

2 Planning and Legislative Framework

This chapter outlines legislation, regulation and policies that require consideration in the development of the NMBSEMP. It has been compiled based on legislation, regulation and policies current at the time of writing. Further consideration should be given to the requirements current at the time of implementing erosion management recommendations. The legislation, regulation and policies mentioned in this chapter are not meant to be a comprehensive list but should be used as a starting point and guide for determination of considerations at the time of approval and construction.

Proposed management options recommended within the NMBSEMP must be consistent with the local government planning scheme of the MBRC and comply with all relevant legislation (Commonwealth, State and local) and coastal and environmental planning instruments and policies.

The basis and control of management of the coast of Queensland is governed by the *Coastal Protection and Management Act 1995 (Coastal Act)* and the *Sustainable Planning Act 2009 (SP Act)*. Under these Acts, the Coastal Management Plan (CMP), the Coastal Protection State Planning Regulatory Provision (Coastal SPRP), the State Planning Policy (SPP) and the State Development Assessment Provisions are the primary statutory planning instruments for development planning and assessment. The following planning and legislative framework relates to the provisions of the CMP, Coastal SPRP, SPP and SDAP as they apply to the study area. Legislation and policies considered in this SEMP will require consideration of issues including, but not limited to:

- The use of coastal structures for property protection;
- Protection of species listed under State and Commonwealth legislation and conservation of their habitat;
- Management of shoreline erosion in a manner that is not detrimental to the adjacent Moreton Bay Marine Park and Ramsar site; and
- The maintenance of local biodiversity.

These legislative and policy considerations are described in more detail in the following chapters.

2.1 Coastal Protection and Management Act 1995

The Queensland Coastal Act provides for management of the coastal zone.¹ The Coastal Act recognises the diverse range of resources and values of the coastal zone, and has the following objectives:²

- Provide for the protection, conservation, rehabilitation and management of the coastal zone, including its resources and biological diversity;

¹ Coastal waters and land up to a point 5km landward of the high-water mark or the point nearest the high-water mark where land reaches 10m AHD, whichever is more landward: ss15 and 18A *Coastal Act*

² s3

- Have regard to the goal of the National Strategy for Ecologically Sustainable Development in the use of the coastal zone;
- Ensure decisions about land use and development safeguard life and property from the threat of coastal hazards; and
- Encourage the enhancement of knowledge of coastal resources and the effect of human activities on the coastal zone.

The main means of achieving this management under the *Coastal Act* is the regulation of development and allocations, and the preparation of management plans.

The Queensland Government currently manages the coastal zone using the CMP and the SPP. The CMP is an instrument prepared under the *Coastal Act* for the management of the coastal zone and works that are not assessable development under the *SP Act*. It is aimed primarily at local governments as well as other managers on the coastal zone (e.g. State government, Traditional Owners, marine park managers, port authorities). The SPP provides State interests with policies to be considered by land managers particularly when preparing planning schemes. State interests include the coastal environment, biodiversity and natural hazards (e.g. coastal erosion).

In addition, the SPP also provides development assessment criteria to be applied when assessing development related to particular state interests. Similarly, the Coastal SPRP and SDAP provide the performance criteria against which assessment managers and SARA will assess development. These instruments apply to a range of interests relevant to the SEMP, including coastal protection, water quality, native vegetation clearing, Queensland heritage, wetlands and environmentally relevant activities (e.g. dredging).

For the purposes of developing the Northern Moreton Bay SEMP, the CMP will be applied. At the time of implementation of recommendations within the SEMP (e.g. submission of development applications for construction of coastal protection works), the Coastal SPRP, SPP and SDAP will be applied. In this context, all four instruments are considered below.

2.1.1 Coastal Management Plan

The CMP has application to the coastal zone as defined by the *Coastal Act*. The CMP seeks to manage all coastal land and coastal resources within this zone and applies to all management planning, activities, decisions and works that are not assessable development under the *SP Act*, including the development of a SEMP.

The CMP provides for the decision-making of managers of State and local coastal land and coastal resources, and for the owners of private coastal land. There are six principles for the management of coastal land under the CMP:

- (1) *Coastal Landforms and Physical Coastal Processes* – The long-term stability of dunes and other coastal landforms are preserved and physical coastal processes including erosion, accretion and the movement of sediment are able to occur without interruption.

- (2) *Nature Conservation* – Matters of state environmental significance (MSES) are conserved by avoiding impacts or where impacts cannot be avoided residual impacts are mitigated through rehabilitation measures.
- (3) *Indigenous Cultural Heritage* – Aboriginal People and Torres Strait Islanders are the primary guardians, keepers and knowledge holders of their cultural heritage; their connection to coastal and marine resources should be maintained and enhanced.
- (4) *Public Access and Enjoyment of the Coast* – Public access and use of the coast is maintained or enhanced for current and future generations.
- (5) *Management Planning* – Managing and using coastal land is planned, monitored, reported on and reviewed to achieve continuous improvement in management outcomes.
- (6) *Knowledge Sharing and Community Engagement* – Knowledge of coastal resources and their management is shared with the community and the community is engaged in decision-making processes and activities that affect them.

Each of these principles is given effect by a series of coastal management outcomes. As SEMP are developed for priority areas for shoreline erosion management, the most relevant coastal management outcomes to the preparation of the Northern Moreton Bay SEMP are those regarding coastal landforms and physical coastal processes.

Coastal Landforms and Physical Coastal Processes

The coastal management outcomes for coastal landforms and physical coastal processes identify the need to maintain natural processes in the coastal zone, including the natural fluctuations of erosion and accretion and buffers provided by dunes, mangroves and coastal wetlands. The relevance of the coastal management outcomes to the SEMP include the following:

- 1.6 requires a SEMP to be prepared where there is ‘an imminent threat to the community or infrastructure from coastal erosion’. A SEMP is intended to ‘deliver a science-based solution to the erosion problem that considers social, environmental and economic issues.’.
- 1.1 to 1.5 establish, as a general principle, the need to maintain natural processes on the coast, including the processes of erosion and accretion, land stabilisation by native vegetation, natural buffering by dunes, mangroves and coastal wetlands, and maintenance of sand within the active beach system.
- 1.7 requires management planning for assets in areas at risk from erosion to adopt the hierarchy of avoid, retreat, accommodate or defend.
- 1.8 identifies a preference for beach nourishment when considering the defence of coastal assets.
- 1.8 also identifies that where seawalls are considered, beach nourishment should be undertaken in conjunction so as to balance the loss of sediment locked up behind the walls.
- 1.10 requires the consideration of sea level rise in managing the coast.

These outcomes, therefore, establish the framework of considerations for the Northern Moreton Bay SEMP. Consistent with the Coastal SPRP, SPP and SDAP, the CMP identifies a hierarchy of management options. This is represented in Figure 2-1 below. See also Section 3.

