

Application for a



Office of  
Environment  
& Heritage

# 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)	Marnie Kikken	
2. Australian Business Number (ABN):	86 408 856 411	
3. Organisation name and position of applicant ^: (if applicable)	Ku-ring-gai Council Marnie Kikken - Manager Environment and Sustainability	
4. Postal address ^:	818 Pacific Hwy, Gordon NSW 2072	Telephone ^: B.H. (02) 9424 0000 A.H. [REDACTED]
5. Location of the action (including grid reference and local government area and delineated on a map).	<p>The Ku-ring-gai Flying-fox Reserve (KFFR) is an area of 15.3 hectares of bushland in Gordon, within the Ku-ring-gai Local Government Area (LGA) (-33.750499,151.160331). The KFFR is a vegetated gully encompassing the downstream section of Stoney Creek and adjoining extensive bushland (see Appendix A). To the east, downstream, the reserve adjoins large bushland areas managed by Ku-ring-gai Council, which are contiguous with Garigal National Park in the Middle Harbour Catchment.</p> <p>KFFR is zoned E2 - Environmental Conservation and is managed under a Conservation Agreement entered into between Ku-ring-gai Council and the NSW Government in February 1991. The Conservation Agreement outlines the management intent of the KFFR in accordance with the provisions of s. 721(1) of the <i>National Parks and Wildlife Act 1974</i> (NSW). The proposed action is within an area which</p>	

\* 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.

	<p>has been unused by flying fox since 2013. The site is located in a clearing on the northern side of Stony Creek, approximately 50 m from where the GHFF actively roosted in 2015, until the 9<sup>th</sup> of April when the GHFF vacated the KFFR. It is considered unlikely that the GHFF will return this winter.</p> <p>The site of the pile burns and location of roosting GHFF during 2015 is indicated in Appendix A.</p>
<p>6. Full description of the action and its purpose (e.g. environmental assessment, development, etc.)</p>	<p>The activity is to complete two (2) pile burns consisting of weed species removed from within the KFFR, strategically placed away from roosting GHFF and in a location which is presumed to have an intact soil seedbank which will respond positively to fire.</p> <p>The activity will be conducted at a time when no GHFF are within the KFFR. This will mean conducting the work either at night or while there are no roosting GHFF during the day time (as is the case as of 9<sup>th</sup> of April 2015). The action will be completed in the presence of a qualified ecologist, outside of the breeding/weaning season. The activity will be conducted when the prevailing winds will carry smoke away from where the GHFF were roosting, which is approximately 50 m to the North of the pile burn sites.</p> <p>The pile burns will be conducted in collaboration with the local bush care group and the Ku-ring-gai Bat Conservation Society, and managed by skilled and experienced bush regenerators from Ku-ring-gai Council.</p> <p>The project is designed to effectively manage the weedy material collected from this area of the KFFR, and also stimulate the soil seedbank to encourage germination of native species.</p> <p>The project is anticipated to benefit the vegetation within the impacted area.</p> <p>These 2 small pile burns will act as a trial for the soil resilience and response to fire of the vegetation within the KFFR. The results of this burn will be closely monitored and will help to inform the ongoing management of the KFFR for the benefit of the GHFF, the vegetation community and the surrounding residents.</p> <p>Ku-ring-gai Council received an Environmental Trust Grant (ref: 2013/SL/0036), for rehabilitation works within the KFFR. The grant includes ecological burning intended to improve the habitat for GHFF in the core of the KFFR. The current activity (2 small pile burns) will be monitored to help determine what could be expected from an ecoburn as per the Environmental Trust Grant. Any future action such as an ecoburn, would be the subject of a separate s91 application.</p> <p>The Environmental Trust Grant (ref: 2013/SL/0036) is included as Appendix B.</p>

