



Application for a

Section 91 Licence

under the *Threatened Species Conservation Act 1995* to harm or pick a threatened species, population or ecological community* or damage habitat.

1. Applicant's Name ^: (if additional persons require authorisation by this licence, please attach details of names and addresses)	Mr. David Ryan Northern Beaches Council	
2. Australian Business Number (ABN):	57284295198	
3. Organisation name and position of applicant ^: (if applicable)	Northern Beaches Council Manager – Bushland and Biodiversity Natural Environment and Climate Change (NECC)	
4. Postal address ^:	Civic Centre 725 Pittwater Road Dee Why NSW 2099	Telephone ^: B.H. ■ - ■■ ■ A.H. ■■■ ■■■
5. Location of the action (including grid reference and local government area and delineated on a map).	Cannes Reserve Avalon NSW 2107 Pittwater LGA E 344 577 44 N 278 037 12 (see attached map)	

* A threatened species, population or ecological community means a species, population or ecological community identified in Schedule 1, 1A or Schedule 2 of the *Threatened Species Conservation Act 1995*.

^The personal details of all Section 91 licences will be displayed in the register of Section 91 licences required under Section 104 of the *Threatened Species Conservation Act 1995*. See notes.



Location Cannes Reserve
Avalon

 Cannes Reserve boundary

 NORTH

Scale
1cm = 8m

Data Sources: Pittwater Council, 2017; Aerial image: © Land and Property Information, 2014

<p>6. Full description of the action and its purpose (e.g. environmental assessment, development, etc.)</p>	<p>As part of the on-going management of the Grey-headed flying fox camp at Cannes Reserve Avalon, Northern Beaches Council (NBC) proposes to remove a total of 3 mature trees within the south east buffer of the reserve.</p> <p>One single tree species, a Cheese Tree (<i>Glochidion ferdinandi</i>) is indigenous to the reserve and forms part of the Coastal Littoral Rainforest Endangered Ecological Community EEC as defined in the Cannes Reserve Flying-fox Camp Management Plan 2015. This species is particularly abundant within the reserve represented by both mature canopy adults, sub canopy juveniles and seedlings. This single tree is detached from the core remnant area of the reserve.</p> <p>As of 27/7/2017 this tree supported a total of 31 Grey-headed flying fox.</p> <p>The other 2 trees proposed for removal are the non-indigenous Jacaranda (<i>Jacaranda mimosifolia</i>) of which both are former plantings, clumped close together and occur within the rear of No:1 Net Road, within the 7 meter buffer.</p> <p>As of 27/6/2017, only 1 Jacaranda tree supported a total of 6 Grey-headed flying fox</p> <p>The removal of selected roost trees in high conflict areas under the relevant licenses is a management option that is tabled in the Cannes Reserve Flying-fox Camp Management Plan 2015-2020. A 7m buffer exists around the reserve and was created to distance the GHFF from residents thus reducing conflict. The removal of trees greater than 3m was undertaken to ensure that GHFF cannot roost within close proximity to residents. As part of the on-going management of both the GHFF and the Littoral remnant, vegetation modification has been routinely undertaken to remove non-indigenous species (weeds) together with the removal of roost tree habitat and potential roost tree habitat (tree species > 3m height) from the buffer to, as stated, reduce conflict and distance the GHFF from the residents.</p> <p>It has been observed that the removal of GHFF roost vegetation has significantly decreased the level of conflict between the animal and residents, at least for the interim.</p> <p>Vegetation modification (roost habitat buffer removal and frond removal on roost Cabbage palms) was carried out concurrently with the trial dispersal and has been ongoing. Apart from an isolated clump of non-indigenous Banana (<i>Musa</i> sp.) the buffer now supports a discontinuous herbaceous shrub layer primarily of indigenous Coastal Littoral EEC species. The 7m buffer area is an on-going part of the management of both the reserve's vegetation and the GHFF.</p>
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It is proposed that the works to remove these 3 mature trees are to be undertaken at night, after the camp empties (i.e. when all of the Grey-headed Flying-foxes (GHFF) have vacated the reserve to forage).

