Agricultural Water Rates Task Force

Questions Posed by Members

WA-3 / WA-9

Question 1: *Are there any current WA-3/WA-9 customers that can receive Gage Canal water?*

Answer: Yes, there are approximately (41) WA-3 and WA-9 customers that could technically receive water from Gage at the WA-8 rate, however in order for this to happen there would need to be steps taken by the customer to facilitate this delivery. This would include building a pond, installing a pump and filter, separating the irrigation system from the potable system onsite, and installation of a backflow device on any onsite potable water meter. Some of these properties may not have a conveyance lateral in place from the Gage system, which would be an additional cost to have installed.

Question 2: *Do we still want to allow WA-3/WA-9 service to customers outside City limits?*

Answer: To be discussed by the Task Force.

Question 3: *How many of the WA-3/WA-9 customers are actually engaged in agricultural businesses or farming/non-farming?*

Answer: Staff used aerial photography of Google Earth and Google Maps to survey the existing 193 WA3 and WA9 customer properties to identify the “type” of agricultural activity taking place at each property. The following results are considered estimates since aerial photos may not be up to date.

Results of aerial survey for type of agricultural activity:

21 with residences alone (11%)

93 residences with substantial greenery (48%)

7 properties with row crops (3.5%)

9 nurseries (4.5%)

63 groves (33%)

Question 4: *What is quantity of use by the WA-3/WA-9 customer groups and class and is it enough revenue to cover cost of service?*

Answer:

Based on FY 17/18 12 month usage:

Customer Group	FY 2017/18 Usage (CCF)	Percent of Total

WA-3 with Residence	262,264	1.0%
WA-3 without Residence	22,183	0.1%
WA-9 with Residence	97,728	0.4%
WA-9 without Residence	105,257	0.4%
All Other Customers	25,550,825	98.1%
Total RPU Customers	26,038,257	100.0%

Refer to Agricultural Water Rates Task Force Special Meeting June 28, 2018 Agenda item 4 COSA presentation slide 23:

1. ~ $684,000 projected annual under-collection FY 18/19 for WA-3/WA-9 customers
    a. Compared to SFR and Commercial rate structures effective July 1, 2018

Question 5: *How often are WA-3/9 properties inspected for rule compliance?*

Answer: Number 1 of the Special Conditions section of the WA-3 rate requires that customers "*continuously meet the criteria set out in the "Applicability" section*" to remain eligible for the WA-3 rate, however it does not suggest or specify an inspection interval. The Special Conditions section of the WA-9 rate does not call out any similar requirement for continuous compliance with the Applicability of the WA-9 rate.

Question 6: *Roughly how many of the current WA-3/WA-9 customers still actually qualify for their respective rate?*

Answer: Staff has used aerial photography of Google Earth and Google Maps to survey the existing WA3/WA9 customer properties. The following results would be considered estimates since aerial photos may not be up to date. It is also difficult to get a complete count of trees on a property from an aerial photo alone.

Estimated results of aerial survey:

(145) 75% are in compliance

(16) 8% are not in compliance

(30) 15% are close to compliance

(3) 2% that require more investigation.

Again, these are best estimates from aerial photos alone and site visits would need to be conducted to obtain a completely accurate tree count and site assessment.

Question 7: *Should "Ag" rates be allowed outside the Greenbelt?*

Answer: To be discussed by the Task Force.

WA-8

Question 1: *Why do the WA-8 rate conditions require pressurized sprinkler systems to receive Gage irrigation water onsite?*

Answer: To ensure efficient water use and to get away from wasteful and inefficient furrow type irrigation practices.

Question 2: *How much water do the WA-8 customers actually take from Gage canal and what are the usage patterns?*

Answer: Below are the amounts of WA-8 water that was billed by RPU to customers who have a Greenbelt Contract:

