UTILITY SYSTEMS UPDATE

WATER, WASTEWATER AND STORM DRAINAGE UTILITY SYSTEMS

City Council Work Session
April 10, 2024

WORK SESSION OBJECTIVES

UTILITY SYSTEMS UPDATE

- WATER
- WASTEWATER
- STORM DRAINAGE

FINANCIAL

- REVENUE / EXPENSE TRENDS
- RATE COMPARISON
- PROPOSED RATE ADJUSTMENT

WATER SYSTEM

- With the completion of the New Water Treatment Plant (WTP) in 2018, City Staff has been focusing on water main replacement projects, demolition of the Old WTP and some minor projects at the New WTP.
- Green Peter Reservoir Drawdown impacts to the Water Treatment Plant have now become an unplanned priority for Staff.
- The WTP has produced over 576.06 million gallons of water in FY 23/24 (through February 2024).
- Increase of approximately 22 million gallons over the same time period for the previous year. Primarily tied to summer months of 2023 and new meters coming online.

WATER SYSTEM

- City Staff maintain 85.46 miles of distribution main throughout Lebanon. There are multiple large and small diameter water mains that are in need of replacement throughout the City.
- Focus on replacing mains with highest priority, which include those with leaks and those that are undersized.
- Additional membranes will be added to the Water Treatment Plant this next fiscal year to ensure ability to meet water demand during times of high turbidity on the South Santiam River. Primarily due to the drawdown.
- Maintenance Distribution Crews spent time repairing leaks, installing new meters and general upkeep of the system.

WATER SYSTEM

- Average yearly funding for line replacement allows for approximately 2500-3000 lineal feet. This depends on size, location and bidding climate.
- Equates to an approximate 160-year replacement cycle.
- Typical life cycles on ductile iron waterline (what the City currently installs) is approximately 75 years.
- Replacement continues to be well below the recommended replacement cycle.

WATER SYSTEM

Upcoming Projects

- **Water Treatment Plant** - addition of filter cartridges to complete buildout on existing racks.
- **Seventh Street Waterline Replacement** (Oak to F Streets). Construction is currently underway and includes street reconstruction, sanitary sewer, and storm drainage replacement.
- **Stoltz Hill Road Waterline Extension** – in conjunction with the Airport Road / Stoltz Hill Traffic Signal Project. Proposed to bid in summer of 2024 pending right of way.
- **Grant Street Waterline Replacement** (Main to 5th Streets) FY 24/25 pending ODOT approval of access ramp design at Main Street (Highway 20) and UPRR Permit.
- **Sherman Street Waterline Replacement** (Main to 5th Streets) FY 25/26

WASTEWATER SYSTEM

- The Wastewater Plant has treated approximately 968 million gallons of sewage in FY 23/24 (through February 2024).
- Replacing pumps in the Westside Interceptor Pump Station.
- Wastewater Treatment Plant Facilities Plan Update. Preliminary findings indicate multiple large projects to complete over the next twenty years. The top two priority projects are estimated to cost $35 million. Completion of the master plan is scheduled for spring/summer 2024.

WASTEWATER SYSTEM

- Continue to see a substantial increase in sewer lines and laterals that are failing.
- City Maintenance Crews cleaned over 16,000 lineal feet of sanitary mainline and televised almost 13,775 lineal feet over the last year.
- There are approximately 65.05 miles of sanitary sewer main within the collection system.

WASTEWATER SYSTEM

- Current funding on average replaces approximately 2,000 to 2,500 lineal feet of sewer mainline pipe per year. This depends on size, location and bidding climate.
- Equates to a 170-year replacement cycle.
- Typical life cycle for older concrete/clay pipes is 50-75 years. Newer PVC pipe has a lifecycle of approximately 100 years.
- Aging pipes contribute a substantial amount of infiltration and inflow (I&I) increased loading on the Wastewater Treatment Plant. This is driving the priority projects at the WWTP.

WASTEWATER SYSTEM

Upcoming Projects

- **Westside Interceptor** update
- **Third Street Alley Sewer Replacement** FY 24/25
- **Stoltz Hill Road Sanitary Sewer Extension** (part of Airport Road Signal Project) FY 24/25
- **Wastewater Treatment Plant Facility Plan** estimated completion spring/summer 2024
- **Grove Street Sanitary Sewer Project** FY 24/25

STORM DRAINAGE SYSTEM

- There are approximately 62.88 miles of storm drainage mains and 51.93 miles of open channel drainage ways with the collection system.
- Currently drainage mainline replacement is approximately 1,500 lineal feet every two to three years based on the limited funding the Drainage Utility generates (approximately $250 per year)
- This equates to a very lengthy replacement cycle.
- The Maintenance Collections Crew spends a large amount of summertime months mowing drainage ways.

STORM DRAINAGE SYSTEM

- The new Storm Drainage Master Plan has a Capital Projects section which recommends multiple improvements and upgrades along with the typical life cycle replacements within the storm drainage system.
- All of these factors mentioned above will require additional funding to meet requirements and keep the system operational.

STORM DRAINAGE SYSTEM

Upcoming Projects

- **Willow Street Storm Extension** FY 24/25
- **Minor Capital Projects** replacing drainage pipe, manholes and catch basins.
- **Drainage System** video inspection, cleaning, mowing (natural and ditched drainage ways) and repair.
- **TMDL** Total Maximum Daily Loading

FINANCIAL

REVENUE

All three systems are on track to be at or above projections.

