

WARD RESEARCH

Understanding Resident Perceptions of the Board of Water Supply

Prepared for:

The Board of Water Supply June 2017

Ward Research, Inc.

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Executive Summary

The following section presents key findings from a telephone survey of n=686 Oahu residents, conducted via cellphone and landline. The maximum sampling error for n=686 is +/-3.6%. This is the second wave of the tracking study; the baseline measure was conducted in 2015.

Overall Satisfaction with the BWS

- Total overall satisfaction with the Board of Water Supply (BWS) is nearly unchanged from 2015 (63% up from 60% strong satisfaction or a 6 or 7 rating on a 7-point scale where 7=extremely satisfied).
- However, the proportion of bill payers who indicated strong satisfaction with the BWS showed a statistically-significant increase (59% up from 53%).
- Despite the increase in bill payer satisfaction, however, non-bill payers continued to indicate higher levels of satisfaction with the BWS (70% down from 75%).
- The Board of Water Supply's mission is to provide Oahu residents with safe, dependable, and affordable drinking water supply now and into the future. The proportion of residents strongly satisfied with the BWS's ability to provide dependable water showed a statistically-significant decrease in 2017 (78% down from 82%). Changes in satisfaction with the BWS's ability to provide safe water (73% down from 77%) and keep water rates affordable (48% up from 44%) are not statistically-significant.

Customer Service

- Total overall satisfaction with BWS's customer service is similar to what it was in 2015 (67% up from 62%), but satisfaction among bill payers showed a statistically-significant increase (69% up from 60%).
- Once again, very few residents contacted the BWS either about a bill (6% unchanged) or for some other reason (6% down from 7%) in the past six months. Approximately one-half among them are satisfied with how the communication was handled, primarily because their problem was resolved or their question answered.
- Residents continue to report high levels of satisfaction with the BWS employees, especially for the employees' courtesy (67% up from 63% indicating strong satisfaction) and overall professionalism (66% up from 63%).

Executive Summary

The Quality of Water and Delivery of Water Service

- Residents continue to be strongly satisfied with the quality (73% up from 72%), taste (70% unchanged), and pressure (69% down from 72%) of their water, with levels of satisfaction from 2015 nearly unchanged.
- Based on strong satisfaction ratings, residents find the BWS's delivery of water service to be very reliable (78% up from 76% strongly satisfied) and its fast response to trouble calls improved (58% up from 50%).
- One-half of residents are again strongly satisfied with the condition of Oahu's water delivery system (48% down from 52%) and the job that the BWS is doing repairing, maintaining, and replacing Oahu's water delivery system (53% down from 54%).
- None of the changes in strong satisfaction ratings for the quality and delivery of water service, as discussed in this section, are statistically-significant.

Rates, Bills, and the Cost of Water Service

- More than two-fifths of residents feel that water rates are fair, based on strong satisfaction ratings (45% up from 37%). This increase from 2015 is statistically-significant. A greater proportion of non-bill payers than bill payers indicated strong satisfaction with the fairness of rates (49% vs. 43%).
- For the first time in tracking, residents were asked their perceptions about the affordability of water service. Only 6% of residents answered that the BWS charges 1 cent per gallon for residential water service---the rest believe that it is more. After being told that the BWS charges less than 1 cent per gallon, 3 out of 4 residents said that water rates are affordable, nearly double that who said the same before being told this information (76% up from 39%). It may be helpful to include this information in the BWS's communications about water rates.
- Once again, a majority of residents are <u>not</u> aware that their water and sewer charges are from two different agencies (32% are aware unchanged), although they are aware that their water bill is combined with their sewer bill (60% down from 62%).

Executive Summary

Community Outreach and Message Recall

- Awareness of the BWS's activities and programs, including in the repair and maintenance of the water system (47% unchanged) and in water conservation (39% down from 42%), and participation in BWS tours, classes and workshops are very similar to what they were in 2015 (8% down from 9%). Recall of messages from the BWS is also nearly unchanged (22% up from 20%).
- Recall of news stories about the BWS showed a statistically-significant increase (41% up from 34%), and the stories far most often recalled were about water main breaks (71% up from 52%).
- When asked which sources they trust to provide honest, accurate information about freshwater issues in Hawaii, residents again reported highest trust ratings for the BWS (62% strongly trust up from 57%) and scientists (62% up from 61%).

Objectives and Methodology

- The objective of the research was to track measures of satisfaction and other key metrics related to perceptions of the Board of Water Supply and the fulfillment of its mission. This is the second wave of the tracking study; the baseline measure was conducted in 2015.
- A 14-minute telephone survey was conducted from May 1 to May 22, 2017, among n=686 Oahu residents. The maximum sampling error for a sample of n=686 at the 95% confidence level is +/-3.6%.
- The same survey instrument used in 2015, with a few minor changes, was used in 2017. A copy of the survey instrument is in the Appendix.
- All calling took place in the Calling Center in the Ward Research downtown Honolulu office from 4:30pm to 8:30pm on weekdays and 9:00am to 5:00pm on weekends during the survey period.
- Quotas were set so that the total sample was fairly evenly divided among the nine Council Districts.
- Data were processed using SPSS for Windows, which allows for the cross-tabulation of data by key variables (e.g., age, ethnicity, income, bill paying status).
- Data were weighted by age to accurately reflect the Oahu population based on the 2010 Census and to be representative of the population.

Age	Unweighted Data		Weights	Weighted Data	
	#	%		#	%
18 to 24	52	8	1.725214291	90	13
25 to 34	85	12	1.443913367	123	18
35 to 44	93	14	1.229890466	114	17
45 to 54	116	17	1.03661884	120	18
55 to 64	137	20	0.762805197	105	15
65+	195	28	0.648329795	126	18
Refused	8	1	1.000000000	8	1

Profile of Respondents

Bill Paying Status	2017	2015
Bill Payer	69%	66%
Non-Bill Payer	31	34
Age	2017	2015
18 – 24 years old	13%	13%
25 – 34 years old	18	18
35 – 44 years old	17	17
45 – 54 years old	18	17
55 – 64 years old	15	15
65 and older	18	18
Refused	1	2
Ethnicity	2017	2015
Caucasian	17%	19%
Chinese	5	6
Filipino	14	14
Hawaiian/part-Hawaiian	22	21
Japanese	21	22
Mixed	10	8
Other	10	8
Refused	1	2
Base=	686	685

Number of People in Household	2017	2015
1 person	9%	10%
2 people	24	23
3 – 4 people	39	40
5 or more people	28	25
Refused	1	1
MEAN	3.75	3.66
Household Income	2017	2015
Under \$25,000	9%	9%
\$25,000 – under \$35,000	9	8
\$35,000 – under \$50,000	8	13
\$50,000 – under \$75,000	15	14
\$75,000 – under \$100,000	17	15
\$100,000 and above	29	21
Refused	13	19
Gender	2017	2015
Male	51%	50%
Female	49	50
Base=	686	685

