

APPENDIX B: DECC ASSUMED CONCURRENCE



Department of
Environment and Conservation (NSW)

Our reference : HOF52778
Contact : Robert Humphries (02) 9585 6952

Mr C W Cowan
General Manager
Cessnock Council
PO Box 152
CESSNOCK NSW 2325

Dear Mr Cowan

Assumed concurrence for the Hunter Economic Zone (HEZ)

I am writing to Council in relation to the proposed staged development of the 4(h), 1(a) and 5(a) lands at the HEZ.

As of 18 February 2005, the area encompassed by the HEZ Local Environment Plan (LEP) has been shown to support 29 species of threatened flora and fauna and five endangered ecological communities (EECs):- Kurri Sand Swamp Woodland, Hunter Lowland Redgum Forest; River-flat Eucalypt Forest on Coastal Floodplains, Freshwater Wetlands on Coastal Floodplains and the Lower Hunter Spotted Gum Ironbark Forest. Many of these values occur in areas intended for development.

DEC involvement

The former National Parks and Wildlife Service (NPWS), now the Department of Environment and Conservation (DEC), has worked with the proponent HEZ Pty Ltd; Cessnock City Council; the Department of Infrastructure, Planning and Natural Resources (DIPNR); and other government agencies since 1999 to identify constraints and achieve a balance between development objectives and conservation outcomes at the HEZ site. The DEC's roles as a statutory authority under the *Threatened Species Conservation (TSC) Act* and the *National Parks and Wildlife (NPW) Act* were triggered during the preparation of the Cessnock LEP (Amendment 60) - Hunter Employment Zone; at the development application stage for the Stage 1 road infrastructure; and in relation to the licensing of associated activities which have involved picking of threatened species and damage to their habitat. The DEC has also acted in an advisory role to Council on threatened species and cultural heritage matters during the preparation of an Environmental Management Strategy (EMS) for the HEZ and to the consultants for the proponent, Harper Somers O'Sullivan, in the preparation of the Ecological Constraints Master Plan (ECMP).

Conservation outcomes

The Cessnock LEP (Amendment 60) rezoned approximately 855ha of land at the HEZ as 7(b) Habitat Protection and a further 1273 ha as 8(a) National Park. These zones encompass a representative sample of the five endangered ecological communities and other vegetation present at the HEZ, as well as habitat and movement corridors for a number of threatened fauna and flora identified during surveys of the site. However, during finalisation of the LEP, new information about threatened species at the HEZ came to light including important records for Swift Parrot dating back 15 years. Subsequent surveys undertaken as part of the development

assessment process for the road infrastructure also identified a number of previously unrecorded and newly-listed threatened species at the HEZ site. This included significant populations of the vulnerable plants *Grevillea parviflora* subsp. *parviflora* and *Rutidosia heterogama* and breeding sites for the vulnerable Green-thighed Frog and three species of threatened woodland bird. Most of these threatened species were recorded within the 4(h) lands.

The Ecological Constraints Master Plan (ECMP)

To address these additional threatened species, the DEC recommended that detailed constraints mapping be undertaken by the proponent to identify areas of particular sensitivity and guide future development of the industrial lands at the HEZ. The ECMP and subsequent information provided by HEZ Pty Ltd represents the results of systematic threatened species surveys undertaken over a period of 24 months across the industrial lands as well as the habitat protection zone along the central creek line at the HEZ.

Outstanding threatened species issues

Most of these threatened species and their habitat occur to some extent within the 7(b) lands or in Werakata National Park. However, the results of the ECMP clearly indicate that there are a number of threatened flora and fauna which occur largely on the industrial lands and which are either not adequately represented within protected lands or which have important habitat within the 4(h) lands. These species are:

<i>Acacia bynoeana</i>	Green-thighed Frog
<i>Callistemon linearifolius</i>	Swift Parrot
<i>Eucalyptus glaucina</i>	Brown Treecreeper
<i>Rutidosia heterogama</i>	

In addition, the ECMP shows that there are areas along the central creek corridor, but outside of the 7(b) lands, which support a large number of mature, hollow-bearing trees and represent important habitat for a number of threatened fauna recorded at the HEZ.

