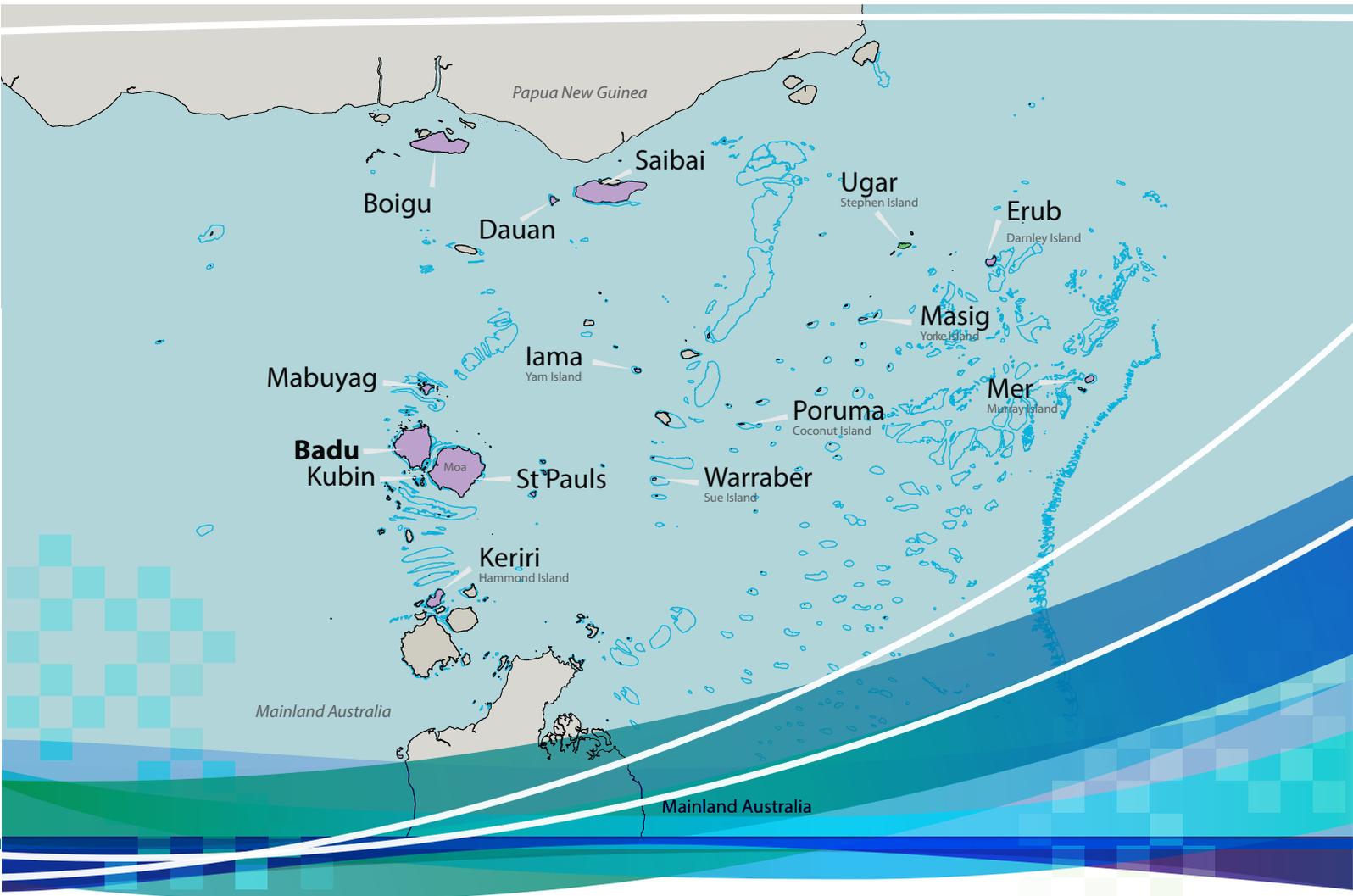




# Badu Island









Editor's Note –

## Community Snapshot

### Location

- Badu Island is part of the Torres Strait inner and near western group of islands. The Badu community is the largest in the Torres Strait Island Regional Council area and the second largest in the Torres Strait after Thursday Island.

### Population

- According to the most recent census, there were 783 people living on Badu Island in August 2011, however, the population is highly transient and this may not be an accurate estimate.

### Natural Hazards

- Coastal hazards, including erosion and storm tide inundation, have an impact on Badu Island but overall the community is in a good position in relation to these hazards, both now and with respect to future climate change.
- Due to the topography and vegetation cover over Badu Island, natural hazards such as catchment flooding, bushfire and landslide are potential threats to the Badu Island community and need to be managed to varying degrees.

### Topography and Environment

- An unsubmerged remnant of the Great Dividing Range, Badu consists mainly of volcanic and granite rocks. The terrain alternates between rocky mountainous outcrops and sandy ridges covered with light scrub.
- Dominant habitat types include eucalypt forest, shrubland and mangroves. Vine thicket, grassland and acacia woodlands complement the larger mosaic of habitat and provide habitat niches for faunal species.
- Native flora and fauna that have been identified on Badu Island include the beach stone curlew, eastern long eared bat, grey goshawk, little tern, brush tailed tree rat, spectacled flying fox, radjah shelduck, black necked stork, eastern curlew and emerald monitor.
- Badu is characterised by a network of watercourses, some of which flow intermittently and others which are spring fed and flow all year round.
- As with all Torres Strait Islanders, the Badu Island community has close connections to land, sea and sky and consider themselves as part of Gogobithiay (a local word for land, sea and sky).





