

Torres Strait Island
REGIONAL COUNCIL

AGENDA

CLIMATE ADAPTATION AND ENVIRONMENT COMMITTEE

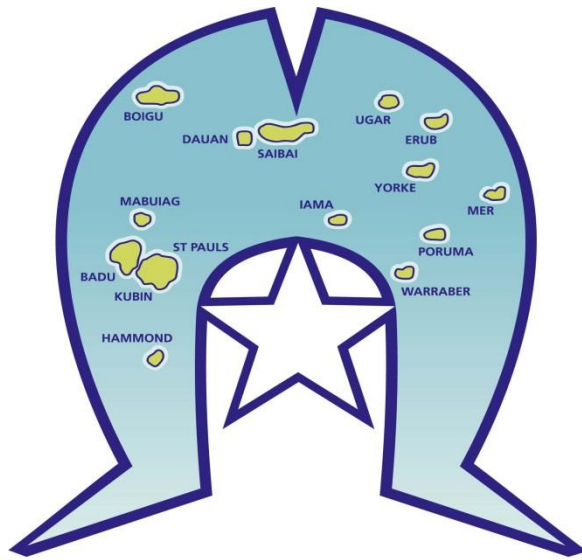
Date: Wednesday - 25th August 2021

Time: 10am - 12noon

Venue: VMR #6 – 0292 970 558

Agenda

1. Welcome (Chair)
2. Opening Prayer
3. Apologies
4. Conflict of Interest (COI)/ Material Personal Interest (MPI) Declaration
5. Confirmation of previous minutes – 22nd June 2021
6. Action Items List
7. Climate Change Adaptation and Environment Committee – Engineering Services Projects/ Works update
8. Environmental Policy – Verbal Update
9. General/ Other Business (on notice)
10. Next meeting date
 - Wednesday 27th October 2021
11. Closing Prayer



Torres Strait Island
REGIONAL COUNCIL

MINUTES

CLIMATE ADAPTATION AND ENVIRONMENT COMMITTEE

Date: Tuesday– 22 June 2021

Time: 10am – 12noon

Venue: VMR #6 – 0292 970 558

**CLIMATE ADAPTATION AND ENVIRONMENT
STANDING COMMITTEE MEETING
23rd June 2021**

PRESENT:

Chair - Cr Hilda Mosby
Member - Cr Seriako Dorante
Member - Cr Kabay Tamu

Acting Chief Engineer – Adea Kabai
Capital Works Engineer - Kristian Duthie
Waste and Sustainability Engineer - Jarrah Doran-Smith
Senior Legal Counsel - Peter Krebs
Secretariat Officer - Kathy Cochran

Invited Guest:

Mr Allen Cunneen - LGAQ

APOLOGY:

Agenda

1. Welcome (Chair)

Cr Hilda Mosby welcomed everyone to the meeting and thanked them for their time.

2. Opening Prayer

Cr Hilda Mosby invited Cr Seriako Dorante to open the meeting in prayer.

3. Apologies

Nil

4. Conflict of Interest (Declarable or Prescribed)

Cr Hilda Mosby declared a declarable conflict and stated she is a TSRA member with the Climate Change portfolio, a member of the Climate Change National Group - CSIRO

Cr Seriako Dorante declared a declarable conflict and stated he is a TSRA member for Hammond Island.

Cr Kabay Tamu declared a declarable conflict and stated he is a claimant in a United Nation litigation on climate change.

5. Confirmation of previous minutes – 10 February 2021

RESOLUTION:

Moved: Cr Hilda Mosby; *Second:* Cr Seriako Dorante

That the Committee accepts the minutes of the Climate Adaptation and Environment Meeting held on the 10th February 2021 as a true and accurate record.

ALL IN FAVOUR

2:12pm – Cr Kabay Tamu joined the meeting.

6. Action Items List

ACTION: Acting Chief Engineer to update Secretariat with the action item list via email and copy Cr Hilda Mosby and Members in.

7. Metal Waste Clean Up Presentation

Acting Chief Engineer spoke to the report and provided an on the engagement and invited Jarrah to speak to the presentation.

