

**WOODBURN TO BALLINA – FOCUS GROUP – ECOLOGY
MINUTES OF MEETING NO.2 – TUESDAY 5 APRIL 2005**

Harry Batt opened the meeting at approximately 3.15 pm, and welcomed members. Apologies were received from Kerry Kelly; Bert Plenkovitch; David Thompson; Natalie Mc Carthy; Kim Forsyth; Ken Exley and Angela Owers. The new members, Emma Walke and John Moye, were introduced. Harry asked all members to introduce themselves for the benefit of the new members to the focus group. He thanked everyone for joining the meeting. Steve Flatley introduced himself as a 'fill in' for this meeting, on behalf of Bert Plenkovitch, who is normally a member of the group.

ITEM 1 Focus Group 1: minutes (Harry Batt, Hyder)

A copy of the minutes was handed out, although they had been emailed prior to the meeting. The members were asked for their comments and since they had not much time to digest the minutes, they would be accepted. Any comments can be sent to Daniela from GeoLINK. Her email address is daniela@geolink.net.au. Mark will be sending comments to Daniela regarding his comment on the use of the precautionary principle when rating an ecological community.

The minutes were accepted in principle.

ITEM 2 Ecological Constraints Report – Phase 1 (Brett Campbell, Geolyse)

Brett provided a brief recap on the presentation he made at the first Ecology Focus Group. He made various points regarding the report that had been distributed to the members:

- Phase 1 ecological investigations were undertaken to ascertain the major ecological constraints within the study area for input into the route corridor selection process.
- The main concern at this broad level of investigation was the identification of broad level constraints.
- The various habitats within the study area were assessed in terms of the importance of the vegetation communities and whether or not there were endangered populations present. The assessment was based on desktop information (from LGAs and National Parks and other literature), and limited field surveys. From the information gathered thus far, preliminary measures and methods of alleviating possible impact and potential impacts could be considered.
- Mapping at a 1:25 000 scale was used
- The ranking system of Level 1 – 5 was explained, for the benefit of the new members.
- The objectives of the study were: to determine the flora and fauna species potentially utilising the study area; to identify ecological constraints for the Pacific Highway Upgrade Project; qualitatively rank the ecological constraints of each land unit, and where possible identify mitigation measures to alleviate potential ecological impacts; to identify whether a Species Impact Statement (SIS) is required, or whether referral to Environment Australia under the provisions of the Environment Protection and Biodiversity Conservation Act (1999) is required.

There was concern expressed by other focus group members over the processes used and the conclusions reached in preparing the preliminary ecology report. The points raised are summarised as follows:

- The draft report did not acknowledge or reference material received from Ballina Shire Council, Mark Graham or others.
- Debate over the rating of various ecological communities and areas, was the basis for the discussion and was centred on the subjective opinion of the possibility of mitigation, or not.

- Mark suggested that on the barest minimum level, all likely constraints in terms of impact mitigation or potential mitigation measures should be listed and considered. He believed this was standard process for ecological surveys.
- Mark also said that a rigorous literature review on each species that was likely to occur in the area should be undertaken at this stage of the project, rather than at a later stage, as he felt that if detailed research and mapping was done at this stage, that far more category 5 areas would emerge, and therefore change the planning of various route corridor options. He believes that the relative importance of various species and vegetation communities is based on flawed research procedures. He concluded by saying that he had significant concerns over the conclusions that have been arrived at (referred to in the draft ecological constraints report), as in his opinion, they are underpinned by heavily flawed base data. Mark finds the whole report to be lacking in structure and support, as he finds that sound literature has not underpinned the report, and that rather subjective opinion has replaced that. He feels also that an SIS would be required for a showstopper to be assessed.
- The group was then reminded that the preliminary report, was exactly that, preliminary, and that comments and suggestions and submissions were welcomed, and should be sent to Daniela at GeoLINK. Shane also stated that at this stage of the project very broad data was collected, rather than detailed species studies, and that once the 3/4/or 5 preferred corridor options were decided upon, that detailed studies would be undertaken.
- Scott stated that inevitably there is going to be some sensitive areas which are traversed by the highway, and that the best practice solution would be to investigate best mitigation measures to minimise impact.
- Ian suggested that a gap within the report was that the 'easy mitigation areas' were not identified, and that by doing this, it may guide the elimination of route corridor options more easily. He recommends the documentation of 'non ecologically sensitive' areas.
- Mark commented particularly on the fact that the swamp orchid in the floodplain wetlands were identified as being a showstopper, however it is a fact that the swamp orchid is a species known to be conservable through translocation.
- Shane reinforced the process saying that the idea of today was to hand out the report and then ask for comment to be sent to Daniela.
- Ian raised a huge concern he has regarding the fact that the Wardell heath was presented in the report as one vegetation community, whereas in reality it is a mosaic of vegetation communities. He believes the report should be updated to reflect the reality. He expressed distress at the fact that this information had been supplied to Hyder by the Ballina Shire Council in the beginning stages of the project. Brett responded by saying that the report had been prepared prior to the receipt of various pieces of information that had not been incorporated into the draft as yet. Although, he admitted, and apologised for the fact that this information from Ballina Shire had not been included, it had been an oversight on Geolyse's part. Brett confirmed that he still will include all the various submissions of information (from Mark, Ian and various other sources), and that the report is not final yet. He welcomed input from the group.
- There was a comment made regarding the fact that there is not enough documentation on Species Impact Statement (SIS) processes and which communities they address.
- Ian raised a question of the time periods over which mitigation measures are based on, to which an example answer was given regarding Koala underpasses, which are very expensive to construct, but last very well as a measure.
- Mark commented on the report findings stating that when referring to vegetation communities, it does not suffice to state that minimal costs are involved in rehabilitation, and that rather he felt that there were quite significant costs involved.

