CITY COUNCIL COMMUNICATION

MEETING DATE: October 16, 2018 **ITEM NUMBER: 5.A.**

SECOND READING: N/A

TYPE OF ITEM: Study Session

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SUBJECT/AGENDA TITLE: Duplex Water Accounts

EXECUTIVE SUMMARY: Duplexes have historically been part of the single-family residential water rate class. Recent customer inquiry and subsequent Council direction prompted an investigation into the usage patterns of duplexes, the result of which is information showing a significantly different level of domestic (indoor) water use, but similar irrigation patterns between single-family homes and duplexes. Several options are available to address this difference, which could impact development fees and/or water rates charged for duplexes going forward.

COUNCIL OPTIONS: Council Direction

RECOMMENDED OPTIONS: Council Direction

FISCAL IMPACT & FUND SOURCE FOR RECOMMENDED ACTION: Changes to existing water rates will impact the Water Operating Fund, and changes to existing system development fees will impact the Water Construction Fund.

BACKGROUND AND ISSUE ANALYSIS:

Review of Water Utility Funds

The Water Utility has four legal funds associated with it, which differ in the source of their funding as well as their allowable use.

Fund	Source of Revenue	Allowable Use
Water Operating	Water Rates	All other expenses of the Water Utility
Water Construction	System Development Fees & Developer Participation	System expansion or new regulatory requirements
Water Cash Acquisition	Cash-in-Lieu of Water Rights	Water supply expansion
Raw Water Storage	Sale of High Mountain Dams	Raw water storage

Expenses of the Water Utility that are not allowed under the three special funds or are not covered by existing revenues in those areas must be covered by water rates paid by all customers.

Relationship of System Development Fees to Rates

System development fees are set using an industry standard method known as the "buy-in" method. The value of the existing system is established, and then divided by the number of single-family equivalent users to establish a per-unit value. This equivalence is established based on a combination of the capacity of the meter installed and the average water use of all users in that rate class (see Excerpt from Water Rate & Fee Study, attached).

The water system is designed to meet the needs of the installed water services, so the capacity of the installed meters is an important component. The ability of each user to turn on the water tap and have water flow from it each time depends on the system being properly sized. The payment of the system development fee is, essentially, a purchase of system capacity of a particular type. Therefore, the payment of the system development fee establishes the rate class into which a property is classified. When uses change, such as a single-family residence in an area re-zoned as commercial converting to a commercial use, the owner is required to pay the difference in the system development fee to change the user class for that property. This is analogous to a fee a user would pay to install a larger meter, which is also a change to a higher system capacity.

In general, rates and fees are set with an overarching goal of fairness. Each user should pay for the water they use each month, as well as their fair share of the capacity required to serve them.

Comparison of Single Family and Duplex Water Use

Historically, there has been no opportunity to differentiate between single-family homes and duplexes in water use data, because both users with one and two units both pay the same development fees and rates. Recently, PWNR staff worked with Planning and Development Services to create a dataset that included the number of residential units per parcel, allowing a comparison of average daily water use.

Results of this analysis show that duplexes consistently use twice as much water in the winter as single family homes (Figure 1). Summer use is approximately twenty-five percent higher in a duplex (Figure 2). Averaging over the year, a duplex uses approximately fifty percent more water than a single family home.

Figure 1 (Average Daily Winter Use):

