

## MINUTES

### REGULAR MEETING OF THE BOARD OF WATER SUPPLY

September 25, 2017

At 2:00 PM on September 25, 2017 in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Andaya called to order the Regular Meeting.

Present: Bryan P. Andaya, Chair  
Kapua Sproat, Vice Chair  
David C. Hulihee  
Ross S. Sasamura  
Ford N. Fuchigami

Also Present: Ernest Lau, Manager and Chief Engineer  
Ellen Kitamura, Deputy Manager and Chief Engineer  
Erwin Kawata  
Michael Fuke  
Jason Takaki  
Joe Cooper  
Kevin Ihu  
Kathleen Pahinui  
Michael Matsuo  
Garon Hamasaki  
Robert Morita  
Michele Thomas  
Barry Usagawa  
Marc Chun  
Joseph Burruso  
Jonathan Suzuki  
Evan Kaneshiro  
Chad Kamalani-Coleman  
Christopher Morris  
Benedict Meria

Others Present: Jeff Lau, Deputy Corporation Counsel  
Duane Pang, Deputy Corporation Counsel  
David Ebersold, CDM Smith  
Audrey Harris, CDM Smith  
Tom Myers, Brown & Caldwell  
Chris Cleveland, Brown & Caldwell  
Susan Uyesugi, SSFM International

Absent: Kay C. Matsui

APPROVAL OF  
MINUTES

Approval of the Minutes of the Regular Meeting held on August 28,  
2017

MOTION  
TO APPROVE

David Hulihee and Ross Sasamura motioned and seconded, respectively,  
to approve the Minutes of the Regular Meeting of August 28, 2017. The  
motion was unanimously carried.



**BOARD OF WATER SUPPLY**  
CITY AND COUNTY OF HONOLULU

**RESOLUTION NO. 878, 2017**

**RECOGNITION OF THE BOARD OF WATER SUPPLY  
MEN'S PIPE TAPPING TEAM FOR REPRESENTING HAWAII  
IN THE 2017 AMERICAN WATER WORKS ASSOCIATION COMPETITION**

**WHEREAS**, EVAN KANESHIRO, CHAD KAMALANI-COLEMAN, CHRISTOPHER MORRIS, and BENEDICT MERIA of the Board of Water Supply (BWS), City and County of Honolulu represented the Hawaii Section of the American Water Works Association (AWWA) with honor and perseverance in the Pipe Tapping Contest, Men's Division, held from June 12 to 14, 2017, in Philadelphia, Pennsylvania; and

**WHEREAS**, the Pipe Tapping Contest is a much anticipated competition at the annual conference and exposition that is coordinated by the AWWA, the world's largest organization of drinking water supply professionals; and

**WHEREAS**, this competition, which is based on the skills and teamwork required of pipefitters, tests the ability of a team to complete a service connection to a live waterline in the fastest time, while meeting rigorous industry standards; and

**WHEREAS**, through their resolve and proficiency, the BWS pipe tapping team prevailed in the 2016 AWWA Hawaii Section Men's Division of the contest with a best time of one minute, 30.53 seconds (1:30.53) to earn the state championship title and go on to represent Hawaii at the 2017 national contest; and

**WHEREAS**, through this notable achievement, the team has brought pride to the Department and enhanced its reputation within our local community of water supply professionals; and now, therefore

**BE IT RESOLVED** by the Members of the Board of Water Supply, City and County of Honolulu, that we do hereby express to EVAN KANESHIRO, CHAD KAMALANI-COLEMAN, CHRISTOPHER MORRIS, and BENEDICT MERIA our sincere thanks for their dedication and personal time spent in countless practice sessions to improve their technique and speed for state and national competitions; and

**BE IT FURTHER RESOLVED** that the Members of this Board express to these individuals our deepest gratitude for representing the Department and the Hawaii Section of the AWWA, as well as our steadfast support and best wishes for when they compete in the 2018 AWWA Hawaii Section Pipe Tapping Contest at the Pacific Water Conference in Honolulu; and

**BE IT FINALLY RESOLVED** that a copy of this Resolution be presented to EVAN KANESHIRO, CHAD KAMALANI-COLEMAN, CHRISTOPHER MORRIS, and BENEDICT MERIA with our warmest aloha and appreciation for their excellent efforts.



Resolution No. 878, 2017

Adopted this 25<sup>th</sup> day of September 2017  
Board of Water Supply, Honolulu, Hawaii

BRYAN P. ANDAYA  
Chair of the Board

DISCUSSION: Chair Andaya attended the Pipe Tapping Competition at the 2017 American Water Works Association Conference, and said he was so proud of the BWS's Men's team. Mr. Lau read the resolution, then introduced the team members' families.

MOTION TO ADOPT RESOLUTION NO. 878, 2017 David Hulihee motioned to adopt Resolution No. 878, 2017, Recognition of the BWS's Men's Pipe Tapping Team for Representing Hawaii in the 2017 American Water Works Association (AWWA) Competition, and was seconded by Kapua Sproat. The motion was unanimously carried.

Each team member and the team's coach were presented with framed, signed copies of the resolution.

RESOLUTION NO. 878, 2017, RECOGNITION OF THE BWS'S MEN'S PIPE TAPPING TEAM FOR REPRESENTING HAWAII IN THE 2017 AMERICAN WATER WORKS ASSOCIATION COMPETITION, ADOPTED ON SEPTEMBER 25, 2017			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
KAY C. MATSUI			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		





**BOARD OF WATER SUPPLY**  
**CITY AND COUNTY OF HONOLULU**

**RESOLUTION NO. 877, 2017**

**JOSEPH S. BURRUSO JR.**  
**2017 EMPLOYEE OF THE YEAR**

**WHEREAS**, JOSEPH S. BURRUSO, JR., a Supervising Construction Inspector with the Capital Projects Division, has been a dedicated and exceptional employee since joining the Board of Water Supply (BWS) in February 1991, and was selected as the Department's 2017 Employee of the Year; and

**WHEREAS**, MR. BURRUSO oversees a staff of 10 construction inspectors within the Construction Branch, which is responsible for managing more than 180 projects that are key to ensuring water service reliability on Oahu now and into the future; and

**WHEREAS**, MR. BURRUSO effectively administers an inspection program consisting of many varied and complex projects, made impressive by the fact that the majority of his staff have less than five years of experience in construction inspection; and

**WHEREAS**, MR. BURRUSO has established a highly-effective working process for monitoring the timely completion of projects within the contract constraints; and

**WHEREAS**, MR. BURRUSO is constantly exploring new work processes to improve construction inspection efficiencies, resulting in significant time and cost savings to the BWS and water rate payers; and

**WHEREAS**, MR. BURRUSO works tirelessly with all stakeholders to ensure construction projects run as smoothly as possible with minimal disruptions; and

**WHEREAS**, JOSEPH S. BURRUSO, JR., has been selected as a Board of Water Supply Employee of the Year and will go on to represent BWS in the upcoming City Employee of the Year Recognition Ceremony, bringing pride and honor to the Department, his family, and friends; now, therefore

**BE IT RESOLVED** by the Members of the Board of Water Supply, City and County of Honolulu, that we do hereby express to JOSEPH S. BURRUSO, JR., our sincere appreciation for his outstanding service to the Department and to the City and County of Honolulu; and

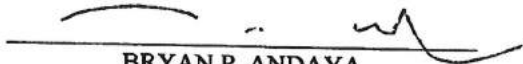
**BE IT FURTHER RESOLVED** that the Members of this Board express to JOSEPH S. BURRUSO, JR., our sincere congratulations upon his selection as the Board of Water Supply Employee of the Year for 2017; and

**BE IT FINALLY RESOLVED** that this Resolution be presented to MR. BURRUSO with our heartfelt aloha and best wishes for success in all his future endeavors.



Resolution No. 877, 2017

Adopted this 25<sup>th</sup> day of September 2017  
Board of Water Supply, Honolulu, Hawaii

  
BRYAN P. ANDAYA  
Chair of the Board

DISCUSSION: Mr. Lau read the resolution and congratulated Mr. Burruso. Mr. Andaya also congratulated him and added how it really says a lot about the BWS that Mr. Burruso was named as the City Employee of the Year. He also added that it's good people, like Mr. Burruso, that makes the BWS special.

MOTION TO ADOPT RESOLUTION NO. 877, 2017 David Hulihee motioned to adopt Resolution No. 877, 2017, Joseph S. Burruso, Jr., 2017 Employee of the Year, and was seconded by Kapua Sproat. The motion was unanimously carried.

In recognition of the BWS 2017 Employee of the Year, Chair Andaya presented Mr. Burruso with a plaque and a framed, signed resolution. Mr. Burruso was also selected as the City's Employee of the Year at the City and County of Honolulu's Annual Employees' Recognition Program on September 22, 2017.

RESOLUTION NO. 877, 2017, JOSEPH S. BURRUSO, JR., 2017 EMPLOYEE OF THE YEAR ADOPTED ON SEPTEMBER 25, 2017			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
KAY C. MATSUI			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		





**BOARD OF WATER SUPPLY**  
**CITY AND COUNTY OF HONOLULU**

**RESOLUTION NO. 879, 2017**

**JONATHAN M. SUZUKI**  
**2017 MANAGER OF THE YEAR**

**WHEREAS**, JONATHAN M. SUZUKI, Assistant Program Administrator of the Capital Projects Division (CPD), has been selected as the Board of Water Supply (BWS) Manager of the Year for 2017; and

**WHEREAS**, MR. SUZUKI helps oversee 60 BWS employees who carry out an effective Capital Improvement Program (CIP) to ensure reliable delivery of Oahu's drinking water to BWS customers now and in the future; and

**WHEREAS**, MR. SUZUKI has demonstrated outstanding and consistent efforts to listen to staff needs and find solutions, capitalize on available assets, seek new tools and resources for staff, and develop and implement new programs to strengthen the CPD's future -- ultimately improving public services; and

**WHEREAS**, to address anticipated impacts of a significantly expanding CIP to meet projected water infrastructure needs, MR. SUZUKI has provided exceptional leadership in ensuring that effective work processes, sufficient well-trained staff, and cooperative relationships with private and public entities are in place to coordinate and facilitate the design and construction of critical infrastructure projects now and in the future; and

**WHEREAS**, MR. SUZUKI's contributions, which will impact the BWS for many years to come, include improvements to contract language and standard specifications; written procedures for reporting project progress; standardized processes and procedures to work with the State Historic Preservation Division and other agencies; introduction of a new entry-level class of construction inspector aides to the Department; and collaboration with the Human Resources Office on a CPD Leadership Academy that will develop and train current and future Capital Projects supervisors who will sustain an expanded CIP; and

**WHEREAS**, JONATHAN M. SUZUKI has proven himself to be a dedicated, dependable, and skillful manager who leads by example and personifies attributes that employees desire in their leaders, earning the respect of his subordinates, colleagues, and BWS management; and

**WHEREAS**, MR. SUZUKI's selection as the 2017 BWS Manager of the Year and his nomination as a City Manager of the Year has brought pride and honor to the BWS and all his family and friends; now, therefore

**BE IT RESOLVED** by the Members of the Board of Water Supply, City and County of Honolulu, that we hereby do express to JONATHAN M. SUZUKI our heartfelt appreciation for his outstanding service to the Department and to the City and County of Honolulu; and

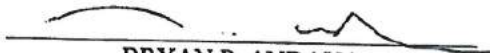
**BE IT FURTHER RESOLVED** that the Members of this Board express our sincere congratulations upon his selection as the Board of Water Supply Manager of the Year for 2017; and

**BE IT FINALLY RESOLVED** that a copy of this Resolution be presented to MR. SUZUKI with our warmest aloha and best wishes for all his future endeavors.



Resolution No. 879, 2017

Adopted this 25<sup>th</sup> day of September 2017  
Board of Water Supply, Honolulu, Hawaii

  
BRYAN P. ANDAYA  
Chair of the Board

DISCUSSION: Mr. Lau informed the Board that Mr. Suzuki would be retiring in a few days, after 37 years with the Board of Water Supply. Mr. Lau also added that Mr. Suzuki is a dedicated employee, and that the Department will truly miss him. Mr. Lau read the resolution.

MOTION TO ADOPT RESOLUTION NO. 879, 2017 David Hulihee motioned to adopt Resolution No. 879, 2017, Jonathan M. Suzuki, 2017 Manager of the Year, and was seconded by Kapua Sproat. The motion was unanimously carried.

In recognition of the BWS 2017 Manager of the Year, Mr. Andaya presented Mr. Suzuki with a plaque and a framed, signed resolution. Mr. Suzuki was also selected as the City's Manager of the Year at the City and County of Honolulu's Annual Employees' Recognition Program on September 22, 2017.

RESOLUTION NO. 879, 2017, JONATHAN M. SUZUKI, 2017 MANAGER OF THE YEAR, ADOPTED ON SEPTEMBER 25, 2017			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
KAY C. MATSUI			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		





**BOARD OF WATER SUPPLY  
CITY AND COUNTY OF HONOLULU**

**RESOLUTION NO. 880, 2017**

**ADAM C. WONG**

**IN APPRECIATION FOR SERVING AS A MEMBER  
OF THE BOARD OF WATER SUPPLY**

**WHEREAS**, ADAM C. WONG has ably served as a member of the Board of Water Supply (BWS), City and County of Honolulu, since February 2010, and as its Vice Chair since July 2014; and

**WHEREAS**, MR. WONG's experience and work as founder and Managing Partner of ACW Ventures, a diversified investment firm that focuses on local private equity and sustainable yet profitable real estate opportunities, and stints as Vice President and Equity Partner in a local hotel development firm; Area Developer for the Great Harvest Bread franchise in Honolulu; Founder, Vice President, and Director of Parallel 21, Inc., website development firm; and President of e-commerce website e808.com; coupled with the esteem of his colleagues, has resulted in additional recognition and respect for the Board; and

**WHEREAS**, MR. WONG's professional and community affiliations and experience with financial and administrative matters have made him a valuable asset to the Board and a helpful resource in its deliberations, as he provided useful insights and counsel to its members; and

**WHEREAS**, as Board Vice Chair, MR. WONG has supported and encouraged initiatives that have improved the BWS's fiscal management and day-to-day operations, and has volunteered his time and expertise to help effect business and policy decisions for the Board that will benefit the Board of Water Supply and Oahu's water users for many years to come; and

**WHEREAS**, MR. WONG's service is a testament to his commitment to maintaining a municipal water system worthy of trust from the public it serves; now, therefore

**BE IT RESOLVED** by the Members of the Board of Water Supply, City and County of Honolulu, that we do hereby express to ADAM C. WONG our deep appreciation and gratitude for his committed service to this Board and Department; and


**BE IT FURTHER RESOLVED** that the Members of this Board extend to ADAM C. WONG our sincere aloha and best wishes for continued success in all of his future endeavors; and

**BE IT FINALLY RESOLVED** that this Resolution be presented to ADAM C. WONG.



Resolution No. 880, 2017

Adopted this 25<sup>th</sup> day of September 2017  
Board of Water Supply, Honolulu, Hawaii

  
BRYAN P. ANDAYA  
Chair of the Board

MOTION TO  
ADOPT  
RESOLUTION  
NO. 880, 2017

David Hulihee motioned to adopt Resolution No. 880, 2017, Adam C. Wong, Resolution of Appreciation, and was seconded by Kapua Sproat. The motion was unanimously carried.

Adam Wong was unable to attend the meeting, due to his travels. It was decided by Mr. Andaya that the framed, signed resolution will be given to Mr. Wong at a later time.

RESOLUTION NO. 880, 2017, ADAM C. WONG, RESOLUTION OF APPRECIATION, ADOPTED ON SEPTEMBER 25, 2017			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
KAY C. MATSUI			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		

"September 25, 2017

APPROVAL OF  
VIDEOTAPING  
AND  
BROADCASTING  
OF BOARD  
MEETINGS

Chair and Members  
Board of Water Supply  
City and County of Honolulu  
Honolulu, Hawaii 96843

Chair and Members:

Subject: Approval of Videotaping and Broadcasting of Board Meetings

The Board of Water Supply (BWS) is recommending to the Board of Directors (Board) to allow videotaping and broadcasting of the monthly Board meetings. BWS justifies this recommendation for the following reasons:

- 1) BWS would be following standard practice set by the City and County of Honolulu:
  - a. The City and County of Honolulu currently, and has been for many years, videotapes and broadcasts the City Council and Council Committee meetings.
  - b. HART, the other semi-autonomous agency in the City and County of Honolulu, broadcasts their monthly board meetings.

