




PO BOX 675 61750 CHOLLITA ROAD JOSHUA TREE CALIFORNIA 92252
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**CALL AND NOTICE OF SPECIAL JOINT MEETING
OF THE JOSHUA BASIN WATER DISTRICT
BOARD OF DIRECTORS
AND CITIZENS ADVISORY COMMITTEE**

WEDNESDAY, OCTOBER 2, 2013 5:00 PM

Notice is hereby given that Mickey Luckman, President of the Joshua Basin Water District Board of Directors and Jay St. Gaudens, Chairman of the Joshua Basin Water District Citizens Advisory Committee, hereby call a Special Joint Meeting of the Board of Directors and Citizens Advisory Committee of said District to be held Tuesday, October 2, 2013 at 5:00 pm at the Joshua Basin Water District office located at 61750 Chollita Road, Joshua Tree CA 92252 for the purpose of discussion and possible action on the attached agenda.

Dated: Tuesday, October 2, 2013


Mickey Luckman, President, Board of Directors
Joshua Basin Water District



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JOSHUA BASIN WATER DISTRICT
SPECIAL JOINT MEETING OF THE BOARD OF DIRECTORS AND
CITIZENS ADVISORY COMMITTEE
WEDNESDAY OCTOBER 2, 2013 5:00 PM
61750 CHOLLITA ROAD, JOSHUA TREE, CA 92252

AGENDA

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. DETERMINATION OF QUORUM
4. APPROVAL OF AGENDA
5. PUBLIC COMMENT
6. RATE STUDY DISCUSSION
Recommend that the Board receive information, ask questions and provide guidance to consultant as appropriate.
7. ADJOURNMENT

Pg. 1-46

INFORMATION

The Public Comment portion of this agenda provides an opportunity for the public to address the Board of Directors on items not listed on the agenda that are of interest to the public at large and are within the subject matter jurisdiction of this Board. The Board of Directors is prohibited by law from taking action on matters discussed that are not on the agenda, and no adverse conclusions should be drawn if the Board does not respond to public comments at this time. Comments that concern individual customer accounts are welcome; however, we encourage doing so only after other administrative avenues for redress have been fully exhausted. In all cases, your concerns will be referred to the General Manager for review and a timely response.

Comments are to be limited to three minutes per speaker and shall not exceed a total of 20 minutes. All comments are to be directed to the Board of Directors and shall not consist of any personal attacks. Members of the public are expected to maintain a professional, courteous decorum during their comments. Public input may be offered on an agenda item when the item comes up for discussion and/or action. Members of the public who wish to speak shall proceed to the podium when called by the President of the Board. Please state your name and community of residence for the record.

Any person with a disability who requires accommodation in order to participate in this meeting should telephone Joshua Basin Water District at (760) 366-8438, at least 48 hours prior to the meeting to make a request for a disability-related accommodation.

Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the District's office located at 61750 Chollita Road, Joshua Tree, California 92252 during normal business hours.

JOSHUA BASIN WATER DISTRICT
MEETING AGENDA REPORT

Meeting of the Board of Directors and CAC

October 2, 2013

Report to: President and Members of the Board

Prepared by: Susan Greer



TOPIC:
RATE STUDY DISCUSSION

RECOMMENDATION:
Receive information, ask questions and provide guidance to consultant as appropriate.

ANALYSIS:

The District's rate study consultant has provided the attached background information as follow-up to the discussions at the last workshop. The information addresses options that were narrowed down at that meeting such as the tiered structure and amount of increase

The meeting will again be a more informal workshop. The rate consultant needs more feedback as we get closer to the final proposal. The final rate proposal needs to be determined by the end of October in order to send the public hearing notices out in time for a 45-day comment period and the board meeting in December. Ideally, this meeting will provide the final direction for the proposed rate structure. That will allow the Board of Directors to make the final determination of the proposed rate structure at the October 16th meeting, authorize the mailing of the notices and set the public hearing date when the rate increases will be addressed.

STRATEGIC PLAN ITEM:

2.2.2 Rate Study. Conduct rate study, including review and update of structure and analysis of pay/go versus debt financing.

FISCAL IMPACT:

N/A

Joshua Basin Water District



Water Rate Study

Key Issues & Draft Recommendations

Revised 09/26/13



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



Joshua Basin Water District Water Rate Study – Summary of Key Issues

Background

- District provides water service to a 96-square-mile service area
- Facilities include over 270 miles of pipelines, 5 wells, 17 water tanks, 11 booster stations
- Groundwater is sole source of supply
- District serves roughly 4,560 active accounts, over 95% are single family homes

Rates & Finances

- District is a self-supporting enterprise
 - Rates are the main source of revenue
 - Revenues must be adequate to fund the cost of providing service including long-term operating and capital needs
- After a decade of minimal to no rate increases from 1996-2006, District provided good financial stewardship by implementing gradual rate increases but has eased off in recent years
 - Since 1996, water rates have risen by an average of 1.07% per year through 2013
- Last water rate study completed 2007
 - Projected need for long-term 6% annual rate increases
 - District adopted 4 years of 6% rate increases
 - District spread the rate increases over 5 years and adopted no rate increases for the subsequent 2 years (*average annual increase over past 7 years is roughly 3.5%*)

Effective Jan-1	2007	2008	2009	2010	2011	2012	2013
Adopted Rates	6%	6%	6%	6%			
Implemented	6%	6%	3%	6%	3%	0%	0%

- Water rates in lower-middle range compared to other regional agencies
 - Monthly Bill for a single family home with roughly average use of 10 ccf = \$46.47
 - Equivalent to \$0.62 per each 100 gallons of water use (6/10^{ths} of a penny per gallon)
 - Average bill is about 14% lower than the regional survey average for same level of use
 - Roughly 2/3 of District’s residential bills are at or below this level
- District has historically maintained prudent fund reserves, but reserves are temporarily low
 - Reserves decreased to roughly \$1.8 million as of June 30, 2013
 - District to receive a little over \$3.5 million of reimbursements this year from MWA & DWR
- District receiving substantial grants & reimbursements
 - \$7.2 million total grant funding for recharge project (via DWR, CDPH, MWA grants)
 - Additional \$599,000 received this year for MWA reserve reimbursement
 - Some will be reimbursed to District, some will be used to fund recharge project
- ***District facing substantial financial challenges that will require rate increases in upcoming years***

Financial Challenges

➤ **Long-Term Water Supply**

- Groundwater provides 100% of District supply
- Long-term problem: local aquifers receive minimal natural recharge resulting in significant decreases in groundwater levels
- 71-mile Morongo Pipeline (funded largely by taxpayers) and grant-funded recharge facilities will help replenish aquifer (ultimately may need to import 100% supply)
- Imported water purchased from MWA currently costs roughly \$450 per acre-foot with rates expected to increase 5% per year
- Total District demand = about 1,650 acre-feet per year
- The cost of 500 AF (less than 1/3 of District supply) costs about \$250,000 per year (on average)

➤ **Infrastructure Repair, Replacement, and Rehabilitation**

- Facilities include over 270 miles of pipelines, 5 wells, 17 water tanks, 11 booster stations
- High-priority need to replace 70,000 feet of undersized, substandard 4" steel pipelines
 - *Cost estimate: \$5 million*
 - Would likely need to be at least partially debt financed
- Future need for ongoing pipeline replacement program. Approx. 175 miles (87.5%) of District pipelines were installed 40 – 70 years ago.
 - *Cost estimate: Approx. \$500,000 per year to replaced 7,500 feet (1-1/2 miles) each year*
 - Can phase in to this level of funding over a number of years.
- Additional funding needed for maintenance/rehabilitation of water tanks, wells, boosters, equipment, and technology
 - *Cost estimate: \$400,000 per year ongoing (\$200,000 in FY 2013/14 Budget)*
 - Can phase in to this level of funding over a number of years
 - Also, Well 14 may need major refurbishment (not done since 1983)
- Future regulatory requirements
 - *Can be many millions for new treatment infrastructure and ongoing operations*

➤ **Operating Cost Inflation**

- Small annual rate increases needed to keep revenues in line with operating cost inflation

➤ **Decline in Water Sales**

- Water sales have declined from peak years in the mid-2000s and may further decline due to additional conservation and customer response to rate increases
- Reduced sales = reduced revenues = upward pressure on rates
- *Conservation results in slightly lower bills than otherwise (the higher rate is more than offset by the reduced level of water purchases for customers who conserve)*

Financial Projections (See Table 10)

- BWA developed 10-year financial projections to evaluate annual revenue requirements and project rate increases
- Key Assumptions:
 - Based on 2013/14 Budget
 - Operating cost inflation projected at 4% per year
 - Growth projected to escalate from 10 to 20 single family homes per year over next 5 years
 - Water sales projected to decline by 3% for each 10% of rate increases (-0.3 elasticity) for the next 2 years, then by 2% (-0.2 elasticity) in future years.
 - Assumes District starts billing the fixed meter charge to accounts with pulled meters, with the charge phased in from 50% of the fixed meter charge the first year, 75% the second year, and 100% thereafter. The projections assume roughly 1/3 of pulled meter accounts will opt not to pay ongoing charges and instead request a refund of their capacity fee.
 - District's payments for a share of Morongo Pipeline debt reaches final maturity in 2020/21, freeing up \$220,000 per year
 - District to receive a little over \$3.5 million of reimbursements this fiscal year
 - Funding for MWA water purchases projected to remain at 500 AF per year for at least next 5 years (until additional financial resources are available)
 - \$5 million replacement of 70,000 feet of substandard 4" pipelines assumed to be funded by a \$2 million drawdown of fund reserves coupled with a \$3 million 20-year loan (debt service = \$240,000 per year)
 - Funding for ongoing maintenance/repair/rehab of wells, boosters, tanks, escalated from \$200,000 in 2013/14 to \$300,000 per year over 2 years
 - \$100,000 per year included for equipment, technology, and vehicles starting 2014/15
 - Funding for pipeline replacements gradually phased in from \$200,000 in 2016/17 to \$500,000 annually by the end of the decade
 - Minimum fund reserve target for planning purposes: 30% of O&M + \$2 million for emergency and other reserves (escalates from \$3.1M to \$3.5M in 10 years)

Rate Projections (Proposed rates & impacts shown on Tables 18 – 21)

- Cash flows show overall 7% rate increases for next 4 years. Combined with the rate structure adjustments, low-use customers will face lower impacts and high-use customers will see larger impacts (which can be partially mitigated with conservation).
- Lower rate increases in near term results in higher rate increases in longer term and vice versa
- Each 1% increase on current rates generates approx. \$27,500 (3.5% increase generates \$100,000)
- Rate increases are partially offset by new revenue sources
 - **Capacity Charges** - Capacity charges paid by new connections to the water system; revenues vary based on growth (e.g. current fees generate roughly \$36,000 for every 10 new 3/4" meter connections)
 - **Pulled Meter Accounts** - Applying the fixed monthly charge to accounts with pulled meters would generate about \$200,000 per year assuming roughly 1/3 of pulled meter accounts opt to not pay the charge and instead have their capacity fees refunded. These accounts will instead have to pay the full capacity charge in effect at the time they choose to connect.
- Currently assuming 4 years of rate increases would be adopted via the Prop. 218 process

Water Rate Structure

- Water rates include 2 components
 - Basic Monthly Fee: Fixed meter charge based on meter size (48% of rate revs)
 - Higher charges for larger meters based on increased capacity needs in water system
 - Water Flow Charge: Variable charge based on metered water use (52% of rate revenues)
 - Single family homes (95% of accounts) pay according to a 4-tier rate structure
(note: 4th tier was added in last rate study based on input from the CAC)
 - All others pay uniform charge (equal to the weighted average of single family tiers)
- Rate structure needs to comply with CUWCC BMP 1.4 for grant eligibility
 - Option 1: 30% fixed and 70% variable rate recovery
 - More conservation incentive, but less financial stability with significantly higher variable revenue recovery
 - Big change from current rate structure
 - Option 2: Run CUWCC financial model to determine cost recovery
 - Preliminary analysis indicates variable rates should recover at least 50% of rate revenues

Fixed Meter Charge Modifications (See Table 14)

- Fixed meter charge revenue recovery reduced from current level of 48% to 40% over next 4 years
 - Compared to other regional agencies, higher water users in the District pay lower rates per unit for higher levels of water use

Note: lower fixed charge revenue recovery results in lower impacts to low water users and higher impacts to higher water users
- Combine rates for 3/4-inch and 1-inch meters into a single rate
 - New plumbing code requirements require 1-inch meters for homes that have the same demand as current homes with 3/4-inch meters
 - Currently over 4,320 3/4-inch meters and 175 1-inch meters

Variable Water Rate Structure Modifications (See Tables 16 -18)

- Variable rate revenue recovery increased from current level of 52% to 60% over next 4 years
- Revise tier breakpoints:

	<u>Current</u>	<u>Proposed</u>
Tier 1	0 – 5 hcf	0 – 5 hcf
Tier 2	5.01 – 20 hcf	5.01 – 10 hcf
Tier 3	20.01 – 40 hcf	10.01 – 20 hcf
Tier 4	> 40 hcf	> 20 hcf

- Adjust the steepness of tiered rates (for ¾" and 1" meters) to gradually increase conservation incentive
 - Current: differential from lowest to highest tier is approx. 28%
 - Proposed: differential from lowest to highest tier phased in over 4 years to 50%
 - Tier steepness phased in over 4 years to minimize the annual impact

Note: Steeper tiers and/or reduced tier breakpoints result in lower impacts to low water users and higher impacts to higher water users

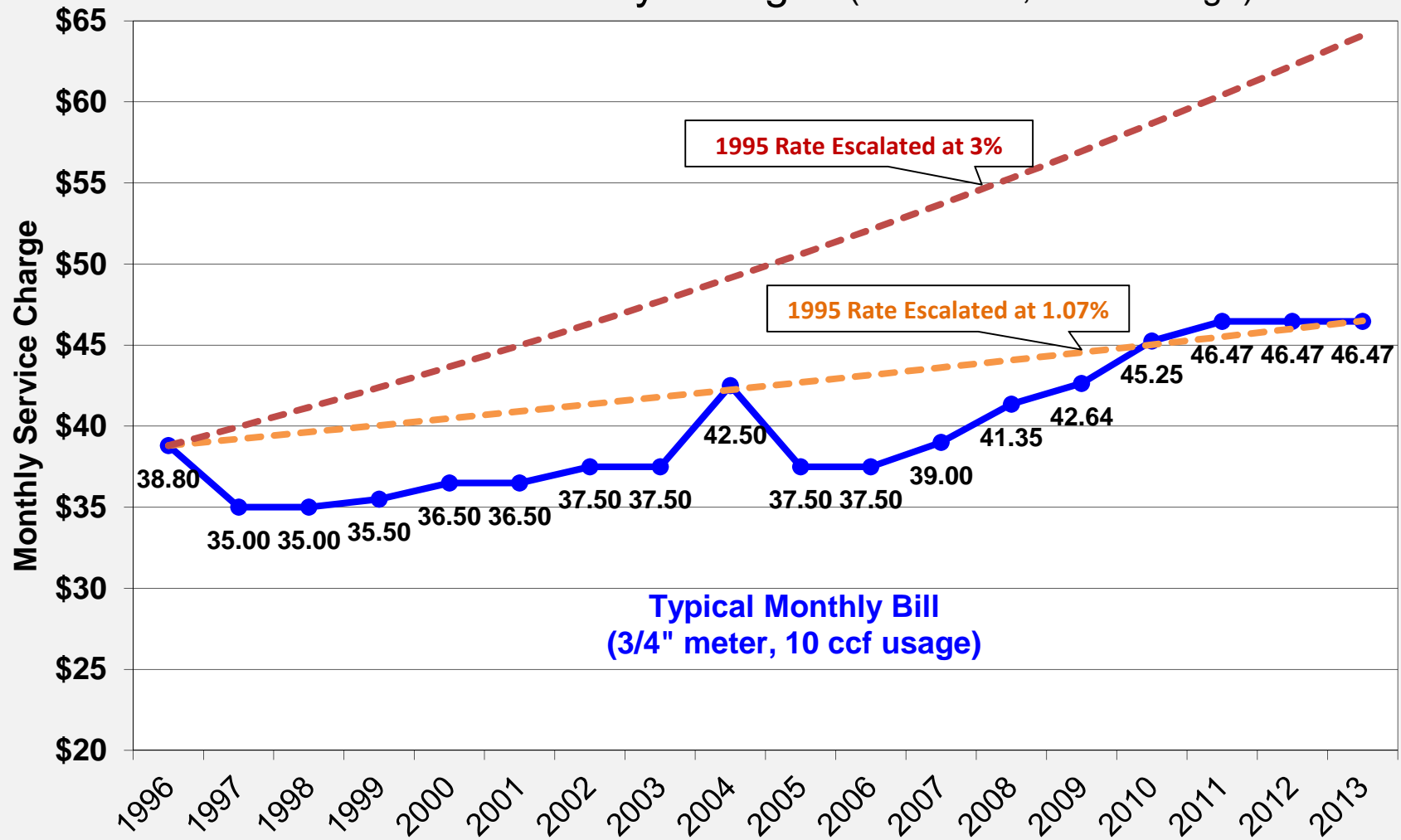
Next Steps

- Receive additional CAC and Board input
 - Finalize rate recommendations
 - Draft and mail Prop 218 notices
 - Hold a public hearing on the proposed rates at least 45 days after mailing the Prop 218 notices
 - Goal: New rates effective starting January 1, 2014
-