Profile of Respondents

Years of Oahu Residency	2017	2015
Less than 2 years	1%	1%
2 – less than 5 years	3	4
5 – less than 10 years	4	6
10 or more years	35	39
Born and raised on Oahu	56	51
Home Ownership	2017	2015
Own	59%	58%
Rent	36	37
Occupy without payment	4	5
Refused	1	0
Type of Home	2017	2015
House	71%	67%
Apartment	13	15
Condominium	10	11
Townhouse	6	6
Other	1	1
Base=	686	685

Area of Residence	2017	2015
East Honolulu	12%	9%
Urban Honolulu	32	33
Windward	12	15
Pearl City, Aiea, Moanalua	8	6
Central Oahu	18	21
Ewa Plain	9	9
North Shore	4	2
Leeward	5	5
Council District	2017	2015
Council District 1	12%	12%
Council District 2	11	12
Council District 3	10	11
Council District 4	11	11
Council District 5	12	12
Council District 6	11	11
Council District 7	11	10
Council District 8	11	11
Council District 9	12	11
Base=	686	685

Definitions

Bill Payers= Residents who pay a bill directly to the BWS

Non-Bill Payers= Residents who do <u>not</u> pay a bill directly to the BWS, but as part of rent or maintenance fees

Strong Satisfaction= 6 or 7 rating on a 7-point scale, where 1=extremely dissatisfied and 7=extremely satisfied

Moderate Satisfaction = 5 rating

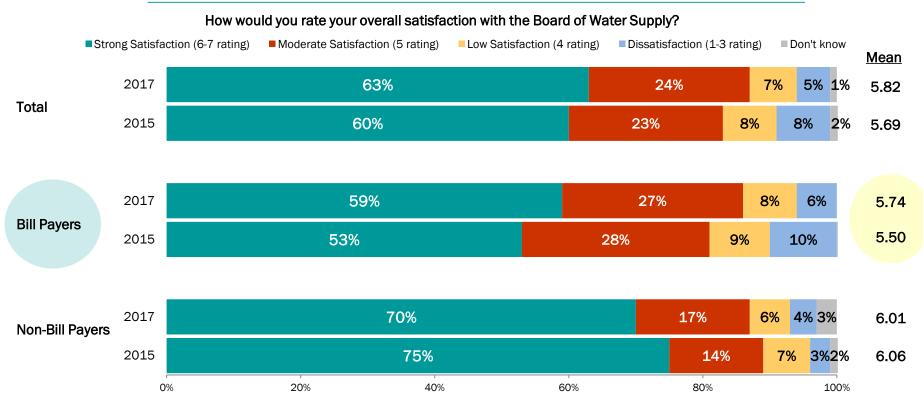
Low Satisfaction= 4 rating Dissatisfaction= 1, 2, or 3 rating on a 7-point scale, where 1=extremely dissatisfied and 7=extremely satisfied

Very Affordable= 6 or 7 rating on a 7-point scale, where 1=not at all affordable and 7=extremely affordable Moderately Affordable= 5 rating Somewhat Not Affordable= 4 rating Not Affordable= 1, 2, or 3 rating on a 7-point scale, where 1=not at all affordable and 7=extremely affordable

Strongly Trust= 6 or 7 rating on a 7-point scale, where 1=do not trust them at all and 7=extremely trustworthy
Moderately Trust= 5 rating
Somewhat Distrust= 4 rating
Distrust= 1, 2, or 3 rating on a 7-point scale where 1=do not trust them at all and 7=extremely trustworthy

Overall Satisfaction with the BWS

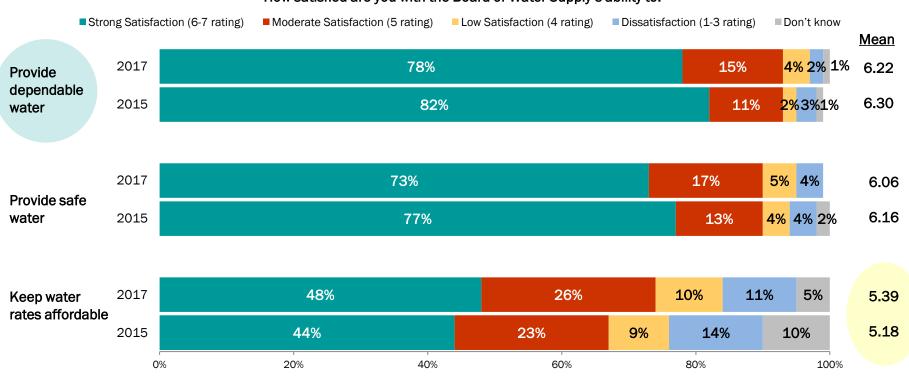
- Three out of 5 residents surveyed reported strong overall satisfaction with the BWS (rated their level of satisfaction a 6 or 7 on a 7-point scale, where 7=extremely satisfied), a slight increase from 2015 (63% up from 60%).
- Among bill payers (those who pay a bill directly to the BWS), the proportion who indicated strong overall satisfaction with the utility increased (59% up from 53%). The increase is statistically-significant.
- Despite the increase in bill payer satisfaction, non-bill payers continue to report higher levels of satisfaction with the BWS than are bill payers (70% vs. 59% strongly satisfied). Greater proportions of renters than homeowners also continue to indicate strong satisfaction with the BWS (68% vs. 59%). No other statistically-significant differences in strong satisfaction were found.



Base= Total: 2017=686, 2015=685; Bill Payers: 2017=472, 2015=454; Non-Bill Payers: 2017=214, 2015=231

The BWS Mission

- Satisfaction with the BWS's ability to fulfill its mission to provide dependable (78% down from 82% indicating strong satisfaction) and safe water (73% down from 77%) remains strong; satisfaction with its ability to keep water rates affordable is not as strong in comparison (48% up from 44%).
- The decrease in the proportion of residents indicating strong satisfaction with the BWS's ability to provide dependable water is statistically-significant.
- As shown on the next page, non-bill payers were less likely to indicate strong satisfaction with the BWS's ability to provide dependable and safe water than they were in 2015.



How satisfied are you with the Board of Water Supply's ability to:

Base= Total: 2017=686, 2015=685

The BWS Mission – Subsample Findings

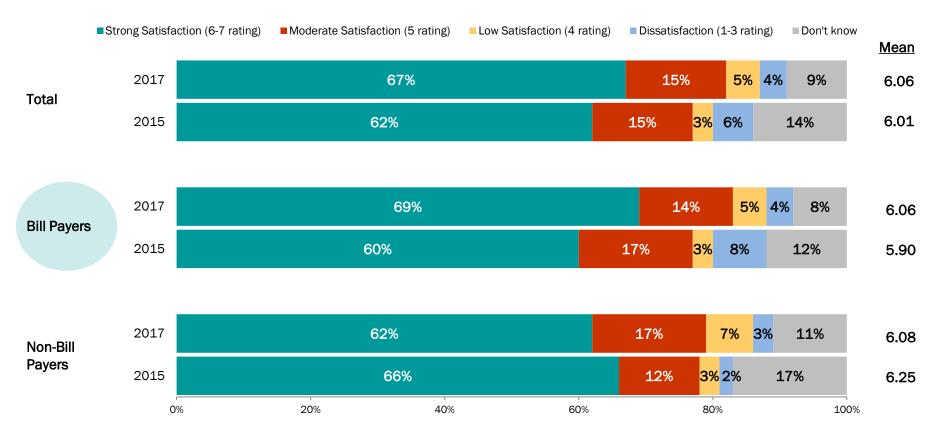
	Statistically-Significant Differences Between Subsamples: More likely to be strongly satisfied	Statistically-Significant Changes in Strongly Satisfied Ratings from 2015: Bill Payers and Non-Bill Payers
Provide dependable water		Non-Bill Payers 80% - down from 88%
Provide safe water		Non-Bill Payers 74% - down from 84%
Keep water rates affordable	<\$50K HH Income (56%) vs. \$50K+ (43%)	

