A

Water Demand Projections

Table of Contents

List of Tables

List of Figures

POPULATION ESTIMATES AND PROJECTIONS

The South Florida Water Management District (SFWMD or District) develops water demand estimates and projections in coordination with stakeholder groups, other agencies, utilities, and local governments. **Chapter 2** of the *2026 Upper East Coast Water Supply Plan Update* (2026 UEC Plan Update) provides summary information, and this appendix describes the methods used to develop water demand estimates for the 2024 base year as well as projections through 2050 for the UEC Planning Area. Demands are developed for six water use categories: Public Supply (PS), Domestic Self-Supply (DSS), Agriculture (AG), Commercial/Industrial/Institutional (CII), Landscape/Recreational (L/R), and Power Generation (PG). Water demand estimates and projections are provided in 5-year increments through 2050 for average rainfall and 1-in-10-year drought conditions. In addition, demands for PS are described and analyzed in two ways: gross (or raw) demand and net (or finished) demand.

This section presents the methodology used to develop the 2024 population estimates and 2050 population projections for the UEC Planning Area, which are essential to determining water demands. The University of Florida's Bureau of Economic and Business Research (BEBR) publishes low, medium, and high population estimates and projections to account for uncertainty in future population growth. BEBR provides population data at the county level; however, water supply planning requires population estimates and projections at the subcounty level to delineate PS utility service areas and DSS areas for PS and DSS demands. Section 373.709(2)(a)1., Florida Statutes (F.S.), prescribes the use of BEBR medium population projections in determining water supply needs in regional water supply plans as follows:

> *Population projections used for determining public water supply needs must be based upon the best available data. In determining best available data, the district shall consider the University of Florida Bureau of Economic and Business Research (BEBR) medium population projections and population projection data and analysis submitted by a local government pursuant to the public workshop described in subsection (1) if the data and analysis support the local government's comprehensive plan. Any adjustment of or deviation from the BEBR projections must be fully described, and the original BEBR data must be presented along with the adjusted data.*

In accordance with Section 373.709(2)(a)1., F.S., permanent resident estimates and projections for each county, published by BEBR (Rayer and Comfort 2025), were used as the basis of population projections in this 2026 UEC Plan Update. BEBR county population estimates and projections are also used by local governments in their Comprehensive Plans. Adjustments were made to include only the portion of Okeechobee County within the UEC Planning Area. The 2024 permanent resident populations within the UEC Planning Area were as follows:

- Martin County: 165,380 permanent residents
- Okeechobee County: 557 permanent residents
- St. Lucie County: 380,773 permanent residents

Utility Service Areas

To establish current and future PS and DSS populations, each PS utility's 2024 and 2050 potable water service area was delineated. A utility service area refers to the area with water distribution infrastructure and water customers served by a particular PS utility. The SFWMD developed 2024 and 2050 utility service area maps based on information from utilities and the Water Use Permit database. Accuracy of the service area maps was verified through correspondence with all PS utilities. Note that there are no PS utilities in the northeastern portion of Okeechobee County within the UEC Planning Area boundary. **Appendix B** includes summaries of the PS utilities that provide 0.10 million gallons per day (mgd) or greater of net (finished) potable water. **Figures B-1** and **B-2** show the current and future PS service areas and wellfields in Martin County, respectively. **Figures B-3** and **B-4** show the current and future PS service areas and wellfields in St. Lucie County, respectively.

Population Projection Methodology

Census block populations from the 2020 Census (United States Census Bureau 2020) and 2024 PS service area maps were used to estimate the 2024 permanent resident populations for PS utilities and DSS areas. Each census block within the UEC Planning Area was assigned to a PS service area or a DSS area. The distribution of population in census blocks not entirely within a single PS service area or DSS area was based on visual comparison of residential land use coverage. PS service area and DSS area population estimates for 2020 through 2024, used for determining the per capita use rate (PCUR) for each PS utility, were calculated by applying annual county growth rates published by BEBR with 2024 estimates (Rayer and Comfort 2025) and the United States Census Bureau (2020).

Population projections to 2050 were calculated using Future Utility Service Area (**Figures B-2** and **B-4**) distributions of population served with the 2020 Census data (United States Census Bureau 2020). Population growth rate was provided by the county population projections (BEBR medium) from the 2025 set of projections (Rayer and Comfort 2025). When available, detailed subcounty population projections from county planning departments were assigned to PS utility service areas and DSS areas. In some cases, modifications were made to service area populations based on information from local land use planning maps and local government Comprehensive Plans.

Population Projection Results

Table A-1 provides the results of the population distributions by county and PS utility (or DSS) from 2024 to 2050. The results were shared with and reviewed by utility and municipal/county government staff.

The populations shown in **Table A-1** indicate the UEC Planning Area will contain 195,507 additional permanent residents by 2050, an increase of approximately 36%. Port St. Lucie has the largest current and future populations, accounting for nearly half of the region's projected 2050 PS population.

Table A-1. Service area population projections in the UEC Planning Area.

PS Utility or DSS	Service Area Population Projections							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Indiantown	6,211	6,410	6,459	11,650	12,684	13,065	13,130	13,195
Jupiter (Martin Portion)	2,289	2,362	2,381	2,452	2,501	2,551	2,602	2,641
Martin County Utilities	96,224	98,163	98,457	102,396	105,468	110,741	114,063	117,485
Port St. Lucie (Martin Portion)	1,597	1,604	1,605	1,613	1,616	1,624	1,632	1,636
Sailfish Point	1,163	1,182	1,186	1,210	1,246	1,271	1,297	1,323
South Martin Regional Utility	20,784	21,449	21,615	22,264	22,932	23,620	24,328	25,058
St. Lucie Village Parklife	822	825	826	830	834	839	843	847
Stuart	17,495	17,775	17,845	18,030	18,391	18,759	19,134	19,517
Tequesta (Martin Portion)	3,575	3,589	3,593	3,611	3,629	3,647	3,665	3,684
PS Total	**150,160**	**153,359**	**153,967**	**164,056**	**169,301**	**176,117**	**180,694**	**185,386**
DSS Total	**11,141**	**12,021**	**12,433**	**8,944**	**8,799**	**5,883**	**4,406**	**2,414**
Martin County Total	**161,301**	**165,380**	**166,400**	**173,000**	**178,100**	**182,000**	**185,100**	**187,800**
Okeechobee County[a]								
PS Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
DSS Total	**548**	**557**	**559**	**570**	**582**	**593**	**605**	**617**
Okeechobee County Total	**548**	**557**	**559**	**570**	**582**	**593**	**605**	**617**
St. Lucie County								
Fort Pierce Utilities Authority	68,392	71,570	72,364	78,105	79,453	80,840	82,024	82,490
Harbour Ridge	1,198	1,254	1,292	1,315	1,332	1,351	1,366	1,373
Martin County Utilities (St. Lucie Portion)	67	67	67	67	67	67	67	67
Meadowood Community Association	676	676	676	676	676	676	676	676
Port St. Lucie	198,755	223,848	230,122	260,379	294,457	313,363	343,677	349,366
Reserve Community Development District	3,565	3,608	3,618	3,673	3,728	3,784	3,841	3,898
Spanish Lakes Country Club	1,618	1,646	1,654	1,687	1,724	1,762	1,797	1,798
Spanish Lakes Fairways	2,120	2,217	2,241	2,269	2,289	2,309	2,323	2,336
St. Lucie County Utilities	15,296	18,526	19,334	27,693	45,644	64,189	66,189	66,972
St. Lucie West Services District	13,163	13,436	13,505	13,607	13,656	13,707	13,719	13,796
PS Total	**304,850**	**336,848**	**344,873**	**389,471**	**443,026**	**482,048**	**515,679**	**522,772**
DSS Total	**17,415**	**43,925**	**50,527**	**48,729**	**30,874**	**22,152**	**14,621**	**31,028**
St. Lucie County Total	**322,265**	**380,773**	**395,400**	**438,200**	**473,900**	**504,200**	**530,300**	**553,800**
UEC Planning Area Total								
UEC Planning Area PS Total	**455,010**	**490,207**	**498,840**	**553,527**	**612,327**	**658,165**	**696,373**	**708,158**
UEC Planning Area DSS Total	**29,104**	**56,503**	**63,519**	**58,243**	**40,255**	**28,628**	**19,632**	**34,059**
UEC Planning Area Total	**484,114**	**546,710**	**562,359**	**611,770**	**652,582**	**686,793**	**716,005**	**742,217**

DSS = Domestic Self-Supply; PS = Public Supply; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries. No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.

Comparing these 2026 UEC Plan Update population projections to those published in the 2011, 2016, and 2021 UEC plan updates can provide insight into the importance of population growth rates based on BEBR medium projections. Prior to the national economic downturn in 2008, high rates of development in the region pointed to higher population growth rates (**Figure A-1**). The population projections in the 2011 UEC Plan Update were a result of higher population growth rates prior to the recession. The BEBR projections used in this 2026 UEC Plan Update indicate slower growth rates than projected in the 2011 UEC Plan Update and growth rates closely aligned with the projections published in the 2021 and 2016 plan updates.

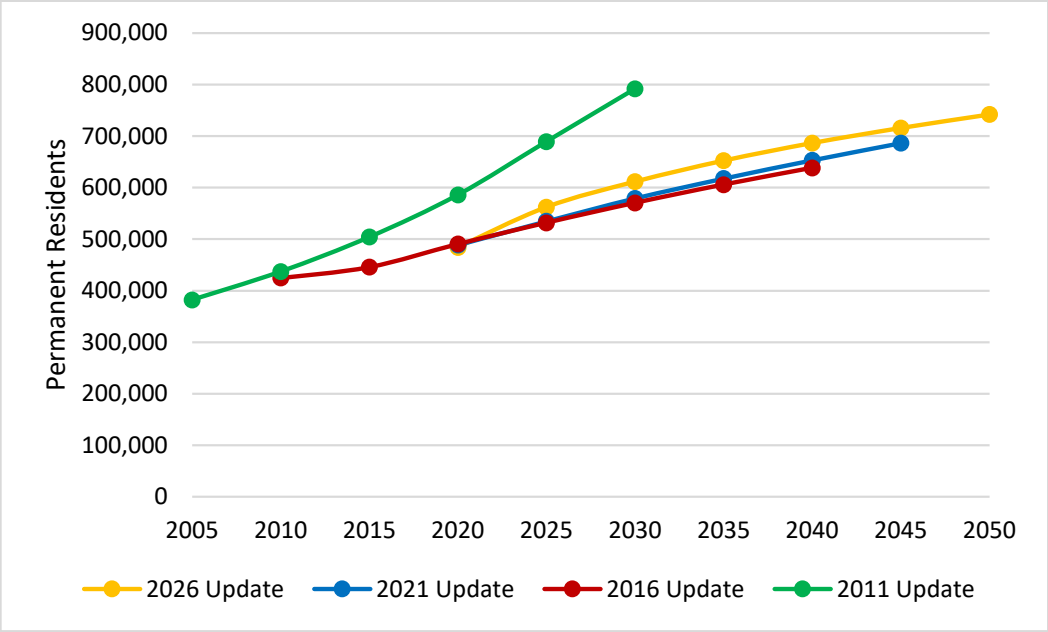


Figure A-1. Comparison of population projections from the 2011, 2016, 2021, and 2026 UEC water supply plan updates.

