

Public Hearing on Proposed Water Rates

January 17, 2019

Ammon City Hall

2135 S Ammon Rd

7:00 PM – Broadcasted on FM 88.1

Section 1: Proposed Monthly Water Rates

- **Metered Water Rates for all residential metered customers**
 - o Base Rate: \$30.00
 - Includes \$19.00 for the Water Bond
 - o Usage Rate: \$1.00 per 1,000 gallons of usage
- **Unmetered Water Rates for all residential unmetered customers**
 - o Small Lots (Less than 10,000 square feet): \$50.00 level pay until meter is installed
 - Includes \$19.00 for the water bond
 - Based on the average usage in small lots over the prior 12-month period
 - o Large Lots (10,000 square feet and larger): \$70.00 level pay until meter is installed
 - Includes \$19.00 for the water bond
 - Based on the average usage in large lots over the prior 12-month period

Section 2: Reasons for Proposed Metered Water Rate

- 1. Provide for Long-term Stability of Water System.** The current rates do not sustain the system on a long-term basis and place the water system at risk. The proposed rates will provide long-term sustainability of the water system.
- 2. Recommended by Water Facilities Planning Study.** The City of Ammon hired a civil engineering firm, Keller Associates, to complete a Water Facilities Planning Study that identifies the ordinary and necessary changes required for the long-term sustainability of the water system. The study provided a list of measures (see attachment) that bring the water system into compliance with state code, improve emergency response resiliency, replace aging infrastructure, and address other essential water system needs. The proposed rates will provide necessary funding for the operations, maintenance, depreciation, replacement of system components, and necessary improvements that are required by the Water Facilities Planning Study.
- 3. Engineering Basis for Proposed Rates.** Keller Associates, in compliance with the Water Facilities Planning Study, has confirmed that the proposed rates meet the requirements of the engineering study to provide the funding necessary to maintain the city's water system (see attached memo) and to comply with state and federal water quality requirements.
- 4. Equitable Rate Structure.** A usage-based rate is a more equitable way of charging for potable water than Ammon's current flat rate system.
- 5. Public Outreach and Research.** The proposed water rate is the result of years of review and hundreds of hours of research, engineering, financial modeling, public outreach, and discussions on

the part of city officials and professionals in the field. In addition, a citizen-based committee reviewed and analyzed the engineering study, conclusions, and water usage and recommended the City transition to a metered rate system.

- 6. Groundwater Rights and System Capacity.** Water rights and system capacity are strained during the summer irrigation months. Charging customers based on actual usage encourages water conservation. Water rights are becoming much more difficult to obtain than in the past and conservation is an important part of helping to stretch water rights and system capacity.
- 7. Proprietary Fund.** Water fees collected are maintained in a separate fund for operation, maintenance, and the ordinary and necessary expenses of the water system. These funds must be used for the water system.
- 8. Meter Installation Plan.** On December 20, 2018, the Ammon City Council adopted a meter installation plan to finish installation of water meters in all remaining unmetered locations within the next six years.

Section 3: Attachments (Resources for Proposed Water Rates)

1. Memorandum from Keller Associates providing an engineering basis for proposed water rates.
2. Table 8.1 from the Water Facilities Planning Study.



Technical Memorandum

TO: Mayor Sean Coletti and Ammon City Council
FROM: Marvin Fielding, P.E., Riley Bradshaw, P.E. – Keller Associates
DATE: January 16, 2019
SUBJECT: Engineering Opinion of Proposed Water Rate



1.0 PURPOSE

Keller Associates recently completed a Water Facilities Planning Study (WFPS) for the City of Ammon which recommended system facilities projects and operational changes to meet current and future drinking water supply, delivery, and storage needs in Ammon. In conjunction with this effort, the City hired Econics to assist City staff in developing a water rate analysis model in their WaterWorth software. This WaterWorth model allowed the City to evaluate the financial impacts of different water rate structures and was the primary means of developing a set of potential rates that met the City's rate priorities identified in the WFPS. The water rate priorities selected by the City are:

- 1) Implement a usage-based user rate
- 2) Fund the water system and address current system needs
- 3) Create a sustainable water fund that will fund the water system and operational costs without taking on additional debt

Fifteen potential water rate alternatives were developed using WaterWorth from 2017-2018. These rate structure alternatives were reviewed and discussed by City staff, elected officials, and consultants. The City Council voted on December 20, 2018 to publish a monthly user rate consisting of a \$30 base rate plus \$1.00 per thousand gallons used during that month. Also included was a \$50 per month levelized rate for non-metered Small Lots and \$70 per month levelized rate for non-metered Large Lots (see Section 3.0 for further explanation).

