Auckland Unitary Plan Operative in part

Plan Change 80

RPS Well-functioning Urban Environment, Resilience to the Effects of Climate Change and Qualifying Matters

Operative 13 December 2024

Enclosed:

- Public Notice
- Seal page
- Operative version

Public Notice

Auckland Unitary Plan - Plan Change to become operative

Resource Management Act 1991 (the Act)

Plan Change 80 - RPS Well-Functioning Urban Environment, Resilience to the Effects of Climate Change and Qualifying Matters.

At its meeting on 14 November 2024, the Council resolved to approve the above plan change to the Auckland Unitary Plan following the completion of the statutory processes.

The operative date is 13 December 2024.

The updated district plan and background information may be viewed at the following www.aucklandcouncil.govt.nz/planchanges

Dated 06/12/24

Find out more: phone 09 301 0101 or visit aucklandcouncil.govt.nz

Seal Page

Auckland Unitary Plan
Plan Change 80: RPS Well-functioning Urban Environment, Resilience to the Effects of Climate Change and Qualifying Matters

THE COMMON SEAL of the **AUCKLAND COUNCIL** was hereby affixed under the authority of council :

~~Mayor / Deputy Mayor~~ / Chief Executive / ~~Chief Officer~~

~~Deputy Mayor / Chief Executive / Chief Officer~~ / General Counsel

This plan change became operative on 13 December 2024

Operative Version

B2. Tāhuhu whakaruruhau ā-taone - Urban growth and form

Tāhuhu whakaruruhau ā-taone

The sheltering ridge pole

B2.1. Issues

Auckland's growing population increases demand for housing, employment, business, infrastructure, social facilities and services.

Growth needs to be provided for in a way that does all of the following:

(1A) contributes to well-functioning urban environments;

(1B) improves resilience to the effects of climate change;

(1) enhances the quality of life for individuals and communities;

(2) supports integrated planning of land use, infrastructure and development;

(3) optimises the efficient use of the existing urban area;

(4) encourages the efficient use of existing social facilities and provides for new social facilities;

(5) enables provision and use of infrastructure in a way that is efficient, effective and timely;

(6) maintains and enhances the quality of the environment, both natural and built;

(7) maintains opportunities for rural production; and

(8) enables Mana Whenua to participate and their culture and values to be recognised and provided for.

B2.2. Urban growth and form

B2.2.1. Objectives

(1A) A well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

(1) A well-functioning urban environment with a quality compact urban form that enables all of the following:

(a) a higher-quality urban environment;

(b) greater productivity and economic growth;

(c) better use of existing infrastructure and efficient provision of new infrastructure;

(d) good accessibility for all people, including by improved and more efficient public or active transport;

(e) greater social and cultural vitality;

(f) better maintenance of rural character and rural productivity;

(g) reduced adverse environmental effects; and

(h) improved resilience to the effects of climate change.

(2) Urban growth is primarily accommodated within the urban area 2016 (as identified in Appendix 1A).

(3) Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth and social facilities to support growth.

(4) Urbanisation is contained within the Rural Urban Boundary, towns, and rural and coastal towns and villages.

(5) The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages:

(a) is integrated with the provision of appropriate infrastructure; and

(b) improves resilience to the effects of climate change.

B2.2.2. Policies

Development capacity and supply of land for urban development

(1) Include sufficient land within the Rural Urban Boundary that is appropriately zoned to accommodate at any one time a minimum of seven years' projected growth in terms of residential, commercial and industrial demand and corresponding requirements for social facilities, after allowing for any constraints on subdivision, use and development of land.

(2) Ensure the location or any relocation of the Rural Urban Boundary identifies land suitable for urbanisation in locations that contribute to a well-functioning urban environment and that:

(a) promote the achievement of a quality compact urban form

(b) enable the efficient supply of land for residential, commercial and industrial activities and social facilities;

(c) integrate land use and transport supporting a range of transport modes;

(d) support the efficient provision of infrastructure;

(e) provide choices that meet the needs of people and communities for a range of housing types and working environments;

(ee) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and

(f) follow the structure plan guidelines as set out in Appendix 1; while:

(g) protecting natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character;

(h) protecting the Waitākere Ranges Heritage Area and its heritage features;

(i) ensuring that significant adverse effects from urban development on receiving waters in relation to natural resource and Mana Whenua values are avoided, remedied or mitigated;

(j) avoiding elite soils and avoiding where practicable prime soils which are significant for their ability to sustain food production;

(k) avoiding mineral resources that are commercially viable;

(l) avoiding areas with significant natural hazard risks and where practicable avoiding areas prone to natural hazards including coastal hazards and flooding, including the effects of climate change including sea level rise on the extent and frequency of hazards; and

(m) aligning the Rural Urban Boundary with:

(i) strong natural boundaries such as the coastal edge, rivers, natural catchments or watersheds, and prominent ridgelines; or

(ii) where strong natural boundaries are not present, then other natural elements such as streams, wetlands, identified outstanding natural landscapes or features or significant ecological areas, or human elements such as property boundaries, open space, road or rail boundaries, electricity transmission corridors or airport flight paths.

(n) limits or avoids urbanisation where a “qualifying matter” justifies that limitation or avoidance of urbanisation.

(3) Enable rezoning of future urban zoned land for urbanisation following structure planning and plan change processes in accordance with Appendix 1 Structure plan guidelines.

Quality compact urban form

(4) Promote urban growth and intensification within the urban area 2016 (as identified in Appendix 1A), enable urban growth and intensification within the Rural Urban Boundary, towns, and rural and coastal towns and villages, in a way that contributes to a well-functioning urban environment and avoid urbanisation outside these areas.

(5) Enable higher residential intensification:

(a) in and around centres;

(b) along identified corridors; and

(c) close to public transport, social facilities (including open space) and employment opportunities.

(6) Identify a hierarchy of centres that contributes to a well-functioning urban environment which supports a quality compact urban form:

(a) at a regional level through the city centre, metropolitan centres and town centres which function as commercial, cultural and social focal points for the region or sub-regions; and

(b) at a local level through local and neighbourhood centres that provide for a range of activities to support and serve as focal points for their local communities.

(7) Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that contribute to a well-functioning urban environment and that do all of the following:

(a) support a quality compact urban form;

(b) provide for a range of housing types and employment choices for the area;

(c) integrate with the provision of infrastructure;

(caa) provide good accessibility, including by way of efficient and effective public or active transport;

(ca) incorporate resilience to the effects of climate change;

(d) follow the structure plan guidelines as set out in Appendix 1; and

(e) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets.

(8) Enable the use of land zoned future urban within the Rural Urban Boundary or other land zoned future urban for rural activities until urban zonings are applied, provided that the subdivision, use and development does not hinder or prevent the future urban use of the land.

(9) Apply a Rural Urban Boundary for Waiheke Island (identified in Appendix 1B) as a regional policy statement method.

B2.3. A quality built environment

B2.3.1. Objectives

(1) A well-functioning urban environment with a quality built environment where subdivision, use and development do all of the following:

(a) respond to the intrinsic qualities and physical characteristics of the site and area, including its setting;

(b) reinforce the hierarchy of centres and corridors;

(c) contribute to a diverse mix of choice and opportunity for people and communities;

(d) maximise resource and infrastructure efficiency;

(e) are capable of adapting to changing needs; and

(f) has improved resilience to the effects of climate change.

(2) Innovative design to address environmental effects is encouraged.

(3) The health and safety of people and communities are promoted.

B2.3.2. Policies

(1) Manage the form and design of subdivision, use and development so that it contributes to a well-functioning urban environment and does all of the following:

(a) supports the planned future environment, including its shape, landform, outlook, location and relationship to its surroundings, including landscape and heritage;

(b) contributes to the safety of the site, street and neighbourhood;

(c) develops street networks and block patterns that provide good access and enable a range of travel options;

(d) achieves a high level of amenity and safety for pedestrians and cyclists;

(e) meets the functional, and operational needs of the intended use;

(f) allows for change and enables innovative design and adaptive re-use; and

(g) improves resilience to the effects of climate change.

(2) Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and communities by all of the following:

(a) providing access for people of all ages and abilities;

(b) enabling walking, cycling and public transport and minimising vehicle movements; and

(c) minimising the adverse effects of discharges of contaminants from land use activities (including transport effects) and subdivision.

(3) Enable a range of built forms to support choice and meet the needs of Auckland's diverse population.

(4) Balance the main functions of streets as places for people and as routes for the movement of vehicles.

(5) Mitigate the adverse environmental effects of subdivision, use and development through appropriate design including energy and water efficiency and waste minimisation.

B2.4. Residential growth

B2.4.1. Objectives

(1) Residential intensification contributes to a well-functioning urban environment and supports a quality compact urban form.

(1A) Residential intensification is limited in some areas to the extent necessary to give effect to identified qualifying matters.

(2) Residential areas are attractive, healthy, safe and have improved resilience to the effects of climate change with quality development that is in keeping with the planned built character of the area.

(3) Land within and adjacent to centres and corridors or in close proximity to public transport and social facilities (including open space) or employment opportunities is the primary focus for residential intensification.

(4) An increase in housing capacity and the range of housing choice which meets the varied needs and lifestyles of Auckland's diverse and growing population.

(5) Non-residential activities are provided in residential areas to support the needs of people and communities.

(6) Sufficient, feasible development capacity for housing is provided, in accordance with Objectives 1 to 4 above, to meet the targets in Table B2.4.1 below:

Table B2.4.1: Minimum Dwelling Targets

Term	Short to Medium 1 - 10 years (2016 – 2026)	Long 11 - 30 years (2027 – 2046)	Total 1 – 30 years (2016 – 2046)
Minimum Target (number of dwellings)	189,800	218,500	408,300

Source: Development Strategy, Assessing Demand, Auckland Plan 2050.

B2.4.2. Policies

Residential intensification

(1) Provide a range of residential zones that enable different housing types and intensity that are appropriate to the residential character of the area.

(2) Enable higher residential intensities in areas closest to centres, the public transport network, large social facilities, education facilities, tertiary education facilities, healthcare facilities and existing or proposed open space, which contribute to a well-functioning urban environment.

(3) Provide for medium residential intensities in area that are within moderate walking distance to centres, public transport, social facilities and open space.

(4) Provide for lower residential intensity in areas:

(a) that are not close to centres and public transport;

(b) that are subject to high environmental constraints;

(c) where there are natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character;

(d) where there is a suburban area with an existing neighbourhood character; and

(e) where there are other qualifying matters listed in Chapter A that justify that limitation.

(5) Avoid intensification in areas:

(a) where there are natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage or special character; or

(b) that are subject to significant natural hazard risks including where the frequency and extent of the natural hazards are being affected by climate change; or

(c) where there are other qualifying matters listed in Chapter A which justify avoidance of intensification;

where such intensification is inconsistent with the protection of the scheduled natural or physical resources or with the avoidance or mitigation of the natural hazard risks or is necessary to give effect to identified qualifying matters.

(6) Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification, including, as a qualifying matter, limiting intensification prior to upgrade of capacity in areas of known water and wastewater infrastructure constraints.

(7) Manage adverse reverse sensitivity effects from urban intensification on land with existing incompatible activities.

Residential neighbourhood and character

(8) Recognise and provide for existing and planned neighbourhood character through the use of place-based planning tools.

(9) Manage built form, design and development to achieve an attractive, healthy and safe environment that is in keeping with the descriptions set out in placed-based plan provisions.

(10) Provide for non-residential activities and require them to be of a scale and form that are in keeping with the existing and planned built character of the area.

Affordable housing

(11) Enable a sufficient supply and diverse range of dwelling types, sizes and locations, that meet the housing needs of people and communities, including:

(a) households on low to moderate incomes; and

(b) people with special housing requirements.

B2.5. Commercial and industrial growth

B2.5.1. Objectives

(1) Employment and commercial and industrial opportunities meet current and future demands.

(2) Commercial growth and activities are primarily focussed within a hierarchy of centres and identified growth corridors that contribute to a well-functioning urban environment and a compact urban form.

(2A) Commercial and industrial activities are resilient to the effects of climate change.