The intention therefore, of this proposed tree removal operation, is to remove the preferred roosting habitat that these 3 trees now provide the GHFF. All 3 trees are within close proximity to residents from both Net Road and Cannes Drive however, the No: 1 Net Road property is particularly affected by GHFF persistent roosting in all 3 trees. These 3 roosting locations thus continue to present problems to the nearby residents that are affected by loss of amenity, odour, noise and visual distress.

It is now confirmed that all 3 trees are also within the 7m buffer. (Refer to map attached).

The resident at No: 1 Net Road recently had the rear boundary of the property surveyed. Providing this survey to council, the owner highlighted the fact that the 3 trees are well within the buffer, where trees to more that 3m in height are removed as part of the management of buffers in the reserve. The resident at No: 1 Net Road has claimed that the GHFF are continually using the 3 trees as a roost. This has been confirmed by Council's Bushland Management Officer who has observed GHFF in the 3 trees on numerous occasions where numbers roosting in the past 3 months have fluctuated between +30 to + 60 animals across the 3 trees.

The removal of the proposed 3 trees is not expected to affect the GHFF as there are opportunities for seeking further roosting sites available on a variety of canopy tree species closer to the core which is within close proximity to the 3 trees.

The reserve's camp has been occupied by a total of 410 GHFF in the past week (Static count undertaken 27/6/2017). The proposed removal would be conducted during evening hours in favourable weather conditions by a Northern Beaches Council Certified Panel Contractor (in this case the same contractor Active Tree Services would be used) using lightweight equipment i.e. pruning saw/small chainsaws to remove the 3 trees.

Proposed tree works within Cannes Reserve will be undertaken in accordance with the provisions of the relevant Section 91 License granted by The Office of Environment and Heritage (OEH).

The proposed works will be carried out using best practice techniques including the use of all relevant WHS safety gear. A comprehensive risk assessment will be implemented along with a Work Health Safety Induction checklist by the tree contractor which would be to both

Council and the contractor's satisfaction prior to any works being

	<p>undertaken. During the night works the reserve shall be closed to the public with appropriate signage displayed and areas of access taped off to limit intrusion. Only Council staff, relevant tree contractor staff and a wildlife carer will be admitted into the reserve.</p> <p>The equipment used in the proposed tree removal would consist of hand held tools i.e. extension pole saw pruner and both lightweight small (battery operated) and medium sized chainsaws (petrol) therefore noise generated during the tree removal will not have an impact on any GHFF that may be elsewhere foraging close to the reserve, or on any of the neighbouring residents with the proposed timeframes for night works being from 17.00 hours through to 23.00 hours.</p> <p>Works are expected to be over 2 nights however any inclement weather may extend or prolong the overall night work tree removal.</p> <p>It is expected that removal will not affect the microclimate as all 3 trees are outside the core and are within the now extensively cleared 7m buffer which comprises a low herbaceous native species shrub layer. Removal however will increase light and ultra violet light where the canopy crown shade has been removed but this will have negligible impact on the buffer.</p> <p>Council's Bushland Management Officer (BMO) will be present on site during the course of the night works to ensure that the contractor is implementing the works according to the specifications, the s.91 Licence and the relevant attached conditions. Once concluded, Council's BMO will then notify and debrief OEH on the works undertaken.</p> <p>A complete GHFF static count will be conducted prior to any night works being undertaken (at least 1 hour before works commence). 2 exodus counts will also be conducted at least 2 days prior to the works taking place. A population count will also be conducted at the Warriewood Wetlands camp prior to night works proceeding. Works will not be conducted if GHFF remain within the camp nor during periods of adverse weather including strong winds or sustained heavy rains.</p> <p>Residents immediately adjacent to the reserve will be notified regarding the proposed night works by letter/email 48 hours prior to the works taking place. Information about the work will also be placed on the Northern Beaches Council website.</p> <p>A registered wildlife carer (WIRES) will be on site prior to and during the entire course of tree work removal to assist in monitoring the activity and removing sick or injured wildlife.</p>
7. Details of the area to be affected by the	<p>Cannes Reserve is 0.67 hectares in total which includes 0.14 hectares of unformed road (Net Road). The adjoining Gunyah Place</p>

