

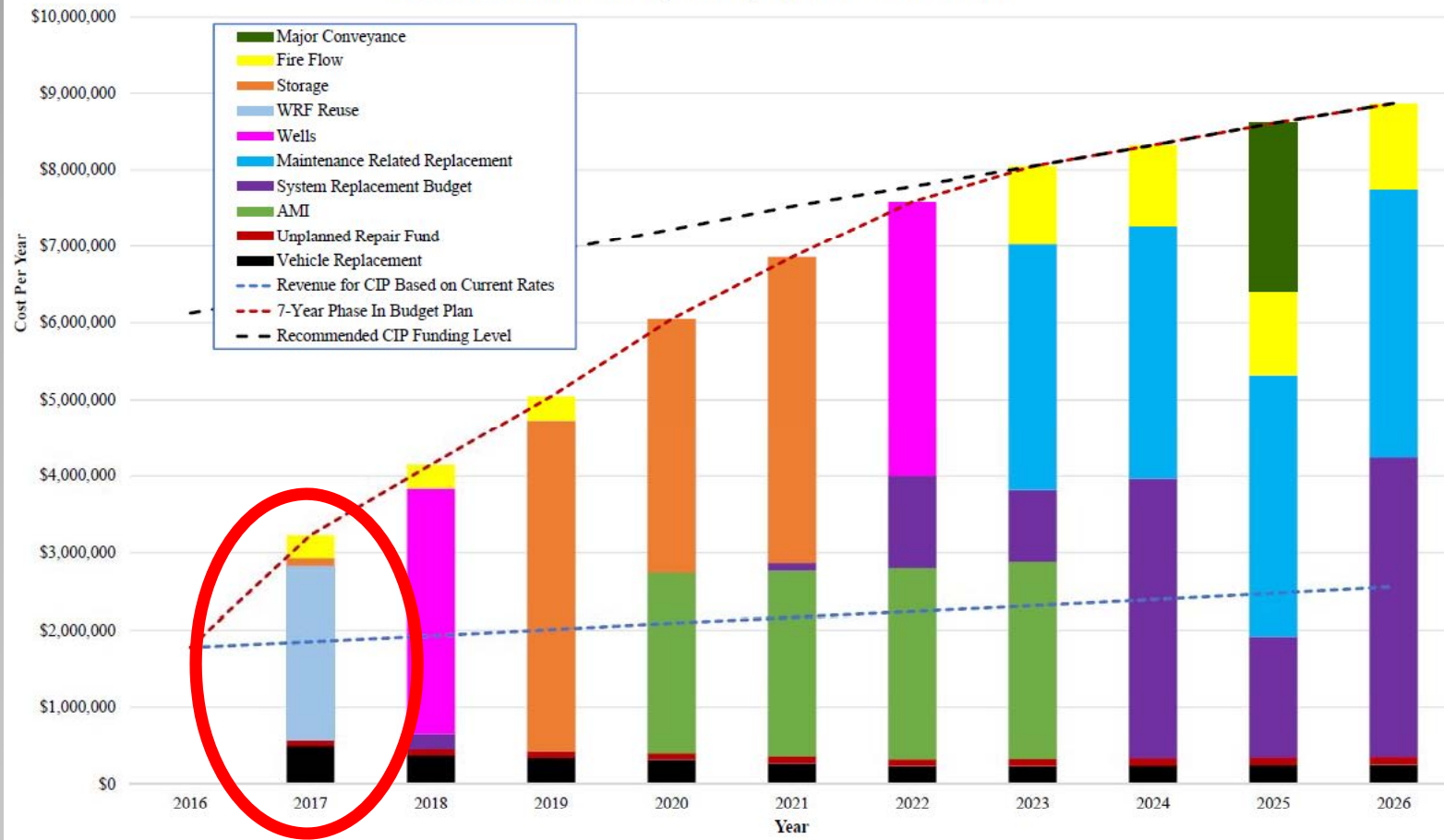
WATER CONSERVATION – ORIENTED RATES

1 Adopt 4-Tier Rate Structure

- A. $\frac{3}{4}$ " meter block volumes set to 11,34,65 and 65+ in thousands of gallons per month.
- B. All meter sizes 1" and greater block volumes set to the ($\frac{3}{4}$ " value) x (AWWA multiplier).
- C. Base rates as shown which are the same as the original 7-year CIP implementation in the Water Master Plan.
- D. Tier 1 = \$0.71, Tier 2 = \$0.89, Tier 3 = \$1.07, Tier 4 = \$1.42 (all per 1,000 gallons)
- E. Begin the Tier volume charge beginning October 1, 2016.
- F. Begin the base rate change (which includes the increase for the Jordanelle payment) beginning July 1, 2016.

Objectives

Figure 8-2
Recommended Water Fund Expenditures, Scenario 2 - 7-Year Phase In



7-Year CIP Plan

Improvement I

10-Year Capital			FY 2017	Scenario 2, 7-Year Phase In Plan								
Project Identifier	Project Description	Estimate Total Cost (2016 Dollars)		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
FF 1	Replace 6,306 feet of existing 2 and 4 inch pipe with 8 inch pipe	\$871,015	\$299,043	\$317,255								
FF 2	Replace 24,173 feet of existing 4 inch pipe with 8 inch pipe	\$3,336,000						\$1,025,715	\$1,056,486	\$1,088,181	\$1,120,826	
ST 1	Construct 10 million gallon storage reservoir	\$10,422,000	\$100,000	\$4,306,073	\$3,309,746	\$3,988,676						
RW 1	Tertiary wastewater treatment improvements	\$1,200,000	\$1,236,000									
RW 2	12 inch pipe extending existing reuse line to Lakeside Sports Complex	\$189,000										
RW 3	Booster Station from WRF to Sleepy Ridge Golf Course Pond	\$150,000	\$194,670									
