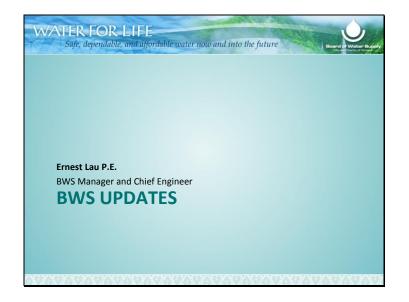






## **Meeting Objectives**

- Receive updates regarding the BWS
- Provide additional information related to fixed charges and get your feedback
- Discuss the 10-year revenue requirement to implement the Water Master Plan



## BWS announces 2018 Poster and Poetry Contests

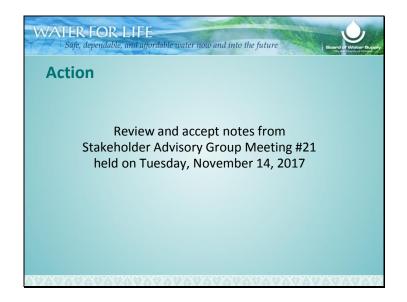
Conserve Water: Use it Wisely

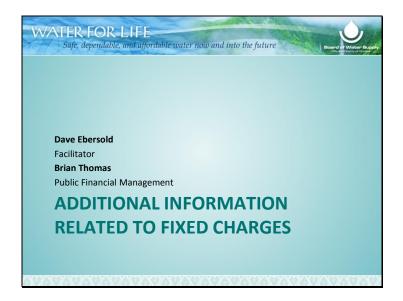




# <image>







### **BWS's Current Billing Charge**

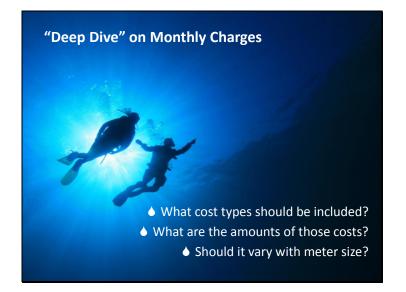
- The charge is a flat fee of \$9.26 per bill for all customers, whatever their meter size or level of use
- The billing charge covers:
  - Customer service and billing staff
  - Meter maintenance and repair
  - Meter reading
  - Processing and mailing bills
- Noted in 2014 Audit for not being able to clearly justify billing charge, recommended to follow industry best practice (AWWA)

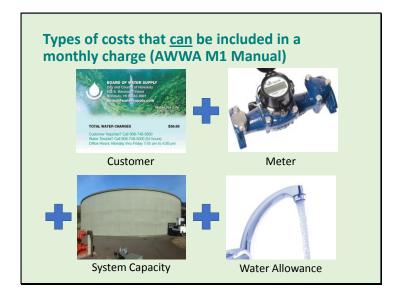
Meter Size	Maui	Kauai	Hawaii	BWS (Example)
5/8	\$19.25	\$17.75	\$18.30	\$7.75
3/4	\$31.00	\$24.75		\$7.75
1	\$46.00	\$36.50	\$39.00	\$13.15
1.5	\$88.00	\$65.50	\$73.00	\$26.30
2	\$137.00	\$100.00	\$113.00	\$42.05
3	\$242.00	\$181.00	\$207.00	\$84.10
4	\$420.00	\$297.00	\$342.00	\$131.40
6	\$770.00	\$587.00	\$678.00	\$262.80
8	\$1,215.00	\$934.00	\$1,081.00	\$420.45
10			\$1,560.00	
12			\$2,720.00	

### **Questions About the Fixed Charges**

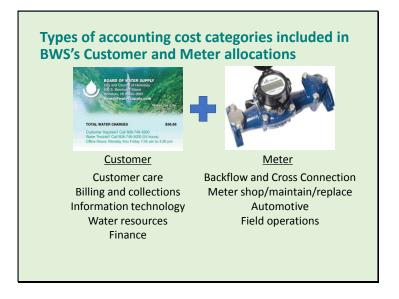
- Is BWS's current billing charge clear? Is it equitable?
- Should BWS's current fixed charge be changed to vary by meter size?
- Should it be the same for all classes of potable water customers?
- As always, the "whys" and "why nots" matter















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Meter Size	AWWA Capacity Ratios	BWS Meter Cost Ratios	BWS Meter Cost	Meter Type
3/4	1	1	\$86	3/4" Displacement
1	1.7	1.6	\$141	1" Displacement
1.5	3.4	2.0	\$171	1-1/2" Displacement
2	5.4	6.9	\$590	2" Turbine
3	10.9	8.8	\$753	3" Turbine
4	17.0	17.9	\$1,538	4" Turbine
6	33.9	32.9	\$2,829	6" Turbine
8	54.3	50.8	\$4,372	8" Turbine

