

# CITIZENS' WATER ADVISORY COMMITTEE (CWAC)

## Finance Subcommittee

Wednesday, February 18, 2014, 9:00 a.m.  
Tucson Water La Entrada Building  
3<sup>rd</sup> Floor Director's Conference Room  
310 W. Alameda Street, Tucson, Arizona



## Legal Action Report

### 1. Roll Call

The meeting was called to order by Finance Subcommittee Chair Bruce Billings at 9:03 a.m. Those present and absent were:

#### Members Present:

Bruce Billings (Chair)	Representative, Ward 3
Alan Tonelson	Representative, Ward 1
Brian Wong	Representative, City Manager
Chuck Freitas	Representative, City Manager
Mark Taylor	Representative, City Manager

#### Members Absent:

Catlow Shipek	Representative, City Manager
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#### Tucson Water Staff Members:

Belinda Oden	Business Services Administrator
Melodee Loyer	Chief Planner
Candice Rupprecht	Public Information Specialist
Kris LaFleur	Staff Assistant
Vidin Metelov	Secretary

#### Others Present:

Harold Smith	Raftelis Financial
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2. **Announcements** – There were no announcements.

3. **Call to Audience** – There were no Audience comments.

4. **Review of February 3, 2015, Legal Action Report and approval of Meeting Minutes** – Subcommittee Members reviewed the Legal Action Report from the February 3, 2015, CWAC Finance Subcommittee meeting. Member Tonelson moved to approve the Meeting Minutes; Member Freitas seconded the motion. The motion was carried by a vote of 5-0.

5. **Cost-of-Service / Rate Design Options** – Harold Smith of Raftelis Financial led a presentation and discussion between Members and Staff about water-usage block pricing methods and options for Tucson Water. Discussions included common methods for setting appropriate block cutoffs, comparison of block rate practices of water utilities

## **Citizens' Water Advisory Committee (CWAC) Finance Subcommittee**

Legal Action Report

February 18, 2015

nationally and regionally, and an exploration of Tucson Water's conservation and revenue goals via its block pricing structure.

Discussion focused on three proposed options for changing Tucson Water's block pricing structure: 1) reduce the Block 1 cutoff to 7 ccf/mo (cutoffs at 7, 15, 30 ccf), 2) reduce the Block 1 cutoff to 5 ccf and Block 2 cutoff to 10 ccf (cutoffs at 5, 10, 30 ccf), or 3) include the first 5 ccf in each residential customer's service charge (no cutoff changes).

After extensive discussion, Members opted to remove Option 3 from further consideration. Members expressed interest in exploring projected revenues under Option 1 or under the current block rate structure.

Further discussion included consideration of service charge changes, contemplation of block rates and water conservation goals for multifamily residential units, and additional consideration of the cost-of-service vote from the February 3, 2015, Subcommittee meeting.

6. **Miscellaneous Fees** – This item was continued to the February 24 Finance Subcommittee meeting.
7. **Future Meetings / Agenda Items** –
  - Bill redesign (March)
8. **Adjournment** – The meeting was adjourned at 10:57 a.m.

# TUCSON WATER

## *Review of Practices for Determining First Blocks of Residential Volumetric Rates*

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Meeting of the Finance Subcommittee  
of the Citizens Water Advisory Committee  
February 18, 2015

# CRITERIA TO CONSIDER WHEN SETTING BLOCKS

- » Pricing Signals
- » Revenue Stability
- » Financial Sufficiency
- » Initial Bill Impacts
- » Affordability
- » Capabilities of Billing Software

# COMMON METHODS FOR SETTING BLOCKS

- » Efficient Indoor Water Usage
  - Based on Standardized Values
  - Based on Median Usage in Lowest Usage Months
  - Based on Water Budgets
- » Efficient Indoor and Outdoor Water Usage
- » Focus on Average Monthly Usage
- » Focus on Seasonal Basis (Average Winter Use)
  - Standardized
  - Individualized

# FOCUS THE FIRST BLOCK ON EFFICIENT INDOOR WATER USAGE

- » **RATIONALE:** Allows customers essential water use at a low rate, but sends strong conservation signals associated with outdoor and excessive usage
- » **APPROACHES**
  - **Rancho Water:** Generated based on a water budget (with individualized tiers based on each customer's use)
  - **City of Beverly Hills:** Based on standardized household size and standardized average consumption
  - **San Antonio:** Median water used in the lowest usage month

# RANCHO WATER

## » **Block 1: Indoor Use**

- Incorporates household size, gallons per capita per day, number of units, and the number of days in the billing period.

## » **Block 2: Outdoor Use**

- Incorporates the landscape area, a drought factor, the efficiency of irrigation, and the weather.

