



Public Utility District No. 1
of Thurston County

NOVEMBER 2016 NEWSLETTER



Commissioner's Corner

By Linda Oosterman, District 3



An interesting article on purifying water during an emergency is posted below.

Purifying Water During an Emergency

The treatments described below work only to remove bacteria or viruses from water. If you suspect the water is unsafe because of chemicals, oils, poisonous substances, sewage or other contaminants, do not drink the water. Don't drink water that is dark colored, has an odor or contains solid materials.

Storing water safely

The best source of drinking water during an emergency is water you have stored with your emergency supplies.

- Store one gallon of water per person per day--enough for at least three days.
- Store-bought, factory-sealed bottled water is best. Check for an expiration date and replace as needed.
- If you choose to fill your own water containers:
- Collect the water from a safe supply.
- Store water in thoroughly washed plastic containers such as soft drink bottles. You can also purchase food-grade plastic buckets or drums.
- Seal water containers tightly, label with date, and store in a cool, dark place.
- Replace water every six months.
- Never reuse a container that held toxic substances such as pesticides, chemicals or oil.

Purifying by boiling

If your tap water is unsafe, boiling is the best method to kill disease-causing organisms.

If tap water is unavailable, the following may be considered as potential water sources. Water taken from these sources should be boiled before drinking.

- Rainwater
- Lakes
- Rivers and streams
- Natural springs
- Ponds

Continued on page 2

921 Lakeridge Way SW, Suite 301, Olympia, Washington 98502-6081

(360) 357-8783 • Toll Free (866) 357-8783 • Fax (360) 357-1172 • www.thurstonpud.org

Caution: Many chemical pollutants will not be removed by boiling. Cloudy water should be filtered before boiling. Filter cloudy water using coffee filters, paper towels, cheesecloth or a cotton plug in a funnel.

- Bring the water to a rolling boil for at least one full minute.
- Let the water cool before drinking.
- Add two drops of household bleach per gallon to maintain water quality while in storage.

Purifying by adding liquid chlorine bleach

- Treat water by adding liquid unscented household bleach, such as Clorox or Purex.
- Household bleach is typically between 5.25 percent and 8.25 percent chlorine. Read the label.
- Avoid using bleaches that contain perfumes, dyes and other additives. Be sure to read the label.
- Cloudy water should be filtered before adding bleach.
- Place the water in a clean container. Add the amount of bleach according to the table below.
- Mix thoroughly and let stand for at least 60 minutes before drinking.

Treating water with household bleach containing 5.25-8.25 percent chlorine

Volume of Water to be Treated	Bleach Solution to Add
1 quart/1 liter	5 drops
1/2 gallon/2 quarts/2 liters	10 drops
1 gallon	1/4 teaspoon
5 gallons	1 teaspoon
10 gallons	2 teaspoons

Caution: Bleach will not kill some disease-causing organisms commonly found in surface water. Bleach will not remove chemical pollutants.

Update on PUD's Capital Improvement Plan, 2017-2021

In 2014, the PUD had community meetings in Thurston, Lewis and Pierce counties to engage our customers in a discussion on how to best prepare for and fund capital improvements necessary in the coming years. After receiving public input, the Board of Commissioners made a decision to pay for ongoing operations and maintenance costs from rates and to pay for capital improvements and replacements from capital surcharges. The infrastructure of each system is unique to each water system of the PUD's 160 water systems, but generally, infrastructure refers to the wells, pumps, water mains, pump houses, booster pumps, service lines, water meters, reservoirs, treatment systems, electrical systems, and other associated equipment.

Capital surcharges are used to fund system replacement at the end of an asset's life cycle. We developed and use an integrated asset management system to estimate when things need to be replaced. A capital surcharge of \$1.00 per month per home, or per equivalent residential unit for other facilities, was implemented beginning January 1, 2015. In 2016, this surcharge increased to \$2.90, and it is projected to increase to \$4.80 on January 1, 2017. The PUD made a commitment to you that we will be good shepherds of these monies you pay as surcharges and only use them for infrastructure replacement. The projected capital surcharges per month, for the next few years, are listed below:

Year Capital Surcharge

2017	\$4.80
2018	\$6.70
2019	\$8.60
2020	\$10.50

Based on the replacement schedule in the asset management plan (AMP), our capital improvement plan (CIP) spending funded by surcharges for the next five years is outlined below:

Year CIP Projected Expenditures

2017	\$647,650
2018	\$460,477
2019	\$443,271
2020	\$430,320
2021	\$406,423

A summary of these projected CIP expenditures, for the years 2017 – 2021, by category, follows the article in this newsletter. A detailed breakout, outlining system improvements/replacements for each water system, for 2017-2021, based on infrastructure replacement schedules from the AMP can be found on the District's web site at <http://www.thurstonpud.org/projects.htm>. Our CIP work and other achievements for the past few years are also listed on the web site at the link above. If you would like a copy of any of these documents mailed to you, please contact Carrie Bowen, cbowen@thurstonpud.org, (360) 357-8783, or toll free at (866) 357-8783.

We have not used any of the capital surcharge funds to replace infrastructure so far. We have been using other PUD capital funding for replacements and allowing surcharge monies to accumulate. The capital surcharge account has **\$111,713.96** in it as of August 8, 2016, and we expect to begin using these monies at the beginning of 2017.

Projected Capital Improvement Plan Costs – Estimated Using the Asset Management Plan

Item No.	Total Estimated Costs				
	2017	2018	2019	2020	2021
CI-41 Valves Total Estimated Costs Per Year	\$20,000	\$20,000	\$0	\$0	\$0
CI-44 Pumphouses Total Estimated Costs Per Year	\$30,000	\$40,000	\$0	\$58,000	\$26,000
CI-53 Construction to be completed	\$90,000	\$0	\$0	\$0	\$0
CI -62 Treatment Total Estimated Costs Per	\$36,300	\$35,400	\$87,950	\$16,560	\$20,850
CI-65 Pressure Tanks Total Estimated Costs	\$41,200	\$34,240	\$42,900	\$52,440	\$60,180
CI-66 Miscellaneous Total Estimated Costs	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
CI-68 Well Drilling Total Estimated Costs	\$0	\$0	\$0	\$0	\$0
CI-71 Electrical Total Estimated Costs Per	\$32,300	\$33,600	\$17,700	\$11,100	\$15,200
CI-75 Meters Total Estimated Costs Per Year	\$69,300	\$37,458	\$32,300	\$23,200	\$25,550
CI-76 Pumps Total Estimated Costs Per Year	\$144,300	\$118,752	\$122,400	\$129,400	\$120,800
CI-79 Tracy 1 Total Estimated Costs	\$20,000	\$0	\$0	\$0	\$0
CI-80 Ivan Total Estimated Costs (Contact	\$0	\$22,000	\$0	\$0	\$0
Total Estimated CIP Costs Per Asset Management Plan	\$533,400	\$369,450	\$353,250	\$340,700	\$318,580
15% Contingency	\$80,010	\$55,418	\$52,988	\$51,105	\$47,787
Administrative Cost of All Projects	\$34,240	\$35,610	\$37,034	\$38,515	\$40,056
Total Cost Estimates	\$647,650	\$460,477	\$443,271	\$430,320	\$406,423