## Township

- Due to Badu Island's land area, population size and proximity to Horn Island and Thursday Island, Badu functions as the key population and activity hub for the Torres Strait Island Regional Council area.

## Community Aspirations <sup>1</sup>

- Aspirations for built community and sporting facilities include the establishment of a youth centre, community garden, various sport and recreation facilities (such as a swimming pool, cricket pitch and soccer nets), a cultural / arts centre, multi-purpose community hall, playgrounds and parks with picnic areas and toilets.
- Possible enterprise opportunities include a saw mill, an inter-island tourist venture and tourist fishing ventures, slaughter yard and aquaculture ponds.

1. Many of the community aspirations listed here are taken from the Badu Community Booklet 2012, which identifies community priorities relating to the National Indigenous Reform Agreement (NIRA) building blocks of early childhood, schooling, health, economic participation, healthy homes, safe communities, governance and leadership. Priorities that have a development implication are summarised here to provide an indication of the needs of the community. This is supplemented with information gained from community members during community consultation.

## Other Planning Matters

- The Badu community hosts the 'island of origin' games each year.



## Local Story

Long ago at Wakaid there was a man who had four beautiful daughters, Madainab, Mainab, Damanab, and Kotinab.

One day he told them that they would be going that night to hunt for turtle by torchlight. In the evening they made their way by canoe to Kubin, and from there, south to the big reef a short distance away, where they released suckerfish (*gapul*). They did not know that they were being watched by a sorcerer who was using evil magic against them.

Presently one of the suckerfish attached itself to a turtle. Madainab, the eldest daughter, jumped into the water to catch the turtle and was taken down deep by it. She never came up. "Madainab, my beautiful daughter," said the father after he had set sail for the return journey to Badu, "the spot at which you died shall be named for you."

By the time the canoe reached Zigini Ngur, the second daughter, Mainab, was so ill that the father decided to take her ashore at the small beach nearby. She died there. The father and his remaining two daughters built a *sara* (platform) and placed her body on it. They then returned to their canoe.

"We cannot return to Wakaid," said the father. "We shall go to Argan." And as they sailed for the west coast of Badu, he said to the girl who lay on the *sara*: "Mainab, my beautiful daughter, men will call the beach where you died by your name."

When the father and Damanab and Kotinab reached a certain small bay between Barabaras and Argan they landed, to be greeted by the young men who were camped close by.

That night the young men danced, and Damanab fell in love with one of them. She did not sail with her father and her sister when they left in the morning, instead remaining with the young man whom she had chosen for her husband from among the dancers. From a distance the father looked back at her and said: "Damanab, my beautiful daughter, your home shall be called by your name."



The father and his youngest daughter went ashore for the last time at Koteid. After they had been there for a while, news of the beautiful girl spread to a nearby village. "Let us go and dance for her," said the young men. "Let us see if she will choose one of us to be her husband."

So the young men decorated their bodies and set out with their drums to dance for Kotinab. Presently she chose one of them.

"Kotinab, my beautiful daughter," the father said at parting from his youngest child, "your name will live on, for the place to which you are going will henceforth be known as Kotinab. Later, I shall come and make my home within sight of you."

This he did, turning to stone on the reef, not far from the southern end of the beach called Kotinab.

**Source:**

*Myths & Legends of Torres Strait, Lawrie, 1970*  
[Told by Yopelli Panuel at Badu, 25 October 1967]



## 7.2.1

# Badu Island - local plan code

### 7.2.1.1 Application

The code applies where identified in the assessment criteria column of tables 5.5.1, 5.5.2, 5.6.1 or 5.8.1, in part 5 of this planning scheme.

When using this code, reference should be made to section 5.3.

### 7.2.1.2 Purpose

- (1) The purpose of the Badu Island local plan code is to guide development on Badu Island in a way that best meets the needs of the community.
- (2) The purpose of the Badu Island local plan code will be achieved through the overall outcomes listed on the following pages under the headings of:
  - (a) Gogobithiay (land, sea and sky)
  - (b) Natural hazards
  - (c) Torres Strait people and townships
  - (d) Ailan kastom and cultural heritage
  - (e) Getting around
  - (f) Town infrastructure.

**Note** – For the purposes of this local plan code, the strategic framework maps in schedule 2 form part of the local plan maps. They contain information referred to in this code.



**Editor's note** – To identify where the zones and precincts apply across the local plan area, refer to the maps in schedule 2.





## Gogobithiay (Land, Sea and Sky)

- (1) Development minimises and mitigates impacts on areas of high and moderate environmental value within the environmental management and conservation zone.
- (2) All development within the environmental management and conservation zone:
  - (a) avoids areas of high and moderate environmental value, wherever possible; and
  - (b) where areas of high and moderate environmental value can not be avoided, is located, designed and operated in a way that minimises and mitigates impacts to areas of environment value.
- (3) Within the township zone, development is designed to avoid or minimise impacts on environmental values, including existing vegetation, waterways, natural drainage lines and fauna movement corridors, wherever practical. Development should not occur within waterways.
- (4) The habitat values, water quality and natural ecological and hydrological processes of waterways and wetlands, including fresh water springs, are maintained. This includes important recreational and commercial fishing areas within the marine environment surrounding Badu Island.