(3) Industrial growth and activities are enabled in a manner that does all of the following:

(a) promotes economic development;

(b) promotes the efficient use of buildings, land and infrastructure in industrial zones;

(c) manages conflicts between incompatible activities;

(d) recognises the particular locational requirements of some industries; and

(e) enables the development and use of Mana Whenua's resources for their economic well-being.

B2.5.2. Policies

(1) Encourage commercial growth and development in the city centre, metropolitan and town centres, and enable retail activities on identified growth corridors, to provide the primary focus for Auckland's commercial growth.

(2) Support the function, role and amenity of centres by encouraging commercial and residential activities within centres, ensuring development that locates within centres contributes to a well-functioning urban environment and the following:

(aa) a high-density urban form that responds to a centre's accessibility by public transport, commercial activity and community facilities;

(a) an attractive and efficient urban environment with a distinctive sense of place and quality public places;

(b) a diverse range of activities, with the greatest mix, concentration and density of activities in the city centre;

(c) a distribution of centres that provide for the needs of people and communities;

(d) employment and commercial opportunities**;**

(e) a character and form that supports the role of centres as focal points for communities and compact mixed-use environments;

(f) the efficient use of land, buildings and infrastructure;

(g) high-quality street environments including pedestrian and cycle networks and facilities;

(h) development does not compromise the ability for mixed use developments, or commercial activities to locate and expand within centres; and

(i) a scale and form of development that is necessary to achieve any relevant identified qualifying matters.

(3) Enable the expansion of metropolitan and town centres having regard to whether it will do all of the following:

(a) improve access to a range of facilities, goods and services in a convenient and efficient manner;

(b) maintain or enhance a compact mixed-use environment in the centre;

(c) retain or enhance the existing centre's function, role and amenity;

(d) support the existing network of centres and achieve a sustainable distribution of centres that is supported by sufficient population growth;

(e) manage adverse effects on the function, role and amenity of the city centre, and other metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors;

(f) avoid, remedy or mitigate the effects of commercial activity on adjoining land uses;

(g) support medium to high intensity residential development; and

(h) support a safe and efficient transport system which is integrated with the centre.

(4) Enable new metropolitan, town and local centres which contribute to a well-functioning urban environment following a structure planning process and plan change process in accordance with Appendix 1 Structure plan guidelines, having regard to all of the following:

(a) the proximity of the new centre to existing or planned medium to high intensity residential development;

(b) the existing network of centres and whether there will be sufficient population growth to achieve a sustainable distribution of centres;

(c) whether the new centre will avoid or minimise adverse effects on the function, role and amenity of the city centre, metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors;

(d) the form and role of the proposed centre;

(e) any significant adverse effects on existing and planned infrastructure;

(f) a safe and efficient transport system which is integrated with the centre; and

(g) any significant adverse effects on the environment or on natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage special character, or other identified qualifying matter.

(5) Enable retail activities, where appropriate, on identified growth corridors in business zones, having regard to all of the following:

(a) adverse effects on the function, role and amenity of the city centre, metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors;

(b) adverse effects on the quality compact urban form including the existing and planned location of activities, facilities, infrastructure and public investment;

(c) effects on community social and economic wellbeing and accessibility;

(d) the efficient use and integration of land and infrastructure;

(e) effects on the safe and efficient operation of the transport network;

(f) effects of the development on the efficient use of any industrial land, in particular opportunities for land extensive industrial activities and heavy industry;

(g) avoiding conflicts between incompatible activities; and

(h) the effects on residential activity.

(6) Enable commercial activities, where appropriate, in business zones in locations other than the city centre, metropolitan and town centres and identified growth corridors, having regard to all of the following:

(a) the matters listed in Policy B2.5.2(5)(a) to Policy B2.5.2(5)(h) above;

(b) the extent to which activities would compromise the achievement of policies B2.5.2(1) and B.2.5.2(2): and

(c) the extent to which activities would compromise the hierarchy of locations identified in policies B2.5.2(1) to B.2.5.2(5).

(7) Enable the supply of land for industrial activities, in particular for

land-extensive industrial activities and for heavy industry in areas where the character, scale and intensity of the effects from those activities can be appropriately managed.

(8) Enable the supply of industrial land which is relatively flat, has efficient access to freight routes, rail or freight hubs, ports and airports, and can be efficiently served by infrastructure.

(9) Enable the efficient use of industrial land for industrial activities and avoid incompatible activities by all of the following:

(a) limiting the scale and type of non-industrial activities on land zoned for light industry;

(b) preventing non-industrial activities (other than accessory activities) from establishing on land zoned for heavy industry; and

(c) promoting co-location of industrial activities to manage adverse effects and to benefit from agglomeration.

(10) Manage reverse sensitivity effects on the efficient operation, use and development of existing industrial activities, including by preventing inappropriate sensitive activities locating or intensifying in or adjacent to heavy industrial zones.

(10A) Require commercial, retail and industrial activities to be located, designed and developed with best practice resilience to the effects of climate change.

B2.6. Rural and coastal towns and villages

B2.6.1. Objectives

(1) Growth and development of existing or new rural and coastal towns and villages is enabled in ways that:

(a) avoid natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage or special character unless growth and development protects or enhances such values; and

(b) avoid elite soils and avoid where practicable prime soils which are significant for their ability to sustain food production; and

(c) avoid areas with significant natural hazard risks;

(ca) are resilient to the effects of climate change;

(d) are consistent with the local character of the town or village and the surrounding area; and

(e) enables the development and use of Mana Whenua’s resources for their economic well-being.

(2) Rural and coastal towns and villages have adequate infrastructure.

B2.6.2. Policies

(1) Require the establishment of new or expansion of existing rural and coastal towns and villages to be undertaken in a manner that does all of the following:

(a) maintains or enhances the character of any existing town or village;

(b) incorporates adequate provision for infrastructure;

(c) avoids locations with significant natural hazard risks where those risks cannot be adequately remedied or mitigated;

(d) avoids elite soils and avoids where practicable prime soils which are significant for their ability to sustain food production;

(e) maintains adequate separation between incompatible land uses;

(f) is compatible with natural and physical characteristics, including those of the coastal environment;

(g) provides access to the town or village through a range of transport options including walking and cycling; and

(h) improves resilience to the effects of climate change.

(2) Avoid locating new or expanding existing rural and coastal towns and villages in or adjacent to areas that contain significant natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage or special character, unless the growth and development protects or enhances such resources including by any of the following measures:

(a) the creation of reserves;

(b) increased public access;

(c) restoration of degraded environments;

(d) creation of significant new areas of biodiversity; or

(e) enablement of papakāinga, customary use, cultural activities and appropriate commercial activities.

(3) Enable the establishment of new or significant expansions of existing rural and coastal towns and villages through the structure planning and plan change processes in accordance with Appendix 1 Structure plan guidelines.

(4) Enable small-scale growth of and development in rural and coastal towns and villages without the need for structure planning, in a manner consistent with policies B2.6.2(1) and (2).

(5) Enable papakāinga, marae, customary use, cultural activities and appropriate commercial activities on Māori land and on other land where Mana Whenua have collective ownership.

B2.7. Open space and recreation facilities

B2.7.1. Objectives

(1) Recreational needs of people and communities are met through the provision of a range of quality open spaces and recreation facilities which contribute to a well-functioning urban environment.

(2) Public access to and along Auckland's coastline, coastal marine area, lakes, rivers, streams and wetlands is maintained and enhanced.

(3) Reverse sensitivity effects between open spaces and recreation facilities and neighbouring land uses are avoided, remedied or mitigated.

(4) Open space and recreation are resilient to the effects of climate change.

B2.7.2. Policies

(1) Enable the development and use of a wide range of open spaces and recreation facilities to provide a variety of activities, experiences and functions and which contribute to a well-functioning urban environment.

(2) Promote the physical connection of open spaces to enable people and wildlife to move around efficiently and safely.

(3) Provide a range of open spaces and recreation facilities in locations that are accessible to people and communities.

(4) Provide open spaces and recreation facilities in areas where there is an existing or anticipated deficiency.

(5) Enable the development and use of existing and new major recreation facilities.

(6) Encourage major recreation facilities in locations that are convenient and accessible to people and communities by a range of transportation modes.

(7) Avoid, remedy or mitigate significant adverse effects of land use or development on open spaces and recreation facilities.

(8) Avoid, remedy or mitigate significant adverse effects from the use of open spaces and recreational facilities on nearby residents and communities.

(9) Enable public access to lakes, rivers, streams, wetlands and the coastal marine area by enabling public facilities and by seeking agreements with private landowners where appropriate.

(10) Limit public access to and along the coastal marine area, lakes, rivers, streams and wetlands by esplanade reserves, esplanade strips or other legal mechanisms where necessary for health, safety or security reasons or to protect significant natural or physical resources.

(11) Provide for improved resilience to the effects of climate change in open space and associated recreation and biodiversity management.

B2.8. Social facilities

B2.8.1. Objectives

(1) Social facilities that meet the needs of people and communities, including enabling them to provide for their social, economic and cultural well-being and their health and safety and which contribute to a well-functioning urban environment.

(2) Social facilities located where they are accessible by an appropriate range of transport modes.

(3) Reverse sensitivity effects between social facilities and neighbouring land uses are avoided, remedied or mitigated.

(4) Social facilities are resilient to the effects of climate change.

B2.8.2. Policies

(1) Enable social facilities that are accessible to people of all ages and abilities to establish in appropriate locations which contribute to a well-functioning urban environment as follows:

(a) small-scale social facilities are located within or close to their local communities;

(b) medium-scale social facilities are located with easy access to city, metropolitan and town centres and on corridors;

(c) large-scale social facilities are located where the transport network (including public transport and walking and cycling routes) has sufficient existing or proposed capacity.

(2) Enable the provision of social facilities to meet the diverse demographic and cultural needs of people and communities.

(3) Enable intensive use and development of existing and new social facility sites.

(4) In growth and intensification areas identify as part of the structure plan process where social facilities will be required and enable their establishment in appropriate locations which contribute to a well-functioning urban environment.

(5) Enable the efficient and flexible use of social facilities by providing on the same site for:

(a) activities accessory to the primary function of the site; and

(b) in appropriate locations, co-location of complementary residential and commercial activities.

(6) Manage the transport effects of high trip-generating social facilities in an integrated manner..

(7) Require social facilities to use best practice resilience to the effects of climate change.

B2.9. Explanation and principal reasons for adoption

A broad strategy is needed to address the resource management issues arising from the scale of urban growth in Auckland.

The National Policy Statement on Urban Development 2020 (NPSUD) includes objectives and policies on well-functioning urban environment and sets out matters that are to be addressed as a minimum, to achieve this. Achieving a well-functioning urban environment is reflected by a wide range of objectives and policies across the entire Regional Policy Statement (RPS). A well-functioning urban environment is a high-level concept and is an overarching objective of the RPS.

The objectives of a well-functioning urban environment and a quality compact urban form are supported by a primary policy approach of focussing the greatest levels of residential intensification in areas with good accessibility, including by public or active transport, and around commercial centres and transport nodes and along major transport corridors.

A compact urban form is one with clear boundaries where the residential and commercial areas are relatively close together. In Auckland, most urban growth is expected to be inside the Rural Urban Boundary:

- to promote efficient and timely provision of infrastructure;
- to protect natural and physical resources that have been scheduled for particular identified values; and
- to avoid urbanisation without appropriate structure planning.

The location of the Rural Urban Boundary is a district plan land use rule pursuant to section 9(3) of the Resource Management Act 1991, other than for Waiheke Island where it is an interim regional policy statement method until it is considered as part of a plan change to incorporate the Auckland Council District Plan – Operative Hauraki Gulf Islands Section into the Unitary Plan.

A well-functioning urban environment and compact urban form can deliver a range of benefits for current and future generations by:

- enabling a range of housing choices in size, typology and price within neighbourhoods;
- protecting sites and areas with identified high environmental values;
- providing access to open space and social facilities;
- fostering productivity, creativity and social vitality by enabling social and business networks based on spatial proximity;
- limiting or avoiding intensification where there are qualifying matters that justify that limitation or avoidance of intensification;
- promoting an integrated approach to land use and transport;
- providing investment certainty about use and development strategies; and
- improving resilience to the effects of climate change.