8. Regional Waste Management (Allen Cunneen – invitee)

Acting Chief Engineer invited Mr Allen Cunneen from Local Government Association of Queensland to speak to the report.

RECOMMENDATION:

Moved: Cr Hilda Mosby; Second: Cr Kabay Tamu

That the Committee supports and recommends the report goes to SARG for noting and recommending to the Full Council for endorsement.

ALL IN FAVOUR

ACTION: Secretariat Officer to place report on the July 2021 SARG and Ordinary Meeting Agenda.

3:22pm – Mr Allen Cunneen leave the meeting.

9. Seawall Projects Update

Acting Chief Engineer, Mr Adeah Kabay initially spoke to the report and then invited Mr Kristan Duthie, Acting Manager, Capital Works, Mr Kristan Duthie to provide and overview of the project to date.

ACTION: Seawall Project Manager, David Stevens to keep Cr Hilda Mosby updated regularly. To note when carrying out geo technical dig/testing to be mindful of native title and cultural sensitivities.

Recommendation that the Committee notes the report. All in favour.

10. Master Planning process

Draft version of each Master Plan for Saibai, Boigu, Dauan and Kubin has been completed and provided to respective Councillors and TSIRC Staff.

Community visits planned for other Divisions as per itinerary in report. Hope to have completed and Plans available for endorsement later in the year.

ACTION: Kristan to send update on the Master Plans to Secretariat Officer to distribute to Chair and members.

ACTION: Cr Dorante requested an update on his community (Hammond) Master Plan.

11. General/ Other Business (on notice)

No genera business.

12. Next meeting date

– Wednesday 25th August 2021

13. Closing Prayer

Cr Hilda Mosby invited Cr Seriako Dorante to close the meeting in prayer.

MEETING CLOSED – 3:56pm

CLIMATE CHANGE ADAPTATION AND ENVIRONMENT COMMITTEE ACTION ITEM REGISTER

[illegible]



TORRES STRAIT ISLAND REGIONAL COUNCIL

AGENDA REPORT

| | |
|--------------------------|--------------------------------------------------------------------------------------|
| ORDINARY MEETING: | August 2021 |
| DATE: | 25 August 2021 |
| ITEM: | Agenda Item for Noting by Committee |
| SUBJECT: | Climate Change Adaptation and Environment Committee Update – Engineering Services |
| AUTHOR: | Adeah Kabai – Acting Chief Engineer |

Recommendation:

That;

Climate Change Adaptation and Environment Committee notes this report.

Purpose:

The purpose of this report is to provide an update to the Climate Change Adaptation and Environmental Committee in relation to projects/works being undertaken by Council's Engineering Services Department.

Background:

TSIRC's Engineering Services department manage the following projects and works, that are in line with the portfolio scope for the Climate Change Adaptation and Environmental Committee:

- Coastal Defence Works/Projects (Seawalls Program)
- Metal Waste legacy Clean-up Project
- Coastal Hazards and Adaptation Study (CHAS)
- Queensland Indigenous Waste Strategy
- Rain Gauges Project
- Tidal Gauge Project

OFFICER COMMENT

Torres Strait Climate Change Strategy

In the Torres Strait Climate Change Strategy space, TSIRC Engineering is currently working on:

- The development of TSIRC's Coastal Hazard Adaptation Study (CHAS)
- Providing assistance/support to DATSIP in relation to the Master Planning
- Delivery of the Tidal Gauge Project
- Delivery of installation of additional rain gauges funded by QRA.

Coastal Hazards and Adaptation Study (CHAS)

QCoast2100 is a one-off funding program administered by the Queensland Government's Local Government Association of Queensland (LGAQ). It is designed to assist coastal Councils in making decisions regarding long-term management and response to the coastal hazards facing their communities, through the development of a CHAS.

The Coastal Hazard Adaptation Strategy considers the risks to all 15 TSIRC communities posed by coastal hazards: coastal erosion, permanent inundation due to sea-level rise and inundation due to storm tide. It follows an eight-Phase prescribed process, as set out in QCoast2100's Developing a

Coastal Hazard Adaptation Strategy: Minimum Standards and Guideline for Queensland Local Governments.