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total CCF	Total AFY
FY 10-11	3,379	3,483	3,361	5,579	7,953	1,750	0	2,113	918	0	173	7,121	**35,830**	**82.25**
FY 11-12	0	10,691	0	8,402	0	4,574	0	4,400	936	0	3,240	5,147	**37,390**	**85.84**
FY 12-13	5,215	5,752	7,173	7,693	5,320	2,996	762	1,108	365	0	1,594	5,060	**43,038**	**98.80**
FY 13-14	7,172	5,267	6,202	7,155	6,030	4,592	2,148	3,103	2,999	727	6,187	5,821	**57,403**	**131.78**
FY 14-15	6,238	8,004	0	16,633	6,324	0	2,980	0	1,629	2,704	5,994	4,245	**54,751**	**125.69**
FY 15-16	8,249	7,501	8,352	8,264	4,939	3,413	0	2,392	104	3,569	104	8,490	**55,377**	**127.13**
FY 16-17	104	18,502	312	18,540	311	6,169	312	970	0	2,096	104	12,423	**59,843**	**137.38**
FY 17-18	5,579	8,144	7,986	6,828	5,179	3,397	2,530	1,264	4,209	555	5,372	5,266	**56,309**	**129.27**

Question 3: *Can the Lamar/Coon property at 2732 Mary Street receive WA-8 water*?

Answer: No, it cannot. 2732 Mary Street (cross Victoria Ave.) used to receive water from Gage years ago but the conveyance line from the Gage Canal, down Mary Street to this property, was abandoned about 10 years ago. Unfortunately, this property is not a candidate for WA-8 water at this time without capital investment in Gage conveyance infrastructure.

Question 4: *What was the impetus for the Greenbelt Flowage agreement that established the WA-8 Gage "pass-thru" rate in 1993?*

Answer: There was land around the Citrus State Park area that used to have groves of orange trees which previously held Gage Canal Company shares. When the groves were removed the shares were turned back in since the properties no longer required Gage water. When the parcels began being replanted with orange trees to re-establish the State Park groves there was a need for affordable water, and Gage water seemed the only reasonable solution. This issue was brought forth to the Council Land

Use Committee on July 16, 1992. The Greenbelt Flowage Agreement allowed these properties to be served Gage water without there being shares associated with the parcels of land being served.

Gage Canal

Question 1: *How much was paid for Gage by City during condemnation and what revenue was used for that purchase?*

Answer: Starting on Page 3, line 27, of the Stipulation for Judgement in Eminent Domain and Final Order of Condemnation (dated June 9, 1965) it states the total payment by the City to the Gage Canal Company was $547,276.86. Our research shows that Riverside Public Utilities' ratepayer funds paid this cost to acquire Gage assets. Per accounting procedures, fixed assets are recorded to the Fund that provided the funding and all fixed assets from Gage are recorded in the Water Fund. In addition, per City Finance, no Gage Canal related assets are found in any other City Fund(s).

Question 2: *Why so much vacant land on southeastern side of Gage canal?*

Answer: This is a geographically challenging area regarding service from the Gage Canal and requires pumping uphill. The Gage canal was designed as a gravity flow system, except for a handful of private pump companies that assisted pumping Gage water to properties located on the southerly side of the canal.

Question 3: *How can the Corona Farms, on Madison x Victoria, be served Gage water?*

Answer: The conveyance lateral between the last delivery point and the property was abandoned many years ago by Gage Canal. This lateral would need to be replaced in order to get Gage water to the property. After that, there would need to be a pond built to receive the water, a pump installed to pressurize the water, an electrical service installed to power the pump, a filtration system installed to filter the water pulled from the pond and finally this system tied into the existing irrigation system onsite. We estimate all this work to cost upwards of $100,000.

Question 4: *What about organic farmer concerns in regards to type of water they receive?*

Answer: Gage canal water has no additives in it except for when algae growth within the canal needs to be chemically treated. When this happens Gage notifies all downstream users of the planned application so they can decide whether the treatment will adversely affect their crops, trees or plants.

Question 5: *Regarding GrowRIVERSIDE, are increases in "Other Ag" due to them receiving Gage canal water?*

Answer: Most of the increases in "Other Ag" were nurseries. The influx of nurseries to this area were a result of the O.C. and L.A. areas pushing out such businesses due to increased urbanization and development of land. The nursery owners saw large open spaces in the Greenbelt and knew there was affordable and accessible water.

<u>Question 6</u>: *What happens to Gage Canal shares that are not paid? Why do they go back to the City?*

<u>Answer</u>: When the annual "water tax" per share is not paid by a shareholder the City encumbers the shares. The Agreement for Operation of Gage Canal Facilities established by the 1965 Judgement In Eminent Domain and Final Order of Condemnation grants the City the right to encumber shares. The City takes over payment of the annual water tax, gains in number of shares and amount of water entitlement.

