# Rosedale: Bevian Rd Concept Application (MP05-0199) Response to Public Submissions and Referrals to Government Agencies

Marsim has received a summary of submissions from the Department of Planning arising from the public exhibition of the Bevian Concept Application and copies of comments from various government agencies as follows:

- 1. Summary of 32 public Submissions;
- 2. Comments from the following Government Agencies:
  - a. Department of Water and Energy;
  - b. Department of Primary Industry;
  - c. Department of Education;
  - d. Roads and Traffic Authority;
  - e. Department of Lands;
  - f. Rural Fire Service
  - g. Eurobodalla Council
  - h. Department of Planning
- 3. Submission for the Rosedale Association;
- 4. Submission from Coastwatchers Association.

Below in tabular form is a response to each issue:

| Item | Issue  | Action for Comment   |
|------|--|--|
|      | ubmissions   | Action to Comment  |
| 1.   | Traffic  |  |
|      | <ul> <li>Concern that the Traffic Study gives no indication of when the data was collected, particularly because of the disparity between traffic volumes at "high" and "low" season.</li> <li>Concern at general increase in traffic and the likely impact on the local road network (George Bass Drive, Burri Road specifically mentioned), including increased potential for vehicle / pedestrian conflict and a call for the developer to install a pedestrian footbridge over George Bass Drive.</li> <li>Concern at cumulative traffic impact of the proposal and other proposals in the vicinity (Barlings Beach and Rosedale Farm MP06_0038).</li> </ul> | <ul> <li>The traffic report has been prepared using conservative estimates of traffic volumes and is therefore considered satisfactory. The traffic counts were undertaken during the morning and afternoon peak periods on 19 October 2006 and 28/29 May 2007.</li> <li>The traffic analysis has been undertaken having regard to the cumulative effect of future developments in the area including the Barlings Beach development, Rosedale Farm etc. The traffic analysis and the operation of the surrounding road network was found to be satisfactory.</li> </ul> |
|      | Concern at noise impacts from increased traffic.   | The subject application is for Concept<br>Approval only. A more comprehensive<br>acoustic assessment will be undertaken as<br>part of the subsequent Development<br>Application.   |
|      | Speed limit on George Bass Drive should<br>be reduced.   | As part of the traffic assessment, Marsim's traffic consultant has recommended that the RTA give consideration to lowering the speed limit along George Bass Drive, in the vicinity of the southern access point to 80km/hr  |

#### 2. Access

- Option 2 is the preferred location for southern access road (or should at least be reconsidered). Current location of the southern access road breaches the 50m buffer.
- Concern about the location of the proposed intersection of southern access road with George Bass Drive at the bottom of a hill, 100km/h speed limit, poor sightlines. Furthermore it is contrary to Council's DCP 160.
- Safety concerns about the proximity of the proposed southern access road and the access to the Barlings Beach development.

- The proposed location of the southern access road, as well as the possible alternatives described in the Environmental Assessment, do not adequately protect the ecological, scenic and environmental attributes of the Bevian Wetland and are therefore contrary to the overarching objectives of the 7a Environmental Protection (Wetlands) zone under the Eurobodalla LEP.
- Concern about the proposed location of the northern access road (at the crest of a hill on George Bass Drive).
- Concern about additional traffic and demand for parking at the beach which generates the need for the creation of a new beach access and designated parking area.

- Marsim has relocated the southern access road to a location in the south eastern portion of the site; adjacent to the western boundary of the Tomakin Sewerage Treatment Plant.
- As noted above, the southern access road has been relocated to a position to the east of the original location at the Bevian Road. The sight lines in the new location are considered to be satisfactory.
- The proximity of the Barlings Beach access point with that of the southern access point to the subject development was a fundamental design criterion of the intersection design and complies with the relevant RTA guidelines. Notwithstanding this, the new location of the southern access, adjacent to the Sewerage Treatment Plant, provides a better traffic engineered solution in terms of its proximity with the Barlings Beach development.
- Engineering design specifications aim to improve the current access road to provide greater drainage protection to Bevian Wetland which is currently uncontrolled by the existing gravel access road. The proposed layout also raises traffic above wet crossings caused by surface drainage.

However, Marsim now proposes to relocate the southern access road further to the east adjacent to the western boundary of Council's Sewerage. This location will considerably separate the road from the Bevian Wetland

- The proposed intersection at the northern access point has been designed in accordance with RTA guidelines
- Adequate public access to the beach already exists and it is considered that no additional carparking is required as a consequence of the proposed development. Sufficient carparking will be available within the development road network at the southern portion of the site to cater for residents within the development who live in the northern portion of the site who may wish to visit the beach.

#### 3. Infrastructure

- Concern about the ability of existing infrastructure / services to accommodate additional demand generated by the proposed development, with particular concern expressed regarding the adequacy of health and medical services / facilities.
- Lack of public transport facilities increases reliance on private vehicles.
- Council has made adequate allowances in their future planning of infrastructure for development of the Rosedale site. It is also considered that adequate medical services are available.
- Existing bus services by Prior Bus Company link Rosedale with Batemans Bay and Moruya. As the residential population of the site, it will strengthen the demand for public transport in the area.

# Subdivision Design / Urban Design / Lot Sizes / Density

• Proposed lot sizes do not comply with the *Eurobodalla Settlement Strategy* and insufficient justification is provided to the departure. Action SP19 applies a minimum lot size of 1200sqm to the Rosedale Urban Expansion Area. The intention was to ensure that development of Urban Expansion land would be compatible with the 2ec Residential – Environmental Constraints zoning and the character of the existing settlement of Rosedale.

#### Lot Sizes

The Eurobodalla Settlement Strategy is the document which provides the basis of the decision making process in the preparation of the forthcoming Shire-wide LEP, Structure Plans, DCPs and Place Statements.

The Settlement Strategy therefore has no statutory authority but provides guidance for future planning instruments and policies and is appropriately a matter for consideration in the assessment of development applications within the Shire.

The Strategy, in Action SP 19, recommends a minimum lot size of 1200sqm for the Rosedale Expansion Area. However the figure of 1200sqm is derived from an analysis undertaken by the Eurobodalla Council as part of its submission to the Minister's Expert Panel on Sensitive Urban Land Review

In that analysis Council determined that the total suitable development area within the Rosedale Urban Expansion Zones was 179ha. This was further reduced by 25% for servicing (roads, easements etc), yielding approx 134.25ha. This represented a yield of approx 120 lots at an average lot size (locality average) of 1200 sqm. It should be noted that this is not a minimum lot size but an average lot size.

Although it is the desire of Council to achieve a lot yield of approximately of 1,120 lots over the Rosedale Sensitive Urban Land at an average size of 1,200 sqm per equivalent lot size over the entire area, the constraints on the subject site are such that only 792 lots are achievable. This represents an average equivalent lot size over the site of approximately 1,560 sqm over the approximately 113 ha of developable land.

In terms of minimum lot size, the Rosedale DCP nominates a minimum lot size of 600

sqm. However, the minimum lot size in the Eurobodalla Residential DCP is 450 sqm In this regard, one of the key recommendations of the Minister's Independent Expert Panel in relation to the scale and type of land release of Urban Expansion Land states "Residential development should aim to achieve a range of housing types to meet demographic change, with a higher overall yield than traditionally achieved in adjoining areas, to make better use of land resources and utility services".

The recommendations of the Expert Panel were also adopted in the South Coast Regional Strategy and the Eurobodalla Settlement Strategy.

Within the subject development, a variety of lot sizes will be provided ranging from 450 sqm to 1,600 sqm in the southern precinct; 450 sqm to 1750sqm in the central portion of the site; and 750 sqm to 8,550 sqm in the northern portion of the site. These are considered satisfactory and consistent with the recommendations of the Minister's Independent Expert Panel on Sensitive Urban Land, the South Coast Regional Strategy and the Eurobodalla settlement Strategy.

• The documentation does not adequately address nor justify the departure from the minimum lot sizes in the area zoned 1c Rural Small Holdings and the inability of the proposal to satisfy the criteria of Council's Interim Policy for Rural Residential Land.

# Lot Sizes in Rural 1C Zone

As stated in the Environmental Assessment report, the site has been the subject of comprehensive studies and analysis in terms of its suitability for residential subdivision (refer to **Section 1.4.3** of the Environmental Assessment Report).

Particular regard has been given to recommendations of the recently published South Coast Strategy and the recommendations of the Independent Panel on Sensitive Urban Lands in the South Coast.

In particular one of the recommendations of the Independent Panel in relation to the scale and type of land release of Urban Expansion Land states "Residential development should aim to achieve a range of housing types to meet demographic change, with a higher overall yield than traditionally achieved in adjoining areas, to make better use of land resources and utility services".

In this regard, the principles espoused by the panel in relation to Urban Expansion land are also considered relevant and appropriate for the 1 (c) land in order to make better use of land resources and utility services.

Consequently, residential lots of between

• General concern about the scale and density of development. Broad consensus appears to be that the yield should be halved (400 – 500 lots) in order to achieve a more sustainable development.

558 sqm and 3,665 sqm are proposed which is considered to be appropriate and consistent with the principles of the Panel recommendations on Sensitive Urban Land and the South Coast Strategy released in December 2006. The Eurobodalla Council has supported in principle the smaller lot sizes within the Rural 1(c) zone.