Table 1
 Joshua Basin Water District
 Monthly Water Rates

Effective Jan-1	2007	2008	2009	2010	Current 2011	
RATE ADJUSTMENT	6%	6%	3%	6%	3%	
BASIC MONTHLY FEE						
<u>Meter Size</u>	<u>Capacity (gpm)</u>	<u>Monthly Rate</u>				
3/4"	30	\$20.00	\$21.20	\$21.84	\$23.15	\$23.82
1"	50	33.30	35.30	36.36	38.55	39.70
1-1/2"	100	66.70	70.70	72.83	77.20	79.40
2"	160	106.70	113.10	116.50	123.49	127.00
3"	300	200.00	212.00	218.40	231.51	238.20
MONTHLY WATER FLOW CHARGES						
For 3/4" & 1" Meters		<u>Rate Per Unit (hcf)*</u>				
<u>Consumption</u>						
0 - 5 units		\$1.80	\$1.91	\$1.97	\$2.09	\$2.14
5.01 - 20 units		2.00	2.12	2.19	2.33	2.39
20.01 - 40 units		2.10	2.25	2.32	2.46	2.57
40.01 + units		2.15	2.35	2.42	2.57	2.75
<i>1 unit = one hundred cubic feet = 748 gallons</i>						
For 1-1/2", 2" and 3" Meters		<u>Rate Per Unit (hcf)*</u>				
Unit rate per all water use		\$2.00	\$2.12	\$2.19	\$2.33	\$2.39
PRIVATE FIRE PROTECTION						
<u>Device Size</u>	<u>Monthly Rate</u>					
2"	\$10.60	\$11.24	\$11.58	\$12.28	\$12.62	
3"	21.20	22.47	23.15	24.54	25.25	
4"	42.40	44.94	46.29	49.07	50.50	
6"	63.60	67.42	69.45	73.62	75.76	
8"	95.40	101.12	104.60	110.41	113.62	

Joshua Basin Water District Historical Monthly Charges (3/4" meter, 10 ccf usage)



Joshua Basin Water District

Average Cost per 100 Gallons (3/4" meter, 10 ccf usage)

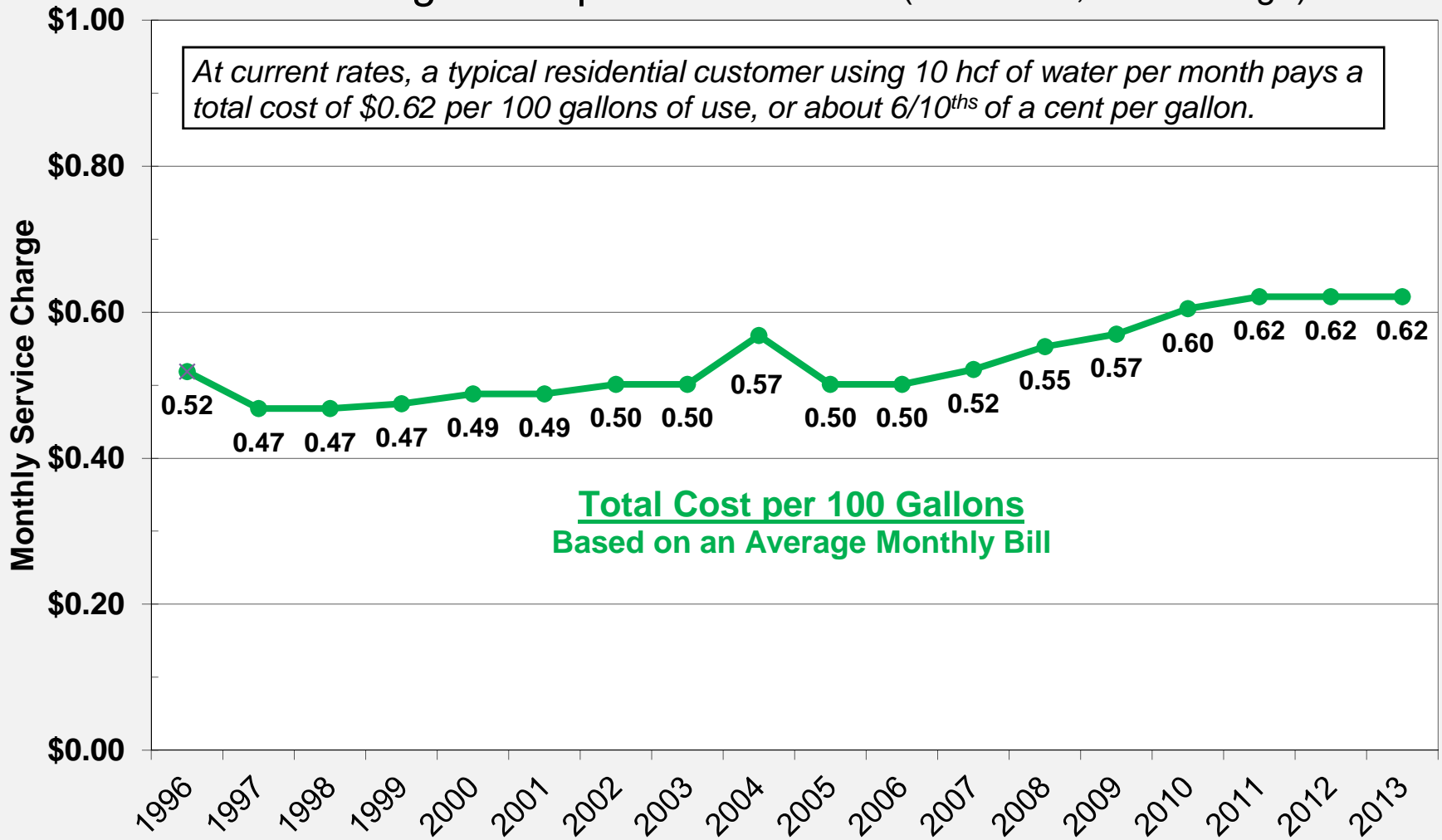


Table 2
 Joshua Basin Water District
 Monthly Residential Water Rate Survey

	Fixed Charges (5/8" or 3/4")	Residential Usage Charges		Monthly Service Charges		
		Tiers	Rate per hcf	5 hcf	10 hcf	15 hcf
Mission Springs Water Dist [1]	9.32	3 tiers	0.99 - 1.83	15.02	23.72	32.42
City of Hesperia	19.64	4 tiers	0.90 - 2.24	24.14	31.89	58.44
Twentynine Palms Water District	11.00	uniform block	2.33	22.65	34.30	45.95
Joshua Basin Water District	23.82	4 tiers	2.14 - 2.75	34.52	46.47	58.42
Golden State Water Company [2]	14.95	3 tiers	2.726 - 3.605	32.01	49.08	66.96
Bighorn Desert View Water Agency	27.50	uniform block	3.00	42.50	57.50	72.50
<i>With debt surcharge (1/2 customers)</i>	32.15	uniform block	3.00	45.44	62.81	80.80
Apple Valley Ranchos Water Co	23.08	3 tiers	2.443 - 3.054	40.79	58.16	76.15
High Desert Water District	23.30	4 tiers	3.59 - 9.08	43.35	71.80	106.25
CSA 70 - Landers [3]	29.36	3 tiers	4.77 - 6.31	53.21	77.06	101.63
CSA 70 W3 - Hacienda/Morongo [3]	43.93	3 tiers	4.49 - 5.94	66.38	88.83	111.95
CSA 70 W4 - Pioneertown Area [3]	37.00	4 tiers	6.28 - 9.55	68.40	99.80	135.90
CSA 70 F - Morongo Valley [3]	58.78	3 tiers	6.58 - 8.70	91.68	124.58	158.47
Average	27.22			44.68	63.82	85.76
Median	23.82			42.07	59.16	76.40

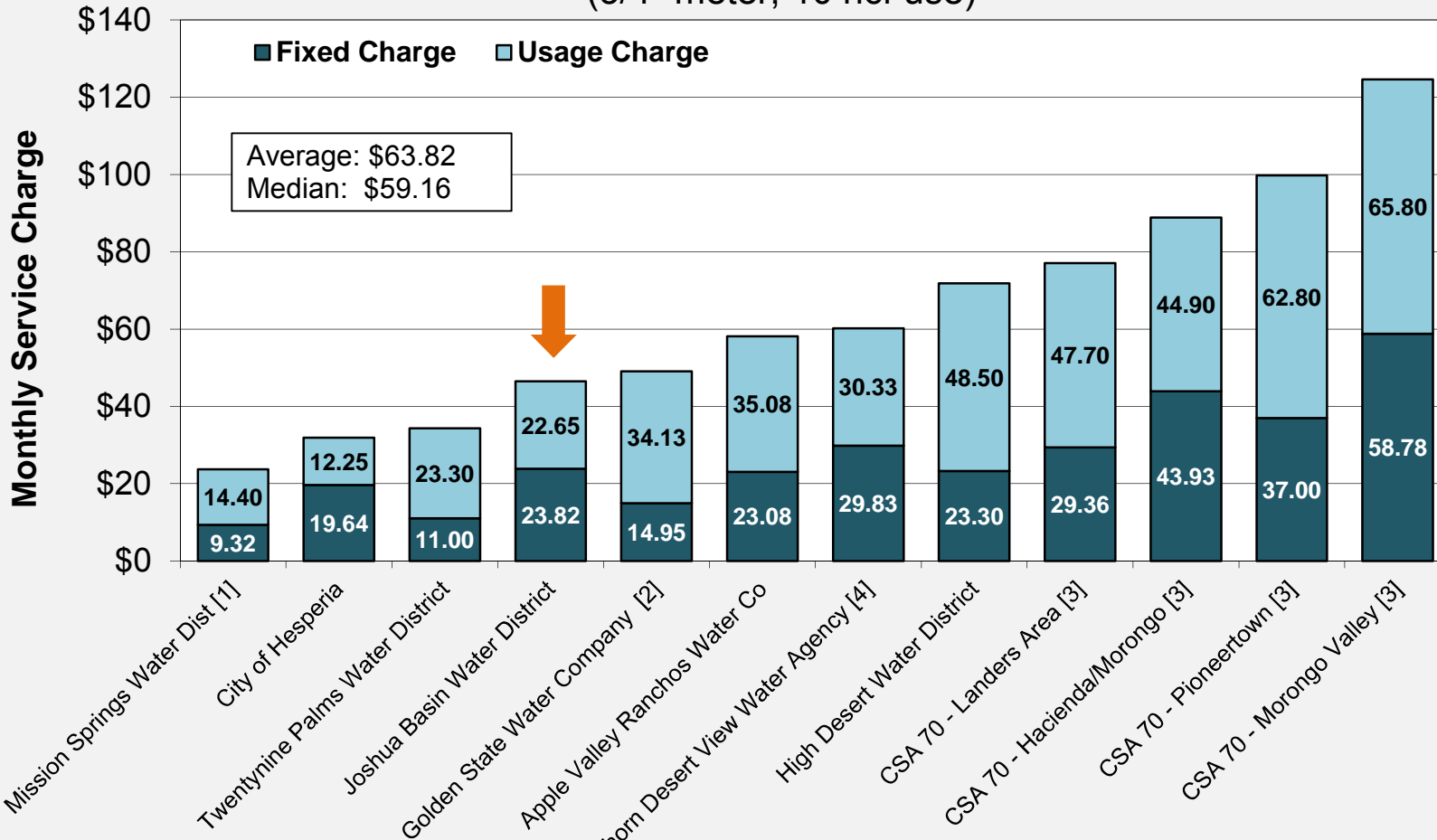
1 Serves City of Desert Hot Springs.

2 Apple Valley / Victorville / Lucerne area.

3 San Bernardino County Service Area.

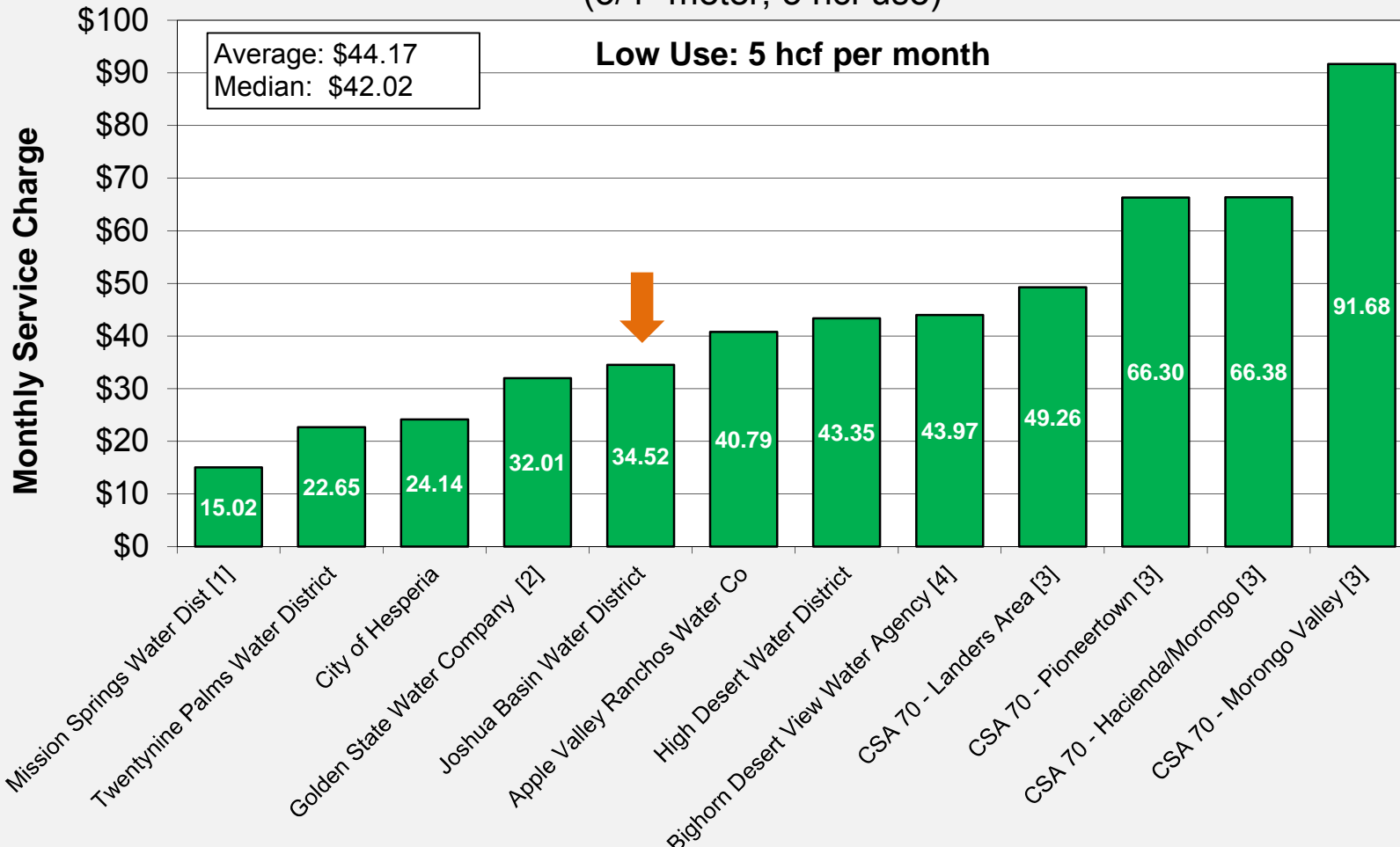
4 Based on average charges for Bighorn Desert Water Agency (not double counted).

