

TOWN OF PRESCOTT VALLEY

REPORT RE MODIFICATION (AND POSSIBLE INCREASE) OF WATER RATE COMPONENTS PER ARS §9-511.01

April 9, 2015

The Town of Prescott Valley (Town) has determined to modify (and, in some cases, increase) the Town's Water & Wastewater System Capacity Charges and Water Resource Charge. This Report (in conjunction with other documents), is submitted for public review and comment prior to consideration of the modifications by the Town Council (in accordance with Arizona Revised Statutes (ARS) §9-511.01). The Report outlines the analysis, planning and prior processes that support the proposed modifications.

Background

On December 19, 2013, the Town contracted with Raftelis Financial Consultants, Inc. to perform a study of the Water & Wastewater System Capacity Charges in order to update those charges. Staff asked Raftelis to consider, in the process, combining the Water System Capacity Charges for both the Town and the former Prescott Valley Water District service areas and to explore changing the way the Water & Wastewater System Capacity Charges are administered. Raftelis has since made a recommendation as to the amount (and administration) of the Water & Wastewater System Capacity Charges in its 2015 Water and Wastewater System Capacity Charges Report, March 31, 2015 (Raftelis Report).

The Raftelis Report did not specifically study the Town's Water Resource Charge. However, to keep the administration of these three connection Charges consistent, Town staff is proposing that the method by which Water Resource Charges is calculated be changed in the same manner as the Water & Wastewater System Capacity Charges. And, since this change in administration will have an impact on the Water Resource Charges applied to categories of development (increasing or decreasing), it is necessary for those potential impacts to be set forth in this Report. At the same time, staff desires to supplement the Raftelis Report to discuss potential impacts of the administration change to Water & Wastewater System Capacity Charges on some categories of development.

Methodology Change

Currently, the Town administers the Water & Wastewater System Capacity Charges and the Water Resource Charge in varying ways by development type. This Report focuses on the Water Resource Charge, but most of the discussion is also applicable to the Water & Wastewater System Capacity Charges.

The base unit for residential development is the single-family home. On the other hand, the base unit for Commercial development is the fixture unit. A summary of the current Water Resource Charges is included in Table 1.

Table 1 – Current Water Resource Charges (and Assessment Methodology)

Customer Type	Current Assessment Method	Current Charges
Residential (Single Family)	Flat Charge (fixed)	\$1,526.00
Multi-Family	Percentage of residential	
Duplex	85% (per unit)	2 x 0.85 x \$1,526 = \$2,594.20
Triplex	85% (per unit)	3 x 0.85 x \$1,526 = \$3,891.30
Fourplex	85% (per unit)	4 x 0.85 x \$1,526 = \$5,188.40
Apartment / Condo	80% (per unit)	Units x 0.80 x \$1,526 Eg: 12 unit apartment 12 x 0.80 x \$1,526 = \$14,649.60
Hotels / Motels	50% (per room)	Rooms x 0.50 x \$1,526 Eg. 100 room hotel 100 x 0.50 x \$1,526 = \$76,300
Commercial	Fixture Units 25 fixture units = 1 residential unit (single family)	\$1,526 / 25 = \$61.04 per fixture unit
Undefined	Based on Meter Size	Based on Meter Size

It is now proposed that meter size be the sole basis for calculating Water Resource Charges for all types of developments. [Note that the “undefined” category of development is already administered based on meter size.] Table 2 shows how the Water Resource Charge will now apply for meters size 5/8 inches in diameter to 10 inches in diameter. [Note that the Town currently does not utilize 3/4 inch meters, but that size is being added to the list to provide for a smaller cost increase increment between the 5/8inch meter and the 1-inch meter.]

Table 2 – Existing and Proposed Water Resource Charges

Meter Size	Related Fixture Units	Existing Commercial Charge	Proposed Charge
5/8-inch	25	\$1,526.00	\$1,526.00

¾-inch	38	N/A	\$2,319.52
1-inch	63	\$3,845.52	\$3,845.52
1 ½ - inch	125	\$7,630.00	\$7,630.00
2-inch	200	\$12,208.00	\$12,208.00
3-inch	400	\$24,416.00	\$24,416.00
4-inch	625	\$38,150.00	\$38,150.00
6-inch	1250	\$76,300.00	\$76,300.00
8-inch	2000	\$122,080.00	\$122,080.00
10-inch	3600	\$219,744.00	\$219,744.00

Potential Impact: Residential, Single-Family

The vast majority of single-family residences in Prescott Valley are served water through a 5/8-inch meter. This class of development will not see a change in the Water Resources Charge. However, in the rare case when a meter larger than 5/8-inch is desired or required, a higher Charge would be assessed.

Potential Impact: Residential, Multi-Family

Duplexes, triplexes and four-plexes are generally owned by one person or entity and can be served by a single water meter or by individual meters to each unit. Currently, these developments pay 85% of the Single-Family Charge ($0.85 \times \$1,526 = \$1,297.10$) for each unit regardless of how many water meters are needed:

Duplex = 2 units = \$2,594.20
 Triplex = 3 units = \$3,891.30
 Four-plex = 4 units = \$5,188.40

Under the proposed new methodology, the development would have the option of paying either the full single-family amount (\$1,526) for each 5/8-inch water meter desired:

One 5/8-inch meter = \$1,526.00
 Two 5/8-inch meters = \$3,052.00
 Three 5/8-inch meters = \$4,578.00
 Four 5/8-inch meters = \$6,104.00

or a single Charge if the entire development is served by one meter:

5/8-meter \$1,526.00
 ¾-meter \$2,319.54
 1-inch meter \$3,845.52
 1 ½-inch meter \$7,630.00

Thus, total Charges paid may increase or decrease based on how the development is metered.

