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North Nowra Link Road – North Nowra Concept Plan Application

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Submission

Introduction

I am very strongly opposed to both the both the Central (Pitt Street-Narang) and Southern (Illaroo Road-West Bunberra Street) options for the North Nowra Link Road.

I believe that the Southern Option can be swiftly eliminated on the following grounds. It will be the most expensive option requiring compulsory acquisition of three houses on the Princes Highway, and construction of the most expensive bridge option across a wide and deep part of the gorge. The bridge will traverse a very scenic part of the gorge and have a severely negative environmental impact and would cut the bushland in two. It is close to, and may threaten a Grey-headed Flying-fox maternity site and would be constructed across a flight path of this endangered species. The southern road option would cut through the habitat of the threatened Brittle Midge Orchid and destroy a number of these plants.

I shall initially address the issue of the Giant Burrowing Frog, which is a vulnerable species that has received totally inadequate assessment in the Concept Plan documents. I will then address the broader issues of the Central and Northern Link Road options.

Giant Burrowing Frog

The North Nowra Link Road Concept Plan fails to properly address the issues relating to the Giant Burrowing Frog (GBF). It

- fails to address the legislative requirements
- repeatedly denies the recorded existence of the GBF in the Regional Park, based on the positive identification by an expert
- fails to make full and proper reference to previous studies
- understates the habitat value to the species
- overstates the impact of the existing powerline clearing on GBF mobility
- understates the impact of construction of a sub-arterial road through the GBF habitat

1. Legislative requirements

The Biodiversity Assessment (BA) prepared by Shoalhaven City council as part of the Environmental Assessment does not fully meet the NSW Department of Planning Director General's Requirements DGRs as they relate to biodiversity *"This Assessment must clearly identify and consider any direct and indirect impacts on critical habitats, threatened species, populations or ecological communities under both state and Commonwealth legislation recorded along the nominated routes and surrounding area....must also consider the potential impacts of the route options on the conservation options and integrity of the Bomaderry Creek Regional Park, particularly as a result of fragmentation impacts and edge effects. Measures to avoid or mitigate impacts...must be identified with an assessment of the feasibility, effectiveness and reliability of these proposed measures"*.

With regard to the Giant Burrowing Frog (GBF), the potential impacts have not been correctly assessed and the proposed measures to avoid or mitigate impacts, are totally inadequate, with no assessment of the feasibility reliability and effectiveness, as required. Generalized statements such as BA p.72 "the proposed development has been designed to minimize impacts on identified areas of environmental importance" are demonstrably untrue, largely because the critical habitat of the GBF has not been correctly identified and previous work by experts in the field of the GBF have not been acknowledged and thus ignored, leading to a grossly incorrect assessment of the potential impact on the GBF.

The BA p. 72 continues *"An Environmental Management Plan (EMP) will be developed through ongoing consultation with relevant regulators, expert groups and individuals and will inform the construction phase of the project in order to minimize environmental impacts"*. And further, in 6.1 Avoidance and Mitigation Measures, *"A range of mitigation measures during construction will be implemented by SCC and further measures will be considered as part of the final road design and development of the EMP"*. This totally fails to address the requirements with regard to protection of the Giant Burrowing Frog. No measures have been specified and therefore none assessed with regard to the feasibility, effectiveness or reliability of any measures, so it does not meet the DGRs requirements, or the legislation.

Similarly, for the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act) these issues have not been addressed. The very significant failings in the Biodiversity Assessment and Environmental Assessment relating to the Giant Burrowing Frog (GBF) are discussed below.

2. Vegetation Communities

Most records for the GBF occur in dry sclerophyll forest, although it has been reported to use wet habitats for breeding sites. This species is found in heath woodland and open forest with sandy soils

(DEWAH, 2009). The vegetation communities of principal interest to the GBF in the Regional Park are the Kunzea Shrubland which forms prime habitat and Sandstone Sedgeland which forms breeding habitat.

Kunzea Shrubland (dominant species *Kunzea ambigua*, *Leptospermum sejunctum*) occurs on broad rock outcrops above the gorge within the Grey gum-Stringybark Forest/Woodland, as discrete patches on rock outcrops. This community occurs on a broad rock outcrop on the Central Route, just west of the gorge, extending north. The associated shallow sandy soils on sandstone comprises GBF habitat, especially under wet conditions.

The Central Route option bisects the largest northern occurrence of this soil/vegetation association.

Sandstone Sedgeland (dominant species *Melaleuca thymifolia*, *Viminaria juncea*, *Leptospermum spp.*), occurs on the plateau, on shallow moist soils covering broad areas of bedrock. Occupies poorly drained sites with shallow soils over sandstone bedrock. Occurs mainly to the west of the gorge where broad sandstone surfaces are close to the surface.

Mitchell McCotter (1993) provides a vegetation map of the subject land that identifies the spatial extent of the vegetation communities. KMA (2007 and 2008) provides greater floristic detail and definition of the vegetation communities.

3. Giant Burrowing Frog habitat

Webb (1993) wrote that “*At the northern end of its range (the Hawkesbury Sandstone Formation), H. australiacus occurs in hanging swamps on sandstone ledges beside perennial non-flooding creeks.*” It “*has also been recorded from relatively dry habitats indicating that moist conditions are not a prerequisite for occurrence*”.

The Environmental Assessment Report (EAR) p.59 considered that “*while the habitat is suitable for the species, it is more limited in size and quality than other known habitat in the Shoalhaven Region (eg Vincentia and Booderee National Park). The potential breeding sites observed during the survey support the concept that if the GBF still occurred in the area surveyed, the population size would be extremely small.*”

While a small population size for GBF in the Regional Park is not disputed, the interesting comparison with nearby populations highlights the significance and vulnerability of a Bomaderry Creek population and emphasizes the importance of offering maximum protection to ensure the survival of the species there. Construction of a sub-arterial road through the middle of its prime habitat would be inconsistent with that aim

The opinion of Daly (1996) was that “*The Bomaderry Creek GBF population may consist of only a few animals. Given the status of this species in NSW and Vic all populations are considered significant*” (G Daly, 1996). “*The existing disjunct and patchy distribution indicates the conservation of this species should be given high priority*” (Webb 1993).

The EAR p. 132 reports “*Habitat suitable for the Giant Burrowing Frog (GBF) was recorded on the northern side of the Central Option, although no individual GBF have been recorded*”.

This is a misrepresentation of the truth and in contradiction with the areas of GFB habitat and potential GFB breeding sites to the north and south of the proposed road, as shown in Figure 8 of the BA (p. 31). Daly (1992) has made a positive identification of the species in this habitat.

The BA p.28 continues *"in September 2009, an inspection of the study area was undertaken by... Eco Logical Australia...Suitable breeding and broader foraging habitat was identified within the study area and adjacent to the proposed Central Route corridor as shown in Figure 8"*. This map clearly identifies the potential GBF breeding site (McCotter, 1995) located to the south of the proposed road, which has been previously described by Daly (1993) and Webb (1993).

Daly (1996) wrote of this site: *"Five potential breeding sites were located at Bomaderry creek on the western edge of the sandstone gorge. Site 3 was a creek which is surrounded by wet heath. This creek is considered the most suitable breeding site for GBFs within the Bomaderry Creek Bushland because of its size and adjacent vegetation."* Two recent photos of this site are attached (Plate 1).

Webb (1993) wrote of this area and site *"the sandstone ledge and associated creek and wet heath/Kunzea ambigua scrub on the western side of the gorge provides suitable, largely undegraded habitat for H. australiacus...During my visit on 26 September 1993, conditions were relatively dry except for a slow-flowing creek through a hanging swamp (wet heath) to the south of the proposed road and numerous seepage lines both north and south of the proposed road in Kunzea ambigua scrub. Nevertheless, it was apparent that during wetter periods the wet heath/Kunzea ambigua scrub vegetation which extends across the proposed road would be suitable habitat during both breeding and non-breeding periods. During prolonged drought periods, H. australiacus may concentrate primarily along the semi-permanent creek-line to the south of the proposed road but extend out from there during more favorable periods."* Hoser (1989) cited in Webb (1993) notes that *H. australiacus* moves great distances from breeding areas in search of food and may even be found moving about on nights too hot for other frogs.

Despite the existing literature on this potential GBF breeding site, and its location shown in Figure 8 of the BA, claims are made in the EAR p.127 stating that *"potential breeding habitat exists only on the northern side of the Central Option eliminating the need to traverse the road to access additional area of habitat"*.

This is an extraordinarily ill-informed and poorly researched claim, which is in contradiction with the distribution of habitats shown in Fig. 8 in the BA report, is also at odds with Hoser's observation cited above, that the GBF moves great distances from breeding areas in search of food

With reference to construction of the Central Option for the proposed Link road, the BA states, p.54: *"the total area of sub-optimal GBF habitat within the study area is approximately 13.67 ha. Direct impacts on sub-optimal GBF habitat will be limited to the clearing of approximately 0.22 ha on the northern side of the Central Route corridor"*.

This is inaccurate and misleading. The use of the word sub-optimal is both incorrect and an apparent attempt to diminish the perceived value of the GBF habitat. A GBF has been recorded in this habitat, and it is recognized as GBF habitat by experts. Is this a ploy to deflect attention from the potentially disastrous impact of a sub-arterial road bisecting the habitat?

Daly (1996) wrote *"The prime habitat of the species at Bomaderry Creek is the woodland and heath (Kunzea Shrubland) that occurs on the sandstone shelf on the western edge of the creek. The woodland*

areas west of the Grey Gum/Tickbush (Kunzea ambigua) is not considered prime habitat, although animals may disperse through this area."

The existing Kunzea Shrubland/GBF habitat is bisected by the periodically slashed powerline easement. This easement is serviced by a narrow unsealed, unformed, rarely used vehicular track some 3 m wide, formed by removal of the surface soil. The track is only rarely used during the day and not at night when the GBFs are more likely to be active. In contrast, the proposed Central Option link road would be a sealed sub arterial road constructed largely adjacent to the existing clearing, and carrying regular traffic at 80 km/h.

The existing clearing and track offers no barrier to the movement of GBFs (or any other animal) travelling between the northern and southern parts of the existing GBF habitat. The impact of construction of the Link Road on the GBF habitat would be highly significant.

Proponents of the Central Option have consistently used the argument that the road would follow the existing powerline clearing which forms an existing barrier to the movement of fauna across the clearing. I contend that this is not so, and that construction of the Central Option road would form a permanent barrier that would bisect the Regional Park and destroy its continuity and integrity.

