Chapter 2: Promoting sustainable management of natural and physical resources in the Wellington region

Chapter 2.1: A sustainable region

The Wellington region has a long and eventful history, not the least of which is its Māori identification as "Te Upoko o Te Ika a Maui" or the Head of Maui's fish. The head of the fish, in Māori thinking, is the sweetest part.

Hutia te rito o te harakeke. Kei hea te komako e ko?

Ki mai nei ki ahau. He aha te mea nui o te ao?

Maku e ki atu: He tangata, he tangata, he tangata.

If you were to pluck out the centre shoot of the flax bush, where would the bellbird sing?

If you were to ask me, what is the most important thing in the world?

I would reply: It is people, people, people.

This whakataukī, or proverb, is a metaphor for nurturing and sustainably managing the environment for the good of all. It can be used to symbolise the role of the environment, family and community in nurturing the individual and environment. When harvesting flax, only the outer leaves are harvested to ensure regeneration of the plant. If the flax is not nurtured and protected, the bellbird, which relies on flax for survival, is threatened. Likewise, people are endangered if our natural and physical resources are not properly cared for. People and our institutions are central in this dynamic, underpinning the role we have as guardians of resources for current and future generations.

The Regional Policy Statement is mandated by the Resource Management Act. Its purpose is to promote the sustainable management of natural and physical resources in the Wellington region. Sustainable management in the Resource Management Act encapsulates the idea of environmental sustainability. In other words, natural and physical resources may be used and developed by people and communities to provide for their economic, social and cultural wellbeing, and health and safety, but only in such a way that ensures the potential of these resources are sustained for future generations, and the life-supporting capacity of ecological systems is retained or restored.

Tangata whenua consider that the life force – mauri – of natural systems needs to be protected. If it is compromised by unwise resource use, this would also constitute a risk for the people dependent on those resources. This concept is reflected in the current approach to sustainability, which takes into account the interdependence of the many parts of the ecosystem, including people. The Resource Management Act refers to "safeguarding the life supporting capacity of air, water, soils and ecosystems."

Chapter 2.2: The Wellington region

The Regional Policy Statement for the Wellington region applies to the whole of the greater Wellington region. The region covers 813,005 hectares of land and has 497 kilometres of coastline. The following city and district councils have jurisdiction in performing the functions of territorial authorities, under the Resource Management Act, within the Wellington region:

- Kāpiti Coast District Council
- Porirua City Council
- Wellington City Council
- Lower Hutt City Council
- Upper Hutt City Council
- South Wairarapa District Council
- Carterton District Council
- Masterton District Council
- A small part of Tararua District is also in the region.

The Wellington Regional Council has jurisdiction over the Wellington region, in performing the functions of a regional council under the Resource Management Act. The region shares boundaries with Horowhenua District Council, Horizons (Manawatu-Wanganui) Regional Council and Marlborough District Council.

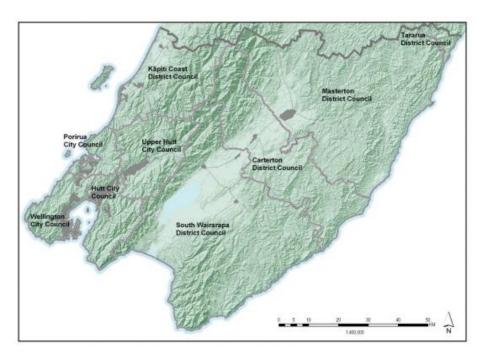


Figure 2: Wellington region and city and district council boundaries

In addition to these representative arrangements, there are six recognised tangata whenua tribal groups in the region. They are Ngāti Raukawa ki te Tonga, Ngāti Toa Rangātira, Rangitāne o Wairarapa, Ngāti Kahungunu ki Wairarapa, Taranaki Whānui ki te Upoko o te Ika a Maui and Te Ati Awa ki Whakarongotai. These tribes are currently represented by the following six iwi authorities:

- Ngāti Raukawa ki te Tonga is represented by Ngā Hapū o Ōtaki
- Te Ati Awa ki Whakarongotai is represented by Ati Awa ki Whakarongotai Charitable Trust
- Ngāti Toa Rangātira is represented by Te Rūnanga o Toa Rangātira Inc
- Taranaki Whānui ki te Upoko o te Ika a Maui is represented by Port Nicholson Block Settlement Trust
- Ngāti Kahungunu ki Wairarapa is represented by Ngāti Kahungunu ki Wairarapa Trust
- Rangitāne o Wairarapa is represented by Rangitāne o Wairarapa Inc.

Chapter 2.3: Community outcomes for the Wellington region

There is a wide range of factors – political, social, cultural, economic and environmental – that can influence the region's move towards or away from sustainability. The Regional Policy Statement helps promote sustainability by identifying the significant resource management issues of the region, then setting out objectives, policies and methods to address these issues using the means available under the Resource Management Act.

There are other regional and national policy documents that also play a role in contributing towards sustainability and that address social, economic, cultural and environmental issues for the region. Some of these contribute to the formulation of objectives and policies contained within the Regional Policy Statement, as noted in section 1.3.

Key documents prepared by Wellington Regional Council and the region's city and district councils are the Wellington Regional Strategy (the region's sustainable economic growth framework), the Regional Land Transport Strategy, and the long-term council community plans prepared by all local authorities.

So what do these documents suggest our region will be like, if we manage our natural and physical resources sustainably? The outcomes below are identified as key outcomes for the region within the Wellington Regional Strategy (June 2007) and in Wellington Regional Council's Long Term Council Community Plan 2006 – 2016 (amended June 2007).

Community Outcomes

- **Healthy environment** We have clean water, fresh air and healthy soils. Well functioning and diverse ecosystems make up an environment that can support our needs. Resources are used efficiently. There is minimal waste and pollution.
- Connected community Our connections and access are efficient, quick and easy locally, nationally and internationally. Our communication networks, air and sea ports, roads and public transport systems enable us to link well with others, both within and outside the region.
- Quality lifestyle Living in the Wellington region is enjoyable and people feel safe. A variety of lifestyles can be pursued. Our art, sport, recreation and entertainment scenes are enjoyed by all community members and attract visitors.
- Entrepreneurial and innovation region Innovation and new endeavours are welcomed and encouraged. Ideas are exchanged across all sectors, resulting in a creative business culture. We have excellent education and research institutions, and benefit from being the seat of government.
- Sense of place We have a deep sense of pride in the Wellington region and there is a strong community spirit. We value the region's unique characteristics its rural, urban and harbour landscapes, its climate, its central location, and its capital city.
- **Essential services** High quality and secure infrastructure and services meet our everyday needs. These are developed and maintained to support the sustainable growth of the region, now and in the future.
- Prosperous community All members of our community prosper from a strong and growing economy. A thriving business sector attracts and retains a skilled and productive workforce.
- **Healthy community** Our physical and mental health is protected. Living and working environments are safe, and everyone has access to health care. Every opportunity is taken to recognise and provide for good health.
- **Prepared community** We can cope with emergency events. Individuals and businesses are able to take responsibility for their own well-being. Effective emergency management systems are in place.
- Strong and tolerant community People are important. All members of our community are empowered to participate in decision making and to contribute to society. We celebrate diversity and welcome newcomers, while recognising the importance of our tangata whenua.

While a large proportion of our community is in the city areas of Wellington, Porirua, Hutt, and Upper Hutt, a significant proportion is also in small townships and rural areas which largely rely on rural production activities. The rural production activities that occur in and around the rural and small township areas provide economic, social, cultural, and

environmental benefits for the region as a whole, and contribute to the achievement of the community outcomes.

This Regional Policy Statement is an integral document in helping the Wellington Regional Council and the region's city and district councils support the achievement of this region's community outcomes. We can aim to reduce greenhouse gas emissions by reducing the use of fossil fuels for transport – for example, by investing in better public transport, encouraging more walking and cycling, reducing the need for travel, and steering development to achieve more integrated land use. There are policies in this Regional Policy Statement, particularly those under the banner of 'urban form, design and development', to this effect. We can also plan for some of the consequences of climate change and adapt where and how we live to cope with the likely changes. And, there are policies under the banner of 'natural hazards', to this effect. However, regional policy statements cannot respond to all of the issues and challenges that face our communities in attaining these outcomes. For example, a regional policy statement may not be the best mechanism to manage biosecurity issues, or be the most appropriate strategic planning document in which to speculate about the region's potential future capacity to support environmental refugees as a result of climate change effects in the wider Pacific region or beyond.

