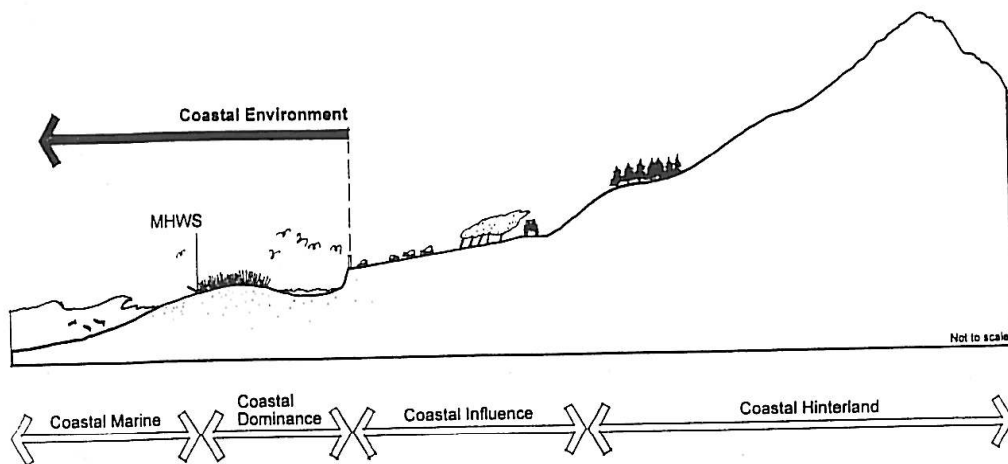


1. Coastal Executive Summary

1.0 Introduction

- 1.01 The coastal environment is very important in New Zealand. Many of us live near the coast; we go to the beach; we fish in the sea; some rely on the sea for their livelihood and, for Maori, there are strong cultural associations with the coast and all it provides. Because of the coast's importance to Southlanders and our long history with this environment, there can often be debate around how this area should be used and managed.
- 1.02 The coast is a dynamic natural environment with unique ecological values. Where these natural processes and valued ecosystems are under the sea, we might be excused for not realising their importance and contribution toward the dynamic and diverse nature of the marine environment. The submarine environment is not a natural habitat for humans, and knowledge of this environment can only be gained through active research. Compared to our knowledge of land based activities, comparatively little is known about physical processes of natural or modified marine habitats. Further, the sea is dynamic and variable; many of the fish and other animal species inhabiting it are mobile. There is general acknowledgement among agencies with interests in coastal management that information to assess marine ecological processes, such as nutrient supply for commercially important fisheries, and coastal dynamics like shoreline stability due to currents and waves, is generally inadequate. This statement could be expanded to include all coastal processes.
- 1.03 The sea and the land are inter-related. What people do on the land has major impacts on the health of the sea. Rivers bring sediment and pollution from our land use activities into the marine environment. Looking after water quality and habitat in the sea requires us to look after the land as well. Conversely, the sea also has the potential to be a serious hazard to coastal settlements and property due to dynamic natural marine processes.
- 1.04 Balancing the use and the protection of the coastal environment requires careful management that goes beyond looking after only what we can see. Because of the importance of the coast to us all, and because there are so many different issues located within the margin of land and sea, management of the coastal environment is shared between several authorities.
- 1.05 The Southland Region contains over 3,000 kilometres of coastline. Approximately 63% of that (1892 km) is located within Fiordland and a further 26% (781 km) is the coastline of Stewart Island. Much of these areas are generally inaccessible, except by sea.

- 1.06 The coastal environment therefore, includes:
- the continental shelf area
 - estuaries
 - coastal lagoons
 - inshore subtidal areas
 - land margins directly affecting, and affected by, coastal activities.