<p>action (<i>in hectares</i>).</p>	<p>Reserve is 0.08 hectares, however much of this area is cleared parkland with little suitable roost habitat. Since 2012, the camp extent ranges between approximately 0.22 hectares and 0.25 hectares (as occupied during the 2014 influx).</p> <p>A total of 3 mature trees are proposed to be removed. It is difficult to quantify this into hectares as all works are above ground and do not equate to complete vegetation removal. The trees foliage is generally located outside the actual rainforest canopy of the other EEC species, so the canopy will remain intact and it is only the 1 sentinel Cheese tree and the 2 planted Jacaranda trees being removed.</p> <p>The proposed tree removal works are not expected to generate gross disturbance to the Coastal Littoral Rainforest EEC in terms of its physicality. No soil loss or erosion is expected as the trees upper foliage will be retained and once removed, will be laid over the sloping buffer. The woody parts i.e. larger lateral branches will be removed and removed off site however the trunks will be felled and left to rot <i>in situ</i> to act as habitat for reptiles and microhabitats for invertebrates e.g. fungi. The buffer vegetation is expected to suffer some trampling during the night works operation however species such as <i>Rubus spp.</i> and small shrubs are expected to recover and will remain viable within the buffer in the long-term.</p> <p>No chipping of vegetation will occur.</p> <p>See attached map for the location of the proposed pruning works.</p>
<p>8. Duration and timing of the action (<i>including staging, if any</i>).</p>	<p>Ideally the proposed tree removal works would be carried out as soon as possible and undertaken as night works when the camp is unoccupied. However if a weather event interrupts the tree removal and prevents further works from being carried out then works will require rescheduling and will need to be completed during that week or when stable weather conditions return, certainly it is anticipated by the end of July 2017. Weather interruptions may stretch the night works out to an extended night sessions by the contractor in order to complete by would finish by no later than 23.00 hours.</p>
<p>9. Is the action to occur on land declared as critical habitat*? (<i>tick appropriate box</i>)</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>* Critical habitat means habitat declared as critical habitat under Part 3 of the <i>Threatened Species Conservation Act 1995</i>.</p>	

10. Threatened species, populations or ecological communities to be harmed or picked.	Scientific name	Common name (if known)	Conservation status (i.e. critically endangered, endangered or vulnerable)	Details of no. of individual animals, or proportion and type of plant material (e.g. fertile branchlets for herbarium specimens or whole plants or plant parts)
	<i>Pteropus poliocephalus</i>	Grey-headed flying fox	Vulnerable	Cannes Reserve zero animals
	<i>Ninox strenua</i>	Powerful Owl	Vulnerable	See SIS Ecological
	<i>Miniopterus schreibersii</i>	Eastern Bentwing Bat	Vulnerable	See SIS Ecological
	<i>Mormopterus norfolkensis</i>	East Coast Freetail Bat	Vulnerable	See SIS Ecological
	Pittwater Spotted Gum Forest	Pittwater Spotted Gum Forest	Endangered Ecological Community	None
	Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Littoral Rainforest	Endangered Ecological Community	See Section 16 below
11. Species impact: (please tick appropriate box) a) For action proposed on land declared as critical habtat; or b) For action proposed on land <u>not</u> declared as critical habitat.	an SIS is attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Copy of SIS with OEH Items 12 to 25 have been addressed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
N.B: Provision of a species impact statement is a statutory requirement of a licence application if the action is proposed on critical habitat. The provision of information addressing items 12 to 17 is a statutory requirement of a licence application if the action proposed is <u>not</u> on land that is critical habitat. Information addressing any of the questions below must be attached to the application.				

12. Describe the type and condition of habitats in and adjacent to the land to be affected by the action.	<p>Buffer - Dense herbaceous layer supports Bandicoot, Black rat and Scrub Wrens.</p> <p>It is expected that the immediate and surrounding area will be little affected by the night work operations as work will be confined to a small area (slope within the buffer where all 3 trees occur) and outside of the core area.</p>
13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality (<i>include reference sources</i>).	See Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)
14. Provide details of any known or potential habitat for a threatened species on the land to be affected by the action (<i>include reference sources</i>).	See Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)
15. Provide details of the amount of such habitat to be affected by the action proposed in relation to the known distribution of the species and its habitat in the locality.	<p>The 3 trees proposed for removal are to be lopped to ground level.</p> <p>The Jacaranda is not endemic and therefore an undesirable species within the reserve.</p> <p>The Cheese tree is to be lopped to ground level however once felled, the stump will not be poisoned which will allow the tree to re-shoot and sucker. The regrowth will be allowed to persist - as a shrub by routine pruning as part of the buffer management i.e. new growth will be routinely trimmed and pruned so as foliage does not exceed the 3m height level. The tree can persist into the future albeit as a shrub and its roots can continue to bind and hold the soil together thus minimizing erosion.</p>

