

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)	Mark Beharrell Pittwater Council		
2. Australian Business Number (ABN):	61340837871		
3. Organisation name and position of applicant ^: (if applicable)	Pittwater Council Manager - Natural Environment and Education (NEE)		
4. Postal address ^:	PO BOX 882	Telephone ^:	
	Mona Vale NSW 1660	B.H. 02 99701368	
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.H.	

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.

6. Full description of the action and its purpose (e.g. environmental assessment, development, etc.)

Pittwater Council proposes to "pineapple-prune" a number of Cabbage Tree Palms (*Livistona australis*) within Cannes Reserve. These palms are indigenous species and part of the Coastal Littoral Rainforest Endangered Ecological Community EEC as defined in the Cannes Reserve Flying-fox Camp Management Plan 2015.

Council pineapple-pruned 13 Cabbage Tree Palms in November 2015 which were located within the nominated 7-metre buffer around the edge of the reserve. These works were permitted as part of Council's current Section 91 Licence No. C0001064. Two licence variations were also approved by the Office of Environment & Heritage to allow these works to be undertaken later than mid-August 2015 and also to be undertaken at night, when all of the Grey-headed Flying-foxes (GHFF) had left the reserve to forage. The intention of this operation was to remove the preferred roosting habitat that the palm fronds provide and hopefully reduce GHFF numbers overall. It is of Council's opinion that this operation had a degree of success as numbers have been lower in recent months, and GHFF have since not been roosting in some locations where they have presented problems to nearby residents.

Some residents have since claimed that the flying-foxes have relocated further to the south (uphill) and into palms closer to their houses, and into areas not previously roosted in. All of these palms are located beyond the 7-metre buffer, therefore requiring separate approval.

The camp has been unoccupied by flying-foxes in the past week, for reasons unknown as no management actions have occurred since mid-November by Council. Council would like to take advantage of this window of opportunity by conducting additional palm pruning as soon as possible, to avoid any need for night works. The proposed pruning would be conducted during daylight hours in favourable weather conditions by a Pittwater Council Certified Panel Contractor (in this case the same contractor Active Tree Services would be used) using electric saws/pruners) to prune palm fronds in selected palms (refer to map attached). Should the GHFF return prior to the works being scheduled, the works will be conducted at night once all GHFF have left to forage, in a similar manner to as previously undertaken.

A total of 24 individual Cabbage Tree Palms are proposed to be pruned, located in the core area of the reserve. In addition, up to 20 palms are proposed to be pruned/re-pruned within the buffer area (the original 13 of which some have now re-grown lower fronds, plus up to another 7), potentially a total of up to 44 palms altogether. There were, as of making this application, no visual observations of any animal (GHFF) roosting in any of the proposed palms nor, as of

the 4th April 2016 have any GHFF been observed occupying the central roost or anywhere within Cannes Reserve nor have any GHFF been observed in adjacent reserves or gullies within the immediate vicinity for at least one week, either by Council staff or residents.

All works on Council land will be undertaken in accordance with the provisions of the relevant Section 91 Licence granted by The Office of Environment and Heritage (OEH).

The proposed works will be carried out using best practice techniques including safety gear. A comprehensive risk assessment will be implemented along with a Work Health Safety Induction checklist which would be to both Council and the Contractor's satisfaction prior to any works being undertaken.

The equipment used in the proposed palm pruning would consist of hand held tools i.e. extension pole saw pruner or small chainsaws, therefore noise generated will not have an impact on any GHFF that may be elsewhere in the reserve, or on any neighbouring residents.

The purpose of the proposed works therefore is to modify the habitat sufficiently so that it is no longer attractive or suitable as a GHFF camp. It is expected that the palm frond removal will only see a slight influence on the microclimate as it may increase light and ultra violet light that may impact on the core temperature of the reserve. If this does occur however, it will only make the reserve less desirable for GHFF to inhabit.

Council's Bushland Management Officer (BMO) will be present on site during the course of the works to ensure that the contractor is implementing the works according to the specifications which will be made available to OEH.

A complete GHFF static count will be conducted prior to any works being undertaken. Works will not be conducted during periods of adverse weather including strong winds or sustained heavy rains.

Residents immediately adjacent to the reserve will be notified by letter/email 48 hours prior to the works taking place. Information about the work will also be placed on Council's website.