I believe that the mapping of the Kunzea Shrubland boundaries adjacent to the existing powerline clearing misrepresents the natural vegetation and faunal boundaries and that prior to the clearing of the easement, continuous GFB habitat extended across the easement.

As a geologist (BSc Melb.) and with a Diploma of Agriculture (Dookie) I have some years experience mapping soils/vegetation, and geomorphological mapping. I briefly inspected the site where the powerline clearing passes through the GBF habitat on 28/3/11, with botanist Terry Barratt. The linear southern boundary to the northern GBF habitat area (characterized by the Kunzea Shrubland) is clearly not a natural vegetation boundary but an artifact of slashing under the power line. The natural boundary is within the powerline clearing and if slashing ceased, that boundary would be re-established.

At the time of the inspection, slashing of the powerline clearing had not occurred for some time. North of the narrow powerline access track, regrowth of *Kunzea ambigua* up to 0.5m high had occurred between the established Kunzea Shrubland and the edge of the powerline access track, west of the spur track to West Cambewarra Road.

To the south of the powerline access track, east of the intersecting track from the Hanging Swamp boardwalk, *Kunzea* regrowth was also present in the slashed clearing. It is clear that under pre-clearing conditions, the Kunzea Shrubland extended south across the powerline margins near this four way intersection. Scattered *Kunzea ambigua* extends further south to join with dense Kunzea Shrubland less than 30 metres to the south.

Four photos (Plate 2) are attached of the *Kunzea* regrowth near this intersection.

Top left: View from the west towards the track to West Cambewarra Road (mid distance left) and the track from the Hanging Swamp boardwalk (mid right).

Top right: View from the east showing *Kunzea* regrowth between the established Kunzea Shrubland to the north, and the edge of the narrow service track.

Bottom left: Kunzea regrowth near the intersection of the powerline access track and the track to West Cambewarra Road.

Bottom right: Kunzea regrowth in the slashed powerline easement, east of the intersection with the track from the Hanging Swamp boardwalk.

Prior to clearing, the Kunzea Shrubland would have extended across the powerline easement near the track intersection. The northern boundary of the southern mapped GBF habitat area (Figs. 8 and 23 in the BA) occurs much closer to the powerline clearing than shown. Opposite the gravel scrape to the north of the road, thick *Kunzea ambigua* on thin soils on bedrock occurs only 20 metres south of the road clearing.

Potential GBF habitat is continuous across the powerline clearing with the maximum separation of Kunzea Shrubland in the west of only about 30 metres of heath woodland. The BA p.54 itself notes "*most records of the GBF occur in dry sclerophyll forest...the species is also found in heath, woodland and open forest with sandy soils*". A very narrow band of heath woodland within a much larger area of GFB Kunzea Shrubland would present no barrier to the movement of the frogs across this area.

The GFB habitat area has been previously mapped as a continuous entity (Fig 1) by botanist Terry Barratt, in a report to Shoalhaven City Council by Webb (1993) *Significance of the Giant Burrowing Frog (Heleioporus australiacus) in Bomaderry Creek Reserve*.

The mapping of the GFB habitat in the Assessment, showing a break along the powerline easement is not based on scientific evidence but appears to be more a convenience to support the proponent's contention that a link road constructed along the existing powerline clearing would present no risk to the GBF population. This is demonstrably false.

The GBF habitat on both sides of the powerline clearing would be occupied by a single, and almost certainly small, population. Construction of the proposed road would sever the connection between the two areas. *Hoser (1989) cited in Webb (1993) notes that H. australiacus moves great distances from breeding areas in search of food and may even be found moving about on nights too hot for other frogs*".

Potential breeding sites are located both north and south of the proposed road, with the most favorable site located in the southern habitat area. Nonetheless, the species could be expected to range over the entire GFB habitat and beyond. Construction of the Central Option for the North Nowra Link Road could well result in extinction of this population, with road kill being a principal likely cause.

The BA states, p.54: "*the total area of sub-optimal GBF habitat within the study area is approximately 13.67 ha. Direct impacts on sub-optimal GBF habitat will be limited to the clearing of approximately 0.22 ha on the northern side of the Central Route corridor*".

This is inaccurate and misleading. The use of the word sub-optimal is both incorrect and an apparent attempt to downgrade the perceived value of the GBF habitat. A GBF has been recorded in this habitat, and it has been recognized a prime GBF habitat. It is an apparent attempt to deflect attention from the potentially disastrous impact of a sub-arterial road bisecting the habitat.

Daly (1996) wrote "*The prime habitat of the species at Bomaderry Creek is the woodland and heath (Kunzea Shrubland) that occurs on the sandstone shelf on the western edge of the creek. The woodland areas west of the Grey Gum/Tickbush (Kunzea ambigua) is not considered prime habitat, although animals may disperse through this area.*"

The impact of construction of the Central Option road on the GBF habitat will be highly significant. The road would in fact extend beyond the existing narrow slashed area of the powerline easement with its narrow access track. In the vicinity of the Kunzea Shrubland GBF habitat the access track is merely a 3 metre wide unformed unsealed vehicular track formed by removal of the surface soil. The existing easement and track offers no barrier to the movement of GBFs (or any other animal). The track is rarely used for powerline maintenance, and not at night when the GBFs are more likely to be active.

4. Status of the Giant Burrowing Frog in Bomaderry Creek Regional Park

The GBF is listed in Table 1 (BA) as vulnerable under both the EPBC Act and the TSC Act, and that there is a potential likelihood for it to occur here as habitat suitable for the GBF is known to occur within the study area. It further states that the species has never been positively recorded within the study area. This is totally false and misleading. A single male was heard in GBF Kunzea Shrubland habitat to the north of the proposed road on 16 May 1992 by Garry Daly an environmental consultant and expert on the GBF, (referred to in this Environmental Assessment as an "experienced herpetologist" and Dr Alan York a botanist with NSW State Forests. The call of the male GBF is quite distinctive and is a common method for recording the frog's presence. This record has been cited in a number of papers and has not been disputed. It further states that two surveys undertaken by Eco Logical failed to record the species. This is discussed later.

This misrepresentation that a positive identification of the GBF has not been made in the Regional Park is repeated throughout the documents presented by the proponent.

The Environmental Assessment Report (EAR) states (p. 59) that "*A single possible call was heard within the study area in 1992. The species has never been found in the study area*". The BA states (p.27) that "*the GBF was first recorded for its potential to occur in the vicinity of the North Nowra Link Road (Central Option) in 1992 when it was "thought that a possible call of an individual was detected"*".

These are gross misrepresentations of the truth. I have spoken with Garry Daly (29/3/11), an acknowledged expert on the GBF and he assured me that in 1992 he made a positive identification based on the GBF call. It is unfortunate that Eco Logical and JBA Planning repeatedly make this false representation throughout the documents tendered for the proposal. One might wonder why this has been done.

Webb (1993) wrote "*H. australiacus is notoriously difficult to find...in my experience, H. australiacus is one of the most difficult frogs in eastern Australia to detect because it burrows deep into earth banks of creeks and in damp swampy ground, and tends to call primarily during wet periods co-inciding with its breeding season (summer-autumn). The optimum time to conduct a survey for H. australiacus is therefore during prolonged wet periods coinciding with their peak breeding period (late summer-early autumn)*" the chances of detection are slim under dry weather conditions.

The BA, p.54 again falsely states “that a single possible call was heard by Garry Daly within the study area in 1992. Nonetheless the species has never been positively recorded in the study area since although there have been a number of subsequent investigations”. This is a further misrepresentation. It was a definite GBF call from a single male – G Daly, pers. com. 29.3.11.

“The Bomaderry Creek GBF population may consist of only a few animals. Given the status of this species in NSW and Vic all populations are considered significant” (G Daly, 1996).

5. Surveys undertaken to detect the Giant Burrowing Frog

The EAR continues (p. 59) “Incidental and coordinated surveys in the vicinity of the original GBF possible observation have occurred in the intervening period since 1992, and in September 2009 an inspection of the subject land was undertaken over an 8 hour period to investigate GBF habitat within the study area. A nocturnal survey was undertaken in March 2010. During the March 2010 survey, timing and weather conditions were within the accepted parameters to enable detection of the species and the area had received above average temperature and rainfall during recent months.

While the survey conditions were conducive to promoting GBF activity, conditions were not optimal, which would have involved high levels of rainfall to encourage breeding (calling) activity”. The proponents thereby acknowledge that the failure to record the presence of GBF on that occasion cannot be relied on and further state “definitive conclusions on the presence of the GBF cannot be drawn on the basis of the current survey”.

The BA p.28, states that subsequent “surveys for the GBF have been undertaken by either experienced herpetologists or qualified consultants and have not resulted in any positive record of the species in the potential habitat within the study area.” An additional nocturnal survey undertaken by Eco Logical following 15 mm of rain during the previous two days following an unseasonably warm period during March 2010 focusing on potential habitat either side of the central route option. No evidence of GBF was recorded during the surveys.

It is likely that the conditions were not conducive at that time for GBF breeding (calling) activity. Daly (1993) found male frogs call predominantly during warm nights after periods of intense rain from February to May. Calling occurs mainly at night but has also been observed during the day. Males call during summer and autumn from partially flooded burrows at the base of creek banks or beneath dense vegetation beside creeks and swampy ground, but breeding is not restricted to burrows. (Daly, 1996).

6. Impact of the Central Route Option

The EAR states p.120 that the Central Option will have a 30 metre wide road reserve corridor. To avoid ecologically sensitive areas (ie in the vicinity of threatened flora species) this will be reduced where practicable to a 20 metre wide road reserve and clearance area. The Central Option will result in the clearance of 0.09 ha of Kunzea Shrubland. (this is inconsistent with page 127, where the clearing is stated as 0.22 ha.)

These figures grossly understate the impact of the proposed road. The clearing of a seemingly small area of GBF habitat is not the issue. The real issue is the construction of a sub-arterial road which would create a major barrier to the frog and prove a threat to its survival..

The EAR p.127, states "*There are no confirmed records of the GBF being present in the study area. However suitable sub-optimal breeding habitat (known as sandstone sedge) occurs within Bomaderry Creek Regional park and lies adjacent to the northern edge of the Central Option. This primarily wet habitat is relatively small in size compared to other habitats in the Shoalhaven Region and appears to be rarely inundated with water which is required for the breeding process. Furthermore most records of GBF in the region occur in dry sclerophyll forest type habitats*".
The Central Option... will remove a small area of this sub-optimal breeding habitat, approximately 0.22 ha".