Potential Impact: Apartments/Condominiums and Motels/Hotels

These developments will likely see a decrease in the Water Resource Charge paid with the new meter size methodology. Staff has reviewed historical Charges paid by these types of developments (along with historical water usage). The review shows that in most cases, Apartments and Condominiums use about 30% of the water that a residential (single-family) development uses. Yet, the current Water Resources Charge is based on 80% of that same Charge. Likewise, the historical water usage by Motels and Hotels was found to be about 25% of single-family residential units. Yet, the current Water Resource Charge is based on 50% of the single-family Charge. Thus, it is likely that these types of developments will see a significant decrease in Water Resource Charges.

Potential Impact: Commercial

Commercial developments are assessed Water Resource Charges based on fixture units. Fixture units are defined and assigned by the International Plumbing Code. A typical fixture unit table is provided below.

Table 3 – Typical Fixture Unit Assignments

Appliance or Fixture	Private	Public
Bar sink	1	1
Bathroom (water closet, lavatory, bidet and tub or shower)	6	-
Bathtub	2	2
Bidet	1	
Bidet	2	
Clothes Washer	3	3
Dishwasher, domestic	2	2
Drinking fountain	0.5	0.5
Floor drain	2	2
Shower	2	2
Laundry tub	2	2
Lavatory	1	1
Bar sink	1	
Kitchen sink, domestic	2	2
Laundry sink	2	2
Service or mop basin		3
Urinal	2	2
Water closet with gravity tank	3	4
Water closet with flushometer tank	3	4

The Town has defined a single-family residential unit as typically having 25 fixture units. Therefore, the Water Resource Charge associated with a fixture unit was derived from the single-family Charge divided by 25 fixture units ($\$1,526/25$ fixture units = \$61.04 per

fixture unit). This Charge per fixture unit was then applied to Commercial Developments using the total number of fixture units identified by the architect or engineer.

The Primary difference for this class of development will be the incremental fee steps that will be charged for specific meter sizes. Currently a business would pay based on fixture units, which would likely fall between meter sizes and would increase linearly for each fixture unit added. Under the proposed method, the Charge would increase in steps from one meter size to the next. Thus, Water Resource Charges under the new methodology may increase or decrease.

Potential Impact: Existing Developments and Tennant Improvements

Existing developments (all classes) wishing to expand will not be charged an additional Water Resource Charge unless the expanded development cannot be served by the existing water meter. If a larger meter is needed, the development will be charged the difference between the amounts associated with the meter sizes from Table 2. For example, if an expanding business currently has a 1-inch meter but will need a 1-1/2-inch meter, the business will be given a credit based on the size of the existing meter, resulting in a Charge that is the difference between the two meters, or:

$$\$7,630.00 - \$3845.52 = \$3,784.48$$

If that same business expands a second time (but the expansion can still be served without increasing the meter size above the 1-1/2 inch meter), no additional Charge will be assessed.

Potential Impact: Undefined Development

Undefined development is any development that does not have identifiable fixture units. This would include schools, gravel operations, nurseries, tree farms, turf farms, or other businesses that use water to grow or manufacture products. These types of developments are currently assessed Water Resource Charges based on the size of the water meter needed. Thus, there will be no impact for this class of development based on the new methodology.

Background

The Town's Water & Wastewater System Capacity Charges and Water Resource Charge are also known as system development charges, plant investment fees, tap fees, and a variety of other terms.¹

¹ In Arizona two different statutes are the basis for one-time charges or fees paid by new customers for system capacity. ARS §9-463.05 is part of municipal subdivision regulations and provides for development fees to offset costs associated with providing necessary public services to new developments,. And, ARS §9-511.01 is part of authority for municipalities to engage in businesses of a public nature and provides for assessing water or wastewater rates or rate components, fees or service charges in the domestic water or wastewater business. Town water and wastewater system capacity charges are based on ARS §9-511.01.

As described in the Sixth Edition of the American Water Works Association publication *Manual of Water Supply Practices M1, Principles of Water Rates, Fees, and Charges*, these types of charges are meant to compensate a community for the cost of acquiring, constructing and extending infrastructure to support new development:

"[Such assessments are] a one-time charge paid by a new water system customer for system capacity. It is also assessed to existing customers requiring increased system capacity. The receipts from this charge are used to finance the development of capacity-related water facilities and are an important funding/financing source for growth-related or capacity-related water facilities."

Such one-time charges cannot cover operational and maintenance expenses, or the repair and replacement of existing infrastructure or facilities. The revenues collected must be dedicated solely for infrastructure expansion required by new development. And, the charges must be proportional to a new development's share of infrastructure costs.

This was initially for historical reasons since monthly utility rates authorized under that statute were the initial source for repaying bonds to purchase water and wastewater improvements for existing customers. It followed that subsequent one-time charges for new customers (also used to pay off bonds) would be adopted under the same statutory process. Moreover, the charges under this latter statute have been distinguished from development fees adopted under the former statute in that they have looked backward and charged new customers for that increment of the remaining capacity in current public resources that those customers are using up. Development fees, on the other hand, typically look forward and charge residents of new developments for their share of facilities expected to be needed because of the new developments. In the end, both types of one-time payments finance new improvements for new customers. But, utility capacity charges start by attempting to recover "lost opportunity costs" for already-built facilities.