

# Pittwater Community Alliance

## Notes of Beach Restoration Meeting with Angus Gordon

Monday 8<sup>th</sup> August 2022

Prior Storm Events - 1920's, 1940's, 1960's 1974, 2007, 2016

In the 1974 event the Newport Surf clubhouse was partially undermined

South end of Newport Beach – the boundaries in the old subdivision did not take into account storm events etc. and were drawn well down the beach.

There is no public access to the Newport Pool (access at mid to high tide is inside the private boundaries) however owners have always allowed the public access.

Mean High Water Level – AG it is a more complex issue than commonly thought about and represented in the 1900 Act

Technically speaking the coastal boundaries shown in the title documents are not valid as they are not in accord with the 1900 Real Property Act.

In the 1974 storm which inflicted greater damage than the 2022 storm council commenced a beach nourishment repair by bringing in sand to both North & South Newport beach including the car park.

The 2016 Coastal Management Act and accompanying SEPP state that private owners cannot carry out emergency works at all any more, any coastal protective works on private property can only proceed with a DA.

Emergency works can only be undertaken by a public authority.

NBC agreed to carry out needed emergency works the last few weeks however under the Act the emergency works need to be removed after 90 days creating a huge dilemma for the owners.

**Definition** of Beach nourishment – is just sand obtained from elsewhere (either onshore or offshore sources) and used to increase the volume of sand in the coastal compartment thereby widening the beach and providing a protective buffer.

Revetment – Rubble Rocks covered by sand and where appropriate then vegetated. The size of the rocks needed is dependent on a number of factors and design guidelines are available.

Vertical Wall in Collaroy has been constructed from reinforced concrete.

Beach Nourishment practices continue to be carried out on the Gold Coast by the Queensland State Government with sand pumped from off-shore. This has been going on for 50 years. A similar situation exists in SA for Adelaide's beaches.

**Pittwater Community Alliance (PCA)** is a group of 12 major resident & community associations in Pittwater. We assist in representing their interests to protect and preserve the unique environment of Pittwater.  
**PCA** is independent and has no political allegiance or bias. PO Box 1180 Newport NSW 2106

Other Sydney coastal beaches affected by the current storm are Nth Cronulla, Wamberal and Nth Avalon.

The damage to south Newport is a little unusual. The damage from each storm differs depending on the reefs, direction of the swells, wave height, tides etc. and is very difficult to predict.

Storms appear to have happened less frequently in the last 30 to 50 years than in the period before but this changed again in the early 2000s. No one fully understands why but is believed to be related to a changing pattern in the high & low pressure systems and in particular their shift in latitude. The varying nature of the ocean currents also plays a part.

Overseas experiences – The Netherlands have had huge beach nourishment works with up to 30 million cubic metres of sand being pumped from off-shore. The US have also large beach nourishment programs on the east coast, west coast and in the Gulf to stabilise shorelines.

AG believes Beach Nourishment is the most effective form of repair, followed by Revetment methods. Concrete Vertical walls are doomed to catastrophic failure (although may take 50 – 60 years) with salt getting into the reinforcing.

The NSW government has not been helping councils and they come under a lot of pressure when owners feel left out.

Progressive failures are better than catastrophic failures. Revetment repairs will eventually have progressive failures but by using bigger rocks and boulders will delay any such failures.

Mean High Water Mark (MHWM) – this mark is not a fixed line even though various surveyors have selected one from time to time. The MHWM is an outdated concept as beaches come and go continually. You can't draw a defining line. It is better described as a zone defined by the location where high water intersects the beach from time to time as the beach accretes and erodes according to the weather.

There has been a new combined council group formed called the 'Sydney Coastal Council Group' and has been funded by the various Sydney affected councils. However it is felt they cannot be effective unless the NSW Government gets involved financially for more permanent programs to be effective but to date they have not been interested. AG said Rob Stokes has been supportive of beach nourishment but was not getting any support.

NSW Government is indicating it wishes to help at Stockton Beach using a beach nourishment method.

Location of off-shore sand has been mapped and is located a few kms off-shore. This sand is 35 to 40m deep. (Offshore further is called the mid shelf muddy zone and is not suitable with too many fine particles). The question of environmental damage to off-shore was discussed and AG said this had been well mapped and considered and with GPS technology the sand could be mined in strips so that what was left between the strips just fell into the

gap with all the floor life (plants vertebrae etc) speedily recovering as had been studied overseas.

The type of sand required has to be the same as was there and comes from the Hawkesbury Sandstone. Middle Creek is a potential source for this sand and was used in 1974. It could be a current source although any large state program would need to source the sand from various locations including both onshore and off-shore.

How is Collaroy repairs being funded? It is believed that 10% State Gov't, 10% council and 80% landowners. It is further believed that each land owner had to contribute \$200,000 making the cost app \$250,000 per property. Originally it was thought only the 10 properties impacted by the 2016 storm were involved however anecdotal reports are that number could have doubled which would give the total cost between \$2.5 to \$5.0 million. It has been noted since the completion of the Collaroy vertical wall that a number of landowners had filled in the gap between the wall and themselves and now have a significantly bigger usable block (with the obvious result the property has increased significantly greater in value than the cost of their contribution).

When asked what a beach nourishment program would cost at Collaroy AG commented that you could not do part of Collaroy beach, you would have to do the lot and that would require app 1million cu m of sand. At an estimated \$10/cu m that would amount to app \$10m and be needed every 20 to 30 years.

The proposed extensions to the Newport Surf Club include a vertical concrete wall in front of the clubhouse.

Where to now in general?

- Need State Government to take a position for the long term future of the State beaches
- Concentrate on 'Nourishment' strategies – not walls
- Need a round table with council and state (& federal) governments.
- Think about some LEP changes i.e. where beach frontages are they have to have adequate set-back for property structures.

Where to for Newport?

- Need State Gov't to contribute like Collaroy – but using Nourishment strategies
- Look at various sources of suitable sand i.e. Middle Creek or Off-shore
- Newport Community to discuss
- Discuss with NBC need for more permanent access to pool

GRB 12/8/2022