PUBLIC SUPPLY

The PS category includes potable water supplied by water treatment plants with a current allocation of 0.10 mgd or greater. Developing PS demand projections in the UEC Planning Area was a multistep process that included determining PS utility service area and DSS populations, calculating PCURs, and projecting future water needs.

NOTE

Perceived discrepancies in table totals are due to rounding.

PS Projection Methodology

Per Capita Use Rates

For each PS utility, a net (finished) water PCUR was developed by dividing the annual net (finished) water volume for 2020 through 2024 by the corresponding service area populations (permanent residents) for each year. The five annual PCURs were then averaged. Net (finished) water volumes for 2020 through 2024 were obtained from the PS utility

monthly operating reports submitted to the Florida Department of Environmental Protection (FDEP). The net (finished) water volume reported to the FDEP includes all water produced for permanent and seasonal residents; industrial, landscaping, and irrigation water supplied by PS utilities; and any water distribution losses. The resulting PCURs (**Table A-2**) conform to guidance provided by the FDEP for consistent statewide water supply planning. Future water conservation savings were not factored into demand projections and PCURs due to water savings uncertainty. The average PCURs for each county were calculated by averaging PS and DSS PCURs, weighted by their respective permanent resident populations.

Table A-2. Average net (finished) water per capita use rates (in gallons per capita per day) in the UEC Planning Area.

PS Utility or DSS	2020 – 2024 Average PCUR
Martin County	
Indiantown	94
Jupiter (Martin Portion)	203
Martin County Utilities	118
Port St. Lucie (Martin Portion)	94
Sailfish Point	155
South Martin Regional Utility	195
St. Lucie Village Parklife	87
Stuart	171
Tequesta (Martin Portion)	193
Martin County DSS	**137**
Martin County Average	**137**
Okeechobee County[a]	
Okeechobee County DSS	102
Okeechobee County Average	**102**
St. Lucie County	
Fort Pierce Utilities Authority	128
Harbour Ridge	132
Martin County Utilities (St. Lucie Portion)	118
Meadowood Community Association	126
Port St. Lucie	94
Reserve Community Development District	114
Spanish Lakes Country Club	104
Spanish Lakes Fairways	105
St. Lucie County Utilities	100
St. Lucie West Services District	128
St. Lucie County DSS	**103**
St. Lucie County Average	**103**
UEC Planning Area Average	
UEC Planning Area Average	**113**

DSS = Domestic Self-Supply; PCUR = per capita use rate; PS = Public Supply; UEC = Upper East Coast.

[a] Values listed are only for the areas within the UEC Planning Area boundaries. No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.

Finished-to-Raw Water Conversion

Net (finished) demands (**Table A-3**) were calculated by multiplying the PS service area or DSS area population and the 5-year average PCUR. Gross (raw) water withdrawals are the volumes needed from the water source(s) to produce the required net (finished) water volumes considering water treatment process losses. Water use permit allocations are based on the gross (raw) water volume needed to meet service area demands, based on the demands projected at the time of the permit application. Therefore, it is important to present gross (raw) demands in water supply plans along with the net (finished) demands.

Table A-3. PS net (finished) water demands under average rainfall conditions in the UEC Planning Area.

PS Utility[a]	Net (Finished) Water Demand – Average Rainfall Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Indiantown	0.58	0.60	0.61	1.10	1.19	1.23	1.23	1.24
Jupiter (Martin Portion)	0.46	0.48	0.48	0.50	0.51	0.52	0.53	0.54
Martin County Utilities	11.35	11.58	11.62	12.08	12.45	13.07	13.46	13.86
Port St. Lucie (Martin Portion)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Sailfish Point	0.18	0.18	0.18	0.19	0.19	0.20	0.20	0.21
South Martin Regional Utility	4.05	4.18	4.21	4.34	4.47	4.61	4.74	4.89
St. Lucie Village Parklife	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Stuart	2.99	3.04	3.05	3.08	3.14	3.21	3.27	3.34
Tequesta (Martin Portion)	0.69	0.69	0.69	0.70	0.70	0.70	0.71	0.71
Martin County Total	**20.52**	**20.97**	**21.06**	**22.21**	**22.87**	**23.76**	**24.36**	**25.01**
St. Lucie County								
Fort Pierce Utilities Authority	8.75	9.16	9.26	10.00	10.17	10.35	10.50	10.56
Harbour Ridge	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.18
Martin County Utilities (St. Lucie Portion)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Meadowood Community Association	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Port St. Lucie	18.68	21.04	21.63	24.48	27.68	29.46	32.31	32.84
Reserve Community Development District	0.14	0.11	0.11	0.12	0.12	0.13	0.13	0.13
Spanish Lakes Country Club	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19
Spanish Lakes Fairways	0.22	0.23	0.24	0.24	0.24	0.24	0.24	0.25
St. Lucie County Utilities	1.53	1.85	1.93	2.77	4.56	6.42	6.62	6.70
St. Lucie West Services District	1.95	2.02	2.03	2.04	2.05	2.05	2.07	2.08
St. Lucie County Total	**31.70**	**34.85**	**35.64**	**40.10**	**45.28**	**49.11**	**52.34**	**53.03**
UEC Planning Area Total								
UEC Planning Area Total	**52.22**	**55.82**	**56.70**	**62.31**	**68.15**	**72.87**	**76.70**	**78.04**

mgd = million gallons per day; PS = Public Supply; UEC = Upper East Coast.

[a] No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.

To determine the projected gross (raw) water demand for each PS utility, net (finished) water projections were multiplied by finished-to-raw ratios (**Table A-4**), which are based on the treatment efficiency of each PS treatment plant. For example, if a typical reverse osmosis treatment facility withdraws a gross (raw) volume of 10.00 mgd and produces 8.00 mgd of net (finished) water, its treatment losses are 20%. Therefore, its finished-to-raw ratio would be 1.25 (10 mgd divided by 8 mgd). For utilities with proposed projects that will change the treatment types and efficiencies, the finished-to-raw ratios are adjusted to account for the projected timing of implementation and corresponding changes in treatment losses.

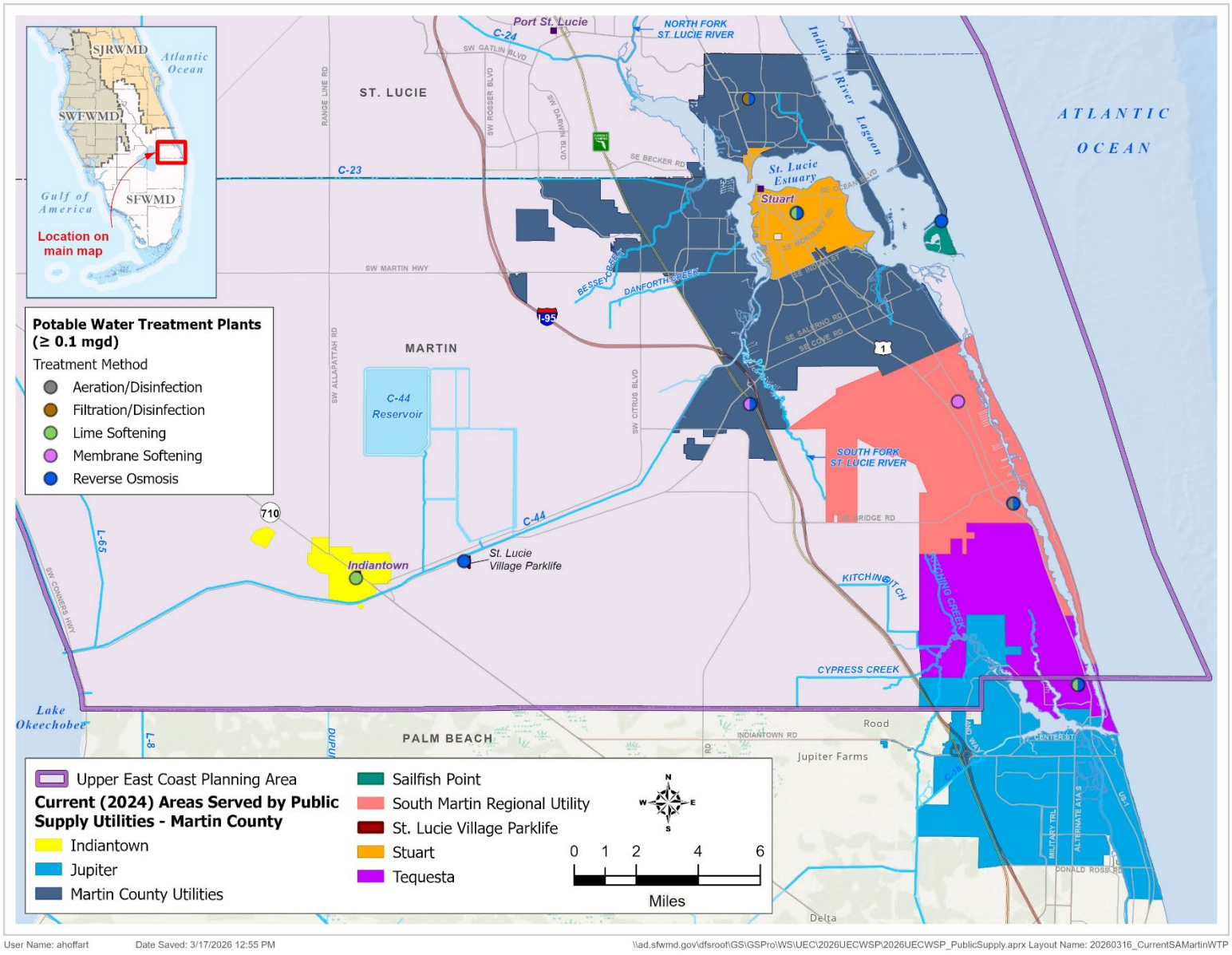
Treatment efficiencies were determined from information supplied by utilities during initial outreach efforts, in the water use permit applications, from the FDEP Drinking Water Database (FDEP 2024), and from actual pumpage reports. The assumed standard treatment losses are 0% for aeration/disinfection only, 3% for lime softening/flocculation, 15% for nanofiltration, and 25% for reverse osmosis. If a utility has more than one treatment method, the ratio reflects combined treatment efficiencies and is typically based on pumpage reports comparing raw and finished water totals. Finished-to-raw adjustments for potable water treatment plants in the UEC Planning Area based on their existing treatment processes are listed in **Table A-4**. The locations of potable water treatment plants by treatment method are shown in **Figures A-2** and **A-3**. In recent years, utilities have been replacing aging lime softening facilities with membrane processes to accommodate current and projected regulatory standards, including maximum contaminant levels for perfluoroalkyl and polyfluoroalkyl substances, known as PFAS, which may result in increased future demands.

Table A-4. Finished-to-raw water adjustment ratios for PS utilities in the UEC Planning Area.

