4 resource management issues

Contents of this chapter

RI1 Introduction

This chapter states the significant resource management issues affecting Nelson City. It identifies the nature and cause of issues. These issues are addressed in the objectives, policies and methods in the chapters that follow.

RI2 Issues that cross territorial boundaries

RI2.i Nelson City shares territorial boundaries with the Tasman and Marlborough Districts.

RI2.ii The Council recognises that although divided by local authority boundaries, the Nelson province is a socially and economically integrated unit. It functions as one effective community and it is geographically isolated from other communities.

RI2.1 The issues

R12.1.i With Tasman District:

a) Urban space requirements, including residential, industrial and commercial expansion.
b) Integrated management of the effects of the use, development, or protection of natural and physical resources
c) Integrated management of the effects arising from, and effects on, urban services such as Bell's Island Oxidation Ponds and the Roding river urban water supply
d) Management of coastal water quality and coastal space
e) Protection of natural values and features in the Waimea Estuary
f) Solid waste and hazardous waste management
g) Recognition of iwi issues
h) Management of the effects arising from the use of the road network and management of the effects of transportation of hazardous substances
i) The protection of marine areas
j) Management of the Roding River, which transects both the Nelson and Tasman districts.

RI2.ii With Marlborough District:

k) Management of the effects arising from the use of the road network and the effects on the road network and management of the effects arising from transportation of hazardous substances
l) Management of coastal water quality and coastal space
m) The protection of marine areas

RI3 Population characteristics

RI3.i People and communities are a part of the District's environment. Change in the number and characteristics of the local population (both resident and visitor) influences the means by which the well-being, health, or safety of that population is provided, and places additional demands on the District's natural and physical resources.

RI3.ii Population growth rates have fluctuated in the past, for reasons which have little to do with district or regional plans. Nevertheless, it is important that assumptions are made, for the purposes of the Plan, as to likely rates of future growth. The Council regularly monitors changes in population, household and visitor numbers, along with other indicators.

RI3.iii Many of the District's resources, particularly infrastructural resources, are approaching capacity in terms of the population they can serve. Substantial reinvestment is likely to be required if growth is to continue at present levels.

RI3.1 The issue

RI3.1i Sustainable management of natural and physical resources, including financial sustainability, in the face of change in the number and characteristics of the District's population.

RI4 Tangata whenua

RI4.i Issues relating to the tangata whenua are discussed fully in the Regional Policy Statement (Section 5 and Appendix 2) and that discussion is also relevant to this Plan. An underlying issue is the recognition of Maori communities as distinct entities. See also "Competing Demands or Values" and "Heritage and Cultural Values" below.

RI4.1 The issues

RI4.1.i Adequately recognising the needs and aspirations of tangata whenua in resource management processes.

RI4.1.ii Adverse effects of resource use on cultural values and sites of significance to tangata whenua.

RI4.1.iii Access to culturally important resources such as pingao, flax, and kiekie.

RI4.1.iv Identification and setting aside as waahi tapu reserves of any sites of significant traditional value.

RI4.1.v Avoidance of damage to waahi tapu sites as a result of earthworks or activities.

RI4.vi The recognition of Maori communities for resource management purposes.

RI4.1.vii How to provide for kaitiakitanga and self management of tribal resources.

RI5 Landscape, seascape and open space values

RI5.i The landscape and topographic setting of Nelson City is integral to its identity, influencing past and future patterns and forms of development.

RI5.ii Nelson is a coastal city occupying the river valleys, low hills and plains inland of Nelson Haven and Waimea Estuary. The city is framed by a series of largely undeveloped ridgelines running back to indigenous forest on much of the remote skyline with forestry and farming occupying much of the land in between.

RI5.iii Within the existing urban boundary, the landscape is largely modified. However, important visual perspectives of the city's remote backdrop, coastal environment and riparian areas may be attained from within the urban area, from traffic corridors, pedestrian precincts, public open space and private property.

RI5.iv The coastal landscape outside the urban area consists of an open coast line fringed largely by pastoral farming and forestry, and containing valued land form and seascape features such as the Boulder Bank, bluffs, and estuaries.

