August 2015

DOH 331-562

Drinking Water State Revolving Fund

City of Port Townsend New surface water filtration system and reservoir



When Port Townsend residents turn on their taps, they receive water that has traveled from the Olympic Mountains, through a forest, two rivers, two lakes, and 29 miles of transmission pipe.

In 2013, the State Department of Health notified the City that conditions and current management practices for the watershed were such that the planned UV treatment would not be sufficient without additional watershed protection measures.

Based on a qualitative comparison and the relative costs of filtration vs. enhanced watershed protection, the City elected to build a new water filtration plant.

| Scope of the projects |
|---------------------------|
| The City has received two |
| Drinking Water State |
| Revolving Fund loans to |
| help finance the water |
| treatment facility and a |
| replacement reservoir. |

| Water Filtration System and Reservoir | | |
|---|--------------|--|
| Funding Source | Amount | |
| Drinking Water State Revolving Fund (Loan 1) | \$5,053,250 | |
| Drinking Water State Revolving Fund (Loan 2) | \$6,896,007 | |
| Total budgeted to date | \$11,829,764 | |
| Lower 1% interest rate for will save the City of Port Townsend over \$2.8 million for the 20-year term ¹ . | | |

One loan (for about \$5

million) will help pay to pilot test, design and build a low-pressure membrane filtration and chlorination treatment facility on city-owned property.

The project will include a parking area, landscaping, storm drainage, an access road, sewer, security monitoring system upgrades and power service. In addition, Port Townsend will replace its deteriorating 5-million-gallon concrete storage reservoir. The reservoir is over 35 years old, and it does not meet earthquake protection standards. Total project cost for both projects is approximately \$17 million.

The city also will install a booster pump station to permit water transfer from the new reservoir to the existing 1-million-gallon standpipe to supplement available water as needed. Total project cost for this project is \$9 million. This second DWSRF loan request is for a portion of that total amount (\$6,896,007).

Construction began in 2015 and is scheduled to be completed by October 31, 2016.

¹ Assumes 2.75% interest rate and 5% cost to issue bonds and service debt.



Partnerships for safe, reliable drinking water



Public health benefits

Water from rivers, lakes and streams is called surface water. Federal law requires that it be carefully monitored and treated because it is more vulnerable to contamination than well water.

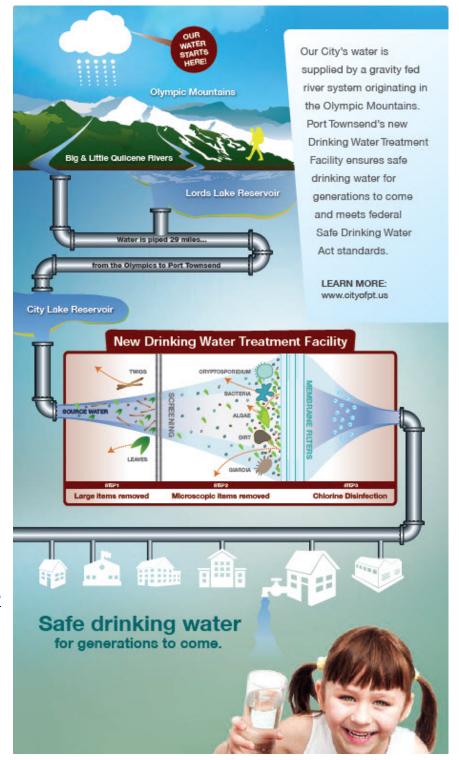
The Long Term 2 Enhanced Surface Water Treatment Rule requires surface water systems to be capable of filtering out tiny parasites, such as *Cryptosporidium*, which can cause gastrointestinal

illness. Port Townsend's new filtration plant will meet standards set forth in the law.

Port Townsend has a gravity fed water distribution system that involves piping water 29 miles from the Big and Little Quilcene Rivers. Port Townsend provides 12 million gallons of water to the Port Townsend Paper Mill – about 90 percent of the total water demand. The mill will connect its potable water system to the City's distribution system to receive water from the new treatment system

> Graphic compliments of City of Port Townsend

Want to learn more? DWSRF success stories are available online at www.doh.wa.gov/DWSRFP rofiles.



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