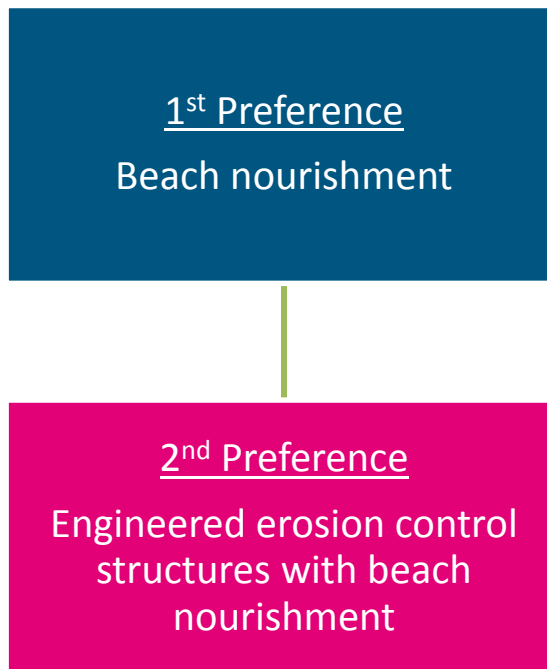


Figure 2-1 Preference for erosion control structures identified in the CMP

Other Relevant Outcomes

Other coastal management outcomes which are relevant to the Northern Moreton Bay SEMP include:

- 2.1 Areas containing MSES are conserved by:
 - Protecting areas containing MSES, sensitive natural ecosystems, their process and habitat (particularly feeding, nesting and roosting sites) from threats; and
 - Maintaining, enhancing or re-establishing habitat connectivity for species movement.
- 2.2 Where impacts on MSES cannot be avoided, impacts are mitigated by actions such as restoring or rehabilitating natural environmental values of similar or adjacent habitat or other actions that reduce threats to MSES.
- 4.2 The use of undeveloped esplanades and road reserves vulnerable to coastal erosion for vehicular access is supported if they provide the only lawful means of vehicular access.

2.1.2 Tidal Works and Quarry Material

Tidal works are defined under the *Coastal Act* as work 'above land under tidal water, or on land that will or may be under tidal water because of development on or near the land, and work that is an integral part of the relevant work, wherever located'.³ This includes rockwalls, groynes, jetties,

³ *Coastal Act*, Sch. 1

embankments and land reclamation. Prescribed tidal works is further defined under the *Coastal Protection and Management Regulation 2003 (Coastal Regulation)* as tidal work that is completely or partly within a local government tidal area.⁴ Both tidal works and prescribed tidal works require approval under the *SP Act* (see Section 2.2 below).

In addition, for works involving the extraction of material from tidal water (i.e. 'quarry material'), approval is required from the Chief Executive administering the Act. This is relevant to the extraction of sand from tidal water for the purpose of beach nourishment.

2.2 Other Instruments

2.2.1 Commonwealth Legislation

2.2.1.1 *Environmental Protection and Biodiversity Conservation Act 1999*

Any actions that have or are likely to have a significant impact on a matter of national environmental significance (NES) are to be referred to the Minister administering the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). Matters of NES that *may* be significantly impacted by coastal protection works in the Study Area include:

- Wetlands of international importance (Moreton Bay Ramsar Site);
- Listed threatened species and ecological communities; and
- Migratory species.

If coastal protection works are declared a 'controlled action', approval will be required from Minister before the works can commence.

Directory of Important Wetlands in Australia

The Australian, State and Territory governments have jointly compiled a Directory of Important Wetlands in Australia which identifies and recognises Australia's nationally important wetlands. Although not directly protected under Commonwealth legislation, these wetlands are still of planning significance at a Commonwealth level.

The Moreton Bay Aggregation (QLD134) and Pumicestone Passage (QLD 136) are listed on the Directory and are both protected at a State level under marine parks legislation as the Moreton Bay Marine Park (see Section 2.2.2.6).

2.2.2 State Legislation and Instruments

2.2.2.1 *Sustainable Planning Act 2009*

The *SP Act* is the central piece of planning legislation, used by the State Government to regulate planning and development. Management planning and erosion management development are both regulated under the Act.

Management and planning actions in Queensland are managed by SPIs and Local Planning Instruments (LPIs). Specifically, these instruments apply to government decision-making and

⁴ *Coastal Regulation* s14(1)

planning in relation to land management. SPIs include SPRPs, Regional Plans (RPs) and SPPs, while LPIs include planning schemes, temporary LPIs and planning scheme policies.

The *SP Act* also regulates the assessment of development through the Integrated Development Assessment System (IDAS). This system utilises relevant SPIs and LPIs to assess whether or not development can be approved.

The key SPIs and LPIs which are triggered by management or development in the study area are summarised in Table 2-3 and include the following:

- Coastal SPRP;
- South East Queensland Koala Conservation SPRP 2010;
- South East Queensland Regional Plan 2009-2031 (SEQRP);
- SPP 2013;
- Coastal Management Plan (see Section 2.1.1); and
- Caboolture ShirePlan and planning scheme policies (see Section 2.3.3).

These are discussed below in relation to their impact on the preparation of a SEMP for the study area. The *SP Act* also establishes the SDAP which are an instrument used for development assessment.

Table 2-1 Summary of Application of SPIs and LPIs

Trigger	Instrument	Application of instrument
Development in or adjacent to a declared fish habitat area	SDAP Module 5	Development assessment
Clearing of native vegetation	SDAP Module 8	Development assessment
Environmentally relevant activities (e.g. dredging)	SDAP Module 4	Development assessment
Development in a coastal management district	SDAP Module 10	Development assessment
	Coastal SPRP	
	SPP	
Management of coastal land and coastal resources	CMP	Management & decision-making
Decision making in SEQ	SEQRP	Management & decision-making
Development related to land affected by MSES	SPP	Development assessment
Development within a coastal hazard area	SPP	Development assessment
Development within the former Caboolture Shire local government area	<i>Caboolture ShirePlan</i>	Development assessment

Assessment under the *SP Act* for potential shoreline erosion management recommendations will be required according to triggers including but not limited to:

- Tidal works (including prescribed tidal works) under the *Coastal Act* ;
- Fisheries matters (including removal, destruction or damage to marine plants, and work in fish habitat areas) under the *Fisheries Act 1994 (Fisheries Act)*;
- Vegetation clearing under the *Vegetation Management Act 1999 (VM Act)*;
- Dredging under *the Environmental Protection Act 1994 (EP Act)*;
- Interference with heritage items under the *Queensland Heritage Act 1992* and *Aboriginal Cultural Heritage Act 2003*; and
- Disturbance of acid sulfate soils (ASS).

These are discussed in Sections 2.2.2.2 to 2.2.2.10 below. Development applications are assessed by the Assessment Manager, usually local government, with the State Assessment and Referral Agency (SARA) acting as a concurrence agency on behalf of the State. Other Departments act as technical agencies for various jurisdictional triggers. SARA assesses development against the SDAP and while local government Assessment Managers assess against relevant LPIs, as well as other SPIs.

Coastal Protection State Planning Regulatory Provision 2013

The Coastal Protection SPRP applies to development in a coastal management district (CMD) that is impact assessable or requires referral to EHP, or that is assessed by EHP as the assessment manager.