**Editor's note** – To identify areas of high environmental value and moderate environmental value or subject to natural hazards, refer to the maps in schedule 2.





## Natural Hazards

- (1) Risks to people and property caused by coastal hazards, including erosion, storm tide inundation and the impacts of projected sea level rise, are minimised to the greatest extent possible by:
  - (a) Avoiding –
    - (i) Coastal hazard areas are kept free of essential community infrastructure, community facilities and accommodation activities, unless involving coastal dependent development; or temporary or readily relocatable development; or the upgrade or replacement of existing buildings or infrastructure; or a house or dual occupancy on an existing lot within the township zone;
    - (ii) New lots are not created within a coastal hazard area unless the purpose of the subdivision is to create a lot over a lease area or house site established before the planning scheme was adopted; or the lots are within a designated expansion area and the requirements of (c) and (d) are met;
    - (iii) Development does not worsen the severity or impact to people and property caused by coastal hazards.
  - (b) Retreating –
    - (i) When in need of upgrading or replacement, essential community infrastructure, community facilities and accommodation activities within a coastal hazard area are relocated outside of this area, wherever possible.
  - (c) Accommodating –
    - (i) Unless coastal dependent or temporary or readily relocatable, development within a coastal hazard area is:
      - (A) sited to lessen the potential risk of erosion and storm tide inundation;
      - (B) designed to withstand the erosion and storm tide inundation hazard; and
      - (C) designed to minimise susceptibility to erosion and storm tide inundation.
    - (ii) Essential community infrastructure is able to function effectively during and immediately after a coastal hazard.
    - (iii) Community facilities, accommodation activities and coastal dependent development provide for an evacuation route that is available at all times.
    - (iv) Development involving the manufacture or storage of hazardous materials does not increase risk to public safety or the environment caused by erosion and storm tide inundation.

- (d) Protecting –
- (i) To the greatest extent possible, development maintains environmental features and physical characteristics that provide protective functions for existing development against the risk of erosion and storm tide inundation.
  - (ii) As a last resort, coastal protection works may be considered to protect existing development.
- (2) Development avoids, minimises or mitigates risks to people and property caused by flooding, bushfire and landslide.
  - (3) Development does not worsen the severity or impact to people and property caused by flooding, bushfire and landslide.
  - (4) Essential community infrastructure is able to function effectively during and immediately after a flood, bushfire or landslide.

 **Editor's Note** – It is critical that future development in the Torres Strait takes into account potential risks associated with coastal hazards such as erosion and storm tide inundation, both now and in the future as sea levels rise. Planning responses will vary from island to island depending on the geomorphology of the island; the location of the township and township expansion area in relation to coastal hazards; the nature and severity of the risk; and the desires and aspirations held by the local community. In many cases, decisions about how to respond to coastal hazards will take time for local communities to thoroughly consider and decide.

This planning scheme takes coastal hazards into account using the best available data (at the time of writing). It is anticipated that, over time, the communities of the Torres Strait will continue to discuss these issues and develop an agreed position on the most appropriate responses at the local level. The outcome of these decisions will need to be incorporated into future amendments or revisions to this planning scheme.

While the best available data has been used in this planning scheme, projections about climate change may alter over time. In addition, circumstances may change which means that previous projections about coastal hazards are no longer valid (for example, if a sea wall is constructed to protect a township, calculations about where sea levels may extend to as a consequence of storm tide inundation and sea level rise will no longer be accurate). These circumstances will be taken into account either through development application processes or through planning scheme amendments.

**Note** – For the purpose of section 13 of the Building Regulations 2006:

- (1) land shown as flood hazard areas and storm tide inundation areas on the maps in schedule 2 is designated as the flood hazard area; and
- (2) the defined flood level in both areas is declared to be 2.24m + 0.8m relative to 2010 MSL datum.

 **Editor's Note** – Dwelling houses and dual occupancies are not made assessable in the township zone under section 5 of this planning scheme. However, building works approval will be required. The declaration of flood hazard areas under the planning scheme trigger various requirements under the Building Codes of Australia.

 **Editor's Note** – Essential community infrastructure is used in this document to describe infrastructure that is critical during and after an emergency and includes land uses such as emergency services, hospitals, health care services, renewable energy facilities, telecommunications facilities, utility installations, substations and major electricity infrastructure (see the land use definitions in schedule 1.1).

This is different to the term community facilities, which is used in this document to describe facilities which provide important social services to the community. Land use examples of community facilities include cemeteries, child care centres, clubs, community care centres, community residences, community uses, crematoriums, detention facilities, educational establishments, emergency services, health care services, hospitals, places of worship, retirement facilities, residential care facilities and rooming accommodation (see the land use definitions in schedule 1.1).



**Note** – Coastal dependent development is defined in the State Planning Policy.

**Note** – Land shown as bushfire hazard area on the maps in schedule 2 is designated as the bushfire prone area for the purposes of section 12 of the Building Regulation 2006. The bushfire hazard area (bushfire prone area) includes land covered by very high, high and medium hazard areas, as well as the potential impact buffer area category.



