Section 32 Evaluation Report

Part 2: Earthworks

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Table of acronyms

Abbreviation	Full term
EW	Earthworks
GWRC	Greater Wellington Regional Council
INF	Infrastructure
MfE	Ministry for the Environment
NES	National Environmental Standards
NESCS	National environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011
NES-ETA	National Environmental Standards for Electricity Transmission Activities 2009
NES-FW	National Environmental Standards for Freshwater 2020
NES-PF	National Environmental Standards for Plantation Forestry 2017
NES-TF	National Environmental Standards for Telecommunication Facilities 2016
NPS	National Policy Statements
NPS-ET	National Policy Statement for Electricity Transmission 2008
NPS-FM	National Policy Statement for Freshwater Management 2020
NZCPS	New Zealand Coastal Policy Statement 2010
ODP	Operative District Plan
PDP	Proposed District Plan
PNRP	Proposed Natural Resources Plan
RMA	Resource Management Act
RPS	Regional Policy Statement for the Wellington Region 2013

1.0 Overview and Purpose

1.1 Introduction to the resource management issue

This section 32 evaluation report is focused on the Earthworks topic, and the related provision in the Earthworks Chapter of the Proposed Plan (Part 2 – General District-Wide Matters). The purpose of the topic is to enable earthworks while addressing the adverse effects of this activity.

Since the 'first generation' operative district plan was made operative, second-generation district plans been developed across New Zealand that have built on and incorporated improved approaches to dealing with earthworks. Feedback from resource users has indicated areas where the operative provisions can be improved. National directives, and particularly the National Planning Standards, have also been developed that to a greater or lesser extent address this topic. As a result, it is evident that the operative earthworks provisions can be improved upon and better formulated to address these matters.

2.0 Reference to other evaluation reports

This report should also be read in conjunction with the following evaluation reports:

Report	Relationship to this topic
Part 1: Context to s32 evaluation and evaluation of proposed Strategic Objectives	This report provides an overview of the PDP background and policy approach including the District Plan response to the National Policy Statement on Urban Development requirements. It also provides an evaluation of the Strategic Direction chapters of the PDP.
Subdivision	The purpose of the chapter to which this report relates is to assist the Council to carry out its functions under the RMA relating to the control of subdivision. The Earthworks Chapter, by contrast, manages the adverse effects of earthworks on the environment, including earthworks associated with subdivision proposals.
Historic Heritage, Notable Trees and Sites and Areas of Significance to Māori	Areas in which earthworks are proposed may contain archaeological sites and sites and areas of significance to Māori, or be located within the dripline of notable trees. Provisions relating to earthworks in the sites and areas and in proximity to notable trees are contained in the Earthworks Chapter. Provisions relating to other activities and for the broader protection of these sites are located in the Sites and Areas of Significance to Māori Chapter and Historic Heritage and Notable Trees Chapters.
Infrastructure and Transport	Provisions relating to infrastructure are located in the Infrastructure Chapter and infrastructure activities are generally exempt from the provisions in the Earthworks Chapter. However, earthworks that would affect infrastructure assets such as the National Grid and gas transmission pipelines are contained in the Earthworks Chapter.
	The Transport Chapter contains provisions relating to transport matters, albeit provisions relating to the transport of earthworks materials are contained in the Earthworks Chapter.
Natural Hazards	The Earthworks Chapter includes policies and rules that implement the objectives in the Natural Hazards Chapter where earthworks proposals relate to natural hazard mitigation works or are located in areas subject to identified natural hazard risks.

Report	Relationship to this topic
Natural Character and Natural Features and Landscapes	The Earthworks Chapter includes policies and rules that implement the objectives in the Natural Character Chapter where earthworks proposals affect riparian margins and policies and rules where earthworks proposals affect Outstanding Natural Features and Landscapes, Special Amenity Landscapes and Ridgelines and Hilltops.
Ecosystems and Indigenous Biodiversity	The Earthworks Chapter includes policies and rules that implement the objectives in the Ecosystems and Indigenous Biodiversity Chapter where earthworks proposals affect Significant Natural Areas.
Coastal Environment	The Earthworks Chapter includes policies and rules that implement the objectives in the Coastal Environment Chapter where earthworks proposals affect land in the Coastal Environment, coastal margins and Areas of Very High or High Coastal Natural Character.
Contaminated Land and Hazardous Substances	The Contaminated Land Chapter manages subdivision, use and development of contaminated land and potentially contaminated land for the purposes of protecting human health.
General Rural Zone and Open Space and Recreation Zones	The Earthworks Chapter includes rules relating to the maintenance and construction of tracks in the General Rural Zone and Open Space and Recreation Zone that implement objectives in the respective zone-based chapters. The
Airport Zone	The Earthworks Chapter includes a rule and standard relating to earthworks activities in the Airport Zone that implement objectives in the relevant zone-based chapter.
All Zones	The objectives in all zone chapters that describe the scale and form of the development of each zone are relevant, that that 'consistency' with that scale and form where earthworks activities are concerned is one of the key considerations under Objective EW-01.
Development Areas	The Earthworks Chapter contains a policy and matters of discretion that require consideration of the outcomes sought in Development Areas, where earthworks activities are concerned.

3.0 Strategic Direction

The following objectives in the Strategic Direction chapter of the Proposed District Plan that are relevant to this issue/topic are:

Anga whakamua – Moving into the future

AW-O4: The development and design of the City reflects mana whenua and the contribution of their culture, traditions, ancestral lands, waterbodies, sites, areas and landscapes, and other taonga of significance to the district's identity and sense of belonging.

Historic Heritage and Sites and Areas of Significance to Maori

HHSASM-O1: Significant buildings, sites, areas, places and objects that exemplify Wellington's historical and cultural values are identified, recognised and protected.

HHSASM-O3: The cultural, spiritual and/or historical values associated with sites and areas of significance to Māori are protected.

Natural Environment

NE-O1: The natural character, landscapes and features, and ecosystems that contribute to the City's identity and have significance for mana whenua as kaitiaki are identified, recognised, protected, and, where possible, enhanced.

NE-O2: Future subdivision and development is designed to limit further degradation of the City's water bodies, and recognises mana whenua and their relationship to water (Te Mana o Te Wai).

Strategic City Assets and Infrastructure

SCA-06: Infrastructure operates efficiently and safely and is protected from incompatible development and activities that may create reverse sensitivity effects.

Sustainability, Resilience and Climate Change

SRCC-02:

Risks from natural hazards are:

- 1. Identified and understood:
- 2. Planned for through adaptation and mitigation measures to ensure the risks are low; and
- 3. Avoided where the risks are intolerable.

SRCC-03:

Subdivision, development and use:

- 1. Effectively manage the risks associated with climate change and sea level rise;
- 2. Support the City's ability to adapt over time to the impacts of climate change and sea level rise; and
- 3. Support natural functioning ecosystems and processes to help build resilience into the natural and built environments..

Urban Form and Development

UFD-O2 (in part): Urban development in identified greenfield areas:

1. Is environmentally and ecologically sensitive ...

An evaluation of these objectives is contained in the companion section 32 Evaluation Overview Report. It is noted that a number of the objectives forming part of the Plan's Strategic Direction and referenced above inform the earthworks provisions but relate more directly to outstanding, significant and special areas and values. As the genesis for those provisions lie in other topics (e.g., landscape, mana whenua, indigenous biodiversity) they are also referenced in the relevant s32 Evaluation Reports relating to those topics.

4.0 Regulatory and policy direction

In carrying out a s32 analysis, an evaluation is required of how the objectives of the proposal achieves the purpose and principles contained in Part 2 of the RMA.

Section 5 sets out the purpose of the RMA, which is to promote the sustainable management of natural and physical resources.

Sustainable management 'means managing the use, development, and protection of natural and physical resources to enable people and communities to provide for their social, economic and cultural wellbeing 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'.

In achieving this purpose, all persons exercising functions and powers under the RMA also need to:

- Recognise and provide for the matters of national importance identified in s6
- Have particular regard to the range of other matters referred to in s7
- Take into account the principles of the Treaty of Waitangi/Te Tiriti o Waitangi in s8.

4.1 Section 6

The s6 matters relevant to this topic are:

Section	Relevant Matter
6(a) - (c), (e) (f) and (h)	 The Earthworks Chapter includes specific provisions that relate to: the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development; the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development; the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna; the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga; the protection of historic heritage from inappropriate subdivision, use, and development; and the management of significant risks from natural hazards.

4.2 Section 7

The s7 matters that are relevant to this topic are:

Relevant Matter
kaitiakitanga
the ethic of stewardship
the efficient use and development of natural and physical resources
Inclusive of soils
the maintenance and enhancement of amenity values
With respect to the management of earthworks in urban, rural and coastal and riparian margins
intrinsic values of ecosystems
In or supported by soils are well as in receiving environments
maintenance and enhancement of the quality of the environment

s7(g)	any finite characteristics of natural and physical resources
	Inclusive of soils
s7(i)	the effects of climate change
	Accounting for the effects of climate change on soils, slope stability and the management of erosion and sediment arising from earthworks

Section 7 matters are particularly relevant when seen through the lens of considerations derived from other topics that inform the earthworks provisions.

4.3 Section 8

Reflecting Te Tiriti o Waitangi principles with respect to partnership, participation and protection, the Council and Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira have worked in partnership to develop provisions that recognise and protect sites and areas of significance, that have informed the earthworks provisions.

4.4 National Direction

4.4.1 National Policy Statements

There are five National Policy Statements (NPS) currently in force:

- NPS for Electricity Transmission 2008 (NPSET)
- New Zealand Coastal Policy Statement 2010 (NZCPS)
- NPS for Renewable Electricity Generation 2011
- NPS for Freshwater Management 2020 (NPSFM)
- NPS on Urban Development 2020

The instrument/s and associated provisions relevant to this topic are:

NPS	Relevant Objectives / Policies
NPSET 2008	Policy 10 In achieving the purpose of the Act [RMA], decision-makers must to the extent reasonably possible manage activities to avoid reverse sensitivity effects on the electricity transmission network and to ensure that operation, maintenance, upgrading, and development of the electricity transmission network is not compromised.
NZCPS 2010	Provide for the integrated management of natural and physical resources in the coastal environment, and activities that affect the coastal environment. This requires: (c) particular consideration of situations where: (iv) land use activities affect, or are likely to affect, water quality in the coastal environment and marine ecosystems through increasing sedimentation
	Policy 22 (1) Assess and monitor sedimentation levels and impacts on the coastal environment. (2) Require that subdivision, use, or development will not result in a significant increase in sedimentation in the coastal marine area, or other coastal water. (3) Control the impacts of vegetation removal on sedimentation including the impacts of harvesting plantation forestry. (4) Reduce sediment loadings in runoff and in stormwater systems through controls on land use activities.