The SPRP provides assessment criteria for coastal hazards, development in an erosion prone area, nature conservation, areas of High Ecological Significance (HES), public access, and coastal-dependent development. The following constraints and requirements are relevant to works under the SEMP:

- Retreat is the default option in areas threatened by erosion in the erosion prone area. The presence of development to a scale and intensity that makes retreat not achievable may justify property protection works. Structural engineering and stabilisation works are a last resort where there is an immediate threat to public safety, property or infrastructure. These works must not cause adverse impacts on coastal resources or natural cycles of erosion and accretion of beaches.
- All tidal works require (a) proof of demonstrated need in the public interest, and (b) a comprehensive investigation that determines no significant adverse impacts on longshore transport of sediments or an increase in coastal hazards (including erosion) to neighbouring foreshore.
- Beach and related areas that contain significant wildlife habitat are to be protected and managed. This includes:
 - Key shorebird roosting and feeding habitat. Where works require the loss of shorebird habitat, offsets are to be provided before the works commence;

- Fish habitat and movement passages, including those in Deception Bay and the Pumicestone Passage;
- Benthic habitat, including seagrass beds in Pumicestone Passage, around Sandstone Point and in Deception Bay, as well as benthic communities and tidal flats; and
- Stands of native vegetation, especially riparian vegetation. Riparian zones are to be maintained as wildlife corridors.
- No development in areas of HES.
- No net loss of public access to the foreshore unless it compromises the protection of coastal resources.
- Dredging must be beneficial to the State in terms of navigation and economics and be proven to maintain the existing physical environment of the area. An application for dredging will only be approved where supported by studies into the nature of dredging spoils and impacts on physical processes, and maintenance dredging requires a dredge management plan.
- Reclamation will only be allowed where clearly justified and where there are no or minimal adverse impacts on coastal resources. Reclamation is justified where it is necessary for erosion control/nourishment purposes, protects the physical environment, or is necessary to reinstate land that has been eroded where the reclamation is coordinated with neighbouring properties.

State Development Assessment Provisions

The SDAP is divided into 19 modules. The most relevant of these to the SEMP are Module 5 (fisheries resources), 8 (native vegetation clearing) and 10 (coastal protection). If works were proposed consisting of dredging or in relation to a heritage location, Modules 4 (environmentally relevant activities) and 9 (Queensland heritage) would also apply.

The requirements of these Modules are to be considered as part of development assessment. A series of performance and acceptable outcomes are set out in each module identifying ways in which development can meet the purpose of the Module. The key considerations for the SEMP from these outcomes include the following:

- Development on tidal land or fish habitats should be public infrastructure with no viable alternative, or for a legitimate public safety issue, or on land subject to a resource allocation authority (RAA);
- Development is designed to minimise impacts on habitat values and community use of FHAs;
- Erosion control structures do not cause loss of fish habitat beyond the structure footprint and are in response to the immediate threat of significant erosion;
- Development is in accordance with Fish Habitat Management Operational Policies (see Section 2.2.2.3);
- Clearing is in accordance with the Vegetation Management Act 1999 (see Section 2.2.2.4);
- Development in an erosion prone area maintains coastal landforms and processes;

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- Erosion prone areas are maintained free of development other than coastal-dependent development or development that is temporary, readily relocatable or able to be abandoned;
- Coastal protection work is undertaken only as a last resort; and
- Development is set back from MSES.

State Planning Policy 2013

The SPP is a guiding instrument for a centralised treatment of management planning and assessment of development activities in Queensland. It identifies the planning outcomes that should be included in local planning schemes as well as interim development assessment provisions.

The SPP outlines assessment requirements for all State interests, including the following three of relevance to the SEMP:

- Coastal environment;
- Natural hazards (including coastal erosion); and
- Biodiversity.

The assessment requirements of these State Interests are summarised in Table 2-2.

Table 2-2 State Interests and Assessment Criteria under Draft SPP

State Interest	Relevant Assessment Criteria
Coastal environment	Development involving operational works in a CMD is to: <ol style="list-style-type: none"> 1. Avoid or minimise adverse impacts on coastal processes and coastal resources, and scenic amenity of important natural coastal landscapes, views or vistas; 2. Maintain or enhance general public access to, or along, the foreshore unless this is contrary to the protection of coastal resources or public safety; and 3. Not involve reclamation of tidal land other than for the purposes of coastal protection works or work necessary to protect coastal resources or coastal processes.
Biodiversity	Development involving operational work on land related to MSES is to: <ol style="list-style-type: none"> 4. Identify any potential significant adverse environmental impacts on MSES; and 5. Manage the significance adverse environmental impacts on MSES by, in order of priority: <ul style="list-style-type: none"> ○ Avoiding significant adverse environmental impacts; ○ Mitigating significant adverse environmental impacts where these cannot be avoided; and ○ Where applicable, offsetting any residual adverse impacts.
Natural hazards	Development involving operational works on land within a coastal hazard area or a flood hazard area is to: <ol style="list-style-type: none"> 6. Avoid natural hazard areas or mitigate the risk of the natural hazard; 7. Support and not unduly burden disaster management responses or recovery capacity and capabilities;

State Interest	Relevant Assessment Criteria
	<p>8. Directly, indirectly and cumulatively avoid an increase in the severity of the natural hazard and the potential for damage on the site or to other properties; and</p> <p>9. Maintain or enhance natural processes and the protective function or landforms and vegetation that can mitigate risks associated with the natural hazard.</p> <p>Development involving operational works on land within an erosion prone area is to:</p> <p>10. Not be located in an erosion prone area within a CMD unless it cannot feasibly be located elsewhere and is coastal-dependent development, temporary, readily relocatable or able to be abandoned;</p> <p>11. Propose to undertake coastal protection work (excluding beach nourishment) only as a last resort where coastal erosion presents an imminent threat to public safety or existing buildings and structures, and all of the following apply:</p> <ul style="list-style-type: none"> ○ The property cannot reasonably be relocated or abandoned; and ○ Any coastal protect works to protect private property is located as far landward as practicable and on the lot containing the property to the maximum extent reasonable; and ○ The coastal protection work mitigates any increase in coastal hazard risk for adjacent areas.

South East Queensland Regional Plan 2009-2031

The SEQRP is a planning document which sets the regional vision for future development and growth in SEQ. The key effect of the SEQRP is to advise on planning and decision-making in managing development and growth. The following principles are relevant to decision-making in the coastal zone for the purposes of this SEMP:

- 1.4 Natural hazards and climate change adaptation;
- 2.1 Biodiversity;
- 2.4 Managing the coast;
- 3.1 Regional landscape values; and
- 4.2 Land, extractive resources, minerals, forestry and fisheries.

These policies emphasise the need to reduce the exposure of coastal areas to coastal erosion and inundation, taking into account projected climate change impacts (mostly reflected as part of the CMP, see Section 2.1.1). This is to be achieved without impacts on areas of significant biodiversity values, coastal values and natural coastal processes, and fish habitat and movement values. The SEMP must also be consistent with the Moreton Bay Marine Park zoning provisions (see Section 2.2.2.6).

No development assessment criteria apply under the SEQRP SPRP.

2.2.2.2 *Environmental Protection Act 1994*

The *Environmental Protection Act 1994 (EP Act)* and the *Environmental Protection Regulation 2008 (EP Regulation)* provide the main framework in Queensland for controlling environmental harm and pollution resulting from development.

The EP Act sets out a general environmental duty (s319) requiring persons not to cause environmental harm unless all reasonable and practicable measures are taken to prevent or minimise the harm. Compliance with the duty is a defence to causing environmental harm without appropriate authorisation.⁵ In the context of the SEMP, Council must not carry out any activities that cause, or are likely to cause, environmental harm unless they take reasonable and practicable measures to prevent or minimise the harm.

