

Slide 1



WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City & County of Honolulu

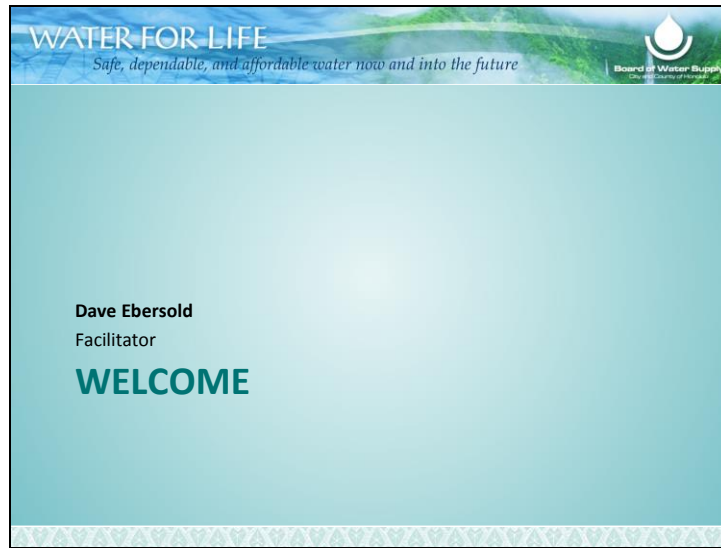
Stakeholder Advisory Group

**Board of Water Supply
City & County of Honolulu**

Tuesday September 12, 2017

The slide features a header banner with a scenic background of water and green hills. The banner contains the 'WATER FOR LIFE' logo and tagline on the left, and the 'Board of Water Supply' logo on the right. The main content is centered on a teal gradient background.

Slide 2



WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Phoenix

Dave Ebersold
Facilitator

WELCOME

The slide features a teal background with a decorative border at the bottom. The top header includes the 'WATER FOR LIFE' logo and the Board of Water Supply logo for the City of Phoenix.

Slide 3



WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City and County of Honolulu

WELCOME NEW STAKEHOLDER

Guy Yamamoto
Vice President
YHB Hawaii

The slide features a teal background with a decorative border at the bottom. The top banner includes the 'WATER FOR LIFE' logo and the Board of Water Supply logo.

Slide 4

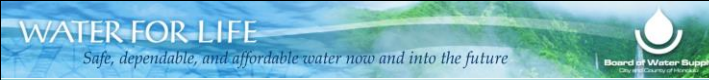


WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Phoenix

Public Comments on Agenda Items

The slide features a header with a scenic background of water and green hills. The main content area is a solid teal color with the text 'Public Comments on Agenda Items' centered in a bold, dark teal font. A decorative border with a repeating pattern is at the bottom.




WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Denver

Meeting Objectives

- ◆ Receive updates regarding the BWS
- ◆ Stakeholder input on residential rate tiers
- ◆ Stakeholder input on low/fixed income affordability strategies for BWS

Slide 6



WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Phoenix

Action

Review and accept notes from
Stakeholder Advisory Group Meeting #18
held on Tuesday, August 09, 2017

Slide 7



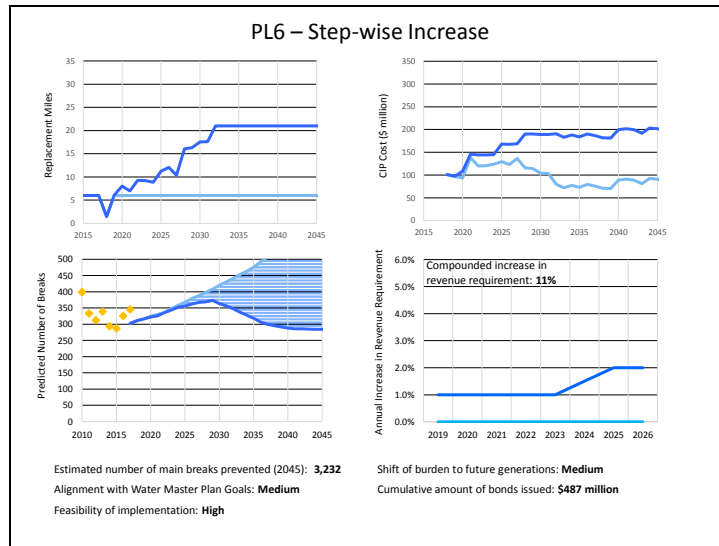
WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City and County of Denver

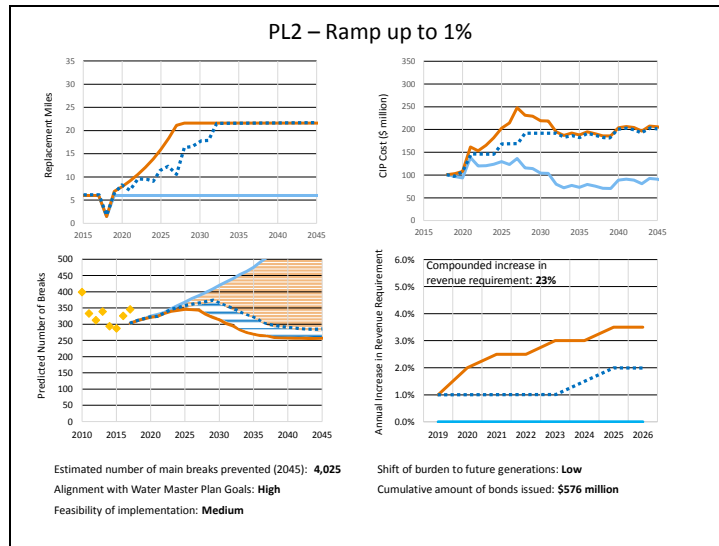
Ernest Lau P.E.
BWS Manager and Chief Engineer
BWS UPDATES

The slide features a teal background with a decorative border at the bottom. The top banner includes the 'WATER FOR LIFE' logo and the Board of Water Supply logo. The main text identifies Ernest Lau P.E. as the BWS Manager and Chief Engineer, and the title of the presentation as 'BWS UPDATES'.