Chapter 2.4: Integrating management of natural and physical resources

The management of activities so that the life supporting capacity of natural and physical resources is sustained can only be achieved if there is consideration of multiple resources and processes. A prime role of the Regional Policy Statement is to integrate management of the natural and physical resources of the region in response to issues of regional significance, including those issues of significance to iwi authorities.

But what does 'integrated management' mean, and why is this approach so important?

Resources co-exist and interact with one another and are impacted on by the activities people undertake. Kaitiakitanga, the environmental guardianship practiced by tangata whenua, has its foundation in the world view that all life and the elements within the natural world which support life – such as land and water – are connected. People are a part of the natural order, not superior to it. The land and everything within and upon it is interrelated. Land management, river management, and maintaining and developing transport or housing infrastructure all utilise resources and can have an effect upon natural processes.

Integration must occur at a range of scales and in a variety of contexts. The effects of activities can be localised or extensive, or they can be temporary or permanent. For example, an industry may subject a local community to objectionable odour, while runoff from rural land into streams can have adverse effects throughout the catchment or in the receiving environment in the coastal marine area, some distance away. Similarly, visual effects may be significant for some distance, perhaps even in a neighbouring region. Water catchments are often an appropriate scale for assessing effects because many effects are generally contained within a catchment and assume relevance to a definable community of

interest. In an urban context, specified distances or travel times to essential services - such as transit nodes, a central business district, fire station, school or hospital — often provide an equivalent to 'catchment' in considering the inter-relationships between where people live, work and play, and how they access various places and services in going about their life. Integrated management is relevant to managing the inter-relationships between infrastructure and its associated services and any natural resource associated with it. It is also relevant to productive enterprise in rural areas and the natural resources upon which these enterprises rely.

Taking a whole of catchment approach is promoted within this Regional Policy Statement. It means considering the full mix of purposes, uses and activities within a catchment in terms of how these interact and contribute to outcomes within the catchment and for receiving environments beyond – such as in relation to soil productivity, water quality, erosion and stormwater control, or natural hazards. A whole of catchment approach is particularly useful for understanding and managing indigenous ecosystems and their complex interconnections. As well as having their own intrinsic values, healthy ecosystems provide us with ecosystem services that support our existence by providing clean air and water, productive soils and natural filtering processes. Providing for the community's needs while sustaining our ecosystems in a healthy state is one of our largest challenges. The whole of catchment approach suggests a need to work with multiple parties to establish shared objectives for a catchment and to ensure uses and activities are working towards the same goals or at least are not working against their attainment.

Just as it is essential to recognise and manage resources in an interconnected way, it is also vital to involve people in a meaningful way. Natural and physical resources are better managed when the social, economic and cultural factors that surround and drive their use or protection is taken into account. Decisions made about the management of resources are more effective and lasting if they reflect choices made by the community in terms of what it is best or most able to do. If integrated management is to be successful, it must recognise differing community and customary values, interests, skills, capacity and aspirations. Recognising and supporting the growth in community involvement in environmental projects, such as beach care, biodiversity and/or habitat protection, and reducing environmental 'footprints' is key to increasing community participation in regional resource management issues.

Many agencies, including government departments, regulatory authorities, and nongovernmental organisations, share responsibility for providing direction to ensure resources are sustainably managed. To ensure that their objectives and policies are coherent and mutually supportive, it is essential that a common understanding of resource issues and sustainable management is shared. The processes adopted in dealing with day-to-day issues need to be closely aligned.

Wellington Regional Council and the region's city and district councils oversee the management of natural and physical resources on behalf of the community. Although legislation such as the Resource Management Act directs councils to perform certain functions and to manage defined resources, there is considerable discretion in terms of how this is to be achieved. In practical terms, councils make judgements about the appropriateness of a particular activity in a particular place. All places are part of a wider

context and community. It is for the community to provide direction to the council on many of the effects arising from new activities. In attributing value to the environment, councils need to engage with communities and provide appropriate opportunities for comment about the management of resources. The Resource Management Act also charges councils with the responsibility of taking into account the principles of Te Tiriti o Waitangi when managing natural and physical resources. This includes the right of Māori to retain rangatiratanga and manage resources according to kaitiakitanga.

This Regional Policy Statement for the Wellington region has a key role in integrating the management of natural and physical resources. It identifies the resource management issues of regional significance, recognising the shared responsibility and the need for a common understanding of issues. It then sets out objectives, policies and methods that recognise the interaction and connection between different resources, the range of scales in which an issue can be addressed and the need to consider the social, economic cultural and environmental factors alongside one another. Ultimately, the Regional Policy Statement focuses on the matters that it can influence to make progress towards a sustainable region.

Chapter 2.5: Application of the Regional Policy Statement across physical and jurisdictional boundaries

Natural and physical resources and processes do not stop at city, district or regional boundaries. Wellington Regional Council, the region's district and city councils, and neighbouring councils need processes to address issues that cross boundaries. These issues can be geographic or jurisdictional.

Wellington Regional Council and the region's district and city councils will promote consistent and integrated application of the objectives, policies and methods contained in this Regional Policy Statement. To this end, they will:

- Encourage agencies in the region to make provision, where appropriate, for the management of regionally significant issues in a manner consistent with objectives and policies stated in this document
- Review district and regional plans to give effect to the Regional Policy Statement
- Consult neighbouring regional councils over the preparation of plans prepared under the Resource Management Act
- Promote a collaborative approach to managing resource consent applications where the request for a consent involves decisions to be taken by a district or city council and the Wellington Regional Council
- Promote an integrated approach to managing resource consent applications where the application site or effects arising from the proposed activity cross regional or district boundaries and/or have implications for adjoining local authorities
- Promote a collaborative and consistent approach to managing regionally significant

infrastructure that crosses territorial authority boundaries

 Investigate transferring and delegating powers, functions and duties to other authorities, including iwi authorities, where this will result in more effective or efficient resource management.

Wellington Regional Council and the region's district and city councils share some functions in accordance with the Resource Management Act. This is for the control of the use of land for the avoidance or mitigation of natural hazards; maintaining and enhancing indigenous biodiversity; and preventing or mitigating any adverse effects of the storage, use, disposal, or transportation of hazardous substances. The policies which describe how these responsibilities have been allocated are in section 4.3.

Chapter 2A: Definitions

1 in 100-year flood

This return period ratio refers to the probability of a hazard event occurring in any given year. A 1 in 100-year probability means that a hazard event has a 1 per cent chance of occurring in a 12-month period (i.e. a 1 per cent annual exceedance probability – see below). Note that this means that more than one 100-year event may occur over the course of a century.

Abstraction

Taking water from a water body.

Aeolian

A term that relates to the wind, usually in reference to fine materials transported and deposited by the wind (e.g. windblown sand, silt or loess). Can also be used to refer to the process of erosion by the wind, i.e. aeolian erosion. Aeolian processes commonly occur in dry conditions, in riverbeds and in coastal environments.

Aggradation

A term used in geology for the accumulation of sediment in rivers and nearby landforms. Aggradation occurs when sediment supply exceeds the ability of a river to transport the sediment.

Aggregate

A broad category of coarse particulate material used in construction, which includes sand, gravel, crushed stone, slag and recycled concrete as well as aggregates which have been modified by the addition of products such as cement or lime. Aggregates are a component of composite materials such as concrete and asphalt concrete.

Airshed

Local air management areas, as gazetted by the Minister for the Environment on 1 September 2005, for air quality management purposes.

Amenity values

As defined in the Resource Management Act.

Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

Annual exceedance probability

A measure of the likelihood, usually expressed as a percentage, of a natural hazard event exceeding a particular magnitude. A 1 per cent annual exceedance probability event has a 1 per cent (or 1:100) chance of occurring at a location in any given year.

Aquatic compensation

A conservation outcome resulting from actions that are intended to compensate for any more than minor residual adverse effects on a *wetland* or *river* after all appropriate avoidance, minimisation, remediation, and aquatic offset measures have been sequentially applied.

Aquatic offset

A measurable conservation outcome resulting from actions that are intended to:

- a) redress any more than minor residual adverse effects on a *wetland* or *river* after all appropriate avoidance, minimisation, and remediation, measures have been sequentially applied; and
- b) achieve no net loss, and preferably a net gain, in the extent and values of the wetland or river, where:
 - (i) no net loss means that the measurable positive effects of actions match any loss of extent or values over space and time, taking into account the type and location of the wetland or river; and
 - (ii) net gain means that the measurable positive effects of actions exceed the point of no net loss.