## Torres Strait People and Townships

- (1) Due to Badu Island's land area, population size and proximity to Horn Island and Thursday Island, Badu functions as the key population and activity hub for the Torres Strait Island Regional Council area.
- (2) Economic and employment opportunities are critical for the long term sustainability and self determination of the Badu community and opportunities are taken for development to support these objectives. Opportunities may include enterprises such as a saw mill, inter-island tourist venture, tourist fishing venture, slaughter yard and aquaculture ponds.
- (3) New commercial and government uses are consolidated within the township centre core to reinforce this area as the focal point for business activity within the community.
- (4) Development facilitates access to affordable, fresh and healthy foods, including community gardens, fresh food markets and home food gardens.
- (5) New development contributes to the creation of pleasant, safe attractive living environments and the health and wellbeing of Torres Strait Islanders.
- (6) A range of accommodation activities is provided within the township zone that responds to the needs of the community, including larger dwellings suitable for large families and smaller dwellings suitable for singles, young couples, older couples and small families.
- (7) New accommodation activities make efficient use of available unconstrained land within the township zone.
- (8) The township expansion precinct is developed primarily for the purpose of accommodation activities, well connected to the existing township, creates a pleasant living environment for internal and surrounding residents and able to be efficiently serviced by town infrastructure.
- (9) Outstations and camping areas are generally located within the environmental management and conservation zone and are an important part of Torres Strait Islander life, helping to keep communities connected to their traditional lands.
- (10) Development that requires connections to town services is located so that electricity, water supply and sewerage infrastructure can be provided in a cost effective and efficient way.
- (11) Safe and convenient access to community, sport and recreation facilities is available to meet the needs of the community, including people with special needs, older people, children, low income earners and people with disabilities.
- (12) Town infrastructure and short term accommodation capacity on Badu Island is able to respond to demand from the large number of visitors from PNG and other communities in the Torres Strait, particularly during Island of Origin games.
- (13) New industrial activities are located where they will not unduly impact on the people's amenity, health or safety.



 **Editor's Note** – The terms 'garden', 'community garden' and 'food garden' are used in this planning scheme to describe traditional gardens and home food production, which may be conducted by individuals, households or clan/family groups within a house lot or elsewhere in the community on traditional land. These terms are not the same as 'cropping', which is done for commercial purposes and defined elsewhere in this planning scheme (see the land use definitions in schedule 1.1).



## Ailan Kastom and Cultural Heritage

- (1) Communities are developed based on Ailan Kastom. In particular, access to the sea and the natural environment is maintained, and important places and events used for traditional practices are protected from any impacts of development.
- (2) Places and items of heritage significance for cultural, historical or archaeological reasons are identified and protected for the benefit of current and future generations.

 **Editor's Note** – Places shown as sacred sites and significant trees on the maps in schedule 2 are potential locations of cultural heritage value. Other locations of cultural heritage will exist that are not shown on the maps and in some cases, locations are not recorded due to reasons of confidentiality.

It is important that all land users are aware of their obligations under the *Torres Strait Islander Cultural Heritage Act 2003*.

The Act recognises that Torres Strait Islander people are the guardians, keepers and knowledge holders of their cultural heritage. Importantly, the Act recognises that significant areas do not necessarily have markings or other physical evidence indicating occupation or denoting its significance. For example, geographical places of importance may such as places that are part of myths or legends (commonly referred to as 'storyplaces') are significant under the Act.

The most important part of the Act is the Duty of Care provisions that require those conducting activities in areas of significance to take all reasonable and practical measures to avoid harming cultural heritage.

In addition, historical cultural heritage that are not Indigenous in origin are protected under the *Queensland Heritage Act 1992*. These places are recorded in this planning scheme.





## Getting Around

- (1) The Badu Island airstrip, helicopter landing pad, barge ramp, finger pier and associated facilities are critical pieces of transport infrastructure for the Badu Island community. Development does not impact on the integrity of these facilities or the efficient and safe operation of air and sea transport services.
- (2) Transport infrastructure is designed to minimise noise, lighting or other disturbances to residents and users of surrounding accommodation activities and community facilities.
- (3) Roads and associated culverts do not increase the concentration and flow of water through the township zone and contribute to problems of coastal erosion.

 **Editor's Note** – Development within tidal areas may be assessable against Schedule 4A of the Coastal Protection and Management Regulation 2003 if defined as 'prescribed tidal works'. For a definition of 'prescribed tidal works' refer to the *Coastal Protection and Management Act 2003*.

 **Editor's Note** – Transport infrastructure is used in this document to describe infrastructure required to move people around. Examples include roads, jetties, barge ramps, airports, helipads and walkways.

It includes land use definitions such as air services, transport depot and landing (see the land use definitions in schedule 1.1).



## Town Infrastructure

- (1) Reliance on local waste facilities for the disposal of construction waste is minimised to the extent possible.
- (2) Town infrastructure is located and designed to avoid or minimise negative impacts on the community including negative visual impacts.



**Editor's Note** – Town infrastructure is used in this document to describe infrastructure required to provide a basic range of town services. Examples include water supply, sewage treatment, waste collection and disposal, stormwater management, electricity and telecommunications. It includes land uses such as major electricity infrastructure, renewable energy facilities, sub-stations, telecommunication facilities and utility installation facilities (see the land use definitions in schedule 1.1).

Services provided by town infrastructure may or may not be available within the township zone but typically are not available outside of the township zone. For further information about the existing and planned infrastructure (water supply, sewerage, stormwater, transport, parks and land for community facilities) refer to the local government infrastructure plans (LGIPs) in part 4 of this planning scheme.