NPSFM 2020	Policy 3	Ī
	Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.	
	Policy 9	
	The habitats of indigenous freshwater species are protected.	
	Policy 10	
	The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.	

4.4.2 Proposed National Policy Statements

In addition to the five NPSs currently in force there are also two proposed NPSs under development, noting that these are yet to be issued and have no legal effect:

- Proposed NPS for Highly Productive Land (NPSHPL)
- Proposed NPS for Indigenous Biodiversity (NPSIB)

Broadly speaking, however, the NPSHPL is intended to provide direction where the potential competing demands of urban growth and the maintenance of the productive potential of land is concerned, and so may have a consequential, albeit indirect bearing on provisions relating to earthworks.

As flagged by its title, the focus of NPSIB is on the protection of indigenous biodiversity, and may have a consequential, albeit indirect bearing on provisions relating to earthworks.

4.4.3 National Environmental Standards

In addition to the NPSs there are nine National Environmental Standards (NES) currently in force:

- NES for Air Quality 2004
- NES for Sources of Human Drinking Water 2007
- NES for Electricity Transmission Activities 2009 (NESTA)
- NES for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NESCS)
- NES for Telecommunication Facilities 2016 (NESTF)
- NES for Plantation Forestry 2017 (NESPF)
- NES for Freshwater 2020 (NESFW)
- NES for Marine Aquaculture 2020
- NES for Storing Tyres Outdoors 2021

The following standard/s and associated provisions relevant to this topic are:

NES	Relevant Regulations
NESTA 2009	Earthworks
	31 Permitted activities
	(1) Earthworks relating to an existing transmission line are a permitted activity if all of the conditions in subclauses (2) to (9) are complied with.

Conditions

- (2) Earthworks in a natural area must not, in a calendar year, exceed (a) 50 m³ per transmission line support structure; or (b) 100 m³ per access track.
- (3) Erosion sediment control must be applied and maintained at the site of earthworks, during and after the earthworks, to avoid the adverse effects of sediment on water bodies and the coastal marine area.
- (4) All areas of soil exposed by the earthworks must be stabilised against erosion as soon as practicable after the earthworks end to avoid the adverse effects of sediment on water bodies and the coastal marine area.
- (5) The earthworks must not create or contribute to (a) instability or subsidence of a slope or another land surface; or (b) erosion of the bed or bank of a water body or the coastal marine area; or (c) drainage problems or flooding of overland flow paths.
- (6) Soil or debris from the earthworks must not be placed where it can enter a water body or the coastal marine area.
- (7) Earthworks must not be carried out on the bed of a lake or river or in the coastal marine area.
- (8) Earthworks must not be carried out in a historic heritage area unless they are carried out on an archaeological site in accordance with the Heritage New Zealand Pouhere Taonga Act 2014.
- (9) Earthworks must not be carried out on land that a local authority has identified as containing, or possibly containing, contaminants that pose a risk to the environment.

32 Controlled activities

Earthworks relating to an existing transmission line are a controlled activity if (a) 1 or more of the conditions in regulation 33(2) to (7) are breached; but (b) both of the conditions in regulation 33(8) and (9) are complied with.

Matters over which control reserved

(2) Control is reserved over the following matters in relation to a controlled activity under this regulation: (a) the extent and nature of any disturbance; and (b) management of the earthworks and the methods used to carry out the earthworks; and (c) control of erosion and sediment and restoration of the land; and (d) visual, landscape, and ecological effects; and (e) the effects on historic heritage; and (f) the effects on drainage, flooding, and overland flow paths.

35 Restricted discretionary activities: historic heritage areas

(1) Earthworks relating to an existing transmission line are a restricted discretionary activity if the condition in regulation 33(8) is breached.

Matters to which discretion restricted

(2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation: (a)the extent and nature of any disturbance; and (b) management of the earthworks and the methods used to carry out the earthworks; and (c) control of erosion and sediment and restoration of the land; and (d) visual, landscape, and ecological effects; and (e) the effects on historic heritage; and (f) the effects on drainage, flooding, and overland flow paths.

36 Restricted discretionary activities: potentially contaminated land

(1) Earthworks relating to an existing transmission line are a restricted discretionary activity if the condition in regulation 33(9) is breached.

Matters to which discretion restricted

(2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation: (a) restoration of the land; and (b) management of the earthworks and the methods used to carry out the earthworks; and (c) the extent and nature of any disturbance in relation to ecological and health effects.

NESCS 2011

The NESCS applies to land disturbance activities on land that is contaminated or potentially contaminated (where an activity listed in HAIL is being undertaken, has been undertaken or is more likely than not to have been undertaken on that 'piece of land').

The NESCS classifies as permitted activities:

- removal or replacement of fuel storage systems and associated soil, and associated subsurface soil sampling;
- · soil sampling; and
- small-scale (no greater than 25m³ per 500m² of affected land) and temporary soil disturbance activities (no more than two months' duration).

The NESCS requires:

- that controls be put in place to minimise people's contact with the soil during the
 disturbance works including the people undertaking the disturbance works and
 any people on neighbouring properties who might come into contact with
 contaminants moving off-site (for example, in dust or water);
- that the soil be reinstated to an erosion resistant state within one month of completing the sampling or subsurface works;
- that, if there is a structure in place designed to contain contaminants, then the integrity of the structure must not be compromised; and
- disposal of removed soil at a facility authorised to receive such waste;

and sets limits on the:

- volume of soil disturbance (no more than 25m³ (in-situ volume) per 500m² of land);
- volume of soil removed (up to a total limit of 5m³ (in-situ volume) per 500m² of land per year, not including soil removed as samples for laboratory analysis) provided that the soil is disposed of at a facility authorised to receive such material; and
- duration of the soil disturbance (no longer than 2 months).

Regulations 8(5) and 8(6) require that, if an activity cannot meet the requirements for a permitted activity, a resource consent will be required. For an application to be considered as a controlled or a restricted discretionary activity, the consent authority must receive a detailed site investigation report on the land. The report must identify the applicable standard for soil contamination for the land. If the detailed investigation shows that the soil contamination does not exceed the applicable standard for the land, then the activity must be considered as a controlled activity. If the detailed investigation shows that the soil contamination does exceed the applicable standard for the land, then the activity must be considered as a restricted discretionary activity.

The controls required for soil disturbance activities under the NESCS are restricted to those related to human health. The soil disturbance activities may be subject to

controls to reduce other effects (such as environmental effects) through regional or district rules (for example, controls on earthworks to reduce water and sediment runoff).

NESTF 2016

53 Earthworks associated with certain antennas

- (1) This regulation applies to a regulated activity if it (a) is a regulated activity under regulation 30, 32, or 34; and (b) includes earthworks (as referred to in regulation 5(1)(d)).
- (2) This regulation is complied with if (a) all special place earthworks are carried out in accordance with the district rules about earthworks that apply to earthworks carried out at that place; and (b) each time rural earthworks are carried out in relation to the facility, (i) the volume of the earthworks is not more than 450 m³; and (ii) the management plan requirements in subclause (3) are complied with.
- (3) The management plan requirements are that—
- (a) before commencing the earthworks, the facility operator must prepare a management plan in accordance with subclauses (4) and (5); and (b) the earthworks must be carried out in accordance with that management plan; and (c) the facility operator must give a copy of the management plan to the local authority if requested by the local authority at any time before the expiry of 6 months from the completion of the earthworks.
- (4) An earthworks management plan must set out the following: (a) where the earthworks will be carried out: (b) the nature and scale of the earthworks: (c) when the earthworks will be started and completed: (d) the measures that will be taken to ensure that the earthworks do not, as far as practicable, cause or contribute to any of the following: (i) sediment run-off from the site: (ii) soil or debris from the works entering any water body or the coastal marine area: (iii) instability or subsidence of a slope or another land surface: (iv) erosion of the bed or bank of a water body or the coastal marine area: (v) drainage problems, flooding, or the diversion of overland flow paths: (vi) dust problems on adjoining land: (e) the measures that will be taken to complete the earthworks in a way that will, as far as practicable, (i) restore the site to its previous condition; and (ii) stabilise the site against subsequent erosion.
- (5) The management plan must be set out in a level of detail that is reasonable and proportionate having regard to the matters referred to in subclause (4)(a) to (c).
- (6) The measures referred to in subclause (4)(d) and (e) must be (a) designed to minimise the effect on the environment of the earthworks; and (b) reasonable and proportionate having regard to the matters referred to in subclause (4)(a) to (c).
- (7) In this regulation, rural earthworks means earthworks that (a) are carried out in a rural zone and not in a road reserve; and (b) are not special place earthworks; special place earthworks means earthworks that are carried out at a place referred to in regulation 45(1), 46(1), 47(1), 48(1), 49(1), 50(1), or 51(1).

54 Earthworks: regional rules apply

- (1) This regulation applies to a regulated activity if it includes earthworks (as referred to in regulation 5(1)(d)).
- (2) This regulation is complied with if the earthworks are carried out in accordance with any applicable regional rules about earthworks.

