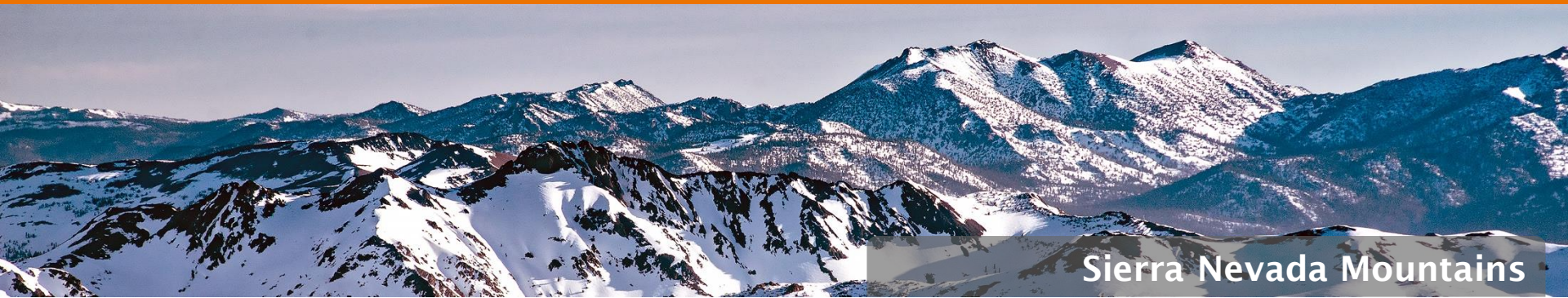


An aerial photograph of a large concrete dam with a reservoir behind it. The dam is situated in a lush, green valley with a river flowing through it. The water in the reservoir is a deep blue, and the surrounding landscape is filled with dense green trees and vegetation. The sky is clear and blue.

EBMUD Today & Tomorrow
Berkeley City Council
June 11, 2019
Board Director, Andy Katz

Your Water



Sierra Nevada Mountains



Pardee Reservoir



Mokelumne Aqueducts

Environmental Protection



EBMUD provides wastewater services for 685,000 residents in the East Bay

- Average Flow: ~50 million gallons per day (MGD)
- Peak Flow (system-wide): ~ 700 MGD

Objectives

- Protect public health
- Protect San Francisco Bay
- Recover resources



Protecting the Bay: Private Sewer Laterals and Consent Decree



Engaging the public to understand the impact of rain on regional infrastructure and the Bay

Private sewer lateral ordinance:

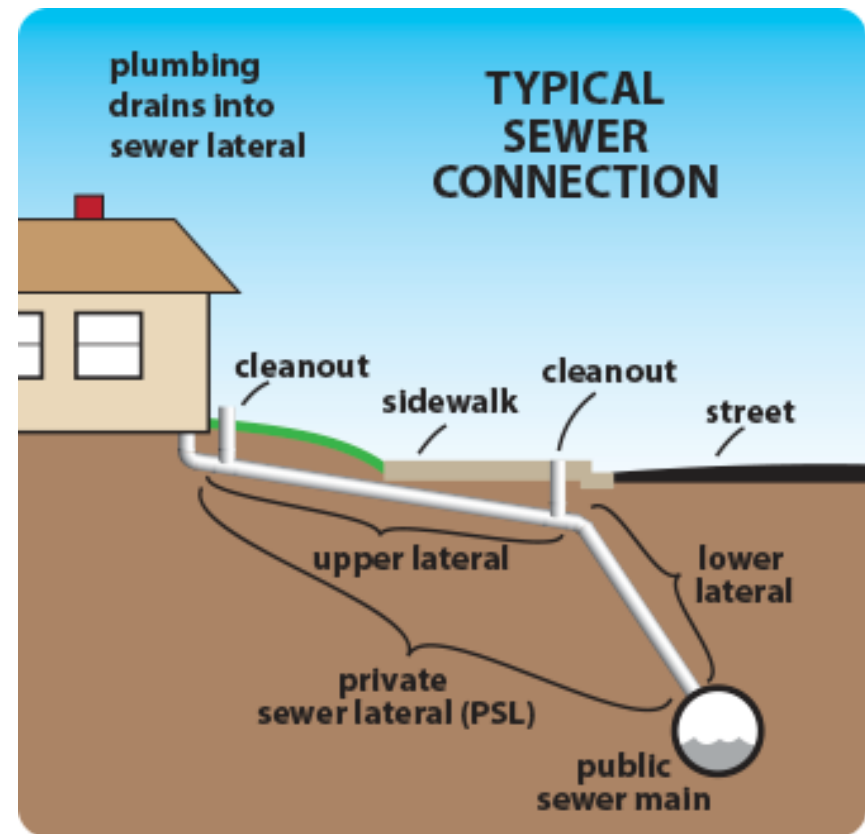
Lateral inspection/upgrade at change of ownership or renovation.

