

# **2021 PSAR Guide: Part A Line 6 Functional Population**

## Overview

- What is Functional Population?
- How to Properly Calculate Functional Population
- How to Use the 2021 REQPOP Calculator
- How to Use the 2021 REQPOP Calculator – Master Meters
- How to Use the 2021 REQPOP Calculator – Master Meters Example



## **What is Functional Population?**

Functional Population is the served permanent population as adjusted by the seasonal residents, tourist, group quarters, and net commuter population within a utility service area.

This value is not simply the number of residents who live within a utility service area year-round. Functional population considers all types of residents (permanent, seasonal, tourist, etc.) to get an accurate picture of per capita water usage throughout the year.

# How to Properly Calculate Functional Population

To ensure that Part A Line 6 Functional Population is properly calculated, use the 2021 REQPOP Calculator. The calculator can be found on the [Section D, Public Supply Annual Reports and Significant Use](#) webpage in the PSAR Resources box.

**It's important to use the 2021 REQPOP Calculator, not a calculator from a previous year.** REQPOP Calculators are updated yearly with population variables, so using an older calculator will yield an incorrect value.

The screenshot displays the 2021 REQPOP Calculator spreadsheet. The interface includes a ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help, and Acrobat. The spreadsheet content is as follows:

- Row 1:** Welcome!
- Row 2:** These are Worksheets A-I for Part D of the Water Use Permit Information Manual.
- Row 3:** If you have verified that your service area is correct, then you may proceed to calculate your population served. Please follow steps 1 and 2. Once complete, print Worksheets A-I and Submit with your PSAR
- Row 4:** 1) Select your service area from the drop down menu below:
- Row 5:** CHARLOTTE\_GASPARILLA ISLAND WATER ASSOC\_WUP#\_718
- Row 6:** RESUNITS
- Row 7:** 2) Enter your total dwelling units served:
- Row 8:** Note: For master-metered communities, please utilize the Index A-Residential Account sheet to calculate total dwelling units served
- Row 9:** Voila! Here is your total population served:
- Row 10:** REQPOP+FTOURPOP+FNETCOM
- Row 11:** 0
- Row 12:** Note: The above population served estimates includes the permanent, seasonal, tourist, and net commuters. If you plan to take a significant use deduction, you may not be able to include tourist and net commuters. Restrictions apply.
- Row 13:** Data from the last five years:
- Row 14:** Total Dwellings Units Served
- Row 15:** Table with 6 columns: Year, 2017, 2018, 2019, 2020, 2021, Average
- Row 16:** Table with 6 columns: Value, 1,982, 1,988, 1,990, 2,003, 0, 1,991
- Row 17:** Total Dwellings Units Served
- Row 18:** Bar chart showing values for 1,982, 1,988, 1,990, and 2,003.
- Row 19:** PopulationServed
- Row 20:** Index A-Residential Account
- Row 21:** Indexed B-Service Area Summary
- Row 22:** G-Functional Tourist Population



## How to Use the 2021 REQPOP Calculator

1. Select your service area from the dropdown menu. The menu is organized by county then WUP Number.

The screenshot shows the 'Population Served' worksheet of the 2021 REQPOP Calculator. A dropdown menu is open for cell B9, displaying a list of service areas organized by county (Charlotte and Citrus) and then by WUP number. The selected option is 'CHARLOTTE\_GASPARILLA ISLAND WATER ASSOC\_WUP#\_718'. Below the dropdown, the formula bar shows the formula  $REQPOP + FTOURPOP + FNETCOM$ . The spreadsheet also includes a table for 'Total Dwellings Units Served' from 2017 to 2021, and a bar chart titled 'Total Dwellings Units Served' showing the data for the years 2017, 2018, 2019, and 2020.

Year	2017	2018	2019	2020	2021	Average
Total Dwellings Units Served	1,982	1,988	1,990	2,003	0	1,991

This close-up screenshot shows the dropdown menu for the service area selection. The menu is organized by county (Charlotte and Citrus) and then by WUP number. The selected option is 'CHARLOTTE\_GASPARILLA ISLAND WATER ASSOC\_WUP#\_718'. The formula bar below the dropdown shows the formula  $REQPOP + FTOURPOP + FNETCOM$ .

# How to Use the 2021 REQPOP Calculator (Continued)

2. Enter the value from Part B Line 5 Subtotal of Residential Service, Number of Dwelling Units served from your PSAR under RESUNITS.

