

**Proposed Subdivision of Lot 1 DP 408800, 62 Hillside
Road, Newport**

Species Impact Statement

For:

Martens & Associates Pty Ltd

June 2016

Final



**PO Box 2474
Carlingford Court 2118**


Report No. 15023RP3

The preparation of this report has been in accordance with the brief provided by the Client and has relied upon the data and results collected at or under the times and conditions specified in the report. All findings, conclusions or recommendations contained within the report are based only on the aforementioned circumstances. The report has been prepared for use by the Client and no responsibility for its use by other parties is accepted by Cumberland Ecology.

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Approved by: David Robertson

Position: Director

Signed: 

Date: 23 June, 2016

I, Mr Peter Roach, Director of Cariste Pty Ltd of PO Box 7099 McMahons Point 2060, being the applicant for the development consents for proposed subdivision of Lot 1 in DP 408800, No. 62 Hillside Road, Newport in the Pittwater LGA have read and understood this Species Impact Statement. I understand the implications of the recommendations made in the statement and accept that they may be placed as conditions of consent or concurrence for the proposal.

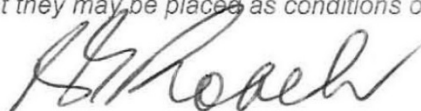
Signed:  Date: 10/6/16

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Executive Summary

S1 Purpose

This document is a Species Impact Statement (SIS) that has been prepared to assess the impacts of a proposed residential subdivision of Lot 1 DP 408800, also known as No. 62 Hillside Road, Newport. A shared private driveway for Lot 1 DP 408800 and Lots 21 and 22 DP 1036400 (No. 85 Hillside Road, Newport) has been approved for development, and works are in progress. For the purposes of this assessment, the 'Subject Site' includes Lot 1 DP 408800 and Lots 21 and 22 DP 1036400. The Subject Site is located within the Pittwater Local Government Area (LGA).

The Subject Site is approximately 1.06 ha in area and is largely vegetated, although includes some cleared areas, an existing unsealed driveway a dilapidated dwelling and a shed. It is bordered by residential properties on three sides, and Attunga Reserve adjoins the Subject Site to the east. For the purposes of this assessment, the vegetation adjoining the Subject Site, including proximate parts of Attunga Reserve, and within neighbouring residential lots has been considered part of the 'Study Area'.

Martens & Associates Pty Ltd on behalf of Cariste Pty Ltd is planning to lodge a DA for the subdivision of Lot 1 DP 408800 with Pittwater Council. The proposed development involves subdivision to create four new housing lots and provides for indicative building pads, Asset Protection Zones (APZ's) and ancillary works, including drainage.

This SIS has been prepared in accordance with Section 109 and 110 of the *Threatened Species Conservation Act 1995* (TSC Act) and with the requirements of the Director General of the Office of Environment and Heritage (OEH).

S2 Background

Cumberland Ecology previously conducted assessments of the ecological values of the Subject Site in 2006 and recently in 2015. The Subject Site has been subject to extensive studies spanning more than fifteen years, the preparation of a number of development applications (DA) and proceedings in the NSW Land and Environment Court. The current development proposal has considered the reasons for refusal by Council, and the advice provided by the Commissioner and court appointed witnesses during the Court hearing and the findings of the Court in their decision on the refusal of an eight (8) lot subdivision on the Subject Site.

The proposed development will require the clearing of an area of Littoral Rainforest, which meets the criteria for the Endangered Ecological Community (EEC) listed under the *New South Wales Threatened Species Conservation Act 1995* (TSC Act). The community also meets the criteria for Littoral Rainforest and Coastal Vine Thickets of Eastern Australia

Critically Endangered Ecological Community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). A referral to the Department of Environment and Conservation will be submitted to determine if further assessment under the EPBC Act is required. It is not expected that the proposed development will be considered to be a Controlled Action in terms of the EPBC Act Significant Impact Guidelines.

