#### **RESOLUTION NO.**

# A RESOLUTION CONCERNING WATER AND SEWER UTILITY RATE STRUCTURES

## **Findings**

- A. The City's current water and sewer rate structures retain many aspects of the rate structures in effect when the system had no residential water meters to track usage and no asset management system to track costs.
- B. City customers continue to increase efficiency and the estimated indoor use by residential customers for 2013 was approximately 55 gallons per capita per day (gpcd), well below the national average of 65 gpcd for "non-conserving" households and closer to the average of "conserving households," which is 45 gpcd according to the American Water Works Association (AWWA) Household End Use of Water Without and With Conservation (1997).
- C. Although rates have increased to take into account rising costs due to system capital improvements, the rate structures for water and sewer have continued to include flat fees and allowances that are perceived to create inequities by not adequately considering use.
- D. The rate setting process we conducted for rate modernization includes nationally accepted rate development procedures defined in the AWWA Rate Manual and includes three steps: establish the system revenue requirement, conduct a cost of service analysis, and design the rate structure for how we collect the total revenue target.
- E. The revenue requirements for the City's water and sewer systems were established through extensive master planning processes. A Water Master Plan, A Water Management and Conservation Plan, System Optimization Study, and Public Facilities Plan were completed in 2011 with approval of major capital projects. A Sewer Collection System Master Plan with a 20-year Sewer Financial Plan, System Optimization Study, and the Public Facilities Plan were completed in 2014. Rates have been adjusted to account for the approved capital costs associated with implementing these plans. Additional future increases are expected.
- F. A cost of service analysis was conducted for the water and sewer utilities following nationally accepted methodology defined in the AWWA Principles of Water Rates, Fees, and Charges, M1 Manual and the Water Environment Federation Financing and Charges for Wastewater Systems Manual 27 to establish an equitable distribution of costs that considered the differences in providing service based on usage characteristics and facility requirements. The results of these analyses were shared with Council in rate workshops on September 24, 2014 and October 14, 2014. At that time, Council chose not to strictly adhere to the revenue targets by class established by the cost of service analyses. The Council chose instead to conduct a rate design process balancing cost equity with other rate objectives such as affordability, efficient use and revenue stability.
- G. A previous rate committee recommended iterations of rate design for water

including evaluation of tiered rates in 2008, and reducing the allowance from 600 cubic feet (cf) to zero over time. The allowance was reduced at that time to 400 cf. Another attempt to reduce the allowance from 400 cf to zero was considered in 2012 through a process conducted by Council and the Infrastructure Advisory Committee. This failed to achieve consensus as there were too many other variables to implement a full rate structure modernization at that time, and a decision was deferred.

- H. Previous iterations of rate design for sewer focused on development of the Extra Strength Charge (ESC) program. Prior to 2012, the City imposed an additional charge for certain sewer customers known to discharge wastewater with Biochemical Oxygen Demand (BOD) or Total Suspended Solids (TSS) in excess of average household effluent. As of 2012, only 12 customers were paying the extra strength charge. The City suspended the ESC program in 2012 because it believed that other customers might also be discharging at extra-strength levels and not in the existing program. The City started a process for identifying extra-strength dischargers and developing a new rate structure for those customers based on the impact of their higher strength wastewater. The ESC Advisory Committee recommended in May 2014 that Council evaluate a holistic sewer rate structure change across all classes.
- I. In support of the current rate design process, numerous rate design scenarios were prepared to address Council objectives that rates be:
  - Equitable
  - Affordable
  - Promote efficient use
  - Provide revenue stability
  - Support rate stability
  - Publically acceptable
  - Administratively feasible
- K. The Council, with community input, has reviewed a range of rate structure scenarios and the estimated bill impacts for different customer classes. The Council selected proposals on November 5, 2014 to take forward into a public comment period. The water and Sewer rate structure proposals were shared with the public during the month of November online, in open houses, in press releases and through direct outreach to interested parties. Feedback from the public comment period was shared with Council on December 3, 2014 at which time the Council chose to move forward with the changes to the sewer rate structure as proposed. They chose to move forward with the changes to the water rate structure as proposed with one minor revision of setting the revenue generated from the monthly meter charges to 40% of the total revenue. The Council wishes to establish the rate structure principles in this resolution to govern the way in which the City collects its water and sewer rates to meet system revenue needs on an equitable basis.