PS Utility[a]	Finished-to-Raw Ratio
Martin County	
Indiantown	1.03
Jupiter (Martin Portion)	1.20
Martin County Utilities	1.21
Port St. Lucie (Martin Portion)	1.28
Sailfish Point	1.33
South Martin Regional Utility	1.24
St. Lucie Village Parklife	1.28
Stuart	1.05
Tequesta (Martin Portion)	1.19
St. Lucie County	
Fort Pierce Utilities Authority	1.22
Harbour Ridge	1.03
Martin County Utilities (St. Lucie Portion)	1.21
Meadowood Community Association	1.03
Port St. Lucie	1.28
Reserve Community Development District	1.03
Spanish Lakes Country Club	1.33
Spanish Lakes Fairways	1.33
St. Lucie County Utilities	1.18
St. Lucie West Services District	1.33

PS = Public Supply; UEC = Upper East Coast.

[a] No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.



User Name: ahoffart Date Saved: 3/17/2026 12:55 PM \\ad.sfwmd.gov\dfsroot\GS\GSPro\WS\UEC\2026UECWSP\2026UECWSP_PublicSupply.aprx Layout Name: 20260316_CurrentSAMartinWTP

Figure A-2. Potable water treatment plants and current areas served by PS utilities in Martin County.

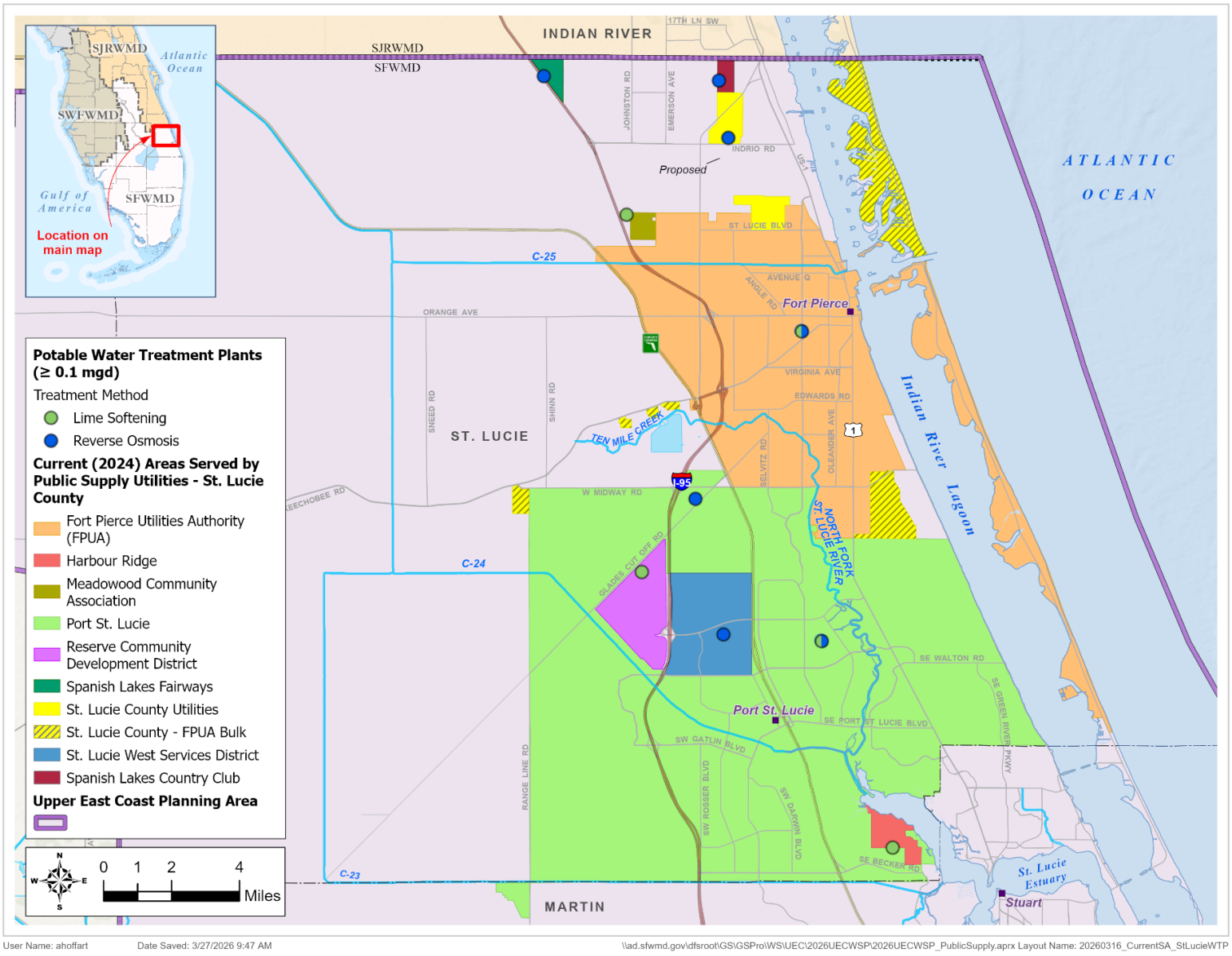


Figure A-3. Potable water treatment plants and current areas served by PS utilities in St. Lucie County.

PS Projection Results

Average Rainfall Conditions

Gross (raw) demands for PS under average rainfall conditions for 2020 through 2050 are provided in **Table A-5**.

Table A-5. PS gross (raw) water demands under average rainfall conditions in the UEC Planning Area.

PS Utility[a]	Gross (Raw) Water Demand – Average Rainfall Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Indiantown	0.60	0.62	0.63	1.19	1.34	1.39	1.39	1.40
Jupiter (Martin Portion)	0.55	0.58	0.58	0.60	0.61	0.62	0.64	0.65
Martin County Utilities	13.73	14.01	14.06	14.62	15.56	16.34	16.96	17.60
Port St. Lucie (Martin Portion)	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20
Sailfish Point	0.24	0.24	0.24	0.25	0.25	0.27	0.27	0.28
South Martin Regional Utility	5.02	5.18	4.66	4.80	4.95	5.30	5.69	5.87
St. Lucie Village Parklife	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Stuart	3.14	3.19	3.20	3.33	3.39	3.47	3.53	3.61
Tequesta (Martin Portion)	0.82	0.82	0.85	0.86	0.88	0.88	0.89	0.89
Martin County Total	**24.38**	**24.92**	**24.50**	**25.94**	**27.27**	**28.56**	**29.66**	**30.59**
St. Lucie County								
Fort Pierce Utilities Authority	10.68	11.18	11.30	12.20	12.41	12.63	12.81	12.88
Harbour Ridge	0.16	0.18	0.18	0.18	0.19	0.19	0.19	0.19
Martin County Utilities (St. Lucie Portion)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Meadowood Community Association	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Port St. Lucie	23.91	26.93	28.10	32.07	36.26	39.18	42.97	43.68
Reserve Community Development District	0.14	0.11	0.11	0.12	0.12	0.13	0.13	0.13
Spanish Lakes Country Club	0.23	0.23	0.23	0.24	0.24	0.24	0.25	0.25
Spanish Lakes Fairways	0.29	0.31	0.32	0.32	0.32	0.32	0.32	0.33
St. Lucie County Utilities	1.81	2.18	2.28	3.68	6.06	8.54	8.80	8.91
St. Lucie West Services District	2.59	2.69	2.70	2.71	2.73	2.73	2.75	2.77
St. Lucie County Total	**39.91**	**43.91**	**45.32**	**51.62**	**58.43**	**64.06**	**68.32**	**69.24**
UEC Planning Area Total								
UEC Planning Area Total	**64.29**	**68.83**	**69.82**	**77.56**	**85.70**	**92.62**	**97.98**	**99.83**

mgd = million gallons per day; PS = Public Supply; UEC = Upper East Coast.

[a] No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.

1-in-10-Year Drought Conditions

Section 373.709, F.S., states that the level-of-certainty planning goal associated with identifying water demands shall be based on meeting demands during 1-in-10-year drought conditions. A 1-in-10-year drought is characterized by diminished rain and increased evapotranspiration relative to the historical record for a specific location. The increased PS demands during 1-in-10-year drought conditions were calculated using the method described in the *Districtwide Water Supply Assessment* (SFWMD 1998), which considers the increased demands on the irrigation portion of PS during droughts. The drought demand factors are 1.17 for Martin County, 1.17 for northeastern Okeechobee County (within the UEC Planning Area), and 1.09 for St. Lucie County. Average water demands were multiplied by the drought demand factor to calculate demands during 1-in-10-year drought conditions (**Tables A-6** and **A-7**).

INFO

Average Rainfall and 1-in-10-Year Drought

An **average rainfall year** is defined as a year having rainfall with a 50% probability of being exceeded in any other year.

A **1-in-10-year drought** is defined as a year in which below normal rainfall occurs with a 90% probability of being exceeded in any other year. It has an expected return frequency of once in 10 years.

Table A-6. PS net (finished) water demands under 1-in-10-year drought conditions in the UEC Planning Area.

PS Utility[a]	Net (Finished) Water Demand – 1-in-10-Year Drought Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Indiantown	0.68	0.70	0.71	1.29	1.39	1.44	1.44	1.45
Jupiter (Martin Portion)	0.54	0.56	0.56	0.59	0.60	0.61	0.62	0.63
Martin County Utilities	13.28	13.55	13.60	14.13	14.57	15.29	15.75	16.22
Port St. Lucie (Martin Portion)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Sailfish Point	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.25
South Martin Regional Utility	4.74	4.89	4.93	5.08	5.23	5.39	5.55	5.72
St. Lucie Village Parklife	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Stuart	3.50	3.56	3.57	3.60	3.67	3.76	3.83	3.91
Tequesta (Martin Portion)	0.81	0.81	0.81	0.82	0.82	0.82	0.83	0.83
Martin County Total	**24.02**	**24.54**	**24.65**	**25.99**	**26.76**	**27.80**	**28.51**	**29.27**
St. Lucie County								
Fort Pierce Utilities Authority	9.54	9.98	10.09	10.90	11.09	11.28	11.45	11.51
Harbour Ridge	0.17	0.19	0.19	0.19	0.20	0.20	0.20	0.20
Martin County Utilities (St. Lucie Portion)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Meadowood Community Association	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Port St. Lucie	20.36	22.93	23.58	26.68	30.17	32.11	35.22	35.80
Reserve Community Development District	0.15	0.12	0.12	0.13	0.13	0.14	0.14	0.14
Spanish Lakes Country Club	0.19	0.19	0.19	0.20	0.20	0.20	0.21	0.21

Table A-6. Continued.

PS Utility	Net (Finished) Water Demand – 1-in-10-Year Drought Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
St. Lucie County (Continued)								
Spanish Lakes Fairways	0.24	0.25	0.26	0.26	0.26	0.26	0.26	0.27
St. Lucie County Utilities	1.67	2.02	2.10	3.02	4.97	7.00	7.22	7.30
St. Lucie West Services District	2.13	2.20	2.21	2.22	2.23	2.23	2.26	2.27
St. Lucie County Total	**34.56**	**37.99**	**38.85**	**43.71**	**49.36**	**53.53**	**57.07**	**57.81**
UEC Planning Area Total								
UEC Planning Area Total	**58.58**	**62.53**	**63.50**	**69.70**	**76.12**	**81.33**	**85.58**	**87.08**

mgd = million gallons per day; PS = Public Supply; UEC = Upper East Coast.
[a] No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.

