## Summary of Submissions to Draft Coastal Hazards – Tweed Development Control Plan Section B25

Table 1 contains a summary of public submissions. Tables 2 and 3 contain summaries of submission by Office of Environment and Heritage.

Table 1 Summary of Submissions - Public

Respondent	Issue	Description	Planning Comment	Action
1. Kingscliff	Clarification of effect of Clause 3.4 on property.	Needed clarification of Clause 3.4 Subdivision and its effect on strata title development at Murphy Road, Kingscliff.  Stated that any changes reduce their ability to construct similar units and major development ramifications with loss in property value.	A significant proportion of Murphy's Road property is landward of the 2100 hazard line and therefore has the potential for medium density development within this area.  The prevention of subdivision (where additional dwelling entitlements will be created) was intended to be a measure to limit the number of landowners in the areas affected by coastal erosion. It is not intended to be a limit on the type of land use that can be carried out on the areas affected.  However, on closer analysis it is not appropriate for a DCP to prohibit a type of development that is permitted under the prevailing LEP (DCP's cannot legally do this). If Council wishes to pursue limiting the creation of additional dwelling entitlements by controlling subdivision it will need to address this in its LEP.  It is recommended that clause 3.4 of the DCP be deleted.	Delete Section 3.4
2. Kingscliff	"Tweed Coastline Management Plan" coastal erosion and MHWM evidence.	The submission stated that the Tweed shoreline has not changed to any great extent since it was first surveyed in 1884 and this can be calculated from parish maps.  Submitter stated that the Tweed Coastline Management Plan was given this evidence but ignored it and are therefore, incorrect in there assumed that the location of the MHWM has changed.  Because the DCP is based on the Tweed Shire Coastline hazard Definition Study which is fundamentally flawed, then the DCP is also flawed. Long term coastal erosion on the Tweed coast is a myth.	<ul> <li>The 'Tweed Coastline Management Plan" was based on a substantial base of knowledge and not just on survey data. This included:</li> <li>Review of both New South Wales and Queensland state government sources of coastal and ocean data, including surveys, photogrammetry, wave information and results of previous coastal process investigations;</li> <li>Vertical aerial photographs for various dates extending back to 1944;</li> <li>Review of previous reports on the area, containing plans, photographs and summaries of activities relating to development, sand mining and coastal works;</li> </ul>	No change

Respondent	Issue	Description	Planning Comment	Action
			Search of regional libraries for historical books containing photographs and other relevant information;	
			Review of Tweed Shire historical cadastral plans; and	
			Discussions with residents and others with local knowledge.	
			It is clear that the WBM report presented data from a number of sources not just previous survey data.	
			Council's position is that coastline hazards and underlying coastal processes are affecting the Tweed coast and that modelling has identified land that will be affected over the immediate, 2050 and 2100 year time frame.	
3. Tweed	Suggests new	Made on behalf of the Tweed Coast Holiday Parks	Consultant comment	Add the word "Tourism" to
Heads	clauses for coastal caravan parks.	Reserve trust. The Trust currently operates 3 caravan parks which as impacted by the DCP (Fingal, Kingscliff North and Kingscliff beach).	It is not the intention of Council to sterilise development on land affected by coastal hazards. Certain development, by its nature, should be located in coastal areas as to allow the holidaying public to	the heading in section 3.1.2 and 3.2.2.  No other change
		The trust has prepared a Business Plan to redevelop the sites, the plan being endorsed by the landowners (LPMA).	get access to the beautiful beaches of the Tweed.  Caravan parks may be located within coastal hazard	
		The exhibited Draft DCP does not make provision for redevelopment of existing caravan parks; - provision should be made in the Final DCP on the basis of a "no worse outcome" test.	areas if the infrastructure can be moved or demolished at a later stage when threatened by hazard impacts. Short warning times will usually still be sufficient for holiday makers to pack up their belongings and depart.	
		The submitter made suggestions for a new clause for the redevelopment of existing caravan parks within each zone which includes:	The redevelopment of an existing caravan park should not be prevented by the DCP unless it results in an increase in the exposure of the community to	
		<ul> <li>Section 1.6 – Definitions (definition of worse outcome,</li> </ul>	coastal hazard risks or an increase in the intensity of the existing approved use (such as permanent occupants).	
		<ul> <li>New section 3.1.7; which included the following clauses.</li> </ul>	The submission also refers to "other short term accommodation facilities", but this is not defined or	
		<ul> <li>Redevelopment of existing caravan parks and other short term accommodation facilities must not result in a worse outcome</li> </ul>	explained. Any new clauses should be restricted to caravan parks only.	
		then currently lawfully exists.	It may be prudent to include some additional clauses	
		<ul> <li>redeveloped caravan park sites shall only be used as short term (i.e. tourist</li> </ul>	that allow specifically for limited redevelopment of caravan parks in each of the immediate (no buildings) and 2050 hazard zones. The redevelopment of	

Respondent	Issue	Description	Planning Comment	Action
Respondent		accommodation) sites;  No new permanent building shall be erected within the immediate hazard Zone  The general provisions in Section 3.1.6 also apply – the seven coast line hazards as defined in Table 2 of the NSW Government Guidelines for preparation of Coastal Zone Management Plans.  New section 3.2.7 as for 3.1.7  New section 3.3.7 as for 3.1.7	caravan parks in the 2100 hazard zone should be subject to the general controls that apply to any development in that zone.  Consultants recommendation was to include the following clauses:  "Add a new dot point to section 3.1.6 (Immediate Hazard Zone) as follows:  'Redevelopment of caravan parks must not result in the intensification of use or additional sites or construction of permanent buildings or permanent residential occupation of buildings.'  "Add a new dot point to section 3.2.6 (2050 Hazard Zone) as follows:  'Redevelopment of caravan parks must not result in the intensification of use or additional sites or construction of permanent buildings or permanent residential occupation of buildings.'  Council staff comment  Given the potential for high level of disruption to operations, cost implications from damage to and from any infrastructure in the Immediate Hazard Zone and expensive interim protection measures in a planned retreat zone, it is recommended that no new buildings be allowed in the Immediate Hazard Zone, regardless of use. Therefore, it is recommended that the DCP not contain any clause specifically relating to Caravan Parks and no change to the document in	
4. Seaside	Support of the DCP.	Submitter Kingscliff in the new Seaside development and supports the DCP  Submission suggests it would be beneficial to allow some movement of the 7f environmental line east towards the new 100 yr hazard line in the DCP.  Allowing some limited forms of development between the 7f line and the 100 yr line in this Southern Seaside area to allow installation of swimming pools or gazebo areas to help with encouraging better design options in that area due to the limited current building footprint on those southern lots.	response to this submission.  This DCP and the LEP are different instruments.  Council may consider realigning the 7(f) zone in a future LEP review but that is not a matter for this DCP.  Swimming pools and gazebos are a use that may be appropriate in the 2100 hazard zone and any application would be assessed on its merits.	No change