The above paragraphs make incorrect assertions and display an ignorance of the vegetation and GFB habitat environments in the Regional Park. Kunzea Shrubland occurs adjacent to the northern edge of the Central Option and is certainly not GBF breeding habitat, and it is not known as sandstone sedge. The GBF breeding habitats are located elsewhere. This is an extraordinary error in the EAR.

The EAR, p.127 continues "*Mitigating factors in relation to the potential impacts to the GBF resulting from the loss of potential habitat are*

- * *Potential breeding habitat exists only on the northern side of the Central Option eliminating the need to traverse the road to access additional area of habitat*
- * *The design of the bridge will allow non-impaired movement for terrestrial and aquatic species*".

The above assertions are false

- * the GBF habitat is continuous across the proposed road route as previously discussed.
- * a prime breeding habitat site is present to south of road.
- * the GBF habitat is currently bisected by a narrow unsealed unformed rarely used (during day) vehicular track.
- * the existing powerline clearing would provide no barrier to frogs travelling between the northern and southern areas of the existing GBF habitat.
- * if the Central Option is constructed, this will be replaced by a two lane sub-arterial road which will present a major threat to the GBF from road mortality.
- * the proposed bridge would occur well to the east of the GBF habitat and the GFB is unlikely to go out of its way to make use of the space under the bridge. The GBF is more likely to take a more direct route across the road.

High mortality of frogs attempting to cross the road could be expected due to their slow moving habit. Furthermore, "*the frog has a habit of sitting still on warm wet roads and is not startled by cars or headlights, and a small population could be adversely affected by one road kill*". Jacqueline Recsci in Ehmann, H. (ed.) 1977. *Threatened Frogs of NSW: Habits Status and Conservation*. Frogs and Tadpoles Study Group of NSW, South Sydney. pp56-64. Chapter 3. Eastern Owl Frog (Giant Burrowing Frog).

Webb (1993) also noted that "*H. australiacus is most active and most detectable after rain...Many observations have been made of this species active on tracks and roads after rain*". This further highlights the very considerable danger to the species from road mortality should the Central Route option be constructed bisecting the Kunzea Shrubland GBF habitat. No possibility of mortality should be contemplated for this likely very small population

An unsupported contention with invalid conclusions is made in the BA, p.70 *"an existing service road along the central route permanently fragments vegetation and may create a barrier to some flora and fauna movement. Although the operation of the NNLR will result in an increase in traffic flow through the area, it is not expected to create a more significant barrier to flora and fauna than what currently exists. The existing road consists of hard packed gravel and rock, with a slashed area of variable width on either side of the road along the majority of its length"*.

The above invites the following comments:

- * the existing service road fragmentation is minimal.
- * the service road creates no barrier to the movements of the GBF
- * operation of the NNLR will create a highly significant barrier to the GBF.
- * the existing track is not "hard packed rock and gravel" but merely a narrow strip from which the surface soil has been removed or eroded.
- * the traffic flow through the area will increase from virtually zero to a regular stream at 80 kmh.

Webb (1993) concluded with regard to the GBF *"In my opinion, the road would present an insurmountable barrier to dispersion northward through the Kunzea ambigua scrub during favorable periods, as well as divide suitable habitat into two very small isolettes"*

However it is contended in the BA (p.76) *"It is unlikely that road kill will be a factor for this species. This is primarily due to lack of known records that would confirm the species present in the study area but also the potential breeding habitat exists only on the northern side of the potential route eliminating the need to traverse the road to access additional areas of habitat"*.

This is wrong, poorly researched and is inconsistent with data reported elsewhere in the BA. As previously discussed, GBF is commonly observed on roads and is known to sit on them under warm wet conditions. Suggesting it is unlikely to occur because of lack of species record in the area is both wrong (it has been recorded) and spurious reasoning. As breeding habitat occurs on both sides of the road, it is ludicrous to suggest *"eliminating the need to traverse the road to access additional habitat"*. What unadulterated rubbish. Tell that to the frogs!

The BA, p states *"There is also the potential for indirect impacts including **road mortality**, potential water quality and hydrologic changes in the area over which the GBF are likely to range. Many of these indirect factors can be mitigated as discussed below in section 6."* However no specific relevant measures are presented in section 6, despite the DGR that these measures *"must be identified with an assessment of the feasibility, effectiveness and reliability of these proposed measures"*.

The BA states, p.55 *"No direct impacts are expected or likely to occur on listed threatened species as a result of construction of the North Nowra Link Road....Although the project has potential to result in indirect impacts to a number of threatened species...it is not expected that the conservation value of a threatened species or their habitat will be adversely impacted by construction of the North Nowra Link Road."* This is demonstrably false. The construction of the NNLR would threaten the existence of the GBF in its habitat west of Bomaderry Creek, and the conservation status of both the frog and its habitat will be severely impacted.

The BAS further states, p.76 *"There may be indirect loss of habitat adjacent to the road...from the altered hydrological, nutrient and microclimatic conditions along the road verge. The level of impact is also directly related to the size of the fragmentation and the vehicle usage on the road. However the*

fact that only limited habitat for the species is present in BCRP and that no individuals have been recently recorded suggests that it is highly unlikely that the proposal will adversely impact this species ability to move between areas of suitable habitat”.

The poor reasoning displayed above is astounding. The size of the available habitat in BCRP has absolutely nothing to do with the proposal adversely impacting on the species ability to move between areas of suitable habitat. What would severely impact would be construction of a sealed road carrying significant traffic at speed. That no individuals have been recently recorded may well result from surveys having been undertaken at inappropriate times, and the small number of individuals present. This makes it even more important that this vulnerable species is not made locally extinct resulting from a sub-arterial road being constructed through the heart of its habitat.

7. Mitigation measures

The BA p.69 asserts “*The potential impacts ...include things such as road kill, noise and light pollution from cars. The potential ...is minimized through a range of mitigation measures which ensure that any potential for impacts is significantly reduced...it is not expected that the conservation value of a threatened species or their habitat will be adversely impacted by the operation of the NNLR*”.

Mitigation of road kill of the GBF in the BCRP is not an *option* and must not be allowed to occur, especially given the small population of this vulnerable species.

The EAR p.127 states “*The design of the bridge will allow non-impered movement for terrestrial and aquatic species*”. However the frogs are more likely to take a direct path across the road within the Kunzea shrubland and thus be liable to road kill, than to divert outside their preferred habitat to cross under the bridge.

To mitigate the potential impacts on GBF and/or its habitat during construction of the Central Option, the EAR, p.127 indicated that an Environmental Management Plan would be implemented to limit direct and indirect impacts on this species.

However limiting impacts on a small vulnerable population of GBFs with an as yet undetailed EMP is surely inadequate and does not meet the DGRs. There should be no adverse impacts on this species at any stage, and this should be fully detailed before project approval.

The BA p. 76 “*One of the mitigation measures ...is the bridge design ...will allow the movement of GBF below the bridge and along the Bomaderry Creek riparian zone The bridge will not significantly impact on the species ability to move through potential habitat or provide a physical barrier for the species*”.

To minimize roadkill, the EAR p.160 proposes including signage and provision of high contrast road pavement to help see fauna crossing.

Webb (1993) concluded “Proposed remedial actions... would be largely ineffective for *H. australiacus*.... I am not aware of any studies which support the efficacy of wildlife underpasses for frogs. Modified speed limits and signage is of minimal use in protecting small animals such as frogs which may venture onto roads. I make this judgment based on the size and speed of movement of *H. australiacus* , difficulty in observing them from a distance, particularly when stationary, and the prevailing mindset among motorists and from the regarding “small slimy creatures” such as frogs

lizards and snakes.... I don't believe that monitoring mortalities and injuries to wombats and swamp wallabies will provide and adequate indicator of the impact on *H. australiacus*." (Webb, 1993).

"Other potential impact include: degradation of the semi-permanent creek through the wet heath, ...and additional predation pressure from domestic animals using the road as an access route to the core of the reserve" (Webb, 1993).

The EAR Assessment concluded that the impacts on the habitat were considered to be minimal and insignificant, partly because the route option follows the general alignment of a cleared services road and the transmission line corridor which already affects habitat connectivity within the Regional Park

For the reasons outlined throughout this response, I consider this conclusion to be without foundation.

8. Proposed offset

"There is a proposal to transfer some Council land to DECCW tenure... as compensation...The transfer of this land will increase potential habitat for the species under DECCW tenure".

BA p.55 *"although the impacts to a small area of sub-optimal GBF habitat (0.22 ha) cannot be avoided should the Central Route be constructed, the 50 ha offset that is being proposed by Council will provide adequate compensation given that the balance of the area identified as sub-optimal habitat will be obtained within the offset site".*

"The construction...is not expected to have an adverse impact on the conservation value of the BCRP...any adverse impacts associated with this will be outweighed by the benefits afforded through the inclusion of 50 ha of existing SCC land to the BCRP as an offset...the amount of land amount of land to be cleared ...is not expected to result in adverse impacts to the conservation value of vegetation corridors given that 50 ha of existing SCC land will be transferred into BCRP as an offset. This will provide a net benefit for vegetation corridors and enhance their conservation value within the BCRP"

This proposal is nothing less than a bribe. The land is being managed by Council on behalf of the ratepayers. The land should be conserved and properly managed by Council, without it being used as an inducement by Council to achieve its preferred option.

There is nothing gained by adding existing GFB habitat in the north, while severing the habitat in the south by constructing a road, fragmenting the GBF habitat and excising the best breeding habitat from the greater part of the habitat. Such a transfer would not increase the gross existing habitat area, and should be fully protected by Council regardless.

9. Conclusions

1. The Environmental Assessment Report and Biodiversity Assessment repeatedly deny the confirmed observation of the Giant Burrowing Frog in the Regional Park by expert Garry Daly in 1992. This misrepresentation creates a heavy bias in these reports in favour of the proponent.