Potential habitat is also present for threatened fauna species recorded from within or near the Subject Site, including forest owls, Grey-headed Flying-fox, microchiropteran bats (small insectivorous bats) and amphibians.

S3 Field Survey Results

S3.1 Flora

No threatened flora have been recorded on the Subject Site, despite extensive surveys, and are therefore not considered likely to occur.

S3.2 Fauna

Based on the presence of suitable habitat, the Subject Site provides suitable foraging and roosting habitat for a number of threatened mammals and birds. Two microchiropteran bat species: Eastern Bentwing-bat (*Miniopterus schreibersii oceanensis*) and the Little Bentwing-bat (*Miniopterus australis*), both of which are listed as Vulnerable under TSC Act, were recorded as occurring on or adjoining the Subject Site during targeted surveys.

Suitable foraging and roosting habitat occurs for the Powerful Owl (*Ninox strenua*) which has been recorded in the adjoining Attunga Reserve (Bain et al, 2014); however, this species was not detected during surveys by Cumberland Ecology, or previous consultants during surveys of the Subject Site. No nesting habitat is present for this species, due to a lack of hollow-bearing trees.

S4 Impacts

S4.1 Direct Impacts

The Subject Site is approximately 1.06 ha in size, 0.61 ha of which consists of good quality, intact, Littoral Rainforest, which is listed as an EEC under the TSC Act and a CEEC under the EPBC Act, and total of 0.23 ha of poor quality Littoral Rainforest that conforms only to the TSC Act condition class. The remainder of the Subject Site includes urban native and exotic vegetation, and existing buildings and an unsealed driveway.

The proposed development will result in the complete removal of a total area of 0.05 ha (6%) of all Littoral Rainforest, which is made up of 0.04 ha of good quality, and 0.01 ha of poor quality Littoral Rainforest. Additionally, a further 0.15 ha (17%) of the total area of Littoral Rainforest will be modified as part of an APZ and other purposes, which is made up of 0.10 ha of good quality vegetation and 0.04 ha of poor quality examples of this community.

There is expected to be a minor net loss of canopy cover on the Subject Site, however, this includes exotic canopy cover consisting of large Coral Trees (*Erythrina x sykesii*) (6% of all

canopy cover present on the Subject Site), which will be removed under the proposal. The removal of the exotic canopy species will allow for supplementary replanting of Littoral Rainforest tree species within the APZs, drainage depression, and other areas of Littoral Rainforest retained onsite. The VMP has been prepared to assist in the restoration of Littoral Rainforest both within the area of subdivision, and the adjoining lots, to ensure that the values of the Littoral Rainforest are maintained.

The Subject Site contains potential habitat for a number of threatened fauna species. No threatened flora species are considered to be affected.

The proposal will also remove foraging and roosting habitat for a number of threatened fauna species known from the locality and likely to use the Subject Site as part of a wider foraging range. These species have been defined in the SIS as 'affected species' and include:

- Superb Fruit-Dove (*Ptilinopus superbus*);
- Powerful Owl (*Ninox strenua*);
- Barking Owl (*Ninox connivens*);
- Eastern Bentwing-bat (*Miniopterus schreibersii oceanensis*);
- Little Bentwing-bat (*Miniopterus australis*);
- Large-eared Pied Bat (*Chalinolobus dwyeri*);
- Grey-headed Flying-fox (*Pteropus poliocephalus*); and
- Squirrel Glider (*Petaurus norfolcensis*) on Barrenjoey Peninsula, north of Bushrangers Hill.

However, these species are highly mobile, and the Subject Site would only represent a small area of the total home range for each of these fauna species. This is particularly the case for threatened owls, the fruit-dove and the bats. Furthermore, the best quality habitats present on the Subject Site will be retained and protected under a positive covenant, and therefore habitat will be largely retained, and further enhanced through the implementation of a Vegetation Management Plan and nest box installation. For these reasons, although these threatened fauna species are considered to be 'affected species', for the purposes of this SIS, no significant impacts are expected to occur as a result of the proposed development.