31,600 certificates issued = 425 miles of laterals certified leak-free, that's 24% of all properties

Large wastewater pipeline upgrades:

Pump Station Q Project, Urban Runoff Diversion Project, 3rd Street Interceptor Rehabilitation

\$2M annually in regional support to find/prioritize repairs: Flow Monitoring, Smoke Testing, Salinity Sampling, TV, video and photography inspection



Lead Sampling in Schools

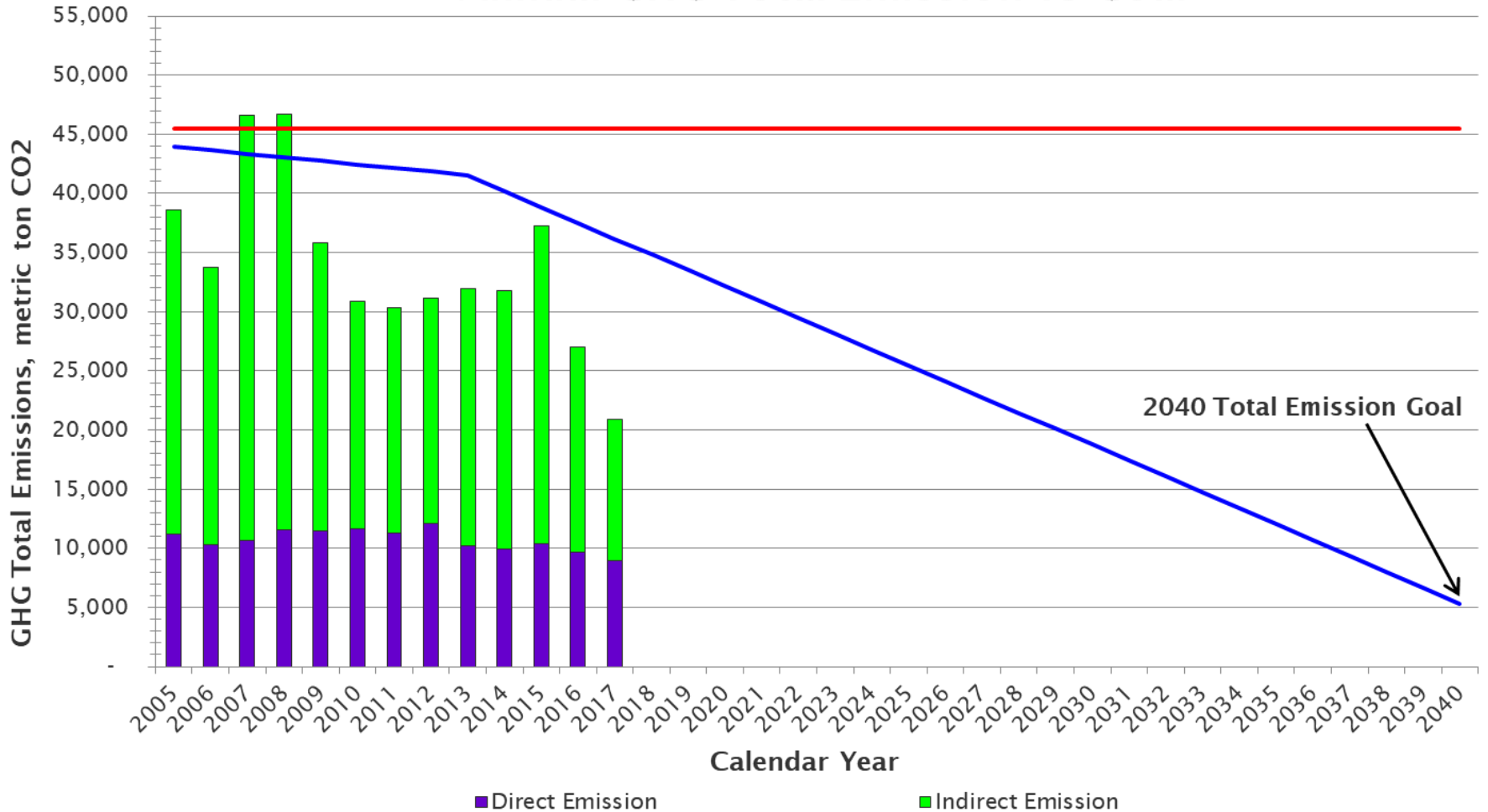


- By July 2019 water systems like EBMUD required to provide lead testing at pre-k through 12th grade school sites constructed prior to 2010.
- Testing in all schools now complete. Schools with lead above the action levels of 15 micrograms per liter were found to be from school-owned fixtures that were replaced.

