



**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, APRIL 1, 2014**

SUBJECT SUPPLEMENTARY REPORT - BULK WATER DISPENSING STATIONS

ISSUE

The new bulk water dispensing station installation project is nearing completion. Prior to completing the third and final station, the Commission has requested staff to review an alternate solution for their consideration.

BACKGROUND

At its January 7, 2014 meeting, the Juan de Fuca Water Distribution Commission considered a staff report, Attachment 1, which outlined the status of the Bulk Water Dispensing Station project, with a recommendation to complete the third and final bulk water dispensing station in 2014 with \$50,000 in supplementary project funding. The report was tabled. Staff were directed to review an alternate solution to provide bulk water dispensing to potable bulk water haulers, specifically, to consider the implications of constructing new standpipes in one or more locations, that would be accessible only to potable water hauler permit holders who had tanker trucks outfitted with flow control equipment, redundant backflow prevention equipment and analog metering devices. The alternate solution would need to be achieved at no additional cost to the service area and meet all of the project objectives as outlined in the January report.

Currently, there is one commercial potable bulk water hauler, South Island Water Ltd., who is reselling the water. Aside from the fourteen bulk water carrier permit holders who obtain water for uses not requiring potability, there are also three other permit holders who haul water for personal domestic use.

Since the February Commission meeting, staff were copied on the attached Commission correspondence, Attachment 2, in which South Island Water Ltd. is claiming that the new bulk water dispensing stations locations are resulting in significant increased costs as a result of longer travel times and longer fill times due to slower fill rates. Further, the letter states that the Juan de Fuca Water Distribution Commission is 'no longer allowing the use of fire hydrants as a source of potable water for potable water delivery trucks'.

At the January and February Commission meetings, the following issues were identified by South Island Water Ltd.: 1) to provide an on-truck solution for water metering and backflow prevention; 2) the use of fire hydrants as a potable water source; and 3) the claim of additional travel and filling time that resulted in cost increases for South Island Water Ltd's customers, particularly in the Juan de Fuca Electoral Area. Staff have reviewed the issues and technical aspects and have concluded the following:

1. The project objectives set out in 2011 remain critical to ensure the water distribution system is protected from contamination and infrastructure damage. While there is an on-truck solution for backflow prevention and metering, these devices, along with a basic standpipe, would not meet the other objectives that are being met with the new bulk water dispensing stations. In order to construct a standpipe in a suitable location and provide the equipment that would be necessary to meet the objectives, the estimated costs would be comparable to the costs of the recently completed stations.

2. The correspondence referenced above implies the fact that fire hydrants are no longer allowed as a source of potable water, is a recent change. There has never been authorized use of fire hydrants as a source of potable water for potable water delivery trucks. Prior to the new bulk water dispensing stations, there were four designated standpipes for this purpose. Improper fire hydrant operation could result in distribution system infrastructure damage and impact to the hydrant's operating mechanism, leaving the hydrant inoperable for fire use.
3. The travel time between the old Otter Point Road standpipe in the District of Sooke and the new dispensing station in the District of Sooke is five minutes – a driving distance of 3.3 km. For filling time comparisons, a field test was conducted filling the CRD's 14,000 litre (3,700 US Gallon) water truck from the old Rocky Point Road standpipe and the new dispensing station in the District of Sooke, to confirm fill times. It is understood that the South Island Water Ltd. truck tanks are similar in size. When filling from the old standpipe, the truck took twelve minutes to fill – the flow rate was 1,167 litres/minute. When filling from the new dispensing station, the truck took fourteen minutes to fill – the flow rate was 1,000 litres/minute. The filling time difference was two minutes.

The focus of the discussion on this matter since January has been around an alternate solution for bulk water dispensing to mitigate the financial impacts South Island Water Ltd. is claiming are affecting their business and their customers. It must be noted that any change to the requirements for bulk water carriers, whether it be related to permitting, required equipment, billing, or end use of water, would be covered under a revised Section 105 of CRD Bylaw No. 3889 and apply to all permit holders. It would not be practical for the CRD to administer different operational, financial or administrative processes or procedures to accommodate different requirements for individual hauling companies.

ALTERNATIVES

Alternative 1: That the Juan de Fuca Water Distribution Commission direct staff to complete the third and final bulk water dispensing station in East Sooke as proposed in the January 7, 2014 staff report, and approve the \$50,000 funding requested in the 2014 capital plan to supplement the project budget.

Alternative 2: That the Juan de Fuca Water Distribution Commission direct staff to stop work on the third bulk water dispensing station project in East Sooke and undertake a more detailed analysis of alternate solutions for the provision of bulk water dispensing stations.

Alternative 3: That the Juan de Fuca Water Distribution Commission direct staff to install additional bulk water dispensing station(s), based on the current equipment design, at location(s) approved by the Commission, and approve an additional \$110,000 per station in capital funding in the 2014 capital budget.

IMPLICATIONS

Alternative 1

Under this alternative, the project would be completed as planned and the original project objectives would be met. Upon completion, three new bulk water dispensing stations in Langford, Sooke and East Sooke would be available to permitted water haulers. To complete the project, staff requested \$50,000 in supplemental project budget funding in the 2014 capital budget. The operational impacts for the water haulers are outlined in the background above.

Alternative 2

It is unlikely that alternate solutions for the provision of bulk water dispensing stations, such as constructing basic standpipes with some additional truck mounted equipment, would prove to be more cost effective than completing the current in-stream project, while meeting the original project objectives.

Alternative 3

Constructing additional bulk water dispensing stations would potentially decrease the travel time for some carriers. The current and/or future year capital budgets and operating and maintenance budgets would be adjusted to reflect the additional funding requirements.

CONCLUSION

The Juan de Fuca Water Distribution service has made a significant investment in completing the two new bulk water dispensing stations in the District of Sooke and the City of Langford to ensure that the water distribution system is protected from contamination and infrastructure damage. Much effort has gone into the planning, design, specification of equipment, and implementation of this project to get to the current state. Alternate solutions for bulk water dispensing could compromise the objectives of the project and are unlikely to result in cost savings. Completion of the third station in East Sooke in 2014 would complete the project as planned.

RECOMMENDATION

That the Juan de Fuca Water Distribution Commission direct staff to complete the third and final bulk water dispensing station in East Sooke as proposed in the January 7, 2014 staff report, and approve the \$50,000 funding requested in the 2014 capital plan to supplement the project budget.

Ted Robbins, BSc, CTech
General Manager, Integrated Water Services

TR:mm
Attachments: 2