NESPF 2017 The NESPF contains a large number of provisions relating to earthworks (regs. 22 to 35). Other subparts address the consent status of activities such as harvesting and related ground disturbance (e.g., reg. 67). Given their length, the provisions are not repeated in this report. but can be found

here: https://www.mfe.govt.nz/land/land-acts-and-regulations/national-environmental-standards-plantation-forestry/about-standards

NESFW 2020

Some forms of earthworks in proximity to natural wetlands are regulated under the NESFW. Namely, earthworks and land disturbance in proximity to natural wetlands:

- are permitted if they are for the purposes of restoration and can comply with specified conditions (reg 38) or are a restricted discretionary activity if they cannot comply with those conditions (reg 39);
- are permitted if they are for the purposes of scientific research and can comply with specified conditions (reg 40) or are a restricted discretionary activity if they cannot comply with those conditions (reg 41);
- are a restricted discretionary activity if they are for the purposes of constructing
 a wetland utility structure (reg 42) and a permitted activity if they are for the
 purpose of maintaining such structures and can comply with specified conditions
 (reg 43), or are a restricted discretionary activity if they cannot (reg 44);
- are a discretionary activity if they are for the purposes of constructing a specified infrastructure (reg 45) and a permitted activity if they are for the purpose of maintaining or operating such infrastructure and can comply with specified conditions (reg 46), or are a restricted discretionary activity if they cannot (reg 47);
- are a permitted activity if they are for the purposes of arable or horticultural land use in areas used for those purposes during 2010 – 2020 if they can comply with specified conditions (reg 50); and
- are permitted if they are for the purposes of natural hazard works and can comply with specified conditions (reg 51).

Additionally, earthworks in proximity to natural wetlands are a non-complying activity if they would result in the complete or partial drainage of those wetlands (reg 52), and are prohibited if located within such a wetland, with the same result (reg 53).

The default setting for these activities where otherwise not provided for is non-complying (reg 54).

General conditions on natural wetland activities are set out in reg 55.

4.4.4 National Planning Standards

The National Planning Standards require that where the following matters are addressed, they must be included in the Earthworks chapter in Part 2 – District-Wide Matters of the District Plan:

- the Format Standard has been applied with respect to the structure of the Earthworks chapter; and
- the mandated definition for 'earthworks' has been applied.

4.5 National Guidance Documents

There is no national guidance relevant to this topic, other than the Quality Planning guidance note titled Earthworks Management, which has served as a reference point in the development of the provisions relating to this topic.

4.6 Regional Policy and Plans

Regional Policy Statement for the Wellington Region 2013 (RPS)

The table below identifies the relevant provisions and resource management topics for earthworks contained in the RPS.

Air Quality		
Section	Relevant matters	
Objective 1 Policy 1 (M)	Objective 1: Discharges of dust to air to not adversely affect amenity values and people's wellbeing. Policy 1 requires district plans to include policies and/or rules that discourage:(b) new land uses or activities that emit dust and which can affect the health of people and lower the amenity value of the surrounding areas, locating near sensitive activities.	
Coastal Environm	ent	
Section	Relevant matters	
Objectives 3 to 8 Policies 3, 4, 6, 22, 24, 26, 28, 94 (M) Policies 35, 36, 37, 38, 40, 53, 64 (R)	Objectives 3 to 8 (and associated policies) set out expectations for district plans and resource consent considerations with respect to: identifying the landward extent of the Coastal Environment; recognising the regional significance of Porirua Harbour; protecting historic heritage values; protecting indigenous ecosystems and habitats with significant indigenous biodiversity values; protecting outstanding natural features and landscape values; managing special amenity landscape values; preserving the natural character of the Coastal Environment; supporting a whole of catchment approach; protecting high natural character in the Coastal Environment; managing effects on natural character in the Coastal Environment; safeguarding aquatic ecosystem health in water bodies; safeguarding the life-supporting capacity of coastal ecosystems; and considering public access to and along the coastal marine area.	
Freshwater		
Section	Relevant matters	
Objective 12 Policy 15 (M) Objective 13 and Policies 40, 41, 42, 43, 64 (R)	Objective 12: The quantity and quality of fresh water: (a) meet the range of uses and values for which water is required; (b) safeguard the life supporting capacity of water bodies; and (c) meet the reasonably foreseeable needs of future generations. Policy 15 requires district plans to include policies, rules and/or methods that control earthworks to minimise: (a) erosion; and (b) silt and sediment runoff into water, or ento land that may enter water, so that agustic ecceptor health.	
Objective 8 and Policy 53 (R)	into water, or onto land that may enter water, so that aquatic ecosystem health is safeguarded. Objectives 12, 13 and 8 (and associated policies) also set out expectations for district plans and resource consent considerations with respect to:	

safeguarding aquatic ecosystem health in water bodies; minimising contamination in stormwater from development; protecting aquatic ecological function of water bodies; supporting a whole of catchment approach; considering public access to and along the coastal marine area, lakes and rivers. Historic Heritage Section Relevant matters Objective 15 Objective 15: Historic heritage is identified and protected from inappropriate modification, use and development. Policies 21 and 22 Policies 21 and 22 require district plans to identify places, sites and areas with (M) significant historic heritage values and protect historic heritage values. Policy 46 (R) respectively. Policy 46 includes as a resource consent consideration the managing of effects on historic heritage value. Indigenous Biodiversity Section Relevant matters Objective 16 Objective 16: Indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state. Policies 23 and 24 Policies 23 and 24 require district plans to identify indigenous ecosystems and (M) habitats with significant indigenous biodiversity values and protect indigenous Policy 47 (R) ecosystems and habitats with significant indigenous biodiversity values, respectively. Policy 47 includes as a resource consent consideration the managing of effects on indigenous ecosystems and habitats with significant indigenous biodiversity values. Landscape Section Relevant matters Objective 17 Objective 17: The region's outstanding natural features and landscapes are identified and their landscape values protected from inappropriate subdivision, Policies 25, 26, 27 use and development. and 28 (M) Policies 25 and 26 require district plans to identify outstanding natural features Policy 50 (R) and landscapes and protect outstanding natural features and landscape values, respectively. Policies 27 and 28 require district plans to identify special amenity landscapes and manage special amenity landscape values, respectively. Policy 50 includes as a resource consent consideration the managing of effects on outstanding natural features and landscapes. Natural Hazards Section Relevant matters

Objectives 19, 20 and 21 Policy 29 (M) Policies 51 and 52 (R)	businesses, property and infrastructure from natural hazards and climate change effects are reduced. Objective 20: Hazard mitigation measures, structural works and other activities do not increase the risk and consequences of natural hazard events. Objective 21: Communities are more resilient to natural hazards, including the impacts of climate change, and people are better prepared for the consequences of natural hazard events. Policy 29 requires district plans to contain provisions to avoid inappropriate subdivision and development in areas at high risk from natural hazards. Policies 51 and 52 include as resource consent considerations the minimising	
	of the risks and consequences of natural hazards the minimising adverse effects of hazard mitigation measures, respectively.	
Tangata Whenua		
Section	Relevant matters	
Objectives 25, 26, 27 and 28	Objective 25: The concept of kaitiakitanga is integrated into the sustainable management of the Wellington region's natural and physical resources.	
Policy 49 (R)	Objective 26: Mauri is sustained, particularly in relation to coastal and fresh waters.	
	Objective 27: Mahinga kai and natural resources used for customary purposes, are maintained and enhanced, and these resources are healthy and accessible to tangata whenua.	
	Objective 28: The cultural relationship of Mäori with their ancestral lands, water, sites, wähi tapu and other taonga is maintained.	
	Policy 49 includes as a resource consent consideration recognising and providing for matters of significance to tangata whenua.	
Soils and minerals		
Section	Relevant matters	
Objective 29	Objective 29: Land management practices do not accelerate soil erosion.	
Policy 15 (M) Policies 41 and 68 (R)	Policy 15 requires district plans to include policies, rules and/or methods that control earthworks to minimise: (a) erosion; and (b) silt and sediment runoff into water, or onto land that may enter water, so that aquatic ecosystem health is safeguarded.	
	Policy 41 includes as a resource consent consideration minimising the effects of earthworks, whereas Policy 68 seeks to promote non-regulatory means of minimising soil erosion.	

M = policies which must be <u>implemented</u> in accordance with stated methods in the RPS R = policies to which <u>particular regard</u> must be had when changing a district plan

As signalled above, Policies 1 and 15 in the RPS most directly inform the general provisions of the Earthworks chapter.

The explanation to Policy 15 acknowledges the overlapping roles that WCC and GWRC have in controlling earthworks and signals that the policy is intended to ensure the authorities integrate their plan provisions with this collective responsibility in mind.

Regional Plans

There are currently five operative regional plans and one (partly operative) proposed regional plan for the Wellington region:

- Regional Freshwater Plan for the Wellington Region, 1999
- Regional Coastal Plan for the Wellington Region, 2000
- Regional Air Quality Management Plan for the Wellington Region, 2000
- Regional Soil Plan for the Wellington Region, 2000
- Regional Plan for discharges to the land, 1999
- Proposed Natural Resources Plan, appeals version 2021

The proposed Natural Resources Plan (PNRP) replaces the five operative regional plans, with provisions in this plan now largely operative with the exception of those that are subject to appeal.

Where the relevant provisions of the PNRP relating to earthworks are subject to appeal, the equivalent provisions in the Regional Soil Plan (RSP) continue to have effect. Those PNRP provisions subject to appeal or variation by way of consent order are marked with an asterisk in the following table, which identifies the relevant provisions for earthworks contained in the PNRP and RSP.