Respondent	Issue	Description	Planning Comment	Action
5. Seaside	Objects to DCP controls.	Section 1.3 – relationship with other plans. Suggests that the prohibition of development east of the 2100 hazard line discriminates against beachfront landholders in the Seaside development	Section 1.3 is required in the event that there is an inconsistency between a SEPP, REP or LEP and the Coastal Hazard DCP. The DCP does not prohibit any development.	No change
		Section 3 - the Immediate Hazard Zone impacts mainly on Marine Parade Kingscliff, the proposed requirements of this zone appear appropriate, and common sense. The 2050 Hazard Zone and 2100 Hazard Zone will of necessity slow down the approval process, as well as incurring increased costs  The submitted summarised by stating the document is clearly written, and seeks to deal with a difficult problem logically. However, some sections do need to be clarified or expanded. Potential confusion over interpretation of what is allowable in the 2050 and 2100 Hazard Zones needs to be addressed, and more guidelines as to estimating zone boundaries for individual allotments need to be added.	Council may consider realigning the 7(f) zone in a future LEP review but that is not a matter for this DCP.  If individual owners need assistance with the DCP it is suggested to come into Council and ask the planner on duty at the time. In addition, technical or consultant advice may be needed with certain developments. Additional reports will cause cost impacts on development and require technical expertise in Council to be reviewed.  A number of changes are made as a result of other specific submissions that will assist in making the DCP easier to interpret.	
6. Seaside	Objects to DCP for Seaside.	Landowner at Seaside.  States the need for a method for determining where the 2050 and 2100 hazard lines dissects their lots.  Considers the inconsistency between the location of the 7(f) zone at Seaside and the 2100 hazard line is discriminatory and the 7(f) line should be changed.  States that the controls for the immediate hazard zone and the 2050 hazard zone are sensible.  The DCP states that the owner needs to maintain or improve existing public beach access and amenity 3.2.2(h). Does not understand the relevance of this.  Does Council have the expertise to assess coastal risk management reports?  Can I still build a dual occupancy development at Seaside?  Can I still build a pool or deck or pergola east of the 2100 hazard line?	Council may consider realigning the 7(f) zone in a future LEP review but that is not a matter for this DCP.  Section 3.3.2 (h) refers to the design of the development not what the owner needs to do. The DCP states that the design needs to maintain or improve existing public beach, foreshore or waterfront access and amenity where possible. In many cases this will not be a consideration.  Council will need to ensure that it does have in house resources to review detailed coastal risk management reports.  The DCP does not prohibit dual occupancy development or decks or pools or any other development type. If these uses are permitted in the LEP and consistent with other DCP's then an application can be lodged and it will be assessed on its merits in relation to coastal hazard issues.	No Change

Respondent	Issue	Description	Planning Comment	Action
7. Cabarita Beach	Objects to DCP.	Objects to the inequitable outcomes for affected property owners especially for properties within the immediate impact and the 2050 Hazard Zones. The DCP imposes severe restrictions on development and significant negative impacts for directly affected owners.	The DCP does not control land use in the same way that an LEP sets out permitted and prohibited uses. The DCP works from the premise that if a use is permitted in the zone then the way that the land use can carried out and the information needed to support any application are prescribed in the DCP. It also gives an applicant an idea of the sort of controls that may be imposed on any approval and the design issues that may be acceptable.	No change
			The nature of coastal erosion means that property closer to the sea is generally more vulnerable to being affected. The closer you are to the sea, the higher the risk. The DCP is based on this premise and so it affects property differently depending how close the sea the site is. It is a risk based DCP.	
			The perception of risk by local populations influences considerably the design of coastal defence solutions. A commonly spread idea among communities residing within areas at risk is that hard engineering provides better protection against coastal erosion and associated risk of coastal flooding. This belief, which may be founded at the short term but not necessarily at the long run, has been observed in a number of European sites (Eurosion, 2004). Another problem that has been observed was the fact that these hard measures tend to move the problem further downstream and disturb the natural equilibrium at the coast. In some cases the erosion problem was even worsened by applying hard measures.	
			Over the long term the safety of human lives, protecting the environment and protecting the economic value of a coastal area are the main reasons for coastal protection. Council considers that in the absence of a decision to protect the Tweed coastline through hard and/or soft engineering measures then a risk based DCP that considers each application on its merits is a valid approach to managing coastal development.	

Respondent	Issue	Description	Planning Comment	Action
			"The combination of large and increasing risk from climate change in the coastal zone, the making of basically irreversible decisions on long-lived assets, and the lag effect in action to reduce risk indicate a need for early adaptation in many cases." (DECC, 2009). Given that Council has information on the potential for some private property to be affected by coastal hazards it is appropriate that it take action at this time.	
	Debatable issues in Sea Level Rise and Coastal Erosion.	The submitter states in detail that the position of the hazard lines is far from certain due to the uncertain nature of sea level rise and coastal erosion as recognised in the NSW Coastal Policy. Shows evidence that no one knows the exact extent of sea level rise in response to climate change. In addition, no one knows the exact extant of sea level rise in response to climate change or when it will occur so planning based on these estimates could be wrong. The uncertainty and impacts of the policy are very substantial and any course of action should be conservative.  Considerable variability in sea level rise estimates- the NSW Sea level Rise Policy is significantly more than the IPCC estimates.	Since the 1950's, major efforts have been undertaken to understand the behaviour of coastal systems and highlight the interactions between waves, wind, tides, foreshore profile, sediment transport and finally coastline evolution. These efforts have led to the development of models, which are now commonly used in coastal engineering design.  The coast is highly dynamic and complex. It is subject to continuous and extensive changes in response to variations in meteorological and oceanographic conditions. The nature of these changes depends on the way coastal processes interact with landforms, vegetation and sediment.  Accurate assessment and determination of coastal hazard areas is critical for coastal development assessment, planning, and mitigation and response activities. The science behind the coastal hazards lines is based on the most accurate and up to date data available.  The sea level rise underpinning the hazard lines in the DCP is 40 cm to 2050 and 90 cm to 2100 (compared to 1990 levels) which is consistent with the NSW Sea Level Policy 2009.	No change
	Sea level rise and coastal erosion.	The submitter explains in detail that in spite of historically measured sea level rise there is no evidence of coastal erosion haven taken place at Cabarita. He cites the NSW Parliamentary Library Research Service (Smith, 2010) to support this view and points out that the IPCC also acknowledges that there is insufficient evidence to be absolutely certain. Given this uncertainty he considers there is no evidence on which to base a planning policy which has substantial socioeconomic	The beach at Cabarita has been eroded in the past and submitter notes that it was quite eroded in about 1974 when much of the Tweed coast suffered from coastal storm events. To find evidence of active coastal erosion we need only look at the foreshore at Faulks park where two major periods of erosion have resulted in the loss of community assets such as roads, vegetation and park land as well as the beach itself. These events happened with minimal warning and the coast is now approximately at the 2050	No change

Respondent	Issue	Description	Planning Comment	Action
		impacts.	erosion line as at 2011. It is not clear why this previously stable strip of coast is now so actively eroding, but it is clear evidence of coastal erosion on the Tweed coast. It is an excellent reason to have a coastal hazards DCP.	
			Erosion from natural beach processes does not permanently affect the form of the beach and hence its value as a public asset. However, it does involve a landward shift in its location. The problems associated with beach erosion only occur once the shoreline recession threatens property. The problem is not so much that the beach is eroding but that development has occurred within the zone of natural beach fluctuations.	
			Smith (2010) concludes in his paper that "global sea level is rising. Rather than simply ignoring this potential threat, an adaptation strategy outlines a plan to cope with climate change and sea level rises." He concludes that the adaptation strategy should include accommodation of sea level rise through forward planning, protection of property via 'hard' engineering solutions (eg sea walls) and 'soft' measures (eg beach nourishment) as well as planned retreat through planning instruments such as no build areas or building setbacks for susceptible land. It is clear that in principle, Smith supports planning controls in the coastal zone such as this DCP.	
	Issues regarding storm event Impacts.	The evidence for worsening coastal erosion from storm events is well beyond the capability of current scientific methods. There is no research capable of informing any judgement. The WBM Oceanics Report supported this.  Suggests focus on the existing erosion escarpment and therefore limit development seaward of the immediate hazard line and monitor this line.	Storms result in raised water levels (known as storm surge) and highly energetic waves induced by extreme winds. Combined with high tides, storms may result in catastrophic damages. Beside damages to coastal infrastructure, storms can cause beaches and dunes to retreat of by 'tens' of meters in a few hours, or may considerably undermine cliff stability. In the past 30 years, a significant number of cases have reported extreme storm events that severely damaged the coast. Storm surge is a major factor in coastal erosion and has been documented in many scientific documents including the NSW State Coastal Policy (NSW Government, 1990).	No change
			seaward of the immediate hazard line will simply ignore the best available information and lull land	