RI5.v Development (structures, plantings, and land disturbance activities) has the potential to detract from the visual appearance of landscape and seascape components within and surrounding the District. The significance of this will depend on the degree of modification in the existing landscape or seascape and the visual obtrusiveness of specific activities within it.

RI5.vi Pressure on landscape, seascape, and open space values is most likely in areas where topography, productive potential, and access are conducive to changes in resource use, including aquaculture.

RI5.vii Pressure also arises as a result of the desire or need to locate utilities on ridgetop or hilltop locations due to locations and operational constraints.

RI5.1 The issues

RI5.1.i Adverse visual effects on the remote backdrop to the District through structures, tracking, land clearance, and planting technique.

RI5.1.ii Loss of rural and coastal open space through the encroachment of urban development and other built facilities.

RI5.1.iii Adverse visual effects on key landscape and open space features within the urban area resulting from development on ridge lines, in important viewshafts or encroaching on riparian open space.

RI5.1.iv Adverse visual effects on landscape and open space values by signage, particularly along traffic corridors.

RI5.1.v Adverse visual effects on the seascape through structures within the Coastal Marine Area.

RI5.1.vi Effects on access caused by exclusive occupation of public open space, including in the Coastal Marine Area.

RI6 Natural features

RI6.i Natural features add to the bio-diversity of Nelson's environment as well as contributing to the district's landscape setting, amenity values, and heritage. These values are represented in the natural character of the coastal environment, wetlands, rivers and their margins, significant natural landscapes and land forms, areas of indigenous vegetation, and habitats of indigenous fauna.

RI6.1 The issues

RI6.1.i Degradation of the integrity and extent of natural features under development pressure involving, for example, clearance of indigenous vegetation, drainage of wetlands, watercourse disturbances, human occupation and pollution.

RI6.1.ii Degradation of the natural character of rivers and the coastal environment.

RI7 Soil

RI7.i The soils of Nelson represent an important regional resource. Protection of the present capability and integrity of that resource to enable its continued use by present and future users is considered to be a significant resource management issue.

RI7.ii Much of the Eastern Hills of Nelson has previously been farmed, but erosion problems experienced, combined with soil infertility and weed reversion problems, indicated that this was not necessarily a sustainable use in the long term. Much of this country was acquired by the former NZ Forest Service and planted in exotic forest partly as an effort to overcome the problem. As a result, a substantial part of the district is now planted in plantation forest which forms a resource of significant value to the local economy.

RI7.iii A significant portion of the District is also in largely unmodified indigenous vegetation administered by the Department of Conservation, and the Council (as waterworks reserve).

RI7.iv Farming is still an important activity in the Nelson area. Dairy farming is locally important on the flats at the head of the Nelson Haven, and there are a number of larger sheep and cattle grazing units located mainly on the better classes of hill country. Many existing farms are experiencing serious weed reversion problems, and many former units have been subdivided into small allotments used by part-time and hobby farmers, for wood lot forestry and for lifestyle units.

RI7.v Potential adverse effects on the soil resource may occur as a result of activities which are inappropriate. Such activities are likely to be those which disturb the surface of the soil or remove land area permanently from productive use, which may cause effects such as soil compaction, loss of water holding capacity, loss of soil depth available for plant roots, loss of soil structure, loss of micro-organisms, and loss of fertility as well as more obvious forms of erosion.

RI7.1 The issues

RI7.1.i Erosion and degradation of soils and the life supporting capacity of soils as a result of inappropriate land use and development.

RI8 Coastal environment

RI8.i While the total land area administered by Nelson City Council is comparatively small in size, the Council administers an important and varied coastal environment. This environment includes areas of high conservation, cultural, scenic, commercial, re creation, and amenity value, as well as containing the major port for the Nelson/Tasman area. Refer Chapter 2 (Meanings of Words) definition for Coastal Environment.

RI8.ii The Resource Management Act places special emphasis on the preservation of the natural character of the coastal environment and the special relationship of Maori with the coast. In order to guide resource management in the coastal environment, the Minister of Conservation prepared the New Zealand Coastal Policy Statement which was gazetted in 1994.

RI8.1 The issues

RI8.1.i Areas of cultural significance being adversely affected by works and uses.

RI8.1.ii Natural values being adversely affected by current and future development needs of port operations.

