NEHU009



Application for a

Department of Environment and Conservation (NSW)

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: (if additional persons require authorisation by this licence, please attach details of names and addresses)	Note: A team of consultancies will undertake / supervise seed collection. Team details are provided in Attachment 7.	
Organisation name and position of Applicant: (if applicable)		
3. Postal address:	1 :	4. Telephone: B.H.
5. Location of the action (including grid reference and local government area and delineated on a map).	"Hunter Economic Zone" (HEZ), Čessnock LGA. For location and map details refer to attached documentation (Attachment 1)	1
6. Full description of the action and its purpose (eg. scientific research, environmental assessment, regeneration activities, development etc.).	In accordance with Cessnock Local Environmental Plan 1989, Cessnock Development Control Plan 2006, Part E - Specific Areas - E.6 HEZ and Draft HEZ Habitat Management Strategy (Revised and Updated), September 2005 (Refer to Attachment 2), the use of local native species in landscape and restoration works is encouraged to retain and further enhance	

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 existing character, habitat value and environmental resilience of the Hunter Economic Zone (HEZ).

It is envisaged that the use of provenance plant material will further complement proposed landscape and bushland restoration procedures such as topsoil stripping and reinstatement of existing site seed banks and bushland regeneration. Works are applicable to road corridors and individual lots within HEZ.

The establishment of a strategic programme to procure suitable volumes of local provenance material from HEZ and nearby areas is imperative to the success of this conservation initiative. By building the HEZ seed bank up over time, access to local provenance material will be possible for future landscape works

Collection of seed and propagules will occur only within land zoned 4(h). This is to ensure that local provenance material is used for all landscaping and restoration works. It is also to secure long term conservation outcomes, both for the Estate and the adjoining Werakata National Park.

The following actions will apply to the Threatened species and Endangered Ecological Communities (EEC) listed in No. 10 of this application and for the Protected flora species as listed within The Vegetation of the Hunter Economic Zone (Bell 2004) (Refer to Attachment 3 for Flora Species List containing Protected Species). These actions are:

- Seed collection of groundcover, shrub and / or tree species.
 Removal of seed from EEC site and direct seeded and / or propagated
- Collection of Cutting / Division Material of groundcover, shrub and/or tree species. Removal of material from EEC site and propagated.
- Collection of Brush Matting of groundcover, shrub and/or tree

	species. Removal of material from EEC site and transported to suitable recipient site.				
	 Translocation of Native Sod of groundcover, shrub and/or tree species. Removal of material from EEC site and translocation to approved restoration areas 				
	Seed collection protocols will be in accordance with best practice measures and the specifications contained in the Florabank Guidelines (Refer to Attachment 4).				
7. Details of the area to be affected by the action (in hectares).	There is approximately 977 ha of land within land zoned 4(h) within HEZ.				
	Seed collection will only occur in areas nominated for development or in approved areas within HEZ. Where land is not owned by HEZ Nominees, seed collection will				
	only occur where authorisation to access has been provided by the landowner.				
8. Duration and timing of the action (including staging, if any).	December 2007 December 2017				
9. Is the action to occur on land declared as critical habitat [*] ? (please tick appropriate box)	Yes No.				

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

·	D-1455 M	Osmania Maria	Ospos-usta-	Datailers
	Scientific Name	Common Name (if known)	Conservation Status	Details of
10. Throatened energies		(ii KiiQWii)	(ie. endangered	no. of individual animals, or
 Threatened species, populations or 			or vulnerable)	proportion and
ecological				type of plant
communities to be	Acacia bynoeana			material
harmed or picked.		N-4	Endangered	(eg. fertile
	Callistemon linearifolius	Netted Bottlebrush	Vulnerable	branchlets for
		Dollicon don	Valliciable	herbarium
	Eucalyptus glaucina	Slaty Redgum	Vulnerable	specimens or
				whole plants or plant parts)
		Parramatta	Vulnerable	pram paney
	Eucalyptus	Redgum		The part of the
	parramattensis			plant that will be
	subsp. decadens	Small Flowered	Vulnerable	taken will be the
	Grevillea parviflora	Grevillea		fruit or the seed.
	subsp. parviflora	l		The no. of plants
		Heath	Vulnerable	to be collected is
	Rutidosis	Wrinklewort		difficult to
	heterogama			determine due to
	Hunter Lowland		EEC	the process being
	Redgum forest			over a long time.
				It is only possible to give quantities
	Kurri Sand Swamp		EEC	of plants to be
	Woodland			collected on land
	l		EEC	that has beer
	Lower Hunter			approved this
	Spotted Gum Ironbark Forest			being Stage 2
	I O I Dank i O I GSt			Road and the Uniting Church
				Site. If required
		ii.		the quantity o
				plants can be
				supplied for these
				two proposals. I
				is noted that seed collection will
			Ì	only occur in
				areas nominated
				for developmen
				or in approved
	<u> </u>		<u> </u>	areas.
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