## » **Block 3: Excessive Use**

- Block differential (X), multiplied by outdoor use

## » **Block 4: Wasteful Use**

- Any usage above Block 3

## » **Other Examples: Eastern Municipal Water District, El Toro Water District, City of Corona, Moulton Nigal Water District**

# CITY OF BEVERLY HILLS

## » **Block 1: Indoor Use**

- 0 to 7,500 gallons ( $\approx 10$  ccf)
- Based on four residents per household and 60 gallons per capita per day

## » **Block 2: Indoor and Outdoor Use**

- 7,500 to 41,000 gallons ( $\approx 10$  to 55 ccf)
- Based on the difference between the first and third blocks

## » **Block 3: Discretionary Use**

- 41,000+ gallons ( $\approx 55$  ccf)
- Targets the top 20% of water users

# SAN ANTONIO WATER SYSTEM (SAWS)

- » **Block 1: Non-discretionary indoor usage**
  - 0 to 5,985 gallons (8 ccf)
  - Median usage in the lowest usage month
- » **Block 2: Non-discretionary indoor and outdoor usage**
  - 5,986 to 12,718 gallons (8 ccf to 17 ccf)
  - Based on SAWS Conservation staff research
- » **Block 3: Discretionary usage**
  - 12,719 to 19,450 gallons (17 ccf to 26 ccf)
  - Based on the difference between the second and fourth block
- » **Block 4: Disproportionate water use**
  - 19,451+ gallons (26+ ccf)
  - Targets the top 5% of users

# SET THE FIRST BLOCK TO INCLUDE INDOOR AND SOME OUTDOOR WATER USAGE

- » **RATIONALE:** Allows customers more flexibility before hitting the penalties associated with the higher tiers
- » **City of Ontario:** Two tiered system
  - Block 1: 0 to 11,250 gallons (0 ccf to  $\approx$ 15 ccf)
    - Includes all indoor and some outdoor water usage
  - Block 2: 11,251+ gallons (15+ ccf)
    - Incorporates discretionary water usage for residential customers
    - Average residential usage is 16,500 gallons per month
- » **Other Example:** City of Brea

# BASE THE FIRST BLOCK ON A PERCENTAGE OF AVERAGE MONTHLY USAGE

- » **RATIONALE:** Setting blocks based on the Average Monthly Usage smoothes out seasonal differences and often also takes into account the percentage of users captured
- » **City of Raleigh:** Three tiered blocks
  - Block 1: Set from 0 to 3,250 gallons ( $\approx 4$  ccf) , or 65% of the average residential monthly use
  - Block 2: Set from 3,251 to 7,500 gallons, ( $\approx 4$  ccf to  $\approx 10$  ccf) or 115% of the average residential monthly use
  - Block 3: Set at 7,501+ gallons, ( $\approx 10+$  ccf) to incorporate discretionary use

# BASE THE FIRST BLOCK ON AVERAGE WINTER CONSUMPTION

- » **RATIONALE:** In areas with defined seasons, the average winter consumption can be taken to represent average indoor usage
- » **APPROACHES:**
  - City of Cary (Blocks based on standardized usage patterns)
  - City of El Paso (Blocks based on individual winter usage patterns)

# BLOCK 1 CUT-OFF VOLUMES SOUTHWEST

According to the 2014 AMWA Utility Financial Information Survey, of the participating water utilities in the Southwest with block rates for residential customers:

- » 22% had Block 1 cut-offs of 5 ccf or less
- » 44% had Block 1 cut-offs between 6 and 10 ccf

First block cut-off volumes ranged from 3 to 27 ccf

# MOST COMMON FIRST TIERS IN AZ

Block 1 Cut-off		Rate Structures with Block 1	
		Cut-off at This Level	
Gal.	CCF	%	Cumulative %
2,000	2.7	8%	8%
4,000	5.3	54%	62%
6,000	8.0	12%	74%
8,000	10.7	8%	82%
10,000	13.4	10%	91%
15,000	20.1	4%	95%
20,000	26.7	2%	96%
50,000	66.8	4%	100%

Source: Water and Wastewater Service Pricing in Arizona: 2013-14 Rates Survey Results, WIFA

# BLOCK 1 CUT-OFF VOLUMES NATIONWIDE

Of all the participating water utilities with block rates for residential customers:

- » 33% had Block 1 cut-offs of 5 ccf or less
- » 35% had Block 1 cut-offs between 6 and 10 ccf
- » 16% had Block 1 cut-offs between 11 and 15 ccf

# CURRENT STRUCTURE AND CONSUMPTION PATTERNS

## Single Family Residential

	<b>Consumption Blocks (ccf)</b>	<b>% of Accounts</b>	<b>% of Consumption</b>
<b>Block 1</b>	0-10	72.0%	73.2%
<b>Block 2</b>	11-15	14.8%	12.1%
<b>Block 3</b>	16-30	10.9%	10.9%
<b>Block 4</b>	>30	2.3%	3.8%