The City requested that Keller Associates review and provide an Engineer's Opinion on the proposed rate. Specifically, we were asked to respond to the following questions related to the proposed rate structure:

- 1) Will the proposed water rate meet the City of Ammon's water system infrastructure and operational needs?
- 2) If implemented, does the proposed rate result in undercharging customers, therefore requiring the City of Ammon to increase rates at a future date?
- 3) If implemented, does the proposed rate result in overcharging customers resulting in excess funds, which is not in keeping with Idaho statutes governing municipal enterprise services?

2.0 ADEQUACY OF RATE TO MEET CURRENT SYSTEM NEEDS

The first question addresses whether the new user rate affects the City's ability to meet its expenses of operation, maintenance, replacement, depreciation, rehabilitation, payment of bonds and interest, and operational needs. The Ammon Water Department's operations and maintenance needs were coordinated between Econics and City of Ammon staff and it is assumed that these needs are met through the budgets in the WaterWorth model. The budgets in the WaterWorth model were based on input provided by City staff in regards to service life and replacement of existing infrastructure. They also considers additional infrastructure projects identified in the Water Facilities Planning Study (WFPS) to bring the City more into compliance with the Idaho Drinking Water Rules and to address other water system needs.

While a detailed rate study was beyond the scope requested for the WFPS, Keller Associates did include a high-level look at rate impacts in Chapter 9 of the study. To evaluate whether the proposed rate can meet the needs identified in the WFPS, we compared the rate and funding effects of the WaterWorth model to the rate evaluation performed in the WFPS (updated to provide a more accurate comparison):

	WFPS Rate	Proposed Rate
Total Funds Generated in Base Year:	\$3.40 Million	\$3.37 Million
Average User Increase:	\$16.77 per month	\$16.18 per month
Highest Priority System Needs Met By:	2025	2021
2037 Projected System Needs Met By:	2038	2032

The table above shows that the funding effects of the WFPS rate and the WaterWorth rate are very similar. The proposed rate completes needed system infrastructure projects faster than the WFPS rate as a result of utilizing available reserve funds. This comparison provides additional context for the City's separate work with Econics to develop a usage-based rate structure. This analysis does not dive into the more detailed cash balance strategy used by WaterWorth, which includes the effects of conservation, reserve funds, fund sources, and operations and maintenance costs. It simply assumes that the money budgeted for these categories in the model is available for use and calculates how quickly projects can be completed.

The closeness of the Total Funds Generated and the Average User Increase of the two rate scenarios compared suggests that the net effect of the WaterWorth plan is similar to that contemplated by the study and that completion of projects to address system needs is likely to happen within the planning horizon (year 2037) used for the WFPS.

This analysis assumes that the budgets in the WaterWorth model are used solely for completing infrastructure projects identified in the WFPS. In reality, the system may have other replacement needs that occur during this time frame. Any use of these funds for purposes not currently identified in the WFPS would have the effect of delaying project completion from what is shown in the table above.



3.0 RATES FOR UNMETERED CUSTOMERS

While the City is working towards having every residential customer on a meter, completing this process will take several years. A non-metered rate will need to be implemented for those customers without a meter until one is installed. The City has approached this need by considering what the proposed usage-based rate would be if applied to the average usage of the metered customers in the two existing billing categories: Small Lot (less than 10,000 SF) and Large Lot (10,000 SF or greater). Based on the average monthly usage in these two user categories of 20,000 gallons/month and 38,000 gallons/month, respectively (based on historical City meter data), the City has proposed a new levelized rate of \$50/month for Small Lots and \$70/month for Large Lots.

While these rates are based on broad user categories, usage in these categories is easily obtainable and the categories depend on lot size, which directly correlates with water usage. If these users were to be left unmetered for a longer period of time, Keller Associates would recommend taking a more user specific approach. As these rates will only be used over the next several years, we feel that this is a valid approach for this situation.

The Water Facilities Planning Study (WFPS) proposed an average (system-wide) user rate increase of \$16.77/account/month. As was noted previously, this number is very close to the increase associated with the proposed usage-based rate. The proposed non-metered rate for Small Lots and Large Lots results in an increase to non-metered customers of \$11.75/month and \$24.25/month, respectively. Since the increase proposed in the WFPS falls between these two rates, the proposed non-metered rates are justified in the larger financial picture.

4.0 UNDER AND OVER CHARGING CUSTOMERS

The last two questions posed by the City ask whether the proposed rate is at risk of over- or under-charging drinking water customers. The City does not want to increase rates frequently, but also wishes to avoid excess funds. Having closely analyzed the water department's funding sources using the WaterWorth model, the City can have greater confidence in rate stability over the planning horizon used.

Based on the observations noted above, it appears that the net increase in funds is in line with the funding needed to complete the projects identified in the Water Facilities Planning Study (WFPS). The City also has the tools now to determine whether lowering a rate would be appropriate in the future when debt service is retired or if infrastructure needs have been met for the near future.

We recommend that the WFPS be updated every five years in order to identify changing system needs. It is possible that additional projects will be identified at that time to maintain compliance with the Drinking Water Rules. The City's rate structure should be re-evaluated and adjusted periodically.

