

From: frankmieszala [REDACTED]  
Sent: Tuesday, 9 February 2016 9:06 AM  
To: OEH PD Coastal Reforms Mailbox  
Subject: 11\_090216\_Submission on proposed coastal reforms from Frank Mieszala on Lake Macquarie

To whom it may concern,

I live at Blacksmiths Beach (2281) at the entrance to Lake Macquarie. I have read through the documentation supplied related to the proposed reforms and get the strong feeling they are aimed, in general, at maintaining the natural environment/amenity as much as possible and allowing sea level rise to reclaim its natural level. Whilst I agree with this in general, I would like to point out a couple of issues at Blacksmiths beach.

There is a narrow (100-150m wide) entrance to Lake Macquarie between Swansea heads and the breakwall at Blacksmiths beach. This trained entrance allows recreational vessels in and out of the lake, and maintains a very healthy tidal lake environment, while at the same time restricting tidal fluctuation in the lake to around 200-300mm (compared with say 1.5m at the entrance).

The entrance on Blacksmiths side is formed by a sand spit between Belmont hill to the north and Blacksmiths to the south - a distance of several kilometres. The Pacific Highway runs through this area and there are four suburbs involved (Belmont south, Marks Point, Pelican and Blacksmiths) as well as Swansea township south of the bridge. All of these suburbs are on sand and less than 2m AHD.

At the recent COP21 in Paris, the participating governments agreed to (try to) limit global temperature rise to 2 degrees. I understand it has already risen about 0.6 degrees since 1920. The upshot of that is that, as the heat gradually permeates through the oceans and ice caps, sea level will rise over the next few centuries as ice melts and water expands. A rise of about 4.7m has been projected for a 2 degrees increase in air temperature.

Whilst this is 200-300 years away, a rise of 2m will completely submerge all five suburbs mentioned above, and cut off the Pacific Hwy and the eastern passage around the lake. At 0.9 m, predicted for 2100, the sand dunes at Blacksmiths beach will have collapsed and the beach will start reclaiming residential properties. The impact of an unrestricted opening between Belmont south and Swansea heads will convert Lake Macquarie into a bay with significant tidal variation being felt all around the lake. Attempts to maintain the natural environment by allowing recession of the beach are futile. The natural environment, along with the five suburbs, will all disappear.

Blacksmiths beach is also known as Nine-mile beach, stretching from Blacksmiths to Redhead. Whilst I believe the coastal reforms are appropriate for 7 of the 9 miles, the economic and social consequences of allowing recession on the first 2 miles have not been properly considered or evaluated, i.e. relocating five suburbs, cutting the Pacific Hwy, and exposing the whole lake foreshore to significant tidal variation.

The community at Marks Pt and Belmont south, in collaboration with Lake Macquarie City Council, have developed a unique adaptation plan for "lake level rise", a slow bath tub type rise. LMCC have now invited the residents of Blacksmiths and Pelican to collaborate on an adaptation plan for Blacksmiths and Swansea channel, where storm events, fast flowing water, and erosion will be the issues.

I request that the government consider the issues I have raised before finalising the reforms. Given the progress LMCC have made, it may be worthwhile using Lake Macquarie as a case study for other areas.

Yours Sincerely,  
Frank Mieszala