# Over 25 of 77 accounting cost categories<br/>include allocations to customers or meters<a href="#page">meter size</a></a><a href="#page">size</a></a><a href="#page">yillo</a><a href="#page">yillo</a></a><a href="#page">yillo</a></a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a></a><a href="#page">yillo</a></a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a></a><a href="#page">yillo</a></a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><a href="#page">yillo</a></a><

T	wo option	s for montl
	Туре	Total
	Same for all meter sizes	\$10,906,000
	Varies by meter size	\$12,473,300
	$\langle$	\$23,379,300
		Ļ
S	pread uniform	nly over 1.9 mil
E	xample amc	ounts

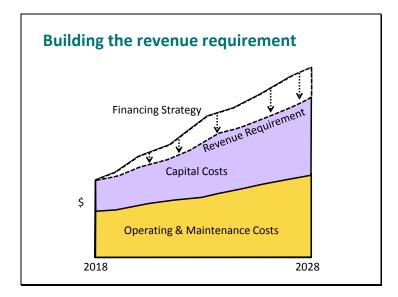
	Total	То	tal				
Same for all meter sizes	\$10,906,000	Same for all \$10,9 meter sizes	06,000				
Change by meter size	\$12,473,300	Change by \$12,4 meter size	73,300				
	\$23,379,300	\$23,3	79,300				
Spread uniformly over 1.9 million bills = \$5.60 per bill							

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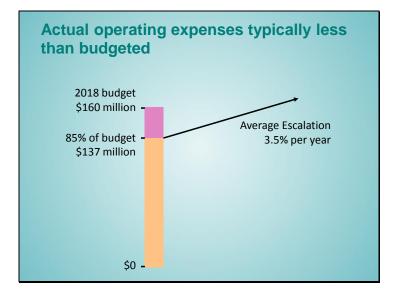
Two options for monthly Customer Charge								
Meter Size	# Mtrs	Uniform Customer Charge	Average Monthly Bill	% of Bill that is Fixed	Customer Charge by Meter Size	Average Monthly Bill	% of Bill that is Fixed	
5/8 or ¾	162,508	\$12.05	\$52	23.2%	\$10.40	\$50	20.8%	
1	8,384	\$12.05	\$235	5.1%	\$13.30	\$236	5.6%	
1.5	3,097	\$12.05	\$458	2.6%	\$15.20	\$462	3.3%	
2	3,851	\$12.05	\$911	1.3%	\$38.70	\$938	4.1%	
3	456	\$12.05	\$2,900	0.4%	\$47.80	\$2,935	1.6%	
4	294	\$12.05	\$6,036	0.2%	\$81.45	\$6,116	1.5%	
6	154	\$12.05	\$10,552	0.1%	\$163.40	\$10,704	1.5%	
8	325	\$12.05	\$11,681	0.1%	\$249.25	\$11,919	2.1%	
Example amounts								



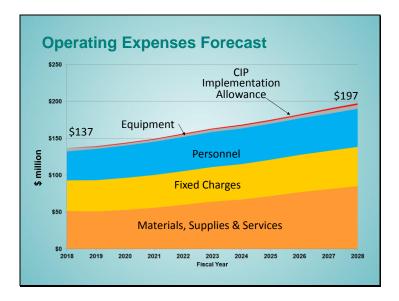


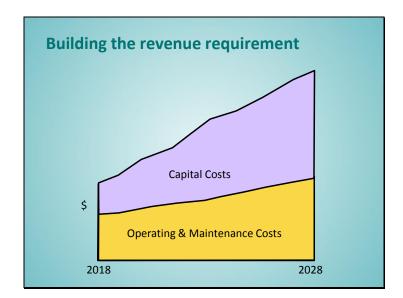


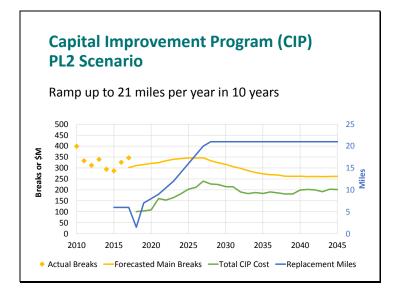












## Pump stations The "heart" of the system Improve from 82% to 90% of pumps on-line Upgrade to higher efficiency more reliable MCCs, motors, and pumps