#### Scale of Development

The South Coast Regional Strategy has planned for an anticipated population growth of approximately 60,000 people and up to 45,600 new dwellings within the region by 2031.

In relation to the Eurobodalla Shire, and the subject site in particular, the Strategy:

- identifies the requirement for an additional 10,700 dwellings in the Eurobodalla Shire within the next 25 years;
- adopts the specific recommendations of the Sensitive Lands Review Panel for the subject site including the recommendation that "Residential development should aim to achieve a range of housing types to meet demographic change, with a higher overall yield than traditionally achieved in adjoining areas, to make better use of land resources and utility services".

The Eurobodalla Council had anticipated that the Urban Expansion Land would provide a lot yield of approx 1100 lots.

As part of the consultation process, in the preparation of the subject Concept Application for 792 lots, Council requested that Marsim investigate how it could further increase lot yield by the introduction of dual occupancies. Marsim agreed to investigate such a proposal and has identified a number of sites that are suitable for dual occupancies.

Having regard to the recommendations of the Sensitive Urban Lands Review for higher lot densities, the new dwelling targets set by the South Coast Regional Strategy and the request by Council for greater residential density than the 792 lots proposed in the Concept Application, it is considered that a lot yield of 792 lots on the subject site is satisfactory and does not represent an over development of the site.

A restriction of lot yield to 400-500 lots is considered unreasonable; particularly in relation to the maximisation of use of infrastructure and land resources.

• Concern that the commercial / retail precinct and the community centre should be more centrally located to improve walkability and reduce reliance on private vehicles.  Location of Commercial/Retail Precinct and Community Centre
 The Commercial/Retail and Community

The Commercial/Retail and Community facilities have been located in the southern portion of the site as it is the more densely populated area of the development as opposed to locating them in the geographic centre of the site which would be more remote from the population centre.

It is considered that the proposed location of these facilities within the area of highest population concentration will be more effective in promoting walkability to these facilities.

• Raises concern about the creation of small lots on steep land at the southern end of the site.

Concern about the subdivision of some of the steep land zoned 1c Rural (SW corner of the site) and suggests that it should not be disturbed - assertion that there is no policy basis to support the development of land with slopes exceeding 25%. Small lots on Steep Land

The lots in the Rural 1c Zone range from 558 sqm to 3,665 sqm and, for the reasons detailed above, are considered to be appropriate in size.

In terms of the location and design of dwelling on steep sites, there are many places around the world built on significant slope; from hill towns in Italy, Greece and Spain through to the majority of Sydney's eastern suburbs.

These great places have taught us are many techniques for successfully dealing with slope, such as terracing, stilt housing and cantilever slab construction to ensure that slope is sensitively managed and developments with a high quality are achieved.

In areas of greater slopes lots are deeper to enable the construction techniques above which minimise earthworks. For example (Attachment 1) James Robertson House is built on a 50% slope in Pittwater, Sydney.

#### 5. **Environment**

- Concern about the impact on water quality in both the Wetland and Saltwater Creek and the cumulative impact of all the current development (especially Rosedale Farm). Requests ongoing monitoring of water quality both during construction and post development. Also requests monitoring of water quality at effluent outfall at Long Nose Point.
- The 50m buffer proposed to the Wetland is inadequate and should be increased to 100m measured from the top of the bank, consistent with the Department of Natural Resources *Strategic Assessment of Riparian Corridors* which requires a total buffer of 100m to Category 1 waterways.
- The Rosedale site is at the headwaters of the catchment and the objective is to improve the existing runoff water quality. This will ensure no cumulative adverse impact caused by our site. Runoff water quality monitoring will be undertaken on the subject site during construction and for two years after completion of each stage.
- The runoff hydrology and water quality will mimic the existing behaviour before reaching the 50m buffer

- Concerned that the vegetation / wildlife corridor running along the ridge top eastwest is too narrow and does not extend all the way across the site to the western boundary.
- The DoP have only required a 50 m buffer from top of the wetland bank, not 100m. despite this a buffer of up 200 m has been provided where the topography permits. A 100 m buffer particularly on the Northern eastern edge of Bevian wetland is not justified given that the topography increases sharply to this aspect. As the wetland is not classed as a category 1 waterway the suggested buffer is not required. The proposed buffers are Supported by DWE.
- Bevian Road should be retained as a recreation path (ie. the southern access road should be relocated) as the adjacent hedgerow vegetation provides important habitat for bird species and its aesthetic and scientific value has not been recognised.
- Marsim has relocated the southern road access to the south-east of the site adjacent to the STP. The existing Bevian Road access will be retained as private access for the adjoining lots. Where the road is not required within the site the old road will be closed and an alternative path route proposed. The habitat value of the adjoining Spotted Gum vegetation has been recognised, but in the light of higher priority conservation priorities, that is to protect EEC's and Bevian Wetland, the loss of Spotted Gum Vegetation is considered to be of lower ecological significance.
- Concern about the boardwalk traversing the Wetland – rubbish, noise, general degradation; and a recommendation that pedestrian access be relocated to the eastern side of the wetland, away from the waterline.
- The boardwalk has been deleted from the Concept Application.
- General concern about the adequacy of the wildlife corridors – supplementary native planting is required along both the eastern and western boundaries of the site to provide connections to / from the State Forest and Burrawang property.
- An additional western corridor connection is now being provided from Bevian Wetland to Mogo State Forest.
- Concerned that the development does not demonstrate a high degree of sustainability – failure to mandate on-site energy production / solar heating / sewage disposal etc.
- designed as a concept only, and whilst adequate infrastructure has been demonstrated to be available to service the site, it is the intent of Marsim to provide for an environmentally sustainable and responsible project. The detailed ESD issues will be managed at a DA stage of the process including controls regarding energy efficiency, water storage and usage including grey water, sewage and building construction.

However, mandating of onsite sewage disposal is not considered appropriate for

the soils, topography and location of sensitive wetlands and creeks. 6. **Amenity** · General concern about a development of **Erosion of Amenity** The South Coast Regional Strategy identifies this size and its resultant population eroding the need to develop 10,700 new dwellings the high level of amenity currently enjoyed by local residents. Also expressed in terms of within the Eurobodalla Shire within the next the development being out of character 25 years. with the existing low density, low key development in the area. The Council itself has requested Marsim to investigate higher densities on the site beyond the proposed 792 lots in order to maximise use of land and infrastructure resources. The design and density of the subject Concept Application have been developed to minimise environmental impacts and retain the amenity of the area whilst providing housing for the anticipated population over the next 25 years. • Concern about the impact of noise both **Acoustic Impact during Construction** during the construction phase and post and Post Development development on both existing residents in The subject application seeks concept the area and on the Wetland. Seeks approval only. A comprehensive restrictions on construction hours. construction acoustic impact assessment will be undertaken as part of the subsequent Development Application for the project. **Bushfire Risk** · Concern about bushfire management, The subdivision has been designed in specifically that no residential lots should be accordance with the requirements of allowed either west of the westernmost Park Planning for Bushfire Protection 2006. Edge Road or north of the northernmost The proposed asset protection zones road in the Country Zone. are considered adequate in addressing the surrounding threats. Construction standards and rear property access on the lots of concern provide an ability to effectively defend property. • Concern that the APZs are insufficient, with particular concern being expressed about The subdivision has been designed in the steep land in the south western corner of accordance with the requirements of the site where residential development is Planning for Bushfire Protection 2006. The presence of steep lands has been proposed. considered in defining the required APZ's. The bushfire risk has been considered in accordance with Planning for Bushfire Protection 2006 which takes into account the type of vegetation and the slopes. • The north western corner of the site should Steep Lots in North-Western Corner not be redeveloped (reference DCP 160) The north-western corner of Marsim's land contains slopes in excess of 33 degrees. This due to its scenic value, steep slopes (areas where slopes exceed 33%) and associated land is zoned Rural 1a and does not form bushfire risk. part of the development site.

Aesthetically the presence of tall forest vegetation and ridgelines provides good visual separation from any external vantage points. Of the area within application boundary, slope with more than 33% have been taken into design consideration. The proposed lots have sufficient space outside steep area for minimal 10X20m housing development. Visual Impact Concern expressed that the visual Additional photos have been taken from assessment that accompanies the EA is relevant public foreshore places towards the Subject Site for further visual impact inadequate and dismisses the visual significance of the site, the Eurobodalla assessment. These places are: South Broulee National Park and other public foreshore Beach / Broulee Island (dist. 4.5km), Moruya places. The visual assessment should Heads (dist. 11km), Pedro Point (dist.13km), address the impact of the development Congo Point (dist. 15km), and Plantation when viewed from Tuross Head, North Point (dist. 27km). Broulee Beach, Broulee Island, Moruya Heads, Pedro Point and Congo as well as As demonstrated from the photos from the ocean. (Attachment 1), the site is not clearly identifiable from Moruya Heads (dist. 11km) and beyond. From South Broulee Beach and Broulee Island, part of the Knoll and South Eastern ridge is visible and the rest of the site is screened by existing trees. The overlay of dwellings and future street trees, most of the dwellings are sheltered from sight once the street trees are established. Social and Economic Impact **Increase in Rates**  Concern that the proposed development The subject site will create 792 new lots; may result in an increase in Council rates. each of which will pay rates for services provided to them by Council. Any increase in rates of other properties in the area should only arise if there is an increase in the value of that land. • The documentation does not provide an Viability of Commercial/Retail Facilities economic analysis of whether commercial / It is considered that the development of 792 retail facilities are required or will be viable. dwellings will give rise to a demand for a This should be provided prior to any local shop and commercial and community determination of the application. facilities. The commercial viability of these facilities will be a matter of consideration for Marsim. However, it is Marsim's intention to provide these facilities up-front in a staged process in anticipation of the incoming population. Concern that the proposed development **Impact on Property Values** will have an adverse impact of property The proposed standard of development values in the local area. within the subject site, in terms of the public domain and the built form, is to be of a high

standard.

