



Our Ref: 405062_LEO_026_a

23 February 2007

Department of Environment and Conservation
PO Box 488G
Newcastle NSW 2300

Attention: David Darvall

Dear David

DEC response to Proposed Oyster Lease Dredging, Wallis Lake – Major Project Application # 05_0174

We refer to the DEC assessment of the Environmental Assessment (EA) prepared for this project (your ref DOC06/53726 File 2733071A1 Part 3A) dated 16 February 2007. In response to the advice provided by the DEC, we provide the following information.

The advice provided by the DEC is based on a misunderstanding of the project and consequently the project impacts. In this regard, note that we twice offered a site meeting with the DEC (which were both declined), so that a full and informed appreciation of the project could be gained prior to the DEC assessment of the EA. We note that as part of the DEC assessment process, a site visit was undertaken (without notifying the landowner) with a Great Lakes Council officer. We can only presume that this action was taken by the DEC on the misguided assumption that the Council officer could provide some additional insight to the project (despite having no more knowledge of the project than the DEC officer). It is submitted that this action was totally inappropriate, given that Council has no role in the approval process other than providing comment on the application and that the provision of such advice could justifiably be seen to be prejudiced, given that Council is involved in a Class 1 appeal in the Land and Environment Court with the owner of that land in relation to another matter.

Despite our previous requests to the DEC, we were not asked to attend the site inspection, which if it had occurred, would have avoided the misunderstanding of the project impacts communicated in the Department's assessment of the EA. Please also note that the exhibition period for the project closed on 1 December 2006. You would appreciate that the ensuing 11 week period for the DEC to respond to the EA (given that a detailed response had already been provided on the draft EA in July 2006) has delayed the approval process timeframes to a critical stage from the proponent's perspective. We therefore request a site meeting as a matter of urgency with the DEC to resolve the issues. It would be appreciated if you could arrange for Steve Lewer to contact either the undersigned or Brett Campbell before the end of this week to arrange a site meeting.

In light of the comments provided by the DEC, we offer the following response which may assist in your further assessment of the project impacts, prior to our site meeting.

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1. Inadequate assessment of likely impacts on threatened species and endangered ecological communities

Coastal Saltmarsh EEC

The reference to blockage of surface flows is incorrect. The entire pipeline route through the saltmarsh area is subject to tidal inundation and during spring tides would be totally inundated. Tidal flow of water will not be blocked or altered by the existence of the pipeline, as the pipeline is not located parallel to the river bank alignment. Being located on an angle to the perpendicular, the tidal wave will simply surge up either side of the pipeline and recede in the same manner. Surface flows from rainfall events will also not be significantly altered, as surface water in this area recedes towards the Wallamba River in the same way as tidal flow, which will continue either side of the pipeline.

The impacts of installing the pipeline in the saltmarsh area were addressed in detail in the EA, through the Section 5A Assessment and application of mitigation measures. To summarise, the pipeline will be assembled in 100 m sections and towed by a tractor through the saltmarsh through an existing degraded area of saltmarsh (compacted cattle track, variable width 1 – 3 m) to the Wallamba River edge at booster pump 2. This will necessitate approximately five trips, although each trip will be progressively shorter, as the pipeline gradually extends north towards booster pump 3. The impact will be limited to a single, defined tractor track and the pipeline itself, although the pipeline alignment will be along an existing, compacted, degraded track formed by cattle. The length and width of the construction envelope in this section of the pipeline is estimated as 2 m wide (not 10 m as indicated in the DEC's assessment) and approximately 600 m long.

As indicated in the EA, following decommissioning of the pipeline, the route will be inspected for compaction of the pipeline alignment and where required, the implementation of proven rehabilitation techniques. These rehabilitation techniques include, but are not limited to, ripping of compacted areas along the alignment using a rotary hoe to de-compact and re-aerate the soil to facilitate recruitment of adjacent saltmarsh propagules. Planting of saltmarsh taxa or transplantation would only be required should monitoring show a lack of recruitment to the disturbed area, although this is considered to be highly unlikely.