Assumed concurrence

Under cl. 64 of the *Environmental Planning & Assessment Act Regulation 2000*, the Director General of the DEC has the power to issue an assumed concurrence to Council for the HEZ. This assumed concurrence has the same status as a concurrence issued under section 79B of the *EP&A Act*. The DEC has now met with the proponent, HEZ Pty Ltd, and its consultants, Harper Somers O'Sullivan, on several occasions to discuss an assumed concurrence for the HEZ in the light of the results of the ECMP and potential conservation outcomes for threatened species and/or their habitat which occur on 4(h), 1(a) or 5(a) lands but which are not adequately protected by the LEP. Various options have been discussed including the need to identify additional conservation areas within the 4(h) lands; offsetting for those species which subsequent surveys show are well-represented on lands adjacent to the HEZ; and/or site-specific controls consistent with the EMS for the HEZ.

Accordingly, a number of proposed conservation areas have now been identified within the 4(h) lands which in DEC's opinion have the potential to provide an adequate level of protection for those threatened species and their habitat identified as not being well represented in the Werakata National Park and/or Environmental Protection Zone. This would involve deferring development of approximately 89 ha of industrial land for conservation purposes (as shown in the attached map dated 27 January 2005 and described in the attached table dated 27 January 2005) and would be reflected in a Masterplan for the HEZ site.

The reduction in socio-economic benefits resulting from this decrease in the amount of ecologically unconstrained land available for industrial development could be offset to some degree by rezoning portions of the 7(b) lands, which do not support significant threatened species

values, for industrial uses (see attached map and table). If these 7(b) lands were subsequently rezoned 4(h), this would reduce the additional area to be deferred for conservation to 53 ha.

The DEC advises that, should HEZ Pty Ltd apply to Council to have the Cessnock LEP amended to reflect the recommendations outlined in this letter and the accompanying documentation, the DEC would support such amendments on both threatened species and cultural heritage grounds for the purposes of s. 62 and 34A of the *Environmental Planning and Assessment (EP&A) Act 1979*.

The DEC advises that Council can assume concurrence for permissible development (as per the Local Environment Plan) of the remaining lands at the HEZ (as per the attached map) in accordance with cl. 64 of the *EP&A Regulation 2000* provided the conditions in Attachment 1 are met.

The DEC will assess whether the assumed concurrence and/or the LEP and /or the amended LEP provide adequate protection for any newly-listed or discovered threatened species subsequently identified at the HEZ site. DEC undertakes to do this within 30 working days of being notified of such records and will advise the consent authority and the proponent accordingly.

Under proposed amendments to the *TSC Act*, it may be possible for Council to seek biodiversity certification of the Cessnock LEP (Amendment 60) - Hunter Employment Zone. This would streamline the assessment process for all future development of the HEZ by removing the requirement to undertake threatened species assessments on lands covered by this certification.

The conditions outlined in Attachment 1 have been discussed with and accepted by the proponent, who has committed to undertaking further surveys within the vicinity of the HEZ site over the next 12 months to ascertain whether there is any suitable land which supports equivalent or better threatened species values to the proposed additional conservation areas shown on the attached map.

Should you require any further information regarding this matter please contact Robert Humphries, Manager Threatened Species Unit on 02 9585 6952 or fax 02 9585 6442.

