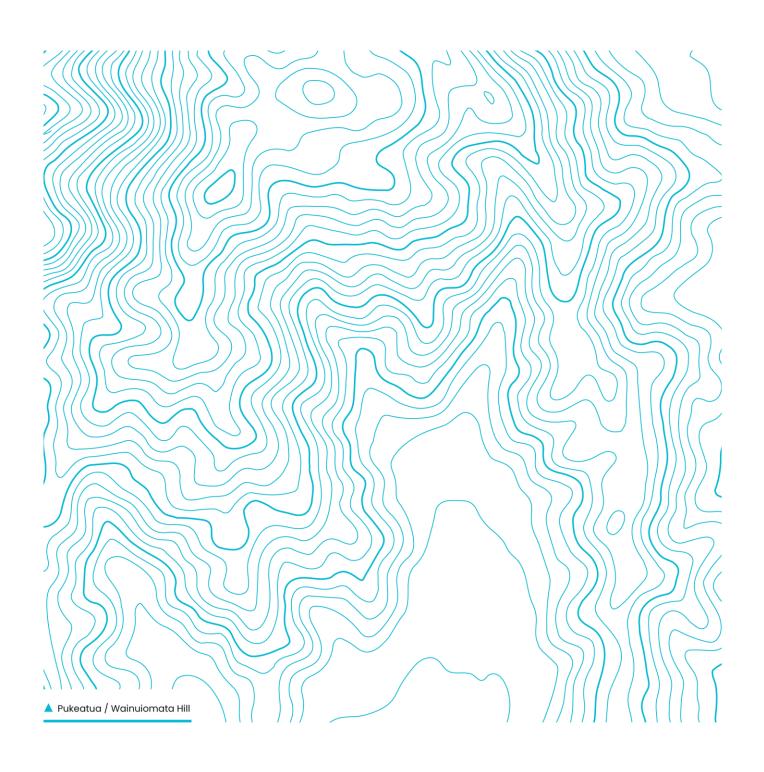


# Section 32 Evaluation QUARRY ZONE



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## 2 Overview and Purpose

- (1) Hutt City Council is reviewing the City of Lower Hutt District Plan. This is a full review of the District Plan, including the approach to quarries.
- (2) This report is a record of the review with regard to a Quarry Zone, a zone specifically targeted at the sites of existing quarries, and includes an evaluation of objectives and provisions for a proposed District Plan to address the Quarry Zone, in accordance with the requirements of s32 of the Resource Management Act 1991.
- (3) This report sits as one of a package of reports for the proposed District Plan and should be read alongside the plan-wide report for matters common to all Plan topics.

#### **Quarrying and Lower Hutt**

- (4) A quarry is a location or area used for the permanent removal and extraction of aggregates (clay, silt, rock or sand). It includes the area of aggregate resource and surrounding land associated with the operation of a quarry and which is used for quarrying activities.
- (5) Quarrying activities are the extraction, processing (including crushing, screening, washing, and blending), transport, storage, sale and recycling of aggregates (clay, silt, rock, sand), the deposition of overburden material, rehabilitation, landscaping and cleanfilling of the quarry, and the use of land and accessory buildings for offices, workshops and car parking areas associated with the operation of the quarry.
- (6) Quarrying provides raw materials necessary for construction and development, including:
  - Hard rock aggregates,
  - Sorted and rounded material, including those formed by coastal, river and lake processes, and
  - Specific minerals such as limestone, or mineral rich deposits with specific industrial uses.

- (7) Deposits of raw materials vary spatially, and the ability to extract them depends on a number of factors, including the depth and volume of overburden, existing land use in the area, access and planning restrictions.
- (8) Quarries have operated within the district and in the vicinity of the proposed quarry zone for well over a century. The number of quarries has declined over this time. Quarrying is also an important activity used in flood hazard management. Quarrying of the Hutt River lowers the riverbed level that is built up by flooding. The products of the quarrying and ancillary activities have provided essential materials and products for the construction of roading, natural hazard mitigation structures and 3 waters infrastructure in the Hutt, and for residential, commercial, industrial, education and recreation facilities.

## 3 Statutory and Policy Context

(9) The following sections discuss the national, regional and local policy framework that are particularly relevant to the statutory and policy context for the Quarry Zone for the District Plan Review.

### 3.1 Resource Management Act 1991

### 3.3.1 Section 5 – Purpose and Principles

- (10) The purpose of the RMA is set out in Section 5. The purpose is to promote the sustainable management of natural and physical resources.
- (11) Under s5(2) of the Act, sustainable management means:
  - managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—
    - (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
    - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
    - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.
- (12) The Quarry Zone chapter connects to the purpose of the Act by managing the use and development of natural and physical resources (aggregate materials) to enable people and communities to provide for their wellbeing.

#### 3.3.2 Section 6 – Matters of National Importance

(13) Section 6 of the RMA sets out matters of national importance that all persons exercising functions and powers under the Act shall recognise and provide for in achieving the purpose of the RMA. The relevant s6 matters for the Quarry Zone are:

Section	Relevant Matter
6 (h)	The management of significant risks of natural hazards.
	The proposed quarry zone is located on a steep slope adjacent to the Wellington Fault. The resultant natural hazards need to be considered.

(14) A number of matters of national importance are considered on a district wide basis as part of the section 32 reports for other chapters. This includes matters in relation to outstanding natural character, outstanding natural features, the preservation of natural character, areas of significant indigenous vegetation and habitats of indigenous fauna and, natural character.

#### 3.3.3 Section 7 – Other Matters

(15) Section 7 of the RMA sets out other matters that all persons exercising functions and powers under it shall have particular regard to in achieving the purpose of the RMA. The relevant s7 matters for the Quarry Zone are:

Section	Relevant Matter
7(b)	The efficient use and development of natural and physical resources.
	Quarrying is the most efficient method of obtaining aggregate for development. Quarrying activities typically involve extraction of natural resources for use in construction and manufacturing. Quarrying activities can also involve

	aggregates and other materials that are used in industrial activities and agriculture.
7 (ba)	The efficiency of the end use of energy:
	There is a link between the location of quarries and the efficiency of the end use of the quarried materials, and associated products. The energy cost being tied to the transportation of material. The location of ancillary activities within the zone and the proximity of the quarry, and processed products, to development is therefore important.
7(c)	The maintenance and enhancement of amenity values.
	Quarrying activities can have a range of impacts on amenity values in the surrounding area including impacts from noise and dust and impacts on visual amenity from the removal of vegetation and disturbance of land that may not be rehabilitated for an extended period.
7(f)	Maintenance and enhancement of the quality of the environment.
	Quarrying involves potentially significant adverse effects on surrounding areas if not managed.
	Additionally, development in adjacent areas has the potential to adversely affect the amenity of the quarrying through reverse sensitivity
7(g)	Any finite characteristics of natural and physical resources.
	Mineral resources are finite and quarrying activities can only occur where mineral resources are present and accessible,