Respondent	Issue	Description	Planning Comment	Action
			owners into a false sense of security in relation to coastal erosion.	
			Land-use planning decisions may provide for the development of a house that has only a 50–60-year lifespan, but the zoning of that land has a far longer lifespan and signals the ability to build and rebuild indefinitely on the site into the future. It is important that Council should consider planning controls over lands affected over as range of time periods by coastal erosion.	
	Application of this DCP logic to other areas.	Council has not taken the same logic to other policy such as flood controls.	Flooding is an event that is modelled and reviewed periodically and is also subject to a risk based approach (similar to this draft DCP). Generally, where Council has evidence that a piece of land is flood prone it requires some assessment of that flood affectation in support of any development application. It also requires measures to be incorporated in development to reflect flood information (eg floor heights). It also reserves the right to refuse development of flood prone land if the risk of severe affectation is high, such as in a high hazard flood way. Where Council is approached to permit the intensification of a residential use on flood prone land it may be refused if the risk to life and property is excessive.  So, on balance there is a similarity to the way that Council handles flood hazard and how it proposes to deal with coastal erosion hazard.	No change
	Development, title and value impacts.	The DCP effectively removes certainty of title and normally expected usage rights associated with land ownership. The DCP has the effect of removing certainty of usages associated with the applicable zoning and hence undermines the concept of land title and the value attached to it.	The controls proposed in the draft DCP are not prohibitions, but are intended to ensure that the level of risk applicable to the subject property is considered both by the applicant in preparing the application and the Council in making its decision. There is no evidence that this type of control will affect the title and right of the land ownership.	No change
	Land value.	Landowners impacted have effectively lost a clear right to develop the land in accordance with the LEP zoning. Land values will fall.	There is no evidence to substantiate claims that the proposed DCP will depreciate the value of properties in the locality. In areas such as Gosford LGA and Pittwater LGA where plans such as this have been in place for some time, land values have not widely depreciated.	No change

Respondent	Issue	Description	Planning Comment	Action
			In Byron Shire a DCP addressing coastal erosion hazard has affected residential property at Belongil since 1988, yet the value of land sales in that location has increased and it is still the most expensive residential land in Byron Shire.	
			Land valuation is a complex matter and certainty of future use as a factor that affects valuation has never been guaranteed by planning instruments as a right to any land and has always been subject to periodic change.	
	Wider investment impacts – investment and job loss.	Suggests the DCP may irreparably damage investment confidence due to uncertainty of land use. Tweed may be viewed as a high risk area for property developers driving them to safer low policy risk areas.	There is no evidence to suggest that land values will be drastically impacted, let alone job losses or significant investment losses as a result of a coastal erosion DCP. In Cabarita for example there are no private properties in the immediate hazard zone, only 15 private properties in the 2050 hazard zone and just 22 private properties in the 2100 hazard zone. In Hastings Point there are only 15 private properties affected by the 2100 hazard zone and none affected by the other zones.	No change
	Taxation impacts.	Rates: reductions in the value of coastal land will mean significant falls in rates income from coastal areas.  State Government Land Tax Revenue Losses: investment land is subject to State Government tax, most beach front land is held for investment due to its value. The loss in value of this land as a consequence of adopting the DCP will result in the loss of substantial land tax income for the State Government  Federal Government capital Gains Tax Losses: Due to the large loss in land value caused by implementation for the draft Coastal Hazards DCP, the federal government will loss substantial Capital Gains Tax revenue from reduced capital gain on sale.	As stated above there is no evidence that land values will be reduced. There are not many privately owned properties affected by the DCP.	No change
	Need to adjust values, land tax and rates on DCP adoption.	Due to property loses there will be a need for a revaluation of land. The DCP should not be implemented until the next valuation cycle is completed and that the valuation process specifically takes account of the impact the proposed DCP will have on property values.	As stated above there is no evidence that land values will be reduced. If valuations change it will not be possible to quarantine the effects of other issues such as the Global Financial Crisis and changes to interest rates which are more likely to impact on land valuation across a range of properties along the coast.	No change

Respondent	Issue	Description	Planning Comment	Action
	Refund historically incorrectly levied rates and taxes.	If the DCP is adopted the govt has been collecting rates and taxes at a premium level on land which should never have been collected. Therefore landowners impacted by this change should be repaid the difference in the taxes.	As stated above there is no evidence that land values will be reduced or that land tax and rates will change or that any changes can be attributed to the DCP.	No change
	Value impacts and innocent third parties – mortgagors.	Many coastal properties will be subject to mortgages held by banks and other financial institutions and therefore a direct impact on these institutions. In cases where the new valuation falls below the allowable risk margins for the institution, the mortgagor can exercise an immediate right to repayment of the mortgage in part or full. If this is not done they may proceed to foreclosure. Given the substantial reductions in value, it is quite likely that these financial institutions will bear considerable losses as a result.	As stated above there is no evidence that land values will be reduced or that there will be any consequential changes to mortgages.	No change
	DCP incongruence with policy and other studies.	Outlines the difference between various policies and the documents that relate to the DCP  NSW Coastal Policy – The DCP is inconsistent with the NSW Costal Policy. The policy does not suggest the removal of existing building. Consistency would see social equity considered.  NSW Sea Level Policy 2009 - gives sea level rise benchmarks. These greatly exceed those of the IPCC. The variability between the estimates used by the IPCC and NSW govt. Therefore the extent is not clear.  WBM Oceanics Report 2000- shows that was no retreat of the main dune erosion scarp. This study presented a more modest view.  Tweed Coastline Hazard Definition Study 2007-provides a more modest view of projected shoreline erosion than reflected by the DCP.	The Tweed Coastline Management Plan (2005) was prepared in accordance with both the NSW Government Coastline Management Manual (1990) and the NSW Coastal Policy 1997. The initial Tweed Shire Coastline Hazard Definition Study was produced in 2001 and the maps were updated in 2010 to account for new information on sea level rise.  The draft DCP was a recommended action of the Tweed Coastline Management Plan and is consistent with the suite of documents that Council has commissioned. It is not appropriate to take excerpts out of context and say that the draft DCP is inconsistent with other Council documents.  The NSW Coastal Policy was adopted in 1997. This policy states in table 3 – Design of DCP's: "Public setback lines will be set for every new development that immediately adjoins coastal lakes, estuaries, beaches, foreshores and cliffs."  In the NSW Sea Level Policy 2009, 'These benchmarks were based on the sea level rise projections developed by Australian and international experts and considered most appropriate for planning purposes in NSW, while acknowledging the uncertainty associated with these projections. The benchmarks will be	No change

Respondent	Issue	Description	Planning Comment	Action
			reviewed based on updated information, with the next review likely to coincide with the release of the fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) in 2014.'	
			In "NSW Coastal Planning Guideline Adapting to Sea Level Rise" (Aug 2010) the NSW Department of Planning states that development controls that could be considered by Councils in DCP's include mitigation works, construction methods or materials, development size, building design, the need for relocatable buildings or temporary buildings and the location of utilities. The DCP could also specify a time limit to the use or trigger limited conditions on development that allow use of the coastal land until such time as impacts compromise life and property.	
			The DCP is clearly consistent with State and local policies and background reports and studies.	
	Section 88E Conveyancing Act Item.	The DCP suggests that s88E Conveyancing Act to cease use and remove structures. The submitter raised many issues with this such as if a whole large building will be demolished if it only a corner is within 20m of escarpment.	Tweed Council has discretion as to how it exercises its rights as a public authority under Section 88E of the Conveyancing Act, 1919. Requiring a covenant that a use cease and a building be relocated or demolished give Council the legal right to deal with subsequent owners of a property about this issue. It shows that Council does not want to prohibit development outright, but take a precautionary approach for coastal hazards in order to avoid any risks to human life. It is an example of a trigger limited conditions on development that allow use of the coastal land until such time as impacts compromise life and property.  Council can exercise discretion in enforcing the covenant on a case by case basis, so that property is	No change
			not abandoned or demolished without regard to the particular circumstances of the case.	
			A distance of 20 m was recommended as it is consistent with the nominated distance in the Coastal Protection Act,1979 Code of Practice. The Code of Practice stipulates that emergency protection works should be placed no further than 20 m from the most seaward wall of the building to be protected. At this point the building is considered to be under immediate threat from coastal hazards.	

