**Fleur Matheson – Summary of evidence**

My name is Dr Fleur Elizabeth Matheson. I am an Aquatic Biogeochemist and Research Programme Leader at NIWA. I have 18 years of experience researching seagrass ecosystems in New Zealand.

I was not involved in the Eastern Bays Shared Path Project during the preparation of the AEE in May 2019.

However, I was engaged by Hutt City Council in July 2019 to give further consideration to monitoring and addressing the impact of the Project's construction and beach nourishment activities on seagrass beds in Lowry Bay.

There are three seagrass occurrences in Lowry Bay near the Project footprint. In total, they occupy slightly less than 2000$m^2$ of the intertidal and shallow subtidal foreshore. These occurrences are the only known remaining seagrass in Wellington Harbour.

A very small area (2$m^2$) of the southern-most seagrass occurrence overlaps with the 5m wide construction zone for the curved sea wall.

A further small area (7$m^2$) of the central seagrass occurrence adjoins and lies within the toe of the initial adjusted shore profile following beach nourishment. The adjusted profile is anticipated to develop some weeks to months after the nourishment.

Consequently, the risk to seagrass in Lowry Bay from the Project activities is considered to be temporary and small.

After reviewing the AEE, and the relevant technical reports appended to the AEE, I provided a memorandum to Hutt City Council with additional monitoring recommendations on 29 July 2019. These recommendations have been incorporated into the subsequent proposed consent conditions.

The measures in proposed consent condition EM.11(c) to avoid adverse effects on seagrass include:

- firstly, ensuring that the seagrass beds are appropriately marked during the Project's construction and beach nourishment activities; and
- secondly, monitoring the seagrass beds before and after these activities.

The monitoring is intended to confirm that the beach nourishment works have not resulted in any net loss of seagrass extent and cover as a result of any unanticipated effects.

Proposed consent conditions EM.13 to EM.18 include a list of further measures to avoid adverse effects, specifically from the beach nourishment activities. These include additional measures to avoid physical encroachment, increased turbidity and/or altered hydrodynamics effects.

To conclude, I consider that the proposed consent conditions, as appended to the evidence of Caroline van Halderen, are sufficient to avoid adverse effects on seagrass.