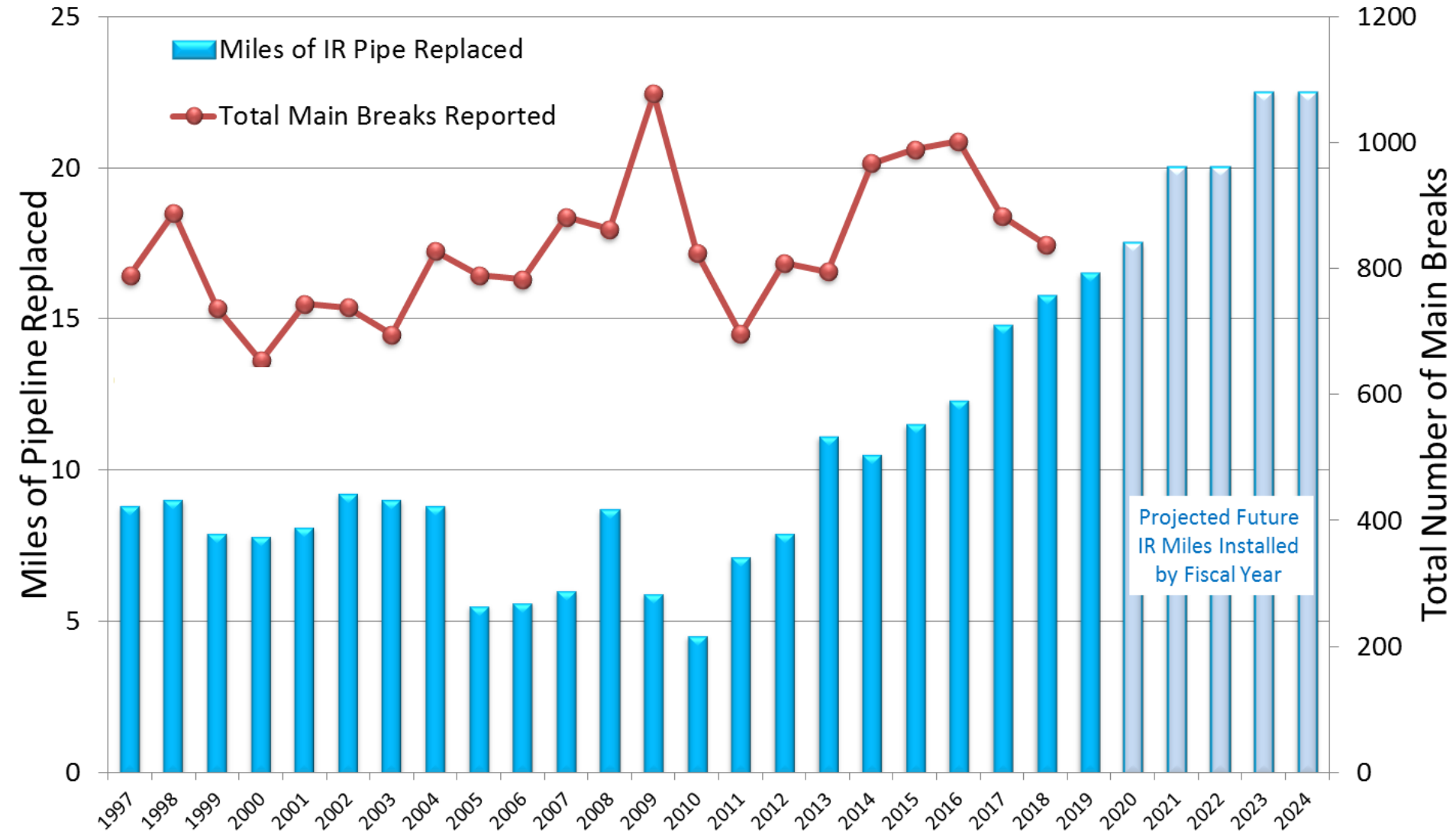
Climate Change - Mitigation and Adaptation



Annual GHG Total Emission vs Goal



Ramped-up Pipe Replacement




Sample Average Water Bill and Affordability



The District bills every 2 months

- Typical water use in Berkeley is about **5 CCF** per month
- Collects Berkeley's sewer collection fees as a pass-through
- Average per day EBMUD cost: **\$2.14**
- Total cost per day including City of Berkeley charges: **\$3.29**

EAST BAY MUNICIPAL UTILITY DISTRICT										
1-866-40-EBMUD										
YOUR ACCOUNT NUMBER:					12345678001					
Next Read Date is 05/08/2019										
Your Payment is Due by 03/28/2019										
Every day, EBMUD customers rely on an underground network of infrastructure that delivers safe and clean water to every East Bay tap, and treats the wastewater from your home. Your rate dollars help maintain and upgrade these vital systems. Thank you for supporting EBMUD, your public, not-for-profit water agency. Learn more at ebmud.com.										
										