2. Relevance of existing regional policy statement issues

- 2.1 We've reviewed each of the issues to assess whether they remain relevant in Southland today. We've found that most of the existing coastal issues within the current Regional Policy Statement and the Southland District Plan remain relevant. However, some of the issues have changed in importance or their scope may have changed slightly. Accordingly some corresponding changes are needed in the wording of some of the listed issues. Several of the matters will now be able to be amalgamated to create issues that have a wider scope.
- 2.2 Currently, with the exception of estuaries and some frequent bathing areas, there is very little science that links the effects, real and perceived, of land based activities on the marine environment. Given that the coastline is a very important environment to us, there is surprisingly little information available on the coastal marine interface and how different land/coast management activities affect one another. Adverse effects arise because this interaction between activities on land and on water is not given adequate recognition.
- 2.3 On the whole, the quality of coastal waters surrounding Southland is very good. However there are small localised areas, especially in and around some of the larger estuaries, with very poor water quality that potentially makes

some forms of recreation unsafe. The consumption of shellfish and fish still needs to be monitored for health risks at some locations. Work is still needed to re-establish areas to their natural state or to a level that allows contact recreation and consumption of shellfish and fish. This must include monitoring discharges and dumping of all forms.

- 2.4 Noise is often generated by genuine coastal marine users that may cause offence or problems to the surrounding coastal marine area, eg ships in port affecting housing. Noise requirements should always be taken into account when making decisions about the management of the coastal area as there is a need to protect legitimate activities. The issue needs to incorporate both those activities that generate noise, and those activities that may be sensitive to certain types or excessive noise.
- 2.5 The storage, use, disposal or transportation of hazardous substances also poses a potential risk to plant animal and human life along our coastlines. Discharges from ships, ballast water and spilt product can also have negative effects to our coastlines, particularly where they introduce new organisms.
- 2.6 While the maintenance and enhancement of public access to the coast is a matter of national importance, different means of access can have different impacts. Consideration is required as to the appropriate type of access for particular areas, eg vehicular, boat, pedestrian or air; and the degree to which livestock, domestic animals and humans should be denied access to protect ecosystems and amenity values, and reduction of the sea/land buffer. Regulating authorities need to have special regard to the potential impacts on the coastal marine area from different land management practices of which access can be a major component.
- 2.7 Some recreational activities are incompatible with each other, eg water skiing, rowing, sailing and swimming. This remains an ongoing issue that needs continuing management in the coastal environment, with pressure on space growing in some instances due to new recreation practices or an increase in uptake of existing ones.
- 2.8 The location and design of infrastructure such as outfalls, roading, pipelines and power and telephone lines, within the coastal area and its margins can give rise to the following adverse effects:
 - detraction from the natural character;
 - impacts upon existing and potential activities, for example, recreation;
 - impeding of access to the coast and harbour areas; and
 - physical damage caused by altering or interfering with coastal processes.
- 2.9 These effects must all be considered when decisions are made about infrastructure within the coastal margins, as there is ongoing interest wherever any infrastructure is proposed for this area. This is especially true

of adverse effects on the natural character of coastlines, matters of significance to Maori, ecosystems and recreational and amenity values of an area.

- 2.10 It is also important to recognise the contribution some structures located in the coastal marine area make to Southland's economic and social wellbeing. This needs to include the extent to which provision should be made for utilities as infrastructure (including ports) contributes to the economic and social wellbeing of the region.
- 2.11 A large amount of coastal development has occurred in the recent past and this trend is expected to be ongoing. The current process for defining and protecting "natural character", while allowing for appropriate use and development, is often very confusing. The best means of preserving the "natural character" of the coastal environment while providing for appropriate use and development has become a very important issue due to increasing pressure to develop coastal margins. To date there has been no clear resolution as to how this issue should be dealt with.
- 2.12 Pest plants and animals have huge potential to impact negatively on the coastal marine environment. Pests are spreading in and around harbours and estuaries, resulting in siltation and adverse affects on recreation and ecosystems.
- 2.13 Coastal development pressure has highlighted the risks of modifying natural sand dune systems, causing erosion and displacement of habitats for native flora and fauna. However all development or change to the coastal area can adversely effect the established environment and this needs to be managed very carefully.
- 2.14 Rising sea levels as a result of climate change may adversely impact upon the coastal environment through inundation, drainage and erosion. Natural processes combined with sea level rise have the potential to have major consequences for the coastal environment.
- 2.15 Heritage values are often overlooked; however it is very important to protect and preserve significant sites. Development pressures along the coastal margin have highlighted the conflict that often occurs when proposed developments are located on land that it is known to have or may contain sites of historical importance.
- 2.16 There are ongoing fisheries management issues, which must be considered when looking at any activities or development that could potentially affect coastal areas, as the numbers and diversity of fish species can be affected by habitat modification.
- 2.17 The customary relationship between Maori and the coastal environment is now formally recognised through several statutory processes. When changes