<u>Question 7</u>: *What is the quality of the water provided to the Gage Canal from the Gage Exchange and can we see some historical results of the samples that are taken every 6 months?*

<u>Answer</u>: Results from the last year were submitted to the Task Force members on 8/1/2018.

<u>Question 8</u>: *How many "water contract" holders are there currently?*

<u>Answer</u>: There are currently 48 water contracts that allow the contract holders to utilize a portion of the City's entitlements from Gage.

<u>Question 9</u>: *The Gage Canal Company system "meters" water to shareholders with a technique that is over 100 years old and it is likely that this type of metering technique under registers how much water each customer receives. If the metering was more accurate, there would be more water available. Will the City work with the Gage Canal Company to reduce loss from inaccurate meters?*

<u>Answer</u>: The Gage Canal and its associated delivery systems were not designed for actual "metering" devices. The system was designed as a gravity flow system utilizing weirs, which is not an exact science. There are no meters used in the delivery systems from the Gage Canal, except where a private pump company is being utilized. Per the terms of the 1965 Friendly Condemnation and Judgment in Eminent Domain, and the resulting Operating Agreement between the City and The Gage Canal Company, Gage was allowed to continue to operate in the same manner it was used to since its inception and the shareholders receiving irrigation deliveries should not notice any difference in their deliveries. This means water deliveries were allowed to continue through the "Miner's Inch" delivery method. This method utilizes concrete weir structures with openings that are adjusted for specific MID delivery amounts. Since all gravity flow deliveries are made through these types of rudimentary devices it would be very difficult to install an accurate metering device. The private pump companies that exist do utilize metering devices since their systems are pressurized and they need to be able to know how much water they pumped from the canal. To get actual meters installed on the delivery lines would require significant capital investment and retrofitting of the delivery systems. Even if that was done, the meters may or may not work accurately due to the limited pressure in certain areas of the delivery system.

Question 10: *What was the legal process that allows the City to encumber abandoned Gage shares?*

Answer: Shares of the Gage Canal are considered "abandoned" when a shareholder fails to pay their annual water tax assessment to Gage, equivalent to their proportionate number of shares. Shares also become abandoned when shares were not properly transferred, or were given up, during a real estate transaction during the escrow process. The Operating Agreement established as part of the 1965 Final Judgement in Eminent Domain allows the City to encumber available shares.

Question 11: *Are there any things the Task Force should be concerned about during the rate recommendation development process that could potentially re-open the 1965 judgement that would allow claimants to come back in and sue for Gage assets?*

Answer: Given the recommendatory nature of the Task Force, and its mission limited to WA-3 and WA-9, neither of which are directly related to Gage water rights or assets, I am not aware of any things the Task Force should be concerned about during the rate recommendation development process that could potentially re-open the 1965 judgement that would allow claimants to come back in and sue for Gage assets.

Cost of Service (COSA)

Question 1: *What does it cost to get water to the Greenbelt since Gage water has been co-mingled with City water?*

Answer: The majority of the water that ends up providing irrigation service to Gage shareholders and the Greenbelt area originates in the same place as the water provided to the City from Gage. The only area this is not the case is when water is pumped from the Utilities' Olivewood Booster station from the Riverside Canal (per the Gage Exchange agreement) or when the Olivewood wells operated by the Gage Canal Company (on RCC property) are pumped to the Gage Canal. Both of these two inputs enter the Gage Canal above Poly High School. This would be the first place where any "co-mingling" takes place and the City does not receive any of the water beyond this "co-mingling" point. The Cost of Service Analysis (COSA) answers the question of how much it costs to produce Gage water from the production wells in San Bernardino. When The Gage Exchange does run, the Gage Canal receives 1.25 times the amount of water taken at the Linden/Evans Reservoir complex (the City's potable water supply).

Question 2: *How were the revenue requirements determined?*

Answer: Agricultural Water Rates Task Force Special Meeting June 28, 2018 Agenda item 4 COSA presentation slides 12 and 13.