Table A-7. PS gross (raw) water demands under 1-in-10-year drought conditions in the UEC Planning Area.

PS Utility[a]	Gross (Raw) Water Demand – 1-in-10-Year Drought Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Indiantown	0.70	0.73	0.74	1.39	1.57	1.63	1.63	1.64
Jupiter (Martin Portion)	0.64	0.68	0.68	0.70	0.71	0.73	0.75	0.76
Martin County Utilities	16.06	16.39	16.45	17.11	18.21	19.12	19.84	20.59
Port St. Lucie (Martin Portion)	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23
Sailfish Point	0.28	0.28	0.28	0.29	0.29	0.32	0.32	0.33
South Martin Regional Utility	5.87	6.06	5.45	5.62	5.79	6.20	6.66	6.87
St. Lucie Village Parklife	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Stuart	3.67	3.73	3.74	3.90	3.97	4.06	4.13	4.22
Tequesta (Martin Portion)	0.96	0.96	0.99	1.01	1.03	1.03	1.04	1.04
Martin County Total	**28.51**	**29.16**	**28.66**	**30.36**	**31.91**	**33.43**	**34.71**	**35.79**
St. Lucie County								
Fort Pierce Utilities Authority	11.64	12.19	12.32	13.30	13.53	13.77	13.96	14.04
Harbour Ridge	0.17	0.20	0.20	0.20	0.21	0.21	0.21	0.21
Martin County Utilities (St. Lucie Portion)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Meadowood Community Association	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Port St. Lucie	26.06	29.35	30.63	34.96	39.52	42.71	46.84	47.61
Reserve Community Development District	0.15	0.12	0.12	0.13	0.13	0.14	0.14	0.14
Spanish Lakes Country Club	0.25	0.25	0.25	0.26	0.26	0.26	0.27	0.27
Spanish Lakes Fairways	0.32	0.34	0.35	0.35	0.35	0.35	0.35	0.36
St. Lucie County Utilities	1.97	2.38	2.49	4.01	6.61	9.31	9.59	9.71
St. Lucie West Services District	2.82	2.93	2.94	2.95	2.98	2.98	3.00	3.02
St. Lucie County Total	**43.49**	**47.87**	**49.41**	**56.27**	**63.70**	**69.84**	**74.47**	**75.47**
UEC Planning Area Total								
UEC Planning Area Total	**72.00**	**77.03**	**78.07**	**86.63**	**95.61**	**103.27**	**109.18**	**111.26**

mgd = million gallons per day; PS = Public Supply; UEC = Upper East Coast.
[a] No PS utilities are located in the portion of Okeechobee County within the UEC Planning Area.

DOMESTIC SELF-SUPPLY

The DSS category typically includes potable water used by households that are served by small utilities with current allocations less than 0.10 mgd or that are self-supplied by private wells. The permanent resident populations within DSS areas were developed simultaneously with the PS population estimates and projections as described earlier. To determine the current and future DSS demands, the weighted average PS PCURs (**Table A-2**) were multiplied by the DSS permanent resident populations in each county. DSS county PCURs remain constant through 2050. For DSS demands, the finished-to-raw water ratio is assumed to be 1.00. Therefore, no distinction is made between gross (raw) and net (finished) water demands.

Tables A-8 and **A-9** contain the UEC Planning Area's DSS demand estimates and projections under average rainfall and 1-in-10-year drought conditions. The drought demand factors used for PS also were used to calculate 1-in-10-year drought DSS demands. The average gross (raw) DSS demands in 2024 were 6.23 mgd for 56,503 permanent residents (**Table A-1**) and are expected to decrease to 3.59 mgd in 2050 due to expansion of PS utility service areas to serve current DSS areas.

Table A-8. DSS gross (raw) water demands under average rainfall conditions in the UEC Planning Area.

County DSS	Demand – Average Rainfall Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin	1.53	1.65	1.70	1.23	1.21	0.81	0.60	0.33
Okeechobee[a]	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
St. Lucie	1.79	4.52	5.20	5.02	3.18	2.28	1.51	3.20
UEC Planning Area Total	**3.38**	**6.23**	**6.96**	**6.31**	**4.45**	**3.15**	**2.17**	**3.59**

DSS = Domestic Self-Supply; mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Table A-9. DSS gross (raw) water demands under 1-in-10-year drought conditions in the UEC Planning Area.

County DSS	Demand – 1-in-10-Year Drought Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin	1.79	1.93	1.99	1.44	1.42	0.95	0.70	0.39
Okeechobee[a]	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
St. Lucie	1.95	4.93	5.67	5.47	3.47	2.49	1.65	3.49
UEC Planning Area Total	**3.81**	**6.93**	**7.73**	**6.98**	**4.96**	**3.51**	**2.42**	**3.95**

DSS = Domestic Self-Supply; mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

AGRICULTURE

Water demands reported under AG include water used for agricultural production, such as farm irrigation, operation of greenhouses and nurseries, and raising livestock. Water used in the processing of agricultural commodities is accounted for under the CII category.

Previous UEC plan updates relied on various sources to develop agricultural acreage estimates and projections, including agricultural water use permits, parcel-level land use maps, and results from the United States Census of Agriculture. Irrigated acres were translated to water volume (mgd) estimates using the Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS) model (Smajstrla 1990).

Florida State legislation passed in 2013 prescribed a new approach for water management districts to consider agricultural water demands from the Florida Department of Agriculture and Consumer Services (FDACS). Section 570.93, F.S., directs the FDACS to develop annual statewide agricultural acreage and water demand projections based on the same 20-year planning horizon used in water supply planning. Under Section 373.709(2)(a), F.S., water management districts are required to consider FDACS projections, and any adjustments or deviations from the projections published by FDACS, "…must be fully described, and the original data must be presented along with the adjusted data."

AG Projection Methodology

FSAID Acreage and Demands Data

FDACS publishes 20-year agricultural acreage and associated water demand projections in annual Florida Statewide Agricultural Irrigation Demand (FSAID) reports. The 12th annual report (referred to as FSAID XII) was published in 2025 (FDACS 2025). The FSAID XII acreage projections (**Tables A-10** and **A-11**) are used in this 2026 UEC Plan Update to calculate AG demands.

Table A-10. Irrigated agricultural acres in the UEC Planning Area (From FDACS 2025).

Crop	2023	2025	2030	2035	2040	2045	2050
Sugarcane	26,152	26,152	25,802	24,375	23,667	23,433	22,716
Citrus	23,924	23,795	23,638	23,638	23,462	23,462	23,422
Hay/Pasture	19,862	19,779	19,673	19,637	19,525	19,525	18,938
Fresh Market Vegetables	11,446	11,446	10,933	10,677	10,429	9,810	9,810
Greenhouse/Nursery	4,489	3,981	3,724	3,715	3,704	3,570	3,489
Sod	3,388	3,388	3,335	3,335	2,826	2,826	2,826
Potatoes	1,398	1,398	1,101	1,101	1,101	272	272
Fruit (excluding citrus)	945	945	945	945	926	926	618
Field Crops	843	843	843	843	843	843	843
Total	**92,447**	**91,727**	**89,994**	**88,266**	**86,483**	**84,667**	**82,934**

FDACS = Florida Department of Agriculture and Consumer Services; UEC = Upper East Coast.

Table A-11. Irrigated agricultural demands (in mgd) in the UEC Planning Area (From FDACS 2025).

Crop	2023	2025	2030	2035	2040	2045	2050
Sugarcane	33.02	33.02	32.58	30.77	29.87	29.58	28.68
Citrus	20.54	20.44	20.22	20.25	20.09	20.07	20.03
Hay/Pasture	14.31	14.16	13.96	13.94	13.77	13.72	13.35
Fresh Market Vegetables	15.74	15.76	15.07	14.70	14.35	13.53	13.53
Greenhouse/Nursery	11.47	10.32	9.75	9.73	9.72	9.40	9.19
Sod	3.23	3.23	3.19	3.19	2.73	2.73	2.73
Potatoes	1.41	1.41	1.14	1.14	1.14	0.29	0.29
Fruit (excluding citrus)	1.75	1.75	1.75	1.75	1.71	1.71	1.12
Field Crops	0.72	0.72	0.72	0.71	0.71	0.71	0.71
Total	**102.19**	**100.81**	**98.38**	**96.18**	**94.09**	**91.74**	**89.63**

FDACS = Florida Department of Agriculture and Consumer Services; mgd = million gallons per day; UEC = Upper East Coast.

Comparison of FSAID XII and AFSIRS Demands

The estimated 2024 and projected 2050 demands from the AFSIRS model were compared to the FSAID XII report. The demand projections differed by 52.68 mgd in 2024 and 46.99 mgd in 2050 despite sharing a similar irrigated acreage footprint (**Figure A-4**).

The SFWMD uses AFSIRS to estimate crop irrigation demands simulated in regional groundwater models, and the demands using AFSIRS resemble those obtained through the SFWMD's permitting methods. After reviewing water demands from FSAID XII and AFSIRS, the SFWMD chose to use water demand estimates and projections from AFSIRS based on irrigated acres published in the FSAID XII report (FDACS 2025). The decision to deviate from water demands published in the FSAID XII report (FDACS 2025) was made to maintain a consistent approach with previous planning and regional modeling efforts.

Data for soil type, rainfall, reference evapotranspiration are among the key inputs used with AFSIRS to calculate current and future demands. Soil input data were obtained from the Natural Resources Conservation Service's Soil Survey Geographic (SSURGO) database. Daily rainfall data were obtained from the SFWMD's Next Generation Radar (NEXRAD) rainfall data set. Reference evapotranspiration data were obtained from the United States Geological Survey's South Florida Information Access (SOFIA) database. The irrigation method for each irrigated parcel used with AFSIRS is provided in the FSAID XII data set. Most citrus groves are irrigated via microirrigation. Flood and seepage irrigation are the most common methods for all other crop categories.

Water demands associated with livestock and aquaculture production complete the demands for the AG category. Demands for these activities are taken directly from the FSAID XII report (FDACS 2025) without adjustment.