A quality built environment is one which enhances opportunities for people's well-being by ensuring that new buildings respond to the existing built and natural environment in ways that promote the plan's objectives and maintain and enhance the amenity values of an area. In most areas this is regulated by permitted standards and by assessment where those standards are exceeded. In centres and where higher intensity development is enabled, the design and appearance of buildings is generally assessed on a restricted discretionary basis.

In addressing the effects of growth, and contributing to a well-functioning urban environment, a key factor is enabling sufficient development capacity in the urban area and sufficient land for new housing and businesses over the next 30 years. It is also important to ensure that urban environments have improved resilience to the effects of climate change. The objectives and policies guide the location of urban growth areas. They identify how greenfield land which is suitable for urbanisation will be managed until it is re-zoned for urban development. They encourage provision for Mana Whenua to develop and use their resources. They also set out the process to be followed to ensure that urban development is supported by infrastructure on a timely and efficient basis. They should be considered in conjunction with the Council's other principal strategic plans such as the Auckland Plan, the Long-term plan and the Regional Land Transport Plan. The strategies and asset management plans of infrastructure providers will also be highly relevant.

Housing affordability is a significant issue in Auckland. These objectives and policies, as one component of the many things that need to be done to address this issue, seek to enable urban growth, improve development capacity and encourage a variety of housing types, sizes and locations as resource management methods to improve housing affordability.

Urban growth in rural and coastal towns and villages is also anticipated and provided for, but at a much lesser scale than in the main urban areas. Extensions to towns and villages, and proposals for new towns or villages, must be considered against factors including ensuring compatibility with existing local character, the protection of areas with identified values (including areas of land containing elite soils) and the avoidance of areas with significant natural hazards. Changes of zoning to accommodate such growth will be the subject of structure planning processes, as for other plan changes.

Auckland has a large number of open spaces that covers a wide variety of environments. Open spaces and recreation facilities may be privately or publicly owned and operated. Auckland's streets, including shared spaces and street berms, are also an important component of the open space network. The coastal marine area is a significant public open space and recreational resource. For additional policy direction on the coastal environment see section B8 Coastal environment.

Collectively these open spaces perform a wide range of functions including:

- providing opportunities for active and passive recreational activities, locally or Auckland-wide;
- enabling public access to the coastline, islands and beaches;
- maintaining and enhancing the amenity values and the quality of the environment around them;
- protecting and enhancing our natural and cultural heritage, landscapes and

ecological values; and

- providing locations for social facilities used for sports, recreation and leisure and community activities.

With growth, new open spaces and social facilities will be required and the existing open space and social facilities will need to be expanded and upgraded to meet the needs of new residents and the increased level of use.

Social facilities include public and private facilities which provide for services such as education, health, justice, corrections, community and cultural facilities. They also contribute to the economy of Auckland and New Zealand in a variety of ways, both supporting other activities and by contributing to a high-value knowledge economy. This is particularly important for a growing city, as increasing numbers of people rely on these facilities to meet their needs and provide for their social, economic and cultural well-being.

The objectives and policies in this section of the regional policy statement must be read together with other relevant sections which set out the direction for the sustainable management of natural and physical resources in more specific contexts.

B7. Toitū te whenua, toitū te taiao – Natural resources

Ngā ariki o te rangi, ngā ariki o te whenua, ngā ariki o te moana, ngā ariki o te taiao

The chiefly deities of the sky, of the earth, of the sea, the spiritual caretakers of the environment

B7.1. Issues

The combination of urban growth and past land, coastal and freshwater management practices have:

(1) placed increasing pressure on land and water resources including habitats and biodiversity;

(2) reduced air quality; and

(3) increased demand for mineral resources.

The pressures on natural resources need to be managed not only for environmental well-being but also for social, economic and cultural well-being.

B7.2. Indigenous biodiversity

B7.2.1. Objectives

(1) Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision use and development.

(2) Indigenous biodiversity is maintained through protection, restoration and enhancement in areas where ecological values are degraded, or where development is occurring.

B7.2.2. Policies

(1) Identify and evaluate areas of indigenous vegetation and the habitats of indigenous fauna in terrestrial and freshwater environments considering the following factors in terms of the descriptors contained in Schedule 3 Significant Ecological Areas – Terrestrial Schedule:

(a) representativeness;

(b) stepping stones, migration pathways and buffers;

(c) threat status and rarity;

(d) uniqueness or distinctiveness; and

(e) diversity.

(2) Include an area of indigenous vegetation or a habitat of indigenous fauna in terrestrial or freshwater environments in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule if the area or habitat is significant.

(3) Identify and evaluate areas of significant indigenous vegetation, and the significant habitats of indigenous fauna, in the coastal marine area considering the following factors in terms of the descriptors contained in Schedule 4 Significant Ecological Areas – Marine Schedule:

(a) recognised international or national significance;

(b) threat status and rarity;

(c) uniqueness or distinctiveness;

(d) diversity;

(e) stepping stones, buffers and migration pathways; and

(f) representativeness.

(4) Include an area of indigenous vegetation or a habitat of indigenous fauna in the coastal marine area in the Schedule 4 Significant Ecological Areas – Marine Schedule if the area or habitat is significant.

(5) Avoid adverse effects on areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and Schedule 4 Significant Ecological Areas – Marine Schedule.

(5A) Improve the resilience of areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and of Schedule 4 Significant Ecological Areas – Marine Schedule to the effects of climate change.

B7.3. Freshwater systems

B7.3.1. Objectives

(1) Degraded freshwater systems are enhanced.

(2) Loss of freshwater systems is minimised.

(3) The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.

B7.3.2. Policies

Integrated management of land use and freshwater systems

(1) Integrate the management of subdivision, use and development and freshwater systems by undertaking all of the following:

(a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of new growth or intensification;

(b) ensuring catchment management plans form part of the structure planning process;

(c) controlling the use of land and discharges to minimise the adverse effects of runoff on freshwater systems and progressively reduce existing adverse effects where those systems or water are degraded; and

(d) avoiding development where it will significantly increase adverse effects on freshwater systems, unless these adverse effects can be adequately mitigated.

Management of freshwater systems

(2) Identify degraded freshwater systems.

(3) Promote the enhancement of freshwater systems identified as being degraded to progressively reduce adverse effects.

(4) Avoid the permanent loss and significant modification or diversion of lakes, rivers, streams (excluding ephemeral streams), and wetlands and their margins, unless all of the following apply:

(a) it is necessary to provide for:

(i) the health and safety of communities; or

(ii) the enhancement and restoration of freshwater systems and values; or

(iii) the sustainable use of land and resources to provide for growth and development; or

(iv) infrastructure;

(b) no practicable alternative exists;

(c) mitigation measures are implemented to address the adverse effects arising from the loss in freshwater system functions and values; and

(d) where adverse effects cannot be adequately mitigated, environmental benefits including on-site or off-site works are provided.

(5) Manage subdivision, use, development, including discharges and activities in the beds of lakes, rivers, streams, and in wetlands, to do all of the following:

(a) protect identified Natural Lake Management Areas, Natural Stream Management Areas, and Wetland Management Areas;

(aa) improve resilience to the effects of climate change;

(b) minimise erosion and modification of beds and banks of lakes, rivers, streams and wetlands;

(c) limit the establishment of structures within the beds of lakes, rivers and streams and in wetlands to those that have a functional need or operational requirement to be located there; and

(d) maintain or where appropriate enhance:

(i) freshwater systems not protected under Policy B7.3.2(5)(a);

(ii) navigation along rivers and public access to and along lakes, rivers and streams;

(iii) existing riparian vegetation located on the margins of lakes, rivers, streams and wetlands; and

(iv) areas of significant indigenous biodiversity.

(6) Restore and enhance freshwater systems where practicable when development, change of land use, and subdivision occur.

B7.4. Coastal water, freshwater and geothermal water

B7.4.1. Objectives

(1) Coastal water, freshwater and geothermal water are used within identified limits while safeguarding the life-supporting capacity and the natural, social and cultural values of the waters.

(2) The quality of freshwater and coastal water is maintained where it is excellent or good and progressively improved over time where it is degraded.

(3) Freshwater and geothermal water is allocated efficiently to provide for social, economic and cultural purposes.

(4) The adverse effects of point and non-point discharges, in particular stormwater runoff and wastewater discharges, on coastal waters, freshwater and geothermal water are minimised and existing adverse effects are progressively reduced.

(5) The adverse effects from changes in or intensification of land use on coastal water and freshwater quality are avoided, remedied or mitigated.

(6) Mana Whenua values, mātauranga and tikanga associated with coastal water, freshwater and geothermal water are recognised and provided for, including their traditional and cultural uses and values.

B7.4.2. Policies

Integrated management

(1) Integrate the management of subdivision, use, development and coastal water and freshwater, by:

(a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of growth; and

(b) requiring catchment management planning as part of structure planning;

(c) controlling the use of land and discharges to minimise the adverse effects of runoff on water and progressively reduce existing adverse effects where those water are degraded; and

(d) avoiding development where it will significantly increase adverse effects on water, unless these adverse effects can be adequately mitigated.

National Policy Statement for Freshwater Management

(2) Give effect to the National Policy Statement for Freshwater Management 2014 by establishing all of the following:

(a) freshwater objectives;

(b) freshwater management units and, for each unit:

(i) values;

(ii) water quality limits;

(iii) environmental flows and/or levels; and

(c) targets and implementation methods where freshwater units do not meet freshwater objectives.

(3) Integrate Mana Whenua values, mātauranga and tikanga when giving effect to the National Policy Statement for Freshwater Management 2014 in establishing all of the following:

(a) water quality limits for freshwater, including groundwater;

(b) the allocation and use of freshwater resources, including groundwater; and

(c) measures to improve the integrated management of the effects of the use and development of land and freshwater on coastal water and the coastal environment.

Water quality

(4) Identify areas of coastal water and freshwater bodies that have been degraded by human activities.

(5) Engage with Mana Whenua to:

(a) identify areas of degraded coastal water where they have a particular interest; and

(b) remedy or, where remediation is not practicable, mitigate adverse effects on these degraded areas and values.

(6) Progressively improve water quality in areas identified as having degraded water quality through managing subdivision, use, development and discharges.

(7) Manage the discharges of contaminants into water from subdivision, use and development to avoid where practicable, and otherwise minimise, all of the following:

(a) significant bacterial contamination of freshwater and coastal water;

(b) adverse effects on the quality of freshwater and coastal water;

(c) adverse effects from contaminants, including nutrients generated on or applied to land, and the potential for these to enter freshwater and coastal water from both point and non-point sources;

(d) adverse effects on Mana Whenua values associated with coastal water, freshwater and geothermal water, including wāhi tapu, wāhi taonga and mahinga kai; and

(e) adverse effects on the water quality of catchments and aquifers that provide water for domestic and municipal supply.

Sediment runoff

(8) Minimise the loss of sediment from subdivision, use and development, and manage the discharge of sediment into freshwater and coastal water, by:

(a) promoting the use of soil conservation and management measures to retain soil and sediment on land; and

(b) requiring land disturbing activities to use industry best practice and standards appropriate to the nature and scale of the land disturbing activity and the sensitivity of the receiving environment.

Stormwater management

(9) Manage stormwater by all of the following:

(a) requiring subdivision, use and development to:

(i) minimise the generation and discharge of contaminants;

(ii) minimise adverse effects on freshwater and coastal water and the capacity of the stormwater network; and

(iii) improve resilience to the effects of climate change;

(b) adopting the best practicable option for every stormwater diversion and discharge; and

(c) controlling the diversion and discharge of stormwater outside of areas serviced by a public stormwater network.

Wastewater

(10) Manage the adverse effects of wastewater discharges to freshwater and coastal water by all of the following:

(a) ensuring that new development is supported by wastewater infrastructure with sufficient capacity to serve the development;

(b) progressively reducing existing network overflows and associated adverse effects by all of the following:

(i) making receiving environments that are sensitive to the adverse effects of wastewater discharges a priority;

(ii) adopting the best practicable option for preventing or minimising the adverse effects of discharges from wastewater networks including works to reduce overflow frequencies and volumes;

(iii) ensuring plans are in place for the effective operation and maintenance of the wastewater network and to minimise dry weather overflow discharges;

(iv) ensuring processes are in place to mitigate the adverse effects of overflows on public health and safety and the environment where the overflows occur;

(c) adopting the best practicable option for minimising the adverse effects of discharges from wastewater treatment plants; and

(d) ensuring on-site wastewater systems avoid significant adverse effects on freshwater and coastal water.

