

Application for a

Section 91 Licence

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

1. Applicant's Name: <i>(if additional persons require authorisation by this licence, please attach details of names and addresses)</i>	Lindsay Walker.	
2. Organisation name and position of Applicant: <i>(if applicable)</i>	Lismore City Council. Executive Director – Development and Governance.	
3. Postal address:	PO Box 23A, Lismore NSW 2480	4. Telephone: B.H. 6625 0565 A.H.
5. Location of the action <i>(including grid reference and local government area and delineated on a map).</i>	<p>The Flying-fox relocation will occur at Rotary Park Lismore, grid reference 153° 17' 50" E ; 28° 48' 35" N, in the Lismore City Council Local Government Area (Appendix 1). The reserve is Crown Land managed by Lismore City Council, the Trustee for the reserve.</p> <p>The park is zoned 7a Environmental Protection (natural vegetation and wetlands zone). Management objectives for the zone are:</p> <ul style="list-style-type: none"> • To protect and preserve significant wetlands, and • To retain significant areas of unique natural vegetation, such as rainforest remnants, and • To prohibit development which could destroy or damage a wetland ecosystem or rainforest. <p>The Flying-fox roost is located in the rainforest canopy of the western part of the reserve as delineated in the aerial photograph of the reserve (Figure 2, Appendix 3).</p>	

<p>6. Full description of the action and its purpose (eg., environmental assessment, development etc.).</p>	<p>Purpose of the Relocation</p> <p>The relocation will prevent further health and amenity impacts to residents adjoining the reserve, and protect the ecological function of the reserve and threatened species reliant on it.</p> <p>Council continues to liaise with DEC, DEH and NSW Health over resident's health concerns. Written correspondence addressing community concerns was sent to residents most affected by the animals' presence. Despite this, residents continue to complain to Council and demand their relocation. Issues raised by residents for and against relocation are detailed in Appendix 2.</p> <p>Council undertook a Noise Impact Assessment (Appendix 5) in response to noise complaints by local residents. As shown by the assessment, noise generated by the Flying-foxes is significantly impacting the amenity of residents in Gardener Avenue, adjoining the reserve.</p> <p>Relocation of Flying-foxes roosting at Rotary Park will help retain habitat for all threatened flora and fauna species reliant on the remnant. Flying-foxes have denuded rainforest canopy in nearby rainforest roost sites. This process is progressing in Rotary Park threatening the function and integrity of the entire rainforest community and the persistence of threatened flora and fauna species in the reserve. Rotary Park is a fragile remnant of high conservation value. Furthermore, the Flying-fox roost is inconsistent with Lismore City Council zoning management objectives for the reserve.</p> <p>Council commissioned an independent expert analysis of the 'Suitability of Sites in the Lismore Region for Roosting Flying-foxes' and undertook an assessment of Alternative Management Options to Relocation of Flying-foxes (Appendix 6) and Economic and Social Matters associated with relocation (Appendix 7). Following deliberation of assessment findings Council considers that it is imperative that the relocation occurs before the Flying-foxes make Rotary Park a permanent camp.</p> <p>Preparation</p> <p>All residents within a 350 metre radius of the roost site will receive a Letter of Notice prior to commencement of relocation. The letters will notify residents of the activity, particularly noise generation, its duration, and purpose of the activity. Residents will be warned not to handle Flying-foxes under any circumstances and will be supplied with a Council contact phone number in the event of animals landing in backyards or similar. A media campaign will be run in conjunction to inform the wider community of the relocation and the hazards of handling animals. NPWS Flying-foxes educational information on this matter will be made available to all local residents.</p> <p>Council staff will participate in dispersal of Flying-foxes. A staff training program will be organised in consultation with the Project Manager who will undertake training with</p>
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6. Cont'd	<p>Council's Safety Officer, David Bryant. Participant training will occur in the week leading up to the relocation, and will focus on the dispersal purpose, methodology, communication protocols, and roles and responsibilities of all participants. A thorough site assessment will be undertaken to determine safety hazards and ensure the health and wellbeing of participants.</p> <p>The Project Manager and Council's Bushland Management Officer will be the principle contacts for the project. Local Police will be notified and consulted on appropriate precautionary measures.</p> <p>Representatives from Commonwealth DEH, NSW DEC and Northern Rivers Wildlife Carers Inc., will be formally invited to participate in the relocation in an observation and advisory capacity. James Clark-Williams from Goonellabah Veterinary Hospital will be on site during each dispersal session to monitor animal welfare. James has been vaccinated against lyssavirus, has experience in handling and treating Flying-foxes, and monitored bat welfare during the nearby Maclean Flying-fox relocation in 1999.</p> <p>Methodology and Contingencies</p> <p>The relocation methodology will be based on a modified version of that used at the Maclean High School site (Tidemann, 2003) since this is the only known method to be effective with minimum environmental impact and no observed harm to Flying-foxes.</p> <p>Flying-foxes currently roosting at the site will be driven from the site by high intensity noise. Up to 80 dB will be generated twice daily for up to 30 minutes before dawn (06:00) and before dusk (17:00) for a period of up to 14 days or until full dispersal is achieved. Only the amount of noise required to disperse Flying-foxes will be generated. Relocation attempts will cease and methodologies will be reassessed if dispersal has not been achieved after 14 days.</p> <p>If Rotary Park is reoccupied as a roost site, dispersal procedures will be repeated as required while Council has State and Commonwealth approval to do so, until Flying-foxes relocate or until the Project Manager decides that relocation attempts are not likely to be effective.</p> <p>If Flying-foxes temporarily roost in one or more unsuitable sites following dispersal, they will be dispersed before dusk with permission from and in consultation with landowners.</p> <p>Long-term success of the project will depend on Flying-foxes not returning to roost at Rotary Park or other unsuitable sites but relocating to one of the nominated 'traditional' roost sites or other suitable bushland areas.</p> <p>Each dispersal session will consist of a series of five to ten minute crescendos delivered at ten to fifteen minute intervals. Noise will be generated by aerosol horns, starter pistols,</p>
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unmuffled two-stroke motors, metal drums and stock whips. Trial measurements will be made prior to the event to ensure noise generation does not exceed 80 dB.

