

Meeting Notes



Purpose of Meeting	Ecological Focus Group Meeting 1		
Project	Upgrading the Pacific Highway Wells Crossing to Iluka Road		
Place of Meeting	Grafton Community Centre	Date	7 November 2005
Present	Ten attendees from Community, RTA and SKM		

- 1) General comments about ecological issues in the study area:
 - The coastal Emu and the poorly understood movement pattern of the species.
 - Local residents are active in protecting the natural environment as a corridor linking Yuraygir National Park to areas to the west (around Brooms Head Road and further south).
 - Road strike is a big issue with the Emu's in the area, particularly at Iluka, north of the Clarence.
 - The dingo is a major predator in the northern section, and this may have implications for underpasses as predators may ambush fauna at the crossing points.
 - The potential future extension of Yuraygir National Park, with possible connections to Pine Brush State Forest – how would the route options impact on areas of future National Park?
 - The Emu has an important role in seed spreading and reduction in its viability or range may have implications for vegetation communities as a result of loss of seed spreading.
 - The Emu is an important 'indicator' species, demonstrating the high ecological values of the area.
 - In excess of 50 threatened species are known in the area and habitat loss is driving species to extinction.
- 2) Issues associated with the project:
 - the impact on forest owls.
 - the impact on vegetation, in particular threatened plant species.
 - the success or otherwise of underpasses, tunnels, overhead ropes etc. as fauna crossings.
 - WIRES representatives raised concerns that they would be deluged with a large number of animals to care for during the clearing phase – burden on local resources that are not well funded.
 - Once the habitat is cleared it is not possible to release the animals in the adjacent bushland because it already has its quota of species and individuals – carrying capacity is limited so relocated species would be subject to competition.
 - Emu's are easily confused by fencing based on resident observations and therefore won't be able to find openings that are designed to funnel the birds under the road.
 - Residents were concerned with underpasses being used by predators (foxes, cats and dingoes).
 - Endangered ecological communities have not been surveyed accurately and the mapping does not show all the EECs in the study area.
 - The issue of bushfire should be addressed, in terms of increased risk from cigarette



butts etc, the need for access for residents wishing to flee the area, and animals being driven into exclusion fencing by fires.

- More effort needs to be applied to understanding the movement patterns of fauna and how these will be affected by the project.
- Request for WIRES representative on the Value Management Workshop. RTA advised that local community representation at the VMW is already sufficient, with 6 community representatives and 4 from Clarence Valley Council.
- Community should have access to more detailed ecological data.
- Homes can be built elsewhere, farms can be recompensed, but habitat can not be replaced.
- Concerned about the massive fragmentation of habitat.

3) Issues associated with the route options:

- The Green/C and Red/D options would be highly damaging to the ecology of the area.
- Problems of appropriate fencing for Emu and other fauna species.
- Any of the eastern options (Purple/B, Green/C and Red/D) would open up areas that have been minimally disturbed to date.
- If the western option was adopted would the fill be sourced from the eastern part of the study area and if so, how would the impacts of this be assessed?
- How many crossing points are to be provided, how big and where would they be located?

4) Actions to follow up:

- Provision of references/copies of reports on effectiveness of fauna crossings (SKM/RTA).
- The period of exhibition of the options was too short. An extension of time was requested (RTA).
- Consult with Matt Clarke of NPWS on the Emu issue (SKM).
- List of all threatened species that are known to occur in the area (SKM).