Currently, BWS is the only large City and County agency not videotaping and broadcasting their meetings.

- 2) BWS is committed to transparency when establishing policy, especially on issues that will impact our customers such as rate increases. Videotaping and broadcasting will allow for greater public awareness of decisions made by the Board and BWS that will affect the community.
- 3) By making the videos of the meetings available to watch on 'Olelo and the BWS website, BWS is encouraging the community to take a more active role in the BWS.
- 4) BWS acknowledges that many in our community are not able to attend the Board meetings, and this will help to address that issue.
- 5) As the BWS and its Board of Directors move ahead in the current rate making process, it will become more imperative to ensure the public has access to the same information that the Board does to assist in the understanding of decisions that are and will be made.



Upon Board approval of this recommendation:

- 1) BWS will work with 'Olelo to set up the system and train BWS Communications staff to videotape the meetings.
- 2) The Communications Office will edit and upload the videos to the BWS website and send to 'Olelo to air.
- 3) A schedule of air dates will be provided to the Board, as well as posted on our website.
- 4) Further communication outreach will be done through news releases and social media.
- 5) Any costs for doing the videotaping will be minimal. Currently, 'Olelo will provide equipment to trained BWS Communications staff. We have one 'Olelo certified trained employee and have two to three more being certified.

We appreciate the Board's consideration of this recommendation and believe it will improve transparency and accessibility for our customers to the BWS as it carries out its mission, "to provide safe, dependable, and affordable water now and into the future."

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer"

DISCUSSION:

Mr. Lau stated that the BWS is the only large City agency with a major Board that does not televise their Board meetings. BWS is committed to transparency, and videotaping and broadcasting will allow greater public awareness. Many people are unable to attend the monthly Board meetings for various reasons, so televising the meetings would allow viewing of the meetings. The BWS Communications Office has already been working with 'Olelo and has one 'Olelo Certified employee to videotape the meetings. Two to three more employees are being trained. Any costs for doing the videotaping will be minimal.

Vice Chair Sproat inquired if HART airs their meetings on 'Olelo, as well as having them available online. Kathleen Pahinui, Information Officer, responded by saying that she has seen them on 'Olelo, as well as City Council and Committee hearings. Ms. Sproat expressed her support for videotaping the meetings and having them available online, adding that it's an important resource for people who want to view them. Ms. Sproat's concern was determining the air times. Ms. Pahinui stated that 'Olelo would provide the schedule.

Board Member Fuchigami asked if the meetings would be aired live. Ms. Pahinui answered that there is a lot of technology involved with live



video streaming, so initially, BWS will only be posting pre-recorded meetings on the website and airing on 'Olelo. However, they are working toward doing live streams.

Mr. Andaya stated that this is a great idea, for the sake of transparency, especially as BWS moves into their rate study.

**MOTION TO  
APPROVE**

Ross Sasamura and Kapua Sproat motioned and seconded, respectfully, to approve Videotaping and Broadcasting of Board Meetings. The motion was unanimously carried.

VIDEOTAPING AND BROADCASTING OF BOARD MEETINGS, APPROVED ON SEPTEMBER 25, 2017			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
KAY C. MATSUI			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		

"September 25, 2017

CREATION OF  
A PERMITTED  
INTERACTION  
GROUP FOR  
WATER RATE  
STUDY

Chair and Members  
Board of Water Supply  
City and County of Honolulu  
Honolulu, Hawaii 96843

Chair and Members:

Subject: To Determine the Role of the Board in the Water Rate Study  
Process and Creation of a Hawaii Revised Statutes Section  
92-2.5(b) Permitted Interaction Group

The Board of Water Supply (BWS) is undergoing a water rate study and requests the involvement of the Board in the process. The Board adopted the 30-Year Water Master Plan (WMP) on October 24, 2016. Based on the water infrastructure improvements recommended by the WMP, a 30-Year Capital Improvement Program (CIP) was developed. The water rate study will determine the appropriate water rates and charges needed to fund BWS operations, including the 30-Year CIP. We are seeking Board member(s) participation to work with the BWS's senior managers and consultants on the water rate study. Ultimately, any recommendations resulting from the water rate study will be presented to the Board to conduct public hearings and to take action at a regular meeting of the Board.

If two or more Board members would like to participate in the development of the water rate study, we recommend the creation of a Permitted Interaction Group. The pertinent section of Chapter 92, Hawaii Revised Statutes regarding the permitted interaction of members is as follows:

*§92-2.5 Permitted interactions of members. (a) Two members of a board may discuss between themselves matters relating to official board business to enable them to perform their duties faithfully, as long as no commitment to vote is made or sought and the two members do not constitute a quorum of their board.*

*(b) Two or more members of a board, but less than the number of members which would constitute a quorum for the board, may be assigned to:*

*(1) Investigate a matter relating to the official business of their board; provided that:*

*(A) The scope of the investigation and the scope of each member's authority are defined at a meeting of the board;*

*(B) All resulting findings and recommendations are presented to the board at a meeting of the board; and*

*(C) Deliberation and decision-making on the matter investigated, if any, occurs only at a duly noticed meeting of the board held subsequent to the meeting at which the findings and recommendations of the investigation were presented to the board; or*

*(2) Present, discuss, or negotiate any position which the board has adopted at a meeting of the board; provided that the assignment is made and the scope of each member's authority is defined at a meeting of the board prior to the presentation, discussion or negotiation.*

The involvement of the Board in the water rate study is an important opportunity to ensure a collaborative implementation of the long-term strategies identified in the WMP to address the needs of the BWS and its customers.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer"

DISCUSSION:

Manager Lau began by saying that Mr. Andaya suggested the creation of a Permitted Interaction Group (PIG) to assist the BWS in the development of new water rates and charges for the next five year period. Mr. Lau explained that because there is so much information and discussion required to develop the water rate study, it is challenging to engage the Board only once a month at the monthly Board meetings. The creation of a PIG would allow for two to three Board Members to meet with the BWS outside of the monthly Board meetings to ensure collaborative implementation of the strategies developed in the water rate study. Mr. Lau stated that Permitted Interaction Groups were created previously for the Redevelopment of the Beretania Complex Properties and in the development of the BWS Strategic Plans.

Mr. Andaya and Ms. Sproat volunteered to serve on the PIG. Mr. Andaya called for a motion to approve the creation of a PIG consisting of himself and Ms. Sproat. Ms. Sproat asked if Board Member Matsui could participate in the discussions if she wanted to. Deputy Corporation Counsel Pang stated that if the Board voted today and did not include Ms. Matsui on the PIG and wanted to include her later, the Board would have to dissolve this PIG and create a new one. Mr. Pang stated that the Board could include Ms. Matsui on the PIG created today, and if she was unable to attend the meetings, it would not affect the PIG because the other two members could still meet. Mr. Andaya suggested to include Ms. Matsui to the PIG and called for a motion to approve the creation of a PIG consisting of himself, Ms. Sproat, and Ms. Matsui.

MOTION TO  
APPROVE

Ross Sasamura motioned to approve Chair Andaya, Vice Chair Sproat, and Board Member Matsui to serve on the Permitted Interaction Group to develop the Water Rate Study. The motion was seconded by Kapua Sproat and unanimously carried.

CREATING A HRS SECTION 92-2.5(B) PERMITTED INTERACTION GROUP CONSISTING OF CHAIR ANDAYA, VICE CHAIR SPROAT AND BOARD MEMBER MATSUI, TO DEVELOP THE WATER RATE STUDY, WAS APPROVED ON SEPTEMBER 25, 2017			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
DAVID C. HULIHEE	X		
KAPUA SPROAT	X		
KAY C. MATSUI			ABSENT
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI	X		



ITEM FOR INFORMATION NO. 1

"September 25, 2017

FINANCIAL  
PLAN AND  
RATE STUDY  
UPDATE

Chair and Members  
Board of Water Supply  
City and County of Honolulu  
Honolulu, Hawaii 96843

Chair and Members:

Subject: Board of Water Supply Financial Plan and Rate Study Update

Joe Cooper, Waterworks Controller, and David Ebersold of CDM Smith, will present an update of our Water Master Plan Financial Plan and Rate Study.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

Attachment"

The foregoing was for information only.

DISCUSSION:

Joe Cooper gave the presentation on the Financial Plan and Rate Study. Mr. Cooper's discussion included questions that the Stakeholder Advisory Group (SAG) was asked to consider, the business case to be made for providing customer assistance, current BWS affordability support, Portland's Low Income Assistance Program, the customer assistance development process and considerations, and input from the SAG on September 12, 2017.

David Ebersold gave the presentation on Residential Rate Tiers. Mr. Ebersold went over considerations for tier adjustments, BWS's current tier structure, the comparison of single-family residential rate tiers of other water utilities, BWS's single family water usage statistics in 2015-2016, changes to sample bill amounts resulting from different tier shift examples, and "essential needs" tier considerations.

Mr. Fuchigami asked what the correlation is between consumption, and the upkeep of the water system and debt service. Mr. Lau responded that the rate revenue is the only revenue the BWS has to operate and maintain the water system. The tier structure is designed to encourage conservation with the residential customers and BWS depends on these quantity based rates to generate revenue.

Mr. Fuchigami asked if the operating costs would drop if consumption drops. Mr. Lau replied that there would need to be some drop in costs, like

electricity usage, but there are still other costs that BWS would incur regardless of less consumption, like maintaining the same amount of facilities. However, if revenues decreased drastically, BWS would need to lessen costs in some way such as operating less pumping stations.

Mr. Fuchigami asked how much water will be conserved, based on Mr. Ebersold's recommendations and the rate structure. Mr. Ebersold said that there are no specific recommendations being made at this time, and that they are just presenting examples to show the types of changes that can happen by adjusting the rate tiers. Mr. Lau added that they are just trying to redefine where to draw the line between the tiers under the current usage patterns. Mr. Andaya asked if there are any studies done by the AWWA, as far as price elasticity, to see if there would be any impact on conservation if the tiers are adjusted. Mr. Ebersold replied that there are a number of studies out there that look at the price elasticity of water. In general, because water is priced fairly low, as prices change, people's usage patterns don't change much. Mr. Andaya said it seems that conservation seems to be minimal, in terms of setting the tiers. Mr. Lau stated that he doesn't think conservation would be minimal because he feels the tier structure does encourage conservation. For example, customers may cut back on irrigation if they were charged more for using that water.

Mr. Lau explained cost of service and how much it costs to provide services to the different customer classes. The cost of service study indicated that BWS is only recovering 88% of the cost it takes to provide water to single-family customers. The rest is being subsidized, to a large extent, by the non-residential class and to some extent by the multi-family residential class. Mr. Ebersold stated that the SAG suggests to get closer to the actual cost of service. Mr. Fuchigami asked if this philosophy is similar to Hawaiian Electric's. Mr. Ebersold responded yes, and also similar to a number of water agencies throughout the country.

Mr. Fuchigami asked if the Board is now being asked to make a recommendation of which tier to select. Mr. Lau replied that they were not asking for a final decision today, but to let him know if the Board has any recommendations, as BWS will be drafting proposals by Spring of 2018.

Mr. Fuchigami expressed his concern of reduced consumption and rising operating costs, and that he wanted to take a closer look at that. Mr. Lau assured him that they will get more information on that area.

Board Member Hulihee inquired if Portland and Detroit went through the same process. Mr. Ebersold explained that Detroit, in particular, struggled with affordability problems and went through a very painful process. Portland does not use rate tiers, but their rate structure is driven around affordability issues.

Mr. Lau asked if tier structures are the most typical way of structuring water rate. Mr. Ebersold responded by saying that tier structures are by far the

most common. He added that there has been a new structure emerging, called water budgets, where there's a water budget for each customer based on their household size and the amount of irrigated land that they have.

Ms. Sproat inquired about lifeline rates, or "essential needs" rates. Mr. Ebersold showed her examples of what would happen by creating an "essential needs" tier. Ms. Sproat expressed her support for the "essential needs" tier, as long as it does not create a strain. She also supports adding an additional tier for conservation.

Mr. Ebersold went over upcoming topics. Mr. Lau commented that all these topics are part of a complicated discussion, and the BWS is looking at Spring of 2018 to have everything put together in a more coherent way.

Mr. Andaya asked when the Board would need to make a decision on the rate structure. Mr. Ebersold said that, at this point, they are just collecting input to provide the initial structure of the financial model. Mr. Lau then thanked the Board for taking action on the Permitted Interaction Group, as it is a way for three of the Board Members to participate in discussions regarding the rate study.

Ms. Sproat commented that she felt like the feedback from the SAG was consistent with discussions the Board had at the September Board Meeting.

Mr. Fuchigami asked why Portland and Detroit were picked for the Stakeholder presentation. Mr. Ebersold replied that Portland and Detroit were chosen because the Stakeholders were interested in learning more about customer assistance programs. Portland and Detroit have among the most sophisticated and comprehensive customer assistance programs in the country. Mr. Lau added that Portland has gone through different generations of having customer assistance programs, so they would be one of the more experienced utility agencies doing that kind of program. Detroit was brought up by one of the Stakeholders because of the economic situation there. In response to Mr. Fuchigami's question of why a city more comparable to Honolulu wasn't chosen. Mr. Ebersold stated that the other islands were looked at, but they didn't really have much customer assistance programs.

Mr. Lau added that they are also looking at research on customer assistance programs, done by the Water Research Foundation, which did a good recap of customer assistance programs.



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Board of Water Supply  
City and County of Honolulu

## **Board Update**

**Affordability Assistance and Residential Rate Tiers**

**Joe Cooper, Waterworks Controller**

**David Ebersold, CDM Smith**

**BWS Water Master Plan Project**

**September 25 , 2017**



# 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?



# 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]



# 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



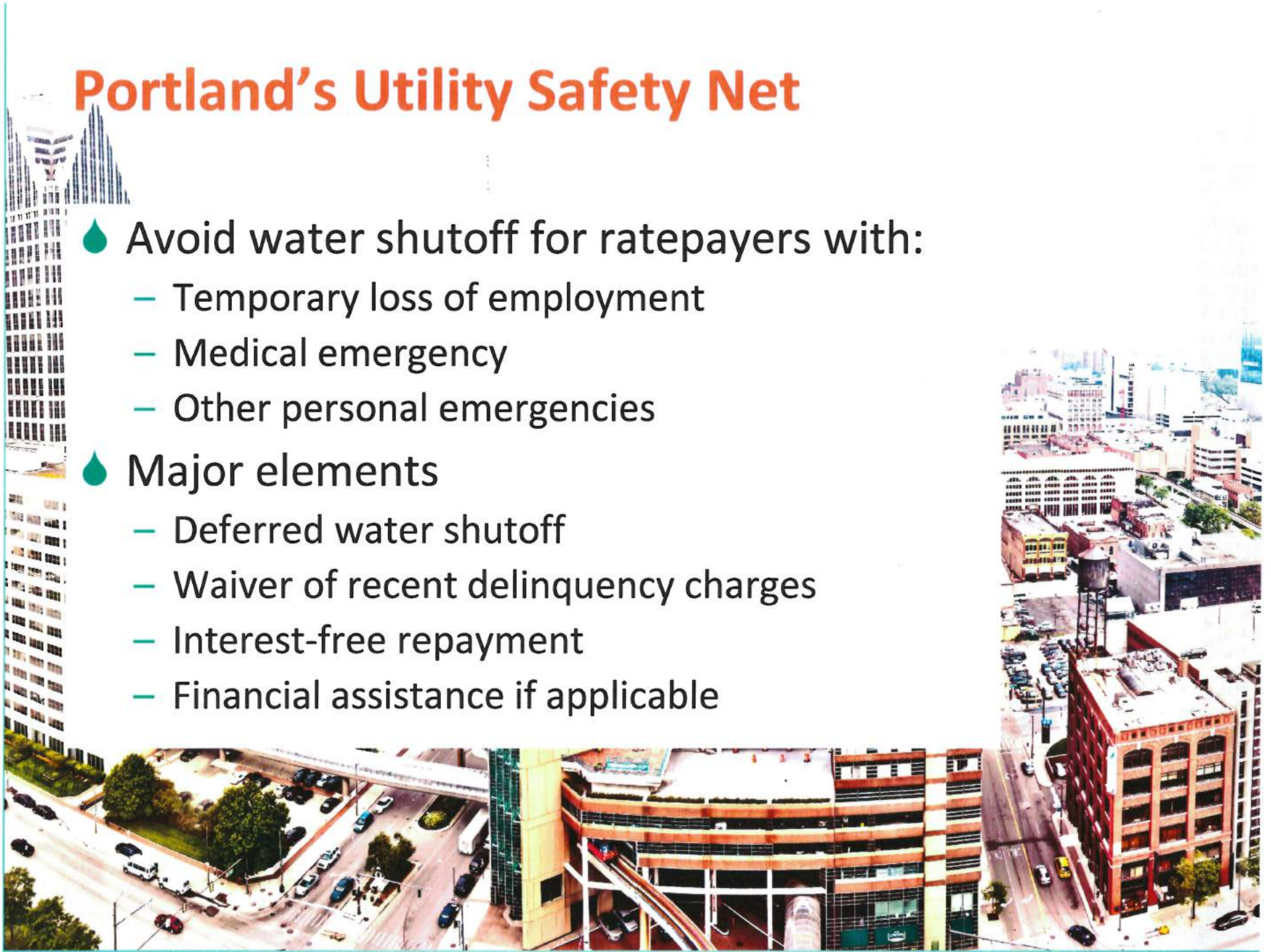
# Portland's Low Income Assistance Program

