

<b>NSW Coastal Panel</b>	MEETING NUMBER: 24
	LOCATION: Teleconference
	DATE: 29 JANUARY 2016
<b>MINUTES</b>	

**Present**

<b>Name</b>	<b>Nominating Organisation</b>
Mr Angus Gordon (AG)	Chair
Dr Carolyn Davies (CD)	Office of Environment and Heritage (Deputy Chair)
Prof Bruce Thom (BT)	Local Government NSW (LGNSW)
Prof Andrew Short (AS)	Local Government NSW (LGNSW)
Mr Steve Murray (SM)	Department of Planning and Environment
Mr Steve Lawson (SL)	Department of Primary Industries – Crown Lands
Ms Jane Gibbs (JG)	Office of Environment and Heritage - Coastal Panel Secretariat
Dr Marc Daley (MD)	Office of Environment and Heritage - Coastal Panel Secretariat

**Agenda Item 1 – Welcome and Apologies**

The Chair opened the meeting and welcomed Panel members.

Apologies were received from Ms Jane Lofthouse (Local Government NSW) and Mr Allan Young (Department of Planning and Environment).

**Agenda Item 2 – Declaration of Interests**

JL did not attend this meeting due to a conflict of interest in relation to her employment with Tweed Shire Council.

**Agenda Item 3 – Confirmation of Previous Panel Minutes**

No minutes from previous meetings were provided for confirmation

**Agenda Item 4 – Matters arising from Previous Meetings**

MD advised the Panel that he is still awaiting responses from Wollongong City Council and Shoalhaven on how the Panel's advice was considered in relation to proposed works at Coalcliff and Mollymook.

**Agenda Item 5 – Summary of Kingcliff Site Visit**

AG gave a summary of the Panel's site visit to Kingscliff on 21 January 2016. In attendance at the site visit were AG, BT, AS, SL and MD.

**Agenda Item 6 – Kingscliff Foreshore Protection Works and Central Park Development Plan**

On 15 January 2016 the Coastal Panel received correspondence from Tweed Shire Council notifying the Panel of its intention to undertake Foreshore Protection Works at Kingscliff. This notification is pursuant to clause 129(2A)(b)(i) of the *State Environmental Planning Policy (Infrastructure) 2007*, requiring public authorities proposing new works on the open coast and

where a coastal zone management plan is not in place, to notify the Coastal Panel before carrying out the development and take the panel's response into consideration.

Following a discussion and consideration of the matter, the Panel instructed MD to prepare a draft response to Tweed Shire Council for circulation and finalisation by the Panel, structuring its advice into two sections – issues for noting, and formal considerations, capturing the following elements:

- The documents and information relied upon to inform the Panel's advice to Council include:
  - (i) *Foreshore protection works and central park development, Kingcliff Review of Environmental Factors Revision 1.0* (dated 23 November 2015)
  - (ii) *Concept design drawings* supplied with the REF (dated 16 November 2015)
  - (iii) Site visit and verbal discussion with Council on 21 January 2016.
- The Panel noted that Council has received a Federal Government Grant of \$9.81M from the National Stronger Region Funding Program, which would be Council's primary funding mechanism for carrying out this project. Council advised that the estimated revetment wall cost was approximately \$7M; however if there are cost overruns, expenditure planned for other elements of the development would be used to fund the revetment construction and Council would use other sources to fund various other elements of the development over time.
- The Panel discussed the nature of the coastal processes which are known influence the Kingscliff compartment, this included the movement of sand waves which are known to exacerbate beach erosion from time to time. The Panel also discussed the influence of the Cudgen breakwaters, which interrupt the continuous flow of sand from south to north and contributes to the formation and migration of sand slugs. The Panel noted this has created additional management challengers for maintaining a stable supply of sand and beach amenity.
- The Panel noted the previous management actions undertaken on the Kingscliff coastline to date, have traditionally adopted a philosophy of protection dating back to the 2005 Tweed Coastline Management Plan.
- The Panel raised a concern in relation to the existing vertical piled seawall in-front of the Surf Club, noting it has not been designed to withstand regular prolonged exposure to open-coast waves and which the proposed works may place additional pressures on the structure, increasing the risk of damage or failure to this wall. The Panel also noted that the REF indicates the founding level of this (piled) wall is RL 0m, and Council would need to ensure that this wall is adequately and appropriate founded.
- The Panel noted that Council has opted to undertake the detailed REF design on a revetment wall option that does not include a nourishment component, a factor which was included in the original multi criteria analysis, used to assist in determining the preferred management option. The Panel also noted the design of the wall had been downgraded from 7T rock to 5T rock (underlain by geotextile material) and a crest level at RL5. The structure is also being design to accommodate a storm tide and scour depths to -2m. However, the Panel noted the design is likely to result in some overtopping at times and how this will be managed still needs to be considered.
- The Panel noted that throughout the plan reference to the word 'amenity' had the tendency to cause confusion, in that 'amenity' was being utilised in reference to the overall amenity of the project, which includes a central park precinct, a cycle way and updates to a community hall, rather than 'amenity' in relation to the environment and amenity of the beach.