Modern saltmarsh restoration practices in NSW have achieved numerous successes (eg. Mason Park Homebush Bay, Federal Park Annandale, Settlement Point Shores Port Macquarie, Salt Pan Creek Western Sydney, Tempe Reserve, Duck River Silverwater, Tom Thumb Lagoon Wollongong). The proposed rehabilitation of the saltmarsh is expected to be straightforward and effective, given that both no major re-contouring of the area (to achieve correct tidal levels) would be required and an existing saltmarsh is present to provide a source of recruitment. Ongoing monitoring of the rehabilitation works will ensure that the saltmarsh is rehabilitated appropriately. Further, this rehabilitation will improve the existing situation,

as the proposed pipeline alignment through the saltmarsh is currently compacted (from previous cattle grazing) and would otherwise remain in a degraded state.

DEC concerns regarding additional clearing being required for the pipeline is incorrect. There are sufficient cleared and highly modified linear tracks along which the pipeline will be placed. Potential impacts of the installation and maintenance of the pipeline on the adjacent saltmarsh environment was assessed adequately in the EA. Mitigation measures regarding monitoring of the pipeline, raising it in sections and rehabilitation of any disturbed areas post decommissioning were all addressed in detail in the EA. Contrary to DEC's assessment, booster pumps will not be located in the saltmarsh.

Swamp Sclerophyll Forest and Swamp Oak Forest EEC's on Coastal Floodplain

DEC's assessment that 1700 m of this vegetation community would need to be cleared is totally incorrect. As indicated in the EA, the majority of the pipeline route in the vicinity of these vegetation communities is located along a previously cleared boundary fence alignment. Further, the pipeline route does not traverse a continuous vegetated corridor of remnant vegetation and, as such, there will not be any fragmenting or severing of corridors for threatened species. A site inspection will confirm these misunderstandings of the project impact.

Threatened Species

DEC's comments on the Threatened Species 'likely to occur' directly reflect the assessment of likelihood of occurrence contained in the flora and fauna survey and assessment report (Appendix C of EA), however, at no time does the report argue that the surrounding habitats will "mitigate" the impacts of the proposal. To clarify, we assessed the impacts of the proposal in accordance with the legislative framework of Section 5A of the *Environmental Planning & Assessment Act 1979* (which is over and above what is required for Part 3A Assessments). To this end, we considered the impact of the proposal in the context of the surrounding habitat as to whether the proposal is "likely to have a significant effect on Threatened Species, populations or ecological communities or their habitats". Clearly, the scale, nature and short term duration of the proposal could not be argued to significantly impact on species, populations or communities listed under the TSC Act, when considering the local abundances of these species, populations or communities.

Further, it appears that the DEC comments are based on a misconception relating to the amount of clearing required, and used this as a basis for their perceived concerns. In addition, the statement concerning the Wallum Froglet and Eastern Chestnut Mouse demonstrate a lack of understanding of the species' habitat requirements, as the term "undisturbed" habitats is entirely incorrect for the Eastern Chestnut Mouse, a species that is well documented to be an early coloniser after fire and other disturbance events and actually disappearing from climax communities. Similarly, Wallum Froglets are often found in highly disturbed areas and have been recorded in Dry Forests up to 600 m from wetland areas.

In regards to the potential impact of the frequent maintenance, daily maintenance inspections of the pipeline will be undertaken on foot by two personnel. Traverse of the pipeline route has been taken into consideration in assessment of the potential impacts of the pipeline, which are considered to be negligible in the context of the proposed development.

2. Inadequate consideration of alternative routes for the dredge pipeline and

3. Inadequate consideration of alternative routes for stockpiling activities

This matter was raised by the DEC in their assessment of the draft EA in July 2006. Consequently, the final EA was amended to provide more detail on these matters. **Section 2.1.1** and **Section 8.1** of the final EA provided adequate consideration of the alternative routes for the dredge pipeline and stockpile site. The information provided in the EA in respect of these alternatives was comprehensive and provided sufficient justification on which to base a decision for location of the dredge pipeline and stockpile site.