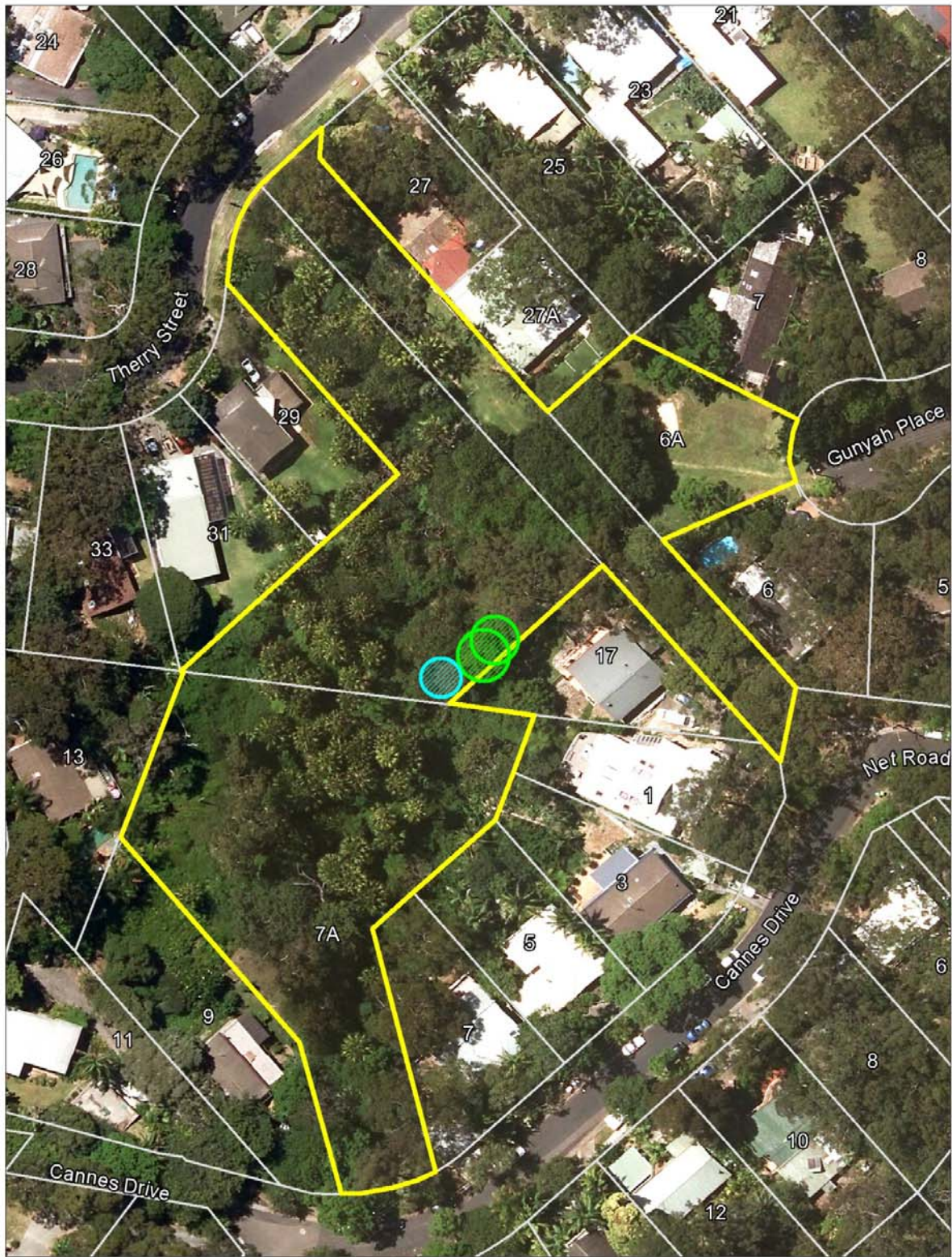
<p>16. Provide an assessment of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species.</p>	<p>The impacts to the Coastal Littoral Rainforest EEC during the tree removal are expected to be minimal as the removal will have zero impact on the overall health and viability of the Coastal Littoral EEC. The Cheese tree will grow back as evidenced by the typical response to this species when lopped.</p> <p>The Jacaranda trees are close to a residential boundary that is within the buffer however devoid of mature EEC species except for recent buffer plantings.</p> <p>The “intensity of effect” remains negligible as the works are arboreal and well away from the ground. The Cheese position is as a sentinel so after removal its influence on microclimate is therefore negligible. Furthermore and apart from the GHFF using as a roost, the proposed tree removal will have little impact to other fauna which utilize both the Cheese tree and Jacaranda as habitat. Apart from the GHFF, no observations have been recorded by the BMO for either nests or possum dreys in all 3 trees.</p> <p>The proposed vegetation removal works are designed to further limit the roosting habitat for the GHFF, which is in line with the objectives of the Cannes Reserve Flying-fox Camp Management Plan to reduce the population of GHFF in such a small reserve with adjacent residences located very close. Although the intention is to modify the habitat to make it undesirable and influence the GHFF to either move into the core or relocate elsewhere, the actual impact on habitat overall for the species within the wider region is miniscule. The removal of the proposed 3 trees will in no way have any impact on placing the habitat of the GHFF under any threat, however the removal will serve to attempt to resolve a very localised issue.</p>
<p>17. Provide details of possible measures to avoid or ameliorate the effect of the action.</p>	<p>As stated above, the Cheese tree removed during the night work operations will grow back and the Jacaranda is a non-indigenous undesirable species. The reserve’s vegetation will remain healthy and viable and the Coastal Littoral Rainforest EEC will not be impacted detrimentally.</p>
<p><i>N.B: The Director-General must determine whether the action proposed is likely to significantly affect threatened species, populations or ecological communities, or their habitats. To enable this assessment the Applicant is required to address items 18 to 24. Any additional information referred to in addressing these items must be attached to the application.</i></p>	
<p>18. In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the</p>	<p>The GHFF is a listed threatened species, however the proposed works will not have an adverse effect or place the species at risk of extinction. The intention of the works is to reduce the roosting habitat available and therefore reduce numbers overall. As the works will occur while the GHFF are absent, they will not be in</p>