See disc provided: Species Impact Statement 2012 (Eco Logical Australia) Cannes Reserve flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure)

7. Details of the area to be affected by the action (in hectares).

Cannes Reserve is 0.67 hectares in total which includes 0.14 hectares of unformed road (Net Road). The adjoining Gunyah Place 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).
	See attached map blue and green circled areas for the location of the proposed pruning works. A total of up to 44 palms are proposed to be pruned. It is difficult to quantify this into hectares as all works are above ground and do not equate to complete vegetation removal. The Cabbage Tree Palm foliage is generally located above the actual rainforest canopy of the other species, so the canopy will remain intact and it is only the emergent palms being pruned.
	The proposed palm pruning 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 and as pineapple-pruning involves leaving fronds above 45 degrees intact, the palms pruned will not die, the palms will replace the removed fronds within 12 months and remain healthy and viable in the long-term.
8. Duration and timing of the action (including staging, if any).	Ideally the proposed pruning works would be carried out as soon as possible while the camp is unoccupied. However should the GHFF return prior, the pruning works will be undertaken at night and works scheduled to be completed by the end of June 2016. It will likely take a few sessions by the contract crew to complete.
9. Is the action to occur on land declared as critical habitat*? (tick appropriate box)	☐ Yes ☑ No
* Critical habitat means habitate Conservation Act 1995.	at declared as critical habitat under Part 3 of the Threatened Species

10 Throatanad anasias	Scientific name	Common name	Conservation	Details of
 Threatened species, populations or ecological communities to be harmed or picked. 		(if known)	status (i.e. critically endangered, endangered or vulnerable)	no. of individual animals, or proportion and type of plant material (e.g. fertile branchlets for herbarium specimens or whole plants or plant parts)
	Pteropus poliocephalus	Grey-headed flying fox	Vulnerable	Cannes Reserve zero animals 30/03/2016
	Ninox strenua	Powerful Owl	Vulnerable	See SIS Ecological
	Miniopterus schreibersii	Eastern Bentwing Bat	Vulnerable	See SIS Ecological
	Mormopterus norfolkensis	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;	an SIS is attached	□Yes	☑ No Copy of SIS	S with OEH
b) For action proposed on land <u>not</u> declared as critical habitat. B: Provision of a species in	Items 12 to 25 hav		☑ Yes	□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.	See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)
13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality (include reference sources).	See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 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 (include reference sources).	See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 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.	See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)

16. Provide an assessment of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species. The impacts to the Coastal Littoral Rainforest EEC during the proposed palm pruning of up to 44 specimens are expected to be minimal as the pruning will have zero impact on the overall health and viability of the Coastal Littoral EEC. The palms' pruned fronds will grow back as evidenced by the more recent palm pruning where the palms are now almost back to their usual rotund shape

The "intensity of effect" remains negligible as the works are arboreal and well away from the ground. The palms are either positioned as 'sentinels' or are found as emergent so influence on microclimate is therefore negligible, as the rainforest canopy below will not be altered. Furthermore the proposed palm pruning will have little impact to other fauna which utilize the palms as habitat e.g Brushtail Possums as there is plentiful habitat elsewhere in the reserve.

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 relocate elsewhere, the actual impact on habitat overall for the species within the wider region is miniscule. The pruning of up to 44 Cabbage Tree Palms will in no way have any impact on placing the habitat of the GHFF under threat; all it does is serve to attempt to resolve a very localised issue.

17. Provide details of possible measures to avoid or ameliorate the effect of the action. As stated above, the fronds removed during the pineapplepruning operations will grow back and the palms themselves therefore remain healthy and viable and the Coastal Littoral Rainforest EEC will not be impacted detrimentally.

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.

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 species such that a viable local population of the species is likely to be placed at risk of extinction.

The Grey-headed Flying-fox 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 any way stressed, rather they will simply move on to another known camp when they 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 hugely on other regional camps, 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, as no splinters or new camps were formed during this period.

For other listed threatened species refer to:

See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia

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 Grey-headed Flying-fox 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 select EEC specimens will be pruned, they will not be poisoned or wholly removed therefore can reshoot in the future.

See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)

21. In relation to the habitat of a threatened species, population or ecological community:

As per the map on Page 13 of this application, it can be seen that the pruning of the 24 palms outside of the buffer represents a habitat reduction of only 4.2% of the total habitat within the reserve including buffer areas, and 10% of total habitat excluding buffers. As mentioned elsewhere, this is only a temporary loss of roosting habitat and not a permanent loss of EEC vegetation.

See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)

- (i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and
- (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
- (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.
- 22. Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).

See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)