Proposed Natural Resources Plan		
Section	Relevant matters	
Objective O41	The adverse effects of dust on amenity values and people's well-being are minimised.	
Objective O42*	Soils are healthy, retain a range of uses and accelerated soil erosion is reduced.	
Objective O44*	The adverse effects on soil and water from land use activities are minimised.	
Objective O47*	The amount of sediment-laden runoff entering water is minimised.	
Policy P6*	The cultural, social and economic benefits of using land and water for (j) enabling urban development where it maintains the quality of the natural environment shall be recognised.	
Policy P36* The ecological health and significant values of Te Awarua-o-Porirua in Wellington Harbour (Port Nicholson) and Wairarapa Moana will be including by (a) managing activities, erosion-prone land, and riparian material reduce sedimentation rates and pollutant impacts, to meet the water aquatic ecosystem health and mahinga kai objectives set out in Tables 3		
Policy P58	Air quality amenity in urban, rural and the coastal marine areas shall be managed to minimise dust	
Policy P101	Earthworks activities that have the potential to result in significant accelerated soil erosion, or to lead to off-site discharges of silt and sediment to surface water bodies, shall use measures, including good management practice, to: 9A0	

	minimise the risk of accelerated soil erosion, and (b) control silt and sediment			
	runoff, and (c) ensure the site is stabilised and vegetation cover is restored.			
Policy P103*	Maintain or restore water quality, aquatic ecosystem health, mahinga kai and natural character, a reduce the amount of contaminants entering surface water bodies, through the management of riparian margins including: (b) set-back distances from surface water bodies for some land use activities including earthworks			
Rule R99*	Makes the use of land (and associated sediment discharges) from earthworks up to 3,000m² per property per 12-month period a permitted activity, subject to compliance with specified conditions focused on water quality, receiving waters, aquatic ecology, stability and proximity to water bodies.			
Rules R99A* and R99B*	Rule R99A makes the use of land (and associated sediment discharges) from earthworks up to 10,000m² per property per 12-month period for the purposes of construction a new farm track, subject to compliance with specified conditions focused on the dimensions of the works, water quality, stability and proximity to water bodies. Rule R99B provides for a default to controlled activities where certain of these conditions are not met.			
Rule R102*	Makes the use of land (and associated sediment discharges) from earthworks associated with renewable energy generation proposal a restricted discretionary activity where specified conditions are met.			
Rule R103*	Makes the use of land (and associated sediment discharges) from earthworks unable to meet the conditions of the rules referred to above a discretionary activity.			
Regional Soil P	Plan			
Regional Soil F	Plan Relevant matters			
Section	Relevant matters 4.4.1 Land use practices reflect the inherent susceptibility of some landforms to			
Section	Relevant matters 4.4.1 Land use practices reflect the inherent susceptibility of some landforms to erosion 4.1.2 The potential of the Region's soils to provide for a full range of uses for			
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Section Objectives	 Relevant matters 4.4.1 Land use practices reflect the inherent susceptibility of some landforms to erosion 4.1.2 The potential of the Region's soils to provide for a full range of uses for present and future generations is maintained or enhanced. 4.1.3 The life-supporting capacity of the Region's soils is maintained. 4.1.11 Land management practices are adopted for the effective control of sediment runoff to water bodies. 4.2.1 To promote land management practices that recognise the inherent 			
Section Objectives	 Relevant matters 4.4.1 Land use practices reflect the inherent susceptibility of some landforms to erosion 4.1.2 The potential of the Region's soils to provide for a full range of uses for present and future generations is maintained or enhanced. 4.1.3 The life-supporting capacity of the Region's soils is maintained. 4.1.11 Land management practices are adopted for the effective control of sediment runoff to water bodies. 4.2.1 To promote land management practices that recognise the inherent susceptibility of some landforms to erosion. 4.2.8 To work with other relevant agencies and groups in order to determine roles and responsibilities for promoting and achieving a co-ordinated approach to 			

	mitigation structures and works; water quality; downstream locations; bridges, culverts and other water crossing structures; aquatic ecosystems; and historic sites with tangata whenua values.
	4.2.16 To ensure that recognised erosion control and land rehabilitation techniques are adopted to avoid, remedy or mitigate any adverse effects resulting from soil disturbance activities.
Rules 1 and 2	Rule 1 makes any roading or tracking activity that exceeds stated parameters a restricted discretionary activity. Rule 2 makes any soil disturbance on 'erosion prone land' that exceeds stated parameters a restricted discretionary activity.

4.7 Iwi Management Plan(s)

Currently, there are no lwi Management Plans that are applicable to Wellington City.

4.8 Relevant plans or strategies

The following plans / strategies are relevant to this topic:

Plan / Strategy	Organisation	Relevant Provisions
Code of Practice for Land Development December 2012	Wellington City Council	 Sets out the technical engineering criteria for approving the design and construction of developments. Part B relates to earthworks design and construction and sets out principles and criteria with respect to silt, sediment, erosion and stormwater control, dust control, site preparation, site water management, fill batters, fill materials, compaction, inspection and testing of fill, cuts, walls, loading and spillage, hours of work, duration of earthworks, planting, certification of suitability of earth fill and as-built requirements. The 2012 version of the Code will be updated during the course of the District Plan review process.
Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region February 2021	Greater Wellington Regional Council	 Provides technical guidance for the selection, design and use of erosion and sediment control practices and measures for land disturbing activities in the Wellington context. The primary intended audience for the Guide is designers and contractors/implementers who construct, operate, and maintain such measures as part of earthworks and other land disturbing activities at multiple scales.
Small Earthworks: Erosion and Sediment Control for Small Sites June 2006	Greater Wellington Regional Council	A pocket guide to managing sediment on site for small-scale projects, such as building a retaining wall.
Upper Stebbings & Glenside West Concept Masterplan October 2020	Wellington City Council	 Summarises a detailed investigation into housing options across the wider Stebbings Structure Plan area. Includes a vision and principles for the development: what it might look like and what people will need in the new community.

		 Includes land use options and delivery mechanisms.
Lincolnshire Farm Structure Plan August 2006	Wellington C Council	 Provides guidance to give effect to the Council's Urban Development Strategy, Environmental Strategy, and the Northern Growth Management Framework. Provides design assessment criteria for both subdivision and land use consent applications within the relevant area. Forms part of the operative Wellington City Council District Plan. The 2006 version of the structure plan will be replaced by new provisions incorporated directly into the Proposed Plan.

4.9 Other relevant legislation or regulations

The following additional legislative / regulatory requirements are also relevant to this topic:

Legislation / Regulation	Relevant Provisions			
Crown Minerals Act 1991	Sets out the broad legislative framework for the issuing of permits to prospect, explore and mine Crown-owned minerals. Extractive activities like mining of gold or gravel may require a mining permit under the Act.			
NZ Pouhere Taonga Act 2014	Earthworks that affect an archaeological site may require an Archaeological Authority from Heritage New Zealand under the Act.			
Electricity (Hazards from Trees) Regulations 2003	 These Regulations: prescribe distances from electrical conductors within which trees must not encroach; set rules about who has responsibility for cutting or trimming trees that encroach on electrical conductors; specify who is liable if those rules are breached; and provide an arbitration system to resolve disputes between electricity retailers, network companies and tree owners about the operation of the regulations. 			
Building Act 2004	Retaining walls higher than 1.5 metres (3.0 metres in rural area if designed by a chartered professional engineer) require a building consent.			

5.0 Resource Management Issues Analysis

5.1 Background

This part of the report identifies and analyses the key issues relevant to this topic.

5.2 Evidence Base - Research, Consultation, Information and Analysis undertaken

The Council has reviewed the operative District Plan, commissioned technical advice and assistance from various internal and external experts and utilised this, along with internal workshops and community feedback to assist with setting the plan framework. This work has been used to inform the identification and assessment of the environmental, economic, social and cultural effects that are anticipated from the implementation of the provisions. This advice includes the following:

Title	Author	Brief synopsis
Planning for Growth – District Plan Review – Earthworks: Issues & Options Report, 30 September 2020	Spencer Holmes	 Comprises a review of the Operative District Plan provisions relating to earthworks. Inclusive of the provisions as introduced into the Plan by way of Plan Change 70 (operative September 2010). Involved consultation with key staff from the Council's consents, compliance and engineering teams, Wellington Water, geotechnical engineers and surveyors. Identifies key issues and options with respect to the operative provisions Contains recommendations with respect to these issues and options.

In addition to the material listed in the table above, the Council has also gathered the following information and advice that is relevant to this topic:

• Further consultation, on the basis of the Issues & Options Report, was undertaken in 2021 with the key Council staff referred to above.

5.2.1 Analysis of Operative District Plan provisions relevant to this topic

For the purposes of this report the key provisions in the Operative Wellington District Plan of relevance to this topic are summarised below.

Topic	Summary of relevant provisions		
Earthworks	This chapter has a single objective (29.2.1) which seeks the following: • To provide for the use, development and protection of land and physica resources while avoiding, remedying or mitigating any adverse effects of earthworks and associated structures on the environment.		
	This objective is implemented by a framework of 12 supporting policies that:		
	 Ensure that earthworks are coordinated with development Provide for minor earthworks where instability risks are minimal Ensure that earthworks minimise risk of instability Require earthworks to minimise erosion, dust and sediment beyond the works 		
	Ensure earthworks do not exacerbate flood events		

Topic	Summary of relevant provisions		
	 Ensure earthworks protect and enhance stream character and amenity Ensure earthworks reflect natural landforms and minimise their visual impact 		
	 Manage earthworks in open space / conservation areas in accordance with the purpose of those areas 		
	 Control earthworks in areas with identified coastal, landscape, conservation, and heritage values 		
	 Ensure structures to stabilise landslips reflect local character and amenity 		
	 Ensure the transport of materials is conducted safely and minimises amenity effects Protect koiwi, taonga and archaeological sites. 		
	Froteot kolwi, taoriya anu archaeological sites.		
	Rules relating to earthworks are arranged by their location in specific zones, precincts, overlays and on specific sites.		
	Standards and conditions are imposed relating to cut height, fill depth, degree of slope, area, purpose of the works, dust generation, the volume of material transported, and proximity to electricity transmission lines and the coastal marine area.		
	Earthworks default to restricted discretionary or discretionary activity status where the standards and conditions are not complied with.		
	During the course of reviewing the operative provisions for the purposes of preparing the Issues & Options Report referred to above, the following key issues were identified:		
	The need to align the earthworks provisions with the requirements of the National Planning Standards and PNRP provisions; The provided the standard of the provision of th		
	The need to resolve ambiguities in the way in which the permitted activity standards are interpreted and implemented; The need to play the partition of the permitted and implemented; The need to play the partition of the permitted and implemented;		
	 The need to clarify certification requirements; The need to provide greater certainty with respect to non-notification clauses; 		
	The need to ensure that flooding effects arising from earthworks are adequately assessed.		
	Overall, however, the Issues & Options Report found that the operative earthworks provisions (inclusive of the relevant objectives and policies) have proved to be effective, subject to the above technical issues being resolved.		