As noted in the LGIPs, it is difficult to predict future demand for town infrastructure in TSIRC communities due to the way development processes and funding takes place in the region. Therefore, decisions about infrastructure provision are likely to be made on a case by case basis, depending on funding availability and a range of other factors.



### 7.2.1.3 Criteria for assessment

Table 7.2.1.3 — Assessable development

Performance outcomes	Acceptable outcomes
<b>Gogobithiay (land, sea and sky)</b>	
<p><b>PO1</b></p> <p>In limited circumstances, land within the environmental management and conservation zone can be developed for urban purposes provided that the development:</p> <ol style="list-style-type: none"> <li>(1) needs to be separated from where people live; or</li> <li>(2) needs to be located in a particular place or near a particular resource to be able to function; or</li> <li>(3) requires a large area of land that can not physically fit within the township zone; or</li> <li>(4) is for the purpose of town infrastructure; or</li> <li>(5) is required to support ailan kastom or traditional practices.</li> </ol> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 10px;"> <p> <b>Editor's Note</b> – Urban purposes is used in this document to describe all of the defined activity groups other than rural activities in schedule 1.1.1 in this planning scheme. An exception to this is part 4 of the planning scheme where urban purposes is defined as per the administrative definitions in schedule 1.2 of this planning scheme.</p> </div>	<p>No acceptable outcome is nominated.</p>
<p><b>PO2</b></p> <p>Development does not occur within the environmental management and conservation zone unless it:</p> <ol style="list-style-type: none"> <li>(1) minimises and mitigates impacts to areas of high and moderate environmental value;</li> <li>(2) maintains connectivity of habitat and fauna movement corridors; and</li> <li>(3) connects tracts of fragmented habitat by vegetating rehabilitation areas where possible.</li> </ol>	<p>No acceptable outcome is nominated.</p>

Performance outcomes	Acceptable outcomes
<p><b>PO3</b> Development is separated from waterways and wetlands to help maintain habitat values, water quality and natural ecological and hydrological processes.</p> <p> <b>Editor's Note</b> – The maps provided in schedule 2 show the locations of all known waterways. It should be noted that other waterways may exist that are not shown on these maps.</p>	<p><b>A03.1</b> Development:</p> <ol style="list-style-type: none"> <li>(1) provides a minimum buffer of 50m to high value waterways, low value waterways, wetlands and marine habitats; or</li> <li>(2) is no closer to these areas than existing buildings on the site.</li> </ol> <p><b>A03.2</b> Within these buffer areas, vegetation is retained, no infrastructure is established and no earthworks are carried out.</p>
<p><b>PO4</b> Development does not introduce or spread known or potential pest or weed species by:</p> <ol style="list-style-type: none"> <li>(1) removing existing weed or pest infestations; and</li> <li>(2) adopting measures to control the introduction of new pests, such as cane toads, and weeds.</li> </ol>	<p>No acceptable outcome is nominated.</p>
<p><b>PO5</b> Development does not occur within the water catchment area.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO6</b> All landscaping and revegetation is done using plants native to Badu Island.</p>	<p>No acceptable outcome is nominated.</p>
<b>Natural Hazards – Coastal Hazards</b>	
<p><b>PO7</b> Essential community infrastructure, community facilities and accommodation activities (excluding dwelling houses and dual occupancies) are located outside of the coastal hazard area unless involving:</p> <ol style="list-style-type: none"> <li>(1) coastal dependent development; or</li> <li>(2) development that is temporary or readily relocatable; or</li> <li>(3) the upgrade or replacement of existing essential community infrastructure, community facilities or accommodation activities.</li> </ol> <p> <b>Editor's Note</b> – Dwelling houses and dual occupancies are not made assessable under section 5 of this planning scheme, therefore, the planning scheme provisions do not apply to these land uses. However, building works approval will be required.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO8</b> New lots are not created within a coastal hazard area unless the purpose of the subdivision is to create a lot over a lease area or house site established before the planning scheme was adopted.</p>	<p><b>A08.1</b> New lots are not created within the erosion prone area or storm tide inundation area.</p>



Performance outcomes	Acceptable outcomes
<p><b>PO9</b> Unless development is coastal dependent development, temporary or readily relocatable, development within a coastal hazard area is:</p> <ol style="list-style-type: none"> <li>(1) sited to lessen potential risk of erosion and storm tide inundation by locating in a landward position of adjacent buildings or, where there are no adjacent buildings, the most landward position on the lot;</li> <li>(2) designed to withstand the erosion and storm tide inundation hazard; and</li> <li>(3) designed to minimise susceptibility to storm tide inundation by ensuring floor levels are above the defined flood level.</li> </ol> <p> <b>Editor's Note</b> – To demonstrate achievement with this PO, a report prepared by a suitably qualified RPEQ (Registered Professional Engineer of Queensland) with coastal engineering experience may be required.</p> <p> <b>Editor's Note</b> – For the purpose of this PO, storage sheds and storage buildings associated with barge ramps, marinas and piers are considered to be coastal dependent development.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO10</b> Essential community infrastructure is able to function effectively during and immediately after a coastal hazard.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO11</b> Community facilities, accommodation activities and coastal dependent development provide for an evacuation route that is available at all times.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO12</b> Development involving hazardous materials manufactured or stored in bulk is not located on land subject to coastal hazard.</p>	<p><b>AO12.1</b> The manufacture or storage of hazardous materials in bulk does not occur within the erosion prone area or storm tide inundation area.</p>

