

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

2018 ANNUAL WATER USE REPORT



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2018 ANNUAL GROUNDWATER USE SUMMARY



SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Introduction

The Suwannee River Water Management District (District) is one of five regional water management districts in Florida. The District encompasses all or part of 15 counties in north-central Florida and includes 7,640 square miles with 13 river basins. The District manages water and related natural resources by providing water quality and water use monitoring, planning, research, regulation, land acquisition and management, and flood protection.

In support of water supply planning, the District incorporates data from water use monitoring programs and produces estimates of water use across six categories. The District has compiled the 2018 Annual Groundwater Use Report to provide Districtwide estimates of groundwater use. This report includes estimates of rainfall as compared to groundwater withdrawals (Table 1), total groundwater withdrawals broken down by water use type and county (Table 2), as well as estimates of historical groundwater use over time.

Data Sources/Methodology

Historical groundwater use data from 1965 through 2005 were obtained from the United States Geological Survey (Historical Groundwater Use Data 1965-2005). Water use estimates for 2010 came from estimates produced in support of the North Florida Regional Water Supply Plan (2015-2035) and the Water Supply Assessment (2015-2035). Estimates of 2015-2017 groundwater use are published in the Annual Groundwater Use Report which can be found on the District's website (Annual Groundwater Use Report, SRWMD 2015-2017). Estimates of 2018 groundwater use and population were prepared as described below and reflect the best available information presented at the time the report was produced for the District.

Population

The District used population estimates published by the Bureau of Economic and Business Research (BEBR) to estimate county-wide population. To estimate water use and per person water usage rates, the District estimated populations served by a public water supplier, via self-supply (domestic well), and from an institutional supplier (e.g. prisoners). Population served by public supply was estimated using data received from public water suppliers in 2018. The institutional population was estimated based on data provided by the Florida Department of Corrections (FDOC). Once a population served by public supply was estimated, it was subtracted from the county-wide BEBR population estimate along with the institutional population. The remaining estimate was considered the non-served population and was used to estimate the domestic self-supply water use. Parcel level data was also used to estimate the percent of population residing in the District for counties shared with adjacent water management districts. This percentage was estimated using the percent of residential dwelling units located in the District's portion. These shared counties were Alachua, Baker, Bradford, Jefferson, and Levy Counties. For more detailed information on the population estimation process, see "2014-2018 Population Estimation and Projection Technical Memo."

Water Use Categories

Water use is summarized in six different categories: public supply, domestic self-supply and small public supply, agriculture, commercial/industrial/institutional and mining/dewatering, landscape/recreational/aesthetics, and thermoelectric power generation. Below is a description of each water use category, along with the source and/or methodology of the data used in this report.

Public supply (PS)

The PS category includes all large municipal, public, and private systems that supply potable water to the public from a central water supply system for human consumption and other uses that have average annual permitted quantities of 0.1 million gallons per day (MGD) or more.

Data sources/Methodology

Water use data in this category were obtained from the Monthly Operating Reports (MORs) submitted to the Florida Department of Environmental Protection (FDEP) by system operators at the utility. The MOR reports the volume of treated groundwater, which represents a reasonable approximation of total groundwater pumped for facilities in the District.

Domestic self-supply and small public supply (DSS)

The DSS category includes domestic water uses generally associated with residential dwellings that are not served by a central public supply utility and water usage from small public supply systems that have average annual permitted quantities of less than 0.1 MGD.

Data sources/Methodology

Water use data from small public suppliers were obtained from MORs reported to FDEP by system operators at the utility. If no MORs were available, water use was set to the permitted allocation. Domestic water use was compiled using non-served population estimates for the county and county-level estimated residential per capita water use rates which were calculated from data provided by public utilities for each county.

Agriculture (AG)

The agricultural water use category includes the irrigation of crops, water used to raise livestock, and other miscellaneous water uses associated with agricultural production, such as aquaculture. These users typically obtain water from a dedicated, on-site well or surface water withdrawal and are not connected to a central utility. Irrigated acreage and projected water demands were determined for a variety of crop rotations as well as livestock water needs.

Data sources/Methodology

The Balmoral Group (Balmoral) has been contracted by the Florida Department of Agriculture and Consumer Services to develop the Florida Statewide Agricultural Irrigation Demand (FSAID) database. This FSAID database incorporates statewide agricultural monitoring from all five water management districts and produces base year agricultural water use estimates and agricultural water demand projections for all irrigated agricultural parcels in the state. These estimates reflect average climate conditions. Future demand projections are updated on a yearly basis to reflect farmers' response to potential shifts in future market conditions such as changes in projected future irrigated acreages and/or mixture of crop types. Estimated average year water demand for 2018 base year of FSAID VII were used for irrigation, livestock, and aquaculture (Florida Statewide Agricultural Irrigation Demand Estimated Agricultural Water Demand, 2018-2045). Groundwater is the primary water supply for agriculture in the District,

therefore over 99 percent of the agricultural demand estimate was assumed to come from groundwater (Technical Memorandum, 2020).

Commercial/Industrial/Institutional and Mining/Dewatering (CII/MD)

The Commercial, Industrial, and Institutional (CII) category represents water use associated with the production of goods or provisions of services by CII establishments, as well as water used at facilities such as hospitals, churches, prisons, schools, etc. The CII category also includes the use of water associated with mining and long-term dewatering operations (MD). This category does not include entities whose water needs are met by PS systems.

Data sources/Methodology

CII/MD permits with drinking water wells were updated based on their MORs reported to FDEP. Large CII/MD users with a permitted groundwater withdrawal greater than or equal to 0.1 MGD or that have a well greater than eight inches in diameter are required to report their water use to the District. Water use for any user that is below the threshold for reporting is set to the allocation defined in the permit. MD permits that operate under a closed loop cycle are estimated at 30% of their allocation. This is because water that is not lost to evaporation is recycled.

Landscape/Recreational/Aesthetics (LRA)

The Landscape, Recreational and Aesthetic (LRA) Irrigation category represents water use associated with the irrigation, maintenance, and operation of golf courses, cemeteries, parks, medians, attractions, and other large self-supplied green areas. This category does not include entities whose water needs are met by PS systems.

Data sources/Methodology

LRA permits with drinking water wells were updated based on their MORs reported to FDEP by system operators. Large LRA users that have a reporting requirement submit their water use to the District. Water use for any user that is below the threshold for reporting is set to the allocation defined in the permit.

Thermoelectric power generation (PG)

Thermoelectric Power Generation (PG) category represents the water use associated with power plant and power generation facilities. PG water use includes the consumptive use of water for steam generation, cooling, and replenishment of cooling reservoirs.