The impacts of the proposal on these species are considered in detail within this SIS.

S4.2 Indirect Impacts

Indirect impacts that will result from the proposal include the increased fragmentation of habitats in the locality. The proposed removal of this small area of vegetation and habitat would add to further fragmentation and reduce faunal corridors than that of current

conditions. However, the proposal will not completely isolate the habitat present as connectivity will still remain to offsite habitat.

Other indirect impacts include increased edge-effects due to the increased urban development and associated weed invasion and the increase in light penetration into the rainforest vegetation. Uncontrolled stormwater run-off has the potential to indirectly impact on the native vegetation present, through the increase in nutrients and potential for soil erosion. Changes to the hydrological regime are also a potential source of indirect impacts to the rainforest vegetation, which is highly dependent on a continually moist abiotic environment.

However, all indirect impacts are considered to be manageable through the implementation of mitigation measures, including water cycle management and restoration and management works through a Vegetation Management Plan (VMP).

S5 Avoidance Measures

The proposed development has been prepared in consideration of the findings of the Land and Environment Court proceedings, and in regard to Council's Development Control Plan (DCP) P21 B4.15 Littoral Rainforest – Endangered Ecological Community in terms of avoiding impacts to threatened species, populations and ecological communities. B4.15 provides the following criteria:

- Development shall not remove or significantly impact on areas of littoral rainforest.
- Development shall restore and regenerate areas of littoral rainforest.
- Development shall not result in a significant loss of canopy cover or a net loss in native canopy trees.

In consideration of DCP21 (B4.15) the development has been significantly refined to avoid impacts to Littoral Rainforest through a number of measures. This includes the proposed creation of larger than allowable lot sizes, reducing the total number of lots and developed area across the Subject Site. Building footprints, ancillary works, and APZ's have been clustered and centred on the most disturbed portions of the Subject Site, to maximise the area of intact Littoral Rainforest that is retained. To the extent possible, the buildings and ancillary works have also been tightly clustered, to reduce impacts from clearing and edge effects. This has resulted in an estimated 9% of the overall native canopy cover of the Subject Site being removed, as opposed to more than 25% of the overall native canopy removed under the original DA.

As part of the preparation of the current DA, there has been consultation with Rural Fire Service (RFS) to refine the road alignment, and the use of permeable road surfaces. This has included avoidance of significant rock outcrops and boulders and also mature trees, particularly Cabbage Tree Palms to the greatest extent possible.

The development proposal has focused on retention of the best quality Littoral Rainforest on the upslope parts of the Subject Site, and maintaining a wide corridor that links remnant vegetation east to west, and in to Attunga Reserve.

There is expected to be a minor net loss of canopy trees on the Subject Site, however the canopy loss will be offset by supplementary replanting of Littoral Rainforest tree species within the retained areas of Littoral Rainforest, APZs, and the drainage line, which contains a number of large exotic Coral Trees that will be removed (accounting for 6% of the total canopy cover on the Subject Site), as part of the proposal. The APZ for Lot 1c and Lot 1d has some available area for clustered planting of fire retardant Littoral Rainforest tree species including Lilly Pilly (*Acmena smithii*) and Cheese Tree (*Glochidion ferdinandi*). When considered in context of the Study Area, the loss of canopy cover is considered marginal.

S6 Ameliorative and Compensatory Measures

Ameliorative measures as part of the proposal include during-construction measures and some long-term management strategies.

A vegetation management plan (VMP) has been prepared for the retained Littoral Rainforest on the Subject Site. The implementation of the VMP is for three years, from the date of land subdivision. A conservation trust will be established, and a portion of the sale from each lot will contribute to the funds for implementation of the VMP, and some limited future maintenance works. The VMP has been prepared for all retained vegetation across all lots on the Subject Site, including those subject to the current subdivision, and also the balance of land from previously approved DA's. This is offered in order to maximise the value of the Littoral Rainforest retained on the Subject Site, and maintain a habitat corridor from east to west in perpetuity. The VMP includes a monitoring programme to evaluate the success of restoration and management efforts.