#### 3.3.4 Section 8 – Treaty of Waitangi

- (16) Section 8 of the RMA requires Council to take into account the principles of the Treaty of Waitangi when exercising functions and powers under the Act.
- (17) Council has engaged with Mana Whenua of Lower Hutt as part of the District Plan Review, including with representatives of Taranaki Whānui ki te Upoko o te Ika (Port Nicholson Block Settlement Trust), Wellington Tenths Trust, Palmerston North Māori Reserve Trust, Te Rūnanganui o Te Āti Awa ki Te Upoko o Te Ika a Māui Incorporated and Te Rūnanga o Toa Rangatira Incorporated.
- (18) This engagement has demonstrated two key principles of the treaty, the first being the principle of partnership by, recognising and fostering mutual good faith with our existing iwi partnerships and continuing to provide the opportunities for tangata whenua to input meaningfully into the design of the quarry zone.
- (19) Secondly, the principle of active protection is another key aspect of the treaty principles demonstrated, as it seeks ways to deliver mixed and culturally dynamic communities in a sustainable way.

### 3.2 National Policy Statements

- (20) Section 75(3)(a) of the RMA requires district plans to give effect to national policy statements.
- (21) The National Policy Statement on Urban Development is relevant in a general sense in that it requires RMA plans to provide opportunities for land development to meet housing and business needs, supported by adequate development capacity. The construction of infrastructure and land development is directly dependent on the supply of aggregate and other natural materials.

### 3.3 New Zealand Coastal Policy Statement

(22) The New Zealand Coastal Policy Statement 2010 (NZCPS) sets out the objectives and policies in order to achieve the purpose of the RMA in relation to the coastal environment. The NZCPS is discussed in the s32 report for the Coastal Environment Chapter.

#### 3.4 National Environmental Standards

- (23) Section 75(3)(a) of the RMA requires district plans to give effect to national environmental standards. The following national environmental standards are relevant for the Quarry Zone or quarrying activities.
  - National Environmental Standards for Air Quality 2004 (NES-AQ)
  - National Environmental Standard for Assessing and Managing Contaminants to Soils to Protect Human Health 2011 (NES-CS)
  - National Environmental Standards for Freshwater Management 2020 (NEW-FW)
  - National Environmental Standard for Commercial Forestry (NES-CF)
- (24) The NES-AQ is relevant to quarrying activities. The standard prohibits certain activities and places limits on others including particulate matter (PM10). However, the NES-AQ is not directly relevant to the proposed District Plan as the responsibility for monitoring, regulating and enforcing discharge to air lies with Greater Wellington Regional Council.
- (25) The NES-CS applies to land where a Hazardous Activities and Industries List (HAIL), is occurring, has occurred, or more likely than not occurred. The standards apply to removal, or replacement of fuel storage tanks, or the disturbance of land. Quarrying and ancillary activities fall within the Hazardous Activities and Industries List and the quarry and asphalt manufacturing have been identified in the Selected land Use Register.
- (26) The NES-FW require a resource consent from a regional council as a discretionary activity (Standard 45A) to undertake the following activities associated with quarrying:
  - vegetation clearance within 10m of a natural inland wetland
  - earthworks or land disturbance within 10m of a natural inland wetland, or within 100m if it is likely to result in complete or partial damage to all or part of the wetland
  - discharge of water, to, or within 100m of a wetland.
- (27) Forestry quarrying in commercial plantation forests is managed by the National Environmental Standard for Commercial Forestry (NES-CF).

### 3.5 National Planning Standards

- (28) Section 75(3)(ba) of the RMA requires district plans to give effect to national planning standards.
- (29) Standard 8 of the National Planning Standards (the Zone Framework Standard) provides for the zones that can be included in the District Plan. While the Standard does not explicitly provide for a quarry zone, it does provide additional special purpose zones when the proposed land use activities or anticipated outcomes of the additional zone meet all of the following criteria:
  - · Are significant to the district, region or country,
  - Are impractical to be managed through another zone, and
  - Are impractical to be managed through a combination of other spatial layers.
- (30) Standard 14 of the National Planning Standards (the Definitions Standard) specifies definitions to be used for terms where they are used in planning documents. This includes the following definitions that are particularly relevant to the Quarry Zone:

Term	Definition
Primary production	<ul> <li>means:</li> <li>(a) any aquaculture, agricultural, pastoral, horticultural, mining, quarrying or forestry activities; and</li> <li>(b) includes initial processing, as an ancillary activity, of commodities that result from the listed activities in (a);</li> <li>(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</li> <li>(d) excludes further processing of those commodities into a different product.</li> </ul>
Quarry	means a location or area used for the permanent removal and extraction of aggregates (clay, silt, rock or sand). It

	includes the area of aggregate resource and surrounding
	land associated with the operation of a quarry and which is
	used for quarrying activities.
Quarrying	means the extraction, processing (including crushing,
activities	screening, washing, and blending), transport, storage, sale
	and recycling of aggregates (clay, silt, rock, sand), the
	deposition of overburden material, rehabilitation,
	landscaping and clean filling of the quarry, and the use of
	land and accessory buildings for offices, workshops and
	car parking areas associated with the operation of the
	quarry.

# 3.6 Regional Policy Statement for the Wellington Region

- (31) Under section 75(3)(c) of the RMA, district plans are required to give effect to the relevant policy statement.
- (32) The Regional Policy Statement for the Wellington Region ('the RPS') identifies the significant resource management issues for the region and outlines the policies and methods required to achieve the integrated sustainable management of the region's natural and physical resources.
- (33) The relevant objectives and policies of the RPS for Quarry Zone are discussed below:

Reference	Comment
Objective 31	The demand for mineral resources is met from resources located in close proximity of demand.
	This supports the location of the quarry zone close to the main urban area and the main transport links which utilise most of the material produced in the zone.
Policy 60	Utilising the region's mineral resources – consideration

Council must give particular regard to:

- (a) the social, economic, and environmental benefits from utilising mineral resources within the region; and
- (b) protecting significant mineral resources from incompatible or inappropriate land uses alongside.

This is particularly relevant to the quarrying zone. The materials from the quarry provide the primary resource used in construction. It is a key resource in infrastructure construction and maintenance.

(34) The Wellington Regional Policy Statement contains a number of objectives that relate to tangata whenua, indigenous vegetation and fauna, natural hazards, significant features and landscapes, and transport. These are examined in depth in the section 32 reports for the associated chapters.