• Questions the validity of Marsim's projection of 10-15 years for completion of the project when considered in tandem with other developments in the vicinity (Barlings Beach, Rosedale Farm) and particularly in terms of scheduling competing demands for construction materials and equipment, personnel, cumulative construction traffic and other environmental impacts.

Should there be any impact on land values, it is considered that they will rise rather than fall.

# Marsim's Projections on 10-15 Year Completion of the Project

The development is proposed to be undertaken in 3 stages over the next 10-15 years. Demand will govern the rate of development and the lifespan of the development process.

# 10. Strategic Planning

• Concern about the location of the proposed development – additional housing should be located in proximity to existing centres which provide access to employment, schools and other services. The existing policy framework (Lower South Coast REP No. 2, South Coast Regional Strategy and Eurobodalla Settlement Strategy) clearly directs substantial population growth to locations within existing settlements, or to areas immediately adjacent to existing settlements that have the capacity to provide the requisite range of services / infrastructure.

#### Infrastructure

The issue of servicing has been addressed and assessed as satisfactory at Section 2.9 of Environmental Assessment of the Concept Application.

Notwithstanding this, the Minister's Independent Expert Panel on Sensitive Urban Land Review assessed the appropriateness of 16 areas (totalling approx 2200ha) already zoned for potential development.

The Panel's terms of reference required it to:

- o Review the suitability of each site for urban development and the scale and type of any recommended land release, having regard to the site's biophysical constraints, servicing and infrastructure issues and compatibility with the strategic directions of the draft South Coast Regional Strategy, and
- Advise on the priority and timing of any recommended releases for urban development, including an assessment against forecast population growth trends contained in the draft South Coast Regional Strategy.

Of the 2,200ha assessed, less than 30% was recommended to be appropriate for development.

The Panel concluded, in part, that the Rosedale site is considered mostly suitable for urban development in view of the past land clearing and farming activities.

It also recommended that "Residential development should aim to achieve a range of housing types to meet demographic change, with a higher overall yield than traditionally achieved in adjoining

areas, to make better use of land resources and utility services"

The Panel also noted that the Rosedale site assessment by Eurobodalla Council concludes that around 180 hectares of land is suitable for development, with a possible yield of over 1100 lots, based on development at a similar density to its surrounds (averaging around 1200 sqm per lot).

The South Coast Regional Strategy and the Eurobodalla Settlement Strategy have adopted the recommendations of the Expert Panel's Review.

Having regard to the general support for appropriateness of the development of the subject Rosedale site for residential development in order to satisfy the demand for 10,700 new dwellings over the next 25 years, and the fact that the assessment took into consideration such matters as:

- the site's biophysical constraints,
- servicing and infrastructure issues;
   and
- compatibility with the strategic directions of the draft South Coast Regional Strategy,

.....it is considered that the servicing of the subject site in terms of infrastructure has been satisfactorily addressed.

- The Proponent should be required to provide strategic justification for the proposal in light of the quantum of development approved under MP06\_0038 (141 lot residential subdivision at Rosedale) and the recently commenced Barlings Beachside 200+ dwelling development as well as the future redevelopment of the Barlings Beach Caravan Park.
- The site is located adjacent to 3 isolated Hamlets (Guerilla Bay, Rosedale and Barlings Beach) and therefore the *Settlement Strategy* places a low priority on its release and development. The proposal, given the number of lots and its relationship to the aforementioned Hamlets constitutes an inappropriate and sprawling urban development and a resultant loss of settlement type and character of existing development.

# Strategic Justification for necessity of Development

As noted in previous sections, the South Coast Regional Strategy and the Eurobodalla Settlement Strategy acknowledge the need to find appropriate sites for 10,700 new dwellings in the Eurobodalla Shire.

Both documents support the development of the subject site for residential development.

# Inappropriate development

The subject site has been earmarked as land suitable for the expansion of the existing coastal settlements in the area since 1987 when the Eurobodalla Rural LEP was gazetted; identifying the majority of the subject site as an Urban Expansion zone. The appropriateness of the subject site for development was also identified in the Lower South Coast Regional Strategy.

In more recent years, the site has been the subject of numerous studies and reviews in

terms of its development potential.

As noted above, both the current South Coast Regional Strategy and the Eurobodalla Settlement Strategy have adopted the findings of the Sensitive Urban land Review in terms of, amongst other things, the appropriateness of development of the subject Rosedale site for residential development in order to satisfy the demand for housing over the next 25 years.

The scale, form and character of the development will be compatible with surrounding areas and reflect the South Coast style.

• Concern that approval of the proposed development will have implications for future zonings in the area.

• Implications on Future Zoning in the Area This is a matter for Council and the Department of Planning.

However, it is considered unlikely that other sites in the area, not already zoned suitable for development, will be rezoned. This is largely because the South Coast Regional Strategy and Eurobodalla Settlement Strategy have recently been adopted; both of which both adopt the recommendations of the South Coast Sensitive Land Review which identifies the coastal sites considered suitable for development.

#### 11. Miscellaneous

• Concern expressed that the name "Rosedale" should not be referenced in any way in relation to the development.

# Use of the name "Rosedale" in relation to the development

The subject site has the Rosedale postcode of 2536 and has been identified as "Rosedale" in all Council's documentation and planning instruments.

It appears somewhat odd and proprietorial that a section of the Rosedale community perceives itself as having the sole right to be associated, by name, with the area.

It is considered that there is no legal, moral or ethical reason why the subject site, having been known as Rosedale for all these years, should not be able to describe its location by that name.

• The proponent should be required to make a contribution to the cost of enhancement of Barlings beach Aboriginal Place as future residents will benefit from this facility.

# Contribution to the Cost of an Aboriginal facility on Barlings Beach

It is understood that a condition of development consent for the Barlings Beach site requires the developer to fund the cost of enhancing the Barlings Beach Aboriginal Place.

There is no nexus between the subject development and the Barlings Beach development or the Aboriginal Place on that

site. Any notion that Marsim should contribute to the costs associated with another development in this way are rejected.

#### Department of Water and Energy

12. Riparian Corridors

#### Riparian Buffers

 Under no circumstances must the riparian corridor width be reduced any further tan was previously actually agreed to by DWE and as shown in Figures 27(a), 9b) and (c) of EA; The Bevian Road Concept Application has been reviewed by DWE, who have found that the defined buffers are adequate. If in the future there is a need to review the required buffers, than DWE will be required to sign off any proposed amendments. However, whilst there may be minor adjustments in the widths of the Riparian Buffers the intent and intended outcome will be maintained.

#### Landscaping

- Riparian Corridors to be rehabilitated with fully structured native riparian vegetation only;
- The landscape Concept Plan (dated 23 /11/07) is to be amended and the legend uses clear separate colours to distinguish between the various landscape treatments as shown on this plan. For instance it is difficult to determine those areas on the plan that are proposed to use "informal tree planting (scattered or clustered)" and those areas that are to use "mass tree planting".
- The Bevian Road Landscape Concept Plan (dated 23/11/07) shows open space is located along the watercourses within the Ecological Zone. The open space areas should be beyond (outside) the Ecological Zone.

Noted. Plans amended.

• The open space areas outside the areas already nominated as Ecological Zones are to be used for a variety of recreational purposes and it is not considered appropriate that they be incorporated in the Ecological Zone as this may unnecessarily restrict activities including the addition of facilities in those areas.

The Open Space areas will be landscaped with locally occurring native species and form a buffer between the development and fully restored ecological zones.

- 13. Bevian Wetland
  - The Department supports the provision of a minimum 50 m wide vegetated buffer surrounding Bevian wetland (measured from the wetland high water mark) extending to a maximum of 200 m to the north of the high water mark boundary and the restoration of the native vegetation communities. The plant species composition and planting densities within the 50-200 metre wide buffer should reflect the local remnant vegetation.
- Noted. The Ecological Site Management Plan is consistent with this recommendation.

