	0	0	0	0	0
PECANS	0	0	0	0	0	0
WATERMELONS	0	0	0	0	0	0
MISC. FRUIT	0	0	0	0	0	0
FIELD CORN	4,000	3,000	0	3,000	0	0
SORGHUM	0	0	0	0	0	0
SOYBEANS	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0
MISC. GRAINS	0	0	0	0	0	0
FERNS	5	5	5	0	0	0
FLOWERS & FOLIAGE	25	25	15	10	0	0
IMPROVED PASTURE	5,500	1,000	0	1,000	0	0
WOODY ORNAMENTALS	75	75	75	0	0	0
SOD	0	0	0	0	0	0
TURF GRASS	1,061	787	787	0	0	0
	32,721	25,947	882	25,060	0	5

TABLE A-38 IRRIGATION WATER USE

ST. JOHNS COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	15.00	0.00	5,000	4.45	0.00	0.00	4.45
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	16.92	0.00	70	0.06	0.00	0.00	0.06
POTATOES	0.00	14.21	0.00	18,946	16.87	0.00	0.00	16.87
SWEET CORN	0.00	25.55	0.00	1,064	0.95	0.00	0.00	0.95
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	24.81	0.00	1,033	0.92	0.00	0.00	0.92
BLUEBERRIES	0.00	0.00	9.30	3	0.00	0.00	0.00	0.00
CITRUS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	20.79	0.00	5,197	4.63	0.00	0.00	4.63
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	27	0.02	0.00	0.00	0.02
FLOWERS & FOLIAGE	65.00	80.00	0.00	147	0.13	0.00	0.00	0.13
IMPROVED PASTURE	0.00	42.85	0.00	3,570	3.02	0.16	0.00	3.18
WOODY ORNAMENTALS	70.00	0.00	0.00	437	0.39	0.00	0.00	0.39
SOD	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TURF GRASS	80.31	0.00	0.00	5,267	2.91	1.17	0.61	4.08
LIVESTOCK	0.00	0.00	0.00	270	0.14	0.10	0.00	0.24
				41,031	34.49	1.43	0.61	35.92

