

WSW DATA AND ANALYSIS APPENDIX A
Table WSW-3, Table WSW-6, Table WSW-10, and Table WSW-19

Table WSW-3: Functional Population and Demand Comparison, 2010-2040								
	2015 SWFWMD Regional Water Supply Plan		2017 SFWMD Regional Water Supply Plan ⁽¹⁾		2018 County Projections			
					Total County Projections ⁽²⁾		SFWMD Area Only	
Year	Population	Demand	Population	Demand	Population	Demand	Population	Demand
2010	185,595	17.776	2,012					
2015 ⁽³⁾	193,550	18.496	2,040	0.170				
2020	203,349	19.385	7,369	0.710	203,235	22.695	2,101	0.150
2025	212,131	20.164	12,689	1.240	215,595	24.093	2,464	0.189
2030	219,654	20.825	18,010	1.770	232,743	26.020	2,938	0.238
2035	226,725	21.450	23,331	2.300	264,654	28.391	3,563	0.304
2040			28,652	2.830	282,433	31.509	4,374	0.389

Source: SWFWMD, SFWMD & Charlotte County Community Development Department, 2019

All demand is shown in Million Gallons per Day (MGD)

(1) Includes only that part of Charlotte County within SFWMD's jurisdiction

(2) Includes population outside of Charlotte County served by Charlotte County potable water sources