■ Threatened flora recorded from the study locality

Scientific Name	Status			No. records in study area	Most recent record	Associated vegetation type
	ROTAP	NSW	Cwealth			
<i>Eucalyptus tetrapleura</i>	2VCa	V	V	18	2003	Moist Eucalypt Forest
<i>Eucalyptus glaucina</i>	3VCa	E1		1	2001	Woodland / open forest
<i>Melaleuca irbyana</i>		E1		13	2004	Open forest in moist sites
<i>Amorphospermum whitei</i>	3RCa	V		1	1918	Lowland / riparian rainforest areas
<i>Grevillea masonii</i>	2E	E1		2	2003	Open woodland areas
<i>Grevillea quadricauda</i>	3VC-	V	V	2	1997	Eucalypt woodland along drainage lines
<i>Hibbertia marginata</i>		V		11	1999	Forest / open forest grassy
<i>Grammitis stenophylla</i> (fern)		E1		1	1997	Rainforest / wet sclerophyll forest
<i>Persicaria elatior</i>	3V	V		1	1997	Marshland areas adjacent to streams
<i>Drynaria rigidula</i> (fern)		E1		1	1992	Moist rainforest areas
<i>Macadamia tetraphylla</i>	2VC-	V		1	1980	Subtropical rainforest areas
<i>Melichrus hirsutus</i>	2E	E1	E	2	2003	Sclerophyll woodland / open forest
<i>Austromyrtus fragrantissima</i>	3EC-	E1		6	1991	Subtropical rainforest areas
<i>Quassia</i> sp. 'Moonee Creek'	2E	E1	E	4	2004	Subtropical rainforest and wet forest areas
<i>Geijera paniculata</i>		E1		1	1997	Dry and Subtropical rainforest areas
<i>Prostanthera palustris</i>		V		1	1983	Wet heath
<i>Endiandra hayesii</i>	3VC-	V		1	2002	Subtropical rainforest areas
<i>Phaius australis</i>	3Vca	E1		1	1991	Swamp forest areas
<i>Olax angulata</i>	2Vci	V		3	1994	Woodland areas near swamps
<i>Rutidosia heterogama</i>	2Vca	V	V	3	2002	Grasslands in open forest / woodland
<i>Elyonurus citreus</i>		E1		1	2002	Near coastal areas



■ Threatened fauna recorded from the study locality

Scientific name	Common name	Status		Broad habitat preference
		Cwealth	NSW	
<i>Coracina lineata</i>	Barred Cuckoo-shrike		V	Rainforest
<i>Ptilinopus magnificus</i>	Wompoo Fruit-Dove		V	
<i>Tyto capensis</i>	Grass Owl		V	Grassland
<i>Stagonopleura guttata</i>	Diamond Firetail		V	
<i>Dromaius novaehollandiae</i>	Emu		E2	
<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork		E1	Wetland / Swamp
<i>Irediparra gallinacea</i>	Comb-crested Jacana		V	
<i>Grus rubicundus</i>	Brolga		V	
<i>Anseranas semipalmata</i>	Magpie Goose		V	
<i>Pandion haliaetus</i>	Osprey		V	Estuarine / Coastal
<i>Haematopus longirostris</i>	Pied Oystercatcher		V	
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo		V	Woodland / Forest
<i>Aepyprymnus rufescens</i>	Rufous Bettong		V	
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V	V	
<i>Climacteris picumnus</i>	Brown Treecreeper		V	
<i>Ninox strenua</i>	Powerful Owl		V	
<i>Lophoictinia isura</i>	Square-tailed Kite		V	Woodland / Forest
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale		V	
<i>Phascolarctos cinereus</i>	Koala		V	
<i>Erythrotriorchis radiatus</i>	Red Goshawk	E	E1	
<i>Petaurus australis</i>	Yellow-bellied Glider		V	
<i>Pteropus alecto</i>	Black Flying-fox		V	
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	
<i>Burhinus grallarius</i>	Bush Stone-curlew		E1	
<i>Melithreptus gularis gularis</i>	Black-chinned Honeyeater		V	
<i>Chalinolobus nigrogriseus</i>	Hoary Wattled Bat		V	
<i>Miniopterus australis</i>	Little Bentwing-bat		V	
<i>Pomatostomus temporalis temporalis</i>	Grey-crowned Babbler		V	
<i>Melanodryas cucullata</i>	Hooded Robin		V	
<i>Cacophis harriettae</i>	White-crowned Snake		V	
<i>Petaurus norfolcensis</i>	Squirrel Glider		V	
<i>Mormopterus beccarii</i>	Beccari's Freetail-bat		V	
<i>Ninox connivens</i>	Barking Owl		V	
<i>Dromaius novaehollandiae</i>	Emu		E2	
<i>Myotis adversus</i>	Large-footed Myotis		V	
<i>Hoplocephalus stephensii</i>	Stephens' Banded Snake		V	
<i>Tyto tenebricosa</i>	Sooty Owl		V	
<i>Tyto novaehollandiae</i>	Masked Owl		V	



■ Threatened freshwater fish species within NSW and likelihood of occurrence in the study area

