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; and~~.~~

(9) avoids or mitigates the risk from natural hazards.

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~~.~~;and

(i) avoiding natural hazard risks where the risks are significant or managing natural hazard risks where the risks are tolerable or acceptable.

(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~~.~~; and

(c) avoids natural hazard risks where the risks are significant or manages natural hazard risks where the risks are tolerable or acceptable.

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) avoid~~ing~~ areas with significant natural hazard risks or manage the natural hazard risks where the risks are tolerable or acceptable ~~and where practicable avoiding areas prone to natural hazards~~ including coastal hazards and flooding, and including the effects of climate change ~~including~~ and 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~~.~~; and

(f) avoid natural hazard risks where the risks are significant or manage natural hazard risks where the risks are tolerable or acceptable.

(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~~.~~; and

(g) avoid natural hazard risks where the risks are significant or manage natural hazard risks where the risks are tolerable or acceptable.

(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~~.~~; and

(h) avoids natural hazard risks where the risks are significant or manages natural hazard risks where the risks are tolerable or acceptable.

(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 and the risks from natural hazards.

(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 of the risks from natural hazards where the risks are significant ~~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 natural hazards and 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.

(11) Require commercial, retail and industrial activities to be located, designed and developed to avoid natural hazard risks where the risks are significant and manage the natural hazard risks where the risks are tolerable or acceptable.

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 or manage the natural hazard risks where the risks are tolerable or acceptable; and

(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~~ areas with significant natural hazard risks or manages the natural hazard risks where ~~those~~ the risks ~~cannot be adequately remedied or mitigated~~ are tolerable or acceptable;

(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 <u>natural hazards and</u> 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.

(12) Avoid the risks from natural hazards to facilities on areas of public open space where the risks are significant or manage the natural hazard risks where the risks are tolerable or acceptable.

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 natural hazards and 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.

(8) Avoid the risks from natural hazards to social facilities where the risks are significant or manage the natural hazard risk where the risks are tolerable or acceptable.

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 approach to natural hazards is to differentiate the risk based on the likelihood and consequences of the hazard and have different policy approaches applying depending on what the level of risk is.

Where the risk from the hazard is significant the approach is to avoid development and limit further exposure to the hazard risk. Tolerable risk applies to situations where the risk needs to be managed to ensure that it is maintained at a tolerable level. Acceptable risk applies to situations where the risk is low and can be maintained at that level.

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.

B9. Toitū te tuawhenua- Rural environment

Me tupu te ora ki te tuawhenua

Grow your livelihood inland

B9.1. Issues

The Auckland region is not just the location of New Zealand's largest city. Most of the Auckland region's land is rural and contains extensive, productive and valuable areas used for farming (agriculture, horticulture and grazing), rural service industries), forestry and rural recreation. The rural parts of Auckland also contain important natural resources, including native bush, significant ecological areas and outstanding natural landscapes. A significant amount of Māori Land is located in the rural areas of Auckland, some of which contains established marae and/or urupā which may be subject to significant natural hazard risks. The contributions made by rural areas and rural communities to the well-being of the region must be acknowledged and enabled.

The outward expansion of urban areas and people's lifestyle choices and recreational activities place significant pressures on maintaining the amenity values and the quality of the environment in rural areas. Specific issues in the Auckland region are:

- protecting the finite resource of elite quality soils from urban expansion;
- managing subdivision to prevent undue fragmentation of large sites in ways that restrict rural production activities;
- addressing reverse sensitivity effects which rural-residential development can have on rural production activities; ~~and~~
- some marae and/or urupā which may be subject to significant natural hazard risks and there is lack of options for their relocation; and
- managing the opportunities for countryside living in rural areas in ways that provide for rural-residential development in close proximity to urban areas and the larger rural and coastal towns and villages while minimising the loss of rural production land.

B9.2. Rural activities

B9.2.1. Objectives

(1) Rural areas make a significant contribution to the wider economic productivity of, and food supply for, Auckland and New Zealand.

(2) Areas of land containing elite soil are protected for the purpose of food supply from inappropriate subdivision, urban use and development.

(3) Rural production and other activities that support rural communities are enabled while the character, amenity, landscape and biodiversity values of rural areas, including within the coastal environment, are maintained.

(4) Auckland's rural areas outside the Rural Urban Boundary and rural and coastal towns and villages are protected from inappropriate subdivision, urban use and development.