A revenue requirement forecast analyzes the costs of a utility to determine how much revenue needs to be generated by retail rates in each fiscal year. The analysis includes projected operating and maintenance costs, capital funding costs, debt service, and policy requirements such as the ability to meet established debt coverage levels and cash reserve targets. The analysis also considers the projected revenues generated from sources other than retail rates that can reduce the amount of revenue needed from retail rates. These offsetting revenues include interest earnings, wholesale sales, conveyance/wheeling revenues, lease revenues and other miscellaneous sources.

RPU's revenue requirements forecast was determined through a comprehensive process that began with the development of the Utility 2.0 Strategic Plan several years ago. At Council's direction, RPU initially analyzed Option 3 of the Utility 2.0 Strategic Plan including infrastructure improvements over the next ten years and determined the rates needed to support it. After the initial rate plan was presented, Council gave direction to revise the analysis which included reprioritizing and extending infrastructure projects in an effort to reduce the rate increases. The rates that were implemented on July 1, 2018 are based on the revised analysis.

The initial revenue requirements forecast, based on Utility 2.0 Strategic Plan Option 3, is discussed in section 4 of the Water Cost of Service and Rate Design Study report from August 2017. The revised revenue requirements are shown in the Water Cost of Service and Rate Design Project Memorandum dated March 30, 2018. This document was included as attachment 2 to the June 28, 2018 agenda item 4 Water Cost of Service Analysis and Rate Design Study Overview.

Question 3: *Why isn't agriculture identified as a unique/separate customer class?*

Answer: Agricultural Water Rates Task Force Special Meeting June 28, 2018 Agenda item 4 COSA presentation slide 21:

1. If considered a unique class within cost of service analysis
    a. Higher increases than transitioning to residential or commercial
2. Appropriate class is residential or commercial
3. Reduce rates because past ownership of Gage shares?
    a. Not all customers were past owners
    b. All shares had been sold to City
4. Proposition R and Measure C require separate rate?
    a. WA-8 (Gage Water Company) Class

If WA-3 and WA-9 were considered a unique customer class within the cost of service analysis, the cost of service and associated rates would be higher than residential or commercial due to the typically high peaking factors of WA-3 and WA-9 customers. Customer with higher peaking factors are responsible for a higher proportionate share of peak costs.

<u>Question 4</u>: *What were the WA-3 / WA-9 data analysis results and characteristics?*

<u>Answer</u>: The data analysis reviewed detailed customer billing data for all of RPU's customer types including WA-3 and WA-9 customers. Factors including average usage per account, meter sizes, and how WA-3 and WA-9 customers with residences compare to other large single family customers. That comparison showed that WA-3 and WA-9 customers with residences had water usage patterns very similar to large single family customers with high outdoor usage.

WA-3 and WA-9 customers without residences are commercial enterprises similar to other commercial and industrial customers that utilize water to support their business activities. Thus, they were included in the commercial and industrial class. Also see Agricultural Water Rates Task Force Special Meeting June 28, 2018 Agenda item 4 COSA presentation slide 22.

<u>Question 5</u>: *The COS shows that the city produces water from different sources that each have a different cost. Under 218 rules, could the city establish a tiered rate structure based on the different costs of each source. Thus tier 1 would be source 1, tier 2 source 2, etc. . I understand that the city overheads would need to be added to each source cost. The important point to this is, could the city do this, not will the city do what I am asking? I also understand that the city blends water from different sources for quality purposes. Again this is a different issue than my basic question.*

<u>Answer</u>: Yes, the City can allocate different sources of supply (with different associated costs) to each tier. The City is currently doing so. Here is what the 2017 COSA provides:

For classes with tiered rates, supply costs are allocated to each tier starting with the lowest cost sources for usage in Tier 1 and applying the higher cost supplies to usage in the upper tiers. For example, the Proposed Tier I rate for single family residential (SFR) includes base costs, plus the SFR class's share of supply costs for water produced from the Gage supply, RPU's lowest cost water source, and a portion of existing debt service. Tier 2 rate includes the class's remaining portion of Gage costs, the class's share of costs to produce water from the Riverside North/South supply, a portion of those from Waterman supply (the next highest cost sources of supply), and a portion of supply related capital costs. The Tier 3 rate includes the class's remaining portion of Waterman costs, the class's share of costs for the Flume system costs (the highest cost source of supply) as well as portion of supply related capital costs. The tiered rate calculations for SFR are discussed in the 2017 COSA starting on page 65.