Joshua Basin Water District Survey of Monthly Residential Water Rates (3/4" meter, 10 hcf use)



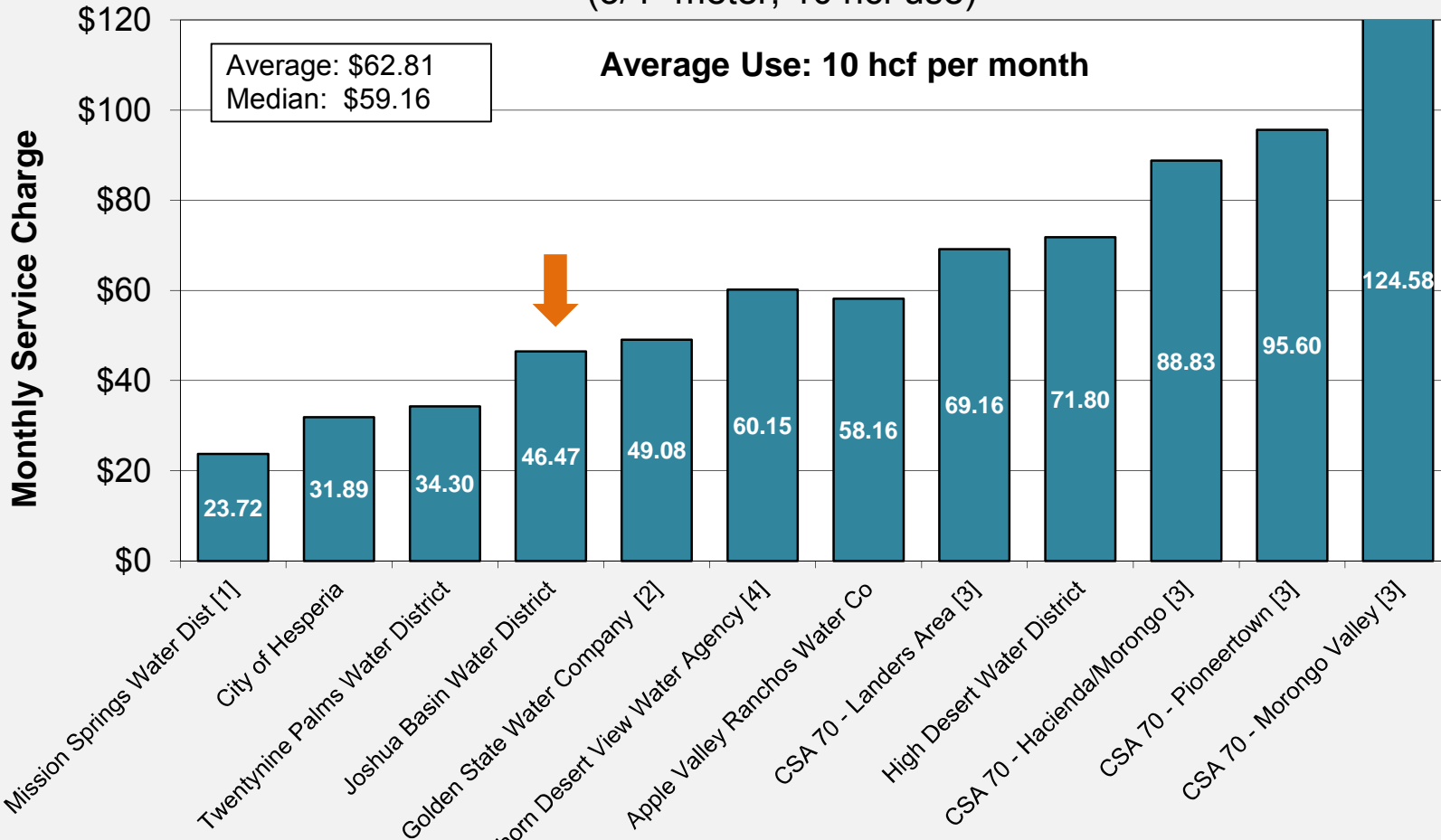
1 Serves City of Desert Hot Springs. 2 Apple Valley / Victorville / Lucerne area. 3 San Bernardino County Service Area.
4 Average charge shown (roughly half of customers pay a \$4.65 monthly surcharge for debt service recovery).

Joshua Basin Water District Survey of Monthly Residential Water Rates (3/4" meter, 5 hcf use)



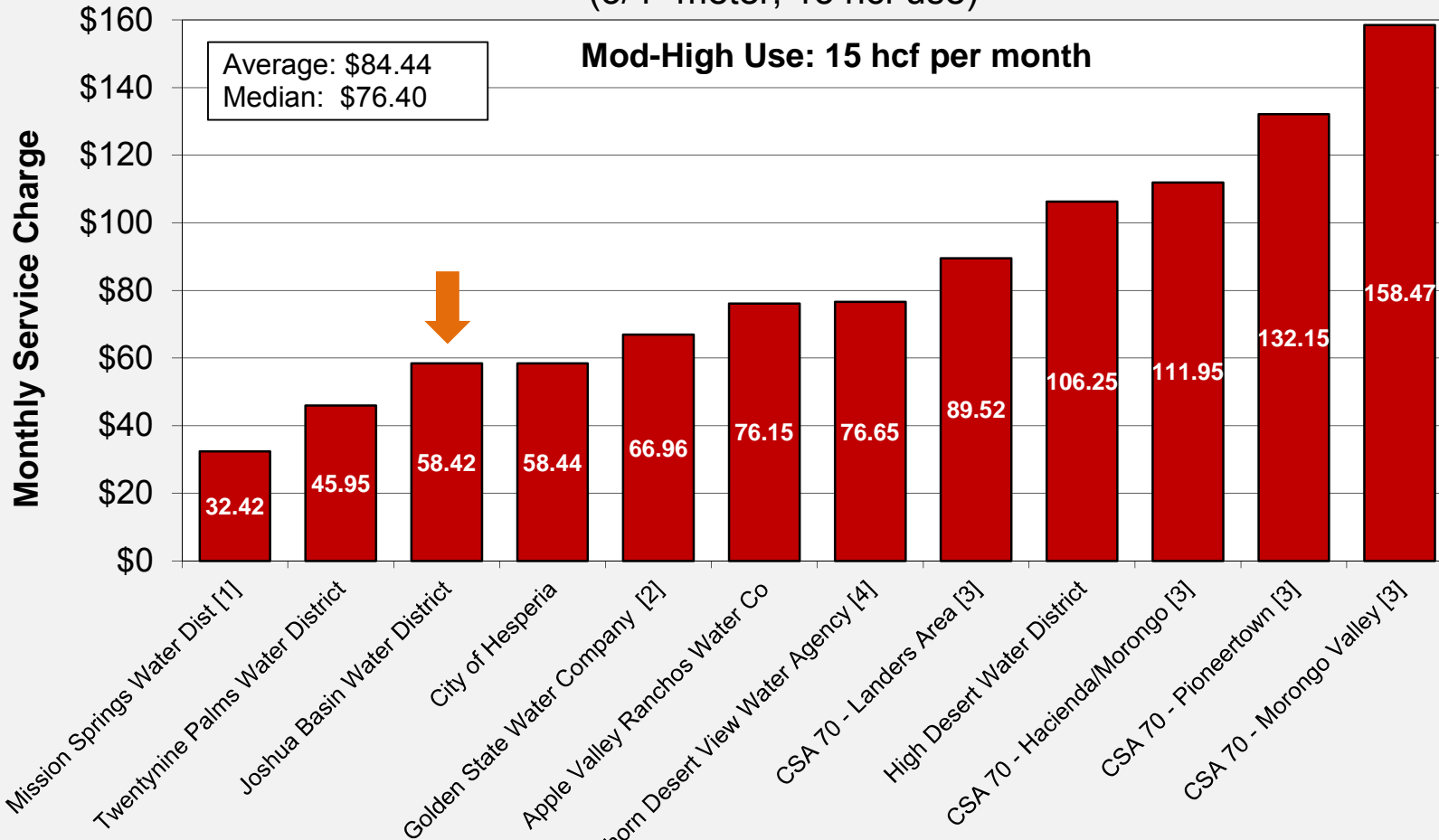
1 Serves City of Desert Hot Springs. 2 Apple Valley / Victorville / Lucerne area. 3 San Bernardino County Service Area.
4 Average charge shown (roughly half of customers pay a \$4.65 monthly surcharge for debt service recovery).

Joshua Basin Water District Survey of Monthly Residential Water Rates (3/4" meter, 10 hcf use)



1 Serves City of Desert Hot Springs. 2 Apple Valley / Victorville / Lucerne area. 3 San Bernardino County Service Area.
4 Average charge shown (roughly half of customers pay a \$4.65 monthly surcharge for debt service recovery).

Joshua Basin Water District Survey of Monthly Residential Water Rates (3/4" meter, 15 hcf use)



1 Serves City of Desert Hot Springs. 2 Apple Valley / Victorville / Lucerne area. 3 San Bernardino County Service Area.
4 Average charge shown (roughly half of customers pay a \$4.65 monthly surcharge for debt service recovery).

Table 3
 Joshua Basin Water District
 Active Accounts by Customer Class & Meter Size

Meter Size	Single Family Residential	Multi-Family Residential	Commercial & Institutional	Total	% of Total
3/4"	4,006	34	80	4,120	95.2%
1"	119	25	16	160	3.7%
1-1/2"	4	14	8	26	0.6%
2"	3	3	12	18	0.4%
3"	<u>0</u>	<u>1</u>	<u>4</u>	<u>5</u>	<u>0.1%</u>
Total	4,132	77	120	4,329	100.0%
% of Total	95.4%	1.8%	2.8%	100.0%	

Table 4
 Joshua Basin Water District
 Historical Water Production by Month (Acre-Feet)

Month	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Jul	192.0	200.6	199.6	205.1	168.1	201.1	223.2	194.3	208.5	191.5	181.4	177.2
Aug	192.9	187.5	164.5	190.5	189.8	204.0	200.2	178.0	176.9	187.3	178.5	172.0
Sep	167.5	153.7	143.7	167.5	168.0	194.1	206.3	153.5	187.1	161.6	152.5	162.0
Oct	143.6	132.3	151.7	129.5	103.5	163.5	159.9	139.6	132.2	122.1	120.3	139.6
Nov	113.4	112.2	105.4	101.8	111.7	132.8	137.5	95.5	109.8	104.8	107.3	109.7
Dec	110.5	90.7	98.9	99.0	103.7	126.2	109.3	113.1	108.2	91.4	94.1	87.8
Jan	100.1	95.0	105.5	87.4	103.7	111.4	90.4	98.4	90.8	93.3	108.9	122.9
Feb	99.9	93.6	95.5	75.5	110.5	136.3	87.4	86.0	78.1	91.2	109.1	90.2
Mar	121.3	100.3	116.7	97.8	105.2	113.9	110.2	113.5	108.9	104.9	111.2	123.7
Apr	131.4	110.9	128.5	117.5	107.8	135.4	125.2	138.5	121.0	122.7	119.1	148.0
May	150.8	147.7	161.2	153.9	156.8	160.3	142.9	160.8	140.1	144.0	147.1	153.3
Jun	176.4	182.2	182.5	223.0	180.5	182.4	171.7	170.5	162.6	156.8	169.3	183.6
Total	1,699.8	1,606.7	1,653.7	1,648.5	1,609.3	1,861.3	1,764.1	1,641.6	1,624.3	1,571.2	1,598.7	1,669.9
Annual Change		-5.5%	2.9%	-0.3%	-2.4%	15.7%	-5.2%	-6.9%	-1.1%	-3.3%	1.8%	4.4%
Avg Month	141.7	133.9	137.8	137.4	134.1	155.1	147.0	136.8	135.4	130.9	133.2	139.2
Max Month	192.9	200.6	199.6	223.0	189.8	204.0	223.2	194.3	208.5	191.5	181.4	183.6
Min Month	99.9	90.7	95.5	75.5	103.5	111.4	87.4	86.0	78.1	91.2	94.1	87.8
Max / Avg	1.36	1.50	1.45	1.62	1.42	1.32	1.52	1.42	1.54	1.46	1.36	1.32
Jul-Dec %	54%	55%	52%	54%	52%	55%	59%	53%	57%	55%	52%	51%

Joshua Basin Water District

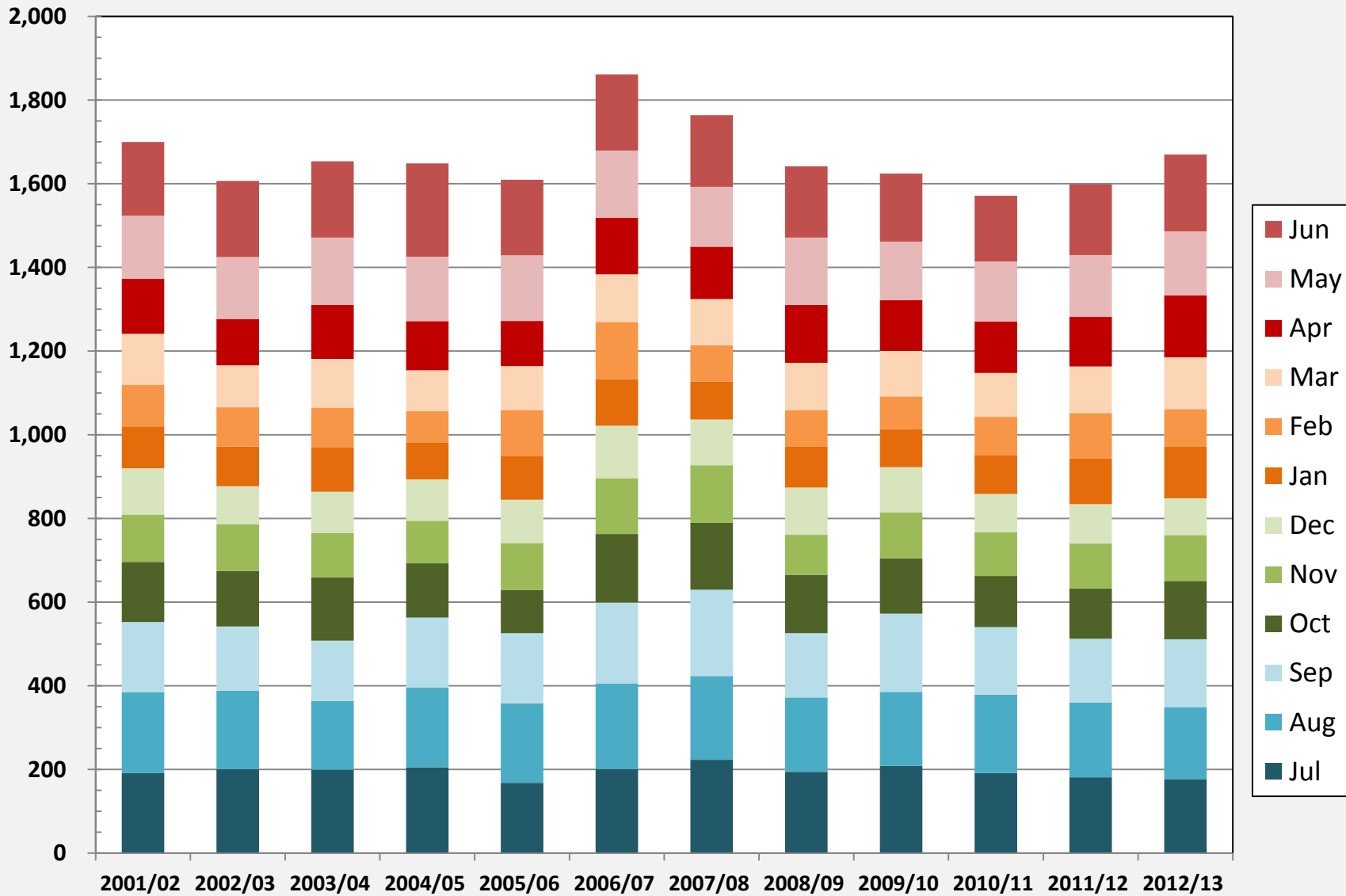


Table 5
 Joshua Basin Water District
 Fund Balances

Fund	Invested in	June 30, 2012 Balance	June 30, 2013 Balance
Operating/Capital Reserves			
General Operating Fund		\$145,086	\$91,523
Credit Card Account		57,362	62,479
Investment Account	LAIF	1,066,343	57,114
Equipment/Technology Reserve (1)	LAIF	256,211	361,807
Well/Booster Pump Reserve (1)	LAIF	<u>0</u>	<u>50,000</u>
Subtotal		1,525,002	622,923
Other District Reserves			
Petty Cash		600	600
Change Drawer Fund		1,500	1,500
Payroll Fund		5,000	5,000
Emergency Reserve Fund (2)	LAIF	1,000,000	1,000,000
Opportunity Fund	LAIF	<u>2,000,000</u>	<u>173,235</u>
Subtotal		3,007,100	1,180,335
Subtotal: Beginning Balance for Financial Projections			1,803,258
Restricted Funds - Legally			
Consumer & Projects Deposits	LAIF	224,142	242,912
Water Capacity Fees (4)	LAIF	(95,329)	23,117
Sewer Capacity Fees	LAIF	112,898	288,145
CMM Reserve Fund	LAIF	333,468	360,367
CMM Redemption Fund	LAIF	273,294	244,355
CMM Prepayments Fund	LAIF	<u>2,962</u>	<u>2,980</u>
Subtotal		851,435	1,161,876
Other			
Hi-Desert Medical Center (WWTP)	LAIF	0	595,909
Total		5,383,537	3,561,043
<p>1 - Restricted for replacement of assets for in these categories only. Well/Booster Pump Reserve was established in 2012/13 with annual funding of \$50,000. Annual funding for E/T Reserve is \$100,000 per year.</p> <p>2 - Emergency Fund is restricted for unplanned/unbudgeted emergencies or disasters.</p> <p>3 - Opportunity Fund is restricted for use if an opportunity arises that the Board wants to take advantage of for future items not planned or anticipated.</p> <p>4 - Water capacity fund went negative in FY2012 because the District completed more applicable projects than funding received.</p> <p>Source: District Fund Balance Reports.</p>			

Table 6
 Joshua Basin Water District
 Grant Funding & Reimbursements

Grant/Reimbursement	Total Grant	Reimbursement (for Prior Exps)	FY 2013/14 Project Funding
DWR IRWM Prop 84 Grant	\$3,000,000	\$1,929,000	\$1,071,000
CDPH Prop 84 Grant	3,200,000	0	3,200,000
MWA Local Grant	1,000,000	1,000,000	0
MWA IDM Reserve Excess Balance	599,000	599,000	0
Total	7,799,000	3,528,000	4,271,000

Is the \$101K Grant Retention Receivable also a cash reimbursement for prior project expenditures?