Yours sincerely

 1/3/05

SIMON A Y SMITH
Acting Director General

Attachment 1 - Conditions of Assumed Concurrence

1. The 4(h) lands identified in the attached map titled DEC Deferred Conservation Areas dated 27 January 2005) are deferred from development for the reasons outlined in the Table 1 until such time as:
 - a) the results of further survey work indicate that there has been a change in the conservation status of the threatened species listed above e.g. further large populations are discovered locally on secure tenure; and/or
 - b) alternative lands supporting equivalent or better threatened species values have been identified in the vicinity of the HEZ and secured for conservation to the satisfaction of the Manager, Threatened Species Unit, Metropolitan. This could be achieved through amendments to the Cessnock LEP and/or through the use of positive and or restrictive covenants and may require the purchase of additional land or land swaps with adjoining land owners or Council.
 - c) These deferred areas are to be clearly delineated to the nearest 5 metres on the ground through the use of appropriate corner and angle survey marks signage, and where construction occurs adjacent to deferred areas fencing as well as track closures and rehabilitation to prevent access and avoid damage during construction activities on adjoining 4h land shall be provided.
2. Road crossings of creek lines through deferred areas are to achieve a minimum width, which presents the least possible disruption to the movement of fauna and water flow in these areas as per condition 5 (a) below.
3. Road crossings and associated works adjacent to deferred areas are to be constructed so that they do not impact on these areas. Deferred areas adjacent to construction works are to be clearly delineated on the ground prior to commencement of construction and the deferred conservation areas are to be protected as per condition 1c above.
4. The lands zoned 7(b) Environmental Protection (Conservation), including the deferred areas referred to in condition 1 and shown on the map dated 27 January 2005 are actively managed for conservation consistent with the Environmental Management Strategies (finalised in accordance with condition 5 below) which addresses issues such as:
 - a) access - this is a key issue at the HEZ and requires the rationalisation and closure of the many informal tracks throughout the site to reduce the incidence of arson, rubbish dumping and soil erosion resulting from recreational vehicle use;
 - b) fire frequency - a more natural fire regime should be implemented which reflects the requirements of the threatened species that occur at the site. In most cases this will mean less frequent fire, but once access and the associated arson issue has been addressed, it may be necessary to plan ecological burns; and
 - c) weed control - this should be undertaken by appropriately qualified and experienced bush regenerators using methods which are both effective but will have minimal impact on threatened species and their habitat.
5. The EMS for the HEZ shall be finalised to the satisfaction of the Director General of the DEC within 12 months of the date of this letter (Should the EMS not be finalised within 12 months, this may not affect the validity of this concurrence). The draft EMS and its component strategies, in particular the Habitat Management, Water Management and Bushfire Management Strategies, are to incorporate the specific measures outlined below which will

reduce the impact of development on threatened species and their habitat within the 4(h), 1(a) and 5(a) lands:

- (a) All road crossings of the central creek line (Chinaman's Hollow Creek) as shown on the attached map defined in condition 1 are to be constructed so that they achieve a maximum clearance impact of 35m for the entire length where they cross this important corridor. Where the construction of stormwater detention/retention basins that are part of these crossings can not be restricted to the 35 metre clearance width, they are permitted to be constructed within the 7B lands in accordance with those matters identified in point 6, but should be designed and constructed so as to achieve the minimum impact possible. These areas should be fenced on both sides to include all work prior to the commencement of construction to avoid disturbing adjoining vegetated areas, particularly any lands zoned 7(b) or 8(a). The crossings should be designed in such a way as to minimise impacts on fauna movement and water flow along the creek corridor. Where required, dedicated fauna underpasses and overpasses should be installed to facilitate movement of terrestrial and arboreal fauna along the creek corridor at these crossings and reduce the potential for road kill. Once these crossings have been constructed, any cleared areas in excess of the safe operating requirements for the road, such as batters, should be revegetated.
- (b) The direct and indirect impacts of changes to water quality and water flows on Green-thighed Frog habitat need to be addressed in detail at the design, construction and operational phases of development including roadworks. This will involve the study and investigation, adoption and implementation of a set of best practice stormwater control measures to ensure that any surface runoff from development sites is contained, treated and released so that it does not significantly alter natural nutrient, pH and sediment levels, as well as in-stream or over-bank flow patterns.
- (c) A bushfire risk map of the HEZ should be prepared which highlights areas of high bushfire hazard across the site. Once these areas have been identified, appropriate bushfire mitigation measures should be put in place. These measures should be contained within the 4(h), 1(a) and 5(a) lands where practicable and should not impact on the 7(b) lands or identified conservation areas within the 4(h) lands. Such impacts can be avoided by:
 - configuring development of the 4(h), 1(a) and 5(a) lands so that internal roads, car parks and any open space areas are incorporated within Asset Protection and Strategic Fire Advantage Zones wherever practicable; and
 - utilising clearing associated with existing infrastructure, such as powerline or railway easements, to provide bushfire protection for adjacent developable lands.

