

CITY COUNCIL REPORT

DATE: December 18, 2015

TO: Mayor and Council Members

FROM: Brad Hill, Utilities Director
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CC: Josh Copley, Jerene Watson, Barbara Goodrich, Leadership Team

SUBJECT: Staff Response to Questions regarding the Utilities 2015 Rate Study

The purpose of this City Council Report is to provide a response to questions of staff regarding the 2015 Rate Study. Staff's responses are *italicized*.

DISCUSSION:

Reclaimed Water

- a. **Based on costs identified in the Reclaimed Water Enterprise Fund, what should the reclaimed water rate be to ensure the City covers all of the costs to produce the reclaimed water? How does this rate compare with current reclaimed water rate that is 35% of potable by policy?**

The 2015 Rate Study addresses the revenue requirements that cover the cost to operate, maintain and produce reclaimed water including capital investments in the system. The rates proposed in the study (either the 3% or 7% increase) will be adequate to cover the expenses. Staff proposes to keep the rates at 35% of potable.

- b. **What is the rationale for the City not charging reclaimed water customers less than the 35% of the cost of potable water, which is the City's policy?**

Based on the 2015 Rate Study, if we charge a reclaimed customer or Customer Class less than the 35% policy, the fund would be out of balance and end up under collecting the necessary revenue. This would subsequently require a need to address capital improvement expenses and debt issuance to bring the fund back into balance.

- c. **Do the rate payers subsidize the cost of the reclaimed water? Please explain.**

Neither water nor wastewater customers subsidize the cost of reclaimed water moving forward. For FY 2016, Utilities and Finance worked on separating the expenditures for reclaimed water. This work demonstrated that the reclaimed

water fund is supported by the reclaimed water customers. However, when referring to the proposed Rate Structure (p. 55 & 56 of the Rate Study Final Draft Report) which is based upon the structure approved by Council in 2010, those reclaimed water customers that pay a higher rate than the cost to produce reclaimed water (i.e., \$1.62/1000 gallons) will subsidize other reclaimed water customers that pay a lower rate.

- d. **Does the Reclaimed Water Enterprise Fund include any allocation of the overall costs to operate the wastewater treatment plants? Since reclaimed water customers benefit directly from the A+ water coming from the treatment plants, shouldn't they share a portion of the cost of operating those plants?**

The Reclaimed Water Enterprise Fund is paying for its share of administrative costs that are located in the Water Enterprise Fund such as Utilities Administration, Engineering, and Regulatory Compliance. The reclaimed water fund is also paying for its share of citywide indirect expenses.

The second portion of the question is purely a policy decision by City Council on where to draw the distinction between the costs associated to wastewater customers and reclaimed water customers. Historically, the City Council via their Agreement with Continental Country Club in 1983 defined effluent as "...at the point of discharge from the City's treatment facilities." As of 1993, reclaimed rates have been set by policy tied to a percentage of potable water rates. When reviewing this concept today, staff believes that the point of discharge is still a valid location to split operational expenses between wastewater and reclaimed water and it was used as the basis for the split out of the Reclaimed Water Enterprise Fund.

- e. **What calculations were used to justify the so-called off-peak rates for golf courses? Were they based on cost-of-service? Have off-peak rates ever been offered to any reclaimed water customers other than golf courses?**

The Off-Peak reclaimed water customer class was created 20 years ago when City Council adopted Ordinance 1874 in 1995. In that ordinance, the rates charged to customers in that class were specified. There were no calculations provided in the ordinance or otherwise, so staff presumes these rates were initially established via policy. Moving forward, these rates were modified in 2006 and both the rates and rate structure were modified in 2010 via policy. The 2015 proposed rates are recommended to be changed by policy as well (e.g., 3% or 7% increase) and no change to the rate structure.

The definition of an Off-Peak reclaimed water customer class is spelled out clearly in Ordinance 1874. That is, those high volume users (>50M gallons/year) who provide their own storage and are able to accept water on an "as-available" basis. Golf Courses are the only user, besides Snowbowl, that meet those requirements. To date only golf courses are within the customer class.

