customer poet of the set of the s

Pipes reinvented A fresh start for old pipes

his year, a 123-year-old pipe emerged in Oakland. Underground since 1893, it was still delivering water to customers. While pipes this old are rare, many parts of our system date back to the 1920s and 1940s when cast iron was the prime pipe material of its time.

EBMUD is tackling the dirty and difficult job of replacing our 4,200-mile system of water mains. Corrosion, seismic hazards, landslides and age pose challenges—making pipes vulnerable to leaks and breaks—and consequently water outages.

That's why a new EBMUD team is focused on increasing the amount of pipes we replace from 10 miles up to 40 miles every year. The team is looking at everything from innovative pipe technologies to improved installation methods. A few years shy of celebrating our centennial anniversary, this is EBMUD's plan to ensure our pipes best serve today's customers—and those 100 years from now. In the Kensington Hills, on the Hayward Fault, our crews installed 1,800 feet of earthquake-resistant ductile iron pipe. This pipe technology is new to EBMUD, but, since the 1970s, has a perfect track record in Japan for surviving powerful tremors. The secret is in the pipe's flexible joints. During a large earthquake or landslide, the joints can compress, extend and deflect without failing.

In Richmond, San Pablo, Lafayette and Walnut Creek, EBMUD is using a trenchless pipeline renewal method that requires less digging and neighborhood disruptions. This method involves inserting a structural liner in the existing pipes, making them like new.

We are constantly on the move upgrading and renewing our water mains. You can expect to see EBMUD crews at work in your community, installing the next generation of pipes, to keep our water system running smoothly.



Are you ready if the tap runs dry?

Following a big earthquake or if a pipe bursts in your neighborhood, you may be out of water. Our crews work fast, but repairs on broken pipes take time. One of the most important things you can do to prepare for emergencies—big or small—is having enough water stored for you, your family and pets.

Your emergency water supplies at home will help you bridge the gap until water service is restored or water distribution sites are ready. EBMUD is meeting with local cities in the service area to discuss how, who and when water would be distributed to areas where it's needed after an earthquake.

When disaster strikes, EBMUD must assess damage and repair our pipes so the water can flow. Be prepared and setup your emergency water supplies.

Test your preparedness prowess

- I. How often should you rotate stored tap water?
 - a. Every 30 days
 - b. Every 3 months
 - C. Every 6 months d.
 - Never
- 2. Each family member needs 1-2 gallons of water per day and I gallon for pets. You should have enough water to last how many days?
 - a. I to 2 days
 - 3 to 7 days b.
 - c. 8 to 9 days
 - d. 10 to 12 days
- 3. Water should be stored in this kind of container:
 - a. Glass container
 - b. Plastic milk jug
 - c. Cardboard container
 - d. Clean, airtight food-grade plastic container
- 4. To purify water, your emergency kit should include:
 - Camping stove and pot
 - b. Measuring spoon or medicine dropper C.
 - Unscented liquid bleach
 - d. Clean cloth
 - e. All of the above

How did you do? Sharpen your emergency preparedness skills with EBMUD's tips and recommendations at ebmud.com/BeReady. I) C' 5) B' 3) D' ∉) €

Water-wise friendly reminders

Time is ticking

The deadline to apply for rebates of up to \$50 for the purchase of a water-efficient toilet or \$150 for clothes washers is Dec. 31, 2016. Apply today at ebmud.com/rebates

Fall in love with flora

Fall—it's the season to plant. Temperatures are dropping and soils are still warm. So, run don't walk to your local nursery. Make sure to choose less thirsty plants with our WaterSmart tag. Find nurseries that carry EBMUD-approved plants at ebmud.com/plants.

Keep saving

As always, be wise about watering outdoors. Avoid runoff on sidewalks, streets and hardscapes. Thank you for making conservation a way of life. More water-saving tips at ebmud.com/watersmart.



EAST BAY MUNICIPAL UTILITY DISTRICT

P.O. Box 24055 • Oakland, CA 94623 1-866-403-2683 www.ebmud.com

Board of Directors

John A. Coleman • Andy Katz • Doug Linney Lesa R. McIntosh • Frank Mellon William B. Patterson • Marguerite Young

> **General Manager** Alexander R. Coate

EBMUD Mission Statement

To manage the natural resources with which the District is entrusted; to provide reliable, high-quality water and wastewater services at fair and reasonable rates for the people of the East Bay; and to preserve and protect the environment for future generations.