Council Meeting of October 12, 2016

Agenda Item No. 8e

REQUEST FOR COUNCIL ACTION

SUBJECT: Update Water Rates

SUMMARY: Increase residential and commercial water rates to meet rising costs of operations and wholesale water costs. Also, create a new "cost plus" Large User commercial water rate.

FISCAL AND/OR ASSET IMPACT: About $1.2M additional annual revenue from regular customers, plus about $120,000 from one existing Large User. Potential additional revenues from future Large Users (data centers, water bottlers, food production, manufacturing, etc).

STAFF RECOMMENDATION:

Staff supports the City Manager's recommendation. Staff also recommends using a consultant in near future for a Cost of Service Analysis and comprehensive utility rate study (last done in 2006) to create long-term solution.

MOTION RECOMMENDED:

"I move to adopt (Option A: City Manager recommendation, Option B, Option C, or other) water rates with tentative effective date of _____ after a future public hearing to adopt a revised Uniform Fee Schedule."

Roll Call vote required

Prepared by:
Stephen Glain
Mgt. Asst. to City Mgr.

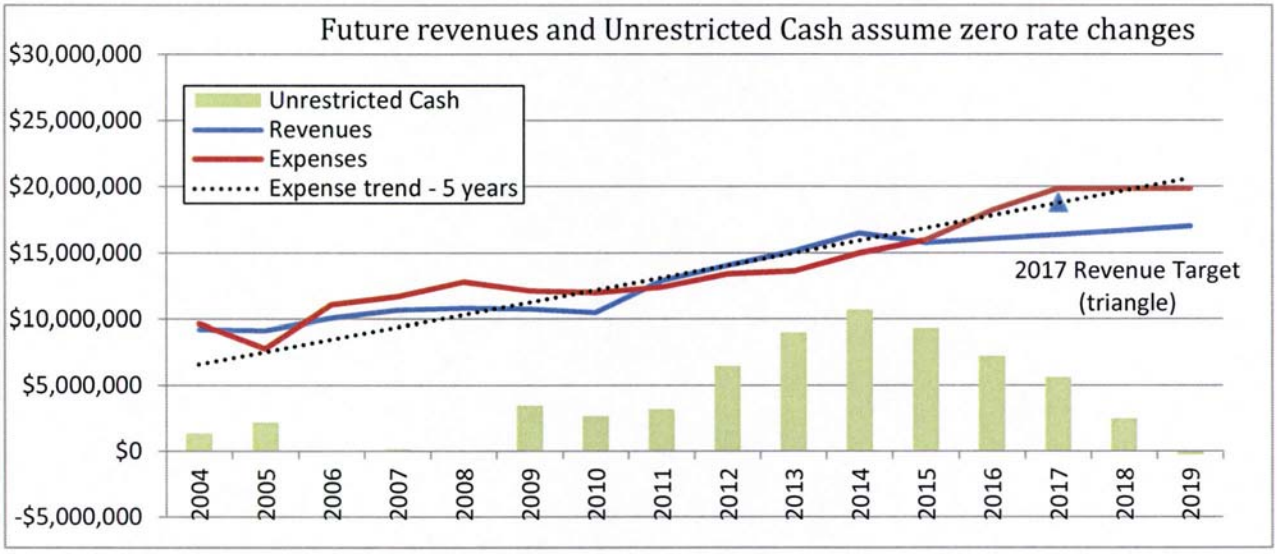
Recommended by:
FOR
Wendell Rigby
Public Works Director

Reviewed as to Legal Sufficiency:
David Brickey
City Attorney

Recommended by:
Mark R. Palesh
City Manager

BACKGROUND DISCUSSION:

Since rates were last changed in 2013, expenses have increased in Personnel, Operations, Water Costs (Source of Supply), and Capital Projects. A rate increase of 14.4% would bring total revenues up to the projected 5-yr trend of expenses (2016 staff Utility Rate Analysis, audited by Keddington & Christensen, LLC).



City Manager's Recommendation: 7.2% increase to all residential and commercial rates (fixed and volume charges). This recommended increase is half of the 14.4% number in the table above, in an effort to minimize the impact on ratepayers and spread future cost increases over multiple years. The cost of the proposed new Public Works building will also be shared by all enterprise funds (Water, Sewer, Storm, Solid Waste, Street Lights, etc.).

See rate option details on next page.

Rate Options

Option A

City Manager's recommendation:

- **7.2% increase** for all Availability and Commodity charges (all commercial & residential customers)
- **Large User rate** (>500,000 gal/day) = wholesale cost + 6%
- Keep existing residential tiers and single tier commercial structure.

Option B

- Menu of line-item increase options

Expense Category	Annual Expense Increase since last rate change	Monthly Fee Increase avg Residential customer	Rate Increase (for Availability and Commodity Charges)
*Personnel	$ 145,250	$0.37	0.9%
Operations	$ 926,367	$2.38	5.7%
Source of Supply	$ 303,186	$0.78	1.9%
Cap. Projects	$ 988,069	$2.54	6.0%
Totals	$ 2,362,871	$6.07	**14.4%

*COLA already approved by Council
**14.4% would bring total revenues up to the projected 5-yr trend of expenses (2016 staff Utility Rate Analysis, audited by Keddington & Christensen, LLC).

- **Large User rate** (>500,000 gal/day) = wholesale cost + 6%
- Keep existing residential tiers and single tier commercial structure.

Option C

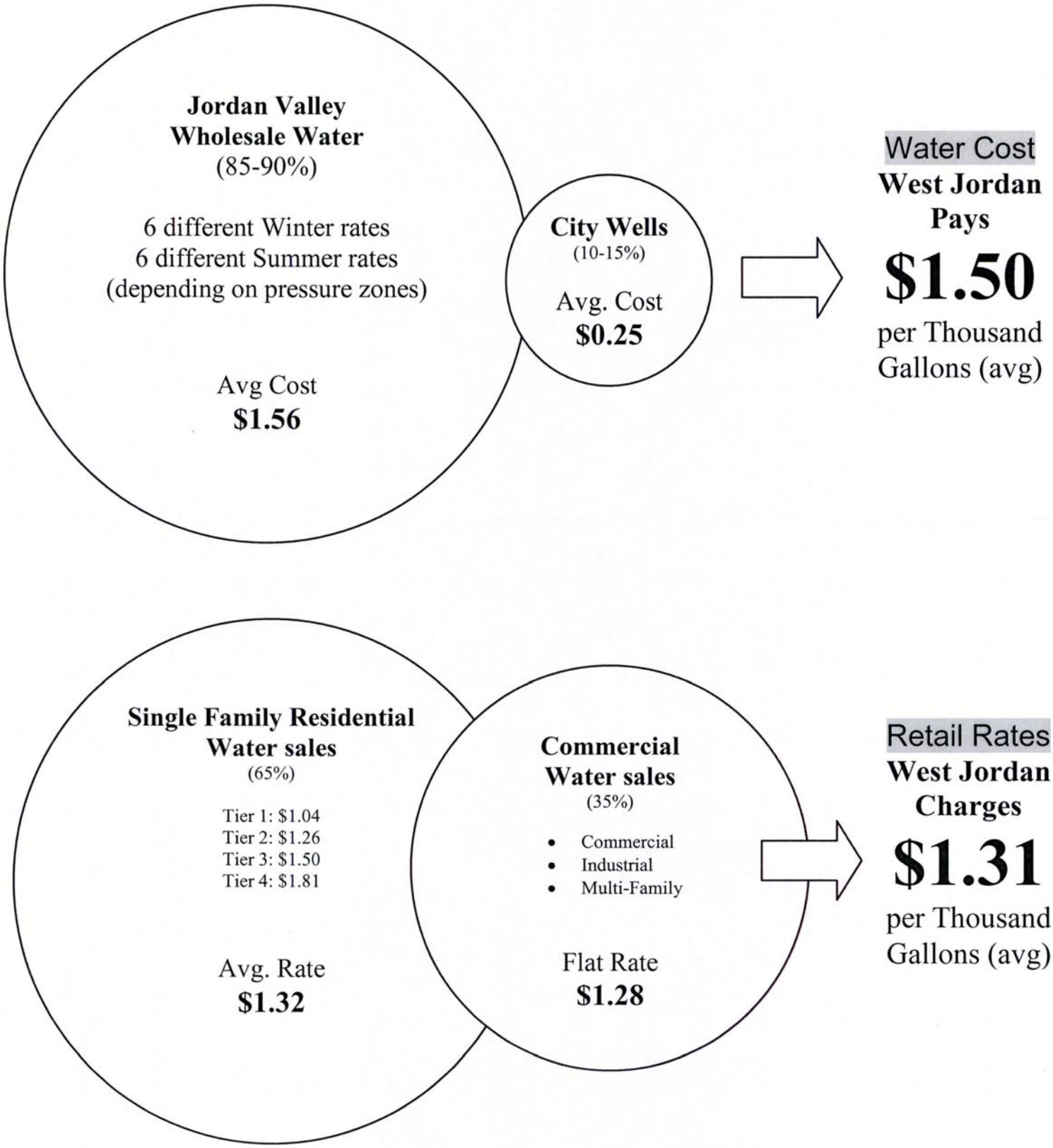
- **Availability Charge:** $26.43 for Residential Customers (up from $23.11). Increase 14.4% for all residential and commercial customers (various rates, by meter size).
- **Commodity Charge:** $1.50/1,000 gallons for ALL residential and commercial customers
- Eliminate existing 4 residential tiers
- **Large User rate** (>500,000 gal/day) = wholesale cost + 6%