to the coastal environment are proposed or new issues arise, appropriate consultation is required to ensure the established process is followed.

- 2.18 Marine farming may give rise to adverse effects upon the environment. These include impacts on water quality, recreation, visual amenity, benthic communities and navigation. While no significant technological or scientific advancements have changed the impact of marine farming on the environment, there have been some legislative changes since the last Regional Policy Statement was developed. Water quality is the most important factor in marine farming, and its biggest limitation. When water quality becomes poor in the consented marine farm areas, it is imperative that refuge areas are designated to protect against major losses within the farms (ie areas these farms can move to for short periods of time outside of their consented areas). There may be a need too for future marine farming refuge areas in parts of the region not yet used for marine farms.
- 2.19 Some activities require the exclusive use of particular coastal marine areas, however this has the potential to cause conflict with other parties who might also seek to use the same areas. Careful consideration will always be needed when making decisions regarding the exclusive rights to establish structures or usage within the coastal environment.
- 2.20 The exclusive or preferential occupation for safe harbouring is an ongoing issue that has the potential to compromise the safety of vessels at sea. It could be argued that this is not a regionally significant issue and is better provided for at a national level. However the overall issue of safety of vessels at sea does need to be included within the Regional Policy Statement. This issue could be amended to reflect this.
- 2.21 People and communities have an expectation that lands of the Crown in the coastal marine area shall generally be available for free public use and enjoyment. This expectation has not changed since the last Regional Policy Statement was formulated.
- 2.22 The coastal marine area is highly dynamic and a lack of knowledge and understanding of the interaction between natural coastal processes combined with the introduction of built structures or activities and development will often result in some unforeseen environmental impacts.
- 2.23 Numerous factors need to be taken into consideration when decisions are made about whether a particular proposal or activity should be allowed in the coastal marine area. These include structure size, use, scale, benefits and impacts. Exclusive or preferential occupation of the coastal marine area, particularly for those activities and development that are not necessarily linked to a particular location, may preclude activities that can only be located on the coast or in the coastal marine area from taking place there.

2.24 While it is not an emerging issue, the potential for nuclear driven vessels or nuclear generation in the coastal marine area may require consideration during the review process. If the status quo with respect to government policy regarding nuclear power generation and transportation varies from existing policy in future, the regional policy statement may need to provide contingencies for such change. Policy may need to recognise community expectations with respect to the risks change may pose at a regional level and assess the level of protection warranted for Southland's coastal marine area.

2.3 Relevance of existing Southland District Plan Issues

2.31 The Southland District covers approximately 11% of the land area of New Zealand and the District's coastline is approximately 3400km long. The Southland coastline is extremely varied with a wide range of landforms and features, including but not limited to dune systems, estuaries, harbours, cliffs, beaches, indigenous forests, wetlands, rural land and urban areas. The existing District Plan was formulated during the 1990s and adopted in 2001.

2.32 Section 4.6 'Coastal Resource Area' of the existing District Plan identifies five resource management issues relating to the coast:

- the possibility of sea level rise and its effect on low-lying communities;
- land use and development can threaten wildlife habitats;
- land use and development can degrade the quality of estuary and coastal water;
- the natural character of the coast is threatened by inappropriate use and development;
- previous failure to recognise the significance the coast has to Maori.

