

COBAKI LAKES RESIDENTIAL DEVELOPMENT

RESPONSE TO DEPARTMENT OF PLANNING SUBMISSIONS

Issues	Proponents Response
Planning Framework	
Development Code	
<p>It is understood that the Development Code will formally be included in any future PPR documents. The Department has reviewed the copy of the draft Code formally submitted on 18th March 2009 against the State Housing Code and provided comments in an email dated 14th April 2009. It may not be necessary to implement all of the Cobaki Code, if the State Code achieves the same objectives.</p>	<p>The Cobaki Development Code has been prepared to enable a wide range of complying development on different size lots. A detailed comparison of the NSW State Housing Code and the Cobaki Development Code and the applicability of the State Housing to only a very minor proportion of the development have been submitted to the Department of Planning.</p>
<p>For whatever part of the Cobaki Code e.g. the aspect governing lots under 450 sq metres, is not covered by the State Code, to implement the Cobaki Code the best mechanism would be for the Minister to make an Order under section 75R(3A) and directly amend the Housing SEPP to insert the Cobaki Lakes Development Code (in an appropriately drafted form) as a "Schedule 3 Variation". This avoids the need to make an Order under section 75P(2)(d) and also leaves the exempt and complying provisions in the one place rather than having a separate order.</p>	<p>The legal mechanisms to enable the Cobaki Development Code to apply to all future development in the Cobaki Lakes estate have been submitted to the Department of Planning for assessment. There needs to be a process where the non complying development can be assessed by the Tweed Shire Council as a development application under Part 4 of the EP&A Act.</p>
<p>However, in order to make such a determination, it would be useful for the following to be considered (these are the aspects that Council's must address when they seek any variations from the Housing Code).</p> <ul style="list-style-type: none"> - Why should Cobaki Lakes be excluded from the application of the General Housing Code (complying development)? What is the justification for the alternative code? 	<p>The lot sizes proposed in the Cobaki Lakes development are mostly less than 450m², and those that are 450m² and above are generally proposed with zero lot lines. This means there is relatively little housing to which the State Housing Code could be applied, and where there are some larger lots on the sloping areas, these generally have to include APZ's for bushfire protection which precludes the use of the State Housing Code. Detailed reasons and justifications for the use of the Cobaki Development Code have been provided to the Department of Planning.</p>
<p>By excluding some lots from the application of the General Housing Code how will this likely to impact on the uptake of complying development under the General Housing Code in the Local Government Area?</p>	<p>All of the development in the Tweed Shire external to the Cobaki Lakes development will be assessed under the State Housing Code unless the lot is subject to bushfire regulations.</p>
<p>Could a local variation to a development standard(s) allow for the inclusion of the lot(s) to the application of the Code?</p>	<p>The type of development proposed in Cobaki Lades is integrated housing on different size allotments.</p>

Issues	Proponents Response
	<p>There are no development standards which can provide guidelines for the type of development proposed in Cobaki Lades. The guidelines in the Development Code include many of the parameters and standards developed for the Urban Growth Centres around the Sydney Metropolitan area. It is considered that the legal mechanisms sent to the Department of Planning are the most appropriate for implementation of the Cobaki Development Code.</p>
Urban Design	
<p>There is insufficient information within the Precinct Development Matrix to assess the Concept Plan. The following information should be provided:</p> <ul style="list-style-type: none"> • Locations of low/medium/high density residential development, business parks, mixed use, education, community facilities etc, across the site. It is important for the Department to understand where these areas will be in relation to each other, and how their location relates to the road layout, open space and environmental protection areas. 	<p>The whole of the residential areas will be developed with a mix of housing types and lot sizes. The areas adjacent to the town centre will have a slightly higher residential density to reflect access to services. The areas which are on slopes greater than 10% will have larger lots and lower density. The dwelling density varies between 18 and 30 dwellings per nett hectare depending upon location. There will not be any discrete areas of low medium or high density in the estate. There is no business park area proposed in the Concept Plan. The town centre and neighbourhood centre areas will be mixed use. The school sites, central open space and environmental protection areas are detailed and located on the Concept Plan. The local park areas for each precinct have not been identified at this stage. There is a commitment to provide the requisite passive open space with the detailed subdivision applications that will be submitted to for assessment and approval as development proceeds. In this detailed planning, the size and location of the local park areas will be to the Tweed Shire Council's requirements. The active open space will be located in the central spine and the area will be the amount required by Tweed Shire Council. The main collector and arterial roads are detailed and located on the Concept Plan.</p>
<p>The EA states that the Concept Plan is expected to propose employment nodes within Cobaki itself at its Town Centre and also at its eastern entrance, conveniently located to transport infrastructure. However, the Concept Plan includes a Town and neighbourhood centre.</p>	<p>The Cobaki Lakes development is proposed as a master planned community with schools, retail/commercial, community and recreation facilities. There is no employment land proposed. An expert on retail economics, Conics Pty. Ltd., has examined the originally proposed site and advised that any employment land located on Boyd Street in the Cobaki Lakes development would be too small and isolated to be viable or host any significant amount of employment.</p>

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<p>However it does not identify an area of employment lands at the eastern entrance. If the Cobaki Lakes community is to be self-contained (as stated in the EA) the Concept Plan should include an area for employment lands, identify the location of this area on the Concept Plan and justification provided for its location and size.</p>	<p>Given that there are large areas of nearby employment land yet to be developed in the Gold Coast Airport and in the land under the southern runway of the Airport it is not necessary or feasible to designate employment land in the Cobaki Lakes estate. Significant employment will be created in the retail, restaurant, recreation and commercial areas of the town centre and neighbourhood centre of the Concept Plan.</p>
<p>There is insufficient information regarding the design of the town and neighbourhood centres. The nominated GFAs / densities in the centres appear to be extremely low. Please provide further details regarding the proposed centres, including location of town square, community uses, proposed circulation, traffic access and circulation and public transport.</p>	<p>The GFAs of the retail and commercial facilities are those required to service the ultimate population of Cobaki Lakes. This land is designated as mixed use and some unit development is also proposed. In addition to the specified retail/commercial and community service GFAs there are a number of uses which will need space. For example, the roads, rear access ways, car parks, loading and unloading docks, landscaped areas, town square, setbacks and buffer areas. Residential product such as SOHOs and terrace housing would also be suitable for this mixed use area. The development matrix allows a wide range of development uses in these centre such as libraries, medical and health facilities and indoor recreation facilities. It is considered that the GFAs/densities based on nett area in these centres are satisfactory. The detailed planning for these centres will be carried out and submitted to Tweed Shire Council for assessment and approval. This will include all the traffic access, pedestrian movements and a public transport mode. It is not possible to pre-plan these centres in too much detail until the characteristics and growth rate of the incoming population have been established.</p>
<p>There is insufficient information for the Department to assess product types on lot sizes less than 450sqm. It is noted that the proposed Design Guidelines will address this issue and enable the Department to assess smaller lot sizes and the variety of product types. Further information is required in relation to design controls, such as private /communal open space, heights, deep soil zones, maximum site coverage, external living areas, landscaping, amenity, privacy, etc.</p>	<p>The Cobaki Development Code addresses all of the issues associated with small lot integrated housing including solar aspect, privacy, streetscape, private open space and the legal process to control this type of development. This Code has utilised many of the development controls prepared for the urban growth centres in Sydney and enhanced them.</p>
<p>Traffic & Access</p>	
<p>More detailed information is required to justify the proposed road hierarchy within the site.</p>	<p>The road hierarchy within the site is in conformity with the Tweed Shire Council requirements for arterial, collector, distributor and local streets.</p>

Issues	Proponents Response
	<p>The Cobaki Parkway is a four lane arterial road to cope with all the traffic from development within the estate and from areas in the Tweed to the south. The Sandy Lane Road will be the main collector road for the development with two intersections with Cobaki Parkway. The capacity of Sandy Lane Road will be sufficient for all the traffic generation from the local streets leading into it. The road hierarchy is basically fixed by the topography of the site and the location of the residential areas. There is no opportunity for a different road hierarchy of roads without having collector roads too steep for public transport buses. The road hierarchy proposed is already approved by Tweed Shire Council and meets all of their requirements. As detailed planning is carried out for each stage of the development a subdivision and road layout development application will be submitted to Tweed Shire Council for assessment and approval. The actual intersection location and design for the distributor street onto the collector road will depend on detailed design. The critical issue is the capacity of the arterial roads and the collector roads. These roads are more than sufficient for the traffic generation from the future residential areas in the estate. The design of the distributor roads and local streets will not have any traffic capacity constraints. The Cobaki estate adjoins land which is not subject to any future development so there is no possibility of the distributor roads and local streets feeding to any other roads other than the Cobaki Parkway and the Sandy Lane collector road and these roads have been designed for the ultimate traffic generation within Cobaki. There is no alternative road hierarchy available.</p>
<p>It is understood that until the Boyd Street Interchange is constructed or an alternative appropriate traffic arrangement has been agreed to by the relevant Departments, the development will be limited to a maximum of 3,500 residential lots, as per the Deed of Agreement with the Queensland Department of Main Roads.</p>	<p>The Deed of Agreement contains a provision to that affect.</p>
<p>What other options have been considered to manage traffic beyond the 3500 lot threshold, if the Boyd Street Interchange is not constructed/approved? The Department needs to be certain that appropriate access can be provided to the site.</p>	<p>The Boyd Street overpass has been constructed for the future interchange design. There is no certainty that the interchange will be constructed before the 3500 lot threshold has been reached.</p>