RW 4	Booster Station at Sleepy Ridge Golf Course Pond	\$650,000										
SW 1	Install 18,774 feet of pipe for SW Annex (Paid for by developer)	\$1,735,000	\$154,500									
W 1	Drill a new well in Orem Water System	\$3,000,000										
W 2	Drill a new well in Orem Water System	\$3,000,000					\$3,582,157					
AMI	Install new automated meter infrastructure	\$8,300,000	\$669,500		\$2,335,431	\$2,405,494	\$2,477,659	\$2,551,988				
R 1	Maintenance related replacement/improvement projects	\$10,427,000						\$3,206,089	\$3,302,272	\$3,401,340	\$3,503,380	
Major Conveyance	400 South pipe replacement	\$1,686,000								\$2,199,848		
System Replacement	Replace system where needed	\$9,007,000		\$0	\$0	\$100,000	\$1,200,000	\$937,599	\$3,627,836	\$1,575,701	\$3,888,910	
Repairs	Unplanned repair fund	\$750,000		\$81,955	\$84,413	\$86,946	\$89,554	\$92,241	\$95,008	\$97,858	\$100,794	
Fleet Replacement	Fleet maintenance and replacement	\$2,629,000		\$343,157	\$320,340	\$272,917	\$235,171	\$235,970	\$242,954	\$245,969	\$253,253	
TOTAL			\$57,352,000	\$7,726,000	\$5,048,439	\$6,049,930	\$6,854,032	\$7,584,540	\$8,049,602	\$8,324,555	\$8,608,896	\$8,867,163

\$0

\$77,250

\$498,016

\$3,228,979

7- Year CIP Plan

Meter Size	Year 1
0.75	\$15.74
1	\$39.22
1.5	\$110.42
2	\$181.64
3	\$276.59
4	\$466.48
6	\$1,178.58
8	\$1,574.21
10	\$2,361.32

78%

13%

91% TOTAL

Base Rates – Same

Table 2: Represents Flow Allotment (AWWA) by Meter Size

Meter	Tier 1	Tier 2	Tier 3	Tier 4
0.75	11	34	65	>65
1	18	57	109	>109
1.5	37	113	216	>216
2	59	181	346	>346
3	110	340	650	>650
4	220	680	1300	>1300
6	458	1417	2709	>2709
8	587	1813	3466	>3466
10	1063	3287	6284	>6284