The statements made referring to the “inadequate consideration of alternative routes” for the pipeline are strongly refuted. While both the location of the pipeline route and stockpile site were considered as separate concerns, it is obvious that the pipeline route is inextricably linked to the stockpile site. In regards to the pipeline route, it was selected based on assessment of the lowest potential impact and pipeline length. Specifically, it was chosen to take advantage of an existing fence line clearing to avoid additional ecological impacts. Further, the route of the component of the pipeline located in the saltmarsh area was selected to take advantage of the existing linear disturbance (compacted cattle track) area, despite the increase in length and associated costs that this would involve.

4. Inadequate offset provisions

As the habitats potentially impacted by the proposal are highly disturbed regrowth areas, it is strongly argued that offsets are not required in respect of the proposed development impacts. The proposed pipeline is not conceived as a permanent installation and the EA sets out a range of ameliorative measures that will be detailed in a project Environmental Management Strategy to be prepared prior to commencement of the project. These mitigation measures, particularly those relating to rehabilitation in the existing degraded saltmarsh area, will result in the post-development quality of this habitat being improved.

It should be clearly understood by the DEC, that the existing cleared fence line alignments along which part of the pipeline route will traverse are unrelated to the project, being existing disturbed areas which we are seeking to take advantage of, in order to minimise the need for traverse of the pipeline through uncleared adjacent habitats. The use of these existing alignments and their potential to reduce impacts of the project formed a crucial component of the decision making process in determining the most appropriate route

corridor for the pipeline. Hence, potential impacts associated with the pipeline are largely limited to the disturbed sedgeland and saltmarsh areas which will be regenerated post development, the details of which will be provided in the of the project Environmental Management Strategy to be prepared prior to commencement of the project.

Regarding the stockpile site, the vast majority of the site is located on existing cleared grazing land, with the removal of a 0.5 hectare area of highly modified swamp sclerophyll forest (section 4.1.1 Appendix C of EA) within the areas proposed for settlement ponds no's 1 at the stockpile site. This area supports two distinct disturbance ecotypes of this vegetation community, these being an Exotic Pasture Grassland-Sedgeland with scattered juvenile trees and a Low Woodland. These areas are subject to continued and repeated disturbance through grazing and/or slashing and are heavily invaded with herbaceous and woody weeds in places.

The loss of these two disturbance Swamp Sclerophyll ecotypes is not considered to be significant, given the degree of their disturbance, small size and extant large areas of relatively undisturbed freshwater Swamp Sclerophyll Forest habitat present in the immediate locality of the adjacent SEPP 14 wetland.

Given the negligible potential impacts described above on EEC's, the DEC's comments regarding covenants on the land in respect of the proposed development are unfounded and unjustifiable, as are the comments regarding the need to offset the development's potential impacts.

5. Impacts of accidents, leakage and spills

Daily inspections of the pipeline (where located on land) will be undertaken on foot by two personnel. Impacts on the surrounding vegetation and the pipeline route associated with these inspections are negligible.

The risk of pipeline failure has been assessed in the EA as being extremely low, due to the pipeline being all new pipe, rated to twice the booster pump pressure output and the daily monitoring regime of regular checking that will be undertaken. Notwithstanding, contrary to the DEC comments regarding lack of information regarding mitigation strategies and clean up measures should a leakage occur, Section 4.3.7 of the EA and Section 5.1.1 of Appendix C of the EA provides details on these matters.

Those areas through which the pipeline traverse have been assessed for potential impacts, with the results indicating that there was a very low risk of impacting adversely upon the Wallum Froglet population. This is due to the pipeline being all new pipe, rated to twice the booster pump pressure output and the pipeline monitoring regime of regular checking that will be in place.

Risks associated with contamination due to diesel spills were addressed in Section 2.3.5 and 2.4.7 of the EA, which indicates the procedures for refuelling of machinery and booster pumps. Were this operation

considered to be a significant threat, additional mitigation measures, over and above standard best practice for refuelling would have been considered and detailed.

There is a very low probability of the pipeline breaching for reasons stated previously. The pipe used will be brand new and rated to twice the pressure output of the booster pumps. Further mitigation measures including regular inspection of the pipeline for any signs of stress and the constant monitoring of dredge pipe pressure by the dredge operator will ensure that this risk is minimised.