RI8.1.iii Coastal discharges resulting in degradation of coastal water quality; particularly in the estuarine areas of Nelson Haven and Waimea Inlet where there are sensitive values and a high degree of usage.

RI8.1.iv Subdivision and development impacting on coastal landscapes, natural areas and habitats

RI8.1.v Lack of public access and potential future loss of public access along the coasts as a result of private land ownership and structures.

RI8.1.vi Navigation and safety concerns related to the use of small craft.

RI8.1.vii Potential degradation of the coastal environment due to increase in visitors and recreational use.

RI8.1.viii Natural character of the coastal environment being adversely affected by coastal structures and physical works such as reclamation and impoundment particularly outside the functional area of Port Nelson.

RI8.1.ix Cumulative adverse effects of activities impacting on the natural character of the coast and on natural processes associated with sand and shingle extraction and spoil disposal.

RI8.1.x Potential for development in areas subject to coastal erosion and accretion.

RI8.1.xi Potential adverse effects as a result of the development of aquaculture.

RI8.1.xii Marine reserves, taiapure, and mahinga mataitai proposals conflicting with other uses and values.

RI8.1.xiii Particular importance placed on controls over activities in the foreshore and seabed by the RMA.

RI9 Risk from natural hazards

RI9.i Natural hazards have the potential to place both human life and properties at considerable risk. While in many instances the probability of such events may be low, their consequences or effects on a built up urban environment may be dramatic.

RI9.ii Natural processes, including erosion and inundation, are not 'hazardous' in themselves – rather they become hazards when they interact with human activities. Natural hazards arise when human development is so located or designed that it interacts with natural processes. Human responses to natural hazards can worsen natural hazards elsewhere and/or can have adverse effects on natural values and the environment. Activities not related to0 natural hazard response can also interfere with natural processes and create new natural hazards, for example earthworks in floodways.

RI9.iii Works intended to protect persons or property from natural hazards may have significant adverse effects on the environment. Unless they are carefully designed with an adequate knowledge of the associated natural processes involved they may also be ineffective or even make problems worse in other locations.

RI9.iv In the past, development has often intensified in areas subject to natural hazards concurrent with protection of remedial work programmes.

RI9.v Natural phenomena which have historically or may in the future place the District's population and resources at risk include:

a) Flooding

A feature of the city's location within the flood plains of several river catchments (Maitai, Brook and York), with urban storm water discharges compounding natural runoff.

b) Land Instability

A feature of the geological setting of the district and land use practices within both the urban area (for example the Tahunanui slump) and its hinterland (clearance of vegetation causing soil erosion and sedimentation).

c) Earthquakes

Nelson is traversed by several active faults and lies in close proximity to parts of the Alpine Fault system. Damage in past earthquakes has largely been due to ground shaking, however, more severe localised seismic activity could induce slope failure, land rupture along faults, or liquefaction.

d) Tsunami

Four tsunami (seismic sea wave) events have been recorded in the Nelson area in the past 150 years, the most severe with 1.5m waves outside the Boulder Bank.

e) Coastal Erosion

A feature of the dynamic processes of erosion and deposition of coastal material, evident in the form of the Boulder Bank and Tahunanui Beach.

f) Fire

A feature of the area's dry climate and the extent of exotic forests and other flammable vegetation.

g) Adverse Climatic Events

Such as drought, snow and temperature extremes.

h) Sea Level Rise

A feature of global warming but still a widely debated phenomenon.

RI9.1 The issues

RI9.1.i Risk to property and human life associated with community use and occupation of hazard prone areas.

RI9.1.ii Accentuated risk of natural hazards as a result of land use practices such as slope excavation, disturbance of soil and vegetation, and structures.

RI10 Energy efficiency

RI10.i Energy efficiency is related to the use of fossil fuels, electricity, and other forms of energy. The private motor car is the principal mode of transport for the District's population, a feature arising in the absence of a comprehensive public transport network and with population dispersal both within the urban boundaries and outlying rural areas. The increased use of motor vehicles is environmentally undesirable in terms of carbon dioxide and other emissions. Similarly there can be adverse atmospheric effects associated with the use of fossil fuels such as coal for heating.