- Shane reminded the group that the statement 'minimal costs' does not indicate a low cost, but rather that in comparison to the many hundreds of millions of dollars involved in the construction of a highway, they may be minimal.
- To summarise his major concerns, Mark felt that since it is the ecology focus group, literature must underpin the subjective assumptions; the reports on field survey and the cost and mitigation implications. He believes that sound scientific practice, and the best available information, should be the basis on which decisions are made, rather than subjective opinion.
- Ian and Mark shared a concern over the time period (8- 10 weeks) assigned to documenting endangered species. They believe that it is an impossible task, and that even the most expert of experts cannot fulfil that brief.
- Brett reminded the group that when there is more certainty over the list of potential flora species, they will do further studies at stage 2 of the project. He is cognisant of the fact that seasonal variations occur within vegetation and other communities.
- The group agreed on the fact that any impact upon coastal swamp forest and coastal plain ecosystems would not be suitable, as they are extremely complex and sensitive environs. John and Mark presented that the most diverse terrestrial orchids are present in this area, and that they believed that it is impossible to find this endangered plant species in the same magnitude anywhere else in Australia. If a vegetated sink is breached, it could destroy the entire wetland.
- John gave a description of the geological formation of the Wardell heath: Pleistocene sand dunes under Wardell heath. These inner barrier sand dunes are represented by ridges and swales through which groundwater rises and falls according to the season. The ridges are underlaid by a lens of coffee rock – which is an impermeable rock in nature and formation, and basic to the existence of all inner barrier sand dunes (which are typical of the Northern Rivers, and display a characteristic swamp vegetation). If the coffee rock layer is cut through (for example in the building of a highway) the water is leached from the dune layering and thus the swamp is drained. An example of this was given by Stephanie, on the Lennox Head bypass, the Melaleuca swamp is now ninety percent dead as a result of the coffee rock being disturbed and the sand dune layers leached. Retardation of the groundwater flow leads to a change in habitat.
- Emma asked whether the whole spectrum of biodiversity is going to be looked at, and more specifically whether the diversity of the whole study area would be assessed, and not exclusively the Wardell heath. It was confirmed that this was merely part of the process of knocking out various areas that are no go areas, as they did not want to consider a highway that would lead to the extinction of various species.
- Ian and Mark addressed some specific information that they did not agree with – firstly that there are contrary statements in the one report with regard to the Wardell heath – one suggesting it a no go area, and one suggesting that using the area is mitigable. Secondly that the likeliness of impact on certain species has either been 'left out' (in the case of some species of microbats for instance), or that the broad brush premise used as a base has to be backed up with scientific literature.
- Other points noted by A Ross: 7 swale swamps; hollow dependent micro-bats.

No.	ACTION	WHO
1	Hydrological data for ecosystems and flooding within the study area	Mark Graham to supply
2	Specific response to the content of the preliminary ecology report.	All ecology focus group members, to send comments to Daniela from GeoLINK.