Environmentally relevant activities (ERAs) are a particular type of action causing environmental harm. These activities can only be undertaken with the appropriate approval. Under the *EP Regulation*, ERAs include dredging (ERA 16). Authorisation to undertake ERA 16 may be required where dredging of sand of beach nourishment purposes is recommended under the SEMP.

Environmental protection policies (EPPs) are also prepared under the EP Act to protect Queensland's environment. These EPPs seek to protect environmental values (EVs) and objectives identified for various aspects of the environment including water, noise, air quality and waste management. EVs and objectives have been identified under the following policies and instruments for the study area:

- *Environmental Protection (Water) Policy 2009*;
 - Caboolture Rive Environmental Values and Water Quality Objectives, July 2010;
 - Moreton Bay, North Stradbroke, South Stradbroke, Moreton and Moreton Bay Islands Environmental Values and Water Quality Objectives, July 2010;
 - Pumicestone Passage Environmental Values and Water Quality Objectives, July 2010;
 - Pine Rivers and Redcliffe Creeks Environmental Values and Water Quality Objectives, July 2010; and
 - Queensland Water Quality Guidelines 2009.
- *Environmental Protection (Air) 2008*;
- *Environmental Protection (Noise) Policy 2008*; and
- *Environmental Protection (Waste Management) Regulation 2000*.

2.2.2.3 *Fisheries Act 1994*

The *Fisheries Act 1994* protects fisheries resources and fish habitats in Queensland. All coastal protection works requiring the clearing of marine plants (including any removal, damage or destruction) or occurring in declared fish habitat areas (FHA) require assessment under the *SP Act* subject to concurrence assessment against the SDAP. In addition, works involving land under a FHA declaration require resource allocation authority (RAA) from the Department of Agriculture,

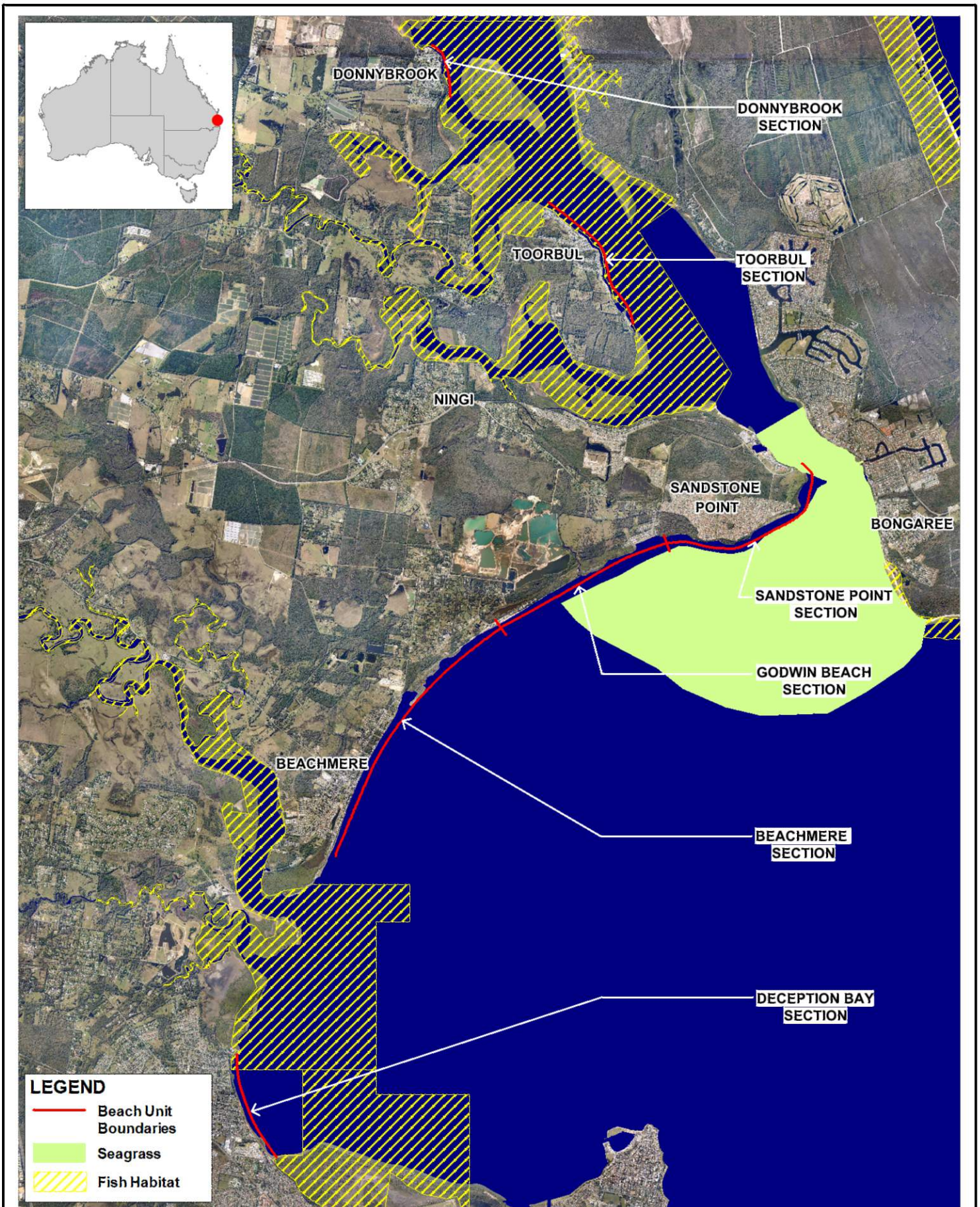
⁵ EP Act s493A

Fisheries and Forestry (DAFF). DAFF is the technical agency for all development applications involving fisheries matters (e.g. marine plants, FHAs) under the *Fisheries Act 1994* while the Department of National Parks, Recreation, Sport and Racing (DNRPSR) is responsible for the declaration and management of FHAs.

Figure 2-2 shows the extent of the Pumicestone, Kippa-Ring and Deception Bay FHAs which cover the coastal waters offshore of Toorbul and Donnybrook, offshore of Deception Bay, and in the Caboolture River as far as Caboolture. Figure 2-2 also shows seagrass (i.e. benthic marine plant) mapping for these same waters. The fisheries values of these waters is summarised in Table 2-3.

Table 2-3 Summary of Fisheries Values in the Study Area

Area	Fisheries Values
Onshore	<ol style="list-style-type: none"> 1. <i>Avicennia</i>, <i>Aegiceras</i>, <i>Cerriops</i> and <i>Rhizophora spp.</i> mangrove communities dominating fringing shoreline, especially in Pumicestone Passage; 2. One of two areas in Queensland with substantial <i>Bruguiera gymnorhiza</i> (Pumicestone Passage); 3. Sandy-mud foreshore and tidal flats; 4. Samphire flats around the Caboolture River and Burpengary Creek 5. Mangrove over-wash islands; and 6. Extensive wetland habitat.
Offshore	<ol style="list-style-type: none"> 7. Pumicestone Passage, Kippa-Ring and Deception Bay FHAs; 8. Dense-to-sparse and ephemeral seagrass beds in Pumicestone Passage, between Sandstone Point and Goodwin Beach, and in Deception Bay 9. Intertidal shoals; 10. Fisheries: Australian bass, bream, blue salmon, estuary cod, flathead, garfish, jewfish, luderick, mangrove jack, ocean beach mullet; sea mullet, tailor, whiting, mud crabs, sand crabs, banana prawns, eastern king prawns, bay prawns, school prawns and greasyback prawns; 11. Important juvenile finfish and crustacean area (Kippa-Ring) 12. Indigenous fishing; 13. Exceptionally high values for recreational fishing and also popular for boating; (Pumicestone Passage and Deception Bay); and 14. Potential dugong and turtle habitat.