Performance outcomes	Acceptable outcomes
<p><b>PO13</b> Development:</p> <p>(1) maintains vegetation on coastal landforms where its removal or damage may:</p> <p>(a) destabilise the area and increase the potential for erosion; or</p> <p>(b) interrupt natural sediment trapping processes or sand dune or land building processes; and</p> <p>(2) maintains the sediment volumes of sand dunes and near-shore coastal landforms; and</p> <p>(3) maintains physical coastal processes outside the development, including longshore transport of sediment along the coast.</p>	No acceptable outcome is nominated.
<p><b>PO14</b> Development does not result in a worsening of coastal hazards outside of the development site.</p>	No acceptable outcome is nominated.
<b>Natural Hazards – Flooding</b>	
<p><b>PO15</b> Essential community infrastructure, community facilities and accommodation activities (excluding dwelling houses and dual occupancies) are located outside of a flood hazard area unless involving:</p> <p>(1) development that is temporary or readily relocatable; or</p> <p>(2) the upgrade or replacement of existing essential community infrastructure, community facilities or accommodation activities.</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 10px;"> <p> <b>Editor's Note</b> – Dwelling houses and dual occupancies are not made assessable under section 5 of this planning scheme, therefore, the planning scheme provisions do not apply to these land uses. However, building works approval will be required.</p> </div>	<p><b>AO15.1</b> Essential community infrastructure and community facilities are not established or expanded within a flood hazard area.</p>
<p><b>PO16</b> New lots are not created within the flood hazard area unless the purpose of the subdivision is to create a lot over a lease area or house site established before the planning scheme was adopted, or a suitable building envelope can be provided outside the flood hazard area.</p>	<p><b>AO16.1</b> New lots are not created within the flood hazard area.</p>
<p><b>PO17</b> Essential community infrastructure is able to function effectively during and immediately after a flood.</p>	<p><b>AO17.1</b> Essential community infrastructure and community facilities are not established or expanded within a flood hazard area.</p>



Performance outcomes	Acceptable outcomes
<p><b>PO18</b> Development involving hazardous materials manufactured or stored in bulk is not located on land subject to flood hazard.</p>	<p><b>AO18.1</b> The manufacture or storage of hazardous material in bulk does not occur in the flood hazard area.</p>
<p><b>PO19</b> Community facilities and accommodation activities provide for an evacuation route that is available at all times.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO20</b> Development for an urban purpose within a flood hazard area is designed to minimise susceptibility to flood impacts by ensuring floor levels are above the defined flood level.</p> <div data-bbox="164 712 783 1016" style="background-color: #e0e0e0; padding: 5px;"> <p> <b>Editor's Note</b> – Urban purposes is used in this document to describe all of the defined activity groups other than rural activities in schedule 1.1.1 in this planning scheme. An exception to this is part 4 of the planning scheme where urban purposes is defined as per the administrative definitions in schedule 1.2 of this planning scheme.</p> </div>	<p>No acceptable outcome is nominated.</p>
<p><b>PO21</b> The extent of filling utilised to achieve the necessary floor levels, evacuation routes and flood immunity for infrastructure is minimised.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO22</b> Development does not change flooding characteristics outside of the site in a manner that results in:</p> <ol style="list-style-type: none"> <li>(1) loss of flood storage;</li> <li>(2) loss of, or changes to, flow paths;</li> <li>(3) acceleration or retardation of flows;</li> <li>(4) increase in the depth, duration or velocity of flood waters;</li> <li>(5) any reduction in flood warning times; or</li> <li>(6) any other worsening of flood hazards on other properties or town infrastructure.</li> </ol> <div data-bbox="164 1653 783 1823" style="background-color: #e0e0e0; padding: 5px;"> <p> <b>Editor's Note</b> – To demonstrate achievement with this PO, a flood assessment and hydraulic report prepared by a suitably qualified professional may be required.</p> </div> <div data-bbox="164 1850 783 1977" style="background-color: #e0e0e0; padding: 5px;"> <p> <b>Editor's Note</b> – This PO applies to all flood water whether or not the flooding is caused by storm tides or heavy rainfall.</p> </div>	<p>No acceptable outcome is nominated.</p>