RI10.1 The issues

RI10.1.i Energy inefficiencies associated with urban extension and pressure on infrastructure resources, design, building design, and the high level of dependency on private vehicles (and the lack of alternatives in Nelson).

RI10.1.ii Atmospheric pollution from consumption of fossil fuels.

RI10.1.iii Adverse environmental effects of the production and use of alternative energy sources.

RI11 Efficient use of natural and physical resources

RI11.i Efficiency in resource use is about minimising 'waste', and often arises in relation to changes to or intensification of resource use. It requires that regard be given to the finite characteristics and sustainable use of resources to meet not only immediate but long-term individual and community needs. One of these resources is freshwater, which needs to be efficiently allocated to avoid wastage of the resource and degradation of freshwater environments as a result of over-abstraction. To do so, resources must be seen for not only their economic but also their ecological and environmental worth.

RI11.ii Resources available for urban development are limited with potential to conflict with other values (such as natural character and landscape). Intensification of use also presents conflicts as values such as amenity come under pressure from increasingly dense development.

RI11.iii Efficiency of use applies to physical resources as well as natural resources, and is a major issue in relation to infrastructure. Efficient use of infrastructure has important economic effects for the community which, at the end of the day, must pay to maintain if not develop those assets.

RI11.1 The issues

RI11.1.i Balancing the potential adverse effects of highly efficient and intensive land use on amenity and other matters against inefficient use of physical resources such as infrastructure.

RI11.1.ii How to manage and whether to influence form of future development to avoid or minimise burdening the community with inefficiently used services.

RI12 Public access to margins of lakes, rivers, and the coast

RI12.i In addition to their ecological significance, riparian areas and the coast have important recreational, scenic, and aesthetic qualities. The maintenance and enhancement of public access is recognised as a matter of national importance under Section 6(d) of the Act. The foreshore and certain riverbeds are public domain, but are often bordered by private land. Restricted public access to such areas undermines the opportunity for people to enjoy and appreciate them. Unrestricted public access may, however, conflict with adjoining land use (safety and security considerations do conflict with public access during cargo handling at the Port) and sometimes ecological and conservation values.

RI12.1 The issue

RI12.1.i Patterns of land and coastal use that may compromise public access to and within the margins of lakes, rivers, and the coast, and conflict between access, resource use, and other values.

RI13 Heritage and cultural values

RI13.i Heritage or cultural value may be assigned to buildings, areas, sites, or vegetation (either individually or, as in a streetscape, collectively) having some notable historic, architectural, scientific, archaeological, spiritual or other special value serving to remind present and future generations of past activities and inhabitants of Nelson. These include sites and areas of special significance to the tangata whenua, such as Mahinga Kai or waahi tapu and sites of archaeological significance (eg the argillite quarry sites, the Nelson Boulder Bank, and midden sites). Heritage features and sites are typically vulnerable in a dynamic environment characterised by economic development and growth.

RI13.1 The issues

RI13.1.i Loss of important heritage features and sites for present and future generations due to their demolition, desecration, or modification for activities unsympathetic or incompatible with the inherent value of these resources.

RI13.1.ii Recognition of the cultural affiliations of tangata whenua with their ancestral lands, waters, sites, waahi tapu, and other taonga.

RI13.1.iii Recognition of the status of the protection of historic heritage from inappropriate subdivision, use and development as a matter of national importance in the Resource Management Act 1991.

RI14 Amenity values

RI14.i Amenity values are those inherent qualities or characteristics which contribute to people's appreciation or enjoyment of the local environment and therefore the community's overall perception of well being.

RI14.ii components of amenity may include privacy, sunlight admission, open space and visual streetscape, convenience and accessibility, public health and safety, the degree of acceptable nuisance elements, and recreational, natural and aesthetic values, together determining the pleasantness and coherence of the District as a whole and within its constituent environments

RI14.iii The amenity of an area is largely attributed to its dominant land or water use opportunities and built form. The factors defining acceptable standards of amenity differ between areas within the district, for example between living and working environments, or between the conservation estate and urban environment.

RI14.1 The issues

RI14.1.i Loss of the environmental pleasantness and coherency (in appearance or function) of an area or streetscape such as the coastal environment, City Centre or a residential neighbourhood, through aspects of development such as signage, design and appearance, and traffic, which are insensitive or inappropriate to its existing amenity.