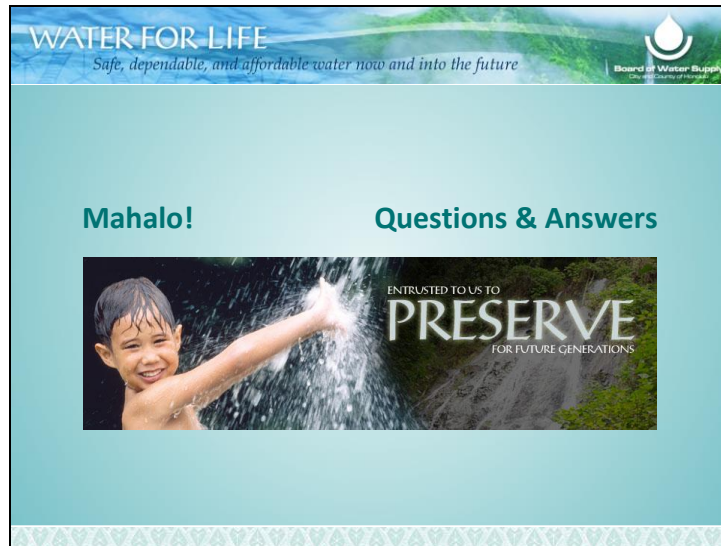
Slide 8



Slide 9



The BWS Board provided direction to staff to proceed with using the PL2 pipeline replacement scenario in financial modeling. In particular, the Board felt it was very important to have a strong alignment with the Water Master Plan and that this scenario provided that alignment. This scenario would also reduce more water main breaks sooner by replacing more high priority pipelines earlier.



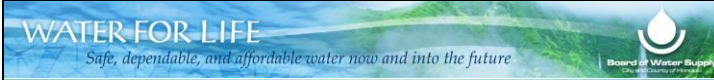
WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City and County of Honolulu

Mahalo! **Questions & Answers**

ENTRUSTED TO US TO
PRESERVE
FOR FUTURE GENERATIONS

The slide features a teal background with a decorative border at the bottom. It includes a header with the 'WATER FOR LIFE' logo and tagline, and a central image of a child playing in water with the text 'ENTRUSTED TO US TO PRESERVE FOR FUTURE GENERATIONS' overlaid.



WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Denver

Dave Ebersold
Facilitator

**AFFORDABILITY PROGRAMS
UPDATE**

The slide features a teal background with a decorative patterned border at the bottom. The top banner includes the 'WATER FOR LIFE' logo and the Board of Water Supply logo.

Current BWS Affordability Support

- ◆ Inclining-block rate structure
- ◆ Moved to monthly billing
- ◆ Zero interest, case-by-case payment plans
- ◆ Multiple steps and accommodations to avoid turn-off
- ◆ Bill adjustments for underground leaks
- ◆ Referral to community social-service support
 - Helping Hands
 - Catholic Charities

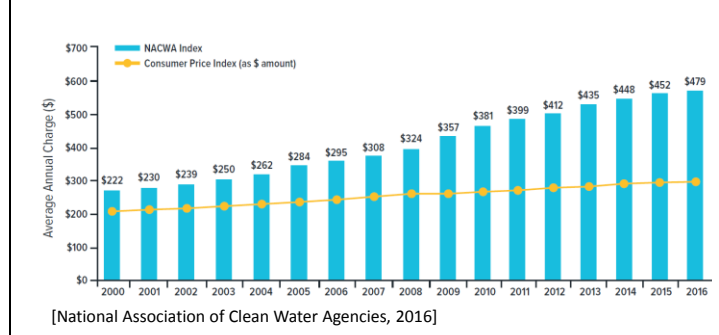
Questions to Consider

- ◆ Should BWS enhance its customer assistance program?
- ◆ What types of additional program elements should be considered?
- ◆ Who should pay for those costs/subsidies?

Slide 14

“The issues of affordability and assistance for low-income customers are becoming a higher priority for the water industry as rates continue to rise in order to finance needed infrastructure investments.”

--AWWA Journal, August 2017



The values for 2016 are based on the responses from 167 NACWA members serving nearly 103 million people.



The Business Case for Customer Assistance

- ◆ Build and sustain long-term customer loyalty, trust and satisfaction
- ◆ Proactive approach is more effective than just waiting for accounts to become past due
- ◆ Costs of collections, disconnections, reconnections and write-offs are spread to all customers
- ◆ Programs tailored to occasions when customers can't pay have the potential to recover substantial revenue, reduce turn-offs, better business outcomes

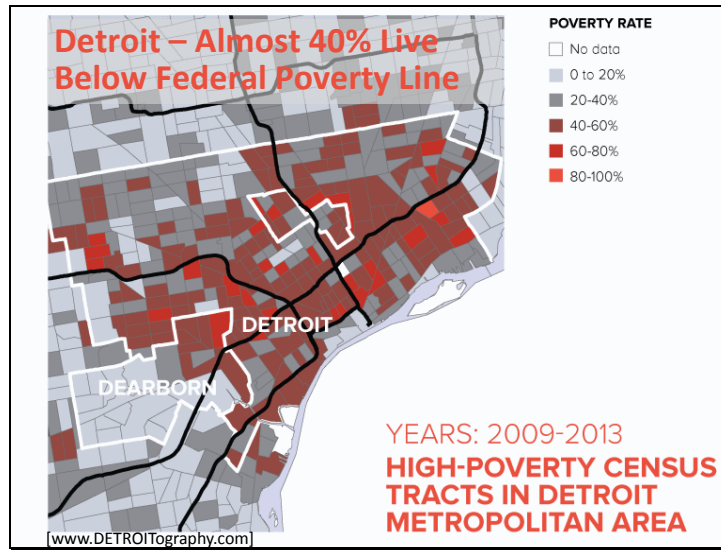
[Water Research Foundation, Best Practices in Customer Payment Assistance Programs, 2010]



Types of Affordability Programs

1. Bill discounts and credits
2. Flexible terms for repayment
3. Block rate structure and lifeline rates
4. Temporary or crisis assistance
5. Water efficiency and leak repairs
6. Community and local government assistance programs
7. Income-based discounts

(Abell Foundation Report, Nov 2016)



More than 27,000 Detroit Homes had Their Water Shut Off in 2017

- ◆ High bad debt expense
- ◆ High unmanageable past-due accounts eligible for shutoff
- ◆ Decided against income-based rates because of potential legal challenges
- ◆ Volunteer-funded assistance programs offered inadequate patchwork of support

Source: Blake et al., August 2017. Model Water Utility Affordability Programs, American Water Works Association, 109:8.