Customer Service

Satisfaction with Overall Customer Service

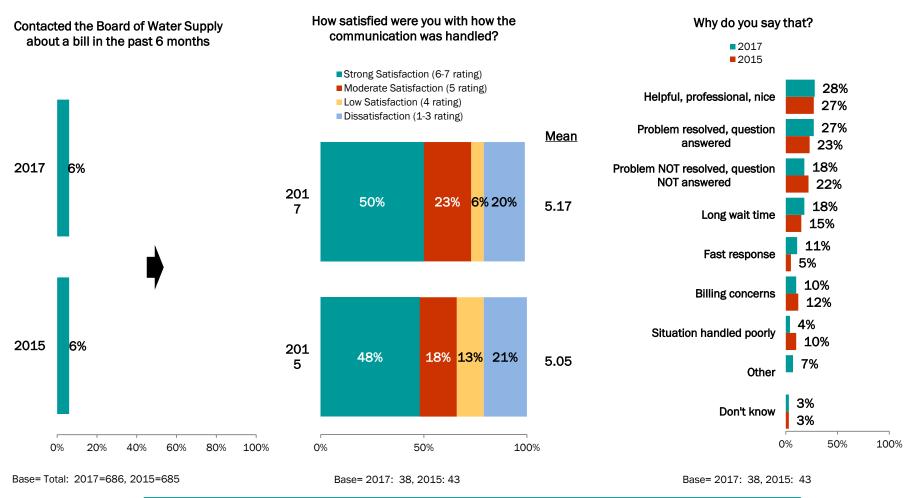
- Two out of 3 residents indicated strong satisfaction with the overall customer service that they receive from the BWS, comparable to the proportion that did so in 2015 (67% up from 62%).
- Based on strong satisfaction ratings, bill payers are more satisfied with the BWS's customer service than they were in 2015 (69% up from 60%).

How would you rate your satisfaction with the Board of Water Supply in terms of overall customer service?



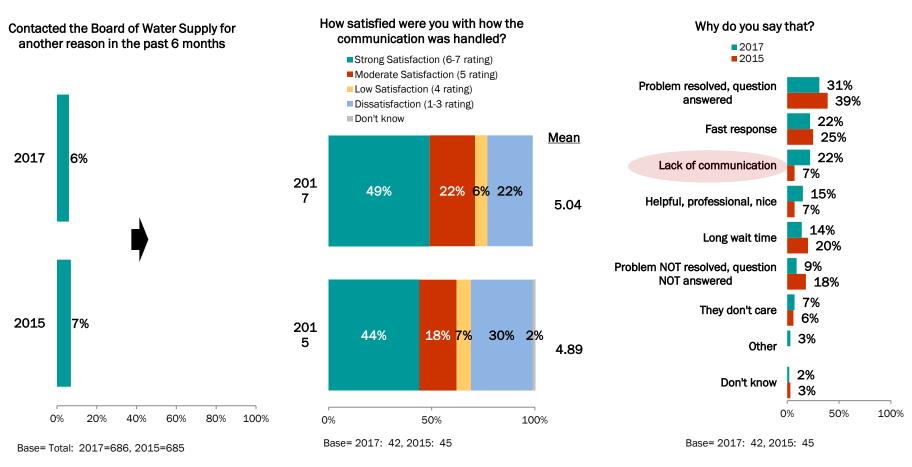
Base= Total: 2017=686, 2015=685; Bill Payers: 2017=472, 2015=454; Non-Bill Payers: 2017=214, 2015=231

Contacting the BWS about a Bill



- Once again, only a small proportion of residents contacted the BWS about a bill in the past six months (6% no change) and half among them were strongly satisfied with the contact (50% up from 48%).
- The reasons mentioned most often for their satisfaction rating were "the customer service representative was helpful, professional, or nice" (28% up from 27%) and "the problem was resolved" (27% up from 23%).

Contacting the BWS for Another Reason

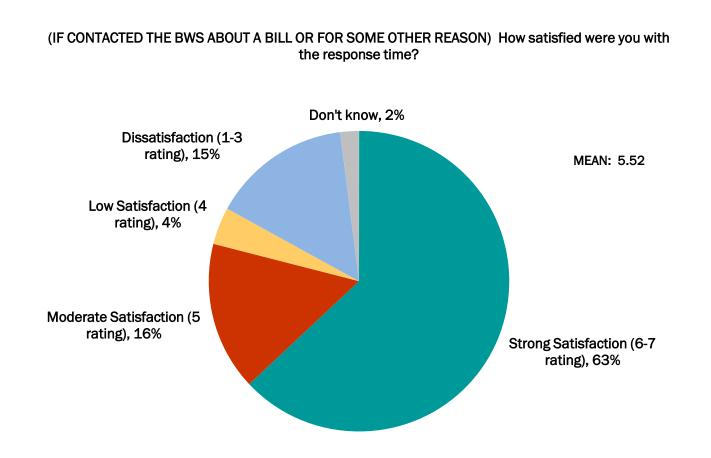


- Similarly, only a small proportion of residents contacted the BWS for another reason in the past six months (6% down from 7%) and half among them were strongly satisfied with the contact (49% up from 44%).
- The reasons mentioned most often for their satisfaction rating were "the problem was resolved, the question answered" (31% down from 39%) and "fast response" (22% down from 25%). Note that the percentage of respondents who cited "lack of communication," or that they did not receive a response showed a statistically-significant increase, from 7% to 22%.

Indicates statistically-significant differences in responses

Satisfaction with Response Time

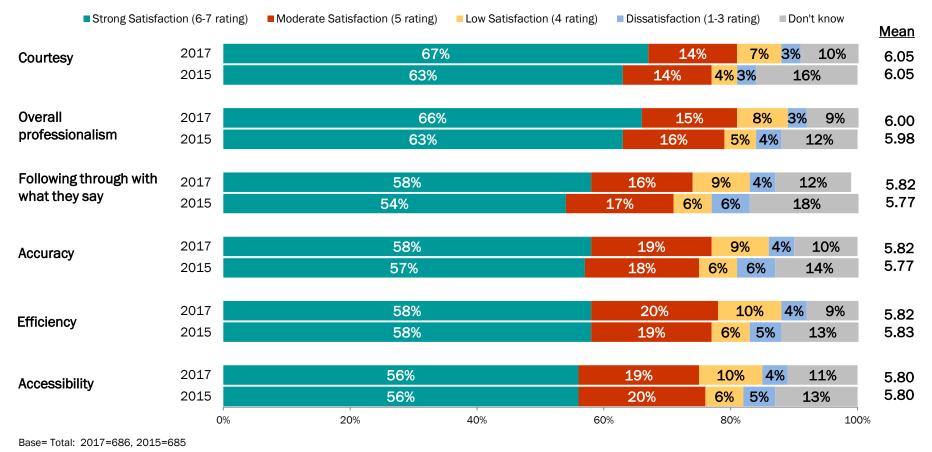
• Those who contacted the BWS about a bill or for another reason in the past six months were asked how satisfied they were with the response time: 3 out of 5 said they are strongly satisfied (63%).