Issues	Proponents Response
Who will fund the Boyd Street Interchange should it be constructed/approved?	The Tweed Shire Council has included the cost of 50% of the Interchange in its road contribution plan (T.R.C.P.). The funding of the remaining 50% will be by the Queensland DMR and the N.S.W. RTA and other traffic generators in Tugun benefitting from the Interchange. Cobaki Lakes will be funding its proportion of the Interchange costs through its contributions to the Tweed T.R.C.P.
It is understood that a Pacific Highway and Adjacent Arterial Roads Master Plan Steering Committee has been formed by DMR, TSC, GCCC and the RTA to determine if the Boyd Street Overpass should be upgraded to a full interchange. Further information should be provided in regard to the status of the Committee's discussions in this regard.	A letter from the Tweed Shire Council in relation to the status of the Committee's discussions has been forwarded separately.
Flora & Fauna	
An insufficient level of assessment of the impacts on threatened species (flora, fauna or EECs) affected by the proposed development footprint has been undertaken to give certainty to the maximum development footprint. If certainty is required in relation to total yield and final subdivision layout, the equivalent of a 7 part test must be undertaken on each affected species / community as part of the Concept Plan application.	The equivalent of a 7-part test has now been completed for each affected species / community as part of the Concept Plan application.
The proposed EEC offsets are not acceptable for the following reasons: <u>Revegetation does not constitute an acceptable offset.</u> The offset strategy includes revegetation (creation) and regeneration of EECs. The loss of an EEC cannot be offset by the creation of an EEC elsewhere. Reconstruction of ecological communities involves high risks and uncertainties for biodiversity outcomes, can take a considerable amount of time (50-100 years) and is generally less preferable than other management strategies such as enhancing existing habitat.	The Site Regeneration & Revegetation Plan (JWA 2009) provides for a combination of regeneration & revegetation techniques. These techniques in combination will ensure restoration of degraded areas and offsets for any vegetation removal. If land conservation is over and above that required to satisfy planning laws, and that conservation land is highly degraded, then rehabilitation of that degraded land should be seen as an acceptable offset. The level of significance of any loss of EEC's has been assessed by using the provision of Section 5a of the TSC ACT (1995) (7-part test).
<u>In any case, offsets should be quantifiable and be agreed prior to the impact occurring.</u> The EA states that the total area of freshwater wetland / Swamp Sclerophyll Forest on Floodplain EEC revegetated within the landscaped areas will be dependent on the location of landscaping and recreational facilities within these areas. As such a total offset area has not been nominated.	A number of Management Plans have been prepared to accompany the Concept Plan. The plans establish the principles and the strategic intent of the management actions. Where required for future project applications, the proponent will prepare site or issue-specific management plans detailing specific actions, the timing of commencement and completion, performance monitoring and mechanisms for corrective action.

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	<p>This approach is considered appropriate at Concept Plan stage. Whilst the total offset area is unclear for Freshwater wetland and Swamp sclerophyll forest at the Concept Plan stage, the following minimum offsets are applicable:</p> <ul style="list-style-type: none"> • Swamp sclerophyll forest on floodplain – 4.02:1 • Freshwater wetland –the replacement of 26.45ha of highly degraded wetland with a minimum of 8.89ha of regenerated wetland which will be protected in perpetuity is a reasonable ecological outcome in this instance)
<p><u>The minimum environmental offset ratio should be at least 2:1.</u> The following proposed offsets are inconsistent with this ratio:</p> <ul style="list-style-type: none"> i.) Swamp Sclerophyll on Floodplain (0.6:1) ii.) Lowland Rainforest on Floodplain (no regeneration proposed) iii.) Freshwater wetland (0.4:1) iv.) Swamp Oak Floodplain Forest (no regeneration proposed) v.) Saltmarsh (no regeneration proposed) 	<p>DECC's <i>Principles for the use of Biodiversity Offsets in NSW</i> does not refer to a minimum of 2:1 offset ratio. It is unclear where the DoP have sourced the minimum environmental offset ratio from as it is not referenced in the submission.</p> <p>The proponent disagrees that revegetation is not a suitable offset, particularly given that off-site offsets are mentioned previously and in other submissions from government agencies as an option as well as within DECC's <i>Principles for the use of Biodiversity Offsets in NSW</i>. If land conservation is over and above that required to satisfy planning laws and that conservation land is highly degraded then rehabilitation of that degraded land should be seen as an acceptable offset.</p> <p>Actual proposed offsets combining regeneration of degraded areas and revegetation works are as follows:</p> <ul style="list-style-type: none"> • Swamp sclerophyll forest on floodplain – 4.02:1 • Lowland rainforest on floodplain – 4.59:0 (no loss proposed) • Freshwater wetland – the replacement of 26.45ha of highly degraded wetland with a minimum of 8.89ha of regenerated wetland which will be protected in perpetuity is a reasonable ecological outcome in this instance) • Swamp oak floodplain forest – 23.3:1 • Saltmarsh – 1.08:1 (The entire 53.98ha hectares of Saltmarsh is currently degraded due to grazing activities and exotic grasses, and will be subject to restoration works).

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	In total, there will be a net gain of 13.14ha of EEC vegetation communities on the site.
Please provide further consideration to appropriate offsets for the loss of all EECs on site. If certainty is required in relation to total yield and subdivision layout, off-site offsets should be investigated as appropriate. The Department and the DECC would be happy to assist LEDA in finding appropriate offsets. The DECC's BioBanking Public Register may also assist in this regard.	Loss of EEC's has been calculated as the possible maximum loss based on the concept plan. However, there may be opportunities to retain EEC's within the proposed development footprint and this will be the subject of a detailed assessment at the Development Application stage. The level of significance of any loss of EEC's has been assessed by using the provision of Section 5a of the TSC ACT (1995) (7-part test).
<p>It is stated that the loss of the various EECs "is not considered to represent a significant impact in relation to the regional distribution of this community". Impacts at a local level, not just the regional level, are important as the long-term loss of biodiversity at all levels arises mainly from the accumulation of losses and depletions of populations at a local level.</p> <ul style="list-style-type: none"> - The Department cannot support the loss of EECs without appropriate offsets and the equivalent of a 7 part test to determine the impact locally and regionally on the loss of EECs. 	The equivalent of a 7-part test has now been completed for each affected species / community as part of the Concept Plan application.
The areas proposed to be used as offsets within the Concept Plan boundary should be protected via a conservation agreement in perpetuity or rezoned to Environmental Protection and dedicated to Council or the relevant State government Department (subject to their agreement). Offsets should be permanent as the impacts on biodiversity are permanent.	Agreed.
Aboriginal Cultural Heritage	
The final Aboriginal Cultural Heritage Assessment (following all sub-surface testing) and Cultural Heritage Management Plan (CHMP) must be provided with the Response to Submissions / Preferred Project Report to give the Minister certainty that there are no areas of significance in areas that are identified for development.	Sub surface testing has now been completed. The final Aboriginal Cultural Heritage Assessment and Cultural Heritage Management Plan will be submitted as soon as possible for consideration by the Department of Planning so that there is the certainty that is necessary.
Refer to the attached report " <i>Aboriginal Archaeological and Cultural Heritage Document Review</i> " prepared by Dominic Steele Consulting Archaeology on behalf of the Department, for detailed comments on this issue.	The report has been thoroughly considered.