(5) Auckland's rural areas inside the Rural Urban Boundary are not compromised for future urbanisation by inappropriate subdivision, use and development.

B9.2.2. Policies

(1) Enable a diverse range of activities while avoiding significant adverse effects on and urbanisation of rural areas, including within the coastal environment, and avoiding, remedying, or mitigating other adverse effects on rural character, amenity, landscape and biodiversity values.

(2) Minimise the potential for reverse sensitivity effects by:

(a) preventing sensitive activities (such as countryside living) from establishing in areas where rural production activities could be adversely affected; or

(b) requiring sensitive activities (such as new countryside living) to adopt on-site methods to avoid reverse sensitivity effects on rural production activities; and

(c) avoiding subdivision and development that would result in incompatible uses or sensitive activities (such as countryside living) being introduced into areas containing mineral resources for future extraction.

(3) Encourage improved land management practices in rural production areas to progressively reduce and contain adverse environmental effects.

B9.3. Land with high productive potential

B9.3.1. Objectives

(1) Land containing elite soils is protected through land management practices to maintain its capability, flexibility and accessibility for primary production.

(2) Land containing prime soil is managed to enable its capability, flexibility and accessibility for primary production.

(3) The productive potential of land that does not contain elite or prime soil is recognised.

B9.3.2. Policies

(1) Avoid new countryside living subdivision, use and development on land containing elite soil and discourage them on land containing prime soil.

(2) Encourage activities that do not depend on using land containing elite and prime soil to locate outside these areas.

(3) Recognise the productive potential of land that does not contain elite or prime soil and encourage the continued use of this land for rural production.

(4) Provide for non-soil dependent rural enterprises (including post-harvest facilities) on land containing elite or prime soil where there are economic and operational benefits associated with concentrating such enterprises in specific rural localities.

(5) Encourage land management practices that retain the physical and chemical capability of rural soils.

B9.4. Rural subdivision

B9.4.1. Objectives

(1) *[deleted]*

(2) Subdivision does not undermine the productive potential of land containing elite soils.

(3) Subdivision of rural land avoids, remedies or mitigates adverse effects on the character, amenity, natural character, landscape and biodiversity values of rural areas (including within the coastal environment), and provides resilience to effects of natural hazards.

(3A) Te Wāhi Hunuku subdivision of rural land for the relocation of identified marae and urupā avoids or minimises adverse effects on the character, amenity, natural character, landscape and biodiversity values of rural areas (including within the coastal environment).

(4) Land subdivision protects and enhances significant indigenous biodiversity.

B9.4.2. Policies

(1) Enable the permanent protection and enhancement of areas of significant indigenous biodiversity and rehabilitation through subdivision.

(2) Enable subdivision for the following purposes:

(a) the creation of parks and reserves, including esplanade reserves;

(b) the establishment and operation of infrastructure;

(c) rural production purposes;

(d) marae, papakāinga, urupā and other activities that support Māori relationships with their land where this land is managed by the Te Ture Whenua Māori Land Act 1993; and

(e) special circumstances that provide for significant benefit to the local rural community, and that cannot be met through the use of existing titles.

(2A) Provide for very limited rural subdivision for the relocation of established marae and urupā on land managed by the Te Ture Whenua Māori Land Act 1993 to avoid significant natural hazard risks.

(3) Provide for and encourage the transfer of the residential development potential of rural sites to Countryside Living zones to reduce the impact from

in-situ subdivision on rural land, and for title boundaries to be amalgamated to:

(a) promote the productivity of rural land;

(b) manage adverse effects of population growth across all rural areas;

(c) improve environmental outcomes associated with the protection of identified areas of high natural values;

(d) improve the management of reverse sensitivity conflicts; and

(e) avoid unplanned demand for infrastructure in remote areas, or across areas of scattered development.

(4) Provide for new rural lifestyle subdivision in locations and at scales and densities so as to:

(a) avoid areas that would undermine the integrity of the Rural Urban Boundary or compromise the expansion of the satellite towns of Warkworth and Pukekohe, and rural and coastal towns and villages;

(b) protect 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;

(c) avoid land containing elite soil;

(d) avoid where practicable land containing prime soil;

(e) avoid areas that would constrain the operation of existing mineral extraction activities or areas containing mineral resources identified in the plan for future extraction;

(f) maintain or enhance landscape, rural and, where relevant, coastal, character and amenity values;

(g) avoid the potential for reverse sensitivity effects that could hinder the continued operation or growth of existing rural activities, or the establishment of new rural activities; and

(h) safeguard the operation, maintenance, upgrading or development of existing or planned infrastructure.