This should reduce the need to clear vegetation and enhance fauna movement across the site.

- (d) The 4(h) lands support a number of mature trees (>50cm dbh) which represent important roosting, breeding and foraging habitat for threatened species known to use the HEZ site such as the Swift Parrot, Regent Honeyeater and Brown Treecreeper. Wherever practicable, mature trees within the 4(h) lands should be retained and protected from development by incorporating them within landscaped areas or Asset Protection Zones; and maintaining a vegetative buffer around them. Additional plantings of tree species which provide important foraging habitat for threatened species at the HEZ, such as Spotted Gum, Forest Red Gum and Grey Gum, should be undertaken as part of the landscaping program for the site (see below).

- (e) Proposed conservation areas on 4(h) lands should be protected from the indirect impacts of adjacent development (noise, lighting, overshadowing and dust) through the use of appropriate fencing, vegetative buffers and/or planted screens, as well as perimeter roads and car parks. The vegetation should also be actively managed in accordance with an approved and adopted HEZ Management Plan (as per condition 4 above) to control weed infestation, inappropriate access, frequent fire, erosion, rubbish dumping and encourage natural regeneration. Any landscaping should use locally indigenous plants only and compliment the existing natural vegetation.
6. The following range of activities on the 7(b) lands are covered by this assumed concurrence provided that they are consistent with the objectives and the permissible uses for the 7(b) Environment Protection (Conservation) Zone outlined in the Cessnock LEP (Amendment 60) and the conditions described in this letter. In particular, these activities will need to be consistent with the completed EMS for the HEZ to ensure that both direct and indirect impacts on threatened species and their habitat are minimised.
- roads which cross the 7(b) lands and are part of the internal road network (as shown on the attached map);
 - stormwater detention/retention basins associated with the internal road network (as above);
 - cycle ways associated with the internal road network (as above);
 - the upgrade of existing easements to create service corridors for the installation of utilities such as water, electricity, sewer and gas;
 - environmental education facilities and associated low impact activities such as walking trails and signage;
 - environment protection works which are undertaken in accordance with the EMS for these lands; and
 - use of these lands by Aboriginal people who have the consent of the owners to gather traditional food for ceremonial, cultural or educational purposes, but not for commercial purposes.

Any other activities proposed within the 7(b) zone which are likely to impact on threatened species or their habitat are excluded from this assumed concurrence and will need to be assessed in accordance with the *Environmental Planning & Assessment Act* and the *TSC Act*.