Respondent	Issue	Description	Planning Comment	Action
	6 metre setback from 2050 Hazard Zone.	The wording to this clause does not make sense. Council will need to review this clause.	This clause was intended to be included as applying to the 2100 hazard zone to give a preferred position for buildings in the long term. It should not have been applied to the 2050 zone as it cannot be achieved. It is recommended that it be deleted from the 2050 zone as it is a drafting error that cannot be achieved.  On consideration of the submissions made on this matter and that the DCP should be a 'modest' approach to impacting on private property it is further recommended that the 6m setback be deleted from the 2100 hazard zone to give owners in this area a greater level of flexibility in the placement of buildings in the event of new development being proposed. It is likely the DCP will be revisited over the next 10 to 20 years and the need for setbacks can be further considered at a future review.	It is recommended that the reference to a 6 m setback from the landward edge of the 2050 hazard line be deleted from Section 3.2 2050 hazard zone, Section 3.3 2100 hazard zone and Section 4.5 Possible Development Scenarios.
	Differential Implementation of coastal controls across Local and State jurisdictions.	Given that this is an international issue is being dealt with in a piecemeal fashion at the local government level. Each LGA will deal with it differently. In addition, Gold Coast does not have these types of controls and the result will be investment and wealth to flow from the Tweed to these areas. Tweed needs to put forward an argument to State and Federal govt . for a standardised approach across the entire Australian coast.	The Environmental Planning and Assessment Act, 1979 and the Coastal Protection Act, 1979 both prescribe clear roles for local government in coastal land use issues. Local governments need to act in accordance with local issues. As Tweed Council area is on the coastline that is affected by coastal hazards, this is considered a local issue. It is unlikely that the state or federal governments will prescribe a one size fits all policy with regards to coastal erosion in the near future or take action to acquire land or supply the funds to build protection works. Given the immediate consequences of coastal hazards, Council are of the opinion that action needs to be taken. A DCP that addresses this issue is one action that Council can take.  The Federal government considers that there is a need to build the capacity of those charged with management in the coastal zone to ensure that they have the knowledge, tools and skills to manage risk. Local government is responsible for key planning and land-use decisions that are critically affected by climate change risks.	No change

Respondent	Issue	Description	Planning Comment	Action
	Specific matters relating to our Property – Council Purchase Option.	Our property is the most affected property on the Tweed Coast, as the entire beachfront falls with the 2050 Hazard Line. The property has a zero setback to the Cabarita Surf club and is mostly surrounded by public land. Given these circumstanced Council may wish to purchase our property which would give Council many benefits.	Council has no plans to purchase this property at this time. However, public buy back of properties affected by natural hazards is an option available to any level of government and should not be discounted as a possibility if funds become available through a State or Federally funded scheme. It may be that the introduction of a carbon tax or trading system could yield funds to purchase properties most likely to be directly affected by sea level rise over the long term.	No change
8. Sydney	Responding for Datenews Investments Pty Ltd owners of the Kingscliff Hotel 201 Marine Parade Kingscliff.	Hazard Lines seem to be uniform distances across the coast and make no consideration for topography, geology, existing storm or coastal mitigation measures for a particular site. Where sites sit on rock bases or are currently protected or are clearly at a height where waves have not touched them for thousands of years, it seems excessive to have to provide reports for development.	Since the 1950's, major efforts have been undertaken to understand the behaviour of coastal systems and highlight the interactions between waves, wind, tides, foreshore profile, sediment transport and finally coastline evolution. These efforts have led to the development of models, which are now commonly used in coastal engineering design.	No change.
	Kingsuiii.	иечеюритети.	The lines are uniform across the areas as some factors in the calculations have been standardised and no engineering measures have been included in the model. Council has indicated that in the case of Kingscliff it is willing to investigate ongoing soft engineering measures such as beach nourishment as well as hard engineering measures in some circumstances eg Cudgen surf club.	
			The hazard lines will need to be revisited when a firm position is taken by Council on hard and soft engineering controls (including approvals that are required) in the Kingscliff precinct. In the interim the modelled lines should remain as a best estimation of the coastal hazard risk in this location.	
9. Cabarita Beach	Erosion escarpment.	The DCP refers to erosion escarpment. This is not defined. No discernable escarpment at Cabarita Beach.	Council acknowledges that this has not been defined in the DCP. It is therefore suggested to include the following definition in the DCP which is based on the definition in the NSW Code of Practice under the Coastal Protection Act, 1979.	Include definition of erosion escarpment in section 1.6  Erosion Escarpment: the vertical or near vertical drop in the profile of a
			Erosion Escarpment: the vertical or near vertical drop in the profile of a beach caused by tidal or storm erosion.	beach caused by tidal or storm erosion.
			Location of the erosion escarpment for the purposes of this DCP requires professional assessment on a site by site basis. Beaches will not always exhibit an	

Respondent	Issue	Description	Planning Comment	Action
			erosion escarpment.	
	20m from escarpment.	After the 1974 cyclone there was a significant escarpment after a short time this was rectified by nature- what happens in cases of normal sand replenishment.	Shoreline recession due to net sediment loss should not be confused with beach erosion, which results in a short term exchange of sand between the different portions of the beach, not a net loss from the active beach system. Shoreline recession is therefore a long term process which is overlaid by short term fluctuations due to storm activity.	No change
			However, if a use is required to cease because a building is within 20 m of an erosion escarpment, this does not require a change of ownership. If the erosion stops at 20 m and then accretion occurs then subject to appropriate engineering advice the use may recommence. The intent of the provision is to ensure that lives are not lost by persons continuing to use a building that is in imminent danger of being affected by coastal processes. It is Council's intention that the use of coastal land be maintained for as long as it is safe to do so.	
	Moderate approach.	Wants a moderate approach as Cabarita has suffered no noticeable erosion over the last 50 years. Supports all of the points as stated in No. 7 submission.	Over the long term the safety of human lives and protecting the economic value of a coastal area are the main reasons for the need of coastal protection. Council believes this policy option provides an acceptable approach to coastal protection given the level of threat currently modelled for the Tweed coast.	No change
10. Kingscliff	Property on Murphys Road Kingscliff.	Property owner on Murphys Road that is predominately landward of the 2100 Hazard Line.  Provides excerpt of local paper that quotes the Mayor Kevin Skinner stated that some Tweed properties which are affected by planning rule changes may be subject to negotiated compensation for the effects of coastal erosion. Council needs to clarify this position.  Need to clarify if this would have major development ramification and cause a significant loss in property value.  Will the prevention of subdivision stifle the development of this land for medium density consistent with neighbouring lots?	This DCP does not address the development density of land that it affects.  Should Council consider that land affected in part by Coastal hazards should be allowed increased development rights on non affected parts, then this can be addressed in other planning instruments.  Council has not indicated any intention in acquiring these sites which are affected by Coastal erosion.  The prevention of subdivision (where additional dwelling entitlements will be created) was intended to be a measure to limit the number of landowners in the areas affected by coastal erosion. It is not intended to be a limit on the type of land use that can be carried out on the areas affected.  However, on closer analysis it is not appropriate for a	Delete section 3.4 from the DCP

