Q&A Re: Water Supply and Fire Event on May 15, 2016

There have been a few questions regarding the water supply during and after the fire event of May 15, 2016. The following Q&A has been prepared to respond to those questions:

Q: It was reported that City officials were aware for nearly a decade that their water storage system was inadequate and could not meet the demand for fighting a sustained fire. Is this true?

A: Not true. EPCOR operated the water system in White Rock until October 30th, 2015 under the regulatory authority of the province of BC. EPCOR’s Total Water Quality Management (TWQM) project prepared in 2012 is when the public (including the City of White Rock) was made aware of the deficiencies and the proposed upgrades.

Q: What is the City’s water storage deficiency?

A: EPCOR commissioned a Water System Master Plan Update in 2013. The 2013 Water System Master Plan Update notes a potential storage deficiency of 1.55 million litres (ML) in the year 2049 using forecasted population projections and future demand that, according to that report, was identified in the 2010 Water System Master Plan Update.

Q: What plans does the City have to address the future water storage deficiency?

A: The City of White Rock intends to complete the TWQM project which included:

- the construction of a new 1.73 ML reservoir on the Oxford site, completed December 2015;
- the demolition of the 1.73 ML high reservoir on the Merklin site, completed April 2016; and
- the construction of a new 1.55 ML reservoir on the Merklin site, to be completed December 2016.

Q: Why did the City demolish the 1.73 ML high reservoir on the Merklin site?

A: The 1.73 ML high reservoir on the Merklin site did not meet current seismic standards and is to be replaced with the construction of a new 1.55 ML reservoir.

Q: Why did the City demolish the 1.73 ML high reservoir on the Merklin site prior to building the replacement 1.55 ML reservoir?

A: The site is too small to hold both during construction as the new reservoir at the Merklin site is being constructed in the same location as the demolished high tower.
Q: Did the City run out of water during the fire event of May 15, 2016?
A: No, but White Rock did contact Surrey to open emergency water connections from Surrey to White Rock as demands were exceeding our ability to maintain a sustainable supply of water.

Q: When was the last time the emergency water connections were used?
A: This was the first incident that required the use of the emergency water connections.

Q: The water connection(s) to the City of Surrey, can they be used for the City of White Rock to join Metro water services?
A: The water connection(s) to the City of Surrey are for emergency purposes only. Additional infrastructure would have to be installed in order for the City of White Rock to connect to Metro Vancouver. The approximate capital cost calculated in 2013 was $27 million.

Q: What made this fire event different than other fire events?
A: This was an extraordinary fire event calling for an unprecedented amount of water. It is estimated that the fire operations was using 400 litres of water per second (LS) for a peak period of approximately six (6) hours.

Q: What water capacity is the White Rock water system designed to handle?
A: The water system is designed to handle a fire event using 212 LS for 2.6 hours.

Q: Some properties in White Rock had no water during the fire event. Does this mean those properties are in danger if a similar fire occurred at their property?
A: No, as fighting the fire was a priority all available water was being pumped to provide sufficient water to the location of the fire. This would be the case for all fires thus there would be water to fight a fire as needed.

Q: Some properties in White Rock had discoloured water during the fire event. Why did that happen?
A: The discolouration was similar to what would be experienced when water lines are flushed from our fire hydrants. The water in the pipes was flowing at an exceptionally high velocity, as well as the well pumps were pumping very quickly from the aquifer, which caused the water to be very turbulent which caused the water to be discoloured.
Q: The City of White Rock, in consultation with Fraser Health, issued a boil water advisory. Why did the City feel it was necessary to issue precautionary boil water advisory?

A: The fire event placed an unprecedented draw on the water supply to low levels creating negative pressure in the water lines. The City was concerned that this negative pressure could result in bacterial contaminants entering the distribution system. As a precautionary measure, the City issued the boil water advisory.

Q: The boil water advisory was later lifted. What did the City do to ensure that the water was safe?

A: The City took water samples on the following Monday and Tuesday following the event on Sunday. The City, with the support of Fraser Health, lifted the boil water advisory once tests on all of the City’s water samples confirmed that there were no bacterial contaminants in the water supply.