Freshwater and geothermal water quantity, allocation and use

(11) Promote the efficient allocation of freshwater and geothermal water by all of the following:

(a) establishing clear limits for water allocation;

(b) avoiding over-allocation of water, including phasing out any existing over-allocation;

(c) safeguarding spring flows, surface waterbody base flows, ecosystem processes, life-supporting capacity, the recharge of adjacent aquifers, and geothermal temperature and amenity; and

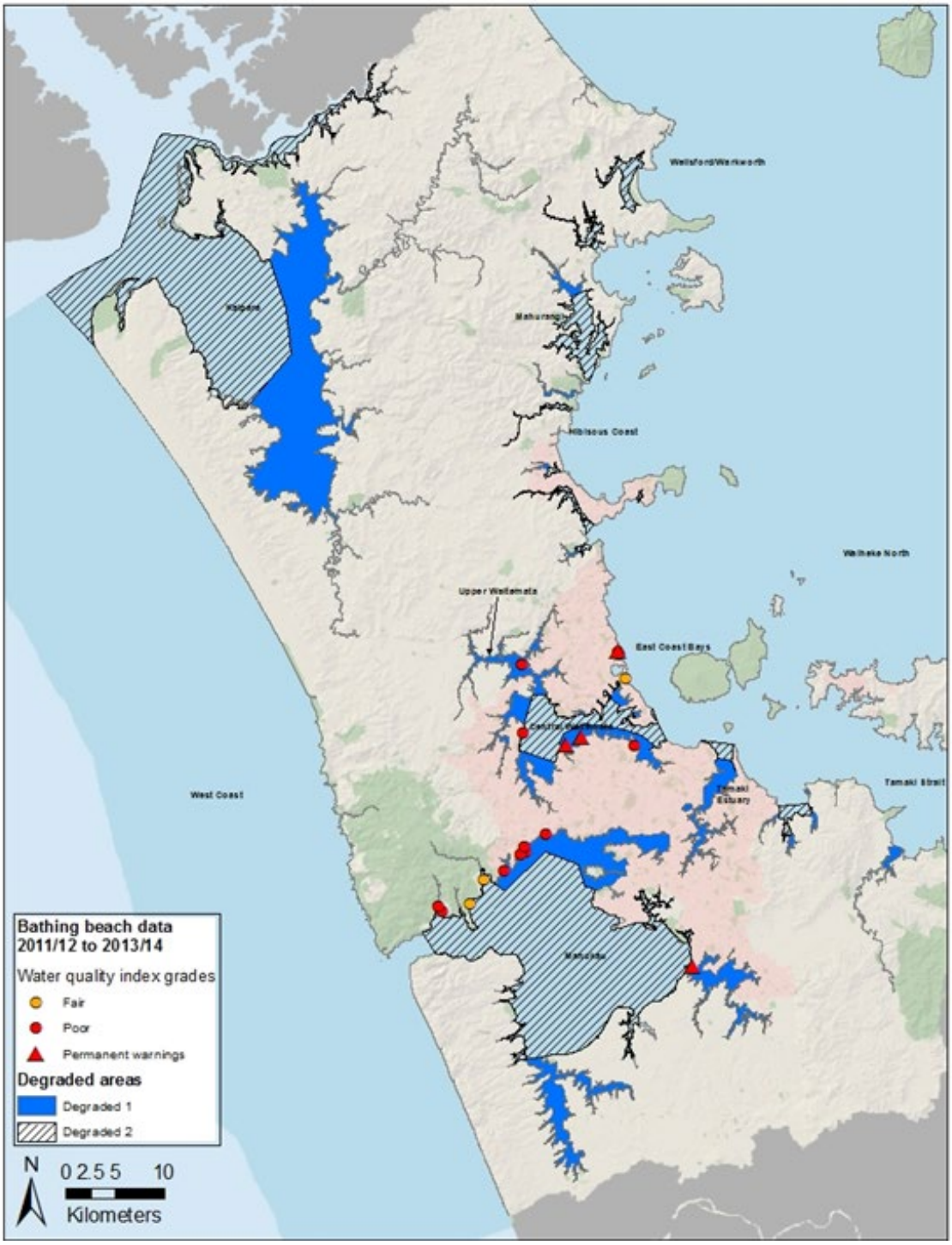
(d) providing for the reasonable requirements of domestic and municipal water supplies.

(12) Promote the efficient use of freshwater and geothermal water.

(13) Promote the taking of groundwater rather than the taking of water from rivers and streams in areas where groundwater is available for allocation.

(14) Enable the harvesting and storage of freshwater and rainwater to meet increasing demand for water and to manage water scarcity conditions, including those made worse by climate change.

Figure B7.4.2.1: Areas of coastal water that have been degraded by human activities



B7.5. Air

B7.5.1. Objectives

(1) The discharge of contaminants to air from use and development is managed to improve region-wide air quality, enhance amenity values in urban areas and to maintain air quality at appropriate levels in rural and coastal areas.

(2) Industry and infrastructure are enabled by providing for reduced ambient air quality amenity in appropriate locations.

(3) Avoid, remedy or mitigate adverse effects from discharges of contaminants to air for the purpose of protecting human health, property and the environment.

B7.5.2. Policies

(1) Manage discharge of contaminants to air from use and development to:

(a) avoid significant adverse effects on human health and reduce exposure to adverse air discharges;

(b) control activities that use or discharge noxious or dangerous substances;

(c) minimise reverse sensitivity effects by avoiding or mitigating potential land use conflict between activities that discharge to air and activities that are sensitive to air discharges;

(d) protect activities that are sensitive to the adverse effects of air discharges;

(e) protect flora and fauna from the adverse effects of air discharges;

(f) enable the operation and development of infrastructure, industrial activities and rural production activities that discharge contaminants into air, by providing for low air quality amenity in appropriate locations;

(2) Implement Policies B7.5.2(1)(a)-(f) by a combination of regulatory and non-regulatory methods that include:

(a) managing industrial discharges to air; and

(b) reducing emissions from domestic fires; and

(c) reducing emissions from motor vehicles.

B7.6. Minerals

B7.6.1. Objectives

(1) Auckland's mineral resources are effectively and efficiently utilised.

B7.6.2. Policies

(1) Provide for mineral extraction activities within appropriate areas to ensure a secure supply of extractable minerals for Auckland's continuing development.

(2) Encourage the use of recycled mineral material, construction waste and demolition waste to supplement mineral supply.

(3) Identify extractable mineral deposits for future use and safeguard the areas containing regionally significant extractable deposits from inappropriate land use and development.

(4) Require mineral extraction activities to be established and operated in ways which avoid, remedy or mitigate significant adverse effects on the environment.

(5) Avoid locating sensitive activities adjacent to regionally significant mineral resources unless they can avoid compromising existing and future mineral extraction.

(6) Enable industries that use the products of mineral extraction activities to locate on sites adjoining quarry zones.

B7.7. Explanation and principal reasons for adoption

Indigenous biodiversity

Natural ecosystems and indigenous biological diversity are important constituents of the life-supporting capacity of the natural resources of the entire Auckland region. Healthy and functioning ecosystems contribute to improved water quality, soil conservation and the capacity to assimilate greenhouse gases, as well as contributing to the character and identity of Auckland.

Development has adversely affected Auckland's natural heritage resulting in loss of habitats and a reduction of indigenous biodiversity. Also the introduction of animal and plant pests has threatened the viability of some indigenous ecosystems and species. Coastal and marine ecosystems are also subject to change, damage or destruction from inappropriate subdivision, use and development, as well as natural processes.

Areas containing threatened ecosystems and species require effective management to protect them, and enhance their resilience which is important for the long-term viability of indigenous biodiversity and to help respond to the effects of climate change. Effectively addressing these issues requires a combination of regulatory and voluntary efforts.

Areas of high ecological value have been identified as significant ecological areas using significance factors set out in the schedules of the Unitary Plan. (See Schedule 3 Significant Ecological Areas – Terrestrial Schedule and Schedule 4 Significant Ecological Areas – Marine Schedule.) The coastal marine area has not yet been comprehensively surveyed for the purpose of identifying marine significant ecological areas. Those that have been identified may under-represent the extent of significant marine communities and habitats present in the sub-tidal areas of the region.

The objectives and policies seek to promote the protection of significant vegetation and fauna and the maintenance of indigenous biodiversity by:

- evidence-based factors to identify areas of significant indigenous biodiversity;
- identifying areas of ecological significance;
- promoting restoration efforts to improve the quality, functioning and extent of these areas;
- providing for Mana Whenua's role as owners of land with a high proportion of significant indigenous biodiversity and as kaitiaki of their rohe;
- establishing a management approach which seeks to avoid adverse effects on or degradation of significant indigenous biodiversity and requires that, where adverse effects do arise from activities, they are remedied, mitigated or offset;
- providing for reasonable use by landowners;
- recognising the particular pressure the coastal environment is under from use and development; and
- recognising that there are some uncertainties in the management of indigenous biodiversity for which a precautionary response is appropriate.

Freshwater and geothermal water

Auckland is characterised by relatively small and shallow natural lakes, remnant wetlands, a few larger rivers and a network of small, shallow and short streams. Groundwater aquifers underlie both urban and rural areas. There are also geothermal water resources in parts of Auckland. The sources of municipal water supply for Auckland include a number of water supply lakes created by dams, rivers and groundwater aquifers. Maintaining the quality of freshwater, managing its use and making more efficient use of available supply are key policy approaches.

Freshwater systems are made up of lakes, rivers, streams and wetlands (including their headwaters, margins and associated flood plains) and aquifers. They are valued for:

- their ecological and biodiversity values;
- their natural character, landscape, amenity and recreational values;
- their use for navigation and access; and
- municipal, domestic and stock water supply.

Freshwater systems also provide an essential link between the land and the sea, including natural processes to regulate runoff during storms, receive and filter contaminants, and allow aquatic fauna to reach spawning areas and upstream habitats. Rivers and streams have an essential role as a natural component of an urban stormwater collection and management system.

The loss of freshwater systems and degradation of their values, particularly small streams, is a significant issue facing Auckland. Loss occurs through the piping and infilling of streams, including headwater reaches. Degradation can result from many causes, including sediment runoff from land development and the runoff of contaminants from urban and rural land uses. Increased impervious surfaces in urban areas can change the amount and intensity of surface water runoff which can create or worsen

flooding events and exacerbate the erosion of rivers and streams. In rural areas lakes, rivers and streams are affected by stock access to stream beds, loss of riparian vegetation, and reduced water quality from the runoff of fertiliser, sediment and other contaminants from primary production activities. Infrastructure establishment and upgrading may also affect all types of freshwater resources. Runoff into freshwater systems can also lead to undesirable impacts on coastal water quality and use and enjoyment of the coastal marine area.

Development needs be managed to facilitate the drainage function of freshwater systems while retaining the natural, recreational and amenity values of the system. Appropriate provisions need to be put in place to ensure that, as far as practicable, sediment is retained on the land and contaminants are caught and kept out of rivers, streams and coastal waters. The adverse effects of stormwater discharges cannot solely or effectively be managed ‘at the end of the pipe’.

Stormwater management must also encompass the land use activities that contribute contaminants to the drainage network. Integrated land and water management is an important focus of this approach. In many situations development can be designed so as to provide for adequate drainage while retaining natural water systems and enhancing them where they are degraded. Intensification and redevelopment can also offer opportunities to restore and enhance degraded freshwater systems.

In urban areas particular attention is given to the management of the quantity and quality of discharges from stormwater network systems and of overflow discharges from the public wastewater network. These discharges have the greatest adverse effects on the physical form and quality of urban streams, and are also a major source of degradation of coastal water quality and ecosystem values.