2. Subsequent surveys have been undertaken when either the timing or conditions have not been favorable for frog breeding (calling) activity. Experts acknowledge that the GBF is one of the most difficult frogs in eastern Australia to detect.
3. The significance of the existing powerline clearing and access track as a barrier to faunal movement is grossly overstated. Where this narrow clearing traverses the GBF habitat, it would present no barrier to the movement of the frogs.
4. The frog's Kunzea shrubland habitat is consistently described as *sub-optimal*. Experts have described it as *prime habitat*. This appears to be a deliberate attempt to devalue the habitat for the advantage of the proponent.
5. The most suitable sedgeland breeding site occurs to the south of the proposed road. It is shown on a Biodiversity Assessment habitat diagram but its presence is specifically denied in the text of the two documents. It is suggested that as the breeding sites are located to the north of the proposed road, that the frogs would not need to forage to the south. A bizarre claim.
6. There are inconsistencies in the text including a contention that sandstone sedge breeding habitat lies adjacent to the northern edge of the Central Option. This is a bizarre suggestion that displays a lack of understanding of the site.
7. The impact of a sealed sub-arterial road through the middle of the GBF habitat is grossly understated. The frogs are slow moving and tend to sit on roads under warm wet conditions. This is a recipe for extinction.
8. While the potential for road kill is acknowledged, it is claimed that mitigation measures would significantly reduce the potential for impacts. With a small population of a vulnerable species, any such impact must be prevented. There is expert opinion that the proposed mitigating measures would not be effective.

References

- Jacqueline Recsci *in* Ehmann, H. (ed.) 1977. *Threatened Frogs of NSW: Habits Status and Conservation*. Frogs and Tadpoles Study Group of NSW, South Sydney. pp56-64. Chapter3. Eastern Owl Frog (Giant Burrowing Frog).
- Mitchell McCotter (1992b). *Fauna Impact Statement , North Nowra-Bomaderry Link Road*. Report Prepared for Shoalhaven City Council.
- Webb, G., (1993) *Significance of the Giant Burrowing Frog (Heleioporus australiacus) in Bomaderry Creek Reserve*. Report to Shoalhaven City Council.
- Daly G., (1996) *North Nowra-Bomaderry Link Road: Giant Burrowing Frog*. Report Prepared for Shoalhaven City Council.

The Central and Northern Link Road Options

Consequences of and alternatives to the proposed Link Road Central Option

The proposed link road from Pitt Street to Narang Road would fragment the bushland. Emphasis on the degraded condition beneath the powerline by proponents of that route is a misleading furphy. While some degradation is present, ecological continuity within the park is retained. However this would be destroyed by a sealed sub-arterial road through the middle of the bushland. The proposed road would not be constructed within the degraded powerline easement, but mostly in natural bushland adjacent to it, cutting a broad swathe through the bush, severing ecological connection and access for bushwalkers and cyclists. It would inevitably degrade the creek and gorge, with intrusion of traffic noise destroying its ambience, and rubbish and vehicular pollution despoiling the pristine waterway

The northern link road option along West Cambewarra Road, within the northern edge of the bushland, would protect the integrity of the bushland. It would also provide superior egress for North Nowra residents travelling towards Moss Vale or Sydney, and more direct access to Bomaderry facilities, than the Pitt Street-Narang Road route.

However neither of these potential link road routes would solve the traffic problems. While easing traffic flows along Illaroo Road in the short term, the problems will merely be transferred from North Nowra to Bomaderry, where the increased traffic load on the highway will have to negotiate an existing second set of traffic lights at Bolong Road and still be faced with the bottleneck at the bridge, with traffic entering from Illaroo Road. In the longer term, with increasing housing development in North Nowra, the traffic situation will deteriorate further and a permanent solution to the problem will have to be found.

West Cambewarra Road should be the road link to the highway, but a third bridge crossing of the Shoalhaven is prerequisite for overcoming the traffic problems. This could be situated immediately upstream of the existing bridges, but the siting of the third bridge must be seen in the context of future transport planning for Nowra and the Shoalhaven region to the south.

Prior history of the North Nowra Link Road

An earlier attempt by Shoalhaven City Council to construct a road through the bushland led to a Land and Environment Court case (number 10376 of 1993: Leach v Director General National Parks and Wildlife Service and Shoalhaven City Council). In his judgment, Justice Stein concluded "*I am satisfied that there is a need for a link road between North Nowra and the Princes Highway.....It seems apparent from the evidence that the northern route via west Cambewarra Road is shorter and cheaper than the preferred route.... This alternative is arguably better for the environment, for endangered fauna, rare plants and the recreational values of the Bomaderry Creek gorge. This is because the northern route is situated on the extremity of the area*". Justice Stein upheld the appeal and construction of the road was denied.

The same arguments presented then are relevant today.

Current Link Road Proposal

In the Concept Plan submitted by Shoalhaven City Council, the proposed corridor through the Regional Park has in part been revised down to 20 metres from an originally proposed width of 30 metres but at construction the width might be revised again.

The road corridor will be largely offset to the north of the existing powerline clearing, resulting in further clearing of native vegetation, some of which is through habitat of animals with an EPBC listing status of vulnerable. The existing cleared width for the service road is 15 metres. Additional clearing of vegetation to the north of the powerline easement will be up to a further 15 metres for the new road reserve, and for road construction purposes at required chainages. This will result in a broad swathe cut through the native vegetation of the Bomaderry Creek Regional Park of up to 30 metres in width.

Together with the constructed road, this will result in major fragmentation of the Regional Park and bushland.

Nature and extent of likely impact on threatened species

The Environmental Assessment Report mentions 4 State and Commonwealth listed plant species considered as likely to occur or known to occur within the study area, and 16 State and Commonwealth listed fauna species considered to have the potential to occur or known to occur within the study area.

Of the plant species, *Eucalyptus langleyi* is listed as vulnerable, and *Zieria baeuerlenii* as endangered.

Two *Eucalyptus langleyi* plants that may be required to be removed to construct the proposed link road were identified during vegetation surveys. As only 12 other individuals were recorded outside the development footprint, the loss would comprise 13% of the population. The referral concedes impacts to this species but concludes "*It is considered unlikely that the loss of 2 individuals will lead to significant impact on an important population of this species*".

Studies estimate that 4,000 plants occur in 13 stands to the south west of Nowra. The implication is that because this is a small northernmost identified population of the species, that loss of 13% of the population is less significant. However it is a proclaimed Vulnerable species and as such, its situation should demand special protection.

Two threatened fauna species have been identified in the study area, the Grey-headed Flying-fox and the Giant Burrowing Frog. The Giant Burrowing Frog has been discussed in detail earlier.

The Environmental Assessment Report states (p.60) "*The study area is known to contain suitable habitat for the Grey-headed Flying-fox and it is identified as an itinerant visitor during the summer months to the forests in the study area. Further surveys to determine if the population within the study area is a maternal camp will take place in 2011.*"

Kevin Mills and Associates: *Final Flora and Fauna Assessment, North Nowra Link Road, Environmental Assessment, Shoalhaven City Council (July 2008)* identified the Grey-headed Flying-fox as an itinerant visitor during the summer months to the forest in the area. They stated that "*Despite the EPBC reporting tool indicating a possible occurrence in the area, the potential available habitat in*

the area and no individuals recorded in the flora and fauna assessments within the study site, it is unlikely that the proposal would significantly impact this species or its potential habitat”.

The report was dated July 2008. In April 2008, I visited a site in the far south east of Mills and Associates’ study area. The site is on a low saddle connecting the high monadnock within the large meander loop of the Bomaderry Creek. A colony of Grey-headed Flying-foxes was present, spread along the saddles with the main concentration on the southern side

Gerardine Hawkins (Flying-fox Information and Conservation Network and also Flying-fox and microbat coordinator for the Native Animal Network Association, who has also been conducting Flying-fox population studies of all the known colonies in the Shoalhaven, was well aware of and was monitoring the population. She told me that one outward flight path was along the river towards the area of the proposed road development. The site is now classified as a maternity site.

The failure by Mills and Associates to identify this colony seems a serious shortcoming of their report. As the colony is now a maternity site, and with potential to expand upstream along the creek to other suitable sites closer to the proposed link road, a detailed study of the potential impact of a link road on the colony seems warranted.

Measures to avoid or reduce impacts

The Council Referral states that “*an Environmental Management Plan will be developed through ongoing consultation with relevant regulators, expert groups and individuals, and will inform the constructional and operational phases of the project in order to minimize environmental impacts*”. I submit that this should have been done in the planning stages of the proposed project and may well be too late in some aspects after construction has been approved and commenced.

The Referral makes great play of the previously discussed conservation offset, claiming that “*this offset would compensate for the necessary revocation of a small amount of DECCW land as well as compensating for impacts to biodiversity values of the area*”. Nothing could be further from the truth. Nothing could compensate for truncation and fragmentation of the bushland, and the land on offer should be retained in any case to enhance the viability and values of the park. So the Council offer (inducement?) delivers absolutely nothing, but at the expense of integrity of the Regional Park.

With its new found environmental care and wisdom, the interests of the community and the state would be best served by Council donating those lots within the bushland which are zoned residential, to form additional inclusions to the Regional Park, to further enhance its value as a major local attraction for recreational and educational pursuits and as a significant tourism drawcard.

Shoalhaven City Council’s Proposed Offset Strategy

If approval is granted for construction of their preferred (central) option for the North Nowra Link Road, Shoalhaven City Council is proposing an offset strategy of dedicating 50 ha of surrounding Council lands to DECCW for inclusion in the Regional Park so that the whole area can be managed by DECCW. However lesser compensatory areas are offered for the other Route Options.

This proposal has the appearance of a bribe, to garner support for Council’s preferred central Route option, with lesser inducements for the alternative routes.

Loss of fauna habitat

The Council Referral to DEWHA (2009) concedes that the Proposed “North Nowra link road (Central Option) will impact on the habitat of the Yellow-bellied Glider and the Giant Burrowing Frog (GBF). It identifies GBF habitat *“in the vicinity of Bomaderry Creek and the proposed Link Road will fragment this habitat.”* Council proposes to mitigate and reduce these impacts by committing to *“an in-principle offer made to DECCW outlining the transfer of Council land as compensation for the revocation of land under DECCW tenure for the construction of the link road”*. It then claims that transfer of this land will increase the potential habitat for all fauna species within DECCW tenure.

This raises a number of issues.

1. Once again, this proposal seems to me very much like an inducement from Council to a government department (DECCW) seeking support for the scheme it is hoping to pursue. However with significant damage or destruction of land which is under its responsibility (the Bomaderry Creek Regional Park) agreement to such a proposal by DECCW would be an abrogation of its responsibilities.
2. Council’s proposal will in no way mitigate or reduce the destructive impact of the proposed road. The land under Council’s current responsibility has environmental values that Council should be committed to preserve at any cost, and not to use as a pawn in an attempt to gain support for the proposed road.
3. It does not address the issue of the proposed road bridge being under the flight path of the Grey-headed Flying-foxes from the maternal colony in the gorge to the south of the park, even though its consultant observed presence of the bats using sonar equipment.