- 💧 **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



# 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





# Portland's Multi-Family Pilot Program is Under Review

## ◆ Key issues

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





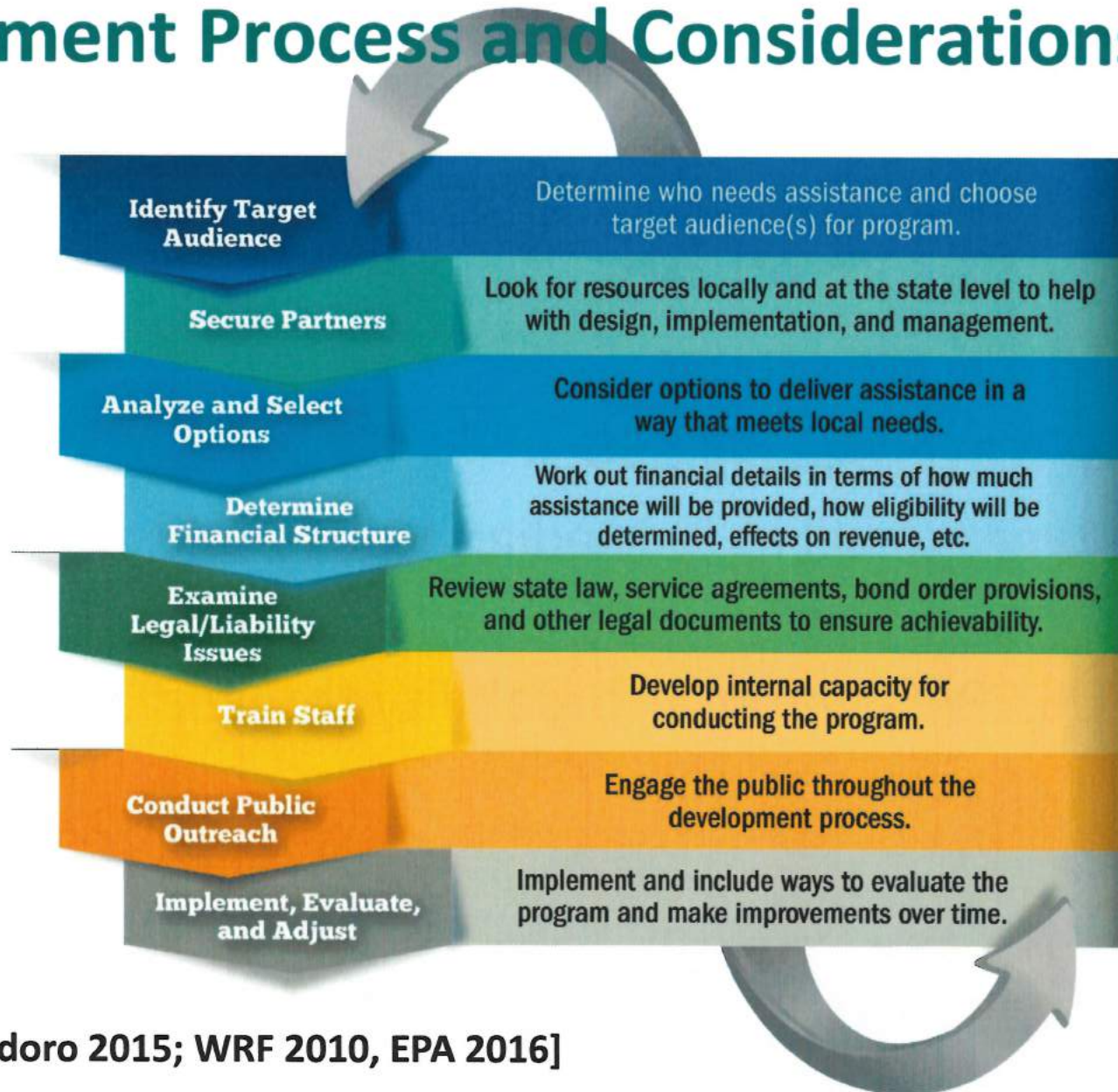
# Projected Costs for 2017-18 are About \$5 Million

- ◆ 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





# Customer Assistance Program Development Process and Considerations



[Davis and Teodoro 2015; WRF 2010, EPA 2016]

## 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 (MHI) 0.57%
- 💧 US EPA's water affordability threshold is 2.5% of MHI



# Stakeholder Advisory Group Input Summary (Sept. 12, 2017)

- ◆ Should BWS enhance its customer assistance program?
  - Yes, and recognizing BWS's existing programs, in specific ways
- ◆ What types of additional program elements should be considered?
  - Leak detection
  - Plumbing repair assistance
  - Water conservation
- ◆ Who should pay for those costs/subsidies?
  - BWS's customers
  - Considering the costs, start with a pilot program to make sure it actually helps/is effective



# Considerations for Tier Adjustments

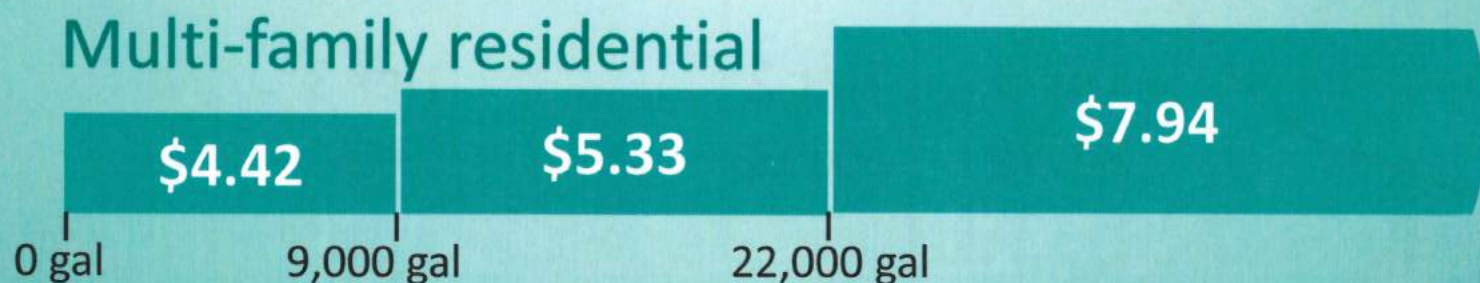
- ◆ Should the top tier be adjusted to include more customers, e.g. top 10%, 15%, 20%?
- ◆ Should a higher rate apply to the top tier to discourage wasteful use and encourage conservation by the highest water users? Why or why not?
- ◆ Should tiers be added? If so, to what purpose?
- ◆ Should the tiers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



# BWS's Residential Customers Pay More as Use Increases



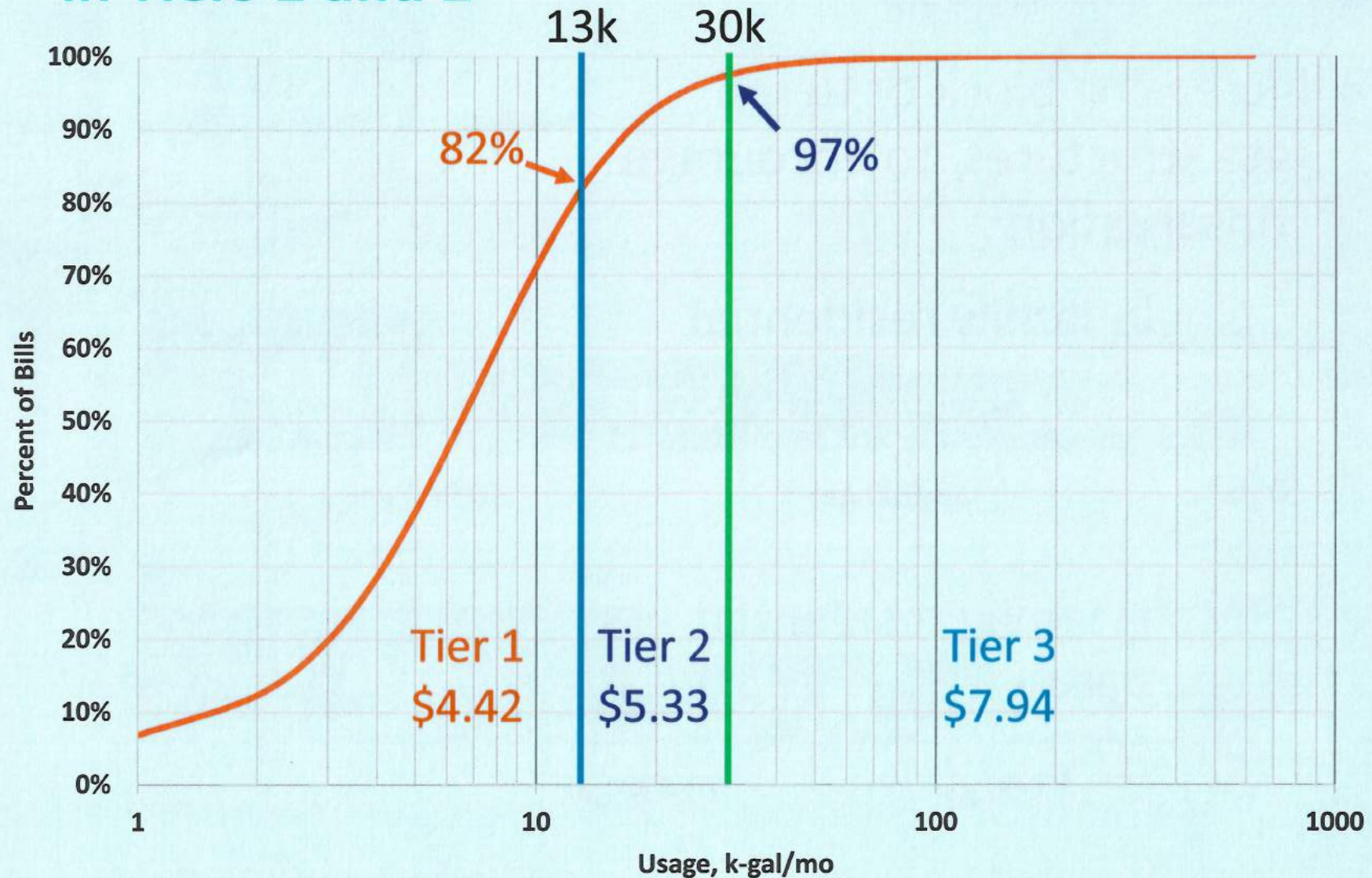
- Increasing block or tiered rate structures, to encourage conservation



Charges per 1,000 gallons



# 97% of Single-Family Residential Customers are in Tiers 1 and 2



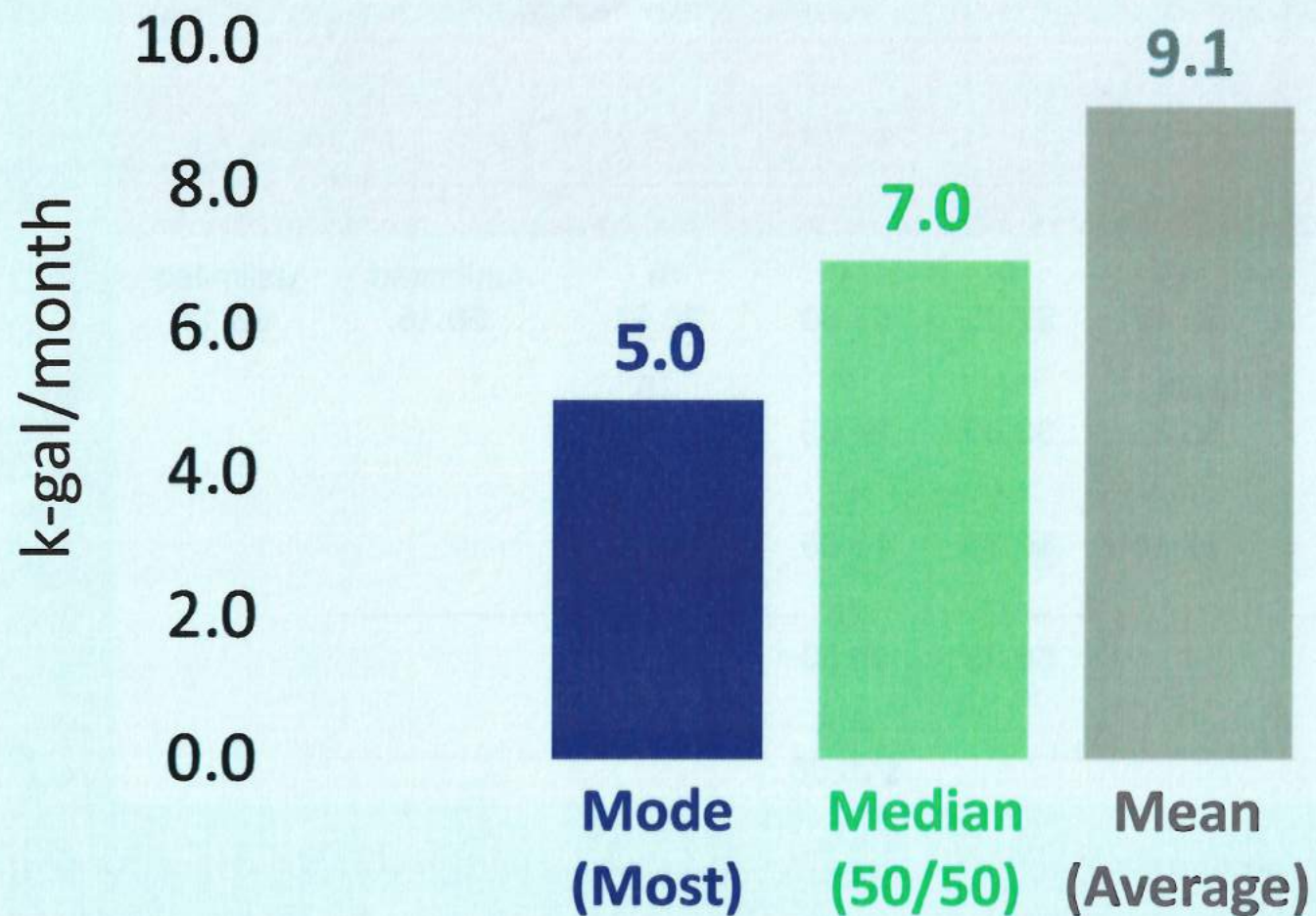
# Comparison of Single-Family Residential Rate Tiers