Table 7
 Joshua Basin Water District
 Outstanding Debt

Year Ending June 30	Debt Funded by District Payments			Assessment Bonds	
	2006 IDM GO Refunding Bonds (MWA)			1996 Copper	
	Upcoming Yr IDM Debt Svc	Est. Local Agency %	District Share %	District Payment	Mt. Mesa AD Bonds
2014	3,254,750	25%	27%	219,696	248,002
2015	3,253,000	25%	27%	219,578	247,817
2016	3,250,750	25%	27%	219,426	248,430
2017	3,257,750	25%	27%	219,898	247,840
2018	3,253,250	25%	27%	219,594	248,047
2019	3,257,500	25%	27%	219,881	248,030
2020	3,259,750	25%	27%	220,033	247,787
2021	2,304,750	25%	27%	155,571	247,320
2022					247,605
2023					246,642
2024					246,432
2025					246,930
2026					246,135
2027					246,047
2028					245,645
2029					245,905
2030					245,805
2031					245,345
2032					244,525
2033					244,322
2034					244,692
2035					244,612
2036					244,230
Total				3,230,567	7,408,502

Table 8
 Joshua Basin Water District
 Debt Service Estimates, \$3M Bank Loan

\$3 Million of Project Funding

	10-Year Bank Loan	15-Year Bank Loan	20-Year Bank Loan
Project Funding Target	\$5,000,000	\$5,000,000	\$5,000,000
Loan Amount			
Project Funding	\$5,000,000	\$5,000,000	\$5,000,000
Issuance Costs (est.)	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>
Total Loan Amount	5,075,000	5,075,000	5,075,000
Loan Terms			
Term (years)	10	15	20
Interest Rate (est.)	3.50%	4.00%	4.50%
Annual Debt Service	\$610,000	\$456,000	\$390,000
Total Payments Over Term of Loan	\$6,100,000	\$6,840,000	\$7,800,000
Debt Service per \$1 Million of Project Funding	\$122,000	\$91,200	\$78,000

Table 9
 Joshua Basin Water District
 Debt Service Estimates, \$5M Bank Loan

\$5 Million of Project Funding

	10-Year Bank Loan	15-Year Bank Loan	20-Year Bank Loan
Project Funding Target	\$5,000,000	\$5,000,000	\$5,000,000
Loan Amount			
Project Funding	\$5,000,000	\$5,000,000	\$5,000,000
Issuance Costs (est.)	<u>75,000</u>	<u>75,000</u>	<u>75,000</u>
Total Loan Amount	5,075,000	5,075,000	5,075,000
Loan Terms			
Term (years)	10	15	20
Interest Rate (est.)	3.50%	4.00%	4.50%
Annual Debt Service	\$610,000	\$456,000	\$390,000
Total Payments Over Term of Loan	\$6,100,000	\$6,840,000	\$7,800,000
Debt Service per \$1 Million of Project Funding	\$122,000	\$91,200	\$78,000

Table 10

Joshua Basin Water District - Cash Flow Projections

	Budget	Projected									Esc Factor	
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23		
1	Effective Date of Rate Adjustment	01/01/14	01/01/15	01/01/16	01/01/17	01/01/18	01/01/19	01/01/20	01/01/21	01/01/22	01/01/23	
2	Rate Adjustment %	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	
3	Growth: New EDUs	-	10	10	15	15	20	20	20	20	20	
4	Growth in Billable EDUs %	-	0.2%	0.2%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	
5	Wtr Demand Elasticity (Response to Rate Incr)	-	(0.3)	(0.3)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	
6	Change in Annual Water Consumption	-	-2.1%	-2.1%	-1.4%	-1.4%	-1.2%	-1.2%	-1.2%	-1.2%	-1.2%	
7	Basic Facility Fee	\$3,090	\$3,150	\$3,210	\$3,270	\$3,340	\$3,410	\$3,480	\$3,550	\$3,620	\$3,690	2.0%
8	Meter Installation Charge (Non-Tract)	\$890	\$910	\$930	\$950	\$970	\$990	\$1,010	\$1,030	\$1,050	\$1,070	2.0%
9	Water Purchases from MWA (AF)	0	500	500	500	500	500	500	500	800	800	
10	MWA Rate per AF	\$450	\$473	\$497	\$522	\$548	\$575	\$604	\$634	\$666	\$699	5.0%
11	Pulled Meter Accounts	1,047	700	700	700	700	700	700	700	700	700	
12	Pulled Meter Rate (% of Fixed Charge)	50%	75%	100%	100%	100%	100%	100%	100%	100%	100%	
13	Interest Rate	-	1.0%	1.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
14	Annual Cost Escalator	-	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
15	Beginning Fund Reserves	\$1,803,000	\$5,948,000	\$6,051,000	\$6,174,000	\$6,186,000	\$6,235,000	\$6,285,000	\$6,325,000	\$6,375,000	\$6,379,000	
16	REVENUES											
17	Water Rate Revenues (with Jan-1 increase)	2,838,000	3,024,000	3,205,000	3,402,000	3,605,000	3,803,000	4,016,000	4,242,000	4,480,000	4,732,000	
18	Fixed Charges from Pulled Meters	75,000	205,000	210,000	214,000	219,000	229,000	242,000	257,000	272,000	289,000	
19	Standby Revenue (Net of Uncollectable)	1,036,071	1,036,000	1,036,000	1,035,000	1,034,000	1,033,000	1,032,000	1,031,000	1,030,000	1,029,000	
20	Private Fire Svc & Special Services	131,881	130,000	133,000	136,000	139,000	142,000	145,000	148,000	151,000	154,000	2.0%
21	Water Capacity & Meter Install Fees	0	41,000	41,000	63,000	65,000	88,000	90,000	92,000	93,000	95,000	
22	Interest Earnings	9,040	59,000	91,000	123,000	124,000	125,000	126,000	127,000	128,000	128,000	
23	Property Taxes	396,283	404,000	412,000	420,000	428,000	437,000	446,000	455,000	464,000	473,000	2.0%
24	Total Revenues	4,486,275	4,899,000	5,128,000	5,393,000	5,614,000	5,857,000	6,097,000	6,352,000	6,618,000	6,900,000	
25	Grants/Reimbursements	3,528,000										
26	New Grant Proceeds	4,271,000										
27	Potential Debt Proceeds		5,000,000									
28	EXPENSES											
29	Operating & Maintenance											
30	Production (tank refurbishment included below)	872,842	908,000	944,000	982,000	1,021,000	1,062,000	1,104,000	1,148,000	1,194,000	1,242,000	
31	Distribution	629,760	655,000	681,000	708,000	736,000	765,000	796,000	828,000	861,000	895,000	
32	Customer Service	545,868	568,000	591,000	615,000	640,000	666,000	693,000	721,000	750,000	780,000	
33	Administration	564,284	587,000	610,000	634,000	659,000	685,000	712,000	740,000	770,000	801,000	
34	Engineering	188,034	196,000	204,000	212,000	220,000	229,000	238,000	248,000	258,000	268,000	
35	Finance	426,502	444,000	462,000	480,000	499,000	519,000	540,000	562,000	584,000	607,000	
36	Personnel & Legal	222,326	231,000	240,000	250,000	260,000	270,000	281,000	292,000	304,000	316,000	
37	Subtotal	3,449,616	3,589,000	3,732,000	3,881,000	4,035,000	4,196,000	4,364,000	4,539,000	4,721,000	4,909,000	
38	Debt Service (assumes 20-yr loan)	0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	
39	Non-Operating											
40	Morongo Basin Pipeline Pymts to MWA	219,696	220,000	220,000	219,000	220,000	220,000	220,000	156,000	0	0	
41	Water Purchases from MWA	0	237,000	249,000	261,000	274,000	288,000	302,000	317,000	533,000	559,000	
42	Tank, Well & Pump Maint/Improvements	200,000	250,000	300,000	312,000	324,000	337,000	350,000	364,000	379,000	394,000	
43	Equipment/Tech/Vehicle Replacement	0	100,000	104,000	108,000	112,000	116,000	121,000	126,000	131,000	136,000	
44	Pipeline Replacement (7,500' / yr)	0	0	0	200,000	200,000	250,000	300,000	400,000	450,000	500,000	
45	Replace 75,000' of Substandard 4" Pipe	0	5,000,000	0	0	0	0	0	0	0	0	
46	Grant-Funded Recharge Projects	4,271,000	0	0	0	0	0	0	0	0	0	
47	Subtotal	4,690,696	5,807,000	873,000	1,100,000	1,130,000	1,211,000	1,293,000	1,363,000	1,493,000	1,589,000	
48	Total Expenses	8,140,312	9,796,000	5,005,000	5,381,000	5,565,000	5,807,000	6,057,000	6,302,000	6,614,000	6,898,000	
49	Revenues Less Expenses	4,144,963	103,000	123,000	12,000	49,000	50,000	40,000	50,000	4,000	2,000	
50	Ending Fund Reserves	5,947,963	6,051,000	6,174,000	6,186,000	6,235,000	6,285,000	6,325,000	6,375,000	6,379,000	6,381,000	
51	Debt Service Coverage		3.28	3.49	3.78	3.95	4.15	4.33	4.53	4.74	4.98	