7. Details of the area to be affected by the action ( <i>in hectares</i> ).	<p>The pile burns are within areas of Sydney Sandstone Gully Forest where exotic weed species have been removed and gathered together in a pile. The vegetation is dry and dead, consists only of material removed from the locality and is located in an area which is highly degraded but which is highly likely to contain a viable soil seedbank.</p> <p>The total area to be directly impacted by the 2 pile burns is &lt;20m<sup>2</sup>.</p>			
8. Duration and timing of the action ( <i>including staging, if any</i> ).	<p>Pending approval, the action will occur between late April and July, outside of the breeding/weaning season and other sensitive life stages of the GHFF.</p> <p>The burn will be conducted at a time when no GHFF are in the KFFR, this will either be at night, or during a time when no GHFF are roosting in the KFFR, which has been the case since the 8th of April 2016.</p> <p>Much of the preparatory work has already been completed, and the plant material is dry and dead. The work will be carried out in three stages.</p> <ol style="list-style-type: none"> <li>1. Pre-burn - the site will be prepped for safety over a 2 hour period, this will involve no loud machinery and only very minor disturbances.</li> <li>2. During the pile burn – The pile will be ignited following confirmation from a wildlife ecologist that no GHFF are within the camp. From the time of ignition to the time the fire is fully extinguished will approximately 1 hour.</li> <li>3. Post burn - some cleaning up and packing away of hoses will be conducted following the pile burn. Weed management activities, and fencing to restrict access will be implemented in the weeks following the pile burns. The level of disturbance associated with the post burn activities is considered to be similar to the ongoing bushcare activities carried out in the KFFR by the bushcare group and council staff.</li> </ol> <p>With the exception of the post work weeding and fencing, the whole exercise is anticipated to be completed within 4 hours.</p>			
9. Is the action to occur on land declared as critical habitat*? ( <i>tick appropriate box</i> )	<p><input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No</p>			
10. Threatened species, populations or ecological communities to be harmed or picked.	<u>Scientific name</u>	<u>Common name</u> ( <i>if known</i> )	<u>Conservation status</u> ( <i>i.e. critically endangered, endangered or vulnerable</i> )	<u>Details of no. of individual animals, or proportion and type of plant</u>
<p>* Critical habitat means habitat declared as critical habitat under Part 3 of the <i>Threatened Species Conservation Act 1995</i>.</p>				

				<u>material</u> (e.g. fertile branchlets for herbarium specimens or whole plants or plant parts)
	1. Pteropus poliocephalus	1. Grey-headed Flying Fox	1. Vulnerable (TSC Act and EPBC Act)	Numbers of flying fox within the KFFR since 2014 has ranged from 5,000 – 50,000.
	2. Ninox strenua	Powerful Owl	Vulnerable (TSC Act)	Occasional sightings within the KFFR. No roost tree within 50 m of the pile burn sites.
11. Species impact: (please tick appropriate box) a) For action proposed on land declared as critical habitat; or b) For action proposed on land <u>not</u> declared as critical habitat.	an SIS is attached <input type="checkbox"/> Yes <input type="checkbox"/> No  Items 12 to 25 have been addressed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<p><i>N.B: Provision of a species impact statement is a statutory requirement of a licence application if the action is proposed on critical habitat.</i></p> <p><i>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.</i></p>				
12. Describe the type and condition of habitats in and adjacent to the land to be affected by the action.	The KFFR hosts an important maternal colony for GHFF, and contains several plant communities and associations which vary with topography, aspects and soil type. The majority of the site is dominated by sandstone flora associations within Sydney Sandstone Gully communities, whilst riparian vegetation dominates along the banks of Stony Creek in sheltered areas. The upper and more exposed slopes contain more sclerophyll dominated			