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

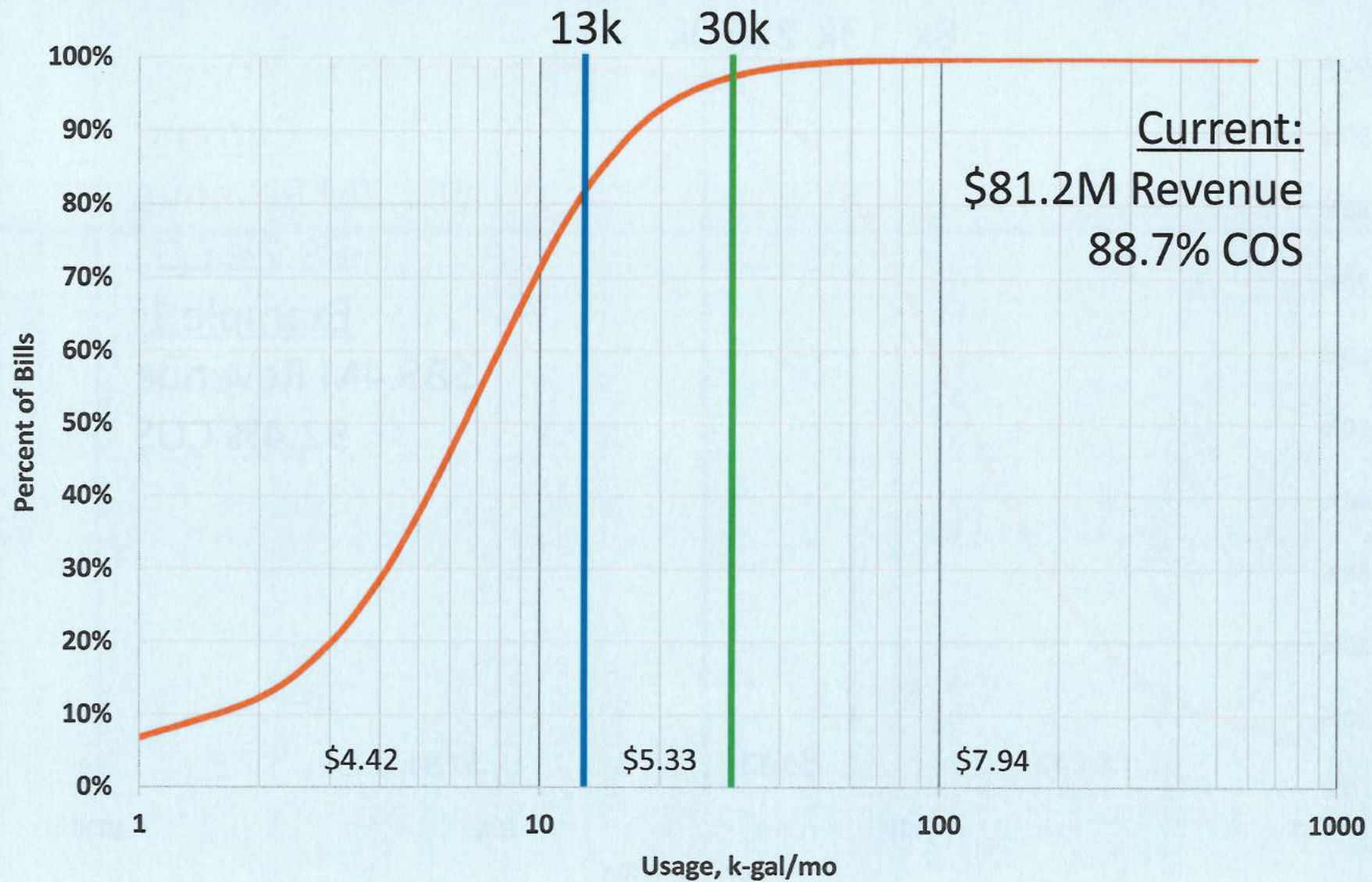


## BWS's Single-Family Water Usage Statistics (2015-2016)

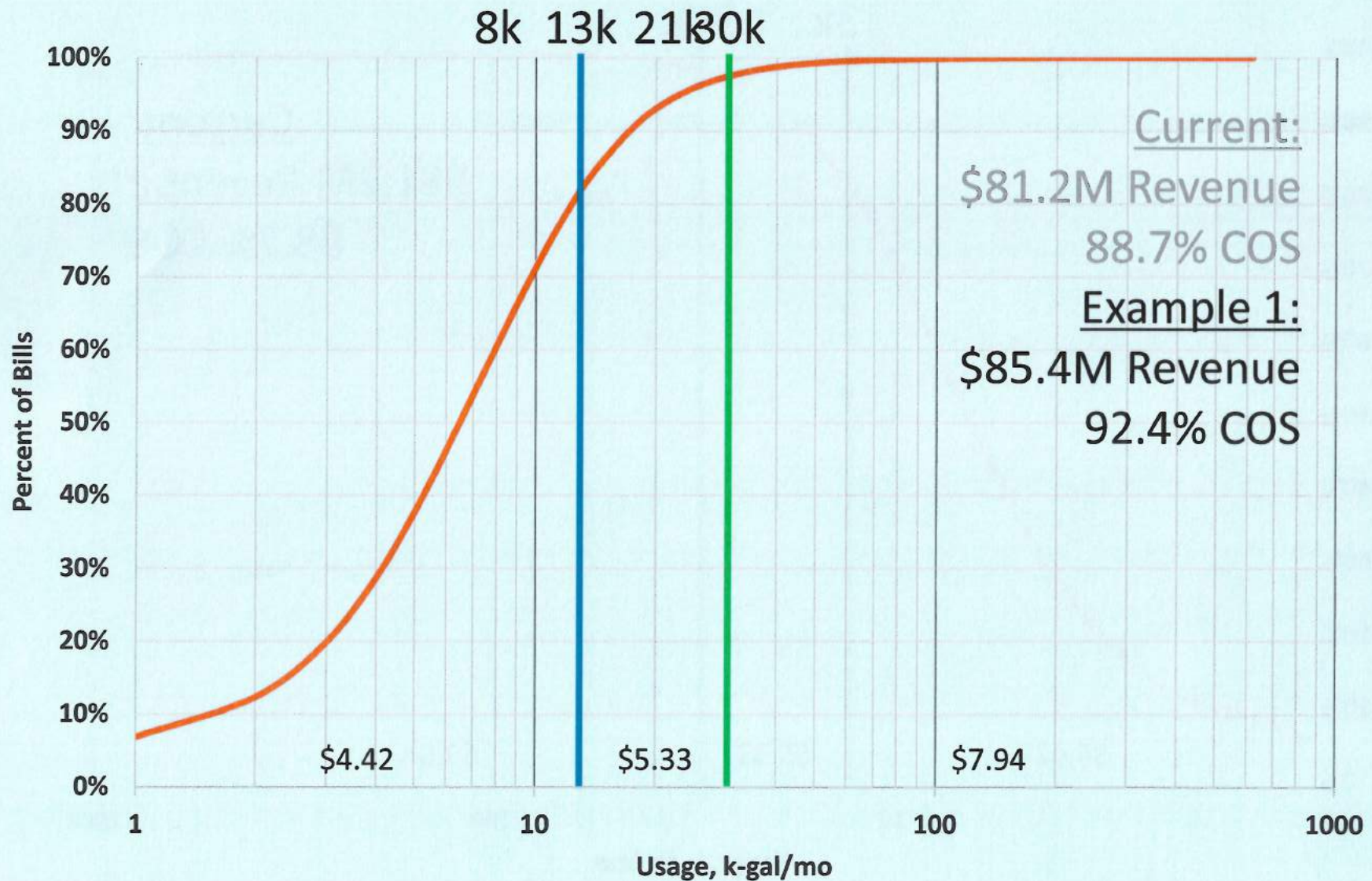




# Single Family Usage Curve – Current

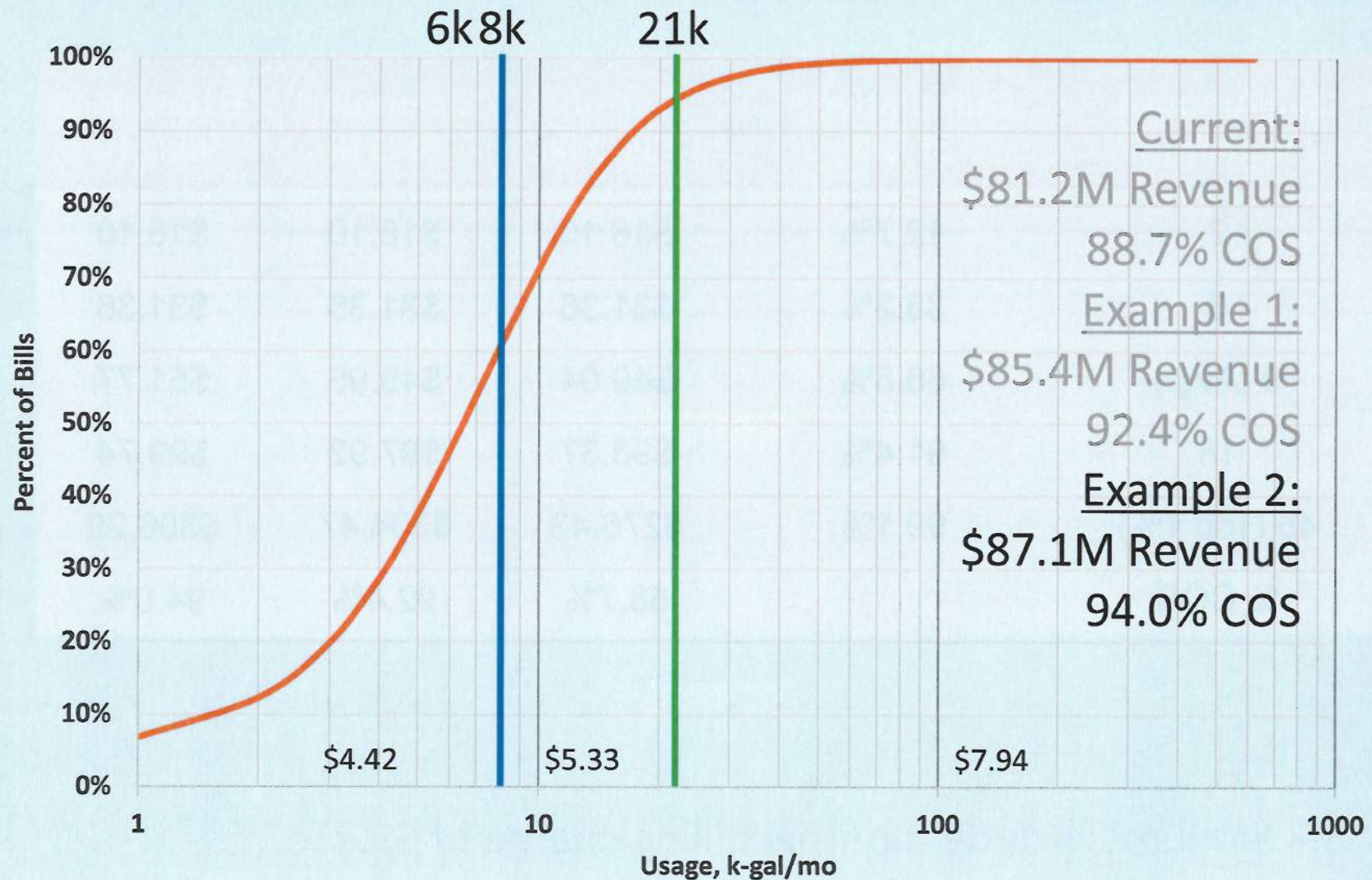


# Single Family Usage Curve – Example 1





# Single Family Usage Curve – Example 2



# 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



# Stakeholder Advisory Group Input Summary (Sept. 12, 2017)

- ◆ Should the top tier be adjusted to include more customers, e.g. top 10%, 15%, 20%?
  - Yes, at least the top 10%
- ◆ Should a higher rate apply to the top tier?
  - Yes. These customers are using more than their fair share, resulting in a burden on the resource
- ◆ Should tiers be added? If so, to what purpose?
  - Yes, for conservation and affordability
- ◆ Should the tiers be adjusted to generate more revenue from single-family customers to close the gap in cost of service?
  - Yes