## Residential Low Income

	<b>Consumption Blocks (ccf)</b>	<b>% of Accounts</b>	<b>% of Consumption</b>
<b>Block 1</b>	0-10	70.5%	80.1%
<b>Block 2</b>	11-15	18.6%	12.1%
<b>Block 3</b>	16-30	10.2%	7.0%
<b>Block 4</b>	>30	0.8%	0.9%

## Duplex/Triplex

	<b>Consumption Blocks (ccf)</b>	<b>% of Accounts</b>	<b>% of Consumption</b>
<b>Block 1</b>	0-15	77.9%	81.8%
<b>Block 2</b>	16-20	10.6%	8.6%
<b>Block 3</b>	21-35	9.5%	6.8%
<b>Block 4</b>	>30	2.0%	2.7%

# OPTIONS

- » **Lower Block 1 Cut-off to 7 ccf (winter average)**
  - Cut-offs at 7 ccf, 15 ccf and 30 ccf
- » **Lower Block 1 Cut-off to 5 ccf and Block 2 Cut-off to 10 ccf**
  - Cut-offs at 5 ccf, 10 ccf and 30 ccf
- » **Include 5 ccf in Service Charge**
  - First 5 ccf of consumption included in Monthly Service Charge
  - Block cut-offs unchanged
- » **Others?**

# LOWER BLOCK 1 CUT-OFF TO 7 CCF

## Single Family Residential

Option

Current

	<b>Consumption Blocks (ccf)</b>	<b>% of Accounts</b>	<b>% of Consumption</b>	<b>% of Accounts</b>	<b>% of Consumption</b>
<b>Block 1</b>	0-7	55.3%	59.9%	58.8%	67.0%
<b>Block 2</b>	8-15	31.5%	25.5%	19.1%	14.9%
<b>Block 3</b>	16-30	10.9%	10.9%	18.7%	14.5%
<b>Block 4</b>	>30	2.3%	3.8%	3.4%	3.7%

## Residential Low Income

Option

Current

	<b>Consumption Blocks (ccf)</b>	<b>% of Accounts</b>	<b>% of Consumption</b>	<b>% of Accounts</b>	<b>% of Consumption</b>
<b>Block 1</b>	0-7	50.5%	65.2%	70.5%	80.1%
<b>Block 2</b>	8-15	38.5%	26.9%	18.6%	12.1%
<b>Block 3</b>	16-30	10.2%	7.0%	10.2%	7.0%
<b>Block 4</b>	>30	0.8%	0.9%	0.8%	0.9%

# LOWER BLOCK 1 CUT-OFF TO 5 CCF

## Single Family Residential

	Option		Current		
	Consumption Blocks (ccf)	% of Accounts	% of Consumption	% of Accounts	% of Consumption
<b>Block 1</b>	0-5	40.2%	47.0%	58.8%	67.0%
<b>Block 2</b>	6-10	31.8%	26.2%	19.1%	14.9%
<b>Block 3</b>	10-30	25.7%	23.0%	18.7%	14.5%
<b>Block 4</b>	>30	2.3%	3.8%	3.4%	3.7%

## Residential Low Income

	Option		Current		
	Consumption Blocks (ccf)	% of Accounts	% of Consumption	% of Accounts	% of Consumption
<b>Block 1</b>	0-5	34.7%	50.8%	70.5%	80.1%
<b>Block 2</b>	6-10	35.7%	29.3%	18.6%	12.1%
<b>Block 3</b>	10-30	28.8%	19.0%	10.2%	7.0%
<b>Block 4</b>	>30	0.8%	0.9%	0.8%	0.9%

# INCLUDE 5 CCF IN SERVICE CHARGE

- » First 5 ccf of consumption is included in the Monthly Service Charge.
- » Service Charge would increase to include charge for 5 ccf.
- » Cost per ccf included in Service Charge would be less than Block 1 rate.
- » All other consumption would be billed according to the rate structure.

# LOW END CONSUMPTION

## Single Family Residential

Consumption Block (ccf)	0	1	2	3	4	5
% of Bills Ending in Block	7.1%	4.0%	5.8%	7.1%	7.9%	8.2%
Cumulative %	7.1%	11.1%	17.0%	24.1%	32.0%	40.2%

## Low Income Residential

Consumption Block (ccf)	0	1	2	3	4	5
% of Bills Ending in Block	1.9%	4.2%	6.3%	7.1%	7.6%	7.6%
Cumulative %	1.9%	6.1%	12.4%	19.5%	27.1%	34.7%

# NEXT STEPS

- » Model rates and bill impacts under favored options.
- » Select option(s) to present to Council