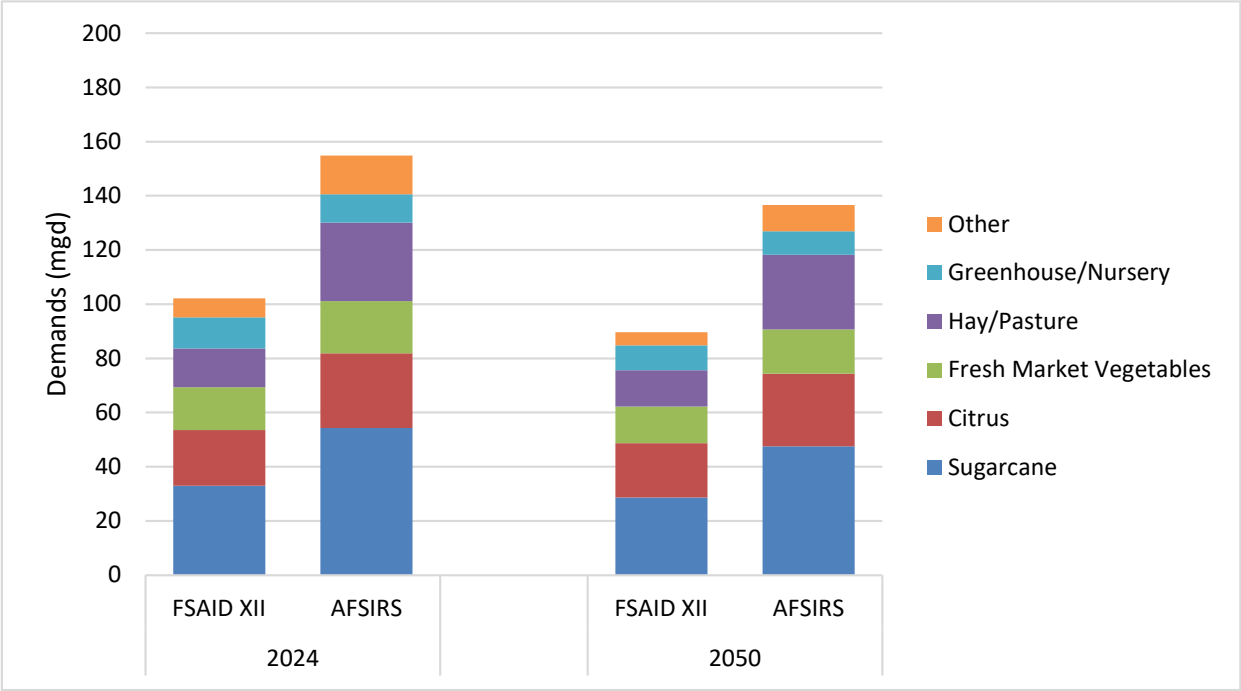


Figure A-4. Comparison of average water demands from the 12th Florida Statewide Agricultural Irrigation Demand (FSAID XII) report and the Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS). (Note: The "Other" category includes commodities combined from **Table A-11** that are not graphed individually.)

AG Projection Results

AG acres and water demands depend on the choices of individual agricultural producers from year to year. Those choices are affected by several factors, including weather, markets, disease, proprietary information, and urban development pressure. AG projections can be affected by population changes as well as future land use conversions.

The gross irrigation requirements for various crop types under the AG category are provided in **Tables A-12** to **A-20**. **Tables A-21** and **A-22** summarize the gross water requirements for livestock and aquaculture. **Table A-23** summarizes all irrigated agricultural acreage and gross water demands in the UEC Planning Area by commodity, and **Table A-24** summarizes all irrigated agricultural acreage and gross water demands by county.

Sugarcane

Table A-12 presents the SFWMD's sugarcane acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions.

Table A-12. Gross irrigation demands (in mgd) for sugarcane acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	26,152	26,152	26,152	25,802	24,375	23,667	23,433	22,716
Average rainfall	54.35	54.35	54.35	53.62	50.73	49.65	49.10	47.60
1-in-10-year drought	63.12	63.12	63.12	62.27	58.91	58.12	57.48	55.72
Okeechobee County[a]								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lucie County								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UEC Planning Area Total								
Irrigated acres	**26,152**	**26,152**	**26,152**	**25,802**	**24,375**	**23,667**	**23,433**	**22,716**
Average rainfall	**54.35**	**54.35**	**54.35**	**53.62**	**50.73**	**49.65**	**49.10**	**47.60**
1-in-10-year drought	**63.12**	**63.12**	**63.12**	**62.27**	**58.91**	**58.12**	**57.48**	**55.72**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Sugarcane

Citrus

Table A-13 presents the SFWMD's citrus acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions.

Table A-13. Gross irrigation demands (in mgd) for citrus acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	734	734	734	734	734	710	710	710
Average rainfall	0.81	0.81	0.81	0.81	0.81	0.79	0.79	0.79
1-in-10-year drought	1.03	1.03	1.03	1.03	1.03	1.00	1.00	1.00
Okeechobee County[a]								
Irrigated acres	1,159	1,159	1,159	1,087	1,087	1,087	1,087	1,087
Average rainfall	1.26	1.26	1.26	1.18	1.18	1.18	1.18	1.18
1-in-10-year drought	1.56	1.56	1.56	1.46	1.46	1.46	1.46	1.46
St. Lucie County								
Irrigated acres	22,031	22,031	21,902	21,817	21,817	21,665	21,665	21,625
Average rainfall	25.45	25.45	25.26	25.21	25.21	24.48	24.48	24.79
1-in-10-year drought	32.12	32.12	31.87	31.81	31.81	30.89	30.89	31.63
UEC Planning Area Total								
Irrigated acres	**23,924**	**23,924**	**23,795**	**23,638**	**23,638**	**23,462**	**23,462**	**23,422**
Average rainfall	**27.52**	**27.52**	**27.33**	**27.20**	**27.20**	**26.45**	**26.45**	**26.76**
1-in-10-year drought	**34.71**	**34.71**	**34.46**	**34.30**	**34.30**	**33.35**	**33.35**	**34.09**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Citrus Grove

Hay/Pasture

Table A-14 presents the SFWMD's hay/pasture acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions. The FSAID acres for this category are labeled and modeled as hay/pasture. The associated demands calculated with AFSIRS are assumed to capture irrigation for hay and any irrigation used for improved pasture.

Table A-14. Gross irrigation demands (in mgd) for hay/pasture acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	8,890	8,807	8,807	8,807	8,807	8,807	8,807	8,220
Average rainfall	13.36	13.24	13.24	13.24	13.24	13.24	13.24	12.24
1-in-10-year drought	15.38	15.24	15.24	15.24	15.24	15.24	15.24	14.06
Okeechobee County[a]								
Irrigated acres	502	502	502	502	502	502	502	502
Average rainfall	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
1-in-10-year drought	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
St. Lucie County								
Irrigated acres	10,471	10,471	10,471	10,365	10,328	10,216	10,216	10,216
Average rainfall	15.35	15.35	15.35	15.21	15.14	15.00	15.00	15.00
1-in-10-year drought	17.93	17.93	17.93	17.76	17.69	17.53	17.53	17.53
UEC Planning Area Total								
Irrigated acres	**19,863**	**19,780**	**19,780**	**19,674**	**19,637**	**19,525**	**19,525**	**18,938**
Average rainfall	**29.09**	**28.97**	**28.97**	**28.83**	**28.76**	**28.62**	**28.62**	**27.62**
1-in-10-year drought	**33.79**	**33.65**	**33.65**	**33.48**	**33.41**	**33.25**	**33.25**	**32.07**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Hay Field

Fresh Market Vegetables

Table A-15 presents the SFWMD's fresh market vegetable acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions, assuming two plantings per year lasting 4 months each. Examples of crops in the fresh market vegetable category include tomatoes, green beans, peppers, and melons.

Table A-15. Gross irrigation demands (in mgd) for fresh market vegetable acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	7,331	7,331	7,331	6,828	6,828	6,580	6,196	6,196
Average rainfall	14.56	14.56	14.56	13.86	13.86	13.34	12.56	12.56
1-in-10-year drought	16.70	16.70	16.70	15.93	15.93	15.33	14.41	14.41
Okeechobee County[a]								
Irrigated acres	48	48	48	48	48	48	48	48
Average rainfall	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
1-in-10-year drought	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
St. Lucie County								
Irrigated acres	4,067	4,067	4,067	4,058	3,801	3,801	3,567	3,567
Average rainfall	4.58	4.58	4.58	4.37	3.92	3.92	3.60	3.60
1-in-10-year drought	5.89	5.89	5.89	5.62	5.04	5.04	4.63	4.63
UEC Planning Area Total								
Irrigated acres	**11,446**	**11,446**	**11,446**	**10,934**	**10,677**	**10,429**	**9,811**	**9,811**
Average rainfall	**19.26**	**19.26**	**19.26**	**18.35**	**17.90**	**17.38**	**16.28**	**16.28**
1-in-10-year drought	**22.73**	**22.73**	**22.73**	**21.69**	**21.11**	**20.51**	**19.18**	**19.18**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Bell Peppers

Greenhouse/Nursery

Table A-16 presents the SFWMD's greenhouse/nursery acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions.

Table A-16. Gross irrigation demands (in mgd) for greenhouse/nursery acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	3,233	2,932	2,724	2,516	2,516	2,516	2,453	2,453
Average rainfall	7.28	6.39	6.14	5.49	5.49	5.49	5.46	5.46
1-in-10-year drought	8.11	7.12	6.83	6.11	6.11	6.11	6.08	6.08
Okeechobee County[a]								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lucie County								
Irrigated acres	1,257	1,257	1,257	1,208	1,200	1,188	1,117	1,035
Average rainfall	4.08	4.08	4.08	3.88	3.88	3.67	3.41	3.12
1-in-10-year drought	4.44	4.44	4.44	4.23	4.23	3.99	3.71	3.42
UEC Planning Area Total								
Irrigated acres	**4,490**	**4,189**	**3,981**	**3,724**	**3,716**	**3,704**	**3,570**	**3,488**
Average rainfall	**11.36**	**10.47**	**10.22**	**9.37**	**9.37**	**9.16**	**8.87**	**8.58**
1-in-10-year drought	**12.55**	**11.56**	**11.27**	**10.34**	**10.34**	**10.10**	**9.79**	**9.50**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Greenhouse

Sod

Table A-17 presents the SFWMD's sod acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions.

Table A-17. Gross irrigation demands (in mgd) for sod acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	2,196	2,196	2,196	2,196	2,196	1,688	1,688	1,688
Average rainfall	3.69	3.69	3.69	3.69	3.69	3.13	3.13	3.13
1-in-10-year drought	4.44	4.44	4.44	4.44	4.44	3.99	3.99	3.99
Okeechobee County[a]								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lucie County								
Irrigated acres	1,192	1,192	1,192	1,139	1,139	1,139	1,139	1,139
Average rainfall	2.69	2.69	2.69	2.54	2.54	2.54	2.54	2.54
1-in-10-year drought	3.16	3.16	3.16	2.99	2.99	2.99	2.99	2.99
UEC Planning Area Total								
Irrigated acres	**3,388**	**3,388**	**3,388**	**3,335**	**3,335**	**2,827**	**2,827**	**2,827**
Average rainfall	**6.38**	**6.38**	**6.38**	**6.23**	**6.23**	**5.67**	**5.67**	**5.67**
1-in-10-year drought	**7.60**	**7.60**	**7.60**	**7.43**	**7.43**	**6.98**	**6.98**	**6.98**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Sod Farm

Potatoes

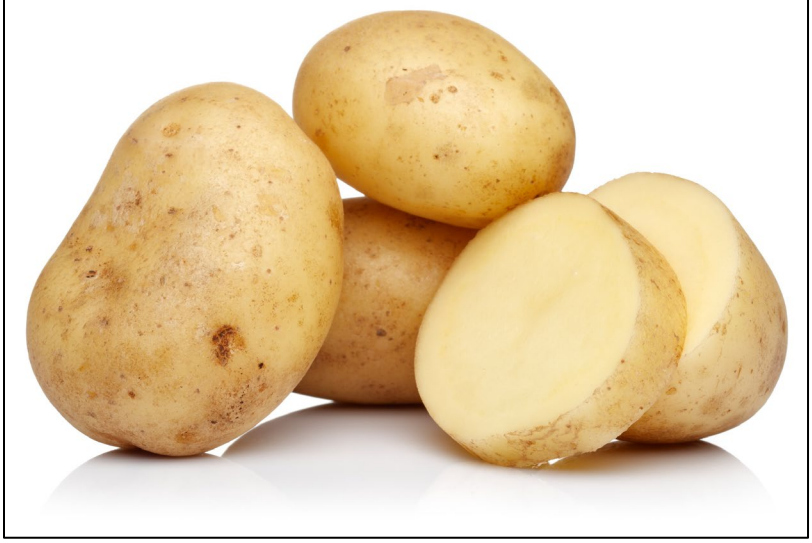
Table A-18 presents the SFWMD's potato acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions.