#### 3.3.1 Proposed RPS Change 1

- (35) Section 74(2)(a)(i) of the RMA requires Council to have regard to any proposed regional policy statement when preparing its district plan.
- (36) The decisions version of Proposed RPS Change 1 to the RPS was published on 4 October 2024. As of the writing of this report, parts of the proposed change are subject to appeals.
- (37) Of relevance for the Quarry Zone chapter, the proposed change includes changes that relate to greenhouse gas emissions, climate change and vegetation clearance.

## 3.7 Natural Resources Plan for the Wellington Region

(38) Under section 75(4)(b) of the RMA, a district plan must not be inconsistent with a regional plan for any matter specified in section 30(1) of the RMA

(which lists functions of regional councils under the Act). The Natural Resources Plan is the only regional plan for the Wellington region.

(39) The relevant objectives and policies of the Natural Resource Plan are discussed below:

Reference	Comment
Objective 9	The social, economic, cultural and environmental
	benefits of Regionally Significant Infrastructure,
Policy 12	renewable energy generation activities and the
	utilisation of mineral resources are recognised.
	Policy P12: Benefits of mineral resource utilisation
	This objective and policy mean that particular regard is
	given to the benefits resulting from the utilisation of
	quarried materials are considered for quarrying and
	ancillary activities.
Objective 11	Significant mineral resources and the ongoing
	operation, maintenance and upgrade of Regionally
Policy 15	Significant Infrastructure and renewable energy
	generation activities are protected from incompatible
	use and development occurring under, over, or
	adjacent to the infrastructure or activity
	Policy P15: Incompatible activities adjacent to
	Regionally Significant Infrastructure, renewable
	electricity generation activities and significant mineral
	resources.
	This objective and policy recognise and supports the
	protection of the quarrying in the proposed quarry zone
	from reverse sensitivity effects from incompatible use
	in adjacent zones.

(40) The Natural Resources Plan contains a number of objectives and policies that relate to tangata whenua, indigenous vegetation and fauna, natural

- hazards, significant features and landscapes, and transport. These are examined in depth in the section 32 reports for the associated chapters.
- (41) The NRP also contains provisions relating to the discharge of contaminants to land, water and air, the taking of water, and the damming and diversion of water. These provisions relate to regional Council responsibilities under the RMA.
- (42) There are several issues that are managed by regulations in both regional and district plans. This includes:
  - The management of dust. The WRNRP contains policies and rules that manage dust generation beyond the site boundary. Rule 27 explicitly manages the discharge of contaminants to air (including dust and odour) from the handling of bulk materials from quarrying, mining, clean filling, blasting, extraction, crushing, screening, processing, stockpiling, handling, conveying, sorting and storage.
  - Discharge of contaminants to air (including dust and odour) from the storage, handling, redistribution or packing of cement in fully enclosed silos and conveyance systems. Fuel storage and drying and kiln processes are also specifically managed.
  - Managements of large earthworks (exceeding 3000m²), earthworks on contaminated sites and in areas prone to erosion.
  - The management of minor sand and gravel extraction.
  - Removal of vegetation on hazard prone land.
  - Stormwater discharges from contaminated sites.

### 3.8 Proposed NRP Change 1

- (43) Section 74(2)(a)(ii) of the RMA requires Council, when preparing or changing a district plan, to have regard to any proposed regional plan in regard to any matter of regional significance or for which the regional council has primary responsibility under Part 4 of the RMA.
- (44) Greater Wellington Regional Council notified a proposed change to the Natural Resources Plan in October 2023 (Proposed NRP Change 1). As of the writing of this report, the hearing of submissions on the proposed changes are ongoing, and there have been no decisions on the proposed changes.

- (45) Proposed NRP Change 1 proposes changes to give effect to the Te Whaitua te Whanganui-a-Tara Implementation Program. The key rules that potentially affect quarrying, ancillary activities and the proposed Quarry Zone include:
  - Catchment management of water discharges
  - Management of stormwater discharges.
  - Management of land disturbance from earthworks and vegetation clearance.
  - Amendments to air quality rules.

## 3.9 Iwi management plans

- (46) Section 74(2A) requires territorial authorities, when preparing or changing a district plan, to take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on the resource management issues of the district.
- (47) However, no iwi management plans have been lodged with the Council.

## 3.10 Hutt City Council plans, policies, and strategies

- Under section 74(2)(b)(i) of the RMA requires the Council to have regard to management plans and strategies prepared under other Acts. In addition, there are other Council plans, policies and strategies that should be considered when developing the District Plan as they set Council's intentions on matters that are relevant for the District Plan.
- (49) There are no plans, policies or strategies that directly address quarrying.

## 3.11 District plans of adjacent territorial authorities

- (50) Section 74(2)(c) of the RMA requires the Council to have regard to the extent to which the District Plan needs to be consistent with the plans or proposed plans of adjacent territorial authorities.
- (51) As the proposed Quarry Zone would not be near the boundaries of adjacent territorial authorities, there are no cross boundary issues for the quarry zone and little value in being consistent with the district plans of adjacent councils.
- (52) A further analysis of the approach of other district plans for quarries is summarised in the Evidence Base section of this report (section 4.2).

## 3.12 Other statutory and non-statutory plans, policies, and strategies

- (53) In addition to Hutt City Council's plans, policies and strategies (discussed above), there are regional and national plans, policies and strategies that, while not mandatory considerations for the District Plan Review, should still be considered as they form part of the management regime for natural and physical resources in the district, and considering these documents can aid integrated management.
- (54) The following other statutory and non-statutory plans, policies and strategies are relevant for the Quarry Zone:

## Responsibly Delivering Value – A Minerals and Petroleum Resource Strategy for Aotearoa New Zealand: (2019 – 2029)

- (55) This strategy outlines the Government's vision for the minerals and petroleum sector over the next 10 years (2019-2029). This Strategy sets out principles that should assist Government, iwi/hapū, industry and any other groups making decisions that affect the sector.
- (56) The Strategy recognises that our economy currently depends on minerals and we need to ensure we have an affordable and secured supply of the right minerals to support a productive, sustainable and inclusive economy

both now and in the future. Crushed rock is expensive to transport (the cost of aggregate doubles in the first 30km of transport) which is why it is important that quarries are located near their end uses.

- (57) The Strategy also emphasises the importance of environmental and social responsibility for extraction industries including:
  - avoiding, and if unavoidable, minimising disturbance, waste, pollution and emissions;
  - efficiently using inputs such as water and energy; seeking positive environmental outcomes;
  - rehabilitating the environment during operations and once operations cease;
  - active engagement between operators and iwi/hapū and the wider community to ensure community and cultural interests are respected and meaningfully considered.