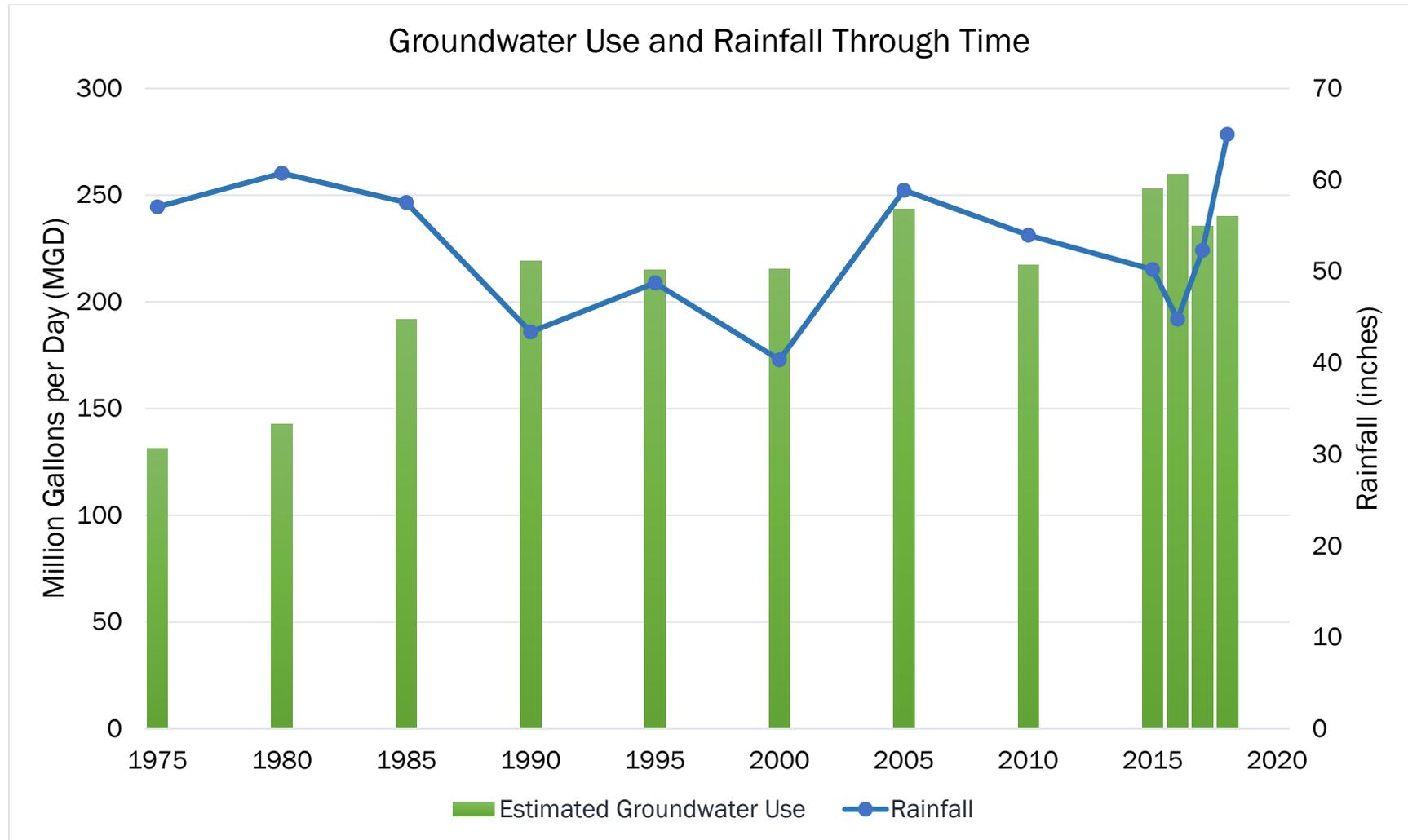
Data sources/Methodology

Water use data from power plant operations is reported to the District and included in this category.

2018 Rainfall

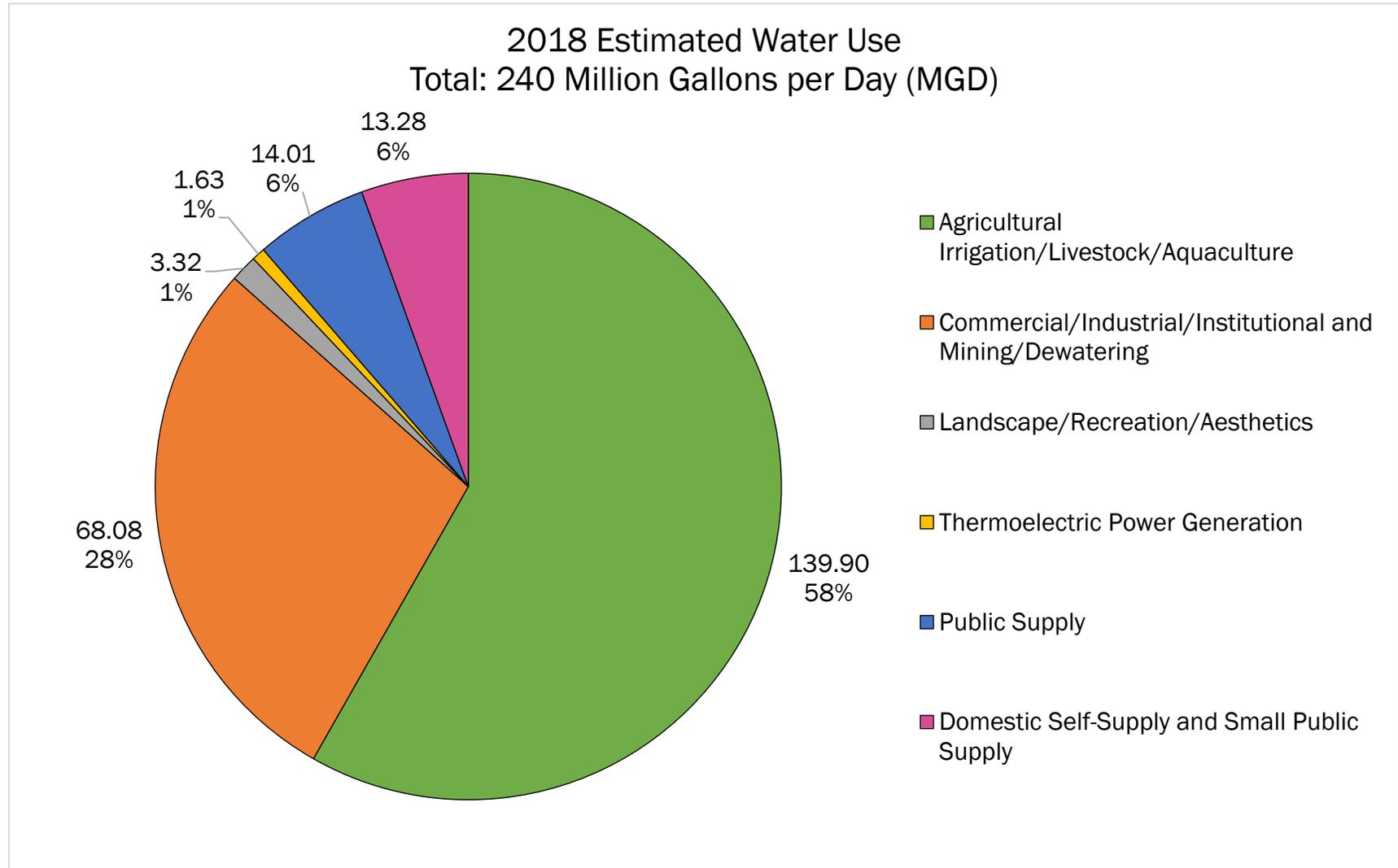
Figure 1: Groundwater Use and Rainfall Through Time

Total annual rainfall throughout the District was estimated at about 65 inches in 2018. Because of the strong El Nino in place, the rainfall in December was more than three times higher than the long-term average for the month and set a district record maximum.