ITEM 3 Corridor Identification Process (Harry Batt, Hyder)

Harry outlined the process of the project to date, from the beginning to the identification of the 'green and gold' route corridor options. He explained that the process to date has been based on broad desktop study in terms of information collection on the study area. He added that those route corridor options that 'survive' the process of elimination will be dissected on a more detailed level.

Harry said that the discussion of corridors according to their nodes and their strengths and weaknesses from an ecological point of view will be done at the next focus group meeting.

ITEM 4 Survey Methodology and Snapshot of Results (Brett Campbell)

Brett explained that the terrestrial flora and fauna surveys were conducted generally in accordance with the Draft Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities DEC (2004). The various methods were as below:

Fauna methodology:

- 13 fauna study sites were selected in areas where the corridors overlapped, so that it could be nearest to all possible route corridor options. Other sites were also chosen for specific fauna groups such as birds. Various trapping mechanisms; call playbacks; and spotlighting were used over a period of time during the night.
- 17 threatened species were recorded during the surveys.

Flora methodology:

- Methods used for the establishment of the 80 20mx20m full floristic plots and data recording followed NSWNPWS (2004).
- Random menders were also undertaken.
- The data was collated and stored on a 'paradox' database. Then it was analysed using PATN to establish vegetation communities, which was then mapped at a 1:5000, and verified using in field ground –truthing.
- No threatened species were identified as yet, but to date the process only included targeted threatened species and surveys had not yet been undertaken within rainforest habitat. Rainforest habitat surveys are starting on April 6th.

Aquatic ecology methodology:

- Intensive trapping programmes in areas of appropriate habitats for threatened aquatic species were undertaken, and general fisheries nets and traps were used for other species.
- No threatened aquatic species were recorded as yet.

Some questions arose from the presentation:

- How many vegetation survey plots will be put on route N-O? This answer was not known off hand. Typical dimensions of the survey plots are 20 x 20
- The methods of collecting data were questioned, and they were accepted as being the correct method.
- A comment was made that it was almost impossible to find a homogenous flora habitat patch, and that perhaps is the key to representing it – by various habitat types.
- A member asked what has been done to survey koalas specifically, and it was confirmed that searches had been done, as well as spotlighting.
- Grass owls were discussed, and it was noted that they are a species to take special notice of, as their habitat was different to most other birds. It was asked whether there were any mitigation measures that were suitable for these species. It was stated that there was some thought around the fact that the grass owls only start breeding after the rains.
- A member asked how many bird species were already recorded, Brett confirmed that 139 species were already recorded.
- One of the focus group members said that the reason why there was probably no record of the Oxleyan Pygmy Perch, was because they had a dry three years previous to this season. It has been known that there could be 15 years between findings of the threatened species at one site. This reiterated that the sites chosen may have been suitable, but that no survey results might necessarily be found.
- Similarly, Stephanie and Mark confirmed that the grass owls have been calling of late, although the callbacks did not receive any response.
- Brett noted that some species have, according to the survey results, been conspicuous by their absence. Emma suggested that the cane and quarry trucks may have scared some species away for a little while, as the cane harvesting season has just finished.
- Ian asked the question if there was going to be some comparison between going East of Wardell and going West of Wardell with the highway corridor options. Ian suggested the route D-E-G-H had no ecological constraints, and no striking mitigation measures necessary in terms of ecology. In response to the question, however, Harry said that each corridor node section will be evaluated according to their strengths and weaknesses according to their ecological significance.
- To the above point, the comment was made that if ecological species are not mapped at the outset, one cannot make any further decisions or detail the links further based on such broad based analysis. The Nature Conservation Council; NCEC and the Total Environment Centre shared this opinion.
- Ian expressed concern over the process that has been followed, and that the council records which were submitted (as per earlier on in the notes) are now untimely in terms of assisting in the assessment process. Ballina Council will be writing a letter of disappointment to the RTA , the Minister and various Government Departments over the issue. Shane said it was fine to write the

letter, but that could Ian consider checking whether in fact there was a huge gap, in the preliminary ecological report, without consulting council information to date.

- The tight time frame was raised as a major concern, and it was asked why the process is rushed so much. Shane explained how a tight time frame is important in terms of community impact reduction.

ITEM 5 Next Meeting

Date: Wed 4th May

Time: 3pm to 5pm

Venue: Woodburn CWA Hall