Florence Waters 1234 PIPELINE ST BERKELEY, CA 94704-1234										
Bill Date: 03/13/19										
Billing Period (60 Days)										
From 1/7/19 To 3/8/19										
For: 1234 Pipeline St Private Residence								AMOUNT		TOTAL
PREVIOUS CHARGES AND CREDITS										
PREVIOUS AMOUNT DUE								205.84		
FULL PAYMENT - 01/17/19								-205.84		0.00
EBMUD - WATER CHARGES										
WATER SERVICE CHARGE								49.26		
WATER FLOW CHARGE 10 UNITS @3.76								37.60		86.86
EBMUD - WASTEWATER CHARGES										
WASTEWATER TREATMENT CHARGE								41.10		
SF BAY POLLUTION PREVENTION FEE								0.40		41.50
PASS THROUGH CHARGES FOR THE CITY OF BERKELEY SEWER SERVICES										68.90
PLEASE SEE REVERSE SIDE FOR ADDITIONAL INFORMATION								TOTAL CURRENT CHARGES		197.26
METER SIZE	ELEV. Band	METER READINGS		UNITS	CONSUMPTION INFORMATION			Days	Gal/Day	
5/8 inch	1	Current	Previous	10	Gallons	60	125			
		524	514	10	7,480	64	116			
		LAST	YEAR		7,480					

Investing with Your Dollars



Delivering High Quality, Reliable Water through Smart Reinvestment, Innovation, and Efficiencies

- Pipeline Rebuild
- Water and Wastewater treatment plant upgrades and replacement of other key infrastructure
- Capital improvement projects prioritized by:
 - Safety
 - Reliability
 - Water Quality

customer **Pipeline** 
March • April 2019

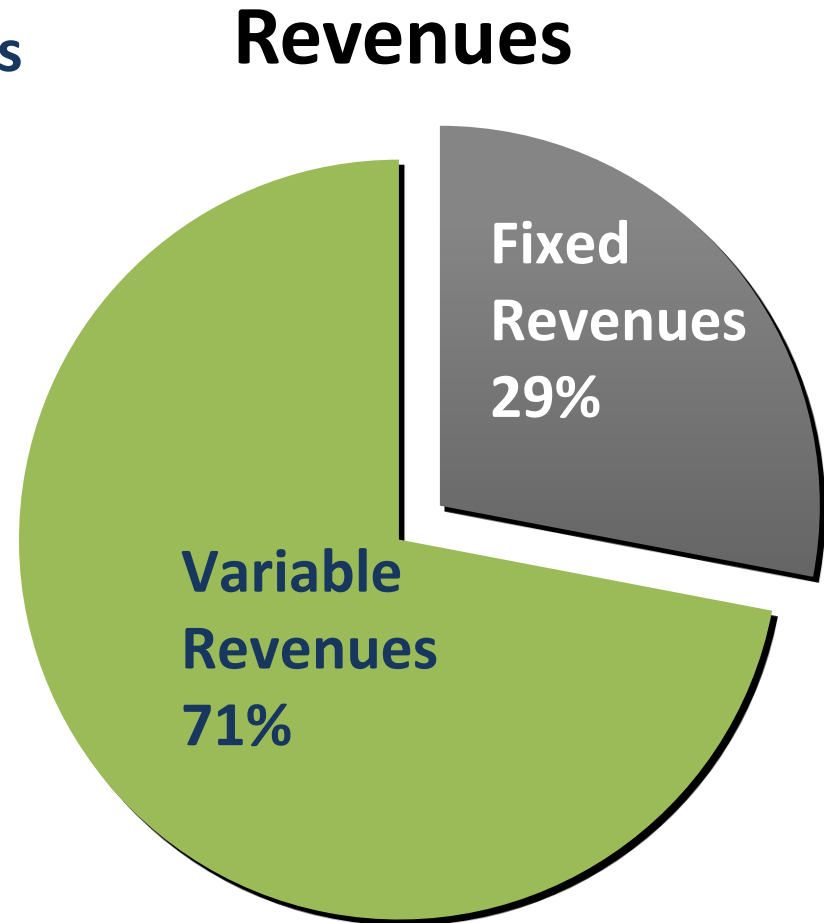
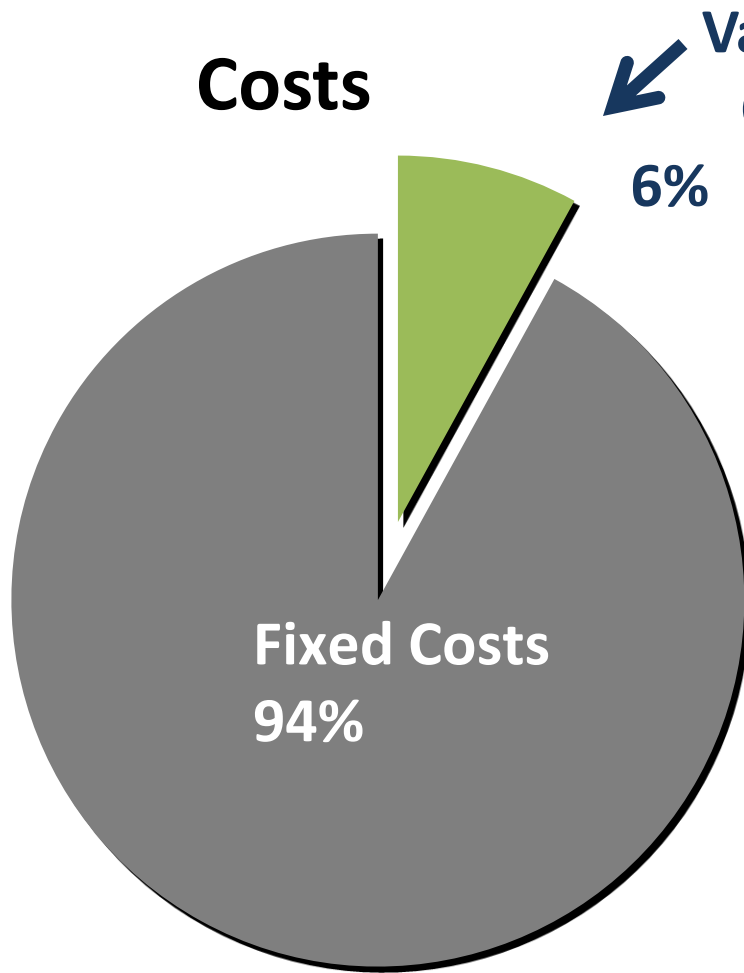
Invest in Resilience