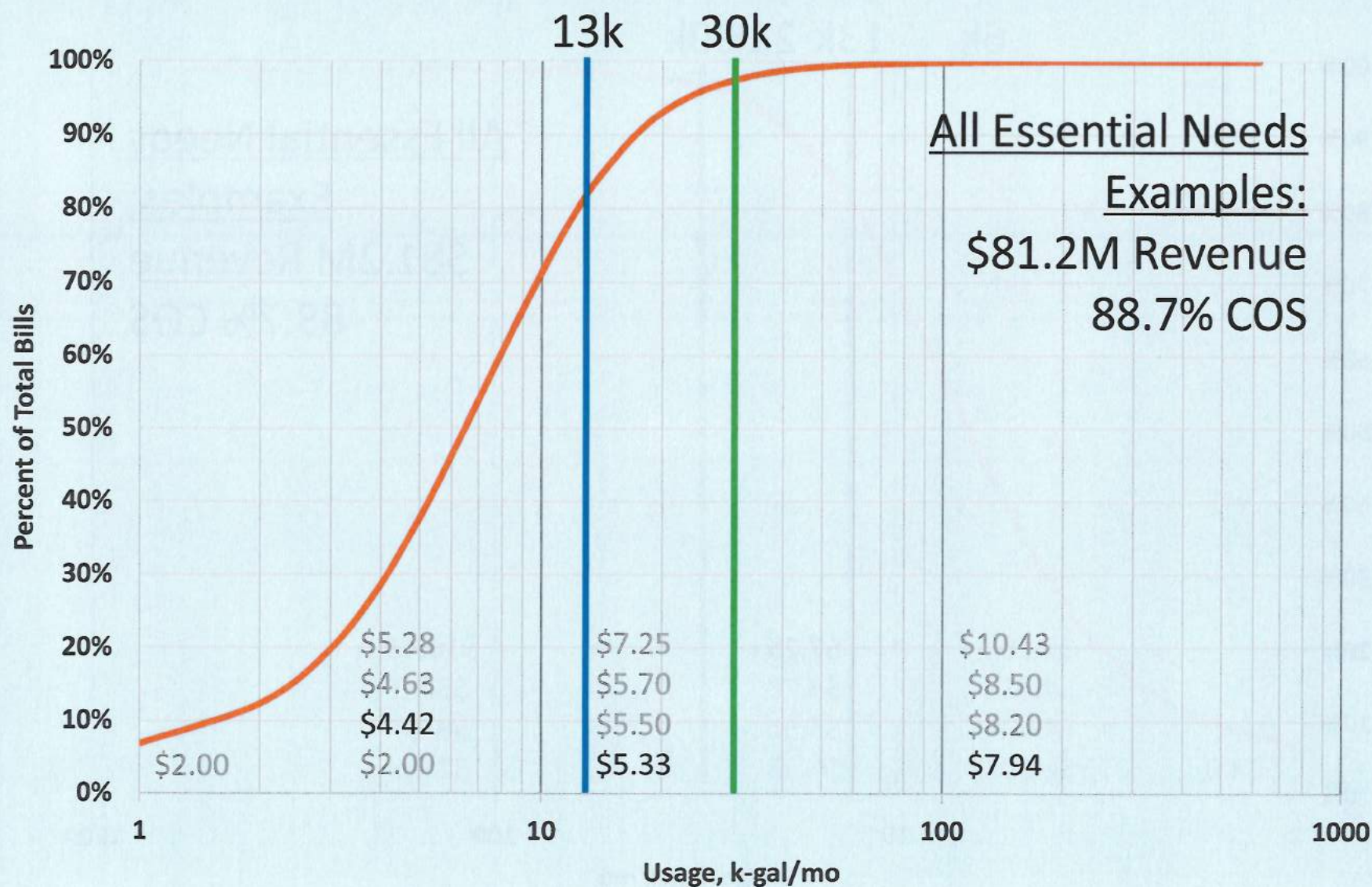


# “Essential Needs” Tier Considerations

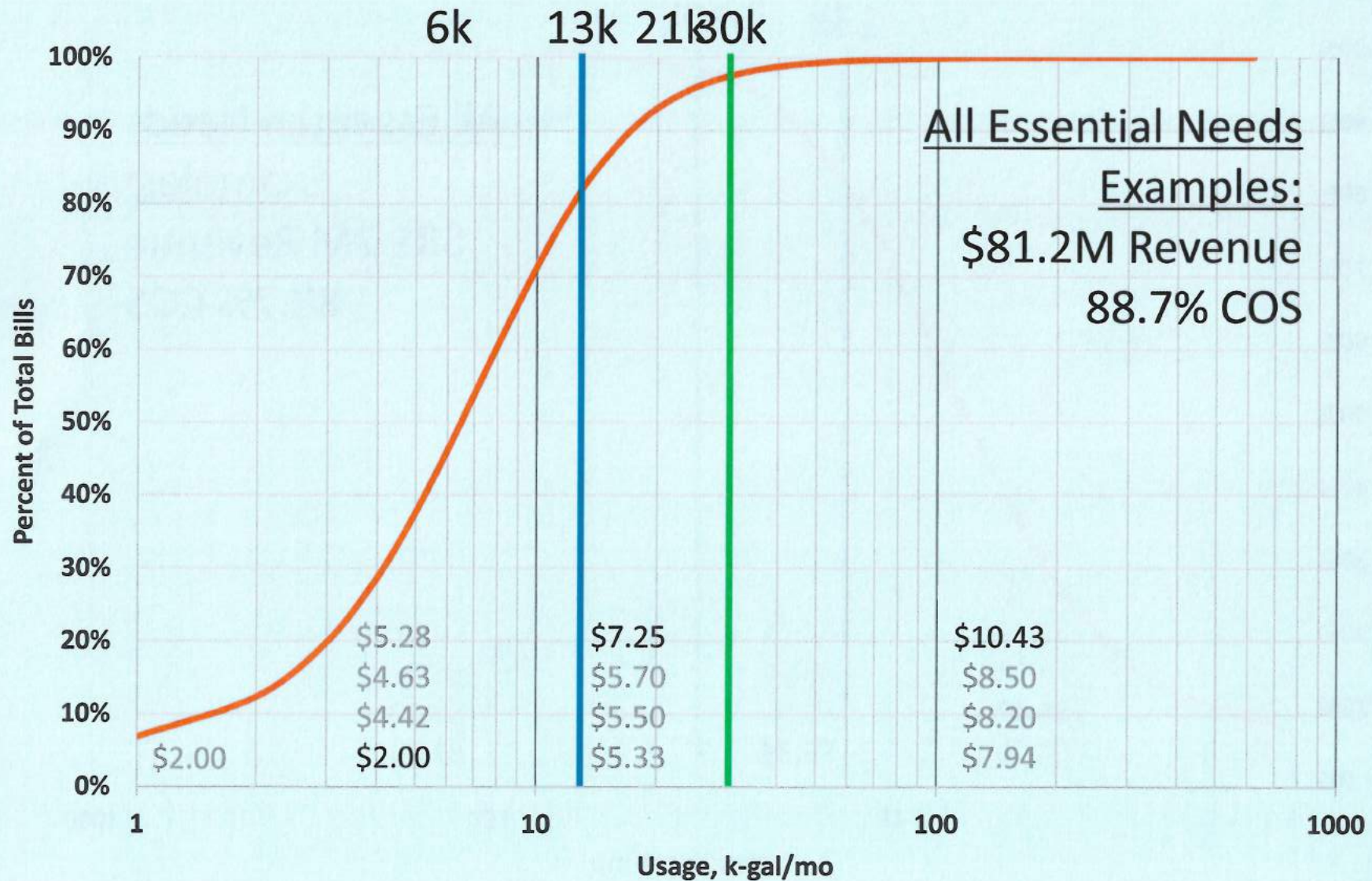
- ◆ Is establishing an Essential Needs tier recommended?
- ◆ What’s an appropriate ceiling for an Essential Needs tier?
- ◆ What level of discount?
- ◆ Who would support this rate?
- ◆ Where might opposition arise?
- ◆ What issues should be anticipated?



# Single Family Usage Curve – Current

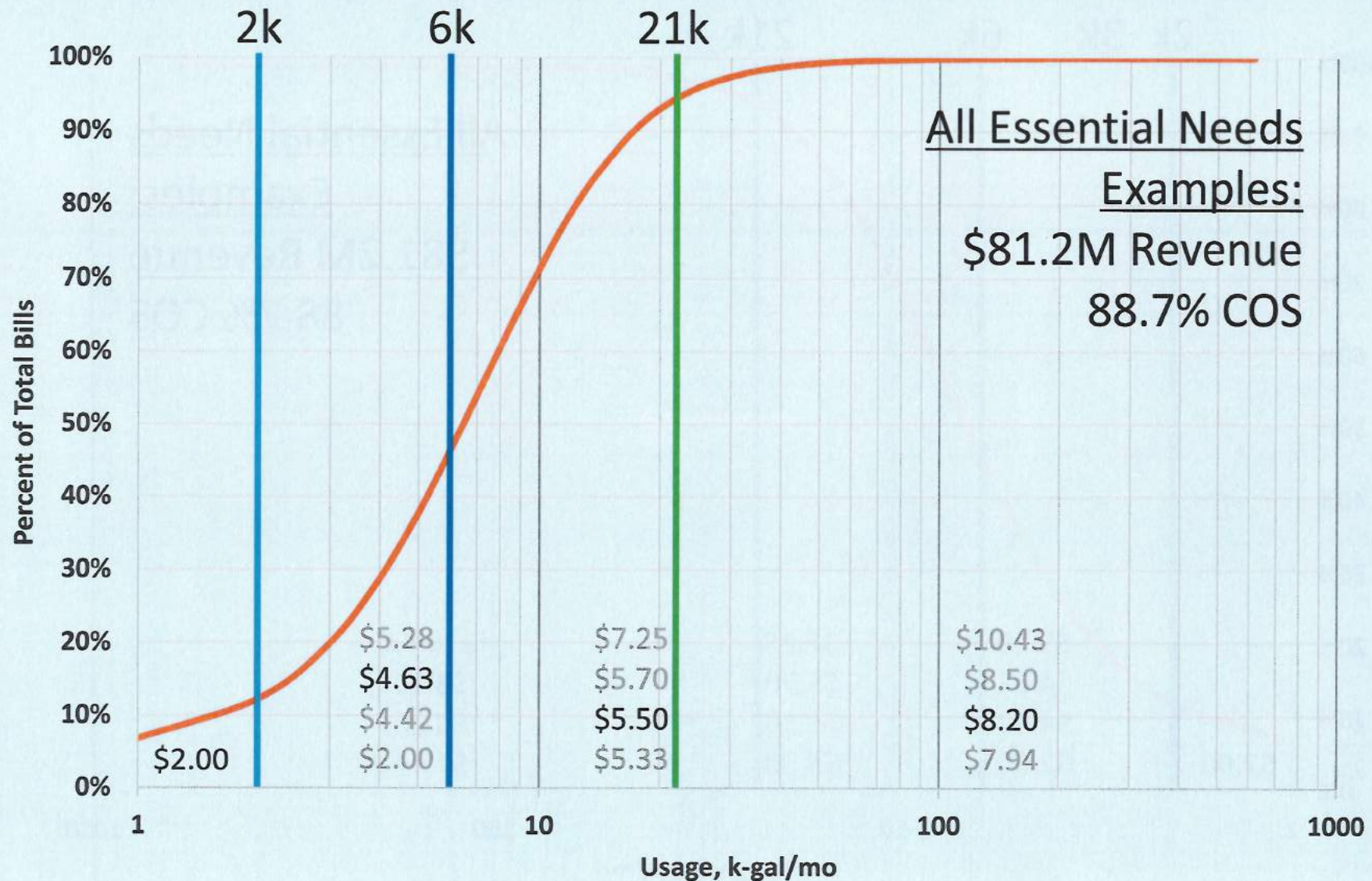


# Single Family Usage Curve – Example L1

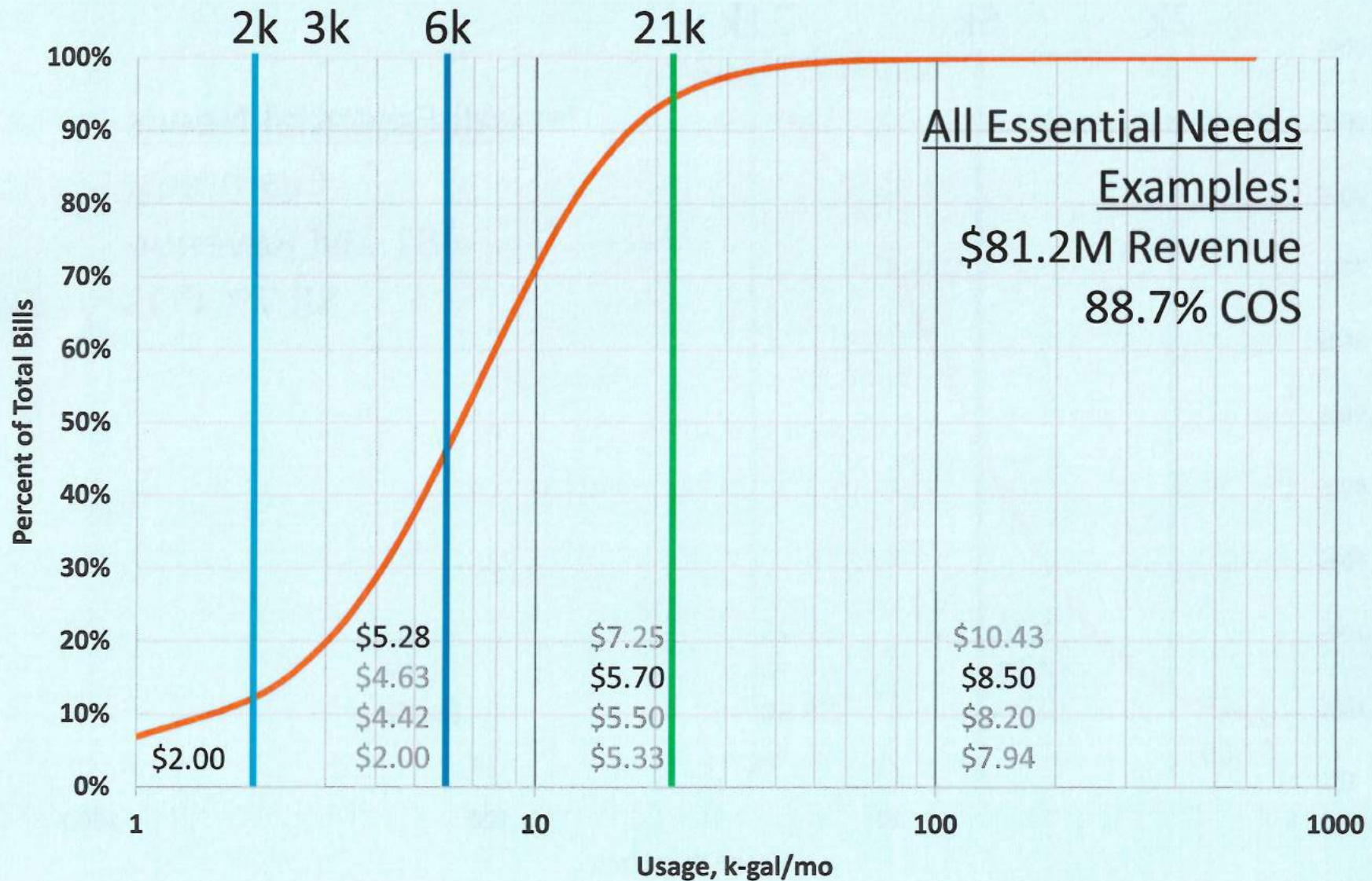




# Single Family Usage Curve – Example L2



# Single Family Usage Curve – Example L3





# 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

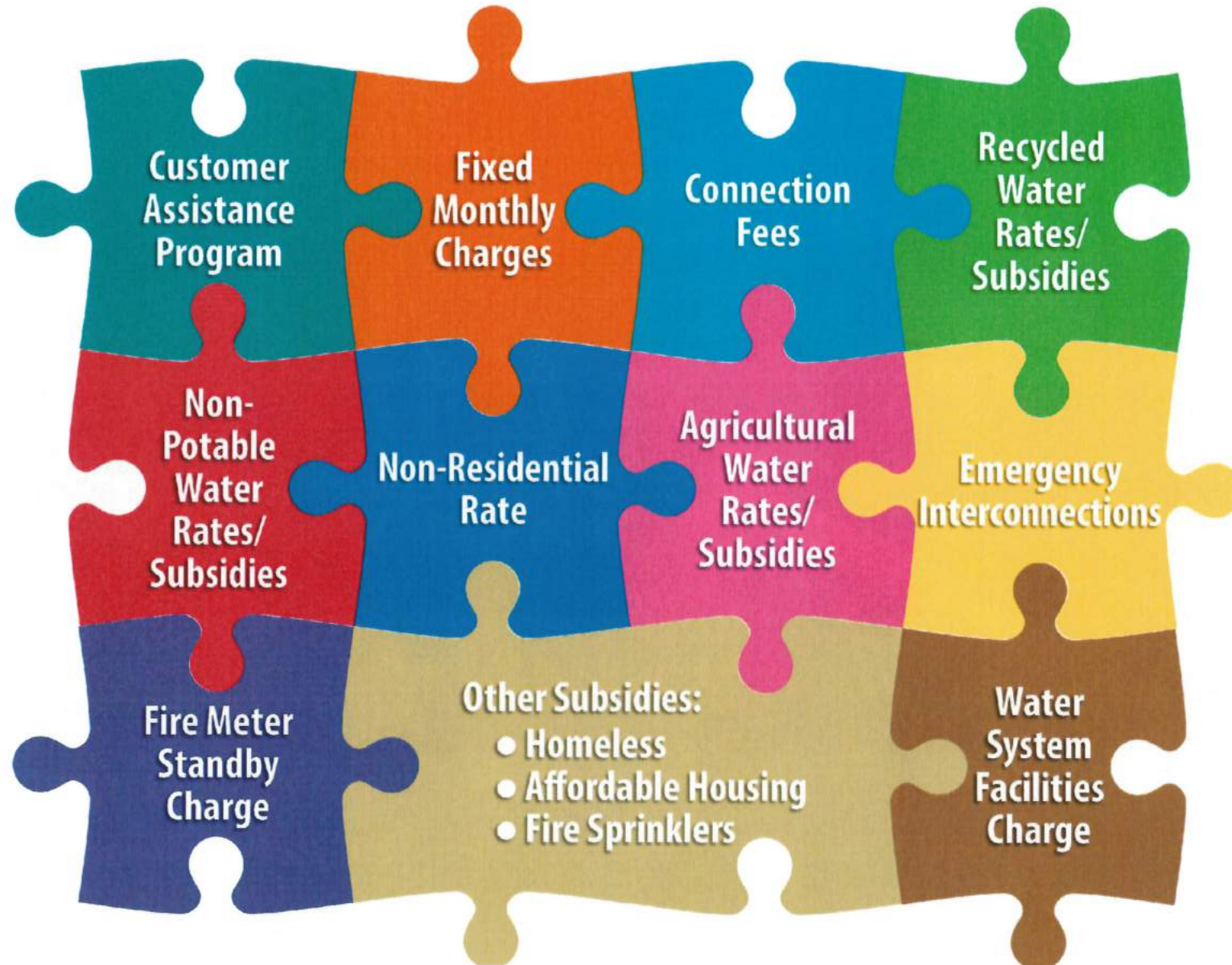


# Stakeholder Advisory Group Input Summary (Sept. 12, 2017)

- 💧 Is establishing an “Essential Needs” tier recommended?
  - Yes
- 💧 What’s an appropriate ceiling for an Essential Needs tier?
  - Not so high that it is more than basic needs
- 💧 What level of discount?
  - Lower than current tier 1 rate, but
  - Raise the rates in other tiers so that only those using basic needs pay lower bills



# Upcoming Topics

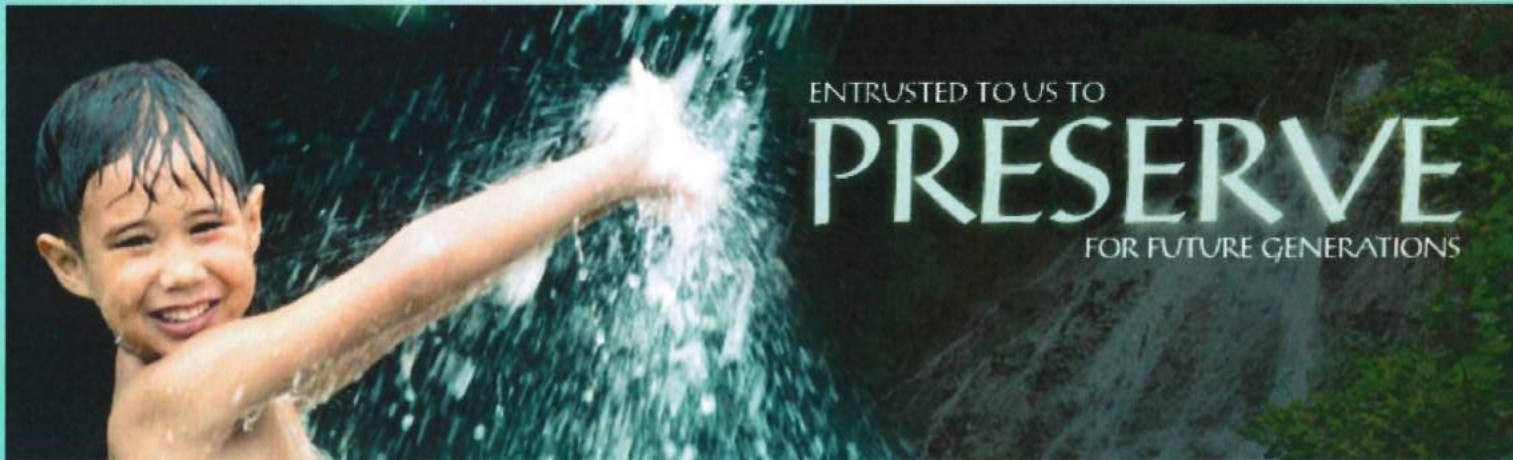


# WATER FOR LIFE

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Board of Water Supply  
City and County of Honolulu



**Mahalo!**





ITEM FOR INFORMATION NO. 2

"September 25, 2017

CAPITAL  
PROJECTS AND  
CONSTRUCTION  
MANAGEMENT  
PROGRAM  
MANAGEMENT  
UPDATE

Chair and Members  
Board of Water Supply  
City and County of Honolulu  
Honolulu, Hawaii 96843

Chair and Members:

Subject: Capital Projects Division and Construction Management  
Program Management Update

Jonathan Suzuki, Capital Projects Division Assistant Program Administrator,  
will provide an update on Capital Improvement Program.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

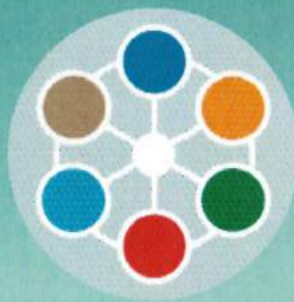
Attachment"

The foregoing was for information only.