<p>species such that a viable local population of the species is likely to be placed at risk of extinction.</p>	<p>any way stressed, rather they will simply move on to another roost within the reserve's core or possibly to another known camp when they return from overnight foraging to discover that their roosts have been reduced in Cannes Reserve. As the numbers in the past year at Cannes have been relatively low (zero to ~600 individuals) this will not impact on other regional camps (Warriewood, Balgowlah, Gordon, North Avoca) most of which have populations in the thousands so any increase will be negligible. Splintering or establishing of new camps in the Avalon region is unlikely, based on Council's experience with its recent dispersal program and subsequent palm pruning night works as no splinters or new camps were formed during those periods.</p> <p>For other listed threatened species refer to:</p> <p>Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)</p>
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19. In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.	The GHFF is not listed as an endangered population. There are no listed endangered populations which will be adversely affected by the proposed works.
20. In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed: (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.	The two endangered ecological communities (EEC's) present in Cannes Reserve – Coastal Littoral Rainforest and Pittwater Spotted Gum Forest will not be adversely affected by the proposed works or placed at risk of extinction. Although one selected EEC tree specimen will be lopped, it will not be poisoned and therefore can go on to persist reshooting in the future. See Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)
21. In relation to the habitat	See Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)

<p>of a threatened species, population or ecological community:</p> <p>(i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and</p> <p>(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and</p> <p>(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality.</p>	
<p>22. Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).</p>	<p>See Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)</p>
<p>23. Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.</p>	<p>See Cannes Reserve Flying-fox Camp Management Plan 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)</p>


24. Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.	<p>While the loss of habitat is a key threatening process for the GHFF, the proposed works are considered justified due to the level of distress expressed by residents surrounding the reserve and the 3 trees occurring within the 7m buffer. This distress is due to the proximity of at times, large numbers of GHFF to the existing residences. The numbers of GHFF have been as high as 3,500 animals in July 2014, which is completely untenable and unsustainable for an extremely small remnant reserve of 0.6 hectares.</p> <p>Works to remove the proposed 3 trees will not lead to major loss of habitat in the reserve.</p>