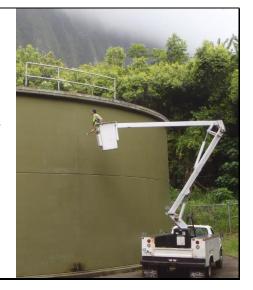
### Source capacity

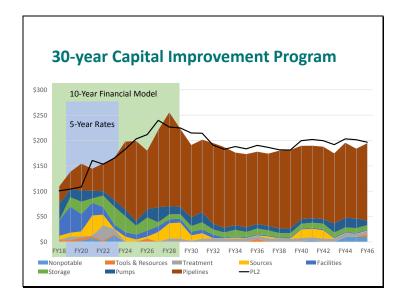
- Demands will decrease through mid-2020's but will then increase
- Climate change will effect the production of some sources
- Install additional source capacity early, so it is ready when needed
- Diversify the types of sources to protect groundwater

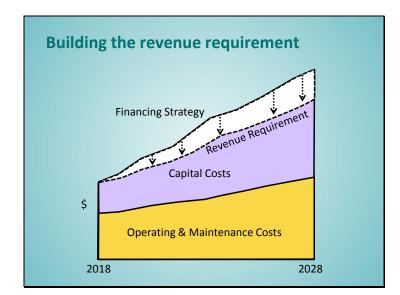


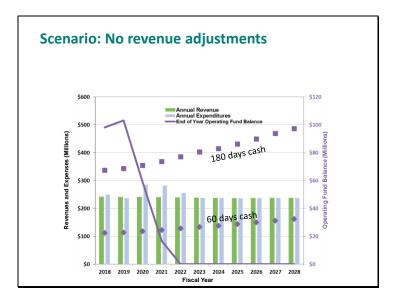
### Other high priority projects

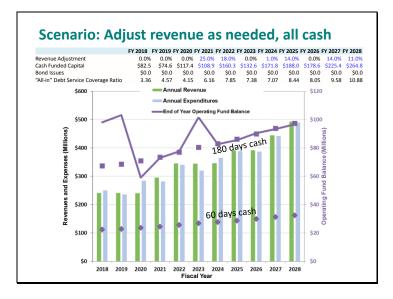
- Repair/replace high priority reservoirs
- Implement business tools and processes to facilitate implementation of an increased CIP
- Complete high priority reliability projects identified in the WMP to protect the system from disasters

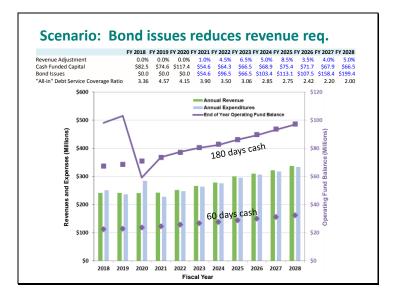


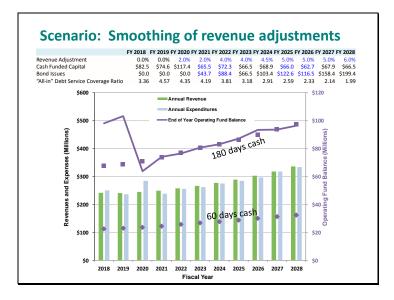


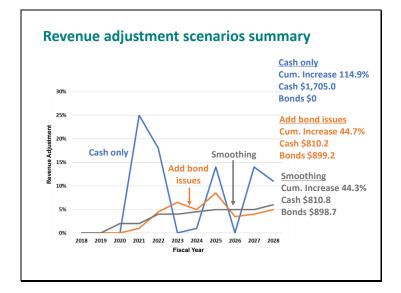




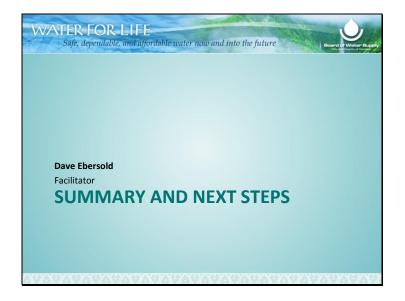














# **BWS Board Workshop on Water Rates**

Monday, January 8, 2018
 2:00 – 4:00 pm
 Board of Water Supply
 630 S. Beretania Street, 3<sup>rd</sup> Floor

# **Next Meeting**

Wednesday, January 10, 2018
 4:00 – 6:30 pm
 Blaisdell Center, Hawaii Suites

### 2018 Stakeholder Advisory Group Meeting Schedule

- Wednesday, January 10, 2018
   4:00 6:30 pm
   Blaisdell Center, Hawaii Suites
- Wednesday, February 21, 2018
   4:00 6:30 pm
   Hawaiian Electric Training Rooms, Honolulu Club
- Tuesday, March 13, 2018,
   4:00 6:30 pm
   Blaisdell Center, Hawaii Suites
- Others TBD