Respondent	Issue	Description	Planning Comment	Action
			DCP to prohibit a type of development that is permitted under the prevailing LEP (DCP's cannot legally do this). If Council wishes to pursue limiting the creation of additional dwelling entitlements by controlling subdivision it will need to address this in its LEP.  It is recommended that clause 3.4 of the DCP be	
			deleted.	
11.Cabarita Beach	Cabarita Beach Development.	The Tweed DCP proposes medium density development on their land. The lot has its long axis running in a north /south direction so it is severely impacted by the 2050 hazard line.	The intent of the DCP is to get as much new development or extensions to occur landward of the 2050 hazard line. The DCP does not intend to rezone the site or prohibit uses outright.	It is recommended that the reference to a 6 m setback from the landward edge of the 2050 hazard line be deleted from Section 3.2
		The 2050 Hazard Line traverses the site near the western boundary (landward) and impacts significantly for any future development. The Coastal hazards DCP renders the subject site unsuitable for any new development and renovations are highly restricted because the lot runs in a north south axis and there is no room for new buildings landward of the line.  The 6m setback requirement in the 2050 hazard zone will prohibit development entirely.  The lot should be given special consideration.	The 6m setback clause was intended to be included as applying to the 2100 hazard zone to give a preferred position for buildings in the long term. It should not have been applied to the 2050 zone as it cannot be achieved. It is recommended that it be deleted from the 2050 zone as it is a drafting error.  The intent of the DCP for a property such as this one is that new development will need to be as far landward as possible on the lot, will need to be removable in the event that the erosion escarpment comes to within 20 metres of the building, or be demolished. However, should the applicants coastal risk management report document a case such to support deep pile foundations and/or hard engineering protection, that can still meet the aims of the DCP and the provisions generally, than that application will be considered on its merits.  It is the intent of this risk based DCP that lots predominantly within the 2050 hazard zone will be subject to greater controls and need more innovative solutions than lots in the 2100 hazard zone.  No special consideration is warranted.	2050 hazard zone.
12. Kingscliff	The rock wall in front of Murphy's Road at Kingscliff.	Submitters consider a 1960's air photo shows a rock wall running parallel to Murphys road and about 30 metres seaward of their land was built in the 50' or 60's after sand mining and will protect their land.	It is not clear from the air photo what sort of structure is located east of Murphy's Road in what is now the sand dunes. If it not a structurally sound rock wall then it may not have any protection value. In the absence of confirmation of what is there it is a precautionary approach to still apply the 2100 hazard zone to the land in Murphy's Road. If the beach	No change

Respondent	Issue	Description	Planning Comment	Action
			erodes to reveal a rock wall of substance this position can be revisited.	
	Sand pumping from the Tweed River onto Kingscliff Beach.	If Council is considering a soft engineering approach by pumping sand onto Kingscliff beach then why impose such erosion controls at all?	If Council is successful in obtaining approval for sand replenishment onto Kingscliff beach and the project can be funded then there is a case to review the DCP as it applies to any property protected by the sand replenishment.	No change
			The DCP should be revisited if this occurs	
13. Kingscliff	Artificial island structures.	Artificial islands located off shore appear to be used in other countries to form a barrier to erosion, enhance sand collections and provide surf breaks. Why can they be used at Kingscliff?	The Tweed Shire Coastline Management Study and Management Plan addressed alternative forms of hard and soft engineering protection. At this stage Council is using a combination of limited hard controls eg Cudgen surf club, Faux park and Kingscliff bowls club combined with sand nourishment (dredged sand) and planning controls.	No change
14. Cabarita Beach	Drop in property values at Cabarita and subsequent impact on the community.	The DCP will cause property values to drop and then this will flow into community impacts. The rules should not change after a property is purchased in good faith.	There is no evidence to substantiate claims that the proposed DCP will depreciate the value of properties in the locality. In areas such as Gosford LGA and Pittwater LGA where plans such as this have been in place for some time, land values have not widely depreciated.	No change
			In Byron Shire a DCP addressing coastal erosion hazard has affected residential property at Belongil since 1988, yet the value of land sales in that location has increased and it is still the most expensive residential land in Byron Shire.	
			Land valuation is a complex matter and certainty of future use as a factor that affects valuation has never been guaranteed by planning instruments as a right to any land and has always been subject to periodic change.	
15. Kingscliff	Hazard lines and the rock wall protection at Kingscliff.	Why do hazard lines not consider the rock wall protection on the seaward side of Kingscliff bowls club?	It is unlikely that the rock wall protecting the Kingscliff bowls club will offer widespread protection to other properties unless a sand nourishment program is established on Kingscliff beach.	No change
			If Council is successful in obtaining approval for sand replenishment onto Kingscliff beach and the project can be funded then there is a case to review the DCP	

Respondent	Issue	Description	Planning Comment	Action
			as it applies to any property protected by properly constructed rock walls and sand replenishment.	
			The DCP should be revisited if this occurs.	
16. Kingscliff	Drop in property values.	The DCP will cause property values to drop and then this will flow into community impacts.	There is no evidence to substantiate claims that the proposed DCP will depreciate the value of properties in the locality. In areas such as Gosford LGA and Pittwater LGA where plans such as this have been in place for some time, land values have not widely depreciated.	No change
			In Byron Shire a DCP addressing coastal erosion hazard has affected residential property at Belongil since 1988, yet the value of land sales in that location has increased and it is still the most expensive residential land in Byron Shire.	
			Land valuation is a complex matter and certainty of future use as a factor that affects valuation has never been guaranteed by planning instruments as a right to any land and has always been subject to periodic change.	
	The rock wall in front of Murphy's Road at Kingscliff.	They consider a 1960's air photo shows a rock wall running parallel to Murphys road and about 30 metres seaward of their land was built in the 50' or 60's after sand mining and will protect their land.	It is not clear from the air photo what sort of structure is located east of Murphy's Road in what is now the sand dunes. If it not a structurally sound rock wall then it may not have any protection value. In the absence of confirmation of what is there it is a precautionary approach to still apply the 2100 hazard zone to the land in Murphy's Road. If the beach erodes to reveal a rock wall of substance this position can be revisited.	No change
	Transfer of development rights to land outside of the 2100 hazard zone.	Landowners only partly affected by the 2100 hazard line should be given increased development rights on the unaffected part to compensate for reduced opportunity.	This DCP does not address the development density of land that it affects. Should Council consider that land affected in part by coastal hazards should be allowed increased development rights on non affected parts, then this can be addressed in other planning instruments such as an LEP.	No change
17.	Multiple issues.	See separate table with comments and recommended changes		

- o **Table 2** contains comments on the draft DCP Section B25 Coastal Hazards
- o **Table 3** contains comments on the draft DCP Coastal Risk Management Report Guidelines.

