

Caring for our Coasts and Seas

Caring for our Coasts and Seas - Summary

Our regional goal for coasts and seas is:

To identify, protect, rehabilitate and sustainably manage the coastal and marine ecosystems, processes and physical features of SEQ.

Desired outcomes associated with this goal are:

Integrated management and coordination of the coastal zone, particularly with regard to key natural resource issues

Public uses and activities within the coastal zone are managed in accordance with the principles of ecologically sustainable development

Natural coastal ecosystems and resources are protected and enhanced

Improved water quality in marine and estuarine environments

Four *key strategies* have been identified to achieve the desired outcomes

- C1 Restore, maintain and enhance the biological diversity of coastal ecosystems**
- C2 Protect, manage and restore coastal wetlands so that their natural, cultural and economic values are maintained**
- C3 Manage coastal development and land use activities and processes in accordance with the principles of ecologically sustainable development (ESD), especially in terms of acid sulfate soil management**
- C4 Manage public access to the coast from both land and sea so that ecological processes are sustained**

Priority Actions required to implement these strategies include:

Ensure representation of all natural coastal wetlands in protected areas large enough to protect their natural, cultural and functional values, and nominate internationally outstanding sites for listing where appropriate under international conventions.

- Document and develop management plans for coastal wetlands, including those identified in the Coastal Plan, on a priority basis beginning with those on State land.
- Give statutory protection to coastal wetlands, including those identified under the SEQ Coastal Management Plan.

- Complete a range of natural resource inventories for coastal wetlands, shorebirds, rocky reefs, seagrass and remnant vegetation.
- Analyse available information and map wetlands to inform planning and management decisions to conserve and protect all coastal wetlands.
- Document the extent and impact of acid sulphate soils (ASS), and implement appropriate strategies for ASS management.

- Complete coastal geographic information systems for SEQ and make this information available to all government and the community.
- Implement administrative arrangements for more integrated and coordinated management of the coastal zone.
- Ensure that all natural coastal wetlands are represented in protected areas.

1.0 Our goal for coast and seas management

To identify, protect, rehabilitate and sustainably manage the coastal and marine ecosystems, processes and physical features of SEQ.

2.0 Desired outcomes

- Integrated management and coordination of the coastal zone, particularly with regard to key natural resource issues.
- Public uses and activities within the coastal zone are managed in accordance with the principles of ecological sustainable development.
- Natural coastal ecosystems and resources are protected and enhanced; and
- Water quality in marine and estuarine environments is improved.

3.0 Threats to our coast and seas

In order to achieve these long term outcomes, the management of our coast and seas in South East Queensland will be influenced by, and must take account of, threatening processes and relevant statutory and policy requirements. These are summarised below.

The coastal zone of South East Queensland is one of the most heavily impacted areas of the state but it contains some of the most diverse natural habitats in Queensland. These include major sand islands with a variety of land uses including urban development, sandmining and nature conservation. A variety of smaller islands range from near pristine to heavily developed.

The current pattern of settlement in South East Queensland is similar to elsewhere in Australia, with most major population and industrial centres located along the coast. Substantial areas of coastal catchments are dedicated to agricultural activities or rural residential uses. As a result, considerable areas of intertidal and coastal habitat have been modified for human uses and activities including urban development, agriculture, industry and port facilities.

Environmental management issues arising from such uses include effects on water catchment discharges and the quality of coastal waters. Issues such as adverse impacts on fish habitat areas, erosion of water courses and beaches, urban expansion, pollution and loss of coastal vegetation are generally associated with catchment areas with high and growing populations and with intensive land use and high economic productivity. These areas also rate highly for recreational and commercial fishing values.

Priority Issues

Identified priority issues in South East Queensland include:

- Increasing pressures on the coastal environment from urban growth and other forms of development;
- Declining water quality and ecosystem health and resources in water catchments, particularly Moreton Bay (pollution, loss of seagrass, algal blooms, threats to fisheries);
- Potential loss of industry viability for tourism and fishing;
- Balancing the needs of development and resource use with their long-term sustainability;
- Protecting and enhancing the lifestyle and recreational opportunities available to residents and visitors in South East Queensland;
- Increasing expectations regarding improved access to and use of the coast; and,
- Lack of sufficient coordinated management.