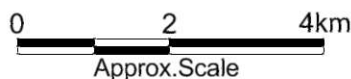


Title: **Marine Resources in the SEMP Area (FHAs and seagrass)**

Figure: **2-2**

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BMT WBM endeavours to ensure that the information provided in this map is correct at the time of publication. BMT WBM does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.



Relevant policies necessary to consider when recommending works involving fisheries matters are summarised in Table 2-4 below.

Table 2-4 Summary of Applicable Fish Habitat Management Operational Policies and Policy Requirements for Erosion Management Works in the SEMP Area

Policy	Applicable Policy Requirements
FHMOP 001 Management of protection of marine plants and other tidal fish habitats	<ol style="list-style-type: none"> 1. Coastal development proposals should avoid impacts to marine plants and other tidal fish habitats; 2. All private development works must be set back from tidal lands and fish habitats; 3. Tenure over tidal fish habitats for private development is not supported; 4. Erosion protection and dredging activities must be in accordance with FHMOP 010 and FHMOP 040, respectively; and 5. Revetment works supported only where there is substantiated accelerated bank erosion or slumping threatening buildings or infrastructure.
FHMOP 002 Management of declared Fish Habitat Areas	<ol style="list-style-type: none"> 6. RAA only to be issued in a declared FHA for 'prescribed development purposes' includes maintaining: <ul style="list-style-type: none"> o A structure that was constructed before the area was declared to be a FHA under the Fisheries Act; and o A lawfully constructed structure; and 7. Constructing a permanent structure on tidal land or depositing material for beach replenishment is not supported in a FHA.
FHMOP 004 Dredging, extraction and spoil disposal activities: Departmental procedures for provision of fisheries comments	<ol style="list-style-type: none"> 8. Dredging for waterway management (i.e. beach nourishment) is determined on a case-by-case basis but requires community/habitat benefits to outweigh potential losses; 9. Dredging within FHA prohibited unless in an existing navigation channel; 10. Spoil disposal on non-tidal land is preferred; 11. Proposals for dredging for waterway management, dredging for navigational purposes, or spoil disposal will not be opposed where there are: <ul style="list-style-type: none"> o No, or very minimal, immediate or foreseeable, permanent, adverse impacts on fisheries resources; or o Demonstrated fisheries related benefits; or o Essential community benefits (e.g. beach nourishment); and 12. Dredging or spoil disposal proposal will be opposed where dredging occurs within a FHA and/or feasible alternative exist.
FHMOP 010 Tidal fish habitats, erosion control and beach replenishment	<ol style="list-style-type: none"> 13. Natural shoreline processes and existing tidal fish habitat values are to be maintained by: <ul style="list-style-type: none"> o Using erosion buffer zones and managed retreat where there is no significant erosion; o Treating the cause of erosion, rather than only

Policy	Applicable Policy Requirements
	<p>attempting to manage the erosion through the use of erosion control structures and beach replenishment, where the erosion is the result of human activities;</p> <ul style="list-style-type: none"> o Designating buffer zones; <p>14. Erosion control measures are supported where there is significant erosion, inadequate erosion buffer zone and impossibility of managed retreat;</p> <p>15. Erosion control structures are to be constructed by parties with as-of-right or approved use of land (for private property) or by local government on behalf of the community;</p> <p>16. Erosion control structures not permitted in declared FHA, unless temporary;</p> <p>17. Seawalls, revetments and other structures parallel to the shoreline are to be located as far landward as possible;</p> <p>18. Depositing material for beach nourishment not permitted in FHA;</p> <p>19. Beach nourishment supported only where there is significant erosion or requirement for the protection or effective functioning of erosion control structures;</p> <p>20. Nourishment material must be sourced outside the FHA with a buffer zone of at least 100m between extraction site and the FHA boundary;</p> <p>21. Nourishment material must be sourced away from locations where there are marine plants and fishing grounds;</p> <p>22. Filling of tidal land for creation of a dune or beach at a level above HAT must be an integral part of the erosion control design and minimise renourishment frequency/impact of renourishment of tidal fish habitats, or remove the need for other erosion control works; and</p> <p>23. Dredging to comply with FHMOP 004.</p>