Based on these findings,

#### THE CITY OF BEND RESOLVES AS FOLLOWS:

Section 1. City staff shall continue to collect and analyze utility system water use and related data by customer class. Utility billing business processes and

software shall be upgraded as needed to provide data collection, management, analysis and forecasting to allow continued cost-of-service analysis and more refined rate structures to be established over time based on changing customer usage characteristics.

### Section 2. The new water rate structure shall:

- At this time, maintain the existing single rate structure for all customer classes, charging based on meter size and volume used rather than establishing separate charges for each customer class, with the intent to revisit cost of service and rate structure by customer class once the new billing software and related business processes have been updated. This is expected to occur once new billing software has been acquired and installed, which is scheduled for the end of the 2017 calendar year.
- Adopt defensible, standard methodology for calculating monthly meter charges using American Water Works Association (AWWA) meter capacity equivalent factors. Meter equivalents are used because it is representative of the infrastructure required to serve different meter sizes. Capacity factors are based on the safe operating capacity of a meter. The calculation of the monthly meter charges is as follows:
  - (a) Account charge = (total customer and fire costs ÷ total accounts)
  - (b) Meter capacity equivalent (MCE) factors from AWWA
  - (c) MCE charges = MCE cost x MCE factor.
    Where MCE cost includes meter & service costs plus a portion of peaking costs ÷ total equivalent meters)
  - (d) Monthly fixed charge = a + c
- Eliminate the 400 cubic foot allowance and bill water customers for all volume of water delivered.
- Collect at least 40% of the total revenue from the fixed monthly account charges to protect revenue stability.
- Update and standardize process for assigning meter sizes based on Unified Plumbing Code, and continue to update and automate collection of customer data to enable future modeling of usage characteristics and moving toward customer specific rate structures in the future. This will also support targeted conservation efforts such as measurement of any irrigation water budget rate pilots and other class specific rate structures to be developed and analyzed in the future.

#### Section 3. The new sewer rate structure shall:

- Maintain rate structure by customer class designations, but expand to include Multi Family Residential as its own class with a unique rate structure as well as Non-Residential Extra Strength Charge categories of Low, Medium, High, and Super High.
- Eliminate the flat rate for Single Family Residential customers, adopting a monthly charge plus volume charge.

- Collect sewer volume charge based on monthly average winter water usage to isolate the indoor water usage as an estimate of wastewater discharge volume.
- Eliminate Non-Residential 1,000 cubic foot volume allowance and bill for all volume.
- Implement an Extra Strength Charge program by assessing a monthly program fee and a slow phase in of increased volume charges for the Extra Strength categories of Low, Medium, High, and Super High. This enables the City to begin recovering system costs imposed by higher strength wastewater discharge from those Extra Strength customers, while tempering initial impact to these businesses.
- Revisit the Extra Strength Charge program at the end of the first year
  of implementation to review costs and the number of program
  participants. Adjust the program fee and volume charges for the Extra
  Strength Categories to recover more of the costs to the system of
  higher strength wastewater discharge.
- Section 4. Sections 1-3 of this resolution address rate structure only. The actual water and sewer rates to be imposed will be based on both the changes to the rate structure identified in this resolution and the revenue needs of the water and sewer systems. The rates to be charged may be affected by decisions on the following:
  - Juniper Utility Divestiture
  - Reserve Funding Polices for Revenue Stability and System Repair and Replacement
  - Assistance Program Funding for Low Income and Senior/Disabled Customers
  - Additional Conservation Funding for staffing and budget to effectively implement new programs and increased Education and Outreach
  - Previously Forecasted Rate Increases
  - Changes to Sewer and Water System Development Charges
  - Elimination of Legacy Rate Agreements
  - Service Area Protection
    - Water restriction of drilling new wells
    - Sewer funding for Local Area Improvements for new connections
  - Establishing Standby Fees for Water and Sewer
  - Sewer Volume Charge Basis Winter Quarter Average Policy
- Section 5. This resolution takes effect immediately upon adoption. Implementation of the changes in water and sewer utility rates are scheduled to go into effect July 1, 2015 with Council adoption of the new fee schedule.

Adopted by roll call vote by the City Council on December 17, 2014.	
YES:	NO:
	Jim Clinton, Mayor
Attest:	
Robyn Christie, City Recorder	
Approved as to Form:	
Mary Winters, City Attorney	