Compensation strategies include the implementation of a fully funded VMP for all areas of retained native vegetation on the Subject Site. This will maintain a continuous vegetated corridor or Littoral Rainforest in the northern part of the Subject Site, from east to west. Additional compensation measures include the installation of nest boxes in the retained areas of Littoral Rainforest and the implementation of the VMP. This will improve the condition of Littoral Rainforest over the Subject Site and improve habitat for threatened fauna species, particularly the Powerful Owl.

S7 Conclusion

The proposed development has been significantly refined to avoid impacts to native vegetation through a number of measures, including reducing the scale of development across the Subject Site and clustering the proposed works, which are located in the most disturbed areas of the site. Additionally, consultation with the RFS has resulted in a modified APZ, which allows retention of Littoral Rainforest canopy trees, rock outcrops, and limits impacts to natural drainage, through the use of permeable road surfaces.

Nonetheless, the proposed development will result in the complete removal of a total of 0.05 ha (6%) of all Littoral Rainforest, which is made up of 0.04 ha of good quality, and 0.01 ha of

poor quality Littoral Rainforest. Additionally, a further 0.15 ha (17%) of the total area of Littoral Rainforest will be modified as part of an APZ and other purposes, which is made up of 0.10 ha of good quality vegetation and 0.04 ha of poor quality examples of this community.

The Littoral Rainforest present on the Subject Site represents a portion of the total patch present in the Study Area, which includes the adjoining Attunga Reserve. The loss of Littoral Rainforest on the Subject Site represents approximately 3% of the total patch present in the Study Area, and the APZ / modified zones make up approximately 7% of the total patch present in the Study Area. The 0.65 ha of Littoral Rainforest retained on the Subject Site, including the northern corridor of vegetation, will retain connectivity to vegetation in the Study Area and broader locality post development.

Littoral Rainforest retained on the Subject Site will be actively managed under a VMP to restore the degraded areas and maintain the integrity of the Littoral Rainforest patch present in the Study Area. The removal of large exotic Coral Trees, which constitute approximately 6% of all the canopy present on the Subject Site, will allow for replacement planting with rainforest species in the APZ and drainage line.

The loss of native vegetation will result in the removal of potential foraging and roosting habitat within a large home range for a number of highly mobile threatened fauna species known or likely to occur in the habitats present, including Powerful Owl, Barking Owl, Grey-headed Flying-fox, threatened microbats Eastern Bentwing-bat and Little Bentwing-bat and Superb Fruit-dove. The endangered population of Squirrel Glider on the Barrenjoey Peninsula may utilise the vegetation present on the Subject Site as part of a movement corridor, although the majority of this corridor will be retained in the Conservation Area. No significant impacts to species or populations listed under the TSC Act or EPBC Act.

Therefore, while the proposed development will result in the loss of habitat for threatened species, populations and communities, as listed under the TSC Act and EPBC Act, the highest quality habitats will be retained on the Subject Site and actively managed under a fully funded VMP. The long term security of the Littoral Rainforest present on the Subject Site will be confirmed by the establishment of a protective covenant (S88B) placed each of the new lots under the proposed subdivision. This will ensure that this EEC is not significantly impacted in the Study Area.

When considered in terms of the improvements in condition that can be achieved through implementation of the VMP, and prescribed mitigation measures to improve the water quality and control flow of run-off on the site, no significant impact is expected to occur to any species, populations or ecological communities, as listed under the TSC Act and EPBC Act.

Introduction

1.1 Purpose

This document is a Species Impact Statement (SIS) that has been prepared to assess the impacts of a proposed residential subdivision of Lot 1 DP 408800, also known as No. 62 Hillside Road, Newport. A shared private driveway for Lot 1 DP 408800 and Lots 21 and 22 DP 1036400 (No. 85 Hillside Road, Newport) has been approved for development, and works are in progress. For the purposes of this assessment, the 'Subject Site' includes Lot 1 DP 408800 and Lots 21 and 22 DP 1036400, as shown in **Figure 1.1**. The Subject Site is located within the Pittwater Local Government Area (LGA).