Some freshwater bodies outside urban areas have high biodiversity and/or water quality. These are included as management areas, with a protection-oriented management approach.

Surface water bodies and groundwater aquifers cannot supply all of Auckland's future water needs without more efficient management approaches to the allocation and use of available freshwater. The principal consumptive use of freshwater in Auckland is for municipal water supply.

Mana Whenua are responsible for the kaitiakitanga of water, its spiritual essence to cleanse, and its importance to the ongoing well-being of people. Land-based activities can compromise the ways in which Mana Whenua value water in rivers and streams. The mixing of different types of water through discharges, or by the diversion of these water bodies is contrary to Mana Whenua views on how water should be managed.

All of these matters need to be addressed in an integrated manner to minimise adverse effects on freshwater systems during subdivision, use and development. The National Policy Statement for Freshwater Management 2014 and the New Zealand Coastal Policy Statement 2010 provide both short-term and long-term directions that the Unitary Plan has to implement.

Areas of degraded water quality

Water quality is fundamental to a range of use and values, to the ecosystem function and the life-supporting capacity of the coast. The coast is the receiving environment for discharges, both from historic and present activities that are undertaken in the coastal marine area and from land. The objectives and policies seek to avoid on-going decline in water quality, to improve water quality over time through a range of mechanisms and so to give effect to Policy 21 of the New Zealand Coastal Policy Statement 2010. They also recognise the significance and value of the coastal marine area for Mana Whenua.

Auckland's coastal receiving environments are under continued pressure from both coastal and land-based (rural and urban) activities. Inner harbour and estuarine areas where sediments and contaminants accumulate are usually the most adversely affected areas. This is particularly the case in the Waitematā and Manukau Harbours, especially the Tāmaki Estuary and the Mangere Inlet and around marinas and ports. The best water quality is found at locations that are more exposed to open ocean water currents and have less development in their catchments, or have received upgrades to the network infrastructure.

Degradation of coastal receiving environments can have significant adverse effects on recreational, amenity, Mana Whenua and economic values.

Degraded areas have been identified based on assessments of water quality, sediment contamination and benthic health. While two classes of degraded areas have been identified, the distinction does not imply a ranking or any priority for action. It is important that both areas be considered together because of the dynamic and interconnected nature of coastal environments and because the classes may change over time as more knowledge is gained and as pressures on receiving environments change. There is evidence that even moderate levels of degradation can result in ecosystem level changes, and it is not yet known how reversible these changes might be.

Identifying an area as degraded does not imply that it has no value. Degraded areas may contain valuable habitats, support important species, or form critical connections with other systems and many are identified as significant ecological areas.

Air

Motor vehicles, domestic fires and, to a lesser extent, industry are the main sources of air pollution in urban areas of Auckland. Emissions in urban areas cause air quality to exceed national and international standards and guidelines from time to time, in both localised areas and across greater Auckland. In rural and especially coastal areas, air quality is usually very good. Rural air pollution is normally more localised and comes from outdoor fires, use of agricultural chemicals and odour from agricultural activities.

Vehicle emissions and domestic fires, which are the major sources of air pollutants in Auckland, are not directly regulated under the Unitary Plan but by other controls. Some air quality effects may be indirectly addressed by the objectives and policies for a compact urban form and a centres-based urban development strategy.

Industrial emissions can have localised adverse effects on amenity and some industrial emissions can contain noxious or dangerous substances that are hazardous to human health. Industry emissions therefore need to be managed by the reduction, containment

and treatment of the discharge at its source to avoid or reduce these effects. When new sensitive activities are put in close proximity to activities with air discharges, reverse sensitivity effects may occur, challenging the long-term operation of the existing activity.

Industry and rural production is vital to our economic prosperity. Accordingly a balance needs to be struck between enabling this activity and achieving acceptable levels of air quality.

National environmental standards for air quality establish health-related ambient air quality standards. These focus mainly on the control of PM particulate matter, but also set maximum acceptable air concentrations for other contaminants such as nitrogen dioxide.

Minerals

Minerals in the context of Auckland include:

- aggregates, such as stone, rock, sand and gravel, for industry, construction and infrastructure;
- limestone deposits for manufacturing fertilisers, roading basecourse and cement;
- silica sand, shells and shingle for construction materials, glass production and beach replenishment purposes;
- iron sand for production of steel; and
- clay for brick, ceramics and pottery products.

Minerals are essential for Auckland's development. In the past, Auckland's quarries have produced nearly 10 million tonnes of aggregates per year. Currently a number of mineral extraction sites still operate in Auckland. Minerals are also imported from other parts of the country, particularly from the northern Waikato area.

The demand for minerals, particularly aggregates, is expected to increase to 15 million tonnes per annum by 2041. This will support growth and development, and renew and maintain buildings, roads and infrastructure.

Given the anticipated increases in demand for and Auckland's dependence on minerals, an accessible supply of minerals is a matter of regional importance. This means that the use of aggregate resources needs to be used as efficiency and effectively as possible

Mineral extraction activities are encouraged to adopt best practice management of their sites to minimise adverse effects on both the natural environment and on the amenity values and quality of life of neighbouring land uses. Greater focus is also given to avoiding reverse sensitivity conflicts between mineral extraction sites and surrounding land uses and giving greater protection to the ongoing supply of minerals for Auckland.

B8. Toitū te taiwhenua - Coastal environment

Te tere i uta

Te tere i tai

The shoals from the shallows and the shoals from the deep

B8.1. Issues

Auckland's coastal environment is a fundamental part of the region's identity. It has high natural, social and cultural values, and economic uses. It is one of the most desirable places in New Zealand for living and recreation.

Subdivision, use and development within the coastal environment need to be in an appropriate location and of an appropriate form.

Some forms of subdivision, use and development are dependent for their operation on the natural and physical resources of the coastal environment or on their location in the coastal environment, and provision needs to be made for these in appropriate locations.

B8.2. Natural character

B8.2.1. Objectives

(1) Areas of the coastal environment with outstanding and high natural character are preserved and protected from inappropriate subdivision, use and development.

(2) Subdivision, use and development in the coastal environment are designed, located and managed to preserve the characteristics and qualities that contribute to the natural character of the coastal environment.

(3) Where practicable, in the coastal environment areas with degraded natural character are restored or rehabilitated and areas of high and outstanding natural character are enhanced.

B8.2.2. Policies

(1) Identify and evaluate areas of outstanding natural character or high natural character considering the following factors:

(a) natural elements, processes and patterns;

(b) biophysical, ecological, geological and geomorphological aspects;

(c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;

(d) the natural movement of water and sediment;

(e) the natural darkness of the night sky;

(f) places or areas that are wild or scenic; and

(g) experiential attributes, including the sounds and smell of the sea, and their context or setting.

(2) Include an area in the coastal environment with outstanding or high natural character in Schedule 8 Outstanding Natural Character and High Natural Character Overlay Schedule.

(3) Preserve and protect areas of outstanding natural character and high natural character from inappropriate subdivision, use and development by:

(a) avoiding adverse effects of activities on natural character in areas of the coastal environment scheduled as outstanding natural character; and

(b) avoiding significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment.

(4) Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects on natural character of the coastal environment not identified as outstanding natural character and high natural character from inappropriate subdivision, use and development.

(4A) Provide for the natural systems that support natural character to respond in a resilient way to the effects of climate change including sea level rise over at least 100 years.

(5) Enable land use practices and restoration projects that will restore, rehabilitate or enhance natural character in outstanding natural character and high natural character areas in the coastal environment.

(6) Provide for the use of transferable development rights to avoid inappropriate subdivision, use and development in or on land adjoining to areas of outstanding natural character and high natural character.

B8.3. Subdivision, use and development

B8.3.1. Objectives

(1) Subdivision, use and development in the coastal environment are located in appropriate places and are of an appropriate form and within appropriate limits, taking into account the range of uses and values of the coastal environment.

(2) The adverse effects of subdivision, use and development on the values of the coastal environment are avoided, remedied or mitigated.

(3) The natural and physical resources of the coastal environment are used efficiently and activities that depend on the use of the natural and physical resources of the coastal environment are provided for in appropriate locations.

(4) Rights to occupy parts of the coastal marine area are generally limited to activities that have a functional need to locate in the coastal marine area, or an operational need making the occupation of the coastal marine area more appropriate than land outside of the coastal marine area.

(5) Uses and developments that have a need to locate on land above and below the mean high water springs are provided for in an integrated manner.

(6) Conflicts between activities including reverse sensitivity effects are avoided, remedied or mitigated.

(7) In areas potentially affected by coastal hazards, including sea level rise over at least 100 years, subdivision, use and development avoid increasing the risk of social, environmental and economic harm.

B8.3.2. Policies

Use and development

(1) Recognise the contribution that use and development of the coastal environment make to the social, economic and cultural well-being of people and communities.

(2) Avoid or mitigate sprawling or sporadic patterns of subdivision, use and development in the coastal environment by all of the following:

(a) concentrating subdivision, use and development within areas already characterised by development and where natural character values are already compromised;

(b) avoiding urban activities in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal, historic heritage and special character; and

(c) ensuring that subdivision, use or development involving land above and below the mean high water springs can provide for any associated facilities or infrastructure in an integrated manner.

(3) Provide for use and development in the coastal marine area that:

(a) have a functional need which requires the use of the natural and physical resources of the coastal marine area;

(b) are for the public benefit or public recreation that cannot practicably be located outside the coastal marine area;

(c) have an operational need making a location in the coastal marine area appropriate and that cannot practicably be located outside the coastal marine area; or

(d) enable the use of the coastal marine area by Mana Whenua for Māori cultural activities and customary uses.

(4) Require subdivision, use and development in the coastal environment to avoid, remedy or mitigate the adverse effects of activities above and below the mean high water springs, including the effects on existing uses and on the coastal receiving environment.

(5) Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown or little understood, but could be significantly adverse.

(6) Consider the purposes for which land or water in the coastal environment is held or managed under any enactment for conservation or protection purposes and:

(a) avoid adverse effects that are significant in relation to those purposes; and

(b) avoid, remedy or mitigate other adverse effects in relation to those purposes.

(7) Set back development from the coastal marine area, where practicable, to protect the natural character and amenity values of the coastal environment.

Ports

(8) Recognise the national and regional significance of the Auckland ports and the need for them to be located within the coastal environment by all of the following:

(a) enabling the efficient and safe operation of the ports and their connection with other transport modes;

(b) enabling the safe navigation and berthing of vessels, including by dredging; and

(c) avoiding or mitigating the adverse effects of activities that may compromise efficient and safe port operations.

Reclamation

(9) Avoid reclamation of land in the coastal marine area unless all of the following apply:

(a) land outside the coastal marine area is not available for the proposed activity;

(b) the activity which requires reclamation can only occur in or adjacent to the coastal marine area;

(c) there are no practicable alternative methods of providing for the activity; and

(d) the reclamation will provide significant regional or national benefit.

Aquaculture

(10) Provide for aquaculture activities in appropriate places and forms and within appropriate limits in the coastal environment, taking into account all of the following:

(a) the quality of water required for the aquaculture activity;

(b) land-based facilities and infrastructure required to support the operation of aquaculture activities; and

(c) the potential social, economic and cultural benefits associated with the operation and development of aquaculture activities.

(11) Recognise that the extraction of minerals and renewable marine energy generation can have social and economic benefits and can be appropriate activities in the coastal environment.

B8.4. Public access and open space

B8.4.1. Objectives

(1) Public access to and along the coastal marine area is maintained and enhanced, except where it is appropriate to restrict that access, in a manner that is sensitive to the use and values of an area.

(2) Public access is restricted only where necessary to ensure health or safety, for security reasons, for the efficient and safe operation of activities, or to protect the value of areas that are sensitive to disturbance.

(3) The open space, recreation and amenity values of the coastal environment are maintained or enhanced, including through the provision of public facilities in appropriate locations.

B8.4.2. Policies

(1) Subdivision, use and development in the coastal environment must, where practicable, do all of the following:

(a) maintain and where possible enhance public access to and along the coastal marine area, including through the provision of esplanade reserves and strips;

(b) be designed and located to minimise impacts on public use of and access to and along the coastal marine area;

(c) be set back from the coastal marine area to protect public open space values and access; and

(d) take into account the likely impact of coastal processes and climate change, including sea level rise over at least 100 years, and be set back sufficiently to not compromise the ability of future generations to have access to and along the coast.