(If residential dwelling units in your service area use a master meter, please see the next slides.)

3. That's it! Functional Population will auto-populate. Enter this value on Line 6 of your PSAR.

Residential Water Service Category	Number of Dwelling Units	Number of Metered Connections	Annual Average (gpd)	% of Total	Documentation on an Attached Sheet
1. Single Family Dwelling Units	11,765	11,696	3,047,459	57.47%	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Multiple Family Dwelling Units	7,884	469	749,515	14.13%	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Mobile Home Dwelling Units				0.00%	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Residential Irrigation Accounts	N/A			0.00%	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Subtotal of Residential Service	19,649	12,165	3,796,974	71.61%	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Information Manual may proceed to calculate your lete, print Worksheets A-I and Submit with your PSAR

RESUNITS 19,649

Note: For master-metered communities, please utilize the Index A-Residential Account sheet to calculate total dwelling units served

Voila! Here is your total population served:

REQPOP=EQUBPOP-FNETCOM  
19,825

Note: The above population served estimates includes the permanent, seasonal, tourist, and net commuters. If you plan to take a significant use deduction, you may not be able to include tourist and net commuters. Restrictions apply.

Data from the last five years:

Total Dwellings Units Served					
2016	2017	2018	2019	2020	Average
18,080	18,581	18,996	19,319	19,649	18,925

Total Dwellings Units Served

PopulationServed Index A-Residential Account Indexed B-Service Area Summary G-Fun



# How to Use the 2021 REQPOP Calculator - Master Meters

In order to calculate residential accounts that are master metered, go to the Index A-Residential Accounts tab of the REQPOP Calculator.

This tab, Worksheet A: Residential Account Housing Unit Estimation, allows you to estimate the number of residential units if the exact number is unknown and to demonstrate how many residential account housing units are in each meter size category. The worksheet is divided into 4 categories of master metered residential accounts: Single Family, Multi-Family, Mobile Home (Trailer), and Manufactured Home.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T																														
2	Permittee Name:	GASPARILLA ISLAND WATER ASSOC.											INDEX	0																																				
3	Permit Number(s):	718																																																
4	Year of Interest:	2021																																																
5	Enter Only Meter Data for Residential Accounts (No Commercial)																																																	
6	Do Not Include Irrigation Account Meters																																																	
7																																																		
8	Data Entry Required in Solid Bordered Cells																																																	
9	Calculated Output in Dashed Bordered Cells																																																	
10																																																		
11	Total Individually Metered Residences:											= A																																						
12																																																		
13	Master Metered Residential Accounts Worksheet																																																	
14																																																		
15	Single Family Master Metered										Multi-family Master Metered																																							
16		Number of Single Family	Unit	Equivalent Residential	OR Counted Residential						Number of Multi-Family	Unit	Equivalent Residential	OR Counted Residential																																				
17	Meter Size	Equivalent Units	Master Meters	Adjustment Factor	Housing Units	(B x C) / D					Meter Size	Equivalent Units	Master Meters	Adjustment Factor	Housing Units	(B x C) / D																																		
18		B	C	D								B	C	D																																				
19																																																		
20																																																		
21																																																		
22																																																		
23																																																		
24	1"	2.5		1							3/4"	1.5		0.7																																				
25	1 1/2"	5		1							1"	2.5		0.7																																				
26	2"	8		1							1 1/2"	5		0.7																																				
27	3"	17.5		1							2"	8		0.7																																				
28	4"	30		1							3"	17.5		0.7																																				
29	6"	62.5		1							4"	30		0.7																																				
30	8"	90		1							6"	62.5		0.7																																				
31	10"	145		1							8"	90		0.7																																				
32	12"	215		1							10"	145		0.7																																				
33											12"	215		0.7																																				
34																																																		
35	Mobile Home (Trailer) Master Metered										Manufactured Home Master Metered																																							
36		Number of Mobile Home	Unit	Equivalent Residential	OR Counted Residential							Number of Manufactured Home	Unit	Equivalent Residential	OR Counted Residential																																			
37		Equivalent Units	Master Meters	Adjustment Factor	Housing Units	(B x C) / D						Equivalent Units	Master Meters	Adjustment Factor	Housing Units	(B x C) / D																																		
38		B	C	D								B	C	D																																				
39																																																		
40																																																		
41																																																		
42																																																		
43	3/4"	1.5		0.6							3/4"	1.5		0.8																																				
44	1"	2.5		0.6							1"	2.5		0.8																																				
45	1 1/2"	5		0.6							1 1/2"	5		0.8																																				
46	2"	8		0.6							2"	8		0.8																																				
47	3"	17.5		0.6							3"	17.5		0.8																																				
48	4"	30		0.6							4"	30		0.8																																				
49	6"	62.5		0.6							6"	62.5		0.8																																				
50	8"	90		0.6							8"	90		0.8																																				
51	10"	145		0.6							10"	145		0.8																																				
52	12"	215		0.6							12"	215		0.8																																				
53																																																		
54																																																		
55	Total Residential Account Housing Units for the Year of Interest (RESUNITS) = G																																																	
56																																																		
57	(Sum the total individually metered residences (A) and the sum of equivalent master metered residential account housing units (Es) or the sums of the counted master metered residential account housing units (Fs).																																																	
58																																																		
59																																																		
	PopulationServed										Index A-Residential Account										Indexed B-Service Area Summary										G-Functional Tourist Population										I-Functional Net Comr									