Three or four teams of up to six Council employees flanking the north eastern perimeter of the colony will generate the noise initially. The disturbance activity will commence approximately 20 metres from the colony perimeter and move progressively closer and into the core of the colony as required. Teams will move within the reserve to disperse all Flying-foxes.

Noise generation will be coordinated by the Project Manager in visual contact with the camp and in radio contact with team leaders of noisemakers. As required, the teams will make successive disturbance sessions incrementally closer and louder to the Flying-foxes to achieve their relocation.

During dispersal sessions a 'spotter' will be positioned at the adjoining vantage point, Claude Riley Lookout, with binoculars and in radio contact with the Project Manager to observe, monitor and report on Flying-fox movements and destination/s.

Project Management

Council has arranged to contract John Nelson as a suitably qualified and experienced person to manage the relocation. John has appropriate experience in Flying-fox management, including animal welfare and camp relocation at the Melbourne Botanic Gardens site. He is willing and able to manage the project in the given timeframe.

Monitoring and Reporting

Council will be responsible for monitoring of animal welfare from commencement of relocation to seven days after dispersal attempts have ceased. Similarly, if further dispersals are required, Council will monitor animal welfare for their duration and for seven days following.

Monitoring will consist of pre-relocation counts in Rotary Park and nearby camps to establish baseline information and help determine the relocation destination. Daily estimates of Flying-fox numbers and animal welfare observations will be undertaken at Rotary Park and all nearby camps to determine the relocation destination and success or otherwise of methods to disperse animals. As mentioned above, long-term success of the project will depend on Flying-foxes not returning to roost at Rotary Park or other unsuitable sites but relocating to one of the nominated 'traditional' roost sites or other suitable bushland areas.

Monitoring information will be detailed in a report to be submitted to the Federal Government DEH and NSW DEC at conclusion of dispersal. The report will also detail the success or otherwise of techniques used and community responses to the relocation.

* 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*.