Large User commercial water rate

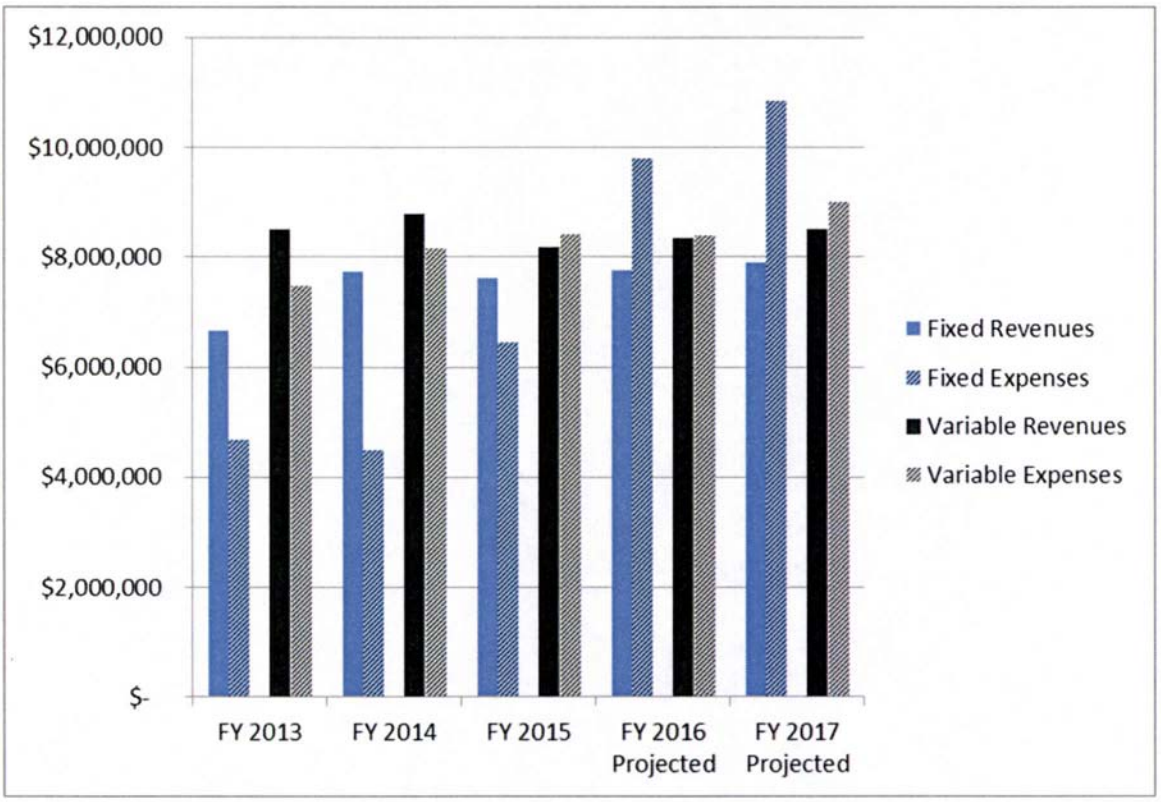
- Large User = any commercial customer using 500,000 gal/day or more
- Large User rate = wholesale cost of water + 6% (per Jordan Valley pressure zones)

Currently, this Large User rate would only apply to one utility customer (Dannon Company), whose water fees would increase by about $120,000 per year. The City's previous largest customer, Fairchild Semiconductor, has gone out of business. The policy would apply to any future large customers that meet the criteria. The 500,000 gal/day threshold can be adjusted, if Council chooses to do so.

Water Cost vs. Retail Rates



Expenses and Revenues: Fixed vs. Variable



Fixed Expenses = personnel, operations, supplies, materials, equipment, etc. (generally funded by Fixed Revenues aka "Monthly Availability Charges")

Variable Expenses = wholesale water purchases from Jordan Valley, well pumping costs (generally funded by Variable Revenues aka "Commodity Charges" per 1,000 gallons)

The City is losing a small amount of money on total water sales vs. total water purchases (variable costs) due to annual Jordan Valley wholesale cost increases. Another concern is potential shortfall for capital projects (fixed costs), which are generally funded by fixed monthly "Availability Charges". The City attempts to match fixed revenues/expenses and variable revenues/expenses for these reasons:

- Fluctuations in water consumption (weather, drought, conservation, etc) generally pay for themselves. We simply buy more or less water according to demand, and pass on the cost to customers through "Commodity Rates" (cost per 1,000 gallons).
- Fixed revenues from "Availability Charges" are stable and support ongoing operations regardless of how much water is sold.

UTILITY RATE ANALYSIS 2016

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INTEROFFICE MEMORANDUM

TO: Mayor and City Council Members

CC:

FROM: Mark R. Palesh

SUBJECT: Annual Utility Rate Analysis

DATE: April 7, 2016

City staff has completed the annual Utility Rate Analysis in preparation for the coming fiscal year 2016-17. The analysis includes four enterprise funds (Water, Sewer, Solid Waste, Storm Water) and Street Lights (General Fund). The analysis uses an industry standard methodology, which was provided by rate consultant HDR Engineering. Utility rates are "cost-based" and attempt to meet the full revenue requirements of the utilities, including personnel, operations, bond payments, and "existing/replacement" portions of capital projects ("growth" portions are paid by impact fees).

The analysis was reviewed by our financial auditors, Keddington & Christensen, LLC. The auditors' report confirms that the methodology and projections are reasonable, and mentions: "It appears that if the rates stay the same with the projected increased capital costs, the City will have negative unrestricted cash balances in a fairly short time" [about 1-3 years]. These time frames will be shortened if cash balances are used for other non-utility purposes, such as funding a new Public Works building.

Rates were last adjusted in July 2013. Expenses in all utilities have increased at the normal rate of 4-8% per year, so revenues have fallen behind and now need to increase to cover 3 years' worth of cost increases. Many of our expenses are beyond City control, such as wholesale water purchases, electricity, supplies, materials, service contracts, wastewater treatment costs, and state/federally mandated storm water standards.