Table A-18. Gross irrigation demands (in mgd) for potato acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	1,398	1,398	1,398	1,101	1,101	1,101	272	272
Average rainfall	3.93	3.93	3.93	3.10	3.10	3.10	0.77	0.77
1-in-10-year drought	4.57	4.57	4.57	3.60	3.60	3.60	0.89	0.89
Okeechobee County[a]								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lucie County								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UEC Planning Area Total								
Irrigated acres	**1,398**	**1,398**	**1,398**	**1,101**	**1,101**	**1,101**	**272**	**272**
Average rainfall	**3.93**	**3.93**	**3.93**	**3.10**	**3.10**	**3.10**	**0.77**	**0.77**
1-in-10-year drought	**4.57**	**4.57**	**4.57**	**3.60**	**3.60**	**3.60**	**0.89**	**0.89**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.



White Potatoes

Fruit (Excluding Citrus)

Table A-19 presents the SFWMD's fruit (excluding citrus) acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions.

Table A-19. Gross irrigation demands (in mgd) for fruit (excluding citrus) acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	10	10	10	10	10	10	10	10
Average rainfall	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1-in-10-year drought	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Okeechobee County[a]								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lucie County								
Irrigated acres	935	935	935	935	935	915	915	608
Average rainfall	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.27
1-in-10-year drought	2.20	2.20	2.20	2.20	2.20	2.20	2.20	1.46
UEC Planning Area Total								
Irrigated acres	**945**	**945**	**945**	**945**	**945**	**925**	**925**	**618**
Average rainfall	**1.93**	**1.93**	**1.93**	**1.93**	**1.93**	**1.92**	**1.92**	**1.28**
1-in-10-year drought	**2.22**	**2.22**	**2.22**	**2.22**	**2.22**	**2.22**	**2.22**	**1.48**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Strawberries

Field Crops

Table A-20 presents the SFWMD's field crop acreage and gross irrigation requirement (water withdrawal demand) projections under average rainfall and 1-in-10-year drought conditions. The field crops category includes soybeans, field corn, peanuts, dried beans, lentils, and other grains.

Table A-20. Gross irrigation demands (in mgd) for field crop acreage in the UEC Planning Area.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	271	271	271	271	271	271	271	271
Average rainfall	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
1-in-10-year drought	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Okeechobee County[a]								
Irrigated acres	572	572	572	572	572	572	572	572
Average rainfall	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
1-in-10-year drought	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
St. Lucie County								
Irrigated acres	0	0	0	0	0	0	0	0
Average rainfall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-in-10-year drought	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UEC Planning Area Total								
Irrigated acres	**843**	**843**	**843**	**843**	**843**	**843**	**843**	**843**
Average rainfall	**2.06**	**2.06**	**2.06**	**2.06**	**2.06**	**2.06**	**2.06**	**2.06**
1-in-10-year drought	**2.37**	**2.37**	**2.37**	**2.37**	**2.37**	**2.37**	**2.37**	**2.37**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Corn

Livestock

Table A-21 presents the FSAID XII water demand projections for livestock. Livestock demands published in the FSAID XII report were developed with assumed water requirements per head of livestock. Livestock demands are assumed to be the same under average rainfall and 1-in-10-year drought conditions.

Table A-21. Gross water demands (in mgd) for livestock in the UEC Planning Area.

2020	2024	2025	2030	2035	2040	2045	2050
Martin County							
0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Okeechobee County[a]							
1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
St. Lucie County							
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
UEC Planning Area Total							
1.82	**1.82**	**1.82**	**1.82**	**1.82**	**1.82**	**1.82**	**1.82**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Note: Water demands for livestock were obtained from the FSAID XII report and not calculated using the AFSIRS model.

Cattle

Aquaculture

Table A-22 presents the FSAID XII water demand projections for aquaculture. Aquaculture demands are assumed to be the same under average rainfall and 1-in-10-year drought conditions.

Table A-22. Gross water demands (in mgd) for aquaculture in the UEC Planning Area.

2020	2024	2025	2030	2035	2040	2045	2050
Martin County							
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Okeechobee County[a]							
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
St. Lucie County							
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
UEC Planning Area Total							
0.08	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Note: Water demands for aquaculture were obtained from the FSAID XII report and not calculated using the AFSIRS model.

Summary of Agricultural Results

Irrigated agricultural acres are projected to decrease 10% over the planning horizon, from 92,065 to 82,935 acres (**Tables A-23** and **A-24**). All counties are projected to experience reductions in demands, though Martin County will continue to have the majority of irrigated acres and AG demands through 2050 (**Table A-24**). AG demands across the UEC Planning Area are projected to decrease approximately 12%, from 156.77 mgd in 2024 to 138.52 mgd in 2050 under average rainfall conditions. Sugarcane accounts for the largest share of AG demands: 54.35 mgd in 2024 and 47.60 mgd in 2050. Although sugarcane has the greatest number of irrigated acres in 2024, the crop is projected to have the greatest decrease in irrigated acreage and associated demands over the planning horizon. By 2050, it will be reduced to 22,716 acres.

Table A-23. Summary of gross water demands (in mgd) for all agricultural acreage, livestock, and aquaculture in the UEC Planning Area by commodity.

	2020	2024	2025	2030	2035	2040	2045	2050
Sugarcane								
Irrigated acres	26,152	26,152	26,152	25,802	24,375	23,667	23,433	22,716
Average rainfall	54.35	54.35	54.35	53.62	50.73	49.65	49.10	47.60
1-in-10-year drought	63.12	63.12	63.12	62.27	58.91	58.12	57.48	55.72
Citrus								
Irrigated acres	23,924	23,924	23,795	23,638	23,638	23,462	23,462	23,422
Average rainfall	27.52	27.52	27.33	27.20	27.20	26.45	26.45	26.76
1-in-10-year drought	34.71	34.71	34.46	34.30	34.30	33.35	33.35	34.09
Hay/Pasture								
Irrigated acres	19,863	19,780	19,780	19,674	19,637	19,525	19,525	18,938
Average rainfall	29.09	28.97	28.97	28.83	28.76	28.62	28.62	27.62
1-in-10-year drought	33.79	33.65	33.65	33.48	33.41	33.25	33.25	32.07
Fresh Market Vegetables								
Irrigated acres	11,446	11,446	11,446	10,934	10,677	10,429	9,811	9,811
Average rainfall	19.26	19.26	19.26	18.35	17.90	17.38	16.28	16.28
1-in-10-year drought	22.73	22.73	22.73	21.69	21.11	20.51	19.18	19.18
Greenhouse/Nursery								
Irrigated acres	4,490	4,189	3,981	3,724	3,716	3,704	3,570	3,488
Average rainfall	11.36	10.47	10.22	9.37	9.37	9.16	8.87	8.58
1-in-10-year drought	12.55	11.56	11.27	10.34	10.34	10.10	9.79	9.50
Sod								
Irrigated acres	3,388	3,388	3,388	3,335	3,335	2,827	2,827	2,827
Average rainfall	6.38	6.38	6.38	6.23	6.23	5.67	5.67	5.67
1-in-10-year drought	7.60	7.60	7.60	7.43	7.43	6.98	6.98	6.98
Potatoes								
Irrigated acres	1,398	1,398	1,398	1,101	1,101	1,101	272	272
Average rainfall	3.93	3.93	3.93	3.10	3.10	3.10	0.77	0.77
1-in-10-year drought	4.57	4.57	4.57	3.60	3.60	3.60	0.89	0.89
Fruit (excluding citrus)								
Irrigated acres	945	945	945	945	945	925	925	618
Average rainfall	1.93	1.93	1.93	1.93	1.93	1.92	1.92	1.28
1-in-10-year drought	2.22	2.22	2.22	2.22	2.22	2.22	2.22	1.48
Field Crops								
Irrigated acres	843	843	843	843	843	843	843	843
Average rainfall	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06
1-in-10-year drought	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
Livestock								
Irrigated acres	--	--	--	--	--	--	--	--
Average rainfall	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82
1-in-10-year drought	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82

Table A-23. Continued.

Aquaculture								
Irrigated acres	--	--	--	--	--	--	--	--
Average rainfall	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
1-in-10-year drought	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
UEC Planning Area Total								
Irrigated acres	**92,449**	**92,065**	**91,728**	**89,996**	**88,267**	**86,483**	**84,668**	**82,935**
Average rainfall	**157.78**	**156.77**	**156.33**	**152.59**	**149.18**	**145.91**	**141.64**	**138.52**
1-in-10-year drought	**185.56**	**184.43**	**183.89**	**179.60**	**175.59**	**172.40**	**167.41**	**164.18**

mgd = million gallons per day; UEC = Upper East Coast.

Table A-24. Summary of gross water demands (in mgd) for all agricultural acreage, livestock, and aquaculture in the UEC Planning Area by county.

	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Irrigated acres	50,215	49,831	49,623	48,265	46,838	45,350	43,840	42,536
Average rainfall	99.06	98.05	97.80	94.89	92.00	89.82	86.13	83.63
1-in-10-year drought	114.54	113.41	113.12	109.81	106.45	104.58	100.28	97.34
Okeechobee County[a]								
Irrigated acres	2,281	2,281	2,281	2,209	2,209	2,209	2,209	2,209
Average rainfall	4.24	4.24	4.24	4.16	4.16	4.16	4.16	4.16
1-in-10-year drought	4.87	4.87	4.87	4.77	4.77	4.77	4.77	4.77
St. Lucie County								
Irrigated acres	39,953	39,953	39,824	39,522	39,220	38,924	38,619	38,190
Average rainfall	54.48	54.48	54.29	53.54	53.02	51.93	51.35	50.73
1-in-10-year drought	66.15	66.15	65.90	65.02	64.37	63.05	62.36	62.07
UEC Planning Area Total								
Irrigated acres	**92,449**	**92,065**	**91,728**	**89,996**	**88,267**	**86,483**	**84,668**	**82,935**
Average rainfall	**157.78**	**156.77**	**156.33**	**152.59**	**149.18**	**145.91**	**141.64**	**138.52**
1-in-10-year drought	**185.56**	**184.43**	**183.89**	**179.60**	**175.59**	**172.40**	**167.41**	**164.18**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

COMMERCIAL/INDUSTRIAL/INSTITUTIONAL

The CII water use category includes demands associated with commercial and industrial operations for processing, manufacturing, and technical needs (e.g., concrete production, citrus and vegetable processing, and mining operations). Commercial, industrial, or institutional users that receive water from PS utilities or use recirculated water in closed-loop geothermal heating and cooling systems are not included in CII demand calculations. Although a large portion of CII water used by the mining industry for activities such as rock washing is returned to the source, all mining water use is included in demand estimates and projections. All CII demand estimates and projections are presumed to be the same for average rainfall and 1-in-10-year drought conditions.