Moreton Bay

Moreton Bay has a variety of unique habitat values that include wetlands and foreshores listed under the internationally significant Ramsar agreement, and limited banks of corals characteristic of inshore reefs. The Bay also supports large populations of dugong and turtle which is unusual for an area in such close proximity to a major urban centre such as Brisbane (QFMA, 1997).

Moreton Bay is one of Queensland's most important coastal resources. In addition to its natural attributes, the Bay contributes significantly to the economy of the region and the State through a wide range of commercial and recreational uses. These include shipping, extractive industries, commercial and recreational fishing, tourism and a variety of recreation activities.

As well as the major river catchments in South East Queensland, there are a large number of small streams flowing directly to the sea. Many of these are in urban areas and have a separate range of issues to larger catchments, as well as many issues in common. Some of the important issues in these catchments are: storm floods; urban weeds; loss of biodiversity; disruption of riparian corridors; runoff from domestic chemicals and fertilizers, roads and shopping centres; and acid leachate from acid sulfate soil disturbance.

Studies of the ecological health of coastal waters, particularly Moreton Bay, have flagged a number of environmental warning signs, including:

- Gradual decline of water quality and habitats of western and southern Moreton Bay and adjacent shores, particularly in terms of sediment (turbidity) and nitrogen accumulation;
- Algal blooms in Deception Bay, Bramble Bay and Hayes Inlet;
- The lower Brisbane River estuary does not meet national guidelines for primary contact recreation;
- Loss of biological diversity;
- Loss of seagrass in Bramble Bay, Deception Bay and near the mouth of the Logan River;
- Reports of fewer fish in Moreton Bay;
- Loss of, and impacts on, fish spawning grounds through human activities such as boating and jet-skiing in areas such as Maroochy, Mooloolah and Pumicestone;
- Excessive pollution in Pumicestone Passage caused by changed land use and management practices; and
- Effects of fishing activities on habitats and water quality.

These signs indicate that the marine environment will need careful monitoring and intervention if sustainability is to be maintained and highlight the integral link between freshwater and coastal marine environments. A number of high impact areas with respect to the above environmental warning signs in Moreton Bay include:

- *Western Moreton Bay (Bramble Bay, Hayes Inlet and Deception Bay);*
- *Southern Bay areas; and*
- *Tidal Bremer River to lower Brisbane River estuary (Abal et al, 1998).*

Moreton Bay and Pumicestone Passage are recognised on a global scale for their unique aquatic environs that cover a range of habitats from seagrass meadows to coral beds, for fish and crustaceans, turtles and dugongs. Increased exploitation of the area by all users and interaction between these users will inevitably result in a range of conflicts. Appropriate management strategies are required to ensure the effects and implications of this conflict are minimised.

4.0 Strategies required to achieve the outcomes

Four *key strategies* have been identified to achieve the outcomes:

C1	Identify, , maintain and restore the biological diversity of coastal ecosystems.
C2	Protect, manage and restore coastal wetlands so that their natural, cultural and economic values are maintained.
C3	Manage coastal development and land use activities and processes in accordance with the principles of ecologically sustainable development (ESD), especially in terms of acid sulfate soil management.
C4	Manage public access to the coast from both land and sea so that ecological processes are sustained.

C1 Identify, maintain and restore the biological diversity of coastal ecosystems.

How is the implementation of these actions being coordinated?

These actions are being coordinated through relevant legislation such as the *Coastal Protection and Management Act 1995*, *Nature Conservation Act 1992* and the *Fisheries Act 1994*, and by state and local government agencies. The *Coastal Protection and Management Act 1995* provides a framework for the coordination of these activities across the coastal zone.