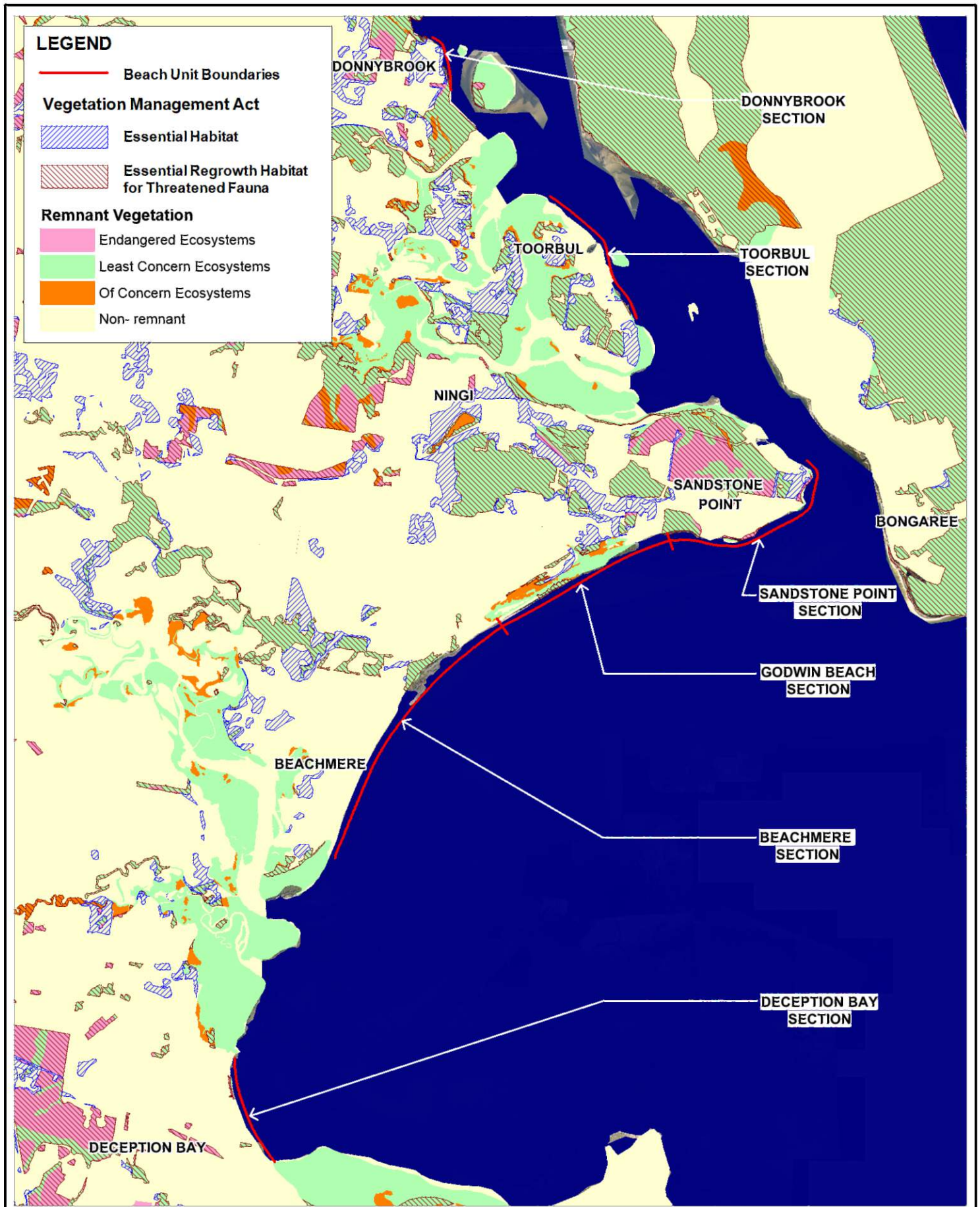
2.2.2.4 Vegetation Management Act 1999

The *Vegetation Management Act 1999 (VM Act)* prohibits the clearing of native vegetation unless for a relevant purpose. Alternatively, clearing may be exempt from the approval process where listed under Schedule 24 of the *SP Regulation*. Relevant purposes and exemptions relevant to shoreline erosion management for particular land are summarised in Table 2-5.

Table 2-5 Relevant Purposes and Exemptions Applicable to Clearing Vegetation for Shoreline Management Works

Type of Vegetation on Regional Ecosystem Map	Colour on RE Map	Relevant Purpose/Exemptions Available for Clearing
<i>Freehold land</i>		
Non-remnant	White	1. For any purpose
Remnant	Green, orange or pink	2. Under a development approval for a material change of use or to reconfigure a lot where the Department administering the VM Act is a concurrence agency to the development application
<i>Leasehold land (other than a lease used for agriculture and grazing)</i>		
Non-remnant	White	3. For any purpose
<i>Road</i>		
Non-remnant or remnant least concern	White or green	4. Any purpose carried out by a local government in an urban area
<i>Trust land</i>		
Non-remnant	White	5. Carried out by the trustee for any purpose
<i>All land types</i>		
All types	White, green, orange or pink	6. Where approval has been obtained for works which are: <ul style="list-style-type: none"> o A project declared to be a significant project under the State Development and Public Works Organisation Act 1971, section 26; and o For an extractive industry (including dredging and ancillary deposition).

Regional ecosystem (RE) and remnant vegetation mapping for the study area are shown in Figure 2-3.

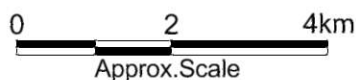


Title:
Regional Ecosystems and Remnant Vegetation Mapping for SEMP Area

Figure:
2-3

Rev:
A

BMT WBM endeavours to ensure that the information provided in this map is correct at the time of publication. BMT WBM does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.



2.2.2.5 Nature Conservation Act 1992

The object of the *Nature Conservation Act 1992 (NC Act)* is the conservation of nature. This includes the protection of native flora and fauna and the declaration of protected areas. The Beachmere Conservation Park is a protected areas designated under the *Nature Conservation (Protected Areas) Regulation 1994* (see Figure 2-4). In addition, least concern (LC) and endangered, vulnerable or near threatened (EVNT) species under the *Nature Conservation (Wildlife) Regulation 2006* have been identified through online searches as occurring in the study area.

Any action that involves the taking or native flora or fauna is unlawful unless authorised by a permit. Wherever clearing is required for the purposes of coastal protection works, including clearing to gain access to sand extraction areas, the proponent must obtain the appropriate permit under the *NC Act*. This does not apply, however, to flora covered under the provisions of other Acts (e.g. marine plants). All clearing of koala habitat trees must be in accordance with the *Nature Conservation (Koala) Conservation Plan 2006*.

Similarly, any works in a conservation park require a permit from the Chief Executive or trustee managing the park. This includes the use of all natural resources (i.e. natural and physical features) and/or cultural resources (i.e. resources of spiritual, historic, archaeological significance).

2.2.2.6 Marine Parks Act 2004

The *Marine Parks Act 2004 (MP Act)* establishes a framework for protecting the marine environment through declaration of marine parks. Under the *MP Act* the Moreton Bay Marine Park (MBMP) has been declared over the tidal waters and tidal land (up to HAT)⁶ of all beach units in the study area (see Figure 2-4). This marine park is managed under the *Marine Parks (Moreton Bay) Zoning Plan 2008*.

Zones, their objects and limitations are summarised in Table 2-6. For each zone, persons may carry out works where they are consistent with the objects of the zone, and under the appropriate permit (where necessary).

Table 2-6 Objects of Marine Park Zones in the SEMP Area

Zone	Areas	Objects
Conservation park (yellow)	Toorbul, Donnybrook, Sandstone Point, Goodwin Beach	<ol style="list-style-type: none"> 1. To provide for the conservation of the areas of the marine park within the zone 2. To provide opportunities for reasonable use and enjoyment, including, for example, limited extractive use, of the areas
Habitat protection (blue)	Beachmere and Deception Bay	<ol style="list-style-type: none"> 3. To provide for the conservation of the areas of the marine park within the zone through the protection and management of sensitive habitats that are generally free from potentially damaging activities 4. To provide opportunities for reasonable use of the