For example, under Schedule WA-1, Single-Family Residential Metered Service, Tier 1 rates are as follows:

Quantity: $1.16 per 100 cubic feet

Customer Charge: $15.80

The quantity charge includes costs for the resource (the cost to produce the water), transmission and distribution costs (the costs to deliver the water including transmission, distribution, capital), and base (operating and capital costs incurred to provide a basic level of service to each customer).

Quantity: $0.23 for resource, $0.29_for transmission and distribution, and $0.64 for base.

Such quantity and customer charges would vary if applied, for example, to only agricultural customers, based the particular needs of that class.

Question 6: *Based on the COS which shows Gage water is about $140./af including supply and distribution, after adding City overheads, what would the rate per CCF be if a rate were established solely using Gage water? (My rough calculation results in a CCF cost of about $.67/CCF or $290/af)*

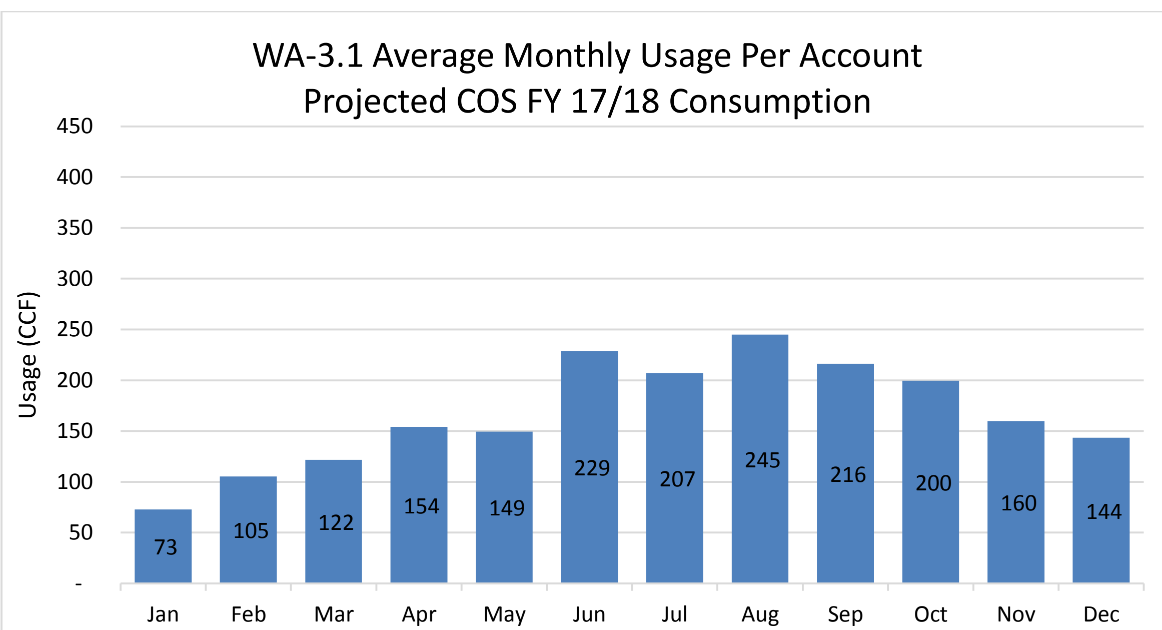
Answer: In order to give a precise answer, the City would have to perform a cost of service analysis to verify the numbers that were cited in the question, based upon the water demand of a particular class. In order to do so, the Task Force would have to request that City Council authorize such study.