(3) 2014 estimate for SFWMD

Table WSW-6: Functional Population and Water Demand Projections, 2020-2040

Potable Water Utility Service Area	2020	2025	2030	2035	2040	Permitted Capacity	Peak Capacity	2020	2025	2030	2035	2040
Urban Service Area												
Charlotte County Utilities - Burnt Store	6,519	7,747	9,486	11,974	15,809			0.685	0.815	0.997	1.259	1.662
Lee County - Burnt Store Marina ⁽¹⁾	3669	3936	4223	4,531	4,861			0.386	0.414	0.444	0.476	0.511
Lee County - Resort at Tranquility Lake ⁽¹⁾	400	400	400	400	400			0.042	0.042	0.042	0.042	0.042
<i>CCU Burnt Store Subtotal</i>	<i>10,588</i>	<i>12,083</i>	<i>14,109</i>	<i>16,905</i>	<i>21,070</i>	<i>2.400</i>	<i>3.600</i>	<i>1.113</i>	<i>1.270</i>	<i>1.483</i>	<i>1.777</i>	<i>2.215</i>
Charlotte County Utilities - SWFWMD Mid/West County	125,491	130,509	137,520	146,486	157,918			13.194	13.722	14.459	15.402	16.604
El Jobean Water Association ⁽²⁾	1,191	1,265	1,358	1,468	1,608			0.125	0.133	0.143	0.154	0.169
NHC Utilities, Inc. ⁽²⁾	649	652	652	0	652			0.068	0.069	0.069	0.000	0.069
Riverwood Community Development District ⁽²⁾	3,133	3,415	3,805	4,333	5,038			0.329	0.359	0.400	0.456	0.530
Little Gasparilla Island Utilities ⁽²⁾⁽³⁾	590	592	593	593	596			0.062	0.062	0.062	0.062	0.063
<i>CCU Peace River/Manasota RWSA Subtotal</i>	<i>131,054</i>	<i>136,433</i>	<i>143,928</i>	<i>152,880</i>	<i>165,812</i>	<i>16.100</i>	<i>22.540</i>	<i>13.779</i>	<i>14.345</i>	<i>15.133</i>	<i>16.074</i>	<i>17.434</i>
City of Punta Gorda - Incorporated	23,086	24,959	27,511	30,340	32,922			3.256	3.520	3.880	4.279	4.643
City of Punta Gorda - Unincorporated	13,027	14,575	16,617	18,983	21,904			1.370	1.532	1.747	1.996	2.303
<i>City of Punta Gorda Subtotal</i>	<i>36,113</i>	<i>39,534</i>	<i>44,128</i>	<i>49,323</i>	<i>54,826</i>	<i>10.000</i>	<i>10.000</i>	<i>4.626</i>	<i>5.052</i>	<i>5.627</i>	<i>6.275</i>	<i>6.946</i>
Gasparilla Island Water Association - Charlotte County Portion	544	546	549	556	580			0.057	0.057	0.058	0.058	0.061
Gasparilla Island Water Association - Lee County Portion	2576	2764	2965	3,181	3,413			0.254	0.272	0.292	0.313	0.336
<i>Gasparilla Island Water Association Subtotal</i>	<i>3,120</i>	<i>3,310</i>	<i>3,514</i>	<i>3,737</i>	<i>3,993</i>	<i>1.186</i>	<i>1.223</i>	<i>0.311</i>	<i>0.329</i>	<i>0.350</i>	<i>0.372</i>	<i>0.397</i>
Englewood Water District ⁽⁴⁾	11,252	11,558	12,081	12,797	13,349			1.183	1.215	1.270	1.345	1.404
Bocilla Utilities ⁽³⁾⁽⁵⁾	241	243	243	243	243			0.025	0.026	0.026	0.026	0.026
Knight Island Utilities ⁽³⁾⁽⁵⁾	269	271	271	272	272			0.028	0.028	0.028	0.029	0.029
<i>Englewood Water District Subtotal</i>	<i>11,762</i>	<i>12,072</i>	<i>12,595</i>	<i>13,312</i>	<i>13,864</i>	<i>5.360</i>	<i>6.590</i>	<i>1.237</i>	<i>1.269</i>	<i>1.324</i>	<i>1.400</i>	<i>1.458</i>
Charlotte County Utilities - SWFWMD South/East County	378	418	471	549	657	0.000		0.040	0.044	0.050	0.058	0.069
Charlotte Harbor Water Association	5,644	5,867	6,138	6,547	7,241	0.750	0.750	0.593	0.617	0.645	0.688	0.761
North Charlotte Waterworks	3,516	4,158	5,057	6,352	8,236	0.040	0.040	0.370	0.437	0.532	0.668	0.866
Town & Country Utilities	389	459	551	670	825	0.250	0.250	0.041	0.048	0.058	0.070	0.087
DeSoto County Utilities	91	91	91	91	91	0.000		0.010	0.010	0.010	0.010	0.010
Pelican Perch RV Park	41	43	46	46	46	0.004	0.004	0.004	0.005	0.005	0.005	0.005
Urban Service Area Subtotal	202,696	214,468	230,628	250,412	276,661			22.123	23.426	25.216	27.396	30.247
Rural Service Area												
Charlotte County Utilities - Burnt Store	1,004	1,306	1,776	2,392	3,211	0.000		0.106	0.137	0.187	0.251	0.338
Charlotte County Utilites - SFWMD South/East County	1,041	1,334	1,716	2,222	2,878	0.000		0.109	0.140	0.180	0.234	0.303
Charlotte County Utilites - SWFWMD Mid/West County	1,690	1,764	1,964	2,303	2,820	0.000		0.178	0.185	0.206	0.242	0.296
Charlotte County Utilities - SWFWMD South/East County	281	337	407	506	650	0.000		0.030	0.035	0.043	0.053	0.068
Charlotte Harbor Water Association	569	614	664	729	832	0.000		0.060	0.065	0.070	0.077	0.087
City of Punta Gorda - Unincorporated	66	74	82	94	112	0.000		0.007	0.008	0.009	0.010	0.012
Florida Governmental Utility Authority ⁽⁶⁾	219	265	332	424	584	0.000		0.023	0.028	0.035	0.045	0.061
North Charlotte Waterworks	888	1,047	1,256	1,512	1,816	0.000		0.093	0.110	0.132	0.159	0.191
Charlotte Correctional Institution	1,640	1,759	1,887	2,024	2,171	0.300	0.300	0.172	0.185	0.198	0.213	0.228
Paradise Park Condominium Association	671	671	671	671	671	0.060	0.060	0.071	0.071	0.071	0.071	0.071
Shell Creek Park MHP	457	457	457	457	457	0.050	0.050	0.048	0.048	0.048	0.048	0.048
Sun N Shade Family Campground	378	405	419	419	419	0.015	0.015	0.040	0.043	0.044	0.044	0.044
Tropical Palms MHP	609	642	642	642	642	0.080	0.080	0.064	0.068	0.068	0.068	0.068
Rural Service Area Subtotal	9,513	10,675	12,273	14,395	17,263			1.000	1.122	1.290	1.513	1.815
TOTAL	212,209	225,143	242,901	264,807	293,924			23.123	24.549	26.506	28.909	32.062

Source: Florida Department of Environmental Protection, SWFWMD, SFWMD & Charlotte County Community Development Department, 2019