Detroit's 10/30/50 Payment Plan

- ◆ "Compassionate" customer service
- ◆ No income restrictions
- ◆ Pay off over 24 months with zero interest and 10% down
- ◆ If a payment is missed, re-enroll by making 30% payment of remaining balance
- ◆ If another payment is missed, re-enroll by making 50% payment of remaining balance



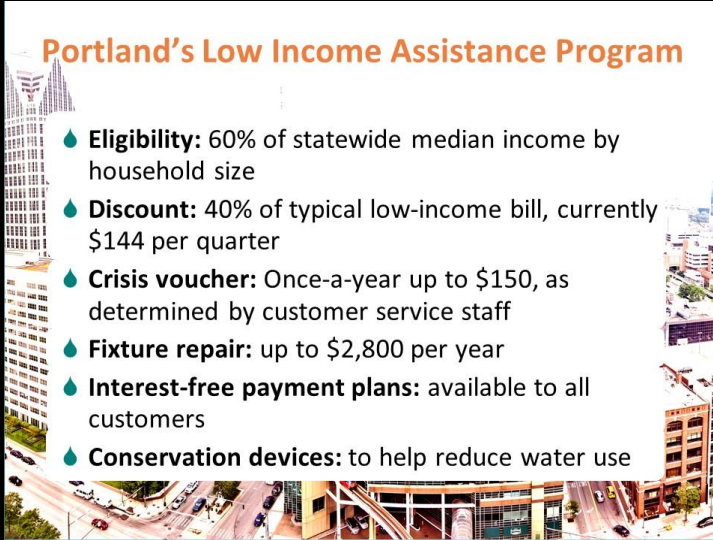
*Income restrictions and eligibility requirements apply.

Program Benefits:

-  Assistance up to \$300 per household per year. \$25 monthly bill credit.
-  Home water audit for households above 120% of average usage.
-  Home repairs up to \$1,000 per household to fix minor plumbing issues leading to high usage.
-  Water saving kits and consumer training classes.
-  Supportive WRAP-Around Services.

WRAP Participant Qualifications:

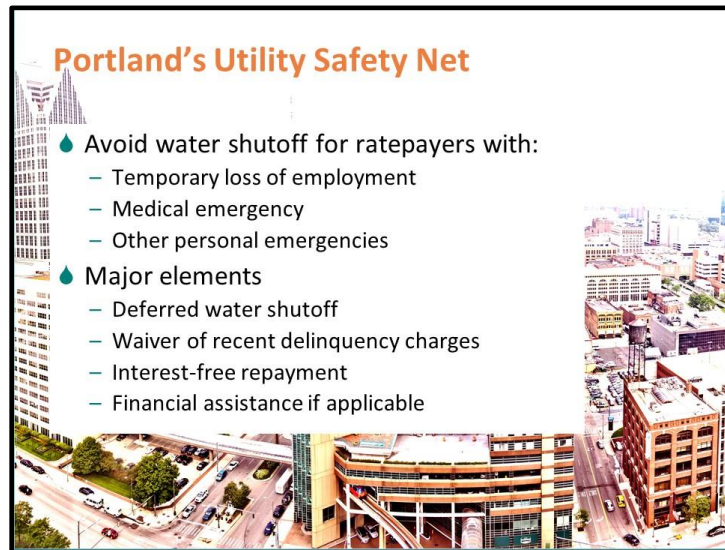
- ✓ Have income at or below 150% of poverty threshold
- ✓ Provide proof of residency & income
- ✓ Provide renter's proof of responsibility for water on lease
- ✓ Stay current on monthly bill payment

A graphic titled "Portland's Low Income Assistance Program" with a background image of a city street scene. The title is in orange text. Below it is a list of six program features, each preceded by a teal diamond icon.

Portland's Low Income Assistance Program

- ◆ **Eligibility:** 60% of statewide median income by household size
- ◆ **Discount:** 40% of typical low-income bill, currently \$144 per quarter
- ◆ **Crisis voucher:** Once-a-year up to \$150, as determined by customer service staff
- ◆ **Fixture repair:** up to \$2,800 per year
- ◆ **Interest-free payment plans:** available to all customers
- ◆ **Conservation devices:** to help reduce water use

Source: Blake et al., August 2017. Model Water Utility Affordability Programs, American Water Works Association, 109:8.



Portland's Utility Safety Net

- ◆ Avoid water shutoff for ratepayers with:
 - Temporary loss of employment
 - Medical emergency
 - Other personal emergencies
- ◆ Major elements
 - Deferred water shutoff
 - Waiver of recent delinquency charges
 - Interest-free repayment
 - Financial assistance if applicable

- Eligibility determined by customer service reps.
- Flexible documentation.

Source: Blake et al., August 2017. Model Water Utility Affordability Programs, American Water Works Association, 109:8.

Portland's Multi-Family Pilot Program is Under Review


- Key issues
 - Troubles with 3rd party vendor
 - High administrative costs
 - Getting accurate records from property managers
 - Ensuring that discounts are passed on to tenants

An aerial photograph of a city street scene. In the foreground, there is a multi-story building with a curved facade and a parking lot. The street is lined with various buildings, including a prominent one with a red roof. The background shows a dense urban environment with more buildings and streets.