- The Bevian Road Landscape Concept Plan (dated 23/11107) shows the boundary of the Ecological Zone (east of Bevian Wetland) is located within the area proposed for 'mass tree planting'. It is not clear why the boundary for the Ecological Zone is not located along the outside edge of the 'mass tree planting' rather than within in it? The Department recommends the boundary is moved to the outside edge of the mass planting area.
- Noted. The landscape plan is to be amended as it incorrectly identifies a "regeneration zone" as a Mass Planting Area. The landscape plan is not consistent with the requirements of the Ecological Site management Plan. The Landscape Plan should simply identify the Conservation Area as proposed in the Ecological Site Management Plan and the management of this area is to be in accordance with the ESMP specifications. A final Landscape plan is to be prepared for contractual purposes which is to be certified by the Appointed Project Ecologist prior to implementation.

# 14. Farm Dams

Section 1.5.6 of the EA refers to existing farm dams which are located on line (page 23). Section 10.4.4 of the Water Management Report prepared by Patterson Britton notes 'the existing farm dams in the northern catchment only would be rehabilitated to function as water quality control ponds' (page 33) and these are shown in Figure 5 (Water Sensitive Urban Design). The existing online farm dams need to form part of the riparian corridor and should not be used for water quality treatment. Any WSUD infrastructure should be located in the development area and should not be located within the watercourses. Environmental enhancement of the dams may be required to provide stable spillways and to maintain the riparian corridor.

The reference in the Patterson Britton Water Management Report (p.33) to the farm dams as water quality control ponds was not intended to suggest they were part of the WSUD strategy. This description as ponds was intended to describe the proposed enhancement with macrophyte planting in the dams in disturbed areas and their natural role in the riparian corridor of removing pollutants from stream flows. The farm dams in the northern portion of the site are not part of the WSUD features for the development.

It is recommended that the existing farm dams be retained as a feature of the Riparian Corridor but not specifically as a water quality control device. Rather to allow the enhancement of the existing dams to provide stable spillways and planting of macrophytes.

# 15. Utility Services

 The Services and Infrastructure Report (Appendix C) shows two sewer pump stations (22 and 23) in close proximity to the watercourses. It is not clear if the pump stations are proposed to be located in the riparian corridor and further details are required to clarify this. The Pump Stations should not be located in the riparian corridors. The location of the pump stations as shown on the referenced plan is conceptual only. In the advanced design of the services, the location of these elements will be selected to avoid significant adverse impacts on the riparian corridor.

# 16. Pedestrian and Cycle Movement

 Section 2.1.3.3 of the EA notes a network of pathways and cycleways throughout the development are aligned with the drainage lines (page 112). Also the Bevian Road Landscape Concept Plan (dated 23/11/07) shows that a light weight timber shared path is proposed towards to edge of the Noted. Access and structures are relocated outside riparian corridors and conservation areas in the Concept Application. The boardwalk has been removed from the Concept Application.

Limited strategic crossing, look out area and one timber viewing platform south of community facility will remain for public Bevian Wetland.

- The Department does not support the locating of pathways in the riparian corridors and recommends that any pathways (except for any crossings and strategic access points) should be located outside the riparian corridors and also outside the minimum 50 m wide buffer area surrounding Bevian Wetland.
- If access to the watercourse edges or wetland is required it may be provided occasionally by a branch path at strategic locations where the ecological integrity of any existing riparian vegetation and the biophysical functions of the riparian corridor, stream bed and bank stability will not be compromised. Branch access paths are best located away from eroding processes along inside (convex) banks. The pathway footprint within any riparian corridor must be minimised.

recreation and educational purposes.

The proposed pathways and cycleways will be installed in an ecological sensitive manner such as for sensitive habitat areas. The "For Construction "plans and the proposed route is to be independently audited and certified by the Project Ecologist prior to implementation. Raised or floating boardwalks are acceptable methods and can be installed without removal any existing canopy vegetation.

With the exception of Crossings it is agreed that pathways should be generally located within the proposed asset protection zones. Watercourse crossings where required will be placed, designed and installed in accordance DWE guidelines Design and Construction of Paths, Cycleways and Accessways along Watercourses and Riparian Area".

The Bevian Wetland is a significant local landscape and controlled access should be provided to engender community support. In accordance with DWE *Guidelines for Controlled Activities*, detailed *Works and Vegetation Management Plans* will be provided for approval by DWE as a condition of consent. The final alignment, design and installation methods of the pathways and cycleways can be accurately defined with the submission of the Controlled Activity Permit application to DWE.

# 17. Asset Protection Zone

- Section 2.5.1 of the EA indicates that at pinch points the edge of the buffer would be landscaped within the asset protection zone (page 136). Under no circumstances is the APZ to encroach any further into the riparian corridor than what has previously been agreed to by DWE and shown in Figures 27 (a) (b) (c) and (d).
- The Ecological Site Management Plan (ESMP) refers to under-scrubbing of the Asset Protection Zone (APZ) (Section 5.5, page 32) and Appendix 3 of the ESMP (Operational Works Program) lists the implementation of a Hazard reduction Program/asset protection zones as an annual task. As the riparian corridors are located adjacent to the APZs, the width of the riparian corridors needs to be clearly delineated on the ground to ensure that the APZ underscrubbing does not disturb or remove riparian vegetation within the riparian corridor.

Noted and agreed

Noted and agreed

Appendix 2 (Ecological Site
 Management Program) identifies the
 need for Environmental Protection
 Works (install riparian zone protection)
 prior to implementing asset protection
 works (install asset protection zones).
 The riparian corridor width must be
 clearly identified and appropriately
 delineated and protected by fencing in
 perpetuity prior to any under-scrubbing
 of the APZ commencing on the site.

Noted and agreed

# Department of Primary Industry

# 18. Landscaping

DPI generally concurs with the proposed retention and rehabilitation of riparian buffer zones for the site for the tributaries of Saltwater Creek and for Bevian Wetland. We note that in the Landscape Concept Plans (see Attachment 9) a timber boardwalk and viewing platforms are proposed within the core riparian buffer zone of Bevian Wetland. While DPI does not object to the boardwalks as designed and located in the Concept Plan and EA, we do not support any further structures or encroachments being permitted in future within the riparian buffer zone of the Bevian Wetland which will diminish its ecological value. Restrictions on any future structures or encroachments into the core riparian buffer zone of Bevian Wetland should be made a condition of approval.

Noted. Access and structures are relocated outside riparian corridors and conservation areas in the Concept Application. The boardwalk has been removed from the Concept Application.

Limited strategic crossing, look out area and one timber viewing platform south of community facility will remain for public recreation and educational purposes.

Light imprint structures will be used where required; details to be submitted in DA stage of the proposal.

#### 19. Erosion and Sediment Control

- DPI places particular importance upon the need to minimise the harm to the natural environment both at the work site and downstream during any development of this site. We expect any approval to require implementation of Best Management Practice with respect to erosion and sediment control during construction and appropriate and effective measures to be incorporated into a comprehensive erosion and sediment control management plan. Implementation of these measures is essential to safeguard the aquatic environment downstream and mitigate impacts on water quality in Saltwater Creek and Bevian Wetland.
- The DPI also recommends a number of other Conditions of Consent

Noted

Noted

#### Department of Education

#### 20. School Facilities

 The existing government primary and secondary schools serving Rosedale currently have no surplus accommodation capacity to cater for the additional students that would be generated from the proposed 806 lot subdivision.

The proposed subdivision is currently within the catchment areas of Broulee Public School and Batemans Bay Nigh School. Both schools are currently managing increased student demand generated by recent scattered coastal development with supplementary demountable classrooms. Any further residential growth would necessitate further additional facilities needs at these schools.

The Department of Education and Training estimates that the proposed development is likely to require the equivalent of five additional primary home bases and five additional secondary general learning spaces, plus associated spaces. These would be provided on the existing school sites, both of which are of the Department's optimum site size. The Department notes that the revised infrastructure Contribution Guidelines issued by the Department of Planning in November 2007 indicate that the Department of Education and Training is limited to seeking a developer levy for land only. On this basis the Department has no requirements for land for school purposes in this instance.

#### School Facilities

The revised infrastructure Contribution Guidelines issued by the Department of Planning in November 2007 indicate that the Department of Education and Training is limited to seeking a developer levy for land only.

On this basis it is noted that the Department has no requirements for land for school purposes in this instance.

#### Roads and Traffic Authority

- 21
- The RTA has received the submitted information and notes that the Traffic Impact Statement indicates that traffic modelling has been undertaken to examine the impact of the development proposal on the existing road network. However, electronic copies of this modelling have not been submitted to the RTA for review. The RTA cannot make an informed comment on the suitability of this proposal until the following information is provided to its satisfaction:
- Electronic copies of all input and output files associated with the SIDRA analysis shall be provided on CD. In this regard the RTA requires that the developer provide SIDRA analysis for the following scenarios: 2007 AM and PM with and
- All additional data requested by the RTA has been forwarded to it, including Electronic copies of traffic modelling, justification of traffic counts and justification of the proportional split between low and medium density housing.
- SIDRA analysis and data files on CD has been forwarded to the RTA. The scenarios tested included the 2007 AM and PM with and without development and 10 year AM and PM projected with and without development scenarios.