The proposed development will require the clearing of an area of Littoral Rainforest, which meets the criteria for the Endangered Ecological Community (EEC) listed under the *New South Wales Threatened Species Conservation Act 1995* (TSC Act). Parts of the community also meets the criteria for Littoral Rainforest and Coastal Vine Thickets of Eastern Australia Critically Endangered Ecological Community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). A referral to the Minister for the Environment will be prepared to determine if further assessment under the EPBC Act is required. It is not anticipated that the proposed development will be deemed a Controlled Action, as per the EPBC Act Significant Impact Guidelines.

The purpose of this SIS is to identify threatened species issues and provide appropriate amelioration for adverse impacts resulting from the proposal. This SIS has been prepared in accordance with Section 109 and 110 of the TSC Act and with the requirements of the Director General of the Office of Environment and Heritage (OEH), which are provided in **Appendix A**.

Although this SIS has been prepared primarily to meet the requirements of the New South Wales (NSW) TSC Act, the impact to threatened flora and fauna listed by the Commonwealth EPBC Act has also been assessed. Within this document, threatened flora and fauna include populations, species and communities listed by the TSC Act and/or the EPBC Act.

The main objectives of this SIS are to:

- Identify threatened species issues and provide appropriate amelioration for adverse impacts resulting from the proposal;

- Provide an appropriate level of background information and assessment to facilitate determinations and licensing processes;
- Assist consent and determining authorities in the assessment of the Development Application under Part 4 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act);
- Assist the Director-General in deciding whether or not concurrence should be granted for the purposes of Parts 4 or 5 of the EP&A Act;
- Assist the Director-General or the Minister for the Environment when consulted for the purposes of Parts 4 or 5 of the EP&A Act;
- Assist the Director-General in the assessment of Section 91 License applications lodged under the TSC Act; and
- Provide preliminary information to the Commonwealth Department of the Environment (DoE) to assist the assessment of a Referral when the proposal is referred to DoE.

This document has been structured to comply precisely with the DGRs. Throughout the SIS at the start of each major section the relevant parts of the DGRs are reproduced in italics in order to demonstrate how each SIS section complies with statutory requirements.

1.2 Background

1.2.1 Location

The Subject Site is located at Lot 1 DP 408800, Lot 21 and Lot 22 DP 1036400, also known as 62 and 85 Hillside Road, Newport and covers an area of approximately 1.06ha. The Subject Site is zoned as E4 – Environmental Living under the *Pittwater Local Environmental Plan 2014* (LZN_017), as shown in **Figure 1.2**. The Subject Site contains land subject to the Pittwater 21 Development Control Plan (DCP) Section B.4.17 Littoral Rainforest - Endangered Ecological Community. The site is bounded by residential properties on three sides, and Attunga Reserve adjoins the Subject Site to the east.

1.2.2 Assessment History

i. Previous Development Applications

The Subject Site has been the focus of extensive studies spanning more than fifteen years, the preparation of a number of development applications (DA), and proceedings in the NSW Land and Environment Court. In 2006, a DA was lodged for an eight lot subdivision over the entire area of 62 and 85 Hillside Road, Newport, with the proposal including construction of seven new dwellings, and retention of the existing house within one of the proposed lots. The DA was refused by Council and the decision was challenged in the NSW Land and Environment Court in 2007. The Court proceedings resulted in direction to prepare an SIS

for the DA, and this included provision for a modified design, as advised by the Court appointed witnesses and Council, for a reduced footprint. This DA was ultimately refused.

In 2009 a DA was submitted to upgrade the existing driveway to accommodate the existing and potential future subdivision and new dwellings. The DA was approved by Pittwater Council (DA N0274/09), and works have commenced to clear the road alignment. The construction of the driveway will occur as part of the future works under the current DA.