- The Panel were concerned that the revetment is likely to result in adverse beach amenity from time to time, unless nourishment is to be included as a key component of the project. The Panel also raised the additional concern of cumulative impacts caused by an already stepped shoreline misalignment, which is likely to be further exacerbated by the proposed wall.
- The Panel noted the importance the impact a series of clustered storms or cyclones may have on beach erosion, and which the proposed wall would further exacerbate sand losses, leaving little to no sand in front of the wall at times and delay any beach recovery.
- The Panel were of the opinion that Council should incorporate an impact mitigation strategy, involving both small scale and larger scale nourishment.
- The Panel were concerned for potential impacts north of the wall, due to a combination of end effects, a stepped misalignment, and the 'locking up of sand' behind the wall that would have otherwise been available. The Panel suggested that over time the shoreline recession issue would propagate north, potentially placing Murphy's Road and Wommin Lagoon at risk. Given the potential future vulnerability of Wommin Lagoon, the Panel noted Council may need to consider the construction of a levee along Fingal Road at some time in the future to mitigate again potential breakthrough in a flood.
- The Panel noted from the REF and discussions with Council, there was no clear long term commitment to nourishment in front of the seawall; however Council did acknowledge that they may pursue opportunistic nourish from time to time. The Panel was concerned that there may have been an underestimation of the impact of the wall and the need for beach nourishment. The Panel's view was that should Council proceed with the project as planned, then nourishment will be essential to maintain beach amenity into the future and Council's intentions for and understanding of long-term beach nourishment strategy needed to be made clear in the plan.
- The Panel noted due to inconsistencies in the REF, that it is not clear how well the issue of loss beach amenity in the absence of nourishment is understood by the community.
- The Panel discussed a number of technical issues in relation to the REF. This included statements of dunes to the north between "*8 to 12 meters in height*", whereas the Panel noted the area north of the bowling club appears to have much lower dunes. The Panel were concerned that the run-up and overtopping potential in this region may have been underestimated.
- The Panel noted a tentative proposal to consider installing a small groyne near the bowling club had been outlined in the options study; However the Panel noted such an alternative would create its own impacts which would require additional amelioration. The Panel were also of the opinion that both the groyne construction and nourishment costs appeared to be undervalued and Council should re-consider the costing of these aspects.
- The Panel noted that Council intends to leave their existing hazard lines in place for Kingscliff, behind the proposed revetment as a no regrets measure. The Panel was supportive of the retention of these controls, as they reflect the residual risk and in the medium to long term Council might not be able to financially maintain the wall, should it be constructed, or support a nourishment plan required in order to maintain a beach. Should the wall be constructed the Panel also discussed the need for Council's emergency management plan to include a provision for public warnings addressing the public risk posed by the wall, such as a member of the public that might find themselves trapped between the water and the structure. The Panel noted such circumstances could arise when the available beach width is quite narrow and wave conditions are such that uprush could overwhelm a person(s) walking along the remnant beach.
- As a longer-term consideration the Panel discussed the merits of Council potentially developing an on-demand sand nourishment strategy, utilising a sand bypassing system

from south of Cudgen Creek. The Panel suggested that such a system could be used to assist in maintaining the beach and minimising erosion during periods of significant storm activity or sand slug movement.

- The Panel discussed the potential for further work to be undertaken to develop a thorough understanding of coastal processes in the embayment, as they relate to the potential beach behaviour in the short, medium and long term. This included Council undertaking or commissioning an analysis of their existing monitoring to develop or improve predictive capabilities in understanding the dynamics of the sand waves, and how they move through and affect the greater compartment.

#### **Agenda Item 6 – Other Business**

CD outlined a list of CZMPs which have been referred to or are due to be referred to the Panel, and asked the Secretariat (JG and MD) to develop a forward program of how they will be dealt with.

#### **Agenda Item 7 – Date for Next Meeting**

No date was set down to the next meeting. The next meeting would be held as required. The meeting closed at 1:15pm.