Bed

As defined in the Resource Management Act.

- a) in relation to any river—
 - (i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks:
 - (ii) in all other cases, the space of land which the waters of the river cover at its fullest flow without overtopping its banks; and
- b) in relation to any lake, except a lake controlled by artificial means,—
 - (i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the lake cover at its annual highest level without exceeding its margin:

- (ii) in all other cases, the space of land which the waters of the lake cover at its highest level without exceeding its margin; and
- c) in relation to any lake controlled by artificial means, the space of land which the waters of the lake cover at its maximum permitted operating level; and
- d) in relation to the sea, the submarine areas covered by the internal waters and the territorial sea.

Biological diversity (or biodiversity)

As defined in the Resource Management Act.

The variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.

Biodiversity compensation

A measurable positive conservation outcome resulting from actions that are designed to compensate for more than minor residual adverse effects on *indigenous biodiversity* after all appropriate avoidance, minimisation, remediation, and *biodiversity offsetting* measures have been sequentially applied. This includes biodiversity compensation in the terrestrial environment.

Biodiversity offsetting

A measurable positive conservation outcome resulting from actions designed to redress for more than minor residual adverse effects on *indigenous biodiversity* after all appropriate avoidance, minimisation, and remediation measures have been sequentially applied. The goal of biodiversity offsetting is to achieve a net gain in type, amount, and condition of *indigenous biodiversity* compared to that lost. This includes biodiversity offsetting in the terrestrial environment.

Buffer/buffering

A defined space between core areas of ecological value and the wider *landscape* that helps to reduce external pressures.

City centre zone

Has the same meaning as in Standard 8 of the National Planning Standards (November 2019): Areas used predominantly for a broad range of commercial, community, recreational and residential activities. The zone is the main centre for the district or region.

Climate change adaptation

In human systems, actions and processes to adjust to actual or expected climate and its effects, in order to reduce harm or take advantage of beneficial opportunities. In natural

systems, the process of adjusting to actual climate and its effects.

Climate change mitigation

<u>Human actions to reduce *greenhouse gas emissions*</u> by sources or enhance removals by sinks of greenhouse gases.

<u>Climate-resilience/Climate-resilient/Resilience and Resilient (in relation to climate change or natural hazards)</u>

The capacity and ability of natural and physical resources, including people, communities, businesses, *infrastructure*, and ecosystems, to withstand the impacts and recover from the effects of climate change, including *natural hazard* events.

Coastal environment

Includes the coastal marine area and the adjacent landward environment, to the extent it has the following characteristics or attributes, (in accordance with policies 5 and 38):

- a) any area or landform dominated by coastal vegetation or habitat
- b) any landform affected by active coastal processes, excluding tsunami
- c) any landscapes or features, including coastal escarpments, that contribute to the natural character, visual quality or amenity value of the coast
- d) any site, structure, place or area of historic heritage value adjacent to, or connected with, the coastal marine area, which derives its heritage value from a coastal location.

Coastal feature

A distinctive characteristic or part of the coastal environment that has arisen as a result of coastal processes.

Coastal hazards

Coastal processes that have the potential to adversely affect human life, property or infrastructure including erosion, sedimentation, storm surge, inundation, tsunami.

Coastal marine area

As defined in the Resource Management Act.

The foreshore, sea bed and coastal water, and the air space above the water:

- a) of which the seaward boundary is the outer limits of the territorial sea;
- b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be

whichever is the lesser of:

- (i) one kilometre upstream from the mouth of the river; or
- (ii) the point upstream that is calculated by multiplying the width of the river mouth by five.

Coastal processes

Dynamic natural, physical and ecological relationships and events, that are characteristically coastal in their occurrence, nature and effects, that act to shape a coastline, its landforms and features – such as, beaches, wave cut platforms – and including processes of: wave formation, breaking and dissipation; swash run-up; nearshore currents; sediment transport, erosion and deposition.

Coastal water

As defined in the Resource Management Act.

Sea water within the outer limits of the territorial sea and includes:

- a) sea water with a substantial freshwater component; and
- b) sea water in estuaries, fiords, inlets, harbours, or embayments.

Compact, well designed and sustainable regional form

As described in Objective 22, section 3.9, Appendix 7.9.

Consequences

The effects on the community of a natural hazard event including injury or loss of life, damage to land, buildings and property, financial costs, and general business and social disruption.

Contact recreation

Recreational activities that involve contact with water, including swimming and paddling.

Contaminant

As defined in the Resource Management Act:

Includes any substance (including gases, odorous compounds, liquids, solids, and microorganisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat —

a) When discharged into water, changes or is likely to change the physical, chemical, or biological condition of water; or

b) When discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged.

Contaminated land

As defined in the Resource Management Act: Land that has a hazardous substance in or on it that —

- a) has significant adverse effects on the environment; or
- b) is reasonably likely to have significant adverse effects on the environment.

Cultural assessment

A report prepared to consider and assess the potential impacts of an activity on the cultural values within an area.

A cultural assessment may include, but is not limited to, Māori history, Te Tiriti claims and settlements, presence of significant sites, social effects and recommendations for avoiding, remedying and mitigating adverse effects

Community drinking water supply

A drinking-water supply that is recorded in the drinking-water register maintained by the Chief Executive of the Ministry of Health (the Director-General) under section 69J of the Health Act 1956 that provides no fewer than 501 people with drinking water for not less than 60 days each calendar year.

DDT

Dichloro-Diphenyl-Trichloroethane (DDT) is an organochlorine insecticide. It is a neurotoxin and suspected carcinogen. It accumulates in the body, is highly persistent in the environment and is extremely toxic to aquatic life.

Decision-making principles for indigenous biodiversity

The following decision-making principles must inform the management of *indigenous* biodiversity:

- a) prioritise the mauri, intrinsic value and well-being of indigenous biodiversity; and
- b) take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi); and
- c) <u>recognise the bond between mana whenua / tangata whenua and indigenous</u> biodiversity based on whakapapa relationships; and
- d) <u>recognise the obligation and responsibility of care that mana whenua / tangata whenua</u> have as *kaitiaki* of *indigenous biodiversity*; and

- e) <u>recognise the role of people and communities (including landowners) as stewards</u> of *indigenous biodiversity*; and
- f) enable the application of te ao Māori and mātauranga Māori; and
- g) form strong and effective partnerships with mana whenua / tangata whenua.

The decision-making principles for *indigenous biodiversity* include any local expressions developed through Method IE.1.

Density

How compact development is in a given area. For example, the number of people per square kilometre, the variety of land uses or activities (mixed use development) per square kilometre, or square meters of retail space per square kilometre of land area.

District Plan

As defined in the Resource Management Act.

An operative plan approved by a territorial authority under Schedule 1; and includes all operative changes to such a plan (whether arising from a review or otherwise).

Domestic fires

Any indoor domestic fire fuelled by solid materials (coal, or wood), and includes open fires, coal-burning heaters, woodburners, multi-fuel burners and wood/coal stoves.

Earthworks

Means the alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.

Ecological connectivity

The structural or functional links or connections between *habitats* and *ecosystems* that provide for the movement of species and processes among and between the *habitats* or *ecosystems*.

Ecological integrity

The extent to which an *ecosystem* is able to support and maintain its:

- a) composition (being its natural diversity of *indigenous* species, *habitats*, and communities); and
- b) structure (being its biotic and abiotic physical features); and

c) functions (being its ecological and physical processes).

Ecosystem

Any system of interacting terrestrial and/or aquatic organisms within their natural and physical environment.

Ecosystem function

The abiotic (physical) and biotic (ecological and biological) flows that are properties of an ecosystem.

Ecosystem health

The degree to which an ecosystem is able to sustain its ecological structure, processes, functions, and resilience within its range of natural variability.

Ecosystem processes

The physical, chemical, and biological processes that link organisms and their environment.

Ecotoxic contaminants

Substances that are capable of causing ill health, injury or death to any living organism – such as heavy metals, polycyclic aromatic hydrocarbons, organochlorine pesticides and antifouling compounds.