An application for subdivision of one lot to create two allotments on Lot 2 DP 1036400, 85 Hillside Road, Newport was approved in 2011 by Pittwater Council (N0730/10). The new Lots are referred to as Lot 21 and Lot 22 DP 1036400 (formerly referred to as Lot 2a and Lot 2b).

ii. Current Development Application

The current development proposal has considered the advice provided by Council and court appointed witnesses during the Court hearing and the findings of the Court in their decision. A Pre-DA meeting was held with Council on the 2nd of June 2015, and the suggested outcomes of the meeting have been incorporated into the design of a modified design with a further reduced footprint.

As part of the preparation of the current DA, there has been consultation with Rural Fire Service (RFS) (meeting on the 20th of October 2015) to discuss assess considerations for fire-fighting vehicles. The suggested outcomes of this meeting, including refinement of the road alignment, and the use of permeable road surfaces, has been incorporated into the current DA.



Legend

- Subject Site
- Lot Boundary

Lot 22 DP 1036400

Lot 1 DP 408800

Lot 21 DP 1036400

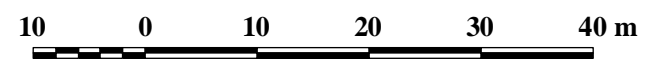
Kanimbla Crescent

Hillside Road

Image Source:
Image © Nearmap
(dated 30-12-2014)



Figure 1.1. Aerial Photograph of the Subject Site





- Legend**
- Subject Site
- Zone**
- E4 - Environmental Living

Image Source:
NearMap
(dated 30-12-2014)

Data Source:
Pittwater Council (2014). Pittwater
Local Environmental Plan 2014 - LZN.



Figure 1.2. Zoning of the Subject Site



1.3 Legislative Requirements

1.3.1 Section 110 Matters

The following Section 110 Matters need only be addressed where relevant:

i. Threat abatement plans

The following threat abatement plans may be relevant to this proposal:

- Predation by the Red Fox (*Vulpes vulpes*); and
- Invasion of Plant Communities by Bitou Bush and Boneseed (*Chrysanthemoides monilifera*).

ii. Recovery plans

- Recovery Plan for the Large Forest Owls; and
- Draft National Recovery Plan for the Grey-headed Flying-fox.

The national recovery plan for *Syzygium paniculatum* is not relevant, as the species has not been recorded on the Subject Site, and therefore the action will not be referred to the Federal Minister for the Environment based on impacts to this species.

iii. Key Threatening Processes

- Clearing of native vegetation;
- Anthropogenic climate change;
- High frequency fires resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition;
- Infection of native plants by *Phytophthora cinnamomi*;
- Introduction and establishment of Exotic Rust Fungi of the Pucciniales pathogenic on plants of the family Myrtaceae;
- Invasion, establishment and spread of Lantana (*Lantana camara* L. sens. lat);
- Invasion of native plant communities by *Chrysanthemoides monilifera*;
- Invasion and establishment of exotic vines and scramblers;
- Invasion of native plant communities by exotic perennial grasses;
- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants;

- Loss of hollow-bearing trees;
- Competition and grazing by the Feral European Rabbit *Oryctolagus cuniculus* (L.);
- Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners *Manorina melanocephala*;
- Predation by the European Red Fox *Vulpes vulpes* (Linnaeus, 1758);
- Predation by the Feral Cat *Felis catus* (Linnaeus, 1758);
- Removal of dead wood and dead trees; and
- Bushrock removal.

iv. *Critical habitat*

At this time, the areas of declared critical habitat are not relevant to this proposal.

1.3.2 Planning Policies

Council's Development Control Plan (DCP) P21 B4.15 Littoral Rainforest – Endangered Ecological Community applies to the Subject Site, and must be considered. B4.15 provides the following criteria:

- Development shall not remove or significantly impact on areas of littoral rainforest.
- Development shall restore and regenerate areas of littoral rainforest.
- Development shall not result in a significant loss of canopy cover or a net loss in native canopy trees.