

OPEN

MINUTE ITEM

ATTACHMENTS

Ordinary meeting of the
Works and Infrastructure Committee

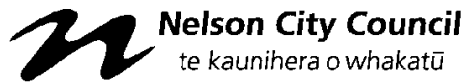
Thursday 16 August 2018
Commencing at 9.00a.m.
Council Chamber

Civic House

110 Trafalgar Street, Nelson

TABLE OF CONTENTS	PAGE
6.1 Chairperson's Report	
A. A2031510 - Chairperson's Report - Modellers Pond Update	2

Chairperson's Report



**Works and Infrastructure
Committee**

16 August 2018

Chairperson's Report

1. Purpose of Report

- 1.1 To update the committee on the trial to address algae and weed reduction in the Modellers detention pond, due to commence this month.

2. Recommendation

That the Works and Infrastructure Committee

Receives the report Chairperson's Report

3. **Update:** Tahunanui detention pond trial of an algae and weed reduction process developed by Dr Simon Tannock of Algaenviro - Australia

- 3.1 Once the "go ahead" was given, planning commenced to undertake the trial to find a "biological solution to a biological problem".
- 3.2 The pond was drained, cleaned and refilled for the National Modellers Convention held early January 2018.
- 3.3 Under the Resource Management Act it was necessary to obtain a resource consent for the trial. Because of the highly scientific nature using specialised "nano technology", authorities have been extremely cautious and wary of any possible adverse effects on the receiving environment.
- 3.4 This has largely been the reason for the delays we have experienced so far – consent conditions have required extensive pre-trial monitoring and laboratory testing to be undertaken both in the pond and in the Back Beach area and out to the Blind Channel. This is to establish a base level understanding of the condition of the receiving environment before the actual Diatomix dosing commences.
- 3.5 We have recently installed the circulation pump, pipework and the dosing unit and have done pond circulation trials using dye and other special techniques which has confirmed that the mixing of dosing fluid in the pond meets Dr Tannock's requirements.

Item 6.1: Chairperson's Report: Attachment 1

Chairperson's Report

- 3.6 As part of the pre-trial testing, we have become aware of nutrient rich water entering the pond through the bottom of the pond. This water is warmer than the pond and is assisting algae to grow, even in winter. This was an unexpected discovery.
- 3.7 Due to the changing nature of the water make-up in the pond, (a mixture of saltwater and contaminated stormwater from the Tahuna area) there will be ongoing monitoring and testing to determine the rate and frequency of the Diatomix dosing which may vary according to the volume of stormwater coming from the Centennial Park pump station into the pond and also the tidal flow.
- 3.8 The Diatomix dosing trial is scheduled to commence on Monday 20 August and will run for up to 18 months. During and after this period there will need to be constant monitoring and laboratory testing to ascertain the biological changes in the pond – because of the minute quantities of the Diatomix fluid involved, change is unlikely to be immediate, but a reducing trend in algae growth should be known after a few months.

Author: **Stuart Walker, Chairperson**

Attachments

Nil