## How to Use the 2021 REQPOP Calculator - Master Meters (Continued)

1. Start by entering A - the total number of **known individual** metered residences.

2A. If the exact number of Master Metered Residential Account Housing Units is **unknown** in any of the 4 categories, use the C columns for those categories.

2B. If the exact number of Master Metered Residential Account Housing Units is **known** for any of the 4 categories, use the F columns for those categories.

3. The worksheet ends with G – your auto-calculated estimated RESUNITS value.

Permittee Name: GASPARILLA ISLAND WATER ASSOC.  
 Permit Number(s): 718  
 Year of Interest: 2021  
 Enter Only Meter Data for Residential Accounts (No Commercial)  
 Do Not Include Irrigation Account Meters  
 Data Entry Required in Solid Bordered Cells  
 Calculated Output in Dashed Bordered Cells

1 Total Individually Metered Residences: = A

Master Metered Residential Accounts Worksheet

Single Family Master Metered

Meter Size	Family Equivalent Units	Number of Single Family Master Meters	Adjusted Units	Equivalent Residential Account Housing Units	OR Counted Residential Account Housing Units
1"	2.5				
1 1/2"	5				
2"	8				
3"	17.5				
4"	30				
6"	62.5				
8"	90				
10"	145				
12"	215				
Sum:					

Multi-family Master Metered

Meter Size	Family Equivalent Units	Number of Multi-Family Master Meters	Adjusted Units	Equivalent Residential Account Housing Units	OR Counted Residential Account Housing Units
1"	2.5				
1 1/2"	5				
2"	8				
3"	17.5				
4"	30				
6"	62.5				
8"	90				
10"	145				
12"	215				
Sum:					

Mobile Home (Trailer) Master Metered

Meter Size	Family Equivalent Units	Number of Mobile Home Master Meters	Adjusted Units	Equivalent Residential Account Housing Units	OR Counted Residential Account Housing Units
1"	2.5				
1 1/2"	5				
2"	8				
3"	17.5				
4"	30				
6"	62.5				
8"	90				
10"	145				
12"	215				
Sum:					

Manufactured Home Master Metered

Meter Size	Family Equivalent Units	Number of Manufactured Home Master Meters	Adjusted Units	Equivalent Residential Account Housing Units	OR Counted Residential Account Housing Units
1"	2.5				
1 1/2"	5				
2"	8				
3"	17.5				
4"	30				
6"	62.5				
8"	90				
10"	145				
12"	215				
Sum:					

55 Total Residential Account Housing Units for the Year of Interest (RESUNITS) = G

Use this value in PopulationServed sheet to calculation functional population



2B. In the F columns, enter the number of residential housing units for each meter size (if known).

4. Go back to the first tab and enter this value into the RESUNITS cell to calculate your Functional Population.

10					
11					RESUNITS
12	2)	Enter your total dwelling units served:			2,097
13					
14		<i>Note: For master-metered communities, please utilize the Index A-F</i>			
15					
16					
17					
18		<b>Voila! Here is your total population served:</b>			
19					
20					REQPOP+FTOURPOP+FNETCOM
21					4,690
22					
23					
24		<b>Note: The above population served estimates includes the permanent</b>			
25		<b>net commuters. If you plan to take a significant use deduction, you</b>			
26		<b>tourist and net commuters. Restrictions apply.</b>			
27					