RI14.1.ii Compromise of the use and enjoyment of individual properties as a consequence of the adverse effects of on site and neighbouring development.

RI14.1.iii Loss of or inadequacy of open space. These provide both visual amenity within the cityscape and space for recreational activities which contribute to the diversity and health of the community.

RI14A Urban design

RI14A.i Urban design considers the design of the city and suburbs. It includes the design of, and relationships between, the buildings, spaces and networks (e.g. streets) and has a significant influence on people because our everyday lives are connected by the environments we share in urban areas.

RI14A.ii While Nelson has many attractive buildings and spaces, there are also some poor examples, where opportunities to do something better were not realised.

RI14A.1 The issues

RI14A.1.i The long lifetime of buildings and subdivision layouts, associated infrastructure and structures mean that poor urban development in our city and suburbs will have long term effects on current and future generations. These effects may include:

a) a city form that is difficult to walk or cycle around and therefore overly dependent on motor vehicles, impacting on convenience and accessibility, and creating low resilience to increasing energy costs.
b) neighbourhoods and communities that are disconnected and lack identity.
c) built structures and public areas such as roads, parks and squares that are not human scaled, have a low level of amenity and do not invite multiple uses.
d) compromise to the attractiveness, vitality and safety of the public environment in town and neighbourhood centres.
e) lack of diversity in development form and types throughout the zones, and consequent lack of variety in the level and scale of living, working and recreational opportunities.
f) poor quality infill development with subsequent poor amenity for residents and compromise to the amenity of neighbours.
g) expansion of urban development into the rural land resource and subsequent effects on roading, servicing and rural landscape values.
h) inefficient use of the residential land resource.
i) poor quality urban design and supporting infrastructure that is difficult and inefficient for future generations to retrofit.

RI14A.1.ii Treating the development of the city and suburban areas as individual activities, involving the layout of predetermined building, street and lot patterns onto the existing environment with little consideration of strategic planning, context and the inter-relationships between sites. This can lead to a poor quality urban environment and poor urban experiences for residents and visitors.

RI14A.1.iii The potential for disjointed consideration of design factors, through prescriptive policy and administrative processes and reliance on minimum standards, to lead to poor urban design for both private and public developments.

RI14B Sustainable land transport

RI14B.i The land transport system is vital for economic and social wellbeing, but can be associated with negative environmental and social effects. Managing the demand for travel, pursuing modal shift and changing to more efficient means of transport with lower environmental impacts and greater social cohesion, is desired.

RI14B.1.ii Land use activities, urban design and the location of activities can also adversely affect the land transport system, particularly the way in which the land transport system addresses potential health and safety effects, sustainability and efficiency of resource use, earthworks, stormwater, construction effects and the choice of travel modes.

RI14B.1 The issues

RI14B.1.i Land transport networks have the potential to adversely affect air and water resources, ecological habitats and biodiversity corridors, our carbon footprint and climate change impacts, urban design and amenity values, the health and safety of different transport mode users and community cohesion.

RI14B.1.ii Land use activities and urban design activities that adversely affect the land transport system. These effects may include:

a) generation of vehicular traffic and increased volumes of traffic.
b) parking and loading effects.
c) effects on visibility and safety.
d) dispersal of activities which leads to social isolation, increased dependence upon the motor vehicle and reduced demand and viability for other forms of transport options, including public transport.
e) dependence upon one form of transport.
f) the inefficient use of resources, in terms of road construction resources and fossil fuel.
g) inconsistencies with the sustainable transport vision of the NCC Regional Land Transport Strategy.

RI15 Adverse environmental effects of activities

RI15.i Adverse effects of activities become a resource management issue where they cross property or site boundaries to the detriment of activities, resources, or values on adjacent sites, or where they have impacts in time (ie limit subsequent uses of the site or resource). The significance of effects such as noise, traffic, glare, odour and contamination will vary according to the setting and adjacent uses or values. For example, a lower environmental standard may be more acceptable within industrial areas than within or adjacent to residential areas.