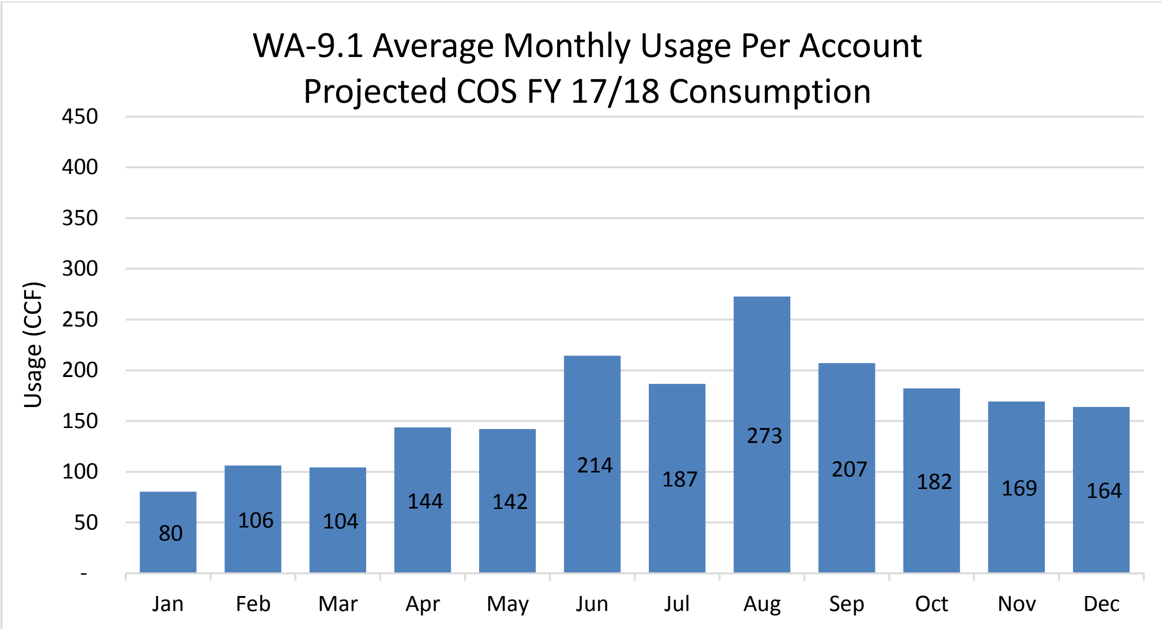
Question 7: *Is the Gage water the highest quality of the 4 sources noted in the COS Table 5-4?*

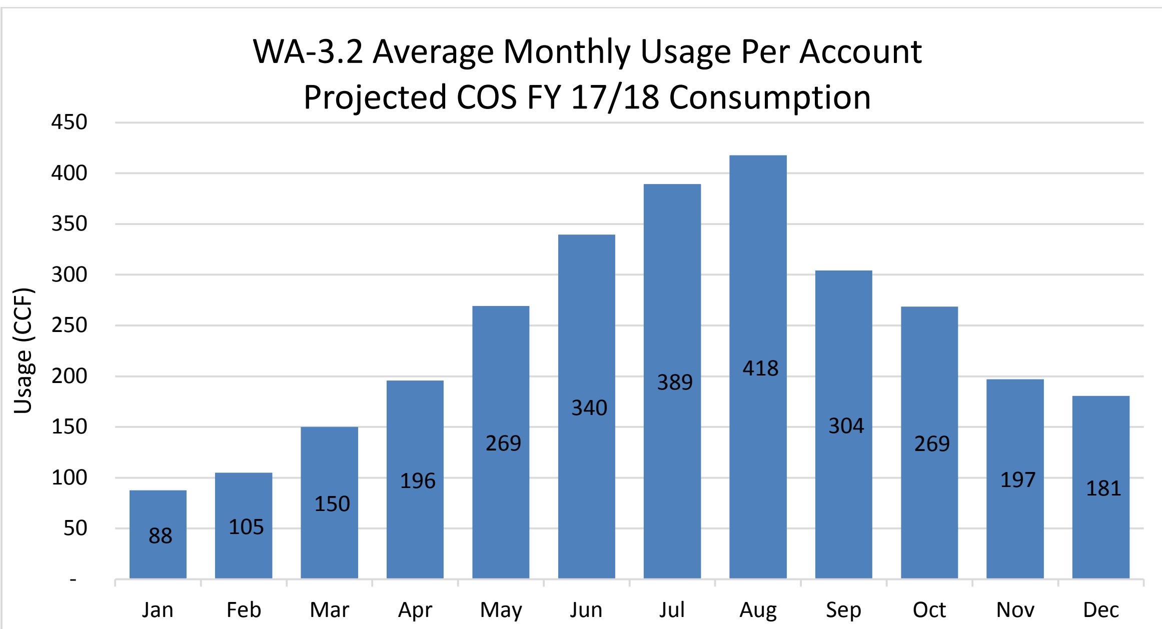
Answer: Yes, but only due to treatment efforts in the San Bernardino area being performed and paid for by Responsible Parties (RP). These treatment processes benefit all Gage Canal Company shareholders.