Effects management hierarchy

- a) In relation to *indigenous biodiversity* means an approach to manage the adverse effects of an activity on *indigenous biodiversity* values that requires that:
 - (i) adverse effects are avoided where practicable; then
 - (ii) where adverse effects cannot be avoided, they are *minimised* where practicable; then
 - (iii) where adverse effects cannot be *minimised*, they are remedied where practicable; then
 - (iv) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, biodiversity offsetting is provided where possible; then
 - (v) where *biodiversity offsetting* of more than minor residual adverse effects is not possible, *biodiversity compensation* is provided; then
 - (vi) if *biodiversity compensation* is not appropriate, the activity itself is avoided.

- b) In relation to natural inland wetlands and *rivers*, means an approach to managing the adverse effects of an activity on the extent or values of a *wetland* or *river* (including cumulative effects and loss of potential value) that requires that:
 - (i) adverse effects are avoided where practicable; then
 - (ii) where adverse effects cannot be avoided, they are *minimised* where practicable; then
 - (iii) where adverse effects cannot be *minimised*, they are remedied where practicable; then
 - (iv) where more than minor residual adverse effects cannot be avoided,
 - (v) minimised, or remedied, aquatic offsetting is provided where possible; then
 - (vi) if aquatic offsetting of more than minor residual adverse effects is not possible, *aquatic compensation* is provided; then
 - (vii) if aquatic compensation is not appropriate, the activity itself is avoided.

Efficient allocation

Includes economic, technical and dynamic efficiency.

Electricity transmission network

The electricity transmission network that:

- a) comprises the network of transmission lines, cables, stations, substations and works used to connect grid injection points and grid exit points used to convey electricity in New Zealand; and
- b) is owned by Transpower New Zealand Limited; and
- c) is commonly known as the National Grid.

Enhancement (in relation to indigenous biodiversity)

The active intervention and management of modified or degraded habitats, ecosystems, landforms and landscapes in order to reinstate indigenous natural character, ecological and physical processes, and cultural and visual qualities. The aim of enhancement actions is to improve the condition of the environment, but not to return it to a former state.

Environmental weeds

Plant species outside their natural range that have invasive attributes and can alter ecological processes in indigenous ecosystems and habitats.

Environmentally responsive

Located, designed and implemented in a way that takes into account the interrelationships between natural and physical resources and the context, constraints and opportunities of a place, and appropriately manages adverse environmental effects.

Ephemeral stream

A stream that is not permanently flowing, or flows only during and after rain events.

Esplanade reserves

As defined in the Resource Management Act.

A reserve within the meaning of the Reserves Act 1977 which is either a local purpose reserve within the meaning of section 23 of that Act, if vested in the territorial authority under section 239, or, a reserve vested in the Crown or regional council, under section 237D; and which is vested in the territorial authority, regional council, or the Crown for the purpose or purposes set out in section 229 of the Resource Management Act.

Esplanade strips

As defined in the Resource Management Act. A strip of land created by the registration of an instrument in accordance with section 232 of the Resource Management Act for a purpose or purposes set out in section 229 Resource Management Act.

Established activities

In relation to Policy 47, means an activity (including maintenance, operation and upgrade) that is in, or affects, an *indigenous ecosystem* or *habitat* with significant *indigenous* biodiversity values or other significant habitats of indigenous fauna and is not a new activity.

ET activities

Any activity required for the operation, maintenance, upgrade, or development of the <u>electricity transmission network</u>, along with all access roads and tracks required to operate and maintain that network.

Fault

A fracture in the crust or between two large blocks of rock in which one side of the fracture has moved relative to the other. This movement can be vertical, horizontal or a combination of the two.

Fault rupture

As stresses build along a fault due to movement either side of the fracture plane, a point is reached when the rocks are unable to accommodate the strain. When the shear

strength of the rocks is exceeded, a fault will rupture. If this rupturing occurs rapidly, it results in an earthquake.

Fault trace

Sometimes referred to as a fault line, is the visible surface expression of a fault that has ruptured the ground surface. Faults do not usually consist of a single, clean fracture and the term fault zone is used when referring to the area of deformation that is associated with the fault plane.

Fine particulate matter (PM10)

All material that is less than 10 microns in aerodynamic diameter. A micron is one thousandth of a millimetre.

Flushing flows

High river flows, usually associated with rainfall, which flush out the river system. These can be artificially induced as a mitigation measure in rivers where flows have been lowered by dams or large abstractions.

Frequency

A measure of the number of occurrences of a natural hazard event per a unit of time (e.g. 100 years).

Fresh water

As defined in the Resource Management Act.

All water except coastal water and geothermal water.

Future Development Strategy

Means any Future Development Strategy prepared and published for local authorities in the Wellington Regional in accordance with Subpart 4 of the National Policy Statement on Urban Development 2020.

Groundwater

Water that soaks into or through the ground and occupies pore spaces and cavities beneath the surface. This water can form an aquifer when it collects on an impermeable layer (for example rock, clay) that prevents further downward seepage,

Greenhouse gas emissions

Atmospheric gases released into the atmosphere that contribute to climate change. These gases are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF6) which are all covered by the Climate Change Response Act 2002. A reference to greenhouse gas emissions

means "gross" greenhouse gas emissions unless otherwise expressed as "net greenhouse gas emissions" or "net-zero".

Group drinking water supply

A registered drinking water supply that is recorded in the drinking water register maintained by the Ministry of Health (the Director-General) under section 69J of the Health Act 1956 that provides more than 25 people with drinking water for not less than 60 days each calendar year.

Habitat

An area with the appropriate combination of resources – such as, food, water, nesting sites, shelter – and environmental conditions – such as, temperature, humidity or shade – for the survival of a species.

Hapū

Sub-tribes of people, providing social and political units based on descent from a common ancestor.

Hard engineering

Engineering works that use structural materials such as concrete, steel, timber or rock armour to provide a hard, inflexible edge between the land-water interface along rivers, shorelines or lake edges. Typical structures include groynes, seawalls, revetments or bulkheads that are designed to prevent erosion of the land.

Hazard risk management strategy

A strategic approach for the management of the risks from *natural hazards* to *minimise* or reduce the overall risk of social, environmental and economic harm and adverse effects from *natural hazards*. It includes some or all of the following elements:

- hazard and hazard *risk* identification;
- <u>impact assessment;</u>
- potential mitigation works (costs/impacts/maintenance);
- <u>assessment of environmental effects;</u>
- assessment of alternate options;
- cost-benefit analysis;
- budget allocation; and
- community engagement and implementation plan.

The scale of a hazard risk management strategy should be commensurate to the size of the proposed development or activity.

Hazard sensitive activity

Means any building that contains one or more of the following activities:

- <u>community facility</u>
- early childhood centre
- educational facility
- emergency service facilities
- major hazard facility
- healthcare activity
- kōhanga reo
- marae
- residential activity
- retirement village
- research activities
- visitor accommodation.

Hazardous substances

As defined in the Resource Management Act.

Includes, but is not limited to, any substance defined in section 2 of the Hazardous Substances and New Organisms Act 1996 as a hazardous substance.

Health needs of people

The amount and quality of water needed to adequately provide for people's hygiene, sanitary, and domestic requirements. It does not include:

- a) water used outside, (e.g. for irrigation, vehicle or house washing or hosing), other than water consumed by animals; or
- b) water used by industry as process water or cooling water.

High density development

Means areas used for urban activities with high concentration and bulk of buildings, such as apartments, and other compatible activities, with an anticipated building height of at least 6 stories.

High hazard risk

Refers to events that are likely to cause moderate to high levels of damage to the subdivision or development, including the land on which it is situated. It applies to areas that face a genuine likelihood of experiencing significant damage in a hazard event – such as fault rupture zones, beaches that experience cyclical or long-term erosion, failure prone hill slopes, or areas that are subject to repeated flooding.

Highly erodible land

Land at risk of severe mass-movement erosion (landslide, earthflow, and gully) if it does not have a protective cover of deep-rooted woody vegetation.

Highly productive agricultural land (Class 1 and II land)

Highly protective agricultural land is Class I and II land in the land use capability classes of the New Zealand Land Resources Inventory.

The Inventory considers five physical factors most important in land management: rock type, soil type, slope, erosion and vegetation and describes land parcels or map units in these terms. In addition to listing the physical resources of the land, its ability to sustain different land uses is also assessed. This is known as the Land Use Capability and consists of three levels of detail.

Land use capability Class I and II lands are described as:

- a) Class I The best land, flat, free draining, well-structured, fertile soils suitable to sustain intensive horticulture with minimal inputs.
- b) Class II Slight limitations to intensive arable use, e.g. slope and erosion.