7. Details of the area to be affected by the action (in hectares).	This Flying-fox roost site is approximately 8,000 metres ² or 0.8 hectares in area. Several residences nearby Rotary Park are currently impacted by the presence of Flying-foxes roosting in the reserve. More residences in the area are likely to be affected in the short term by the dispersal noise generation.			
8. Duration and timing of the action (including staging, if any).	Relocation will occur as soon as possible following State and Commonwealth approvals. The action needs to occur prior to August 2007, well before expected birthing of young Flying-foxes around October/November 2007. This will minimise the chance of females aborting developing foetuses.			
9. Is the action to occur on land declared as critical habitat? (please tick appropriate box)	Yes		No <input checked="" type="checkbox"/>	
10. Threatened species, populations or ecological communities to be harmed or picked.	Scientific Name	Common Name (if known)	Conservation Status (ie. critically endangered, endangered or vulnerable)	Details of no. of individual animals, or proportion and type of plant material (eg. fertile branchlets for herbarium specimens or whole plants or plant parts)
	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Vulnerable	Fluctuating - approximately 10,000 -
	<i>Pteropus alecto</i>	Black Flying-fox	Vulnerable	Fluctuating - approximately 2,000

* Critical habitat means habitat declared as critical habitat under Part 3 of the *Threatened Species Conservation Act 1995*.

<p>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.</p>	<p>Items 12 to 25 have been addressed</p>
<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. The provision of information addressing items 12 to 17 is a statutory requirement of a licence application if the action proposed is not on land that is critical habitat. Information addressing any of the questions below must be attached to the application.</i></p>	
<p>12. Describe the type and condition of habitats in and adjacent to the land to be affected by the action.</p>	<p>Rotary Park is a Dry Rainforest remnant of high conservation value. The reserve was declared a Native Flora Preserve in 1901 and was entered on the Register of the National Estate on 30/05/1995. Moreover as Lowland Rainforest on the NSW North Coast it has recently been listed as an Endangered Ecological Community in Part 3 of Schedule 1 of the NSW TSC Act. The ecological significance of the reserve is reflected by the presence of around 254 native plant species and numerous threatened flora and fauna species listed under State and Federal legislation and national flora conservation lists (Joseph, 2000):</p> <p>Council recognises the high ecological value of the reserve and has dedicated ongoing funding to the Park's restoration since 1985. Council continues to contract a team of professional bush regenerators working to restore and maintain the park's natural values.</p> <p>The habitat adjacent to and surrounding the reserve may be described as a highly modified urban residential environment. Some foraging habitat is provided to Flying-foxes from backyard fruit trees and isolated tree species.</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).

Joseph (2000) details the numerous threatened flora and fauna species at Rotary Park listed under State and Commonwealth legislation and national flora conservation lists as follows:

FAUNA

Threatened Species Conservation Act, 1995

Schedule 1 - Endangered

Nurus brevis – a ground beetle

Schedule 2 - Vulnerable

Ptilinopus regina - Rose-crowned Fruit-Dove

Pteropus alecto - Black Flying-fox

Pteropus poliocephalus - Grey-headed Flying-fox

Commonwealth Environmental Protection and Biodiversity Conservation Act, 1999

Pteropus poliocephalus - Grey-headed Flying-fox

FLORA

Threatened Species Conservation Act, 1995

Schedule 1 - Endangered

Gossia fragrantissima – Sweet Myrtle

Ochrosia moorei - Southern Ochrosia

Tarenna cameronii – Diplospora

Schedule 2 - Vulnerable

Clematis fawcettii – Northern Clematis

Desmodium acanthocladum – Thorny Pea

Floydia praealta – Ball Nut

Tinospora tinosporoides – Arrow Head Vine

Commonwealth Environmental Protection and Biodiversity Conservation Act, 1999

Endangered

Gossia fragrantissima – Sweet Myrtle

Ochrosia moorei - Southern Ochrosia

Vulnerable

Clematis fawcettii – Northern Clematis

Desmodium acanthocladum – Thorny Pea

Floydia praealta – Ball Nut

Tinospora tinosporoides – Arrow Head Vine

Rare or Threatened Australian Plant List – CSIRO (ROTAP – Briggs & Leigh 1995)

