



10 July, 1995

Gulaptis & Smith Pty Ltd
PO Box 278
MACLEAN NSW 2463

NSW
NATIONAL
PARKS AND
WILDLIFE
SERVICE

FAXED

Our reference: 2930
Your reference:

Dear Sir

**RE: "EMERALD WATERS" PROPOSED DEVELOPMENT OF LOT 2 IN
DP840016, PACIFIC HIGHWAY, EMERALD BEACH**

Thank you for your letter of 19 June 1995 requesting the National Parks and Wildlife Service (NPWS) requirements for the above development proposal.

Enclosed for your information is a general list of environmental issues that the National Parks and Wildlife Service (NPWS) considers should be addressed in the preparation of Environmental Impact Statements. Please note that these issues will apply to a greater or lesser degree depending on site specifics. The NPWS is particularly interested in the following.

- ✓ 1. Areas of native vegetation, with special reference to endangered or regionally significant species and associations.
- ✓ 2. Areas of potential significance for native fauna with special reference to the value of the habitat for endangered or regionally significant species.
- ✓ 3. Areas of archaeological potential and Aboriginal heritage values.

It is recommended that detailed surveys be undertaken to determine the ecological and/or cultural significance of the area. The NPWS notes that the Fauna Survey Report (Baverstock *et al* 1995) recorded the endangered Wallum froglet (*Crinia tinnula*) on the site and supports the conclusion that a Fauna Impact Statement is necessary for the proposed development. Directors Requirements for the preparation of a Fauna Impact Statement were supplied to Professor Peter Baverstock by NPWS on 28 March 1995. These Directors Requirements list a number of endangered species which are known or likely to occur in the study area. These include but are not restricted to the following.

Greater broad-nosed bat	<i>Scoteanax rueppellii</i>
Little-bent wing bat	<i>Miniopterus australis</i>
Common bent-wing bat	<i>Miniopterus schreibersii</i>
Squirrel glider	<i>Petaurus norfolcensis</i>
Common planigale	<i>Planigale maculata</i>
Eastern chestnut mouse	<i>Pseudomys gracilicaudatus</i>
Eastern grass owl	<i>Tyto longimembris</i>

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Glossy black-cockatoo	<i>Calyptorhynchus lathamii</i>
Long-nosed potoroo	<i>Potorus tridactylus</i>
Queensland blossom bat	<i>Synconycteris australis</i>
Wallum froglet	<i>Crinia tinnula</i>

The following information outlines approvals which may be required from the NPWS for the proposed development.

It is an offence under section 90 of the National Parks and Wildlife Act to knowingly destroy, deface or damage any Aboriginal relics, without the written consent of the Director-General of National parks and Wildlife. Any application for a Consent to Destroy should be accompanied by evidence of consultation with the local Aboriginal community and an assessment of significance by a qualified archaeologist.

It is an offence under section 99 of the National Parks and Wildlife Act for a person to "take or kill" endangered fauna unless a licence has been issued to that person by the Director-General of the NPWS under section 120 of the Act. "Take" is defined to include "significant modification of the habitat of the fauna which is likely to adversely affect its essential behavioural patterns". Application for a section 120 licence must be accompanied by a FIS and a \$200 application fee. A licence processing fee also applies.

If you have any queries regarding this matter please contact Anne Montgomery, Environmental Planning Officer, on (066) 515946.

Yours faithfully



Matt Cameron
ENVIRONMENTAL PLANNING COORDINATOR

for Manager, Northern Zone

NSW NATIONAL PARKS AND WILDLIFE SERVICE, NORTHERN ZONE

GENERAL ENVIRONMENTAL ISSUES TO BE ADDRESSED

INTRODUCTION

- A description of the proposal and details on the manner in which the environment will be modified, particularly with regard to the clearance of native vegetation and fauna habitats.
- Map(s) placing the development in a regional and local setting should be provided.
- The applicability or otherwise of Local Environment Plans (LEP), Regional Environment Plans (REP) and State Environmental Planning Policies (SEPP) to the site should be determined.
- Information should be provided as to the current and past land use of the site and that of surrounding areas.

FLORA

- A description of the flora at the site, including a map showing the distribution of plant communities in relation to the proposal should be included.
- An assessment should be made at a local, regional and state level of the conservation significance of plant communities and any rare or threatened Australian plant species (ROTAP) at the site.
- The likely impacts of the proposal upon plant communities or ROTAP species should be described as well as measures proposed to ameliorate such impacts.