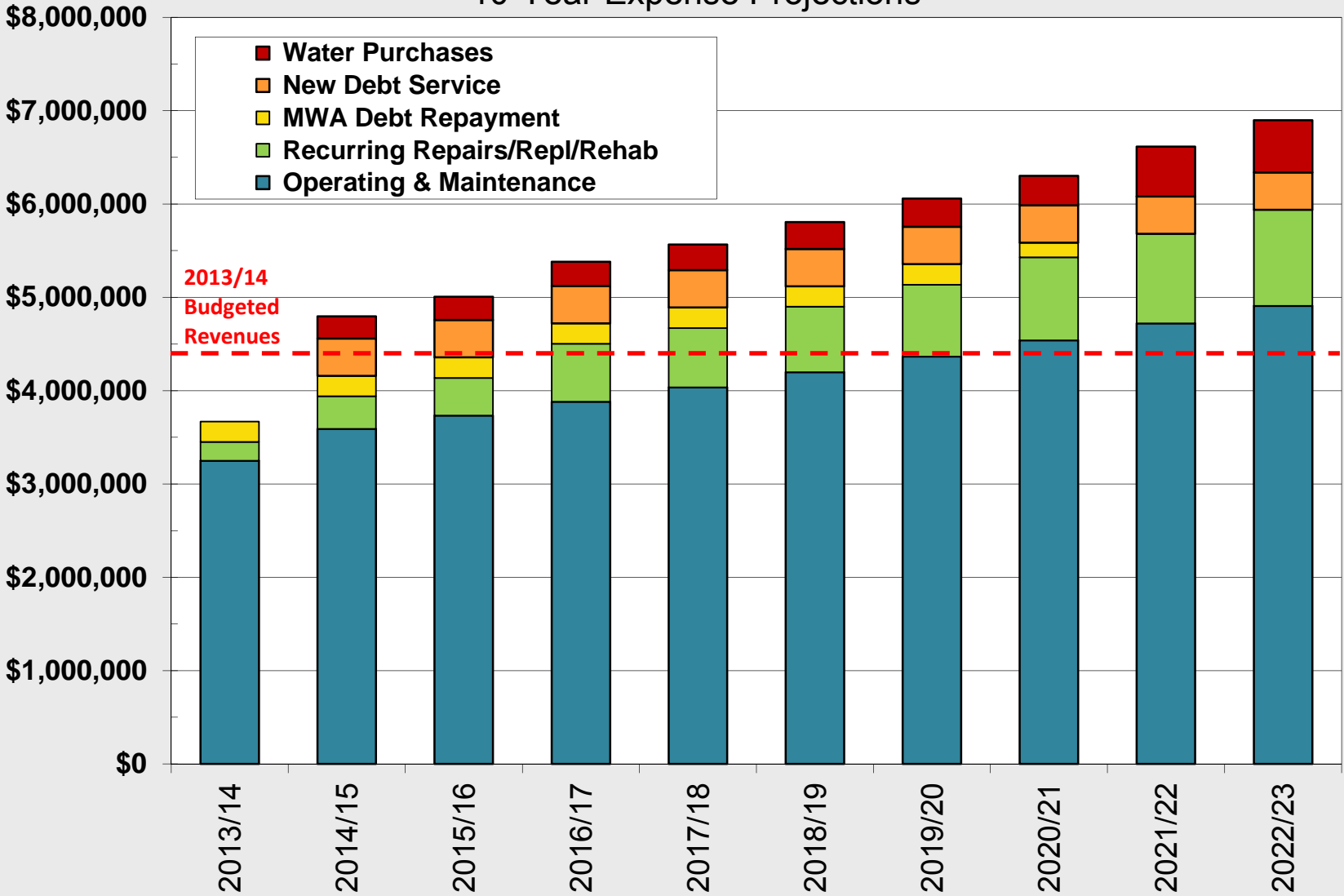
Table 10B

Joshua Basin Water District - Cash Flow Projections

With 3% Inflationary Rate Increases

	Budget	Projected									Esc Factor	
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23		
1	Effective Date of Rate Adjustment	01/01/14	01/01/15	01/01/16	01/01/17	01/01/18	01/01/19	01/01/20	01/01/21	01/01/22	01/01/23	
2	Rate Adjustment %	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	
3	Growth: New EDUs	-	10	10	15	15	20	20	20	20	20	
4	Growth in Billable EDUs %	-	0.2%	0.2%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	
5	Wtr Demand Elasticity (Response to Rate Incr)	-	(0.3)	(0.3)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	
6	Change in Annual Water Consumption	-	-0.9%	-0.9%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%	
7	Basic Facility Fee	\$3,090	\$3,150	\$3,210	\$3,270	\$3,340	\$3,410	\$3,480	\$3,550	\$3,620	\$3,690	2.0%
8	Meter Installation Charge (Non-Tract)	\$890	\$910	\$930	\$950	\$970	\$990	\$1,010	\$1,030	\$1,050	\$1,070	2.0%
9	Water Purchases from MWA (AF)	0	500	500	500	500	500	500	500	800	800	
10	MWA Rate per AF	\$450	\$473	\$497	\$522	\$548	\$575	\$604	\$634	\$666	\$699	5.0%
11	Pulled Meter Accounts	1,047	700	700	700	700	700	700	700	700	700	
12	Pulled Meter Rate (% of Fixed Charge)	50%	75%	100%	100%	100%	100%	100%	100%	100%	100%	
13	Interest Rate	-	1.0%	1.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
14	Annual Cost Escalator	-	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
15	Beginning Fund Reserves	\$1,803,000	\$5,898,000	\$5,845,000	\$5,703,000	\$5,327,000	\$4,863,000	\$4,281,000	\$3,557,000	\$2,697,000	\$1,634,000	
16	REVENUES											
17	Water Rate Revenues (with Jan-1 increase)	2,788,000	2,868,000	2,943,000	3,023,000	3,109,000	3,199,000	3,292,000	3,388,000	3,487,000	3,588,000	
18	Fixed Charges from Pulled Meters	75,000	205,000	210,000	214,000	219,000	229,000	242,000	257,000	272,000	289,000	
19	Standby Revenue (Net of Uncollectable)	1,036,071	1,036,000	1,036,000	1,035,000	1,034,000	1,033,000	1,032,000	1,031,000	1,030,000	1,029,000	
20	Private Fire Svc & Special Services	131,881	130,000	133,000	136,000	139,000	142,000	145,000	148,000	151,000	154,000	2.0%
21	Water Capacity & Meter Install Fees	0	41,000	41,000	63,000	65,000	88,000	90,000	92,000	93,000	95,000	
22	Interest Earnings	9,040	59,000	88,000	114,000	107,000	97,000	86,000	71,000	54,000	33,000	
23	Property Taxes	396,283	404,000	412,000	420,000	428,000	437,000	446,000	455,000	464,000	473,000	2.0%
24	Total Revenues	4,436,275	4,743,000	4,863,000	5,005,000	5,101,000	5,225,000	5,333,000	5,442,000	5,551,000	5,661,000	
25	Grants/Reimbursements	3,528,000										
26	New Grant Proceeds	4,271,000										
27	Potential Debt Proceeds		5,000,000									
28	EXPENSES											
29	Operating & Maintenance											
30	Production (tank refurbishment included below)	872,842	908,000	944,000	982,000	1,021,000	1,062,000	1,104,000	1,148,000	1,194,000	1,242,000	
31	Distribution	629,760	655,000	681,000	708,000	736,000	765,000	796,000	828,000	861,000	895,000	
32	Customer Service	545,868	568,000	591,000	615,000	640,000	666,000	693,000	721,000	750,000	780,000	
33	Administration	564,284	587,000	610,000	634,000	659,000	685,000	712,000	740,000	770,000	801,000	
34	Engineering	188,034	196,000	204,000	212,000	220,000	229,000	238,000	248,000	258,000	268,000	
35	Finance	426,502	444,000	462,000	480,000	499,000	519,000	540,000	562,000	584,000	607,000	
36	Personnel & Legal	222,326	231,000	240,000	250,000	260,000	270,000	281,000	292,000	304,000	316,000	
37	Subtotal	3,449,616	3,589,000	3,732,000	3,881,000	4,035,000	4,196,000	4,364,000	4,539,000	4,721,000	4,909,000	
38	Debt Service (assumes 20-yr loan)	0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	
39	Non-Operating											
40	Morongo Basin Pipeline Pymts to MWA	219,696	220,000	220,000	219,000	220,000	220,000	220,000	156,000	0	0	
41	Water Purchases from MWA	0	237,000	249,000	261,000	274,000	288,000	302,000	317,000	533,000	559,000	
42	Tank, Well & Pump Maint/Improvements	200,000	250,000	300,000	312,000	324,000	337,000	350,000	364,000	379,000	394,000	
43	Equipment/Tech/Vehicle Replacement	0	100,000	104,000	108,000	112,000	116,000	121,000	126,000	131,000	136,000	
44	Pipeline Replacement (7,500' / yr)	0	0	0	200,000	200,000	250,000	300,000	400,000	450,000	500,000	
45	Replace 75,000' of Substandard 4" Pipe	0	5,000,000	0	0	0	0	0	0	0	0	
46	Grant-Funded Recharge Projects	4,271,000	0	0	0	0	0	0	0	0	0	
47	Subtotal	4,690,696	5,807,000	873,000	1,100,000	1,130,000	1,211,000	1,293,000	1,363,000	1,493,000	1,589,000	
48	Total Expenses	8,140,312	9,796,000	5,005,000	5,381,000	5,565,000	5,807,000	6,057,000	6,302,000	6,614,000	6,898,000	
49	Revenues Less Expenses	4,094,963	(53,000)	(142,000)	(376,000)	(464,000)	(582,000)	(724,000)	(860,000)	(1,063,000)	(1,237,000)	
50	Ending Fund Reserves	5,897,963	5,845,000	5,703,000	5,327,000	4,863,000	4,281,000	3,557,000	2,697,000	1,634,000	397,000	
51	Debt Service Coverage		2.89	2.83	2.81	2.67	2.57	2.42	2.26	2.08	1.88	

Joshua Basin Water District 10-Year Expense Projections



Excludes capital projects funded by debt.

Table 11
 Joshua Basin Water District
 5-Year Average Revenues & Expenses

	2013/14	2014/15	2015/16	2016/17	2017/18	5-Year Avg
REVENUES						
Metered Water Sales	1,426,599	0	0	0	0	285,320
Fixed Monthly Charges	1,323,623	0	0	0	0	264,725
Fixed Charges from Pulled Meters	75,000	205,000	210,000	214,000	219,000	184,600
Standby Revenue (Net of Uncollectable)	1,036,071	1,036,000	1,036,000	1,035,000	1,034,000	1,035,414
Private Fire Svc & Special Services	131,881	130,000	133,000	136,000	139,000	133,976
Water Capacity & Meter Install Fees	0	41,000	41,000	63,000	65,000	42,000
Interest Earnings	9,040	59,000	91,000	123,000	124,000	81,208
Property Taxes	396,283	404,000	412,000	420,000	428,000	412,057
Total Revenues	4,398,497	1,875,000	1,923,000	1,991,000	2,009,000	2,439,299
Grants/Reimbursements	3,528,000	0	0	0	0	705,600
New Grant Proceeds	4,271,000	0	0	0	0	854,200
Potential Debt Proceeds	0	5,000,000	0	0	0	1,000,000
EXPENSES						
Operating & Maintenance						
Production	872,842	908,000	944,000	982,000	1,021,000	945,568
Distribution	629,760	655,000	681,000	708,000	736,000	681,952
Customer Service	545,868	568,000	591,000	615,000	640,000	591,974
Administration	564,284	587,000	610,000	634,000	659,000	610,857
Engineering	188,034	196,000	204,000	212,000	220,000	204,007
Finance	426,502	444,000	462,000	480,000	499,000	462,300
Personnel & Legal	222,326	231,000	240,000	250,000	260,000	240,665
Subtotal	3,449,616	3,589,000	3,732,000	3,881,000	4,035,000	3,737,323
Debt Service (assumes 20-yr loan)	0	400,000	400,000	400,000	400,000	320,000
Non-Operating						
Morongo Basin Pipeline Pymts to MWA	219,696	220,000	220,000	219,000	220,000	219,739
Water Purchases from MWA	0	237,000	249,000	261,000	274,000	204,200
Tank, Well & Pump Maint/Improvements	200,000	250,000	300,000	312,000	324,000	277,200
Equipment/Tech/Vehicle Replacement	0	100,000	104,000	108,000	112,000	84,800
Pipeline Replacement (7,500' / yr)	0	0	0	200,000	200,000	80,000
Replace 75,000' of Substandard 4" Pipe	0	5,000,000	0	0	0	1,000,000
Grant-Funded Recharge Projects	4,271,000	0	0	0	0	854,200
Subtotal	4,690,696	5,807,000	873,000	1,100,000	1,130,000	2,720,139
Total Expenses	8,140,312	9,796,000	5,005,000	5,381,000	5,565,000	6,777,462

Table 12
 Joshua Basin Water District
 Cost Recovery Allocation

Based on Projecte 5-Year Average

	Projected 5-Year Avg	Cost Recovery %		Cost Recovery \$	
		Fixed	Variable	Fixed	Variable
REVENUES					
Metered Water Sales	1,665,000				
Fixed Monthly Charges	1,558,750				
Fixed Charges from Pulled Meters	0				
Standby Revenue (Net of Uncollectable)	1,035,250				
Private Fire Svc & Special Services	134,500				
Water Capacity & Meter Install Fees	52,500				
Interest Earnings	99,250				
Property Taxes	416,000				
Total Revenues	4,961,250				
EXPENSES					
Operating & Maintenance					
Production	945,568	40%	60%	378,227	567,341
Distribution	681,952	40%	60%	272,781	409,171
Customer Service	591,974	100%	0%	591,974	0
Administration	610,857	100%	0%	610,857	0
Engineering	204,007	50%	50%	102,003	102,003
Finance	462,300	100%	0%	462,300	0
Personnel & Legal	240,665	100%	0%	240,665	0
Subtotal	3,737,323	71%	29%	2,658,807	1,078,516
Debt Service (assumes 20-yr loan)	320,000	50%	50%	160,000	160,000
Non-Operating					
Morongo Basin Pipeline Pymts to MWA	219,739	0%	100%	0	219,739
Water Purchases from MWA	204,200	0%	100%	0	204,200
Tank, Well & Pump Maint/Improvements	277,200	50%	50%	138,600	138,600
Equipment/Tech/Vehicle Replacement	84,800	50%	50%	42,400	42,400
Pipeline Replacement (7,500' / yr)	80,000	50%	50%	40,000	40,000
Subtotal	865,939	26%	74%	221,000	644,939
Total Expenses	4,923,262	62%	38%	3,039,807	1,883,455
NET FUNDING REQUIRED FROM WATER RATES					
Total Expenses	4,923,262	62%	38%	3,039,807	1,883,455
Less Other Funding Sources	(1,737,500)	100%	0%	(1,737,500)	0
Net Funding from Water Rates	3,185,762	41%	59%	1,302,307	1,883,455

Excludes capital improvement projects funded by grants and debt, but includes associated debt service.

Table 13
 Joshua Basin Water District
 Accounts & Meter Equivalents

Meter Size	Single Family Residential	Multi-Family Residential	Commercial & Institutional	Total Accounts	Capacity ^{1,2} (gpm)	Meter Ratio	Meter Equivalents
3/4" & 1"	4,125	59	96	4,280	30	1.00	4,280
1-1/2"	4	14	8	26	100	3.33	87
2"	3	3	12	18	160	5.33	96
3"	<u>0</u>	<u>1</u>	<u>4</u>	<u>5</u>	300	10.00	<u>50</u>
Total	4,132	77	120	4,329			4,513

1 Based on American Water Works Association standard meter capacities.

2 Note: 1" meters merged in with 3/4" meters due to new plumbing code requirements which require 1" meters for new homes with underlying demand the same as existing homes served by a 3/4" meter.

Note: Number of accounts can vary by billing period due to changes in account status and growth.

Table 14
 Joshua Basin Water District
 Fixed Meter Charge Calculation

	Current	2013/14	2014/15	2015/16	2016/17	
Water Rate Revenue Recovery						
Effective Date of Rate Increase		01/01/14	01/01/15	01/01/16	01/01/17	
Annualized Revenues w/ Rate Increase		\$2,943,000	\$3,118,000	\$3,304,000	\$3,516,000	
Fixed Rate Recovery						
		<i>With 4-Year Phase in to 40% Fixed Rate Recovery</i>				
Cost Recovery Allocation %	48%	46%	44%	42%	40%	
Cost Recovery Allocation \$		\$1,353,780	\$1,371,920	\$1,387,680	\$1,406,400	
Meter Equivalents						
Existing Meter Equivalents		4,513	4,513	4,523	4,533	
Projected Growth		-	10	10	15	
Total		4,513	4,523	4,533	4,548	
Rate per Meter Equivalent						
Annual	\$285.84	\$300.00	\$303.34	\$306.15	\$309.26	
Monthly	23.82	25.00	25.28	25.51	25.77	
Monthly Increase		1.18	0.28	0.23	0.26	
With Steady Annual Increases	\$23.82	\$24.31	\$24.80	\$25.29	\$25.78	
Monthly Increase		0.49	0.49	0.49	0.49	
Projected Fixed Monthly Meter Charges						
<u>Meter Size</u>	<u>Capacity (gpm)</u>					
3/4" & 1"	30	\$23.82	\$24.31	\$24.80	\$25.29	\$25.78
1-1/2"	100	79.40	81.03	82.67	84.30	85.93
2"	160	127.00	129.65	132.27	134.88	137.49
3"	300	238.20	243.09	248.01	252.90	257.79

Note: Fixed Meter Charge for 1" meter is currently \$39.70; 1" meter rate will be merged in with 3/4" meter rate.

Table 15
 Joshua Basin Water District
 Projected Base Year Water Use by Tier

Meter Size	Current Tiers			Proposed Tiers		
	Tier Breakpoints	Water Use (hcf)	% of Subtotal	Tier Breakpoints	Water Use (hcf)	% of Subtotal
3/4" & 1" Meters						
		<u>Use per Tier</u>			<u>Use per Tier</u>	
Tier 1	0 - 5 hcf	200,000	40.0%	0 - 5 hcf	200,000	40.0%
Tier 2	5.01 - 20 hcf	200,000	40.0%	5.01 - 10 hcf	100,000	20.0%
Tier 3	20.01 - 40 hcf	60,000	12.0%	10.01 - 20 hcf	100,000	20.0%
Tier 4	40.01 + hcf	<u>40,000</u>	<u>8.0%</u>	20.01 + hcf	<u>100,000</u>	<u>20.0%</u>
Subtotal		500,000	100.0%		500,000	100.0%
Larger Meters		95,000	100.0%		95,000	100.0%
Construction/Fire		5,000	100.0%		5,000	100.0%
Total		600,000			600,000	

Table 16
 Joshua Basin Water District
 Variable Water Flow Charge Calculation

	Current	2013/14	2014/15	2015/16	2016/17
Water Rate Revenue Recovery					
Effective Date of Rate Increase		01/01/14	01/01/15	01/01/16	01/01/17
Annualized Revenues w/ Rate Increase		\$2,943,000	\$3,118,000	\$3,304,000	\$3,516,000
Variable Rate Recovery					
		<i>With 4-Year Phase in to 60% Variable Rate Recovery</i>			
Cost Recovery Allocation %	52%	54%	56%	58%	60%
Cost Recovery Allocation \$		\$1,589,220	\$1,746,080	\$1,916,320	\$2,109,600
Projected Water Sales (hcf)					
Baseline Water Sales	600,000	600,000	587,400	587,400	587,400
Projected Change in Demand	-	-2.1%	-2.1%	-1.4%	-1.4%
Total	600,000	587,400	587,400	587,400	587,400
Average Rate per Unit (\$/hcf)					
Increase	\$2.35	\$2.71	\$2.97	\$3.26	\$3.59
		0.36	0.27	0.29	0.33
With Steady Annual Increases	\$2.35	\$2.66	\$2.97	\$3.28	\$3.59
Increase in Average Rate (\$/hcf)		0.31	0.31	0.31	0.31
<i>For Informational Purposes</i>					
Equivalent Rate per 100 gallons	\$0.314	\$0.356	\$0.397	\$0.439	\$0.480
Increase (\$ per 100 gallons)		0.041	0.041	0.041	0.041

Table 17
 Joshua Basin Water District
 Current vs. Proposed Water Rate Tiers
 For 3/4" & 1" Meters

Based on projected water use

CURRENT TIERS				PROPOSED TIERS			
	Bi-Monthly Use	Bills Ending in Tier %	Water Use in Tier		Bi-Monthly Use	Bills Ending in Tier %	Water Use in Tier
Tier 1	0 - 5 hcf	42.1%	40.0%	Tier 1	0 - 5 hcf	42.1%	40.0%
Tier 2	5.01 - 20 hcf	46.1%	40.0%	Tier 2	5.01 - 10 hcf	26.9%	20.0%
Tier 3	20.01 - 40 hcf	8.6%	12.0%	Tier 3	10.01 - 20 hcf	19.3%	20.0%
Tier 4	40.01 + hcf	3.3%	8.0%	Tier 4	20.01 + hcf	11.8%	20.0%

Note: Water bills & use statistics based on analysis of utility billing data from FY 2012/13.