(5) Encourage the amalgamation and transfer of rural sites to the Countryside Living zone.

B9.5. Principal reasons for adoption

The purpose of sustainable management includes safeguarding the life-supporting capacity of natural resources now and in the future. This includes protecting the productive potential of the land to provide for present and future generations as well as

indigenous biodiversity. It is also to maintain or enhance the character of rural areas for their contribution to regional amenity values, particularly the landscape and natural character.

Rural and coastal towns and villages, and areas zoned for countryside living, play an important role in enabling people to live, work and play in rural areas. They also can accommodate a portion of Auckland's growth.

Auckland, especially areas in Franklin, has land of high productive potential for farming classified as elite land (Land Use Capability Class 1) and prime land (Land Use Capability Classes 2 and 3). This land is mapped on the Land Use Capability maps. The priority in these areas is to maintain the potential for these high quality soils to be used for agricultural purposes, rather than activities that are not dependent on soil quality.

There are other areas of rural Auckland that support specialised horticultural production which are not on Class 1, 2 or 3 soils. These areas have other advantages such as climate, drainage, water availability or established infrastructure that are equally beneficial as soil quality. No matter what type of rural production occurs, retaining land with high productive potential for primary production provides flexibility to improve economic performance, sustainably manage land resources and enable communities to pursue sustainable lifestyles.

Significant areas of land with high productive potential have been lost to the expansion of urban areas and countryside living development. While countryside living opportunities need to be concentrated around the Rural Urban Boundary, they should also be located out of the way of any future urban expansion. As a consequence there will be a loss of some productive land. Countryside living produces a pattern of relatively small sites that are impractical for primary production due to their size and the expectations of owners and occupiers. New countryside living subdivision is directed away from elite and prime land and from other rural areas with recognised local production advantages.

Marae are hubs for the Māori community and are centres for Māori social, economic and cultural leadership. Cultural associations with the whenua (land) mean that many marae and urupā are currently located in coastal environments or near rivers in the rural environment. Where these cultural sites may be subject to significant natural hazard risks, very limited provision is made for the expansion or creation of new rural sites to relocate these taonga and remain in close proximity to the original whenua.

The provisions of the Unitary Plan include provisions that assist in managing activities and their effects on the rural environment to retain and use its productive potential, biodiversity values, rural character and amenity values. This involves recognising that a rural lifestyle is attractive to many people so that countryside living is enabled in identified areas, while also recognising the importance of protecting the productive potential of rural land as well as its rural amenity values.

The policies seek to ensure that uses and subdivision do not undermine or significantly compromise the productive potential of Auckland’s rural areas, while maintaining those qualities which the community values. The policies therefore prevent urban growth and restrict inappropriate activities from certain locations.

The subdivision policies also enable and encourage the transfer of the residential development potential in productive rural zones to Countryside Living Zones, and for title boundaries to be amalgamated and a residential development right to be realised in Countryside Living Zones.

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 is affected by a wide range of natural hazards, including flooding, coastal erosion (including the effects of sea level rise), freshwater erosion, landslides, wildfires volcano activity, tsunami, earthquakes, liquefaction and other meteorologically induced hazards such as cyclones, tornadoes, and drought. All of these hazards can affect people, property and the wider environment.

The risk that these hazards pose is made up of factors including the nature, magnitude and extent of the potential event, the anticipated frequency or probability of the hazard event occurring, the exposure and sensitivity of the environment to the hazard. The 2023 weather events have highlighted the actual impacts, and potential future impacts, that natural hazards can have on the Auckland region.

Each of these factors needs to be considered to determine the most effective way to reduce or otherwise manage the risks from natural hazards.

Existing 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.

Growth and development need to be managed to ensure that the risk from natural hazards is not increased and, where practicable, reduced. More recent development and future development, in the face of housing supply pressure and desired intensification, will result in more public and private assets being at risk from natural hazards if not managed appropriately.

~~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.

Natural hazards and climate change pose distinct risks for Māori values, rights and interests, including:

- Disproportionate risks to Māori communities due to where they live and work in Auckland, limited landbase and current socioeconomic circumstances

- Fragmented approaches to individualised risk assessment that do not protect Māori interests and are not suited to a more holistic te ao Māori worldview
- The challenge of providing concurrently for the exercise of kaitiakitanga, customary rights and the relationship between Māori and their ancestral lands, water, sites, wāhi tapu and other taonga while managing natural hazard risks.