5.2.2 Analysis of other District Plan provisions relevant to this topic

Current practice has been considered in respect of this topic, with a review undertaken of the following District Plans. It is noted that some but not all of these plans have been prepared in accordance with the National Planning Standards.

Plan	Local Authority	Description of approach
Operative Auckland Unitary Plan 2016 (inclusive of subsequent updates)	Auckland Council	 Earthworks and land disturbance provisions are colocated in adjacent chapters at the regional and district levels respectively. Regional level rules deal with large scale land disturbance with corresponding consent triggers (e.g., controlled activities above 10,000m² and restricted discretionary activities above 50,000m²). Lower triggers apply where slope factors apply.

Plan	Local Authority	Description of approach
		 The policy focus of regional rules is on soil conservation and minimising sediment generation. District level rules deal with smaller scale earthworks with correspondingly tighter consent triggers (e.g., restricted discretionary activities in residential zones where worked areas exceed 500m² and volumes exceed 250m³, with the same status applying in other zones but only where areas exceed 1000m² and volumes exceed 1000m³). Note that volumes are introduced as a metric where district level rules are concerned. The policy focus of district rules is on managing amenity / nuisance effects and stability issues (reflected in the lower thresholds that apply in residential zones). Lower thresholds apply in a series of sensitive overlays. Land disturbance provisions applying to network utilities are located in the Infrastructure chapter. Matters of discretion and assessment criteria are set out to guide the preparation and consideration of applications.
Proposed New Plymouth District Plan 2019	New Plymouth District Council	 Earthworks policies are generally enabling while seeking to address stability, visual amenity and character matters (reflecting their district focus). Earthworks for building activities in all zones involving an area greater than 250m² are a restricted discretionary activity. Earthworks below this threshold are permitted subject to conditions relating to cut depth and fill height, the implementation of erosion and sediment controls etc. Earthworks associated with activities not otherwise provided for are permitted in business, residential or open space zones provided they do not exceed a volume of 250m³ in any 12 month period (or 1000m³ in industrial and rural zones). The same conditions set out above apply with respect to permitted volumes. Matters of discretion (but not assessment criteria) are set out for infringing activities.
Proposed Marlborough Environment Plan 2016 (inclusive of 2020 'appeals version')	Marlborough District Council	 Provisions relating to earthworks are located in each zone, rather than in a stand-alone chapter. As the relevant rules are potted throughout each zone chapter this makes isolating them somewhat challenging (such an approach predates and would not now be compliant with the National Planning Standards). As one example of how the provisions operate (for the Rural Environment Zone): 'Excavation' is permitted subject to compliance with conditions relating to slope, proximity to water bodies and implementation of ESC measures, among others. Earthworks within the National Grid Yard are permitted. Objectives and policies are located in a separate volume of the plan and those relating to earthworks are to be found across a number of chapters including those relating to the sustainable management of natural and

Plan	Local Authority	Description of approach		
		physical resources, indigenous biodiversity, use of the rural environment and resource quality.		
Operative Christchurch District Plan 2017	Christchurch City Council	 Objectives, policies and rules relating to earthworks are located in a broader chapter that also addresses subdivision and development, whereas provisions relating to indigenous biodiversity and ecosystems (for example) are located in a broader chapter covering natural and cultural heritage. Earthworks are permitted provided they do not exceed 0.6m in depth or height or the volumes specified in an accompanying table. The volume thresholds specified in that table range from 20m³ per site in residential and 'local' commercial zones up to 1000m³ in other commercial and industrial zones. Earthworks that exceed these thresholds are generally classed as a restricted discretionary activity. Matters of discretion focus on nuisance, land stability and amenity, as do objectives and policies. 		
Proposed Porirua District Plan 2020	Porirua City Council	 Earthworks provisions are located in their own chapter in accordance with the National Planning Standards, however, earthworks provisions relating to overlays are located in the respective chapters. Policies are generally enabling of earthworks activities. Rules relating to earthworks for infrastructure activities are found in the Infrastructure chapter. Earthworks of a general nature are permitted subject to compliance with standards relating to area, height, location and slope, transport of material, site reinstatement, and silt and sediment retention. Earthworks for purposes of the installation and construction of rainwater tanks and earthworks in the gas transmission pipeline corridor and national grid yard are provided for separately. Non-compliance with these standards sees proposals default to a restricted discretionary activity status. Matters of discretion are limited to stability, visual amenity, landform silt, sediment and dust and vibration (nuisance) considerations. 		

These plans were selected because:

- They have been subject to relatively recent plan reviews that have addressed similar issues relating to this topic;
- The associated Councils are of a similar scale to Wellington City and are confronting similar issues relating to this topic.

A summary of the key findings follows:

- All the plans address earthworks in some manner.
- Provisions in unitary plans relating to s30-type functions focus on broader land disturbance associated with development and concerns regarding soil conservation and sedimentation, whereas provisions in unitary and district plans relating to s31-type

- functions focus on smaller scale earthworks and concerns regarding amenity, nuisance and stability.
- Thresholds for consent in terms of area (and/or volume) of earthworks vary significantly between plans (and between zones within plans).
- Restricted discretionary activity status is commonly applied to earthworks unable to comply with permitted activity standards.
- The location of provisions is mandated by National Planning Standards but there is still considerable inconsistency (or uncertainty) as to their interpretation, particularly where provisions relating to overlays are concerned. This issue may be less crucial with the advent of e-plans.

5.2.3 Advice received from Taranaki Whānui and Ngāti Toa Rangatira

Under Clause 4A of Schedule 1 of the RMA local authorities are required to:

- Provide a copy of any draft policy statement or plan to any iwi authority previously consulted under clause 3 of Schedule 1 prior to notification;
- Allow adequate time and opportunity for those iwi authorities to consider the draft and to supply advice; and
- Have particular regard to any advice received before notifying the plan.

As an extension of this s32(4A) requires evaluation reports prepared in relation to a proposed plan to include a summary of:

- All advice received from iwi authorities concerning the proposal; and
- The response to that advice, including any proposed provisions intended to give effect to the advice.

The District Plan Review has included significant engagement with our mana whenua partners - Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira. This has included over 100 hui and wānanga attended by Council officers over the last 12 months. This has provided a much greater understanding of mana whenua values and aspirations as they relate to the PDP.

The PDP elevates the consideration of mana whenua values in resource management processes, including:

- A new Tangata Whenua chapter which provides context and clarity about who mana whenua are and what environmental outcomes they are seeking.
- A new Sites and Areas of Significance to Māori chapter that provides greater protection for sites and areas of significance than the current District Plan.
- Integrating mana whenua values across the remainder of the plan where relevant.

This is consistent with both the City Goal of 'Partnership with mana whenua' in the Spatial Plan; and the recently signed Tākai Here (2022), which is the new partnership agreement between the Council and our mana whenua partners, Rūnanga o Toa Rangatira, Taranaki Whānui ki Te Upoko o Te Ika and Te Rūnanganui o Te Āti Awa.

A full copy of the advice received is attached as an addendum to the complete suite of Section 32 reports as Addendum A – Advice received from Taranaki Whānui and Ngāti Toa Rangatira.

No specific advice has been received from Taranaki Whānui and Ngāti Toa.

5.2.4 Consultation undertaken to date

The following is a summary of the primary consultation undertaken in respect of this topic:

Who	What	When	Relevant Issues Raised
General Public	Feedback on discussion documents	Draft Spatial Plan consultation from August 2020 to October 2020	 The Draft Spatial Plan process was the pre-cursor to the Draft District Plan process. Consultation on the Draft Spatial Plan did not specifically address earthworks in a technical manner. Topics related to earthworks (e.g. intensified land use, managing natural hazard risks and natural environment values) were open for discussion.
Councillors	Draft Plan workshops	Late 2020 to Mid 2022	There have been regular workshops with Councillors throughout the course of preparing the Draft and Proposed District Plans. These workshops covered a wide range of topics and allowed Councillors to provide feedback on key policy directions and to input into the development of the Draft and Proposed District Plans.
Council and Wellington Water staff, some external advisers	Input on the Issues and Options Earthworks: Issues & Options Report	Prior to September 2020 (paper release date)	 The operative provisions have been largely effective in controlling adverse effects; however, some technical improvements are warranted. Need to align district plan provisions with National Planning Standards and PNRP provisions. Opportunity to refine permitted activity standards. Adoption of relevant standards as a reference point for certification. Clarify non-notification clauses. Address flooding effects and changes to overland flow resulting from earthworks.
Feedback on Draft Plan (internal and external sources)	Feedback received on Draft Plan provisions	Feedback period: 2 November to 14 December 2021	 Expression of relative roles of agencies in managing earthworks and their effects. Enabling tenor of policy framework. Reference to climate change induced exacerbation of hazards. Wording of relevant definitions. Consent status accorded earthworks in outstanding, significant and special areas. Relative status accorded maintenance and construction of tracks.

Clarity of exemptions for minor earthworks.
Integration between and application of 'general' earthworks rules and those that apply in development areas and particular zones.
 Integration between and application of 'general' earthworks rules and those that apply with respect to infrastructure activities and in infrastructure corridors.
Provision for earthworks associated with underground fuel storage tank replacement and removal.
Clarity of provisions relating to flood- prone areas.
Absence of performance standards relating to run-off.
 Wording of particular standards.

A summary of specific feedback on this topic received during consultation on the Draft District Plan is contained in Appendix 1, including how it has been responded to in the Proposed District Plan. Additional detail concerning the wider consultation undertaken in preparing the Proposed District Plan is contained in the companion section 32 Evaluation Overview Report.

In summary, the key findings arising from the consultation undertaken on this topic are:

- The operative provisions provide a reasonable basis for further refinement;
- The earthworks provisions do require amendment to account for the National Planning Standards (NPS), which mandate a definition for 'earthworks' and therefore have implications for the way in which permitted forms of earthworks are defined and catered for;
- There is scope for permitted earthworks to be more clearly defined as an aid in interpretation, application, monitoring and enforcement;
- A better alignment between WCC and GWRC responsibilities, and district plan and PNRP provisions, particularly with respect to the scale of earthworks subject to erosion and sediment management controls, should be effected;
- Council's obligations with respect to the management of natural hazards, and in particular, slope instability and works in flood-prone areas, need to be addressed; and
- The relationship between and relative application of 'general' earthworks standards and those applying to earthworks for particular purposes and/or earthworks in outstanding, significant and special areas can be more clearly articulated.