- without development scenarios 10 year AM and PM projected with and without development scenarios;
- Justification of all traffic count data obtained and used within the SIDRA analysis. The applicant should demonstrate that any surveyed day represents an average day for vehicle movements throughout the network.; and
- The traffic count data was gathered in accordance with the Roads and Traffic Authority's "Guide to Traffic Generating Developments". Traffic count was undertaken during the morning and afternoon peak periods on 19 October 2006 and 28/29 May 2007.
- Existing traffic flows on George Bass Drive have been increased by 100% and on the Princes Highway by 50% to reflect holiday traffic volumes. The analysis of the surrounding intersections including holiday traffic found the intersections will operate at a satisfactory level of intersection operation. These data files have been provided to the authorities.
- Justification for the proportional split between low and medium density housing mixes should be provided. This should be linked to Council LEP or DCP documentation that defines housing mixes within the area.
- The proportional split between low and medium density housing was determined to reflect the nature of demand in the area and the constraints of the site. In particular, the northern portion of the site has a greater rural nature and is more appropriately designed as low density, whereas the southern portion of the site is more appropriately designed for more dense development.

# Department of Land

#### 22. Crown roads - Closing and Purchase

- Where Crown roads are involved in the development and are to be amalgamated in the freehold lands, ownership of these lands may only be obtained by way of lodgement of a road closing application with the department, by the applicant in the first instance. Approval in principal will be given if there are no valid objections following advertising of the proposal.
- A further road purchase application may then be lodged in order to purchase the land within the road. Unfortunately, no guarantees as to the outcome of the road closing process can be given until submissions have been assessed.

# Crown roads - Transfer to Council

 If there are any proposals regarding construction of Crown roads they will be dealt with in accordance with the Roads Act 1993 and this Department's consent for these works will be required as part of the development approval process. Council will be required to Noted

Noted

Noted

accept the transfer of the Crown roads requiring construction that provide access to or within the proposed development. An application and the required fee for road transfer must be lodged with this department to enable gazettal of the Crown road. If Council decline to accept control of the road, the Department will not approve any construction of the road. It is noted that the Eurobodalla Shire constructed to an appropriate standard

Council has indicated that it has no objection to taking ownership of the crown public road once it has been (main through road) but the closure and amalgamation of the remainder of the crown public roads will be dealt with as per the above information.

# Rural Fire Service

23. The Rural Fire Service has not raised any issues that need to be addressed as part of the assessment of submissions. Rather, it has provided a number of Conditions of Consent for imposition by the Minister.

Noted

# Eurobodalla Shire Council

• Sewerage Treatment Plant Buffer

Council accepts the proponent's proposal that no residential lot shall be approved between the STP and the dashed yellow line on the plan entitled "Bevian Road Concept Application - STP Buffer Analysis 4" dated 27 May 2008, unless the proponent has demonstrated to satisfaction of Council and the Minister that the location of any lot satisfies the relevant odour and management criteria for residential development.

In this regard, augmentation work may necessitate augmentation works to the STP in which case these are to be undertaken at the full cost of the developer.

Noted and agreed

25. **Southern Road Access to George Bass** Drive

> Council has raised concern about the appropriateness of Bevian Road access (south) to George Bass Drive and considers that a superior alternative exists by accessing the site from George Bass Drive to the west of the STP opposite the current access to Barlings Beach.

The proposed new access would involve crossing Council's STP site.

Marsim has now amended its Concept Application to relocate the southern access road to the west of the STP as requested by Council.

It is also noted that Council on 24th June 2008 has agreed to dedicate a portion of the STP site for a public road which will be constructed at the cost of the developer.

| 2/  | Povion Dd. Northorn Access to Consul  | Noted and agreed  |
|-----|---|---|
| 26. | Bevian Rd Northern Access to George Bass Drive  Council acknowledges the separate agreement between Marsim and Edwards, the neighbouring land owner, in relation to the northern road access to George Bass Drive.  Council however continues to have concerns about the northern access but will allow the Concept Application to proceed on the understanding that it is only a Concept Plan and that a detailed traffic study and design will need to be provided as part of the design and assessment process. In the event that an appropriate traffic environment can not be achieved the northern access will need to be reconsidered and amended. | Noted and agreed.   |
| 27. | Burri Rd Upgrade Council will seek to pursue the sealing of Burri Road as part of its negotiations with Marsim inconsideration of permitting access over Council's STP land.  | Subsequent to Council's letter of 12th June 2008, Council resolved on 24th June 2008 that Marsim should seal a portion of Burri Road adjacent to the northern boundary of the subject site for a distance able to be funded by the equivalent value of the STP land dedicated as a public road.  Marsim agrees to this proposal and will incorporate this into its Statement of Commitments |
| 28. | Internal Collector Roads  Council confirms its requirement that the internal collection road be constructed to Council's standards and dedicated to Council as a public road.   | Noted and agreed.   |
| 29. | Lot Sizes  Council confirms that it has no objections to the proposed allotment sizes.  | Noted   |
| 30. | Exhibition - Alterations to access road As discussed with the Department of Planning, Council believes that the proposed alterations to the access to the site will not necessitate re-exhibition of the Concepts Application.  | Noted and agreed.   |
| 31. | <ul> <li>Flora and Fauna Habitat Corridor         The Department of Planning has requested that Marsim create a viable habitat corridor in the south western portion of the site by extending the riparian corridor that runs in a north westerly direction through the site from the SEPP 14 wetland to the western property boundary.     </li> </ul>   | Agreed. Marsim has subsequently consulted with officers of the Department of Planning and resolved the location and form of habitat corridor to be provided. This has now been incorporated into the revised Concept Application.   |
| 32. | Rationalisation of Lot Layout in NW corner of the site The Department requests that Marsim considers adjusting the position of Lot U1-1   | Marsim has subsequently discussed this issue with officers of the Department of Planning and has explained that a stub connecting road has been incorporated into the current   |

further to the north in order to consolidate design in order to connect to a parcel of the green connections to the west. land currently zoned Rural 1A. It is not feasible to relocate Lot U1-1 to the north as it would require the relocation of the stub connecting road to a location where the gradients of the topography are too steep to accommodate a roadway. The Department has accepted this and has agreed not to pursue this issue. 33. **Southern Access Road** Agreed. See item 25 above. The Department has requested the southern access road to be relocated as requested by Council STP Buffer 34. Agreed. This issue has since been discussed The Department has requested that the with officers of the Department and it was Concept Plan be amended to exclude 38 agreed that Marsim would seek to relocate lots comprising lots L20 - 4 to 9 inclusive; L21 as many of the 38 lots removed from the - 1 to 11 inclusive; and L22 1-16 inclusive and Concept Application in the southern and to create a super-lot which can be the central portion of the site without extending subject of further consideration upon the the development area. submission of a separate development application which satisfies the Department and Council that the relevant odour and noise management criteria for residential development have been or are able to be achieved. **Statement of Commitments** 35. Noted and agreed. The Department has directed that the Statement of Commitments need to be amended to reflect any amendments to the proposal and indicate the party responsible for carrying out the commitment. The recommendations of the Cultural Heritage Assessment are to be incorporated into the Statement of Commitments. Rosedale Association Water Management Protection of Saltwater Creek and Bevian Saltwater Creek has been given then same Wetland The ecological importance of manipulating consideration as Bevian Wetland. The the water balance has been recognised by stormwater management measures have the Proponent in the case of the SEPP 14 been designed to mimic the hydrology especially for the smaller storms. Section Bevian Wetland. But Saltwater Creek, an offsite ICOLL has not been given the same 10.8 of the Patterson Britton & Partners Water consideration. This ICOLL is a nursery habitat Management report is entitled "Saltwater for several fish species, especially black Creek Hydrology". This demonstrates that bream, snapper and mullet. the pattern of runoff volume is maintained. The ICOLL has experienced massive fish-kills Section 10.10 of the PBP Water Management in recent decades, the most recent early this Report is entitled "Stream Erosion Index" year, after bottom sediments were disturbed which demonstrates that the flows to during a storm inflow event, probably Saltwater Creek would not adversely impact exhausting the ICOLL's available oxygen. on the stability of the creekline. Alteration to the hydrology has increased Most of Section 10 of the PBP Water the frequency of opening to the ocean over Management Report is devoted to that of a comparable ICOLL nearby whose

catchment is undisturbed.

We see this situation as urgently in need of remedy. Water management using Water Sensitive Urban Design (WSUD), appropriately sized riparian buffers and other measures, will contribute to returning the hydrologic regime to approximately its original, forested situation. Under those conditions, the ecologies of each will gradually improve. They may not return to their original state but they will function far better than if existing conditions are merely maintained.

The proponent's site occupies nearly all of the Wetland catchment and almost half of the ICOLL catchment. The adjacent Rosedale Farm development (MP 06-0038, currently lodged as a concept plan with DoP) will occupy another 20% of the ICOLL catchment. The proposed conversion from rural to urban land use provides a once-only opportunity to provide the best possible conditions for the long term recovery of both water-bodies, rather than perpetuating and accelerating their degradation.

We are concerned that the significance of Saltwater Creek to the local land and marine environment has not been recognised in full despite a number of assurances in the EA. It was not named specifically in the Directors General's Requirements and was only mentioned for the first time in the November 2007 Environmental Assessment.

It is an ICOLL with a fragile ecology and as an estuary it is an extension of the Marine Park. As an urban estuary used for both primary and secondary contact uses, there are serious concerns of health and amenity to be considered both on Rosedale Farm and in Rosedale Hamlet.