- f. **In the longer term, how do you expect the value of reclaimed water to change, i.e., increase, decrease, stay the same?**

There is a lot of discussion within the water resource management arena on this topic. Staff believes that as Federal and State regulations are modified in the future to allow for the Direct Potable Reuse of reclaimed water, its value will increase with time. Primarily because it's a water supply that increases with time and it is locally controlled. Additionally, in 2010 Utilities staff was asked by Governor Brewer to be on her Blue Ribbon Panel to advance water sustainability by looking at ways to increase reuse, recycling and conservation on a statewide basis. The results of that study indicated that the increased use of reclaimed water will become more beneficial into the future at achieving those broad statewide goals of sustainability.

- g. **In the longer term, do you believe the City is best served by pricing reclaimed water through a policy process (e.g., the existing 35% of potable water policy) or a cost-based process using the Reclaimed Water Enterprise Fund, or another approach?**

Currently staff believes the policy based approach is better for the City. Either approach to setting rates will have to meet the same revenue requirements. Changing to a cost-of-service based analysis at this time would add additional expense to the reclaimed water fund should Council decide to go this route. However, staff could add a cost-of-service study to the work plan for the next rate study should staff be given that direction.

Tiered rates for non-residential customers

- a. **Recognizing that 2/3 of cities in Arizona use tiered rates for non-residential customers, is there a reason that the City didn't ask the consultant to look at another approach to tiered rate proposals?**

Based upon the Water Commission and public input, staff directed Willdan to include a non-residential tiered rate structure in the 2015 Rate Study. Since this request was not in the consultant's original work plan, they created a tiered rate based upon "meter equivalency" which is one of the accepted methodologies by the American Water Works Association. Upon review, the Water Commission recommended for staff not to proceed further. Additionally, the Water Commission and staff received advice from the consultant that these types of rates may not be well accepted by the business community without further outreach. Staff has not confirmed that 2/3 of cities have tiered rates for non-residential customers but we are looking into that. Note that each city may impose them in a unique manner for which staff or the consultant have not evaluated.

- b. Given examples of the huge water use savings reported in the newspaper for SCA Johnson, FMC, and NAU, do you believe there are additional water conservation opportunities for non-residential customers? (The statement has been made that non-residential customers are relatively inflexible in their water use).**

Staff believes that SCA and NAU achieved significant potable water conservation savings when they converted a portion of that use to direct delivered reclaimed water (i.e., manufacturing process, landscaping, dual-plumbing, etc). In order to better understand a non-residential customer's water conservation potential, utilities typically conduct an on-site extensive "water audit" across customer classes (e.g., hotels, restaurants, etc.). Staff is currently developing the elements of a water audit program. These programs have been extremely useful to utilities in California under their mandate to eliminate water use.

- c. Do you believe that appropriate tiered rates would accomplish the same policy objective of conservation for non-residential customers as they have for residential customers?**

Currently, staff is unsure. While generally speaking some customer classes may have significant water conservation potential while others may not without conducting a comprehensive "water audit" for specific types of businesses or customer classes. Additionally, staff are evaluating water use trends across customer classes over a 13 year period to better understand their summer/winter water use and potential water conservation savings opportunities.

Potable water rate increase

- a. Should increases in water rates (not including the cost of energy) be different for different classes of potable water customers? Why didn't the Study design percentage rate increases to be equal for everyone (not including energy, which has been broken out and is paid equally by everyone)?**

According to Willdan Financial, comparing water rates that do not include the cost of energy will be different for different classes of potable water customers. The reason for this is the 2010 cost-of-service analysis established the relationship between each tiered rate in the form of a "rate multiplier", such as the difference between Tier 1 versus Tier 2, etc. The 2015 Rate Study kept the established relationships between each tier the same as the 2010 study. Should a new cost-of-service study be conducted, the results most likely would end up that the relationship between each tier would not be equal either. While the consumption rates did not increase equally by percentages for all, the overall impact of a customer's bill will be consistent with the increase. Therefore, staff believes the proposal is acceptable.