The first few years of implementing a usage-based rate in particular may change user behavior in unexpected ways. While the demands used in the WaterWorth model have been adjusted to account for 20 percent less usage due to conservation, only time will tell what the long-term conservation impacts of the new rate will be. The infrastructure needs of Ammon's water system may also look very different by the end of the planning horizon. Just as it is recommended that



the WFPS be updated regularly, so should the WaterWorth model be updated regularly in order to see if desired funding keeps pace with expenditures.

5.0 ORDINARY AND NECESSARY NATURE OF SYSTEM OPERATION

Regarding the City's ability to justify the rate increase, every project recommended by the study addresses an existing system need. We consider these improvements to be ordinary and necessary expenditures. The City is considered to be doing only what is necessary to continue providing essential existing services to its customers. The infrastructure projects found in the WFPS all address system needs.

Creating a dedicated Infrastructure Renewal budget puts a funding mechanism in place to allow the City to address its own infrastructure needs and makes the City more capable of responding quickly to problems impacting its customers. By moving to a usage-based rate, the City of Ammon is promoting a sustainable and equitably-funded water system.

6.0 RECOMMENDATIONS

While Keller Associates' involvement during the WaterWorth rate development was relatively limited, we feel that the premise behind the proposed rates is sound. If model assumptions and inputs have been thoroughly vetted, then the resulting funds will be sufficient to fund necessary system infrastructure projects. The City's proposed rate structure meets the City's target funding. While the WaterWorth infrastructure project budgets are justified as necessary expenditures, they should be revisited regularly to ensure that budgets meet forecasted needs.

Keller Associates recommends that the City of Ammon adopt a usage-based rate structure. It is our opinion that basing user rates on actual consumption is the most equitable means of charging customers for the water provided to them by the City. Regardless of the type of rate used, water rates need to be increased from where they currently stand in order to fund current system needs identified in the Water Facilities Planning Study and Keller Associates does not recommend leaving rates as presently constituted. We recommend adopting the metered and non-metered rates as proposed as a means of not only basing user charges on consumption, but also to set in place an adequate funding mechanism that will allow the City to maintain drinking water services that are safe and reliable.





City of Ammon, Idaho
Water Facilities Planning Study

ID#	Item	Cost	Need Addressed
Work to be Contracted (Start in 2018)			
WH TANK AND BS	2.0 MG Tank and 3,000 GPM Booster Station	\$ 3,849,000	Storage and Delivery
ZONE 2 SPLIT	Split Zone 2 into lower and upper subzones	\$ 632,000	Low Pressure, Fire Flow
QL RDG LOOP	8-inch loop from Foothill Rd to Sharptail Rd	\$ 69,000	Low Pressure, Fire Flow
ORIGINAL TOWNSITE	Replace undersized and failing water lines	\$ 5,951,000	Undersized and Leaking Lines
WELL 6*	Well, Tank, and Booster Station Improvements	\$ 1,015,000	Supply, Storage, and Delivery
W6 STORAGE*	Additional 0.5 MG Storage at Well 6	\$ 1,457,000	Storage
Total Contracted		\$ 12,973,000	

ID#	Item	Cost	Need Addressed
Work Performed by City Water Department			
ASPEN LN	Replace 2-inch line with new 8-inch line and hydrant	\$ 63,000	Undersized Line
1st ST LOOP	12-inch loop from Curlew to 1st St.	\$ 294,000	Looping and Fire Flow
LDY HK LOOP	8-inch loop to Crowley Rd	\$ 80,000	Looping and Fire Flow
SOUTH LOOP	16-inch loop from Sunnyside to Township	\$ 888,000	Looping to South Side
COTTAGES LOOP**	12-inch connection from Sunnyside to Tildy Ln	\$ 183,000	Low Pressure, Fire Flow
Total Water Department		\$ 1,508,000	

ID#	Item	Cost	Need Addressed
Developer Requirements			
WH WELL	16-inch dia. X 350-foot, 2,600 gpm Well	\$ 257,000	Supply on South Side
WH WELLHOUSE	15' X 30' Wellhouse w/generator	\$ 777,000	Supply on South Side
FOX HLW LOOP**	8-inch loop in Fox Hollow Subdivision	\$ 149,000	Looping and Fire Flow
Total Developer		\$ 1,183,000	

Total All \$ 15,664,000

*Improvements at Well 6 are not required to meet immediate deficiencies but should be pursued as system demands warrant.

**To be completed only if developer activities (Fox Hollow) or optimization efforts (The Cottages) do not address these distribution issues.

The cost estimate herein is based on our perception of current conditions at the project location. This estimate reflects our opinion of probable costs at this time and is subject to change as the project design matures. Keller Associates has no control over variances in the cost of labor, materials, equipment, services provided by others, contractor's methods of determining prices, competitive bidding or market conditions, practices or bidding strategies. Keller Associates cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the cost presented herein.