DISCUSSION: Jonathan Suzuki, Capital Projects Division Assistant Program Administrator,  
gave the report. There were no comments or discussion.



## Capital Projects Division and Construction Management Program Management Update



Board of Water Supply  
September 25, 2017





## Capital Projects Division

- Design and construction
- Ensure compliance with Standards
- Deliver projects for water infrastructure repairs, renewals and expansions
  - Water System Operations
  - Field Operations
  - Water Quality
  - Water Resources







## CPD Program Overview

Continuing Organizational Optimization







## Next Steps

- Continued systems optimization
- Thoughtful recruitment
- Retention and succession planning
- Leadership academy





# WATER FOR LIFE

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City and County of Honolulu

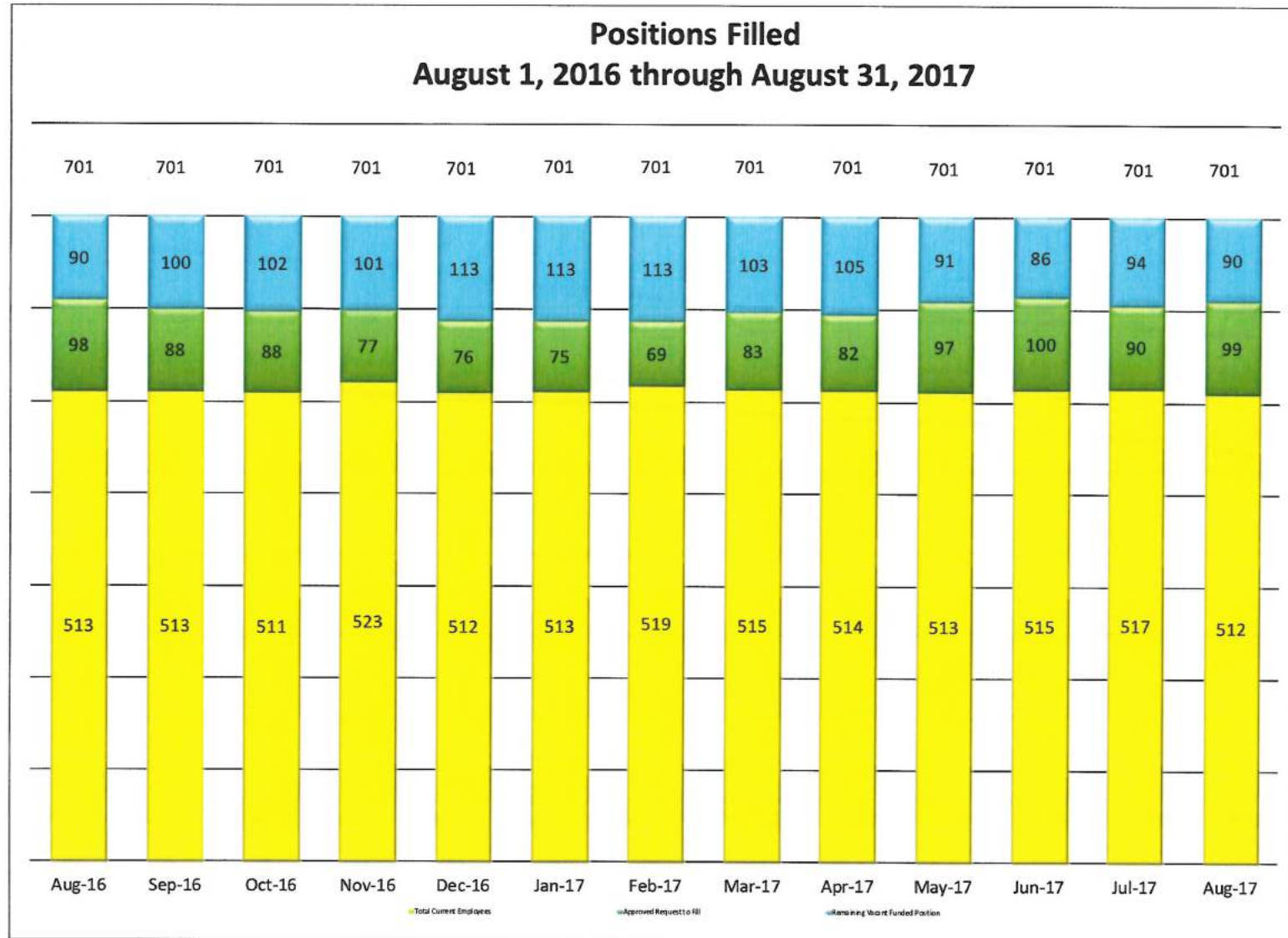
## Mahalo for your support



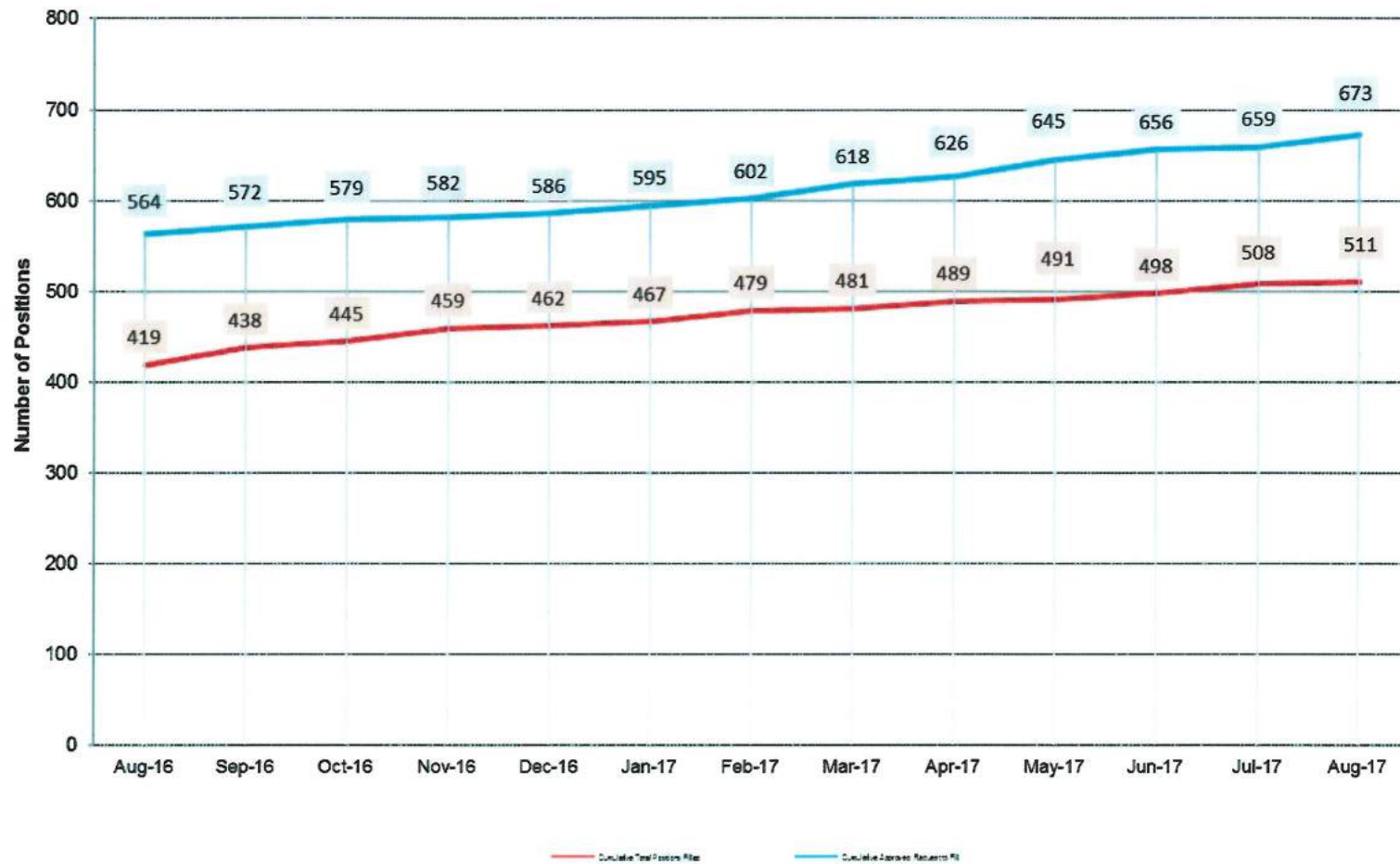


ITEM FOR INFORMATION NO. 3

For the period May17 – Aug17: Actions: 10 New Hires, 10 Promotions,  
2 Transfers, 12 Separations, 47 New Approvals to Fill, 8 Cancelled Requests



# **Cumulative Totals** **August 1, 2016 through August 31, 2017**





**BOARD OF WATER SUPPLY**  
City and County of Honolulu

**RECRUITMENT AND SEPARATION  
STATUS  
For Period May 31, 2017 to August 31,  
2017**

**Status of Positions Under Recruitment**

	as of			
	5/31/2017	6/30/2017	7/31/2017	8/31/2017
Pending DHR Classification Action	18	21	18	17
Pending DHR Open List	28	11	12	8
Pending IDCE	3	2	3	1
Pending Interview Questions	16	18	17	14
Pending Interviews	23	38	37	35
Anticipated Starts	9	10	3	24
Total Positions Under Recruitment	97	100	90	99

**Filled Positions**

Month	May-17	Jun-17	Jul-17	Aug-17
Open list	2	5	4	0
IDCE list	0	2	6	3

**Separations**

Month	May-17	Jun-17	Jul-17	Aug-17
Retire	1	1	0	2
Resign	2	1	2	3

*Legend:*

*DHR = Department of Human Resources City and County of*

*Honolulu IDCE = Intra-Departmental Competitive Examination*

*PD = Position Description*

DISCUSSION: Michele Thomas, Human Resources Office Executive Assistant, gave the report. There were no comments or discussion



"September 25, 2017

GROUNDWATER  
LEVELS

Chair and Members  
Board of Water Supply  
City and County of Honolulu  
Honolulu, Hawaii 96843

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index Stations

There was one aquifer index well within low groundwater status for the production month of August 2017. Punaluu has been in caution status since the week of June 18, 2017. The monthly production average for August 2017 was 158.31 million gallons per day (mgd), which is approximately 10 mgd above the 5-year monthly average.

The Board of Water Supply rainfall index for the month of August 2017 was 100 percent of normal; with a 5-month moving average of 94 percent. As of September 12, 2017, the Hawaii Drought Monitor shows abnormally dry conditions for most of southern Oahu and moderate drought conditions for the leeward coast of Oahu from Ewa to Makaha. Rainfall was above normal in the mountain areas and generally below normal in the urban areas, which may explain the above normal pumpage for August 2017.

Most monitoring wells are exhibiting decreasing head level trends due to the increased pumpage during the summer season.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E  
Manager and Chief Engineer

Attachment"

The foregoing was for information only.

DISCUSSION:

Barry Usagawa, Water Resources Division Program Administrator, gave the report. There were no comments or discussion.

**PRODUCTION, HEAD AND RAINFALL REPORT  
MONTH OF AUGUST 2017**

**POTABLE**

STATION	MGD
HONOLULU (1)	
KULIOUOU	0.08
WAILUPE	0.15
AINA KOA	0.18
AINA KOA II	0.94
MANOA II	0.00
PALOLO	1.13
KAIMUKI HIGH	3.02
KAIMUKI LOW	1.90
WILDER	9.40
BERETANIA HIGH	5.29
BERETANIA LOW	5.39
KALIHI HIGH	0.91
KALIHI LOW	2.14
KAPALAMA	0.93
KALIHI SHAFT	8.13
MOANALUA	1.35
HALAWA SHAFT	10.21
KAAMILO	0.00
KALAUAO	6.54
PUNANANI	12.08
KAHUMANU	0.02
HECO WAIU	2.72
MANANA	0.41
WELLS SUBTOTAL:	72.92
MANOA TUNNEL	0.17
PALOLO TUNNEL	0.23
GRAVITY SUBTOTAL:	0.40
HONO. SUBTOTAL:	73.32

STATION	MGD
WINDWARD (2)	
WAIMANALO II	0.45
WAIMANALO III	0.48
KUOU I	1.72
KUOU II	0.64
KUOU III	0.72
LULUKU	0.97
HAIKU	0.00
IOLEKAA	0.00
KAHALUU	0.82
KAHANA	0.82
PUNALUU I	0.00
PUNALUU II	4.07
PUNALUU III	1.19
KALUANUI	0.00
MAAKUA	0.36
HAUULA	0.08
WELLS SUBTOTAL:	12.30
WAIM. TUNNELS I & II	0.00
WAIM. TUNNELS III&IV	0.19
WAIHEE INCL. WELLS	0.92
WAIHEE TUNNEL	4.26
LULUKU TUNNEL	0.09
HAIKU TUNNEL	0.87
KAHALUU TUNNEL	1.80
GRAVITY SUBTOTAL:	8.13
WIND. SUBTOTAL:	20.43

STATION	MGD
NORTH SHORE (3)	
KAHUKU	0.40
OPANA	0.67
WAIALEE I	0.00
WAIALEE II	0.49
HALEIWA	0.00
WAIALUA	1.41
N.SHORE SUBTOTAL:	2.98

STATION	MGD
MILILANI (4)	
MILILANI I	3.57
MILILANI II	0.00
MILILANI III	0.00
MILILANI IV	1.96
MILILANI SUBTOTAL:	5.52

STATION	MGD
WAIHAWA (5)	
WAIHAWA	1.76
WAIHAWA II	1.91
WAIHAWA SUBTOTAL:	3.67

STATION	MGD
PEARL CITY-HALAWA (6)	
HALAWA 277	1.18
HALAWA 550	0.00
AIEA	1.20
AIEA GULCH 497	0.00
AIEA GULCH 550	0.26
KAONOH I	1.26
WAIMALU I	0.00
NEWTOWN	1.17
WAIU	1.10
PEARL CITY I	0.52
PEARL CITY II	1.20
PEARL CITY III	0.38
PEARL CITY SHAFT	0.96
PEARL CITY-HALAWA SUBTOTAL:	9.22

STATION	MGD
WAIPAHU-EWA (7)	
WAIPIO HTS.	0.35
WAIPIO HTS. I	0.23
WAIPIO HTS. II	0.45
WAIPIO HTS. III	1.38
WAIPAHU	5.77
WAIPAHU II	1.98
WAIPAHU III	2.02
WAIPAHU IV	3.18
KUNIA I	4.64
KUNIA II	2.05
KUNIA III	1.44
HOAEAE	7.16
HONOULIULI I	1.29
HONOULIULI II	6.40
MAKAKILO	0.17
WAIPAHU-EWA SUBTOTAL:	38.49

STATION	MGD
WAIANAE (8)	
MAKAHA I	0.00
MAKAHA II	0.48
MAKAHA III	1.07
MAKAHA V	0.53
MAKAHA VI	0.00
MAKAHA SHAFT	0.00
KAMAILE	0.14
WAIANAE I	0.24
WAIANAE II	0.12
WAIANAE III	0.52
WELLS SUBTOTAL:	3.11
WAI. C&C TUNNEL	1.40
WAI. PLANT. TUNNELS	0.16
GRAVITY SUBTOTAL:	1.56
WAIANAE SUBTOTAL:	4.67