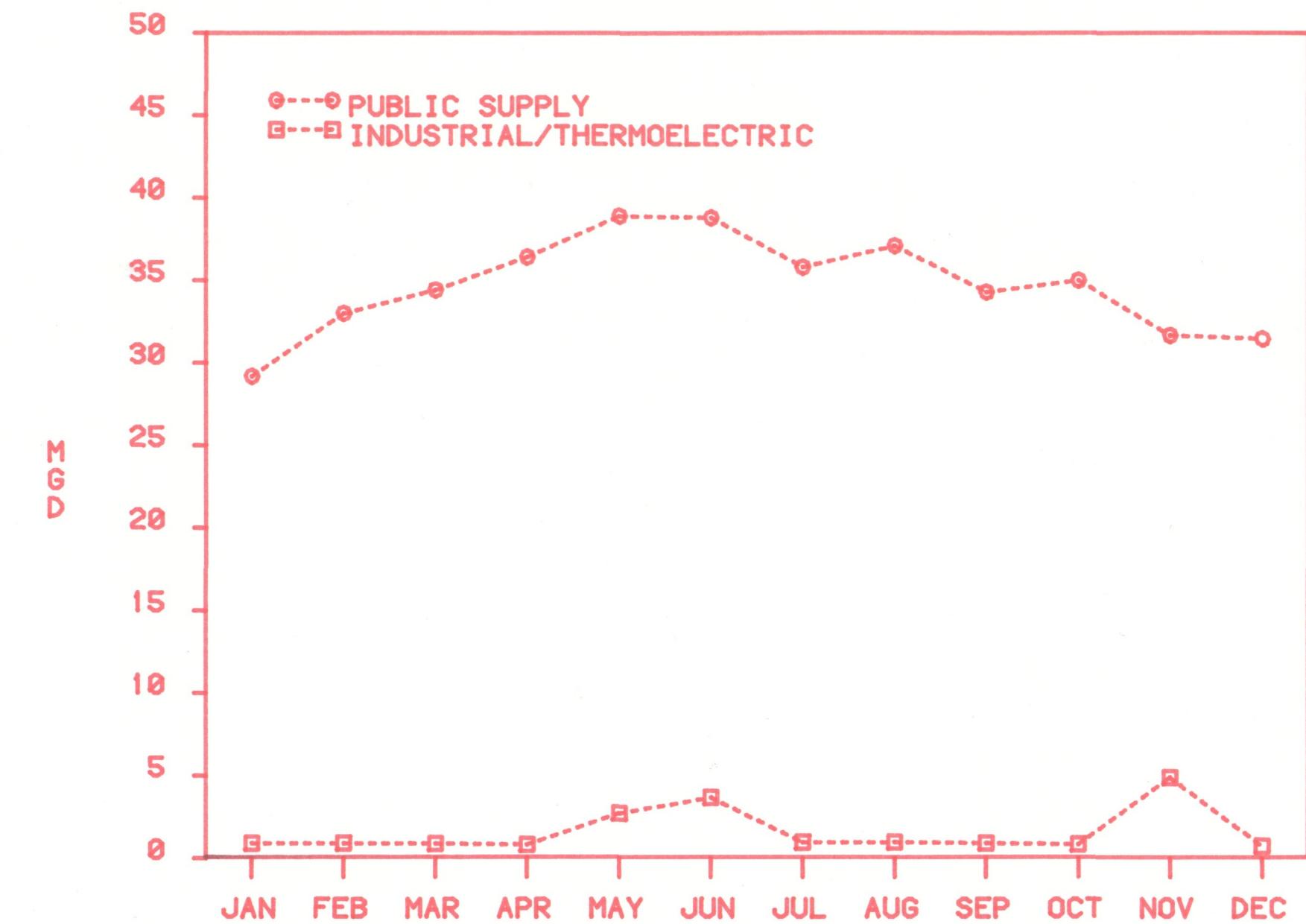


FIGURE A-18

MONTHLY FRESH WATER USE IN VOLUSIA COUNTY FOR 1984

COUNTY: VOLUSIA - 1984

Total Population: 295,368

Total Land Area: 1,207 sq. miles

St. Johns River Water Management Portion

Population: 295,368

Population Public Supply: 253,740

Population Domestic Self-Supplied: 41,628

Gallons Per Capita Day: 136

Land Area: 1,207 sq. miles (772,480 acres)

Acres Farmed: 26,197

Acres Irrigated: 7,613

Fresh Water Use 1984 (MGD)

	GROUND	SURFACE	REUSE	TOTAL
Public	34.58(1)	0.0	-	34.58(1)
Domestic	5.66	0.0	-	5.66
Industrial	0.55	0.0	-	0.55
Agr. Irrigation	23.01	4.85	-	27.86
Thermoelectric	0.25	0.80	-	1.05
Heat Pump/air cond.	6.16	0.0	-	6.16
Free-flowing wells	1.03	0.0	-	1.03
 TOTALS	 71.24(1)	 5.65	 0.0	 76.89(1)

(1) Includes 0.01 MGD saline ground water used for R/O.