Water conservation program

- a. **Why has the City chosen not to fund a robust water conservation program through revenues from water rates?**

Since City Council adopted the existing rates in 2010, limited on-going new annual revenues have been available to begin rebuilding the multiple programs within the Utilities Division (e.g., CIP, water & wastewater treatment plants, wastewater collections, water distribution, engineering, water resources & conservation, etc.). All of these programs were severely cut due to the economic downturn in 2008/09. Specifically, the Water Conservation Program was cut from a budgeted high in FY09 of \$191,474 to an actual expense low in FY10 of only \$21,047. During each budget cycle since 2010 the Utilities Director has had to make the initial hard decisions on which programs would receive new funding each year prior to bringing the spending requests forward to City Council for review and adoption. The Utilities Director has had to balance the funding of programs that ensure the community's health & safety such as water quality and water production against the needs of replacing aging infrastructure and rebuilding the conservation program, etc. With these constraints, Utilities still has managed to re-fund the Water Conservation Program nearly 800% the past five years. While the Water Conservation Program budget in FY16 (\$182,381) is not quite at FY09 budget levels we have made great strides in this direction thanks to the City Council rate increase in 2010.

- b. **Are there ways to make the water conservation program more robust? What would be the approximate annual cost to implement a "best practices" conservation program that incorporates the best practices of cities around the country (i.e., placing Flagstaff among the leaders in water conservation)?**

Yes, there are ways to make the water conservation program more robust. Staff has been expanding a "best practices" program over the years. City Council has funded things such as a 12-15-year water meter replacement program from the historical 20-year replacement cycle, an annual pipeline leak detection program, an annual waterline replacement program, increase funding for financial rebate incentives, reinstating the water enforcement staff and implementing Flagstaff Conserve2Enhance to name a few. However, staff could build a very robust program with more staff and program funding.

Industry best practices typically fall into four categories: 1) system water loss management (infrastructure meter accuracy, infrastructure leak detection, maintenance of infrastructure), 2) customer billing accuracy and customer meter accuracy, 3) financial rebate incentives encouraging the replacement of inefficient fixtures regardless of customer class (landscape, kitchen, bathroom, etc.), and 4) education and outreach. There is no doubt the program could be expanded and some current programs accelerated, such as water meter replacement, by increased funding to cover expanded program expenses and staffing needs. Suggested options include increasing the financial rebate incentive program (both in terms of \$ and analysis of water savings), funding an

expanded water audit program, increase funding for communications and outreach (i.e., website and social media updates). Service to our customers could be expanded by offering real-time water use monitoring and billing by implementing new technology (e.g., water meter fixed-based network and a mobile phone app). Staff is developing costs associated with each of these suggestions and will provide City Council this information at the January 7, 2016 Work Session.

Lastly, staff is currently summarizing the City's water conservation program since 1988. This analysis will take a closer look at how specific components and changes have contributed to Flagstaff's success in reducing historical water use. They will be quantified in terms of dollars per acre-foot saved or acre-feet reduced. Additionally, the analysis will include an evaluation of the financial incentive rebate program using GIS combined with information from the County and the City. Goals will be to conduct a spatial analysis in order to target specific areas of the City, estimate how many more low flow toilets and turf rebates can be offered to the community and how much water can ultimately be saved with this program.

With this information staff can provide City Council with a comprehensive assessment of the Water Conservation Program at some point in early 2016. The assessment will ultimately include how the City can achieve additional reductions in water use, the costs associated with implementing each recommended program and working with the community to define overarching goals of the water conservation program.

c. Does staff believe there should be an appropriate adjustment to the projected revenue based on projected conservation?

Yes, it is well known that a community will experience some water use reduction with an increase in rates.

The impact of water conservation on rates

a. Do you believe that excessive conservation will diminish revenues and drive up water rates and costs for everyone?

Yes, this is a common consequence if the water use decline is not taken into account within the rates. This is currently happening to many municipalities in California.

RECOMMENDATION / CONCLUSION:

This report is for information only.