Archidendron muellerianum – Veiny Lace Flower – 3RCa

Gossia fragrantissima – Sweet Myrtle – 3EC

Clematis fawcettii – Northern Clematis – 3VC

Desmodium acanthocladum – Thorny Pea – 2VC

Floydia praealta – Ball Nut – 3VC

Ochrosia moorei - Southern Ochrosia – 2ECi

Tinospora tinosporoides – Arrow Head Vine – 3RC

Trichosanthes subvelutina – Silky Cucumber – 3RC

13. cont'd	Black and Grey-headed Flying-foxes regularly roost in several nearby reserves. These include the Endangered Ecological Communities (Lowland Rainforest on Floodplain) of Booyong and Boatharbour Nature Reserves (DEC estates), and Currie Park (Lismore City Council managed), as well as the Dry Rainforest remnant of Wilson Park Nature Reserve. Flying-fox roosts also occur in nearby Subtropical rainforest remnants to the east such as Lumley Park.
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>As a significant dry rainforest remnant, Rotary Park provides important habitat for various threatened flora and fauna species listed above in Q. 13.</p> <p>The park is representative of dry rainforest that once covered much of the area subject to low rainfall and a markedly dry spring. It occupies rocky, dry steep slopes on the edge of basalt soil associated with the Big Scrub that once occupied much of the area to the east. The rainforest strata consist of two tree layers with scattered emergent trees such as Hoop Pine (<i>Araucaria cunninghamii</i>) and Australian Teak (<i>Flindersia australis</i>). According to Floyd (1990), the dry rainforest community at Rotary Park is of the <i>Drypetes australasica</i> / <i>Araucaria</i> alliance and <i>Araucaria cunninghamii</i> suballiance. This suballiance exhibits the best height, structural and floristic development within this alliance, and is typified at Rotary Park (Floyd, 1990).</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 roost currently occupies an area of approximately 8000 metres². With their dispersal, this area will be denied to flying foxes as roosting habitat. However, native trees producing pollen, nectar and fruit will continue to be available as foraging habitat for Black and Grey-headed Flying-foxes.</p> <p>According to long-term residents neighbouring the reserve and Lorraine Black from Northern Rivers Wildlife Carers Inc., Flying-foxes have only been known to roost in Rotary Park on a few occasions prior to September/October 2005, in relatively low numbers, and in locations much further from residences. Their apparent non-reliance on the reserve as roosting habitat suggests that it is not critical to their survival.</p> <p>The Black Flying-fox is found in coastal and near-coastal areas across northern Australia through eastern Qld to the Bellinger River in northern NSW. NSW National Parks and Wildlife Service, 2002, 'Threatened Species of the Upper North Coast of NSW – Fauna' report that this species appears to be increasing in numbers in NSW and extending its range to the south.</p> <p>The Black Flying-fox has been recorded locally at the following nature protected areas:</p> <ul style="list-style-type: none">• Ballina Nature Reserve;• Boatharbour Nature Reserve;• Booyong Nature Reserve;• Border Ranges National Park;• Broadwater National Park;• Bundjalung National Park;• Cudgen Nature Reserve;• Currie Park, Lismore;• Lumley Park, Alstonville;• Stotts Island Nature Reserve;• Tweed Estuary Nature Reserve;• Ukerebagh Nature Reserve;• Victoria Park Alstonville; and• Wilson Nature Reserve. <p>NSW National Parks and Wildlife Service, 2002, 'Threatened Species of the Upper North Coast of NSW – Fauna' report that the Grey-headed Flying-fox is found from central eastern Qld south to Victoria. In NSW they mainly occur in coastal areas and along river valleys but occasionally extend to the western slopes.</p>