	<p>vegetation and where the soils are clay influenced on the upper southwest slopes, Sydney Turpentine Ironbark Forest occurs.</p> <p>The specific site where the impacts associated with pile burns will be centralised is a pile of dry and dead vegetation, located in a clearing with no canopy cover. The surrounding soil is exposed primarily due to the weeding and removal of vegetation which now forms the piles to be burnt.</p> <p>The proposed pile burns are anticipated to improve the habitat within this area of the reserve, promoting the germination of native species and helping to regenerate the site.</p> <p>The Flying fox are currently not roosting within the KFFR, having left the camp on 8<sup>th</sup> April 2015 and not expected back this winter. During 2015, the GHFF were roosting upslope to the north, approximately 50m away from the proposed pile burns.</p> <p>The area to be impacted by the pile burns is a very small (20m<sup>2</sup>) degraded site which only contains the piles to be burnt.</p> <p>The pile burn site is similar in many respects to a site identified in an Environmental Trust Grant (ref: 2013/SL/0036). The grant relates to an ecoburn within the KFFR and a further s91 application relating to the ecoburn may be submitted to OEH, pending the results of the currently proposed pile burns.</p>
13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality (include reference sources).	<p>The Reserve provides habitat for species and ecological communities listed in the schedules of the Threatened Species Conservation Act, 1995 (NSW). These include the Powerful Owl (<i>Ninox strenua</i>) which uses the Reserve as part of its habitat range and the Sydney Turpentine Ironbark Forest found in part of the Reserve. Also known to exist in the vicinity is the Red-crowned Toadlet (<i>Pseudophryne australis</i>), and Giant Burrowing Frog (<i>Heleioporus australiacus</i>). (References: Kuringai Council's Biobase, Sydney Bats Website, Powerful Owl Project).</p>
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).	<p>Habitat for GHFF in the form of roosting trees exists throughout the KFFR. The area to be impacted by the pile burns is not currently used by flying fox and roost trees will not be impacted by the pile burns.</p> <p>In relation to powerful owls, no habitat will be directly impacted, and no roost trees are known within 50 m of the pile burns.</p> <p>The Red-crowned Toadlet (<i>Pseudophryne australis</i>) and Giant Burrowing Frog (<i>Heleioporus australiacus</i>), will not be impacted as the pileburns are located away from their preferred habitat along the riparian zone.</p>

<p>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>	<p>The area to be impacted by the pile burns is <math>&lt;20\text{m}^2</math>. The KFFR is <math>153000\text{m}^2</math> (15.3ha), therefore the area impacted represents <math>&lt;0.02\%</math> of the KFFR and none of the habitat area roosted by GHFF in 2015.</p> <p>The proposed burning is anticipated to promote germination of native species, and the results of the burn will be used to determine the most appropriate management of the KFFR in terms of the GHFF, the vegetation, and the residents.</p> <p>An Environmental Trust Grant (ref: 2013/SL/0036) has been approved which includes ecological burning. Pending positive results from the pile burns proposed in this application, a further s91 application relating to the Environmental Trust funded ecoburn may be submitted to OEH. These actions are only proposed if they are considered to benefit the GHFF within the KFFR.</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>Fire and smoke have the potential to cause stress, and dispersal within a GHFF camp. However, the pile burns are very small and GHFF left the camp on 8<sup>th</sup> of April 2015, and are not anticipated to return this winter. The area where GHFF were roosting in 2015 was located approximately 50m away from the proposed pile burns.</p> <p>The mitigation measures detailed below in section 17, reduce the risk associated with the action on the GHFF and other threatened species and all flora and fauna.</p> <p>Considering the GHFF are not currently roosting in the camp, the size of the area to be impacted (<math>&lt;20\text{m}^2</math>), the mitigation measures that will be in place and the availability of habitat within the KFFR throughout the project, the burn is not considered likely to have a significant impact on the lifecycle or habitat of GHFF or any other species.</p>
<p>17. Provide details of possible measures to avoid or ameliorate the effect of the action.</p>	<p>The following measures to avoid or ameliorate the effect of the action will be implemented:</p> <ul style="list-style-type: none"> <li>• All works will be completed in the presence of an ecologist or experienced wildlife carer, with the authority to cease or modify works if it is determined necessary.</li> <li>• The burn will be conducted between April and July in consideration of the breeding/weaning season of the GHFF.</li> <li>• All works will be scheduled to take place when no GHFF are within the camp.</li> <li>• Disturbance, wherever possible will be minimized</li> <li>• Works will not occur during periods of adverse environmental and weather conditions, including food shortages, strong winds, periods of several hours of sustained rain or temperatures exceeding 38 degrees during the day prior to or on the day of any vegetation removal.</li> </ul>