Historic Heritage

As defined in the Resource Management Act.

Those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities:

- archaeological
- architectural

- cultural
- historic
- scientific
- technological

and includes,

- historic sites, structures, places, and areas
- archaeological sites
- sites of significance to Māori, including wāhi tapu, and
- surroundings associated with the natural and physical resources.

Hydrological control

Means the management of a range of stormwater flows and volumes, and the frequency and timing of those flows and volumes in a way that mimics natural processes, from a site, sites, or area into rivers, lakes, wetlands, springs, riparian margins, and other receiving environments to help protect freshwater ecosystem health and well-being.

Hydraulic neutrality

Managing *stormwater* runoff from subdivision, use and development through either onsite or local area disposal or storage, so that peak *stormwater* flows are released from the site or area at a rate that does not exceed the modelled peak flows from the site or area in an *undeveloped state*, in the 10% annual exceedance probability and 1% annual exceedance probability modelled design rainfall events including the predicted impacts of climate change.

Indigenous

Originating naturally in a region or area.

<u>Indigenous biodiversity</u>

The living organisms that occur naturally in New Zealand, and the ecological complexes of which they are part, including all forms of indigenous flora, fauna, and fungi, and their habitats.

Infrastructure

As defined in the Resource Management Act:

Infrastructure includes:

- a) pipelines that distribute or transmit natural or manufactured gas, petroleum, or geothermal energy;
- b) a network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001;
- c) a network for the purpose of radiocommunication as defined in section 2(1) of the Radiocommunications Act 1989;
- d) facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person:
 - (i) uses them in connection with the generation of electricity for the person's use; and
 - (ii) does not use them to generate any electricity for supply to any other person:
- e) a water supply distribution system, including a system for irrigation;
- f) a drainage or sewerage system;
- g) structures for transport on land by cycleways, rail, roads, walkways, or any other means;
- h) facilities for the loading or unloading of cargo or passengers transported on land by any means;
- i) an airport as defined in section 2 of the Airport Authorities Act 1966;
- j) navigation installation as defined in section 2 of the Civil Aviation Act 1990;
- k) facilities for the loading or unloading of cargo or passengers carried by sea, including a port related commercial undertaking as defined in section 2(1) of the Port Companies Act 1988;
- anything described as a network utility operation in regulations made for the purposes of the definition of "network utility operator" in section 166 of the Resource Management Act.

Intertidal zone

The area of foreshore between mean low water mark and mean high water mark.

Intrinsic values

As defined in the Resource Management Act.

In relation to ecosystems, means those aspects of ecosystems and their constituent parts

which have value in their own right, including:

- a) their biological and genetic diversity; and
- b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience.

Inundation

The flooding of a land surface by water. This can result from: surface ponding in heavy rain due to impeded drainage; coastal flooding from storm surge or extreme high tides; sea level rise; tsunami; or river flooding due to heavy rain.

lwi

Tribes, groups of people linked by common ancestry and with common history.

Iwi authority

As defined in the Resource Management Act.

The authority which represents an iwi and which is recognised by that iwi as having the authority to do so.

Iwi management plan

A planning document that is recognised by the iwi authority.

Kaitiakitanga

As defined in the Resource Management Act.

The exercise of guardianship by tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources. It includes the ethic of stewardship.

Kāwanatanga

Governance, as exercised by tangata whenua.

Key centres

Include the regionally significant centres identified in policy 30, as well as other significant local centres that a city or district council consider are integral to the functioning of the region's or a district's form. This includes centres identified for higher density and/ormixed use development in any Council growth and/or development framework or strategy. Examples of growth and/or development framework or strategies in the region are:

a) the Upper Hutt Urban Growth Strategy

- b) Wellington City Northern Growth Management Framework
- c) Porirua Development Framework
- d) Kapiti Coast: Choosing Futures Development Management Strategy and local outcomes statements contained in the Kapiti Coast Long-term Council Community Plan.

Kōiwi

Human bones.

Lake

As defined in the Resource Management Act.

Means a body of fresh water which is entirely or nearly surrounded by land.

Land

As defined in the Resource Management Act.

Includes land covered by water and the airspace above land; and, in a national environmental standard dealing with a regional council function under section 30 or a regional rule, does not include the bed of a lake or river; and, in a national environmental standard dealing with a territorial authority function under section 31 or a district rule, includes the surface of water in a lake or river.

Land-based primary production

<u>Production, from agricultural, pastoral, horticultural, or forestry activities, that is reliant on the soil resource of the land.</u>

Landscape

Landscape is the cumulative expression of natural and cultural elements, patterns and processes in a geographical area.

Local authority

As defined in the Resource Management Act.

Means a regional council or territorial authority.

Low energy receiving environments

Aquatic environments with little flushing action from tides, river flows, or wave action. For example, protected harbours and bays.

Macroinvertebrate

Small animals without backbones. Includes worms, molluscs, crustaceans and insect larvae.

Magnitude

The size of a given natural hazard event. Can include a range of measures including, size of geographic area affected, extent of damage, and the annual exceedance probability of the event.

Mahinga kai

The customary gathering of food and natural materials and the places where those resources are gathered.

Mahinga mātaitai

Places to gather seafood.

Maintain / maintained / maintenance (in relation to indigenous biodiversity)

Maintaining indigenous biodiversity requires:

- a) the maintenance and at least no overall reduction of all the following:
 - (i) the size of populations of *indigenous* species;
 - (ii) indigenous species occupancy across their natural range;
 - (iii) the properties and function of ecosystems and habitats used or occupied by indigenous biodiversity;
 - (iv) the full range and extent of *ecosystems* and *habitats* used or occupied by indigenous biodiversity;
 - (v) connectivity between, and buffering around, ecosystems used or occupied by indigenous biodiversity;
 - (vi) the resilience and adaptability of ecosystems; and
- b) where necessary, the restoration and enhancement of ecosystems and habitats.

Major hazard facility

Has the same meaning as the Health and Safety at Work (Major Hazard Facilities)

Regulations 2016 - means a facility that WorkSafe has designated as a lower tier major hazard facility or an upper tier major hazard facility under regulation 19 or 20.

Mana

Respect, dignity, influence and/or authority associated with the energies and presences of the natural world, as well as of people. It is an essence, presence or energy and is linked to mauri and so can be lost, diminished or restored, innate, developed or won.

Manaakitanga

Responsibilities for care of guests (manaaki).

Marae

Communal meeting places where significant events are held and decisions made. Maraeare important cultural institutions and facilities, and provide a base for hapū and iwigatherings.

Mātaitai

Area management tool that identifies an area as a place of importance for customary food gathering.

Mauri

An energy or life force that tangata whenua consider exists in all things in the natural world, including people. Mauri binds and animates all things in the physical world. Without mauri, mana cannot flow into a person or object.

Maximise

Means to make as large or great as reasonably practicable. Maximised and maximising have the corresponding meaning.

Mean high water springs

The average of each pair of successive high waters during that period of about 24 hours in each semilunation (approximately every 14 days), when the range of tides is the greatest.

Medium density development

Means areas used for urban activities with moderate concentration and bulk of buildings, such as detached, semi-detached and terraced housing, low-rise apartments, and other compatible activities.

Metropolitan centre zone

Has the same meaning as in Standard 8 of the National Planning Standards (November 2019): Areas used predominantly for a broad range of commercial, community, recreational and residential activities. The zone is a focal point for sub-regional urban catchments.

Minimise

Reduce to the smallest amount reasonably practicable. Minimised, minimising and minimisation have the corresponding meaning.

Mineral

As defined in the Resource Management Act.

The same meaning as in section 2(1) of the Crown Minerals Act.

Mixed use development

A variety of compatible and complementary uses within an area. This can include any combination of residential, commercial, industrial, business, retail, institutional or recreational uses.

National grid

National grid as defined by the National Policy Statement for Electricity Transmission 2008.

National policy statement

A statement issued under section 52 of the Resource Management Act.

National Priorities for Biodiversity Protection

Types of ecosystems identified by central government as priorities for biological protection by local government under the Resource Management Act.

Natural features

Elements or patterns arising as a result of natural processes.

Natural hazard

As defined in the Resource Management Act.

Any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Naturally rare

Rare before the arrival of humans in New Zealand

Naturally uncommon ecosystems

Ecosystems with an estimated maximum total area of <0.5 percent (i.e., <134,000ha) of New Zealand's land area (268,680 km²) before human colonization.

