DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti

Memorandum

TO: Lily Burrows

FROM: Richard Ewans, Biodiversity Advisor

DATE: 28 February 2019

SUBJECT: LUC-2018-739, 8 SCOTIA STREET, REMOVAL OF SIGNIFICANT TREES – BIODIVERSITY COMMENTS

Hi Lily,

Please find my biodiversity comments on application LUC-2018-739 as follows.

1. The trees to be removed are exotic *Eucalypt*us sp. scheduled as a group as G089 in Schedule A1.3 (2GP).
2. The site is immediately adjacent to a scheduled Area of Significant Biodiversity Value (ASBV), C021 Hawksbury Lagoon and Hawksbury Lagoon Wildlife Refuge in 2GP.
3. The site lies in an 'at risk' land environment (20-30% indigenous cover left) which encompasses the lagoon margins, but is surrounded by land in an 'acutely threatened' land environment (less than 10% indigenous cover left).
4. Although the trees are exotic, *Eucalyptus* sp. are a source of food for native birds such tui, bellbird and fantail, providing a source of nectar (seasonally) and insects (ongoing), and are likely to provide roosting sites for a variety of native birds.
5. The removal of 20 of the 29 trees present will remove a local food source for native birds.
6. Retaining the existing trees that border Hawksbury Lagoon is desirable to retain some of the food source for native birds, and provide roosting sites for native birds on the lagoon front.
7. The application proposes to replace the *Eucalypt*us sp. trees with other tree species immediately after removal. This is an appropriate remedy for the removal of the habitat values and indigenous trees species that are ecologically appropriate for the site should be used. This will ensure habitat values are replaced in the medium term as the new trees mature, and may enhance habitat values for some native bird species by providing a wider range of foods.
8. The locally appropriate indigenous forest type is a coastal broadleaved forest type containing ngaio and podocarps such as kahikatea, matai and totara. Appendix 1 below provides a list of ecologically appropriate indigenous plant species for the site that should be used to replace the *Eucalyptus* sp.
9. Native plants should be eco-sourced i.e. grown from seed collected locally (i.e. coastal Otago from Dunedin northwards). Most local nurseries will supply eco-sourced plants.
10. The list provided in Appendix 1 includes several species suggested in the application as potential replacement trees. Many of the other species suggested in the proposal[1] are not appropriate for the site from an indigenous biodiversity perspective being exotic species (some of which are plant pests e.g. hawthorn), or non-local native species (native to other parts of New Zealand) such as pohutukawa, akeake, and titoki.

[1] Greentrees Tree Report including RMA application concerning removal of 20 Eucalyptus trees & retention of 10 Eucalyptus trees from within a listed tree group G089 at 8 Scotia St, Waikouaiti. November, 2018.

Kind regards,

Richard Ewans
Biodiversity Advisor

Appendix 1. Ecologically appropriate revegetation species to replace significant trees at 8 Scotia Street – Coastal broadleaved (ngaio) forest type

Species	Common name	Plant type	Generalist	Dry sites	Moist sites	Exposure	Shade tolerance	Planting sequence	Fleshy fruits?	Nectar sources	Notes
Coprosma areolata		Tree	No	Yes	No	Yes	Moderate	Early	Yes	No	Small tree of dry and coastal forest
Coprosma crassifolia		Tree/shrub	No	Yes	No	Yes	Moderate	Later	Yes	No	Exposure-tolerant shrub of dry habitats
Coprosma propinqua	Mingimingi	Shrub	Yes	Yes	Yes	Yes	Moderate	Early	Yes	No	Shrub with good all round performance
Cordyline australis	Cabbage tree	Tree	Yes	Yes	Yes	Yes	Moderate	Early	No	Yes	Fast growing tree with wide environmental tolerance
Hoheria angustifolia	Narrow-leaved lacebark	Tree	Yes	Yes	No	Yes	High	Early	No	Yes	Small tree of dry and coastal forest
Melicytus ramiflorus	Mahoe	Tree	Yes	Yes	No	No	High	Early	Yes	Yes	Plant later in exposed sites
Myoporum laetum	Ngaio	Tree	No	Yes	No	Yes	Moderate	Early	No	No	Fast growth in coastal sites
Myrsine australis	Mapou	Tree	Yes	Yes	No	Yes	High	Early	Yes	No	Slow initial growth
Plagianthus regius	Lowland ribbonwood	Tree	Yes	Yes	No	Yes	Moderate	Early	No	Yes	Requires productive sites
Pseudopanax ferox	Fierce lancewood	Tree	Yes	Yes	No	Yes	High	Early	Yes	No	Small tree of dry and coastal forest
Solanum laciniatum	Poroporo	Shrub	Yes	Yes	Yes	No	Moderate	Early	Yes	No	Fast-growing, sprawling shrub for sheltered sites
Sophora microphylla	Kowhai	Tree	Yes	Yes	No	Yes	Moderate	Early	No	Yes	High value tree for indigenous forest birds
Coprosma lucida	Shining karamu	Shrub	Yes	Yes	Yes	No	High	Early	Yes	No	Understorey shrub
Dacrycarpus dacrydioides	Kahikatea	Tree	Yes	Yes	Yes	Yes	High	Early	Yes	No	Long-lived emergent podocarp
Griselinia littoralis	Broadleaf	Tree	Yes	Yes	Yes	Yes	High	Early	Yes	No	Good all round performance
Melicytus ramiflorus	Mahoe	Tree	Yes	Yes	No	No	High	Early	Yes	Yes	Plant later in exposed sites
Myrsine australis	Mapou	Tree	Yes	Yes	No	Yes	High	Early	Yes	No	Slow initial growth
Pittosporum tenuifolium	Kohuhu	Tree	Yes	Yes	No	Yes	Moderate	Early	Yes	Yes	Pioneer species good for initial plantings
Podocarpus totara	Totara	Tree	Yes	Yes	No	Yes	Low	Early	Yes	No	Long-lived emergent podocarp
Prumnopitys taxifolia	Matai	Tree	Yes	Yes	No	No	High	Later	Yes	No	Long-lived emergent podocarp

Native plant species list for plantings at 8 Scotia Street. The list is derived from;

Lloyd K & Shaw W. 2013. Plant Lists for Dunedin Ecosystems. Wildlands Consultants Ltd Contract Report No. 3237 prepared for Dunedin City Council.