Issues	Proponents Response
Flooding and Climate Change	
<p>The Preliminary Flood Impact Assessment does not provide a satisfactory assessment of flooding and climate change for the following reasons:</p> <ul style="list-style-type: none"> - Flood modelling has not been undertaken in accordance with the DECC '<i>Practical Consideration of Climate Change</i>' guideline. It does not include consideration of potential changes in rainfall patterns as a result of climate change and only considers a sea level rise of 0.2m. According to the IPCC, sea level may rise up to 0.91m by 2100. The scenarios outlined in the DECC guideline must be considered. <p>The assessment does not include consideration of drainage issues or flood events on the local watercourse through the development, or any landscaping of this waterway corridor. Levels may change.</p>	<p>The proponent has committed to carrying out flooding and climate change studies on the basis of:</p> <ul style="list-style-type: none"> a 0.91m sea level rise scenario the adoption of a 10% increase in rainfall intensity for sensitivity testing the use of detailed flood modeling results from the Tweed-Byron Coastal Creek Flood Study consideration of freeboard (DECC recommends 0.5m) the application of the principle of a risk-based approach to the development such that residents remain safe for all flood events up to and including the extreme event. <p>This proposal in dealing with flooding and climate change is considered to be a reasonable approach to determining the new flood planning level for Cobaki. As such, the approach should have the support of DECCW and DOP.</p>

ATTACHMENT 2

ADDITIONAL COMMENTS

General	
All figures within the EA must be provided at minimum A3 size. Many are illegible at the current size, which in some cases, is less than A4.	All the figures have been re-provided in A3.
Section 1 – Introduction	
The Development Code should form part of the Preferred Project Report.	The Cobaki Development Code has been prepared and submitted to form part of the PPR.
Section 2 – Site Analysis	
<p>The EA does not provide sufficient information regarding the current Section 96 modification application with Tweed Shire Council.</p> <ul style="list-style-type: none">- What area does the s96 application cover? What does it look like? Is this area to be excluded from the Concept Plan? How does it integrate with the Concept Plan?	<p>The S96 Application covers the area of Precincts 1&2 in the Precinct Location Plan. The areas of the S96 Application are exactly the same as those precincts, however, the Lake area is not approved in the S96 Application. The development lots and roads planned for in the Concept Plan with the exception that some lots have been amalgamated due to the constraint of 450m² minimum under the Tweed Shire LEP are the same as the S96 application. The area of the S96 application is not intended to be excluded from the Concept plan, indeed it is intended that this DA, i.e. the original DA as amended in the approved S96 Application, be adopted as a DA under the Part 3A Concept Plan process without further assessment. Leda Manorstead wishes to keep this DA alive and seeks the Minister to preserve the DA by agreeing that no further environmental assessment is required pursuant to 75P(i)(c) of the EP&A Act for works associated with that development consent. There will then be future DA's submitted to Tweed Shire Council to subdivide the amalgamated lots when the Concept Plan has been approved. The S96 application has been submitted to Tweed Shire Council and approved on the basis that the road layout is exactly what has been planned for in the Concept plan application and when the larger lots are subdivided the integrated form of housing lots will be identical to that if a new DA had been submitted after the Concept Plan was approved.</p>

Section 2 – Site Analysis	
Will the Design Guidelines and Development Code apply to this area? If so, how?	The Cobaki Development Code will apply to all of the land specified in the Concept Plan application and approval. This includes Precincts 1 & 2. If the Minister preserves the Tweed Shire Council DA under 75P(i)(c) of the EP&A Act without further assessment then the land can be submitted for resubdivision to the Tweed Shire Council and the Development Code can be applied to all the existing approved lots and the newly subdivided lots.
How does the meadow drainage stormwater system approved under K99/1124 relate to the proposed new stormwater system?	The meadow drainage system remains approved until a project application for the lake and central drainage spine is approved. The changes in drainage required would be addressed when the re-subdivision plans for this DA are submitted to Council after the Concept Plan is approved and the lake and central drainage spine areas are approved as a Project Application.
Please provide further detail on the consents to be surrendered should the Concept Plan be approved. In particular, it is not clear whether the existing subdivision consents that approve the construction of roads will be surrendered Eg.- the construction of Cobaki Parkway under DA 94/194 and the construction of Sandy Lane under DA K99/1124. Please provide a plan that shows all roads previously approved and all roads subject to further approval under the Concept Plan and subsequent project/development applications.	All of the consents are sought to be retained until such time as the development progresses and new development applications have been approved under Part 3A on the land covered by the old DA's. When the new development applications have been approved, the old DA's can be surrendered. The initial road construction has been carried out under the old DA's. It is intended that all roads constructed after the Concept Plan is approved with the exception of those preserved by Orders of the Minister will be submitted and approved under Project/Development applications.
It is understood that the existing subdivision approvals require the site to be filled to the design flood level of 2.8m AHD. The contour plan showing finished levels does not reflect this. Please explain. Is additional filling to be approved as part of the Concept Plan?	The existing bulk earthworks have been carried out to 2.9 AHD so that completed construction will achieve a residential floor level of 3.1 AHD. There is no need for additional filling to be approved as part of the Concept Plan.
Section 3 – Planning Framework and Context	
The Department does not support many of the proposed rezonings as outlined below. Further information is required to support the claim that the rezonings will lead to "better planning and future urban design outcomes" and "more efficient use of land". Please provide further justification for Areas 3, 4, 6, 11, 12, 14, 15, 17, 18, 19 and 20.	This issue has been considered in comprehensive discussions with the Department of Planning and DECC.

Section 3 – Planning Framework and Context	
<p><u>Area 8, 9, 15, 16</u> - It is not clear why the Cobaki Parkway alignment results in the need for a realignment of the zone boundaries. DA94/194 establishes the alignment, why does this create zoning issues?</p>	<p>This has been explained.</p>
<p><u>Area 10</u> - It is not clear why the site previously consented to as a school site under DA 1162/2001 (Area 10 on Figure 13) is precluded from being used as open space, as it is currently zoned 6(b). The fact that it has been cleared does not preclude it from being landscaped and used as open space. There is insufficient justification to rezone this area from 6(b) to 2(c) for town centre development.</p>	<p>As above.</p>
<p><u>Area 16</u> - The proposed location for the school site contains a significant area of freshwater wetlands and saltmarsh, which are both EECs. The proponent’s ecologist refers to the saltmarsh community as being of “high conservation value”. The Department does not support the rezoning of this area to 2(c). This area would be more appropriately rezoned to 7(l). Saltmarsh is an area of high conservation value as an EEC and should be protected. Please demonstrate how the approach of avoid, mitigate and compensate has been adhered to in assessing the appropriate use of this site.</p>	<p>The development has been deigned to avoid impact on 85% (45.82ha) of existing Saltmarsh. The development proposes to mitigate the impacts by the creation of an additional 8.85ha of Saltmarsh. The development will compensate for any loss of Saltmarsh through the creation of 8.85ha of Saltmarsh in a degraded pasture area adjacent to the existing Saltmarsh community. This regeneration area will ensure a net gain of Saltmarsh on the Cobaki Lakes site i.e. existing Saltmarsh area is 53.98ha, loss is 8.16ha and revegetation is 8.85ha. This represents a net gain of 0.69ha of Saltmarsh.</p> <p>It is also worth noting that the entire Saltmarsh community is currently degraded due to a history of cattle grazing. The entire Saltmarsh are will be restored in accordance with the Saltmarsh Rehabilitation Plan (JWA 2009). If land conservation is over and above that required to satisfy planning laws and that conservation land is highly degraded then rehabilitation of that degraded land should be seen as an acceptable offset.</p> <p>The replacement of 26.45ha of highly degraded freshwater wetland with a minimum of 8.89ha of regenerated wetland which will be protected in perpetuity. Furthermore, an off-site offset for the removal of degraded Freshwater wetland will be completed in agreement with DECC.</p>

Section 3 – Planning Framework and Context	
Area 18 – The EA argues that the rezoning of this area is justified as it needs to conform to the Cobaki Parkway as the logical zone boundary. This area is not near the Cobaki Parkway. This area is more appropriately zoned to 7(l).	Previous reference to Cobaki Parkway in relation to Area 18 was in error. However, this area is comprised of pastoral grasses and its rezoning for Environmental Protection is not warranted.
There is a lack of consistency in the arguments used to rezone some areas from 6(b) or 2(c) to 7(l) and the arguments used to rezone from 6(b) to 2(c), eg: In Area 16, saltmarsh (an EEC) of moderate conservation value is proposed to be rezoned to 2(c) while in Area 25 an area of forest (not an EEC) of moderate conservation value is proposed to be rezoned to 7(l).	Some isolated and/or degraded areas of EEC are proposed to be removed. The process of avoid, mitigate, compensate has been utilised in the assessment and offsets will be provided where appropriate. The level of significance of any loss of EEC's has been assessed by using the provision of Section 5a of the TSC ACT (1995) (7-part test). Regarding Area 25, rezoning this forested area and revegetating the adjoining grassland area will result in the expansion and consolidation of habitat in this portion of the site. Additionally, this area has been designated as part of a wildlife corridor.
The areas proposed for offsets, habitat rehabilitation and management areas, areas of EECs, the Scribbly Gum Management Area and the Saltmarsh Rehabilitation Area should be rezoned to Environmental Protection. Agreement should be reached with Council regarding the ongoing management and maintenance of these areas.	Walking tracks and other appropriate infrastructure need to be provided in these Crown reserves to service the proposed development.
Boundary adjustments should be made only when they increase the ecological value of the most environmentally sensitive or restrictive zones as per Clause 52 of the Tweed LEP 2000.	Clause 52 requires that the location of the relevant boundary line achieves the primary objective of the most environmentally sensitive or restrictive of the zones involved.
Section 4 – Concept Plan	
The Vision for the development states that “areas of higher density will be located close to areas of greater amenity such as the Town Centre and the central open space area”. It is not possible to assess whether the Concept Plan achieves this vision as densities have not been provided in the Precinct Development Matrix.	The residential densities will be higher near the town centre etc, however, the overall density of the residential areas is low density based on the normal categories of residential density assessment. The overall height of development is a maximum of 3 storeys. There will be some areas of 3 storey unit development near the town and neighbourhood centre and on some sites where the terrain suits unit development, however the site density based on nett area is approximately 18 dwellings per hectare. A wide range of housing types and lot sizes is proposed with flexibility to meet changes in the housing market as well as provide housing product for all demographic segments of the housing market.