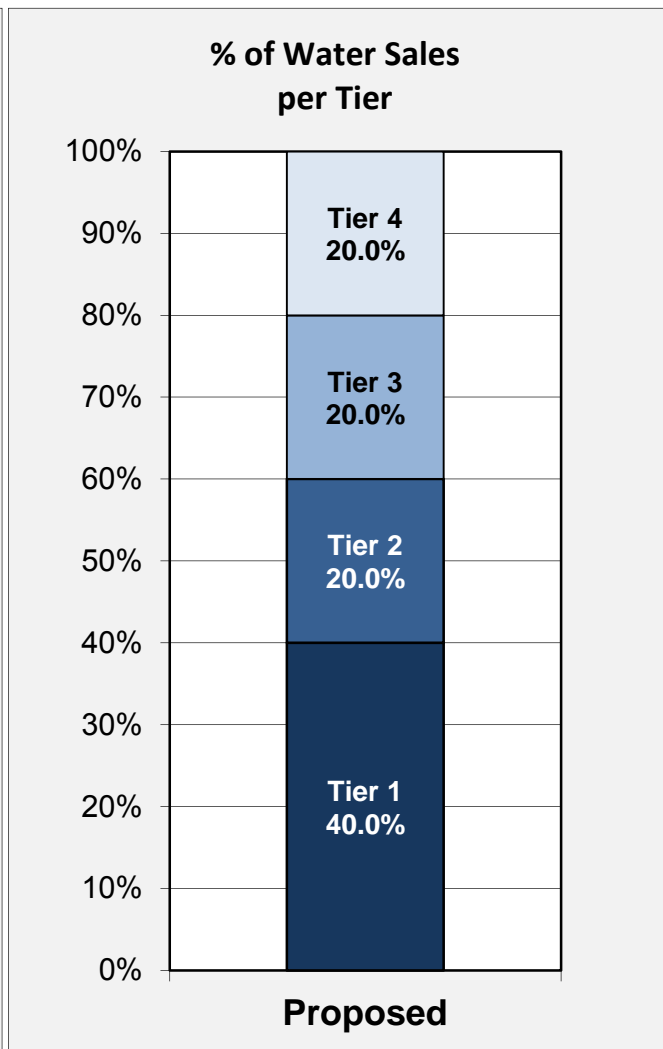
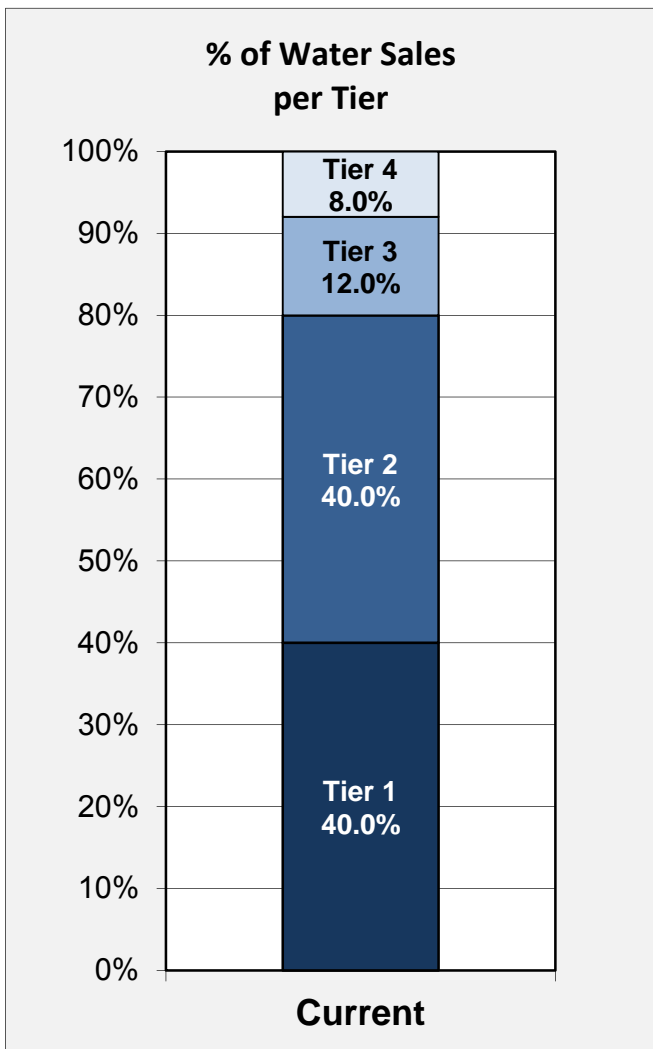


Table 17B

Joshua Basin Water District
 Current vs. Proposed Water Rate Tiers
 For 3/4" & 1" Meters

Based on 2012/13 billing data

CURRENT TIERS				PROPOSED TIERS			
	Bi-Monthly Use	Bills Ending in Tier %	Water Use in Tier		Bi-Monthly Use	Bills Ending in Tier %	Water Use in Tier
Tier 1	0 - 5 hcf	42.1%	38.9%	Tier 1	0 - 5 hcf	42.1%	38.9%
Tier 2	5.01 - 20 hcf	46.1%	40.7%	Tier 2	5.01 - 10 hcf	26.9%	21.5%
Tier 3	20.01 - 40 hcf	8.6%	12.3%	Tier 3	10.01 - 20 hcf	19.3%	19.2%
Tier 4	40.01 + hcf	3.3%	8.1%	Tier 4	20.01 + hcf	11.8%	20.4%

Note: Water bills & use statistics based on analysis of utility billing data from FY 2012/13.

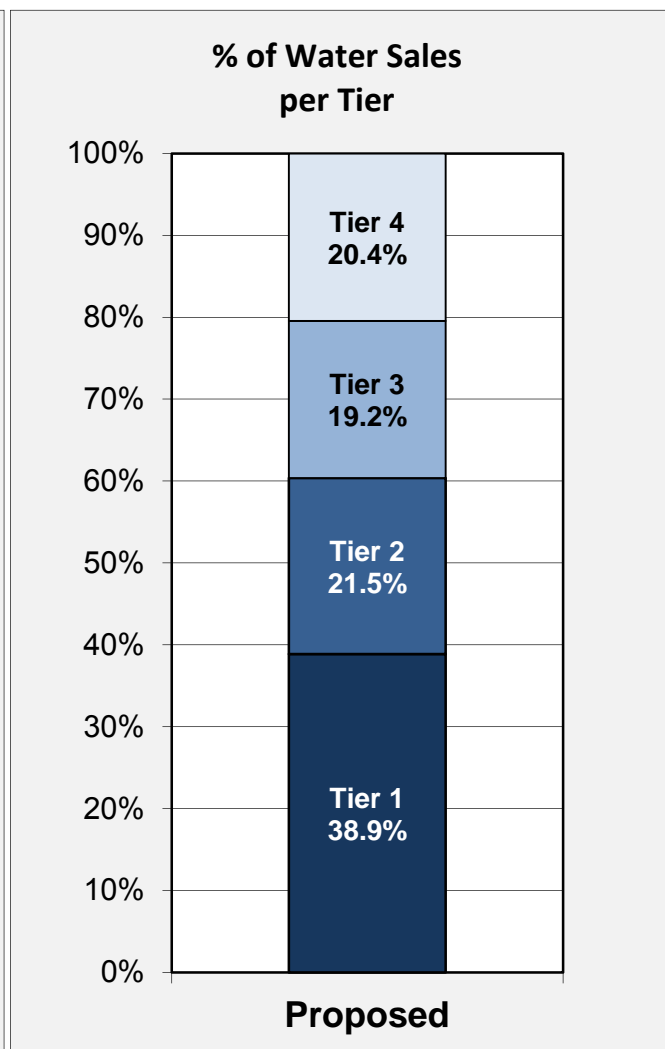
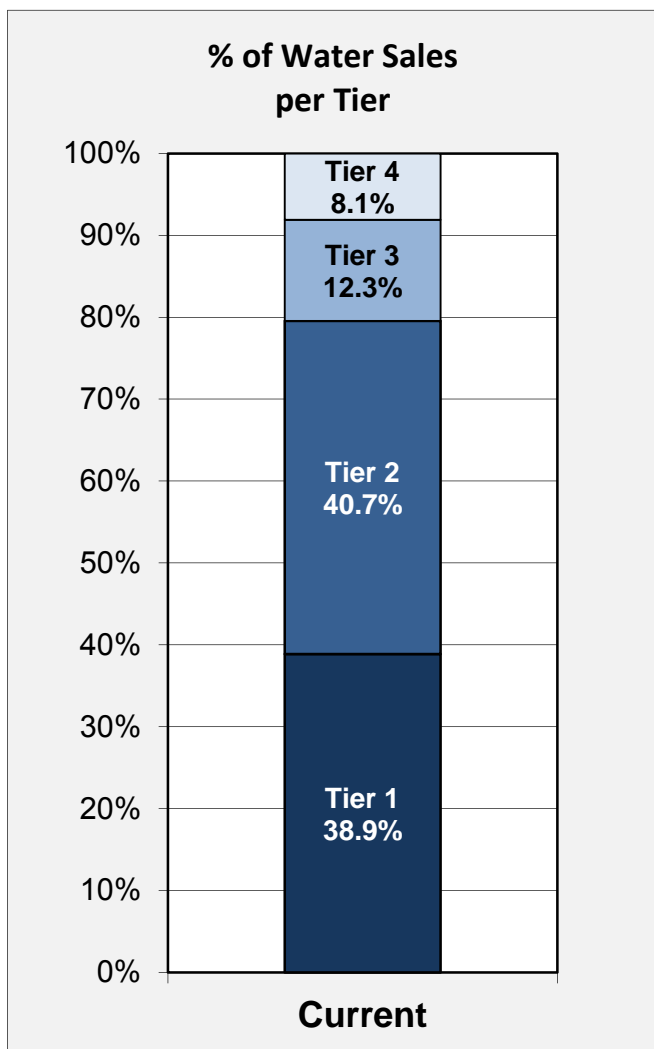


Table 18
 Joshua Basin Water District
 Proposed Water Rate Tiers
 For 3/4" & 1" Meters

	Current (est.)	Projected			
		2013/14	2014/15	2015/16	2016/17
Effective Date of Rate Increase		01/01/14	01/01/15	01/01/16	01/01/17
Target Average Rate (per hcf)	\$2.35	\$2.66	\$2.97	\$3.28	\$3.59
Monthly Tier Breakpoints		New Tier Breakpoints			
Tier 1	0 - 5	0 - 5	0 - 5	0 - 5	0 - 5
Tier 2	>5 - 20	>5 - 10	>5 - 10	>5 - 10	>5 - 10
Tier 3	>20 - 40	>10 - 20	>10 - 20	>10 - 20	>10 - 20
Tier 4	>40	>20	>20	>20	>20
% of Use Billed in Tier		New Tier Breakpoints			
Tier 1	40.0%	40.0%	40.0%	40.0%	40.0%
Tier 2	40.0%	20.0%	20.0%	20.0%	20.0%
Tier 3	12.0%	20.0%	20.0%	20.0%	20.0%
Tier 4	8.0%	20.0%	20.0%	20.0%	20.0%
Proposed Tier Rates		New Tier Breakpoints			
Tier 1	\$2.14	\$2.30	\$2.50	\$2.75	\$3.00
Tier 2	\$2.39	2.60	2.90	3.20	3.50
Tier 3	\$2.57	2.90	3.30	3.65	4.00
Tier 4	\$2.75	3.20	3.70	4.10	4.50
<i>Tier 4 / Tier 1 Differential</i>	28.5%	39.1%	48.0%	49.1%	50.0%
Tier Rate % of Target		New Tier Breakpoints			
Tier 1	91.1%	86.5%	84.2%	83.8%	83.6%
Tier 2	101.7%	97.7%	97.6%	97.6%	97.5%
Tier 3	109.4%	109.0%	111.1%	111.3%	111.4%
Tier 4	117.0%	120.3%	124.6%	125.0%	125.3%
Weighted Average Rate	\$2.34	\$2.66	\$2.98	\$3.29	\$3.60
<i>Difference from Target \$</i>	<i>(0.01)</i>	<i>0.00</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>
<i>Difference from Target %</i>	<i>-0.4%</i>	<i>0.0%</i>	<i>0.3%</i>	<i>0.3%</i>	<i>0.3%</i>

Table 19
 Joshua Basin Water District
 Projected Water Rates

Effective Jan-1	Current	Projected Water Rates				
		2014	2015	2016	2017	
BASIC MONTHLY FEE						
<u>Meter Size</u>	<u>Capacity (gpm)</u>	<u>Monthly Rate</u>				
3/4" & 1"	30	\$23.82	\$24.31	\$24.80	\$25.29	\$25.78
1-1/2"	100	79.40	81.03	82.67	84.30	85.93
2"	160	127.00	129.65	132.27	134.88	137.49
3"	300	238.20	243.09	248.01	252.90	257.79
MONTHLY WATER FLOW CHARGES						
For 3/4" and 1" Meters		<u>Rate Per Unit (\$/hcf)</u>				
<u>New Tier Breakpoints</u>		<u>New Tier Breakpoints</u>				
Tier 1	0 - 5 units	\$2.14	\$2.30	\$2.50	\$2.75	\$3.00
Tier 2	5.01 - 10 units	2.39	2.60	2.90	3.20	3.50
Tier 3	10.01 - 20 units	2.57	2.90	3.30	3.65	4.00
Tier 4	20.01 + units	2.75	3.20	3.70	4.10	4.50
<i>1 unit = one hundred cubic feet = 748 gallons</i>						
For 1-1/2", 2" and 3" Meters		<u>Rate Per Unit (\$/hcf)</u>				
Unit rate for all water use		\$2.39	\$2.66	\$2.97	\$3.28	\$3.59
<i>1 unit = one hundred cubic feet = 748 gallons</i>						
PRIVATE FIRE PROTECTION						
<u>Device Size</u>	<u>Monthly Rate</u>					
2"	\$12.62	\$13.50	\$11.58	\$12.28	\$12.62	
3"	25.25	27.02	23.15	24.54	25.25	
4"	50.50	54.04	46.29	49.07	50.50	
6"	75.76	81.06	69.45	73.62	75.76	
8"	113.62	121.57	104.60	110.41	113.62	

Table 20
 Joshua Basin Water District
 Bill Impacts (3/4" Meter)