Existing major initiatives:

State

- NatureSearch
- WildNet
- Conservation plans and management guidelines for rare and threatened species
- Marine and Coastal Species Database (EPA)
- Development of coastal GIS (EPA)

Regional

- Inventory and Assessment of Rocky Shores in South East Queensland

Local

- Moreton Bay Marine Park and Zoning Plan
- Voluntary Conservation Agreements under the Nature Conservation Act
- DPI Fish Habitat Area Management Plans
- Local government management plans for significant areas
- Shorebird Plan of Management for the Moreton Bay Marine Park
- Management plans for coastal protected areas

Actions Required

Code	Actions	Current Activities	Priority / Localities
C1.1	Complete and implement the South East Queensland Regional Coastal Management Plan.	Partially completed	A Regional
C1.2	Research and monitor the life history, distribution and needs of significant coastal and marine species.	Turtle, dugong, seagrass, shorebirds, fisheries spp. bait spp.	B – Regional (Some species may be locality specific)
C1.3	Ensure representation of all natural coastal wetlands in protected areas which are large enough to protect their natural, cultural and functional values, and nominate internationally outstanding sites for listing, where appropriate under international conventions.	Local government protection of wetlands e.g. Brisbane - Boondall, Tinchi Tamba, Deagon wetlands	A - Coastal Region
C1.4	Develop indicators for the carrying capacity of shallow inshore marine habitat to assess the impacts of commercial and recreational activities.		B - Coastal Region
C1.5	Develop and implement management and education strategies for key fauna and flora eg. shorebirds, dugong, turtles. <i>Also see U1.22</i>	Shorebirds Plan of Management and Education Strategy	B - Regional
C1.6	Assess the impact of upstream and downstream activities on fish breeding.	Fishway IDC; DPI currently investigating fishway development requirements	B-Regional
C1.7	Identify critical barriers to fish movement and remove, or provide fishways.		B-Regional
C1.8	Control the impacts of non-indigenous species on our coasts and seas.	ANZECC Guidelines; Queensland Ballast Water Management Committee	B - Coastal
C1.9	Encourage the re-establishment of native fish stocks to regional waterways.		B -Regional (maybe A for some species)

C2 *Protect, manage and restore coastal wetlands so that their natural, cultural and economic values are maintained.*

How is the implementation of these actions being coordinated?

This strategy is being coordinated in consultation with local government, other state government departments, community groups, indigenous groups and the private sector.

Existing major initiatives include:

State

- Strategy for the Conservation and Management of Queensland Wetlands

Regional

- Mapping and conservation assessment of coastal wetlands in South East Queensland
- Seagrass mapping by Regional Water Quality Strategy

Local

- Local government vegetation mapping (all local authorities) and in particular Brisbane City Councils wetlands mapping inventory
- Numerous local government planning projects for coastal wetlands and environments
- Brisbane City Council draft Wetlands Development Code (in draft City Plan)
- Moreton Bay Fisheries Management Plan
- Include wetland plans (Refer B1 Major initiatives)
- Declared Fish Habitat Areas
- Boondall Wetlands Management Plan
- Deagon Wetlands Management Plan
- Carbrook / Cornubia Wetlands Management Plan
- Tinchi Tamba, Nathan Road Wetland Reserve Management Plan, Black Swamp Wetlands.

Actions Required

Code	Actions	Current Activities	Priority / Localities
Data Collection			
C2.1	Map South East Queensland's wetlands every 5 years at a large scale (1:25 000) (See U1.23)		A - Regional
C2.2	Analyse both historical and recent wetland information to build an understanding of the extent and impact of coastal wetland change over time.		A - Regional
Planning and Management			
C2.3	Give statutory protection to coastal wetlands (including those to be identified under the South East Queensland Coastal Management Plan		A - Coastal Region
C2.4	Encourage and assist the conservation and protection of natural wetlands through the planning and development assessment process.		A - Regional
C2.5	Document and develop management plans for coastal wetlands.		A - Regional, State land
C2.6	Encourage restoration and rehabilitation of coastal wetlands (freshwater and marine).		B - Coastal Region
C2.7	Establish innovation schemes aimed at conserving wetlands in private ownership and in fostering community ownership.		B - Regional
C2.8	Develop a handbook or other resources that detail all the agreements and incentives offered by State and Local Government to encourage wetland conservation. <i>Also see U1.20</i>		B- Regional
C2.9	Investigate opportunities for encouraging recreational and tourist use and enjoyment of public wetlands by providing minimum impact access and interpretative facilities in appropriate locations. <i>(See U1.20)</i>		B - Regional
Monitoring			
C2.10	Local and State Government should have a separate section in their State of Environment Reporting to report on the health of coastal wetlands.		B - Regional
C2.11	Develop criteria for post construction monitoring of environmental impacts.		A - Regional

