



Drinking Water State Revolving Fund

City of Mabton

A rural community in Eastern Washington

The City of Mabton incorporated in 1902, on the site of a Northern Pacific Railway stop, where the company had built a water tower. Today, the city can boast 105 years of experience owning and operating a domestic water system.

The water system pumps groundwater from two wells into an 800,000-gallon reservoir, disinfects it with chlorine, and distributes it to 2,312 people on about 632 active metered connections. However, like many rural communities that attracted settlers at the turn of the last century, Mabton faces three challenges: deteriorating infrastructure, a declining supply of quality source water, and continuing economic issues with fewer ratepayers to shoulder the cost of improvements.

Challenges

Time: Deteriorating infrastructure

Mabton's distribution system is more than 75 years old and half the mains are 4" diameter cast iron. It doesn't meet fire-flow requirements and 38 percent of the water is lost to leakage. Besides wasting precious water, leaks increase the cost of pumping and treating water—and represent a serious health threat to the people who drink it.

The city has one 39-year-old 800,000-gallon welded-steel reservoir described as "rusty" and "corroded" with "multiple holes to daylight in the roof." Workers can't clean the only reservoir without disrupting water service and further degrading fire flow.

Source water: Declining supply

Well 3 contains excess nitrates, Well 5 has a hydrogen sulfide level that prompts customer complaints, and Well 4 has a history of failure. Without Well 4 the city can't meet maximum demand on hot summer weekends without fear of draining the reservoir unless it stops the booster pumps. Booster pumps maintain system pressure. Stopping them reduces leakage, but also increases the risk of contamination.

The chlorination system functions with Well 4. When Well 4 fails, city staff must operate the chlorination system by hand, making it difficult to gage the proper amount of chlorine to apply.

Funding: Continuing economic issues*

In the City of Mabton, the average household income is \$18,000, based on a 2011 income survey. About 14 percent are unemployed and 29 percent live below poverty level.

By contrast, in Washington State the average household income is \$77,232. About 9 percent are unemployed and 13 percent live below poverty level.

* 2008-2012 American Community Survey 5-year estimates

Funding Sources		Status
DWSRF loan for new well	\$1,260,000	Received
DWSRF loan forgiveness for new well	\$540,000	Received
Source Water Protection Grant for Well 6 and Well 3	\$30,000	Received
Predesign Grant for chlorination and generator design	\$19,000	Received
CDBG grant for reservoir	\$1,000,000	Offer list
DWSRF loan for reservoir	\$1,518,000	Offer list
Total funding	\$4,367,000	
Total project costs	\$6,000,000	
Mabton applied to USDA Rural Development to cover the difference of -\$1,633,000.		

Solutions and economic growth

Last year, the City of Mabton started a moratorium on new connections because it can't meet summer water demands. Without new connections, the water system can't grow or receive more revenue from new ratepayers to fund improvements.

To address infrastructure issues, Mabton requested \$6 million in loans and grants from the Drinking Water State Revolving Fund, Community Development Block Grant (CDBG) and USDA Rural Development.

DWSRF approved funding of \$1,800,000 for a new well in the 2013 funding cycle. In 2014, we offered a loan of \$1,533,180 to purchase a 1-million-gallon reservoir, improve the chlorination, and relocate a diesel generator. See all funding sources below.

These projects will help to ensure a safe and reliable water supply, allow Mabton to grow, and support new businesses.

Want to learn more?

More DWSRF success stories are available online at <http://www.doh.wa.gov/DWSRF.aspx>