Tiers

Numbers shown are thousands of gallons per month

Tier	Year 1
Tier 1	\$0.71
Tier 2	\$0.89
Tier 3	\$1.07
Tier 4	\$1.42

RATES

Comparison of Water Rate Structures

City	Culinary											Secondary		
	Monthly Base Rate	Block 1	Block 2	Block 3	Block 4	Block 5	Block 1	Block 2	Block 3	Block 4	Block 5	Monthly Base Rate	Volume Rate	
Spanish Fork	\$10.00	Flat Rate					\$1.14	-	-	-	-		\$13.25	\$0.87
London	\$20.00	Flat Rate					\$1.63	-	-	-	-		\$8.00	-
American Fork	\$21.68	0 - 6K	6 - 9K	> 9K	-	-	\$0.00	\$3.49	\$4.96	-	-		\$20.72	-
Pleasant Grove	\$18.02	0 - 5K	5 - 10K	10 - 15K	15 - 50K	> 50K	\$0.00	\$2.18	\$3.19	\$4.56	\$5.46		\$29.72	-
Springville	\$11.00	0 - 5K	5 - 20K	20 - 60K	60 - 100K	100 - 150K	\$0.00	\$0.95	\$1.50	\$2.00	\$2.50		-	-
Payson	\$16.02	Flat Rate					\$0.86	-	-	-	-		\$13.58	-
Lehi	\$12.25	Flat Rate					\$1.09	-	-	-	-		\$13.56	-
Orem (Current)	\$14.19	Flat Rate					\$0.58	-	-	-	-		-	-
Provo	\$12.69	Seasonal Rate					Winter = \$0.72, Summer = \$1.20						-	-
South Jordan	\$34.88	0 - 10K	10 - 28K	28 - 48K	> 48K	-	\$1.64	\$1.84	\$2.05	\$2.25	-		-	-
Ogden	\$19.91	0 - 6K	6 - 42K	42 - 84K	> 84K	-	\$1.71	\$2.61	\$3.02	\$3.40	-		-	-
Sandy	\$12.00	0 - 6K	6 - 40K	40 - 80K	> 80K	-	\$1.62	\$2.48	\$2.90	\$3.33	-		-	-
Layton	\$12.85	0 - 7K	7K+	-	-	-	\$0.00	\$1.14	-	-	-		-	-
West Jordan	\$23.11	0 - 7K	7 - 20K	20 - 50K	> 50K	-	\$1.04	\$1.26	\$1.50	\$1.81	-		-	-
West Valley(GHID)	\$13.00	Flat Rate					\$1.57	-	-	-	-		-	-
Orem 7-Year Seasonal	\$15.74	Seasonal Rate					Winter = \$0.62, Summer = \$0.93						-	-
Orem 90th	\$15.74	0-11K	11-34K	34-65K	>65K	-	\$0.73	\$0.91	\$1.10	\$1.46			-	-
Orem AWWA	\$15.74	0-11K	11-34K	34-65K	>65K	-	\$0.71	\$0.89	\$1.07	\$1.42			-	-

Comparisons

City	Monthly Base Rate	Block 1	Block 2	Block 3	Block 4	Block 5
Spanish Fork	\$10.00	Flat Rate				
Lindon	\$20.00	Flat Rate				
American Fork	\$21.68	0 - 6K	6 - 9K	> 9K	-	-
Pleasant Grove	\$18.02	0 - 5K	5 - 10K	10 - 15K	15 - 50K	> 50K
Springville	\$11.00	0 - 5K	5 - 20K	20 - 60K	60 - 100K	100 - 150K
Payson	\$16.02	Flat Rate				
Lehi	\$12.25	Flat Rate				
Orem (Current)	\$14.19	Flat Rate				
Provo	\$12.69	Seasonal Rate				
South Jordan	\$34.88	0 - 10K	10 - 28K	28 - 48K	> 48K	-
Ogden	\$19.91	0 - 6K	6 - 42K	42 - 84K	> 84K	-
Sandy	\$12.00	0 - 6K	6 - 40K	40 - 80K	> 80K	-
Layton	\$12.85	0 - 7K	7K+	-	-	-
West Jordan	\$23.11	0 - 7K	7 - 20K	20 - 50K	> 50K	-
West Valley(GHID)	\$13.00	Flat Rate				
Orem 7-Year Seasonal	\$15.74	Seasonal Rate				
Orem 90th	\$15.74	0-11K	11-34K	34-65K	>65K	-
Orem AWWA	\$15.74	0-11K	11-34K	34-65K	>65K	-