FAUNA

- A fauna survey should be undertaken to identify the fauna species known or likely to utilise the site including a description of available fauna habitats.
- Make an assessment of the conservation status and likely impacts on the fauna of the area with particular attention to endangered fauna as listed on Schedule 12 of the National Parks and Wildlife Act (NPW Act)
- describe measures proposed to ameliorate the likely impacts of the proposal on native fauna.
- The provisions of SEPP 44 - Koala Habitat Protection should be addressed

Taking or killing endangered fauna

- It is an offence under Section 99 of the National Parks and Wildlife Act (1974) for a person to take or kill any endangered fauna except when a licence is issued under Section 120 of the NPW Act (1974). Application for a Section 120 licence must be accompanied by a Fauna Impact Statement (FIS).
- The NPW Act defines "take" in relation to any fauna as including "...hunt, shoot, poison, net, snare, spear, pursue, capture, disturb, lure or injure, and without limiting the foregoing also includes significant modification of the habitat of the fauna which is likely to adversely affect its essential behavioural patterns."

Fauna Impact Statements

- An assessment must be made as to whether the proposed development is likely to have a significant impact on the environment of endangered fauna. Section 4a of the Environmental Planning and Assessment Act 1979 provides a seven point test to assist in determining significant effect.
- If the proposed development is considered likely to have a significant effect on the environment of endangered fauna a FIS must accompany any development application. The Director-General of the National Parks and Wildlife Service (NPWS) must be consulted in writing for requirements prior to the preparation of the FIS.
- Detailed guidelines for the preparation of FIS's are available from the Zone office.

CULTURAL

- The presence or absence of Aboriginal sites and the significance of the area to the local Aboriginal population must be determined. The local Aboriginal Land Council should be consulted in this regard.
- An assessment of the impact of the development upon cultural sites should be made and measures proposed to mitigate such impacts detailed.
- A contingency plan should be included that details those measures to be taken in the event that sites are discovered during the course of operations.

GENERAL

- Fauna, flora and cultural surveys and assessments should be undertaken by suitably qualified persons or consultants with details of the qualifications and experience of the people undertaking the work provided.
- Survey design, methods and weather conditions at the time of the surveys should be described as well as the location of survey sites and transects.
- The location of Schedule 12 fauna and ROTAP species should be mapped in relationship to the proposed development
- Maps should be of an appropriate scale for the information presented and be of uniform scale to allow for translocation of data. Photographs of the site are also considered appropriate.
- Any likely or proposed changes to the fire regime of the site and/or surrounding areas should be detailed. An assessment of the impact of such changes on the flora and fauna of the area must be made.

NPWS DATABASES

- The NPWS can provide records of flora and fauna held in the Wildlife Atlas and/or Rare or Threatened Australian Plants (ROTAP) databases. In addition NPWS has an Aboriginal Sites Register which it is able to search. These services generally attract a fee. Inquiries should be made to NPWS Hurstville office, on 02 585 6444.
- It should be noted that the above databases are not comprehensive and should only be used as a guide. They do not negate the need for specific site investigations.

31 May 1996

FAXED



Gulaptis and Smith Pty Ltd
PO Box 278
MACLEAN NSW 2463

**NSW
NATIONAL
PARKS AND
WILDLIFE
SERVICE**

Our reference: 96/529/mjm/1375
Your reference: 2930

Attention: Mr Ed Munday

Dear Sir

RE: "Emerald Waters" Proposed Development of Lot 2 DP 840016 Pridel Investments Pty Ltd.

I refer to your letter dated 29 April 1996, requesting preliminary comment from the National Parks and Wildlife Service (NPWS) on the Species Impact Statement, Vegetation Report and Archaeological Report prepared for the above proposed development, prior to submission of these documents to Council.

The following comments relate to the statutory responsibility of the NPWS for the care and protection of native flora and fauna and sites of Aboriginal archaeological heritage throughout NSW, and for the management of NPWS estate. It should be noted that these comments are offered to assist you in the preparation of final documents for submission, and the NPWS retains the right to comment further following submission of the Development Application.

Draft Species Impact Statement

The NPWS is unable to respond formally at this stage since the *Threatened Species Conservation Act 1995* (TSC Act) requires that the SIS be submitted to the NPWS by Council along with a Development Application, in the first instance, once Council has given approval in principle to the proposal.

The SIS is placed on public exhibition by Council and the NPWS subsequently provides a concurrence report. The NPWS report is then considered by Council when issuing the Development Consent. Please note that if your activity is deemed "designated" under a Local Environment Plan, then the SIS can be exhibited concurrently with the Environmental Impact Statement required for such an activity.