Table 2: Comments on draft Tweed Development Control Plan Section B25 - Coastal Hazards from the NSW Office of Environment and Heritage (OEH)

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	_
1.	General comment on Hazard Definition	Will the Immediate Hazard Line be updated to include the Zone of Reduced Foundation Capacity?  This is recommended in order to ensure that the landward extent of the Immediate Hazard Area includes both the design storm bite and the zone of reduced foundation capacity, such that new development will not be permitted in this area. This approach will also satisfy the definition of Immediate Hazard Zone in the NSW Coastal Planning Guideline – Adapting to Sea Level Rise.	No. the ZRFC can be addressed in the coastal risk management report that is to accompany any DA. Council will need to consider the ZRFC at a future review of the hazard Lines where more information is known about dune height and geomorphology in certain precincts.
2.	General comment	Italicise Acts	Agreed
3.	Section 1.1, dot point 1	Recommend – "To provide guidelines for the development of the land having regard to minimising the <b>coastal hazards</b> risks (a function of likelihood and consequence) associated with <b>to</b> development on land in proximity to the Tweed coast."	
4.	Section 1.1, dot point 3	Recommend – "To minimise the risk to life and property <b>from coastal hazards</b> associated with development and building on land that is in proximity to the Tweed coast."	Agreed
5.	Section 1.1	Recommend adding an additional dot point – "To limit the intensification of development on lands subject to immediate coastal hazard risk"	Disagree. It is not appropriate to target one of the hazard areas for an objective and the suggested wording is too limited.
6.	Section 1.2	Recommend – "This section applies to all land within the Tweed Shire Coastal Hazard Areas in proximity to the Tweed coast as shown in Figure 1 and Appendix A."	Coastal Hazard Areas are not defined on Figure 1 or anywhere else in the instrument. In order to better explain the land to which the DCP applies it is recommended that section 1.2 be changed to

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with <del>strikethrough</del> )	
			"This section applies to all land within the Tweed Shire located seaward of the 2100 Hazard Line and shown on Figures 1.1 to 1.26 inclusive."
7.	Section 1.6	Reference to Figure 1 against many definitions appears incorrect. Figure 1 does not show coastal hazard lines. Recommend reference be made to Figure 1 and Appendix A.	Agreed. It is recommended that throughout the DCP any reference to Figure 1 be changes to "Figure 1.1 to 1.26 inclusive".
8.	Section 1.6, Coastline Hazards	Please amend the definition title in accordance with the Coastal Protection Act, 1979 – "Coastling Coastal Hazards"	Agreed
	Definition  Refer to Guidelines for Preparing CZMP's "Glossary"	<ol> <li>Recommend – "detrimental impacts of coastal processes on the use, capability and amenity of the coastline. The NSW Government Coastline Management Manual Coastal Protection Act 1979 and supporting guideline for Preparation of Coastal Zone Management Plans identifies seven coastline coastal hazards:"</li> </ol>	
		3. As part of the new Coastal Protection Act 1979, the Government has slightly refined the physical coastal processes defined as coastal hazards. Please refer to Part 1(4) of the Act for the list of coastal hazards and amend definition accordingly.	
9.	Figure 1	No figure title	Agreed. Add after Map Index "to Figure 1.1 to 1.26"
10.	Section 2.1	1. First paragraph, first sentence: Recommend – "border with the Byron <b>Shire</b> Council"	1.Agreed. Add "Shire" to first sentence.
		2. Second paragraph: Recommend – "The old NSW Government Coastline Management Manual (1990), now replaced by the "Guidelines for Preparation of Coastal Zone Management Plans (DECCW 2010)", and the NSW Coastal Policy (1997) provided the coastline management framework. Planning factors such as xx, xx, xx are to be taken into consideration	2. Agreed. Changes as recommended.  3. Agreed. Changes as
		3. Third paragraph, first sentence: Recommend – "The Tweed Coastline Management Plan was prepared in accordance with these guidelines the Coastline Management Manual (1990) and other State".	recommended.  4.Agreed. Changes as recommended.
		4. Fourth paragraph, fourth sentence: Recommend - "These hazard lines and zones were updated in 2010 to account for new information on projected sea level rise incorporate the NSW Governments sea level rise planning benchmarks."	5. Agreed. Changes as recommended.
		5. Fifth paragraph:	
		a. Recommend removing reference to "Umwelt Australia"	

#	Section	Comment / recommendation (Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	Response
		b. Recommend – "The Management Plan was adopted <b>by Tweed Shire Council</b> in June 2005.	
11.	Section 2.2	1. Paragraph 1, second sentence: Recommend - "Beaches respond to environmental factors such as annual variations in the amount of sand washed down from rivers; changes in the geometry of river delta channels; sand supply; changes in climate and prevailing wave regime; and changes in the weather".	Agreed. Changes as recommended.
		2. Paragraph 2, second + third sentence: Recommend - "The impact of sea level rise climate change on sandy shorelines will most likely be experienced as more severe coastal erosion during extreme events and increased shoreline recession as a result of predicted sea level rise. Eroded coastlines will increasingly fail to re-build fully following these extreme events and under the influence of sea level rise, resulting in"	2. Agreed. Agreed. Changes as recommended.
		3. Paragraph 3: Recommend - "Coastal erosion from natural beach-processes does not permanently affect the form of the beach and hence its value as a public asset. However it does involve a landward shift in its location. The problems associated with beach coastal erosion only occur once the shoreline recession threatens property. The problem is not so much that the beach system is eroding landward but that development has occurred within the zone of natural beach-coastline fluctuations in response to factors such as climate variability, regional processes and sea level rise."	<ul><li>3. Agreed. Changes as recommended.</li><li>4 Agreed. Changes as recommended.</li></ul>
		4. Paragraph 4: Recommend - "Urban development is expected to continue to be a major activity in proximity to the coast and needs to be carefully planned and managed to minimise impacts on coastal resources and prevent limit urban settlement within areas that are at may be at risk from coastal hazards over the planning horizon."	
12.	Figure 2	If the Immediate Hazard line is going to be updated to include the zone of reduced foundation capacity, the Figure should then be amended to replace the words "slope adjustment" with "zone of slope adjustment and reduced foundation capacity". The description under Figure 2 will then need amending as follows (for example): "For the "Immediate" planning period, the allowances are zero include only the zone of slope adjustment and reduced foundation capacity."	Disagree partly. Hazard lines are conservative enough for this DCP to achieve its stated aims without adding an additional setback for the zone of slope adjustment and reduced foundation capacity. See also comment against item #1.  Some changes should be made to Figure 2 to make it more relevant to this DCP. See annotated diagram.
13.	Section 3.1	It is recommended that no new development (including alterations and additions) be permitted in the	Disagree. A DCP can't prohibit

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	_
	Immediate Hazard Zone	Immediate Hazard Zone (IHZ).  Given that there is no development currently located in the Tweed coast IHZ, and under recognition that the Immediate Hazard Zone represents that area which may be impacted "immediately", it is considered in-appropriate that this DCP provide for the intensification of development in the IHZ.  It is no doubt the intent of the DCP is to ensure that as little development as possible is located within the Immediate Hazard Zone (in accordance with consent conditions applied in the 2050 HZ). Development in the Immediate Hazard Zone should be encouraged to be relocated/removed, and restrained from undergoing intensification via alterations or additions.	development that is permitted in an environmental planning instrument (LEP). Council will need to address prohibition in an LEP if it wants to do this. Given the State Govt push for a Standard LEP prohibition of development will need to be based on a restrictive zone. Note that there are coastal caravan parks at Fingal Head and Kingscliff that are within the immediate impact zone. Redevelopment of these without intensification or expansion of the use may be appropriate and needs to be assessed on its merits.
14.	Section 3.1.2 and 3.1.3	In accordance with comment #13 above, it is recommended that Section 3.1.2 and 3.1.3 be amended to delete existing information and replace with the following controls:     a. No new development is permitted on land within the Immediate Hazard Zone	Disagree. See above. However, after discussion with OEH it is agreed that the word "seaward" should be removed
	Zone	b. No building is to be located within 20m of the current coastal erosion escarpment	from dot point 3 in 3.1.2.  Also delete the word "Additions" from the heading and first dot point of Section 3.1.3.  Also add the words "No additions will be permitted" to the first dot point in 3.1.3.  Also delete the second dot point entirely as it refers to additions.  These actions will tighten up the controls on new development in the immediate impact zone while still allowing merit assessment of renovations, alterations and maintenance.
15.	Section 3.1.6	1. If recommendations in comments #13 and #14 above are accepted, section 3.1.6 is no	Agree to delete 3.1.6 dot point