Section 4 – Concept Plan	
	The intention is to try to maximise the residential density as far as possible whilst maintaining desirable urban design outcomes. This is in accordance with the Department of Planning’s objectives of maximising residential density and a 25 dwellings / hectare target for low density development. It should be noted that most low density development elsewhere is only reaching 10-12 dwellings / hectare and it is only with the smaller lot sizes, plexes, terrace houses and the housing types proposed in the Cobaki development that the objective of 25 dwellings/hectare can be achieved.
The EA identifies design and planning objectives for the proposal. It is unclear how the Concept Plan meets a number of these objectives. For example: <ul style="list-style-type: none"> - How does the Concept Plan respond sensitively to the areas of high conservation value when it seeks to rezone areas of land identified as endangered ecological communities and threatened species habitat? 	Some isolated and/or degraded areas of EEC and/or Threatened species habitat are proposed to be removed. The process of avoid, mitigate, compensate has been utilised in the assessment and offsets will be provided where appropriate. The level of significance of any loss of EEC’s has been assessed by using the provision of Section 5a of the TSC ACT (1995) (7-part test). Rehabilitation works on the subject site will result in a net gain for all recorded EEC’s.
Another objective encourages the use of public transport by ensuring bus stops and bus routes are within easy walkable distance to most of the site. The EA makes a number of references to the provision of bus stops, but nothing specific regarding the location of bus stops has been provided.	The whole of the site will be subject to project applications or development applications before any housing can proceed. All of the subdivision approvals will require compliance with the Tweed Shire Council Development Control Plan section A5 which includes a requirement for 90% of all development to be within 400 metres of a public transport route. The precise location of bus stops will be determined in conjunction with the streetscape design as detailed in the Cobaki Development Code and in the detailed engineering design of the street layout for each subdivision application. It is not appropriate or necessary to try to indicate the location of bus stops in the Concept Plan.
The development description does not contain any reference to the neighbourhood centre however it is shown on the Concept Plan.	The size of the proposed neighbourhood centre is only minor (approximately 2 hectares) and is of a thin linear shape. This centre will not be a traditional neighbourhood centre with surrounding residential development. The limited size of this neighbourhood centre and its shape constrain the planning for a separate centre or that supermarket GFAs and commercial areas need to be specified separately. The development parameters include both areas.

Section 4 – Concept Plan	
	The development description has a joint nomination of town centre and neighbourhood centre.
<p>The Precinct Development Matrix does not separate the town centre from the neighbourhood centre.</p> <ul style="list-style-type: none"> - The Precinct Development Matrix should be amended to clearly refer to Gross Floor Areas (GFAs) in the town centre and neighbourhood centre separately. 	The limited size and shape of the proposed neighbourhood centre (approximately 80 meters x 300 meters) makes it too small an area to warrant separate development controls and separate nomination of GFAs etc. The land will only be able to be developed for a small convenience store and travel based uses such as service station, fast food premises etc. The response above also addresses this issue.
Floor space areas within the town centre and neighbourhood centre should be justified with reference to the Tweed Retail Strategy and an appropriate retail / economic analysis.	The floor space areas nominated in the development matrix include the neighbourhood centre. The floor space areas have been justified in the retail report submitted with the Concept Plan. These areas also accord with the Tweed Retail Strategy report. The total amount of retail and commercial floor space proposed is only that which is needed for the future population within the Cobaki Lakes estate. There is no impact on other retail centres except for comparison shopping and this will occur in both the Gold Coast regional centres and to a lesser extent in the Tweed regional centre, given the location and access of this development. It is unlikely that there will be any access into the Tweed Shire via Piggabeen Road and Kennedy Drive for 10 years. The impact of any retail and commercial floorspace within the development will be nil until access into the Tweed occurs and then it will only be minimal when the development is fully occupied (in 15-20 years time).
<p>The Concept Plan seeks approval for dwelling numbers and densities. However, only indicative dwelling yields are provided. Please confirm whether actual or indicative yields are to be considered?</p> <ul style="list-style-type: none"> - Is LEDA seeking approval for the indicative yields in Table 10 (p50) or the densities outlined in the Precinct Development Matrix in Figure 15? 	The residential densities are indicative only. The objective is to maximise residential density on the areas available for urban development. There is a wide range of housing choice and lot sizes to enable all segments of the housing market to be catered for. There is an overall maximum yield of 5500 dwellings proposed and dwelling density will be higher near the town centre and on some sites where unit development is the most appropriate form of development. The indicative yields have been nominated without detailed design of the street layout and there could be minor changes to the indicative yields when detailed design is carried out. The overall limit of 5500 dwellings will be maintained and adhered to.

Section 4 – Concept Plan	
Table 10 states that there will be 2500 medium density dwellings at a yield of 25/ha and 2500 low density dwellings at a yield of 14/ha. However, Figure 15 indicates a total of 5500 dwellings including 2500 detached, 2400 small lot and 600 multi-unit. Please confirm the total numbers for which approval is being sought and the proposed locations on the Concept Plan.	The Concept Plan overall maximum yield is 5500 dwellings consisting of detached and attached product on allotments of various sizes.
The totals in Table 10 are incorrect, the total should be: 2500/104 = 24ha	The totals in Table 10 have been corrected.
The Open Space Network plan is missing some keys from the legend.	The legend has been amended.
It is not clear how much land is to be dedicated for Environmental Protection and how much will be dedicated for Open Space. Please provide a breakdown that clearly states the proposed amounts of environmental protection areas, structured (sportsfields) open space and unstructured (parklands) open space. Areas to be utilised for stormwater management and environmental offset areas (lakes, etc) should not be included in the areas of open space. Calculations should have regard for the recommended rezonings of environmental areas noted in Section 3 above. Please provide a plan that clearly shows the area of structure and unstructured open space to be dedicated to Council.	<p>The amount of land to be dedicated for Environmental Protection is 196.5ha. The central open space area contains a lake of 9.3ha and it is proposed to include within the central open area all of the structured open space required by Tweed Shire Council for the ultimate population of 12,000 people. The structured open space requirement is 1.7ha per 1,000 persons i.e. 20.4ha. There will also be some local and neighbourhood park areas within the control open space area as well as unstructured open space for local and neighbourhood parks throughout the areas designated for residential development. The total amount of unstructured open space will be in accordance with Tweed Shire Council requirements of 1.1ha per 1,000 persons i.e. 13.56ha. Areas required for stormwater treatment will not be included in the structured and unstructured open space calculations to meet TSC requirements of a minimum of 2.83ha of open space per 1000 people.</p> <p>The location of structured open space area is shown on the Concept Plan. Adjacent to the structured open space in the central open space there will be some areas of local and neighbourhood parks for which detailed design and location is currently being undertaken in the Project Application for the central area. In the Precincts for the developable areas of the site, local parks will be provided when the detailed urban design is submitted in the subdivision applications for each Precinct. There is a written commitment to fully comply with the amount of open space required by the Tweed Shire Council, however it is not possible to detail the exact size and location of the local parks until the subdivision layout design is undertaken in each Precinct.</p>
Pedestrian and cycle paths are shown on Figure 18 not Figure 19. Is there more detail that was intended to be shown on Figure 19?	Figure 19 represents the road network proposed for the development for major roads with capacities > 3000 vehicles per day.