RI15.ii Other effects such as erosion produce impacts such as loss of on site ability to support life, visual impacts, and a number of off site effects, such as siltation of water courses, deposition and impacts on water quality and biota. These impacts are highly important where water courses discharge to estuarine areas in particular. Areas such as the Haven and Waimea Estuary have suffered in the past from the adverse impact of land based activity, to the detriment of the life supporting capacity of the estuaries.

RI15.1 The issues

RI15.1.i Degradation of the life supporting capabilities of natural resources (land, water, air and ecosystems) through the environmental outcomes of resource over-use, contamination, compromise in the integrity of ecological processes, soil compaction or erosion, or habitat destruction.

RI15.1.ii Reduced water quality which may limit downstream uses of the resource.

RI15.1.iii Loss of opportunities to use or enjoy resources and values as a result of adjacent land use or activities.

RI15.1.iv Risk to public health, safety, and amenity values associated with traffic, aircraft and vessel movement, noise, and other contaminant discharges.

RI15.1.v How to manage adverse effects of important regional resources.

RI16 Competing demands or values attributed to resources

RI16.i The District is comprised of natural and physical resources of often conflicting value to different sectors of the resident and visitor communities, for example as a living environment or recreational resource, or having inherent economic, spiritual, cultural or heritage value.

RI16.ii Competing demand is most significant for flat land which is suitable for the widest range of uses, from rural, to industrial and residential uses, given present demands of growth and the limited flat land resource capable of being serviced available in the District. Competition between activities also exists at the rural-urban fringe, and in the coastal environment for continued growth and subdivision.

RI16.iii Competing demand in the Coastal Marine Area between recreational uses, and between recreational, conservation and possibly even productive uses may create resource management conflicts eg limited opportunities to provide for all-tide access or berthage, areas for water skiing, jet skiing etc without causing nuisance.

RI16.iv Projected levels of growth for the district indicate that in future there will be significant competition for water suitable for urban supply with other uses and values. In particular, the greater importance now placed on ecological and conservation values is likely to mean that there will be greater conflict in the management of scarce water resources, where present allocation is at the expense of those values.

RI16.1 The issues

RI16.1.i Reconciliation of demands on conflicts in resource use and protection created by the need for present and future generations to provide for their health and safety and their social, economic and cultural well being.

RI16.1.ii Environmental conflicts between activities, for example, commercial development encroaching into inner city residential areas, or urban sprawl into rural areas.

RI16.1.iii Pressure for economic use of coastal resources and those traditionally valued as 'public' domain.

RI16.1.iv Land use conflicts arising from 'public' values held over private property, for example landscape values or heritage values.

RI16.1.v Conflicts arising from the imposition of private activities on public resources, such as signage adjoining traffic corridors and other public places, impacting on public values such as amenity, and traffic and pedestrian safety.

RI16.1.vi Recognition of the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga, and of the principles of the Treaty of Waitangi.

RI16.1.vii The limited opportunities to meet expectations for boating activity, and the resource management conflicts created by this.

RI17 Hazardous substances, contaminant discharges, and waste management

RI17.i Environment contamination is the process of physical, chemical, or biological change in the condition of land, water, and air as a result of discharges. This may compromise the life supporting capacities of these resources, and accordingly the health of ecosystems and communities. In extreme cases, contaminated sites may be declared unsafe for human use or occupation.

RI17.ii Waste generation and contaminant discharges may arise from a range of industrial, agricultural, and urban activities, in the form of effluent, solid waste, odour, dust, smoke, chemical leachate, or sedimentation. In the past, waste has often been disposed of into sensitive receiving environments such as water bodies or the coast.

RI17.iii The potential or actual environmental effects associated with the discharge of hazardous substances are likely to be more significant because of the toxicity, persistence, explosive, or flammable nature of this material.

RI17.1 The issue

RI17.1.i. Contamination of land, air and water and the associated impacts on cultural values and the health and safety of ecosystems and communities resulting from the generation, use, storage, transportation and disposal of hazardous substances and contaminant wastes.

RI18 Freshwater environments

RI18.i Nelson's freshwater resources include urban and rural rivers, springs, groundwater, some artificial lakes and reservoirs, and a few wetlands. The freshwater issues can be divided into three categories: activities and structures affecting natural character and the functioning of ecosystems; the effects on water flows of water takes for out-of-stream uses; and effects of land uses and discharges on water quality. For each of these categories there are different issues in the urban and rural areas of Nelson.