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	-
	Immediate Hazard Zone	longer relevant. Recommend deleting Section 3.1.6.	1 and leave dot points 2 and 3.
16.	Section 3.2	It is recommended that any proposed new development (including alterations and additions) in the 2050 HZ be granted consent subject to the proviso that the development consent will lapse, and the use of the building will cease if:  a. Any part of the building is located within the Immediate Hazard Zone (by virtue of coastal recession over time and remapping of coastal hazard zones), or;  b. If the erosion escarpment comes within 20 of any part of any building, which ever trigger condition is first realised.  This is recommended due to the recognition that the Immediate Hazard Zone represents that area within which an extreme storm or series of closely spaced storms may erode the coastline back to. For the purpose of development control it is considered necessary to require removal of development from this Zone as soon as the trigger is realised. Development not having applicable development controls should be encouraged to be removed from this zone via means appropriate at the time.  The proposed use of a 20m trigger distance as the primary trigger factor is considered un-justified given the following:  a. The design storm bite (immediate impact) horizontal recession distance along the Tweed Heads coast is predicted to be approximately 200m³/m, therefore potentially resulting in a lineal recession of 30-40m landward of the 1999 erosion escarpment (WBM 2001).  b. 20m (as a trigger distance) has no historical application in Tweed Heads for the purposes of development control	Disagree. The court has ruled that the consent can't lapse, rather it is the use that has to cease. It will be confusing for people to impose a condition on the hazard zone as well as the 20 m rule. It will also require them to perhaps cease a use as a result of a policy change rather than the far more real threat of an active escarpment.  A distance of 20 m was recommended as it is consistent with the nominated distance in the Coastal Protection Act,1979 Code of Practice. The Code of Practice stipulates that emergency protection works should be placed no further than 20 m from the most seaward wall of the building to be protected. At this point the building is considered to be under immediate threat from coastal hazards.  The 20 m trigger is justified because it is a distance that is close enough that people will feel that the threat is imminent and therefore the need to cease a use is reasonable.
17.	Section 3.2.1 2050 Hazard Zone	Reference to Figure 1 seems incorrect, Figure 1 does not display hazard lines.	Agreed. It is recommended that throughout the DCP any reference to Figure 1 be

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	<b></b>
			changes to "Figure 1.1 to 1.26 inclusive".
18.	Section 3.2.2	Recommend including an additional dot-point at the beginning of this section as follows:	Agreed. Add the suggested dot point at the beginning of
	2050 Hazard Zone	<ul> <li>a. Development in this precinct is encouraged to be built as a modular, detachable, relocatable design.         This will benefit future relocation or removal of development in the future if under threat from coastal hazards.     </li> <li>Importantly this is considered appropriate for risk management under recognition that larger non-relocatable development is more logistically difficult to remove in a timely fashion should the development be eventually located within the immediate impact zone and, therefore, at immediate risk from coastal hazards.</li> </ul>	Section 3.2.2.
19.	Section 3.2.2	1. Dot point 3: Recommend "A minimum setback of 6 meters landward from the 2050 <b>Immediate</b> Hazard Line applies for all new development".	1. Disagreed. The 6m setback to the 2050 line was intended to
	2050 Hazard Zone	<ol> <li>Dot point 4: Recommend the trigger for lapsing development consent for development approved in the 2050 Hazard Zone be applied as follows;</li> <li>a. "If development within the 2050 Hazard Zone is granted consent (subject to a Coastal Risk Management Report) then any consent will be granted subject to the proviso that should any part of that development be located within the Immediate Hazard Zone (by virtue of coastal recession over time and remapping of hazard zones), or should any part of that development be located within 20m of the coastal erosion escarpment, then the development consent will lapse and the use of the building will cease. A Section 88E (Conveyancing Act, 1919) instrument will be used to achieve this outcome.</li> <li>Dot point 5: This sentence may be read to imply that "the owner of the land will be responsible for the removal of any or all buildings from the site, where possible". Recommend rewording the sentence as – "If the permitted use or occupation of the building does cease then the owner of the land will be responsible for removal of any or all buildings from the site, where possible, to a location on the site further than 20m from the erosion escarpment where possible, or off the site where not possible."</li> </ol>	give an additional margin of safety to new development, but it is recommended for deletion to reduce the impact on useable land over the time frame of this DCP.  2. Disagreed. It will be confusing for people to impose a condition on the hazard zone as well as the 20 m rule. It will also require them to perhaps cease a use as a result of a policy change rather than the far more real threat of an active escarpment.  3. Agreed.
		4. Dot point 6: Given that new development is permitted in the 2050 Hazard Zone, the requirement for mobile homes "which must be capable of separation and removable by 4WD vehicle" seems highly prescriptive when considering that residential development is allowed in this HZ, however not required to be capable of separation and removal by 4WD.	4. Agreed. Change to read "Where vacant urban sized lots exist that are more than 50% within this precinct preference will be given to lightweight,
		5. Dot point 6, last sentence: Depending on how comment # 19(4) above is considered, recommend - " prior to damage by the sea coastal processes"	modular and demountable

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with <del>strikethrough</del> )	
		6. Dot point 7: It is understood this part is referring to a development which is located in both the 2050 HZ and the Immediate HZ, and where that part of the development overlaps into the Immediate HZ, it may be required to be removed. Therefore, recommend – "Where a site has existing buildings or structures seaward of the 2050 Immediate Hazard Line and the property is the subject of a development application". If this has been misinterpreted, it is unclear as to why a new development would be permitted in the 2050 HZ, however, an approval for a modified development would require part of that development to be removed from the 2050 HZ to fully locate within the 2100 HZ. Under this scenario a merits based assessment is considered suffice, thus, removing the requirement for this statement to be included in the 2050 HZ controls.	buildings".  5. Agreed to comment #19(4) so no change is necessary.  6. Disagreed. Yes, it has been misinterpreted.
		7. Dot point 8 (d), (e), (f): Recommend these statements be a little more specific in describing what is actually meant.  Currently points 8(d) and (e) may be interpreted as endorsing large and "ocean proof/bullet proof" development. It could be interpreted that the intent is to allow development which incorporates for example sheet piling to a depth of say -3m AHD (below scour level) to ensure the development is able to withstand coastal processes if the coastline recedes back into the 2050 hazard area. This is not, however, understood to be the intent. It is assumed the intent of this statement is to ensure that development is built with deep pile foundations (in accordance with Action WC5 in the Coastline Management Plan), but with removal/relocation in mind (in accordance with consent conditions prescribed under dot point 4). This is particularly relevant to the objective of dot point 6 (d) which requires development to "not increase coastal risks to adjoining properties". It is recommended that:  a. In accordance with reducing the future level of risk to development on coastal hazards lands, the DCP should provide a little more description to encourage small scale, modular style residential development (with deep pile foundations) that may be relocated, and commercial development (with deep pile foundations) that, whilst unlikely to be able to be relocated, is designed with removal logistics in mind.	Disagreed. If owners want to build substantial buildings in the 2050 hazard zone, they need to be aware that over the long term they may become threatened directly by coastal processes. However, reserves the right to impose a condition that the use of the building cease and that the building either be removed to a safer place or demolished. This may be a risk that some landowners are willing to take, and they are entitled to have their case considered on merit.
20.	Section 3.2.3 2050 Hazard Zone	<ol> <li>Dot point 2: Is this requirement relating to the Immediate or 2050 Hazard Zone i.e.         "unless that portion of the existing building seaward of the 2050 Immediate Hazard Line is removed".</li> <li>Dot point 3: Again, should 2050 be replaced with Immediate?</li> </ol>	Disagreed. The intent is that where a lot may be affected by both the 2100 and 2050 hazard zones, then the structures seaward of the 2050 line should ideally be removed. This is illustrated in figures 4 and 5.
21.	Section 3.2.6 2050 Hazard Zone	Dot point 3: Recommend – "seven coastline coastal hazards as defined in the NSW government Coastline Management Manual Coastal Protection Act, 1979."	Agreed.
22.	Section 3.3	It is noted that there is no use of the Section 88E instrument, and a requirement to relocate/remove	Disagreed. These measures are not warranted on land that