2.33 Several changes have occurred since the existing District Plan was formulated and the issues above were identified. Chief among these is the significant increase in the amount of development taking place within coastal areas of the Southland District. This has led to public concern about the environmental impacts of coastal development and several new coastal resource management issues have arisen. While the issues identified above are still considered relevant for inclusion in the second generation District Plan, the additional issues that have emerged need to be addressed in the formation of the second generation Southland District Plan. Some of the issues identified above also need to be reframed to reflect new information and policy with issues related to climate change and biodiversity being two examples.

3. Emerging coastal issues in Southland

3.1 The coastal environment is highly dynamic and coastal issues often require careful adaptive management. Since the RPS became operative, there have been several changes to legislation governing or influencing the coastal

environment. Other emerging issues include increased pressure to develop the coastal margin; renewed interest in discharges from land use activities including sewerage; increased tourism and - potentially the biggest - “Climate Change”. There has also been heightened recognition of the customary relationship between Maori and some areas of the coastal environment.

- 3.2 Legislation that has become operative since the original RPS includes the Aquaculture Reform Act 2004, the Foreshore and Seabed Act 2004, the Maori Fisheries Act 2004, the Fiordland Marine Management Act 2004 and the Ngai Tahu Claims Settlement Act 1998.
- 3.3 The RMA makes specific provisions for iwi management plans, with Councils required to take into account any relevant planning document recognised by an iwi authority. In Southland this is Te Tangi a Taurira, The Cry of the People, a living, working document that can assist Ngai Tahu ki Murihiku to participate effectively in natural resource and environmental policy and planning. This document will be important when dealing with issues in the coastal environment.
- 3.4 Arguably Climate Change is the most significant issue that the updated RPS needs to address, because of the potential for increased coastal erosion and marine inundation. The likelihood of sea level rise, increased storm surges and the consequential flooding of and damage to coastal property and infrastructure has become a very high profile concern. The Ministry for the Environment recommends that councils plan for 20cm sea level rise by 2050 and a 50cm sea level rise by 2100.
- 3.5 Lack of information on the coastal marine environment is a big issue. Agencies with interests in coastal management generally acknowledge that there is inadequate information to assess marine ecological processes, such as nutrient supply for commercially important fisheries, and coastal processes such as shoreline stability.
- 3.6 Knowledge of significant landscapes, special habitats, endangered species and other natural features is adequate in some circumstances. However more detailed knowledge is required and there are often difficulties and issues associated with access to undertake this work. There are therefore risks that poorly known coastal resources may be damaged, with no management response possible. Because the coastal marine environment is inhospitable and not very accessible, resource investigations are more expensive than investigations on land.
- 3.7 Risks associated with living on the coast have become readily apparent in recent years. Besides the catastrophic impacts of tsunamis, there are more regular but episodic storms that regularly erode the coastline and create storm surges. This process of erosion is natural, but when it comes into conflict with human occupation, including sites of historical importance, there are demands for sea defences. In conjunction with considering climate

change and sea level rise, we will need to seriously consider long-term land use policy for the coastal environment.

- 3.8 The use of coastal water, subdivision, development and pollution can all affect the “natural character” of coastal areas. Preserving the coast’s natural character, which encompasses landform, vegetation, scenery and ecology, is a matter of national importance in the RMA. However, certain areas of the coast do need to be available for strategically important uses - ports are the obvious example. At the same time, some other activities do not need to be on the coast, other than to capitalise on a marketable asset. The coast could be looked upon as a finite resource: the more development along the coast the less natural coastal landscape remains. A key question is what types of development should occur on the coast and what is the potential impact of such development on the coast’s natural character?
- 3.9 The Southland coast has a long history of early Maori and early European activity. Any remaining physical evidence of this history is important for Southlanders and New Zealanders in order for us to value the environment we live in and all that has gone before us. Over time as development occurs and natural processes change the landscape, some of these historical places are put at risk of damage or complete loss. Natural processes like coastal erosion cannot be stopped, but they can be planned for and processes put in place to safeguard or record historical sites and associations. Any future coastal development should have special regard to any historical values that it may impact upon. Through the development process, impacted historical sites need to be preserved or effects on them mitigated to ensure that this special history is not lost to us.
- 3.10 At the time of writing this document, the New Zealand Coastal Policy Statement(NZCPS) is going through a review process of its own. There are likely to be some changes through this NZCPS that will impact on RPS review when it is completed.