### 3.13 Other legislation or regulations

- (58) In addition to the RMA, other legislation and regulations can be relevant considerations for a district plan, particularly where management of an issue is addressed through multiple pieces of legislation and regulatory bodies.
- (59) The legislation and regulations which are relevant for quarries are discussed below:

Act or Regulation	Comments
Hazardous Substances and New Organisms Act 1996	Quarrying includes the transport, storage, and use of hazardous substances. The Hazardous Substances and New Organisms Act 1996 manages the adverse effects of hazardous substances on the environment. This includes the health and safety of people and communities, including substances that are, or could create substances, that are, explosive, flammable, oxidise, corrosive, toxic or ecotoxic.

	T
Health and Safety at Work Act 2015	Quarrying is a potentially hazardous activity, as it involves work on and the creation of steep slopes, use of large machinery, explosives, etc.  The Health and Safety at Work Act 2015 provides for the protection of workers and other persons against harm to their health, safety, and welfare by eliminating or minimising risks associated with quarrying.
Queen Elizabeth the Second National Trust Act 1977	Parts of the Quarry Zone are covered by Queen Elizabeth the Second Covenants. These covenants control the use of land for a specific purpose. The covenants can be for perpetuity or a fixed term. The conditions of the covenant can only be modified with the approval of the Queen Elisabeth the Second National Trust.
Wildlife Act 1953	The Quarry Zone potentially contains rare indigenous fauna. The Wildlife Act 1953 provides for absolute protection of many animals living in their natural state. It includes native geckos and other taxa that may occur within the Quarry Zone.

# 4 Resource management issues

## 4.1 Introduction to resource management issues

- (60) For the review of the District Plan, resource management issues have primarily been identified through:
  - A review of the existing District Plan approach, including the effectiveness and efficiency of the Plan and issues on legibility and ease of use for plan users,
  - Analysis of existing practice, including a review of other district plans, particularly in the Wellington region,
  - Engagement with Mana Whenua, the community and other stakeholders,
  - A review of technical information, and.
  - A review of resource consents for new activities and changes to existing activities in the Quarry Zone and Council's records of complaints.
  - The following sections discuss these for the proposed Quarry Zone.

## 4.2 Description of the proposed Quarry Zone and surrounding area

- (61) The proposed quarry zone is located in the northwestern portion of Lower Hutt. It includes two historical quarries, located close to State Highway 2, State Highway 58 and the Hutt River.
- (62) The proposed Quarry Zone includes the Winstone Aggregates-owned
  Belmont Quarry as well as the associated ancillary Fulton Hogan-owned
  Bitumen Plant and Firth Industries owned Concrete Product Pant.

(63) The proposed Quarry zone is located on the Wellington Fault scarp, and is surrounded by rural, rural lifestyle blocks and the Belmont Regional Park.

The area is close to the suburbs of Kelson, Manor Park and Taitā.

#### 4.3 Evidence base

## 4.3.1 Existing approach of City of Lower Hutt District Plan

- (64) The operative district plan recognises that the naturally occurring hard rock mineral resources located on the western hills escarpment are regionally significant. Area-wide objectives and policies in section 1.10.5 recognise that:
  - Reasonable access and availability of aggregate material quarried is required to meet the region's development needs.
  - Provisions are required to avoid or mitigate adverse effects
  - Extraction activities need to be managed to enhance amenity values in the area
  - Reverse sensitivity needs to be taken into account when managing land use on surrounding sites.
- Under the operative District Plan, the city's main quarries (the Belmont and Dry Creek Quarries) are in the Extraction Activity Area, an industrial zone that specifically applies to quarries.
- (66) Extraction Activity is specifically defined as:
  - "an operation in connection with prospecting, exploring and any mining operation including blasting, processing (crushing, screening, washing and blending), storage and distribution and sale of aggregates, ancillary earthworks, removal and deposition of overburden and rehabilitation works."
- (67) Extraction activities are generally equivalent to Quarrying Activities as defined in the National Planning Standards.

- (68) The operative District Plan also manages allied industrial activities, which are generally equivalent to ancillary quarry activities under the New Zealand Planning Standards nomenclature.
- (69) The Extraction Activity Area has been part of the District Plan since the Plan first became operative in 2003/2004. Since then, the only notable change to the Plan for this zone was Private Plan Change 33, which became operative in November 2014. This plan change was requested by Winstone Aggregates Limited (owner/operator of quarries within the zone).
- (70) The main issues addressed by the plan change were:
  - The finite nature and nature of the resource,
  - The value of the quarried material to development,
  - Adverse effects of extraction activities on amenity values, including visual amenity,
  - Adverse effects of extraction activities on landscape values,
  - Adverse effects of extraction activities on ecological value of parts of the site and the adjoining Belmont Regional Park. and
  - Adverse effects on the Hutt River.
- (71) The objectives for the Extraction Activity Area are:
  - Objective 6D 1.1.1: To ensure that the adverse effects of extraction activities on the receiving environment and local amenity values are avoided, remedied or mitigated.
  - Objective 6D 1.2.1: To maintain and enhance the visual amenity values of the area.
- (72) These objectives are implemented by policies that:
  - Avoid or mitigate any adverse effects of Extraction activities, including through specific conditions and a quarry management plan,
  - Manage any adverse effects generated by extraction activities to maintain, or enhance, the amenity values of the area,
  - Provide for buffer strips to reduce any adverse effects on the nearest residential activities,
  - Accommodate ancillary activities, providing they are managed to avoid or mitigate any adverse effects,
  - Manage extraction activities to enhance the visual quality of the area,

- Retain indigenous vegetation on the face of the escarpment, especially
  in places of special amenity, as part of the visual backdrop of the city.
- Provide for progressive rehabilitation to allow for future development,
- Manage the design and appearance of buildings is to maintain or enhance the amenity values of the area.
- (73) Quarrying activities are provided for as a permitted activity subject to conditions relating to bulk and location of buildings and structures, design and external appearance of structures, dust, odour, light spill and glare, vibration, hours of operation, fire safety, provision of outdoor storage, a buffer strip of indigenous vegetation, protection of areas of special visual amenity on the escarpment, progressive rehabilitation of the site, management of land instability and a quarry management plan.
- (74) The rules also provide for ancillary quarrying activities and exceedance of permitted activity conditions through the resource consent process. This includes consideration and management of adverse effects on the environment. These are discretionary activities, where Council is not limited in its assessment. All other activities in the zone are Non-Complying.
- (75) Activities in the Quarry Zone are also subject to district-wide chapters, including those covering, subdivision, transport and noise.

#### Management of reverse sensitivity effects in adjacent zones.

(76) Reverse sensitivity effects on quarry activities from sensitive activities at adjacent sites in the general rural and rural residential activity areas are managed via restrictive provisions in a quarry protection area.