BWS Employees

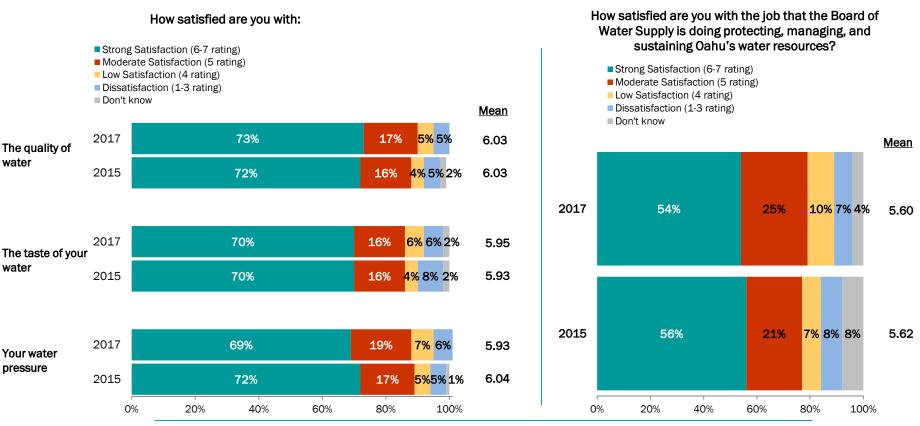
- Ratings for BWS employees changed very little from 2015. At least one-half of residents indicated strong satisfaction with the employees, especially for their courtesy (67% up from 63%) and overall professionalism (66% up from 63%).
- · No statistically-significant differences in strong satisfaction were found between the subsamples tested.

Based on your own experiences or anything you may have seen or heard, how satisfied are you with Board of Water Supply employees based on the following attributes:



The Quality of Water and the Delivery of Water Service

The Quality of Water

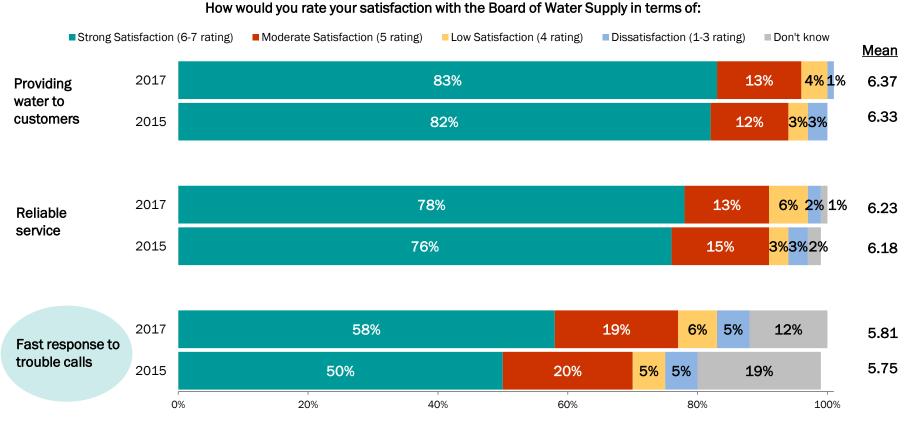


- Residents continued to indicate high levels of satisfaction with the quality (73% up from 72%) and taste (70% unchanged) of their water, as well as with their water pressure (69% down from 72%).
- One-half of residents indicated strong satisfaction with the job that the BWS is doing protecting, managing, and sustaining Oahu's water resources (54% down from 56%).
- Greater proportions of those in \$100K+ income households (compared to <\$100K) indicated strong satisfaction with the quality of water (79% vs. 69%). Meanwhile, lower income respondents (<\$50K) were more likely to indicate strong satisfaction with the job that the BWS is doing protecting, managing, and sustaining Oahu's water resources (61% vs. 50% \$50K+).

Base= Total: 2017=686, 2015=685

The Delivery of Water Service

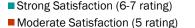
- Four out of 5 residents are strongly satisfied with the BWS in terms of providing water to customers (83% up from 82%) and providing reliable service (78% up from 76%).
- Among all the residents surveyed, the proportion strongly satisfied with the BWS's fast response to trouble calls increased to 58% (up from 50%). The increase is statistically-significant.
- Another statistically-significant difference from 2015, among bill payers only, the proportion strongly satisfied with the BWS's fast response to trouble calls increased (57% up from 46%).



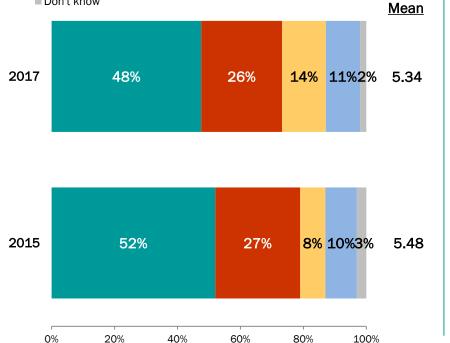
Base= Total: 2017=686, 2015=685

The Water Delivery System

How satisfied are you with the condition of Oahu's water delivery system?



- Low Satisfaction (4 rating)
- Dissatisfaction (1-3 rating)
- Don't know

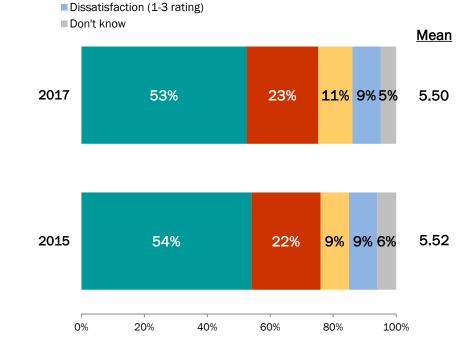


How satisfied are you with the job that the Board of Water Supply is doing repairing, maintaining, and replacing Oahu's water delivery system?

Strong Satisfaction (6-7 rating)

Moderate Satisfaction (5 rating)

Low Satisfaction (4 rating)



• Approximately one-half of residents are strongly satisfied with the condition of Oahu's water delivery system (48% - down from 52%) and the job that the BWS is doing repairing, maintaining, and replacing Oahu's water delivery system (53% - down from 54%).