Water lines are life lines and their resilience affects our recovery after disaster. The Bay Area underground terrain is quite complex. EBMUD's water lines are buried in bayside soils, which can liquefy in earthquakes; they pass through tree-lined hillsides, which are subject to landslide and wildfire; and cross fault lines, where earth movement can tear them apart. Your rate dollars fund crucial investments in our water and wastewater infrastructure. These investments help protect our community against disaster and improve our ability to recover from a major water outage. At EBMUD, emergency preparedness is a priority. We've spent hundreds of millions of dollars on seismic upgrades to shore up the backbone of our system with improvements to pumping plants, reservoirs, water treatment plants and large transmission pipelines. As we head into EBMUD's next 100 years of service, we are focusing on diversifying water sources and renewing our system so we're more resilient to the myriad of hazards that we face. Beginning with local water storage, EBMUD has more than a dozen projects in the works to replace drinking water reservoirs—some more than a century old—with modern equivalents that give us more control over flow and storage, which will be vital during emergencies. New pipelines also are on the horizon. Currently, we replace up to 15 miles of distribution pipes every year—a 50 percent increase from just four years ago—and we're working toward more miles every year. We're using the newest materials and technologies available to rebuild our system. Our inventory of materials now includes earthquake resistant pipes and pipe lining approaches that accelerate repairs and reduce neighborhood disruptions. To reduce the threat of large, damaging wildfires, EBMUD conducts prescribed burns and uses grazing animals and mechanical methods to chew, chip and clear brush that could otherwise fuel fires. Additionally, where possible, EBMUD plants native species that reduce fire risk. EBMUD is always preparing for emergencies, work that will continue for decades to come. We also work with cities and counties to create realistic response and recovery plans.

After a Major Disaster:

-  EBMUD will provide water for critical facilities, like hospitals, first.
-  Crews will assess damage throughout our service area to prioritize repairs. Customers in areas with smaller distribution pipes may be out of water for longer periods.
-  If you don't have water, use your emergency storage – 2 gallons per person (plus pets) per day for 3-7 days – until water distribution centers are established in your city.
-  If you have water, you'll need to know whether it's safe to drink. Check ebmud.com and ebmud.com/emergency-preparedness.