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15 cont'd	<p>The Grey-headed Flying-fox has been recorded locally at the following nature protected areas:</p> <ul style="list-style-type: none">• Ballina Nature Reserve;• Boatharbour Nature Reserve;• Booyong Nature Reserve;• Brunswick Heads Nature Reserve;• Bundjalung National Park;• Cape Byron State Conservation Area;• Cudgen Nature Reserve;• Currie Park;• Lumley Park, Alstonville;• Stotts Island Nature Reserve;• Tweed Estuary Nature Reserve;• Tyagarah Nature Reserve• Ukerebagh Nature Reserve;• Victoria Park Alstonville; and• Wilson Nature Reserve. <p>Experience indicates that following dispersal, Flying-foxes are likely to relocate locally in the short term (Tidemann, 1999). Relative locations of recently used roost sites in the vicinity of Rotary Park are shown in Figure 1, Appendix 3.</p> <p>Appendix 3 details an 'Assessment of the Suitability of Sites in the Lismore Region for Roosting Flying-foxes' and represents an independent expert analysis. From Appendix 3 six nearby alternative sites may be suitable to accommodate flying-foxes from Rotary Park. ie Currie Park, Boat Harbour Nature Reserve, Wilson Nature Reserve, Booyong, Davis Scrub and Maquires Creek (Figure 1). Booyong is considered the most suitable site to accommodate large numbers of relocated animals.</p>
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15. cont'd	<p>Unlike Rotary Park, Currie Park and Wilson and Boatharbour Nature Reserves are relatively remote from residential development. Flying-fox camps at these reserves do not generate community conflict that has occurred at Rotary Park. For this reason Council has identified these and other nearby areas zoned for wildlife habitat protection, as sites suitable for long-term Flying-fox camps.</p> <p>It is unclear why Currie Park has recently been disused for roosting (pers. comm. L. Black & R. Gough - Northern Rivers Wildlife Carers Inc., & R. Joseph). For this reason, it is uncertain if Currie Park, the obvious alternative site to Rotary Park, is suitable to accommodate flying-foxes over the long-term. There was some speculation that the flight path of the Westpac Rescue Helicopter may have been to blame though this cannot be substantiated. As detailed in Appendix 4, Council's restoration of Currie Park, the primary alternative site, is a medium to long term strategy to attract Flying-foxes away from residential areas.</p> <p>Considering the range of known alternative roost habitat sites used by Black and Grey-headed Flying-foxes throughout the North Coast region and in close proximity to Rotary Park, the proposed action is unlikely to significantly reduce suitable roosting habitat for either species.</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>Due to the range of suitable alternative roosting sites and apparent non-reliance on Rotary Park as roosting habitat, denial of roosting habitat at Rotary Park is unlikely to have a significant impact on the life-cycle, habitat or survival of Grey-headed Flying-foxes. Furthermore, relocation of Flying-foxes from Rotary Park will maintain and improve Flying-fox foraging habitat and the habitat of other threatened species in the Endangered Ecological Community by retaining rainforest canopy which is integral to ecosystem health and function.</p> <p>A Recovery Outline and Taxon Summary for the Grey-headed Flying-fox have been prepared under a national Action Plan for Australian Bats (Duncan <i>et. al.</i>, 1999). National recovery objectives relevant to this application are to 'Develop non-destructive methods for management of camps in problem areas' (Duncan <i>et. al.</i>, 1999). This proposed relocation action is non-destructive. It is also consistent with recommended national management actions, ie 'identification of alternative camp sites and encouragement of relocation to these sites where necessary in problem situations'. The Rotary Park Flying-fox colony is considered by Council to be a 'problem situation'. Furthermore, several suitable alternative camp sites are available in the Lismore area.</p> <p>No adverse impacts to individual animals have been observed with recent Flying-fox relocations on the North Coast using the same methodology (Tidemann, 2003). In such cases, animals have moved to nearby campsites in response to noise disturbances, a process that occurs naturally in response to natural disturbances such as fire and hail storms. Furthermore, timing of the proposed dispersal (prior to August, 2007) has been planned to minimise impacts to the Flying-fox breeding cycle and pregnant females.</p>