Staff supports **Recommendation A**, which would raise residential and commercial rates to match current expense trends (about $11.84 increase for typical residential monthly bill). **Recommendation B** would raise rates half as much (about $6.52), but all utilities would continue to operate at a loss and reduce cash balances further. See attached summary of capital projects that would need to be postponed in each scenario.

In the future, the City might benefit by adopting these two industry standards recommended to West Jordan by HDR Engineering:

1. "Small [frequent] rate adjustments are preferred over large [infrequent] rate adjustments."
2. "The City should establish, dedicate, and maintain reserves to adequately meet known and estimated future obligations" (cash balances).

Mark R. Palesh,
City Manager

Utility Rate impacts on Capital Projects

Fiscal Year 2016-17

Rate options 1, 2, and 3 would each provide different levels of revenue. Regular operations, maintenance, and personnel costs will be funded in all three scenarios. However, some capital projects may need to be postponed depending on revenues for each scenario, unless an alternate funding source is found. This approach uses ongoing revenues (utility rates) for ongoing annual capital projects, and preserves cash balances for emergency or future needs.

	Project	Cost	**Option 1** Full rate increase	**Option 2** 50% of full increase	**Option 3** Zero rate increase
			Postpone	Postpone	Postpone
Water	Replace 12,950 linear feet AC line	$1,778,000		x	x
	Well Emergency Generators & equip	$2,278,000			x
Sewer	18" upsize Old Bingham Hwy	$301,630		x	x
	Twin Oaks, Taymar St. pipe upgrades	$245,000		x	x
	1300 West pipe burst	$950,400			x
Storm*	*Barney's Wash Detention pond relocation for New Recreation Ctr.	$1,660,000	x	x	x
	*Storm audit requirements (costs TBD).	TBD	x	x	x
	Axel Park Rd. storm improvements	$459,450		x	x
	O'Reilly piping	$75,000			x
	Ray Meldrum drainage	$225,000			x
Solid Waste**	ACE Disposal contract increases	$142,000		x	x
Street Lights	New lights for dark neighborhoods	$250,000		x	x

*Note: These costs were unknown at the time of rate analysis. Storm rates would need to be even higher than Option 1 to cover Detention Pond Relocation and Storm audit requirements, or find alternate funding source. Storm fund cash balance is committed to other capital projects.

**Note: Solid Waste fund will be negative by June 2017 unless rates increase.

K&C
Keddington & Christensen, LLC
Certified Public Accountants
Gary K. Keddington, CPA
Phyl R. Warnock, CPA
Marcus K. Arbuckle, CPA

INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES

Honorable Mayor and
Members of the City Council
City of West Jordan
West Jordan, Utah

We have performed the procedures enumerated below, which were agreed to by the City of West Jordan (the City). The City of West Jordan's management is responsible for the city's accounting records. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in the report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings are as follows:

1. Review projected utility rates for reasonableness. We feel that the methodology used in the utility rate study is sound. The way it incorporates capital expenditures and debt payments are reasonable. The utility rate study estimates future operating revenue and expense based on historical data and knowledge of individuals who closely monitor the budget, which appears reasonable.
2. Review projections of future cash balances. We feel the utility rate study has reasonable cash projections. It appears that if the rates stay the same with the projected increased capital costs, the City will have negative unrestricted cash balances in a fairly short time. The City needs to determine what it would like its cash balances to be. If the City would like cash balances to be similar to what they are now, then it needs to raise the rates to fully cover all costs. If the city increases the rates, but not enough to cover the actual cost, which may differ from those estimated, then cash balances will continue to decline.
3. Based on the projections, determine the possible effect on net position. When capital purchases are made, net position (fund balance) increases in the invested in capital assets net of related debt area. In the utility rate study, the actual cost of capital projects is taken into account on a cash basis like the budget is. When converted to Generally Accepted Accounting Principles (GAAP) accounting, the capital expenditures are removed from the expense accounts and recorded on the balance sheet. Those items are then depreciated over 5 to 40 years. For example if a capital project costs $100,000 and is depreciated over 10 years, then in GAAP accounting, only $10,000 would be included on the income statement as depreciation expense. The budget and the utility rate study are both using the cash basis (as they should) and would include the $100,000 as current year expense. The $90,000 difference increases the net position (fund balance) in the invested in capital assets net of related debt area (assuming the asset is purchase without the use of debt). The unrestricted fund balance will typically move up and down in a similar pattern as the unrestricted cash balances and accounts receivable (the solid waste fund is different because of the investment in joint venture).

4. Review future revenue and expense projections for reasonableness. In each fund, actual numbers for revenues and expenses were compared for fiscal year (FY) 2013, FY 2014 and FY 2015 to get an average for the yearly change in the accounts. The FY 2015 numbers were then compared to the projected FY 2016 numbers and any significant differences were noted and investigated. The listed reason for the changes in the projected FY 2017 numbers were scanned for reasonableness and inquiries were made of city personnel for any clarification needed.

Our recommendations to the City are as follows:

1. Conduct an impact fee study for the sewer fund, as it appears impact fee revenue is insufficient to cover the capital needs related to future growth.
2. Revisit the capital facilities plan and ensure the plan accurately reflects the capital needs of the city over the next few years.
3. There are significant upgrades needed at the sewer plant due to federal regulations and the utility rate study anticipates paying cash upfront for those costs. Another option would be to bond for those additional costs to smooth out the utility rate increase.

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on the accounting records. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. This report is intended solely for the information and use of the City of West Jordan and is not intended to be and should not be used by anyone other than those specified parties.

Keddington & Christensen, LLC

March 18, 2016

Utility Rate Analysis

Water, Sewer, Storm, Solid Waste, Street Lights

Compiled by Stephen Glain, Mgt. Asst. to City Manager
City of West Jordan
April 8, 2016

Summary

A. Utility rates were last raised in July 2013.
B. All revenues are steady, while expenses are increasing.
C. Water, Sewer, Storm, Solid Waste are all Enterprise Funds. Street Lights is in General Fund.
D. Capital Projects "growth" portions are paid with impact fees, while "existing" or "replacement" portions are paid with user rate revenues.
E. Restricted Cash balances (impact fees) are decreasing significantly for all utility funds, and are already negative for Sewer and Storm—due to slow pace of development.
F. Capital projects for Sewer are being postponed due to insufficient impact fee revenues.
G. The City's impact fee consultant, TischlerBise Inc., will provide impact fee analysis in April 2016.
H. Council approved rate increases for Water, Sewer, and Storm in July 2013 in order to begin an "Infrastructure Replacement Fund." However, a separate fund was never created. The "replacement fund" dollar amounts approved by Council are transferred by journal entry from the regular rate revenue line item to a "capital replacement" revenue line. This only guaranteed the correct revenues the first year (2013-14) with the increased rates, but if future rate increases are postponed or insufficient, there is no additional revenue -- just a journal entry that moves the money on paper.
I. Infrastructure Replacement projects in Water and Sewer could be increased if more funding were available.
J. This analysis used the following methodology:

Step 1. Gather historical revenues, expenses, cash balances.

Step 2. Estimate expenses for FY2017 and further into the future if upcoming major expenses are known, including personnel, operations, and "existing/replacement" portions of capital projects and bond payments.

Step 3. Determine which expenses could be covered by fund balance (preferably one-time expenses) or built into utility rates (ongoing expenses).

Step 4. Set target revenues and recommend utility rates for FY2017 based on 5-yr expense trend line FY2013-2017, or further into the future if possible. This will soften any projected cost spikes while still meeting all expenses in the long term.

Staff Recommendations

1. **Preserve Unrestricted Cash balances** (rate revenues) for specific future expenses:
   - Water - increased capital projects, infrastructure replacement, AMI water meters, antennae, repeaters 2017-2019 ($5M/yr).
   - Sewer – SVWRF phosphorus/nitrogen removal equipment 2018 ($4M), grit removal equipment 2019 ($2M), and possibly subsidize impact fees temporarily for capital projects in FY2017 ($3M).
   - Storm - multiple capital projects, expanded operations to meet State Stormwater Audit requirements (costs TBD).