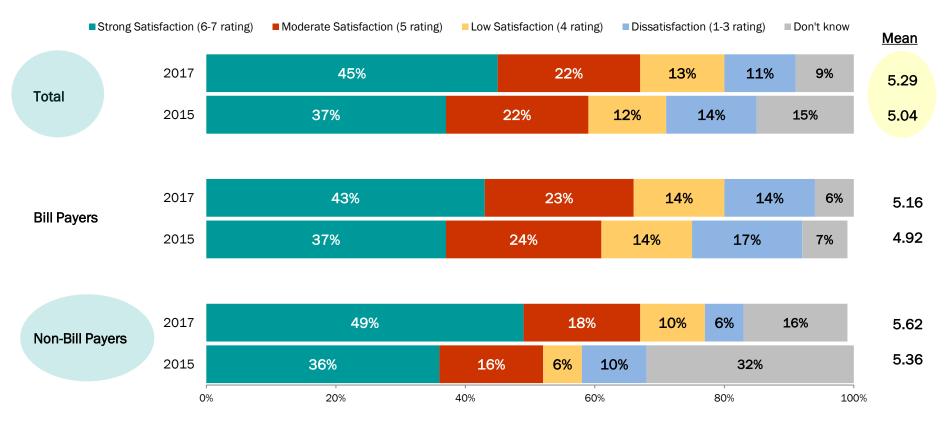
Base= Total: 2017=686, 2015=685

Rates, Bills, and the Cost of Water Service

Fairness of Water Rates

- The level of satisfaction with the fairness of water rates increased to 45% of residents reporting strong satisfaction (up from 37%). Non-bill payer satisfaction, specifically, increased to 49% indicating strong satisfaction (up from 36%). Both of the differences noted are statistically-significant.
- The proportion of bill payers indicating strong satisfaction with the fairness of water rates also increased, but the difference is not statistically-significant (43% up from 37%).

How would you rate your satisfaction with the Board of Water Supply in terms of fairness of water rates?

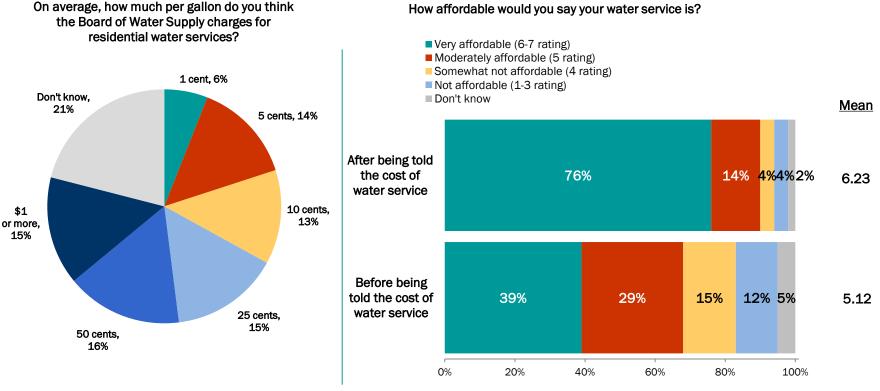


Base= Total: 2017=686, 2015=685; Bill Payers: 2017=472, 2015=454; Non-Bill Payers: 2017=214, 2015=231

Indicates statistically-significant differences in strong satisfaction ratings

Indicates statistically-significant differences in mean ratings

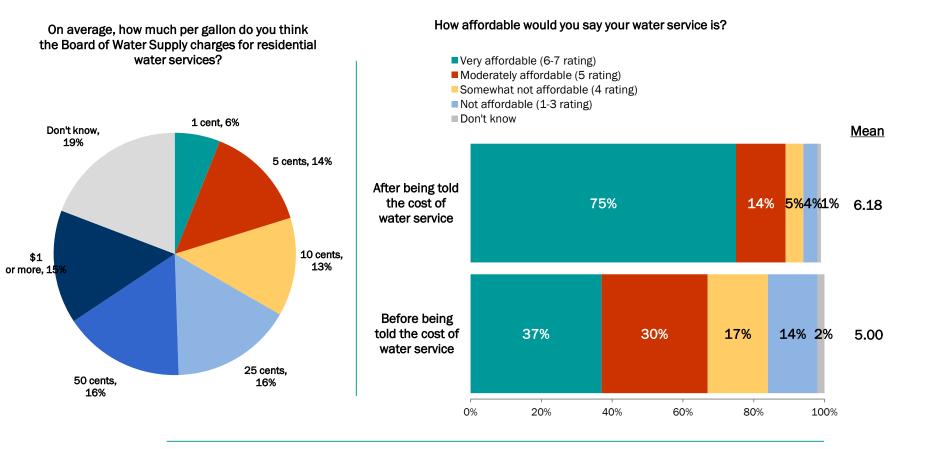
Perceptions about Affordability of Water Service



How affordable would you say your water service is?

- For the first time in tracking, residents were asked how much they think the BWS charges for water service (less than a ٠ penny per gallon for residential customers). Only 6% answered 1 cent per gallon; the rest answered 5 or more cents per gallon.
- Also for the first time in tracking, residents were asked their perceptions about the affordability of water service. Prior to being told the cost of water service ("less than a penny for each gallon of water you use"), 39% responded that the cost of water service is very affordable. After being told the cost of water service, the proportion who indicated that water service is very affordable nearly doubled, to 76%.
- Prior to being told the cost of water service, older residents, 55+ years old, were more likely than younger residents to say that their water service is very affordable (46% vs. 35%).

Perceptions about Affordability of Water Service – Bill Payers Only

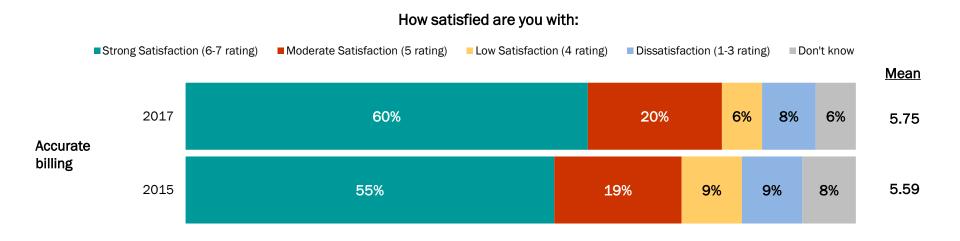


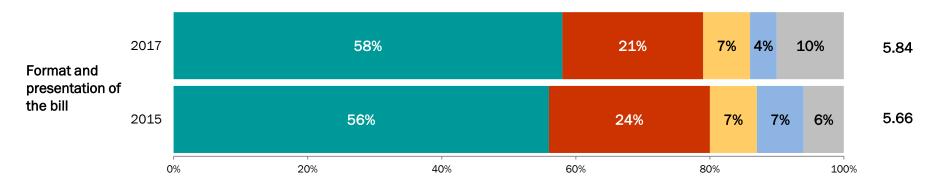
- Among bill payers only, 6% answered that the BWS charges 1 cent per gallon for residential water service.
- Prior to being told the cost of water service ("less than a penny for each gallon of water you use"), 37% of bill payers indicated that the cost of water service is very affordable. After being told the cost of water service, the proportion who indicated that water service is very affordable increased to 75%.

