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**REPORT TO ELECTORAL AREA SERVICES COMMITTEE
MEETING OF WEDNESDAY, SEPTEMBER 21, 2016**

SUBJECT Gardom Pond Dam

ISSUE

Proposed approach to Gardom Pond Dam Mitigation strategy.

BACKGROUND

The Capital Regional District (CRD) is the owner of the land legally described as Lot 12, Section 12, Pender Island, Cowichan District, Plan VIP53931 ("Lot 12"). The land was transferred to the CRD in 1996, at the time of subdivision created by Plan VIP53931, and is held as part of the Pender Island Parks and Recreation Service.

Appurtenant to the land is a conditional water licence issued to the CRD in 1996, which authorized water storage. The CRD is one of 6 water licence holders; the 5 remaining water licence holders are private property owners who also benefit from the water frontage provided by the artificial pond.

The dam is located on Lot 6 and some of the water held back by the dam is stored on CRD Land Lot 12.

The 6 Water Licence Holders (owners; WLH) have been advised by the Dam Safety Office that the dam is in poor condition and remedial works are required to address the dam safety deficiencies. The dam has been classified as "high consequence" by the Dam Safety Office.

During the past 3 years, CRD staff have been playing a central role in coordinating the gathering of information, obtaining engineering reports and as the contact with the Dam Safety Officer.

Currently, the 6 WLH are not in agreement on either the costs or the option to remediate or decommission the dam.

The issue of a fire service area review has been raised as a possible funding option for the Gardom Pond dam mitigation strategy. Upon extensive review, it has been determined that the fire service issues are not relevant to the Gardom Pond Dam concerns. In the event that Gardom Pond is no longer viable as a water source for fire suppression needs, there are a number of cost effective options that can be pursued that would ensure that the area residents maintain, or potentially increase, the current level of fire protection for the area.

In discussions with the Dam Safety Officer, he has confirmed that if the water level of the pond is lowered to the natural level, the water would no longer require water licenses as there would no longer be a structure that would be considered a dam under the regulation. Decommissioning the dam would require ensuring there was road access to the two properties that are currently accessed by the road on top of the dam.

ALTERNATIVES

That the Electoral Area Committee recommend to the CRD Board:

Alternative 1

1. That a financial plan be prepared for the lowest cost option, which would include:
 - a) completing the required works to lower the water level of the pond to its natural level, and providing vehicle access to the two properties that use the road on top of the dam;
 - b) estimating the annual borrowing costs of 5/6 of the project cost over a 15-year period;
 - c) estimating any required annual maintenance cost for the pond area and any ongoing costs required for the road access;
 - d) confirming the approval of the Southern Gulf Islands Electoral Area Director to support funding the 1/6 Community Parks share of the capital project from the Electoral Area Community Works Funds.
2. That a petition be prepared to request the establishment of a Service Area consisting of the 6 water licence holders properties for the purpose of completing the works listed in 1. above; and
3. That a meeting with the water licence holders be held to propose this option and request their approval to proceed as listed above.

Alternative 2

1. That a financial plan be prepared to remediate the dam, which would include:
 - a) Completing the required works to update the dam to provincial standards including construction of a spill-way;
 - b) Establishing a cost sharing formula whereby 1/6 of the costs would be apportioned to the 5 private water licence holders and 4/6 to the Pender Island Parks and Recreation Service, which would seek elector approval from residents within the entire service area to borrow this share of the funds;
 - c) Confirming the approval of the Southern Gulf Islands Electoral Area Director to support funding of the remaining 1/6 of the capital project from the Electoral Area Community Works Fund, and;
 - d) Estimating any required annual maintenance cost for the pond area.
2. That a loan authorization bylaw be prepared for the purpose of completing the capital works listed in 1. above; and
3. That a meeting with the water licence holders be held to propose this option and request their approval to proceed as listed above.

Alternative 3

That staff work with the Board Solicitor to prepare a plan to decommission the dam and recover the costs from the individual water licence holders (5 private land owners and the Pender Community Parks Service) and bring the plan back to the Board for consideration.