*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.*

<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 species such that a viable local population of the species is likely to be placed at risk of extinction.</p>	<p>The action is intended to improve habitat and guide the future management of the reserve for the benefit of GHFF, native fauna and flora and residents surrounding the camp. The potential for impacts is associated with the smoke from the pile burns, however considering; the GHFF are not currently roosting in the camp, the area to be impacted is very small (&lt;20m<sup>2</sup>), the duration of the activity is short (&lt;4hrs) and the mitigation measures outlined in section 17, the activity is unlikely 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.</p>
<p>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.</p>	<p>The grey-headed flying-fox population is not listed as Endangered.</p>
<p>20. In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:</p> <p>(i) is likely to have an adverse effect on the extent of the ecological community such that its</p>	<p>No EEC will be impacted by the proposed pile burns.</p> <p>Sydney Turpentine-Ironbark Forest (STIF), upslope from the pile burns will not be adversely impacted by the action.</p> <p>The action will not adversely modify the composition of any ecological community such that its local occurrence is likely to be placed at risk of extinction.</p>

<p>local occurrence is likely to be placed at risk of extinction, or</p> <p>(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.</p>	
<p>21. In relation to the habitat 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>i) The pile burn locations do not offer habitat for the GHFF. The pile burns represent a fraction (&lt;0.02%) of the KFFR, and the intention of the burn is to promote regeneration of a diversity of native species, including species which will form feeding and roosting resources for the GHFF, increasing habitat extent and quality.</p> <p>ii) The pile burns cover an area of &lt;20m<sup>2</sup>. The proposed activity will not increase fragmentation or cause an area to become isolated.</p> <p>iii) The area impacted by the pile burns is not utilised by GHFF and GHFF are not currently roosting in the KFFR. The pile burns will not remove, modify, fragment or isolate any habitat.</p>

<p>22. Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).</p>	<p>There is no declared critical habitat within the Kuringai LGA, and there is no declared critical habitat associated with GHFF.</p> <p>The maternal camp within the KFFR is considered one of the most significant camps in NSW and is considered a critical component of GHFF habitat along the east coast.</p> <p>Subject to the mitigation measures outlined in section 17 of this report, it is considered that the proposed pile burns are highly unlikely to negatively impact the habitat for GHFF within the KFFR.</p>
<p>23. Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.</p>	<p>The proposed burn is consistent with the Draft National Recovery Plan, in particular, Action 3, which seeks to '<i>Identify, protect and enhance roosting habitat critical to the survival of Greyheaded Flying-foxes</i>'</p> <p>The proposed action is in line with the management objectives outlined in the relevant Saving Our Species program, in particular, the objectives to:</p> <ul style="list-style-type: none"> <li>• Protect roosting habitat critical to the survival of Grey-headed Flying-foxes, for example through management plans, local environmental plans and development assessments, and through volunteer conservation programs for privately owned land.</li> <li>• Determine characteristics of roosting habitat for Grey-headed Flying-foxes, exploring the roles of floristic composition, vegetation structure, microclimate and landscape features, and assess the status of camps.</li> <li>• Enhance and sustain the vegetation of camps critical to the survival of Grey-headed Flying-foxes.</li> </ul> <p>The proposed burns, whilst benefiting the specific locations where they are carried out, will also help to guide future management of the reserve for the benefit of GHFF. Particularly in regards to the possibility of conducting an ecological burn funded through Environmental Trust Grant (ref: 2013/SL/0036).</p>
<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>	<p>The action does not constitute a key threatening process, nor will the action increase the impact of any key threatening process.</p>

## **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<sup>\*</sup>**

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 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**

---

<sup>\*</sup> 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*.

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/S91TscRegisterByDate.htm](http://www.environment.nsw.gov.au/threatenedspecies/S91TscRegisterByDate.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  
(Please print)

---

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

---

Applicant's signature

---

Date

---

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  
F: 02 9995 6900  
PO Box 668  
Parramatta  
NSW 2124

North East Branch  
P: 02 6640 2500  
F: 02 6642 7743  
PO Box 498  
Grafton  
NSW 2460

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

North West Branch  
P: 02 6883 5330  
F: 02 6884 8675  
PO Box 2111  
Dubbo  
NSW 2830

South Branch  
Biodiversity Conservation Section  
P: 02 6122 3100  
F: 02 6299 3525  
PO Box 622 Queanbeyan  
NSW 2620

Office of Environment and Heritage (NSW)  
PO Box A290, Sydney South NSW 1232  
Phone: 131 555 (Environment Line) Fax: 9995 5999  
Email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au)