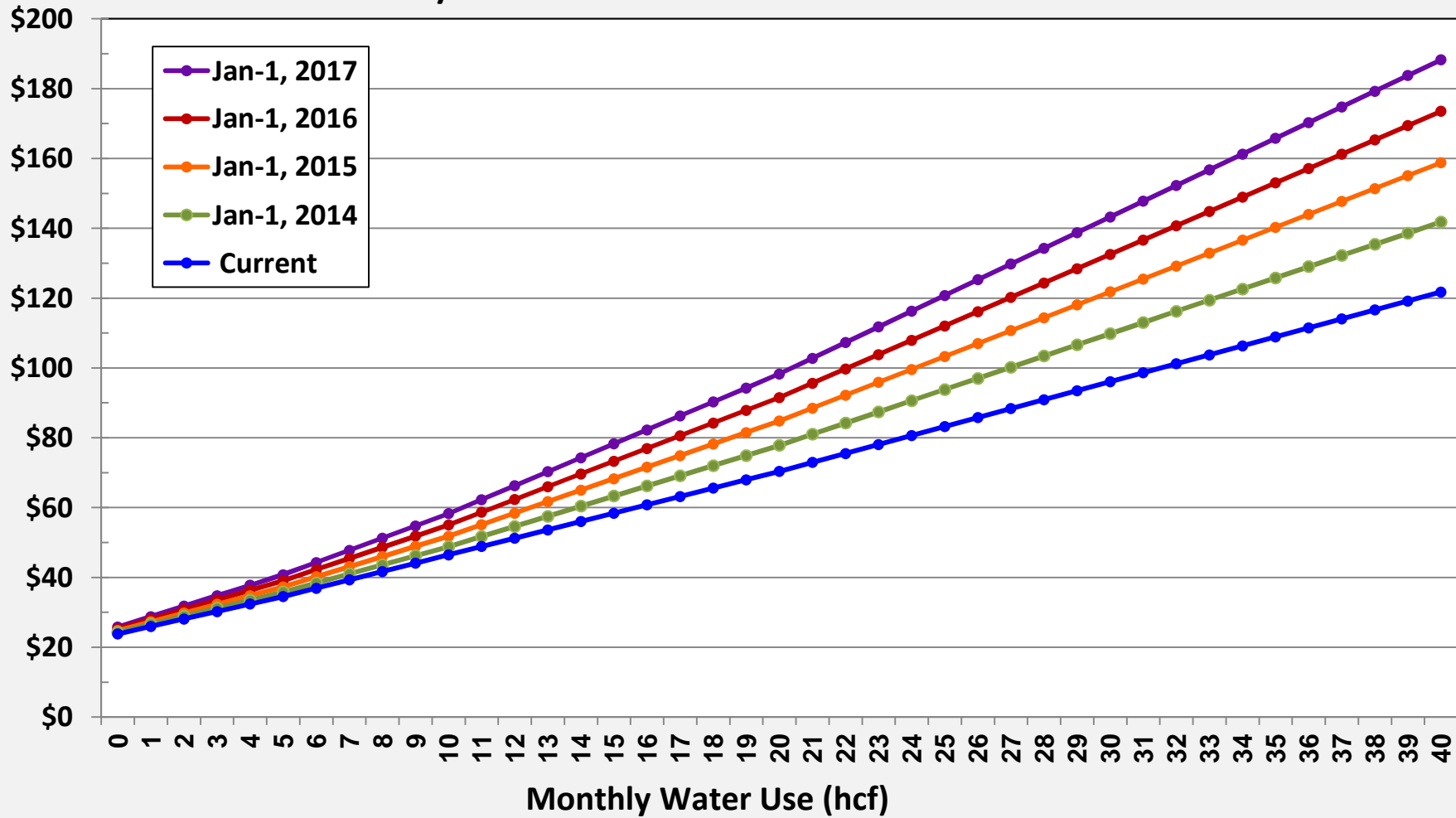
Monthly Use (hcf)	% of Bills in Block	% of Bills at or Below	Current Bill	Projected Monthly Bills				4-Year Impact		
				01/01/14	01/01/15	01/01/16	01/01/17	\$/month	%	\$/day
3/4" Meter Account										
0	1.4%	1.4%	\$23.82	\$24.31	\$24.80	\$25.29	\$25.78	\$1.96	8.2%	\$0.06
1	7.7%	9.1%	25.96	26.61	27.30	28.04	28.78	2.82	10.9%	0.09
2	8.4%	17.5%	28.10	28.91	29.80	30.79	31.78	3.68	13.1%	0.12
3	8.5%	26.1%	30.24	31.21	32.30	33.54	34.78	4.54	15.0%	0.15
4	8.1%	34.1%	32.38	33.51	34.80	36.29	37.78	5.40	16.7%	0.18
5	7.9%	42.1%	34.52	35.81	37.30	39.04	40.78	6.26	18.1%	0.21
6 Median	7.1%	49.1%	36.91	38.41	40.20	42.24	44.28	7.37	20.0%	0.24
7	6.1%	55.2%	39.30	41.01	43.10	45.44	47.78	8.48	21.6%	0.28
8	5.4%	60.6%	41.69	43.61	46.00	48.64	51.28	9.59	23.0%	0.32
9	4.5%	65.1%	44.08	46.21	48.90	51.84	54.78	10.70	24.3%	0.35
10 Avg	3.9%	68.9%	46.47	48.81	51.80	55.04	58.28	11.81	25.4%	0.39
11	3.4%	72.3%	48.86	51.71	55.10	58.69	62.28	13.42	27.5%	0.44
12	2.9%	75.2%	51.25	54.61	58.40	62.34	66.28	15.03	29.3%	0.49
13	2.4%	77.6%	53.64	57.51	61.70	65.99	70.28	16.64	31.0%	0.55
14	2.1%	79.7%	56.03	60.41	65.00	69.64	74.28	18.25	32.6%	0.60
15	1.9%	81.6%	58.42	63.31	68.30	73.29	78.28	19.86	34.0%	0.65
16	1.7%	83.3%	60.81	66.21	71.60	76.94	82.28	21.47	35.3%	0.71
17	1.5%	84.8%	63.20	69.11	74.90	80.59	86.28	23.08	36.5%	0.76
18	1.3%	86.1%	65.59	72.01	78.20	84.24	90.28	24.69	37.6%	0.81
19	1.1%	87.2%	67.98	74.91	81.50	87.89	94.28	26.30	38.7%	0.86
20	1.0%	88.2%	70.37	77.81	84.80	91.54	98.28	27.91	39.7%	0.92
21	0.9%	89.1%	72.94	81.01	88.50	95.64	102.78	29.84	40.9%	0.98
22	0.8%	89.8%	75.51	84.21	92.20	99.74	107.28	31.77	42.1%	1.04
23	0.7%	90.5%	78.08	87.41	95.90	103.84	111.78	33.70	43.2%	1.11
24	0.7%	91.2%	80.65	90.61	99.60	107.94	116.28	35.63	44.2%	1.17
25	0.7%	91.9%	83.22	93.81	103.30	112.04	120.78	37.56	45.1%	1.23
26	0.5%	92.4%	85.79	97.01	107.00	116.14	125.28	39.49	46.0%	1.30
27	0.5%	92.9%	88.36	100.21	110.70	120.24	129.78	41.42	46.9%	1.36
28	0.5%	93.5%	90.93	103.41	114.40	124.34	134.28	43.35	47.7%	1.43
29	0.5%	93.9%	93.50	106.61	118.10	128.44	138.78	45.28	48.4%	1.49
30	0.4%	94.3%	96.07	109.81	121.80	132.54	143.28	47.21	49.1%	1.55
31	0.4%	94.7%	98.64	113.01	125.50	136.64	147.78	49.14	49.8%	1.62
32	0.3%	95.0%	101.21	116.21	129.20	140.74	152.28	51.07	50.5%	1.68
33	0.3%	95.3%	103.78	119.41	132.90	144.84	156.78	53.00	51.1%	1.74
34	0.3%	95.6%	106.35	122.61	136.60	148.94	161.28	54.93	51.7%	1.81
35	0.2%	95.8%	108.92	125.81	140.30	153.04	165.78	56.86	52.2%	1.87
36	0.2%	96.0%	111.49	129.01	144.00	157.14	170.28	58.79	52.7%	1.93
37	0.2%	96.2%	114.06	132.21	147.70	161.24	174.78	60.72	53.2%	2.00
38	0.2%	96.4%	116.63	135.41	151.40	165.34	179.28	62.65	53.7%	2.06
39	0.2%	96.6%	119.20	138.61	155.10	169.44	183.78	64.58	54.2%	2.12
40	0.1%	96.7%	121.77	141.81	158.80	173.54	188.28	66.51	54.6%	2.19
50	41-50: 1.3%	98.0%	149.27	173.81	195.80	214.54	233.28	84.01	56.3%	2.76
75	51-75: 1.2%	99.2%	218.02	253.81	288.30	317.04	345.78	127.76	58.6%	4.20
100	76-100: 0.4%	99.6%	286.77	333.81	380.80	419.54	458.28	171.51	59.8%	5.64
200	101-200: 0.3%	100.0%	561.77	653.81	750.80	829.54	908.28	346.51	61.7%	11.39

Table 21
 Joshua Basin Water District
 Bill Impacts (3/4" Meter)

	Monthly Use	% of Bills at or Below		Current	Projected Bills				4-Year Impact
					01/01/14	01/01/15	01/01/16	01/01/17	
LOW	3 hcf	25%	Monthly Bill	\$30.24	\$31.21	\$32.30	\$33.54	\$34.78	
			Increase \$		0.97	1.09	1.24	1.24	4.54
			Increase %		3.2%	3.5%	3.8%	3.7%	15.0%
MEDIAN	6 hcf	50%	Monthly Bill	\$36.91	\$38.41	\$40.20	\$42.24	\$44.28	
			Increase \$		1.50	1.79	2.04	2.04	7.37
			Increase %		4.1%	4.7%	5.1%	4.8%	20.0%
AVERAGE	10 hcf	70%	Monthly Bill	\$46.47	\$48.81	\$51.80	\$55.04	\$58.28	
			Increase \$		2.34	2.99	3.24	3.24	11.81
			Increase %		5.0%	6.1%	6.3%	5.9%	25.4%
MOD-HIGH	20 hcf	88%	Monthly Bill	\$70.37	\$77.81	\$84.80	\$91.54	\$98.28	
2x Average			Increase \$		7.44	6.99	6.74	6.74	27.91
			Increase %		10.6%	9.0%	7.9%	7.4%	39.7%
HIGH	40 hcf	97%	Monthly Bill	\$121.77	\$141.81	\$158.80	\$173.54	\$188.28	
4x Average			Increase \$		20.04	16.99	14.74	14.74	66.51
			Increase %		16.5%	12.0%	9.3%	8.5%	54.6%
HIGH USER WITH 10% CONSERVATION				10% Conservation Over 4 Years					
			Water Use (hcf)	40	39	38	37	36	
			Monthly Bill	\$121.77	\$138.61	\$151.40	\$161.24	\$170.28	
			Increase \$		16.84	12.79	9.84	9.04	48.51
			Increase %		13.8%	9.2%	6.5%	5.6%	39.8%
HIGH USER WITH 20% CONSERVATION				20% Conservation Over 4 Years					
			Water Use (hcf)	40	38	36	34	32	
			Monthly Bill	\$121.77	\$135.41	\$144.00	\$148.94	\$152.28	
			Increase \$		13.64	8.59	4.94	3.34	30.51
			Increase %		11.2%	6.3%	3.4%	2.2%	25.1%

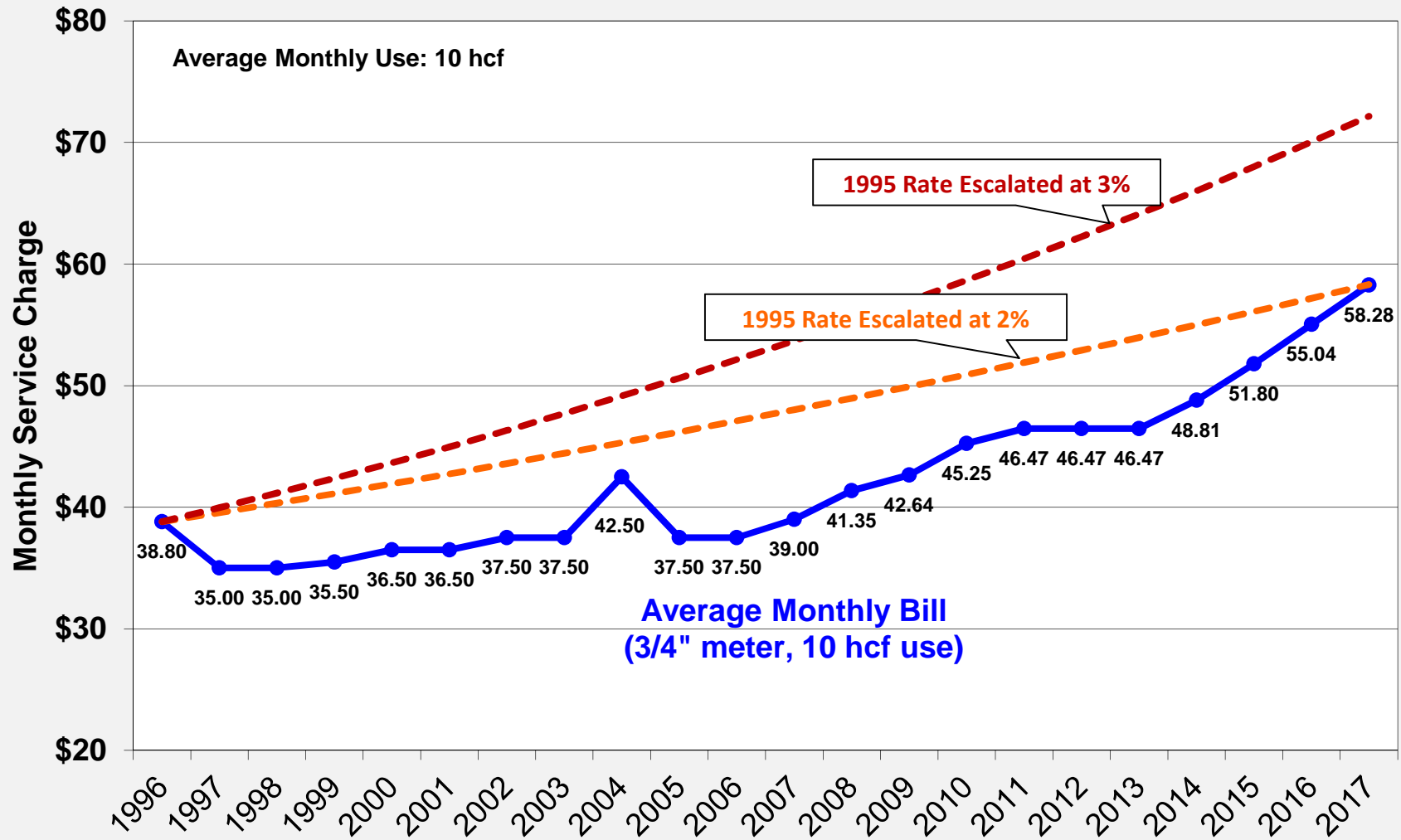
Projected Monthly Bills

3/4" meter at various levels of water use



Joshua Basin Water District

Historical & Projected Monthly Charges (3/4" meter, 10 hcf use)



Joshua Basin Water District

Historical & Projected Monthly Charges (3/4" meter, 6 hcf use)

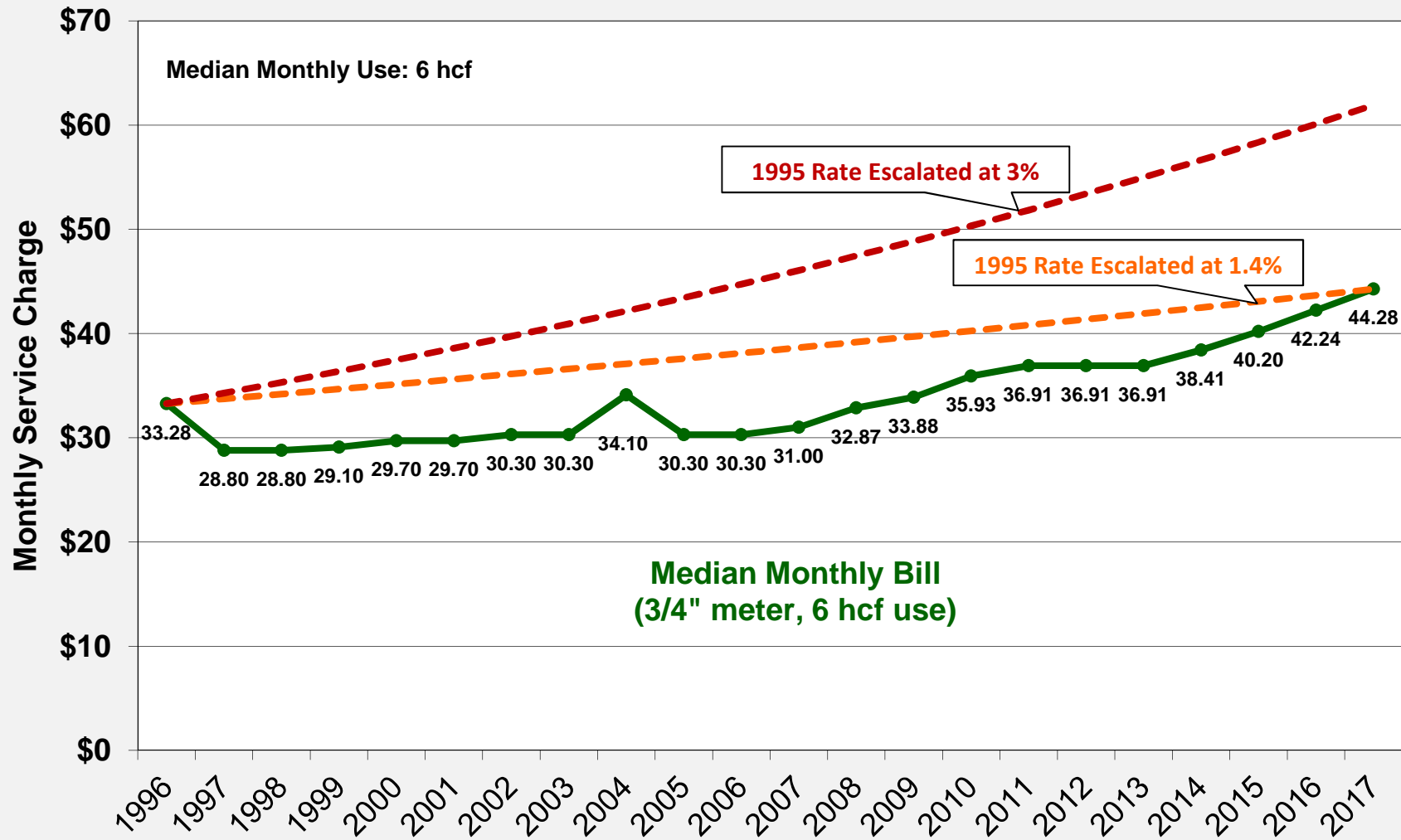


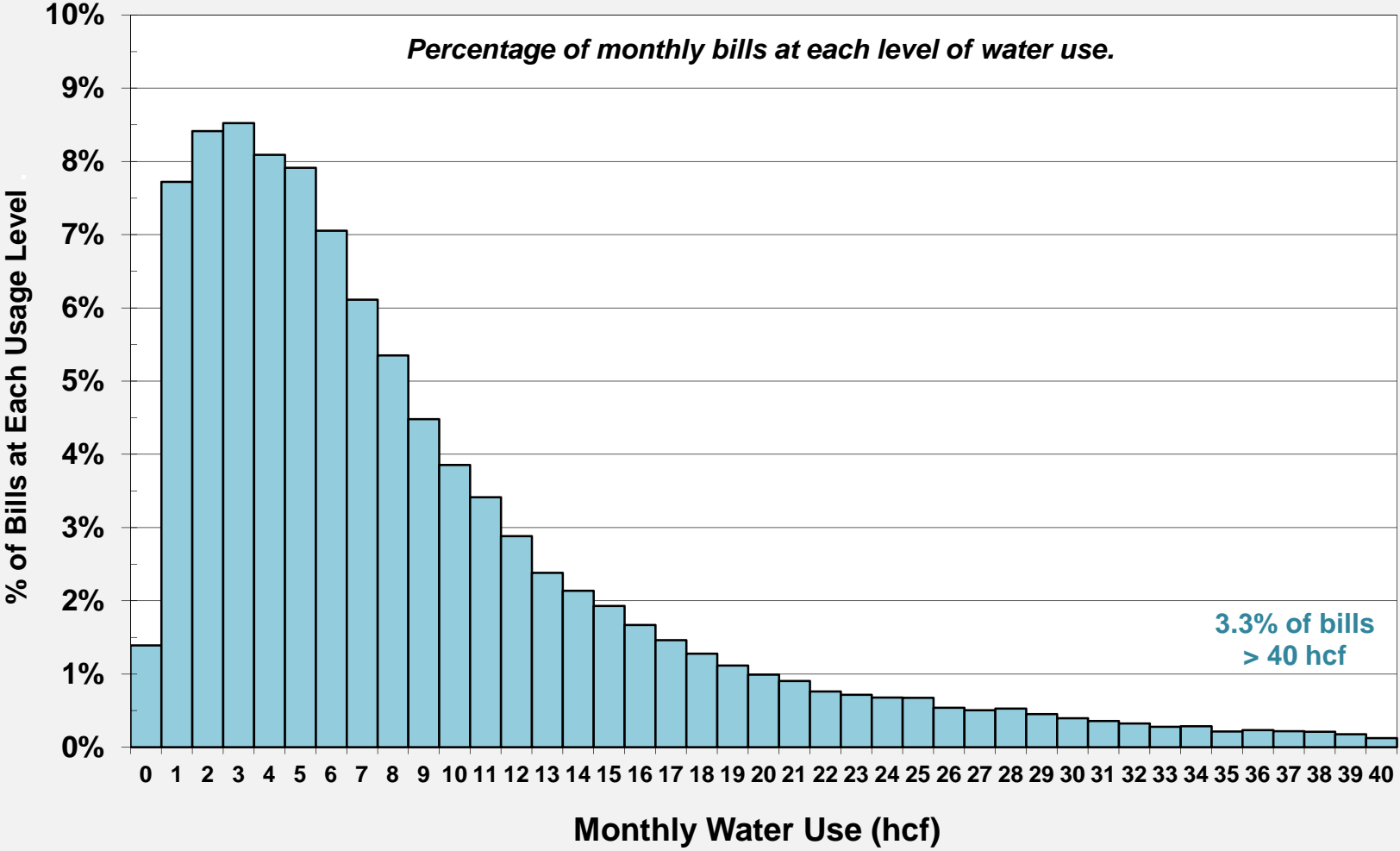
Table A-1
 Joshua Basin Water District
 Consumption Block Analysis (3/4" & 1" Meters) 2012/13