ENVIRONMENTAL IMPLICATIONS

Gardom Pond dam has areas noted as ecologically sensitive and decommissioning the dam could have a negative impact on these areas. The Gulf Islands generally have seen declines in water quantity and quality as a result of demands on groundwater resources; these demands are anticipated to become more extreme with climate change. Remediating the dam and preserving the existing water levels meets a broad environmental objective to preserve and protect, and

aligns with an objective to secure water sources on the islands.

At least one of the properties has an environmental covenant attached to a portion of the property, restricting the use and allowable works. The Islands Trust have confirmed that, in spite of the covenant, they will allow the works needed to address the dam safety deficiencies, will waive any clauses in conflict with the remediation, and will continue to hold the covenant and the property owners will continue to receive the property tax reduction they currently enjoy.

ECONOMIC IMPLICATIONS

In 2013, AECOM provided an engineering report estimating the cost to decommission the dam as being \$422,000 and an estimated cost of rehabilitating the dam at \$938,025. These cost estimates do not include CRD overhead and administrative costs to manage the project.

There is a potential option of establishing a Local Service Area and loan authorization bylaw for the 5 private WLH and Pender Island Parks Commission. The CRD Local Service would then borrow the money to cover the costs of the work and the WLH would be taxed over a period of 10-15 years to recover the associated decommissioning costs or costs to upgrade the dam, if that is the option chosen by the WLH. Finance staff will need to get approval from the Province, as the Bylaw will require approval by the Inspector of Municipalities in addition to elector approval.

There is an opportunity to assign the costs of the project more broadly across the Pender Islands by way of borrowing funds through the Pender Island Parks and Recreation service, as shown in Alternative 2.

The Southern Gulf Islands Director has indicated that he would ask the Board to support an electoral area Community Works Fund Grant to cover a portion of the Pender Parks share.

If the CRD is unsuccessful with either option outlined above, the CRD Board will have to review the legal options available to decommission the dam to recover the costs.

INTERGOVERNMENTAL IMPLICATIONS

The Province of BC's Ministry of Forests, Lands and Natural Resource Operations (FLNRO) has requested that the WLH address the dam safety deficiencies identified with the Gardom Pond Dam. A decision needs to be made by the 6 WLH and confirmed in writing to the FLNRO by September 30, 2016.

RISK IMPLICATIONS

The CRD as a holder of a conditional water licence has statutory obligations under Section 21 of the *Water Act*. As a result, the CRD along with the other WLH would be responsible for a failure of the dam.

One option available to reduce the liability would be to decommission the dam, which allows the CRD Board to abandon the water licence and thus eliminate any statutory obligations arising from regulatory authority.

CONCLUSION

Discussions with the water license holders over the risk and condition of the dam have been ongoing for numerous years. The FLNRO requires, by September 30, 2016, a decision from the water license holders addressing the dam safety deficiencies identified with the Gardom Pond Dam. The 5 private license holders and the CRD (Pender Parks Service) have been notified of a dam safety risk regarding the Gardom Pond Dam. The owners have been unable to agree on a project to address their dam safety deficiencies identified by the Province of BC. Preliminary work has been completed on numerous options and establishing a cost sharing formula that apportions the funds to remediate the dam to both the 5 private licence holders and the entire service area strikes a balance that is fair, affordable for those directly impacted and meets the preserve and protect mandate of the Gulf Islands.

RECOMMENDATION

That the Electoral Area Services Committee recommend to the Capital Regional District Board:

1. That a financial plan be prepared to remediate the dam, which would include:
 - (a) Completing the required works to update the dam to provincial standards including construction of a spill-way;
 - (b) Establishing a cost sharing formula whereby 1/6 of the costs would be apportioned to the 5 private water licence holders and 4/6 to the Pender Island Parks and Recreation Service, which would seek elector approval from residents within the entire service area to borrow this share of the funds;
 - (c) Confirming the approval of the Southern Gulf Islands Electoral Area Director to support funding of the remaining 1/6 of the capital project from the Electoral Area Community Works Fund, and;
 - (d) Estimating any required annual maintenance cost for the pond area.
2. That a loan authorization bylaw be prepared for the purpose of completing the capital works listed in 1. above; and
3. That a meeting with the water licence holders be held to propose this option and request their approval to proceed as listed above.

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