5.3 Summary of Relevant Resource Management Issues

Based on the research, analysis and consultation outlined above the following issues have been identified:

Issue	Comment	Response	
Issue 1: Refinement of definitions and permitted activity standards	 NPS mandates definition for 'earthworks' which has implications for way in which 'excluded' activities in the operative plan (e.g., piling, trenching) are catered for. Practicality of standards relating to sediment run-off and dust emissions. 	Explicit provision for earthworks activities	

	Ambiguity regarding provision for minor-scale earthworks.	 adequacy of erosion and sediment control measures). Explicit policy-based provision for minor earthworks of an appropriate scale and effect.
Issue 2: Alignment of WCC and GWRC responsibilities and plan provisions	Degree of potential duplication where responsibilities of WCC and GWRC, particularly with respect to erosion and sediment control, are concerned.	Clarification of roles and responsibilities in the introduction to the chapter wherein WCC assumes responsibility for managing instability, amenity, dust and traffic safety matters of earthworks, and also erosion and sediment effects for earthworks up to 3,000m² in area, with GWRC assuming responsibility for this matter above that threshold.
Issue 3: Addressing of natural hazards obligations	 Means to address the Council's obligations under s6(h) and 7(i) of the RMA. Granularity of flood mapping. 	 Incorporation of controls on earthworks in flood hazard overlays, associated with natural hazard mitigation works, and located on community scale natural hazard mitigation structures. Inclusion of definitions for the above terms.
Issue 4: Clarify relationship between general earthworks provisions and area and purpose specific provisions	Level of uncertainty regarding the application of general earthworks provisions and how these relate to those catering for earthworks for a particular purpose and/or located in outstanding, special or significant areas.	Refinement of hazard mapping overlays. Inclusion in 'Application of rules' section of explanation for how general earthworks provisions apply, in relation to other provisions catering for earthworks for a particular purpose (e.g., construction of tracks, associated with network utilities), or located in outstanding, significant or special areas (e.g., significant natural areas, the National Grid Yard etc.).

6.0 Evaluation of the Proposal

This section of the report evaluates the objectives of the proposal to determine whether they are the most appropriate means to achieve the purpose of the RMA, as well as the associated policies, rules and standards relative to these objectives. It also assesses the level of detail required for the purposes of this evaluation, including the nature and extent to which the benefits and costs of the proposal have been quantified.

6.1 Scale and Significance

Section 32(1)(c) of the RMA requires that this report contain a level of detail that corresponds with the scale and significance of the environmental, economic, social and cultural effects that are anticipated from the implementation of the proposal.

The level of detail undertaken for this evaluation has been determined by assessing the scale and significance of the environmental, economic, social and cultural effects anticipated through introducing and implementing the proposed provisions (i.e. objectives, policies and rules) relative to a series of key criteria.

Based on this the scale and significance of anticipated effects associated with this proposal are identified below:

Criteria	Scale	/Significan	се	Comment
	Low	Medium	High	
Basis for change	✓			 Need to address implications of National Planning Standards. Some relatively minor changes of a technical nature recommended in the relevant issues and options paper.
Addresses a resource management issue	√			 Need to address implications of National Planning Standards. Some relatively minor changes of a technical nature recommended in the relevant issues and options paper.
Degree of shift from the status quo	√			 The operative provisions are considered largely fit-for-purpose. At first glance, the proposed provisions appear considerably different from their operative equivalents but this is mostly a reflection of formatting changes; many of the metrics and thresholds remain the same.
Who and how many will be affected/ geographical scale of effect/s		√		Earthworks are a common component of developments and the provisions relating to them are often encountered in a City-wide fashion.
Degree of impact on or interest from iwi/ Māori	√			Council and Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira have worked in partnership to develop provisions that recognise and protect sites and areas of significance. These have informed the earthworks provisions.
Timing and duration of effect/s	√			As the proposed provisions do not substantially differ from their operative counterparts, this reduces the duration of their effect, largely to the short-term (as Plan users become familiar with them).
Type of effect/s	~			 Earthworks, if undertaken in an inappropriate manner, can have significant adverse effects on soils, receiving environments, sensitive values, local amenity and natural hazard risk levels. However, as the proposed provisions relating to earthworks do not substantially differ from their operative counterparts, and the operative provisions are generally regarded as largely fit-for-purpose, this reduces their likely effect on the environment and social, cultural and economic well-being.
Degree of risk and uncertainty	~			 There is a low risk of adverse community reaction to the proposed provisions. The proposed provisions represent the continuation of a well-tested approach, and refinements are reasonably well-supported by the evidence base.

Overall, the scale and significance of the proposed provisions is considered to be low for the following reasons:

- The proposed provisions represent the refinement of a well-established framework for managing earthworks activities, and will address some workability issues, to the benefit of resource users and the environment.
- The proposal will not impose any more onerous framework for resource users than exists at present.
- The proposed provisions seek to be clearer (thereby providing greater certainty to plan users) and refine standards and thresholds to certain, measurable metrics.

Consequently, a high-level evaluation of these provisions has been identified as appropriate for the purposes of this report.

6.2 Quantification of Benefits and Costs

Section 32(2)(b) requires that, where practicable, the benefits and costs of a proposal are to be quantified.

Based on the assessment of the scale and significance of the proposed provisions in section 6.1 above, specific quantification of the benefits and costs in this report is considered neither necessary, beneficial nor practicable in relation to this topic for the following reasons:

- The proposal would not result in a more restrictive regime than the *status quo*;
- There is no evidence to demonstrate that the *status quo* is resulting in significant adverse effects;
- The proposal would not result in a significant loss of development opportunity / potential above the *status quo*;
- The proposal would not see the introduction of a more permissive regime that could result in significant adverse effects on s6 matters;
- There is little likelihood of significant indirect or flow-on effects; and
- There is a reasonable level of certainty around the proposal, its effects, and the availability of relevant information.

Instead, this report identifies more generally where any additional costs or cost may lie.

7.0 Overview of Proposal

The proposed provisions relevant to this topic are set out in detail in the ePlan and should be referenced to in conjunction with this evaluation report.

In summary, the proposed provisions include:

- Definitions
 - A set of relevant definitions, including those for:
 - Earthworks (NPS mandated)
 - Cleanfill material (NPS mandated)
 - Dust (NPS mandated)
 - Dust nuisance
 - Cut height
 - Fill depth
 - Existing slope angle
 - Ground level
 - Trenching
 - Stabilised
 - Land
 - Community scale natural hazard mitigation structures

- Natural hazard mitigation works
- Soft engineering natural hazard mitigation works
- One objective (EW-O1) that addresses:
 - consistency with the anticipated scale and form of development in the relevant zone;
 - o adverse effects on visual amenity values, including changes to natural landforms;
 - o erosion and sediment effects beyond the site;
 - o risks associated with slope instability; and
 - o the safety of people and property.
- Eighteen policies that:
 - Provide a broad basis for managing the effects of earthworks generally (EW-P1 to EW-P6); and
 - Provide a specific basis for managing earthworks in outstanding, significant or special areas (EW-P7 to EW-P18).
- A rule framework that manages land use and building and structure activities as follows:

Rule ref.	Activity	Consent Status			
Land Use	Land Use Activities				
EW-R1	Earthworks for the purposes of piling, trenching, maintaining sports fields, undertaking geotechnical investigations, grave digging and the replacement or removal of underground petroleum storage systems associated with service stations	Permitted if compliant with conditions, restricted discretionary activity if not			
EW-R2	Earthworks for the purposes of maintaining tracks associated with permitted activities in Rural Zones	As above			
EW-R3	Earthworks for the purposes of constructing tracks associated with permitted activities in Rural Zones	As above			
EW-R4	Earthworks for the purposes of maintaining public walking or cycling tracks in Open Space Zones	As above			
EW-R5	Earthworks for the purposes of constructing public walking or cycling tracks in Open Space Zones	As above			
EW-R6	General earthworks	As above			
EW-R7	Earthworks within a significant natural area	As above			
EW-R8	Earthworks on the site of scheduled heritage buildings and structures, and within heritage areas	As above			
EW-R9	Earthworks within the root protection area of notable trees	Discretionary activity			

Rule ref.	Activity	Consent Status
EW-R10	Earthworks within areas of very high or high coastal natural character within the Coastal Environment	Permitted if compliant with conditions, discretionary activity if not
EW-R11	Earthworks within coastal or riparian margins within the Coastal Environment	Permitted if compliant with conditions, either restricted discretionary or discretionary activity if not (dependent on zone)
EW-R12	Earthworks within Outstanding Natural Features and Landscapes within the Coastal Environment	Discretionary activity
EW-R13	Earthworks within Special Amenity Landscapes or Ridgelines and Hilltops within the Coastal Environment	Restricted discretionary activity if compliant with conditions, discretionary activity if not
EW-R14	Earthworks within riparian margins (outside the Coastal Environment)	Permitted if compliant with conditions, restricted discretionary activity if not
EW-R15	Earthworks within Outstanding Natural Features and Landscapes, Special Amenity Landscapes and Ridgelines and Hilltops (outside the Coastal Environment) and within the ridgetops in the Upper Stebbings Glenside West Development Area	Permitted if compliant with conditions, restricted discretionary activity if not but compliant with other conditions, discretionary activity if not
EW-R16	Earthworks within the Flood Hazard Overlay	Permitted if compliant with conditions, restricted discretionary activity if not
EW-R17	Earthworks associated with natural hazard mitigation works within the Flood Hazard Overlays and Coastal Hazard Overlays	Permitted if compliant with conditions, discretionary activity if not
EW-R18	Earthworks associated with soft engineering natural hazard mitigation works within Flood Hazard Overlays and Coastal Hazard Overlays	As above
EW-R19	Earthworks on community scale natural hazard mitigation structures	As above
EW-R20	Earthworks in the Airport Zone	Permitted if compliant with conditions, restricted discretionary activity if not but compliant with other conditions, discretionary activity if not
EW-R21	Earthworks within Sites and Areas of Significance Category A and Category B	Restricted discretionary activity
EW-R22	Earthworks in the National Grid Yard	Permitted if compliant with conditions, restricted discretionary activity if not