Base= 2017: 472

About the Bill – Bill Payers Only

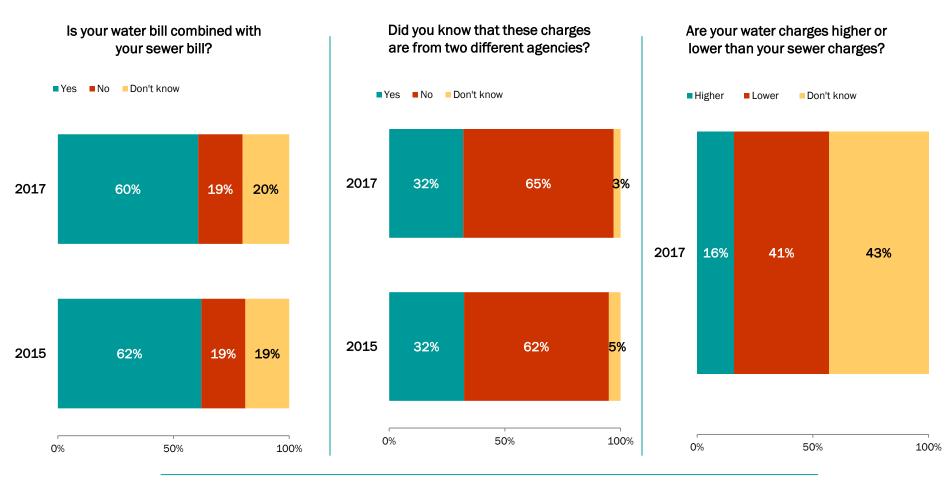
• Three out of 5 bill payers reported strong satisfaction with the accuracy (60% - up from 55%) and the format and presentation of their bill (58% - up from 56%). The changes in ratings from 2015 are not statistically-significant.





Base= Bill Payers: 2017=472, 2015=454

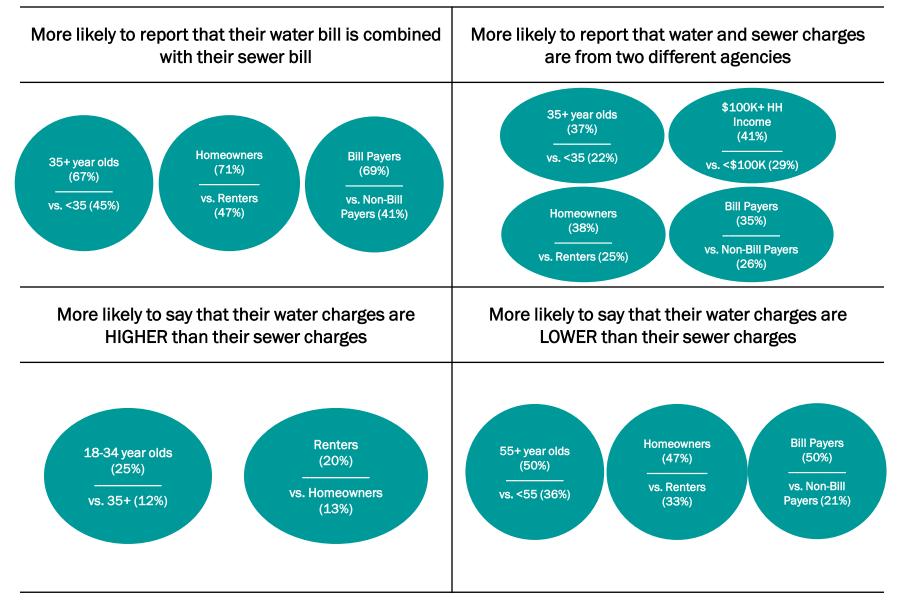
Differentiating Water from Sewer



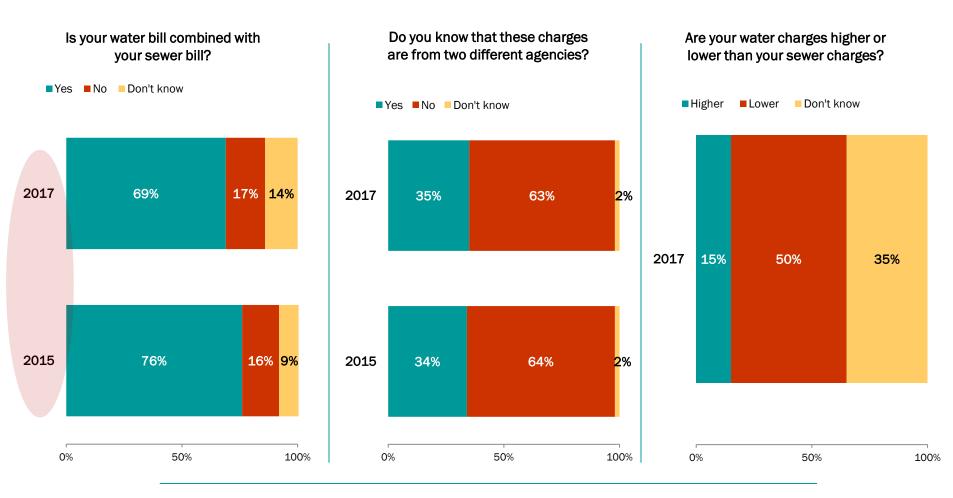
- Awareness of the differences between water and sewer charges are similar to what they were last year. Three out of 5 residents reportedly are aware that their water bill is combined with their sewer bill (60% down from 62%). A much smaller proportion, 1 out of 3, are aware that the charges are from two different agencies (32% unchanged).
- When asked if their water charges are higher or lower than their sewer charges, 2 out of 5 said that their water charges are lower (41%).

Base= Total: 2017=686, 2015=685

Differentiating Water from Sewer – Other Subsamples



Differentiating Water from Sewer – Bill Payers Only

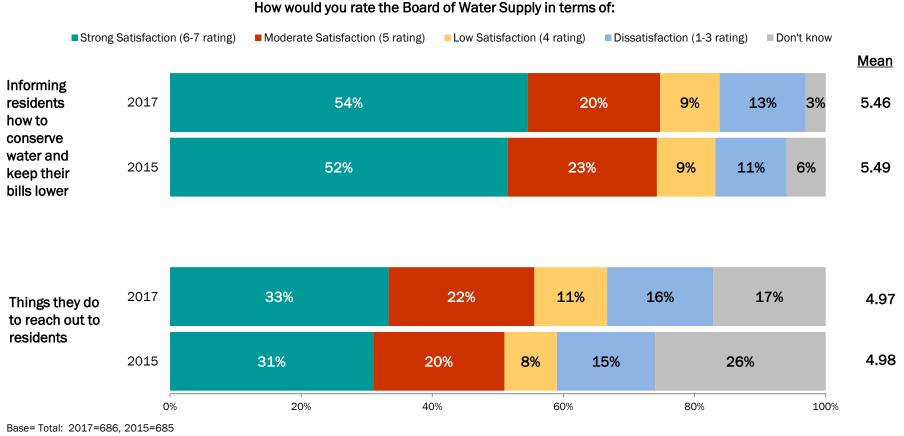


- The proportion of bill payers who said that their water bill is combined with their sewer bill showed a statistically-significant decrease (69% - down from 76%).
- Among bill payers only, approximately one-third said that their water and sewer charges are from two different agencies (35% up from 34%).
- One-half of bill payers said that their water charges are lower than their sewer charges (50%).