The Shoalhaven City Council has committed to mitigation measures to reduce impacts on fauna species by:

1. compensation for the revocation of land under DECCW tenure by addition of Council lands to the Regional Park.
Comment: *This will in no way compensate for fragmentation of the Regional Park, and should occur regardless .*
2. developing strategies within the road design that avoids habitat fragmentation, including:
 - (a) road designed to leave the ground for a considerable distance either side of the creek.
Questions: *What impact will this have on the Grey-headed Flying-foxes flying northward along the gorge? What will the visual impact be on the aesthetics of the Regional Park?*
 - (b) providing underpasses in suitable areas.
Question: *What evidence is there that the frogs would use these underpasses rather than taking their preferred habit of sitting still on warm wet roads?*
 - (c) for arboreal species, providing overpasses in the form of rope bridges or gliding poles with take-off and landing points.
Questions: *Where is the evidence that this action would be appropriate for the relevant species? A system of poles for the passage of possums across the power easement near the*

Giant Burrowing Frog habitat has been trialed along the powerline clearing west of Bomaderry Creek. What were the results of that trial? Were they effective? Have the results been published?

3. Speed limit reduced to 60km/h for the eastern end of the road near the creek to reduce potential fauna collisions.

Comment: *For some species, even 60 km/h will be too fast.*

4. Light coloured road surfaces to enable contrast of fauna in headlights at night.

Comment: *For some drivers, this will just highlight the targets.*

5. Bridge design would acknowledge the objectives of the Bomaderry Creek classification as a Category 1 Environmental Corridor.

Comment: *These objectives would be best achieved with no bridge across the corridor at all.*

NSW Legislation

Kevin Mills and Associates (2008) p.41, state that construction of the Northern option (West Cambewarra Road) would avoid almost all significant impacts on threatened species. The Central route would impact on *Eucalyptus langleyi* and *Zieria baeuerlenii* and would bisect the forest habitat of the Yellow-bellied glider. This route would also bisect the potential habitat of the Giant Burrowing Frog.

In assessment of the project under the NSW Environmental Planning and Assessment Act 1979 (part 3a), Mills and Associates state that the *Guidelines* suggest that the impacts will be more significant if:

- *“habitat features that are likely to be affected by the proposal play an important role in maintaining the long-term viability of the species, population or ecological community”* and
- *“the duration of the impacts are long-term”*, and
- *“the impacts are permanent and irreversible”*.

Approximately one third of the Giant Burrowing Frog habitat area will be split from the larger area by the road which will also pose a significant risk to the survival of individuals. The long-term survival of the smaller or even both population fragments could be at risk. The proponent concedes *that “the road potentially imposes a significant barrier to the movement of the species”*.

The proponent details the lands under Council control proposed to be dedicated to DECCW if the Central route for the North Nowra Link Road is adopted, and the flora and fauna conservation benefits of that land. Because of its identified conservation values, these lands should be protected by Shoalhaven City Council and offered to DECC for addition to the existing Regional Park, and not offered as an inducement to achieve Council’s preferred option.

Tying dedication of the Council owned land to construction of its preferred central link road option, gives the impression that this is being offered as an inducement or a bribe to achieve its aim. This brings to mind the recent (31 August 2009) Land and Environment Court decision in the Catherine Hill Bay case, where development approval was overturned because of an inducement. One might wonder if there is any parallel in the situation with the proposed Bomaderry Creek link road development.

Conclusion

The Kevin Mills and Associates report “concludes (p.46) that the impact of the Northern and Central route options is similar in many respects. This includes the area of bushland cleared and the impact on Bomaderry Creek”.

They continue “The major difference is that the Central route traverses the core of the bushland, whereas the Northern route is located on the edge of the bushland. Thus the Central route would bisect the Regional Park and the habitats of several threatened species, including the Yellow-bellied Glider, *Zieria baeuerlenii* and....the Giant Burrowing Frog. The Central route also results in the removal of two specimens of the vulnerable mallee *Eucalyptus langleyi*, and is very close to a population of the endangered shrub *Zieria baeuerlenii*”.

Despite the clarity of these findings, and without offering further reasoning, the consultant surprisingly suggested that “under the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth)...that the Central route (the preferred option of their employer, the Shoalhaven City Council) be ultimately chosen as the preferred route”.

Robert Thorne
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NSW 2540

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Plate1. Giant Burrowing Frog breeding habitat in hanging swamp. Site 3 of Daly (1996).



Plate 2. *Kunzea ambigua* regrowth along powerline access track clearing.

FIGURE 1

The map illustrates the Bomaderry Creek area, featuring a network of roads including CAMDENHARRA ROAD, WEST ROAD, and MARANG ROAD. A creek flows through the landscape, with various vegetation zones labeled such as SCARB, WET HEATH, GRASSLAND, and GUM. A dashed line indicates the PROPOSED ROAD CENTRELINE. A specific location is marked with an asterisk and labeled 'Approximate site of *Heleporus australiacus*'. The map also shows a survey grid and a scale of 1:4000.

PLAN OF BOMADERRY CREEK AREA

SCALE 1:4000

GRID - INTEGRATED SURVEY GRID

SOURCES OF INFORMATION

- Grey Gum + Vegetation Boundaries - Ground survey, lines identified by T. Barratt
- Cadastral Boundaries - Shoalhaven Council Digital Map Base 6/8/93
- Proposed Road Centreline - Shoalhaven Council Preliminary Engineering Plan 12/91
- Creek + Tip - CMA Orthophotomap

Note. This plan is not a comprehensive vegetation or detail survey.

Stuart Leslie

STUART LESLIE
REGISTERED SURVEYOR

SCALE 1:4000
GRID - INTEGRATED SURVEY GRID

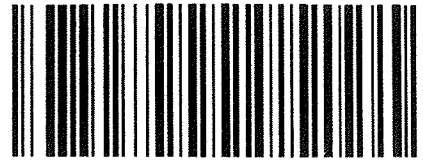
SOURCES OF INFORMATION

Grey Gum + Vegetation Boundaries - Ground survey; lines identified by T. Barratt
Cadastral Boundaries - Shoalhaven Council Digital Map Base 6/8/93
Proposed Road Centreline - Shoalhaven Council Preliminary Engineering Plan 12/91
Creek + Tip - CMA Orthophotomap

Note. This plan is not a comprehensive vegetation or detail survey.

STUART LESLIE
REGISTERED SURVEYOR

23 SEP 1993



PWG000542

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Planning NSW
Southern Office
Wollongong NSW 2520

Darren Lester
9 Beinda Street
Bomaderry NSW 2541

30/3/2011

To Whom It May Concern,

I am writing to voice my opinion as a Bomaderry resident of Shoalhaven City Councils proposed North Nowra-Bomaderry link road, development application 07_0037.

Having grown up in the Bomaderry area I have several concerns about council's preferred Pitt St - Nerang Rd option. I am now 32 and some of my fondest memories growing up in this area and spending time with my late father was walking though the quiet and beautiful location that is Bomaderry Creek. As I got older, it was not uncommon to still spend time with my friends going and exploring the area, as the creek walk can either be a short one, or a longer one, depending on how much time you have. Recently I have been able to take my own son to Bomaderry Creek walk - and on every occasion, what was remarkable was the difficulty in hearing traffic noise. It was almost as if you'd ventured into some far-away nature reserve, quickly forgetting that the highway really was only a short distance away. The sights, sounds and smells of the area seem almost untouched.

I understand that Council feels that a road stretching through the middle of the Creek area will not impact the beauty and tranquility of the area - this seems completely at odds with my own experiences of the area. I will be extremely disappointed if my son will not be able to experience the surreal peace that the area currently provides. Council have alternate options, including a West Cambewarra Rd - Moss Vale Rd option, effectively going around the northern perimeter of the Bomaderry Creek bushland. If council truly sees the need for a link road, then an option that does the least to spoil the existing bushland must be prioritised.

My other concerns relate to traffic flow that the link road is supposed to improve. I live in Beinda Street which joins with the highway about one kilometre from the the Illaroo Road - Highway intersection. I understand that council believes that providing a link road, North Nowra residents will head into Bomaderry then follow the highway south to make their way over the bridge into Nowra itself. Even though I cannot see how many residents will effectively head north so that they can head south, adding some distance to their trip and still meeting up with the same traffic lights they would encounter going the current way, it defies logic as a Bomaderry resident that a busy highway will have even more traffic going down it. It is already not uncommon for traffic to be backed up past the intersection at Beinda Street at peak times - directing more traffic to this side of Bomaderry seems ludicrous.

Further, the council's preferred Nerang Rd option meets with the highway at an intersection, forcing traffic either north or south. There is not even a smooth flow of traffic for vehicles wishing to enter Bomaderry proper. If the northern road option was used traffic would join near the highway at Cambewarra Road, leading to schools, major food chains, public pools and sporting facilities. Surely if a road is required, a smoother transistion to these facilities must be taken into account.

Lastly, I am concerned that council may make it difficult for southbound residents to enter North Nowra at the current Illaroo Road turn-off. I would like some form of confirmation that when and if a link road is built in any location, council will not force its use in this way.

I am not naive enough to think that development can always be perfect, however it seems that this link road will be of more benefit to council in opening up sales of land in North Nowra and that both environmental and social concerns are being put secondary, particularly to Bomaderry residents. I would hope that common sense would prevail and that if a link road truly is needed, then the West Cambewarra - Moss Vale Rd option is seen as the least detrimental to the area.

Yours,

Darren Lester

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From: "Terry Barratt" <terrybar@sctelco.net.au>
To: <plan_comment@planning.nsw.gov.au>
Date: 6/04/2011 11:53 pm
Subject: North Nowra Link Road - Concept Plan Application No. 07_0037
Attachments: Bom Crk - link road - Env Assess Feb 2011 - Landcare's submission Apr '11.doc

Director Infrastructure Projects

Please accept this submission from the Bomaderry Creek Landcare/Bushcare Group.

I am sending this submission on request from our Acting/Secretary.

Terry Barratt
Chair, Bomaderry Creek Landcare/Bushcare Group Inc.



