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Attention:	Mel	Wykes					
Company: Beca		<b>a</b>					
Date: 27 February		ebruary 202	20				
From: Jeremy Gar		my Garrett-	arrett-Walker				
Message Ref: O		Omāroro – Retaining Wall and Access, Dorking Road					
Project No:	W16	6117					

As requested, the following memo considers the ecological issues associated with the proposed upgrade of the entranceway to Prince of Wales park, vegetation clearance, and retaining wall construction at the end of Dorking Road for Omāroro Reservoir. Maps and photos of the site are attached.

## Description of Activity

Wellington Water Limited, who will operate the reservoir on behalf of Wellington City Council, require vehicle access to the roof of the reservoir for emergency activities and infrequent maintenance activities. This vehicle access would be for a mobile crane to lower large or heavy equipment into the reservoir and trucks for delivering this equipment.

In order to allow for vehicle access to the reservoir roof, it is necessary to strengthen the existing access at the end of Dorking Road (where this adjoins the Prince of Wales Park).

The proposed works consist of a timber pole retaining wall with compacted hardfill material, topsoil and grass to form a widening of the existing access suitable for vehicle access. Grass and plants will be planted on the backfill below the retaining wall.

It is anticipated that access will only be required in the following instances:

- Emergency chemical dosing to disinfect stored water on an as needed basis
- Emptying and cleaning the reservoir. This is envisaged to occur very occasionally (anticipated to be once every 10 years or less) as and when required

#### Scope of this assessment

We understand the scope is to:

- Familiarise ourselves with the Dorking Road entrance including vegetation and habitats for indigenous fauna.
- Familiarise ourselves with the scale of the proposed retaining and strengthening works, and with the associated construction activities.
- Assess whether these works will have an adverse ecological effect, in the short, medium or long term, on any ecological values.
- If there is an adverse effect, recommend measures to avoid, remedy or mitigation that effect.

We refer to a project footprint. This relates to the area that will be affected by the works necessary for upgrading this road end.

### Methods

- The site was walked and all vegetation excluding grasses were identified.
- The vegetation was not assessed for ecological significance or ecological value as the findings contained in the Ecological Impact Assessment (EcolA)<sup>1</sup> are considered accurate and relevant. However, summary notes on the condition of the vegetation are provided.
- Terrestrial fauna information contained within the EcolA is considered relevant and current. Therefore, no additional terrestrial fauna surveys were conducted for this memo.
- No streams, drains, or wetlands are within, or near, the proposed footprint. Therefore, no freshwater surveys were conducted for this memo.

### Current condition

Site visit

The site was visited on 19 February 2020 to assess the current condition.

#### **Current Vegetation**

The affected area has been classified in the EcolA as seral native broadleaved scrub and forest communities and Recent native planting in gorse and exotic grasslands (c. 2014).

The site-specific current vegetation (irrespective of broad vegetation types described in the EcoIA) was dominated by exotic or invasive native (i.e. not native to the Wellington Region) plants. The most prevalent species includes:

- Kotukutuku (Fuchsia excorticata)
- Koromiko (Veronica stricta)
- Karaka\* (Corynocarpus laevigatus)
- Karamu (Coprosma robusta)
- Karo\* (Pittosporum crassifolium)
- Harakeke (Phormium tenax)
- Agapanthus\*\* (Agapanthus praecox subsp. Orientalis)
- Pampas\*\* (Cortaderia selloana)
- Blackberry\*\* (Rubus fruticosus)
- \* Denotes native to New Zealand but not the Wellington Region
- \*\* Denotes exotic
- Terrestrial Fauna
- A number of mature karaka trees will be lost as part of these works. Kereru are known to frequent these trees when fruiting (including an incidental observation of an individual feeding in karaka that will be affected during the 19 February 2020 survey).

Freshwater Habitat and Fauna

There are no streams, drains, or wetlands within the location of this additional work.

- Tree aloe\*\* (Aloe arborescens)
- Bear's breeches\*\* (Acanthus mollis)
- Tradescantia\*\* (Tradescantia fluminensis)
- Fennel\*\* (Foeniculum vulgare)
- Montbretia\*\* (Crocosmia x crocosmiiflora)
- Nasturtium\*\* (Tropaeolum majus)

<sup>•</sup> Japanese honeysuckle\*\* (Lonicera japonica)

<sup>&</sup>lt;sup>1</sup> Boffa Miskell Limited 2017. Prince of Wales / Omāroro Reservoir Ecological Impact Assessment. Report prepared by Boffa Miskell Limited for Wellington Water.