2. **Maintain minimum balances of Unrestricted Cash** of approximately 100% to 150% of annual operating budgets for each Enterprise Fund to absorb fluctuations in operating expenses, capital projects, and contingencies. In May 2014, the City Manager and staff submitted recommendations to City Council for minimum cash balances based on AWWA guidelines, including:
   a. 3 months Operations
   b. Annual debt service
   c. Annual capital projects
   d. Capital Replacement (2% of infrastructure assets)
   e. Contingency (up to 4% of infrastructure assets)

   Following this formula, the recommended Cash Balance is approximately 100% to 150% of the annual operating budget for each Enterprise Fund. Unrestricted Cash Balance estimates with zero rate changes are shown below:

Unrestricted Cash Balances					
	Water	Sewer	Solid Waste*	Storm**	Street Lights (General Fund)
2015	9,346,934	9,191,279	850,574	6,565,411	NA
2016	7,208,955	8,509,262	429,206	6,309,408	NA
2017	5,632,395	4,359,403	-59,157	1,826,897	NA

Unrestricted Cash Balances (% of Annual Budget)					
	Water	Sewer	Solid Waste*	Storm**	Street Lights (General Fund)
2015	59%	115%	21%	326%	NA
2016	40%	92%	10%	258%	NA
2017	28%	49%	-1%	43%	NA

*Solid Waste fund will have negative balance by June 2017, unless revenues increase (due to increasing costs and $4M transfer to Storm Fund in 2015).
**Storm cash balance will be needed to meet State Storm Water Audit requirements, and to build 70th South pipeline, and other capital projects.

3. **Improve method to ensure "Infrastructure Replacement Fund" revenues** are built into the utility rates every year. Staff always recommends the fully burdened rates, but Council may or may not approve the rate changes each year.

4. **Establish regular rate changes**, perhaps annually, to improve budgeting and capital project planning, rather than irregular rate changes. Based on multi-year histories, the average annual expense increases are fairly predictable for most utilities.

5. **Create Street Lights Enterprise Fund**. The Street Lights operations are currently in General Fund. An Enterprise Fund would help track revenues/expenses and prepare for capital replacement, especially for the older fiberglass poles that are aging ($15M assets) and eventually replace the new LED light fixtures now being installed ($3.2M assets).

6. **Utility Rate increases recommended:**

Recommendation A				
	Option	Description	FY2017 Rate Change	Approx. monthly bill change
Water	Option 1	Full Increase	14.4%	$ 6.07
Sewer	Option 1	Full Increase	15.1%	$ 3.23
Solid Waste	Option 1	Full Increase	9.8%	$ 1.20
Storm	Option 1	Full Increase	24.9%	$ 1.00
Street Lights	Option 1	Full Increase	20.2%	$ 0.35
Total:				$ 11.84

Recommendation B				
	Option	Description	FY2017 Rate Change	Approx. monthly bill change
Water	Option 2	Partial Increase	7.2%	$ 3.03
Sewer	Option 2	Partial Increase	7.5%	$ 1.61
Solid Waste*	Option 1	Full Increase	9.8%	$ 1.20
Storm	Option 2	Partial Increase	12.4%	$ 0.50
Street Lights	Option 2	Partial Increase	10.1%	$ 0.17
Total:				$ 6.52

*Solid Waste fund will have negative balance by June 2017, unless revenues increase (due to increasing costs and $4M transfer to Storm Fund in 2015). Option 1 full increase is suggested for Solid Waste in both Recommendations A and B.

Utility Rate Change Options

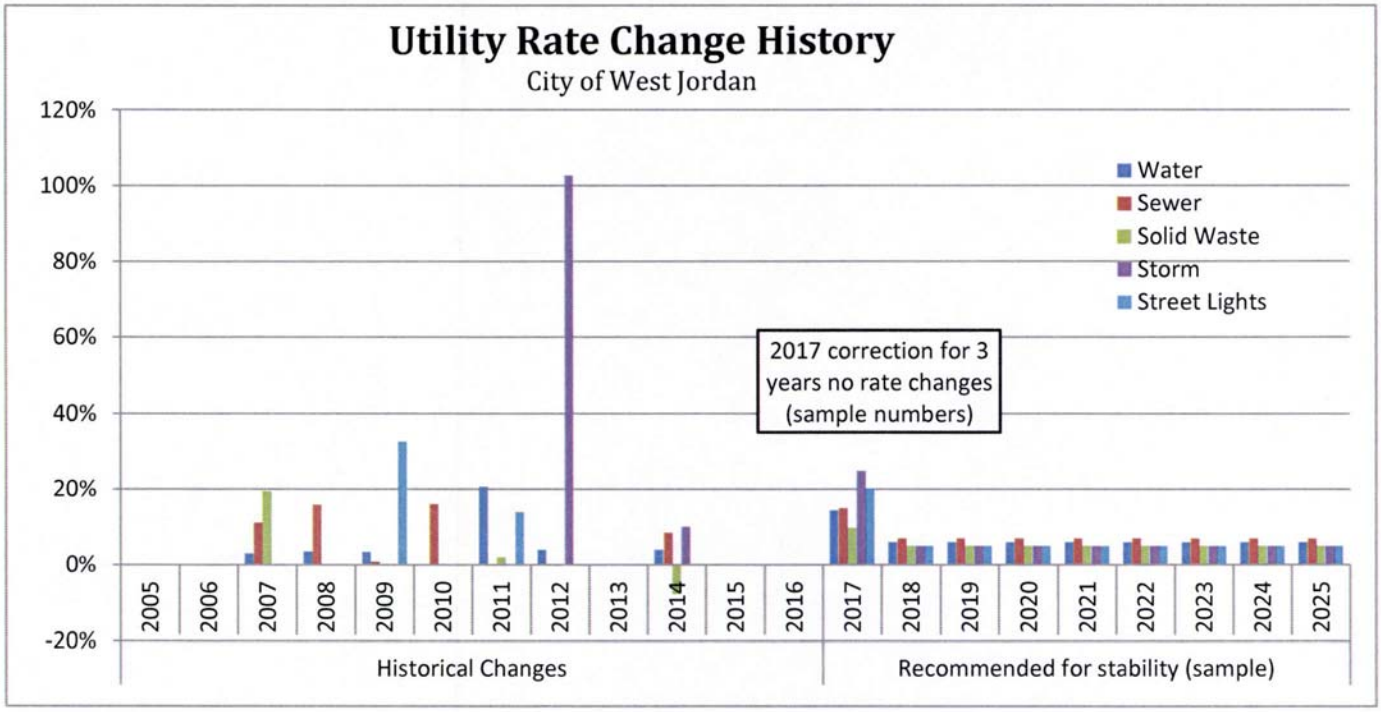
City of West Jordan
FY2016-17

Definitions	
Option 1	Full increase to match expense trend
Option 2	Partial increase (halfway between Options 1 and 3)
Option 3	Zero rate changes - cash balances cover all cost increases