In view of the twin proposed developments currently listed with DoP (MP 05-0199 and MP 06-0038) with their combined potential and likelihood to adversely affect the two waterbodies, the Rosedale recommend that:

Any development in these catchments must not only be required to adopt the most stringent protective measures for both receiving bodies but have as a condition of consent that they must be rehabilitated to the fullest extent that we know how. demonstrating that the runoff water quality to Saltwater Creek would be improved.

The recommended buffers and WSUD measures are considered adequate and is consistent with best practice measures. Water Quality and Quantity Modelling also indicates that there will be an improvement in overall water quality and the surface water flows will be maintained.

The Department of Primary industries, Department of Water and Energy and the Department of Environmental and Climate Change have all supported the proposed buffer and stormwater management measures.

In recognition of the importance of the Bevian Wetland and Saltwater Creek ecosystems, the ESMP requires the achievement of performance based targets for habitat management restoration watercourses, regeneration of adjoining wetland vegetation.

The proponent has adopted restoration measures that are over and above current practices in the local region. Additional restoration measures are considered unnecessary.

The importance of Saltwater Creek has been recognised by mimicking the existing hydrology and improving runoff water quality.

The riparian vegetation would be protected in a riparian corridor and the habitat value of the existing dams would be improved with planting of further macrophytes.

- This implies that a similar degree of rehabilitation is required in the catchments that drain into them to avoid downstream impacts on these significant biodiversity habitats.
- The approach must be whole-ofcatchment. This requires that the two major developers integrate their planning to the extent that there is a smooth ecological transition across cadastral boundaries. It is imperative that this be a condition of consent.
- There is therefore a need for a unified or <u>Integrated Master Plan</u> that sits above and across all the individual Concept Plans, even though they may be approved at different times.

An Integrated Master Plan should identify biophysical constraints to urban development and observe how they can be accommodated to the <u>satisfaction of the environment</u> rather than to satisfy development imperatives alone.

An extensive array of best practice stormwater management measures are proposed in the development to manage runoff to support the rehabilitation of the creeklines.

Other matters noted

# 37. Defining Natural.

There are repeated references in the EA to 'natural' in relation to such matters as water quality, function of Saltwater Creek and Bevian Wetland, values to be restored, etc. However the issue is confused.

The natural, ie the original, environment has been grossly modified, mostly degraded, and any references to 'natural' in these contexts should strictly refer to what existed before these changes occurred, as the earlier Planning Assessment Report states. It is clear that the Proponent interprets 'natural' to mean 'existing.' We contend that water quality and flow benchmark data taken from existing levels are not natural and are invalid here. The only valid benchmark data have yet to be either collected in the field or generated from modeling catchment behavior under full forest cover with no dams. Improvement over highly modified levels is of little value and will simply lead to a continuation of the degradation we try to prevent for an ICOLL and a wetland which are already under considerable stress.

We request that the use of 'natural' be restricted to the undisturbed state of the catchments and to the processes operating in pre-disturbance times and that it be acknowledged that 'existing' levels of different attributes are understood to be highly modified and not natural.

There is no confusion in relation to the Patterson Britton & Partners Water Management Report about the adopted targets for runoff water management.

The site has been in a rural condition for many decades. The aim was to improve on the existing conditions in the creeks/wetland with an integrated strategy of retention and improvement of riparian vegetation, establishment of riparian corridors to prevent further degradation and improvement in runoff water quality.

Paterson Britton refer to existing conditions. Water quality monitoring provided an estimate of pollutant load exports which were high. The estimated improvement in runoff nutrient load was a 60% improvement for total phosphorus and 31% improvement for total nitrogen. This is considered to be a significant contribution to the long term improvement in the conditions of Saltwater Creek and Bevian Wetland.

#### 38. Control of the runoff balance

We assert that to improve the ecological health of the Bevian Wetland and Saltwater Creek, not merely to maintain it, it is essential that the original pattern of runoff should be restored. The EA claims that the use of WSUD principles will ensure only that the existing flow regime is maintained. Details are given in Appendix 24 of the EIS, which states that "the best practice water sensitive urban design approach would maintain the existing runoff volumes and the balance between surface and subsurface flows (groundwater)". This tenet is discussed above under "Natural."

The EA uses the MUSIC model to demonstrate that this requirement will be satisfied. However:

- (a) the analysis is based on flimsy and inappropriate site data; and
- (b) assumptions about the performance of a network of swales, rain-gardens, infiltration ditches, detention ponds etc may be wishful thinking and are unsupported by actual performance data.

These are discussed below.

3.3.1 Poor site data - soil No comprehensive geotechnical investigation has been done for the site. The only relevant site data obtained for the EA was a series of soil infiltrometer measurements at eight sites. The extensive background knowledge on soils held by Council has apparently not been used here.

- We recommend that the MUSIC modelling exercise be revisited using more realistic parameter values.
- We recommend that the MUSIC modelling exercise include undisturbed catchment conditions, ie full forest or woodland cover and no dams.

Assumptions about WSUD component properties

The MUSIC analysis makes quantitative assumptions about the effectiveness of swales, infiltration trenches etc to capture surface runoff and dispose of it slowly into watercourses and the Wetland. To our knowledge, there is no demonstrated site where the performance of WSUD components has been measured. There is a difference between assuming that a design component will operate as required, and checking to ensure that it does so.

We applaud the Proponent's commitment to applying the principles of WSUD in planning

The assessment of the impact on hydrology was based on the industry best management practice methods including the MUSIC model. Soil testing was undertaken at the site of the major infiltration basins to provide site specific data. Reliance was not placed on general or regional soil data

for this site. However, we insist on ensuring that, as described in the EIS, they do indeed work as intended, and thereby protect the sensitive Bevian Wetland and Saltwater Creek from further degradation.

Runoff water quality monitoring will be undertaken by the proponent to confirm performance of the proposed stormwater management measures.

#### Water Monitoring program

The Rosedale Assoc recommend that Planning should require the Proponents to appoint an independent agent to implement a program of water monitoring and evaluation to test not only the performance of the WSUD components at the site but the overall hydrologic performance. This would include the patterns of inflow and outflow including transport of materials for the Wetland and Saltwater Creek both at the eastern boundary and the waterbodies themselves.

Later stages of development should then adapt WSUD components or other facets of water management appropriate to ensuring that the water management objectives as described above are achieved, in particular, restoration of the original, ie natural, flow regime into Bevian Wetland and Saltwater Creek.

#### Recommendation

 that an independent agent be appointed to conduct a rigorous programme of monitoring that drives modifications to the Water Management Program and the Ecological Site Management Plan to ensure that specific outcomes are achieved.

# <u>Monitoring During Different Construction</u> <u>Stages</u>

The development will be spread over three major Stages each with its sub-stages of infrastructure construction (roads, drainage etc), public space landscaping, house building and domestic landscaping. Multiple sub-stages will be in progress simultaneously and since the impacts of each sub-stage are additive, careful attention to scheduling the additional monitoring effort required during resulting peaks will be required.

This is particularly so during infrastructure construction when the potential for off-site environmental damage is greatest: a single event during the critical construction phase could collapse the ecology of either the ICOLL or the Wetland beyond recovery. The Proponent should be required to respond accordingly to these critical periods so as to

As noted above, runoff water quality monitoring will be undertaken by the proponent to confirm performance of the proposed stormwater management measures.

Noted

maintain monitoring at effective levels.

#### Recommendation

 The monitoring programme must be sensitive to the changing levels of potential environmental impact arising from different combinations of construction stages over time.

#### Scheduling of monitoring activities

Monitoring is planned for each of the ICOLL and the Wetland (Ecological Site Management Plan, Appendix 21).

As a component of the overall monitoring program we advocate elsewhere, the Proponent should be required to pursue a much more rigorous monitoring program of both water bodies, including sampling directly from each, employing appropriate measures and sampling regimes for the early detection of adverse impacts. It needs to be made quite clear that both water bodies must be monitored indefinitely. Agreement should be put in train before construction begins for an appropriate authority to take indefinite responsibility for the program eventually.

Recommendations:

- A monitoring program must operate throughout the construction and indefinitely afterwards.
- The Monitoring Program must be a major component of the Ecological Site Management Plan and the principal driver of adaptive changes to it.

#### Bevian Wetland Buffer

The proposed buffers against the Wetland (core 40 m, additional 10 m; EA p 138) are generous but not enough to fully remove the effect of the Centre Zone due in Stage 3 (Appendix 16a). Its proximity to the Wetland should be determined by a zero impact on the Wetland, not by the amenity provided by it.

#### Recommendation

 that the community centre be relocated as far away as is necessary to achieve a zero impact on Bevian Wetland.

that the effective buffer around Bevian Wetland be defined by biophysical factors reflecting the true and effective function of its riparian zone OR 100 m whichever is the greater.

Runoff water quality monitoring will be undertaken by the proponent during construction phases and for two years into the operational phase.

Runoff from the community centre can be managed to flow away from the wetland into the stormwater management measures. The location is considered appropriate from a water management perspective. The buffer to the wetland is also considered adequate with regard to water management from the development.

