



Public Works Memorandum

To: Lilith Vespier, Development Services Manager

From: Tom Wachholder, Public Works Director

Date: November 2, 2021

Subject: Water and Wastewater Capacity

Water Rights Summary: The City's water rights can be found in the February 2018 Water System Plan, see table below. The plan indicates that the City currently serves 3,257 ERUs (Equivalent Residential Units). The City has un-interruptible water rights to serve the 20-year projected maximum day demands of 2,145 gpm for a projected 5,033 ERUs. This indicates that the City anticipates and is able to serve an additional 1,776 ERUs over the 20-year planning period.

The current limiting factor for water services may be a lack the infrastructure to deliver the water through the system. Field testing of the existing capacity to deliver water through the system is planned to occur in the next few months.

Type	Number	Instantaneous		Annual ⁽¹⁾ (acre-feet)	Annual ⁽²⁾ (acre-feet)
		Interruptible (gpm)	Un-Interruptible (gpm)		
Surface Water	4	-	682	1,100	-
	8105	-	673	1,086	-
	S4-28122	1,427	-	90	546
	S4-33068(A)	493	31		702
Surface Water Subtotal		1,920	1,387	2,276	1,248
Ground Water	437-A	-	1,001 ⁽⁴⁾	-	1,100
	G4-29958	2,000	-	-	900
	G4-33068(B)		1,266	702	
Ground Water Subtotal		2,000	2,653	702	2,000
TOTAL⁽³⁾		3,920	2,653⁽⁴⁾	2,978	3,248

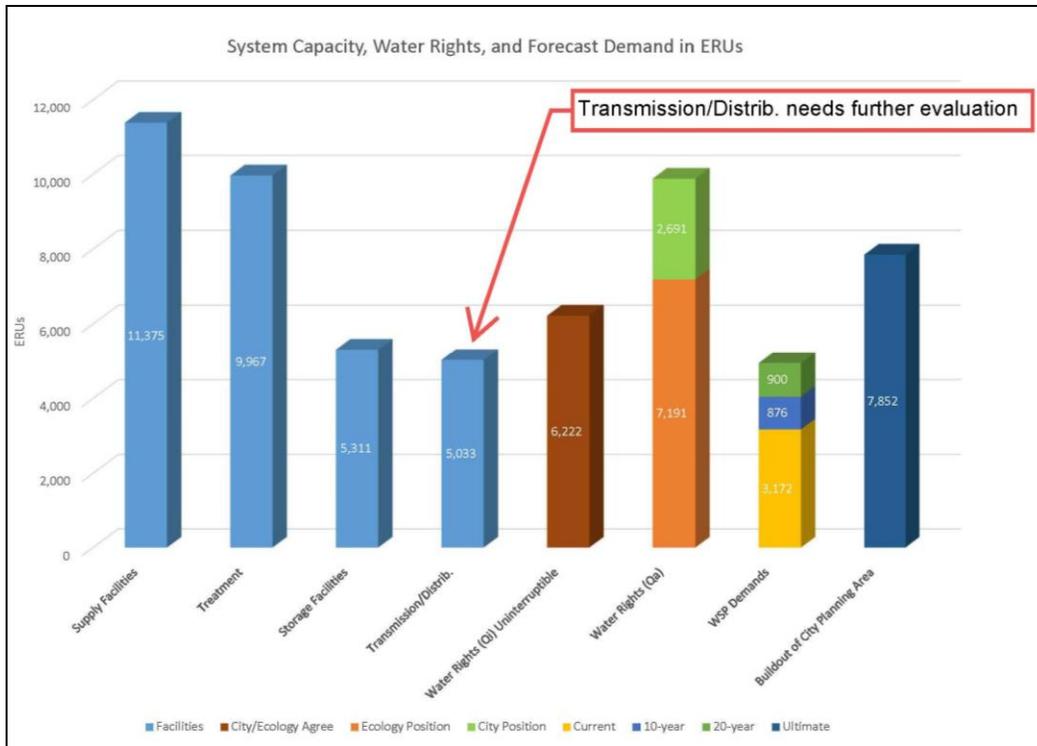
(1) Primary water rights. Additive.

(2) Supplementary water rights. Non-Additive.

(3) The Qi for Certificate 437-A is supplemental or non-additive so it is not added to the total water rights

(4) Rights 4, 8105, S4-28122, and G4-29958 are for Icicle Creek, while right 437-A is for the Wenatchee River.

Icicle Work Group: The Icicle Work Group (IWG) was formed in December 2012 to mitigate water right litigation through collaborative solutions for water management within the Icicle Creek Watershed. The City is one of several stakeholders participating on the IWG to identify and fund water saving projects. For example, the IWG partially funded the City's recent smart water meter project which provides more accurate meter reads allowing to City to isolate domestic water loss areas. If the pending litigation on water rights is resolved in the City's favor, the City will be able to serve 9,882 ERUs.



Wastewater Treatment Plant Capacity Summary: The City’s September 2017 Wastewater General Sewer Plan and Facility Plan (Sewer Plan) defines the Sewer Service Planning Area to include the Leavenworth city and UGA, and some areas out the UGA in the Ski Hill area. The September 2017 Sewer Plan indicates that the City currently serves a population of 1,990 people. The Sewer Service Area projected 2040 population is 2,924 with a projected daily demand of 0.510 million gallons per day (MGD). The current design capacity of the Wastewater Treatment Plant is 0.650 MGD. This indicates that the City anticipates and is able to serve an additional 934 people by the year 2040.

Currently, the Wastewater Treatment Plant upgrades to remove phosphorus are near 100% complete.

Wastewater Collection System: The wastewater collection system is scheduled for rehabilitation work in 2022. This rehabilitation work will repair pipe deficiencies identified in the City’s 2008 General Sewer Plan. In addition, the 2022 rehabilitation project will eliminate a combined stormwater/sanitary sewer connection on Whitman Street. Other combined systems may be added to future rehabilitation efforts.

Developer Requirements: As the City’s Public Works Department continues to identify limiting factors associated with the water system in terms of distribution, each development will need to be evaluated at the time of application to ensure adequate delivery of water and wastewater services.