RI18.ii Urban activities which affect the natural character and ecosystems relate to flood protection works to protect properties, and subdivisions which result in loss of riparian vegetation, increased area of impermeable surface leading to increased stormwater flows, culverts, sedimentation during earthworks, and toxic pollutants running off roads and industries. Specific examples are the flood protection structure on Brook Stream, and the high level of toxins in Arapiki Stream which have been discharged from industrial activities. Stream health in the urban area has been classified as being from moderate to very degraded.

RI18.iii Rural activities which affect natural character and ecosystems relate to forestry and farming activities as well as the continuing demand for rural subdivision. Specific examples are the taking of water for irrigation, stock water and domestic supplies, the potential increase in sedimentation during forestry activities, stock access degrading the quality of water and habitats, and the effects of intensification or rural residential subdivision. River health in the rural areas ranges from very good to degraded.

RI18.iv The flow levels of the Maitai and Roding Rivers are affected by substantial water takes to provide the urban water supply. The water demand projections for the Nelson City urban area are 35,997 cubic metres per day in 2005, rising to 50,299 cubic metres per day in 2045.

RI18.v The effects of water takes on flow levels of rural freshwater (both in rivers and in groundwater) are not likely to be having a significant impact at this stage in most situations, but there are some small rivers such as the Lud and at Cable Bay which are under pressure from abstractions. There is also potential for other rivers to be affected

by water takes if subdivisions continue to occur, increasing the demand for water for domestic uses.

RI18.vi The quality of stormwater flowing into Nelson's urban streams reflects urban land uses. It is the key water quality issue for the urban area, affecting both the small streams it enters and the sensitive coastal receiving environments into which the streams flow (Waimea Inlet and Nelson Haven).

RI18.vii Rural water quality affects the health of the residents (if it is used untreated, or if it is clean enough to swim in) and their stock which are reliant on that water.

RI18.viii Freshwater is essential for survival, and rivers are valued by many people for aesthetic, recreational, spiritual and cultural reasons. Rivers, lakes and wetlands also have intrinsic natural values which are reduced when their health is degraded through physical modification, contamination, and low flows.

RI18.ix Safeguarding the life-supporting capacity of water and ecosystems is central to the purpose of the Resource Management Act. The preservation of the natural character of wetlands, lakes and rivers, and their margins is listed as a matter of national importance.

RI18.x Freshwater and rivers are a 'public good' owned by everyone and managed by the Council on behalf of the public. Public resources such as water and air are managed differently from privately owned resources such as land. Land use activities are generally allowed unless a rule requires otherwise. In contrast, activities involving water or water bodies can only occur if they are expressly allowed by the Act, a rule in a regional plan, or by a resource consent.

RI18.1 The issues

RI18.1.i The potential for activities and structures in the beds of lakes and rivers and their margins to adversely affect water resources and aquatic ecosystems, natural sediment transport, and river stability, and the potential for activities to adversely affect network utilities or public structures.

RI18.1.ii The potential for activities to adversely affect natural character and amenity values of rivers, lakes and wetlands, and their margins. Protection of the natural character of these areas from inappropriate subdivision, use and development is a matter of national importance, while particular regard should be given to the maintenance and enhancement of amenity values.

RI18.1.iii The potential for activities to result in the loss or degradation of wetlands, riparian margins and habitats for indigenous fauna as well as trout.

RI18.1.iv The absence of detailed information on many of Nelson's freshwater resources, in particular un-named streams and groundwater.

RI18.1.v Provision of public access to and along water bodies (where it is safe)as a matter of national importance, and the potential for activities and structures to restrict and affect the ability of the public to gain access.

RI18.1.vi The potential for modified flows and levels of surface water to adversely affect instream and out of stream values.

RI18.1.vii The adverse effects of activities on groundwater levels and flows.

RI18.1.viii The potential for using and taking water to adversely affect stream values, and how to achieve equitable and efficient allocation of water.

RI181.ix The potential for activities and discharges to adversely affect water quality and natural character. How to maintain or enhance water quality to a level appropriate to maintain the recognised uses and values.