

**ATTACHMENT E**  
**CCWUA System Flow Testing**

# Cougar Creek Water System Flow/Pressure Testing Data

**Date of testing = 5-19-2022**

On 5-19-2022, Dion Holton from the Idaho Rural Water Association assisted Loel Fenwick, Allen Lieske, and Craig Lee with measuring the water flow volumes and water pressures at 5 flushing hydrant locations. Flows and pressures were measured with and without Well No. 2 pump in operation. The water pressure was also measured at a location remote from the flushing hydrants during one of the flow tests. The results are tabulated below, following the Summary.

## Summary:

The flows were generally about 150 gallons per minute without Well No. 2 pumping and about 175 gpm with the addition of Well No. 2. One location, the flushing hydrant adjacent to Loel's home, had a lower flow rate about 75 gpm without the well's assistance and about 100 gpm with the well pumping. The dynamic flowing pressure measured at the flushing hydrants during the flow testing was not able to be measured with the equipment the Dion brought. However, the pressure at Loel's basement was measured while the flow test was happening at 3778 Cavanaugh Bay Road and was found to be 30 psi without Well No. 2 pumping and 50 psi with Well No. 2 pumping. The static pressures at each flushing hydrant were measured and found to vary between 67 and 90 psi without Well No. 2; with Well No. 2 pumping these static pressures increased to between 73 psi and 105 psi.

The five flushing valve locations were as follows:

1. At the entrance to Waterbird Landing near the paved Cavanaugh Bay Road.



2. 3778 Cavanaugh Bay Road (adjacent to Joyce Chapman's property)



3. 43 Dutch Harbor (adjacent to Craig Lee's lot)



4. Arnold Drive (adjacent to the CCWU control building under the power line)

5.



6.

7. Tangle Foot (adjacent to Loel Fenwick's house)



5-19-2022 Flow Testing @ C.C.W.A. System

Test # Location	Static Press.		Flow Volume		Static Pressure @ Remote Location
	w/o Well	w/ Well	w/o Well	w/ Well	
① Water Bird Landing	67 psi	73 psi	150 gpm	175 gpm	
② 3708 Cav. Bay Rd.	85 psi	90 psi	150 gpm	175 gpm	At Loops Basement 30 psi w/o well   50 psi w/ well
③ 43 Dutch Harbor	90 psi	92 psi	150 gpm	175 gpm	
④ Arnold Drive	85 psi	90 psi	≈ 100 gpm	≈ 100 gpm	
⑤ Tangle Foot	92 psi	105 psi	75 gpm	100 gpm	

NOTES:

1. Flow volumes were measured using an Akron venturi meter.



PROJECT	COVER CREEK WATER	BY	CL
LOCATION	SYSTEM TESTING	DATE	5-20-22
SCALE		DRAWN BY	
		CHECKED BY	