The following Phases (1 & 2) have previously been completed (GHD):

- Phase 1: Plan for life-of-project stakeholder communication and engagement;
- Phase 2: Scope coastal hazard issues for the area of interest.

TSIRC completed Phase 3 (GHD) in February 2021:

- Phase 3: Identify areas exposed to current and future coastal hazards

TSIRC is currently undertaking phase 4 & 5, and have engaged Alluvium Consulting complete Phase 4 & 5:

- Phase 4: Identify key assets potentially impacted;
- Phase 5: Risk assessment of key assets in coastal hazard areas;

Note: Phase 4 has been approved as completed by LGAQ, with Phase 5 currently completed with deliverables under review.

The following Phases are yet to be funded, however, there have been indications that additional timeframes and funding will be available to remote Councils to complete these Phases:

- Phase 6: Identify potential adaptation options;
- Phase 7: Socio-economic appraisal of adaptation options;
- Phase 8: Strategy development, implementation and review.

In parallel, TSIRC has commenced preliminary discussions with Torres Shire Council (TSC) and Torres Strait Regional Authority (TSRA) on the possibility of combining resources to develop a regional coastal adaptation strategy. A perceived benefit of a regional approach is being able to provide coordinated consultation processes, options and solutions for coastal hazard adaptation to communities across the region. There is also the potential for increased access to funding sources, which will be necessary following the closure of the QCoast2100 program.

DATSIP Master Planning

TSIRC Engineering staff have been integral in assisting DATSIP with the delivery of the Master Planning for TSIRC communities. However, Council input into the Master Planning has been very minimum.

Tidal Gauge Project

In summary, TSIRC have secured funding from TSRA for the installation of new Tidal Gauges and maintenance and repair of existing tide gauges, to the value of \$822,422.00.

Some tidal gauges already exist throughout the Torres Strait, however strong localised tidal effects can cause inaccuracies; additional tide gauges are required for accurate measurements and reporting.

A 5-year maintenance period for both existing and new tide gauges will commence from the installation date.

The funding from TSRA was allocated to fund the following activities in relation to sea level gauge operations and tidal plane study.

1. New Tide Gauge Installations (4 Sites)

- Lite tide gauges to be installed at Boigu, Masig, Poruma and Warraber.

2. Tidal Plane Studies – Existing & New Tide Gauges (11 Sites)

- Complete studies using longer datasets to determine more accurate tidal planes:
 - i. Tidal plane studies using 12 months of historical data recorded from decommissioned and existing tidal gauges at Boigu (pile), Dauan (decommissioned), Iama, Kubin, St Pauls, Thursday Island and Ugar (7 sites).
 - ii. Tidal plane studies using 3 months of data from new tide gauges at Boigu (dolphin), Masig, Poruma and Warraber (4 sites). The 3 month study is to provide some

preliminary information to consultants to use in TSIRC's Coastal Hazard Adaption Strategy work, prior to completion of the 12 month study.

- iii. Tidal plane studies using the full 12 months of data from new tide gauges at Boigu (dolphin), Masig, Poruma and Warraber (4 sites).
3. Five Year Storm Tide Gauge Maintenance Contract
 - Five Year storm tide maintenance contract with DES.
4. Replacement of Iama & Kubin Dolphin Ladders
5. TSIRC Allowance for Management of the Tide Gauges.
 - Five years for TSIRC to manage the Storm Tide Gauge Maintenance Contract.

The new tide gauges were recently installed by DES at 4 sites (Boigu, Masig, Poruma & Warraber). 12-month tidal plane studies are now underway, with results to be provided in due course. DES have commented in their report that marine users have been tying up boats and cray pots to the tide gauges which result in bad data being recorded. The project manager will work with the Communications department to send out educational posts on this topic, and will work to develop signage for the next maintenance trip. Paul Ware Constructions were engaged to replace the tide gauge access ladders at Iama & Kubin, with works completed in early 2021.