In respect of issues relating to Māori, the provisions of this chapter should be read alongside Chapter B6 Mana Whenua in determining the appropriate risk management response.

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) People and ~~C~~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.~~ [Deleted]

(2A)Natural hazard risks to people, property, infrastructure and the environment resulting from existing use and development are reduced.

(3)Natural hazard risks to people, property, infrastructure and the environment from ~~N~~new subdivision, use and development are avoided where the hazard risk is significant ~~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 natural hazard mitigation functions of natural systems, including floodplains and coastal features, are protected from inappropriate subdivision, use and development.

(5A) The natural hazards risks on Māori values, rights and interests are managed in accordance with te ao Māori, mātauranga, and tikanga.

(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 where the risk is likely to be significant. ~~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 and plan change processes.

(3) Ensure the potential effects of climate change, including cumulative effects, and the potential effects on Māori, 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.

(4A) Identify natural hazard risks as significant, potentially tolerable; or acceptable in the risk assessment to determine the management response.

(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 of natural hazard events in combination;

(b) the ~~vulnerability~~ sensitivity of the activity to adverse effects, including the health and safety of people and communities, and on Māori, 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, including natural hazard risk mitigation, 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 hazard~~s~~ risks, either individually or cumulatively, and the extent to which climate change will exacerbate such ~~effects~~ risks, are uncertain or unknown, but may be significant or irreversible, 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.

(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 existing 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 existing risks of natural hazards to people and property are not increased.~~[Deleted]

(8A) Enable adaptation of existing activities in natural hazard areas where risk is maintained at or reduced to a tolerable or acceptable level.

Flooding and coastal hazards

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

~~(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.~~

(9A) Avoid subdivision, use and development in areas that give rise to significant flood and coastal hazard risks.

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

~~(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.~~

(10A) Enable the use and development in coastal hazard areas where the use has a functional or operational need to be located in the coastal hazard area.

(11) [Moved to (21)]

(11A) Manage subdivision, use and development in areas that give rise to potentially tolerable flood or coastal hazard risks, so that the risk is maintained at a tolerable level.

(12) [Moved to (22)]

(12A) Use natural features and buffers, and nature-based solutions where practicable for protection from coastal hazards, in preference to hard structures.

Landslide hazards

~~*Coastal hazards*~~

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

~~(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.~~

(13A) Avoid subdivision, use and development associated with activities sensitive and potentially sensitive to natural hazards and discharge of stormwater and wastewater directly to ground in high (significant) landslide hazard risk areas.

(14) Minimise earthworks and vegetation alteration or removal in high landslide susceptibility assessment areas and high (significant) landslide hazard risk areas.

(15) Manage subdivision, use and development associated with activities sensitive and potentially sensitive to natural hazards, earthworks, vegetation alteration or removal, and stormwater and wastewater discharges directly to ground in medium landslide susceptibility assessment areas and/or medium (tolerable) landslide hazard risk areas

Wildfires

(16) Ensure that subdivision, use and development, mitigate and manage wildfire hazard risk to as low as reasonably practicable.

Managing natural hazard risks while providing for Māori values rights and interests

(17) Provide for the active participation of Māori in the identification and decision-

making over the management of natural hazard risks associated with their values, rights and interests.

(18) Enable Integrated Māori Development on Māori Land, Treaty Settlement Land, and land held in general title identified as receiver sites for managed retreat through the following processes:

(a) spatial planning, including through Māori adaptation plans;

(b) plan changes;

(c) the use of the Special Purpose: Māori Purpose Zone or precincts;

(d) Te Wāhi Hunuku subdivision.

(19) Require natural hazard identification and risk assessments to consider mātauranga and tikanga Māori.

(20) Enable coastal protection for the use of Māori Land, Treaty Settlement land, marae, urupā and the management of mana whenua cultural heritage and values where there is no practicable alternative.

Role of natural systems and hard protection structures

(~~11~~21) Protect, ~~S~~strengthen and prioritise natural systems such as flood plains, vegetation and riparian margins, beaches and sand dunes in preference to using hard protection structures to manage natural hazards.

(21A) Reduce the need for using hard protection structures to protect activities from natural hazards.

