From: Park Board GM"s Office
To: PB Commissioners

Cc: PB Communications; PB LT (Leadership Team) - DL

Subject: Lost Lagoon - Board Update

Date: Monday, September 12, 2022 1:00:48 PM

Dear Commissioners,

The purpose of this email is to provide an update regarding Lost Lagoon.

Over the past few days, we have received questions from concerned residents about a number of dead carp seen in Lost Lagoon. Currently 40 carp have washed up on the shores of Lost Lagoon over several days. A similar ecological event occurred in September 2021.

At that time, water quality testing was performed, alongside necropsies on several of the fish. While the receiving lab could not pinpoint an exact cause, staff believe fish mortality was related to the overall water quality of Lost Lagoon - mainly low dissolved oxygen and high salinity from the adjacent ocean in Coal Harbour. The Stanley Park Ecology Society runs a continuing water quality monitoring program for the lagoon that may shed light on what is shaping up to be a yearly occurrence.

Staff have been aware of the ecological issues and challenges at Lost Lagoon for some time and, over the last few years, have been exploring various feasible solutions to restore the area. Lost Lagoon is an artificially isolated body of water created in the early 1900s when the causeway was built. Formerly a tidal ecosystem, the berm built for Highway 99 turned the lagoon into a pond for recreational and aesthetic purposes. Because it is isolated, infilling, and now only approximately a metre deep (with much of the shoreline non-naturalized), it is considered an ecologically poor habitat, vulnerable to sea level rise and other climatic events. The lack of flushing that happens naturally in the Lost Lagoon area is a major contributor to the water quality issues, along with other localized environmental impacts. Staff are currently working on a Lost Lagoon Reconnection Feasibility Study, exploring the possibility of creating a long-term connection to tidal Coal Harbour. This is in alignment with the Stanley Park Comprehensive Planning work being undertaken with Musqueam, Squamish and Tsleil-Waututh Nations. In the interim, we are developing a sediment handling strategy for sludge that has accumulated over the years at the bottom of the lagoon. Understanding its composition will be essential to informing the remediation options available. Regards.

Betty (on behalf of Donnie Rosa)

Betty Lepps | **Director of Urban Relationships**

<u>Vancouver Park Board</u> | 2099 Beach Avenue t. 604-728-8278 | <u>betty.lepps@vancouver.ca</u>

pronouns: she/her/hers

I am thankful to live, work, and play on the unceded, ancestral territories of the $x^w m = \theta k^w = \psi m$ (Musqueam), $Skwxw = \psi m$ (Squamish), and $s=\psi m$ (Squamish), and $s=\psi m$ (Squamish) and $s=\psi m$ (Squamish).