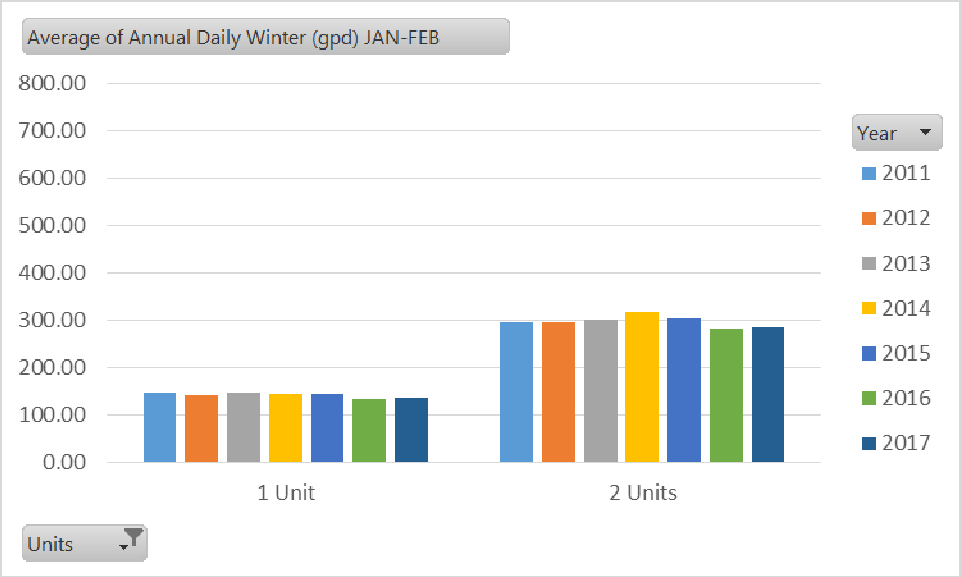
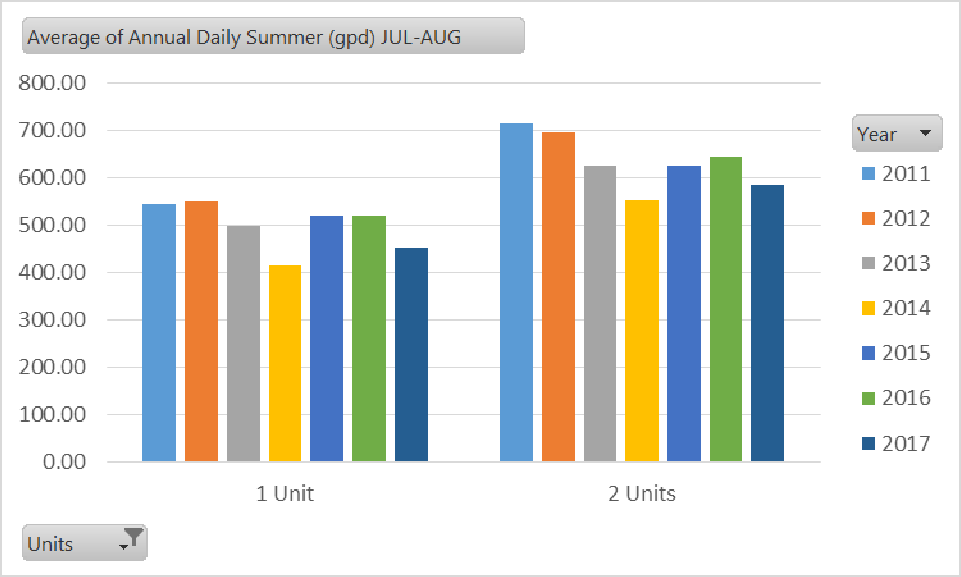


Figure 2 (Average Daily Summer Use):



These figures compare the average gallons per day used in January and February (Figure 1) and July and August (Figure 2) for parcels containing 1 residential unit (single family homes) and 2 residential units (duplexes). To compare monthly water use levels, multiply the daily average by 30 to arrive at the average gallons per month.

Potential Options

1. Duplexes Remain classified as Single Family

While it seems to make sense that the higher water use by duplexes would lead to significantly higher bills, duplexes on average pay less on a per unit basis than a single family home (determined by dividing the average duplex bill by 2 units). Additionally, of all the options provided, this has the lowest development cost.

	Winter	Summer
Average Duplex Bill	$ 33.82	$ 72.85
Average Duplex Bill per Unit	$ 16.91	$ 36.43
Average Single Family Bill	$ 17.08	$ 53.77

2. Classify Duplexes as Multifamily

Some communities classify duplexes as multifamily, and limit their single-family residential user class to truly single-family units. While this user class has a uniform rate for water use, the requirement for multifamily development to install a separate irrigation meter would be cost-prohibitive. Additionally, paying for the average outdoor usage at an irrigation rate would make the summer bill higher than the current average.

3. Require Separate Metering of Units

An option available to property owners is to pay the development fees to have a second meter set. Neighboring communities have required this. The additional development fees would be a one-time cost of approximately $9,210. The annual savings on bills would be approximately $8, based on average use; it's likely that the bill savings would never repay the up-front investment required for this solution.

Property owners also have the option of installing their own submeters for more accurate division of utility bills. These meters would be installed, read, and maintained by the property owner. The cost is significantly lower, because no additional capacity from the City's water system is required. Such a solution could help in cases where there is perceived inequity between duplex residents, such as when low water users feel they are unfairly burdened with half the utility bill from a high water user.

4. Create a new Rate & Fee Class for Duplexes

With the knowledge of the differing usage pattern for duplexes, these users could be analyzed separately from the single-family residential user class to create a new user class during the Water Rate & Fee Study to be completed in 2019. This would allow a true cost of service to be allocated to these users. Rates would likely be similar to single family, though the tiered pricing would likely have higher thresholds. The development fees would likely be only slightly higher for a new duplex class than for the existing single family class, because the total water usage is only fifty percent greater. However, the wastewater system development fee would be significantly higher, because use of that system is approximately double that of the single family user class. Higher development fees could create a disincentive to building duplexes in the future.

ATTACHMENTS:

Excerpt from Water Rate & Fee Study