Source: Blake et al., August 2017. Model Water Utility Affordability Programs, American Water Works Association, 109:8.

Projected Costs for 2017-18 are About \$5 Million

- ◆ Considered voluntary contributions, but don't want to compete with charities
- ◆ Considered taxpayer support or use of City's General Fund on the basis that this was a social service program and not a utility service
- ◆ Chose to fund through utility rates because it is the utility costs that create the need for assistance




Source: Blake et al., August 2017. Model Water Utility Affordability Programs, American Water Works Association, 109:8.



Hawaiian Electric
Maui Electric
Hawai'i Electric Light

Energy Assist Programs


- ◆ Tier Waiver Provision
 - Customers receiving LIHEAP credits are auto-enrolled
 - Applies 1st tier rate to non-fuel energy portion of bill, typically \$0.02 to \$0.03 lower than 2nd and 3rd tiers



Hawaiian Electric
Maui Electric
Hawai'i Electric Light

Energy Assist Programs


- ◆ Tier Waiver Provision
- ◆ Special Medical Needs Pilot Program
 - Limited to first 2,000 qualified applicants
 - Discount of \$0.04 per kWh on first 500 kWh, max \$20 per month



Hawaiian Electric
Maui Electric
Hawai'i Electric Light

Energy Assist Programs

- ◆ Tier Waiver Provision
- ◆ Special Medical Needs Pilot Program
- ◆ Ohana Energy Gift Program
 - Energy gift donation program that allows you to gift friends, family or others in need



Energy Assist Programs

- ◆ Tier Waiver Provision
- ◆ Special Medical Needs Pilot Program
- ◆ Ohana Energy Gift Program
- ◆ Interim Time-of-Use Rate
 - Offers lower rates during lower demand periods as incentive to shift electric use away from peak demand hours
 - Voluntary participation limited to first 5,000 customers

Median Household Income (MHI) is a Common Measure of Affordability

Water Affordability Threshold	Organization
1.5% of MHI	California Department of Public Health
2.5% of MHI	U.S. Environmental Protection Agency
3% of MHI	United Nations Development Program (UNDP)

[Pacific Institute, 2013]

California at the Forefront with AB 685 (2012)

- ◆ Statutorily recognizes that “Every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”
- ◆ Requires state agencies to *consider* the human right to water when “revising, adoption, or establishing policies, regulations, and grant criteria.”
- ◆ Intended “to create a state policy priority and direct state agencies to explicitly consider the human right to water within their relevant administrative processes, measures, and actions.”

Who are BWS's Customers?

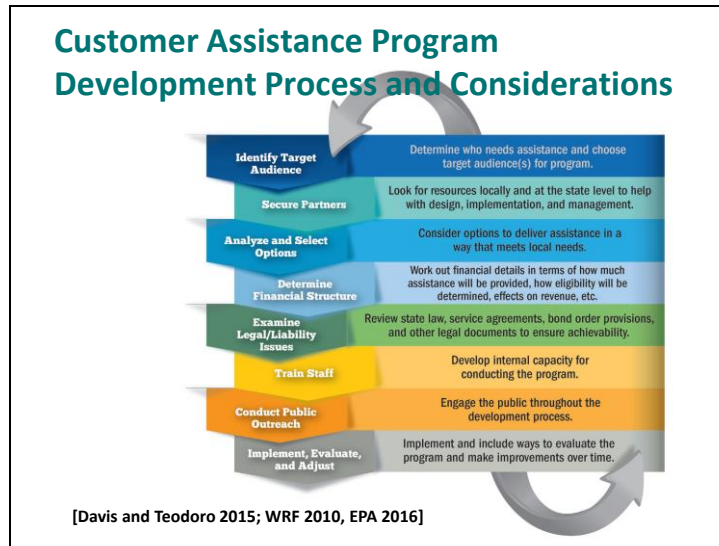
	Households	Multi-generation	SNAP* recipient	Median Household Income	Below poverty level
O'ahu					
SFR	56%	11.5%	6.8%	\$102,479	9.3%
MFR	44%	2.9%	11.5%	\$53,316	14.8%
National Averages					
SFR	69%	3.8%	13.2%	\$53,889	14.4%
MFR	25%				
Direct	78%	--	--	--	--
Indirect	22%	--	--	\$33,339	23%

* SNAP – Supplemental Nutritional Assistance Program (Food Stamps)
 [U.S. Census Bureau 2011-2015; Water Research Foundation 2017]

Source: Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers, Water Research Foundation, Project No. 4557, 2017.

Setting at BWS in 2016

- ◆ 735 turn-offs, 635 unique premises
- ◆ 0.43% turn-off rate
- ◆ 15.7% are repeat
- ◆ SFR average bill \$50
- ◆ Average bill as % Median Household Income 0.57%



Questions to Consider

- ◆ Should BWS enhance its customer assistance program?
- ◆ What types of additional program elements should be considered?
- ◆ Who should pay for those costs/subsidies?



WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Denver

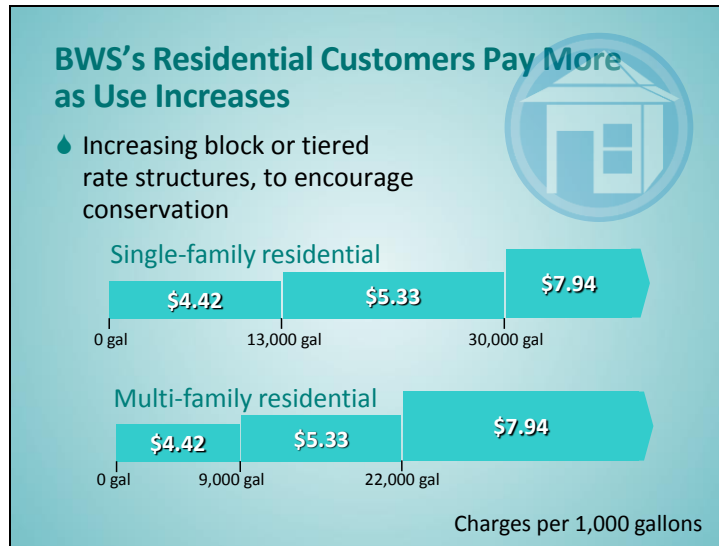
Dave Ebersold
Facilitator

**SINGLE-FAMILY RESIDENTIAL
RATE TIERS**

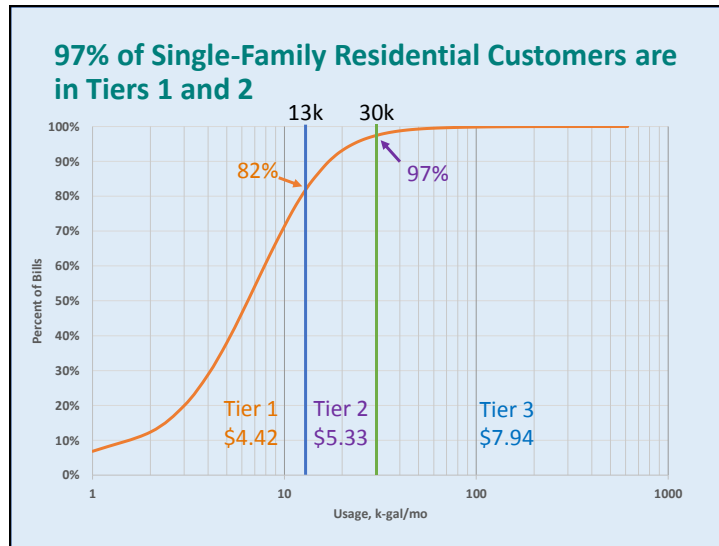
The slide features a teal background with a decorative border at the bottom. The top banner includes the 'WATER FOR LIFE' logo and the Board of Water Supply logo.

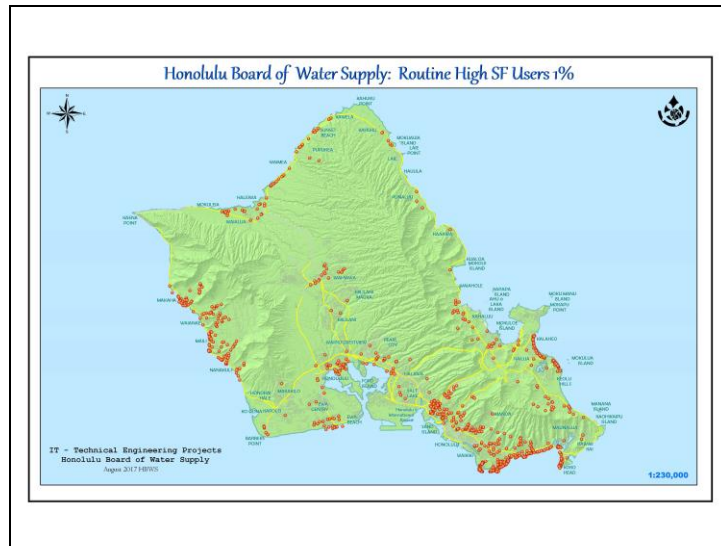
Considerations for Tier Adjustments

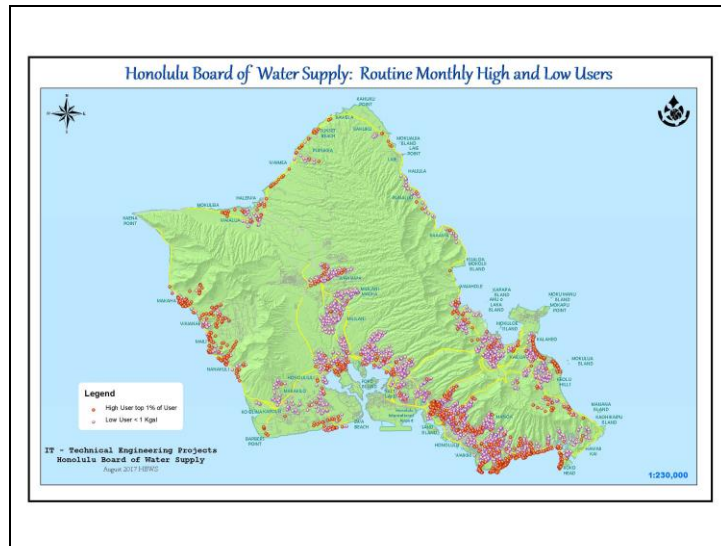
- ◆ Should the top tier be adjusted to include more customers, e.g. top 10%, 15%, 20%?
- ◆ Should a higher rate apply to the top tier to discourage wasteful use and encourage conservation by the highest water users? Why or why not?
- ◆ Should tiers be added? If so, to what purpose?
- ◆ Should the tiers be adjusted to generate more revenue from single-family customers to close the gap in cost of service?



Multi-family residential customers pay the same rates as single-family residential, but the blocks differ.