The 72 naturally uncommon ecosystems in New Zealand are described in Wiser, Susan K et al "New Zealand's Naturally Uncommon Ecosystems" 2013 available at https://www.landcareresearch.co.nz/uploads/public/researchpubs/uncommon-ecosystems-book-section.pdf

Nature-based solutions

Use and management of natural ecosystems and processes, or engineered systems that mimic natural processes, to reduce greenhouse gas emissions, support climate change adaptation and/or strengthen the resilience and well-being of people, indigenous biodiversity, and natural and physical resources to the effects of climate change.

Note: "nature-based solutions" is an umbrella term that encompasses concepts such as green infrastructure (including as defined in the National Planning Standards (November 2019)), green-blue infrastructure, and water-sensitive urban design.

Note: Examples could include:

- planting forests to sequester carbon
- managing peatland in a way that retains its carbon stores, avoids soil loss and associated land subsidence
- planting street trees to reduce urban heat
- restoring coastal dunelands to provide increased resilience to the damaging effects of storm surges linked to sea level rise
- leaving space for rivers to undertake their natural movement and accommodate increased floodwaters (also known as 'room for the river'),
- the use of water-sensitive urban design principles and methods, such as rain gardens to manage contaminants and reduce stormwater runoff in urban areas
- retaining wetlands and planting swales on farmland to slow runoff, reduce flood peaks, retain base flows, and protect water quality
- restoring indigenous forest to a healthy state to increase its resilience to increased climate extremes
- leaving space for estuarine ecosystems, such as salt marshes, to retreat inland in response to sea level rise.

New Zealand Coastal Policy Statement

A statement issued under section 57 of the Resource Management Act.

New Zealand Urban Design Protocol

A voluntary commitment to specific urban design initiatives by signatory organisations, which include central and local government, the property sector, design professionals, professional institutes and other groups. The Protocol aims to make our towns and cities more successful by using quality urban design to help them become:

- competitive places that thrive economically and facilitate creativity and innovation
- liveable places that provide a choice of housing, work and lifestyle options
- a healthy environment that sustains people and nature
- inclusive places that offer opportunities for all citizens
- distinctive places that have a strong identity and sense of place
- well-governed places that have a shared vision and sense of direction.

Ngā kai

Traditional foods

Non-point source discharges

Diffuse discharges of contaminants to air, water and land often from a range of sources and often not be attributable to an individual site or activity. Pastoral and cropping agriculture, silviculture and development of residential subdivisions (for example, construction of infrastructure, septic tanks) are common activities that generate non-point source discharges.

Open space covenant with Queen Elizabeth the Second National Trust (QEII)

An open space covenant with Queen Elizabeth the Second National Trust (QEII) registered pursuant to section 22 of the Queen Elizabeth the Second National Trust Act 1977 on certificates of title. Open Space Covenants need to be approved by the Trust's Board of Directors, and they are typically fenced from stock and defined by survey prior to registration.

Organic waste

Wastes containing carbon compounds that are capable of being readily biologically degraded, including by natural processes, such as paper, food residuals, wood wastes, garden and plant wastes, but not inorganic materials such as metals and glass or plastic.

Organic wastes can be decomposed by microorganisms into methane, carbon dioxide, nitrous oxide, and simple organic molecules (plastic contains carbon compounds and is theoretically organic in nature, but generally is not readily biodegradable).

Ρā

A fortified village.

Papakāinga

A village, ancestral settlement.

Peri-urban

Refers to the immediate area around a settlement that is relatively unmodified by urban development and has characteristics associated with a rural landscape, but which may support activities arising from its accessibility or proximity to people – horse grazing, pony clubs, kennels and catteries, golf courses. Such areas typically come under pressure for urban development and encroachment by activities that compete with primary production in an otherwise rural area.

Permanent forest

Forest actively managed to maintain continuous canopy cover.

Plantation forestry

A forest deliberately established for commercial purposes, being:

- a) <u>at least 1 ha of continuous forest cover of forest species that has been planted</u> <u>and has or will be harvested or replanted; and</u>
- b) includes all associated forestry infrastructure; but
- c) does not include—
 - (i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less than 30 m; or
 - (ii) forest species in urban areas; or
 - (iii) nurseries and seed orchards; or
 - (iv) trees grown for fruit or nuts; or
 - (v) long-term ecological restoration planting of forest species; or
 - (vi) willows and poplars space planted for soil conservation purposes.

Point source discharge

A discharge of contaminants where the point of discharge is identified.

Primary production

Means:

- a) <u>any aquaculture, agricultural, pastoral, horticultural, mining, quarrying or forestry</u> activities; and
- b) <u>includes initial processing, as an ancillary activity, of commodities that result from the listed activities in (a);</u>
- c) includes any land and buildings used for the production of the commodities from

 (a) and used for the initial processing of the commodities in (b); but excludes
 further processing of those commodities into a different product.

Probability

A statistical measure of the chance of occurrence of a natural hazard event. Often expressed as an Annual Exceedance Probability.

Protected species

Species protected by the Wildlife Act 1953 and the Marine Mammals Protection Act 1978.

Public open space

An area of land or water over which the public has right of access and is publicly owned and/or zoned for their recreational, ecological, landscape and/or heritage values.

Rāhui

A temporary restriction or ban.

Raingarden

A planted depression that is designed to absorb rainwater run-off from water impervious urban areas like roofs, driveways, walkways, and compacted lawn areas.

Rangitiratanga

Self-determination.

REG activities

An activity required for the development, operation, maintenance, or upgrade of renewable electricity generation assets.

Regional Focus Areas

Regional focus areas are described and identified on pages 38 to 39 of the Wellington Regional Strategy, 2007.

Regional form

The spatial distribution, arrangement and design of the region's *urban areas* and *rural*

<u>areas</u> and <u>linkages</u> through and <u>between them</u>, <u>infrastructure networks</u>, <u>open space</u>, <u>and</u> their relationship with natural environment values and features.

The physical layout or arrangement of our urban and rural communities and how they link-together. For example, transport networks (e.g. roads, rail, ports), and the patterns of residential, industrial, commercial and other uses alongside or around these networks, and in relation to the topography and geography of the region (e.g. its ranges and valleys, rivers, lakes and coastline). It includes the physical appearance or urban design, housing choice and density; and the arrangement of open spaces.

Regional plan

As defined in the Resource Management Act.

An operative plan (including a regional coastal plan) approved by a regional council or the Minister of Conservation under Schedule 1; and includes all operative changes to such a plan (whether arising from a review or otherwise).

Regionally significant centres

The regionally significant centres are those identified in Policy 30. the:

- Central business district in Wellington city; and
- The sub-regional centres of:
 - Upper Hutt city centre
 - Lower Hutt city centre
 - Porirua city centre
 - Paraparaumu town centre
 - Masterton town centre; and
- Suburban centres in:
 - Petone
 - Kilbirnie
 - Johnsonville.

Regionally significant infrastructure

Regionally significant infrastructure includes:

• <u>pipelines for the distribution or transmission of natural or manufactured gas or</u> petroleum, including any associated fittings, appurtenances, fixtures or equipment