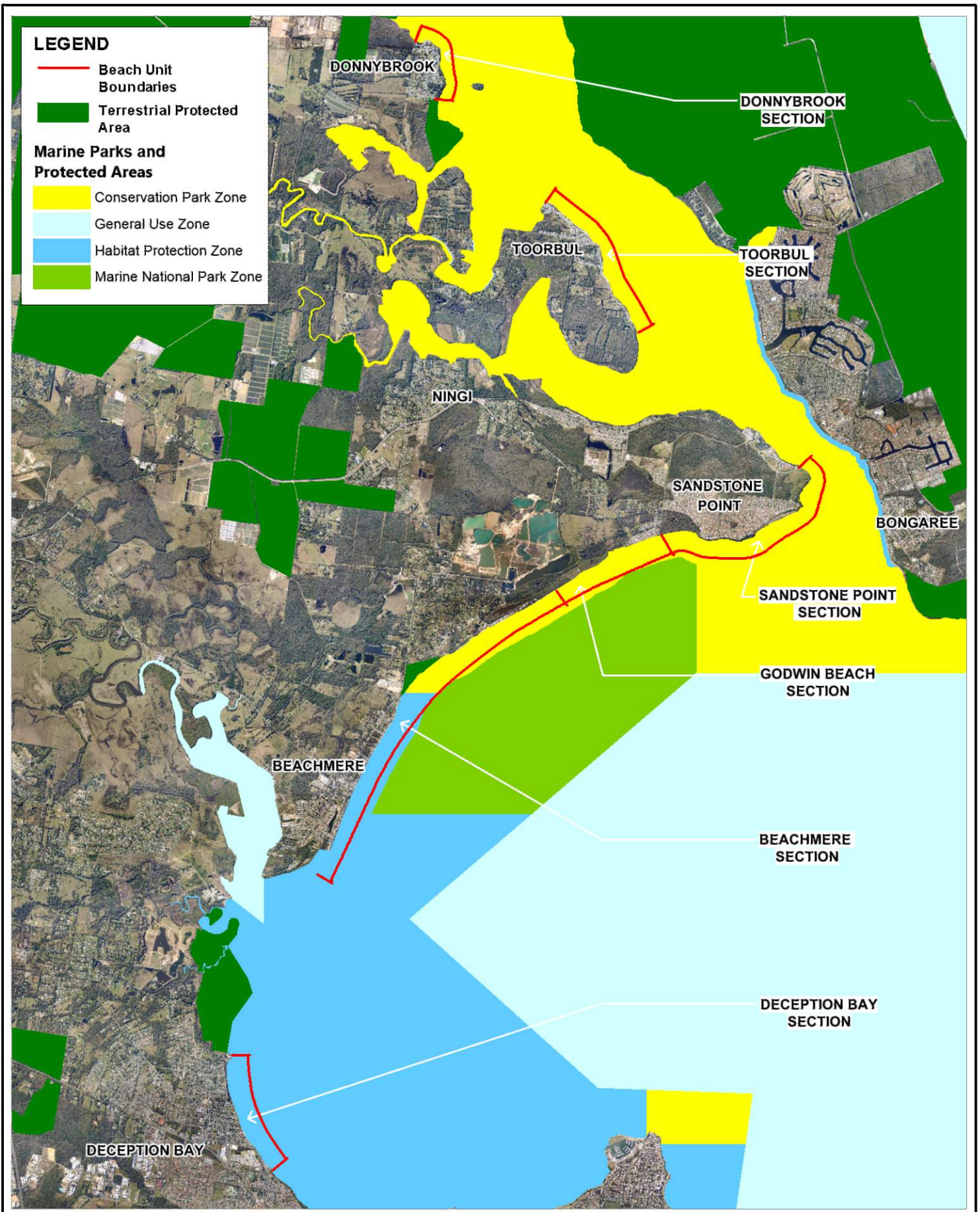
⁶ Highest astronomical tide

Zone	Areas	Objects
		areas
Marine national park (green)	~50m offshore of Goodwin Beach and Beachmere	5. To provide for the protection of the natural integrity and values of the areas of the marine park that are generally free from extractive activities 6. To provide opportunities for particular activities, including, for example, the presentation of the values of the marine park, to be undertaken in relatively undisturbed areas within the zone

The following activities relevant to erosion management require permits:

- Carrying out works consistent with the objects for the zone;
- Carrying out a program for taking marine resources (e.g. sand) that poses a threat to human life or safety, the marine park’s marine ecosystems or the use or amenity of an area in, or adjacent to, the marine park;
- Carrying out major works in a works area (habitat protection zone only); and
- Any other activity that is consistent with the objects of the zone.

Permits can be obtained for these works from the Department of National Parks, Recreation, Sport and Racing (DNPRSR).



Title:
Terrestrial and Marine Protected Areas within the SEMP Area (marine parks and protected areas)

Figure:
2-4

Rev:
A

BMT WBM endeavours to ensure that the information provided in this map is correct at the time of publication. BMT WBM does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.



2.2.2.7 Queensland Heritage Act 1992

The *Queensland Heritage Act 1992* establishes a system for identifying and protecting places of state heritage significance. Any development which will occur on or in association with a heritage place listed on the Queensland Heritage Register by the Queensland Heritage Council requires assessment by EHP.

The only State heritage places identified in the study area on the Queensland Heritage Register is the Deception Bay Sea Baths, located on Captain Cook Parade at Deception Bay.

Local heritage sites in the study area are discussed in Section 2.2.3 below.

Development for erosion management as recommended under this Technical Study which occurs in relation to any of these sites (e.g. erosion control structures for caravan parks) will therefore be assessable under the *Queensland Heritage Act 1992*.

2.2.2.8 Aboriginal Cultural Heritage Act 2003

When undertaking coastal protection works, Council must take all reasonable and practicable measures to ensure their activities do not harm Aboriginal cultural heritage, pursuant to the *Aboriginal Cultural Heritage Act 2003*. Measures that Council must take to ensure compliance with this Act include:

- Following the statutory 'duty of care' guidelines, which may require consultation with the relevant Aboriginal party; or
- Development and approval of a Cultural Heritage Management Plan.

Compliance with the *Aboriginal Cultural Heritage Act 2003* should be determined at the planning stage of any coastal protection works.

No objects of Aboriginal cultural heritage have been noted as occurring in the study area but may be uncovered during subsequent works. In addition, based on a search conducted on 6th May 2013, no active Native Title claims exist over any of the beach units.

2.2.2.9 Tenure Issues

The *Land Act 1994* governs the ownership and distribution of land in Queensland. Specifically, the Act vests all land within the State. Any development involving coastal land other than private freehold land (e.g. intertidal zone, coastal parks and reserves, beds and banks of estuaries), therefore, requires evidence of resource entitlement. In the coastal zone, State land is typically one of the following:

- Deed of grant in trust (DOGIT), held by local government for community purposes;
- Reserve (e.g. parks, caravan parks);
- Road reserve; or
- Unallocated State Land (USL), especially for land below high water.

Proof of owners consent from the State Government is required for development on this land. Majority of State land is administered by the Department of Natural Resources and Mines (DNRM).

2.2.2.10 Other Considerations

It may be necessary to liaise with, and obtain permission from, the following agencies regarding the issues mentioned above:

- EHP for matters concerning dredging, nourishment, conservation values, tidal quarry material allocations, and management under the QCP;
- DNPRSR for marine parks and NC Act permits;
- DNRM for matters concerning the allocation and use of State land, vegetation management, Indigenous cultural issues and land title;
- DAFF for matters concerning fisheries resources, marine plants and FHAs; and
- Department of Transport and Main Roads (TMR)/Maritime Safety Queensland (MSQ)/Regional Harbour Master in relation to navigation and navigation channels for potential dredging within/adjacent to channels and watercourses.

2.2.3 Local Government Instruments

The Northern Moreton Bay SEMP occurs within the local government jurisdiction of MBRC. This jurisdiction extends seaward to the high water mark under the *Local Government Act 2009 (LG Act)* but the Council also has jurisdiction for development assessment over its local government tidal area. The *LG Act* also enables local government to obtain specific jurisdiction from the State Government over the foreshore between the high and low water mark for special purposes, such as coastal protection works.

MBRC controls land use and activity under the local planning scheme (under the *SP Act*) and Local Laws (under the *LG Act*). In relation to coastal management, local government has responsibility for the following:

- Land use control;
- Recreational planning;
- Management of local reserves;
- Bathing reserves;
- Environmental protection and rehabilitation; and
- Monitoring.

2.2.3.1 Caboolture Shire Plan

Each of the Study Area beach units are part of the former Caboolture Shire and managed under the *Caboolture Shire Plan*. This plan provides for development assessment and is meant to reflect a combination of State interests (as reflected in SPPs) and local interests.