BOMADERRY CREEK
LANDCARE/BUSHCARE GROUP
60 Cambewarra Road, Bomaderry 2541

6 April 2011

Daniel Keary
NSW Department of Planning
Director Infrastructure Projects
PO Box 39
Sydney NSW 2001

Dear Mr Keary

Re: North Nowra Link Road – Concept Plan Application No. 07_0037

We wish to register our strong opposition to Options 1 and 2 of the above concept plan application. Both would cut a swathe through significant parts of the Bomaderry Creek Bushland, whereas Option 3 would cut around the northern edge of the Bushland. On that basis alone, if a link road has to be given priority over a third Shoalhaven River crossing on the current Princes Highway alignment, Option 3 would be the best way to go.

We feel it necessary to explain our background and why we have taken this position on the three options advanced by the Shoalhaven City Council.

The Bomaderry Creek Landcare Group was formed in February 1994 and added Bushcare to its name a few years later when the Shoalhaven City Council established a Bushcare operation to encourage and facilitate volunteer bush regeneration activities on bushland under its care, control and management.

Our main area of operations is in the Bomaderry Creek Bushland. In recent years we have increased our scope of activities to the whole catchment of Bomaderry Creek and a few adjacent catchments that all form tributaries of the Shoalhaven River. Over the years we have developed a landscape scale position on natural area resource management in a large area which encompasses some very significant biodiverse hotspots (such as the Bomaderry Creek Bushland) on the northern side of the river, plus some extensive rural lands and growing urban areas.

On Council land, the Group operates in very close cooperation with Council's Bushcare Coordinator in accordance with a formal policy, an approved action plan and in return enjoys some financial support and insurance cover. Elsewhere on national park land, Crown land and freehold land, we operate as a more independent incorporated Landcare Group with our own insurance, but always on activities negotiated and approved by the relevant government agency or landowner.

During the 17 years since our formation we have carried out extensive bush regeneration works, weed and rabbit control, upgraded of walking tracks, installed a boardwalk and signs, erected a gated barrier to prevent antisocial access onto a powerline easement, produced a bushwalks book, leaflet and maps, surveyed weed infestations, native plants and animals, conducted guided walks and held workshops and skills training for our members and neighbours. We have also been proactive in encouraging NP&WS and Council to erect roadside signs and internal directional

and interpretive signs. We regularly remove litter and rubbish from the Bushland and report vandalism, arson and similar anti-social incidents to the relevant agencies.

Most of the projects we have undertaken have been funded by Australian Government grants amounting to over \$60,000 plus three times that value in equivalent in-kind contributions by Group members. In addition we were contracted by NPWS for a fee of \$5,000 to carry out a survey of the Bomaderry *Zieria* (*Zieria baeuerlenii*) in 2007. We also prepared at our own expense and submitted to Council a report on weeds of Crown and Council land in the Bushland in 2008.

Through this significant contribution to the upgrading and management of the Bushland the Group has developed much knowledge and experience as a community based partner in this joint land management undertaking. We are acknowledged by the relevant agencies for our expertise in many aspects of the biodiversity, cultural, recreational and educational values of the Bushland and in our practical knowledge of the management actions needed to protect and enhance these values for the public benefit.

Through our intimate knowledge of the Bushland and its values we have become an important element in the joint management of this outstanding natural resource. This joint management arrangement is a rather unique situation which we are not aware exists in similar settings and we believe that it offers so much benefit for both the Bushland and the community that uses and so much appreciates it.

We believe that there is no need to take a selected part of Council's land and add it to Bomaderry Creek Regional Park in return for a destructive road through the middle of the Park, Crown land and Council land. We see no benefit in merely changing the administration of a part of the Bushland in order to downgrade its values and the experience of its many visitors.

We are at quite a loss to understand the basis on which the offset lands were selected. The same logic which Council has used to extol the conservation values of the offset lands can just as justifiably be applied to the remaining land it has set aside for housing development and tennis court extensions. Why should it retain any of the lands in its ownership? This applies particularly to the tennis court extensions given the nearby environmentally degraded old spoil depot which is a much better alternative site than the adjacent high quality forest currently earmarked for the extensions.

In addition to the diminution of the Bushland values, the unique role of community participation in its management through the Landcare/Bushcare Group could very well be lost. We have brought financial and in-kind resources to this endeavour, brought a unique perspective to its management needs and been an effective conduit for community involvement and enrichment beyond what any single agency could ever hope to achieve.

With regard to the financial resources we have provided, much of which has been spent on the proposed offset land, these resources would not be available to the NP&WS as their management responsibilities are funded through the State Treasury. State agencies such as NP&WS do not have access to the community funds that both Council and community groups do. In fact Council and the Group have been successful this financial year in obtaining \$21, 000 for rabbit control, the installation of a powerline easement barrier and bush regeneration works. The current NP&WS budget is a very few thousand of dollars for some weed management needs.

It is particularly important to be aware of the possibility of loss of community enthusiasm arising from a decision that promises to impact so greatly on the Bushland. Should the Group cease to function this would be a great loss to both the community, the Council and the State Government.

We are very concerned at the serious impact that both Option 1 and 2 would have on the biodiversity values of the Bushland.

Option 2 would cut through the habitat of the *Genoplesium baueri* and 9 individual plants, disturb a part of the old North Nowra tip, cut through a small section of the Regional Park (very close to an unstable and scenic cliff line, cut through the habitat of the Yellow-bellied Glider and the Grey-headed Flying-fox, cross a wide, deep and very scenic part of the Bomaderry Creek gorge and require the compulsory acquisition of a number of residential properties in order to gain access to the Princes Highway, where yet another set of traffic lights would be erected on that very busy thoroughfare. One of the properties to be partly affected by the road on the highway side of the creek is owned by two members of our Group. Not only would the value and enjoyment of their own property be seriously affected, their love of and access to the Bushland would be compromised. These serious matters plus the very high cost of this option would surely rule it out of consideration.

With regard to Option 1, it is clear that the habitat and individual plants of *Zieria baeuerlenii*, *Eucalyptus langleyi* and *Genoplesium baueri* will be adversely affected and that the habitat of at least three Threatened fauna species will certainly be adversely affected and the habitat of up to another nine Threatened species possibly adversely affected.

Contrary to Appendix G – Aboriginal Archaeological Assessment, we believe that the scatter site found on the route of Option 1 close to the creek is of more significance than reported. We are familiar with the original site form in NP&WS records dated September 2000 that shows a greater spread and diversity of stone artefacts than recorded by Council's archaeology consultants. Further consideration of the value of this site must be undertaken, given that it will be destroyed if a road is constructed on the route of Option 1.

Of great concern to our group are the serious implications of Option 1 for the immediate area adjacent to the Nerang Picnic Area.

For the 17 years of our existence we have been working consistently on restoration projects in the area between the entrance to the Regional Park and the western side of the creek. This area is on the proposed route for Option 1 and includes the site of the proposed bridge crossing. It has a long history of unsympathetic land use stretching back to the 1930's. The loving care devoted to bringing this area back to some semblance of naturalness has included hand removal of weeds, spraying, mulching, planting of carefully selected native plant species propagated from local propagules, fencing to keep rabbits from browsing our plantings, signposting to inform visitors about the regeneration programs and guided inspections of our works.

One lot of planting and weed control undertaking was funded via an Envirofund grant to restore the habitat of the Threatened *Z. baeuerlenii*. We are currently seeking advice regarding the legal position over the planned destruction of the regeneration works originally funded via this Australian Government grant.

All of these undertakings and the many years of follow-up maintenance will have been to no avail if the bulldozers, backhoes, cranes, jackhammers, trucks and all other manner of road-

making and bridge-building plant, equipment and materials are allowed to rip this environment apart.

All of this potential impact is apart from other undoubted impacts at risk in this particular locality. The proposed road would destroy the entry to the Park requiring the relocation of the parking area, entrance signs, gate and other infrastructure, it would pass within a few metres of the picnic area, permanently cutting off the sealed access trail for the disabled, destroy two plants of *E. langleyi* and its habitat on the way (and with the relocation of the pipeline may destroy another plant of this species) and will impact very seriously on the view from the Weir Lookout. As a result, all of the very fine recreational facilities at the Nerang Picnic Area (upgraded and enhanced at significant cost to the State Government) will be seriously downgraded in value and appreciation by the visiting public.

The Landcare/Bushcare Group may not be the only ones to give up on this attractive community resource. The local community and visitors to our local government area will no longer find this an acceptable place to visit. Tourism is the life blood of the Shoalhaven City and the Bomaderry Creek Bushland is undoubtedly the most valuable urban bushland, setting in the northern Shoalhaven for attracting visitors and locals for picnicking, walking (both easy and challenging), including access for the disabled, bird watching, viewing the delightful winter/spring flowers of the sandstone tops and the magnificent tall open forest and lush rainforest of the creek gorge and cliff-girted margins. There are potentially significant economic costs in demonstrating to the tourist that we don't care two hoots for the environment and have no regard for their love of this delightful outdoor setting.

Surely we should be arguing about how best to enhance this community asset, discussing where to get the dollars for agreed programs and projects and inviting all interested and affected bodies to get involved in such a positive undertaking, rather than fighting over this negative, divisive plan to build a road for some dubious community benefit?

The argument should not be about where to put the road. The environmental, economic and social benefits of a route around the edge of the Bushland (the West Cambewarra Road parallel route) should have been accepted long ago, and construction along that route also achieved long ago so that we could now be concentrating our attention on the best location for a third crossing of the Shoalhaven River and how we are going to fund that very important undertaking.

Yours sincerely

Peter Owen
Acting Secretary



PCU021325

Department of Planning
Director Infrastructure Projects
PO Box 39
Sydney NSW 2001



March 31 2011

Re: North Nowra Link Road – Concept Plan Application No. 07_0037

The National Parks Association of NSW is very concerned to learn from this application of the threat of revocation of part of a park declared under the National Parks and Wildlife Act merely for a local road linking two urban areas.

The State Government policy relating to such revocations requires the matter to be one of exceptional circumstances and where no suitable alternative sites are available outside NPWS land.

The policy goes further by giving an example of such exceptional circumstances, eg, "...a major highway routing or upgrade". Where is it established in this application that such exceptional circumstances exist?

From this application, it would appear that there is no suitable alternative site available outside NPWS land, but it is clearly established that the option on the edge of the Bomaderry Creek Regional Park will be the most suitable alternative to those that would cut through the heart of the Park and adjacent bushland.

The principle of protecting NPWS lands from such inappropriate alienations has been a long-standing position of the NPA from the time that its strong advocacy for the establishment of a National Parks and Wildlife Act gained success in 1967.