Species		Common Name	Status		Distribution	Likelihood of occurrence
			NSW	CW/ith		
Freshwater	<i>Maccullochella ikei</i>	Eastern Freshwater Cod	E	E	Northern Coastal Rivers	High
	<i>Maccullochella macquariensis</i>	Trout Cod	E	E	Southern Inland Rivers and Hawksebury-Nepean	Very Low
	<i>Craterocephalus fluviatilis</i>	Murray Hardyhead	E	V	Inland Lowland Rivers	None
	<i>Nannoperca oxleyana</i>	Oxleyan Pygmy Perch	E	E	Northern Coastal Rivers	High
	<i>Notopala sublineata</i>	River Snail			Inland Lowland Rivers	None
	<i>Bidyanus bidyanus</i>	Silver Perch	V		Inland Lowland Rivers	None
	<i>Nannoperca australis</i>	Southern Pygmy Perch	V		Inland Lowland Rivers	None
	<i>Macquaria australasica</i>	Macquarie Perch	V	E	Southern Inland and Southern Coastal Rivers	None
	<i>Ambassis agassizii</i>	Olive Perchlet*	E			
	<i>Mogurnda adspersa</i>	Purple spotted gudgeon*#	E		Inland and coastal Rivers	Moderate
	<i>Maccullochella peelii peelii</i>	Murray Cod		V	Inland Rivers	None
	<i>Prototroctes maraena</i>	Australian Grayling		V	Southern Coastal Rivers	Very Low
	<i>Archaeophya adamsi</i>	Adams Emerald Dragonfly	V		Small Coastal Streams	Very Low
	<i>Petalura gigantea</i>	Giant Dragonfly	V		Coastal Wetlands	High
Saltwater	<i>Carcharias taurus</i>	Grey Nurse Shark	E	CE	Oceanic	Very Low
	<i>Pristis zijsron</i>	Green Sawfish	E		Oceanic	Very Low
	<i>Carcharodon carcharias</i>	Great White Shark	V	V	Oceanic	Very Low
	<i>Epinephelus daemeli</i>	Black Cod	V		Estuarine	Moderate

*Western populations

#Eastern populations are not listed but are considered threatened by the Australian Society for Fish Biology.



■ **Freshwater fish species historically recorded in the Clarence River system**

Species Name	Common Name	Likelihood of occurrence
<i>Ambassis agassizii</i>	Olive Perchlet	High
<i>Anguilla australis</i>	Short-Finned Eel	High
<i>Anguilla reinhardtii</i>	Long-Finned Eel	High
<i>Arius graeffei</i>	Freshwater Fork-Tailed Catfish	Low
<i>Craterocephalus marjoriae</i>	Marjorie's Hardyhead	High
<i>Galaxias olidus</i>	Mountain Galaxias	Moderate
<i>Gerres subfasciatus</i>	Silver Biddy	Moderate
<i>Gobiomorphus australis</i>	Striped Gudgeon	High
<i>Gobiomorphus coxii</i>	Cox's Gudgeon	High
<i>Hypseleotris compressa</i>	Empire Gudgeon	High
<i>Hypseleotris galii</i>	Firetailed Gudgeon	High
<i>Hypseleotris klunzingeri</i>	Western Carp Gudgeon	High
<i>Maccullochella ikei</i>	Eastern Freshwater Cod	Low
<i>Macquaria novemaculeata</i>	Australian Bass	High
<i>Melanotaenia duboulayi</i>	Duboulay's Rainbowfish	High
<i>Myxus petardi</i>	Freshwater Mullet	High
<i>Notesthes robusta</i>	Bullrout	High
<i>Philypnodon grandiceps</i>	Flathead Gudgeon	High
<i>Philypnodon sp</i>	Dwarf Flathead Gudgeon	High
<i>Potamalosa richmondia</i>	Freshwater Herring	High
<i>Pseudomugil signifer</i>	Southern Blue-Eye	High
<i>Retropinna semoni</i>	Australian Smelt	High
<i>Rhadinocentrus ornatus</i>	Softspined Rainbowfish	High
<i>Tandanus tandanus</i>	Freshwater Catfish	High
<i>Amniataba percoides</i>	Banded Grunter**	Low
<i>Bidyanus bidyanus</i>	Silver Perch**	Low
<i>Carassius auratus</i>	Goldfish*	High
<i>Gambusia holbrooki</i>	Gambusia*	High
<i>Oncorhynchus mykiss</i>	Rainbow Trout*	Low

(Source: NSW Fisheries 2005; Harris and Gerke, 1997).

*Exotic

**Translocated Natives