**NONPOTABLE**

NONPOTABLE	MGD
KALAUAO SPRINGS	0.49
BARBERS POINT WELL	1.25
GLOVER TUNNEL NP	0.41
NONPOTABLE TOTAL:	2.15

**RECYCLED WATER (JULY 2017)**

RECYCLED WATER	MGD
HONOULIULI WRF R-1	8.29
HONOULIULI WRF RO	1.61
RECYCLED WATER TOTAL:	9.90



**PRODUCTION, HEAD AND RAINFALL REPORT  
MONTH OF AUGUST 2017**

**PRODUCTION SUMMARIES**

TOTAL WATER	MGD
PUMPAGE	148.22
GRAVITY	10.09
POTABLE TOTAL:	158.31
NONPOTABLE	2.15
RECYCLED WATER	9.90
TOTAL WATER:	170.36

CWRM PERMITTED USE AND BWS ASSESSED YIELDS FOR BWS				
POTABLE SOURCES				
WATER USE DISTRICTS		A PERMITTED USE/ BWS YLDS	B AUG 2017	C DIFF. A-B
1	HONOLULU	82.93	72.92	10.01
2	WINDWARD	25.02	15.26	9.76
3	NORTH SHORE	4.74	2.98	1.76
4	MILILANI	7.53	5.52	2.01
5	WAIHAWA	4.27	3.67	0.60
6	PEARL CITY-HALAWA	12.25	9.22	3.03
7	WAIPAHU-EWA	50.63	38.49	12.14
8	WAIANAE	4.34	3.11	1.23
TOTAL:		191.71	151.17	40.54

CWRM PERMITTED USE FOR BWS			
NONPOTABLE SOURCES			
WATER USE DISTRICTS		A PERMITTED USE	B AUG 2017
7	WAIPAHU-EWA (BARBERS POINT WELL)	1.00	1.25
TOTAL:		1.00	1.25

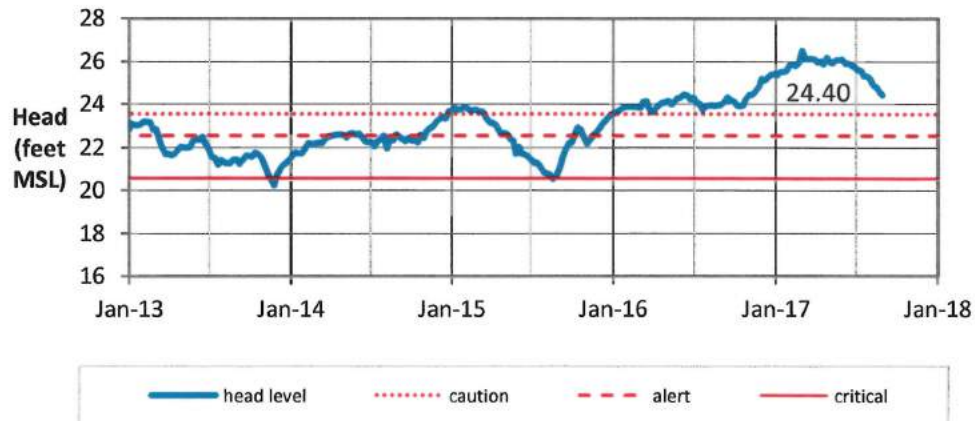
**EFFECTIVE WATER DEMAND PER DISTRICT**

IMPORT/EXPORT BETWEEN WATER USE DISTRICTS			
FROM	TO		MGD
2	1	WINDWARD EXPORT	0.14
7	8	BARBERS PT LB	6.39

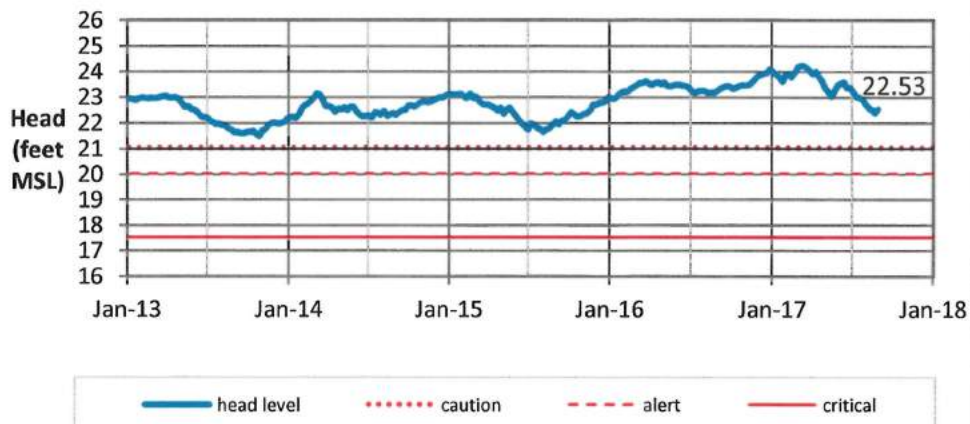
WATER USE DISTRICTS		SUBTOTAL	IMPORT	EXPORT	EFFECTIVE WATER DEMAND
1	HONOLULU	72.92	0.14	-	73.06
2	WINDWARD	15.26	-	0.14	15.12
3	NORTH SHORE	2.98	-	-	2.98
4	MILILANI	5.52	-	-	5.52
5	WAIHAWA	3.67	-	-	3.67
6	PEARL CITY-HALAWA	9.22	-	-	9.22
7	WAIPAHU-EWA	38.49	-	6.39	32.10
8	WAIANAE	3.11	6.39	-	9.50
TOTAL:		151.17	6.53	6.53	151.17