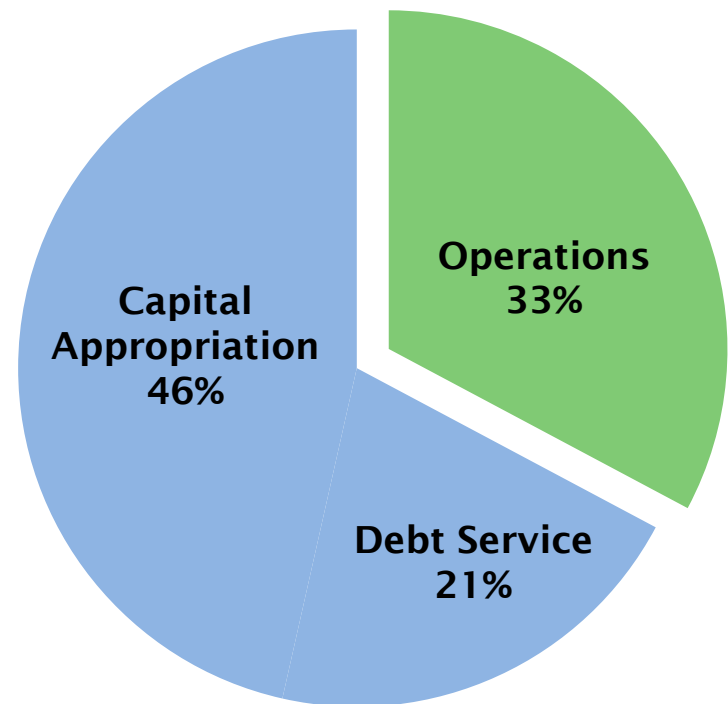
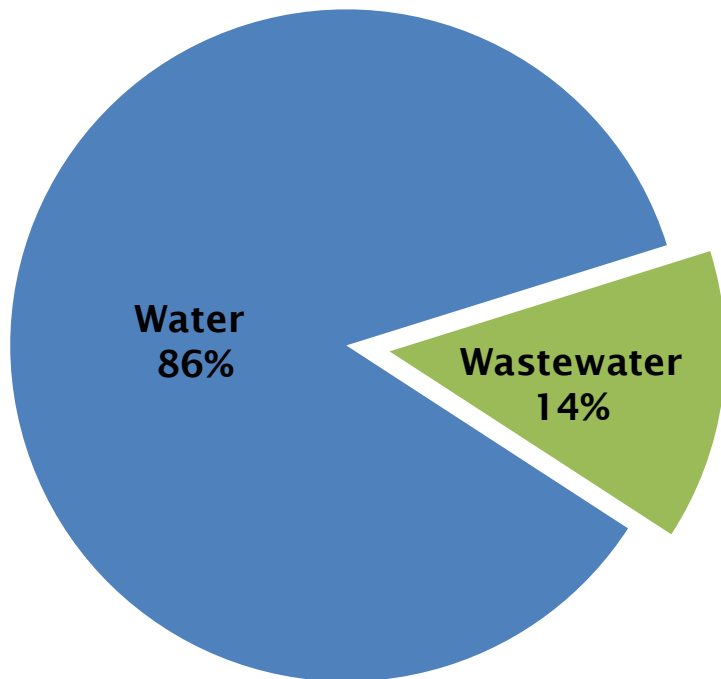
Our Operations Costs are Fixed... Our Revenues are Not