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This procedure differs significantly to that required under the old *Endangered Fauna (Interim Protection Act) 1992* which is now repealed. This Act required the NPWS to exhibit the Faunal Impact Statement (FIS) and to issue a Section 120 Licence if it was found that the development would significantly affect endangered species' habitat.

Prior to preparing the SIS under the new Act, the proponent (not the environmental consultant) must make a formal application to the NPWS for Director General's Requirements which will provide guidance about the factors to be addressed in the SIS. These requirements will differ markedly from those forwarded to your consultant last year under the old legislation, in part because the new Act now requires threatened plants to be addressed as well as fauna.

The draft SIS you have provided is deficient in its consideration of threatened plants since it was prepared under the old legislation. That legislation did not require the SIS to discuss the conservation of any threatened plants that may be considered to have the potential to be impacted upon by the proposed development.

With regard to fauna considerations, the NPWS offers the following brief comments:

- The methodology does not sufficiently describe the field effort, for example, number of trapnights, length of transects, hours spent spotlighting and hours of mistnetting are not detailed. The NPWS cannot, therefore, assess or quantify the use of such terms as, for example, "numerous opportunities" (page 25) or "intensive bat trapping" (page 26).
- Ultrasonic detection techniques do not appear to have been used for microchiropteran bats. Those species that fly above the canopy and, hence, above mistnets or harpnets, have therefore not been surveyed. These would include, for example, the Yellow-bellied Sheath-tail Bat, as acknowledged on page 26. It should also be noted that Bent-winged Bats are known to roost in sea caves in the Emerald Beach area.
- The SIS concludes "the proposed activity will completely remove any habitat for breeding or survival of the Wallum Froglet" (page 38) and that "there are no feasible mitigation measures". However, it may be that careful design of the subdivision with respect to sewerage and drainage lines and/or the proposed artificial lake may mitigate potential adverse impacts on the distribution of the species on site. The NPWS considers that insufficient information about the Wallum Froglet's distribution and the subdivision plans have been forwarded or discussed to allow it to either support or deny this possibility. The NPWS recommends that an expert in wetland design be engaged to provide specific recommendations regarding this aspect of the proposal.

In summary, the current draft would not have fully satisfied the Director General's Requirements in force under the old Act at the time, as detailed in Appendix 1. The initial response of the NPWS at the time probably would have been to seek additional information prior to reaching a decision on whether to licence the activity.

I enclose a copy of the NPWS guidelines regarding the procedures you should now follow under the TSC Act if you conclude your activity will continue to have a significant effect upon the habitat of threatened species (flora and fauna).

Vegetation Report

The vegetation of the study area appears to have been surveyed in adequate detail. Whilst it is noted that no threatened flora species were recorded on site, the inclusion of a brief assessment of the likelihood of unidentified threatened flora species occurring there is recommended. The NPWS database includes a number of records of threatened species from the local area, although a preliminary assessment suggests none of these occur in the habitat types described for the subject area.

The NPWS considers that the increased local population associated with the proposed development may lead to adverse impacts on known threatened plant populations in adjacent areas. The potential for this type of indirect impact should be assessed and mitigation measures suggested to enable protection of these site.

As noted above, the Director General's Requirements for the SIS may include reference to threatened flora species and may require additional information.

Archaeological Report

As noted above, the NPWS considers that the increased local population associated with the proposed development may lead to adverse impacts on adjacent areas. The NPWS therefore advises that further consideration should be given to the potential impacts of the development on the identified midden site on Diggers Head. Mitigation measures should be suggested to enable protection of this site.

It appears that ground visibility in the study area was insufficient to allow adequate assessment of archaeological resources. The NPWS concurs with the recommendation in section 10 of the report that a member of the Coffs Harbour and District Local Aboriginal Land Council be employed to monitor removal of groundcover from the proposed roadways in the development area. Should any additional material suspected of being an Aboriginal artefact or relic be discovered during work at the site, work at that location should cease immediately and the NPWS Northern Zone Archaeologist contacted on the number provided below to arrange an inspection.

If you wish to discuss this matter further please contact John Martindale, Threatened Species Officer or Rebecca Edwards-Booth, Archaeologist on (066) 515 946.