Table 1: HEZ Assumed Concurrence: Deferred Conservation Areas

Parcel	Size	Ownership	Reason
1	17.84 ha	HEZ	<p>Key Threatened Species Further Protected: <i>Callistemon linearifolius</i>, <i>Eucalyptus glaucina</i>, Green-thighed Frog and threatened species reliant on mature trees such as Yellow-bellied Glider and Swift Parrot</p> <p>Endangered Ecological Communities Further Protected: Hunter Lowland Redgum Forest</p> <p>Other: Protection of high quality habitat in the form of mature, hollow-bearing trees; buffering of development impacts on conservation areas, enlargement of key wildlife corridor along Chinamans Hollow Creek</p>
2	19.75 ha	Crown	<p>Key Threatened Species Further Protected: Improves outcome for a large population of <i>Rutidosia heterogama</i> and protects habitat for Black-chinned Honeyeater; Swift Parrot, Regent Honeyeater and other threatened species reliant on mature, hollow-bearing trees such as Yellow-bellied Glider and Powerful Owl. Also buffers high quality Green-thighed Frog habitat and protects <i>Eucalyptus glaucina</i> habitat.</p> <p>Endangered Ecological Communities Further Protected: Hunter Lowland Redgum Forest</p> <p>Other: Protection of high quality habitat in the form of mature, hollow-bearing trees; buffering of development impacts on adjacent habitat protection area along Chinamans Hollow Creek.</p>
3	13.28 ha	Crown	<p>Key Threatened Species Further Protected: Improves outcome for Green-thighed Frog as well as Swift Parrot, Regent Honeyeater and other species reliant on mature, hollow-bearing trees. Protects additional habitat for <i>Grevillea parviflora</i> subsp. <i>parviflora</i> and Glossy Black Cockatoo.</p> <p>Endangered Ecological Communities Further Protected: Lower Hunter Spotted Gum-Ironbark Forest</p> <p>Other: Better protection of high quality habitat in the form of mature, hollow-bearing trees, as well as the creekline(s) flowing into the wetlands at the eastern end of the site and the complex of new stringybark species.</p>
4	15.63 ha	Crown	<p>Key Threatened Species Further Protected: Improves outcome for the large population of <i>Rutidosia heterogama</i> and protects further Green-thighed Frog habitat as well as habitat for <i>Eucalyptus glaucina</i>. Protects additional habitat for Grey-crowned Babbler and Glossy Black Cockatoo.</p> <p>Endangered Ecological Communities Further Protected: Hunter Lowland Redgum Forest</p> <p>Other: Better protection of high quality habitat in the form of mature, hollow-bearing trees; provides a wildlife corridor between parcels of 7(b) land; and protects the creekline flowing west into Chinaman's Hollow Creek.</p>
5	5.42 ha	HEZ	<p>Key Threatened Species Further Protected: Protects a very large stand of <i>Callistemon linearifolius</i> (over 500 individuals) as well as <i>Grevillea parviflora</i> subsp. <i>parviflora</i> and Green-thighed Frog habitat.</p> <p>Endangered Ecological Communities Further Protected: Lower Hunter Spotted Gum-Ironbark</p>

			Forest Other: Protects mature hollow-bearing trees which provide potential foraging and roosting habitat for threatened species such as Yellow-bellied Glider and Koala... Provides protection for the creekline flowing west into Chinamans Hollow Creek.
6	4.75 ha	HEZ	Key Threatened Species Further Protected: Protects a very large stand of <i>Callistemon linearifolius</i> (over 800 individuals). Endangered Ecological Communities Further Protected: Lower Hunter Spotted Gum-Ironbark Forest Other: Improves protection for species reliant on mature, hollow-bearing trees.
7	4.88 ha	HEZ	Key Threatened Species Further Protected: Improves protection for a significant population of <i>Acacia bynoeana</i> (>130 individuals) as well as <i>Grevillea parviflora</i> subsp. <i>parviflora</i> Endangered Ecological Communities Further Protected: Kurri Sand Swamp Woodland Other: Protects a good representative patch of the Kurri Sand Swamp Woodland community.
8	6.75 ha	Crown/ Mindaribba	Key Threatened Species Further Protected: Better protects Green-thighed Frog habitat as well as <i>Grevillea parviflora</i> subsp. <i>parviflora</i> Endangered Ecological Communities Further Protected: Kurri Sand Swamp Woodland Other: Improves protection for species reliant on hollow-bearing trees

Proposed rezoning of 7(b) lands to 4(h)

