ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates 26 May-6 June 2014

Prime Minister and Cabinet Portfolio

Department/Agency: Torres Strait Regional Authority **Outcome/Program:** Torres Strait Regional Authority

Topic: Torres Strait seawalls project

Senator: Senator Cory Bernardi **Question reference number:** 289

Type of Question: Written

Date set by the committee for the return of answer: 11 July 2014

Number of pages: 4

Question:

1. Can you provide an update on the status of the seawalls project?

- 2. How much funding has been provided and by who?
- 3. What is the funding provided for?
- 4. What will be the impact of this project?
- 5. Can you provide an update on the coastal erosion that is a threat to the communities in your region? How will this funding protect this?
- 6. What are the long term effects of this funding?
- 7. Have you done any long term planning of the effect of sea level rise before this project was funded?
- 8. How will the project be delivered? Can you provide an update on what work has commenced or what planning has started?
- 9. Who will be delivering the different components of the project?
- 10. When will it be completed?

Answer:

1. On 26 February 2014 the Commonwealth and Queensland Governments announced a joint funding commitment of \$26.2 million for coastal protection works across six Torres Strait communities.

Since 2010 significant work has been undertaken into assessing the coastal risks and preferred mitigation options. Coastal works (seawalls and bunds) are needed to minimise inundation for Boigu and Saibai as a priority, with additional works required on Iama, Masig, Poruma and Warraber. Engineering and construction advice indicates that the total cost for these works is approximately \$26.2 million.

Project governance and planning activities are well advanced with the Queensland Government providing oversight of a Project Governance Committee comprising:

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- Queensland Government Department Local Government, Community Resilience and Recovery (DLGCRR)
- Torres Strait Island Regional Council (TSIRC)
- Torres Strait Regional Authority (TSRA)
- The Department of Infrastructure and Regional Development (DIRD),
- The Department of Prime Minister and Cabinet (PMC)

The Queensland Government, as Chair of the Project Governance Committee is responsible for the acceptance of the Seawalls Project Implementation Plan (2013-2017), which was finalised by the Torres Strait Island Regional Council on 9 August 2013 and is currently being updated.

The project costs are based on a TSIRC review of the; Poruma Seawall Feasibility Study Report 2011, the Inundation Management on Saibai, Boigu and Lama Islands Report 2012 and the Coastal Engineering Management Report 2007. These documents are appendix to the Project Implementation Plan.

Peer reviewed designs are now being finalised for works at Saibai, Poruma and Boigu. It is expected that tenders for works on Saibai will be published in the coming weeks. These works are also being supported by an ongoing community consultation process.

2. Torres Strait Seawalls Project Funding:

FUNDING BODY	AMOUNT \$
Australian Government Funding	
Former Department of Families, Housing, Community Services and Indigenous Affairs	1million
TSRA	2.2million
PMC (2014)	6million
DIRD (2014)	5million
Queensland Government Funding	
Department of Local Government, Community Resilience and Recovery	12million
TOTAL FUNDING	26.2million

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- 3. The funding is provided to deliver the coastal protection works on the six priority communities of Saibai, Boigu, Iama, Poruma, Masig and Warraber islands. Project details are outlined in the project Implementation Plan.
- 4. The Torres Strait Seawall Project has two primary impacts: to stop further coastal erosion at sites adjacent to communities and community infrastructure where current erosion poses a significant risk to community assets; to provide a level of immunity to communities and coastal assets to the impact of tidal and storm surges. Seawalls will not provide complete immunity to large flood events, but they can significantly reduce the impact of such events, especially events involving significant wave energy.
 - The seawalls will reduce the risk of coastal hazards to community health and wellbeing as well as help to extend the life of significant infrastructure investments in these communities. The project will have additional social and economic impacts through local skills development and employment.
- 5. Due to historic reasons most communities in the Torres Strait have been established in coastal hazard zones, area prone to erosion or inundation, or both. For some communities the entire island sits within a coastal hazard zone. Coastal erosion causes and impacts vary across the region due in part to differing geologies and natural renourishment processes. Boigu and Saibai are mud islands where significant foreshore erosion has been halted due to community built structures or in the case of Boigu the Seabee seawall built in 1998. Early clearing of mangroves in these communities for access reasons would have exacerbated erosion. Inundation is now the main threat on these communities. Poruma, Masig and Warraber are coral cays which are naturally dynamic in nature and built from coralline sands generated from surrounding reef platforms. Barge ramps and barge access channels have altered the natural coastal processes by impeding the natural seasonal movement of sand around the islands. Barge channels pose an additional challenge as sand entering the channel is often moved out and off the reef platform, resulting in a net loss to the island sediment. Iama, whilst a continental island, suffers similar issues where barge access has resulted in loss of a beach area through reduction of sand supply. These issues have been extensively studied and documented by Dr. Kevin Parnell, James Cook University School of Science and Engineering, as well as through studies conducted by Queensland Government coastal scientists (Department of Environment and Resource Management Torres Strait Coastal Erosion Rapid Assessment Reports). The seawall project has been based on recommendations from these reports together

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with a coastal hazard mitigation options reports undertaken by AECOM coastal engineers.

This funding will help to address the immediate and mid-term impacts of these erosion issues at priority sites through installation of structures specifically designed to protect the coast from further erosion. Design of these structures has factored in some long-term sea level rise, with the structure design life typically being 50 years.

- 6. This funding will help to provide immediate to mid-term protection of communities and community assets from erosion and major inundation events over the coming 2-3 decades. Assets in the coastal hazard zones of Boigu and Saibai alone are valued at over \$200 million dollars, so extension of the viability of these assets through this project is likely to provide a good return on investment.
 - The long term effectiveness of this funding will be dependent on the actual rate of global sea level rise, which there are varying estimates of.
- 7. Sea level rise and erosion issues were considered in the Sustainable Land Use Plans (2009) developed for all outer island communities, which in lieu of a formal local government planning scheme have provided the council with a basis for planning decisions. Discussions have yet to formally occur with communities as to the long-term options to respond to sea level rise. This will be undertaken as part of the Torres Strait Adaptation and Resilience Planning project. Inundation maps considering several sea level scenarios were also produced for TSRA and the communities by Dr Kevin Parnell for Iama, Masig, Poruma and Warraber prior to this project.
- 8. The project is being managed by the Torres Strait Island Regional Council and will be delivered through the use of local council staff and specialist subcontractors. The project Implementation Plan was finalised and endorsed by the Project Governance Committee in August 2013. Peer reviewed designs are now being finalised for works at Saibai, Poruma and Boigu. It is expected that tenders for works on Saibai will be published in coming weeks.
- 9. The project governance is being overseen by the Project Governance Committee. The project is being managed by the Torres Strait Island Regional Council with peer review being provided by PDR Engineers of Cairns. Local employment and training outcomes are being managed by the Torres Strait Island Regional Council to ensure long term regional benefits.
- 10. The project is scheduled for completion by June 2017.