Rain Gauge Project

Project Funding Schedule for the Flood Warning Infrastructure Network Project, funded under Category D of the DRFA following the North and Far North Queensland Monsoon Trough in 2019. TSIRC has accepted the funding, based on discussions in late 2020 with both the Queensland Reconstruction Authority and Bureau of Meteorology (BOM).

The total funding amount from QRA is \$40,000.00 with funding deadline of 30 June 2022.

The key objective of the funding is to fund the procurement and installation of two new rain gauges at two new locations.

QRAs initial expectation was that TSIRC would upload rainfall data to the BOM flood warning network. However, BOM has stated that it does not require TSIRC's data, as it has weather stations in the region that provide a greater array of data (not just rainfall). TSIRC has secured agreement from QRA/BOM that the new rain gauges will only supply rainfall data to TSIRC's SCADA system.

Torres Strait Seawall Program/Project

In the Torres Strait Seawall Program/Project, TSIRC Engineering is currently working on:

- The delivery of Torres Strait Seawalls Programme (Stage 2) which is funded by the State and Commonwealth Government with a total grant funding of \$40 Million.
- The purpose of the seawalls programme is to provide suitable coastal defence structures to build resilience against tidal inundation, erosion and damage to community infrastructure in the Torres Strait communities of Boigu, Poruma, Iama, Warraber and Masig.

Below is a high-level update on Seawalls works in each of the identified communities under the current \$40 Million funding.

Note: Detailed scope of works for individual communities can be made available upon request for each community along with Preliminary Designs outlined proposed 'Scope of Works'.

Boigu Island (Stage 2)

| | |
|------------------------|--------------------------------------------------|
| Forecasted Budget: | \$15 Million |
| Forecasted Start Date: | Onsite construction works are currently underway |
| Forecast End Date: | October 2021 |

This project has been awarded to Koppens Development in February 2020. Onsite construction works are progress well in accordance with the contract and the scheduled. Practical completion is forecasted for October 2021.

Reference Contract No. TSIRC2019-203.

Poruma Island (Stages 2 – 5*)

| | |
|------------------------|----------------|
| Forecasted Budget: | \$5 Million |
| Forecasted Start Date: | September 2021 |
| Forecasted End Date: | June 2022 |

TSIRC's In-House Bid to perform the construction using Council's Civil Crew has been conditionally approved. The mobilisation barge with plant and construction materials is planned to depart Cairns early September 2021 shortly followed by commencement of onsite works.

Masig Island

| | |
|------------------------|-------------|
| Forecasted Budget: | \$6 Million |
| Forecasted Start Date: | April 2022 |
| Forecasted End Date: | March 2023 |

The project is currently at the concept design stage. The survey, geotechnical testing, and marine plant surveys have been completed and will be factored in during the preliminary design phase. After further Community Consultation and the design is finalised, it's expected that Approvals for construction will take 4 – 6 months. Approvals for this project will be sought at the same time to submit an In-House Bid process to enable Council Civil Crew to undertake the delivery of the proposed seawall construction works on-site, following completion of the Poruma seawalls works.

Warraber Island

| | |
|------------------------|---------------|
| Forecasted Budget: | \$7 Million |
| Forecasted Start Date: | December 2022 |

Forecasted End Date: November 2023

The project is currently at the concept design stage. The survey, geotechnical testing, and marine plant surveys have been completed and will be factored in during the preliminary design phase. After further Community Consultation and the design is finalised, it's expected that Approvals for construction will take 4 – 6 months. This project will be tendered out to an external contractor to undertake the proposed works. It is proposed that Warraber and lama coastal defence works will be packaged together to demonstrate Value for Money (VfM).

Iama Island

Forecasted Budget: \$7 Million
Forecasted Start Date: March 2022
Forecasted End Date: December 2023

The project is currently at the concept design stage. The survey, geotechnical testing, and marine plant surveys have been completed and will be factored in during the preliminary design phase. After further Community Consultation and the design is finalised, it's expected that Approvals for construction will take 4 – 6 months. This project will be tendered out to an external contractor to undertake the proposed works. It is proposed that Warraber and lama coastal defence works will be packaged together to demonstrate VfM.