2018 Total Districtwide Groundwater Use

Figure 2: Estimated groundwater use in 2018 by category

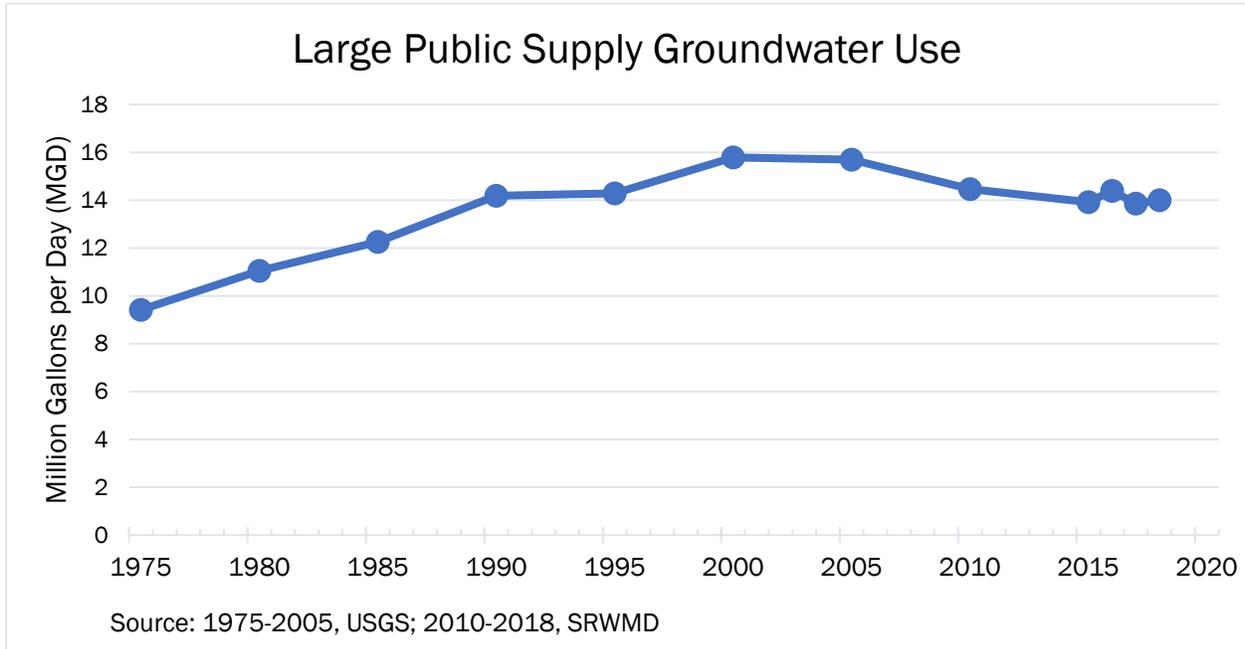


*Putnam county projections are wholly incorporated and reported in SJRWMD.

2018 Public Supply

Figure 3: Large Public Supply Groundwater Use Through Time

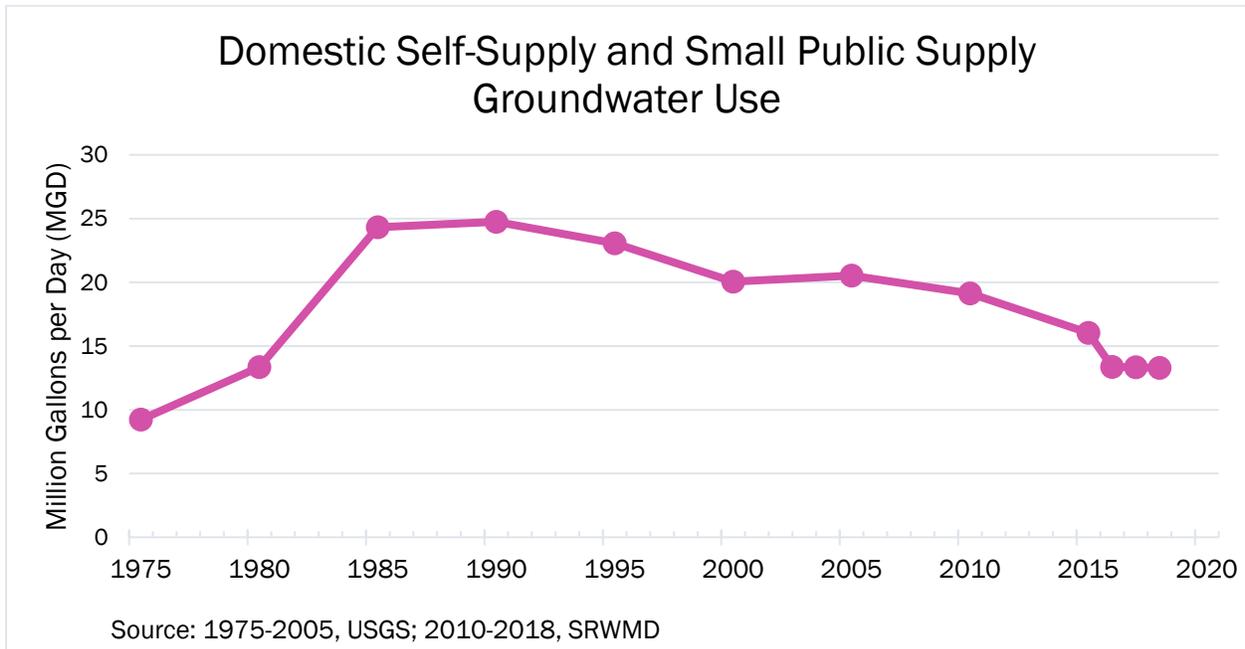
Between 2017 and 2018, public supply groundwater use had a slight increase of about 0.14 MGD.



2018 Domestic Self-Supply and Small Public Supply (DSS)

Figure 4: Domestic Self-Supply and Small Public Supply Groundwater Use Through Time

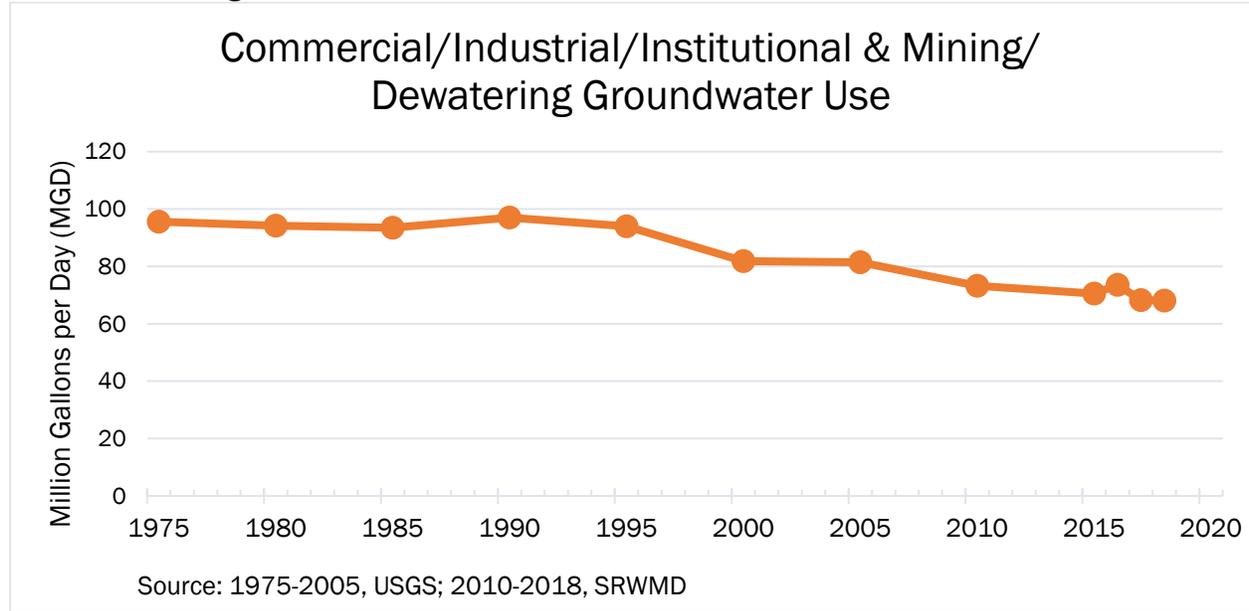
Domestic self-supply and small public supply water use is estimated to be about 13.3 MGD in 2018, which is slightly lower than 2017.



