BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **CASCADIA WATER, LLC,** **Respondent.**	**DOCKET UW-240151**

WATER CONSUMER ADVOCATES OF WASHINGTON, INTERVENOR

RESPONSIVE TESTIMONY OF HARRY L. PALMER

FIRE PROTECTION AND RESPONSE

FIRE FLOWS

Exhibit HLP-3T

January 23, 2025

Q. Have you previously submitted testimony in this proceeding?

A: Yes, I presented testimony that was filed in this case on November 20, 2024, and marked as Exh-HLP-1T.

Q: What is the purpose of submitting this supplemental testimony?

A: The purpose of this testimony is to respond to the Joint Testimony of Matthew J. Rowell and Culley J. Lehman (Exh. MJR-CJL-1JT), regarding water supplies and fire protection, and to the letter from Terry Ney (Exh. MJR-CJL-3).

Q: Terry Ney states that fires hydrants are "essential" to providing adequate fire protection to residents of South Whidbey. Do you agree?

A: No. An adequate source of water is essential to adequate fire protection. Both fire hydrants and tenders can provide adequate water.

Q: What are significant differences between using hydrants and using tenders to supply water?

A: The principal difference is the in fire department operations. As Chief Ney mentioned, using tenders adds staffing to the fire. Fire engines require a minimum staff of three staff. A tender requires one. For this reason, in a perfect firefighting world, all structures would have a fire hydrant near them to use to fight fire. The reality in rural areas like South Whidbey is that generally, only commercial or high-density areas have hydrants. This is true not only within all the fire districts in Island County, but also the large majority of rural areas in the state. It has been this way for many decades. As a result, the fire districts in Island County, including South Whidbey, adapted and developed our water tender shuttle systems to compensate for the lack of hydrants.

Q: Does the tender system effectively provide fires protection?

A: Yes. South Whidbey fire department has fought and continues to fight many structure fires successfully using its fire tenders as its water supply. Again, the question is not hydrants or fire tenders, but an adequate source of water to fight fire. My point is that either works.

Q: In general, how does the tender system work?

A: The tender system on South Whidbey is as follows: Station 36, central to the district, does not have a water tender. Each of the five outlying stations has a tender. Two carry 3,000 gallons of water, one 2,800 gallons of water, and two 2,500 gallons of water. For a large structure fire not served by hydrants, during my tenure all five tenders were dispatched. Each tender carries a 3,000 gallon "fold-a-tank" which is a collapsible container to hold water from which an engine can draft. The first due tender would arrive, deploy its fold-a-tank and empty its water into it. That tender would then leave to find the closest available water source, either a hydrant, pond, swimming pool, etc. The second tender, once on scene, would do the same as the first, as would tenders 3-5. The five tanks on the ground would hold about 13,800 gallons of water available to the engines to use for firefighting. Depending on drive time, this usually results in a process that ensured a tender arriving on scene with more water at about the same time as the last tender was leaving to refill. Most structure fires on are extinguished with less equipment than I described for a large fire.

Q: How does the addition of fire flows to neighborhood water systems affect the ability to fight fires?

A: The addition of fire flows has no effect until the entire system is capable of delivering fire flows and hydrants have been installed. Until that occurs, only some homes benefit from water system upgrades and fire tenders are necessary to supply fire water. Tenders will also be necessary to extinguish wildfires from encroaching on neighborhoods even they have hydrants.

Q: Terry Ney's letter indicates that fire hydrants can result in potential reductions in insurance premiums for homeowners. How large might those savings be?

A: Generally, the savings in a homeowners fire insurance compared to the cost of installation of fire hydrants, hiring firefighters, or purchasing fire apparatus is negligible. Water supply accounts for approximately 40% of the evaluation by the Water Surveying and Rating Bureau (WSRB). During the WRSB's evaluation, they identify approximately 6-8 high risk structures in the district to evaluate water supply. Fire staffing and apparatus make up approximately 50+% of the rating. As an example, the district's last rating from the WSRB during my tenure was in 2017. Rural south Whidbey was downgraded from class 6 to class 7. The primary reason was that the district did not have a ladder truck with full-time staff. In order to keep the rating, I investigated the costs of purchasing a ladder truck and staffing it with full-time staff. The district outlay would have been a minimum of $1.4 million, paid for by the taxpayers. I asked my insurance company what the difference in insurance costs to me would be between a Class 6 and 7. At that time, I would have saved $52.46 per year.

Another financial consideration is that Whidbey Island taxpayers have invested millions of dollars in the tender system which will continue to be needed. Adding hydrants to existing water systems add another substantial cost for homeowners who will pay both

the cost of hydrants and tender system for only a marginal improvement in fire protection.

Q: Rowell and Lehman testify that, contrary to your testimony, two of Cascadia's water systems had fire flows when you served as fire chief (Exh. MJR-CJL-1JT at 23:9-12). Does that change the analysis of water supplies for fire protection?

A: I was apparently incorrect. I'm happy for the residents served by the systems to which they refer. Whether those systems have hydrants does not alter the fact that neighborhoods without hydrants are well protected by the tender system.

Q: How do you respond to the Rowell/Lehman criticism that you incorrectly referenced 1,100 gpm when discussing fire flows (Exh. MJR-CJL-1JT at 24:1-4)?

A: They state that I speak of 1,100 gallon "requirements" and that it is for "commercial" structure. They apparently misunderstand what I said. I stated that homes larger than 3,500 square feet should have 1,000 gallons a minute available to fight fire. The larger the residential structure, and we have many well in excess of 5,000 square feet, the more water it takes to put it out if the fire is growing. My reference to 1,100 gallons a minute was simply to state that 6" mains are capable of maintaining a flow of approximately 1,100 gpm. Commercial structures, based upon their use and construction, may require 2 to 3 times that amount of water to combat a large fire if unsprinklered.

Q: Rowell and Lehman imply that your analysis is flawed because the SWFW Community Risk Assessment and Standards of Coverage mentions Cascadia (Exh. MJR-CJL-1JT at 24:14-16). Are they correct?

A: The mention of Cascadia is not relevant to the analysis. The document identifies Cascadia as a Group A water system under Department of Health regulations.