Case Study: Protecting public and private assets at Collaroy-Narrabeen Beach

Overview
Collaroy-Narrabeen Beach suffered significant erosion during the June 2016 East Coast Low. This resulted in a number of properties being evacuated and deemed unsuitable for occupation and other properties being at imminent risk of damage from any subsequent storms. Council was required to make immediate decisions on the long-term management of the area and adjust its whole planning framework to implement those decisions. A revised policy and planning framework was developed and implemented within six months of the event.

Background
Properties along Collaroy-Narrabeen Beach are at immediate threat of damage from coastal erosion. Development along the beach is also classified as the third most at risk nationally, and most at risk in NSW, from coastal hazards. At present there are 11 individual public assets covering a beach frontage of 490 metres and 202 residential addresses (53 lots) covering a distance of 800 metres that are at immediate threat of damage due to the impacts of a coastal storm.

Previous ad-hoc attempts to protect private property from coastal erosion have resulted in long lengths of the beach being backed by rock, fill, and other structures placed either during or after coastal storms. The engineering strength of these structures is uncertain and they are often buried except when exposed by storms. The 2016 storm caused significant damage to both properties and catastrophic damage to a large number of the ad-hoc works protecting other properties.

Coastal protection works needed to be implemented without delay and in a coordinated manner, under considerable political, technical and industry scrutiny while ensuring community expectations were met.

Implementation
The implementation of the program required careful consideration of a range of legislation including the Environmental Planning and Assessment Act (1979), the Coastal Protection Act (1979), the Crown Lands Act (1989), Conveyancing Act (1919) along with liaison with relevant NSW Departments.

Specific project objectives to the Collaroy-Narrabeen coastal erosion response were to:
- Provide a policy framework in accordance with the relevant coastal legislation and regulation that was easy to interpret, accepted and implemented by those residents effected.
- Work with the necessary state agencies to obtain assistance with and certification of the proposed policy framework and implementation actions.
- Consult residents on the policy framework and methods for implementation.
- Gain the broad acceptance of residents on the policy framework and methods for implementation.
• Implement a solution that afforded both public and private assets the necessary protection without causing damage to the beach or reducing public access and amenity

Council significantly revised its existing management framework. This included preparation and adoption of the Northern Beaches Coastal Erosion Policy, and amendments to the existing Coastal Zone Management Plan (CZMP). As well as these policy documents, Council amended relevant planning controls and provided design guidelines and technical assistance to guide applicants and assure the community that the function and amenity of the beach would not be negatively impacted by the proposed coastal protection works.

Outcomes

A policy framework has been developed in accordance with the relevant coastal legislation and regulation that was able to be understood, accepted and implemented by those residents affected and the broader community. It will enable integrated protection to public and private built assets currently exposed to the impacts of coastal storms and successfully navigates the complex policy and legal issues around allowing public land to be used for private protection on the open coast.

Council has showed considerable leadership in developing the following documents:

- Northern Beaches Coastal Erosion Policy
- CZMP for Collaroy-Narrabeen Beach and Fishermans Beach
- Collaroy-Narrabeen Beach Coastal Protection works concept design and concept alignment
- Collaroy-Narrabeen Beach Coastal Protection Assessment
- Collaroy-Narrabeen Beach Coastal Protection Works Distribution Analysis

When implemented the works will:

- improve public safety and prevent risks to human life
- mitigate current and future risk from coastal hazards taking into account climate change
- maintain the presence of the beach, dunes and foreshore
- maintain public access, amenity and use of beaches and foreshores
- reduce reliance on emergency response

Key Learnings

The experience of Council is that the immediate threat posed by the June 2016 storm drove an expectation that recommendations relating to coastal protection would be implemented quickly. However this desire for rapid implementation emphasises the difficulties Councils face in implementing long term coastal protection options that protect private properties on beaches in NSW while working within a complex State framework.

The next challenge for Council is to work with property owners at all private properties to ensure a coordinated solution. This may involve multiple property owners submitting a joint application for works. Council, as reserve trust manager will ensure the public works will be maintained in accordance with the requirements of the NSW Crown Lands Management Act (2016) and the requirements for asset management, maintenance and renewal under the Local Government Act and NSW Integrated Planning and Reporting Framework.

The works protecting private assets will be maintained in accordance with the NSW Coastal Protection Act 1979 and the Coastal Management Act 2016, as well as the Northern Beaches Council Coastal Erosion Policy. The appropriate obligations and financial arrangements to ensure that protection works for private assets are satisfactorily built and maintained will be established as conditions of consent when approvals for works are granted.

Council has demonstrated strong and innovative leadership in finding a way through the
complex NSW coastal management framework to provide a lasting solution to a problem created over 100 years ago. The framework, action and experience of Council is transferable to other coastal councils who face similar impacts to public and private assets from coastal storms.

Photo: Stuart to Ramsey Streets, Collaroy-Narrabeen Beach (supplied by Northern Beaches Council).

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