2018 Commercial/Industrial/Institutional and Mining/Dewatering (CII/MD)

Figure 5: Commercial/Industrial/Institutional & Mining/Dewatering Groundwater Use Through Time

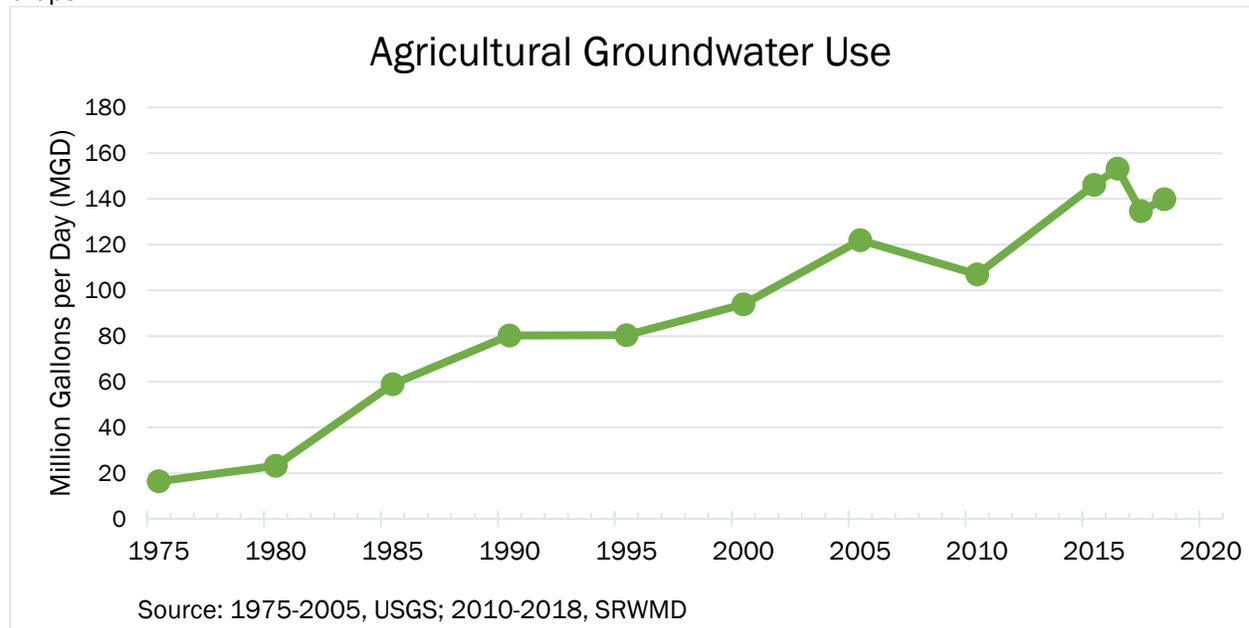
Groundwater use in the CII/MD category is the second largest use throughout the District. CII/MD groundwater use had a slight decrease of less than 0.2 MGD from 2017 to 2018. The trend since 1975 is continuing to decline.



2018 Agricultural Irrigation/Livestock/Aquaculture Use (AG)

Figure 6: Agricultural Irrigation/Livestock/Aquaculture Groundwater Use Through Time

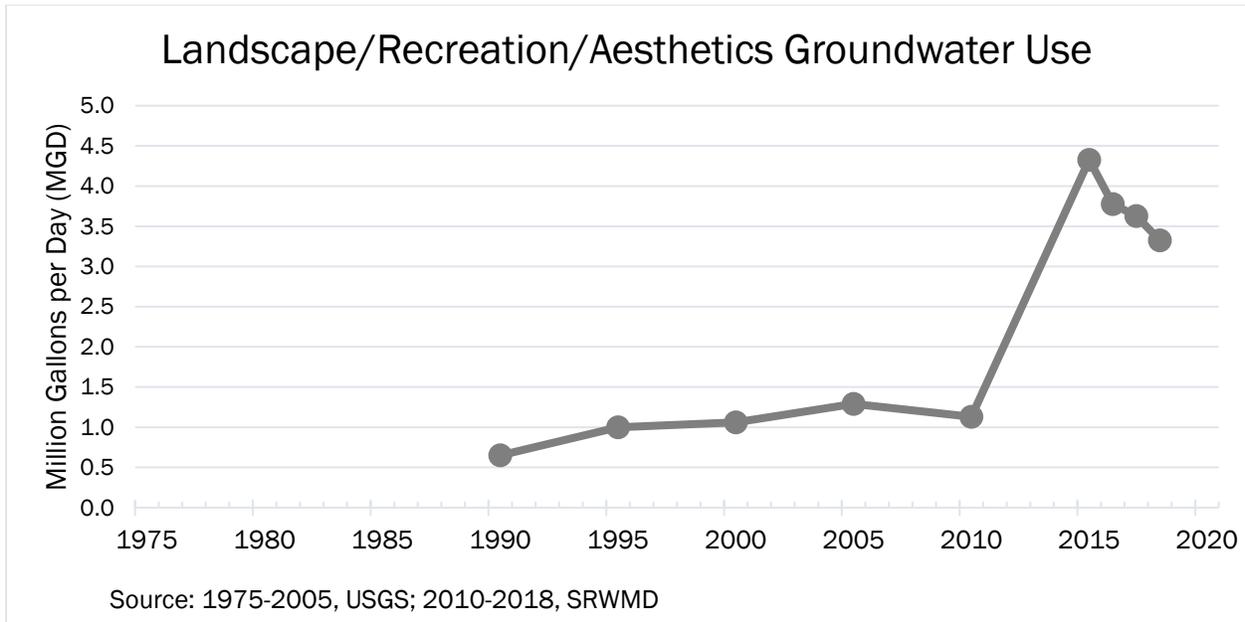
Agricultural irrigation, livestock, and aquaculture use accounts for majority of groundwater use throughout the District. From 2017 to 2018, use in this category increased by about 5.2 MGD and continues to fluctuate year to year based on crops grown and the irrigation assumptions for those crops.



2018 Landscape/Recreation/Aesthetics (LRA)

Figure 7: Landscape/Recreation/Aesthetics Groundwater Use Through Time

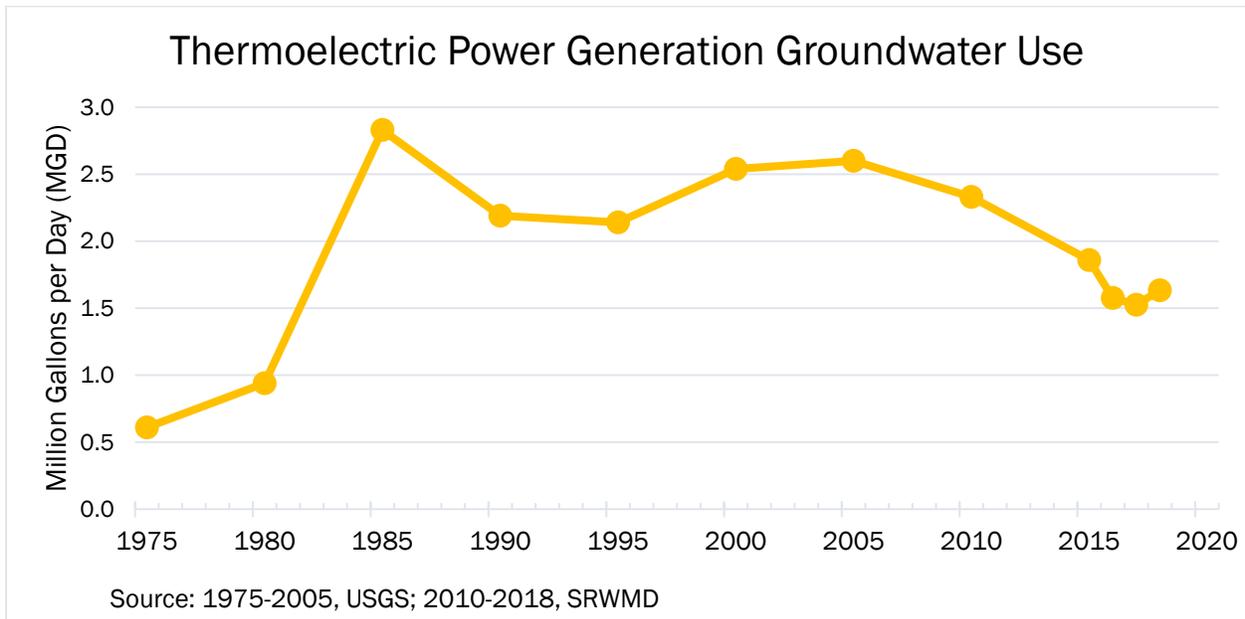
This category accounts for less than 2% of total estimated groundwater use. LRA permits with water use below the reporting threshold were estimated at allocation for 2015-2018. There was a small decline of 0.3 MGD from 2017 to 2018.



