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## REPORT TO REGIONAL PARKS COMMITTEE MEETING OF WEDNESDAY, APRIL 18, 2018

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**SUBJECT**     **Completion of Thetis Lake Pistol Range Restoration Project**

**ISSUE**

To update the Regional Parks Committee regarding the restoration of the Thetis Lake Pistol Range.

**BACKGROUND**

Thetis Lake Regional Park contains a former shooting range that the provincial government identified as a contaminated site. The Capital Regional District (CRD) undertook remediation of the pistol range with the objective of removing unacceptable risks to humans and to restoring the site to natural parkland (Attachment 1).

Work began in 2013 with the majority of remediation work completed in 2014 and 2015. Site remediation included the partial removal of contaminated soils exceeding provincial Contaminated Site Regulation Urban Parkland Standards. The soil remediation and risk assessment work was contracted to SNC-Lavalin. CRD Environmental Protection division staff managed the project and the CRD Regional Parks division staff provided operational support. Following remediation work, the risk assessment indicated no unacceptable risks for human health or the environment based on the assumed receptors and conditions.

Following successful remediation of risks, the Regional Parks Committee directed staff to restore the site to natural parkland. Prior to establishment of the pistol range, this site was a forested wetland. The construction of the pistol range required infilling and draining of the site. The remediation work resulted in a project site consisting of a compacted clay surface devoid of organic forest soils and native vegetation. The site restoration objective was to reverse these impacts to the site as much as feasible and to restore more natural conditions for reintegration into Thetis Lake Regional Park. This work was planned and completed in 2016 and 2017. Project restoration work included:

- Site surveys and restoration planning
- Restoration of surface contouring and drainage
- Restoration of organic soils and woody forest debris
- Native vegetation transplanting (wetland riparian plants and swordfern)
- Tree planting, including 700 red cedar, red alder and Douglas fir trees
- Removal of fencing
- Decommissioning of road access

Staff will continue to monitor the site through 2019 for the successful establishment and survival of native vegetation and the control of priority invasive species. Follow-up planting or other maintenance will be undertaken as part of regular operations during this time.

**INTERGOVERNMENTAL IMPLICATIONS**

CRD staff worked closely with provincial authorities regarding remediation standards. Restoration work was coordinated with the Town of View Royal engineering staff.

### **ECONOMIC IMPLICATIONS**

The total budget for the Thetis Lake Pistol Range site remediation project was \$787,330, which included \$712,610 in project reserve funds and \$74,720 from a BC Brownfields Renewal grant. The final cost of the project was \$736,071 (\$709,700 for remediation and \$26,371 for restoration), resulting in a budget surplus of \$51,259.

### **SOCIAL IMPLICATIONS**

Following remediation work, the risk assessment indicated no unacceptable risks for human health based on the assumed receptors and conditions. The 2014 Risk Assessment prepared by SNC-Lavalin is based on the site returning to naturalized parkland (not for a high use recreation area). This concurs with July 2002 CRD Board direction supporting the Thetis Lake Pistol Range Advisory Group recommendation that the site become naturalized parkland through rehabilitation of the site back to its natural state.

### **ENVIRONMENTAL IMPLICATIONS**

The site has now been restored by removing vehicle access, improving water drainage and forest soils, and replanting the site with native vegetation. Following remediation work, the risk assessment indicated no unacceptable risks for the environment based on the assumed receptors and conditions. The site will be monitored through regular park operations through 2019 and it is not anticipated that any further work will be required.

### **CONCLUSION**

The CRD has completed the remediation and restoration of the former Thetis Lake Pistol Range contaminated site to remove unacceptable risks for human health and the environment. The remediation work was completed in 2014 and 2015 and the restoration of the site to natural parkland was completed in 2017. The site is now suitable for use as natural parkland, although not for intensive recreation. The success of the restoration work will be monitored through 2019. The project was completed on schedule and within budget.

### **RECOMMENDATION**

That the Regional Parks Committee recommend to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Brett Hudson, Acting Senior Manager, Regional Parks
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

BH:tg

Attachment: Attachment 1 – Thetis Lake Pistol Range – Site Remediation and Restoration Photos