## Weekly Head Report

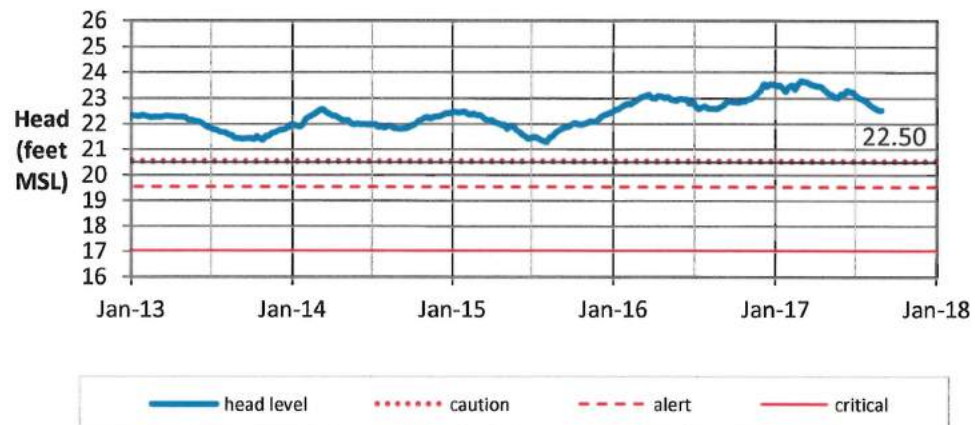
### Kaimuki 09/05/17



### Beretania 09/05/17



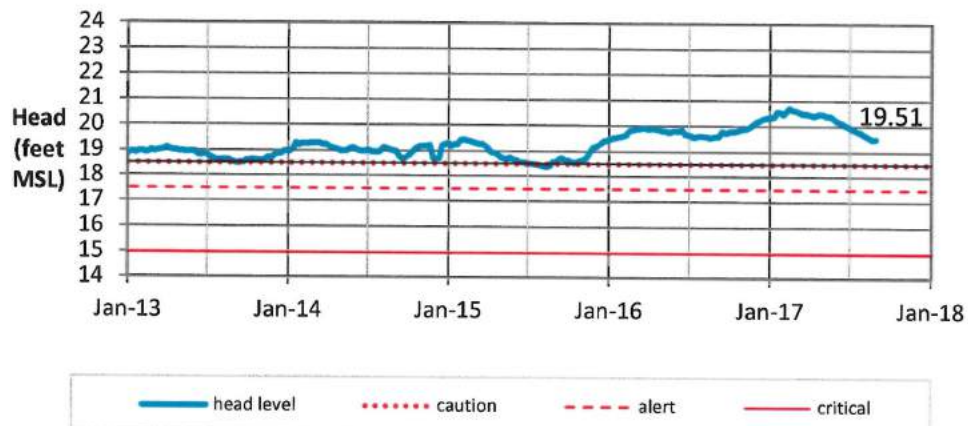
### Kalihi 09/05/17



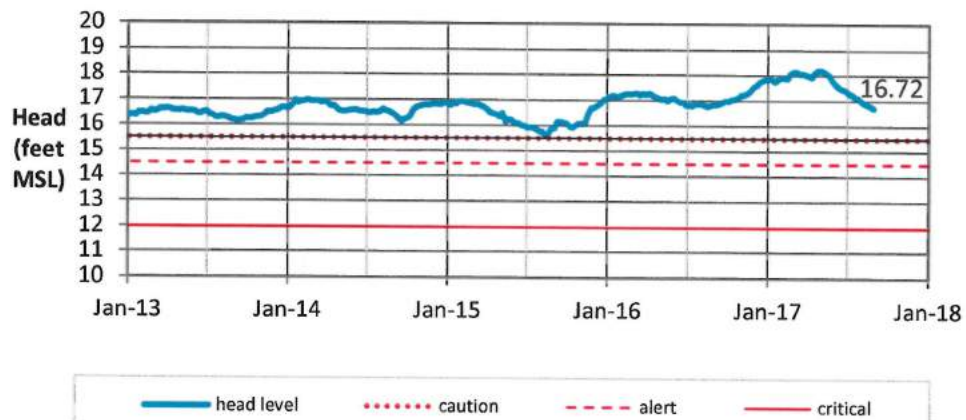


## Weekly Head Report

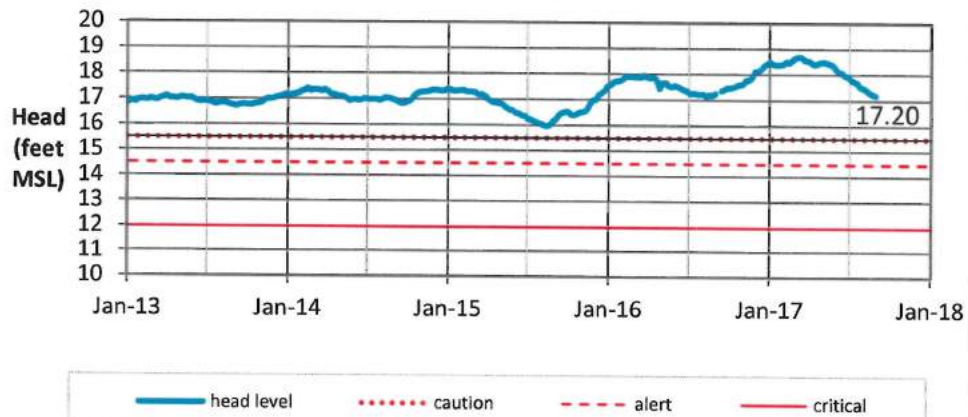
### Moanalua 09/05/17



### Halawa 09/05/17

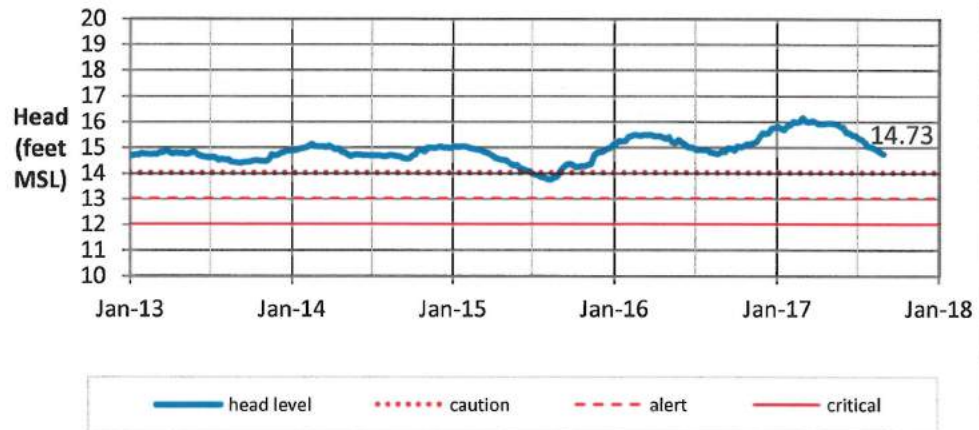


### Kalauao 09/05/17

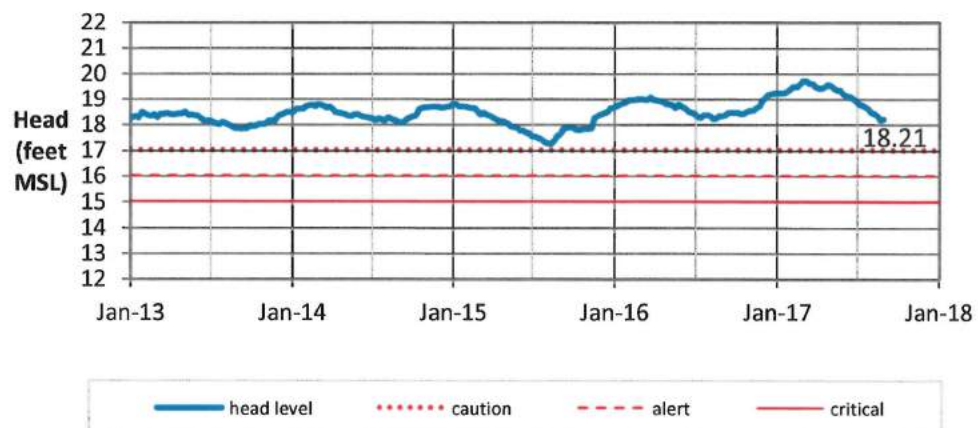


## Weekly Head Report

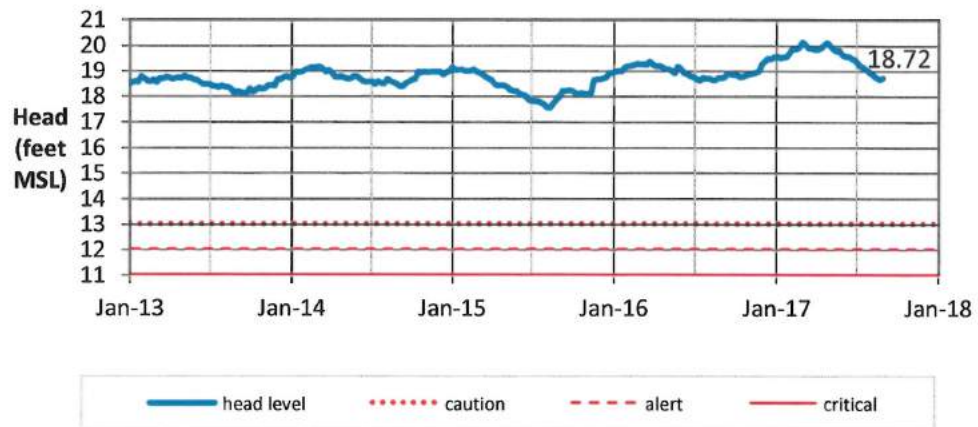
### Pearl City 09/05/17



### Waipahu 09/05/17



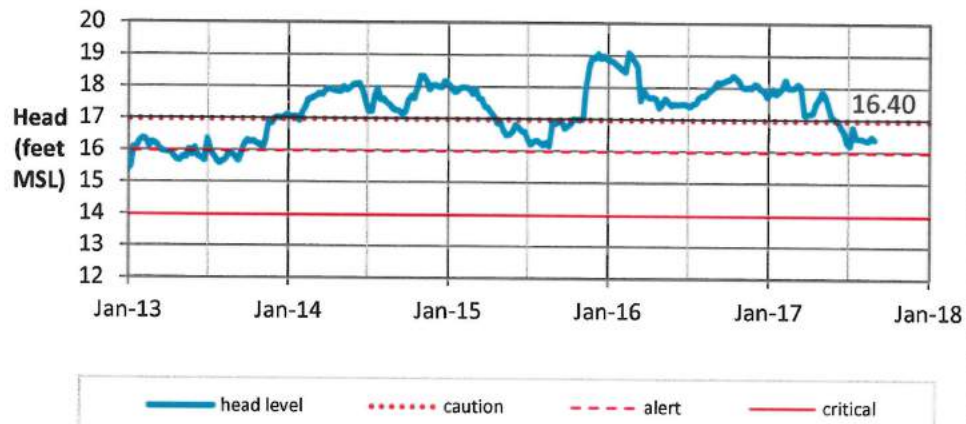
### Hoeaee-Kunia 09/05/17



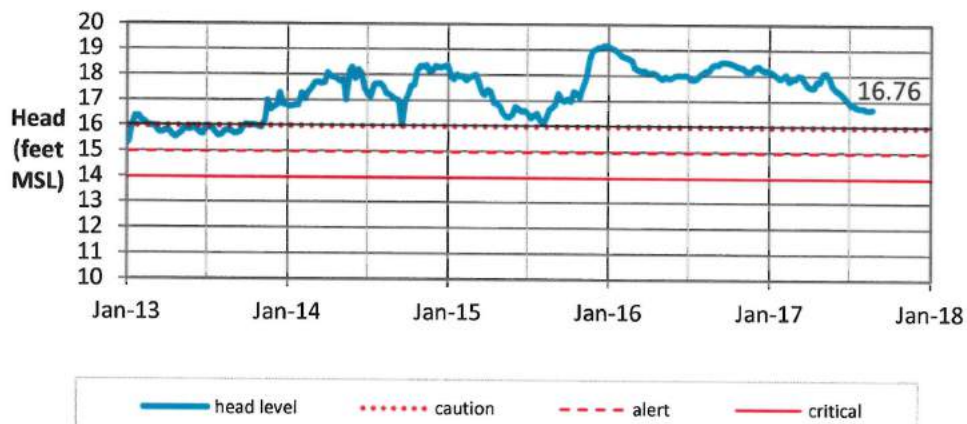


## Weekly Head Report

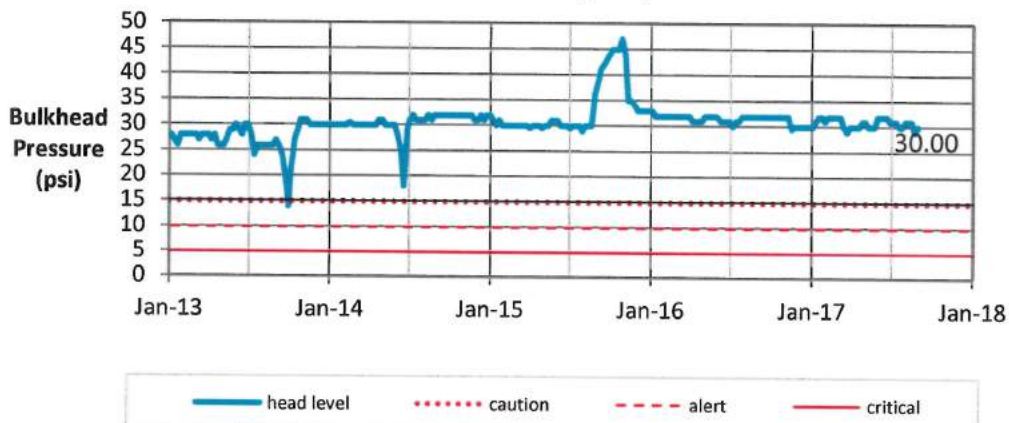
### Punaluu 09/05/17



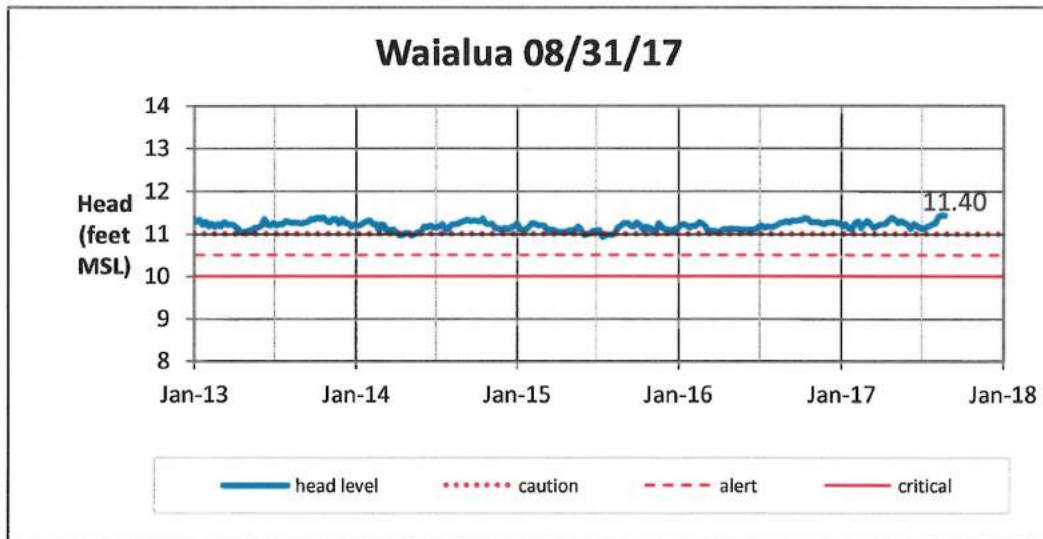
### Kaluanui 08/31/17



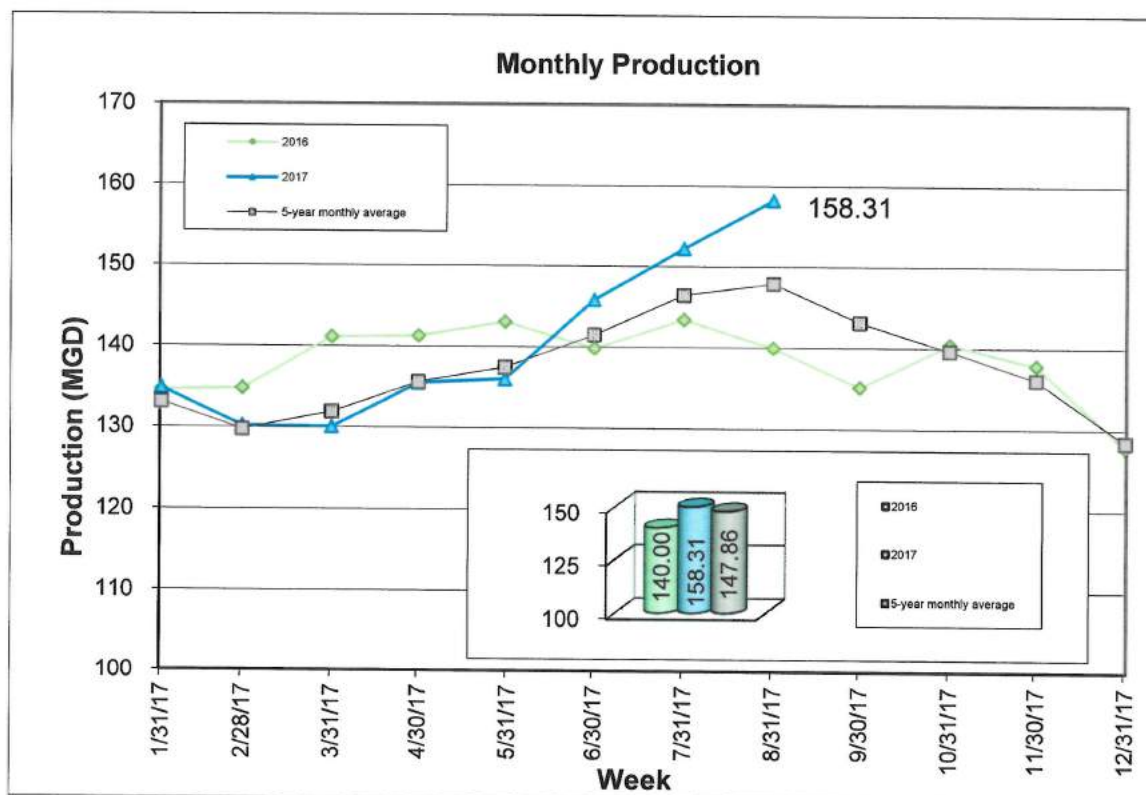
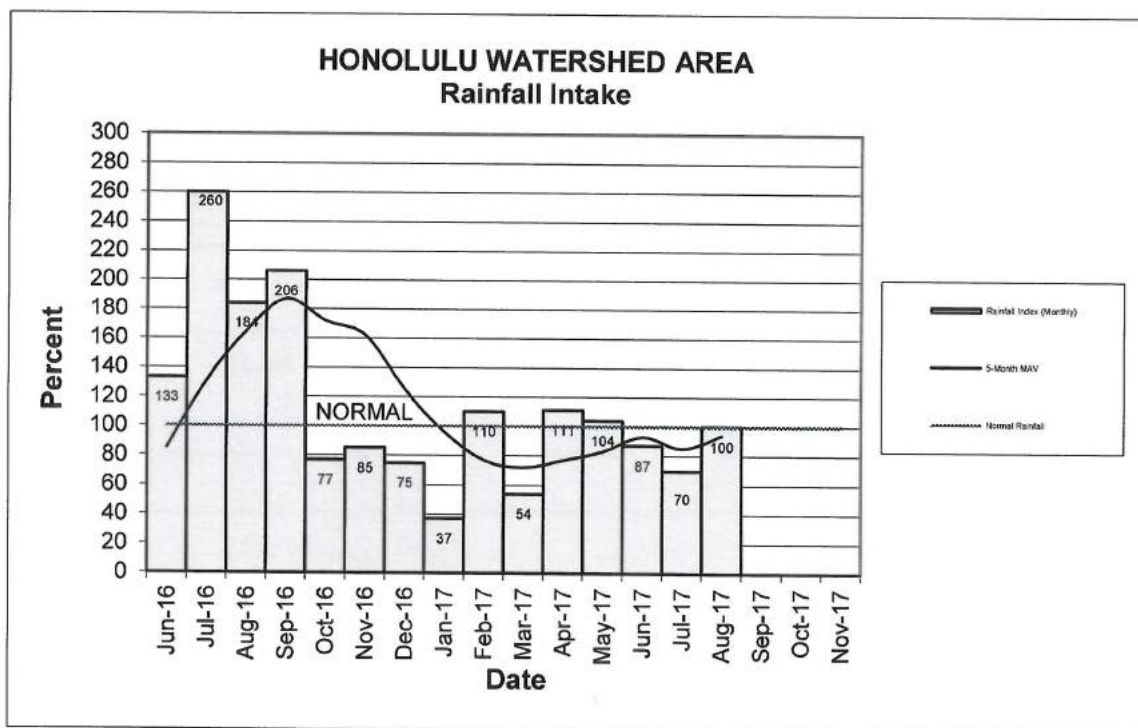
### Waihee Tunnel 09/05/17



## Weekly Head Report







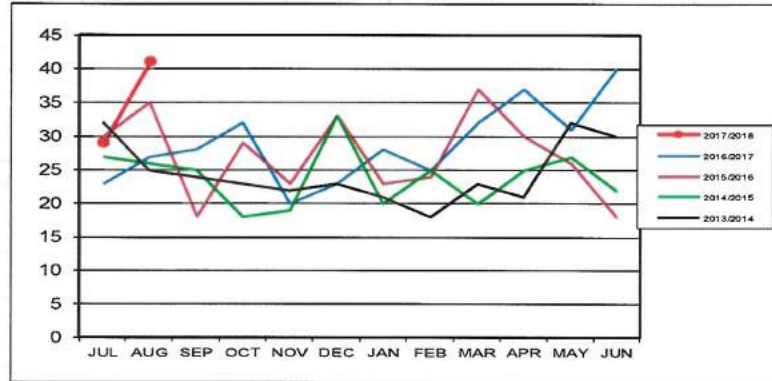
ITEM FOR INFORMATION NO. 5

**WATER MAIN REPAIR REPORT**

**for August 2017**

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2017/2018	29	41											70
2016/2017	23	27	28	32	20	23	28	25	32	37	31	40	346
2015/2016	30	35	18	29	23	33	23	24	37	30	26	18	326
2014/2015	27	26	25	18	19	33	20	25	20	25	27	22	287
2013/2014	32	25	24	23	22	23	21	18	23	21	32	30	294

Date	Address	Size (In)	Pipe Type
8/1/2017	94-1019 LUMIPOLU ST, WAIPAHU	8	CI
8/2/2017	612 PAHUPAI WAY, HONOLULU	4	DI
8/2/2017	3009 POLOHILANI PL, HONOLULU	8	CI
8/4/2017	717 N VINEYARD BLVD, HONOLULU	12	CI
8/4/2017	41-1606 KALANIANA'OLE HWY, WAIMANALO	12	CI
8/5/2017	4238 HALUPA ST, HONOLULU	12	PVC
8/5/1900	87-264 HAKIMO RD, WAIANAE	8	DI
8/7/2017	45-229 KAHANAHOU CIR, KANEEOHE	8	PVC
8/8/2017	46-150 HILINAMA ST, KANEEOHE	8	CI
8/10/2017	99-829 AIEA HTS DR, AIEA	4	CI
8/10/2017	46-234 HEEIA ST, KANEEOHE	8	CI
8/10/2017	47-170 KAM HWY, KANEEOHE	6	CI
8/10/2017	47-178 KAM HWY, KANEEOHE	6	CI
8/10/2017	3627 PAHOA AVE, HONOLULU	6	CI
8/11/2017	3149 BEAUMONT WOODS PL, HONOLULU	8	CI
8/14/2017	99-1266 AIEA HEIGHTS DR APT D, AIEA	8	CI
8/14/2017	91-1031 WAIHUA PL, EWA BEACH	8	DI
8/16/2017	99-732 HULUMANU ST, AIEA	8	CI
8/17/2017	3422 LEAHI AVE, HONOLULU	8	CI
8/18/2017	99-773 POHUE ST, AIEA	8	CI
8/18/2017	45-1040 ANOI RD, KANEEOHE	6	CI
8/19/2017	59-556 AKANOHO PL, HALEIWA	8	CI
8/19/2017	99-710 HULUMANU ST, AIEA	8	CI
8/21/2017	2146 KANEALII AVE, HONOLULU	8	CI
8/21/2017	2282 ANAPANAPA ST, PEARL CITY	8	CI
8/22/2017	59-556 AKANOHO PL, HALEIWA	8	CI
8/23/2017	94-1145 KAHUAILANI ST, WAIPAHU	8	CI
8/23/2017	1396 HONOKAHUA ST, HONOLULU	8	CI
8/23/2017	59-556 AKANOHO PL, HALEIWA	8	CI
8/24/2017	45-211 WAIKALUA RD, KANEEOHE	8	CI
8/24/2017	94-1102 AWALAI ST, WAIPAHU	8	CI
8/26/2017	91-061 PARISH DR	8	PVC
8/26/2017	94-801 KAMEHAMEHA HWY, WAIPAHU	4	PVC
8/26/2017	92 AALAPAPA PL, KAILUA	8	PVC
8/28/2017	765 MOANIALA ST, HONOLULU	8	DI
8/28/2017	98-1258 AKA'AKA ST, AIEA	8	PVC
8/29/2017	59-539 AKANOHO PL, HALEIWA	8	CI
8/29/2017	85-175 MCARTHUR ST, WAIANAE	8	PVC
8/29/2017	3367 WAI'ALAE AVE, HONOLULU	8	CI
8/30/2017	98-1709 KUPUKUPU ST, AIEA	8	CI
8/30/2017	94-1131 AWA'IKI ST, WAIPAHU	8	CI



77.4 miles of pipelines were surveyed by the Leak Detection Team in the month of August.



DISCUSSION:

Mike Fuke, Field Operations Division Acting Program Administrator, gave the report. Mr. Fuchigami thanked the BWS for their collaborative efforts with the Department of Transportation (DOT) for an irrigation break in the Ala Moana area. Mr. Lau also thanked Mr. Fuchigami for DOT's support in the 24-inch Kalanianaʻole Highway main break.

MOTION TO  
ADJOURN


There being no further business Chair Andaya at 3:40 PM called for a motion to adjourn the Open Session. Kapua Sproat so moved; seconded by Ford Fuchigami and unanimously carried.

Respectfully submitted,

THE MINUTES OF THE REGULAR SESSION BOARD MEETING ON SEPTEMBER 25, 2017 WERE APPROVED AT THE OCTOBER 23, 2017 BOARD MEETING			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
DAVID C. HULIHEE	X		
KAY C. MATSUI	X		
RAY C. SOON	X		
ROSS S. SASAMURA	X		
FORD N. FUCHIGAMI			ABSENT

  
LESLEY C. COON

APPROVED:

  
BRYAN P. ANDAYA  
Chair of the Board  
**OCT 23 2017**

Date