Section 4 – Concept Plan	
Figure 19 does not show any “Access street with bus route”.	Figure 19 has been amended accordingly.
The commercial contract to ensure the provision of telecommunications infrastructure to the site should be signed/agreed prior to lodgement of the first DA/PA.	The provision of all infrastructure water, sewerage, electricity and telecommunications will be secured and in place before any lots are released for housing. The national roll out of fibre optic cable for broadband is underway and this may supersede normal telecommunications infrastructure. The provision of telecommunications infrastructure will be from the Gold Coast. The contract for this infrastructure would not be in place until the lots have been constructed and housing was imminent.
Section 4.4 states that the maximum height of the buildings proposed in the Concept Plan is 3 storeys and on the ridgeline a maximum of 8m above finished ground level. What is the difference between existing and proposed finished levels on the ridgeline? It may be more appropriate to provide a maximum RL to AHD to control heights in this location.	There may be some changes to existing levels of the ridgeline when detailed design is carried out for subdivision approval in this location. It is considered the maximum height above finished ground level gives the best control of future development heights along the ridgeline.
Heights should be used in conjunction with densities and road pattern to provide structure and strengthen the urban design intent of the Concept Plan. The heights should not be proposed in a blanket fashion, separate to density and urban design.	The streetscape urban design principles are detailed in the Cobaki Development Code. The intent of the integrated development design is to increase the bulk and height on the corner allotments with plexes where there are larger lots and access points from two roads. This is a desirable urban form for most of the development. Unit development and terrace housing will be located in and around the town centre to maximise density close to services. Most of the development will be two storeys and only some areas will have three storeys. These changes in height are not being proposed in a blanket fashion and are being integrated with density and urban design.
Please provide a floor plan of the proposed townhouse development.	The details of a floor plan are not appropriate for this Concept Plan application.
Buffers should be shown on the Concept Plan and identified as open space as appropriate, ie: ecological buffers should be retained in public open space areas and not private ownership.	All of the buffer areas will be retained as public open space and not in private ownership. Discussions concerning buffers will be had with DECC.
<i>SEPP No.50 – Canal Estate Development</i> should be considered in relation to the construction of the artificial waterbodies.	The SEPP No.50 Canal Estate Development does not apply.

Section 5 – Consultation	
Section 5.3 states that respondents will be able to contact LEDA by mail, email or a 1800 number. What is the status of the community consultation? The Department requests that the consultation report be submitted with the Response to Submissions / Preferred Project Report.	A Consultation Report is included in the Preferred Project Report
Section 6 – Environmental Assessment	
<u>Circulation, Access and Transport</u> The Concept Plan should include a Public Transport Plan that clearly shows proposed bus routes and bus stops. The Plan should demonstrate that all residents will be within 400 metres of a bus stop. The Plan should identify existing and proposed public transport services and infrastructure in the local area, including rail and bus services and public transport interchanges.	Public Transport is the responsibility of NSW Transport. The Cobaki Lakes development road network demonstrates that "90% of allotments or dwellings are within a 400M straight line distance of a potential bus route" in accordance with Council's Development Control Plan S22 Bus Shelters.
The Open Space Network Plan should be supported by a discussion on how the proposed bicycle paths connect to the surrounding cycle network within and outside the site boundary. Cycle routes should be justified in terms of how they relate to the various land uses within the site. Reference should be made to the document, <i>How to Prepare a Bikeplan (RTA 2002)</i> . The document, <i>Planning Guidelines for Walking and Cycling (NSW Govt, 2004)</i> , also provides guidance on this issue.	The closest cycle path to this development is along Gotham Drive and Kennedy Drive and there is no planning by Council to connect the Cobaki Lakes network to Gotham Drive. The design of proposed cycle ways and shared paths within the development will be in accordance with current practice.
The traffic assessment in Appendix H notes that an acoustic assessment has not been provided. An acoustic assessment needs to be undertaken to establish an appropriate noise buffer from the Cobaki Parkway.	There are a number of noise attenuation strategies possible. For example, RTA's Guide to Road Traffic Noise states "to meet the noise criteria via judicious design and construction", EPA's Environmental criteria for Road Traffic Noise, and RTA's Environmental Noise Management Manual. An acoustic barrier with landscaping is the proposed acoustic treatment.
The traffic assessment in Appendix H states that the report should be read in conjunction with the DGRs Design Note published in November 2007. This has not been provided. Please provide a copy of this Design Note if it is relevant.	A copy of this Design Note has been provided.
It is noted that the current Deed of Agreement between LEDA and TSC is being updated. Please provide a copy of this updated DOA.	An updated Deed of Agreement is in preparation.
<u>Flora and Fauna</u> Please provide a plan that shows the buffer to the SEPP14 wetland for the part of the SEPP14 wetland that is separated from the development by a buffer zone and Cobaki Parkway. The plan should nominate a specific buffer width.	The location of the Cobaki Parkway where it lies adjacent to SEPP 14 wetland is in accordance with Development Approval previously given by Tweed Shire Council. In accordance with that approval, there is no buffer between the road reserve and the SEPP 14 area.

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The proposal will result in the loss of 22.15ha of potential foraging habitat for the Grey-Headed Flying Fox which is listed as 'Vulnerable' under the Commonwealth EPBC Act. It is recommended that the application be referred to the Commonwealth to confirm that it is not a 'Controlled Action'.	The application has been referred to the EPBC Referrals Unit
The Constraints Plan shows a 20m buffer to the EECs but the ecological assessment specifies a minimum buffer of 10 metres to EECs. DECC & DPI policy requires a minimum 50m buffer to an EEC. Please provide justification for a reduced buffer having consideration for the following: The <i>NSW Coastal Design Guidelines</i> specify that setbacks may need to be marked and their vegetation preserved. Setbacks should where possible be increased to 100m or more where they are adjacent to ecologically sensitive areas or in situations where the coastal erosion hazard requires greater distance.	In some areas at Cobaki Lakes an ecological buffer to environment protection (EP) zones is either not possible or practical (for various reasons – largely historic) and, instead, ecological plantings at the edge of, but <i>within</i> , the EP zones will be completed to achieve the same objective. The nature and extent of such plantings will be developed on a precinct basis having regard to potential impacts of proposed adjacent development and the nature of the extant vegetation. An Overview Buffer Management Plan has been prepared which establishes the principles and the strategic intent of the management actions. Where required for future project applications, the proponent will prepare site or issue-specific buffer management plans detailing specific actions, the timing of commencement and completion, performance monitoring and mechanisms for corrective action. This approach is considered appropriate at Concept Plan stage.
DPI's policy with regard to aquatic habitat buffers outlined in <i>Policy and Guidelines Aquatic Habitat Management and Fish Conservation 1999</i> requires a buffer of at least 50 metres wide, increasing to 100 metres or more where they are adjacent to ecologically sensitive areas;	See above
The " <i>North Coast handbook for avoiding and reducing rural land use conflict and interface issues</i> " (Final Draft) 8 October 2007 prepared by Rob Learmonth, Rik Whitehead, Bill Boyd, Stephen Fletcher, in consultation with the North Coast Land Use Conflict Project Working Group, sets a minimum buffer distance of 100 metres between residential areas and wetlands and 50 metres between residential areas and native vegetation / habitat; and,	See above
Kings Forest has had a 50m overall buffer applied to it, except where the land use and the vegetation assemblage/community it is protecting enables a variation on 50m to be applied. The buffer includes an inspection/maintenance/fire track. However, where this happens a significant offset has been accepted that includes large areas removed from development and the vegetation it is protecting has a lesser ecological value.	The history and present conditions at Cobaki Lakes are entirely different to the circumstances applying to Kings Forest.

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<p>The Constraints Plan does not specify a buffer to the Environmental Protection Zones (EPZs). Please amend this plan to include a nominated buffer width to the EPZs.</p>	<p>Generally in terms of the proposal Asset Protection Zones themselves contain such buffers, which therefore do not constitute any additional constraint. Buffers of 5m width are proposed to some vegetation isolates to be protected by Environmental Protection Zoning or covenant.</p>
<p>Further detail should be provided on the proposed wildlife corridors. What width is proposed for each wildlife corridor? Any variations to the following minimum widths, as specified in <i>DECC Natural Resource Management Advisory Series: Note 15 Wildlife Corridors</i>, should be justified:</p> <ul style="list-style-type: none"> ○ Regional corridor = 500m ○ Subregional corridor = 300m ○ Local corridor = 50m 	<p>The Concept Plan has been amended to provide appropriate corridors in accordance with consultations had with DECC.</p>
<p>One of the wildlife corridors is shown as going through the proposed school site and another is shown going into residential land in the north of the site. This is not acceptable. Please review all corridors and update the Open Space Network Plan accordingly.</p>	<p>This was never intended and the plan has been amended accordingly.</p>
<p>The following 'key threatening processes' listed under the <i>Threatened Species Conservation Act 1995</i>, have not been considered in the ecological assessment:</p> <ul style="list-style-type: none"> ○ Clearing of native vegetation; ○ Removal of dead wood and trees; ○ Loss of hollow bearing trees; and, ○ Alteration to the natural flow regimes of rivers, streams, floodplains and wetlands. 	<p>Key threatening processes' are addressed in the process of completing an Assessment of Significance (7-part test). The equivalent of a 7-part test has now been completed for each affected species / community as part of the Concept Plan application.</p>
<p>It is noted that the loss of 43.7ha of Wallum froglet forage habitat is proposed to be offset by 3.09ha of rehabilitated Freshwater Wetland plus 2.36ha of Swamp Sclerophyll Forest. This equates to a total offset ratio of only 0.1:1. Further offsets are required.</p>	<p>The proponent disagree that revegetation is not a suitable offset, particularly given that off-site offsets are mentioned previously and in other submissions from government agencies as an option as well as within DECC's <i>Principles for the use of Biodiversity Offsets in NSW</i>. Actual proposed offsets for the Wallum froglet combining regeneration of degraded areas and revegetation works are as follows:</p> <ul style="list-style-type: none"> • Swamp sclerophyll forest on floodplain – 4.78:1; and • Freshwater wetland – the replacement of 26.45ha of highly degraded wetland with 8.89ha of regenerated wetland which will be protected in perpetuity is a reasonable ecological outcome in this instance)