	Rate Increase FY2017	Estimated Cash Balance end FY2017	Current Typical Residential Bill	Estimated New Bill	Approx. Monthly Bill Change
WATER					
Option 1	14.4%	$ 6,109,886	$ 42.01	$ 48.08	$ 6.07
Option 2	7.2%	$ 4,928,451	$ 42.01	$ 45.04	$ 3.03
Option 3	0.0%	$ 5,632,395	$ 42.01	$ 42.01	$ -
SEWER					
Option 1	15.1%	$ 6,577,109	$ 21.44	$ 24.67	$ 3.23
Option 2	7.5%	$ 5,922,791	$ 21.44	$ 23.05	$ 1.61
Option 3	0.0%	$ 4,359,403	$ 21.44	$ 21.44	$ -
SOLID WASTE					
Option 1	9.8%	$ 346,215	$ 12.23	$ 13.43	$ 1.20
Option 2	4.9%	$ 143,529	$ 12.23	$ 12.83	$ 0.60
Option 3	0.0%	$ (59,157)	$ 12.23	$ 12.23	$ -
STORM					
Option 1	24.9%	$ 5,657,982	$ 4.02	$ 5.02	$ 1.00
Option 2	12.4%	$ 5,302,828	$ 4.02	$ 4.52	$ 0.50
Option 3	0.0%	$ 1,826,897	$ 4.02	$ 4.02	$ -
STREET LIGHTS					
Option 1	20.2%	NA (Gen. Fund)	$ 1.71	$ 2.06	$ 0.35
Option 2	10.1%	NA (Gen. Fund)	$ 1.71	$ 1.88	$ 0.17
Option 3	0.0%	NA (Gen. Fund)	$ 1.71	$ 1.71	$ -

Utility Rate Change History

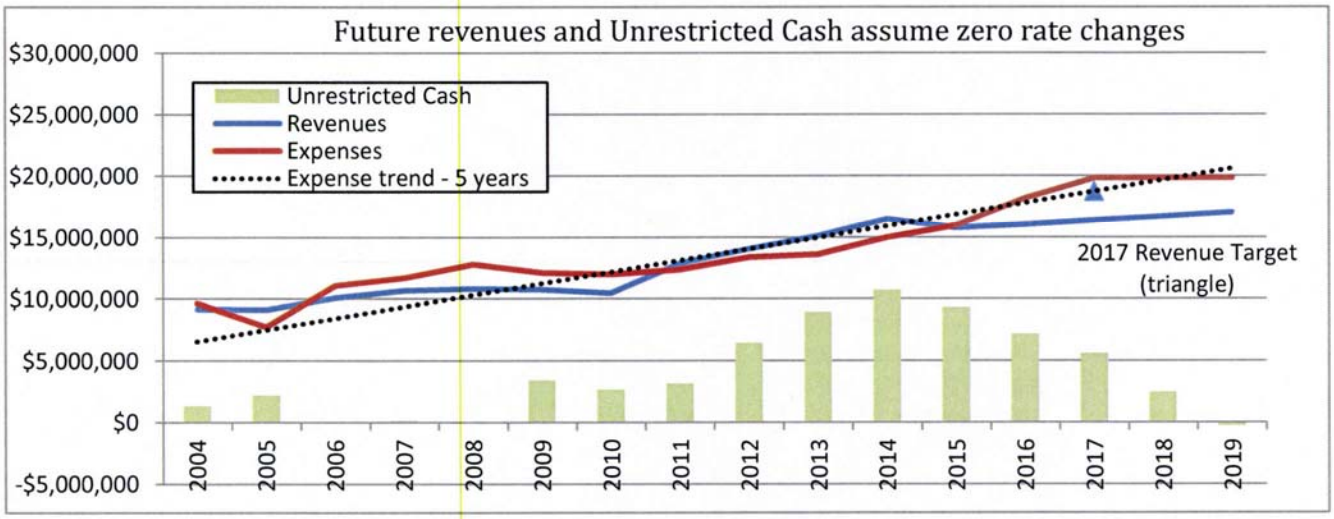
	Fiscal Yr	Water	Sewer	Solid Waste	Storm	Street Lights
Historical Changes	2005	0.0%	0.0%	0.0%	na	0.0%
	2006	0.0%	0.0%	0.0%	na	0.0%
	2007	3.0%	11.2%	19.5%	na	0.0%
	2008	3.5%	15.9%	0.0%	na	0.0%
	2009	3.4%	0.9%	0.0%	na	32.7%
	2010	0.0%	16.1%	0.0%	na	0.0%
	2011	20.7%	0.0%	2.0%	0.0%	14.0%
	2012	3.9%	0.0%	0.0%	102.8%	0.0%
	2013	0.0%	0.0%	0.0%	0.0%	0.0%
	2014	3.9%	8.4%	-7.8%	10.1%	0.0%
	2015	0.0%	0.0%	0.0%	0.0%	0.0%
	2016	0.0%	0.0%	0.0%	0.0%	0.0%
Recommended for stability (sample)	2017	14.4%	15.1%	9.8%	24.9%	20.2%
	2018	6.0%	7.0%	5.0%	5.0%	5.0%
	2019	6.0%	7.0%	5.0%	5.0%	5.0%
	2020	6.0%	7.0%	5.0%	5.0%	5.0%
	2021	6.0%	7.0%	5.0%	5.0%	5.0%
	2022	6.0%	7.0%	5.0%	5.0%	5.0%
	2023	6.0%	7.0%	5.0%	5.0%	5.0%
	2024	6.0%	7.0%	5.0%	5.0%	5.0%
	2025	6.0%	7.0%	5.0%	5.0%	5.0%



Water

Rate Revenues / Expenses / Cash Balance
(not including Impact Fees)

	Revenues	Expenses	Unrestricted Cash	Notes
2004	9,197,325	9,669,218	1,359,114	
2005	9,142,241	7,768,005	2,211,781	
2006	10,078,410	11,099,294	0	
2007	10,659,352	11,716,676	131,431	
2008	10,827,252	12,815,046	29,294	
2009	10,733,630	12,148,785	3,444,470	
2010	10,474,173	11,997,291	2,689,415	
2011	12,885,254	12,396,458	3,191,041	
2012	14,071,562	13,402,848	6,473,764	
2013	15,117,355	13,627,975	8,983,667	
2014	16,480,954	14,992,904	10,706,991	
2015	15,777,748	15,971,428	9,346,934	
2016 est	16,050,838	18,188,817	7,208,955	Cap Projects
2017 est	16,365,855	19,827,795	5,632,395	Cap Proj, AMI meters
2018 est	16,693,172	19,827,795	2,497,772	Cap Proj, AMI meters
2019 est	17,027,035	19,827,795	-302,988	Cap Proj, AMI meters



RATE CHANGE OPTIONS

	Description	5-yr trendline Revenue Target	Rate Increase FY2017	Approx. monthly bill change
Option 1	Full increase to match expenses	18,728,726	14.4%	$6.07
Option 2	Partial increase (halfway)	18,728,726	7.2%	$3.03
***Option 3**	Zero rate changes	18,728,726	0.0%	$0.00

*Graph above shows Option 3 scenario (zero rate changes and resulting Cash Balances)

Sewer

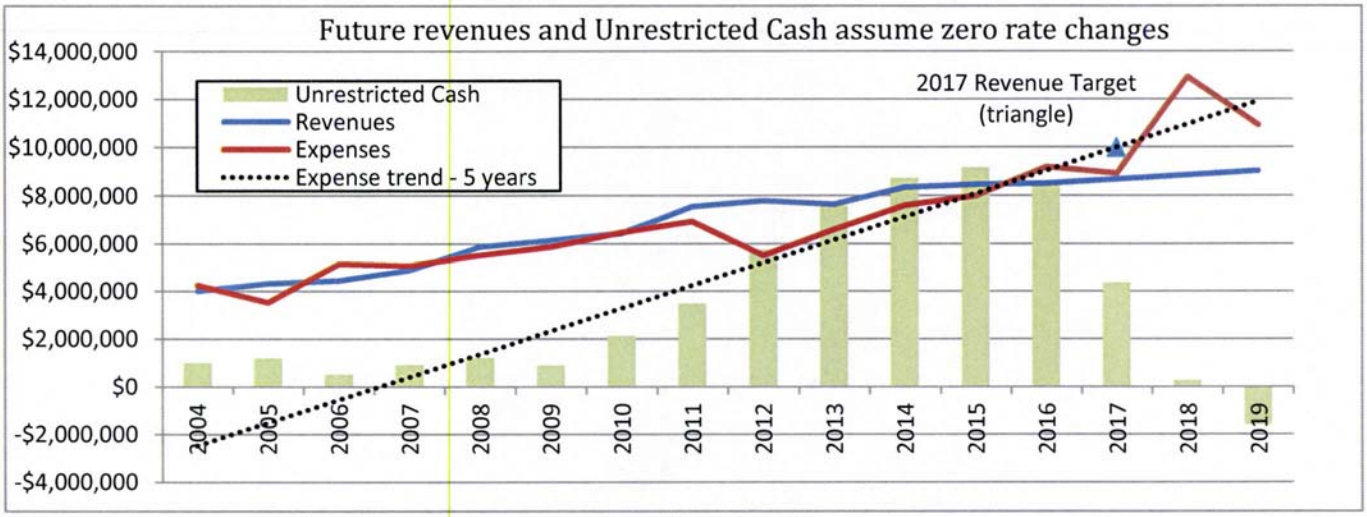
Rate Revenues / Expenses / Cash Balance
(not including Impact Fees)