Community Outreach and Message Recall

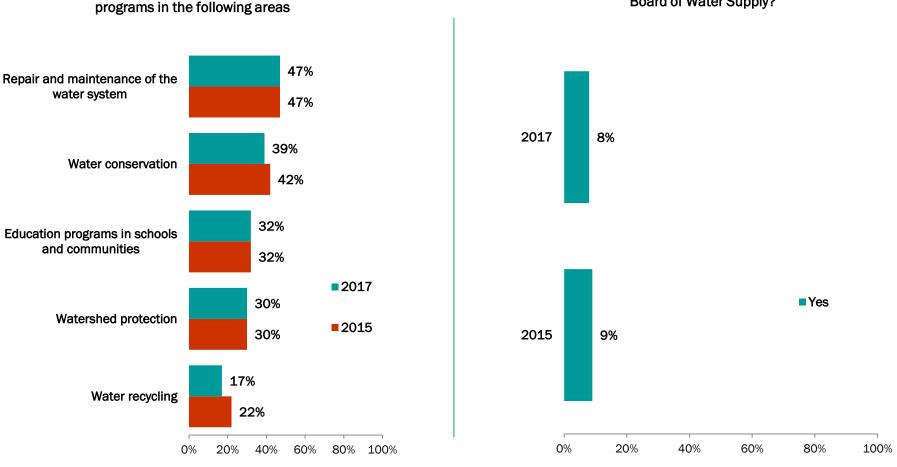
Community Outreach

- One-half of all the residents surveyed are strongly satisfied with the BWS's efforts to inform residents how to conserve water and keep their bills low (54% - up from 52%), while 1 out of 3 are strongly satisfied with the things they do to reach out to Oahu residents (e.g., tours, presentations, workshops, community partnerships) (33% - up from 31%). Changes in ratings from 2015 are not statistically-significant.
- Renters are more likely than homeowners to indicate strong satisfaction with the things the BWS does to reach out to residents (39% vs. 29%).



BWS Programs and Activities

Have seen or heard of the BWS's activities and



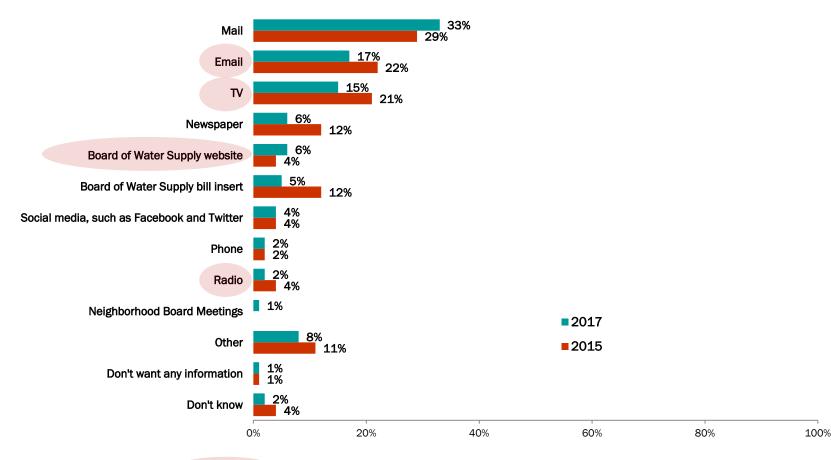
Have you taken tours, classes, or workshops by the Board of Water Supply?

- Awareness of the BWS's activities and programs is nearly unchanged from 2015.
- There has been little change in reported participation in BWS tours, classes, or workshops (8% down from 9%).

Communication from the BWS

- Hardcopy mail continues to be the most preferred method of receiving information (unaided) from the BWS (33% up from 29%).
- Note the decrease in preference for email (17% down from 22%), TV (15% down from 21%), newspaper (6% down from 12%), and the BWS bill insert (5% down from 12%).

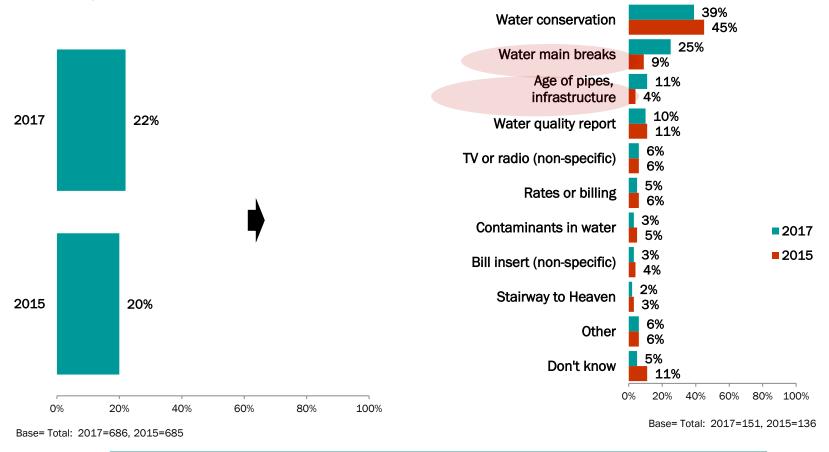
How do you prefer to get information about Board of Water Supply programs and services?



Message Recall

In the past 6 months, remember seeing or hearing any messages from the Board of Water Supply

What do you remember seeing or hearing?

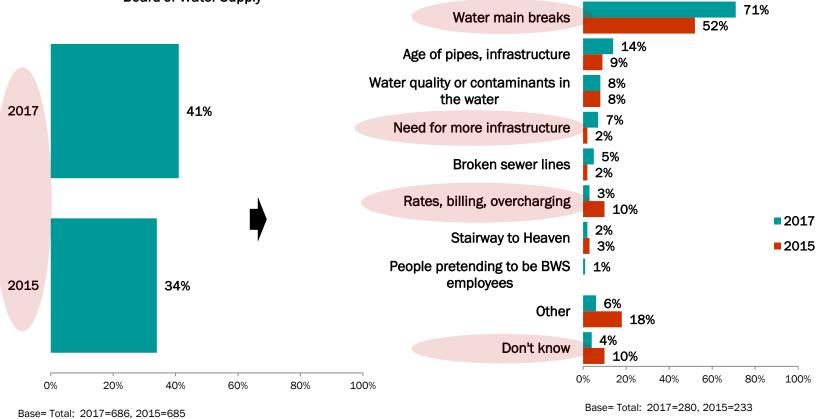


- One out of 5 residents could recall seeing or hearing messages from the BWS (22% up from 20%), most often messages about water conservation (39% - down from 45%).
- Note the increase in recall of messages about water main breaks (25% up from 9%) and the age of pipes (11% up from 4%).