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	The majority of Wallum froglet habitat to be removed is comprised of exotic grassland which provides some forage opportunities during wet weather. The creation of a more suitable 'core' habitat area, linked to adjacent SEPP 14 wetlands via a vegetated corridor, will benefit the local population.
Trees which contain hollows are particularly important for those species of animals, including many threatened species of bats identified on the site, which specifically require such hollows for shelter and nesting. For these species the availability of hollow-bearing trees across the landscape is a key limiting factor to their on-going survival. Any decrease in the availability and natural diversity of hollows can lead to significant loss of hollow-dependent animal species diversity and abundance and in some cases may result in local extinction of these species. As mentioned above, the loss of hollow bearing trees is now a 'key threatening process' under the <i>Threatened Species Conservation Act 1995</i> .	The majority of mature native vegetation on the subject site will be retained. Therefore the majority of hollow-bearing trees will be retained within these forested areas. Any hollow-bearing trees to be removed are likely to occur as isolated paddock trees. The placement of nest-boxes within forested portions of the site is considered to more than adequately compensate for the loss of isolated hollow-bearing trees and is a well-used compensation measure. 'Key threatening processes' are addressed in the process of completing an Assessment of Significance (7-part test). The equivalent of a 7-part test has now been completed for each affected species / community as part of the Concept Plan application.
If certainty is required for the final development yield and subdivision layout, please provide the following information: <ul style="list-style-type: none"> o A plan that shows the existing hollow bearing trees on the site and those trees proposed to be removed as a result of the development. The removal of hollow-bearing trees should be avoided. 	<u>See above.</u>
<ul style="list-style-type: none"> o Where hollow bearing trees are to be removed as a result of the development, the equivalent of a 7 part test should be undertaken to determine the impact on affected threatened fauna species. 	<u>See above.</u>
<ul style="list-style-type: none"> o Whilst nest boxes can increase habitat for many fauna species they should not be considered a replacement for natural tree hollows as they may not be functional in perpetuity. 	<u>See above.</u>

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The flora and fauna assessment carried out by Woodward-Clyde (1997) is the most recent detailed fauna survey undertaken on the site. However, it is noted that this study only covered parcels 7, 8, 9 and 10.

- o Please provide relevant plans from the study that illustrate the portion of the Concept Plan site covered by this 1997 study.

A broad-scale vegetation survey was completed by two (2) scientists on the 8th, 10th and 11th July 2005 over a total period of twelve (12) hours. Vegetation communities were assessed and mapped to ascertain their ecological value and levels of disturbance. A detailed vegetation assessment was completed by three (3) scientists on the 9th and 10th of July 2007 and two (2) scientists on the 11th of July 2007 over a total period of twenty (20) hours. JWA (unpublished data 2007) carried out a targeted Wallum froglet survey in August 2007 on the Subject site after 3-4 days of consistent rain. The site was traversed by two (2) scientists, G.P.S points were recorded for each of the locations where Wallum froglets were calling.

JWA (unpublished data 2007) carried out a Koala and Greater glider survey in December 2007 on the Subject site. The target Koala survey completed in December 2007 included two (2) nights spotlighting for a total of twelve (12) hours. Call play was also used at three (3) locations through out the site. Scat and scratch searches were also employed in this survey. Recently (2009) every Koala food tree listed under Schedule 2 of SEPP 44 has been located and assessed for the presence of Koalas and/or presence of scats. Additionally, approximately twelve (12) hours of spotlighting and call playback was completed. No Koalas were recorded and low numbers of scats were recorded.

- o For which 11 species was the Assessment of Significance carried out?

- Black-necked stork;
- Osprey;
- Powerful owl;
- Masked owl;
- Black flying-fox;
- Yellow-bellied sheath-tail bat;
- Eastern little mastiff bat;
- Greater broad-nosed bat;
- Common bent-wing bat;
- Little bent-wing bat; and
- Koala.

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The ecological assessment concludes that although part of the site meets the criteria for potential koala habitat, no core koala habitat is present on the site, due to the absence of evidence of a resident population. As such, a Koala Plan of Management has not been prepared. A review of the survey effort applied to determine whether core Koala habitat is present raises questions as to the validity of the conclusions reached.

- The Ecological Assessment briefly states (page 27, Volume 1 and page 54, Volume 2) that a recent (2007) survey included searches for scats and scratches as evidence of koala activity. However, the summary of activities undertaken during all fauna surveys (page 76, Volume 2) does not refer to this activity being undertaken recently, with only the 1994 survey being cited for such activity. It is unclear whether this earlier study was conducted over the entire site. In any case, it was evidently determined by the consultant that further studies were required to complete the site assessment.
- The table only refers to the use of spotlighting (by car) and call playback methods as part of the 2007 survey. These methods alone are not considered sufficient to determine the level of koala usage of the site. Daytime surveys must be conducted to determine koala usage, using recognised standard techniques for koala detection (e.g. a SPOT analysis), including searching trees for individual animals and scratch marks and scat searches around the bases of trees.

Please confirm the level of survey effort applied during the 2007 study to ensure that daylight searches for koalas have been properly undertaken across the entire site.

Scribbly Gum Management Plan

Approximately 50% of the Scribbly Gum community in the Scribbly Gum Management Area is to be removed due to public safety concerns. These trees were identified by an arborist and not an ecologist. There appears to be no consideration of the ecological value of the existing canopy density and tree spacing for arboreal animals and the ecological amenity of old growth trees for nesting hollows. These trees should be assessed for their ecological significance and the SGMP amended accordingly.

Recently (2009) every Koala food tree listed under Schedule 2 of SEPP 44 has been located and assessed for the presence of Koalas and/or presence of scats. Additionally, approximately twelve (12) hours of spotlighting and call playback was completed. No Koalas were recorded and low numbers of scats were recorded.

The Scribbly gum community occurs as an isolated patch of vegetation surrounded by large expanses of pasture. The only arboreal animals likely to utilise this community are birds to which canopy density and tree spacing have little relevance.

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	Additionally, an off-site offset is proposed for the removal of Scribbly gums from the Cobaki Lakes site. The Scribbly gum Management Plan (SGMP) has been amended where appropriate. The Scribbly gum community will be managed in accordance with an approved SGMP until such time that the off-site offset has become established to the satisfaction of DECC.
It would be desirable to improve the connectivity of the remnant woodland through the centre of the property by planting Scribbly Gum and Swamp Mahogany rather than cutting down the remaining trees.	An off-site offset is proposed for the removal of Scribbly gums from the Cobaki Lakes site. The Scribbly gum Management Plan (SGMP) has been amended where appropriate. The Scribbly gum community will be managed in accordance with an approved SGMP until such time that the off-site offset has become established to the satisfaction of DECC.
There is no assessment of the viability of the remaining thinned stand when the adjacent area is to be developed with attendant changes to soil moisture and nutrients.	As above
The SGMP states that the Scribbly Gum community is to be managed as 'open space parkland. As such, this area should be shown as either open space, or preferably an Environmental Protection area (as discussed above).	As above.
Harden (1993) lists <i>Eucalyptus racemosa</i> as only occurring on the Central Coast of NSW. The species on the site is more likely to be <i>E. haemastoma</i> or <i>E. signata</i> (Scribbly Gums) which are listed as Koala food trees for northern NSW (SEPP 44) and southern Queensland. The Scribbly Gum woodland should be included in the Koala habitat mapping (Figure 20 Vol 1) and corridor connectivity enhanced.	<p>Recently (2009) every Koala food tree listed under Schedule 2 of SEPP 44 has been located and assessed for the presence of Koalas and/or presence of scats. Additionally, approximately twelve (12) hours of spotlighting and call playback was completed. No Koalas were recorded and low numbers of scats were recorded.</p> <p>The Scribbly gum community occurs as an isolated patch of vegetation surrounded by large expanses of pasture. No evidence of Koala activity has been recorded from this portion of the site and Koalas are considered highly unlikely to utilise this area as habitat.</p>
<p><u>Fauna Management Plan</u></p> <p>The proposed removal of habitat trees is not acceptable as outlined above. Habitat trees should be avoided and the development footprint amended accordingly.</p>	The majority of mature native vegetation on the subject site will be retained. Therefore the majority of hollow-bearing trees will be retained within these forested areas. Any hollow-bearing trees to be removed are likely to occur as isolated paddock trees. The placement of nest-boxes within forested portions of the site is considered to more than adequately compensate for the loss of isolated hollow-bearing trees and is a well-used compensation measure.