Rule ref.	Activity	Consent Status
EW-R23	Earthworks within the Gas Transmission Pipeline Corridor	As above
Building a	and structure activities	
EW-R24	Structures used to retain or stabilise landslips	Permitted if compliant with conditions, restricted discretionary activity if not

- A complementary set of effects standards that address:
 - o Area (EW-S1)
 - Cut height and fill depth (EW-S2)
 - Existing slope angle (EW-S3)
 - Transport of cut or fill material (EW-S4)
 - Dust management (EW-S5)
 - Site reinstatement (EW-S6)
 - Height of structures used to retain or stabilise landslips (EW-S7)
 - Cut height and fill depth associated with the construction or maintenance of tracks in Rural Zones (EW-S8)
 - Track width associated with the construction or maintenance of walking and cycling tracks in Open Space Zones (EW-S9)
 - Earthworks on the site of scheduled heritage buildings and structures or on a site within a heritage area (EW-S10)
 - Earthworks in areas of very high or high coastal natural character within the Coastal Environment (EW-S11)
 - Earthworks in coastal or riparian margins (EW-S12)
 - Earthworks within Special Amenity Landscapes or Ridgelines and Hilltops within the Coastal Environment and within Outstanding Natural Features and Landscapes, Special Amenity Landscapes and Ridgelines and Hilltops (outside the Coastal Environment) and within the Upper Stebbings Glenside West Development Area (EW-S13)
 - Earthworks in the Airport Zone (EW-S14)
 - Earthworks in the National Grid Yard and Gas Transmission Pipeline Corridor (EW-S15)

There are also a number of other objectives in the Proposed Plan that inform the provisions in the Earthworks Chapter, particularly where they relate to outstanding, significant or special areas and values. In summary, these objectives include:

- The Strategic Objectives referred to in section 3 of this report;
- INF-O3 relating to the protection of infrastructure;
- NH-O1 to NH-O3 relating to natural hazards;
- HH-O2 relating to the protection of historic heritage;
- TREE-O2 relating to the protection of notable trees;
- SASM-O2 relating to the protection of Sites and Areas of Significance to Māori;
- ECO-O1 and ECO-O2 relating to the protection of Significant Natural Areas;
- NATC-O1 relating to the preservation and protection of natural character;
- NFL-O1 to NFL-O3 relating to the protection of Outstanding Natural Features and Landscapes and the maintenance of Special Amenity Landscapes and Ridgelines and Hilltops, respectively;
- SUB-O1 relating to an efficient pattern of development;
- CE-O1 to CE-O3 relating to values associated with the Coastal Environment;

- Objectives in the zone chapters (for example GRZ-O1 to GRZ-O3) that describe the outcomes sought for each zone;
- Objectives in the development area chapters (for example DEV-O1 to DEV2-O4) that set out the outcomes sought for those areas; and
- AIRPZ-O2 and AIRPZ-O4 relating to the development of the Airport Zone and adverse effects generated by activities in that zone.

8.0 Evaluation of Proposed Objective

8.1 Introduction

Section 32(1)(a) of the RMA requires that the evaluation report examine the extent to which the objectives of the proposal are the most appropriate way to promote the sustainable management of natural and physical resources.

An examination of the proposed objectives along with reasonable alternatives is included below, with the relative extent of their appropriateness based on an assessment against the following criteria:

- 1. Relevance (i.e., Is the objective related to addressing resource management issues and will it achieve one or more aspects of the purpose and principles of the RMA?)
- 2. Usefulness (i.e., Will the objective guide decision-making? Does it meet sound principles for writing objectives (i.e., does it clearly state the anticipated outcome?)
- 3. Reasonableness (i.e., What is the extent of the regulatory impact imposed on individuals, businesses or the wider community? Is it consistent with identified tangata whenua and community outcomes?)
- 4. Achievability (i.e., Can the objective be achieved with tools and resources available, or likely to be available, to the Council?)

8.2 Evaluation of Objective EW-O1

While not specifically required under s32, it is appropriate to also consider alternative objectives to those currently included in the Proposed District Plan, so as to ensure that the proposed objective(s) are the most appropriate to achieve the purpose of the RMA.

For the purposes of this evaluation, the Council has considered three potential objectives:

- 1. The proposed objective
- 2. The current most relevant objective the status quo
- 3. A reasonable alternative objective.

In practice, the package of Proposed Plan objectives that inform the provisions in the Earthworks Chapter include not just EW-O1 but also the other objectives set out on the previous page. Those objectives are evaluated in the relevant s32 reports relating to district-wide and area-specific topics and, as such, should be read in conjunction with the evaluation contained in the following table.

Proposed Objective EW-O1

Earthworks are undertaken in a manner that:

- 1. Is consistent with the anticipated scale and form of development in the relevant zone;
- 2. Minimises adverse effects on visual amenity values, including changes to natural landforms;
- 3. Minimises erosion and sediment effects beyond the site;
- 4. Minimises risks associated with slope instability; and
- 5. Protects the safety of people and property.

Other potential objectives

Status quo: To provide for the use, development and protection of land and physical resources while avoiding, remedying or mitigating any adverse effects of earthworks and associated structures on the environment (Objective 29.2.1).

Alternative: Avoid, remedy or mitigate any adverse effects of earthworks.

	Preferred objective	Status quo	Alternative		
Relevance:	Relevance:				
Addresses a relevant resource management issue	Seeks to manage earthworks commensurate with the anticipated outcomes for the City's zone, to minimise adverse effects on amenity values, natural resources (soils and receiving water bodies), minimise natural hazard risks, and protect people and physical resources.	Not suitably directive with respect to 'physical resources' or 'adverse effects'.	Only focused on avoiding, remedying or mitigate adverse effects and not enabling of the activity.		
Assists the Council to undertake its functions under s31 RMA	Provides an objective that readily articulates and encapsulates the Council's s31 responsibilities.	Provides an objective that reasonably articulates and encapsulates the Council's s31 responsibilities.	Incorporates the Council's wider s31 responsibilities in terms of effects management.		
Gives effect to higher level documents	Gives effect to the RPS and NPSFM.	Potentially gives effect to the RPS and NPSFM.	Potentially gives effect to the NPSFM.		
Usefulness:					

Guides decision-making	Establishes a clear intent for the management of earthworks activities.	Does not provide a particularly clear intent for the management of earthworks activities, absent of any description of the effects to be managed.	Does not provide a particularly clear intent for the management of earthworks activities, absent of any description of the effects to be managed.
Meets best practice for objectives	The objective is specific and states what is to be achieved.	The objective as worded is ambiguous and difficult to determine how it might be achieved.	The objective is specific and states what is to be achieved.
Reasonableness:			
Will not impose unjustifiably high costs on the community/parts of the community	May assist in reducing costs by directing how and where earthworks activities can be undertaken so that they are less likely to compromise the identified values.	May create uncertainty and therefore costs given its generic content.	Likely to create increased costs due to the strong 'protection' mandate.
Acceptable level of uncertainty and risk	The objective is specific and states what is to be achieved.	The objective as worded is ambiguous and it is difficult to determine how it might be achieved.	The objective as worded is not clear regarding the nature of 'effects' and it is difficult to determine how it might be achieved.
Achievability:			
Consistent with identified tangata whenua and community outcomes	The intended balance between 'enabling' earthworks while specifying the values that are to be accounted for reflects the outcomes of consultation with the general public, stakeholders, and tangata whenua.	The intended balance between 'enabling' earthworks while specifying the values that are to be accounted for broadly reflects the outcomes of consultation with the general public, stakeholders, and tangata whenua.	The sole focus on effects fails to achieve a balance with 'enabling' considerations and does not reflect the outcomes of consultation with the general public, stakeholders, and tangata whenua.
Realistically able to be achieved within the Council's powers, skills and resources	The objective can be achieved through ongoing management of consent processes, non-regulatory methods and monitoring of plan and consent outcomes and the state of the environment.	The objective could be achieved through ongoing management of consent processes, non-regulatory methods and monitoring of plan and consent	The objective could be achieved through ongoing management of consent processes, non-regulatory methods and monitoring of plan and consent outcomes and the state of the environment.

outcomes and the state of the environment.	0			
environment.				
outcomes and the state of the			Environment.	
			outcomes and the state of the	

Summary

The above analysis suggests that the preferred objective is the most appropriate to implement the RPS and in turn, the purpose of the Act. By contrast, the status quo provides limited direction, and the alternative option only gives partial effect to the RMA and higher order direction, as it is overly focused on effects management alone and fails to engender an enabling stance.

9.0 Evaluation of Reasonably Practicable Options and Associated Provisions

9.1 Introduction

Under s32(1)(b) of the RMA, reasonably practicable options to achieve the objective/s associated with this proposal need to be identified and examined. This section of the report evaluates the proposed policies and rules, as they relate to the associated objective(s).

Along with the proposed provisions, the Council has also identified through the research, consultation, information gathering and analysis undertaken in relation to this topic a reasonably practicable alternative option to achieve the objective/s.

The technical and consultation input used to inform this process is outlined in section 5 of this report.

9.2 Evaluation method

For each potential approach an evaluation has been undertaken relating to the costs, benefits and the certainty and sufficiency of information (as informed by section 5 of this report) in order to determine the effectiveness and efficiency of the approach, and whether it is the most appropriate way to achieve the relevant objective(s).

This evaluation is contained in the following sections.

9.3 Provisions to achieve Objective EW-O1

For the purpose of this evaluation, the Council has considered the following potential options:

- 1. The proposed provisions
- 2. The status quo
- 3. A reasonable alternative, involving a non-regulatory approach (i.e., one reliant on education, advocacy, financial assistance, advice etc.)