#### 4.3.2 Analysis of other District Plans

- (77) The approach of the following district plans on quarrying have been reviewed:
  - Wellington City District Plan,
  - · Porirua City District Plan,
  - Upper Hutt City District Plan
  - Combined Wairarapa District Plan, and
  - Kāpiti Coast District Plan.

- (78) The review of these district plans revealed both common approaches to the treatment of quarrying activities, as well as differences, as outlined below:
  - Wellington City Council provides the only example of a quarry zone in the region. Their district plan also includes a quarry precinct.
  - The Porirua City District Plan, the Proposed Upper Hutt District Plan and the Proposed Combined Wairarapa District Plan include provisions for quarrying activities in the General Rural Zone.
  - In general quarrying is treated separately from earthworks. However, the Kapiti Coast District Plan provides for the extension of three existing quarries, and new quarries in the general rural zone in the Earthworks Chapter.
- (79) There are a number of common themes in the management of quarry activities. These include objectives recognising the benefits of quarries, the need to mitigate the effects of quarrying, and minimising reverse sensitivity.
- (80) Policies address matters including:
  - Enabling quarrying activities and ancillary activities
  - Providing for appropriate buildings
  - Requiring quarry plans to demonstrate management of adverse effects and remediation of the site
  - Providing for rules and standards to manage:
  - Illumination effects
  - Dust and odour effects
  - Noise and vibration effects
  - Visual effects on adjacent residential areas
  - Traffic and access Effects
  - Reverse sensitivity effects
  - Indigenous biodiversity
  - Rehabilitation of the site and quarry face.
- (81) In general, these district plans require resource consent for quarrying activities. The exceptions being small farm quarries in the Kāpiti Coast and Wairarapa districts. Wellington City provides for quarrying activities as a controlled activity, whilst most other plans provide for quarrying as a

- restricted discretionary activity in the General Rural Zone. In general, the activity status defaults to discretionary when there is non-compliance with conditions.
- (82) The restriction of councils control or discretion is a useful tool as it identifies the issues that generally apply to quarrying activities.

#### 4.3.3 Resource consents

(83) Council records indicate one new resource consent has been applied for and granted within the quarry zone between 1 January 2014 and 31 December 2023. A certificate of compliance was also issued for some of the activities within the quarry zone.

#### 4.3.4 Quarry Management Plan

- (84) A quarry management plan was last presented to Council in September 2024, as part of the current District Plan Review. The quarry management plan was developed to meet the requirements of operative District Plan, the Natural Resources Plan for the Wellington Region, and resource consents. It is composed of a number of separate plans, including:
  - An erosion and sediment control plan,
  - A noise management plan,
  - A dust management plan
  - · A hazardous substances and spill response team, and
  - A rehabilitation strategy.

### 4.3.5 Monitoring

- (85) Monitoring of the Quarry Zone includes monitoring reports for specific effects and records of complaints. A number of monitoring reports have been supplied to Council in accordance with the permitted activity standards, resource consent conditions or the quarry management plan. These include:
  - Erosion and sediment control
  - Out of season extraction
  - Noise monitoring

- (86) Council has records of 6 complaints for quarrying for the period 1 January 2014 to 31 December 2023. The timing of the complaints indicates that they probably relate to 4 potential events. The issues raised in the complaints can be summarised as follows:
  - Noise from the quarry machinery, including operations early in the morning outside of the permitted operating hours,
  - The noise and vibration from blasting, and
  - Visual impacts of quarry.
- (87) The quarry operator has stated that they have no record any complaints relating to land use activities, beyond those received by Council.

#### 4.3.6 Advice from mana whenua

- (88) Council has engaged with mana whenua on the district plan review through the Kāhui Mana Whenua engagement group. No specific issues have been raised with regard to the quarry zone.
- (89) However, from a general perspective, Mana Whenua have been clear and consistent in their direction and vision throughout the district plan consultation process, which has been led by the conceptual desire to continue to connect to their ancestral lands and work with Council via the treaty to achieve the purpose of section 5 of the Act in a sustainable manner whilst respecting both tikanga (traditional customs) and Te Taiao (the environment).

#### 4.3.7 Stakeholder and community engagement

- (90) As part of the review of the District Plan, Council officers have engaged with Winstone Aggregates Ltd owners and operators of quarries within the proposed Quarry Zone. Winstone Aggregates Ltd raised concerns regarding impacts on the operation of the quarry from regulations that attempt to manage impacts on ecology, amenity and landscape values.
- (91) Council have also engaged with the community as part of the review of the District Plan. The following issues for the Quarry Zone were raised by residents during the draft district plan engagement:

- The removal of sites in the rural lifestyle zone from the Quarry Protection Overlay.
- The removal of provisions relating to reverse sensitivity, and the inclusion of a no complaints covenant on the title and LIMs.
- Loading and unloading of trucks should be included in the hours of operation.

## 4.3.8 Scarcity of opportunities for quarrying hard rock aggregates in the Hutt City District.

(92) The New Zealand Infrastructure committee commissioned an assessment opportunity for aggregates in the Wellington Region in New Zealand. This assessment involved modelling of factors that enable, or limit, the location of new quarries. Variables included source material, land use, proximity to high demand aggregate markets, access to transport networks, and cultural sensitivity. The resultant mapping indicates limited opportunities for new hard aggregate quarries in the Hutt Valley. Outside of the quarry zone, the prime opportunities are located in the Wainuiomata catchment.

### 4.4 Summary of issues analysis

- (93) The following issues have been identified through analysis of compliance information, feedback from the quarry operators, community and analysis of complaints, and comparison with local district plans:
  - a) The continued operation of the quarry is important to support development in the district.
  - b) There are limited opportunities for quarrying in Lower Hutt.
  - c) Managing adverse effects of:
    - quarrying activities on visual amenity,
    - noise and vibration,
    - dust, and

<sup>&</sup>lt;sup>1</sup> Hill MP, Chilton MO. 2024. Aggregate modelling for the Wellington Region of New zealand. Lower Hutt (NZ): GNZ Science. 20p (GNS Science Report; 2024/09. http://doi.org/10.21420/JW09-RF66

- ensuring land stability hazards are contained onsite, and mitigated for post development.
- d) Managing reverse sensitivity effects on the quarry.
- e) Rehabilitation of the site for future use. Including ensuring the stability, minimising any adverse effects of land contamination, and remediation of the quarry face.
- (94) Analysis of the operative District Plan indicates that provisions are largely efficient in providing for quarrying in the Quarry Zone. They provide for quarrying as a permitted activity, whilst the effects of quarrying are largely met through resource consents and a quarry management plan. Potential reverse sensitivity effects are limited through provisions in the surrounding zones.
- (95) Monitoring, and public engagement indicate that the provisions are largely effective in managing the adverse effects of quarrying. There are records of a small number of recorded complaints regarding the quarry operation, combined with some feedback from public consultation.