(2) Provide for a range of open space and recreational use of the coastal environment by doing all of the following:

(a) identifying areas for recreational use, including land-based facilities for those uses, where this ensures the efficient use of the coastal environment;

(b) enabling the provision of facilities in appropriate locations that enhance public access and amenity values;

(c) enabling Māori cultural activities and customary use; and

(d) managing uses to avoid conflicts and mitigate risks.

(3) Restrict public access to and along the coastal marine area, particularly walking access, only where it is necessary to do any of the following:

(a) protect public health and safety;

(b) provide for defence, port or airport purposes;

(c) protect areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal, historic heritage and special character;

(d) protect threatened indigenous species;

(e) protect dunes, estuaries and other sensitive natural areas or habitats;

(f) have a level of security necessary to carry out an activity or function that has been established or provided for;

(g) provide for exclusive use of an area to carry out an activity granted an occupation consent under section12 of the Resource Management Act 1991;

(h) enable a temporary activity or special event; or

(i) in other exceptional circumstances sufficient to justify the restriction.

B8.5. Managing the Hauraki Gulf/Te Moana Nui o Toi/Tīkapa Moana

B8.5.1. Objectives

(1) The management of the Hauraki Gulf gives effect to sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000.

(2) Use and development supports the social and economic well-being of the resident communities of Waiheke and Great Barrier islands, while maintaining or, where appropriate, enhancing the natural and physical resources of the islands.

(3) Economic well-being is enabled from the use of the Hauraki Gulf's natural and physical resources without resulting in further degradation of environmental quality or adversely affecting the life-supporting capacity of marine ecosystems.

B8.5.2. Policies

Integrated management

(1) Encourage and support the restoration and enhancement of the Hauraki Gulf's ecosystems, its islands and catchments.

(2) Require the integrated management of use and development in the catchments, islands, and waters of the Hauraki Gulf to ensure that the ecological values and life-supporting capacity of the Hauraki Gulf are protected, and where appropriate enhanced.

(3) Require applications for use and development to be assessed in terms of the cumulative effect on the ecological and amenity values of the Hauraki Gulf, rather than on an area-specific or case-by-case basis.

(4) Maintain and enhance the values of the islands in the Hauraki Gulf.

(5) Avoid use and development that will compromise the natural character, landscape, conservation and biodiversity values of the islands, particularly in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal, historic heritage and special character.

(6) Promote the restoration and rehabilitation of natural character values of the islands of the Hauraki Gulf.

(7) Ensure that use and development of the area adjoining conservation islands, regional parks or Department of Conservation land, does not adversely affect their scientific, natural or recreational values.

(8) Enhance opportunities for educational and recreational activities on the islands of the Hauraki Gulf if they are consistent with protecting natural and physical resources, particularly in areas where natural and physical resources have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal, historic heritage and special character.

(9) Identify and protect areas or habitats, particularly those unique to the Hauraki Gulf, that are:

(a) significant to the ecological and biodiversity values of the Hauraki Gulf; and

(b) vulnerable to modification.

(10) Work with agencies and stakeholders to establish an ecological bottom line, or agreed target, for managing the Hauraki Gulf's natural and physical resources which will do all of the following:

(a) provide greater certainty in sustaining the Hauraki Gulf's ongoing life-supporting capacity and ecosystem services;

(b) assist in avoiding incremental and ongoing degradation;

(c) co-ordinate cross-jurisdictional integrated management and effort to achieve agreed outcomes;

(d) better measure the success of protection and enhancement initiatives;

(e) assist in establishing a baseline for monitoring changes;

(f) enable better evaluation of the social and economic cost-benefits of management; and

(g) provide an expanded green-blue network linking restored island and mainland sanctuaries with protected, regenerating marine areas where the ecological health and productivity of the marine area will be enhanced.

Providing for the relationship of Mana Whenua with the Hauraki Gulf

(11) Work in partnership with Mana Whenua to protect and enhance culturally important environmental resources and values of the Hauraki Gulf that are important to their traditional, cultural and spiritual relationship with the Hauraki Gulf.

(12) Incorporate mātauranga Māori with western knowledge in establishing management objectives for the Hauraki Gulf.

(13) Require management and decision-making to take into account the historical, cultural and spiritual relationship of Mana Whenua with the Hauraki Gulf, and the ongoing capacity to sustain these relationships.

Maintaining and enhancing social, cultural and recreation values

(14) Identify and protect the natural and physical resources that have important cultural and historic associations for people and communities in and around the Hauraki Gulf.

(15) Identify, maintain, and where appropriate enhance, areas of high recreational use within the Hauraki Gulf by managing water quality, development and potentially conflicting uses so as not to compromise the particular values or qualities of these areas that add to their recreational value.

(16) Encourage the strategic provision of infrastructure and facilities to enhance public access and recreational use and enjoyment of the Hauraki Gulf.

Providing for the use of natural and physical resources, and for economic activities

(17) Provide for commercial activities in the Hauraki Gulf and its catchments while ensuring that the impacts of use, and any future expansion of use and development, do not result in further degradation or net loss of sensitive marine ecosystems.

(18) Encourage the strategic provision of infrastructure and facilities that support economic opportunities for the resident communities of Waiheke and Great Barrier islands.

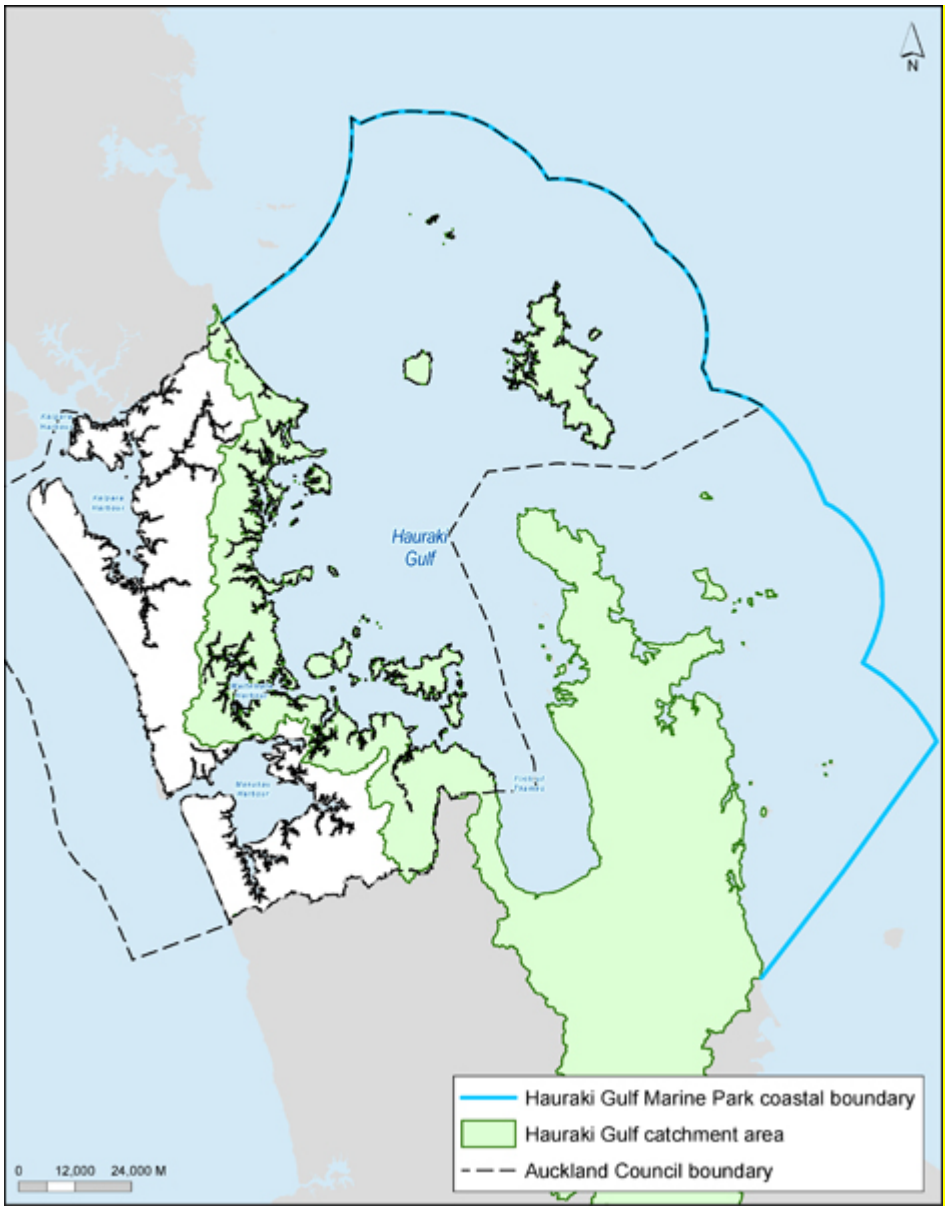
(19) Promote economic development opportunities that complement the unique values of the islands and the Hauraki Gulf.

(20) Promote the national significance of the Hauraki Gulf Marine Park by:

(a) supporting the development of Auckland's waterfront as the gateway to the Hauraki Gulf; and

(b) promoting the Hauraki Gulf as a visitor destination.

Figure 8.5.3.1: Hauraki Gulf Marine Park



B8.6. Explanation and principal reasons for adoption

The coastal environment includes the coastal marine area, islands within the coastal marine area and the area landward of the line of mean high water springs determined by the natural and physical elements, features and processes associated with the coast, including vegetation, landscape, landforms, coastal processes and the other matters included in Policy 1(2) of the New Zealand Coastal Policy Statement 2010. (Refer Figure 1).

Coastal areas all have their own distinct qualities, values and uses and share a rich history of Māori and European settlement. The coast is one of the earliest places of human settlement in New Zealand and continues to play a fundamental role in the character and identity of Auckland. The coastal environment and the resources of the coastal marine area comprise some of the most important taonga to Mana Whenua, who have a traditional and on-going cultural relationship with the coast.

Auckland's richly varied coastal environment is a finite resource with high environmental, social, economic and cultural values. Its coasts and harbours are among its most highly valued natural features. It is the location of New Zealand's largest commercial port and international airport. The marine industry, transport and aquaculture activities all contribute to social and economic well-being. The coastal environment also contains potentially significant renewable energy resources. It is a highly desirable location for often competing residential, commercial, industrial and recreational uses of both land and water. These demands will increase as Auckland grows.

The coastal marine area also provides a range of ecosystem services, including providing food, assimilating discharges from land into coastal waters and enabling a range of coastal uses that support the economic well-being pf people and communities. Land-based activities have a significant effect on the health of the marine environment. Sediment, contaminants and litter that are carried by waterways or pipes into the sea affect water quality and the ecological health of the coast, and are major environmental issues.

The many uses made of the coast have to be managed to ensure that they do not threaten the life-supporting capacity of the marine environment, as a healthy marine environment is fundamental to many of the activities and values of the coast. There is a need to ensure integrated management of activities on both the land and sea to ensure the ecosystem services and values of the coastal environment are maintained.