Yours faithfully

A handwritten signature in black ink that reads "Matt Cameron". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Matt Cameron
Manager Environmental Planning Northern Zone



NSW FISHERIES

Mr E Munday
Gulaptis & Smith Pty Ltd
PO Box 278
MACLEAN NSW 2463

13 July, 1995

Dear Sir,

**Re: "Emerald Waters" Proposed Development of Lot 2 in DP840016
Pacific Highway, Emerald Beach - Pridel Investments Pty Ltd**

Thank you for your letter of 19 June 1995 requesting advice from NSW Fisheries in regard to the above proposed development.

It would be appreciated if the following information could be provided within the Environmental Impact Statement:

1. A vegetation map of the site clearly delineating wetland vegetation types.
2. An assessment of the water quality of Fiddamans Creek and the likely impact of the proposed development on water quality in this creek.

If you have any further questions please contact Craig Copeland on 066-240394.

Yours faithfully,

4. 523977
SAVED 10/1/96
D. G. L. F. M.


Craig Copeland
for PAUL CREW
DIRECTOR OF FISHERIES

FISHERIES



Mr E. Munday
Gulaptis & Smith Pty Ltd
P O Box 278
MACLEAN NSW 2463

Environment
Protection
Authority
New South Wales

NSW Government Offices
49 Victoria Street
PO Box 498
Grafton
N S W 2460

19 JUL 1995

Our Reference: GR1020#335

Your Reference: 2930

Telephone .066. 42 0535
Facsimile .066. 42 7743

Contact: Robyn Jones

"EMERALD WATERS", PACIFIC HIGHWAY, EMERALD BEACH
PRIDEL INVESTMENTS PTY LTD

I refer to your letter to the Environment Protection Authority (EPA) dated 19 June 1995, requesting comments and advice for the preparation of a Environmental Impact Statement (EIS) for the above project.

The EPA has assessed the proposal and provides the following comments and recommendations to be addressed in the EIS:

LOCATION

A topographical or contour map of the area should be included which clearly indicates the areas proposed for lake extraction and development. The plan should include the distances between the development and the nearest residences (both existing and approved future developments).

ACID SULPHATE SOILS (ASS)

It has been stated on page 6 of your documentation that further investigations are proposed for the assessment and treatment of ASS. The EIS should address the potential for ASS in areas which are to be disturbed by the lake extraction. We would recommended that the investigations be undertaken in accordance with the EPA's guideline "Assessing and Managing Acid Sulfate Soils ".

Page 9 of your report states that fill material is to be excavated from the proposed water body and used to cover 23 hectares at an average depth of 1.2 metres. Further investigation is required to determine the potential for ASS in the areas to be extracted and the suitability of the material to be used as a fill material.

EPA

SEWERAGE RETICULATION

As you are aware, the Emerald Beach area is not connected to any sewerage reticulation system. Your proposal appears to depend on a reticulation system which has not yet been constructed nor approved by the relevant government bodies. Therefore, the EPA would anticipate that your development could not begin until a reticulation system is constructed to receive effluent from the pumping station.

Notwithstanding the above, the EIS should include the proposed location of the pumping station and include details in regard to the classification of the receiving waters in the event of an overflow. Prior to the construction of the pumping station a Pollution Control approval will be required under section 17K of the Pollution Control Act, 1970.

AIR POLLUTION

The EIS should give details of any measures proposed for the control of air emissions from the site. In regard to air pollution the EIS should include the following:

- precautionary measures to reduce dust,
- review of all plant and equipment,
- the estimated location and height of stockpiles, and
- any proposed open burning of vegetation.

The EPA would recommend that cleared vegetation be chipped or mulched and not burnt on the site.

WATER POLLUTION

Included in your documentation is a diagram of the "development concept". It appears from this diagram that the proposed lake will be discharging into Fiddamans Creek. The EIS should discuss the measures proposed to control water quality within the lake and minimise the discharge of polluted waters from the development site.

Due to the location of Fiddamans Creek, the EPA would remind you that any discharge from the development should contain less than 50 mg/L of suspended solids and be of a pH between 6.5 and 8.5. A water management plan should be included within the EIS which includes details of sediment and erosion controls proposed during the construction phase of the development.

The EPA would recommend that the EIS include a timetable outlining the program for revegetation and stabilisation of disturbed areas. Stabilisation should be carried out immediately to reduce the potential for sediment laden

discharges from the site. The sediment and erosion control plan should address stormwater management in the interim before the stabilisation has been completed.

It appears from the documentation that large areas are to be disturbed simultaneously. The EIS should outline the program for areas to be cleared, extracted and filled. Additionally, the EIS should include information concerning the flow of stormwater from surrounding areas through the catchment area of the development.