# 5 Scale and significance assessment

- (96) In writing this evaluation report we must provide a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects anticipated from the implementation of the proposal.
- (97) In assessing that scale and significance we have had regard to:

Matters of national importance	Low
Other matters	Low/Moderate
Degree of change from the operative plan	Low  The proposed changes consolidate the existing rules, and do not substantially alter the provisions in the operative District plan.
Geographic scale of effects	Moderate  Activities in the Quarry Zone primarily have the potential to impact sites within the zone and the surrounding areas, a relatively small proportion of Lower Hutt.
Number of people affected	Low/Moderate
Duration of effects	Low/moderate  Most of the effects are limited to the life of the quarry. Remediation of the quarry following it's closure will reduce other effects.

Economic impacts	Low
	This is largely limited to adjacent
	properties, where development is limited
	to mitigate reverse sensitivity, and the
	quarry itself, which has limits imposed to
	maintain amenity, that limit future
	extraction.
	Maintenance of a large quarry within the
	district provides an accessible, low-cost
	source of building aggregate and
	associated construction products.
	The economic impact of not providing for
	a quarry locally is high as economic cost
	of aggregate and manufactured
	materials increases with distance.
Contail and a cultured incompands	1
Social and cultural impacts	Low
Environmental impacts	Moderate
·	
·	Moderate  The effects of the quarry can be heard in
·	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an
·	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural
·	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their
·	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural
·	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their
Environmental impacts	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their proximity.
Environmental impacts  Health and safety impacts	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their proximity.  Low  Low
Environmental impacts  Health and safety impacts  Degree of interest from	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their proximity.  Low  Low  Interest by tangata whenua is largely
Environmental impacts  Health and safety impacts  Degree of interest from	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their proximity.  Low  Low  Interest by tangata whenua is largely through the impact on water quality from
Environmental impacts  Health and safety impacts  Degree of interest from	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their proximity.  Low  Low  Interest by tangata whenua is largely through the impact on water quality from the discharge to the Hutt River. This is an
Environmental impacts  Health and safety impacts  Degree of interest from	Moderate  The effects of the quarry can be heard in the adjacent suburbs, and there is an ongoing effect on the adjacent rural lifestyle zone properties due to their proximity.  Low  Low  Interest by tangata whenua is largely through the impact on water quality from

Degree of interest from the	Low
public	Interest by tangata whenua is largely through the impact on water quality from the discharge to the Hutt River. This is an effect that is managed by Greater Wellington Regional Council through the Natural Resource Plan.
Degree of risk or uncertainty	Low

(98) Based on this assessment, the overall scale and significance of the effects for Quarry Zone are low.

## 6 Proposed District Plan objectives and provisions

(99) The following table gives the objectives of the proposed Quarry Zone chapter, with a summary of the policies and rules that implement the objectives:

Objective	Text and associated provisions
QUARZ-O1 Purpose of the Quarry Zone	The Quarry Zone contributes to well-functioning environments by providing a source of aggregate and products manufactured from aggregate for use in construction and development.  Implemented through:  • QUARZ-P1 Quarrying activities • QUARZ-P3 Recognition of significance of aggregates and finite nature • QUARZ-R5 Quarrying activities • QUARZ-R6 Industrial Activities
QUARZ-O2 Activities in the zone	<ol> <li>Primarily provides for quarrying, processing of quarried material, and manufacturing of products from quarried material,</li> <li>Provides for ancillary activities that are directly associated with quarrying, and</li> <li>Provides for other activities that are compatible with quarrying activities within the Zone and have a functional need or operational need to be within the zone.</li> </ol>

#### Implemented through:

- QUARZ-P1 Quarrying activities
- QUARZ-P2 Potentially incompatible activities
- QUARZ-P3 Recognition of aggregates and finite nature
- QUARZ-R1 repair and maintenance of buildings and structures
- QUARZ-R2 Demolition of buildings and structures
- QUARZ-R3 Construction of new buildings and structures and alterations and additions to existing buildings and structures.
- QUARZ-R5 Quarrying activities

#### QUARZ-O3

## Adverse effects

Adverse effects of activities and development within the Quarry Zone are effectively managed within the Zone

#### Implemented through:

- QUARZ-P4 Zone interfaces
- QUARZ-P5 Retention of indigenous vegetation
- QUARZ-P6 Quarry management plan
- QUARZ-R1 repair and maintenance of buildings and structures
- QUARZ-R2 demolition and removal of buildings and structures
- QUARZ-R3 Construction of new buildings and structures and alterations and additions to existing buildings and structures
- QUARZ-R4 Conservation activities
- QUARZ-R5 Quarrying activities
- QUARZ-R6 Industrial activities ancillary to quarrying
- QUARZ-R7 Residential activity
- QUARZ-R8 Activities not otherwise provided for
- QUARZ-S1 Height

	QUARZ-S2 Hours of operation
	<ul> <li>QUARZ-S3 Vibration associated with blasting</li> </ul>
	<ul> <li>QUARZ-S4 Quarry setback overlay</li> </ul>
	QUARZ-S5 Special amenity overlay
	<ul> <li>QUARZ-S6 Landslide hazard and erosion</li> </ul>
	QUARZ-S7 Quarry management plan
QUARZ-04	Quarry sites within the Quarry Zone, including exposed
	and cut faces, are rehabilitated as soon as practicable
Site	on the completion of quarrying at the site.
rehabilitation	
	Implemented through:
	QUARZ-P6 Quarry Management Plan
	, ,
	QUARZ-R5 Quarrying activities
	QUARZ-S6 landslide hazard and erosion
	<ul> <li>QUARZ-S7 Quarry management plan</li> </ul>

#### Note on the location of the zone

(100) The land included in the Quarry Zone includes two existing quarry sites located on the base of the Western Hills and access by State Highway 2.

The effects of quarry activities have become established in these locations, and the inclusion of these sites in the zone will provide for a continuation of the approach for providing for and managing the effects of these activities.

#### Note on reverse sensitivity provisions

(101) A Quarry Zone Protection Area (QZPA) is proposed within which certain activities will be controlled to manage reverse sensitivity effects on quarry activities. Objectives, policies and rules for activities within the QZPA, address one of the resource management issues identified in section 4.4 of this report. However, these provisions are contained within the chapters for the Rural Lifestyle and General Rural zones. An evaluation of these provisions is included in the s32 evaluation report for these zones.

## 7 Evaluation of objectives

- (102) This section is the evaluation of objectives, as required through s32(1)(a) of the RMA.
- (103) An objective is a statement of what is to be achieved through the resolution of a particular resource management issue. A district plan objective should set out a desired end state to be achieved through the implementation of policies and rules.
- (104) Under s75(1)(a) of the Resource Management Act, a district plan must state the objectives for the district.
- (105) Under s32(1)(a) of the Resource Management Act, an evaluation report required under the Act must examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of the RMA. The purpose of the RMA, as stated in s5(1) of the Act, is to promote the sustainable management of natural and physical resources.