Biennial Budget – FY20 & FY21



\$2.34 Billion



67% of budget is capital investment-related

Water Bills Calculated for 8 CCF/Mo

Annual Charge for SFR – Effective 7/1/19

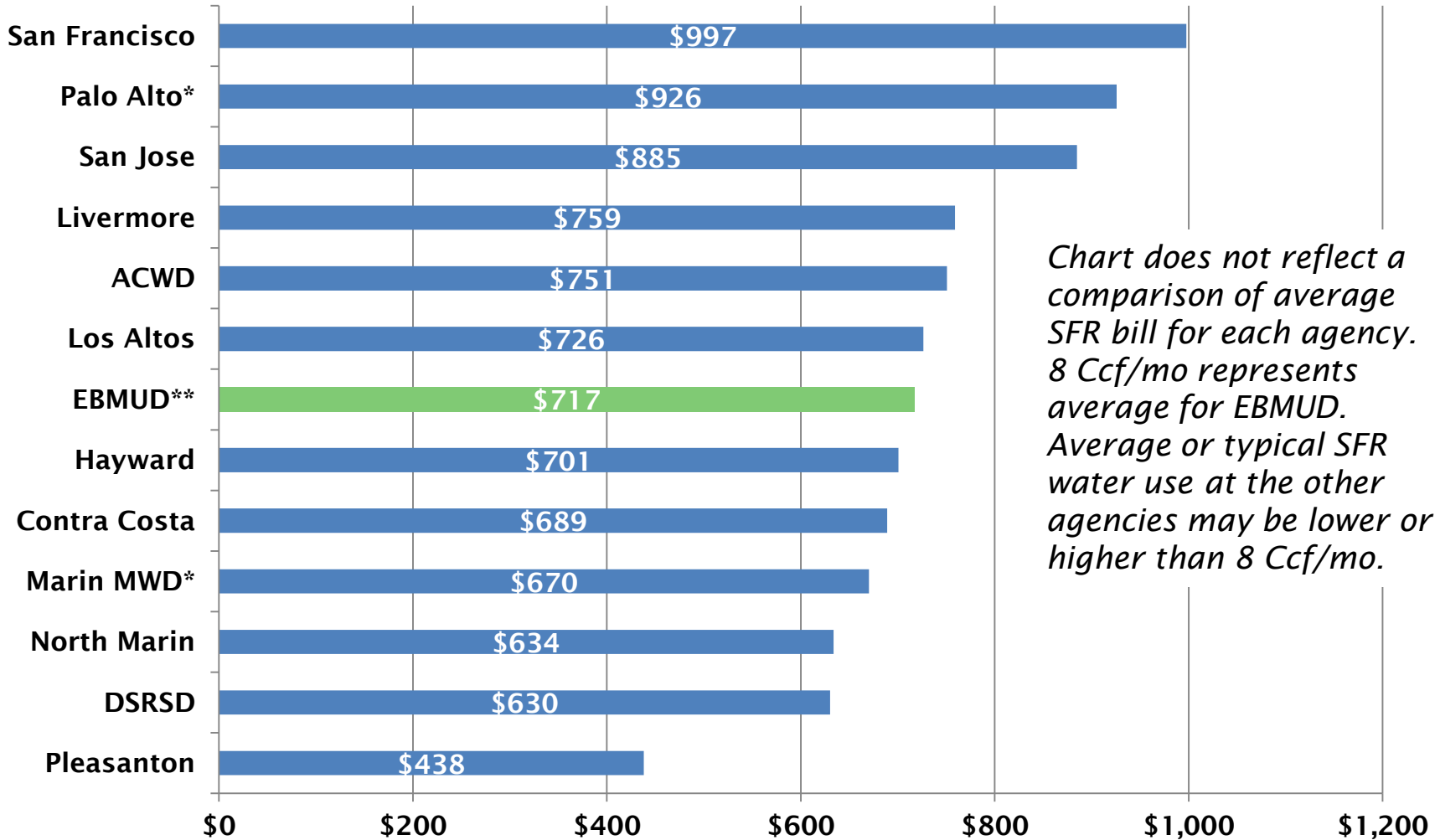


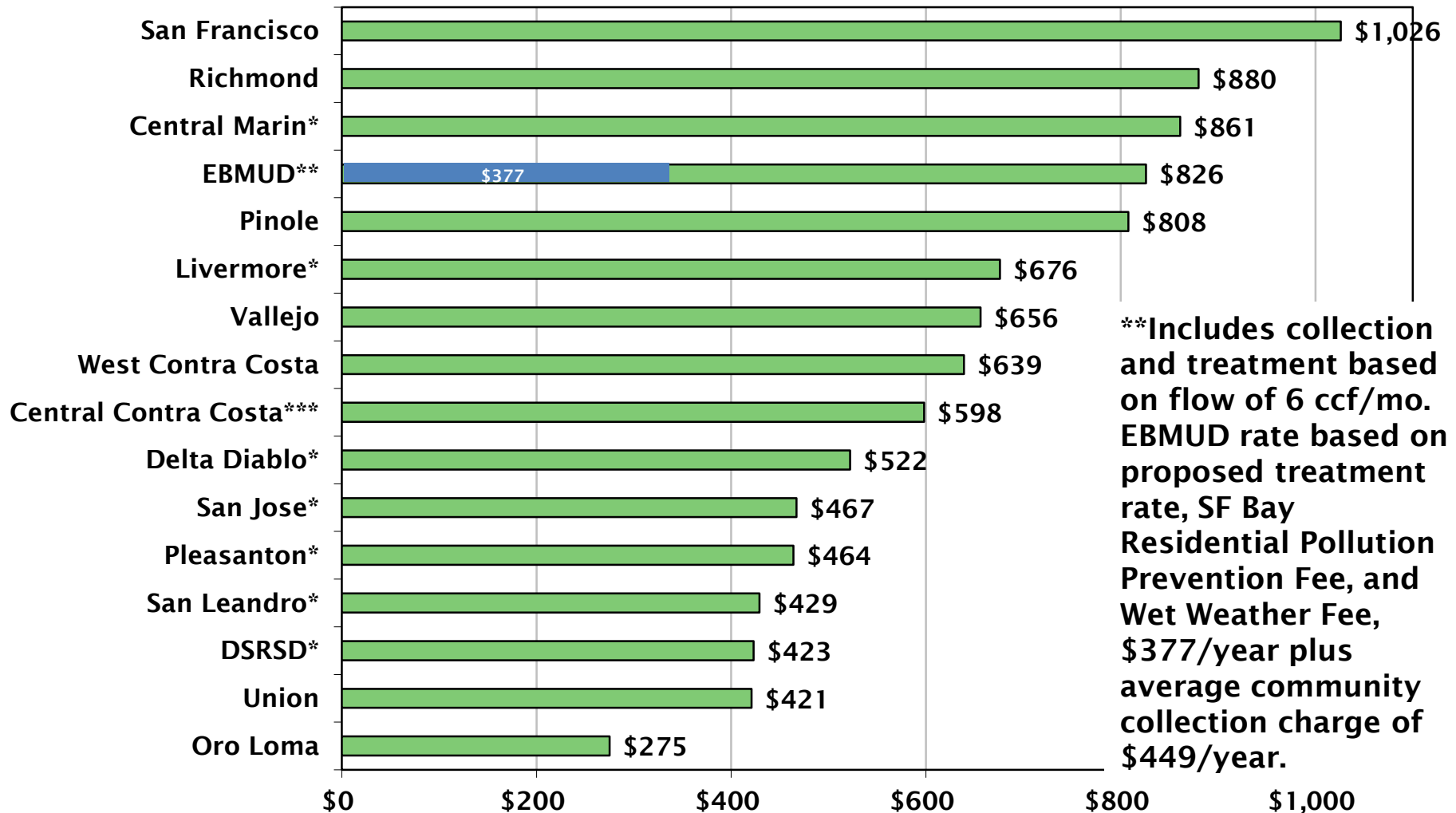
Chart does not reflect a comparison of average SFR bill for each agency. 8 Ccf/mo represents average for EBMUD. Average or typical SFR water use at the other agencies may be lower or higher than 8 Ccf/mo.