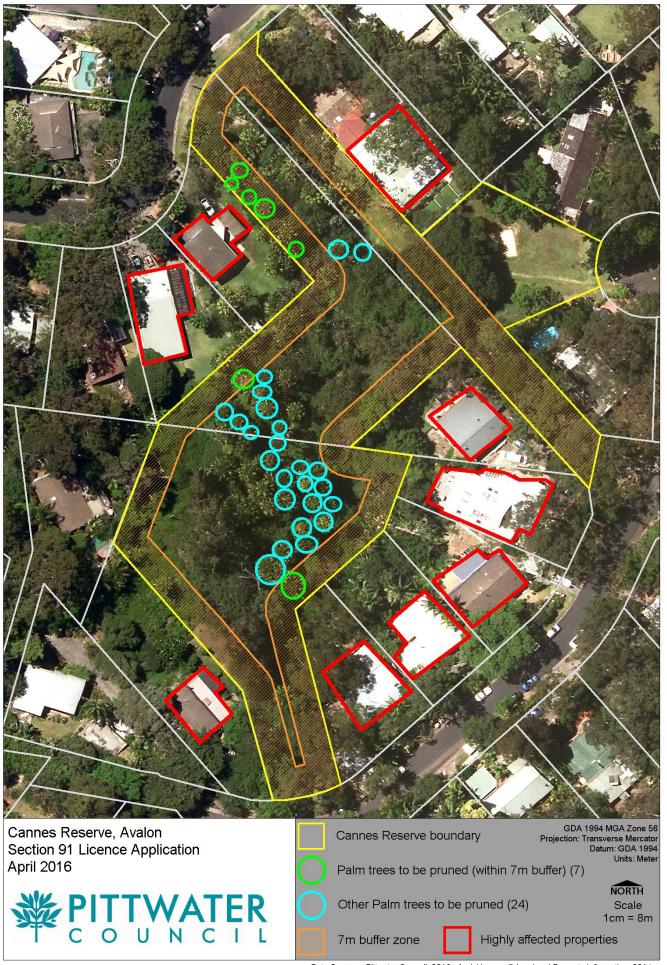
23. Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.

See attached disc: Cannes Reserve Flying-fox Camp Management Plan Final Draft 2015-2020 (Ecosure) and Species Impact Statement Cannes Reserve Avalon 2012 (Eco Logical Australia)

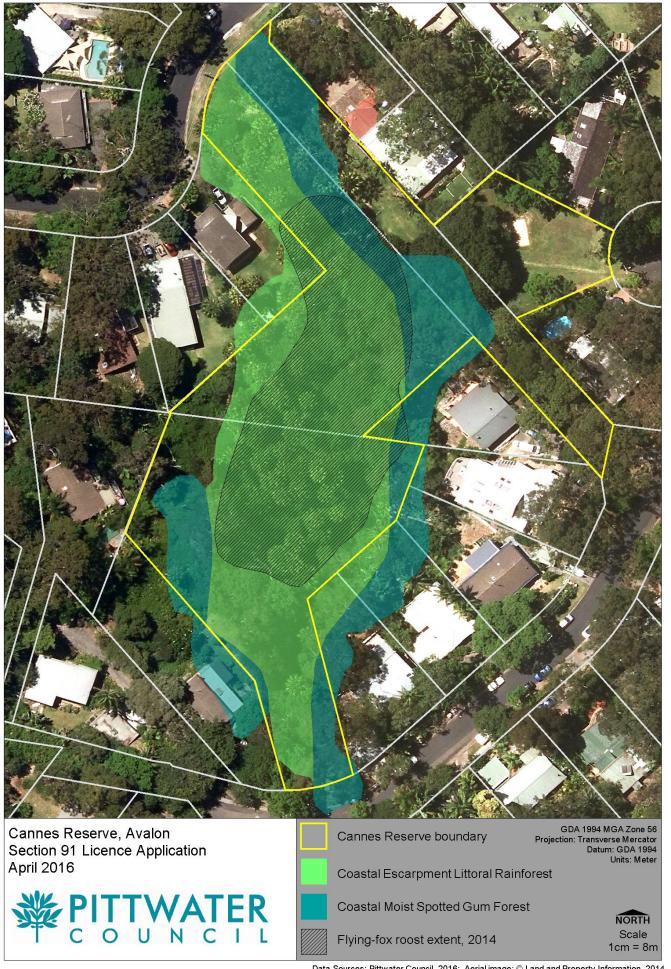
24. Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

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. 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 unsustainable for a linear-shaped reserve of 0.6 hectares.

Works to modify vegetation will not lead to major loss of habitat in the reserve.



Data Sources: Pittwater Council, 2016; Aerial image: © Land and Property Information, 2014





 $\textbf{Data Sources: Pittwater Council}, \textbf{2016}; \ \textbf{Aerial image:} \\ @ \ \textbf{Land and Property Information}, \textbf{2}$

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.

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I confirm that the inforunder the provisions of	mation contained in thi Section 91 of the Thre	is application is correct. atened Species Conserv U 21/11/16	I hereby apply for a licer vation Act 1995.	nce
Applicant's name (Please print)	Mark Beharrell			
Applicant's Position & Organisation (if relevant (Please print)				
Manager Natural Environment and Education NEE				
Applicant's signature				
Date				

For more information or to lodge this form, contact the nearest branch of OEH's

Conservation and Regulation Division:

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F: 02 9995 6900
PO Box 668
Parramatta
NSW 2124

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North East Branch P: 02 4908 6800 F: 02 4908 6810 PO Box 488G, Newcastle NSW 2300

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