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	-
	2100 Hazard Zone	development once that development is located within the Immediate Hazard Area, or once the erosion escarpment encroaches to within 20m of that development, for new development approved in the 2100 Hazard Zone.	is not likely to be affected by coastal processes within the life of this DCP. It will be up to future revised versions of this
		1. It is strongly recommended that approved development in the 2100 HZ has a coastal hazards based trigger for lapsing development consent attached to the consent via a s.88E, as is incorporated into development approvals in the 2050 HZ (refer comment #19(2) above).	DCP or other planning controls to address these issues as sea level rise impacts over the long
		This may be justified by the current understanding that sea level rise is not expected to stop at year 2100 and that the purpose of this DCP Chapter is to limit the impact of coastal hazards on development, infrastructure and the environment up to the 2100 planning horizon. This is also considered an important component of risk management and ensures that the developer, or subsequent purchasers of land, acknowledges (via commencement of the Development) the likely coastal hazards risk to development over the planning horizon.	term.
23.	Section 3.3.2 2100 Hazard Zone	1. It is recommended that Section 3.3.2 includes information in accordance with comment #22 above.	Disagreed. Any major changes to land in the 2100 hazard zone will need to be re-exhibited to ensure affected land owners
			are able to respond.
			1. Agreed
24.	Section 3.3.2	1. Recommend including dot-points 1 and 2 under section 3.2.6 into the 2100 Hazard Zone	g
	2100 Hazard Zone	"General" requirements.	2. Disagreed. If owners want to
		2. Dot Point 5, 6 & 8 - Recommend these statements be a little more specific in describing what is actually meant.	build substantial buildings in the 2100 hazard zone, they need to
		Currently these points may be interpreted as endorsing large and "ocean proof/bullet proof" development. It could be interpreted that the intent is to allow development which incorporates for example sheet piling to a depth of say -3m AHD (below scour level) to ensure the development is able to withstand coastal processes if the coastline recedes back into the 2100 hazard area. This is not, however, understood to be the intent. It is assumed the intent of this statement is to ensure that development is built with deep pile foundations (in accordance with Action WC5 in the Coastline Management Plan), but with removal/relocation in mind (in accordance with consent conditions prescribed under dot point 4). This is particularly relevant to the objective of dot point 6 (d) which requires development to "not increase coastal risks to adjoining properties". It is recommended that:	be aware that over the long term they may become threatened directly by coastal processes. However, the life span of the building is likely to be less than the time frame for immediate threat and it will be up to a future planning instrument to control future generations of development.
		a. In accordance with reducing the future level of risk to development on coastal hazards lands, the DCP should provide a little more description to encourage small scale, modular style residential development (with deep pile foundations) that may be relocated, and commercial development (with deep pile foundations) that, whilst unlikely to be able to be relocated, is designed with removal logistics in mind.	3. Disagreed. The 6m setback to the 2050 line was intended to give an additional margin of safety to new development, but it is recommended for deletion to reduce the impact on
		3. Dot point 9 – It is not understood why a 6m setback is required landward from the 2050 Hazard	to reduce the impact on

#	Section	Comment / recommendation	Response
		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	
		Line, when development is permitted in the 2050 Hazard Zone.	useable land over the time frame of this DCP.
25.	Section 3.4	Recommend – " will be created in the 2100 Hazard Line Zone"	Agreed. Section 3.4 is recommended for deletion as this issue will need to be addressed in a future LEP should Council wish to pursue it.
26.	Section 3.5	This section should be reviewed under the requirements of s.55M of the Coastal Protection Act, 1979. It is recommended that the wording of this section closely resemble that of the requirements of the section 55M of the Act with regard to the conditions that must be met in considering approval for erosion protection works.	Agreed. However if its covered by Section 55M of the Coastal Protection Act, 1979 than perhaps its best just to refer to that. Delete the current section
		For example; The requirement for land, or the beach to be restored if any increased erosion of the beach or adjacent land is caused by the presence of the works should be included. Public safety and access considerations might also be included.	and add "Coastal protection works may be permitted subject to the provisions of Section 55M of the Coastal Protection Act, 1979"
27.	Section 4.2	The proximity of the development to the coastal erosion escarpment (including any erosion protection works / structures where applicable) should also be included as additional information required to be submitted with the DA.	Agreed.
28.	Section 4.3	The proximity of the development to the coastal erosion escarpment (including any erosion protection works / structures where applicable) should also be included as additional information required to be submitted with the DA.	Agreed.
29.	Figure 4 and 5	Recommend:	a. Disagreed. 6m setback to be deleted from the DCP and will
		a. amend location of 6m setback line to be behind the Immediate Impact Line	not be shown on the figures 4 and 5.
		<ul> <li>b. Please name the Hazard Zones on the figures (i.e. Immediate Hazard Zone, 2050 Hazard Zone etc)</li> </ul>	b. Agreed.
30.	Appendix A  Coastal Hazard Line Maps	Please check the scale bars on all figures in Appendix A – the scale represented in the scale bars seems too small, e.g. land allotments in Figure 1.6 and 1.7 (etc) are not over 100m long.	Agreed. Scale bars have been distorted, and need correction.

Table 3: OEH Comments on Draft Coastal Hazards Development Control Plan – Coastal Risk Management Report Guidelines

#	Section	Comment / recommendation	Response
#		(Note: Where relevant, please add text in <b>bold italics</b> and delete text with strikethrough)	
1.	Paragraph 1	Recommend expanding the description on the required qualification of the coastal and structural engineer to state – "suitably qualified coastal engineering and structural engineering consultants (as defined under "Definitions" in section B25 of DCP)."	Agreed.
2.	Dot point 1	Recommend including additional information as follows – "Coastal Hazard Zones:  o the location of the development relevant to the back-beach coastal erosion escarpment  o the location of the development relevant to the coastal hazard zones (i.e. within the 2050 Hazard Zone)"	Agreed. Add to section 1
3.	Dot point 2	"Constraints Risks due to the impact of coastline changes coastal hazards on the land and building(s).	Agreed. Also agreed in discussion with OEH to add a new matter to be inserted after item 2 as follows: "3. An assessment of the zone of reduced foundation capacity as it applies to the progression of the coastal erosion escarpment towards the subject land"
4.	Dot point 3	Recommend – "Compliance with the <b>Development</b> Controls (refer section B25 of DCP)".	Agreed.
5.	Dot point 4	<ol> <li>Recommend – "(where existing structures to be retained include approved coastline protection structures, these must be certified as being structurally adequate during the for withstanding a design storm event".</li> </ol>	<ol> <li>Agreed.</li> <li>Agreed. Add "refer to Section 55m of the Coastal Protection Act,</li> </ol>
		2. Please referring to the requirements of the Coastal Protection Act (or just to the Act its self) regarding erosion protection structures and the requirements regarding public access, safety and offsite impacts to be mitigated (refer CP Act s.55(M)).	1979.
6.	Dot point 5 and 6	Is the life of the development taken to be 100 years or 50 years?	Agreed. Change to "taken to be 50 years" to be consistent with other parts of the DCP.
7.	Dot point 6(a)	Recommend – "impact from water borne debris, wave impact and overtopping, and storm"	Agreed.
8.	Dot point 6	The requirements under dot point 6 seem very onerous considering that the DCP is based around only allowing development outside of the Immediate Hazard Zone, and once that development is at immediate risk from coastal hazards it will be removed / relocated in accordance with development consent conditions.	Agreed. Delete from the words "These precautions a to d inclusive.