Question 8: *Would it be possible for staff to provide a typical use and billing profile curve for WA-3 and WA-9 customer over an entire year ?*

Answer: The four following graphs illustrate WA-3 and WA-9 usage patterns. 3.1/9.1 are with residences and 3.2 and 9.2 are without residences.







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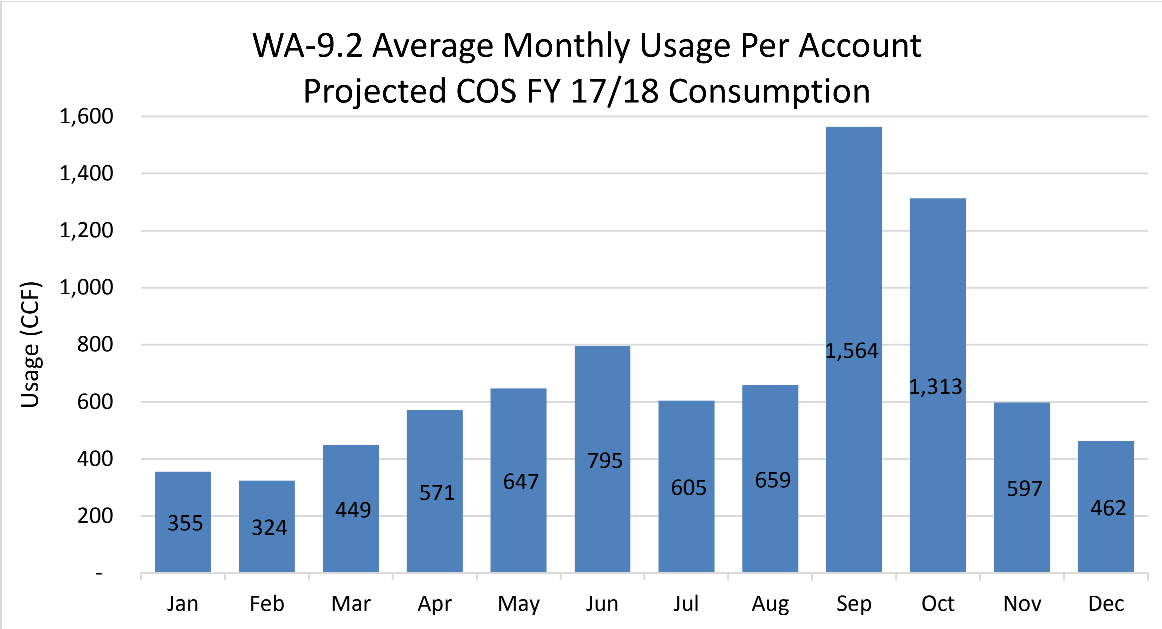

Ag Development Options / Resources

Question 1: *How can low cost loans through RCRCD help equip farmers to receive Gage water?*

Answer: In progress (Seth)

Prop R / Measure C

Question 1: *What has the City done in the past, or are planning to do in the future, to ensure water and electricity is available for agricultural purposes or to utilize Gage water for agriculture as the highest priority?*

Answer: The GrowRIVERSIDE initiative has revitalize agricultural activities in the Greenbelt, which was part of the mission of Measure C and Prop R. Utilizing the Gage Canal as the highest priority is a challenging issue due to the continued reduction of Gage Canal distribution conveyance facilities over the years. This reduction is a result of Gage shareholders stopped taking water from the canal.

Question 2: *Will the Ag water rates apply to all Prop R and Measure C lands?*

Answer: To be discussed by the Task Force.

Question 3: *How should affordable be defined per Prop R and Measure C?*

Answer: To be discussed by the Task Force.

Misc

Question 1: *Can staff confirm how the final recommendation affects everyone on the Task Force?*

Answer: It would be very difficult for staff to determine how the final recommendation will ultimately affect Task Force members directly or indirectly.