Waste Management

In the waste management space, TSIRC is working on:

- Providing support to the development of the Regional Waste Management Plan under the **Queensland Indigenous Waste Strategy (QIWS)**;
- Working on ways to **reduce inputs to island landfills**, including Council and community vehicles and construction and demolition waste; and
- Developing a plan to remove **wreck vehicles** from the islands for recycling which is the **Metal Waste Legacy Clean Up Project**.

Queensland Indigenous Waste Strategy

In recognition of the extremely high cost and difficulty in providing adequate waste management in the Torres Strait, the Queensland Government, through LGAQ has engaged APC Consulting to work closely with TSIRC, TSC and NPARC to develop a Regional Waste Management Plan, under the QIWS. The Torres Strait was identified as the highest priority of all indigenous areas in Queensland, and as such is the first to be considered for initial plan development.

TSIRC is providing support to the project to ensure outputs are fit-for-purpose, realistic and fundable. The project includes engaging with organisations such as CoEx (container exchange) and IBIS to assist in reducing local landfill inputs, high-level planning and costing of an appropriate combination of logistics network and local waste processing (e.g. BioBins), and provision of household recycling bins and community education to facilitate a transition to recycling and waste processing. Consideration is also being given to the conversion of appropriate existing landfills to transfer/processing sites, and developing local skills to run such facilities.

The project intends to deliver waste management solutions that TSIRC and neighbouring Councils can use to pursue funding opportunities for long-term solutions.

Metal Waste legacy Clean-up Project

The objective of this project is to strategically clean up long-term metal waste stockpiles across all 15 TSIRC landfills, stockpile areas and throughout communities. The metal waste streams include:

- Wreck vehicles
- Scrap metal and white goods
- Heavy plant, trucks and equipment

Council advertised Expression of Interest (EOI) in December 2020. The objective of the EOI was to identify contractors who would realistically contribute to the project and shortlist potential contractors suitable for delivering the works.

Council is engaged an external engineering consultant to undertake a detailed review of the EOI respondents to develop the Tender Documentation and go out to Tender to the shortlisted EOI respondents. The final Closed Tender was then sent to the shortlisted respondents, with McMahon Services Australia Pty Ltd being the recommended contractor to award during the August 2021 Council Ordinary Meeting. ARO Industries Pty Ltd was the recommended Superintendent for the contract administration during the execution.

Reducing landfill inputs

TSIRC is currently exploring ways to reduce waste inputs to island landfills, to reduce pressure on sites with limited space and resources. This will include:

- Proposing strategies to arrest the accumulation of wreck vehicles on the islands;
- Working within TSIRC and with external agencies to ensure that construction and demolition waste is shipped to the mainland rather than input into island landfills, whilst in-keeping with biosecurity restrictions; and
- Taking steps to ensure newly-constructed assets are built using materials that consider longevity and end-of-life disposal.

In January 2021, TSIRCs Local Laws and Register of Fees and Charges were amended to allow Council to cease accepting construction waste at all fifteen waste management facilities.

Council's landfills and waste stockpiling areas are lacking in appropriate resources including appropriate heavy plant, waste management infrastructure, dedicated waste management staffing and staffing amenities, are subject to multiple environmental and compliance challenges and legacy issues, and are often cited in inappropriate locations. To transition to a sustainable waste management model, Council must extend the life of its existing sites, reduce the operational burden on maintaining such sites, and work towards addressing compliance issues through critical waste reduction measures.

TSIRC Engineering is currently engaging with internal Council departments (Engineering Operations, Capital Works, BSU) to ensure a better understanding of impending changes. The next step is to engage with external parties in relation to the impending changes.

In conclusion, the projects/works outlined in this briefing paper highlight the works Engineering are currently undertaking in the field of Climate Change Adaptation and Environment portfolio scope.

Consultation:

- Councillors as appropriate
- Relevant Funding bodies

Statutory Requirements:

Local Government Act 2009

Local Government Regulation 2012

Conclusion

It is recommended that the Climate Change Adaptation and Environment Committee notes this report.

**Recommended:**

Adeah Kabai

Acting Chief Engineer