<p>17. Provide details of possible measures to avoid or ameliorate the effect of the action.</p>	<p>To reduce the risk of disease transmission to Lismore residents and ensure the safety of displaced Flying-foxes, all residents within a 350 metre radius of the roost site will receive a Letter of Notice prior to commencement of relocation. The letters will notify residents of the activity, particularly noise generation, its duration, and purpose of the activity. Residents will be warned not to handle Flying-foxes under any circumstances and will be supplied with a Council contact phone number in the event of animals landing in backyards or similar. Public notification and media campaigns will be run in conjunction to inform the wider community of the relocation and the hazards of handling animals. NPWS Flying-foxes educational information on will be made available to all local residents.</p> <p>Noise alone will be used to disperse Flying-foxes. The amount of noise generated and its proximity to roosting Flying-foxes will be limited to that required to disturb roosting Flying-foxes sufficiently to cause them to take flight and relocate out of the reserve.</p> <p>James Clark-Williams from Goonellabah Veterinary Hospital will be on site during each dispersal session to monitor animal welfare and attend to any injured animals. James has been vaccinated against lyssa virus, has experience in handling and treating Flying-foxes, and monitored bat welfare during the nearby Maclean Flying-fox relocation in 1999. Council will meet the reasonable costs of care, treatment and rehabilitation of any injured animals as a result of the relocation.</p> <p>Representatives from the Commonwealth DEH, NSW DEC, Northern Rivers Wildlife Carers Inc., and RSPCA will be formally invited to participate in the relocation in an observation and advisory capacity. Local Police will be notified and consulted on appropriate precautionary measures.</p> <p>Flying-foxes regularly camp in several nature-protected areas in close proximity to Rotary Park. Like Rotary Park, Currie Park is also managed by Lismore City Council and has also received considerable Council resources for its rehabilitation over many years. Council has recently stepped up its bushland restoration at Currie Park with funding for an additional 90 bush regeneration work days over 3 years, with additional works by a supervised Green Corps team of volunteer youths. By rehabilitating roosting habitat at Currie Park, Council is hoping to attract Flying-foxes away from Rotary Park which is judged to be unsuitable due to the close proximity of residences. Rehabilitation of roosting habitat is a recognised 'conservation action' for Black and Grey-headed Flying-foxes (NPWS 2002).</p>
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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 25. Information addressing any of the questions below 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>As detailed in Q. 15 and Q16 the proposed action is unlikely to significantly impact the life cycles of either Black or Grey-headed Flying-foxes, nor is likely to endanger local populations of either species. The relocation methodology will be that of Tidemann (2003) due to the lack of observed harm to Flying-foxes with the relocation undertaken at the Maclean High School site.</p> <p>It is not possible to determine the relationships of Flying-fox colonies at Rotary Park to 'viable local populations'. However, no 'viable local population' of either Black or Grey-headed Flying Fox could be reliant on the roosting habitat present at the site for survival, as evidenced by their infrequent use of the site as roosting habitat.</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>Neither Black nor Grey-headed Flying fox populations in the Lismore area are recognised 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 local occurrence is likely to be placed at risk of extinction,</p> <p>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>The Dry Rainforest community at Rotary Park is now recognised as an Endangered Ecological Community – Lowland Rainforest on the NSW North Coast.</p> <p>The proposed action to relocate Flying-foxes from the reserve will help retain ecological function and integrity of the reserve by preventing further damage to canopy trees by Flying-foxes.</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) Approximately 8000 metres² of roosting habitat will be removed to Black and Grey-headed Flying-foxes as a result of the proposed action. This area represents only a very small proportion of the total area currently used by Flying-fox populations on the North Coast. It is used infrequently as roosting habitat by Flying-foxes and is currently being used only since September/October 2005.</p> <p>Valuable foraging habitat for both species of Flying-foxes and other threatened species recorded at the site will be maintained and improved as a result of the proposed action.</p> <p>(ii) The proposed action will not further fragment or isolate habitat of either Flying-fox species. A high degree of species mobility will ensure genetic exchange is maintained between populations of Black and Grey-headed Flying-foxes.</p> <p>(iii) Flying-foxes commenced day-time roosts at Rotary Park in September/October 2005. As detailed in Q. 15 anecdotal evidence suggests the site has only been used as roosting habitat on only a few previous occasions. The site's roosting habitat is therefore unlikely to be critical to the long-term survival of either species.</p>