Question 2: *Where are we headed with agriculture in the City and what is Riverside's best future regarding Ag?*

Answer: To be discussed by the Task Force.

Question 3: *How does San Antonio Texas and Albuquerque NM utilize their agricultural water canals and can we learn anything from them that can help in our venture?*

Answer: In progress (Seth/Rick)

Question 4: *Does RPU work in concert with other City departments to coordinate rate development in order to fall in line with other standards, initiatives, zoning and general planning that the City has?*

Answer: RPU develops rate recommendations that will fund needed Water and Electric capital improvements as well as ongoing operations and maintenance costs.

Question 5: *No General Fund money has ever subsidized the Water Utility, correct?*

Answer: Correct, we are not aware of General Fund money ever subsidizing the Water Utility.

Question 6: *How much does RPU have independent control over Charges from Other Funds? Does RPU set that or is it set by the General Fund? Who sets the final number?*

Answer: The City's cost allocation plan (cost plan) is a Full Cost model. Generally, the cost plan facilitates the allocation of administrative costs in the City's budget to the areas that receive benefit. The purpose of a cost plan is to allocate costs of internal support departments to other operations. Finance, Human Resources, Innovation and Technology, and General Services departments are classified as "internal service departments" and provide services to the City's "operating departments," including, but not limited to, Public Works, Public Utilities, Police, Fire, and Community and Economic Development. Best practices, accounting standards and federal requirements make it necessary for the City to maintain a well-documented cost allocation plan.

In conjunction with each budget adoption, the City studies what services are provided by internal service departments to operating departments and allocates costs accordingly. For preparation of the FY 2018-20 budget, the Finance Department met with each internal service department to thoroughly review and update the base elements, such as the number of Purchase Orders issued for the allocation of Purchasing Division Costs.

RPU reviews the cost allocation plan including the allocation methodologies and charges allocated to RPU. Generally, after departmental review and discussion, the City determines the cost plan and allocates costs accordingly.

Question 7: *What are other water districts doing? Do they have agricultural classifications? If so, what do their cost structures look like compared to other classifications?*

Answer: We surveyed 30 utilities on whether or not they have agricultural water rates and compiled the results into the spreadsheet (PDF) attached to this document. 13 out of the 30 Utilities surveyed had an agricultural water rate of some type using either potable water, recycled water or offering both potable and recycled options for Ag.

There are also 5 water utilities that receive water from the San Diego County Water Authority (SDCWA) that have Transitional Special Agricultural Water Rates (TSAWR), but these rates look to be temporary as they were created in 2008 and extended through 2020. The TSAWR reduction is a result of not being allocated certain storage and supply costs and in turn are provided a reduced level of supply reliability.

Question 8: *Does our City's vision include "agricultural growth" for our "population growth"?*

Answer: To be discussed by the Task Force.

Question 9: *When the Utility has excess water, electricity, land, or building lease space is there an obligation to seek fair market value/rates when those excess commodities/assets/or spaces are sold or leased out? Is it a practice of the Utility to get market rates for any excess capacity we may have, or do we give out subsidies on excess capacity (water, land, building lease space, power)? Do we normally expect and charge market rates with these excess "capacities"?*

Answer: With respect to leasing space…Office space leasing is done at market rates per Section 7 of the *Real Property Financial Management Policy* (approved by RPU Board on Nov. 21, 2014). Parking structure rates are set at market values.

With respect to land…The net present value of an asset is considered when making decisions on whether to hold or sell an asset while considering the ultimate value and benefit to RPU ratepayers. The adopted *Administrative Manual Section 08.003* "*Disposition and Sale of City Owned Real Property*" is followed for real property transactions.

With respect to electricity…All of RPU's power procurements are sold into the CAISO day-ahead and real-time markets. These system-wide markets are fully transparent to all CAISO participants and the prices are set through a formalized bid clearing process. Additionally, all of our forecasted load is purchased in the CAISO day-ahead market. All of these markets work the same, regardless if our sum total of power purchases are in excess to, or marginally short of, our load serving needs. So by definition, all of our load purchases and procurement sales are done at market rates.

With respect to water….RPU follows the *Policy Principles for Water Portfolio Management* (2014) and strives to appropriately monetize unused and potentially expiring local water production and export rights through pre-planned and pre-executed water sales agreements.