

CITY OF FORKS WATER SYSTEM PLAN SUMMARY

OBJECTIVE

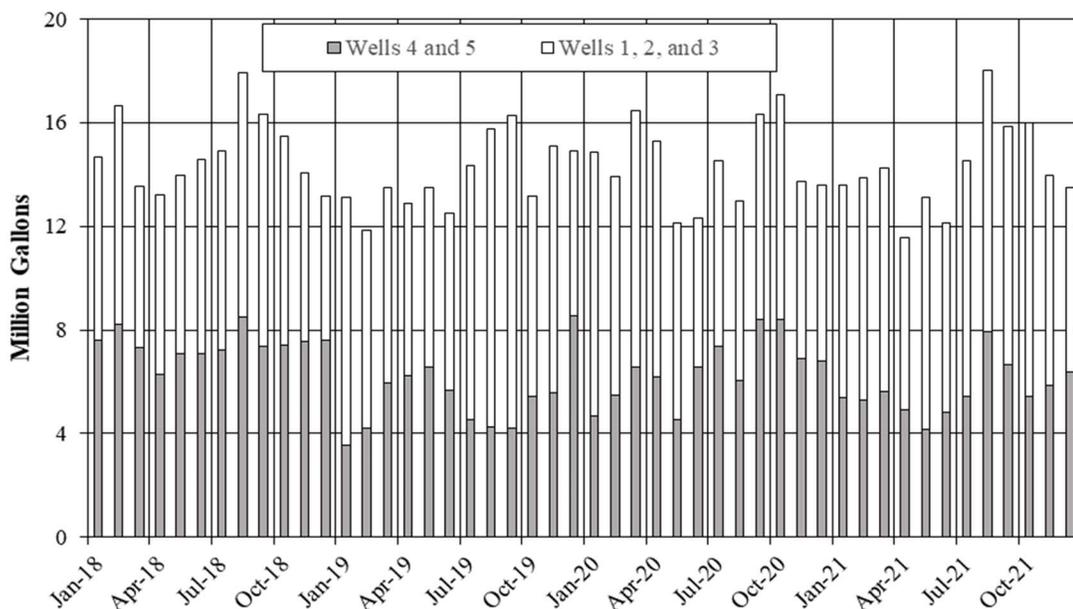
- The City’s Water System Plan (WSP) is a Planning Document for the water utility that should be updated every 10 years (WAC 246-290-100).
- Evaluates system for adequate supply of good quality water (protecting public health and support economic growth).
- Analyzes available water resources (sources of supply) and demands being placed on those resources.
- Compares existing water system capacity to projected future demands.
- Provides a Financial Plan and Improvement Program to implement and fund future water system improvements.

TIMELINE

- The City’s draft WSP was submitted to the Washington State Department of Health (DOH) in August 2022.
- Review comments from DOH were received June 2023.

WATER SYSTEM OVERVIEW

- See Figure 1-3 for a map of the Existing Water Facilities.
- The City receives water from 6 wells which produce an average of 172 MG per year.



- 3 Reservoirs hold 1.9 MG of water.
- Approximately 132,000 feet of pipe.
- The City complies with Water Quality Regulations and distributes an annual Consumer Confidence Report to all water system customers.

PROJECTED FUTURE GROWTH

Year	Population	Average Day Demand, gpd	Maximum Day Demand, gpd	Peak Hour Demand, gpm	ERUs
2021	4,611	466,849	884,130	1,011	3,283
2031	5,026	492,548	929,810	1,079	3,518
2041	5,340	523,320	987,900	1,143	3,738

(1) ERU stands for Equivalent Residential Unit.

Year	Annual Demand, MG
2021	170
2031	180
2041	191

WATER SYSTEM PLAN SUMMARY

- The City has adequate Water Rights and Source Capacity; however, Well 1 is not used due to sulfur odor. The City is currently investigating a solution.
- The City has adequate Storage Capacity and plans to abandon Reservoir 1 (150,000 gallons) in the near future.
- Distribution system deficiencies (customer water pressure and fireflow) cannot be fully identified because a Water System Computer Model was unable to be calibrated. Additionally, the City currently loses approximately 26% (three year average) of water produced due to leakage.

RECOMMENDED CAPITAL IMPROVEMENTS

- 2021-2031:
 - Annual leak detection and leaking pipe replacement.
 - 2 Distribution Projects including analyze and calibrate the Water System Computer Model and amend the WSP.
 - Reservoir 2 and 3 seismic upgrades.
- 2031-2041:
 - Annual leak detection and leaking pipe replacement.
 - 2 Distribution Projects
 - Replace Well 1 if necessary
- Water rates (Ordinance 643) combined with outside financing is projected to fund operations and Capital Improvements through 2031.

WATER USE EFFICIENCY

- DOH requires the Water Use Efficiency (WUE) Program to be adopted every 6 years.
- Previous WUE goal was adopted November 11, 2015 primarily focused on reducing DSL.
- DSL has been reduced from 47% in 2015 to 25% in 2021.
- A public forum to re-establish WUE goals was to be held in 2021, but was cancelled due to Covid.
- Recommend maintain and re-establish WUE goals to continue to reduce DSL to 10% or below by 3.5% per year. A public workshop to be held in 2024.

Year	Percent Unaccounted-for Water Goal
2021	25.0%
2022	21.5%
2023	18.0%
2024	14.5%
2025	11.0%
2026	10.0%