Coastal/foreshore works for remote townships Australia Wide specifically Onslow, Western Australia

M Lee^{1,2}

¹Chichester College of Further Education, West Sussex, England ²Brighton Polytechnic, Lewes Road, Brighton, East Sussex, England

Site Assessment:

Taking the opportunity to collect up to date data, together with any available historical information of the coastline encompassing the Onslow area of Western Australia. (Cyclone, Zone D)

- Actual Coastline topographical review
- Existing and proposed coastal structures
- Water ways such as rivers, creeks, floodplains, salt flats
- Significant developments including agriculture, mining, oil and gas industries

Planned and Emergency Maintenance Ongoing:

Onslow Coastal Seawall structure runs for 1050m protecting the majority of the town and was substantially rebuilt in 1999 after considerable damage from Cyclone Vance. There are other features protecting Onslow including the stormwater and overland flow assets such as the linked "detention" basins or "dry" ponds that will temporarily hold the water until it can flow out into the Beadon Bay.

Budget and Forecast Expenditure:

How do we plan and fund the required works, under ever changing financial constraints and unforeseen limitations to the budget allocation for the Region. Normal level of service will continue and taking into consideration the unknown effect of "Climate Change" on the forward planning, predicting flood conditions and identifying the vulnerable areas will assist in the forecasting of required future spending. Hard decisions will have to be made and a cost to benefit analysis is critical to move forward to achieve the expected level of protection for Onslow itself. This will also apply to any coastal town or city in Australia in the same situation.

Conclusion and Way Forward:

Looking to the future, the development of an achievable and realistic maintenance plan incorporating 5, 10, 25 and 50 year milestones is critical.

References:

Shire of Ashburton information and Reports:

- CHRMAP Coastal Hazard Risk Management & Adaption Plan 03/07/2017
- Report for Onslow Drainage Assessment August 2010
- Onslow Seawall Condition Assessment 08/06/2018
- Onslow Town Site Expansion Development Plan May 2012

Bureau of Meteorology (BOM) Website and Weather Mapping Service. Intramaps