CII Projection Methodology

CII estimates and projections are based on water use data from the SFWMD's Water Use Permit database. If an active CII permit holder did not report water use, demand estimates were calculated as described in the *2023 Estimated Water Use Report* (SFWMD 2025).

Increases in the CII category are expected to be driven by growth of the regional economy and permanent resident population. Therefore, CII projections are anticipated to increase steadily as county permanent resident populations increase. Previous analyses of the relationship between CII demands and population growth support this approach.

CII Projection Results

Table A-25 summarizes the current and projected CII demands in the UEC Planning Area in 5-year increments through 2050. Martin and St. Lucie counties maintain a similar share of the region's CII demands over the planning horizon.

Table A-25. CII demand projections in the UEC Planning Area.

County	Demand (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin	0.36	0.24	0.24	0.25	0.26	0.27	0.27	0.28
Okeechobee[a]	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
St. Lucie	0.29	0.27	0.28	0.32	0.34	0.36	0.38	0.38
UEC Planning Area Total	**0.69**	**0.55**	**0.56**	**0.61**	**0.64**	**0.67**	**0.70**	**0.71**

CII = Commercial/Industrial/Institutional; mgd = million gallons per day; UEC = Upper East Coast.
[a] Values listed are only for the area within the UEC Planning Area boundaries.

LANDSCAPE/RECREATIONAL

L/R water demands include irrigation for golf courses and other landscaped areas, such as parks, sports fields, and common areas of residential developments. L/R acreages reflect only the acres with SFWMD water use permits and include acreages using reclaimed water as a supplemental or backup supply. Acreages irrigated solely with reclaimed water do not require a water use permit and are not included. L/R demands were calculated using a combination of water use reported to the SFWMD as part of its regulatory compliance program and reclaimed water use reported by wastewater utilities to the FDEP.

There are two types of irrigated landscaped areas outside those permitted by the SFWMD that are excluded from the L/R demands. The first type includes landscaped areas irrigated with potable water provided by PS utilities, accounted for in PS demand estimates and projections. The second type is irrigated landscaped areas served by individual residential wells and surface water pumps permitted by rule (Rule 40E-2.061, Florida Administrative Code) and accounted for in DSS demand estimates and projections.

L/R Projection Methodology

L/R 2024 water use data reported to the SFWMD and estimated data for those not required to report are available in the *2023 Estimated Water Use Report* (SFWMD 2025). Reuse flows were determined from information supplied by wastewater utilities during initial outreach efforts and from each utility's 2024 Annual Reuse Report available from the FDEP OCULUS database (FDEP 2024). The 2024 use data from all sources were considered representative of demands under average rainfall conditions.

The SFWMD's reported and estimated water use and the reuse flow data allow for the disaggregation of L/R demands into the landscape and golf irrigation subcategories. Irrigated landscape and golf course acres indicated in **Table A-26** were calculated using the permitted L/R acreage from the SFWMD's Water Use Permit database. L/R acreages reflect only the acres with water use permits, including acreages using reclaimed water as a supplemental or backup supply. Acreages irrigated solely with reclaimed water do not require a water use permit and are not included.

Table A-26. L/R permitted acres in the UEC Planning Area.

Land Use	L/R Permitted Acres in the UEC Planning Area							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Landscape	3,249	3,347	3,368	3,502	3,605	3,684	3,747	3,802
Golf	2,965	3,520	4,500	4,500	4,500	4,500	4,500	4,500
Martin County Total	**6,214**	**6,867**	**7,868**	**8,002**	**8,105**	**8,184**	**8,247**	**8,302**
Okeechobee County[a]								
Landscape	30	42	42	43	44	45	46	47
Golf	0	0	0	0	0	0	0	0
Okeechobee County Total	**30**	**42**	**42**	**43**	**44**	**45**	**46**	**47**
St. Lucie County								
Landscape	5,224	5,360	5,566	6,168	6,671	7,098	7,465	7,514
Golf	1,784	1,784	2,218	2,218	2,218	2,218	2,218	2,218
St. Lucie County Total	**7,008**	**6,995**	**7,784**	**8,386**	**8,889**	**9,316**	**9,683**	**9,732**
UEC Planning Area Total								
Landscape	**8,503**	**8,749**	**8,976**	**9,713**	**10,320**	**10,827**	**11,258**	**11,363**
Golf	**4,749**	**5,304**	**6,718**	**6,718**	**6,718**	**6,718**	**6,718**	**6,718**
UEC Planning Area Total	**13,252**	**14,053**	**15,694**	**16,431**	**17,038**	**17,545**	**17,976**	**18,081**

L/R = Landscape/Recreational; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

The distinction is made between the acres and demands for golf courses and landscaped areas because they are projected to grow at different rates. Landscape irrigation was assumed to increase at the same rate as the counties' permanent resident populations. Golf course acreage and associated water demands in 2020 and 2024 are based on the respective permitted acreage. Following the development of five known proposed golf courses (three in Martin County and two in St. Lucie County) by 2025, golf course acreage and demands are projected to remain stable through 2050. This approach is used in other planning areas within the SFWMD and by other water management districts in Florida.

L/R Projection Results

Gross water demands for L/R were met with a combination of traditional water sources (groundwater and surface water) and reclaimed water. **Table A-27** shows that groundwater and surface water supply sources met approximately 81% of the 2024 L/R water demands, with reclaimed water supplementing the remaining 19%. The ratio of reclaimed water to groundwater/surface water used to meet future L/R demands is assumed to remain constant. Demands for reclaimed water in each county are assumed to grow at the same rate as that county's L/R demands.

Table A-27. L/R gross water demands in the UEC Planning Area by county and source.

Source	Demand – Average Rainfall Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Groundwater/Surface Water	14.07	19.64	19.64	20.42	20.73	20.96	21.15	21.31
Reclaimed Water	2.93	4.09	4.09	4.25	4.32	4.36	4.40	4.44
Martin County Total	**17.00**	**23.73**	**23.73**	**24.67**	**25.04**	**25.33**	**25.55**	**25.75**
Okeechobee County[a]								
Groundwater/Surface Water	0.09	0.12	0.12	0.12	0.13	0.13	0.13	0.13
Reclaimed Water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Okeechobee County Total	**0.09**	**0.12**	**0.12**	**0.12**	**0.13**	**0.13**	**0.13**	**0.13**
St. Lucie County								
Groundwater/Surface Water	13.85	17.44	17.95	20.79	22.04	23.09	24.01	24.13
Reclaimed Water	3.92	4.75	4.89	5.66	6.00	6.29	6.54	6.57
St. Lucie County Total	**17.77**	**22.19**	**22.84**	**26.45**	**28.04**	**29.38**	**30.54**	**30.70**
UEC Planning Area Total								
Groundwater/Surface Water	**28.01**	**37.20**	**37.71**	**41.33**	**42.89**	**44.19**	**45.29**	**45.57**
Reclaimed Water	**6.85**	**8.84**	**8.98**	**9.91**	**10.32**	**10.66**	**10.94**	**11.01**
UEC Planning Area Total	**34.86**	**46.04**	**46.69**	**51.25**	**53.21**	**54.84**	**56.23**	**56.58**

L/R = Landscape/Recreational; mgd = million gallons per day; UEC = Upper East Coast.
[a] Values listed are only for the area within the UEC Planning Area boundaries.

L/R gross irrigation demand projections under average rainfall conditions, including reclaimed water, are presented in **Table A-28**. **Table A-29** shows the estimated quantity of water provided to meet projected demands during 1-in-10-year drought conditions.

Table A-28. L/R gross irrigation demands under average rainfall conditions in the UEC Planning Area.

Land Use	Demand – Average Rainfall Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Landscape	8.43	12.13	12.13	12.61	12.98	13.27	13.49	13.69
Golf	8.57	11.60	11.60	12.06	12.06	12.06	12.06	12.06
Martin County Total	**17.00**	**23.73**	**23.73**	**24.67**	**25.04**	**25.33**	**25.55**	**25.75**
Okeechobee County[a]								
Landscape	0.09	0.12	0.12	0.12	0.13	0.13	0.13	0.13
Golf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Okeechobee County Total	**0.09**	**0.12**	**0.12**	**0.12**	**0.13**	**0.13**	**0.13**	**0.13**
St. Lucie County								
Landscape	12.61	16.91	17.56	19.46	21.05	22.39	23.55	23.71
Golf	5.16	5.28	5.28	6.99	6.99	6.99	6.99	6.99
St. Lucie County Total	**17.77**	**22.19**	**22.84**	**26.45**	**28.04**	**29.38**	**30.54**	**30.70**
UEC Planning Area Total								
Landscape	**21.13**	**29.16**	**29.81**	**32.20**	**34.16**	**35.79**	**37.18**	**37.53**
Golf	**13.73**	**16.88**	**16.88**	**19.05**	**19.05**	**19.05**	**19.05**	**19.05**
UEC Planning Area Total	**34.86**	**46.04**	**46.69**	**51.25**	**53.21**	**54.84**	**56.23**	**56.58**

L/R = Landscape/Recreational; mgd = million gallons per day; UEC = Upper East Coast.
[a] Values listed are only for the area within the UEC Planning Area boundaries.

Table A-29. L/R gross irrigation demands under 1-in-10-year drought conditions in the UEC Planning Area.

Land Use	Demand – 1-in-10-Year Drought Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Landscape	10.62	15.28	15.28	15.89	16.36	16.72	17.00	17.25
Golf	11.14	15.08	15.08	15.68	15.68	15.68	15.68	15.68
Martin County Total	**21.76**	**30.36**	**30.36**	**31.57**	**32.04**	**32.40**	**32.68**	**32.93**
Okeechobee County[a]								
Landscape	0.11	0.15	0.15	0.15	0.16	0.16	0.16	0.17
Golf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Okeechobee County Total	**0.11**	**0.15**	**0.15**	**0.15**	**0.16**	**0.16**	**0.16**	**0.17**
St. Lucie County								
Landscape	15.89	21.31	22.13	24.52	26.52	28.22	29.68	29.87
Golf	6.71	6.86	6.86	9.09	9.09	9.09	9.09	9.09
St. Lucie County Total	**22.60**	**28.17**	**28.99**	**33.61**	**35.61**	**37.30**	**38.77**	**38.96**
UEC Planning Area Total								
Landscape	**26.62**	**36.74**	**37.56**	**40.57**	**43.04**	**45.10**	**46.85**	**47.29**
Golf	**17.85**	**21.94**	**21.94**	**24.77**	**24.77**	**24.77**	**24.77**	**24.77**
UEC Planning Area Total	**44.47**	**58.69**	**59.51**	**65.33**	**67.80**	**69.86**	**71.61**	**72.06**

L/R = Landscape/Recreational; mgd = million gallons per day; UEC = Upper East Coast.
[a] Values listed are only for the area within the UEC Planning Area boundaries.