CONCLUSION

In the preparation of the EIS you should be aware that the onus is on the proponent to demonstrate that consideration has been given to the environmental impact of the proposal. Appropriate controls or precautionary measures should be incorporated in the EIS to eliminate or minimise the impact on the environment.

Thank you for the opportunity to offer comments prior to the completion of the EIS. Should you have any further inquiries please contact Robyn Jones at our Grafton office.

Yours faithfully



DR IAN WOODWARD
Regional Manager
North Coast
for Director-General



Coffs Harbour City Council

Locked Bag 155
Coffs Harbour NSW 2450

Our Ref: 244430

25 July, 1995

Gulaptis & Smith Pty Ltd
PO Box 278
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Dear Sir,

"Emerald Waters" Proposed Development

The Northern Region of the Department of Bush Fire Services has forwarded your proposed development, at Lot 2 DP 840016 Pacific Highway, Emerald Beach, to Council's Fire Control Section for comment.

From the development concept plan shown in the proposal it would seem that there is no significant bush fire threat to the proposed development. However, until a development application is submitted to Council showing details of the proposal we are unable to be more specific.

When preparing the development application you should be aware of the document Planning for Bush Fire Protection which can be used to address any fire threats to the development.

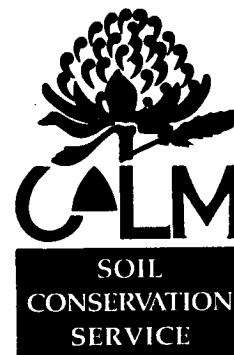
Yours faithfully,


Warwick Roche
Fire Control Officer

WDR:ajk
322

FILE

The Department of Land and Water Conservation incorporates the former Departments of Conservation and Land Management and Water Resources



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Vernon Sts
PO Box 582
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Phone (066) 52 7644
Fax (066) 52 3936

The Manager
Gulaptis & Smith Pty. Ltd.
Consulting Surveyors
PO Box 278
MACLEAN 2463

Dear Sir

"Emerald Waters" Proposed Development Lot 2 DP 840016 Pacific Highway, Emerald Beach - Pridel Investments Pty. Ltd.
Your reference: 2930

Reference is made to your letter dated 19 June 1995.

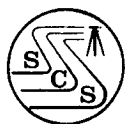
Soil Conservation Service Issues

The Department offers the following information to aid in the preparation of the application. Included are:

- . Guidelines for Soil Conservation Service requirements for the preparation and review of the Environmental Impact Statement and studies for urban and associated developments.
- . An example Statement of Environmental Effects for extractive industries for assistance with the proposed artificial water body.
- . Erosion and Sediment Control Plan for extractive industries.

Please note that two constraining factors for this development site were identified in a recent acid sulphate soil assessment conducted on this site by this office. They are the acid sulphate soil constraint and the earthworks suitability of the existing soil materials. Both factors will require proper assessment.

A copy of "Environmental Guidelines for Assessing and Managing Acid Sulphate Soils" from the Environment Protection Authority office should be consulted.



The Department of Conservation and Land Management incorporates: the Soil Conservation Service, Crown Lands Service, Land Information Centre, Valuer-General's Office, Land Titles Office and Forestry Policy Unit.

2011-0001

Crown Land Service Issues

Reserve 93479 for Public Recreation adjoins this area to the east. Coffs Harbour City Council is currently the corporate manager of this reserve. Any proposed access to the beach will require a dune management plan.

Such a plan should be developed with the support and backing of the corporate managers and should include details on:

- . construction of appropriate accessways and fencing to Departmental standards;
- . any necessary vegetation management including control of exotic plants, particularly bitou bush; and
- . management of dunal degradation such as blowouts.

It is suggested that an easement for public access be created for the whole length of the boundary between the proposed development and the reserve. In the past the Department has had problems with developments that directly adjoin dunal reserves where each house wants its own access to the beach. Creation of an easement and walking track construction should serve to funnel all residents towards the proposed accessways to the beach. This matter should be discussed with Coffs Harbour City Council. Given that the proposed development will cause increased use of this area, the proponent may also consider requesting the direction of Section 94 contributions from the development into the management of this reserve.

If you have any further enquiries, please do not hesitate to contact John Clerke or David Merrikin for Soil Conservation Service issues or John Morley for Crown Land Service issues.

Yours faithfully



John Clerke
Field Supervisor
Coffs Harbour
for JA Butcher
Regional Director
Northern Region

9th August 1995