- a network operated for the purposes of telecommunications, as defined in section
 5 of the Telecommunications Act 2001
- <u>a network operated for the purpose of radiocommunications, as defined in section</u> <u>2(1) of the Radio Communications Act 1989</u>
- the National grid
- facilities for the generation and/or transmission of electricity where it is supplied to the National grid and/or the local distribution network
- <u>facilities for the electricity distribution network, where it is 11kV and above. This</u> excludes private connections to the local distribution network
- the local authority water supply network (including intake structures) and water treatments plants
- the local authority wastewater and stormwater networks and systems, including treatment plants and storage and discharge facilities
- the Strategic Transport Network (including ancillary structures required to operate, maintain, upgrade and develop that network)
- The following local arterial routes: Masterton-Castlepoint Road, Blairlogie-Langdale/Homewood/Riversdale Road and Cape Palliser Road in Wairarapa, Titahi Bay Road and Grays Road in Porirua, and Kāpiti Road, Marine Parade, Mazengarb Road, Te Moana Road, Akatārawa Road, Matatua Road, Rimu Road, Epiha Street, Paekakariki Hill Road, The Parade [Paekakariki] and The Esplanade [Raumati South] in Kāpiti
- Wellington City bus terminal and Wellington Railway Station terminus
- Wellington International Airport including infrastructure and any buildings, installations, and equipment required to operate, maintain, upgrade and develop the airport located on, or adjacent to, land and water used in connection with the airport. This includes infrastructure, buildings, installations and equipment not located on airport land.
- Masterton Hood Aerodrome
- Kapiti Coast Airport
- Commercial Port Areas—and infrastructure associated with Port related activities
 within Wellington Harbour (Port Nicholson) and adjacent land used in association
 with the movement of cargo and passengers including bulk fuel supply
 infrastructure, and storage tanks for bulk liquids, and associated wharflines
- Silverstream, Spicer, and Southern landfills.
- pipelines for the distribution or transmission of natural or manufactured gas or

petroleum

- strategic telecommunications facilities, as defined in section 5 of the Telecommunications Act 2001
- strategic radio communications facilities, as defined in section 2(1) of the Radio Communications Act 1989
- the national electricity grid, as defined by the Electricity Governance Rules 2003
- <u>facilities for the generation and transmission of electricity where it is supplied to the network, as defined by the Electricity Governance Rules 2003</u>
- the local authority water supply network and water treatment plants
- the local authority wastewater and stormwater networks, systems and wastewater treatment plants
- the Strategic Transport Network, as defined in the Wellington Regional Land
 Transport Strategy 2007-2016
- Wellington City bus terminal and Wellington Railway Station terminus
- Wellington International Airport
- Masterton Hood Aerodrome
- Paraparaumu Airport
- Commercial Port Areas within Wellington Harbour and adjacent land used in association with the movement of cargo and passengers and including bulk fuel supply infrastructure, and storage tanks for bulk liquids, and associated wharf lines.

Renewable electricity generation assets

The physical components required for renewable electricity generation, along with the assets and infrastructure (such as cabling, access roads, and tracks) required to generate and store the generated electricity and connect it to transmission or distribution networks or direct to end users.

Renewable energy

As defined in the Resource Management Act.

Energy produced from solar, wind, hydro, geothermal, biomass, tidal wave and ocean current sources.

Residential activity

The use of a premise for any domestic or related purpose by persons living in the premises alone or in the family and/or non-family groups, whether any person is subject to care, supervision or not. A place of residence is typically where a person sleeps and keeps their personal belongings.

Residual risk

The risk to a subdivision or development that remains after implementation of risk treatment or hazard mitigation works.

Resilience (in relation to an ecosystem)

The ability of an ecosystem to absorb and recover from disturbances and its capacity to reorganise into similar ecosystems.

Restoration (in relation to indigenous biodiversity)

The active intervention and management of modified or degraded *habitats*, *ecosystems*, landforms and landscapes in order to maintain or reinstate *indigenous* natural character, ecological and physical processes, and cultural and visual qualities, and may include *enhancement* activities. The aim of restoration actions is to return the environment, either wholly or in part, to a desired former state, including reinstating the supporting ecological processes.

Restoration (in relation to a natural inland wetland)

Active intervention and management, appropriate to the type and location of the wetland, aimed at restoring its ecosystem health, indigenous biodiversity, or hydrological functioning.

Reverse sensitivity

Reverse sensitivity means the vulnerability of an existing lawfully established activity to other activities in the vicinity which are sensitive to adverse environmental effects that may be generated by such existing activity, thereby creating the potential for the operation of such existing activity to be constrained.

Revetment

A structure placed either parallel or perpendicular to a shoreline or riverbank in order to protect property or land from erosion. These are designed to be porous and are commonly built with rocks. This allows water to flow through the cavities, slowing and absorbing the energy from the water flow and allowing finer sediments to deposit in the pore spaces. Rip-rap, gabions, groynes and breakwaters are all types of revetment.

Review to a district or regional plan

The review of a district or regional plans as set out in accordance with section 79 of the Resource Management Act.

Riffles

A shallow, fast flowing section of a stream or river where the water velocity exceeds the upstream and downstream water velocity because of the steeper gradient or shallow depth.

Riparian

Any land that adjoins or directly influences or is influenced by, a water body.

Risk

A combination of the probability of a natural hazard and the consequences that would result from an event of a given magnitude. Commonly expressed by the formula: risk = hazard x vulnerability.

River

As defined in the Resource Management Act.

A continually or intermittently flowing body of fresh water; and includes a stream and modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal)

Rohe

Tribal areas for iwi and hapū.

Rural areas (as at March 2009)

The region's rRural areas (as at March 2009) include all areas not identified in the region's urban areas (as at March 2009) rural zones and settlement zones identified in the Wellington city, Porirua city, Hutt city, Upper Hutt city, Kāpiti coast and Wairarapa combined district plans.

Note: For the avoidance of doubt, this includes the following zones:

- General rural zone
- Rural production zone
- Rural lifestyle zone
- Settlement zone

• Other relevant zones within the rural environment.

Sedimentation

The process of sediment deposition by wind or water, particularly in river, lake or coastal/marine environments.

Sensitive activities

Activities which suffer should they experience adverse effects typically associated with some lawful activities. For example, dust or noise from a quarry or port facility, noise in an entertainment precinct, smells from a sewage treatment facility. Activity considered sensitive include any residential activity, any early childhood education centre, and any hotel or other accommodation activity. It may also include hospitals, schools and respite care facilities.

Sewage

The liquid wastes of a community, including toilet wastes and sometimes trade waste, before treatment. Sewage effluent is the liquid residue after treatment, and sewage sludge is the solid residue after treatment.

Significant mineral resources

Deposits of minerals, the extraction of which is of potential importance in order to meet the current or future mineral needs of the region or nation.

Small scale and community scale distributed electricity generation

Means renewable electricity generation for the purpose of using electricity on a particular site, or supplying an immediate community, or connecting into the distribution network.

Soft engineering

Works such as beach nourishment and dune rebuilding that use non-structural materials (e.g. sand, cobbles, native plants) to mimic natural coastal features that can act to mitigate the impacts from natural hazards.

Special amenity landscapes

Special amenity landscapes are distinctive, widely recognised and highly valued by the community for their contribution to the amenity of the district, city or region.

Specified infrastructure

- a) *infrastructure* that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002);
- b) regionally significant infrastructure;

- c) any public flood control, flood protection, or drainage works carried out:
 - (i) by or on behalf of a *local authority*, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1941; or
 - (ii) for the purpose of drainage, by drainage districts under the Land Drainage Act 1908;
- d) defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990; and
- e) in relation to indigenous ecosystems also means:
 - (i) any nationally significant *infrastructure* identified as such in a *National Policy Statement*
 - (ii) infrastructure that is necessary to support housing development, that is included in a proposed or operative plan or identified for development in any relevant strategy document (including a future development strategy or spatial strategy) adopted by a local authority, in an urban environment (as defined in the National Policy Statement on Urban Development 2020); and
- f) in relation to *freshwater* also means:
 - (i) any water storage *infrastructure*
 - (ii) ski area infrastructure.

Storm surge

A temporary elevation in water at the shoreline caused by a combination of low air pressure, large waves (wave set-up) and strong onshore winds (wind set-up). Storm surge can elevate water levels by over one metre. A storm tide occurs when a storm surge coincides with high tide.

Stormwater

Water that accumulates as a result of rain, particularly during heavy or prolonged rainfall, and includes runoff from urban areas such as roads and roofs, whether flowing overland or in channels or pipes through a catchment.

Strategic public transport network

<u>The Strategic Transport Network includes the following parts of the Wellington Region's transport network:</u>

a) all railway corridors and 'core' bus routes as part of the region's public transport

network identified in the Regional Land Transport Plan 2021; and

- b) all existing and proposed state highways; and
- c) any other strategic roads that are classified as a National High Volume Road,
 National Road, or Regional Road as part of the region's strategic road network
 identified in the Regional Land Transport Plan 2021; and
- d) <u>any other road classified as a high productivity motor vehicle (HPMV) route</u> identified in the Regional Land Transport Plan 2021; and
- e) <u>all sections of the regional cycling network classified as having a combined utility</u> <u>and recreational focus identified in the Regional Land Transport Plan 2021; and</u>
- f) any other existing and proposed cycleway and/or shared paths for which the New Zealand Transport Agency and/or a local authority is/was the requiring authority or is otherwise responsible.

The strategic public transport network is those parts of the region's passenger transport network that provide a high level of service along corridors with high demand for public transport. It connects the region's centres with the central business district in Wellington city. It includes the rail network and key bus corridors within Wellington region.

