



Nellie Gail Ranch Community Education

Dr. Kenneth S. Cheng
Member, Nellie Gail Ranch-
Emergency Preparedness Committee

Qualifications

- Community Emergency Preparedness Instructor
- Disaster Medicine Instructor
- AHA CPR/First Aid Instructor
- FEMA/USPHS Provider - Hurricane Katrina
- FEMA/NIMS 100, 200, 700 Certified
- SAR-TECH – Wilderness Rescue
- High-Angle Rope Rescue Technician - SAR
- Alpine Rescue Technician – SAR
- Certified in Tactical Medicine
- Tactical Physician - SWAT





Water Preservation:
Why, When and How to
Save and Protect Your Water

(Pony Express November 2021)

A vertical strip on the left side of the slide shows a topographic map with contour lines, a river, and a road. The map is partially obscured by a green vertical bar.

Disaster Preparedness: Water

Objectives

1. Understand WHY it may be important to turn off water during a disaster
2. Understand WHEN it is appropriate to turn off water (and when you don't need to turn off other utilities)
3. Learn HOW to shut off water (and also provide your family with 50-100 gallons of drinking water)

Why Preserve Water?

- Rules of “3”
- One gallon per person per day

Types of Disasters

- Fire
- Floods
- Nuclear
- Electrical loss
- Earthquakes



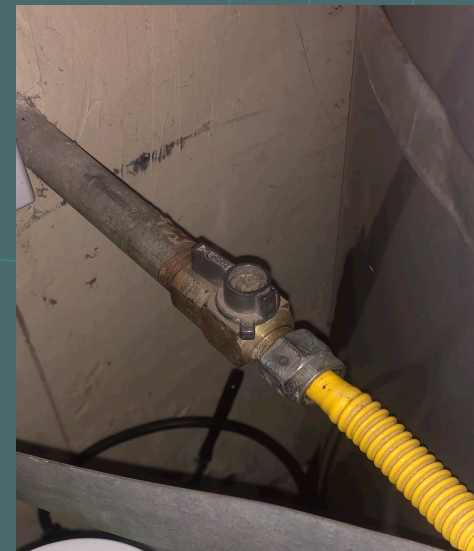


Utilities - Water

- Why is turning off the water so important during a disaster?
- Shouldn't I immediately fill buckets and tubs with water after an earthquake?
- How is shutting off my water main going to get me 50-100 gallons of clean drinking water?

Utilities - Water

- With the water main off, now turn off the hot water heater (turn the thermostat off and/or turn off the gas supply to the hot water heater.)
- Allow the water to cool (several hours.)

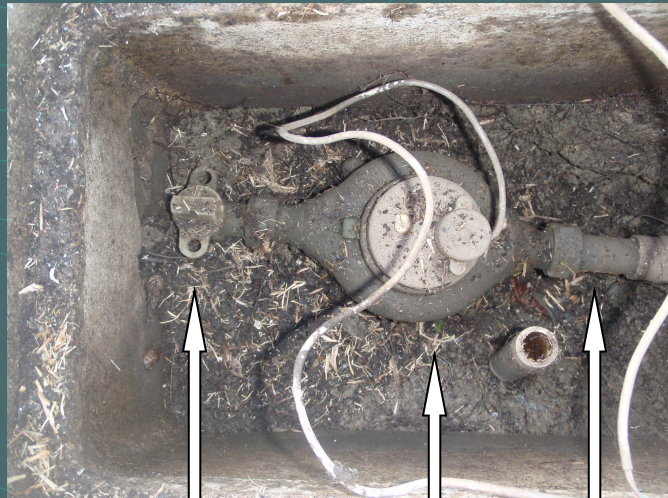


Utilities - Water

- Attach a hose to the hot water drain and open any hot water faucet in your house. You now have 50-100 gallons of clean drinking water.



Utilities - Water



Valve from
street main

Water
meter

Water main
to House

Utilities - Water

- How do I turn off my water?
 - Locate your water meter
 - Lift the cover with your gas/water tool.
 - Identify the water gauge
 - The valve will be between the gauge and the street
 - Use your gas/water tool and turn the valve 180 degrees



A vertical strip on the left side of the slide shows a portion of a topographic map with contour lines and a green shaded area.

Water Storage (pre-disaster)

- Water can spoil if not stored properly (stable temperature, proper container, avoiding light)
- Water storage barrels available (“blue barrels”) in different sizes (15-55 gal)
- Unscented bleach to preserve non-store bough water up to 24 months (8 drops/gallon or 5.5 tsp/55 gallon drum)

Water Storage (pre-disaster)





Utilities - Gas

- Why is turning off gas important?
- When should you turn off the gas?
- How do I identify a gas leak?
- How do I turn off the gas?

Utilities - Gas

- Tips on finding a gas leak...
 - Do not use any electrical appliances
 - Do not use matches
 - Do us a flashlight (LED preferred)
 - Do open windows

Utilities - Gas

- Locate your gas meter
- Turn off your gas only if you know or are suspicious of a leak
- When turning off the gas, make sure valve is turned a full 90 degrees until valve stops



Utilities - Gas

- Should I turn off the gas even if I don't suspect a leak?
- I have an automatic earthquake shut-off valve. Do I need to do anything else?





Utilities - Summary

- Turn off the water at the main valve
- Consider turning off the electricity
- Check carefully for gas leaks
 - Turn off the gas if a leak is identified
 - Leave the gas on if you are confident there is no leak



References

US Geologic Survey *“ShakeOut” Study*:

<http://pubs.usgs.gov/of/2008/1150/of2008-1150small.pdf>

US Geologic Survey *Uniform California Earthquake Rupture Forecast, V. 3*

<http://pubs.usgs.gov/of/2013/1165/>

Supplies (besides Home Depot, Lowes, Costco, Amazon, etc.):

2BeReady.com

sosproducts.com

emergencycase.com

Preparedness Information:

nelliegailranch.org

ReadyOC.com

RedCross.org

Ready.gov



Questions and Answers



Thank you!

Specific questions?
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