#### 39. Riparian Management

The Rosedale Assoc challenge the classification of Saltwater Creek streams as <u>Category 3</u> - <u>Bank stability and water quality</u> (10 m buffer). We are strongly of the opinion that the management objectives for all but the uppermost reaches of these streams is <u>Environmental Corridor</u>, giving them <u>Category 1</u> rating (40 m buffer).

Relegating them to Category 3 belies their potential to not only extend wildlife, especially birds, but to utilise natural biophysical water quality controls more and depend less on engineering solutions. We disagree with some of the upper reaches being sacrificed to building lots. Extending additional corridors north and westward supplements (for birds at least) the proposed continuity and connectivity with Mogo Forest provided by the major E-W corridor (EA p 101). The values of continuity and connectivity should be paramount in a development claiming to be environmentally responsible.

We also challenge that streams feeding Bevian Wetland will have their riparian function replaced by engineered structures. While this approach may satisfy the relevant authorities, it places the SEPP at greater risk than if Category 3 riparian corridors were to be established and become fully functional.

We disagree with the allowance of 'pinch' spots where the riparian strip is reduced so long as the adjacent APZ is landscaped to replace the riparian functions. Firstly, we understand that APZs are required to carry a low fire fuel load which could not infer riparian functionality, secondly, as we state above the riparian buffer should be wider, not narrower.

#### Recommendation:

- Reclassify streams to Category 3 to permit upgrade of corridor, connectivity and filtration functions
- Eliminate pinch points where at all possible and avoid relying on the reduced capacity of APZs to act as filters.
- Restore the riparian vegetation to the streams feeding the Wetland and minimise reliance on WSUD structures for flow and water quality control

From a hydrological function, the creeklines on the northern half of the site are considered Category 3 and the DWE has supported this view. The site is located in the headwaters of Saltwater Creek.

Notwithstanding this categorisation, the proposed riparian corridor widths are generally in excess of the allowance required. This is why DWE agreed that the small number of pinch points in this corridor would not have a significant adverse impact on the function and rehabilitation of the corridor.

The DWE agreed that there were no streams on the southern portion of the site. The topography of this southern area is very different to the northern area consisting of broad valleys exhibiting shallow sheet flow of runoff over a broad area.

40.

#### Boardwalk over wetland edge

The Rosedale Assoc believes it is not acceptable to put an over-water boardwalk in a SEPP Wetland. It brings visitors into the Wetland proper and is an efficient rubbish conduit directly into the water. This feature would be better relocated to the eastern boundary but kept well away from the top waterline for the same reasons.

Wherever the boardwalk is located, impact on the Wetland must be minimal during construction, there can be no machinery allowed on-ground neither can there be any on-ground foot traffic. All operations must progress forward from the existing platform as is practiced in the construction of mangrove boardwalks.

#### Recommendation

 Relocate boardwalk from western side to eastern side of wetland The boardwalk has been deleted from the Concept Application

#### 41. Roads and traffic

#### Access To George Bass Drive

Option 1. The Rosedale Assoc remain unconvinced that the engineering solutions proposed for the SW option (Option 1, Appendix 44) will moderate runoff and reduce the transport of nutrient and sediment to levels approaching those of the formerly undisturbed condition, levels which we argue elsewhere are required for the long term rehabilitation of the Wetland. Any engineering shortfall here will not readily be rectified, if ever, and will merely perpetuate the degradation of the Wetland.

Peak hour traffic congestion in the vicinity of Option 1, the culvert over the Wetland and the Barlings Beach access are in close proximity where the road takes a lazy-Sbend. This is a recipe for traffic congestion and accidents in peak hour especially with private and commercial school traffic in the mornings. Also, we are concerned that future traffic engineering will encroach further on the Wetland.

Option 2 Option 2(SE) is on a straighter road with better visibility. We would normally stand for the protection of vegetation, especially EECs, but we disagree with the consultant's view on the magnitude of the Option 2 ecological impact. The road design should allow for the easy passage of fauna, perhaps via spaced underpasses, into the wetland. The impact can be reduced by moving the road closer to the STP, malodour

The location of the southern access has been relocated from the Bevian Road to a location adjacent to the western boundary of the Tomakin STP. Consequently the issues raised by the Rosedale Association in relation to the impact of the access road on the wetland are no longer relevant.

notwithstanding. The area of disturbance as a measure of impact then becomes of less significance. An area of 0.22 ha of disturbed spotted gum forest will be lost but there is far greater opportunity for replacement plantings here than at the Option 1 site.

#### Recommendation

- We consider that the long term ecological health of the Wetland surpasses considerations of the EECs involved and we urge adoption of Option 2
- In the event Option 2 is adopted the existing gravel road should be retained to provide facilities for pedestrian and cyclist traffic as well as emergency access, but must be re-engineered to provide the same protection to the wetland had Option I been selected.

# <u>Coordination with Rosedale Farm</u> <u>Development</u>

There appears to be no evidence of an effective coordinated traffic plan between the two developments (MP 05-0199 and MP 06-0038). The EA makes no mention of the additional traffic to be generated by the Rosedale Farm development (approx 140 lots). Its access to George Bass Drive will be opposite the access to South Rosedale Hamlet (Rosedale Parade) and the combined traffic levels will be many times greater than at present, the more so because it is the only vehicular access to Rosedale Beaches.

The EA is deficient in that the traffic study makes no mention of the proposed Rosedale Farm development, and the consequent intensified traffic volumes that will be generated along a highly dangerous stretch of George Bass Drive, at the NE intersection with George Bass Drive, and at the Rosedale Parade intersection.

#### Data collection

The Rosedale Assoc can find no reported date for the collection of the road use data used in the transport assessment so do not know if it was collected during peak tourist (holiday) season when traffic volumes are significantly higher or in the off-season. It has been contended that the Shire population doubles at Christmas and Easter while Batemans Bay population quadruples. Severe traffic congestion occurs at the major centres at these times. Even allowing

• The subject development has taken into consideration the cumulative effect of all developments in the vicinity including the Rosedale Farm development.

for some error in these estimates, the data collected for this assessment will be grossly under-estimated if collected during off-season.

#### Speed restrictions.

The speed limit between Malua Bay and Tomakin should be dropped to a uniform 70 km/h, not the 80 km/h proposed.

 Noted. However, this is a matter for Council and the RTA

# 42. Community services and infrastructure

#### Medical

The addition of over 2000 houses (Bevian, Rosedale Farm, Barlings Beach) in the next few decades will require a quantum leap in medical services at all levels. The proponent claims these are available but it is well publicised that area health and medical services are grossly under capacity.

#### Schools and Education

In response to Appendix 38, a letter from the Department of Education stating that schools in the catchment of the subject development are currently at or over capacity, the Proponent merely lists the schools as evidence of there being many from which to choose and dismisses the point about capacity with a brief reference to s94 contributions. It should be of concern that an unfair proportion of the cost of providing schools might ultimately fall on taxpayers. We seek better assurances than this from all parties before consent is granted.

#### Recommendation

 that a firm commitment be sought from the relevant parties to increase infrastructure and services capacity to accommodate the future demand from the large developments in the local area.

#### • Community Infrastructure

The State government through its South Coast Regional Strategy has assessed that within the Eurobodalla Shire, there is a demand for 10,700 new dwellings over the next 25 years.

The manner in which the State provides infrastructure such as Hospitals Schools, Police etc is a State responsibility and beyond the scope of this application.

# Coastwatchers Association

#### 43. Protection of Bevian Wetland

- Southern Road Access
  - The Association is sceptical that the Bevian Road can be upgraded without major impacts on the wetland;
  - Was the alternative route adjacent to the STP fully investigated;
  - o Was there any investigation of the possibility of purchasing land from the owner of Rural 1c land on Thomsen Place(the cul de sac which backs onto the Marsim site) so that Barlings Drive could be used as the Southern access.

The location of the southern access has been relocated from the Bevian Road to a location adjacent to the western boundary of the Tomakin STP. Consequently the issues raised by the Coastwatchers Association in relation to the impact of the access road on the wetland are no longer relevant.

#### Southern Intersection with George Bass Drive

 The southern intersection with George Bass Drive is close to the intersection of the new Barlings Beach development. The Association raises concern that the Bevian wetland will be partially filled to allow the Bevian Road to be diverted to a roundabout that serves both developments.
 wetland; See above comment.

# Proposed Cycleway /Boardwalk

- Objection is raised to the location of the boardwalk in the wetland and recommend its relocation to the eastern side of the site
- The pedestrian /cycleway to the beach could use land that is currently cleared and old Crown roads near the powerline easement;
- If necessary it may be possible to negotiate with Council to use the western outer edge of land on which the Sewerage Treatment Plant is located;
- As Marsim own the Barlings Beach caravan Park, they should provide access through that site to the beach

• The boardwalk has been deleted from the Concept Application

# • Beach Access through Caravan Park

There is no nexus between the subject development and the Caravan Park site across George Bass Drive. It is therefore considered that there is no basis upon which to pursue such a request.

# Poorly Located Commercial / Community Facilities

- The commercial and community facilities should be located towards the centre of the site; especially if the northern part is to be developed first
- Centrally located shops would be surrounded by residents who would pick up the litter. This has been the experience at Tomakin and Mossy Point.