	Revenues	Expenses	Unrestricted Cash	Notes	
2004	4,011,437	4,255,135	1,006,092		
2005	4,326,221	3,522,665	1,198,617		
2006	4,439,627	5,148,746	523,477		
2007	4,875,646	5,066,410	929,145		
2008	5,880,083	5,535,752	1,229,709		
2009	6,139,043	5,879,833	906,460		
2010	6,427,663	6,480,880	2,136,999		
2011	7,548,753	6,935,784	3,483,484		
2012	7,790,530	5,513,029	5,751,365		
2013	7,642,599	6,597,816	7,592,849		
2014	8,350,251	7,606,052	8,741,593		
2015	8,485,034	7,997,176	9,191,279		
2016 est	8,517,672	9,199,689	8,509,262		
2017 est	8,688,025	8,928,815	4,359,403	3,000,000	subsidize impact fees*
2018 est	8,861,786	12,928,815	292,374	4,000,000	SVWRF costs**
2019 est	9,039,022	10,928,815	-1,597,419	2,000,000	SVWRF costs**

Notes:

* $3M subsidy: Impact Fees have been insufficient to fund the "growth" portion of many capital projects for several years. The Unrestricted Cash Balance could temporarily subsidize these costs to avoid further delay of construction, to be repaid by impact fees in the future.

** SVWRF costs: South Valley Water Reclamation Facility has recently informed the City that equipment upgrades are required by new EPA regulations to remove Phosphorus and Nitrogen from the waste stream (approx. $4M). Also, new grit removal equipment is needed (approx. $2M).



RATE CHANGE OPTIONS

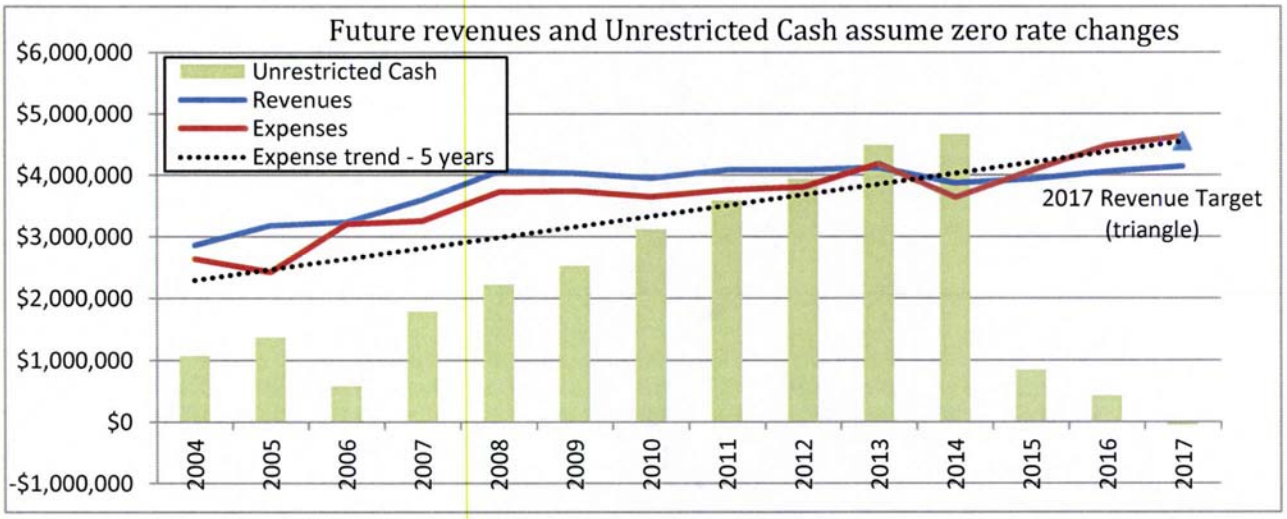
	Description	5-yr trendline Revenue Target	Rate Increase FY2017	Approx. monthly bill change
Option 1	Full increase to match expenses	9,996,662	15.1%	$3.23
Option 2	Partial increase (halfway)	9,996,662	7.5%	$1.61
***Option 3**	Zero rate changes	9,996,662	0.0%	$0.00

*Graph above shows Option 3 scenario (zero rate changes and resulting Cash Balances)

Solid Waste

Rate Revenues / Expenses / Cash Balance

	Revenues	Expenses	Unrestricted Cash	Notes
2004	2,865,097	2,646,161	1,076,619	
2005	3,185,479	2,429,589	1,377,725	
2006	3,239,427	3,208,035	587,880	
2007	3,599,668	3,261,335	1,790,804	
2008	4,065,855	3,728,903	2,225,965	
2009	4,033,183	3,744,193	2,533,837	
2010	3,955,366	3,652,419	3,126,970	
2011	4,089,160	3,761,032	3,592,972	
2012	4,085,054	3,817,376	3,945,789	
2013	4,120,642	4,189,136	4,490,590	
2014	3,875,424	3,639,087	4,665,554	
2015	3,940,325	4,070,686	850,574	Transferred $4M to Storm
2016 est	4,062,121	4,483,489	429,206	contract +2% annually, more dumpst
2017 est	4,143,364	4,631,727	-59,157	contract +2% annually



RATE CHANGE OPTIONS

	Description	5-yr trendline Revenue Target	Rate Increase FY2017	Approx. monthly bill change
Option 1	Full increase to match expenses	4,548,736	9.8%	$1.20
Option 2	Partial increase (halfway)	4,548,736	4.9%	$0.60
***Option 3**	Zero rate changes	4,548,736	0.0%	$0.00