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Whilst nest boxes can increase habitat for many fauna species they should not be considered a replacement for natural tree hollows as they may not be functional in perpetuity.	See above
It is not appropriate for private landowners to be responsible for the maintenance of nest boxes on their property. This should be the responsibility of the developer or Council (subject to agreement).	Agreed
<u>Saltmarsh Rehabilitation Plan</u> Saltmarsh is very susceptible to physical damage but is only proposed to be retained as a 6(b) Recreation zone, which allows a number of intrusive activities – it should be rezoned to Environmental Protection or subject to a conservation agreement in perpetuity. Areas for access should be formalised to prevent indiscriminate ingress into the fragile habitat.	The Saltmarsh areas will be rezoned for Environmental protection. Access by the public will be managed.
There is a contradiction between the areas mapped as ‘Community 13 - low closed grassland’ which by the consultant’s own assessment are saltmarsh EEC, and the development proposal where significant areas of this community are to be made into freshwater wetland or filled and developed without compensation. For example, the areas north-west of Cobaki Parkway that are clearly saltmarsh EEC by their species composition have been labelled freshwater wetland and are to be incorporated in the constructed freshwater wetland.	Whilst the area to the north-west of Cobaki Parkway is currently comprised of an area of degraded Saltmarsh, the hydrology of this area, particularly tidal influences, have been modified by the construction of the road. It is therefore considered that this area is more suitably regenerated as a Freshwater wetland community. No areas of any EEC will be “filled and developed without compensation”. The level of significance of any loss of EEC’s has been assessed by using the provision of Section 5a of the TSC ACT (1995) (7-part test). Rehabilitation works on the subject site will result in a net gain of 13.14ha of EEC vegetation communities on the site.
It is unclear how stormwater from developed area is to be managed to conserve the saltmarsh, particularly if a weir is to be constructed in the main drain. It is not clear what effect this weir will have on tidal inundation of the saltmarsh. Saltmarsh will degenerate and lose its ecological amenity if there is too much fresh water. Please explain.	The weir in the ‘main drain’ will be constructed as part of the Sandy Lane culverts and is intended to separate freshwater wetlands to the north of Sandy Lane from saltmarsh to the south. It is clear in the EA Report that some area of saltmarsh would be lost, however compensatory revegetation and rehabilitation was proposed to off-set this loss and to ensure no net ecological impact. It is proposed that the former contribution of the site to the Broadwater’s fishery would be restored and enhanced to mimic conditions existing before agricultural land use. This will involve careful balancing of the tidal exchange structures influencing the saltmarsh areas to ensure tidal influence prevails in areas that are currently tidal, and expands into areas where saltmarsh colonisation is required or desirable.

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	The detailed design of saltmarsh management, revegetation and rehabilitation works will involve additional survey work and cooperation between ecologists and engineers to ensure these objectives are achieved.
Climate change induced sea level rise will significantly affect saltmarsh ecology as it is dependent on a very narrow upper range of tidal inundation. Though referred to, it is not apparent where the area for landward progression of saltmarsh has been allowed for. Please provide further detail / plans.	The area available for landward progression of saltmarsh in response to sea level rise ('the retreat area') includes all of the area to the south and east of Cobaki Parkway and Sandy Lane, which is outside of the proposed development footprint. Most significantly this includes the large area bordered by the existing saltmarsh (Figure 41 of the EA Report), Cobaki Creek and Piggabeen Road. These areas are ideal as they have very gentle slopes, which would allow the saltmarsh the maximum opportunity to progressively colonise at higher elevation in response to sea level rise.
<p><u>Stormwater, Flooding and Climate Change</u></p> <p>The 'diffuse discharge polishing zone' for drainage of the area north of the Cobaki Parkway road is to be discharged into the saltmarsh, potentially lowering salinity and compromising the saltmarsh EEC viability. The Stormwater Concept Plan should be reviewed and amended accordingly to ensure that stormwater leaving the development site will not have a negative impact on the saltmarsh / SEPP14 wetland.</p>	<p>The intent of discharging pre-treated stormwater into the open space area (which includes areas of saltmarsh) is twofold. Having discussed the proposal and inspected the site with Tweed Shire Council, an opportunity was identified to restore the former contribution of the site to the Cobaki Broadwater's fishery by reinstating and enhancing the conditions that existed prior to the agricultural use of the site. The diffuse discharge of stormwater would deliver nutrients to the saltmarsh and wetland areas, maximising its productivity. Simultaneously, the removal of nutrients from the stormwater before delivery to groundwater, Cobaki Creek or the broadwater, would minimise any potential water quality impacts to the broadwater. The delivery of stormwater during rainfall events will be intermittent and ephemeral. It is understood that providing saline groundwater is present and that the existing tidal regime is maintained, saltmarsh will maintain its competitive advantage and dominate, regardless of the delivery of stormwater during rainfall events. Provided careful balancing of the tidal exchange structures is undertaken, continued tidal influence in the saltmarsh areas will ensure the viability of the EEC. The detailed design of saltmarsh management, revegetation and rehabilitation works will involve cooperation between ecologists and engineers to ensure these objectives are achieved.</p>

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<p>The need and function of the proposed “subterranean pumping system’ to pump saltwater into the constructed freshwater wetland during drought is not well explained. The fresh water plants which are integral to the functioning of constructed wetlands have mechanisms for surviving droughts but will succumb to salt water. The wetlands should be constructed so ASS exposure is eliminated if this is the reason for the salt water flooding. Further explanation/plans of this system should be provided.</p>	<p>The proposed pumping system allowing saline water from Cobaki Creek to be pumped up to the lake was included to address the issues of water quality maintenance that have been raised. This system would minimise any long term maintenance burden to Council.</p> <p>A series of issues; maintenance, acid sulfate soil oxidation, algal blooms and groundwater were raised. Because of this, we propose to have a saline lake system. Depending on the <i>in situ</i> permeability, the lakes will be lined with clay as required. Whilst the stormwater treatment system will still comprise of a treatment train including freshwater wetlands, the areas within and surrounding the main drainage channel, downstream of the lakes, to its discharge at Cobaki Creek will now be saline. This refinement of the design will address each of Council’s concerns.</p>
<p>The discussion regarding the impact of sea level rise in the Stormwater Concept Plan refers to a modelled 1 in 100 year flood level of 2.1mAHD. However, the Preliminary Flood Impact Assessment refers to a level of 2.3mAHD at the site. The justification regarding the consideration of climate change in the stormwater management plan is based on 2.1mAHD not 2.3mAHD. Please confirm the correct flood level and review the assessment of climate change as necessary, having consideration for the DECC guideline.</p>	<p>As discussed above, full project flood modeling of the local and regional catchments is currently being completed now the Tweed Flood Study results have been made available. A conservative approach to climate change, supported elsewhere by DECCW, has been adopted.</p>
<p>The site is quite problematic in relation to sea level rise as the central portion is a very low elevation. Much of the saltmarsh and wetland areas which penetrate almost to the northern most parts of the site will potentially become subject to tidal inundation for a significant percentage of the time. Even if the residential areas are not inundated the ramifications for infrastructure integrity and the general amenity, ecology and hydrogeology would be substantial.</p>	<p>These comments are correct to the extent they illustrate why Sandy Lane will effectively act as a hydraulic control. The extent or size of this physical control will be informed by the flood modeling results. Under the refined proposal, the central corridor, apart from the freshwater wetlands for stormwater treatment, would be saline.</p>
<p>The stormwater management concept, shown in Drawing No. GJ0640.5.4 indicates proposed wetland areas of approximately 16ha (preliminary estimate), thus substantially exceeding the minimum area required for stormwater treatment (8.25ha). It is not clear why the proposed artificial waterbodies need to be so large. This will be a significant maintenance burden on Council. Has Council agreed to maintain these lakes?</p>	<p>The southern lake has been deleted from the amended concept plan, which will minimise any burden to Council. The northern lakes would now be saline and the treatment areas reduced. Consultation with Council is continuing on these matters.</p>