Median Monthly Use: 6.5 hcf
 Average Monthly Use: 10.6 hcf

Monthly Use (hcf)	Number of Bills				Water Use (hcf)		Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Use (hcf)	% of Ttl
0	650	1.4%	650	1.4%	0	0.0%	0	0.0%
1	3,604	7.7%	4,254	9.1%	3,604	0.7%	46,037	9.3%
2	3,929	8.4%	8,183	17.5%	7,858	1.6%	88,470	17.9%
3	3,980	8.5%	12,163	26.1%	11,940	2.4%	126,974	25.7%
4	3,777	8.1%	15,940	34.1%	15,108	3.1%	161,498	32.6%
5	3,694	7.9%	19,634	42.1%	18,470	3.7%	192,245	38.9%
6	3,294	7.1%	22,928	49.1%	19,764	4.0%	219,298	44.3%
7	2,854	6.1%	25,782	55.2%	19,978	4.0%	243,057	49.1%
8	2,498	5.4%	28,280	60.6%	19,984	4.0%	263,962	53.4%
9	2,092	4.5%	30,372	65.1%	18,828	3.8%	282,369	57.1%
10	1,799	3.9%	32,171	68.9%	17,990	3.6%	298,684	60.4%
11	1,593	3.4%	33,764	72.3%	17,523	3.5%	313,200	63.3%
12	1,345	2.9%	35,109	75.2%	16,140	3.3%	326,123	65.9%
13	1,111	2.4%	36,220	77.6%	14,443	2.9%	337,701	68.3%
14	998	2.1%	37,218	79.7%	13,972	2.8%	348,168	70.4%
15	900	1.9%	38,118	81.6%	13,500	2.7%	357,637	72.3%
16	780	1.7%	38,898	83.3%	12,480	2.5%	366,206	74.0%
17	682	1.5%	39,580	84.8%	11,594	2.3%	373,995	75.6%
18	597	1.3%	40,177	86.1%	10,746	2.2%	381,102	77.0%
19	521	1.1%	40,698	87.2%	9,899	2.0%	387,612	78.3%
20	462	1.0%	41,160	88.2%	9,240	1.9%	393,601	79.6%
21	423	0.9%	41,583	89.1%	8,883	1.8%	399,128	80.7%
22	355	0.8%	41,938	89.8%	7,810	1.6%	404,232	81.7%
23	334	0.7%	42,272	90.5%	7,682	1.6%	408,981	82.7%
24	316	0.7%	42,588	91.2%	7,584	1.5%	413,396	83.6%
25	315	0.7%	42,903	91.9%	7,875	1.6%	417,495	84.4%
26	251	0.5%	43,154	92.4%	6,526	1.3%	421,279	85.1%
27	235	0.5%	43,389	92.9%	6,345	1.3%	424,812	85.9%
28	247	0.5%	43,636	93.5%	6,916	1.4%	428,110	86.5%
29	211	0.5%	43,847	93.9%	6,119	1.2%	431,161	87.1%
30	185	0.4%	44,032	94.3%	5,550	1.1%	434,001	87.7%
31	167	0.4%	44,199	94.7%	5,177	1.0%	436,656	88.3%
32	152	0.3%	44,351	95.0%	4,864	1.0%	439,144	88.8%
33	130	0.3%	44,481	95.3%	4,290	0.9%	441,480	89.2%
34	133	0.3%	44,614	95.6%	4,522	0.9%	443,686	89.7%
35	100	0.2%	44,714	95.8%	3,500	0.7%	445,759	90.1%
36	110	0.2%	44,824	96.0%	3,960	0.8%	447,732	90.5%
37	102	0.2%	44,926	96.2%	3,774	0.8%	449,595	90.9%
38	98	0.2%	45,024	96.4%	3,724	0.8%	451,356	91.2%
39	82	0.2%	45,106	96.6%	3,198	0.6%	453,019	91.6%
40	59	0.1%	45,165	96.7%	2,360	0.5%	454,600	91.9%
41	78	0.2%	45,243	96.9%	3,198	0.6%	456,122	92.2%
42	83	0.2%	45,326	97.1%	3,486	0.7%	457,566	92.5%
43	71	0.2%	45,397	97.2%	3,053	0.6%	458,927	92.8%
44	58	0.1%	45,455	97.4%	2,552	0.5%	460,217	93.0%
45	72	0.2%	45,527	97.5%	3,240	0.7%	461,449	93.3%
46	57	0.1%	45,584	97.6%	2,622	0.5%	462,609	93.5%
47	52	0.1%	45,636	97.7%	2,444	0.5%	463,712	93.7%
48	58	0.1%	45,694	97.9%	2,784	0.6%	464,763	93.9%
49	46	0.1%	45,740	98.0%	2,254	0.5%	465,756	94.1%
50	29	0.1%	45,769	98.0%	1,450	0.3%	466,703	94.3%
51-75	559	1.2%	46,328	99.2%	33,798	6.8%	481,526	97.3%
76-100	194	0.4%	46,522	99.6%	16,623	3.4%	487,724	98.6%
101-200	146	0.3%	46,668	100.0%	19,090	3.9%	494,114	99.9%
201+	19	0.0%	46,687	100.0%	4,438	0.9%	494,752	100.0%
Total	46,687	100.0%			494,752	100.0%		

Joshua Basin Water District

Distribution of Monthly Water Bills (3/4" & 1" Meters) 2012/13



Joshua Basin Water District

Single Family Residential Water Bills 2012/13

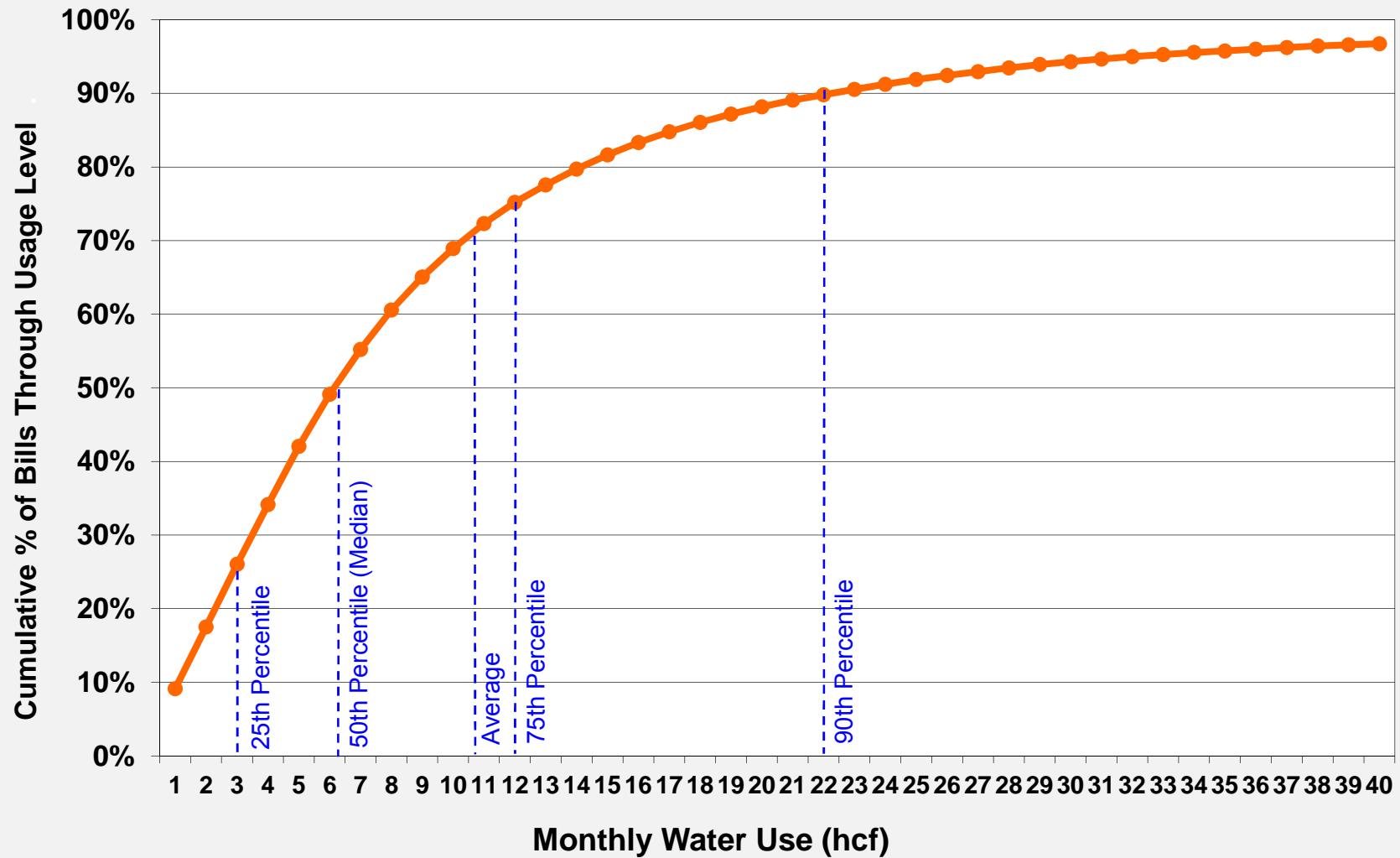


Table A-2
 Joshua Basin Water District
 Consumption Block Analysis (3/4" & 1" Meters) 2011/12

Median Monthly Use: 6.5 hcf
 Average Monthly Use: 10.5 hcf

Monthly Use (hcf)	Number of Bills				Water Use (hcf)		Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Use (hcf)	% of Ttl
0	650	1.4%	650	1.4%	0	0.0%	0	0.0%
1	3,537	7.6%	4,187	9.0%	3,537	0.7%	46,004	9.4%
2	3,885	8.3%	8,072	17.3%	7,770	1.6%	88,471	18.1%
3	3,932	8.4%	12,004	25.7%	11,796	2.4%	127,053	25.9%
4	3,888	8.3%	15,892	34.1%	15,552	3.2%	161,703	33.0%
5	3,735	8.0%	19,627	42.1%	18,675	3.8%	192,465	39.3%
6	3,174	6.8%	22,801	48.9%	19,044	3.9%	219,492	44.8%
7	2,966	6.4%	25,767	55.2%	20,762	4.2%	243,345	49.7%
8	2,436	5.2%	28,203	60.5%	19,488	4.0%	264,232	53.9%
9	2,129	4.6%	30,332	65.0%	19,161	3.9%	282,683	57.7%
10	1,879	4.0%	32,211	69.0%	18,790	3.8%	299,005	61.0%
11	1,565	3.4%	33,776	72.4%	17,215	3.5%	313,448	64.0%
12	1,412	3.0%	35,188	75.4%	16,944	3.5%	326,326	66.6%
13	1,187	2.5%	36,375	78.0%	15,431	3.1%	337,792	68.9%
14	998	2.1%	37,373	80.1%	13,972	2.9%	348,071	71.0%
15	852	1.8%	38,225	81.9%	12,780	2.6%	357,352	72.9%
16	758	1.6%	38,983	83.6%	12,128	2.5%	365,781	74.6%
17	637	1.4%	39,620	84.9%	10,829	2.2%	373,452	76.2%
18	591	1.3%	40,211	86.2%	10,638	2.2%	380,486	77.6%
19	569	1.2%	40,780	87.4%	10,811	2.2%	386,929	79.0%
20	448	1.0%	41,228	88.4%	8,960	1.8%	392,803	80.2%
21	413	0.9%	41,641	89.3%	8,673	1.8%	398,229	81.3%
22	389	0.8%	42,030	90.1%	8,558	1.7%	403,242	82.3%
23	310	0.7%	42,340	90.8%	7,130	1.5%	407,866	83.2%
24	291	0.6%	42,631	91.4%	6,984	1.4%	412,180	84.1%
25	273	0.6%	42,904	92.0%	6,825	1.4%	416,203	84.9%
26	264	0.6%	43,168	92.5%	6,864	1.4%	419,953	85.7%
27	257	0.6%	43,425	93.1%	6,939	1.4%	423,439	86.4%
28	226	0.5%	43,651	93.6%	6,328	1.3%	426,668	87.1%
29	204	0.4%	43,855	94.0%	5,916	1.2%	429,671	87.7%
30	179	0.4%	44,034	94.4%	5,370	1.1%	432,470	88.2%
31	162	0.3%	44,196	94.7%	5,022	1.0%	435,090	88.8%
32	158	0.3%	44,354	95.1%	5,056	1.0%	437,548	89.3%
33	140	0.3%	44,494	95.4%	4,620	0.9%	439,848	89.8%
34	126	0.3%	44,620	95.6%	4,284	0.9%	442,008	90.2%
35	109	0.2%	44,729	95.9%	3,815	0.8%	444,042	90.6%
36	105	0.2%	44,834	96.1%	3,780	0.8%	445,967	91.0%
37	104	0.2%	44,938	96.3%	3,848	0.8%	447,787	91.4%
38	96	0.2%	45,034	96.5%	3,648	0.7%	449,503	91.7%
39	89	0.2%	45,123	96.7%	3,471	0.7%	451,123	92.1%
40	71	0.2%	45,194	96.9%	2,840	0.6%	452,654	92.4%
41	78	0.2%	45,272	97.0%	3,198	0.7%	454,114	92.7%
42	83	0.2%	45,355	97.2%	3,486	0.7%	455,496	92.9%
43	61	0.1%	45,416	97.3%	2,623	0.5%	456,795	93.2%
44	71	0.2%	45,487	97.5%	3,124	0.6%	458,033	93.5%
45	56	0.1%	45,543	97.6%	2,520	0.5%	459,200	93.7%
46	52	0.1%	45,595	97.7%	2,392	0.5%	460,311	93.9%
47	51	0.1%	45,646	97.8%	2,397	0.5%	461,370	94.1%
48	46	0.1%	45,692	97.9%	2,208	0.5%	462,378	94.3%
49	45	0.1%	45,737	98.0%	2,205	0.4%	463,340	94.5%
50	50	0.1%	45,787	98.1%	2,500	0.5%	464,257	94.7%
51-75	544	1.2%	46,331	99.3%	32,738	6.7%	477,870	97.5%
76-100	168	0.4%	46,499	99.7%	14,414	2.9%	483,559	98.7%
101-200	141	0.3%	46,640	100.0%	18,825	3.8%	489,684	99.9%
201+	14	0.0%	46,654	100.0%	3,194	0.7%	490,078	100.0%
Total	46,654	100.0%			490,078	100.0%		

Table A-3
 Joshua Basin Water District
 Residential Water Use Statistics

Fiscal Year	Monthly Water Use (hcf)				
	25th Percentile	Median ¹	Average ²	75th Percentile	90th Percentile
2011/12	3.0	6.5	10.5	12.0	22.0
2012/13	3.0	6.5	10.6	12.0	22.0

1 Half of all monthly bills each year have water use at or below this level.

2 Average is skewed upwards by a proportionally smaller number of moderate to high water users