Performance outcomes	Acceptable outcomes
<p><b>PO23</b></p> <p>Town infrastructure is designed to prevent the intrusion of flood waters.</p>	No acceptable outcome is nominated.
<p><b>PO24</b></p> <p>In areas other than the township expansion area, subdivision does not intensify the number of people living or working within a flood hazard area.</p>	<p><b>AO24.1</b></p> <p>New lots are not created within the flood hazard area.</p>
<p><b>PO25</b></p> <p>Development contributes to effective and efficient disaster management response and recovery capabilities.</p>	No acceptable outcome is nominated.
<p><b>Natural Hazards – Bushfire (Material Change of Use)</b></p>	
<p><b>PO26</b></p> <p>Essential community infrastructure and community facilities are not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances.</p>	<p><b>AO26.1</b></p> <p>Essential community infrastructure and community facilities are not established or expanded within a bushfire hazard area.</p>
<p><b>PO27</b></p> <p>Essential community infrastructure are able to function effectively during and immediately after a bushfire.</p>	<p><b>AO27.1</b></p> <p>Essential community infrastructure is not established or expanded within a bushfire hazard area (bushfire prone area) unless underground.</p>
<p><b>PO28</b></p> <p>Development involving hazardous materials manufactured or stored in bulk is not located within a bushfire hazard area (bushfire prone area).</p>	<p><b>AO28.1</b></p> <p>The manufacture or storage of hazardous material in bulk does not occur within the bushfire hazard area (bushfire prone area).</p>
<p><b>PO29</b></p> <p>Development is located and designed to ensure proposed buildings achieve a radiant heat flux level at any point on the building of:</p> <p>(1) 10kW/sqm where involving essential community infrastructure or community facilities; or</p> <p>(2) 29kW/sqm for all other uses.</p> <p> <b>Editor's Note</b> – The radiant heat flux level is to be achieved by separation unless this is not practically achievable.</p> <p> <b>Editor's Note</b> – The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p>	<p><b>AO29.1</b></p> <p>Buildings are separated from hazardous vegetation by a distance that:</p> <p>(1) achieves a radiant heat flux level at any point on the building of 10kW/sqm, where involving essential community infrastructure or community facilities, or 29kW/sqm for all other uses; and</p> <p>(2) is contained wholly within the development site.</p> <p> <b>Editor's Note</b> – Where a separation distance is to be achieved utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p>
<p><b>PO30</b></p> <p>All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.</p>	No acceptable outcome is nominated.



Performance outcomes	Acceptable outcomes
<p><b>PO31</b> Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.</p>	<p><b>AO31.1</b> A water tank is provided within 10m of each building (other than a class 10 building) which:</p> <ol style="list-style-type: none"> <li>(1) is either below ground level or of non-flammable construction;</li> <li>(2) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters:               <ol style="list-style-type: none"> <li>(a) 10,000L for residential buildings;</li> <li>(b) 45,000L for industrial buildings; and</li> <li>(c) 20,000L for other buildings; and</li> </ol> </li> <li>(3) is provided with fire brigade tank fittings - 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines.</li> </ol>
<p><b>PO32</b> Landscaping uses species that are less likely to exacerbate a bushfire and does not increase fuel loads within separation areas.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO33</b> Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality.</p>	<p>No acceptable outcome is nominated.</p>
<b>Natural Hazards – Bushfire (Reconfiguration of a Lot)</b>	
<p><b>PO34</b> Where subdivision is being undertaken for an urban purpose or within the township zone, a separation distance from hazardous vegetation is provided to achieve a radiant heat flux level of 29kW/sqm at the boundary of the proposed lots.</p> <div style="background-color: #d3d3d3; padding: 5px; margin-top: 10px;"> <p> <b>Editor's Note</b> – Urban purposes is used in this document to describe all of the defined activity groups other than rural activities in schedule 1.1.1 in this planning scheme. An exception to this is part 4 of the planning scheme where urban purposes is defined as per the administrative definitions in schedule 1.2 of this planning scheme.</p> </div> <div style="background-color: #d3d3d3; padding: 5px; margin-top: 10px;"> <p> <b>Editor's Note</b> – The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p> </div>	<p><b>AO34.1.1</b> No new lots are created within a bushfire hazard area (bushfire prone area).</p> <p>OR</p> <p><b>AO34.1.2</b> Lots are separated from hazardous vegetation by a distance that:</p> <ol style="list-style-type: none"> <li>(1) achieves a radiant heat flux level of 29kW/sqm at all lot boundaries; and</li> <li>(2) is contained wholly within the development site.</li> </ol> <div style="background-color: #d3d3d3; padding: 5px; margin-top: 10px;"> <p> <b>Editor's Note</b> – Where a separation distance is to be achieved utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> </div>

Performance outcomes	Acceptable outcomes
<p><b>PO35</b></p> <p>Where subdivision is undertaken for a purpose other than an urban purpose, a building envelope of reasonable dimensions is provided on each lot which achieves a radiant heat flux level of 29kW/sqm at any point.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO36</b></p> <p>The development design responds to the potential threat of bushfire and establishes clear evacuation routes which demonstrate an acceptable or tolerable risk to people, by:</p> <ol style="list-style-type: none"> <li>(1) minimising the length of the development perimeter exposed to, or adjoining hazardous vegetation;</li> <li>(2) avoiding the creation of potential bottle-neck points in the movement network;</li> <li>(3) establishing direct access to a safe assembly/evacuation area in the event of an approaching bushfire; and</li> <li>(4) ensuring roads likely to be used in the event of a fire are designed to minimise traffic congestion.</li> </ol>	<p>No acceptable outcome is nominated.</p>
<p><b>Natural Hazards – Landslide</b></p>	
<p><b>PO37</b></p> <p>Development does not result in an increase in risk to people and buildings from landslide hazard.</p> <div style="background-color: #d9d9d9; padding: 5px; margin-top: 10px;"> <p> <b>Editor's Note</b> – To demonstrate compliance with this PO, a geotechnical engineering report prepared by an experienced geotechnical professional may be required.</p> </div>	<p>No acceptable outcome is nominated.</p>
<p><b>PO38</b></p> <p>Access is available to the site during and after a landslide.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO39</b></p> <p>Landslide control structures or works are contained wholly within the development site.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO40</b></p> <p>Landslide risk mitigation treatments do not have a significant impacts are area of high environmental value and medium environmental value.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO41</b></p> <p>Development involving hazardous materials manufactured or stored in bulk is not located on land subject to landslide hazard.</p>	<p><b>AO41.1</b></p> <p>The manufacture or storage of hazardous material in bulk does not occur in the landslide hazard area.</p>
<p><b>PO42</b></p> <p>Essential community infrastructure and community facilities are able to function effectively during and immediately after a landslide.</p>	<p><b>AO42.1</b></p> <p>Essential community infrastructure and community facilities are not established or expanded within a landslide hazard area.</p>