C3 *Manage coastal development and land use activities and processes in accordance with the principles of ecologically sustainable development (ESD), especially in terms of acid sulfate soil management.*

How is the implementation of these actions being coordinated?

The coordination of coastal development and land use activities and processes is achieved namely through the *Integrated Planning Act*, the *Coastal Protection and Management Act* and local government planning schemes. A policy on Acid Sulfate Soils was being developed as part of the South East Queensland Regional Coastal Management Plan. This policy was being developed in coordination with a State Coastal Plan Policy, Interim State Planning Policy and the QASSMAC Management Strategy.

Existing major initiatives include:

State

- State Planning Policy being developed by DNR
- QASSMAC Management Strategy
- State Coastal Management Plan Policy on Acid Sulfate Soils
- DNR Acid sulfate soils potential mapping

Regional

- South East Queensland Regional Coastal Management Plan Policy on Acid Sulfate Soils
- South East Queensland Regional Coastal Management Plan Policies on Coastal Dependent Development and Activities, Extractive Industries, and Artificial Waterways

Local

- Local government acid sulfate soils mapping
- Local government policies on acid sulfate soils (Redlands, Caboolture)
- Southern Moreton Bay Islands Planning Study
- Minjerraba (Stradbroke Island) Planning and Management Study

Actions Required

Code	Actions	Current Activities	Priority / Localities
Acid Sulfate Soils (ASS)			
C3.1	Determine the extent of acid sulfate soils by preparing and undertaking a Statewide mapping and assessment program.	QASSIT ASS mapping for South East Queensland	A - Coastal Region: Coastal Local governments to do this in more detail
C3.2	Identify and map potential and existing acid sulfate drainage risks on receiving environments.	None	A - Coastal Region
C3.3	Develop and enforce appropriate strategies for development on acid sulfate soils.	Local government codes and policies State guidelines	A - Coastal Region : location areas need to be linked to high risk areas identified on the mapping
C3.4	Implement actions of the QASSMAC Management Strategy.		A-Coastal Region
C3.5	Development applications should include reference to the ASS Risk Map and detail proposed management strategies prior to any approvals being given.		
C3.6	Review development control mechanisms and guidelines for coastal developments to ensure minimal impact on coastal habitat and processes.		B - Coastal Region

C4 Manage public access to the coast from both land and sea so that ecological processes are sustained.

How is the implementation of these actions being coordinated?

Subject to completion of action C1.1

Existing major initiatives include:

to be completed

Actions Required

Code	Actions	Current Activities	Priority / Localities
C4.1	Maintain public ownership of foreshore.		A - Coastal Region
C4.2	Manage public access through provision of defined access nodes.		A - Coastal Region
C4.3	Control movement of vehicles on foreshore (intertidal) areas, and exclude from the dunal system.		A - Coastal Region
C4.4	Identify sites suitable for a range of recreational activities.		A - Coastal Region
C4.5	Provide minimum impact recreational sites where required.		B – Coastal Region
C4.6	Develop codes of practice for whale watching industry and related industries.	<i>Nature Conservation (Whale and Dolphin) Conservation Plan 1997</i>	B - Coastal Region
C4.7	Identify local social and cultural values and incorporate these into coastal planning and management.		B - Region
C4.8	When developing access routes, ensure protection of important breeding sites for significant species.		A- Region
C4.9	Promote effective use of environmental levies to protect the species and habitats of our coasts and seas.		C - Region