Location Number:
Account Number:
Permit Number:



## Pagosa Area Water and Sanitation District 100 Lyn Ave. / Pagosa Springs, CO 81147 PHONE: (970) 731-2691

## 2024 COMMERCIAL WATER METER SIZING WORKSHEET

2024	COMMINIE	171	SIAL WAI	-	IZ IAIT IT	.17	SIZING	VV	OKKSHLLI			
Date:												
Name of Property Owner:												
Name of Contact Person:							•					
Name of Business (if applicable):												
Property Location							•					
Street Address:												
Subdivision:							Block:			Lot:		
	Ī	_	1						T			
EACH Type of Fixture	Number of Fixtures in Bldg 1	+	Number of Fixtures in Bldg 2	+	Number of Fixtures in Bldg 3	=	Total Fixtures	x	*Fixture Unit M	ultiplier	II	Total Fixture Unit Value
Bathub / shower or Combo		+		+		=		х	4.0		H	
Bathroom sink, each set of faucets		+		+		=		х	2.0		H	
Toilet		+		+		=		х	5.0		H	
Urinal		+		+		=		х	3.0		H	
Washing Machine (8 lb)		+		+		=		х	3.0		H	
Washing Machine (15 lb)		+		+		=		х	4.0		H	
Dental unit, cuspidor **		+		+		=		х	1.0		H	
Clinic Sink**		+		+		=		Х	3.0		H	
Bar / Hand Sink**		+		+		=		х	2.0		H	
Drinking Fountain		+		+		=		х			H	
Kitchen sink, hotel or restaurant		+		+		=		Х	4.0		H	
Kitchen sink, domestic		+		+		=		х	1.4		H	
Dishwasher, domestic		+		+		=		Х	1.4		H	
Laundry Sink**		+		+		=		х	1.5		H	
Service or Mop Basin**		+		+		=		х	3.0		H	
Hose bibb - FIRST**		+		+		=		х	2.5		H	
Hose bibb, <b>EACH ADDITIONAL</b> **		+		+		=		х	1.0		H	
Lawn sprinkler, each full head**		+		+		=		х	1.0		H	
Other (Describe)		+		+		=		Х			Ħ	
Other (Describe)		+		+		=		х			Н	
* Based on 2015 International Plumbing Code	&**2006 Univer	sal	Plumbing Code						1	FUY Subtotal	:	
	See Tab	le l	E103.3(3)									
Fixture Description:			GPM:				Number:			ixture Units:	_	
Fixture Description:  Fixture Description:			GPM: GPM:				Number: Number:			ixture Units:	_	
			GFIVI.			•	radinoci.		Calculated i	TIXIUIE OTIIIS.		
										FUY Total:		
I affirm that the information given is co solely on the information provided abdeviation under construction will require	ove, and su	ch	determination	i	s at the di	scr	etion of the	Ρ	agosa Area Water a			
Signature (Design Engineer)								jı	Date Signe	d		
Signature (Owner/Agent)									Date Signe	d		

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### Instructions for completion of the PAWSD Commercial & Multi-Dwelling Water Meter Sizing Worksheet

#### Matrix to Determine Meter Size and Water Demand

Complete the columns of the matrix by supplying the quantity and type of fixtures. Accuracy of the fixture count is necessary to determine the appropriate meter size and Equivalent Units.

#### **Commercial Use**

Applies to business, commercial, industrial, and assembly occupancies. Included are the public and common areas in hotels, restaurants, schools, churches, etc.

#### **Multi-Dwelling Use**

May apply to duplex, apartments, condos, townhomes, etc.

#### **Other Water Requirements**

There are some process water demands that are not listed, such as car washes. Each of these will be assigned a fixture unit count based upon its GPM demand. Make sure this information is provided.

#### Lawn Sprinkler Heads

Add all 1/4, 1/2, 3/4, and full irrigation heads to determine the total number of **full** sprinkler heads. For example, two 1/4 heads and one 1/2 head will equal one full head.

#### **GPM (Gallons per Minute)**

When any water requirement is listed by GPM demand, fixture unit count will be determined by using the 2015 International Plumbing Code Table E103.3(3) - Table For Estimating Demand.

#### **Apartment Buildings**

For Multiple Apartment Buildings, one Meter Sizing Worksheet will need to be filled out per building even if it is to be Master Metered.

### **2024 COMMERCIAL ACCOUNTS**

### This section to be completed by PAWSD staff.

Required Service Size and Equivalent Units Chart							
Fixture Unit Count	Meter Size	* # Equivalent Units	** GPM				
0-30	3/4"	1	50				
30.5-52	1"	1.5	50				
52.5-127	1"	2.5	50				
128-375	1.5"	5	100				
376-700	2"	8	180				
701-1950	3"	16	320				
1951-3700	4"	25	500				
3,701-8,200	6"	50	1,000				

Fixture Count	Total	(from pg.1):
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Corresponding Meter Size: \_\_ Acct Current Meter Size:

> Corresponding EU: \_\_\_\_\_ Acct Current EU:

Meter size/EU ratio determined by hydraulic capacity ratio of meter size as set forth by AWWA Manual M-6.

Prepared By:	Date:

PLEASE NOTE: FEE SCHEDULES ARE SUBJECT TO CHANGE

<sup>\*\*</sup>With approximate flow of 60 psi at meter

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## Appendix E

# Table E103.3(3)

# **Table for Estimating Demand**

Supply Systems Predominantly for Flush Tanks

	Water	
	Supply	Cubic ft
Gal per	Fixture	per
Minute	Units	Minutes
3.0	1	0.041040
5.0	2	0.06840
6.5	3	0.86892
8.0	4	1.06944
9.4	5	1.26592
10.7	6	1.4303760
11.8	7	1.577424
12.8	8	1.711104
13.7	9	1.831416
14.6	10	1.951728
15.4	11	2.058672
16.0	12	2.138880
16.5	13	2.205720
17.0	14	2.272560
17.5	15	2.339400
18.0	16	2.906240
18.4	17	2.459712
18.8	18	2.513184
19.2	19	2.566656
19.6	20	2.620128
21.5	25	2.874120
23.3	30	3.114744
24.9	35	3.328632
26.3	40	3.515784
27.7	45	3.702936
29.1	50	3.890088

Gal per Minute	Water Supply Fixture Units	Cubic ft per Minutes
32.0	60	4.277760
35.0	70	4.678800
38.0	80	5.079840
41.0	90	5.480880
43.5	100	5.815080
48.0	120	6.416640
52.5	140	7.018200
57.0	160	7.619760
61.0	180	8.154480
65.0	200	8.689200
70.0	225	9.357600
75.0	250	10.02600
80.0	275	10.69440
85.0	300	11.362800
105.0	400	14.03640
124.0	500	16.57632
170.0	750	22.72560
208.0	1,000	27.80544
239.0	1,250	31.94952
269.0	1,500	35.95992
297.0	1,750	39.70296
325.0	2,000	43.44600
380.0	2,500	50.79840
433.0	3,000	57.88344
525.0	4,000	70.18200
593.0	5,000	79.27224