*FY19 rates, possible rate increases for July 2019

**Proposed FY20 rates

Wastewater Bills Calculated for 6 CCF/Mo Discharge

Annual Charge for SFR – Effective 7/1/19



**Includes collection and treatment based on flow of 6 ccf/mo. EBMUD rate based on proposed treatment rate, SF Bay Residential Pollution Prevention Fee, and Wet Weather Fee, \$377/year plus average community collection charge of \$449/year.

*FY19 rates, possible rate increases for July 2019
 ***Proposed FY20 rates

Budget and Rates Schedule



EBMUD is proposing rate increases:

July 1, 2019

- 6.5 percent for water charges
- 4* percent for wastewater charges
(*COS changes mean increases will range from 3% to 7% CHK)

July 1, 2020

- 6.25 percent for water charges
- 4 percent for wastewater charges.

For an average household using 200 gallons per day

= less than \$5 per month for water
= less than \$1 for wastewater

Notice mailed to all customers in April

Public hearing held: June 11, 2019 1:15 p.m. 375 11th St, 2nd floor Board Room, Oakland

Preparing for the Next 100 Years

REBUILD

Renew. Reinvest. Ready.

What does it take to deliver safe, clean water every single day? It's the combined force of nature, people and pipes behind the system that brings water and wastewater services to the East Bay. Nearly a century ago, with water supplies strained and water quality unreliable, citizens voted to create the East Bay Municipal Utility District and then approved a \$39 million bond measure to build the water system we enjoy today. This monumental public investment created Pardee Reservoir in the Sierra foothills, a 90-mile aqueduct, and a network of pipelines, pump stations, and treatment plants.

Today, we face a generational challenge. Ensuring that this aging water system will continue to serve us into the next century requires resolve and resources. EBMUD is focused on rebuilding the pipelines that deliver water to your home and doubling the replacement rate in just a few short years. Your rate dollars are also being invested to upgrade critical parts of the system like distribution tanks, pump stations, and wastewater treatment facilities that ensure safe, clean water and protect the bay.

There is a price for reliability. These improvements make our system stronger so we can continue to deliver reliable service to you. As a non-profit public agency, we set rates to cover the cost of service and to keep water and wastewater services running smoothly. We strive to keep our rates and budget in check while we undertake the vital work needed to rebuild this system.

We face a future of accelerating change: earthquakes, severe storms, drought, the rising cost of living, and rising seas. EBMUD is committed to meeting these challenges head on, and surpassing our customers' expectations of high quality, reliable water and wastewater service. We are ready.

Did You Know?

- The cost of water to the average EBMUD customer is \$1.84 per day—or less than a penny a gallon.
- EBMUD conducts more than 20,000 laboratory tests each year to ensure the safety of your drinking water.
- EBMUD is the second largest retail water agency in California.
- The public can enjoy recreation on 58,000 acres of EBMUD watershed in the East Bay and in the Sierra foothills—an area more than four times the size of Manhattan
- No matter how much or little it rains, more than 90% of EBMUD's costs are fixed.

Let's dig into questions



More information: ebmud.com