2018 Thermoelectric Power Generation Water Use (PG)

Figure 8: Thermoelectric Power Generation Groundwater Use Through Time

Thermoelectric power generation groundwater use accounts for less than 1% of groundwater use throughout the District. From 2017 to 2018, PG groundwater use increased by just over 0.1 MGD.



Total Water Use and Rainfall by County in 2018

Table 1: Total Water Use and Rainfall by County in 2018

County	2018 Water Use (MGD)	2018 Total Annual Rainfall (inches)
Alachua (SRWMD portion)	17.25	60.72
Baker (SRWMD portion)	0.27	52.68
Bradford (SRWMD portion)	4.61	55.84
Columbia	11.15	56.62
Dixie	7.49	71.80
Gilchrist	20.53	64.49
Hamilton	35.80	58.95
Jefferson (SRWMD portion)	3.25	67.38
Lafayette	11.97	68.21
Levy (SRWMD portion)	15.71	69.95
Madison	24.18	62.20
Suwannee	43.23	62.09
Taylor	42.03	74.19
Union	2.74	56.93
District Total	240.22	64.97

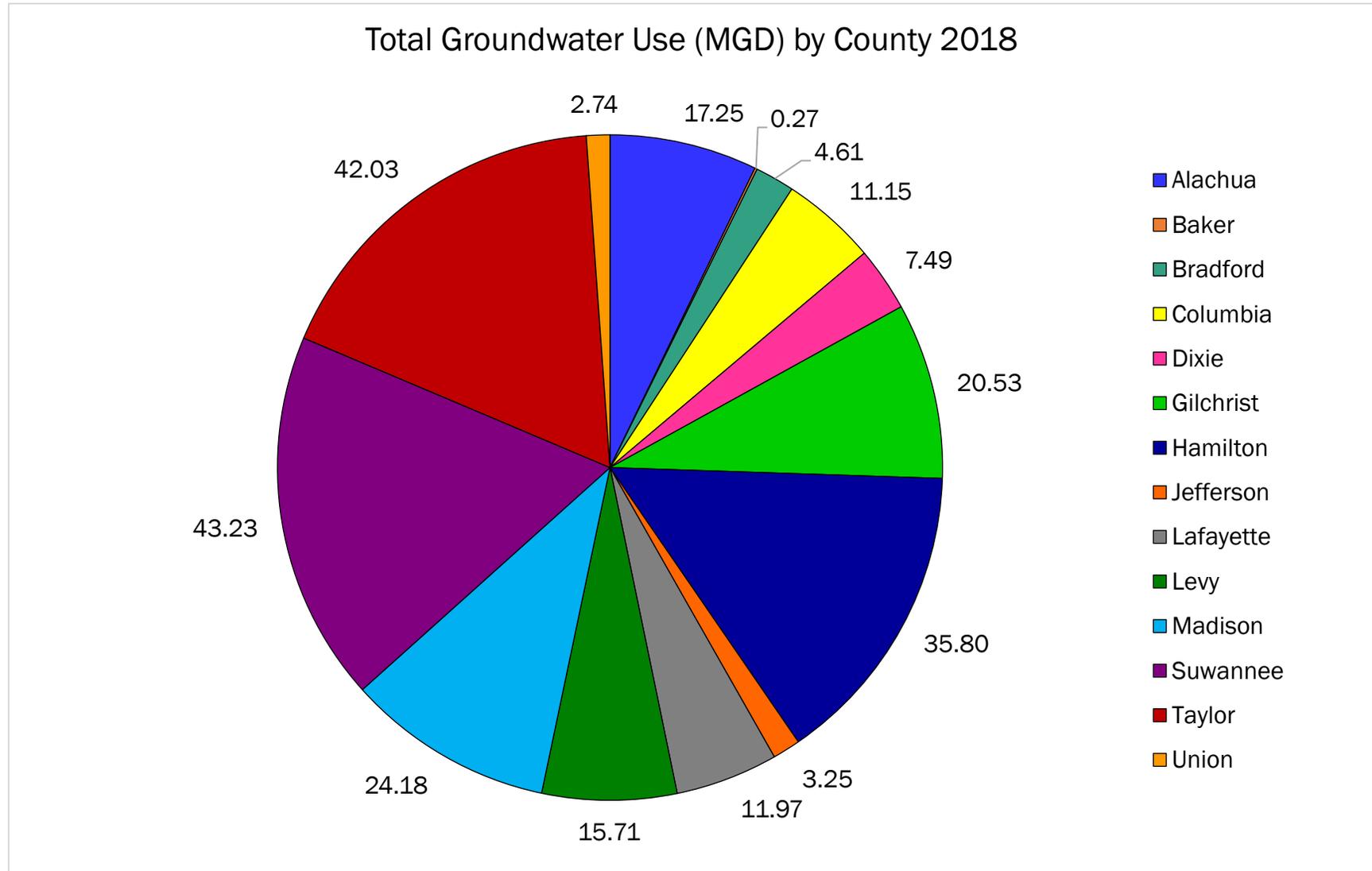
*County rainfall estimates incorporate the total annual rainfall for whole counties.

**The District water use estimates for individual counties and total rainfall estimates include only the SRWMD portion of counties.

***Putnam county projections are wholly incorporated and reported in SJRWMD.

Groundwater Use by County

Figure 9: Groundwater Use Split by County



*Putnam county projections are wholly incorporated and reported in SJRWMD.