City	Monthly Base Rate	Block 1	Block 2	Block 3	Block 4	Block 5
Spanish Fork	\$10.00	\$1.14	-	-	-	-
Lindon	\$20.00	\$1.63	-	-	-	-
American Fork	\$21.68	\$0.00	\$3.49	\$4.96	-	-
Pleasant Grove	\$18.02	\$0.00	\$2.18	\$3.19	\$4.56	\$5.46
Springville	\$11.00	\$0.00	\$0.95	\$1.50	\$2.00	\$2.50
Payson	\$16.02	\$0.86	-	-	-	-
Lehi	\$12.25	\$1.09	-	-	-	-
Orem (Current)	\$14.19	\$0.58	-	-	-	-
Provo	\$12.69	Winter = \$0.72, Summer = \$1.20				
South Jordan	\$34.88	\$1.64	\$1.84	\$2.05	\$2.25	-
Ogden	\$19.91	\$1.71	\$2.61	\$3.02	\$3.40	-
Sandy	\$12.00	\$1.62	\$2.48	\$2.90	\$3.33	-
Layton	\$12.85	\$0.00	\$1.14	-	-	-
West Jordan	\$23.11	\$1.04	\$1.26	\$1.50	\$1.81	-
West Valley(GHID)	\$13.00	\$1.57	-	-	-	-
Orem 7-Year Seasonal	\$15.74	Winter = \$0.62, Summer = \$0.93				
Orem 90th	\$15.74	\$0.73	\$0.91	\$1.10	\$1.46	
Orem AWWA	\$15.74	\$0.71	\$0.89	\$1.07	\$1.42	

Questions

1. What is the purpose/goal of the tiers?
2. How many tiers?
3. Residential and Commercial – Same?
4. What should the block volumes be for a $\frac{3}{4}$ " meter?
5. Should block volumes change with meter size?

Where did these numbers come from?

1. State Co

2. Indoor w
for all ty

3. Conserv

What is



S.B. 28 Water System Conservation Pricing

Bill Text

Status

Hearings/Debate

Enrolled

S.B. 28

Printer Friendly

1

WATER SYSTEM CONSERVATION PRICING

2

2016 GENERAL SESSION

3

STATE OF UTAH

4

Chief Sponsor: Scott K. Jenkins

5

House Sponsor: Lee B. Perry

6

LONG TITLE

General Description:

This bill requires retail water providers to establish an increasing rate structure for culinary water.

Highlighted Provisions:

This bill:

requires retail water providers to establish an increasing rate structure for culinary water and provide certain information to customers.

Money Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

ENACTS:

[73-10-32.5](#), Utah Code Annotated 1953

22

Be it enacted by the Legislature of the state of Utah:

Section 1. Section 73-10-32.5 is enacted to read:

73-10-32.5. Culinary water pricing structure.

A retail water provider, as defined in Section 73-10-32, shall:

(1) establish a culinary water rate structure that:

(a) incorporates increasing block units of water used; and

Bill Sponsor:



Sen. Jenkins, Scott K.

Floor Sponsor:



Rep. Perry, Lee B.