3.11 Local issues – Southland District Plan

- 3.11.1 A number of coastal resource management issues have arisen since the existing District Plan was adopted. These include the following issues which are discussed in more detail in the full coastal issues and options paper:
- Coastal landscape issues
 - Coastal subdivision and development issues
 - Climate change and coastal hazard issues
 - Infrastructure and transportation issues
 - Reverse sensitivity issues
 - Significant habitats of indigenous flora and fauna and biodiversity issues
 - Iwi issues
 - Public access issues

- 3.11.2 In 2006 concern about the impact of increased levels of development on coastal landscapes caused the Southland District Council and Environment Southland to commission a landscape assessment of the District's coast. Boffa Miskell Limited produced the 'Southland Coastal Landscape Study 2006'. Its key findings and the approach and information detailed in it form a useful base from which coastal growth issues can be addressed in the second generation Southland District Plan.

4. Options for Addressing Issues

4.0 Research

- 4.01 The biggest problems in assessing the issues and options relating to the coastal areas of the Southland region are associated with a lack of detailed scientific information about the coastal environment and the poor understanding that results. Many of the processes occurring along the coastal margins of the region are not fully understood and there is also a poor level of understanding about the environmental impacts of human activity on coastal areas. More studies are needed to help us understand this environment.

- 4.02 With the knowledge that the world's climate is changing and sea levels are expected to rise, we need to develop policies that ensure we are prepared for the foreseeable changes to the coastal environment and their associated hazards. As sea levels rise, new areas will be at greater risk of inundation and other coastal hazards such as erosion and storm surges. We need policies that guide us in adapting and adjusting to predicted climate change effects.

4.1 Collaborative Approach

- 4.1.1 Further analysis of the region's/district's coast and coastal issues in conjunction with other councils and key stakeholders may be required in the development of the new plans and during the associated review processes .

4.2 Second generation Southland District Plan

- 4.2.1 There are a number of options available that could be utilised to address coastal resource management issues in the Southland district. In terms of the second generation Southland District Plan it is likely that a combination of these options would best address coastal issues. Options available are discussed fully in the full Coastal Issues and Options paper and include the following:

- further development of existing District Plan approach built on defined Coastal Resource Areas;
- listing of coastal areas of outstanding natural landscapes and features;

- regulatory approaches – development of criteria and policies that set out the level of development that is acceptable in specific coastal areas and development of appropriate performance standards for coastal areas. The degree of regulation could vary in some localities- e.g. areas particularly prone to coastal erosion hazards could be subject to a more stringent regime than less hazard-prone areas;
- non-regulatory approaches – development of design guidelines;
- urban consolidation;
- definition of areas appropriate for coastal development;
- providing for rural activities in Coastal Resource Areas;
- development of findings and recommendations of the ‘Southland Coastal Landscape Study 2006’.

5. Questions for discussion

5.0 Regional Policy Statement

- Do you think we have identified the right coastal issues? Are there other issues and aspects of coastal management that we should be planning for?
- How effective do you feel coastal management practice has been since the Regional Policy Statement became operative? What are the main factors that have influenced performance?
- Where are the priority action areas in our coastal environment re? What are your concerns with respect to coastal development versus loss of natural character? Should the RPS look to identify coastal areas that are appropriate for development? If so, how should the RPS provide adequate guidance to local authorities about appropriate coastal areas for development?

5.1 Southland District Council

- Should the new District plan take a more proactive approach towards managing development along the Coast? Are there areas of the coast where development is not appropriate? If so, should these areas be prioritised for protection?
- Should the parts of the coastlines that have been recognised as containing outstanding natural landscapes and/or outstanding natural features be protected from inappropriate use, development and subdivision? If so, what are the best ways to achieve this?
- Should the Southland District Council look to consolidate coastal development within existing urban areas already located in the Coastal Resource Area?