The importance of the coastal environment is reflected in the statutory resource management framework, particularly as identified in sections 6 and 7 of the Resource Management Act 1991 and as set out in the New Zealand Coastal Policy Statement 2010. The outstanding quality and diversity of the natural resources of the Hauraki Gulf and its islands has been recognised through their inclusion in the Hauraki Gulf Marine Park. In addition, section 10 of the Hauraki Gulf Marine Park Act 2000 requires that the national significance and management directives in section 7 and 8 of that Act be treated as a New Zealand coastal policy statement for the Hauraki Gulf and elevates the inter-relationship between the Hauraki Gulf, its islands, and catchments, and the ability of the

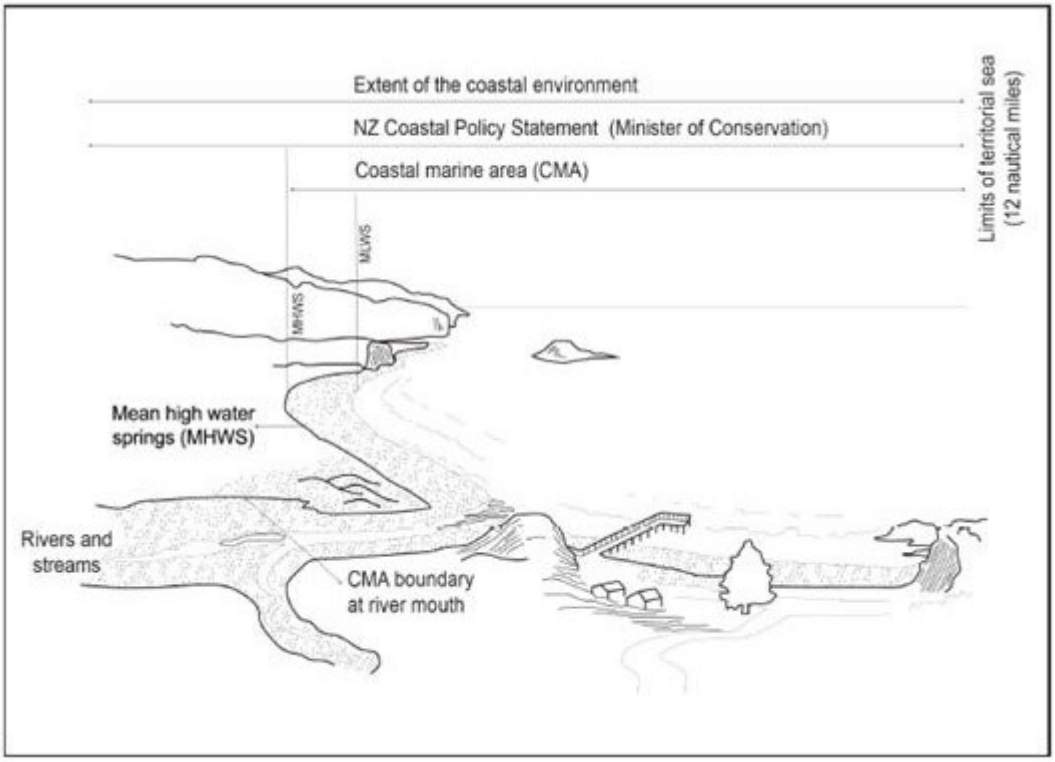
Gulf to sustain the life-supporting capacity of the environment of the Hauraki Gulf and its islands, to matters of national significance.

Auckland's coastal environment is used for a range of recreation activities and valued as an open space resource. There is a public expectation of rights of use and access to and along the coast as recognised and provided for in the Resource Management Act 1991 and the New Zealand Coastal Policy Statement 2010 and under the Marine and Coastal Area (Takutai Moana) Act 2011. However there can be needs to restrict public access in certain circumstances, including for safety, security and biosecurity reasons, or to enable the carrying out of activities, such as port or marine industry.

In addition to the objectives and policies in this section, the values of the coastal environment are recognised and provided for in the objectives and policies of the regional policy statement relating to:

- natural heritage (section B4)
- historic heritage and special character (section B5)
- natural resources (section B7)
- Mana Whenua (section B6)

Figure 1: Extent of the coastal environment



Natural character

Outstanding natural character areas are the iconic, scenic and wilderness areas where the sights, features, and sounds are those of nature and where human-made influences are absent or minor and subservient in the context of the natural environment. These areas provide an important touchstone with nature for an increasingly urbanised population. Areas of high natural character often include rural land used for primary production. Although these areas may lack the same wilderness value as outstanding areas, there is still a significant predominance of naturalness.

Areas of outstanding or high natural character are an increasingly scarce and valuable resource. Auckland's growing population, together with the desire to live near the coast, means that land in the coastal environment is highly valued. It is important that future use and development of largely unmodified freshwater areas is managed to ensure their values are retained for the enjoyment of future generations.

Section 6(a) of the Resource Management Act 1991 requires the Unitary Plan to recognise and provide for the preservation of the natural character of the coastal environment and the protection of it from inappropriate subdivision, use and development. To do that, policy 13 of the New Zealand Coastal Policy Statement 2010 directs that areas with high and outstanding natural character value be identified, that the adverse effects of activities on the natural character of these areas be avoided and that in all other areas significant adverse effects of activities on natural character be avoided.

Land within the coastal environment, including some areas identified as having high natural character, is often used for primary production purposes. The ongoing use of this land for such activities is enabled. Changes that would affect the values of these areas need to be managed to ensure these values are retained in the long-term.

Highly modified areas of the coastal environment still contain elements or features that contribute to their natural character. This may be vegetation, a significant landform, or in areas such as the waterfront, tidal movement and sights and sounds of the sea. Use and development in such areas should avoid significant adverse effects and avoid, remedy or mitigate other effects on the elements or features that contribute to the natural character value of that area.

Subdivision, use and development

The objectives and policies recognise that the coastal environment is a finite resource with a range of values that need to be provided for. As Auckland grows the coastal environment is under increasing pressure for use and development and its natural and physical resources must be used efficiently to ensure it is able to sustain the needs of future generations.

The objectives and policies provide guidance to ensure that subdivision, use and development in the coastal environment is appropriate by:

- ensuring it is located in appropriate areas, taking into account the values identified and the strategic direction for managing subdivision, use and development in the coastal environment, in addition to the values of the coastal environment that need to be considered in other parts of the plan;

- recognising that some forms of use and development rely on the use of the natural and physical resources of the coastal environment, for example renewable energy generation, and that this should be provided for in appropriate locations;
- recognising that the coastal marine area is a limited and highly valued public resource, and that use, development in the coastal marine area should be for activities that have a functional need to be undertaken below mean high water springs and cannot be undertaken on land such as wharves, jetties, aquaculture and moorings;
- providing for activities associated with the on-going operation of infrastructure and existing activities in the coastal marine area, including Auckland's largest commercial port and airport recognising the social and economic benefit they provide, subject to managing the adverse effects;
- requiring the impacts of land use activities on the coastal marine area be taken into account, including impacts on water quality, and that the effects on established coastal marine area activities like aquaculture, port activities, and recreational use; and
- requiring that both the landward and seaward aspects of use and development be considered in an integrated manner, for example the parking and access on land that may be provided as part of an activity in the coastal marine area.

Subdivision, use and development, including redevelopment, needs to take into account the risk of being affected by coastal hazards, including the effects of climate change, and avoid increasing the future risk of social, environmental and economic harm.

Public access and open space

Both the Resource Management Act 1991 (section 6(d)) and the New Zealand Coastal Policy Statement 2010 (Policies 18 and 19) recognise the national significance of maintaining and providing public access, particularly walking access, to and along the coast, and to recognise the significant open space values of the coast.

The coast is one of Auckland's most highly used and valued open space areas. It is used for a range of recreational activities and will be subject to increasing pressure as Auckland grows. To meet these growing needs it will be necessary to work towards linking walking access around the coast and to provide facilities such as boardwalks and boat ramps in appropriate locations. In parts of the coast it may be appropriate to identify areas for a particular recreational activity, in order to make the most efficient use of coastal space and to avoid conflicts between activities.

Public access needs to be restricted in some circumstances to ensure public health and safety, enable the safe use and operation of activities provided for in the coastal marine area, and to protect sensitive areas. This is consistent with Policy 19 (3) of the New Zealand Coastal Policy Statement 2010.

The objectives and policies recognise that:

- subdivision, use and development can have a significant impact on public open space and access. They may enhance access through the provision of esplanade reserves and open space areas, or the design and form of development can limit or detract from open space value and public access;
- the likely future impact of coastal erosion and sea level change needs to be taken into account in considering the appropriate width of reserves and setbacks from the coastal edge, particularly for new greenfield development. There is otherwise a risk that coastal reserves will erode and access will be lost, or that foreshore protection works will be required, if they are to be retained in the long term;
- the provision of facilities, including boardwalks, boat ramps and pontoons can considerably enhance public access and amenity values. Facilities should be enabled in locations where there is high recreational use and it would enhance public access and use of the coast;
- as Auckland grows and there is greater intensification and less private open space it will be important to ensure that there continue to be areas that people can still 'escape' the city and experience wilderness values. These areas need to be managed to ensure changes to access, including car-parking, or changing nature of access (e.g. low-impact walking tracks to formed accessways or vehicle access) do not result in losing the wilderness experience these areas are valued for; and
- restrictions on public access to or along the coastal marine area may need to be limited where it is necessary to protect public health and safety or the values of areas sensitive to disturbance. Restrictions may also be necessary to enable the efficient operation of activities undertaken in the coastal environment, including port, airport and marine industry activities, including access restrictions necessary for customs, security and biosecurity requirements. Some activities in the coastal marine area are granted rights of occupation under section 12 (2) of the Resource Management Act 1991, for example aquaculture or moorings, which require public access to be restricted or limited in parts of the coastal marine area.

Managing the Hauraki Gulf/Te Moana Nui o Toi/Tīkapa Moana

The provisions of section 55 of the Resource Management Act 1991 apply as though sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000 were a national policy statement and a regional council or a territorial authority must take action in accordance with that section.

The objectives and policies provide guidance on giving effect to the Hauraki Gulf Marine Park Act 2000 by:

- recognising the need to integrate the management of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments;
- promoting restoration efforts on islands and maintaining the values of conservation islands;

- supporting protection of areas of significant ecological value, including linkages between land and sea;
- promoting use and development that provides for social and economic opportunities while avoiding further degradation of the marine environment of the Gulf;
- recognising the significance of the open space, recreation and heritage values of the Gulf;
- working with Mana Whenua in managing the Gulf; and
- recognising the need for collaboration in achieving the outcome sought for the Gulf as management of the catchments, marine area and islands is split between different councils and agencies and controlled under different legislation.

B10. Ngā tūpono ki te taiao - Environmental risk

Kia o-whiti, kia mahara te ao tūroa

Vigilance and consideration of the natural environment.

B10.1. Issues

Natural hazards and climate change

Auckland's growth will increase pressure to develop areas more susceptible to natural hazards. There may be conflict between where people want to live and where they can live safely, particularly in some coastal areas. Some existing development, including infrastructure, is already located on land that may be subject to natural hazards. This needs managing to ensure that the risk is not increased.

Climate is changing, in both the short and long term. This creates significant risks, (including exacerbating natural hazards), uncertainties and challenges for Auckland. How the region manages land use in response to climate change will determine the resilience of Auckland's economy, environment, and communities in the future.

Hazardous substances

Auckland contains the largest quantities of hazardous substances of any region in New Zealand. In many instances, these are located close to residential areas and valued environmental areas such as the groundwater aquifer system, and the Waitematā and Manukau harbours

If hazardous substances are not stored, handled, located or transported with proper care they can affect the health and safety of people working and living in these areas and the natural environment.

Contaminated land

The use of chemicals and hazardous substances in a range of industries and activities has resulted in the contamination of sites within the region.

Contamination of soil or groundwater can affect people's health and safety, limit land use, reduce land value, and degrade ecosystems.

Contaminated sites need to be identified, assessed, managed and where necessary remediated to minimise risks to public health and the environment.

Genetically modified organisms

The outdoor use of genetically modified organisms could adversely affect the environment, economy and social and cultural resources and values.

There is disagreement concerning the effects of genetically modified organisms in the environment and the level of risk of irreversible adverse effects.

There is also disagreement concerning the relationship between and demarcation of the management regimes for genetically modified organisms under the Hazardous Substances and New Organisms Act 1996 and the Resource Management Act 1991.

Given the potentially broad range of possible genetically modified organisms, the range of risks could be substantial and may be irreversible.

In these circumstances a cautious approach to managing the risks associated with the outdoor use of genetically modified organisms is appropriate.

B10.2. Natural hazards and climate change

B10.2.1. Objectives

(1) Communities are more resilient to natural hazards and the effects of climate change.

(2) The risks to people, property, infrastructure and the environment from natural hazards are not increased in existing developed areas.

(3) New subdivision, use and development avoid the creation of new risks to people, property and infrastructure.

(4) The effects of climate change on natural hazards, including effects on sea level rise, over at least 100 years and on the frequency and severity of storm events, is recognised and provided for.