Notes for Table WSW-6

Demand projections were calculated using the adopted Level of Service in gallons per capita per day and the functional population projections

Potable water LOS for unincorporated Charlotte County is 225 gallons per day per ERC and 2.14 persons per household, or 105.140 gpd per capita

Potable water LOS for the City of Punta Gorda is 287 gallons per day per ERC and 2.035 persons per household, or 141.032 gpd per capita

Potable water LOS for unincorporated Lee County, including the Lee County portion of Gasparilla Island, is 250 gallons per day per ERC and 2.54 persons per household, or 98.425 gpd per capita

(1) These developments in Lee County are served by Charlotte County's Burnt Store WTP

(2) This utility purchases bulk water from Charlotte County that the County has purchased from the PR/MRWSA

(3) This utility is located in the Rural Service Area, but purchases bulk water from a source within the Urban Service Area

(4) The Englewood Water District has a permitted treatment capacity of 6.000 MGD and a WUP for 5.360 MGD. Approximately 38% of the EWD service population lies in Charlotte County

(5) This utility purchases bulk water from the Englewood Water District

(6) The Florida Governmental Utility Authority is supplied by Lee County Utilities with a WUP of 4.74 MGD, but no service or distribution lines have been extended into Charlotte County and no service is available at this time

Table WSW-10: Reclaimed Water Projects

Project	Responsible Entity	Type	Supply (MGD)	Benefit (MGD)	Capital Cost (\$M)	Cost/ Benefit	O&M/ Benefit
Reuse Expansion, Mid- and West County WWTPs, 2016-2035	Charlotte County	System Expansion	2.60	1.82	\$19.42	\$2.10	\$0.30
Reuse Expansion/Interconnect, Mid- and South County WWTPs, 2016-2035	Charlotte County	System Expansion/ Interconnect	4.50	3.15	\$12.30	\$0.77	\$0.30
Potable Reuse, Punta Gorda WWTP, 2016-2035	City of Punta Gorda	Purification	2.25	2.25	\$18.14	\$1.59	\$0.30
Reuse Expansion, Punta Gorda WWTP, 2016-2035	City of Punta Gorda	System Expansion	2.25	1.57	\$18.14	\$2.27	\$0.30
Reuse Expansion, Englewood WWTP, 2016=2035	Englewood Water District	System Expansion	0.50	0.35	\$4.03	\$2.27	\$0.30
TOTAL			12.10	9.14	72.02		