<p>22. Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).</p>	<p>The TSC Act defines "critical habitat" as "...habitat declared to be critical habitat under Part 3" of the Act. At the time of preparation of this application, the Director-General of the NPWS had not declared any "critical habitat" for either the Black or Grey-headed Flying-foxes.</p> <p>Furthermore, given their status as 'Vulnerable' under the TSC Act, Black and Grey-headed Flying-foxes are ineligible for critical habitat declarations (NPWS 2001).</p>
<p>23. Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.</p>	<p>Neither Recovery Plans nor Threat Abatement Plans have been prepared for either Black or Grey-headed Flying-foxes in NSW. The proposed relocation action is however recognised as a threat to both Black and Grey-headed Flying-foxes (NPWS, 2001; NPWS, 2002).</p> <p>A Recovery Outline and Taxon Summary for the Grey-headed Flying-fox have been prepared under a national Action Plan for Australian Bats (Duncan <i>et. al.</i>, 1999). National recovery objectives relevant to this application are to 'Develop non-destructive methods for management of camps in problem areas' (Duncan <i>et. al.</i>, 1999). The proposed relocation action is non-destructive and therefore consistent with national recovery objectives for the species. The proposed relocation action is also consistent with recommended national management actions, ie 'identification of alternative camp sites and encouragement of relocation to these sites where necessary in problem situations'. The Rotary Park Flying-fox colony is considered by Council to be a 'problem situation'. Furthermore, alternative camp sites are available in the Lismore area and have been identified in Q. 15 & Appendix 3.</p> <p>Council continues to implement conservation actions detailed by NPWS (2001) and NPWS (2002). These include restoration of the alternative Flying-fox roost sites at Currie Park and other public reserves, as detailed in Q. 17.</p> <p>Council acknowledges the lack of, and need for, community education of the ecological importance of Flying-foxes recommended by NPWS (2002).</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 proposed relocation action is not listed as a Key Threatening Process in Schedule 3 of the TSC Act.</p>

REFERENCES

- Duncan, A., Baker, G.B., and Montgomery, N., 1999 'Recovery Outline and Taxon Summaries – Grey-headed Flying-fox', Australian Government Department of the Environment and Heritage,
<http://www.deh.gov.au/biodiversity/threatened/action/bats/13.html>
- Floyd, A. G. 1990 'Australian Rainforests in NSW – Vol. 1. Surrey Beatty and Sons Pty Ltd NSW Australia.
- Joseph, R., 2000 'Restoration of Rotary Park Rainforest Reserve, Past – Present – Future.' Environmental Training and Employment ENVITE Northern Rivers Inc.
- NPWS, 2001 'Grey-headed Flying-fox', Threatened Species Information.
- NPWS, 2002 'Threatened Species of the Upper North Coast of NSW – Fauna', NSW National Parks and Wildlife Service, Northern Directorate, Coffs Harbour.
- Roberts, B.J., 2006 'Management of Urban Flying-fox Camps: Issues of Relevance to Camps in the Lower Clarence, NSW'. Valley Watch Inc., Maclean.
- Tidemann, C.R., 2003 'Dispersal of a Flying-fox camp using sound' in Ecological Management & Restoration, p 224 – 226, Vol 4, No. 3, December 2003.
- Tidemann, C.R., 1999 'Biology and Management of the Grey-headed Flying-fox, *Pteropus poliocephalus*' in Acta Chiropterologica, 1(2): 151-164, 1999.

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 DEC 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 and 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 DEC 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 the Department of Environment and Conservation (NSW).

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.

• 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*.

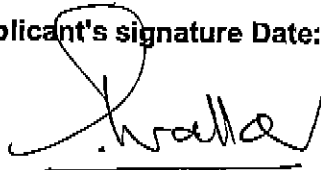
I confirm that the information contained in this application is correct. I hereby apply for a licence under the provisions of Section 91 of the *Threatened Species Conservation Act 1995*.

Applicant's name: Lindsay Walker

organisation and position: Lismore City Council, Executive Director – Development and Governance
(Please print)

Applicant's signature Date:

08/06/07



A handwritten signature in black ink, appearing to read 'L. Walker', is written over a horizontal line. The signature is stylized and cursive.