Subdivision of land

Set out in section 218 of the Resource Management Act.

Swales

Inter-dune depressions that occur between dune crests. Also refers to concave hollows that are designed to hold stormwater run-off and allow the water to soak into the ground.

Systematic conservation planning

A spatially explicit, objective-based and quantitative approach for identifying priority areas for biodiversity conservation.

Tangata whenua

Māori with ancestral claims to a particular area of land and resources. Literally, translated as "people of the land." Iwi are tangata whenua of a particular rohe, while all Māori are tangata whenua of Aotearoa (New Zealand).

Taonga

Treasures, valued resources, both tangible and intangible.

Taonga raranga

Valued plants used for weaving, such as kiekie and pīngao.

Tauranga waka

Canoe landing places.

Te Mana o te Wai

Te Mana o te Wai has the meaning set out in clause 1.3 of the National Policy Statement for Freshwater Management 2020.

Threatened ecosystems

<u>Threatened ecosystems are described by the IUCN Red List categories, Critically</u> Endangered, Endangered and Vulnerable.

Threatened or At Risk species

Threatened or At Risk and Threatened or At Risk (declining) species have, at any time, the meanings given in the New Zealand Threat Classification System Manual (Andrew J Townsend, Peter J de Lange, Clinton A J Duffy, Colin Miskelly, Janice Molloy and David A Norton, 2008. Science & Technical Publishing, Department of Conservation, Wellington), available at: https://www.doc.govt.nz/globalassets/documents/science-andtechnical/sap244.pdf, or its current successor publication

Threatened species

All species determined to be classified by the New Zealand Threat Classification System 2008 (or subsequent revisions) as Nationally Critical, Nationally Vulnerable, Nationally Endangered in the 'Threatened' category and all species determined to be classified as Declining, Relict, and Recovering categories of the 'At Risk' category. For biotic groups that have not been revised to conform with the New Zealand Threat Classification System 2008, all species determined to be classified by the New Zealand Threat Classification 2005 as Acutely Threatened and Chronically Threatened categories are included.

Tier 1 territorial authority

Has the same meaning as in Section 2 of the Resource Management Act 1991.

Note: In the Wellington Region this is Wellington City Council, Hutt City Council, Upper Hutt City Council, Porirua City Council and Kāpiti Coast District Council.

Tier 1 urban environment

Has the same meaning as in subpart 1.4 of the National Policy Statement for Urban Development 2020: Means any urban environment listed in column 1 of table 1 in the Appendix. Note: In the Greater Wellington Region this is Wellington City Council, Hutt City Council, Upper Hutt City Council, Porirua City Council and Kāpiti Coast District Council.

Tikanga

Customary practices and values, typically followed in order to protect mauri and/or mana.

Town centre zone

<u>Has the same meaning as in Standard 8 of the National Planning Standards (November 2019):</u> Areas used predominantly for:

- <u>in smaller urban areas, a range of commercial, community, recreational and</u> residential activities.
- <u>in larger urban areas, a range of commercial, community, recreational and residential activities that service the needs of the immediate and neighbouring suburbs.</u>

Travel choice assessment

A travel choice assessment demonstrates how the subdivision, use and development has considered and incorporated accessibility and connectivity to active transport, sustainable transport modes and supports redistribution of demand from private car use to active and sustainable transport modes.

Travel demand management

Includes a range of mechanisms designed to influence or change travel behaviour – such as road pricing tools and improvements to the efficiency of the existing transport network/s

Tree canopy cover

Means vegetative cover of any trees that are greater than 3 metres in height and 1.5 metres in diameter.

Tsunami

A series of waves generated by the sudden displacement of a water surface. The three main generating mechanisms are submarine fault ruptures, landslides or volcanic activity. Most commonly occur in open ocean, but can also occur in harbours and lakes.

Undeveloped state

The modelled grassed (pastoral or urban open space) state of the site prior to *urban development*.

Urban areas (as at February 2009)

The region's urban areas (as at February 2009) include urban, residential, suburban, towncentre, commercial, community, business and industrial consist of the following zones as identified in the Wellington city, Porirua city, <u>City of Lower Hutt city</u>, Upper Hutt city, Kāpiti Coast and Wairarapa eCombined district plans.

- Urban zones
- <u>Future urban zone</u>
- Open space and recreation zones
- Relevant special purpose zones in the urban area.

Urban environment

Has the same meaning as in subpart 1.4 of the National Policy Statement on Urban Development 2020:

Means any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

- a) is, or is intended to be, predominantly urban in character; and
- b) <u>is, or is intended to be, part of a housing and labour market of at least 10,000 people.</u>

Urban design

Urban design is concerned with the design of the buildings, places, spaces and networks that make up our towns and cities, and the ways people use them. It ranges in scale from a metropolitan region, city or town down to a street, public space or even a single building. Urban design is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design. It is an approach that draws together many different sectors and professions, and it includes both the process of decision-making as well as the outcomes of design. Refer to Appendix 2 to read the urban design principles for the Wellington region.

Urban development

Urban development is subdivision, use and development that is characterised by its planned reliance on reticulated services (such as water supply and drainage) by its generation of traffic, and would include activities (such as manufacturing), which are usually provided for in urban areas. It also typically has lots sizes of less than 3000 square metres.

Urban zones

Means the following zones as identified in the Wellington city, Porirua city, City of Lower Hutt, Upper Hutt city, Kāpiti Coast and Wairarapa Combined district plans:

Large Lot Residential

- Low Density Residential
- General Residential.

Urupā

Burial sites.

Vegetation clearance

The clearance or destruction of woody vegetation (exotic or native) by mechanical or chemical means, including felling vegetation, spraying of vegetation by hand or aerial means, hand clearance, and the burning of vegetation.

Vegetation clearance does not include:

- a) <u>any vegetation clearance, tree removal, or trimming of vegetation associated with the Electricity (Hazards from Trees) Regulations 2003;</u>
- any vegetation clearance or vegetation disturbance covered by the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017;
- c) any vegetation clearance associated with the repair and maintenance of existing roads and tracks; or
- d) the removal of an individual shrub or tree or a standalone clump of trees or shrubs no larger than 20m².

Walkable catchment

A walkable catchment generally consists of a maximum 20-minute average walk, or as otherwise identified by territorial authorities.

Vulnerability

The exposure or susceptibility of a development, building, business or community to the effects from a natural hazard event.

Water body

As defined in the Resource Management Act. Freshwater or geothermal water in a river, lake, stream, pond wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.

Water harvesting

Taking water from water bodies when the amount of water is plentiful, and storing it outside the water body.

Water-sensitive urban design

The integration of planning, engineering design and water management to mimic or restore natural hydrological processes in order to address the quantitative and qualitative impacts of land use and development on land, water and biodiversity, and the community's aesthetic and recreational enjoyment of waterways and the coast. Watersensitive urban design manages stormwater at its source as one of the tools to control runoff and water quality. The terms low impact design, low impact urban design and water-sensitive design are often used synonymously with water-sensitive urban design.

Wāhi tapu

Places of sacredness and immense importance for tangata whenua. Wāhi tapu areas can be prohibited or forbidden places, or private places, where permission should be sought for access, and protocols followed.

Wāhi tīpūna

Ancestral sites.

Well-functioning urban environments

Has the same meaning as in Policy 1 of the National Policy Statement on Urban Development 2020, that is, as a minimum:

- a) have or enable a variety of homes that:
 - (i) meet the needs, in terms of type, price, and location, of different households; and
 - (ii) enable Māori to express their cultural traditions and norms; and
- b) <u>have or enable a variety of sites that are suitable for different business sectors in</u> terms of location and site size; and
- have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport;
 and
- d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- e) support reductions in *greenhouse gas emissions*; and
- f) are resilient to the likely current and future effects of climate change.

Wellington Regional Strategy

The Wellington Regional Strategy is a sustainable economic growth strategy for the Wellington region developed by Wellington's nine local authorities, in conjunction with

central government and the region's business, education, research and voluntary sector interests. It aims to make the Wellington region internationally competitive.

Wetland

As defined in the Resource Management Act.

Permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

Whānau

An extended family group.

Whole-of-life greenhouse gas emissions assessment

An evaluation of the total *greenhouse gas emissions* of a proposal measured in tonnes of carbon dioxide equivalent units, derived from assessing the emissions associated with all elements of the proposed project over its entire life.