6. Groundwater Impacts

As indicated in the EA, the settling ponds will be ‘turkey nest’ ponds (*ie.* no excavation required), with the walls built up above the existing ground surface. Therefore, the ponds will not intercept the groundwater table and therefore will not provide access to the water table. Pond 1 is located on relatively impermeable fine silts and clays with little potential for seepage into the groundwater, based on the low hydraulic conductivity and relatively short residence time in this pond, before being transferred to Pond 2, which will be plastic lined.

The walls of Pond 1 are highly unlikely to seep water into the surrounding land, due to the short residence time in Pond 1 resulting from the existence of a ‘foot valve’, which will instantaneously drain water from the dredge slurry entering Pond 1 to a pump directing water to Pond 2. Further, the walls will not ‘seep’ saline water at saturated hydraulic conductivity, given the wall thickness (9 m at the base) and shallow depth (1 m max.) of water maintained in Pond 1.

7. Inconsistencies with DEC guidelines for fauna survey methodology

Survey effort differed from the draft DEC survey guidelines due to the nature of the proposed development (*ie.* negligible clearing involved) and lack of impacts associated with the development (*eg.* minor loss of hollows). The DEC assertion that the level of survey is inadequate is based on an incorrect understanding of the amount of clearing. It should be noted that the DEC guidelines remain in ‘Draft’ form and have no legislative applicability.

Our approach was consistent with the guidelines, in terms of the assessment process, through the application of the Precautionary Principle. The Flora and Fauna Assessment Report (Appendix C of the EA) considered each species as ‘likely to occur’ **if** appropriate habitat existed. The potential impacts on each of these species were then considered relative to the potential impacts of the project and the occurrence of appropriate habitat in the locality. It is pertinent to note that this assessment was undertaken on a ‘worst case scenario’.

Based on our approach, it was considered that no additional relevant information could be provided through survey types such as live trapping, which only results in a ‘point in time’ detection, as we assumed that breeding populations would occur in the locality.

8. Clarification of adjoining development

DEC’s comments regarding the adjoining development are in erratum in regards to the terms used in the SIS and HMP for the adjoining development. At no point does either report refer to the retention of habitat as being “adequate to offset impacts”. In other words, there is no requirement for the retention of any land proposed to be used for either the stockpile site or dredge pipeline that is proposed for use to “offset” any impacts of the adjacent development.

The HMP for the adjacent development outlines strategies to reduce and mitigate impacts which are based on scientifically proven measures for each of the species addressed. These measures include, but are not limited to, weed management, nest box erection and pre-clearing studies. The SIS only refers to, in accordance with scientific methods, the assessment of surrounding habitats to provide context. There is no recommendation in either report to retain land to “offset” any potential impacts of the adjacent development. Further, the area of Lot 59 proposed for part of the stockpile site operations does not contain any vegetation identified as high habitat value or high conservation significance. This vegetation occurs elsewhere on Lot 59 and is not in the area of Lot 59 proposed for stockpile site operations and will therefore not be affected by the operations at the stockpile site.

The reasons that DEC have concluded this tenuous link between the two development proposals, based on out of context justifications, is questioned. We suggest that reference to Great Lakes Council officers in preparation of the assessment of this project has compromised the DEC’s objective assessment of the impacts of this proposal, and lead to incorrect assumptions and therefore assessment, as well as unnecessary and unjustifiable delays in the assessment of this EA.

9. Summary

We trust that the information provided in this letter will allow the DEC to further assess the EA. We reiterate, however, that these issues must be resolved as a matter of urgency, given the long delays in the DEC’s response to assessment of this EA. Further, these issues can only be resolved through a site visit by DEC officers, with our staff, who will be able to demonstrate in the field the practical side of the response to the issues raised by the DEC assessment to date.

We look forward to your urgent attention to this matter. If you have any queries, please do not hesitate to contact the undersigned, or in absence, Brett Campbell of this office.

Yours faithfully
Orogen Pty Ltd

A handwritten signature in dark ink, appearing to read 'Meleo', is positioned above the printed name of the signatory.

DR JUSTIN MELEO
Project Director