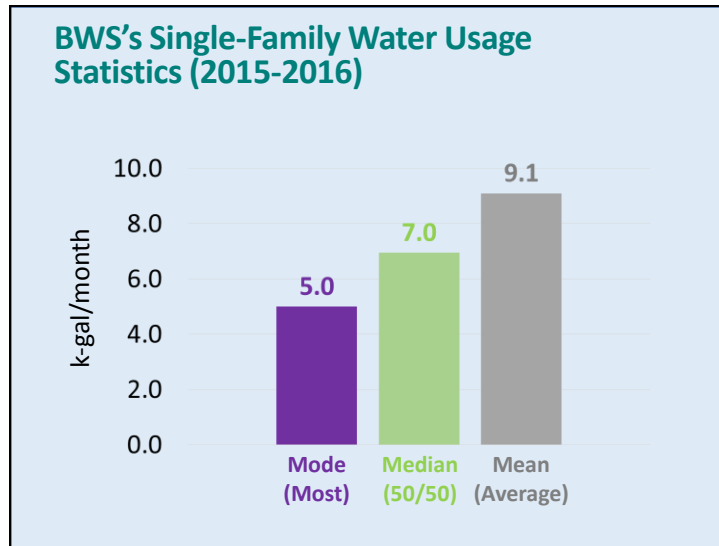


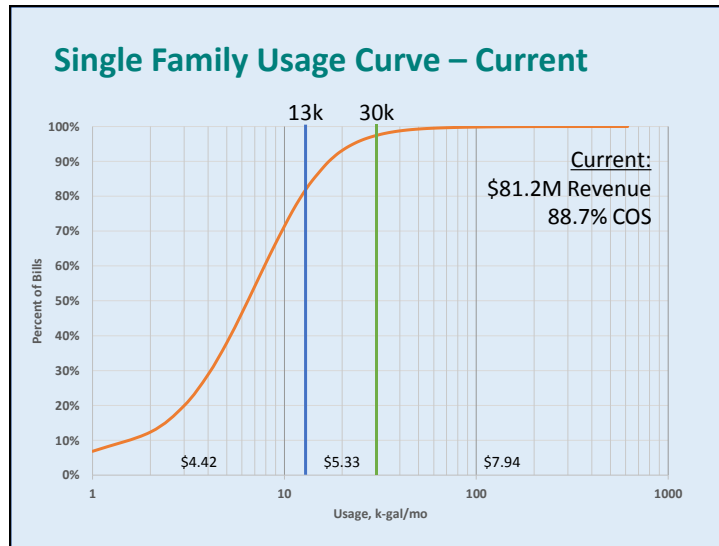


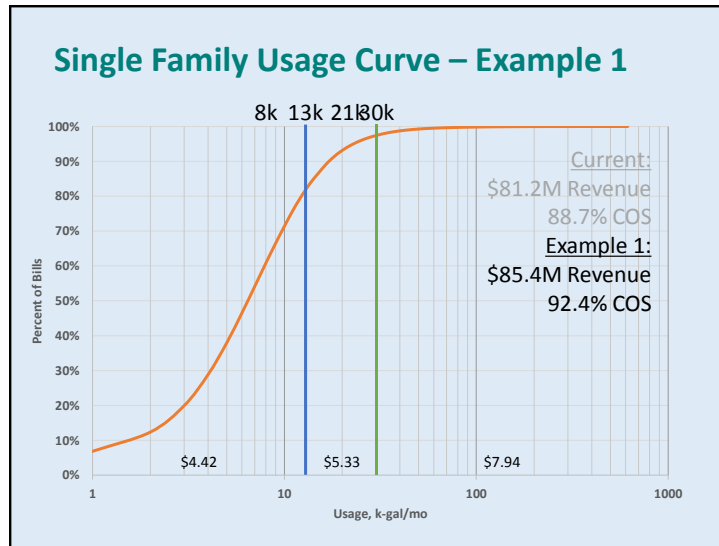
Comparison of Single-Family Residential Rate Tiers

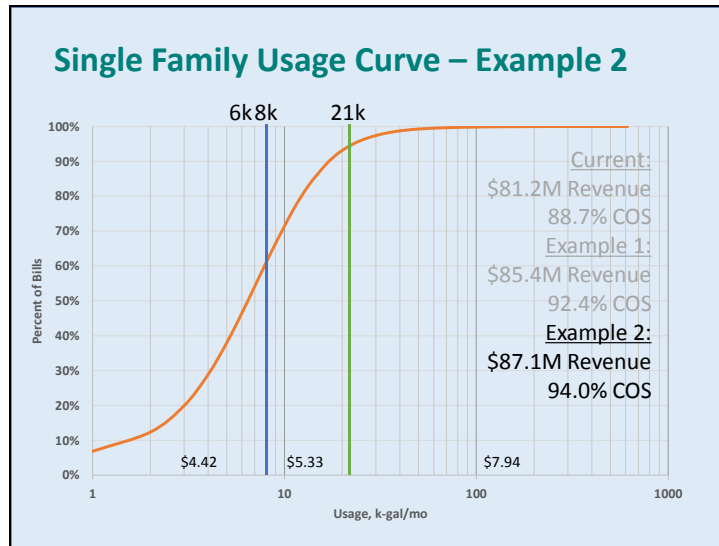
Agency	BWS	Maui	Kauai	Hawaii	Portland	Detroit
Monthly Charge	\$9.26	\$19.25	\$17.45	\$18.30	\$13.60	\$7.02
Tier 1	13 \$4.42	5 \$2.00	1 \$3.80	5 \$0.91	unlimited \$6.15	unlimited \$3.17
Tier 2	30 \$5.33	15 \$3.80	7 \$4.85	15 \$1.88		
Tier 3	>30 \$7.94	35 \$5.70	14 \$5.65	40 \$3.30		
Tier 4		>35 \$6.35	18 \$9.50	>40 \$4.35		
Tier 5			>18 \$10.00			

Based on 5/8-inch or 3/4-inch meter, whichever is lowest available









Single Family Example – Tier Shift

Unit Rate, \$/k-gal/mo	Tiers, k-gal/mo	% Bills in Block	Est. Quantity Rev., \$M	COS, %
Current				
\$4.42	0 – 13	82.4%	\$60.3	
\$5.33	>13 – 30	15.1%	\$12.7	
\$7.94	> 30	2.5%	\$8.1	
			\$81.2	88.7%
Ex. 1: 85 gpcd in Tier 1				
\$4.42	0 – 8	61.0%	\$48.6	
\$5.33	>8 – 21	32.9%	\$23.4	
\$7.94	> 21	6.0%	\$13.4	
			\$85.4	92.4%
Ex. 2: 50 percent bills in Tier 1				
\$4.42	0 – 6	46.7%	\$40.4	
\$5.33	>6 – 21	47.3%	\$33.2	
\$7.94	> 21	6.0%	\$13.5	
			\$87.1	94.0%