Total Groundwater Use by County and Category in 2018

Table 2: Total Groundwater Use (MGD) by County and Category in 2018

County	Planning Region	Agricultural Irrigation/ Livestock/ Aquaculture	Public Supply	Commercial/ Industrial/ Institutional and Mining/ Dewatering	Thermoelectric Power Generation	Landscape/ Recreation/ Aesthetics	Domestic Self-Supply and Small Public Supply	Total
Alachua	Eastern	11.07	2.26	0.34	1.63	1.03	0.92	17.25
Baker	Eastern	0.00	0.00	0.19	0.00	0.00	0.09	0.27
Bradford	Eastern	1.86	0.92	1.06	0.00	0.09	0.68	4.61
Columbia	Eastern	3.82	3.35	0.36	0.00	0.69	2.94	11.15
Dixie	Western	5.38	0.69	0.14	0.00	0.10	1.19	7.49
Gilchrist	Eastern	18.61	0.21	0.55	0.00	0.14	1.02	20.53
Hamilton	Eastern	13.55	0.98	20.71	0.00	0.05	0.51	35.80
Jefferson	Western	2.72	0.02	0.17	0.00	0.09	0.26	3.25
Lafayette	Western	10.91	0.17	0.29	0.00	0.04	0.57	11.97
Levy	Western	13.82	0.72	0.13	0.00	0.16	0.87	15.71
Madison	Western	21.00	1.27	0.90	0.00	0.31	0.71	24.18
Suwannee	Eastern	35.39	1.31	3.96	0.00	0.28	2.29	43.23
Taylor	Western	0.51	1.88	38.74	0.00	0.31	0.59	42.03
Union	Eastern	1.26	0.22	0.56	0.00	0.04	0.65	2.74
Eastern Planning Region Total	NA	85.56	9.25	27.71	1.63	2.32	9.10	135.58
Western Planning Region Total	NA	54.34	4.76	40.36	0.00	1.00	4.18	104.64
District Total	NA	139.90	14.01	68.08	1.63	3.32	13.28	240.22

*Numbers may not add perfectly due to rounding.

**Putnam county projections are wholly incorporated and reported in SJRWMD.

Population by County in 2018

Table 3: Population by County in 2018

County	Total BEBR County Population	Percent of County in District	Estimated District Population Less Institutional	Institutional Population in District	Large Public Supply Population in District	Small Public Supply Population in District	Domestic Self-Supply Population in District	Residential Per Capita Used to Estimate DSS
Alachua	262,088	22.87%	59,943	0	42,007	69	17,867	50
Baker	25,277	2.01%	507	1,839	0	0	507	172*
Bradford	24,499	92.34%	22,622	1,922	7,589	814	14,219	42
Columbia	65,710	100.00%	65,710	5,016	18,780	1,060	45,870	57
Dixie	14,818	100.00%	14,818	1,304	2,585	77	12,156	95
Gilchrist	16,704	100.00%	16,704	767	2,202	0	14,502	70
Hamilton	12,162	100.00%	12,162	2,514	5,212	431	6,519	65
Jefferson	13,623	26.43%	3,600	1,101	603	0	2,997	87
Lafayette	7,094	100.00%	7,094	1,047	1,208	0	5,886	96
Levy	41,054	44.67%	18,337	0	5,843	1,330	11,165	62
Madison	17,812	100.00%	17,812	1,570	5,763	48	12,001	58
Suwannee	42,817	100.00%	42,817	2,089	7,976	437	34,404	65
Taylor	20,068	100.00%	20,068	2,244	11,484	97	8,488	68
Union	10,767	100.00%	10,767	6,813	1,850	93	8,824	72
Total	574,493	NA	312,962	28,228	113,101	4,455	195,405	59

*Baker - <https://www.sjrwmd.com/documents/technical-reports/fact-sheets/>

**Putnam county projections are wholly incorporated and reported in SJRWMD.

Gross Per Capita Rates for Large and Small Public Supply Systems with Service Area Boundaries

Table 4: Gross Per Capita Rates for Large and Small Public Supply Systems with Service Area Boundaries

County	Public Supplier	Permit ID	Large/Small	2018 Population Served	Water Use (MGD)	Gross Per Capita Rate
Alachua	City of Alachua	220667	Large	10,155	1.21	119
Alachua	City of Archer	216647	Large	1,304	0.13	98
Alachua	City of High Springs	216833	Large	6,221	0.58	93
Alachua	City of Newberry	216450	Large	6,573	0.27	42
Alachua	City of Waldo	217300	Large	960	0.07	76
Alachua	Gainesville Regional Utilities	NA	Large	16,794	NA	NA
Bradford	City of Hampton	220481	Small	477	0.04	93
Bradford	City of Lawtey	218998	Large	889	0.21	238
Bradford	City of Starke	216650	Large	6,700	0.68	101
Bradford	Town of Brooker	216644	Small	322	0.04	111
Columbia	City of Lake City	217754	Large	18,705	3.35	179
Columbia	Town of Fort White	218347	Small	506	0.06	122
Columbia	Columbia County Board of Commissioners Ellisville Plant	220704	Large	75	0.07	877
Dixie	City of Cross City	216823	Large	1,696	0.58	341
Dixie	Fanning Springs - Old Town	220310	Large	422	NA	NA
Dixie	Horseshoe Beach Water Utilities	217129	Large	167	0.04	252
Dixie	Town of Suwannee	216831	Large	300	0.07	244
Gilchrist	Town of Trenton	216453	Large	2,100	0.21	99
Gilchrist	Fanning Springs	NA	Large	102	NA	NA
Hamilton	City of Jasper	220463	Large	3,736	0.72	192
Hamilton	City of White Springs	216651	Large	777	0.06	77
Hamilton	Town of Jennings	216567	Large	699	0.14	205
Jefferson	Jefferson Communities Water System	NA	Large	603	NA	NA
Lafayette	Town of Mayo	216851	Large	1,208	0.17	142
Levy	City of Bronson	216830	Large	1,133	0.16	144
Levy	City of Chiefland	216826	Large	2,229	0.29	132
Levy	Fowlers Bluff Water Association	216642	Small	366	0.01	29
Levy	Town of Otter Creek	216656	Small	173	0.01	60

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County	Public Supplier	Permit ID	Large/ Small	2018 Population Served	Water Use (MGD)	Gross Per Capita Rate
Levy	Cedar Key Water & Sewer District	216821	Large	2,304	0.13	57
Levy	City of Fanning Springs	220310	Large	177	0.14	195
Levy	University Oaks MHP	220497	Small	293	0.06	219
Levy	Manatee Utilities	217177	Small	155	0.02	151
Madison	Cherry Lake Utilities	219588	Large	660	0.05	76
Madison	City of Madison	216506	Large	3,969	1.04	263
Madison	Town of Greenville	217127	Large	796	0.10	130
Madison	Town of Lee	218663	Large	338	0.07	213
Suwannee	Advent Christian Village	219527	Large	780	0.13	163
Suwannee	City of Live Oak	220612	Large	6,006	1.06	176
Suwannee	Town of Branford	216658	Large	700	0.08	120
Suwannee	Town of Wellborn	216507	Large	490	0.04	81
Taylor	Big Bend Water Authority	220484	Large	3,300	0.32	98
Taylor	City of Perry	216835	Large	6,919	1.50	216
Taylor	Taylor Coastal Water & Sewer District	221166	Large	1,265	0.06	50
Union	City of Lake Butler	220148	Large	1,850	0.22	121
TOTAL	NA	NA	NA	115,394	14.35	123

*Numbers may not add perfectly due to rounding.

2018 ANNUAL SURFACE WATER SUMMARY



SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Introduction

The majority of water use in the Suwannee River Water Management District is groundwater, however there is some surface water being used for power generation, mining/dewatering, and agriculture.

Data Sources

Surface water is either directly reported to the District or it is estimated based on knowledge of how it is being used. Table 1 below has a breakdown of surface water use in the District. The two different estimations reported are for consumptive and non-consumptive uses. The amount of surface water that is estimated to be consumptively used in mining/dewatering operations represents five percent of the total. This is to account for the loss of water in the mining product and evaporation. The remainder of the water is recirculated in the mining process and is considered non-consumptive. For power generation facilities, two percent of the water is considered to be consumptively used, while the rest is used for once-through cooling and is recycled.