Location of Trees - Cannes Reserve
17 Net Road, Avalon

Data Sources: Pittwater Council, 2017; Aerial image: © Land and Property Information, 2014

-  Jacaranda Trees
-  Cheese Tree
-  Cannes Reserve boundary


NORTH
Scale
1cm = 8m

Important information for the applicant

Processing times and fees

The *Threatened Species Conservation Act 1995* provides that the Director-General must make a decision on the licence application within 120 days where a species impact statement (SIS) has been received. No timeframes have been set for those applications which do not require a SIS. The Director-General will assess your application as soon as possible. You can assist this process by providing clear and concise information in your application.

Applicants may be charged a processing fee. The Director-General is required to advise prospective applicants of the maximum fee payable before the licence application is lodged. Therefore, prospective applicants should contact the Office of Environment and Heritage (OEH) prior to submitting a licence application.

A \$30 licence application fee must accompany a licence application.

Protected fauna and protected native plants^{*}

Licensing provisions for protected fauna and protected native plants are contained within the *National Parks and Wildlife Act 1974*. However, a Section 91 Licence may be extended to include protected fauna and protected native plants when these will be affected by the action.

If you are applying for a licence to cover both threatened and protected species please provide the information requested in Item 10 *as well as* a list of protected species and details of the number of individuals animals or proportion and type of plant material which are likely to be harmed or picked.

Request for additional information

The Director-General may, after receiving the application, request additional information necessary for the determination of the licence application.

Species impact statement

Where the application is not accompanied by a SIS, the Director-General may decide, following an initial assessment of your application, that the action proposed is likely to have a significant effect

^{*} Protected fauna means fauna of a species not named in Schedule 11 of the *National Parks and Wildlife Act 1974*.

Protected native plant means a native plant of a species named in Schedule 13 of the *National Parks and Wildlife Service 1974*.

on threatened species, populations or ecological communities, or their habitats. In such cases, the *Threatened Species Conservation Act 1995* requires that the applicant submit a SIS. Following initial review of the application, the Director-General will advise the applicant of the need to prepare a SIS.

Director-General's requirements for a SIS

Prior to the preparation of a SIS, a request for Director-General's requirements must be forwarded to the relevant OEH Office. The SIS must be prepared in accordance with section 109 and 110 of the TSC Act and must comply with any requirements notified by the Director-General of OEH.

Disclosure of Personal Information in the Public Register of s91 Licences

The Public Register provides a list of licence applications and licences granted. A person about whom personal information is contained in a public register may request that the information is removed or not placed on the register as publicly available.

Copies of all applications and licences issued under section 91 and certificates issued under section 95 of the Act are available on the OEH website at

www.environment.nsw.gov.au/threatenedspecies/S91TSCaRegisterByDate.htm

or in hardcopy form from The Librarian, OEH, 59 Goulburn St, Sydney.

Certificates

If the Director-General decides, following an assessment of your application, that the proposed action is not likely to significantly affect threatened species, populations or ecological communities, or their habitats, a Section 91 Licence is not required and the Director-General must, as soon as practicable after making the determination, issue the applicant with a certificate to that effect.

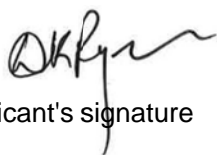
N.B: An action that is not required to be licensed under the Threatened Species Conservation Act 1995, may require licensing under the National Parks and Wildlife Act 1974, if it is likely to affect protected fauna or protected native plants.

I confirm that the information contained in this application is correct. I hereby apply for a licence under the provisions of Section 91 of the *Threatened Species Conservation Act 1995*.

Applicant's name Mr. David Ryan
(Please print)

Applicant's Position & Organisation (if relevant) (Please print)

Manager Bushland and Biodiversity
Northern Beaches Council



Applicant's signature

Date 29th June 2017

For more information or to lodge this form, contact the nearest branch of OEH's Conservation and Regulation Division:

Metropolitan Branch
P: 02 9995 6802
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NSW 2124

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