



**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, JANUARY 7, 2014**

SUBJECT BULK WATER DISPENSING STATIONS

ISSUE

The new bulk water dispensing station installation project is nearing completion and has resulted in operational changes for bulk water carriers.

BACKGROUND

The new bulk water dispensing stations installed at various locations within the Juan de Fuca (JDF) Water Distribution Service area provide safe and effective facilities for bulk water sales.

Bulk water carriers who wish to purchase water from the dispensing stations may do so under permit, as outlined in Section 105 of Capital Regional District (CRD) Bylaw No. 3889. There are currently 16 bulk water carriers that hold permits, who use the water primarily for commercial purposes or for resale, both inside and outside the JDF water service area.

Prior to 2012, there were three designated bulk water dispensing stations at Langford (Millstream Road), Sooke (Otter Point Road), and Metchosin (Rocky Point Road). These stations consisted of standpipes, that:

- did not allow for accurate discharge/billing information;
- did not provide protection against hydraulic pressure transients, resulting from opening/closing operating valves too quickly;
- did not include a fixed backflow prevention device;
- were subject to damage resulting from freezing;
- were in locations that did not have adequate and safe site access and parking areas for the large tanker trucks.

Some carriers were also using fire hydrants as dispensing stations, which is prohibited.

To address these concerns, a project was initiated in 2011 to design and construct three new dispensing stations over 2011-2013, with an initial budget of \$180,000 for design and construction. The new stations were to be constructed at Langford (Henry Eng Road), Sooke (Sooke River Road), and East Sooke (East Sooke Road near Llanilar Road (currently serviced with a temporary hydrant filling station). The Langford and Sooke stations are complete and the East Sooke station will be completed in 2014.

The new bulk water dispensing stations would:

- allow for accurate electronic metered discharge/billing information captured through a smart card reader;
- include an automatic flow control valve to ensure the water distribution system is protected against hydraulic pressure transients;
- include a pressure reducing valve to ensure the carrier's equipment is protected against changes in distribution pressure;
- include heated meter and piping enclosures to prevent freezing – exposed piping is self-draining at the end of each filling cycle;
- include a high hazard reduced pressure backflow prevention device to provide redundant protection against water system contamination (the carriers are also required to have and test/maintain a backflow prevention device on their truck);

- be installed in locations with pressure zones that would not be impacted by sudden increased demand during filling cycles;
- be installed in locations where there are safe and designated access and parking areas.

Once the design work was complete, the packaged equipment prices were obtained, and the first two stations were constructed in Langford and Sooke, the actual costs per installation were exceeding the original budget estimates. To complete the first two stations (completed in 2012), and to complete the third station in 2014, the project budget required \$140,000 in additional funding, for an overall project budget of \$320,000, that has been approved by the Commission through the 2011-2014 budget approvals. Note: the \$50,000 funding request for 2014, included in this total, remains subject to Commission approval. There are no further plans to construct additional stations.

The new dispensing stations have resulted in the following operational changes for bulk water carriers:

1. Depending on the carrier's equipment and previous filling methods, the fill time may have increased as a result of the metering, flow and pressure control equipment designed to protect both the water system and carrier's equipment.
2. The elimination of the Metchosin standpipe, discontinued use of fire hydrants as dispensing stations, and new locations for the Langford, Sooke and East Sooke locations, may result in additional travel time for some carriers, depending on the delivery locations.

ALTERNATIVES

1. That the Juan de Fuca Water Distribution Commission direct staff to complete the third and final bulk water dispensing station in East Sooke in 2014 as proposed.
2. That the Juan de Fuca Water Distribution Commission direct staff to install additional bulk water dispensing station(s), at location(s) approved by the Commission, and approve an additional \$110,000 per station in capital budget funding in the 2014 budget.

IMPLICATIONS

1. With Alternative 1, there would be no further budget impacts as a result of this project. The bulk water carriers would have to adjust their delivery schedule and rates as required to accommodate the operational changes resulting from the new stations.
2. With Alternative 2, the budget impact would be determined by the number of additional stations recommended by the Commission.

SUMMARY

The new bulk water dispensing station project will be completed in 2014, with three new stations upon completion, in Langford, Sooke and East Sooke. The new station locations and equipment have resulted in operational changes for some bulk water carriers. Additional stations would require funding approval in the amount of \$110,000 per station.

RECOMMENDATION

That the Juan de Fuca Water Distribution Commission direct staff to complete the third and final bulk water dispensing station in East Sooke in 2014 as proposed.


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