Performance outcomes	Acceptable outcomes
<b>Torres Strait People and Townships</b>	
<p><b>PO43</b> New commercial and government uses, other than home based businesses, industrial activities, community facilities and waterfront activities, are consolidated within the township centre core area.</p>	<p>No acceptable solution is nominated.</p>
<p><b>PO44</b> Industrial activities minimise any noise, odour or other emissions and do not impact on the community's ability to enjoy their lifestyle.</p>	<p>No acceptable outcome is nominated.</p>
<p><b>PO45</b> Multiple dwellings occur within the township zone and are located, designed and oriented to create pleasant, safe and attractive living environments, including through:</p> <ol style="list-style-type: none"> <li>(1) interspersing with lower density forms of accommodation activities;</li> <li>(2) provision of generous outdoor open space suited to tenant needs;</li> <li>(3) creation of privacy within individual dwellings;</li> <li>(4) provision of an attractive outlook from individual dwellings;</li> <li>(5) optimum access to cooling breezes to dwellings;</li> <li>(6) provision of main building entrances, verandahs and windows that allow overlooking of the street; and</li> <li>(7) screening along site boundaries or dwelling openings to obscure any undesirable views.</li> </ol>	<p>No acceptable solution is nominated.</p>
<p><b>PO46</b> Accommodation activities and community facilities are located and sited so that visual, lighting, noise and other impacts do not unduly affect residents and visitors to the site.</p>	<p><b>AO46.1</b> Accommodation activities and community facilities are separated from:</p> <ol style="list-style-type: none"> <li>(1) existing and future substations by a minimum distance of 50m; and</li> <li>(2) existing and future sea and air transport infrastructure by a minimum distance of 100m.</li> </ol>

Performance outcomes	Acceptable outcomes
<p><b>PO47</b> Development within the township expansion precinct:</p> <ul style="list-style-type: none"> <li>(1) is primarily for the purpose of accommodation activities;</li> <li>(2) connects to surrounding streets and parks to allow easy movement for pedestrians and vehicles between older and newer parts of town;</li> <li>(3) minimises runoff, wastage of water and negative impacts on water quality by retaining natural drainage lines, maximising permeable surfaces and, where possible, maximising opportunities for reuse of water;</li> <li>(4) provides for building orientation that maximises access to cooling breezes;</li> <li>(5) includes a local park in a central location that caters to the needs of future residents of the new development and can be easily seen from residential areas;</li> <li>(6) is sequenced to allow efficient connections or upgrades to town infrastructure such as roads, water, waste water, drainage and electricity; and</li> <li>(7) includes landscaping in streets and public areas.</li> </ul>	No acceptable solution is nominated.
<p><b>PO48</b> Community facilities, particularly those accommodating child care, educational, training and health services are located within the township zone.</p>	No acceptable solution is nominated.
<p><b>PO49</b> Development that may be incompatible with or compromise the ongoing operation or expansion of community facilities does not occur near these uses.</p>	No acceptable solution is nominated.
<p><b>PO50</b> Where possible, community facilities are co-located, multi-purpose and flexible to be able to respond to the changing needs of the community over time.</p>	No acceptable solution is nominated.
<b>Ailan Kastom and Cultural Heritage</b>	
<p><b>PO51</b> The continued practice of Ailan Kastom is facilitated and not impeded by development.</p>	No acceptable solution is nominated.
<p><b>PO52</b> Development does not cause run off, soil erosion or other impacts that may lessen the significance or use of nearby cultural heritage places.</p>	No acceptable solution is nominated.
<b>Getting Around</b>	
<p><b>PO53</b> Development does not impact on Badu Island's air and sea transport infrastructure, including the airstrip, helicopter landing pad, barge ramp, finger pier and associated facilities, or the efficient and safe operation of services from these facilities.</p>	No acceptable solution is nominated.



Performance outcomes	Acceptable outcomes
<p><b>PO54</b> Where upgrading existing, or establishing new, barge ramps or piers, development:</p> <p>(1) is designed to minimise noise, lighting and other disturbances to residents and users of accommodation activities and community facilities; and</p> <p>(2) provides for nearby set down or storage areas to avoid congestion around the facility.</p> <p> <b>Editor's Note</b> – Only development above high water mark is assessable against this planning scheme.</p>	No acceptable solution is nominated.
<p><b>PO55</b> Roads and associated culverts do not increase the concentration and flow of water through the township zone and contribute to problems of coastal erosion.</p>	No acceptable solution is nominated.
<b>Town Infrastructure</b>	
<p><b>PO56</b> Waste materials generated from construction activities are reused or recycled, wherever possible, to minimise reliance on local waste facilities.</p>	No acceptable solution is nominated.
<p><b>PO57</b> The visual impact of town infrastructure is minimised.</p>	No acceptable solution is nominated.
<p><b>PO58</b> Town infrastructure is located and designed to avoid or minimise impacts on the community resulting from noise, odour and other emissions.</p>	No acceptable outcome is nominated.