EXPENSES

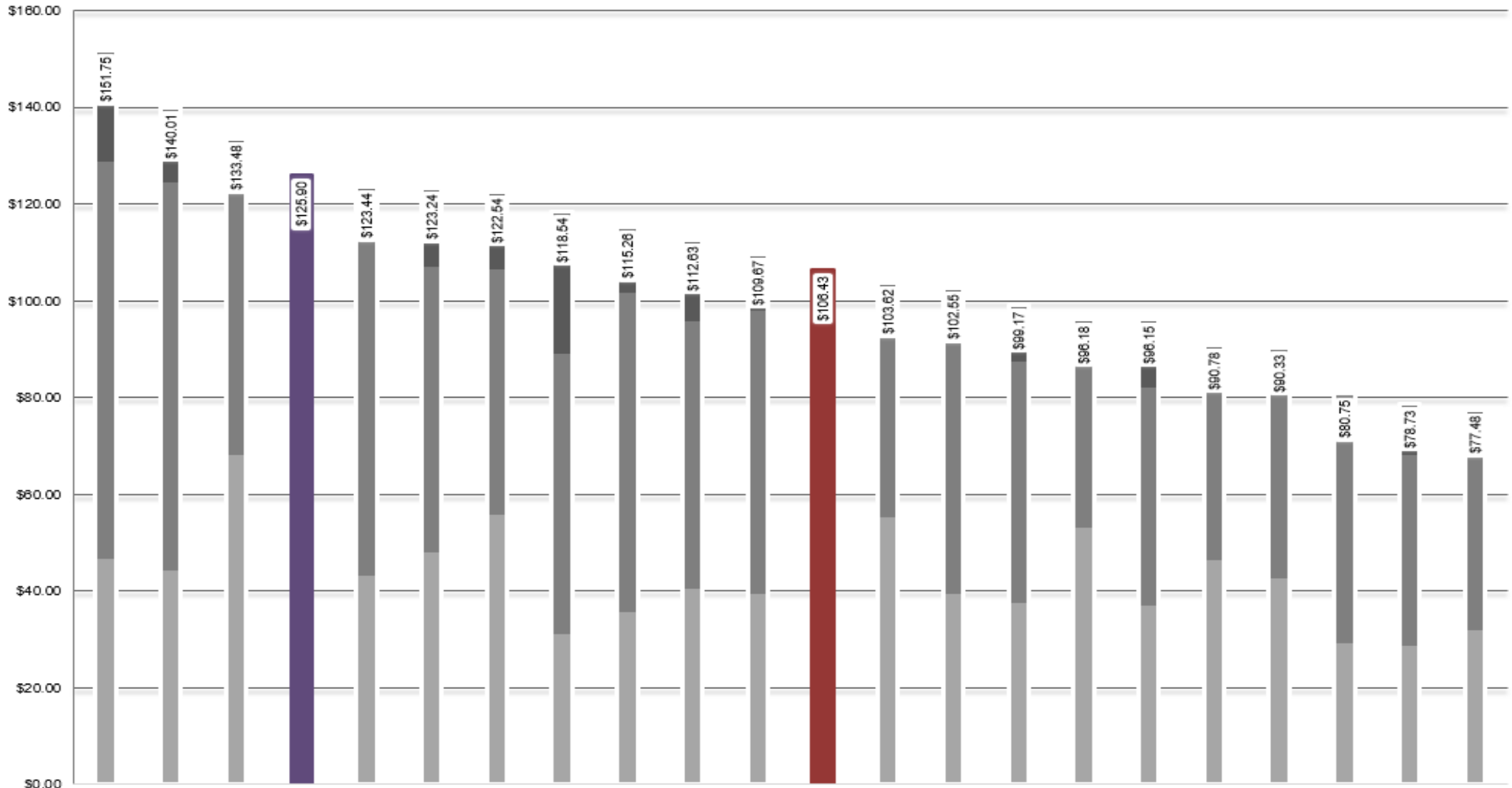
All three utilities are on track to come in at or slightly under budget.

FINANCIAL

Proposed Methodology – **Based on 5 units for Water and Wastewater**			
Utility	Current Average	Proposed Average	Change
Water	$51.01	$52.03	2.00%
Sanitary Sewer	$66.25	$68.56	3.50%
Storm Sewer	$4.82	$5.30	10.00%
Total	**$122.08**	**$125.89**	**3.03%**

The above table shows how rate increases would be completed with a 3.03% bottom-line change and differential changes to each utility.

2024 Utility Rate Comparison - Proposed



	Lake Oswego	Newberg	Sweet Home	Lebanon	Newport	Albany	Tigard	Mil waukie	Oregon City	St. Helens	Wilson ville	Average	The Dalles	Philomath	Forest Grove	Redmond	Dallas	Ashland	Grants Pass	Woodburn	Corvallis	Lincoln City
Storm	$23.11	$15.63	$3.00	$5.31	$9.91	$16.30	$16.05	$29.47	$13.68	$16.79	$11.90	$11.00	$2.00	$3.20	$11.70	$8.51	$14.00	$5.43	$8.81	$0.00	$10.55	$1.05
Sewer	$82.03	$80.27	$62.24	$68.56	$70.36	$59.03	$50.59	$57.92	$65.92	$55.33	$58.49	$53.09	$46.32	$59.85	$49.94	$34.56	$45.21	$39.00	$38.81	$51.67	$39.56	$44.64
Water	$46.61	$44.11	$68.24	$52.03	$43.18	$47.91	$55.90	$31.15	$35.66	$40.52	$39.28	$42.34	$55.30	$39.50	$37.53	$53.11	$36.94	$46.35	$42.71	$29.08	$28.62	$31.79
Rate	$151.75	$140.01	$133.48	$125.90	$123.44	$123.24	$122.54	$118.54	$115.26	$112.63	$109.67	$106.43	$103.62	$102.55	$99.17	$96.18	$96.15	$90.78	$90.33	$80.75	$78.73	$77.48

Average Single Family Residential Charges Based on Five Units (3,740 gallons)


QUESTIONS / COMMENTS