Items 12 to 25 have been addressed

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. Three vegetation communities occur within the lands zoned 4(h) at HEZ. These are as follows:-

- 1. Hunter Lowland Redgum Forest
- 2. Kurri Sand Swamp Woodland
- 3. Lower Hunter Spotted Gum Ironbark Forest

A Draft Ecological Constraints Masterplan (ECMP) for the Hunter Economic Zone (HEZ), (Harper Somers O'Sullivan, February 2004) has been prepared for the site. This document is a comprehensive ecological database for the site. The Ecological Constraints Master Plan (ECMP) has detailed key features as part of the habitat surveys for the 4(h) zone land

These key features include:

- Keystone Mature Tree Species;
- Hollow-bearing Trees;
- Condition of habitat;
- 'Grid Pattern' Habitat Investigations; and
- Threatened Species Surveys.

Refer Harper Somers O'Sullivan, *Draft Ecological Constraints Masterplan (ECMP)* for the Hunter Economic Zone (HEZ), February 2004 for more information (Refer to Attachment 5).

13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality (include reference sources).

Flora Species

Acacia bynoeana
Callistemon linearifolius
Eucalyptus glaucina
Eucalyptus parramattensis subsp.Decadens
Grevillea parviflora subsp. Parviflora
Rutidosis heterogama

Fauna Species

Green-thighed Frog Black-breasted Buzzard Glossy Black-Cockatoo Brown Treecreeper Grev-crowned Babbler Speckled Warbler Swift Parrot Turquoise Parrot Masked Owl Sooty Owl Powerful Owl Regent Honeyeater Black-chinned Honeyeater Koala Yellow-bellied Glider Sauirrel Glider Eastern Falsistrelle Little Bentwing-bat Eastern Bentwing-bat Greater Broad-nosed Bat Large-footed Myotis

Refer Harper Somers O'Sullivan, Draft Ecological Constraints Masterplan (ECMP) for the Hunter Economic Zone (HEZ), February 2004 for more information (Refer to Attachment 5).

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). Threatened species were found within the three EEC's within the site. This being;

- Hunter Lowland Redgum Forest
- 2. Kurri Sand Swamp Woodland
- 3. Lower Hunter Spotted Gurn Ironbark Forest

Threatened Flora Species

Acacia bynoeana

Callistemon linearifolius Eucalyptus glaucina Eucalyptus parramattensis subsp. Decadens Grevillea parviflora subsp. Parviflora

Threatened Fauna Species_

Rutidosis heterogama

Green-thighed Frog Black-breasted Buzzard Glossy Black-Cockatoo Brown Treecreeper Grey-crowned Babbler Speckled Warbler Swift Parrot Turquoise Parrot Masked Owl Sooty Owl Powerful Owl Regent Honeyeater Black-chinned Honeyeater Koala Yellow-bellied Glider

Squirrel Glider Eastern Falsistrelle Little Bentwing-bat Eastern Bentwing-bat East-coast Freetail-bat Greater Broad-nosed Bat Large-footed Myotis

Refer to Appendix A of the Draft ECMP (HSO, 2004) for the Hunter Economic Zone (HEZ) (Attachment 5), for more information on the known or potential habitat for a threatened species on the land to be affected by the action.

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.

This is difficult to determine at this stage due to the long process of the proposal.

Collection of seed and propagules will occur only within land zoned 4(h). Where land is not owned by HEZ Nominees, seed collection will only occur where. authorisation to access has been provided by the landowner.