2018 Surface Water Use Estimates by Permit

Table 5: Estimates of Consumptive, Non-Consumptive, and Total Surface Water use

County	Permit Name	Consumptive Use (mgd)	Non-consumptive Use (mgd)	Total (mgd)
Alachua	Thompson S. Baker Cement Plant	0.003	0.05	0.05
Hamilton	PCS – White Springs	0.52	9.94	10.46
Hamilton	*PCS – White Springs – Total Permit	17.19	326.56	343.75
Suwannee	Suwannee River Power Plant	0.01	0.71	0.72
Taylor	*Big Horse Aggregates Cabbage Grove Mine	0.01	1.81	1.91
Taylor	Martin Marietta Aggregates – Perry Quarry	0.07	1.29	1.36
TOTAL	NA	18.50	354.16	372.75

*No reporting requirement for surface water, estimated at allocation, consumptive use estimated at 5% of allocation.

**Numbers may not add perfectly due to rounding

The large decrease in surface water use by Suwannee River Power Plant is due to the decommissioning of part of the plant. There are six additional agricultural permits that have an allocation that includes some surface water. Two of these permits are not using surface water. For planning purposes, District-wide water use is estimated using FSAID and groundwater is the predominant source.

2018 ANNUAL WASTEWATER TREATMENT FACILITIES SUMMARY



SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Introduction

The State of Florida has formal state objectives listed in Sections 403.064 and 373.250, Florida Statutes (F.S.) to conserve water and promote the reuse of reclaimed water. The Florida Department of Environmental Protection (FDEP) monitors the reuse inventory throughout the state and provides annual updates. The purpose of this inventory is to encourage and promote the use of reclaimed water while also providing access to information on programs that have already been implemented by municipalities and utilities (Reuse Inventory Database and Annual Report).

Data Sources

Annual Reuse data was obtained from the Florida Department of Environmental Protection's Reuse Inventory Database. This database includes all active domestic wastewater treatment facilities that have a permitted capacity of 0.1 million gallons per day (mgd) or more. It also includes facilities that do not engage in reuse activities as well.

Results

Reuse Facilities

There are 28 total domestic wastewater treatment facilities in the District. Of these, 27 make reclaimed water available for reuse (TABLE 1). The total permitted capacity of all facilities in the District is approximately 22.55 mgd. Of the total, 10.67 mgd of reuse water was utilized. This accounts for over 47% of the total permitted capacity. Figure 1 shows a breakdown of 2018 reuse flows by county. The county with the largest reuse flow is Columbia County with about 3.2 mgd, followed by Bradford County with 1.8 mgd, and Taylor County with 1.1 mgd.

Reuse Utilization Types

There is a variety of ways that reuse water is implemented throughout the District. These include agricultural irrigation, industrial, toilet flushing, groundwater recharge and indirect potable use, landscape irrigation, and more. Many facilities used a mixture of two or more methods for reuse. Table 2 below has a breakdown of the utilization of reuse by facility, reuse type, and subtype.

Disposal Facilities

There are three facilities that may use surface water as one method of disposal. The City of Starke had 0.59 mgd of effluent disposal in 2018. The City of Cedar Key and City of Perry did not have any effluent disposal in 2018. The City of Jasper WWTF is the only facility in the District that does not provide reuse of any kind.

Some reuse systems, such as Columbia Correctional Institution, Cross City, and Jefferson Correctional Institution, use other sources of water to supplement the reclaimed water supply, if there is not enough water available. Other sources may include surface water, groundwater, stormwater, or drinking water. This explains why some reuse flows are larger than the total flow of the system. Additional information for supplemental water supplies can be found in Appendix C of FDEP's Annual Reuse Report (Water Reuse Program).

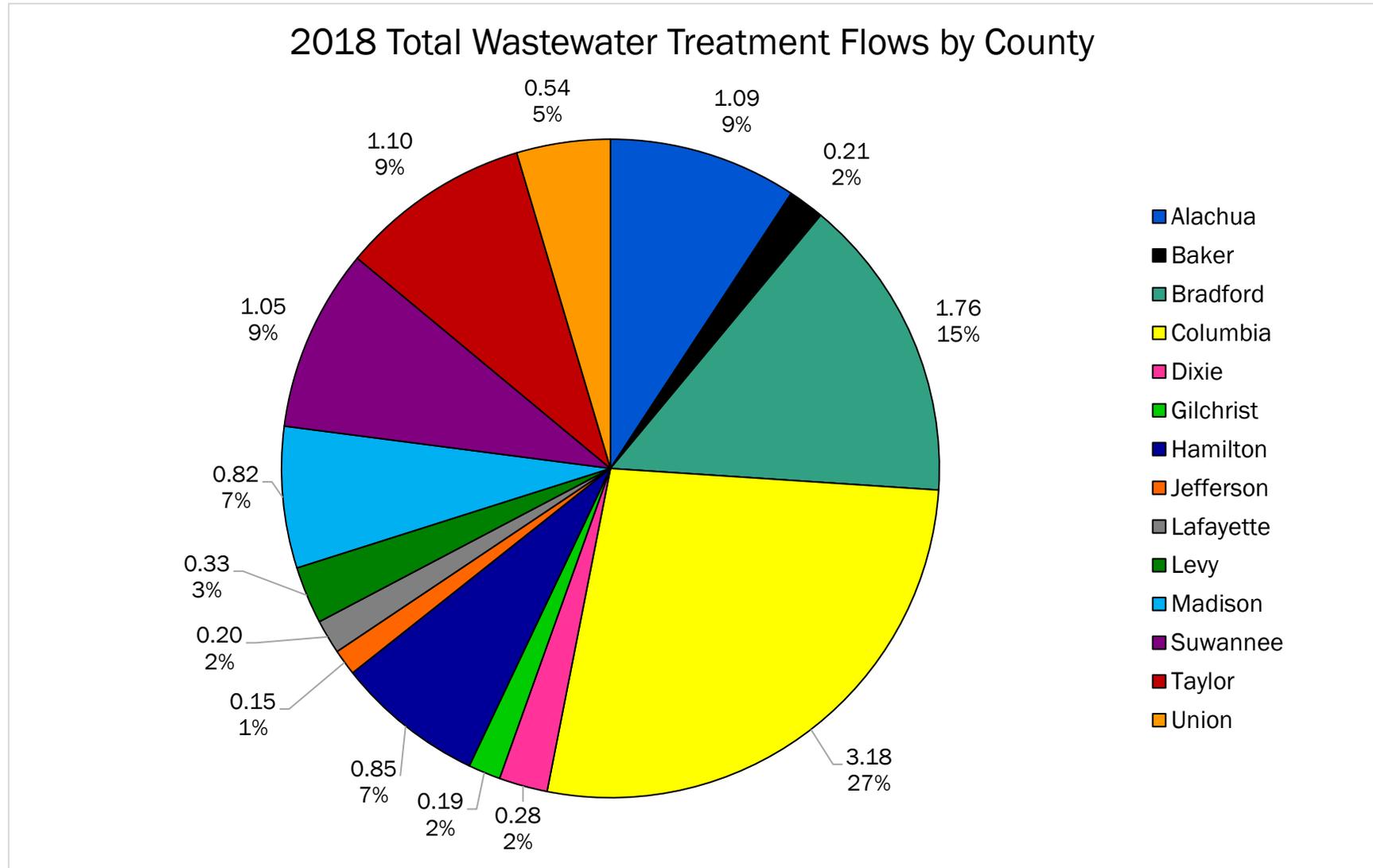
2018 Wastewater Treatment Flows by Facility