TABLE A-39 ACRES FARMED AND IRRIGATED

CROP TYPE		VOLUSIA	COUNTY				
		TOTAL AC FARMED	IRRIGATED ACRES	SPRINKLER ACRES	TILE SEEPAGE ACRES	FLOOD & SEEPAGE ACRES	LOW VOL ACRES
CABBAGE	(1)	880	750	0	0	750	0
CARROTS		0	0	0	0	0	0
CUCUMBERS	(1)	880	750	0	0	750	0
POTATOES		0	0	0	0	0	0
SWEET CORN		0	0	0	0	0	0
WATERCRESS		0	0	0	0	0	0
MISC. VEGETABLES		100	100	0	0	100	0
BLUEBERRIES		0	0	0	0	0	0
CITRUS		5,100	400	300	0	0	100
GRAPES		0	0	0	0	0	0
PEACHES		0	0	0	0	0	0
PEANUTS		0	0	0	0	0	0
PECANS		0	0	0	0	0	0
WATERMELONS		0	0	0	0	0	0
MISC. FRUIT		0	0	0	0	0	0
FIELD CORN		0	0	0	0	0	0
SORGHUM		0	0	0	0	0	0
SOYBEANS		0	0	0	0	0	0
TOBACCO		0	0	0	0	0	0
MISC. GRAINS		0	0	0	0	0	0
FERNS		4,500	3,880	3,880	0	0	0
FLOWERS & FOLIAGE		5	5	5	0	0	0
IMPROVED PASTURE		12,600	300	0	0	300	0
WOODY ORNAMENTALS		0	0	0	0	0	0
SOD		225	200	200	0	0	0
TURF GRASS		1,907	1,228	1,228	0	0	0
		26,197	7,613	5,613	0	1,900	100
		=====	=====	=====	=====	=====	=====
		1,129,195	382,056	122,348	35,668	184,780	39,260

TABLE A-40 IRRIGATION WATER USE

VOLUSIA COUNTY

1984 CALENDAR YEAR

CROP TYPE	SPRINKLER INCHES PER/YR	SEEPAGE INCHES PER/YR	LOW PRESS INCHES PER/YR	TOTAL AC.FT	GROUND WATER M G D	SURFACE WATER M G D	RE-USED WATER M G D	TOTAL WATER M G D
CABBAGE	0.00	13.43	0.00	839	0.75	0.00	0.00	0.75
CARROTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CUCUMBERS	0.00	13.43	0.00	839	0.75	0.00	0.00	0.75
POTATOES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SWEET CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERCRESS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. VEGETABLES	0.00	22.54	0.00	187	0.17	0.00	0.00	0.17
BLUEBERRIES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
CITRUS	17.37	0.00	15.44	562	0.48	0.03	0.00	0.51
GRAPES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEACHES	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PEANUTS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
PECANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
WATERMELONS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. FRUIT	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FIELD CORN	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SORGHUM	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOYBEANS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
TOBACCO	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
MISC. GRAINS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
FERNS	65.00	0.00	0.00	21,016	15.53	3.18	0.00	18.71
FLOWERS & FOLIAGE	65.00	0.00	0.00	27	0.02	0.00	0.00	0.02
IMPROVED PASTURE	0.00	44.96	0.00	1,124	0.95	0.05	0.00	1.00
WOODY ORNAMENTALS	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
SOD	50.12	0.00	0.00	835	0.74	0.00	0.00	0.74
TURF GRASS	49.13	0.00	0.00	5,027	3.49	0.98	0.00	4.47
LIVESTOCK	0.00	0.00	0.00	831	0.13	0.61	0.00	0.74
				31,287	23.01	4.85	0.00	27.86
				=====	=====	=====	=====	=====
				853,759	492.58	261.32	6.26	753.90

ADDITIONAL WATER USE REPORTS

Annual Water Use Survey: 1978, Technical Publication SJ80-5
(Elaine Scott).

Annual Water Use Survey: 1979, Technical Publication SJ81-3
(Richard Marella).

Annual Water Use Survey: 1980, Technical Publication SJ82-5
(Richard Marella)

Annual Water Use Survey: 1981, Technical Publication SJ83-9
(Richard Marella)

Annual Water Use Survey: 1982, Technical Publication SJ84-2
(Richard Marella)

Annual Water Use Survey: 1982, Technical Publication SJ84-2
(Map Series) (Richard Marella)

Annual Water Use Survey: 1983, Technical Publication SJ84-5
(Richard Marella)

Individual Supplement: 1983

Ground Water Withdrawals from the Floridan Aquifer in Duval County
- 1980 (Richard Marella), Technical Publication SJ83-7.

Ground Water Withdrawals from the Floridan Aquifer in Nassau County
- 1982 (Richard Marella), Technical Publication SJ84-4.

Ground Water Withdrawals from the Floridan Aquifer in Clay and
Bradford Counties - 1983 (Richard Marella), Technical
Publication SJ84-14.