Single Family Example – Tier Shift Sample Bill Amounts

Bill Amount, k-gal/mo	Cumulative % of Bills	Current 13k/30k	Example 1 8k/21k	Example 2 6k/21k
2	12.7%	\$18.10	\$18.10	\$18.10
5	38.2%	\$31.36	\$31.36	\$31.36
9 (Avg.)	66.8%	\$49.04	\$49.95	\$51.77
18	91.4%	\$93.37	\$97.92	\$99.74
45 (Top 1%)	99.1%	\$276.43	\$304.47	\$306.29
% COS		88.7%	92.4%	94.0%

Bill amounts include monthly billing charge of \$9.26

Considerations for Tier Adjustments

- ◆ Should the top tier be adjusted to include more customers, e.g. top 10%, 15%, 20%?
- ◆ Should a higher rate apply to the top tier to discourage wasteful use and encourage conservation by the highest water users? Why or why not?
- ◆ Should tiers be added? If so, to what purpose?
- ◆ Should the tiers be adjusted to generate more revenue from single-family customers to close the gap in cost of service?

“Essential Needs” Tier Considerations

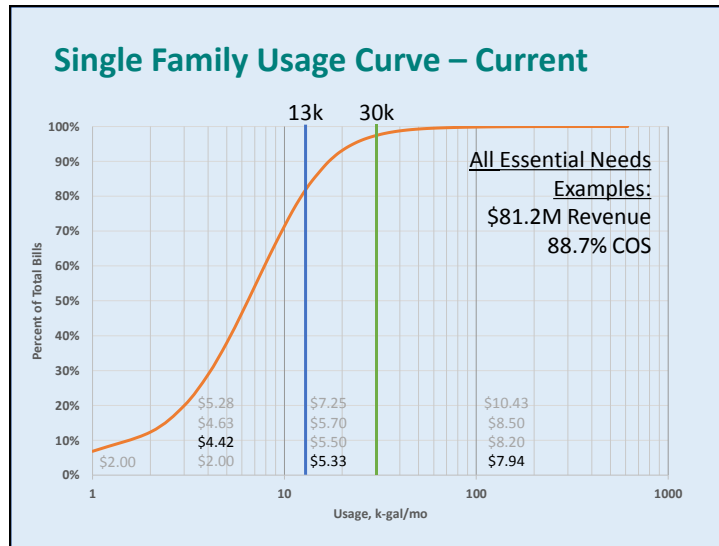
- ◆ Is establishing an Essential Needs tier recommended?
- ◆ What’s an appropriate ceiling for an Essential Needs tier?
- ◆ What level of discount?
- ◆ Who would support this rate?
- ◆ Where might opposition arise?
- ◆ What issues should be anticipated?

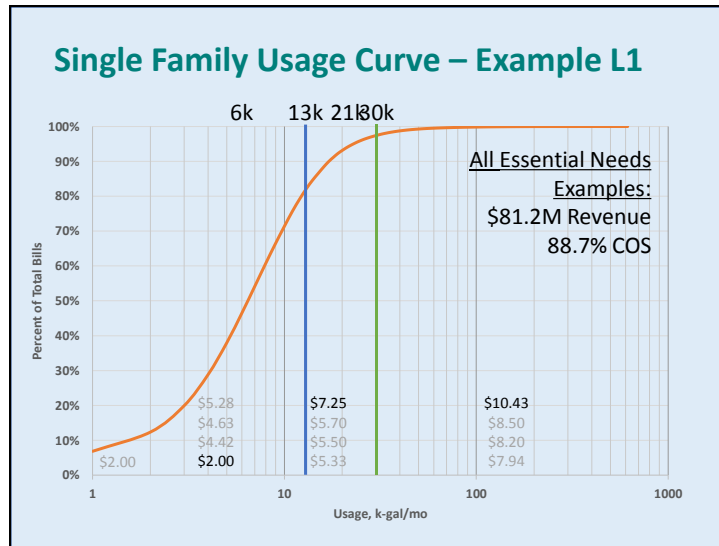
How an Essential Needs Tier Would Work

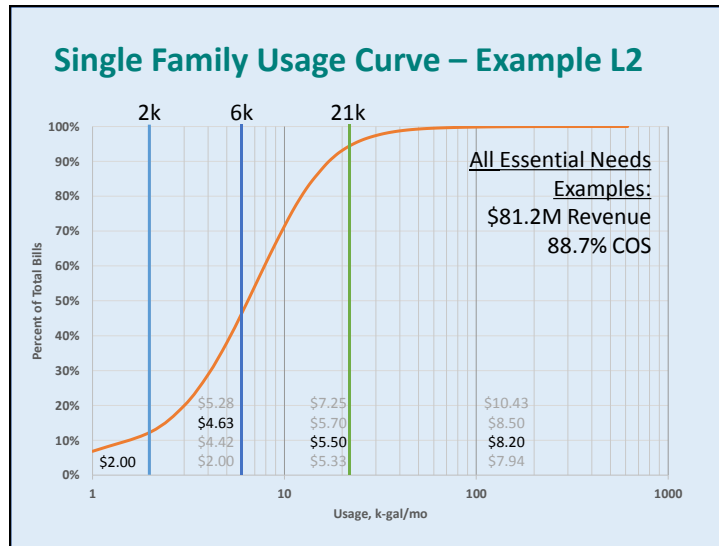
- ◆ Essential Needs tier quantity established at basic level of indoor use by residential customers
- ◆ Essential Needs rate recovers less than actual cost to deliver
- ◆ Revenue from higher tiers covers cost of Essential Needs tier