POWER GENERATION

Demands under the PG category include use of groundwater, fresh surface water, or reclaimed water by thermoelectric power generation facilities. There are two power generation facilities operating in the UEC Planning Area that are addressed in this plan update: the Martin Power Plant near Indiantown (Martin County) and the Treasure Coast Energy Center in Fort Pierce (St. Lucie County). The Martin Power Plant draws surface water from the C-44 Canal and an on-site pond for cooling purposes. The Treasure Coast Energy Center withdraws groundwater from the Floridan aquifer system. No power generation facilities used reclaimed water in 2024; however, once the Mainland Water Reclamation Facility becomes operable, it will provide reclaimed water to the Treasure Coast Energy Center by 2027. More information about the Mainland Water Reclamation Facility is provided in **Appendix E**.

PG demands for 2020 and 2024 were based on reported pumpage and verified through coordination with power generation facility staff. Future demands beyond 2024 were projected by power generation facility staff, considering past and current pumpage, planned projects, and anticipated needs. No new power generation facilities are planned for construction or operation through 2050, and PG demands are projected to remain relatively stable (**Table A-30**). All PG demand estimates and projections are presumed to be the same for average rainfall and 1-in-10-year drought conditions.

Table A-30. PG water demands in the UEC Planning Area between 2020 and 2050.

Facilities	Gross Demand (mgd)[a]							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin Power Plant	11.81	19.61	16.01	16.01	16.01	16.01	16.01	16.01
Treasure Coast Energy Center	1.50	1.50	1.50	0.41	0.41	0.41	0.41	0.41
UEC Planning Area Total	**13.31**	**21.11**	**17.51**	**16.42**	**16.42**	**16.42**	**16.42**	**16.42**

mgd = million gallons per day; PG = Power Generation; UEC = Upper East Coast.

[a] Does not include harvested rainwater, seawater, city water, or surface water returned to the source.

SUMMARY OF DEMAND PROJECTIONS

Total demands for the UEC Planning Area are anticipated to decrease by 16.12 mgd (-5%). AG demands are projected to see the largest decrease from 2024 to 2050, falling from 156.77 mgd to 138.52 mgd (-12%). PS is expected to increase 45% due to the projected population growth of 195,507 permanent residents, reaching 99.83 mgd by 2050. Also driven by population growth, L/R demands are projected to reach 56.58 mgd by 2050. The demands for all remaining categories (DSS, CII, and PG) are small and projected to be 20.72 mgd, combined, in 2050. Gross water demands in 5-year increments, by county and water use category, are provided in **Table A-31** for average rainfall conditions and **Table A-32** for 1-in-10-year drought conditions.

Table A-31. Summary of gross water demands under average rainfall conditions in the UEC Planning Area by water use category.

Water Use Category	Demand – Average Rainfall Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Public Supply	24.38	24.92	24.50	25.94	27.27	28.56	29.66	30.59
Domestic Self-Supply	1.53	1.65	1.70	1.23	1.21	0.81	0.60	0.33
Agriculture	99.06	98.05	97.80	94.89	92.00	89.82	86.13	83.63
Commercial/Industrial/Institutional	0.36	0.24	0.24	0.25	0.26	0.27	0.27	0.28
Landscape/Recreational	17.00	23.73	23.73	24.67	25.04	25.33	25.55	25.75
Power Generation	11.81	19.61	16.01	16.01	16.01	16.01	16.01	16.01
Martin County Total	**154.14**	**168.20**	**163.98**	**162.99**	**161.79**	**160.80**	**158.22**	**156.59**
Okeechobee County[a]								
Public Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic Self-Supply	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Agriculture	4.24	4.24	4.24	4.16	4.16	4.16	4.16	4.16
Commercial/Industrial/Institutional	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Landscape/Recreational	0.09	0.12	0.12	0.12	0.13	0.13	0.13	0.13
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Okeechobee County Total	**4.43**	**4.46**	**4.46**	**4.38**	**4.39**	**4.39**	**4.40**	**4.40**
St. Lucie County								
Public Supply	39.91	43.91	45.32	51.62	58.43	64.06	68.32	69.24
Domestic Self-Supply	1.79	4.52	5.20	5.02	3.18	2.28	1.51	3.20
Agriculture	54.48	54.48	54.29	53.54	53.02	51.93	51.35	50.73
Commercial/Industrial/Institutional	0.29	0.27	0.28	0.32	0.34	0.36	0.38	0.38
Landscape/Recreational	17.77	22.19	22.84	26.45	28.04	29.38	30.54	30.70
Power Generation	1.50	1.50	1.50	0.41	0.41	0.41	0.41	0.41
St. Lucie County Total	**115.74**	**126.87**	**129.43**	**137.36**	**143.42**	**148.42**	**152.51**	**154.66**
UEC Planning Area Total								
Public Supply	**64.29**	**68.83**	**69.82**	**77.56**	**85.70**	**92.62**	**97.98**	**99.83**
Domestic Self-Supply	**3.38**	**6.23**	**6.96**	**6.31**	**4.45**	**3.15**	**2.17**	**3.59**
Agriculture	**157.78**	**156.77**	**156.33**	**152.59**	**149.18**	**145.91**	**141.64**	**138.52**
Commercial/Industrial/Institutional	**0.69**	**0.55**	**0.56**	**0.61**	**0.64**	**0.67**	**0.70**	**0.71**
Landscape/Recreational	**34.86**	**46.04**	**46.69**	**51.24**	**53.21**	**54.84**	**56.22**	**56.58**
Power Generation	**13.31**	**21.11**	**17.51**	**16.42**	**16.42**	**16.42**	**16.42**	**16.42**
UEC Planning Area Total	**274.31**	**299.53**	**297.87**	**304.73**	**309.60**	**313.61**	**315.13**	**315.65**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

Table A-32. Summary of gross water demands under 1-in-10-year drought conditions in the UEC Planning Area by water use category.

Water Use Category	Demand – 1-in-10-Year Drought Conditions (mgd)							
	2020	2024	2025	2030	2035	2040	2045	2050
Martin County								
Public Supply	28.51	29.16	28.66	30.36	31.91	33.43	34.71	35.79
Domestic Self-Supply	1.79	1.93	1.99	1.44	1.42	0.95	0.70	0.39
Agriculture	114.54	113.41	113.12	109.81	106.45	104.58	100.28	97.34
Commercial/Industrial/Institutional	0.36	0.24	0.24	0.25	0.26	0.27	0.27	0.28
Landscape/Recreational	21.76	30.36	30.36	31.57	32.04	32.40	32.68	32.93
Power Generation	11.81	19.61	16.01	16.01	16.01	16.01	16.01	16.01
Martin County Total	**178.77**	**194.71**	**190.38**	**189.44**	**188.09**	**187.64**	**184.65**	**182.74**
Okeechobee County[a]								
Public Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic Self-Supply	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Agriculture	4.87	4.87	4.87	4.77	4.77	4.77	4.77	4.77
Commercial/Industrial/Institutional	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Landscape/Recreational	0.11	0.15	0.15	0.15	0.16	0.16	0.16	0.17
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Okeechobee County Total	**5.09**	**5.13**	**5.13**	**5.03**	**5.04**	**5.04**	**5.05**	**5.06**
St. Lucie County								
Public Supply	43.49	47.87	49.41	56.27	63.70	69.84	74.47	75.47
Domestic Self-Supply	1.95	4.93	5.67	5.47	3.47	2.49	1.65	3.49
Agriculture	66.15	66.15	65.90	65.02	64.37	63.05	62.36	62.07
Commercial/Industrial/Institutional	0.29	0.27	0.28	0.32	0.34	0.36	0.38	0.38
Landscape/Recreational	22.60	28.17	28.99	33.61	35.61	37.30	38.77	38.96
Power Generation	1.50	1.50	1.50	0.41	0.41	0.41	0.41	0.41
St. Lucie County Total	**135.98**	**148.89**	**151.75**	**161.10**	**167.90**	**173.45**	**178.04**	**180.78**
UEC Planning Area Total								
Public Supply	**72.00**	**77.03**	**78.07**	**86.63**	**95.61**	**103.27**	**109.18**	**111.26**
Domestic Self-Supply	**3.81**	**6.93**	**7.73**	**6.98**	**4.96**	**3.51**	**2.42**	**3.95**
Agriculture	**185.56**	**184.43**	**183.89**	**179.60**	**175.59**	**172.40**	**167.41**	**164.18**
Commercial/Industrial/Institutional	**0.69**	**0.55**	**0.56**	**0.61**	**0.64**	**0.67**	**0.70**	**0.71**
Landscape/Recreational	**44.47**	**58.68**	**59.50**	**65.33**	**67.81**	**69.86**	**71.61**	**72.06**
Power Generation	**13.31**	**21.11**	**17.51**	**16.42**	**16.42**	**16.42**	**16.42**	**16.42**
UEC Planning Area Total	**319.84**	**348.73**	**347.26**	**355.57**	**361.03**	**366.13**	**367.74**	**368.58**

mgd = million gallons per day; UEC = Upper East Coast.

[a] Values listed are only for the area within the UEC Planning Area boundaries.

REFERENCES

FDACS. 2025. *Florida Statewide Agricultural Irrigation Demand Estimated Agricultural Water Demand, 2023–2050*. Prepared by The Balmoral Group, Winter Park, FL, for the Florida Department of Agriculture and Consumer Services, Tallahassee, FL. June 2025.

FDEP. 2024. *OCULUS Electronic Document Management System*. Florida Department of Environmental Protection, Tallahassee, FL. Available online at https://depedms.dep.state.fl.us/Oculus/servlet/login.

Rayer, S. and C. Comfort. 2025. *Projections of Florida Population by County, 2025–2050, with Estimates for 2024*. Florida Population Studies, Volume 58, Bulletin 201. University of Florida, Bureau of Economic and Business Research, Gainesville, FL. August 2025.

SFWMD. 1998. *1998 Districtwide Water Supply Assessment.* South Florida Water Management District, West Palm Beach, FL.

SFWMD. 2025. *South Florida Water Management District 2023 Estimated Water Use Report*. South Florida Water Management District, West Palm Beach, FL. January 2025.

Smajstrla, A.G. 1990. *Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS) Model,* Version 5.5. Agricultural Engineering Department, University of Florida, Gainesville, FL. January 1990.

United States Census Bureau. 2020. *2020 Census Redistricting Data (Public Law 94-171) Summary Files*. United States Department of Commerce, Washington, D.C.