

To: Electoral Area Services Committee

Date: 2018-01-10

From: Tareq Islam, Director of Engineering and Community Services

File No: 2320-22

**Subject: Cultus Lake Sewer System Upgrade and Expansion**

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### INTENT

This report is intended to advise the Electoral Area Services Committee on information pertaining to Cultus Lake Sewer System Upgrade and Expansion. Staff is not looking for a recommendation and has forwarded this information should members want more clarification to discuss the item further.

### STRATEGIC AREA(S) OF FOCUS

Support Environmental Stewardship

Support Healthy & Sustainable Community

Provide Responsive & Effective Public Services

### PRIORITIES

Priority #1 Waste Management

Priority #2 Air & Water Quality

### BACKGROUND

The Cultus Lake Park is served by two sewage collection systems under a single Ministry of Environment Permit. The sewer system is comprised of septic tanks and disposal fields. The system was constructed in 1979 and it was operated by the Cultus Lake Park Board until 2014 and since then FVRD has taken over the operation and maintenance of the sewer system.

The existing sewer systems do not have any treatment of the effluent and there is evidence to suggest that the system infrastructure has not been maintained to the industry standard for many years. Flow monitoring reports and septic sludge haul-out records appear to show that for the given period, the FVRD has been compliant with the Ministry of Environment Permit. However, previous reports have documented the risks associated with contamination of the nearby groundwater wells and the challenges in servicing growth. The accumulation of nutrients (e.g., phosphorus and nitrate levels) in the groundwater is a key concern as is bacteriological impact such as E-coli contamination of the lake water.

In order to address these concerns the existing system is need of a major upgrade. In 2015 FVRD initiated a Liquid Waste Management Plan (LWMP) which is a provincially regulated process. The LWMP included several public consultation processes and evaluated an upgrade based on criteria such as holistic approach to sanitary management including lake impact assessment and monitoring program as well as aquifer protection plan. The LWMP requires that any future upgrade or any new system would be a Class A+ system (the highest classification under Provincial regulation is Class A), the plus (+) is to represent removal of phosphorus and higher level nitrates.

## DISCUSSION

FVRD have been working with the Cultus Lake Park Board on the sewer system upgrade and expansion plan. The existing system does not include Mountain View Road and Park Drive subdivisions. The proposed new sewer system would include these communities. In addition the Sunnyside Campground would be also connected to the future sewer system. FVRD has been working with the Parks Board on the location of the plant and system expansion. The following Figure 1 show the location of existing and future systems/plants.

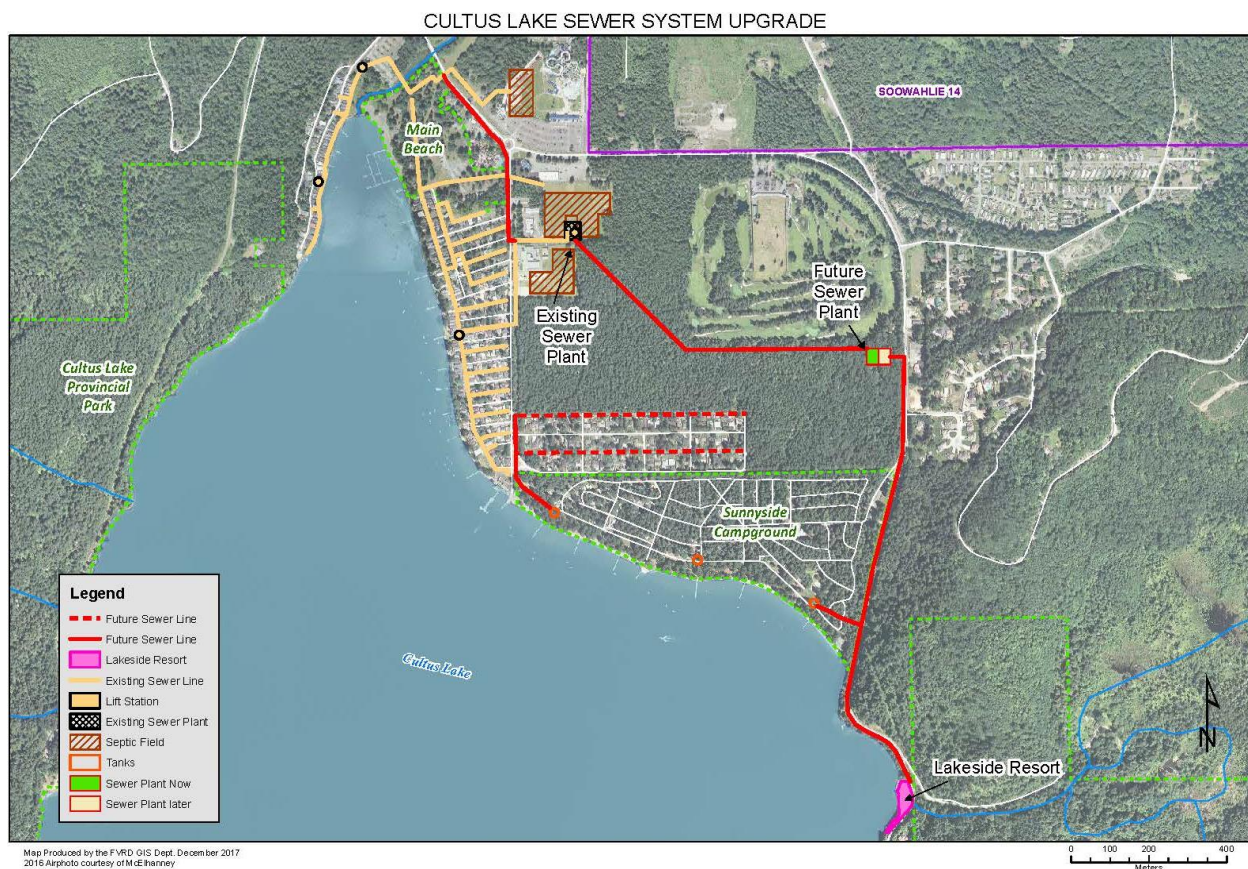


Figure 1: Existing and Future Sewer System Locations

The capital cost of the project would be approximately \$6.5 million for the plant upgrade and approximately \$1.0 million for the Mountain View Road and Park Drive subdivisions collection system infrastructure.

Staff has already initiated a site assessment and predesign study. Based on the LWMP, this plant would be expandable to include users outside Park boundary to include surrounding communities and BC Parks.

To complete this process, staff would need to bring several bylaws to the Board in the near future that includes service area amendment, expansion, and loan authorization bylaws. Staff will be holding a public information meeting on January 18<sup>th</sup> to inform and consult with residential and commercial lease holders, and residents of the Park. Following the public engagement process Staff will be conducting a petition process as well as a referendum in order to attain the necessary assent. Staff are hoping to bring forward further information relating recommendations in form of report and bylaws to the Board directly this month in order to meet the end of March deadline

## **COST**

No cost to FVRD at this time

## **CONCLUSION**

The proposed upgrade and expansion of the existing system would bring tremendous environmental and health benefit to the community. This initiative is highly supported by regulatory bodies including the Ministry of Environment and Ministry of Health and the surrounding First Nations. Reduction of environmental and other liability of the expiring existing system is also very much in consideration.

## **COMMENT BY:**

**Mike Veenbaas, Director of Financial Services**

Reviewed and supported. All costs associated with the upgrade and expansion will be allocated to those properties included in the service with debt proceeds proposed to be borrowed over a 20 year term.

## **COMMENT BY:**

**Paul Gipps, Chief Administrative Officer**

Reviewed and supported