#### **Evaluation of Objectives**

QUARZ-O1 - Purpose of the quarry zone

The Quarry Zone contributes to well-functioning environments by providing a source of aggregate and products manufactured from aggregate for use in construction and development.

QUARZ-O2 - Activities in the zone

The Quarry Zone:

- Primarily provides for quarrying, processing of quarried material, and manufacturing of products from quarried material,
- 2. Provides for ancillary activities that are directly associated with quarrying, and
- 3. Provides for other activities that are compatible with quarrying activities within the Zone and have a functional need or operational need to be within the zone.

QUARZ-O3 - Adverse effects

Adverse effects of activities and development within the Quarry Zone are effectively managed within the Zone.

QUARZ-O4 - Site rehabilitation

Quarry sites within the Quarry Zone, including exposed and cut faces, are rehabilitated as soon as practicable on the completion of quarrying at the site

#### Relevance

- The objectives address resource management issues identified in section
   4.4 of this report.
- Acknowledges the benefits of quarrying activities in supplying aggregate and related materials for local development.
- Recognises the benefits of locating ancillary, and some other related activities adjacent to the quarry.

- Recognises that the activities and development located within quarries create adverse effects that need to be managed within the zone.
- Recognises the need to plan for rehabilitation of quarry sites to enable their longer term use after quarry activities have ceased.

#### **Usefulness**

- Clearly states outcomes for providing for and managing quarry activities.
- Supports the Council function of controlling the actual and potential effects of quarrying activities and other activities on quarrying activities (a function under s31(1)(b) of the RMA).

#### Reasonableness

- The outcomes of the objectives are reasonable as they connect to the purpose of the RMA. The outcomes seek to provide for the wellbeing of people and communities through the supply of base materials for development and infrastructure, while ensuring adverse effects are appropriately managed.
- It is reasonable for the outcomes of the objective to seek to protect the benefits of established quarrying activities by managing reverse sensitivity.
- The outcomes of the objectives are consistent with those sought in the operative District Plan and other district plans in the Wellington region.

#### **Achievability**

 Can be achieved without imposing a significant regulatory burden on people undertaking land use and development under the District Plan (although the policies and rules that implement the objective would have a greater influence on this).

#### **Alternatives**

#### No objective for site rehabilitation

This alternative would comprise the omission of QUARZ-O4. The rationale of this approach would be to place less of a regulatory burden on the operator. This is not proposed due to the potential significant long-term effects of quarry

activities which may occur without site rehabilitation, and which may preclude the benefits of future use of the land.

#### Inclusion of additional objectives relating to built environment

This alternative would result in additional objective relating specifically to the built environment within the quarry zone. This is a common practice for zone chapters in the proposed District Plan. A specific objective relating to the bulk, location and appearance of buildings would provide some guidance for development. However, I don't consider it necessary in this instance as the buildings and structures associated with quarrying activities are limited within the existing zone. If the zone were to be expanded and its size increased then the issue could be considered in the associated plan change.

#### Summary

Objectives QUARRY O1-O4 set clear outcomes for activities within a quarry zone including managing the adverse effects on adjacent zones and preparing for a future use. It would enable Council to undertake its regulatory functions to control the actual and potential impacts of land use and development in a way that is not overly prescriptive and would not impose a significant regulatory burden on people undertaking land use and development under the District Plan.

## 8 Evaluation of Policies and Rules/Methods

- (106) Policies and rules implement, or give effect to, the objectives of a plan.
- (107) Policies of a district plan are the course of action to achieve or implement the plan's objective (i.e. the path to be followed to achieve a certain, specified, environmental outcome). Rules of a district plan implement the plan's policies, and have the force and effect of a regulation.
- (108) Under s32(1)(b) of the Resource Management Act, an evaluation report required under the Act must examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
  - (i) identifying other reasonably practicable options for achieving the objectives; and
  - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
  - (iii) summarising the reasons for deciding on the provisions.
- (109) Under s32(2) of the Resource Management Act, the assessment of the efficiency and effectiveness of the provisions must:
  - (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
    - (i) economic growth that are anticipated to be provided or reduced; and
    - (ii) employment that are anticipated to be provided or reduced; and
  - (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and

(c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

#### Note on the structure of this evaluation

(110) The policies and rules on the Quarry chapter give effect objectives that enable quarrying activities (QUARZ-O1 and O2) and objectives that manage the adverse effects of activities and development (QUARZ-O3 and O4) they are evaluated in the table below as a package of provisions.

#### Note on quantification of benefits and costs

- (111) Under Section 32(2)(b) of the RMA, the benefits and costs assessed should be quantified if practicable.
- (112) The quantification of benefits and costs is not possible in his instance due to paucity of data.

#### Note on risk of acting / not acting if information is uncertain or insufficient

- (113) Under Section 32(2)(c) of the RMA, the assessment of efficiency and effectiveness of provisions must include an assessment of the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.
- (114) For the Quarry zone chapter, information on the management of quarrying activities and ancillary quarry activities is certain and sufficient, including on the range of activities that can take place and the nature of the effects from these activities.

### 8.1 Evaluation of provisions

- QUARZ-P1 Enabled activities, implemented by:
  - QUARZ-R4 Conservation activities

- QUARZ-R5 Quarrying activities
- QUARZ-P2 Potentially incompatible activities, implemented by:
  - o QUARZ-R6 Industrial activities ancillary to quarrying
  - QUARZ-R7 Residential activities
  - o QUARZ-R8 Activities not otherwise provided for
- QUARZ-P3 Recognition of significance of aggregates and finite nature, implemented by:
  - QUARZ-R5 Quarrying activities
- QUARZ-P4 Built development
  - o QUARZ-R1 Repair and maintenance of buildings and structures
  - o QUARZ-R2 Demolition and removal of buildings and structures
  - QUARZ-R3 Construction of new buildings and structures and alterations and additions to existing buildings and structures
- QUARZ-P5 Zone interfaces
- QUARZ-P6 Vibration
- QUARZ-P7 Retention of indigenous vegetation
- QUARZ-P8 Land stability
- QUARZ-P9 Quarry Management Plan, QUARZ-P5 to QUARZ-P9 are collectively implemented by:
  - o QUARZ-R3, QUARZ-R5, QUARZ-R6 and QUARZ-R8

#### Why these provisions are included in the proposed District Plan

These provisions collectively implement QUARZ-O1 to QUARZ-O4. These provisions seek to provide for quarrying and other compatible activities, while managing their adverse effects and providing for site rehabilitation which enables future re-use.