16. Provide an assessment

Seed collection will occur at such levels to ensure that the reproductive cycle and of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species.

habitat of the subject species is not likely to be affected. Adequate conservation areas have been provided for all species, therefore the actions proposed such as seed collection, reusing topsoil for regeneration purposes, propagation of cuttings etc will increase representation of these important ecological characteristics throughout the estate. In addition, collection will only occur within areas already zoned for development.

17. Provide details of possible measures to avoid or ameliorate the effect of the action.

The proposed procurement of propagative material from the above mentioned EEC is part of an integrated site wide approach to conservation and landscape management within HEZ. Seeding and planting of local provenance material together with effective monitoring and assessment programmes will contribute to retaining landscape character, ecological diversity and habitat quality within the proposed development.

Seed collection protocols will be in accordance with the Florabank Guidelines (refer to Attachment 4)

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.

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 life cycle of the subject threatened species will not be disrupted such that the viability of populations is likely to be affected.

Seed collection will occur at such levels to ensure that the reproductive cycle of EEC's and threatened species is not likely to be affected. Adequate conservation areas have been provided for all species and EEC's, therefore the actions proposed such as seed collection, reusing topsoil for regeneration purposes, propagation of

cuttings etc will increase representation of these important ecological characteristics throughout the estate. No endangered populations are known from 19. In the case of an the locality. 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 proposed action will not: 20. In the case of an endangered ecological (i) have an adverse effect on the community or critically extent of the EEC's such that its endangered ecological local occurrence is likely to be community, whether the placed at risk of extinction. action proposed: (ii) adversely modify the (i) is likely to have an composition of the ecological adverse effect on the extent community such that its local of the ecological community occurrence is likely to be placed such that its local at risk of extinction. occurrence is likely to be placed at risk of extinction. This being; The areas proposed for ΩĖ collection of EEC are likely to be developed as a result of the approval of industrial (ii) is likely to substantially development by DECC (refer to Attachment and adversely modify the 6 for Assumed Concurrence). Adequate composition of the representation is contained within the ecological community such conservation areas of the HEZ Estate. that its local occurrence is Therefore collection of propagative material likely to be placed at risk of and reuse of topsoil will only add to the extinction. conservation outcomes for these EEC's across the site as opposed to total loss of the valuable genetic material contained in these plants. The industrial zoned lands from which collection is proposed to occur have been 21. In relation to the habitat of a threatened species. identified for development and approved for population or ecological this purpose by the DECC under the community: Assumed Concurrence (March 2005).

(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

result of the proposed

habitat is likely to become

other areas of habitat as a

fragmented or isolated from

Collection is proposed to occur as part of overall ecologically sustainable principles upon which development of the HEZ is based. Conservation-zoned areas and deferred areas have been identified in collaboration with DECC to ensure that no viable local populations of any of the proposed collection species will be affected by the development. Collection is proposed to occur in these industrial zoned areas to ensure that in addition to the Conservation Zones (and in accordance with the HEZ Habitat Management Strategy) supplementary habitat for EEC's and threatened flora and fauna will be provided in restored and landscaped areas. For this reason it is considered that the proposal will not impact upon the habitat of threatened populations species, ecological OΓ communities.

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).

The proposal will not have an adverse effect on critical habitat.

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

The only species or community for which a recovery plan exists is for Kurri Sand Swamp Woodland (Draft). The proposed activities will be in accordance with this plan.

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.

The proposed action is not recognised as a key threatening process.

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 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 <u>and</u> 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

^{*} 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*.

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- .
Organisation-

Applicant's signature

Date

18/12/07

For more information or to lodge this form, contact the Environment Protection and Regulation Division in your nearest office:

Northern Branch Western Branch Southern Branch Sydney Metro Branch P: 02 6841 9800 P: 02 6640 2500 P: 02 6122 3100 P: 02 9995 5000 F: 02 6882 9217 F: 02 6299 3525 F: 02 6642 7743 F: 02 9995 6900 PO Box 1020 PO Box 498 PO Box 668 PO Box 622 Dubbo Grafton Queanbeyan Parramatta NSW 2830 NSW 2460 NSW 2620 NSW 2124

Department of Environment and Conservation

Head Office, PO Box A290, Sydney South NSW 1232

TOS 5000 (mortals) Form 2005 5000 Femalls info@environment new do

Phone: 2 9995 5000 (switch) Fax: 9995 5999 Email: info@environment.nsw.gov.au