#### Summary of Ecological condition

- The affected area is dominated by exotic vegetation and invasive species which are native to New Zealand, but not the Wellington region
- The native plants which are present have been planted or have grown from seed produced from nearby planted specimens
- Kereru was observed feeding in the karaka trees
- Currently, the area can be considered to have low overall ecological value.

#### **Effects**

- It is assumed all vegetation within the project footprint will be lost (approximately 65-70 m<sup>2</sup>).
- While a kereru was observed feeding in karaka which will be affected, it is worth noting karaka trees are prominent throughout Prince of Wales park and the wider town belt (and the Wellington region in general), meaning the loss of a few trees will not affect the feeding habits of the resident kereru population (notwithstanding the fact karaka are not natural (i.e. have been introduced) to the Wellington region). No *Threatened* or *At Risk* avifauna species are expected to utilise the affected reach.
- In summary, the loss of XX ha of low value vegetation from Prince of Wales Park and the Wellington town belt is considered to have a negligible ecological effect; therefore, does not warrant mitigation.

### Recommendations:

It is assumed all vegetation within the footprint of the proposed works will be lost as part of this activity with limited remedial opportunities due to the need for unimpeded emergency access to the reservoir. Irrespective of the low existing ecological value within the footprint, the following is recommended to mitigate for the effects.

#### Avoid / Minimise

- The existing large totara tree has been avoided in the current designs
- Subsoil drainage has been incorporated into the design to minimise the potential for new drainage issues arising
- The site is isolated from any streams or waterways minimising the risk of sediment reaching streams or the harbour.

## Remedy

- No ecological remediation is proposed for the loss of the low ecological value existing vegetation. However, we note the proposed amenity planting will inadvertently benefit the resident avifauna.

## Mitigation

• No mitigation is proposed for the loss of the affected vegetation due to its low ecological value, the relatively small footprint (approximately 65-70 m²), and the prevalence of these vegetation communities throughout Prince of Wales park and the Wellington Town Belt.

#### Offsetting

No offsetting is proposed.

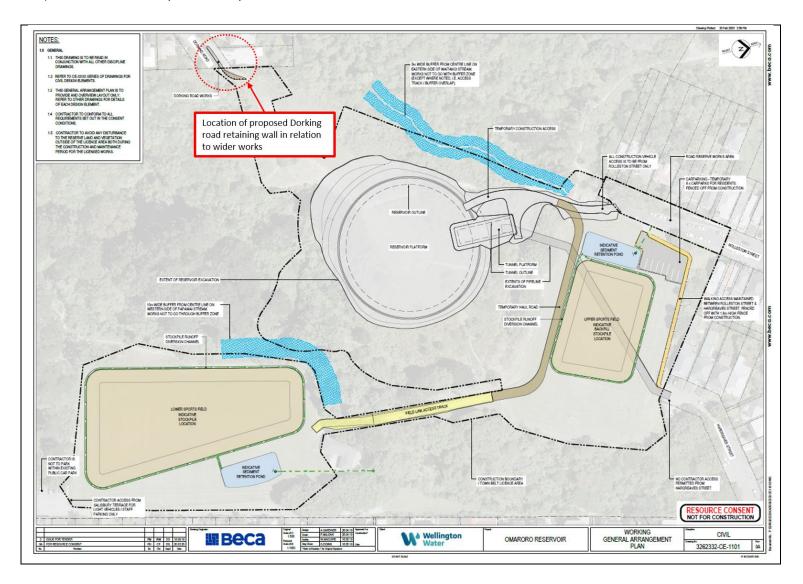
## Conclusions:

The existing vegetation to be affected is considered to have Low ecological value

- Similar, or better, vegetation is prominent throughout Prince of Wales Park and the Wellington Town Belt meaning the magnitude of loss is negligible.
- The overall ecological effect of the loss of the vegetation is considered to be negligible.
- No mitigation or offsetting is proposed; noting the proposed amenity planting will inadvertently benefit resident avifauna.

# Site Maps

Map 1: Site location (red circle) in relation to wider Omāroro Reservoir works





## Site Photos



Photo 1: General vegetation currently existing within proposed footprint.

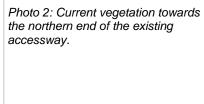




Photo 3: Dense exotic weeds where trees do not provide a canopy.



Photo 4: Dense weed layer at the northern extent of proposed footprint where there is currently no canopy.