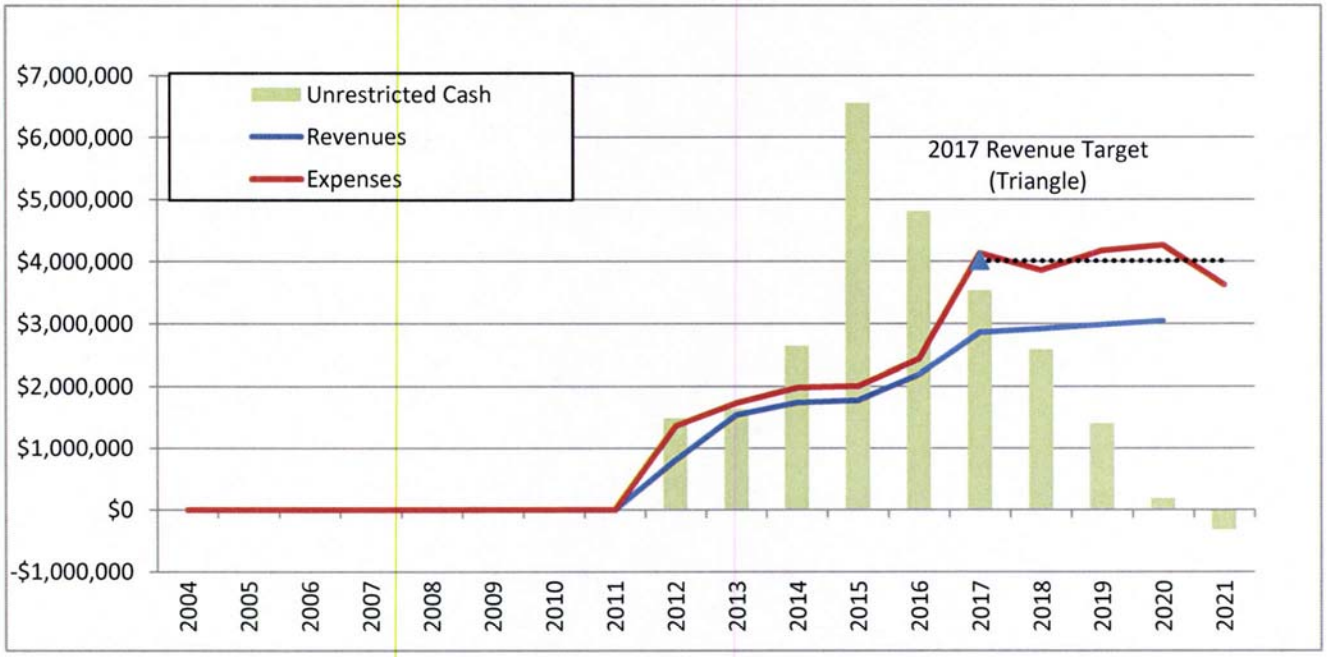
*Graph above shows Option 3 scenario (zero rate changes and resulting Cash Balances)

Storm with UPDES audit costs

Rate Revenues / Expenses / Cash Balance
(not including Impact Fees)

	Revenues	Expenses	Unrestricted Cash	Notes
2004	0	0	0	
2005	0	0	0	
2006	0	0	0	
2007	0	0	0	
2008	0	0	0	
2009	0	0	0	
2010	0	0	0	
2011	0	0	0	
2012	806,368	1,366,140	1,492,160	Storm Fund created
2013	1,540,476	1,734,665	1,641,189	
2014	1,740,866	1,982,908	2,654,896	
2015	1,777,496	2,011,798	6,565,411	Rec'd $4M from Solid Waste
*2016 est	2,196,979	2,447,983	4,814,408	Cap Proj, $1.5M Restr. Cash shortfall
2017 est	2,858,388	4,134,804	3,537,991	CapProj, UPDES audit
2018 est	2,920,556	3,859,349	2,599,198	CapProj, UPDES audit
2019 est	2,983,967	4,178,316	1,404,849	CapProj, UPDES audit
2020 est	3,048,646	4,262,968	190,527	CapProj, UPDES audit
2021 est	3,114,619	3,626,644	-321,498	CapProj, UPDES audit

*Storm revenues increase with new commercial ERU rate February 2016 (partial year FY2016, full year FY2017).



RATE CHANGE OPTIONS

	Description	5-yr trendline Revenue Target	Rate Increase FY2017	Approx. monthly bill increase
Option 1	Full increase to match expenses	4,134,804	42.0%	$1.69
Option 2	Partial increase (halfway)	4,134,804	21.0%	$0.84
***Option 3**	Zero rate changes	4,134,804	0.0%	$0.00

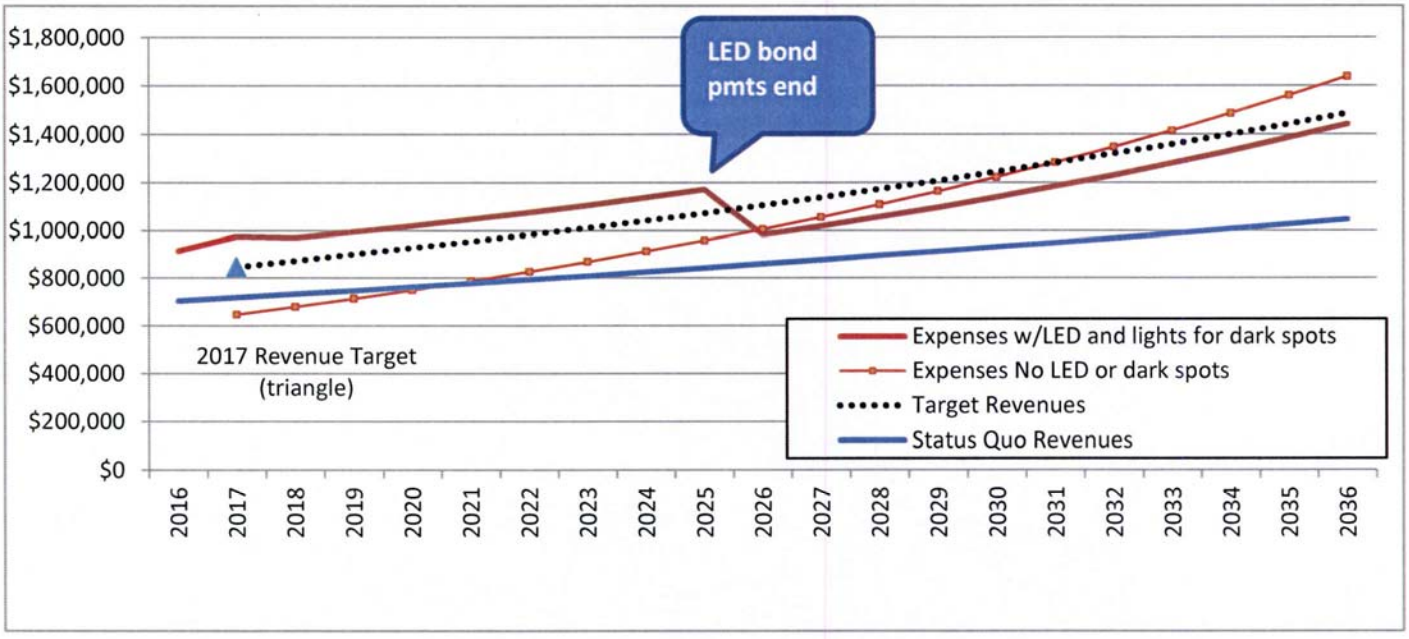
*Graph above shows Option 3 scenario (zero rate changes and resulting Cash Balances)

Street Lights (20 yr trend)

Rate Revenues / Expenses

	Status Quo Revenues	Personnel	Operations (less power)	Power	LED installation, bond	Lights for Dark Spots	Total Expenses w/LED	
Annual change:	2%	5%	5%	5%	0%	0%		Notes
2016	704,809	142,738	78,639	372,796	318,974	0	913,147	LED bond + installation (less rebate)
2017	718,905	147,771	78,639	275,046	224,000	250,000	975,456	LED bond, lights for dark spots
2018	733,283	155,159	82,571	257,796	224,000	250,000	969,526	LED bond, lights for dark spots
2019	747,949	162,917	86,700	270,686	224,000	250,000	994,303	LED bond, lights for dark spots
2020	762,908	171,063	91,035	284,220	224,000	250,000	1,020,318	LED bond, lights for dark spots
2021	778,166	179,616	95,587	298,431	224,000	250,000	1,047,634	LED bond, lights for dark spots
2022	793,729	188,597	100,366	313,352	224,000	250,000	1,076,316	LED bond, lights for dark spots
2023	809,604	198,027	105,384	329,020	224,000	250,000	1,106,431	LED bond, lights for dark spots
2024	825,796	207,929	110,653	345,471	224,000	250,000	1,138,053	LED bond, lights for dark spots
2025	842,312	218,325	116,186	362,744	224,000	250,000	1,171,256	LED bond, lights for dark spots
2026	859,158	229,241	121,995	380,882		250,000	982,118	lights for dark spots
2027	876,341	240,703	128,095	399,926		250,000	1,018,724	lights for dark spots
2028	893,868	252,738	134,500	419,922		250,000	1,057,160	lights for dark spots
2029	911,745	265,375	141,225	440,918		250,000	1,097,518	lights for dark spots
2030	929,980	278,644	148,286	462,964		250,000	1,139,894	lights for dark spots
2031	948,580	292,576	155,700	486,112		250,000	1,184,389	lights for dark spots
2032	967,551	307,205	163,485	510,418		250,000	1,231,109	lights for dark spots
2033	986,902	322,565	171,660	535,939		250,000	1,280,164	lights for dark spots
2034	1,006,640	338,694	180,243	562,736		250,000	1,331,672	lights for dark spots
2035	1,026,773	355,628	189,255	590,873		250,000	1,385,756	lights for dark spots
2036	1,047,309	373,410	198,718	620,416		250,000	1,442,544	lights for dark spots