#### **Efficiency and effectiveness**

#### **Benefits**

- The provisions will maintain reasonable amenity for adjoining zones through a variety of approaches, including vegetation control, control of building heights, and through a quarry management plan.
- Provides for vibration and land stability hazards to be managed so that they do not compromise health and safety.
- Provisions protecting indigenous vegetation and for site rehabilitation will retain, and in future develop, natural environment and indigenous biodiversity values.
- Enables quarries to continue to operate efficiently and effectively, and able to supply aggregate and processed materials which supports development of infrastructure and other activities.
- The supply of quarry materials supports the development of infrastructure (particularly transport networks) and other activities, which supports economic activity and social cohesiveness.
- The site rehabilitation provisions will provide for future activities to establish on the site which may have economic benefits.
- Provides an efficient consenting regime, which incorporates existing approaches to managing quarrying activity, and thereby provides certainty for operators of quarries and associated activities within the Quarry Zone.

#### Costs

Quarrying operations have some potential environmental impacts which will be enabled by the provisions of the zone. However, these effects relate to a defined zone, where effects on the environment from quarry operations have already been established.

- No opportunity for neighbours or others to participate in future quarrying consent applications, as notification is precluded. However, it is noted that no applications have been notified to date.
- There will be some costs to operators if new activities are constrained to achieve compliance with these provisions, or otherwise through consenting costs.

#### Effectiveness/Efficiency

- QUARZ-P1 and QUARZ-P3, and the supporting rule framework, are effective in implementing QUARZ-O1 (Purpose of the Quarry Zone) and QUARZ-O2 (Activities in the zone), as they enable quarrying activities as the primary activities within the zone. Where resource consent is required for quarrying or associated activities, QUARZ-P3 will provide relevant policy direction to ensure the benefits of quarrying activities are appropriately considered.
- QUARZ-P2 and QUARZ-P4 to QUARZ-P9, and the supporting rule framework, are effective in implementing QUARZ-O3
  (Adverse effects) and QUARZ-O4 (Site rehabilitation), as they provide a consenting framework to ensure the
  environmental effects of activities in the Quarry Zone are appropriately managed.
- The policies and assessment matters provide clear direction for consideration by decision makers. The parameters set by the rules and standards, will ensure consenting requirements are related to the scale of the activity and potential adverse effects. Thereby, the provisions are efficient.
- Although consent is required for new quarrying activities, this is appropriate given the potential scale of environmental effects.

#### Reasonably practicable alternatives

#### Status quo

There is little difference between the proposed district plan and status quo. The changes are largely a result of consideration of changes to/or new legislation, national standards, policies and regional policies and plans. The proposed changes are therefore more efficient and effective in giving effect to the new planning framework than the status quo.

#### Quarrying activities are a controlled activity

Under this alternative, quarrying activities are controlled activities. The costs and benefits of this option include:

- There is an environmental cost associated with controlled activities in that consent must be granted. No environmental benefit has been identified.
- An increased economic cost associated with any changes to the regime requiring a resource consent. This is partially
  offset by the economic certainty associated with controlled activities being granted and the knowledge that only set
  criteria need to be accounted for.
- No social or cultural costs or benefits have been identified.

This option is less effective in avoiding, remedying or mitigating the effects of quarrying. In addition, it may be may be less efficient in achieving the objectives as it requires additional consents, or may not be applicable given existing use rights.

#### A more permissive regime for ancillary quarry activities

This alternative Includes provisions providing for ancillary quarrying activities as restricted discretionary activity. This would restrict Council's discretion to set standards that would likely include traffic, noise, vibration, lighting and illumination, visual effects, dust, etc.

The cost and benefits of this approach include:

- Environmental costs associated with unidentified effects. This is particularly an issue if new industries are applied for. No environmental benefits have been identified.
- Economic benefits associated with less consents and more direction for applications for resource consent applications.

  No economic costs have been identified.

No social or cultural costs or benefits have been identified.

Overall, this approach is potentially more efficient at providing for the operation of a quarry, but is less effective in managing the adverse environmental effects.

#### Removal of buffer with Belmont Regional Park

Removal of the standard QUARZ-S4 that limits quarrying as a permitted activity within 10m of the boundary with Belmont Regional Park could have the following benefits and costs:

- It would provide for additional economic benefits in allowing for more of the aggregate to be quarried without the need for resource consent.
- No environmental, social or cultural benefits are identified
- The environment cost associated with this option include the risk of damage to the adjacent property from slope failure, loss of visual amenity and potential effects on indigenous flora and fauna.
- No economic, social or cultural costs are identified.

This option is less effective in providing protection from the effects of quarrying on the adjacent zone.

#### Removal of special amenity area

Removal of standard QUARZ-S5 that require resource consent for quarrying of the land located within the overlay would result in the economic benefits associated with additional aggregate being quarried, the processing by ancillary activities and the proximity of the quarry to the and use of the quarry. There is also an environmental benefit resulting from carbon emissions associated with short transport distances from the site.

However, retention of the overlay and associated rule requiring resource consent, provides for mining and allows for potential mitigation and remediation of potentially significant visual amenity effects associated with a quarry in a highly visible area to significant residential areas in the city.

This option is therefore less efficient and effective in providing for the mitigation of adverse effects of quarrying on visual amenity for the adjacent residential suburbs.

#### No requirement for a quarry management plan

A lack of a quarry management plan has the following potential costs/benefits:

- The environmental cost associated with the non-inclusion of a quarry management plan is the lack of mitigation of the adverse effects of quarrying activities, including noise, vibration and visual effects.
- There is a long term cost associated with rehabilitation of the site following quarrying. A management plan ensures plans are in place for rehabilitation of quarries.
- No economic costs or benefits have been identified.
- The social cost for non-inclusion of a quarry management plan relates to remediation of the site and its potential long-term use. No social benefits have been identified.

No cultural costs or benefits have been identified.

## 9 Summary

- (115) This evaluation has been undertaken in accordance with section 32 of the RMA in order to identify the need, benefits and costs and the appropriateness of the proposal having regard to its effectiveness and efficiency relative to other means in achieving the purpose of the RMA. The evaluation demonstrates that this proposal is the most appropriate option as:
  - The proposed objective provides an objective specific to the Quarry Zone and more clearly articulates the outcomes sought, including recognising the contribution of quarrying.
  - The proposed provisions are consistent with the National Planning Standards.
  - The proposed provisions are broadly consistent with the approaches of recently reviewed and local relevant District Plans.
  - The proposed provisions are considered the most efficient and effective method of providing for Quarry activities and ancillary quarry activities whilst managing their adverse effects.
  - The proposed provisions effectively manage the adverse effects of quarrying on local character and amenity, noise and vibration dust and natural hazards.