It is not clear as to why the Shoalhaven City Council is continuing to pursue a preference for a road (Option 1) through this outstanding area of urban bushland when the biodiversity assessment clearly demonstrates that the West Cambewarra Road parallel route (Option 2) will lead to much less loss of biodiversity values.

Given the significant biodiversity values of this 250 ha urban bushland and its very great recreational and educational benefits for the local community and visitors to the Shoalhaven, NPA considers that every effort should be made to protect it and manage the pressures that will be placed upon it as the population grows and the Bushland's popularity also grows. Everything should be done to retain and improve those values rather than to degrade them.

The four threatened plants and twelve threatened animals (some of which are nationally threatened) within the Bushland are all at some level of risk from Option 1 while only one state threatened species is at risk from Option 3. Even the risk to that species is lessened by Council's refinement to Option 3 which involves creation of a route parallel to West Cambewarra Road with a setback of at least 50 metres within the Bushland. This would avoid the main occurrence of the Glossy-black Cockatoo trees that skirt the edge of West Cambewarra Road.

Incidentally, it is pleasing to be aware that this realignment will avoid two important Aboriginal relic sites at risk from damage along the original West Cambewarra Road alignment.

It is difficult to appreciate why Council is not concerned with the serious impact that Option 1 would have on the recreational opportunities within the Regional Park and Bushland. The road would pass within metres of the picnic area and would destroy the viewing from a very popular lookout.

At the time the 81 ha Bomaderry Creek Regional Park was dedicated (2002), the threat of a road through the middle of the Bushland was put out of everyone's mind and the matter of managing this new park and the remaining bushland was joined in with enthusiasm from the community and a considerable financial input by DECCW. Even Council became more involved in improvements to the significant area of the Bushland that they own.

It was even expected that Council would get on with building a link road which it had always argued was essential, urgent and critical infrastructure for the community. For no understandable reason, Council rejected the opportunity to build the road on the Option 3 route, the one alternative that would attract little community objection, would face little environmental obstacles and would be less costly.

It is distressing to now see Council raise the issue once again with an offer to transfer 50 ha of its land to DECCW in return for approval of a road through the Park and Bushland.

It is not clear why the Government would have ever agreed to consider such a proposition. The Council argues the case that this is a mitigating factor for the impacts created by construction of the road through the middle of the Park and Bushland. This is clearly a subterfuge as it is just an administrative change from one manager to another. The land on offer is mainly gorge terrain with other areas cut off from access which would not be likely to be developed for other purposes. Much of it has already been zoned for scenic protection and recreational uses so it will always be managed in sympathy with environmental benefits. To allow a road through the Park, adjacent Crown land and even the Council land on offer, with the fragmentation of the Bushland that this entails, will actually diminish the Bushland's biodiversity and other values.

To allow Council to divest itself of costly management responsibilities and push these on to the State Government is a proposition that must be seen for what it is and any indication that the new government would be prepared to go along with it must be challenged. The Council should get on with the job of building the road on the margins of the Park and Bushland and at the same time get on with the job of managing the land in its ownership and responsibility. In this context, it is important to be aware that currently there is a highly successful joint management arrangement between the various government agencies and the community represented by the Bomaderry Creek Landcare/ Bushcare Group which is delivering significant benefits for both the Regional Park and the people who visit it. The benefits of the current arrangement not only involve the free services that arise from volunteer inputs, but provide further financial opportunities. This current financial year, both Council and the Landcare/Bushcare group have significantly greater funds available for management of the land on offer than the national parks people have for management of the Park.

It is noted that the environmental assessment currently on display is the third attempt over the past six years by the Council to achieve this requirement, and it is also noted that the two previous assessments were rejected as substandard.

A detailed reading of this road proposal application reveals that it does not meet the standards to be expected for an environmental assessment, particularly where the destruction of a Regional Park, dedicated only eight years previously to much fanfare, is at risk.

The assessment does not meet the Director General's requirements (DGRs) regarding community consultation, biodiversity, cultural and recreational impacts, does not adequately address the impact on the integrity of the Bomaderry Creek Regional Park. The proposed measures to avoid or mitigate impacts are so inadequate or vaguely expressed that they do not meet the standards set out in the DGRs.

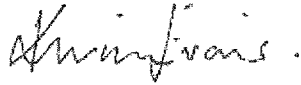
It is noted that many of the surveys needed to address the DECCW Threatened Species Guidelines (2007) have not been carried out or finalized. How could this environmental assessment have been placed on public display in these circumstances? It would seem that there was an inappropriate haste to get them out in the public area prior to the recent state elections.

There is a clear and compelling case for this assessment to be redrafted, the new field data incorporated, a reasonable period set aside for community consultation on the implications of this expensive road proposal and for it to be placed on public display once again and this time for a longer display time to allow the community to properly consider its implications.

NPA supports a decision in favour of Option 3. The other two options are totally rejected as a grossly inappropriate way to treat a first class community resource requiring sensitive protection and management rather than a destructive road project through the heart of it.

Any moves to revoke parts of Bomaderry Creek Regional Park to permit either of Options 1 or 2 to go ahead will be strenuously opposed by NPA.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'Kevin Evans', with a stylized flourish at the end.

Kevin Evans
Executive Officer
National Parks Association NSW Inc



Australian Conservation Foundation Shoalhaven Branch

P.O. Box 263, Nowra, NSW 2541

7 April 2011

Department of Planning
Director Infrastructure Projects
PO Box 39
Sydney NSW 2001

Re: North Nowra Link Road – Concept Plan Application No. 07_0037

The Shoalhaven Branch of the Australian Conservation Foundation (ACF) opposes any road through the main parts of the Bomaderry Creek Bushland, but supports the need for a link road between North Nowra and Bomaderry. It is of the view that the best and least damaging option is along the edge of the Bushland adjacent to West Cambewarra Road (known as Option 3 or the West Cambewarra Road parallel route).

The ACF branch was formed in 1989 as a local representative of the largest Australian national conservation body, to promote the objectives of that body and work for positive conservation outcomes at the local level.

From the outset, the branch took on the issue of a proposed road linking the suburbs of North Nowra and Bomaderry through the Bomaderry Creek Bushland.

The rediscovery of *Zieria baeuerlenii* in the Bushland in 1987 (presumed extinct up to that time) stimulated local conservationists to lobby the Shoalhaven City Council (who were advocating the link road) to relocate it to the edge of the Bushland.

The Council showed no interest in changing the proposed route and pursued its plans, giving itself approval to construct the road in 1992. It was, however, required to seek a license from the NP&WS to take or kill protected fauna as required under the Endangered Fauna (Interim) Protection Act 1992. A condition for NP&WS to consider the matter was subject to the preparation by Council of a Fauna Impact Statement.

It came as a great shock to members of the ACF branch when the NP&WS eventually issued the license. A member of the branch appealed in the Land and Environment Court against this action. The appeal was upheld in a landmark decision based on the precautionary principle (*Leatch v. NPWS and anor* 1993).

The judgement recognised the need to properly consider alternatives and made specific reference to the advantages of a route around the Bushland via West Cambewarra Road.

It was realised that Council was not likely to give up its single minded approach to the issue and, immediately following the court outcome, the ACF branch undertook a campaign for protection and better management of the Bushland which it promoted through a publicly displayed draft Plan of Management (Barratt 1993, 2006). This campaign continues today.

One successful outcome of its campaign was the establishment of the Bomaderry Creek Regional Park over a third of the Bushland in 2002.

The branch has also sought and gained the support of the Nature Conservation Council of NSW for its position on the link road on a number of occasions.

Over the years, Council has spent significant time and money on pursuing the road along the same route through the middle of the Bushland. And so we find ourselves here today still involved in the same old argument. This is all despite the fact that each additional study of the environmental attributes of the Bushland has come up with more and more compelling arguments for the reservation of the whole area for conservation and recreation and for its professional management. Even this current environmental assessment report has demonstrated that the biodiversity and park management issues favour a road around the edge of the Bushland rather than through it.

Council has even improved the approach to the West Cambewarra Road route by proposing a parallel route rather than one along the current road alignment. This effectively moves the road away from the residents' properties, improves the privacy of their already quiet dead-end road, avoids a row of Glossy-black Cockatoo feed trees along the existing road, moves the road away from damaging some important Aboriginal archaeological relics and provides a very suitable access onto Moss Vale Road.

We look forward to a decision to reject Council's preferred option and to the approval of the West Cambewarra Road parallel route.

Yours sincerely

Elle Marks
Secretary/Treasurer

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Andrew Beattie - Public Opinion on North Nowra Link Road Options

From: "Lorraine & Trevor McCarthy" <t.l.macl@bigpond.com>
To: <plan_comment@planning.nsw.gov.au>
Date: 8/04/2011 2:33 PM
Subject: Public Opinion on North Nowra Link Road Options
CC: <gareth.ward@shoalhaven.nsw.gov.au>
Attachments: North Nowra Link Road.doc

Dear Sir/Madam

Re Comments - North Nowra Link Road Options

Unfortunately, I have missed the 18 March 2011 deadline for submitting comment on the above proposal, however, I have attached above my very strong opinions on the Link Road options hoping that they will still be taken into consideration. It is very disappointing to miss out on making a submission due to being away from home before and on the date specified for closure.

Yours faithfully

L McCarthy

4 April 2011

North Nowra / Bomaderry Link Road Options - Exhibition closed on 18 March 2011 - Comments

Dear Sir/Madam

Unfortunately, I was away on holidays when the date for receipt of comments from the public regarding the options for the North Nowra Link Road closed. I feel very strongly about this issue and submit the following comments and although they are late I hope that they can still be taken into consideration.

As a long term resident of Illaroo Road my believe that Illaroo Road is the least of the traffic flow problems Nowra has fallen into through poor planning. The traffic situation as regards flow through Nowra from the north and south is at crisis point. In the peak times; ie 8am to 9am (school and work start period), 2.30pm to 3.30pm (school finish period), 4.30pm to 5pm (work finish period), Friday and Sunday afternoons, holidays, and long weekends, the traffic on the Princes Highway through Nowra from BTU Road in the south, to the Anglican College at Bomaderry and Bolong Road turnoff in the north traffic is bumper to bumper; stop/start and frustratingly slow. In particular, the road south between the hours of 8.30am and 9am, from the Anglican College in the north and the Bridge, the Highway becomes a parking lot each morning of the school term. Therefore, Illaroo Road's traffic problems cannot be looked at in isolation. The problems with the flow of traffic through and around Nowra/Bomaderry/North Nowra has to be considered as a whole. All the Link Road will do is simply shift the traffic problem, not remedy or relieve it. The vehicles still end up on the Princes Highway and have to cross the Bridge. The proposed link road would simply put the traffic onto the Highway at a different point. The big problem is crossing the Shoalhaven River. Until another crossing is built across the River, the traffic problems will not be solved. Ofcourse, the mass of round-a-bouts at South Nowra certainly don't help either.