Note: LED lights will pay for themselves with energy savings over 20 years. Rate increases are NOT to pay for LED lights, but are needed to fund new street lights in neighborhoods with "dark spots".



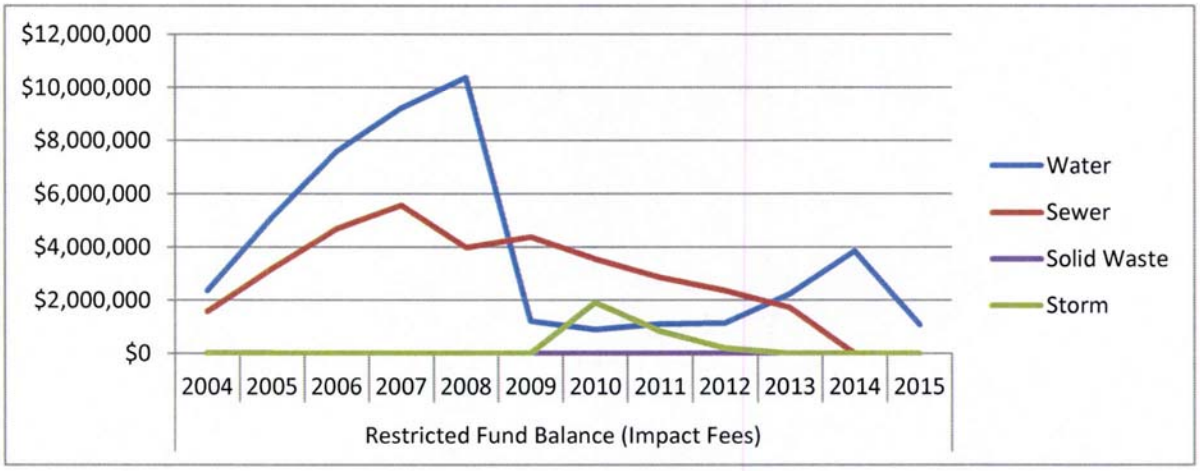
RATE CHANGE OPTIONS

	Description	Revenue Target 2017	Rate Increase FY2017	Approx. monthly bill change
Option 1	Full increase to match expense trend	847,180	20.2%	$0.35
Option 2	Partial increase (halfway)	847,180	10.1%	$0.17
***Option 3**	Zero rate changes	847,180	0.0%	$0.00

Restricted Fund Balances

(Impact Fees)

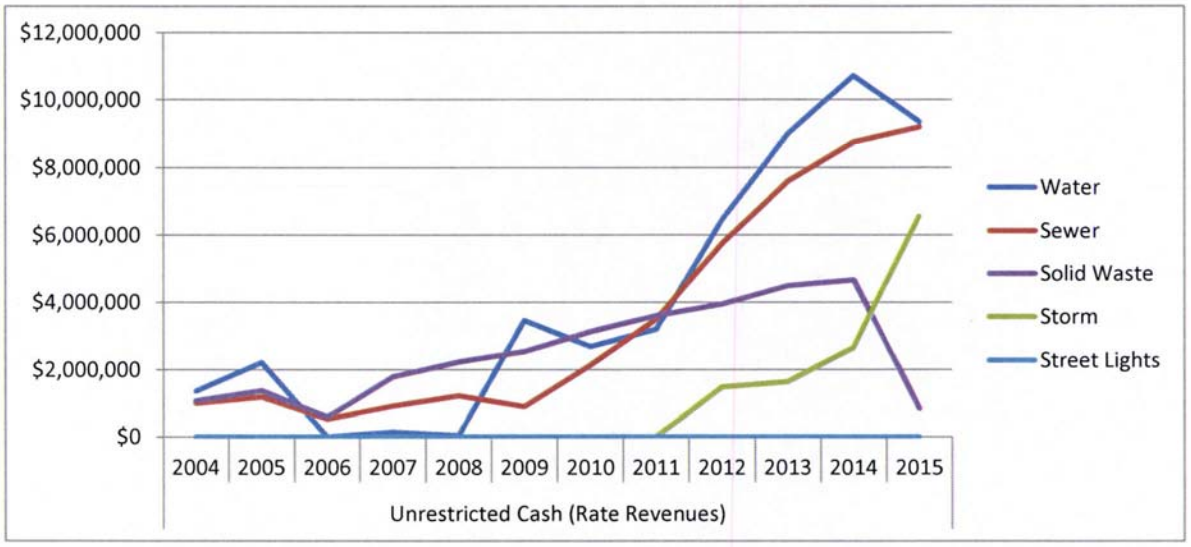
	Water	Sewer	Solid Waste	Storm	Street Lights
2004	2,371,202	1,571,418	23,044	0	na
2005	5,133,462	3,203,455	10,053	0	na
2006	7,577,489	4,694,422	0	0	na
2007	9,219,292	5,572,917	0	0	na
2008	10,385,553	3,985,175	0	0	na
2009	1,222,044	4,380,372	0	0	na
2010	901,719	3,563,294	0	1,913,727	na
2011	1,105,514	2,860,075	0	848,889	na
2012	1,139,833	2,380,931	0	199,654	na
2013	2,238,392	1,736,298	0	0	na
2014	3,860,284	0	0	0	na
2015	1,073,020	0	0	0	na



Unrestricted Cash Balances

(Rate Revenues)

	Water	Sewer	Solid Waste	Storm	Street Lights
2004	1,359,114	1,006,092	1,076,619	0	0
2005	2,211,781	1,198,617	1,377,725	0	0
2006	0	523,477	587,880	0	0
2007	131,431	929,145	1,790,804	0	0
2008	29,294	1,229,709	2,225,965	0	0
2009	3,444,470	906,460	2,533,837	0	0
2010	2,689,415	2,136,999	3,126,970	0	0
2011	3,191,041	3,483,484	3,592,972	0	0
2012	6,473,764	5,751,365	3,945,789	1,492,160	0
2013	8,983,667	7,592,849	4,490,590	1,641,189	0
2014	10,706,991	8,741,593	4,665,554	2,654,896	0
2015	8,888,888	9,191,279	850,574	6,565,411	0



West Jordan Population

	Population	Change
2000	78,336	
2001	82,297	5.1%
2002	85,502	3.9%
2003	88,937	4.0%
2004	93,978	5.7%
2005	97,429	3.7%
2006	100,529	3.2%
2007	102,877	2.3%
2008	103,502	0.6%
2009	104,128	0.6%
2010	105,668	1.5%
2011	106,863	1.1%
2012	107,654	0.7%
2013	108,395	0.7%
2014	109,248	0.8%
2015	110,885	1.5%

All Years	avg annual:	2.4%
Pre-2008	avg annual:	4.0%
Post-2008	avg annual:	0.9%