In the Environment Court of New Zealand Christchurch Registry

I Mua I Te Kōti Taiao o Aotearoa Ōtautahi Rohe

ENV-2018-CHC-215

Under

the Resource Management Act 1991

In the matter of

an appeal under clause 14(1) of the First Schedule of the RMA

in relation to the proposed Second Generation Dunedin City

District Plan (2GP)

Between

Jean Grace

Appellant

And

Dunedin City Council

Respondent

Affidavit of Richard Andrew Ewans

Affirmed 7 October

2021

Concerning: Group 4

Topic: Residential zoning site-specific

Appeal point: DCC Reference number 9

Respondent's solicitors:

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- I, **Richard Andrew Ewans** of Dunedin, Biodiversity Advisor, hereby solemnly and sincerely affirm:
- I have been employed as a Biodiversity Advisor at the Dunedin City Council since 23 October 2018. Part of my role is to provide indigenous biodiversity expertise for planning processes, including on resource consents and assessment of proposed changes to the 2GP.
- I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.
- I hold a Bachelor of Science (Hons) First Class in Plant Ecology from the University of Otago (2000). I have 20 years' experience working on indigenous biodiversity, mostly in the plant ecology field. I have worked in, or for, the public sector for most of that time, either as an employee or contractor/consultant.
- I have extensive ecological field survey experience including providing botanical expertise on programs such as the South Island High Country Tenure Review (Otago), the Mackenzie Basin braided riverbeds vegetation survey, the Waitaki and Mackenzie Districts Significant Natural Areas assessment, Environment Southland High Value Areas programme, Hunua Ranges Watercare Catchment Restoration Project, and Department of Conservation Tier 1 monitoring (a national biodiversity monitoring program).
- I was employed by the Department of Conservation as a Ranger Biodiversity Monitoring between 2004 and 2013. My role involved establishing, maintaining, and reporting on vegetation monitoring programs and providing expertise on threatened plants and ecosystems, and plant pests.
- I have several years' experience in indigenous ecosystem assessment in relation to regional or local authority statutory processes.

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Introduction

- 7 This affidavit provides expert advice to support the changes agreed in the following consent memorandum:
 - (a) Residential site specific (25A Irvine Road) Jean Grace, dated 25 August 2021 (DCC Reference number 9).
- 8 The details of this appeal are included in the affidavit of Katie James relating to this appeal.
- 9 Between July and October 2020, I assessed the biodiversity values on a range of potential sites for rezoning as part of the 2GP Appeals and Variation 2 processes, including the area that is the subject of this affidavit at 25A Irvine Road.
- I inspected the property on 16 March 2020 with the permission of, and accompanied by, the landowners. This inspection was related to potential protection of the site through options such as protective land covenant or scheduling as an Area of Significant Biodiversity Value (ASBV), and options for biodiversity funding. The landowners received a DCC Biodiversity Fund grant for a project located on the part of the property that is the subject of this affidavit (the Site) in the April 2020 funding round.
- On the Site there is approximately 0.45 hectares (4500m²) of regenerating and planted native coastal podocarp-broadleaved forest dominated by ngaio (*Myoporum laetum*). Coastal podocarp-broadleaved forest would have been the main pre-human forest type on Otago Peninsula, which now has only 5% of indigenous forest remaining. The Site supports three species listed on the 2GP Appendix 10A.3 Important native tree list: ngaio, Hall's totara (*Podocarpus laetus*) and kowhai (*Sophora microphylla*).
- 12 In my opinion, given the relative rarity of this indigenous forest type on the Otago Peninsula, all remaining areas should be protected from further loss.
- 13 It is my understanding that under the current plan provisions the Site would be allowed to transition to a General Residential 1 Zone once certain conditions were met. In my opinion development at this level would be inappropriate given the presence of the indigenous vegetation discussed above. However, I could support a lesser level of development on the Site

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if that development were to avoid the area of indigenous vegetation and that vegetation was protected for its biodiversity values.

The 2GP includes a method to protect areas important for biodiversity in an urban setting. This method is called an 'Urban Biodiversity Mapped Area'. It includes rules that restrict indigenous vegetation clearance while providing for management such as fencing, removal of pest plants and conservation activities. In my opinion, including the surveyed area of important indigenous vegetation discussed above in an Urban Biodiversity Mapped Area (UBMA) overlay is necessary in order to protect the ecological values on the Site and ensure the zoning is appropriate in terms of Objective 10.2.1.

Affirmed at Dunedin this 7th day of October before me:

2021,

Richard Andrew Ewans

Johns

A Solicitor/Deputy Registrar of the High Court of New Zealand Justice of the Peace

Joshua Keith Smith Solicitor Dunedin

Appendix 1: 2GP entry for UBMA XX The Cove

UBMA A10.X The Cove

A10.X.1 Description of the area

This UBMA is a small area (0.45ha) of regenerating indigenous coastal broadleaved forest located on private property.

A10.X.1.1 Description of urban environment allotments

The following properties, which are located either entirely or partly within this UBMA, may contain land which qualifies as an urban environment allotment as defined in s76(4C) of the Resource Management Act 1991:

25A Irvine Road

A10.X.2 Biodiversity values to be protected

1. Vegetation/Habitat types:

The site supports regenerating and planted native coastal broadleaved forest dominated by ngaio. Other native tree and shrub species present include kohuhu, cabbage tree, Hall's totara, kowhai, pepper tree/horopito, mahoe, koromiko, lemonwood, kanuka, five-finger, marbleleaf, lancewood and broadleaf. Ground cover present includes hound's tongue fern and hen and chickens fern.

2. Rare and notable species, habitats or communities

Includes mature examples of ngaio, Hall's totara and kowhai which are listed in Appendix 10A.3 Important native tree list. Indigenous vegetation in this UBMA is classified as "At Risk" based on the Threatened Environment Classification having between 20-30 percent of the original vegetation cover remaining nationally. Coastal podocarp-broadleaved forest would have been the main forest type on Otago Peninsula, which now has only 5% of indigenous forest remaining.

3. Species diversity and Naturalness

The vegetation is dominated by indigenous species but is modified in places by invasive weeds and planted non-local native species.

This is the document marked Applicated to in the annexed Affidavit

Of Archael Archael Evans

before me:

A Solicitor of the High Court of New Zealand
Joshua Keith Smith

Solicitor Dunedin

A10.X.3 Principal threats to biodiversity values

Threat	Description
Plant and animal pests	 a. The area contains several invasive weed species such as the climbers banana passionfruit and bomarea; along with hawthorn, gorse and broom.
	b. Some non-local native trees such as akeake have been planted.
	c. Invasive plant pests pose the greatest threat to the conservation values of this UBMA, but threats from animal pests such as possums, rats and mustelids are also present.
2. Fragmentation/loss of continuity/edge effects	The area is vulnerable to edge effects because of its small size and nearby sources of invasive weeds.

A10.X.4 Key management actions to be required or encouraged

Threat	Key management actions
1. Plant and animal pests	a. The highest priority is the removal and continued control of banana passionfruit, bomarea and hawthorn.
	b. Gorse, broom and non-local native species should also be removed.
	 c. Animal pest control would improve the habitat for native fauna, and possum control would also improve the ecological condition of the forest.
2. Fragmentation/loss of continuity/edge effects	a. Encourage and support control of banana passionfruit, bomarea and hawthorn on neighbouring properties.

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