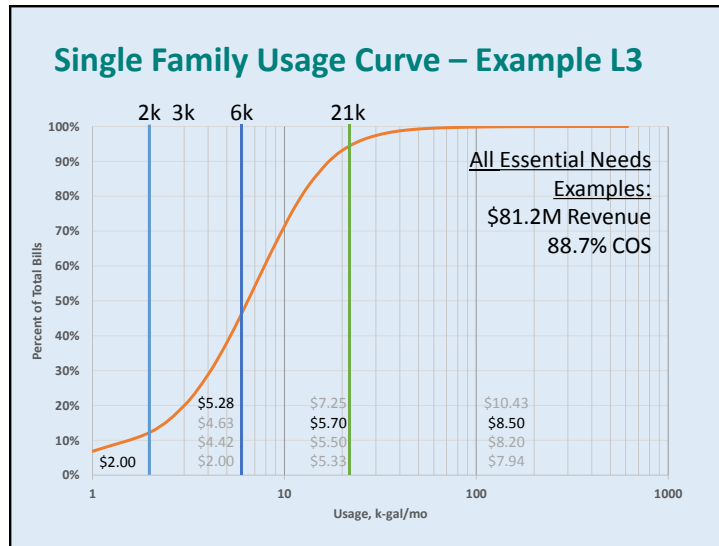
Opportunities for BWS Essential Needs Tier

- ◆ Window of opportunity concurrent with other rate structure adjustments
- ◆ Allows for timely implementation
- ◆ All customers benefit, regardless of income
- ◆ Customers determine their own destiny
- ◆ Supports commitment to conservation









Single Family Example - Essential Needs

Unit Rate, \$/k-gal/mo	Tiers, k-gal/mo	% Bills in Block	Est. Quantity Rev., \$M	COS, %
Current				
\$4.42	0 – 13	82.4%	\$60.3	
\$5.33	>13 - 30	15.1%	\$12.7	
\$7.94	> 30	2.5%	\$8.1	
			\$81.2	88.7%
Alt. L1: 50 percent in Tier 1, \$2.00				
\$2.00	0 – 6	46.7%	\$18.3	
\$7.25	>6 – 21	47.3%	\$45.2	
\$10.43	> 21	6.0%	\$17.8	
			\$81.2	88.7%

Single Family Example - Essential Needs

Unit Rate, \$/k-gal/mo	Tiers, k-gal/mo	% Bills in Block	Est. Quantity Rev., \$M	COS, %
Current				
\$4.42	0 – 13	82.4%	\$60.3	
\$5.33	>13 - 30	15.1%	\$12.7	
\$7.94	> 30	2.5%	\$8.1	
			\$81.2	88.7%
Alt. L2: 4 Tiers, 2k T1				
\$2.00	0 – 2	12.7%	\$7.1	
\$4.63	>2 – 6	34.0%	\$25.9	
\$5.50	>6 – 21	47.3%	\$34.3	
\$8.20	> 21	6.0%	\$14.0	
			\$81.2	88.7%
Alt. L3: 4 Tiers, 3k T1				
\$2.00	0 – 3	19.9%	\$10.3	
\$5.28	>3 – 6	26.8%	\$21.0	
\$5.70	>6 – 21	47.3%	\$35.5	
\$8.50	> 21	6.0%	\$14.4	
			\$81.2	88.7%

Single Family Example – Essential Needs Sample Bill Amounts

Bill Amount, k-gal/mo	Cumulative % of Bills	Current	Ex. L1 6k/21k	Ex. L2 2k/6k/21k	Ex. L3 3k/6k/21k
2	12.7%	\$18.10	13.26	13.26	13.26
5	38.2%	\$31.36	19.26	27.14	25.82
9 (Avg.)	66.8%	\$49.04	43.01	48.26	48.20
18	91.4%	\$93.37	108.26	97.76	99.50
45 (Top 1%)	99.1%	\$276.43	380.33	311.06	320.60
% COS		88.7%	88.7%	88.7%	88.7%

Bill amounts include monthly billing charge of \$9.26

Considerations for an Essential Needs Tier

- ◆ Is establishing an Essential Needs tier recommended?
- ◆ What's an appropriate ceiling for an Essential Needs tier?
- ◆ What level of discount?
- ◆ Who would support this rate?
- ◆ Where might opposition arise?
- ◆ What issues should be anticipated?



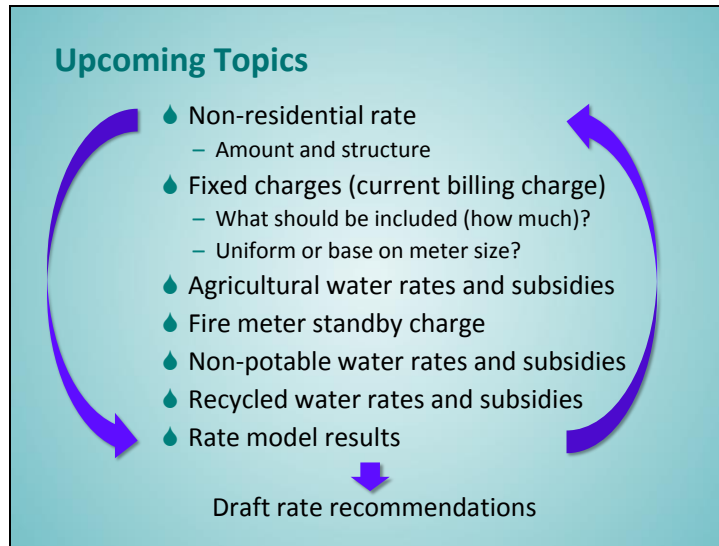
WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City of Denver

Dave Ebersold
Facilitator

SUMMARY AND NEXT STEPS

The slide features a teal background with a decorative border at the bottom. The top banner includes the 'WATER FOR LIFE' logo and the Board of Water Supply logo.



Other Items

- ◆ Next Meeting
Tuesday, October 17, 2017
4:00 – 6:30 pm

Blaisdell, Hawaii Suites

WATER FOR LIFE
Safe, dependable, and affordable water now and into the future

Board of Water Supply
City and County of Honolulu

ENTRUSTED TO US TO
PRESERVE
FOR FUTURE GENERATIONS

Mahalo!

The graphic features a central photograph of a young child splashing water. The background is a light teal color with a decorative border at the bottom. The text is arranged in a clean, modern layout.