Now to the proposed Link Road. Options 1 and 2 and in particular The Pitt Street/Narang Road option, should be scrapped completely and given no more consideration. Council has thrown enough dead money at that old chestnut, which will do nothing positive to fix the problems. All it will do is ruin a unique patch of urban bushland. Neither option will relieve the traffic congestion. These options will simply throw the traffic onto the Princes Highway at a different place, thereby shifting and exacerbating the present congestion on the Highway approaching the Shoalhaven River Bridge.

Those in power making the decision regarding a Link Road Pitt Street to Narange Road would be committing an irresponsible and very short-sighted act by making the decisions to sacrifice the amazing area of urban bushland that is Bomaderry Creek Reserve for an outcome that will do nothing to relieve the traffic congestion; ie loss of this valuable asset for no good reason. I do not believe that those making the decisions regarding the decimation of Bomaderry Bushland have the right to make a decision that will destroy such an important environmental and social resource. Once this unique area is destroyed by the road encroachment it cannot be retrieved. Bomaderry Creek Reserve should remain in perpetuity for this and future generations to enjoy.

Bomaderry Creek Reserve is a unique area of bushland providing habitat for a diverse range of flora and fauna, the rare and endangered *Zieria spp* to name just one. The area is scenically amazing; the creek, the bushland, the rock formations, and is widely used and enjoyed by residents and visitors of all age groups as a wonderful area for walking, playing and quiet relaxation. The area is unique in that it provides a valuable natural space in such close proximity to the urban areas of Nowra and Bomaderry; walking distance. It is extremely important environmentally and any road through the area; ie making the boundaries longer, will destroy any chance of the existing fauna continuing to breed and thereby maintain healthy populations. Wildlife corridors to Cambewarra Mountain and to the bushland flanking the Shoalhaven River will be destroyed, spelling the death knell to healthy populations of fauna. Neither birds nor animals will cross the busy, noisy road proposed to reach other areas so necessary for healthy interbreeding.

The West Cambewarra Road option (3) is the only one offered that is acceptable as being the least environmentally damaging and the one that will cause the least disruption to existing plant and animal communities, and create the least congestion onto the Princes Highway. Constructing the road adjacent to but away from the existing West Cambewarra Road reserve should relieve the concerns of noise, etc expressed by the existing residents of West Cambewarra Road, North Nowra. The bridge required to

cross the creek between North Nowra and Bomaderry would be a fraction of the size of that required for the Pitt Street/Narang Road option and the least damaging to the surrounding environment. The West Cambewarra Road reserve on the Bomaderry side of the creek already exists, therefore, only construction costs required; no land acquisition, no reserve status changes. In addition, this road reserve runs through cleared farmland, therefore, no destruction of vegetation or habitat. West Cambewarra Road is an environmentally sound option. Using this option the link road would come out onto Cambewarra Road, thereby, dispersing traffic before it reached the bottleneck at the intersection (round-a-bout) at Narang Road. Traffic would be dispersed north via Cambewarra Mountain, north via the round-a-bout at the intersection of the Highway and Cambewarra Road, and east at this intersection to schools and pre-schools further along Cambewarra Road and Bomaderry shopping centre. This traffic would otherwise be congesting the Princes Highway at Narang Road. I believe the West Cambewarra Road option should be used should a link road be constructed as it is the least environmentally damaging, the least destructive for the users of the Bomaderry Creek Reserve, and the least costly. Leave Bomaderry Creek Reserve, this important area of bushland and its fragile ecosystem, intact.

As a resident of Illaroo Road, I can advise that during school holidays there are no traffic congestion problems. In school holidays, the traffic amazingly disappears. A survey of the drivers using Illaroo Road, I am sure would show that most of the cars are being used to drop and pick up children to and from the various schools in the area. Children don't seem to walk to school, catch a bus or ride their bikes to school anymore, someone has to drive them. It appears that a lot of residents in North Nowra work in the school system and they all seem to drive to work. Since the rules making children attend the public school in the area/community in which they live have been waived by the Department of Education, the traffic on Illaroo Road has quadrupled; everyone seems to be ferrying a child or children to a school not within walking distance of home; out of their own area. Living on Illaroo Road poses no problems to us in the school holidays.

The traffic problems in Illaroo Road can very simply be eased by the following methods, thus negating the need to destroy Bomaderry Creek Reserve or, in fact, waste more public money on constructing a link road:

- Create an additional lane dedicated 'left turn only' for northbound traffic out of Illaroo Road at the Princes Highway intersection. Huge delays are caused to vehicles wanting to turn right (head north) by vehicles stopped in that lane waiting to turn right (south) from the left hand (northern) lane in Illaroo Road. The two houses at the bottom of Illaroo Road (northern side) have come up for sale within the last 12 months and could have been purchased by Council (or the RTA) in order to construct this 'left turn only' lane.
- Construction of a pedestrian overpass bridge at the Illaroo Road Public School would keep the traffic flowing and solve the long delays caused by so many children needing to cross the road to the school, which happens in a haphazard way, sometimes just one or two children at a time. An overpass would keep the traffic flowing and the only stop lights would be to allow cars to enter Illaroo Road from Crest Avenue. These lights could be programmed to a more orderly and equitable pattern thus avoiding the huge bank up of traffic caused by the indiscriminate 'walk' requests.

Implementation and construction of the above two simple and cost effective measures would go a long way in keeping the peak hour traffic flowing on Illaroo Road. The cost, both in environmental and dollar terms, would be a fraction of the amount required and already wasted on construction of the proposed Pitt Street/Narang Road link road.

I can't stress strongly enough the pointlessness of sacrificing Bomaderry Bushland Reserve to provide a link road that will do very little or nothing to solve Nowra's traffic problems.

Yours faithfully

L McCarthy
Lorraine McCarthy

Copy to Cllr Gareth Ward, Shoalhaven City Council, and State Member for Kiama

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Andrew Beattie - North Nowra Link Road Concept Plan Application No 07_0037

From: "John Kubale" <johnkubale@exemail.com.au>
To: <andrew.beattie@planning.nsw.gov.au>
Date: 5/10/2011 10:10 AM
Subject: North Nowra Link Road Concept Plan Application No 07_0037
Attachments: Link Road.doc

Dear Andrew

Following our phone conversation today, I have attached a copy of my letter with 5 photos (as below), mailed on the 3rd of March 2011 (& copied to Gareth Ward & Matt Brown by the same post).

It is obviously of concern that this was not received.

Yours sincerely – John Kubale







Letters to the editor

28 FEB 2011

roads is growing almost daily. Therefore, we need solutions to the growing traffic congestion. Whatever the plans council had a few years ago for North Nowra, they are not relevant any more.

With due respect to the Illaroo Road residents' unhappiness over long car queues at the bridge traffic lights, you are not the only ones with this problem.

Motorists travelling north-south on the Princes Highway and along Bolong Road suffer as well.

You might think that Matt Brown's and some councilor's latest push just before the state election, with another proposal for a link road, would solve the problem.

Wrong!

I do not live in North Nowra but travel quite often from north to south on the Princes

Highway. Last week the queue extended from the bridge traffic lights to the Anglican College.

This traffic diversion (do not call it a solution) will enable you to join the ever increasing Princes Highway queue instead of your usual one on Illaroo Road. Are you prepared to join another, bigger queue?

And, we hear it is going to cost 18.5 million of taxpayers' dollars!

How often does Matt Brown, Paul Green and Greg Watson travel on the Princes highway route in peak hours?

It's about time for them to stop wasting ratepayer's money on investigations for a non-solution and to come up with a real solution to our traffic problems.

K. Nilsson
Old Erowal Bay



Letters

and what you should know

The South Coast Register gives preference to topical letters of less than 300 words. All letters must be signed and include home and business telephone numbers and full address to enable them to be checked for authenticity. Only an author's initial and surname will be published, along with town of residence. Letters are subject to editing for reasons of clarity or for legal considerations. Unsigned letters will not be published.

Illaroo residents join the queue

THE number of cars on our

45 Ironbark Rd
Tapitallee NSW 2540

tel : 02 4446 0504
email : johnkubale@exemail.com.au

2nd March 2011

Dept of Planning,
Director Infrastructure Projects,
GPO Box 39,
Sydney NSW 2001.

North Nowra Link Road Concept Plan Application No. 07_0037

Dear Sir or Madam

We should like to submit our objection to the above application noting the following points.

1. We believe the method and period of public consultation to be inadequate. On visiting the Shoalhaven Council Building and making a request at the counter, the documents were produced in two bound folders with hundreds of pages that would take many hours to absorb. One must doubt that more than 20 people will spend the time required to do so, with only one reader at a time. Given the cost, so far, of producing this volume of material it would be far more effective to have a wall poster display with a review of the reasoning and conclusions. This should be prepared and an extension of another 30 days provided.
2. We do not believe that the central Pitt St- Narang option will provide benefit to the North Nowra residents travelling south across the bridge, that form the majority of the traffic at busy times. The argument was well put in the attached letter to the register, which stimulated us at about 8.45am on the 1st of March 2011 to access Nowra from the Princes Highway, rather than driving along Illaroo Rd from North Nowra. As we did so we took photos through our windscreen that confirmed Mr Nilsson's remarks. The attached photos show the traffic on the Princes Highway at a standstill from the Bunberra St junction, about 1.5 km north of the Bridge and only a few hundred metres from the Narang Rd roundabout. Even before housing growth in the area, the queuing traffic on Illaroo would simply transfer to the Princes highway. The real bottleneck is the old 2 lane bridge leading south to to Nowra.
3. We believe that the West Cambewarra Road option is a viable one that would allow traffic to Berry and Bomaderry to flow through the existing roundabout, and also traffic to Kangaroo Valley & Moss Vale. It would also provide future access to the Western Nowra bypass and school and shopping centre shown in the Nowra concept plan . This route would also avoid the severe environmental damage to the Bomaderry Creek national park and reserve areas.

Yours Sincerely

John Kubale

Jenny Kubale

Letters to the editor

28 FEB 2011

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Old Erowal Bay

Illaroo residents join the queue

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