The planning scheme assesses activities based on the nature of the activity and the area in which it occurs. In assessing development, the key concern is to ensure the development complies with the outcomes of the LPI. These include desired environmental outcomes (DEOs), overall

outcomes, specific outcomes, probable solutions (for code assessment) and acceptable solutions (for self-assessment).

For each beach unit Table 2-7 summarises the applicable zoning and overlays constraints. This Table is to be read in conjunction with Table 2-8 which lists the level of assessment for common erosion management works for different land uses and overlays.

Table 2-7 Applicable Zones and Overlays for Each Beach Unit

Beach unit	Zones	Overlays
Donnybrook	Rural, Residential A, Open Space	Acid Sulfate Soils, Catchment Protection, Nature Conservation, Scenic Amenity
Toorbul	Rural, Residential A, Open Space	Acid Sulfate Soils, Catchment Protection, Nature Conservation, Scenic Amenity
Sandstone Point	Rural, Residential A, Residential B, Open Space	Acid Sulfate Soils, Bushfire Hazard, Nature Conservation, Scenic Amenity
Godwin Beach	Rural, Rural Residential, Residential A, Open Space	Acid Sulfate Soils, Catchment Protection, Extractive Resources, Nature Conservation, Scenic Amenity
Beachmere	Rural Residential, Residential A, Open Space	Acid Sulfate Soils, Catchment Protection, Nature Conservation
Deception Bay	Residential A, Residential B, Open Space, Special Use	Acid Sulfate Soils, Catchment Protection, Cultural Heritage (Deception Bay Sea Baths), Nature Conservation, Scenic Amenity

Table 2-8 Maximum Assessment Level for Common Erosion Management Works

Activity	Zones/Overlay	Assessment level
<i>Caboolture Shire Plan</i>		
Filling or excavating greater than 50m ³	Rural or Rural Residential Acid Sulfate Soils Catchment Protection	Code assessable
Filling or excavating greater than 20m ³	Residential A, Residential B, Open Space or Special Use Acid Sulfate Soils	Code assessable
Filling or excavating on land within a Biodiversity Significance Area or Conservation Estate Area, or their buffers	Nature Conservation	Code assessable
Vegetation clearing	Catchment Protection	Code assessable
All other development		Exempt

For the above activities, the following codes may be applicable:

- Dams, Filling and Excavation Code;
- Stormwater Code;
- Acid Sulfate Soils Overlay Code;
- Catchment Protection Overlay Code; and
- Nature Conservation Overlay Code.

These should be applied in conjunction with planning scheme policies (PSPs) including the PSP1 Acid Sulfate Soils, PSP3 Cultural Heritage, PSP6 Ecological Assessment, PSP 12 Hazard and Risk and PSP18 Scenic Amenity.

2.2.3.2 *Moreton Bay Regional Council Planning Scheme 2014*

MBRC is currently preparing a new *Moreton Bay Regional Council Planning Scheme* for the MBRC area, consolidating the former Caboolture, Pine Rivers and Redcliffe planning schemes into a single document. The estimated time of release of this planning scheme is late 2014. Upon commencement, it will alter the local planning environment for the NMBSEMP.

2.2.3.3 *Climate Change Instruments*

MBRC's Climate Change Policy (No. 35-2150-004) represents initiative to 'take reasonable, measured and developing steps to incorporate into its operations a planned approach to dealing with climate change, mindful of Council's other obligations as a Local Government'.

The MBRC *Roadmap for a changing climate 2013-2016* was developed under as an instrument intended to assist in achieving the Climate Change Policy. The Roadmap Vision is to 'Create a low carbon region that is resilient to changing climate'. Under this vision, ten strategic outcomes were developed. The most relevant outcomes for coastal erosion planning are:

- **Strategic Outcome 5:** Council assets are resilient to climate change risks and ongoing costs are minimised;
- **Strategic Outcome 7:** Strategic planning documents include climate change mitigation strategies; and
- **Strategic Outcome 10:** Council and the community have the capacity to respond to climate change (mitigation and adaptation).

Strategic Outcome 5 requires the following actions:

- **5.3 Action:** Identify climate change risks which will compromise the service delivered of council assets. Prioritise remedial action (e.g. modify or replace) based on modelling predicted timing for impact to occur. **Indicator:** Exposure to climate risks is reduced.
- **5.4 Action:** Integrate climate change implications into: asset planning and design process, asset construction process, and asset condition inspections. **Indicator:** Council assets are managed to be more resilient to weather events.

These actions correspond to the development of the Northern Moreton Bay SEMP as this instrument aims to identify and mitigate the risks of coastal erosion, including erosion induced by sea level rise, and to protect local assets (where in accordance with legislative requirements). The installation of coastal protection assets (e.g. seawalls, groynes) in accordance with the SEMP accounts for coastal erosion threats from climate change.

Strategic Outcome 7 adopts a critical planning action related to coastal erosion (7.1): Ensure climate change scenarios are considered in river, creek and storm tide mapping. While the Northern Moreton Bay is concerned primarily with coastal erosion, not flooding or storm tide inundation, there is often correlation between these events, with coastal erosion planning assisting the definition of at risk river, creek and storm tide areas.

Strategic Outcome 10 provides that Council and community are to have capacity to respond to climate change, including by adaptation. In part, the Northern Moreton Bay SEMP supports this by identifying management strategies addressing coastal erosion, including that caused by sea level rise.

2.2.3.4 Other Local Instruments

Key planning instruments and policies utilised by MBRC include the following:

- *Moreton Bay Region Community Plan 2011-2021* – sets the overarching targets for the Moreton Bay Region, to be achieved through use of the Corporate Plan, operational measures and other plans. Targets include T12 *Increase the resilience of communities and business to a disaster* and T20 *Increase the health and resilience of waterways and coastal areas*.
- *Corporate Plan 2012-2017* – MBRC's response to the first 5 years of the Community Plan in terms of direct action.
- *Moreton Bay Regional Council Local Disaster Management Plan* – statutory disaster management plan required under *Disaster Management Act 2003*. Identifies flooding and storm tide inundation as potential disasters (which can be exacerbated by erosion). Measures to address these disasters include land use management through application of the QCP (see Section 2.1.1).
- *Caboolture River Recovery Plan, Stage 1: Action Plan* – provides actions for the improvement of the health of the Caboolture River, including erosion problems. Proposed Action 6 is the development of an Erosion and Sediment Control program which could link to the SEMP for Beachmere and Deception Bay.
- *Draft Open Space Strategy 2012-2031* – provides strategic outcomes for open spaces areas in the region. Strategic Outcome 3 is promotion and fostering of environmental values and response to climate variability, including vulnerability to erosion induced by sea-level rise.
- *Land Management Plan: Godwin Beach Environmental Reserve* – management strategy for Godwin Beach Environmental Reserve at Godwin Beach. Requires retention of intertidal habitat in 'good condition', protection of the integrity of natural vegetation communities, and the development of implementation plans which may interact with the SEMP.

- *Policy No: 35-2150-004 Climate Change* – MBRC’s policy on climate change including meeting legislated obligations in regards to climate change, the reduction of vulnerability to weather related risk, and the implementation of adaptation measures.
- *Policy No: 12-2150-044 Sustainability* – MBRC’s policy on sustainability including the enhancement of natural areas and use of an integrated planning approach.