Infrastructure in areas subject to natural hazards

(21B) Enable the construction, operation, maintenance and upgrading of infrastructure, in areas subject to natural hazards where the infrastructure is functionally or operationally required to locate in hazard areas, or it is not reasonably practicable that it be located elsewhere.

(~~12~~22) ~~Minimise~~ Reduce 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 low probability but high potential impact events such as tsunami, earthquake and volcanic eruptions;

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

(c) relocating lifeline utilities away from areas of significant risk, where appropriate and practicable.

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.

(2) 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 erosion (including the effects of sea level rise), freshwater erosion, ~~(coastal and freshwater)~~ landslides, wildfires, ~~instability; and~~
- ~~those that occur less frequently including~~ volcano activity, tsunami, earthquakes, liquefaction and other meteorologically induced hazards such as ~~(~~cyclones, tornadoes~~,~~ and drought~~) and fire~~.

All of these hazards can affect people, property and the wider environment.

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, magnitude and extent of the potential event (which gives the susceptibility of the site to the event) ~~and likely scale~~ ~~of the hazard~~;
- the ~~likelihood~~ anticipated frequency or probability of the hazard occurring (the hazard); and
- the exposure and vulnerability of people, property, infrastructure and the environment to the hazard (resulting in the risk) ~~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.

The provisions in the AUP are focussed on coastal erosion; coastal inundation; flooding and landslides.

Other risks are better managed through public education, emergency preparedness, early warnings and insurance, (e.g. volcanic activity, tsunamis, earthquakes and wildfires).

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.~~ Risk assessment is a key means to identify and understand risks, and to determine which aspects of risk can be managed through appropriate land use planning tools and development methods. Both current and future risks (including the effects of climate change such as sea level rise) need to be considered.

A proportionate risk-based approach has been adopted to address the risks associated with natural hazards. Generally, a risk reduction approach applies to land that has been developed for urban use and a risk avoidance approach applies to the development of land yet to be urbanised. A risk management approach also applies to infrastructure.

To assist with determining the consequences associated with natural hazards, risks are categorised as significant, tolerable or acceptable based on the the characteristics of the hazard and the sensitivity of the activity. Where the risk is “significant” the risk is to be avoided and where it is “tolerable” or “acceptable” the risk is to be managed.

Managing natural hazard risks while providing for Māori values rights and interests

Māori values, rights and interests encompass a range of matters recognized in chapter B6 (Mana Whenua). Natural hazards create significant risks on these matters, including on the use and development of Māori Land, Treaty Settlement Land, marae, urupā and papakāinga, on the mauri of places with significant cultural value, and on the integrity of mana whenua cultural heritage.

Risks from natural hazards can affect access to land and hinder customary uses and the ability to exercise kaitiakitanga. Māori Land and Treaty Settlement Land is

limited to specific areas, often with significant coastal hazard, flooding, landslide, and other risks. Māori require support and flexibility to manage these risks, whether this is enabling development on the balance of the land that avoids natural hazard risks, supporting mitigation that enables use and development to occur, or facilitating retreat from high-risk areas to land acquired for the purpose.

Mana whenua cultural heritage and other areas with cultural value are frequently located along waterways, coastlines and maunga. This makes them particularly vulnerable to flooding, coastal inundation, erosion, and landslides. Subdivision, use and development (including measures to mitigate risks on other properties) can exacerbate these risks. Conversely, such activities can also be designed in a way that improves the resilience of culturally significant areas.

The Unitary Plan addresses natural hazard risk while providing for Māori values rights and interests by acknowledging that where subdivision, use and development is proposed in areas of natural hazard risk, there is also a need to assess effects on Māori Land, Treaty Settlement Land, marae, urupā, mana whenua cultural heritage and values. This assessment is done through engagement with iwi authorities and, importantly, with the hapū and whānau of individual marae and urupā to understand their mātauranga (knowledge) and tikanga (correct customs).

To provide for flexibility and support creative solutions for at-risk Māori Land, Treaty Settlement Land, marae and urupā, this chapter supports the policy framework for the development policies of chapters E20 and E21 subdivision provisions, and zones to avoid and mitigate risk and for managed retreat.

To support the Unitary Plan assessment and management of natural hazard risks, strategy development and planning by the Council, landowners, and mana whenua is needed to ensure the resilience of significant places and existing uses in the face of natural hazards. This includes the application of wellbeing frameworks for climate change such as Te Ora ō Tāmaki Makaurau, and the implementation of Shoreline Adaptation Plans future Māori adaptation plans.

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.