Source: SWFWMD, 2019

Table WSW-19: Functional Population and Sewer Demand Projections, 2020-2040												
Sanitary Sewer Utility Service Area	2020	2025	2030	2035	2040	Permitted Capacity	Peak Capacity	2020	2025	2030	2035	2040
Urban Service Area												
Charlotte County Utilities - Burnt Store	6,560	7,790	9,532	12,020	15,855	0.500	1.000	0.582	0.692	0.846	1.067	1.408
Charlotte County Utilities - Mid County	97,839	101,996	107,823	115,183	124,535	6.000	16.800	8.687	9.056	9.573	10.227	11.057
Charlotte County Utilities - South/East County	419	461	517	595	703	0.000		0.037	0.041	0.046	0.053	0.062
Charlotte County Utilities - West County	31,316	32,487	34,124	36,450	39,683	3.200	7.300	2.780	2.884	3.030	3.236	3.523
City of Punta Gorda - Incorporated	23,086	24,959	27,511	30,340	32,922			1.917	2.073	2.285	2.520	2.734
City of Punta Gorda - Unincorporated	11,400	12,914	14,944	17,299	20,220			1.012	1.147	1.327	1.536	1.795
<i>City of Punta Gorda Subtotal</i>	<i>34,486</i>	<i>37,873</i>	<i>42,455</i>	<i>47,639</i>	<i>53,142</i>	<i>4.000</i>	<i>4.000</i>	<i>2.929</i>	<i>3.219</i>	<i>3.612</i>	<i>4.056</i>	<i>4.529</i>
Englewood Water District ⁽¹⁾	11,252	11,558	12,081	12,797	13,349			0.999	1.026	1.073	1.136	1.185
Utilities, Inc. of Sandalhaven	1,991	1,938	1,800	1,562	1,214			0.177	0.172	0.160	0.139	0.108
<i>Englewood Water District Subtotal</i>	<i>13,243</i>	<i>13,496</i>	<i>13,881</i>	<i>14,359</i>	<i>14,563</i>	<i>1.350</i>		<i>1.176</i>	<i>1.198</i>	<i>1.232</i>	<i>1.275</i>	<i>1.293</i>
Gasparilla Island Water Association	544	546	548	554	574	0.705	0.812	0.048	0.048	0.049	0.049	0.051
Riverwood Community Development District	3,675	3,978	4,400	4,968	5,726	0.499	0.499	0.326	0.353	0.391	0.441	0.508
North Charlotte Waterworks	3,516	4,158	5,057	6,352	8,236	0.015	0.015	0.312	0.369	0.449	0.564	0.731
Town & Country Utilities	389	459	551	670	825	0.200	0.200	0.035	0.041	0.049	0.059	0.073
Bay Palms MHP	102	102	102	102	102	0.010	0.010	0.009	0.009	0.009	0.009	0.009
Gasparilla Mobile Estates	372	372	372	372	372	0.025	0.025	0.033	0.033	0.033	0.033	0.033
Harbor View MHP	270	289	310	318	318	0.024	0.024	0.024	0.026	0.028	0.028	0.028
Lazy Lagoon MHP	349	350	350	350	350	0.015	0.015	0.031	0.031	0.031	0.031	0.031
Palms & Pines MHP	256	256	256	256	256	0.015	0.015	0.023	0.023	0.023	0.023	0.023
Pelican Harbor MHP	323	340	340	340	340	0.020	0.020	0.029	0.030	0.030	0.030	0.030
River Forest Village	435	440	440	440	440	0.035	0.035	0.039	0.039	0.039	0.039	0.039
Villas Del Sol	162	173	185	196	196	0.029	0.029	0.014	0.015	0.016	0.017	0.017
Urban Service Area Subtotal	194,256	205,566	221,243	241,164	266,216			17.115	18.108	19.485	21.238	23.447
Rural Service Area												
Charlotte County Utilities - Burnt Store	1,613	1,948	2,415	3,026	3,830	0.000		0.143	0.173	0.214	0.269	0.340
Charlotte County Utilities - Mid County	1,495	1,608	1,831	2,167	2,678	0.000		0.133	0.143	0.163	0.192	0.238
Charlotte County Utilities - South/East County	1,322	1,671	2,123	2,728	3,528	0.000		0.117	0.148	0.188	0.242	0.313
Charlotte County Utilities - West County	1,234	1,220	1,219	1,269	1,381	0.000		0.110	0.108	0.108	0.113	0.123
City of Punta Gorda - Unincorporated	66	74	82	94	112	0.000		0.006	0.007	0.007	0.008	0.010
Florida Governmental Utility Authority	219	265	335	432	606	0.000		0.019	0.024	0.030	0.038	0.054
Knight Island Utilities	269	271	271	272	272	0.055	0.055	0.024	0.024	0.024	0.024	0.024
North Charlotte Waterworks	888	1,047	1,256	1,512	1,816	0.000		0.079	0.093	0.112	0.134	0.161
Charlotte Correctional Institution	1,640	1,759	1,887	2,024	2,171	0.180		0.146	0.156	0.168	0.180	0.193
Hideaway Bay Beach Club Condominium	360	386	414	432	432	0.021	0.021	0.032	0.034	0.037	0.038	0.038
Paradise Park Condominium Association	671	671	671	671	671	0.024	0.034	0.060	0.060	0.060	0.060	0.060
Shell Creek Park MHP	457	457	457	457	457	0.020	0.020	0.041	0.041	0.041	0.041	0.041
Sun N Shade Family Campground	378	405	419	419	419	0.020		0.034	0.036	0.037	0.037	0.037
Rural Service Area Subtotal	10,612	11,782	13,380	15,503	18,373			0.942	1.046	1.188	1.376	1.631
TOTAL	204,868	217,348	234,623	256,667	284,589			18.057	19.154	20.673	22.614	25.078

Source: Florida Department of Environmental Protection, Charlotte County Community Development Department, 2019

Notes for Table WSW-19

Demand projections were calculated using the adopted Level of Service in gallons per capita per day and the functional population projections

(1) The Englewood Water District has a permitted treatment capacity of 3.000 MGD. Approximately 45% of the EWD service population lies in Charlotte County, and the permitted capacity has been adjusted accordingly.