# Poorly Located Commercial / Community Facilities

As noted above, the Commercial/Community facilities have been located in the southern portion of the site where population densities are greatest rather than in the geographic centre of the site.

With the relocation of the southern entry road, the commercial facilities have moved north of the bio-retention basin therefore the issue is no longer relevant.

It is considered that the proposed location will be more accessible to the majority of the site population and facilitate a greater proportion of the population to walk or cycle to the shops and community/commercial facilities.

#### 45. • Hydrology

- The EA states that the run-off from the site will be approximately the same after the development as before it (in regard to above and below ground volumes). However, the Association raises concerns as to the data about the soil properties used for the modelling. The Association is advised by a Hydrologist that the infiltration is massively overestimated.
- Many of the roads "run straight up and downhills which make runoff hard to slow. Vegetated swales will need to be designed so that they do not scour";
- The Bevian Wetland and its surrounding ecosystems could be degraded if private bores are permitted adjacent to the wetland areas. A condition of Consent should prohibit private and community bores.

Soil sampling and testing along with infiltration testing was undertaken at the major basin locations in the southern catchment. This work was undertaken by a large reputable geotechnical firm with considerable experience in this type of investigation. This has provided site specific and reliable data on infiltration rates.

The swales will be designed to suit the changes in topography and can form a series of cascading sections in steeper areas.

No groundwater bores have been proposed in this development.

# 46. • Topography and Lots

- The Association is concerned about the many small lots on steep land at the southern end of the site, near the wetland. In order to build on these lots, nearly all the land will need to be disturbed and there will be very little room for tanks; and
- o Some of the Rural 1c land is also constrained by steep slopes and should not be disturbed.

The slopes in the southern portion of the subject site, near the wetland, are approx under 20%. Lots in the Urban Expansion zoned land vary in size between 454sqm and 907sqm. The lots in the Rural 1c Zone range from 557 sqm to 4,078 sqm

As noted previously, in terms of the location and design of dwelling on steep sites, there are many techniques for successfully dealing with slope, such as terracing, stilt housing and cantilever slab construction to ensure that slope is sensitively managed and developments with a high quality are achieved.

# 47. • Management of Community Lots

- o The meaning of Section 2.1.5 of the report is unclear. The report says there will be one "community lot" then says there will be 20 community title lots;
- Does the Environmental Protection Lot include all the Conservation Corridors and the Conservation Zone around the Bevian Wetland?
- o The Community Management
  Statement will determine whether
  the final development implements
  the concept plan and will bind the
  Community Association. It should
  therefore contain al the relevant
  recommendations of the
  Ecological Site management plan;
  and
- o The Community management Statement needs to be exhibited

There are 13 precincts being created in order to release land within the development on a staged basis. Under Community Title Legislation, each of these 13 Neighbourhood Precinct lots will be registered as Community Title Lots as outlined on drawing CA-S06.

Within each registered Neighbourhood Precinct, land will either be sold privately (of which there will be 792 registered private owners) or become part of the community land managed and owned by all owners (of which there which there will be only 1 Community Lot).

The remaining land has conservation value and will registered on a staged basis into 6 Ecological Protection Lots also owned and managed by the community.

for public comment before the concept plan is considered.

When a Neighbourhood Precinct Lot is registered, the community land within the Neighbourhood precinct will form part of the Community land lot already registered.

#### 48. • Other Issues and Comments

#### o Population projections

The population projections have been queried. The Association is concerned that the incoming population associated with the planned new 806 lots will more than double the existing local population;

#### Population Projections

The population for Rosedale and Guerrilla Bay of 744 as shown on page 121 of the Environmental Assessment Report was taken from data supplied by Australian Bureau of Statistics 2001. The figure of 197, shown on page 23 is a typographic error and should be 744.

The more relevant statistic is that of the population projections. Population growth estimates have been prepared by the Department of Planning Transport & Population Data Centre. The Department has estimated a population increase of approximately 14,557 buy 2031. The number of additional new dwellings required, at an occupancy rate of 2 persons per dwellings plus a 20% allowance for holiday homes, is 7.810.

The South Coast Regional Strategy has identified a higher figure of 10,700 dwellings in the Eurobodalla Shire over the same period.

It is therefore evident that there will be a significant increase in population throughout the Shire over the forthcoming 25 years.

o <u>Conservation Reserves</u>
The report should acknowledge the nearby Coastal Protection area and that Guerilla Bay and Burrewarra Point are listed on the National Estate

o <u>Risk Assessment (Pages 97-99 of EA)</u>
The table relating to Risk Assessment should identify who will undertake the mitigation measures that are not to be undertaken by the proponent.

o <u>Estuary Management Policy</u>
The increase in boating activities
associated with the Marsim
development will directly add to the
erosion problems within the Tomaga
Estuary.

Noted

Noted

# Estuary Management

As noted, the South Coast Regional Strategy anticipates a demand for 10,700 new dwellings within the Eurobodalla Shire over the next 25 years and a population increase of approximately 60,000 throughout the south coast over the same period. It is considered unreasonable to attribute too much significance to the potential boating activities of residents of the Marsim development in terms of their effect on erosion problems in the Tomago Estuary.

#### o <u>Batemans Bay Park</u>

The additional population will increase sewage flow into the Tomakin STP and the outfall occurs on the boundary of Sanctuary Cove at long Nose Point.

# Plan for Fuel Management: (iv) Community Facilitation and Support

It is not clear who will provide the Community Facilitation and Support.

# Consultation with Health <u>Department</u>

There has been no formal response from the Health Department. The development will have a significant effect on medical and hospital services that are "overwhelmed, especially in holiday seasons".

# o <u>Ecological Site Management Plan</u> (ESMP): Attachment 21 to EA

The recommendations of the ESMP may not be binding on the Community Association

# o <u>Use of Area Near STP as Possible</u> <u>Future tourist Area</u>

The grassed area near the STP is identified in Attachment 47 Map 17, as a possible futurity tourist facility. The Association considers that this area should not be used for uses other than relocation of the shared cycleway, open space and regeneration of the remnant ecosystems.

#### Batemans Bay Park

The Tomakin STP has been specifically designed to cater for the subject development and others in the vicinity. Monitoring of the operation of the STP will properly be the responsibility of the relevant water and sewerage authority.

The Community Association in partnership with Council will be responsible for implantation of community facilitation and support.

#### Health Facilities

There are numerous medical facilities in the area as detailed in Section 2.3.2 of the Environmental Assessment report.

The responsibility for augmenting public health facilities, where considered necessary, is that of the State government, not local government or individual developers

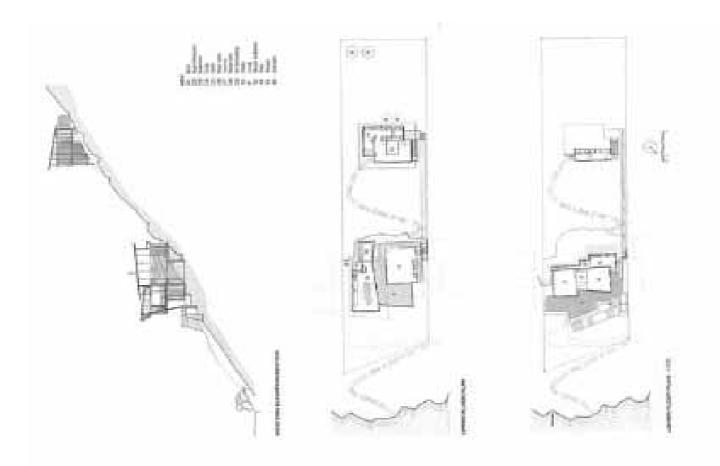
The ESMP is the primary site management Plan on Ecological matters; as such the conditions of approval will state that the ESMP is to be binding on the applicant, registered Proprietor and the Community Association, Through the Conditions of Consent and the Community Association Statement.

Partial restoration of the area is proposed. With the exception of offsetting the loss of vegetation for the purposes of the alternative South eastern access (1 hectare). No further restoration areas are required. Given that this land is not ecologically constrained and it is within a potential odour zone, other more appropriate uses can be determined for this area.

# **ATTACHMENT 1**

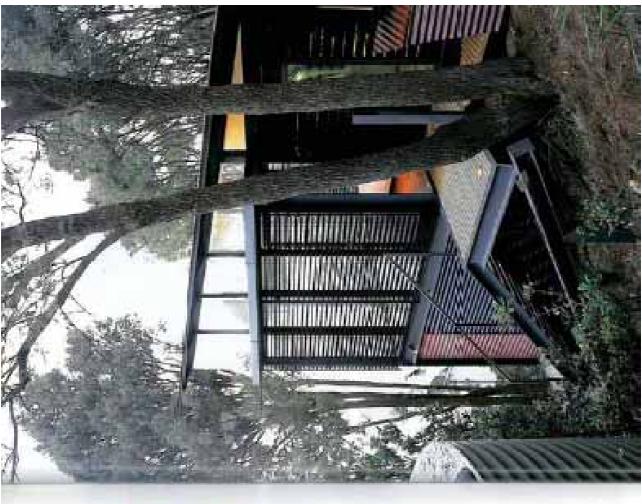


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