(5) The functions of natural systems, including floodplains, are protected from inappropriate subdivision, use and development.

(6) The conveyance function of overland flow paths is maintained.

B10.2.2. Policies

Identification and risk assessment

(1) Identify areas potentially affected by natural hazards, giving priority to those at high risk of being affected, particularly in the coastal environment, and including areas susceptible to coastal inundation and erosion as a result of sea level rise over at least 100 years.

(2) Undertake natural hazard identification and risk assessments as part of structure planning.

(3) Ensure the potential effects of climate change are taken into account when undertaking natural hazard risk assessments.

(4) Assess natural hazard risks:

(a) using the best available and up-to-date hazard information; and

(b) across a range of probabilities of occurrence appropriate to the hazard, including, at least, a 100-year timeframe for evaluating flooding and coastal hazards, including sea level rise in response to global warming.

(5) Manage subdivision, use and development of land subject to natural hazards based on all of the following:

(a) the type and severity of potential events, including the occurrence natural hazard events in combination;

(b) the vulnerability of the activity to adverse effects, including the health and safety of people and communities, the resilience of property to damage and the effects on the environment; and

(c) the cumulative effects of locating activities on land subject to natural hazards and the effects on other activities and resources.

(6) Adopt a precautionary approach to natural hazard risk assessment and management in circumstances where:

(a) the effects of natural hazards and the extent to which climate change will exacerbate such effects are uncertain but may be significant, including the possibility of low-probability but high potential impact events, and also sea level rise over at least 100 years; or

(b) the level of information on the probability and/or impacts of the hazard is limited.

Management approaches

(7) Avoid or mitigate the effects of activities in areas subject to natural hazards, such as earthworks, changes to natural and built drainage systems, vegetation clearance and new or modified structures, so that the risks of natural hazards are not increased.

(8) Manage the location and scale of activities that are vulnerable to the adverse effects of natural hazards so that the risks of natural hazards to people and property are not increased.

(9) Encourage activities that reduce, or do not increase, the risks posed by natural hazards, including any of the following:

(a) protecting and restoring natural landforms and vegetation;

(b) managing retreat by relocation, removal or abandonment of structures;

(c) replacing or modifying existing development to reduce risk without using hard protection structures;

(d) designing for relocatable or recoverable structures; or

(e) providing for low-intensity activities that are less vulnerable to the effects of relevant hazards, including modifying their design and management.

(10) Encourage redevelopment on land subject to natural hazards to reduce existing risks and ensure no new risks are created by using a range of measures such as any of the following:

(a) the design and placement of buildings and structures;

(b) managing activities to increase their resilience to hazard events; or

(c) change of use to a less vulnerable activity.

Role of natural systems

(11) Strengthen natural systems such as flood plains, vegetation and riparian margins, beaches and sand dunes in preference to using hard protection structures.

Infrastructure

(12) Minimise the risks from natural hazards to new infrastructure which functions as a lifeline utility by:

(a) assessing the risks from a range of natural hazard events including sea level rise, and low probability but high potential impact events such as tsunami, earthquake and volcanic eruptions;

(b) utilising design, location and network diversification to minimise the adverse effects on infrastructure and to minimise the adverse effects on the community from the failure of that infrastructure.

Coastal hazards

(13) Require areas potentially affected by coastal hazards over the next 100 years to:

(a) avoid changes in land use that would increase the risk of adverse effects from coastal hazards;

(b) not increase, or reduce, the intensity of activities that are vulnerable to the effects of coastal hazards beyond that enabled by the Plan;

(c) in the event of redevelopment, minimise natural hazard risks through the location and design of development; or

(d) where it is impracticable to locate infrastructure outside of coastal hazard areas, then ensure coastal hazard risks are mitigated.

B10.3. Land – hazardous substances

B10.3.1. Objectives

(1) The environment is protected from adverse effects associated with the storage, use, disposal and transport of hazardous substances.

(2) The storage, use, disposal and transport of hazardous substances are provided for and the social and economic benefits of these activities are recognised.

B10.3.2. Policies

(1) Manage the use and development of land for hazardous facilities and industrial or trade activities to avoid adverse effects on human health and the environment and remedy or mitigate these effects where they cannot be avoided.

(2) Manage the use and development of land for hazardous facilities:

(a) so that such facilities are resilient to the effects of natural hazards, including sea level rise over at least 100 years;

(b) to avoid, remedy or mitigate adverse effects on people and property;

(c) to avoid as far as practicable the contamination of air, land, and water; and

(d) to minimise risks caused by natural hazards.

(3) Manage the effects associated with use and development of land for hazardous facilities by all of the following:

(a) restricting the establishment of sensitive activities near hazardous facilities or areas identified for hazardous facilities if the activities are likely to be adversely affected by a hazardous facility or if they have the potential to limit the operation of the hazardous facility;

(b) ensuring new hazardous facilities are not located near sensitive activities unless significant adverse effects, including cumulative effects, are avoided and other adverse effects are mitigated; and

(c) providing areas for hazardous facilities away from sensitive activities so that the facilities may carry out their operations without unreasonable constraints.

B10.4. Land – contaminated

B10.4.1. Objective

(1) Human health and the quality of air, land and water resources are protected by the identification, management and remediation of land that is contaminated.

B10.4.2. Policies

(1) Identify land that is or may be contaminated based on:

(a) sites known to have supported contaminating land use activities in the past;

(b) sites with a significant potential risk to human health; or

(c) sites having significant adverse effects on the environment.

(2) Land which may be contaminated due to having supported contaminating land use activities in the past but has not been investigated will be identified as being potentially contaminated.

(3) Manage or remediate land that is contaminated where:

(a) the level of contamination renders the land unsuitable for its existing or proposed use; or

(b) the discharge of contaminants from the land is generating or is likely to generate significant adverse effects on the environment; or

(c) development or subdivision of land is proposed.

B10.5. Genetically modified organisms

B10.5.1. Objective

(1) The natural and physical resources of Auckland are protected from adverse effects of the outdoor use of genetically modified organisms.

B10.5.2. Policy

(1) Adopt a cautious approach, including adaptive responses, to the outdoor use of genetically modified organisms.

B10.6. Explanation and principal reasons for adoption

Natural hazards and climate change

Auckland is affected by a wide range of natural hazards, including:

- those that occur frequently such as flooding (coastal and freshwater) and land instability; and
- those that occur less frequently including volcano activity, tsunami, earthquakes, meteorological hazards (cyclones, tornadoes, drought) and fire.

The risk that these hazards pose is not just a reflection of the frequency of these events, rather it is made up of a number of factors including:

- the nature and likely scale of the hazard;
- the likelihood of the hazard occurring; and
- the exposure and vulnerability of the things at risk – people, buildings, infrastructure or natural resources.

Predicted changes in climate could have an effect on the environmental processes that cause natural hazard events and should be taken into account when assessing these factors.

Each of these factors needs to be considered to determine the most effective way to reduce or otherwise manage the risks from natural hazards. Some risks can be effectively managed through land use planning and are addressed through objectives, policies and rules in the Unitary Plan or under the building control regime. Some are appropriately addressed through the provision of new or upgraded infrastructure. Other risks are better managed through public education, emergency preparedness, early warnings and insurance.

Existing land use activities in areas prone to natural hazards may cause or worsen risk. New growth and intensification may also cause or worsen risk, depending on the degree to which natural hazards are avoided, mitigated or accepted during planning and development.

The objectives and policies seek to ensure adequate spatial planning to reduce the risk from natural hazards. They also seek to ensure that new development (including infrastructure) is located and designed to deal with the impacts from hazards that may be experienced over their lifetime.

Land - hazardous substances

Industry and commercial activities (including the energy sector), farms and homes may all use, store, transport or dispose of hazardous substances, including fuels, fertilisers, agrichemicals, industrial and commercial gases, solvents, cleaners, oils and corrosive substances. Some of these activities rely on bulk storage and distribution facilities. All activities involving hazardous substances have the potential to create adverse effects if they escape into the environment, burn, explode, or react with each other. Adverse effects resulting from inadequate management or an accidental release or spill, can include contamination of water, soil and air, damage to ecosystems, human health and property.

The storage, use, disposal and transport of hazardous substances are subject to minimum performance requirements that are set by regulations under the Hazardous Substances and New Organisms Act 1996. These requirements apply regardless of circumstances such as activity and location.

Additional land use controls may also be made under the Resource Management Act 1991 for the prevention or mitigation of any adverse effects of the storage, use, disposal and transport of hazardous substances. Land use controls may manage the risk, likelihood and consequence, of adverse effects, such as those resulting from spills, fires and explosions, having regard to the site-specific circumstances of an activity.

To manage the effect of hazardous substances, the Unitary Plan focuses on the facilities and activities which use, store or dispose of hazardous substances, rather than on the substances themselves. New hazardous facilities should not be located near sensitive activities or other hazardous facilities where significant cumulative effects may occur.

Land - contaminated

Contaminated land is an area where the quality of the soil, groundwater or surface water has been compromised by human activities, usually from the manufacture, use, storage, transport and disposal of hazardous substances.

Land contamination can limit the use of land, cause corrosion that may threaten building structures, reduce land value, and directly endanger the health and safety of people through contact with contaminated soil, swallowing food or water from contaminated environments, or breathing vapours or contaminated dust. Contaminants leaching from soil into groundwater or running off into surface water and eventually into the coastal marine area affect water quality, ecosystems and flora and fauna.

Auckland has a legacy of soil contamination from past activities including:

- use of agrichemicals;

- storage and use of petroleum products;
- timber treatment; and
- sheep-dipping.

Identification of contaminated sites is the first step in any management regime. Initial assessments conducted on behalf of the Ministry for the Environment suggest Auckland may have more than 1700 contaminated sites. This assessment has only targeted sites that are, or have been, occupied by activities historically associated with site contamination, rather than sites that have actually been confirmed as contaminated. Systematic identification of sites needs to continue.

To protect human health, the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health was issued in January 2011. This has established soil contaminant standards that protect human health for a range of land uses. It aims to identify and assess land affected by contaminants in soil when the land use changes, or the land is being subdivided, and, if necessary, require the remediation of the site or the containment of the contaminants to make the land safe for human use.

Genetically Modified Organisms

Genetic modification refers to a set of techniques that alter genetic makeup by adding, deleting or moving genes (within or between species) to produce new and different organisms. Genetically modified organisms are products of genetic modification.

The benefits and risks of genetically modified organisms are continually being redefined as biotechnology advances. However, there remains disagreement about the potential adverse effects of genetically modified organisms on natural resources and ecosystems. The risks could be substantial and certain consequences could be irreversible. Once released into the environment, most genetically modified organisms would be very difficult to eradicate. For these reasons, the activity status of genetically modified organism field trials is discretionary and that of genetically modified organisms' releases is prohibited.

The regulation of genetically modified organisms in New Zealand is under the Hazardous Substances and New Organisms Act 1996. The Hazardous Substances and New Organisms Act 1996 establishes a framework for assessment of genetically modified organisms by the Environmental Protection Authority. This Act sets minimum standards for the creation and use of genetically modified organisms and enables the Environmental Protection Authority to set additional conditions for a particular genetically modified organism.

The Council also has jurisdiction under the Resource Management Act 1991 to control discharges of contaminants and land use, including genetically modified organism field trials and genetically modified organism releases. In exercising this jurisdiction, the Council will seek to ensure that adverse effects on the environment are appropriately avoided, remedied or mitigated, including:

- to ensure that those who are using land to release genetically modified organisms are fully accountable for all costs associated with the genetically modified organism activity including taking all practicable steps to avoid unintentional contamination, and to undertake appropriate clean-up, monitoring and remediation;
- to adopt a cautious approach to the management of potential risks (economic, environmental, social and cultural) associated with the outdoor use of genetically modified organisms;
- to address cultural concerns of Mana Whenua.

The Council does not seek to foreclose potential opportunities associated with a particular genetically modified organism that could benefit the community or the area. If it became evident during field trials or in light of new information that release would be of benefit to Auckland and that potential risks can be managed satisfactorily, the status of a particular activity involving a genetically modified organism could be assessed as part of a plan change.