9	14.1 ha	Crown	
10	21.4 ha	Crown	

Additional conservation areas

88.33 ha

Proposed amendments to 7(b) lands

35.5 ha

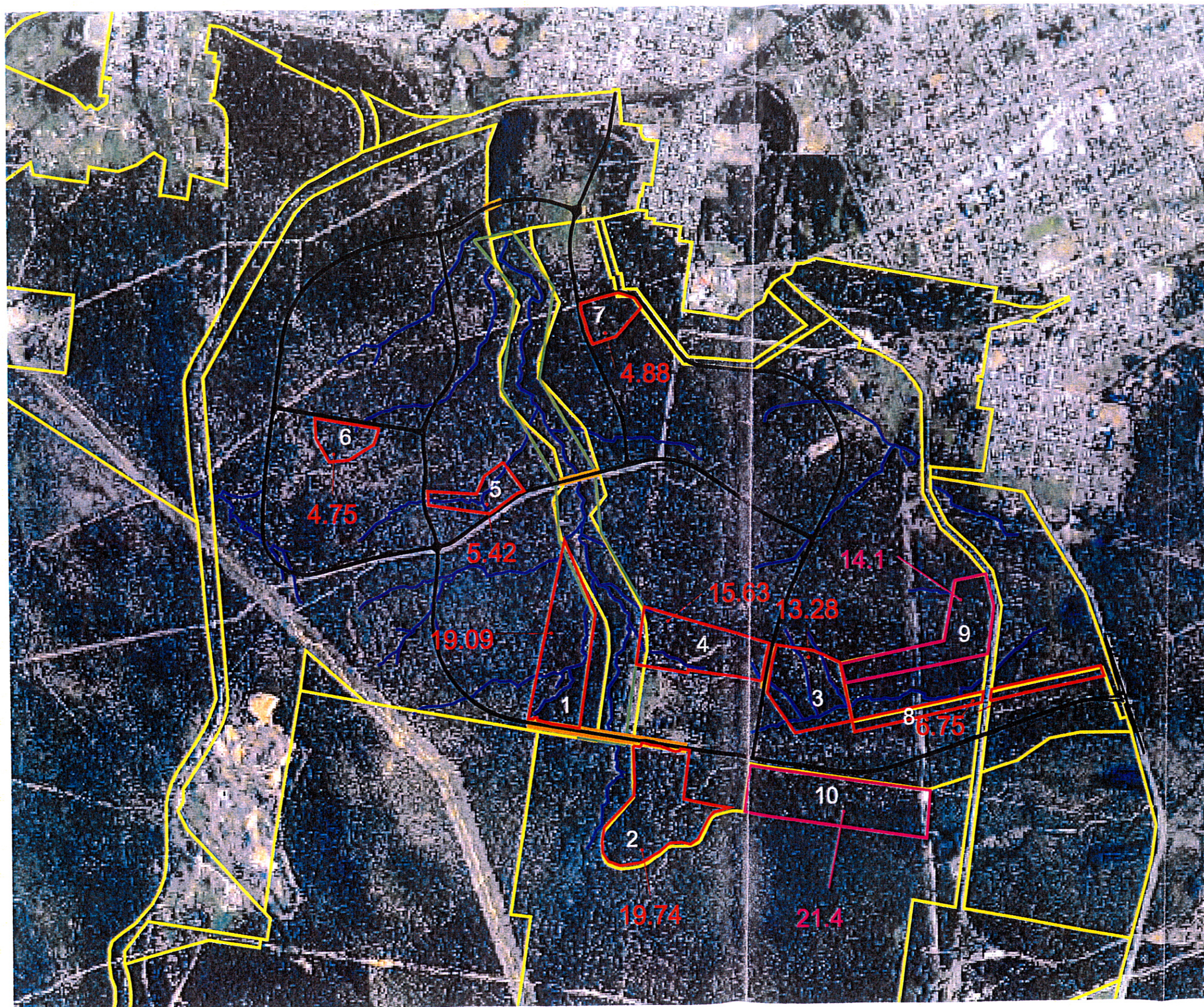
Total additional conservation areas

52.83 ha

Note: Any development of these additional conservation areas is deferred until such time as the DEC is satisfied that suitable alternative lands supporting equivalent threatened species values in the vicinity of the HEZ have been secured and will be actively managed for conservation.

HEZ Deferred Conservation Areas

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This map is not guaranteed to be free from error or omission
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20674_modified_dec_additionalconservationareas_250105_region.shp
Master plan road layout (HSO)
Creekline corridor fencing
Potential LEP amendments
Creekline realignment (HSO version 2)
Zoning
Creeklines (D)

0 199 398 597 Meters



Printed By
R Giddins
27 January 2005

APPENDIX C: QUALIFICATIONS

Name: TOBY LAMBERT

Office: RPS HARPER SOMERS O'SULLIVAN

Position in Company: Senior Ecologist

Qualifications / Memberships: B.Env.Sc.