Table 6: 2018 Wastewater Treatment Flows by Facility

County	Planning Region	City	Facility Name	2018 Total Flow (mgd)	2018 Reuse Flow (mgd)	Capacity (mgd)
Alachua	Eastern	Alachua	Alachua	0.72	0.69	1.50
Alachua	Eastern	High Springs	High Springs	0.16	0.16	0.24
Alachua	Eastern	Newberry	Newberry WWTF	0.21	0.21	0.50
Baker	Eastern	Sanderson	Baker Correctional Institution	0.21	0.21	0.32
Bradford	Eastern	Raiford	Florida State Prison WWTF	1.01	1.01	1.78
Bradford	Eastern	Starke	City of Starke	0.75	0.16	1.65
Columbia	Eastern	Lake City	Columbia Correctional Institution	0.41	0.41	0.53
Columbia	Eastern	Lake City	Lake City WWTF	2.76	2.71	6.05
Dixie	Western	Cross City	Cross City WWTF	0.28	0.52	0.40
Gilchrist	Eastern	Trenton	Lancaster Correctional Institution WWTF	0.10	0.10	0.25
Gilchrist	Eastern	Trenton	City of Trenton	0.09	0.09	0.20
Hamilton	Eastern	Jasper	City of Jasper WWTF	0.63	0.00	1.20
Hamilton	Eastern	Jennings	Town of Jennings WWTF	0.14	0.14	0.18
Hamilton	Eastern	Jasper	SR-6/I-75 WWTF	0.03	0.03	0.13
Hamilton	Eastern	White Springs	Town of White Springs WWTF	0.06	0.06	0.15
Jefferson	Western	Monticello	Jefferson Correctional Institution	0.15	0.16	0.25
Lafayette	Western	Mayo	Mayo WWTP	0.08	0.08	0.15
Lafayette	Western	Mayo	Mayo Correctional Institution	0.12	0.12	0.50
Levy	Western	Cedar Key	Cedar Key WRF	0.09	0.09	0.18
Levy	Western	Chiefland	Chiefland WWTF	0.24	0.24	0.48
Madison	Western	Greenville	Town of Greenville	0.09	0.09	0.15
Madison	Western	Madison	Madison WWTF	0.72	0.72	1.37
Suwannee	Eastern	Dowling Park	Advent Christian Village	0.04	0.04	0.15
Suwannee	Eastern	Branford	Branford	0.06	0.06	0.10
Suwannee	Eastern	Live Oak	City of Live Oak WWTF	0.95	0.94	1.82
Taylor	Western	Perry	City of Perry	0.94	0.94	1.25
Taylor	Western	Perry	Taylor Correctional Institution	0.16	0.16	0.40
Union	Eastern	Lake Butler	Lake Butler WWTF	0.54	0.54	0.70
TOTAL	NA	NA	NA	11.74	10.67	22.55

Wastewater Treatment Flows by County

Figure 10: Wastewater Treatment Flows by County



2018 Utilization of Reuse by Facility and Type

Table 7: 2018 Utilization of Reuse by Facility and Type

County	Planning Region	City	Reuse System Name	Reuse Type	Reuse Subtype	Capacity (mgd)*	Flow (mgd)	Area (acres)
Alachua	Eastern	Alachua	Alachua	PAA&LI	GCI	0.40	0.00	197
Alachua	Eastern	Alachua	Alachua	IND	AOF	1.40	0.53	NA
Alachua	Eastern	Alachua	Alachua	AI	OC	1.23	0.16	105
Alachua	Eastern	High Springs	High Springs	AI	OC	0.24	0.16	33
Alachua	Eastern	Newberry	Newberry WWTF	AI	OC	0.50	0.21	59.8
Baker	Eastern	Sanderson	Baker Correctional Institution	GWR&IPR	RIB	0.19	0.10	4.65
Baker	Eastern	Sanderson	Baker Correctional Institution	AI	OC	0.05	0.04	22.2
Baker	Eastern	Sanderson	Baker Correctional Institution	TF	NA	0.13	0.08	NA
Bradford	Eastern	Raiford	Florida State Prison WWTF	AI	OC	1.78	1.01	766
Bradford	Eastern	Starke	City of Starke	IND	ATP	0.12	0.00	NA
Bradford	Eastern	Starke	City of Starke	AI	OC	0.70	0.16	225
Columbia	Eastern	Lake City	Columbia Correctional Institution	TF	NA	0.25	0.20	NA
Columbia	Eastern	Lake City	Columbia Correctional Institution	AI	OC	0.28	0.20	36
Columbia	Eastern	Lake City	Lake City WWTF	AI	OC	3.00	2.71	350
Dixie	Western	Cross City	Town of Cross City	AI	OC	0.64	0.52	76.9
Gilchrist	Eastern	Trenton	Lancaster Correctional Institution	AI	OC	0.25	0.10	33.8
Gilchrist	Eastern	Trenton	Trenton WWTF	AI	OC	0.20	0.09	40
Hamilton	Eastern	Jennings	Jennings	AI	OC	0.18	0.14	44
Hamilton	Eastern	Jasper	SR-6/I-75 WWTF	AI	OC	0.13	0.03	19.17
Hamilton	Eastern	White Springs	Town of White Springs	IND	AOF	0.15	0.06	NA
Jefferson	Western	Monticello	Jefferson Correctional Institution	TF	NA	0.19	0.09	NA
Jefferson	Western	Monticello	Jefferson Correctional Institution	AI	OC	0.12	0.07	17.5

County	Planning Region	City	Reuse System Name	Reuse Type	Reuse Subtype	Capacity (mgd)*	Flow (mgd)	Area (acres)
Lafayette	Western	Mayo	Mayo Correctional Institution	GWR&IPR	RIB	0.50	0.12	NA
Lafayette	Western	Mayo	Mayo Correctional Institution	TF	NA	0.50	0.00	NA
Lafayette	Western	Mayo	Town of Mayo	AI	OC	0.15	0.08	33
Levy	Western	Cedar Key	Cedar Key	GWR&IPR	AF	0.17	0.09	1
Levy	Western	Cedar Key	Cedar Key	PAA&LI	OPAA	0.03	0.00	6.39
Levy	Western	Chiefland	Chiefland	GWR&IPR	RIB	0.48	0.24	11
Madison	Western	Greenville	Town of Greenville	AI	OC	0.15	0.09	29.35
Madison	Western	Madison	City of Madison	AI	OC	1.37	0.72	275
Suwannee	Eastern	Dowling Park	Advent Christian Village	GWR&IPR	RIB	0.15	0.04	2.07
Suwannee	Eastern	Branford	Branford	AI	OC	0.10	0.06	6.53
Suwannee	Eastern	Live Oak	City of Live Oak	OTH	OTH	0.19	0.19	NA
Suwannee	Eastern	Live Oak	City of Live Oak	AI	OC	1.37	0.48	177
Suwannee	Eastern	Live Oak	City of Live Oak	GWR&IPR	RIB	0.45	0.27	3.06
Suwannee	Eastern	Live Oak	City of Live Oak	PAA&LI	OPAA	0.29	0.00	40
Suwannee	Western	Perry	City of Perry	AI	OC	1.25	0.65	185
Taylor	Western	Perry	City of Perry	IND	AOF	0.80	0.29	NA
Taylor	Western	Perry	Taylor Correctional Institution	GWR&IPR	RIB	0.40	0.16	11.4
Taylor	Eastern	Lake Butler	Lake Butler	AI	OC	0.70	0.54	240

Reuse Type Abbreviations

AI – Agricultural Irrigation
 GWR&IPR - Ground Water Recharge & Indirect Potable Reuse
 IND – Industrial
 PAA&LI - Public Access Areas & Landscape Irrigation
 TF – Toilet Flushing

Reuse Subtype Abbreviations

AOF – At Other Facilities
 ATP - At Treatment Plant
 GCI - Golf Course Irrigation
 OC – Other Crops (sprayfields)
 OPAA - Other Public Access Areas
 RIB – Rapid Infiltration Basin

For more information on reuse, please visit FDEP’s Water Reuse Program website
<https://floridadep.gov/water/domestic-wastewater/content/water-reuse-program>

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