

The background features a dark blue gradient with several circular gauges and arrows. One large gauge on the left has numerical markings from 140 to 260. Other smaller gauges and arrows are scattered across the scene, creating a technical or scientific aesthetic.

# EMERGENCY DRINKING WATER

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# HOW BAD WOULD A 7.0 HAYWARD FAULT EQ BE FOR LAMORINDA?

- Violent shaking, landslides on our side
- Substantial structural damage
- Damage/loss of transportation routes (isolation)
- Loss of power, as generation stations go off line
- Likely loss of communications, especially cell
- **Widespread loss of drinking water service**
- Possible disruption of gas service

# AND WHAT WOULD THAT MEAN?

- Many/most homes will still be habitable, sort of
- Will likely be stuck in place for awhile
- Expect to be on your own
  - Our side of hills probably more accessible to responders (680/24)
  - But response focus likely to be more on Bay side population
- Resources and recovery will come bit by bit
- Will be hard to get information

## AFTER THE SHAKING STOPS...

- It is expected that a major Hayward Fault earthquake will cause 1000's of water distribution system line breaks
  - Napa EQ (5.5) caused about 260 breaks
- Most EBMUD water storage tanks have cut-off values
  - Distribution system will slowly drain out
- Water service will be lost to many areas for days to weeks, or longer

## WHAT CAN YOU EXPECT FROM YOUR WATER UTILITY?

- EBMUD's (and any other water utility's) first priority is to get water into the system and pressurized for fire suppression
  - Not necessarily potable water to drink
- Provision of drinking water is the responsibility of local community government
- If not enough bottled water, then communities ask the County and State for supplies
- Then FEMA steps in
- It can take a few days, but responders have gotten faster

# WHAT DO FOLKS USE WATER FOR?

- Personal consumption: drinking and cooking
- Sanitation, laundry and cleaning
- Landscape and garden irrigation
- Washing cars and other things
- Fire suppression

# WHAT DO YOU USE WATER FOR DURING AN EMERGENCY?

- Personal consumption: drinking and cooking
- Sanitation, laundry and cleaning
- ~~Landscape and garden irrigation~~
- ~~Washing cars and other things~~
- Fire suppression

# PRIORITY #1: PREVENT DEHYDRATION

- How much water do you need to stay alive?
- How much on a hot day? Or if working hard?  
Or both?

# WATER FOR SANITATION

- Personal hygiene
- Washing cooking and eating gear
- Cleaning contaminated surfaces and objects
- Washing necessary clothing, bedding, towels
- Waste disposal

# EMERGENCY HOUSEHOLD WATER NEEDS

- Drinking and cooking water: 1 gallon per person per day
  - Has to be microbiologically stable (disinfected)
- Sanitation water: as available, 1 or more gallons per day
  - The cleaner, the better, but doesn't need to be perfect
- 7 to 10 days supply
- Don't forget your pets and other animals

# AND WHERE DO YOU GET THIS WATER?

- Bottled and stored
- Water heater
- Swimming pools and hot tubs
- Lakes, streams and other sources

## BOTTLED AND STORED

- Prepackaged bottled water doesn't go bad!
  - Ignore the expiration dates
- Can clean and refill plastic milk and beverage containers
  - Add 1/8 teaspoon (~8 drops, 0.6 ml) unscented household chlorine bleach per gallon, then cap or seal container
- 5-gallon containers are convenient
- Big barrels (50-60 gallons) are useful, but heavy and hard to move

# YOU WANT ME TO DRINK POOL WATER?

- There isn't anything toxic to you in it, for short-time use
- The chlorine levels need to be adequate, though
  - Disinfection is the key to success
- Pools and spas are great sources of sanitation water
  - Keep a bucket or two around

# USING OTHER SOURCES: LAKES, PONDS, CREEKS, RAINWATER, ETC

- Filter murky or colored water through clean cloth or coffee filter
  - Or let it settle overnight
- Then, boil for one minute
- Or, add unscented household chlorine bleach (1/8 teaspoon per gallon, ~10 ppm), shake, let sit 30 minutes
  - FYI, household bleach is about 6-8% chlorine
  - 1 tsp ~ 5 ml
- Iodine tablets, UV light pens, backpacking filters work, too
  - Follow directions
  - Best in combination (UV pens and filters don't necessarily get viruses)

# KEEP THESE SUPPLIES ON HAND

- 5-gallon buckets with handles
- Bottle of unscented household chlorine bleach
  - Change this out every year or two, it weakens
- Measuring spoons
- Coffee filters or clean cloths
- Refillable water bottles

# WATER REUSE

- Can you use your water more than once?
- Wash your face, then boil the potatoes?
- Cook the spaghetti, then flush the toilet?

## (HUMAN) WASTE DISPOSAL

- You might not have enough water to flush the toilet
- Urine is one thing, solid waste is another
- A 5-gallon bucket, suitable plastic bags and a seat that fits would be useful to have
  - Don't forget the toilet paper!

QUESTIONS?

More information on the Lamorinda CERT website:  
[lamorindacert.org](http://lamorindacert.org)