Ecological Consultants Association of NSW (Council member)
NSW Driver's Licence (Class C)
OH&S Induction Training (Green Card)
NPWS Scientific Investigation Licence
NSW Animal Ethics Research Authority

Areas of Expertise:

- Environmental Impact Assessment and mediation
- Flora, fauna and habitat survey method, design and identification
- Detailed understanding of legislation and threatened species issues
- Terrestrial fauna surveys
- Project management

Experience Includes:

Dec 2005 - Current	Senior Ecologist RPS Harper Somers O'Sullivan, Broadmeadow, NSW
Mar 2005 - Nov 2005	Senior Project Manager Cumberland Ecology, Epping, NSW
Mar 2004 - Mar 2005	Principal Consultant – Co-founder Keystone Ecological, Kariong, NSW
Jan 1998 - Jan 2004	Ecologist / Senior Ecologist Conacher Travers Environmental Consultants, Somersby, NSW
June 1997 - Dec 1997	Environmental Scientist Australian Defence Industries (ADI), St Mary's, NSW
Early 1997	Field Assistant Anne Clements and Associates, North Sydney, NSW
1996	Research Assistant University of Newcastle, Callaghan, NSW

Name: ALLAN RICHARDSON

Office: RPS HARPER SOMERS O'SULLIVAN

Position in Company: Ecologist

Qualifications / Memberships: B.Env.Sc. (Environmental Management)
B.Env.Sc. (Hons) (Biology)
2002 Hunter Environmental Institute Scholarship

Hunter Bird Observers Club
Waterways Authority Boating Licence
NSW Driver's Licence (Class C)
OH&S Induction Training (Green Card)
NPWS Scientific Investigation Licence
NSW Animal Ethics Research Authority

Areas of Expertise:

- Ornithological Surveys and Research
- Terrestrial flora and fauna surveys
- Flora & Fauna Assessment and Reporting
- GPS Survey and GIS Mapping Projects
- Site and Logistics Management
- Tertiary Tutoring and Demonstrating

Experience Includes:

Jan 2005 – Current	Ecologist RPS Harper Somers O'Sullivan
Jul 2003 – May 2004	Casual Tutor/Demonstrator The University of Newcastle
Jul – Nov 2003	Casual Tutor/Demonstrator The University of Newcastle
Jan 2002	Ornithological Surveyor Wetland Care Australia, Ballina
Nov 1998 – Sep 2000	Manager, Caretaker, Ecologist Yarrahapinni Youth, School and Ecology Centre
Nov 1997	Ornithological Surveyor State Forests
1979 – 1998	Metal Fabrication Trade and Sub-contract Carpentry

Name: ROBERT BROWNE-COOPER

Office: RPS HARPER SOMERS O'SULLIVAN

Position in Company: Ecologist

Qualifications / Memberships: B. Sc. (Biol)
Grad Dip Ed (Science Ed)
Cert Lab Prac (Biol Sci)
Member of the Society of Frogs & Reptiles (SOFAR)
WA Driver's Licence (Class C)
Senior First Aid
OHS General Induction for Construction Work (Green Card)
HUET – Helicopter Underwater Escape Training
TBOSIET – Offshore Safety Induction & Emergency Training
ARPA Accreditation – Agricultural Resources Protection Act
Author of several books on Australian Native Fauna

Areas of Expertise:

- Terrestrial flora and fauna surveys
- Flora & Fauna Assessment and Reporting
- Understanding of Environmental Legislation and threatened flora species issues
- Tree Clearance Supervision and Fauna Handling
- Wetland Sampling, Testing and Monitoring for Water Quality

Experience Includes:

September 2007 – Current	Ecologist RPS Harper Somers O'Sullivan, Broadmeadow, NSW
February 2007 – September 2007	Ecologist Bamford Consulting Ecologists WA
March 2004 – December 2006	Technical Officer Department of Food and Agriculture WA
February 2003 – January 2004	Completed a Grad Dip Ed
March 1995 – December 2003	Zoo Keeper Perth Zoological Gardens Board
June 1985 – March 1995	Laboratory Technician Water Corporation WA