Drafting Attorney: RuthAnne Frost

Fiscal Analyst: Ivan D. Djambov

Bill Tracking

Track this

Email Notification

Tracking Page

Bill Text

- Introduced
- Enrolled (Currently Displayed)

Related Documents

- Fiscal Note
- House Transmittal Letter 1
- Senate Transmittal Letter 1
- Agency Perf Note

Information

- Last Action: 25 Mar 2016, Governor Signed
- Last Location: Lieutenant Governor's office

Effective Date: 10 May 2016

Similar Bills

AWWA terminology

- Uniform
- Inclining Block
- Seasonal
- Excess-Use
- Indoor/Outdoor
- Sliding Scale
- Scarcity Pricing
- Spatial Pricing
- Penalties

OPTIONS

Conservation-oriented water rates

- 3 Tier

3-Tier Example:

1. 0-11,000
2. 11,001 – 44,000
3. 44,001+

VS

- 4 Tier

4- Tier Example:

1. 0-11,000
2. 11,001 – 34,000
3. 34,001 – 65,000
4. 65,000+

How many Tiers?

- YES for both base and volume
- Increase by meter size



Should Residential and Non-residential rates be the same?

- A. 78% of all accounts are $\frac{3}{4}$ ".
 - B. Purpose and goal – Indoor water use.
 - C. 22,000 accounts
-
- A. Use Judgment and common values
 - B. Use comparative city data and meet revenues?
 - C. Use Data?
 1. Percentiles - 90th

What should the block volumes be for the $\frac{3}{4}$ " meter?



Challenges

- Current FY16 Pricing
 - Uniform \$0.58/1,000
 - \$14.19 Base Rate for ¾" Meter
- 7-Year CIP Seasonal
 - Summer Rate \$0.93/1,000
 - Winter Rate \$0.62/1,000
 - \$15.74 Base Rate for ¾" Meter (Proposed 4-Tier plan remains the same)

Considerations

Single Family Home 3/4" Meter Peak Month – August 42,000 Gallons Usage comparison

4 Tier Scenario

0-11 (11)	x \$0.71	=	\$7.81
11-34 (23)	x \$0.89	=	\$20.47
34-65 (8)	x \$1.07	=	\$8.56
65+	x \$1.46	=	<u>\$0.00</u>
TOTAL		=	\$36.84

7-Year Summer

42	x \$0.93	=	\$39.06
TOTAL		=	\$39.06

FY16

42	x \$0.58	=	\$24.36
TOTAL		=	\$24.36

Sampling

+\$12.48 from current
-\$2.22 from 7-year Seasonal

4-Plex 1" meter

Peak Month – September 36,000 Gallons

Usage comparison

4 Tier Scenario

0-18	(18)	x \$0.71	=	\$12.78
18-57	(18)	x \$0.89	=	\$16.02
57-109	(0)	x \$1.07	=	\$0.00
109+		x \$1.46	=	<u>\$0.00</u>
TOTAL			=	\$28.80

7-Year Summer

$$36 \times \$0.93 = \$33.48$$

$$\textbf{TOTAL} = \textbf{\$33.48}$$

FY16

$$42 \times \$0.58 = \$20.88$$

$$\textbf{TOTAL} = \textbf{\$20.88}$$

Sampling

+\$7.92 from current (\$1.98)/unit
-\$4.68 from 7-year Seasonal (\$-1.17/unit)

Questions and Discussion

References

Table 1: Represents Flow Allotment (90th) by Meter Size

Meter	Tier 1	Tier 2	Tier 3	Tier 4
0.75	11	34	65	>65
1	21	64	112	>112
1.5	94	231	389	>389
2	120	324	580	>580
3	477	655	1362	>1362
4	930	1405	2921	>2921
6	1069	2161	4860	>4860
8	995	5736	6474	>6474
10	1088	1435	1592	>1592

Table 3: Represents Flow Allotment Differences from (90th) to AWWA

Meter	Tier 1	Tier 2	Tier 3	Tier 4			
0.75	0	0	0	>0			
1	3	7	3	>3			
1.5	57	118	173	>173			
2	61	143	234	>234			
3	367	315	712	>712			
4	710	725	1621	>1621			
6	611	744	2151	>2151			
8	408	3923	3008	>3008			
10	25	-1852	-4692	>-4692			