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It is not clear how the artificial waterbodies will be constructed. The ASS assessment recommends a “turkey nest” construction, but it would seem that it is proposed to excavate the lakes and utilise fill elsewhere on the site, following treatment of ASS. Please explain.	The constructed lakes are intended to be perched above the level of ASS to minimise disturbance of ASS and interaction with groundwater and the associated management issues. Any discrepancy between the ASS Assessment and other documentation is an oversight.
The SWMP should be updated to reflect DECC as the relevant regulatory body, not the EPA, which no longer exists.	This can readily be addressed and would be done as a matter of course in the preparation of further reports in support of the project applications.
<u>Geotechnical Engineering</u> Refer to the attached letter report “ <i>Geotechnical Engineering, Acid Sulphate Soil, Groundwater and Stormwater Documentation Review</i> ”, dated 2 March 2009, prepared by GHD Geotechnics on behalf of the Department, for detailed comments on this issue.	A detailed response to this letter has been provided.
The Geotechnical Review in Appendix K states that placement of fill across areas containing layers of marine clay will induce consolidation settlement. The magnitude of this settlement can be estimated when proposed fill levels have been established. <ul style="list-style-type: none">- It is understood that fill levels have been established at 3.1mAHD. As such, the magnitude of settlement should be estimated as part of the Concept Plan application.	A peer review of the geotechnical review, conducted by GHD on behalf of the Department of Planning, has found the submitted information to be adequate for concept plan consideration and supports the provision of further, more detailed information at the project application stage. Settlement plates will be installed on these fill areas to ensure the relevant land is suitable for urban development.
The Groundwater Management Plan refers to the ‘ <i>Murray Darling Basin Groundwater Quality Sampling Guidelines (1997)</i> ’. This should be replaced with the appropriate guideline.	In preparing the report, our review of the available guidelines indicated that the Australian Chapter of the International Association of Hydrogeologists (IAH) recommends use of the Murray Darling Basin Groundwater Quality Sampling Guidelines (1997) for guidance on correct groundwater quality monitoring procedures. Whilst we believe these guidelines to be appropriate, other guidelines may be incorporated into the report if the Department deems this necessary.
<u>Noise</u> The RTA’s Guide to Road Traffic Noise states that: “ <i>Where feasible and reasonable, existing noise levels should be reduced to meet the noise criteria via judicious design and construction of the development.</i> ” New development should be set back from the noise source and should not rely on architectural treatment to mitigate noise impacts.	There are a number of acoustic options to meet noise criteria without large setback areas. A landscaped acoustic barrier is the preferred option.
A noise buffer from the Cobaki Parkway should be clearly shown on the Concept Plan.	The acoustic treatment along the Cobaki Parkway is proposed as a landscaped acoustic barrier rather than a large setback area. It is not appropriate to limit acoustic treatment options in the Concept Plan.

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<p><u>Bushfire</u> The Bushfire Assessment in Appendix N states that a couple of small proposed residential enclaves to the north west of the site will need to be looked at in more detail at the subdivision design stage to ensure they can meet the required APZs. Where are these areas? Please provide more detail about these areas.</p>	<p>These areas have been identified to DoP. Resolution of bushfire issues here will be in accordance with <i>Planning for Bushfire Protection (2006)</i> by way of a combination of APZ's and Building Specifications.</p>
<p><i>Planning for Bushfire Protection (2006)</i> specifies that a proponent should not diminish the ecological integrity of adjoining bushland and APZs should be designed to minimise the impacts on any environmental features in the landscape. As such, APZs should always be provided <u>outside</u> any ecological buffer. This should be included as a commitment in the Statement of Commitments.</p>	<p>Existing Development Approvals allow for fire trails to be constructed <i>within</i> the Environmental Protection zones. The proposal is for APZ's to be provided <i>outside</i> the Environmental Protection zones and in accordance with <i>Planning for Bushfire Protection (2006)</i> It does not follow from these regulations that APZ's should always be provided outside any ecological buffer.</p>
<p><u>European Heritage</u> The Statement of Commitments does not include reference to the preservation of tree stumps with platform holds. Please update the Statement of Commitments accordingly.</p>	<p>This is an error in the report. There are no tree stumps of heritage significance in Cobaki Lakes. Report has been amended.</p>
<p><u>Aboriginal Cultural Heritage</u> Refer to the attached report "<i>Aboriginal Archaeological and Cultural Heritage Document Review</i>" prepared by Dominic Steele Consulting Archaeology on behalf of the Department, for detailed comments on this issue.</p>	<p>All issues have been addressed in the updated Aboriginal Cultural Heritage Assessment..</p>
<p>The CHMP states that the Development Area has been categorised into two areas and refers to Appendix 1. The figure in Appendix 1 only shows the Archaeologically Sensitive Areas.</p>	<p>Map has been amended.</p>
<p>Please provide a plan that clearly shows what is meant by the "two areas", ie: (i) disturbed area, and (ii) archaeologically sensitive areas. This is particularly important as it is included in the Definitions in the CHMP.</p>	<p>Map has been amended.</p>
<p>CHMP should not only apply to project applications submitted to the Department. It should also apply to development applications submitted to Tweed Shire Council.</p>	<p>Addressed in updated Cultural Heritage Management Plan.</p>
<p>It is recommended that the key elements identified to be lacking (or requiring further expansion or clarification) in the November 2008 ACHA report be addressed for incorporation into an updated document. These amendments will be required to better guide the proposed Aboriginal cultural heritage strategies to be developed and incorporated within an updated CHMP.</p>	<p>All issues have been addressed in the updated Aboriginal Cultural Heritage Assessment.</p>

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At such time when Aboriginal community correspondence is received that indicates the level of support of the current ACHA and CHMP, updated documents be prepared that incorporate the views, recommendations and possible concerns of the community relative to the Cobaki Lakes Estate development proposal.	Included as a recommendation in Aboriginal Cultural Heritage Assessment.
<u>Demand for Infrastructure & Services</u> The Concept Plan does not account for the provision of regional emergency services infrastructure such as police stations and ambulance services. Please consult the following agencies to ensure relevant infrastructure is allowed for in the Concept Plan: <ul style="list-style-type: none"> - Ambulance Service of NSW - Department of Transport - Railcorp - Australian Rail Track Corporation - NSW Police Force 	Contact has been made with Ambulance Service of NSW, on 11 May 2009 and we are awaiting their comment. Contact has been made with the Minister of Transport, on 11 May 2009 and we are awaiting their comment. (Department of Transport was disbanded 5 years ago). Contact has been made with Railcorp confirming they do not have any requirements for infrastructure within the development. Contact has been made with Australian Rail Track Corporation confirming they do not have any requirements for infrastructure within the development. Contact has been made with NSW Police Force, on 11 May 2009 and we are awaiting their comment.
<u>Off-Site Impacts</u> The EA indicates that there will be certain buffers to manage impacts on the environmental protection areas. These should be shown on the Constraints Plan.	Buffers to the environmental protection areas will be provided in accordance with recommendations from the project ecologist.
The Off-Site Impacts Assessment at Appendix S states that there will be a 30m agricultural buffer in the south western corner of the site. The Tweed Development Control Plan Section A5 specifies that the primary agricultural buffer should not be incorporated into any residential allotments. As such, the Concept Plan should be amended to show the buffer area as public open space.	Gilbert & Sutherland’s interpretation of the intent of the Tweed DCP Section A5 is that habitable buildings are to be kept out of the primary (and secondary) buffers. Provided this occurs, we believe the objective of the buffer will be achieved and that with appropriate planning controls or covenants, there is scope to have portions of residential allotments within the buffers. We note that the relevant appendix of the DCP is advisory only. Prior to the project application for the affected area, we would seek to negotiate with TSC and the DPI on the configuration of allotments so that the development potential of the site and the objectives of the buffers can be realized simultaneously. Until these discussions and negotiations are finalised, the buffers will not be amended on the concept plan.

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Has consultation been undertaken with the adjoining landowners to confirm spray methods for the banana plantation? If this adjoining landowner is undertaking spraying on their land, the buffer to a habitable dwelling should be 80m, which includes a 30m primary buffer.	The bananas discussed in the off-site impacts report cover an area of 100m ² approximately 20m x 5m in dimension and is not a large scale commercial operation. On inspection, the bananas appeared un-maintained and of dubious commercial value and would not accurately be described as a 'plantation'. The provision of an 80m buffer to such a small crop of bananas is, in our view, excessive, regardless of whether the adjoining landowner is undertaking spraying. The provision of a 30m buffer is more than adequate.
It is noted that a road reserve outside the property boundary will be used as a buffer to adjoining agricultural land. This is not supported. The Concept Plan should not rely on adjacent land for the agricultural buffer as the proponent has no control over what might happen to this land in the future. The buffer should be contained within the property boundary.	The small area of the site where it is proposed to use the road reserve as a buffer occurs in the south of the westernmost portion of the site. The length of the boundary affected is in the order of 830m. Whilst we appreciate the Department's concern, in this instance it is considered unwarranted because of the topography and existing vegetation which provide a reasonable buffer from the proposed residential area. The slopes in this area are so steep that the existing vegetation is unlikely to be cleared. The land is only suitable for grazing and again, because of the slope and dense vegetation in areas, the use of this area by cattle is likely to be limited. The DPI Guidelines and the Queensland guidelines allow for the use of topographical features as buffers and we will pursue a reduced agricultural buffer during the project application on this basis.
Statement of Commitments	
The Statement of Commitments does not actually include the recommendations from each report, it only refers to the reports. All key recommendations (particularly where the consultant has proposed a condition or an amendment) should be included in the Statement of Commitments so that it can be a 'stand-alone' document.	To ensure that commitments are comprehensive and to avoid the possibility of contradiction, it is appropriate that commitments be framed by reference to clearly identified reports in which the respective actions are recommended.