News Recall

And in the past six months, remember seeing or hearing any stories in the news concerning the Board of Water Supply

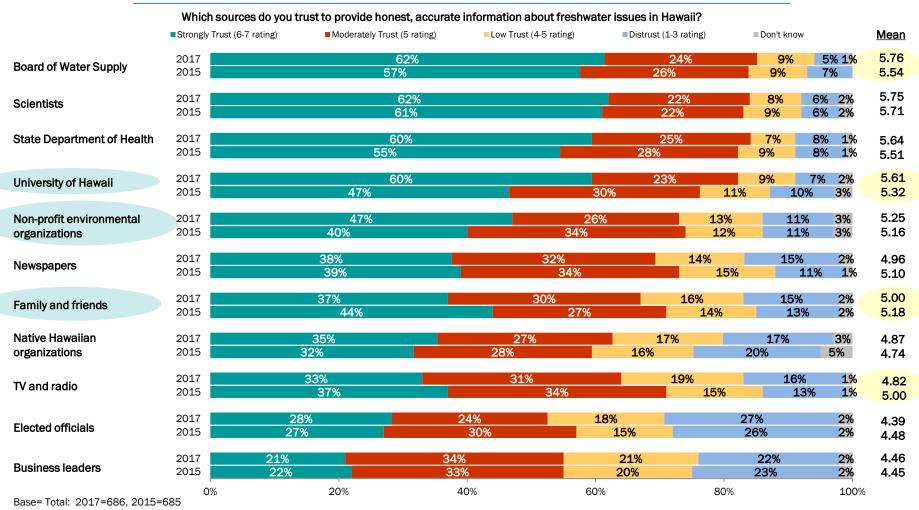
What do you remember seeing or hearing?



- Recall of news stories about the BWS showed a statistically-significant increase to 41% (up from 34%). The stories recalled far more often than any others were about water main breaks (71% up from 52%).
- The following subsamples were more likely than their counterparts to recall seeing or hearing news stories about the BWS: \$50K+ annual household income (47% vs. 28% <\$50K), males (46% vs. 36% female), and homeowners (45% vs. 34% renters).

Sources of Information about Freshwater Issues

- The BWS (62% strongly trust up from 57%) and scientists (62% up from 61%) continue to be the most trusted sources for honest, accurate information about freshwater issues in Hawaii.
- The proportions of residents who said that they strongly trust the University of Hawaii (60% up from 47% strongly trust) and environmental non-profits (47% up from 40%) have increased since 2015. These differences are statistically-significant.
- Based on strongly trust responses, renters are more likely than homeowners to trust the BWS (69% vs. 59%).



- A drivers analysis was conducted in 2015 to identify key drivers of customer satisfaction for the BWS, to allow the BWS to focus on the specific areas that have the greatest impact on satisfaction. In this analysis, four factors were created:
 - Rates and Billing
 - Reliability and Safety
 - Customer Service and Satisfaction with Employees
 - Water Characteristics and Delivery
- NINE drivers were selected by taking the top driver(s) from each of the four factors. These KEY DRIVERS are listed below in order of importance (*fairness of water rates* being the most important and *the quality of your water* being the relatively least important of the drivers). They have the highest impact on the factors.
 - Fairness of water rates
 - Ability to keep water rates affordable
 - Ability to provide dependable water
 - Providing water to customers
 - Courtesy of employees
 - Efficiency of employees
 - Overall professionalism of employees
 - The taste of your water
 - The quality of your water

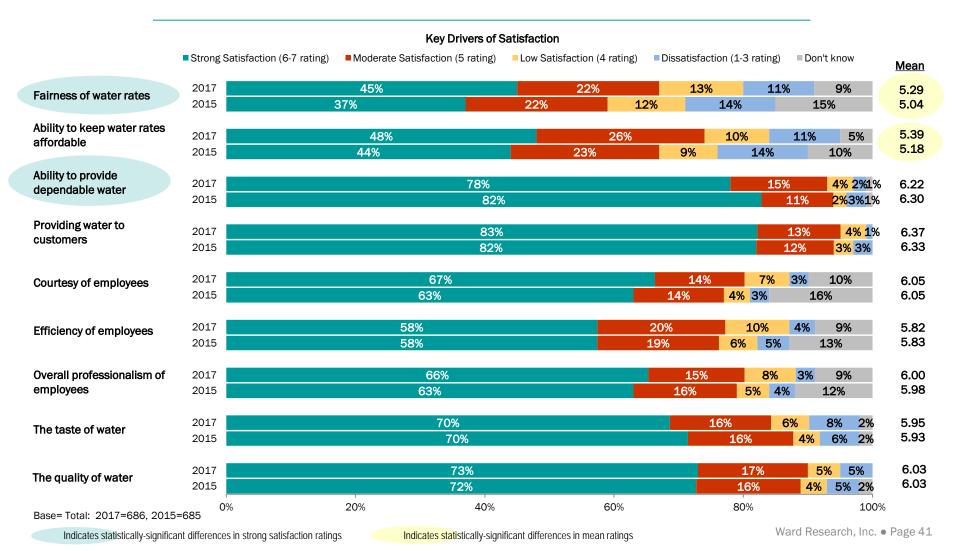
• The number preceding each attribute is its corresponding weight within the factor, indicating its level of impact on the factor. All weights within a factor sum to 100%. Highlighted below are the nine key drivers of satisfaction.

Rates and Billing – 50%		
Weight	Attribute	
27%	Fairness of water rates	
24%	Ability to keep water rates affordable	
16%	Accurate billing	
13%	Format and presentation of the bill	
11%	Things they do to reach out to Oahu residents, like giving tours and presentations, holding workshops, and partnering with various community groups	
9%	Informing residents how to conserve water and keep bills lower	

Reliability and Safety – 22%		
Weight	Attribute	
28%	Ability to provide dependable water	
27%	Providing water to customers	
25%	Reliable service	
19%	Ability to provide safe water	

Customer Service and Satisfaction with Employees – 19%		
Weight	Attribute	
16%	Courtesy of employees	
15%	Efficiency of employees	
15%	Overall professionalism of employees	
14%	Employees following through on what they say they are going to do	
14%	Accessibility of employees	
13%	Accuracy of employees	
6%	Fast response to trouble calls, such as water outages or water main breaks	
6%	Overall customer service	
	Water Characteristics and Delivery – 8%	
Weight	Attribute	
26%	The taste of water	
25%	The quality of water	
14%	The water pressure	
12%	The condition of Oahu's water delivery system	
12%	Repairing, maintaining, and replacing Oahu's water delivery system	
10%	Repairing, maintaining, and sustaining Oahu's water resources	

- A positive: The proportion of residents indicating strong satisfaction with the fairness of water rates---a key driver with a large impact on the largest factor of satisfaction---showed a statistically-significant increase (45% up from 37%). However, despite the increase, fairness of water rates still received the lowest levels of satisfaction among the key drivers.
- It should also be noted that the proportion of residents who are strongly satisfied with the BWS's ability to provide dependable water---another key driver of satisfaction---showed a statistically-significant decrease (78% down from 82%).



Appendices