Note that, as set out in section 7 of this report, there are a series of objectives in the Proposed Plan, beyond EW-O1, particularly those relating to outstanding, significant or special areas or values, that the options above also seek to implement. The options covered in the following table are therefore evaluated with these broader objectives in mind.

Objective EW-O1:

Earthworks are undertaken in a manner that:

- 1. Is consistent with the anticipated scale and form of development in the relevant zone;
- Is consistent with the anticipated scale and form of development in the relevant zone,
 Minimises adverse effects on visual amenity values, including changes to natural landforms;
 Minimises erosion and sediment effects beyond the site;
 Minimises risks associated with slope instability; and
 Protects the safety of people and property.

approach (recommended) inform	k of Acting / Not Acting if there is uncertain or insufficient
Policina Environmental Environmental	rmation about the subject matter of the provisions
Eighteen policies that: Direct costs: Could result in 'minor' earthworks (in terms of depth, volume or area) nevertheless resulting in adverse effects, individually or cumulatively (e.g., instability, erosion, significant or special areas, with reference to lower thresholds which the depth of the control of the contro	considered that there is certain and sufficient information on the considered that there is certain and sufficient information on the to base the proposed policies and methods as: the evidence base for acting is comprehensive; and overall, the risk of not acting is considered to be greater than the risk of acting.

is identified as an assessment					
criteria in relevant rules.					
Effectiveness and efficiency	Effectiveness		Efficiency	I	
	The proposal implements the enabling focus of the objective and would also be effective in The proposal represents ar		The proposal represents an e	efficient method of managing earthworks activities by ensuring that	
	addressing the adverse effects of earthworks activities, including	ing risks of erosion, sedimentation,	low risk earthworks are enab	abled without the need to obtain consent where appropriate. Limits	
	and instability. The proposal would also be effective in compre additional consent requirements where the risks presented by		are also designed to minimise	e regulatory overlap with the exercise of related functions by GWRC.	
	and need to be managed / minimised (e.g., in outstanding, sign				
Overall evaluation	This approach is considered to be appropriate as it builds on the successful aspects relating to the <i>status quo</i> , and incorporates up-to-date resource management practice.			s un-to-date resource management practice	
Option 2: Status Quo	Costs	Benefits		Risk of Acting / Not Acting if there is uncertain or insufficient information about the subject matter of the provisions	
Policies:	Environmental	Environmental		It is considered that there is certain and sufficient information on	
Objective 29.2.1 is	Direct costs: The operative provisions are not necessarily	Direct benefits: Some aspects of	the operative provisions do	relating to the operative policies and methods because this	
implemented by twelve policies	capturing, for the purposes of consent and effects	enable effects and risks to be addr	•	approach has been used for a number of years and is well understood by those already familiar with the provisions. No risk	
that seek ensure that earthworks are undertaken in a	assessment, earthworks activities in outstanding, significant or special areas.	No indirect environmental benefits	have been identified.	assessment is necessary in this respect.	
manner minimises risks and		Economic			
adverse effects.	No indirect environmental costs have been identified.				
Rules:	Economic	Direct benefits: Retention of operative provisions would minimise initial uncertainty and any costs of comprehending			
Rules relating to earthworks	Direct costs: The operative provisions are difficult to follow for those plan users unfamiliar with them.	change for property owners, d Council.	evelopers, community and		
are arranged by their location in specific zones, precincts,					
overlays and on specific sites. Standards and conditions are	No indirect economic costs (e.g., on economic growth or employment) have been identified.	No indirect economic benefits (e employment) have been identified.			
imposed relating to cut height,	Social	Social			
fill depth, degree of slope, area, purpose of the works, dust	No direct or indirect social costs have been identified.	Direct benefits: Regular plan users	s have a degree of familiarity		
generation, the volume of	Cultural	with the operative provisions.			
material transported, and	No direct or indirect cultural costs have been identified	No indirect social benefits have be	en identified.		
proximity to electricity transmission lines and the	no direct of indirect cultural costs have been identified	Cultural			
coastal marine area.		No direct or indirect cultural benefi	ts have been identified		
Earthworks default to restricted		THO GITCOLOT ITIGITED CUITUIAL DELICIT	to have been identified		
discretionary or discretionary activity status where the					
standards and conditions are					
not complied with.					
Other Methods:					
N/A					
Effectiveness and efficiency	Effectiveness Efficiency		Efficiency		
				The <i>status quo</i> is considered to be a relatively efficient means of implementing the objective. It	
	i i i			attempt to avoid regulatory duplication with the exercise of related	
	outstanding, significant or special areas.	averse effects of those activities III	TUTIONIO DY GIVINO.		
Overall evaluation		lopments in resource management	legislation and practice in the	intervening period since the provisions were made operative.	
	,		- '		

Option 3: Alternative approach to provisions	Costs	Benefits		Risk of Acting / Not Acting if there is uncertain or insufficient information about the subject matter of the provisions	
An entirely non-regulatory approach (i.e., one reliant on education, advocacy, financial assistance, advice etc.)	Environmental Direct costs: Non-regulatory approaches are an important adjunct to regulatory methods in that they assist in 'selling' the importance of good earthworks management. However, they rely on voluntary uptake, and it is generally accepted that not all property owners, land managers and developers operate in accordance with best or even good management practice. An approach that entirely relies on non-regulatory means provides no basis for enforcement where earthworks result in significant adverse effects. There is evidence that they can result in such effects, based on the proportion of enforcement cases before the courts relating to earthworks. An entirely non-regulatory approach carries overly high environmental risks and the prospect of failing to achieve the stated objective. No indirect environmental costs have been identified. Economic Direct costs: Non-regulatory approaches are open to interpretation and implementation and alone would likely create a high level of uncertainty among the development community as to bottom lines. No indirect economic costs have been identified. Social Direct costs: A non-regulatory approach would not address concerns from the general public that would inevitably arise from adverse effects of unregulated earthworks. No indirect social costs have been identified.	Economic Direct benefits: Non-regulatory methods are important as an adjunct to regulatory methods as, through such means as good practice guidance, they provide a practical means for developers to likely ensure they comply with objective standards and environmental outcomes. They can be a means of rewarding best practice. Most significantly, they impose no compliance costs on property owners, developers and land managers, and can enable earthworks activities to a greater degree (in the absence of regulatory controls). No indirect economic benefits have been identified. Social No direct or indirect social benefits have been identified. Cultural No direct or indirect cultural benefits have been identified.		There is sufficient information with respect to the evidence base to conclude that this would amount to a high risk of acting (given the lack of effectiveness and efficiency associated with such an approach).	
Effectiveness and efficiency	No direct or indirect cultural costs have been identified Effectiveness		Efficiency		
	The proposal would not be effective in achieving the objective stated environmental outcomes (or attendant community asp	sal would not be effective in achieving the objective as it provides no assurance that ironmental outcomes (or attendant community aspirations) will be achieved on the pasis or, more specifically, with respect to outstanding, significant and/or special		The costs of this proposal outweigh the benefits, particularly given that no objective bottom lines would be imposed and consequently there would be no guarantee of consistent implementation or performance.	
Overall evaluation	This proposal is not appropriate as it provides no assurance to	that the applicable objective would b	e achieved.		

9.4 Further Explanation of Proposed Approach to Provisions

The following provides some additional detail on the rationale for the proposed approach to earthworks in the Proposed Plan and the manner in which the rules are applied to earthworks activities in different locations, with particular reference to those features that differ from the *status quo*:

- Conditions and standards are expressed in objective, measurable terms (e.g., area, cut depth, volume of transported material) rather than via more subjective provisions that may be open to interpretation (e.g., absence of 'sediment-laden' content in run-off).
- Low-risk earthworks (essentially those involving disturbance of areas less than 250m²) are enabled via EW-P2 and the area threshold (EW-S1) that applies with respect to general earthworks (EW-R6).
- Where earthworks involving disturbance of areas greater than 3,000m² are concerned, it
 is anticipated that the GWRC will take the lead in managing erosion and sediment effects,
 whereas this role is assumed by the Council below that threshold, and the Council remains
 responsible for managing other effects (e.g., instability) at all scales.
- Earthworks for specific, lower-risk purposes or in particular zones (i.e., the Airport Zone) is enabled via rules EW-R1, EW-R2, EW-R4 and EW-R20, subject to compliance with specific standards, but not more general standards (via EW-R6).
- Other earthworks of a more general nature are enabled via EW-R6 and attendant standards.
- Earthworks in outstanding, significant or special areas are subject to specific rules (e.g., EW-R7 to EW-R19) which employ a mix of lower thresholds (e.g., consent may be triggered by smaller areas of disturbance) and/or a higher bar in terms of consent status, reflecting the sensitivity of the areas concerned and the relevant aims for those areas as expressed in the objectives summarised in section 8 of this report.

10.0 Conclusion

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 it:

- Includes an objective that is most likely to achieve the purpose of the Act, higher order statutory documents, and the direction under the RPS.
- Is enabling of earthworks where adverse effects can be managed.
- Reflects developing resource management practice in relation to earthworks activities.
- Retains operative provisions including thresholds for consent for earthworks that remain appropriate, providing a degree of continuity and familiarity for existing resource users (e.g., thresholds relating to areas, depths of cut and heights of fill).
- Ensures earthworks provisions are tempered to reflect the particular sensitivities of outstanding, significant and special areas.
- Establishes reasonable default settings and, where applicable, targeted matters of discretion for activities that infringe permitted activity standards.
- Ensures that non-regulatory approaches including the issuing of guidance can remain an important adjunct to regulatory controls.

Appendix 1: Feedback on Draft District Plan 2021

Who	Feedback Received	Response
GWRC, NZHPT	Expression of relative roles of agencies in managing earthworks and their effects.	Additional clarity on roles and responsibilities provided in Introduction to chapter.
GWRC	Enabling tenor of policy framework.	Enabling tenor acknowledges integral nature of earthworks to the development process and extent to which earthworks can be managed without undue adverse effects. Additional clarity with respect to the circumstances in which earthworks can be undertaken in outstanding, significant and special areas provided in policy and as signalled via consent status and applicable standards.
GWRC	Reference to climate change induced exacerbation of hazards.	Addressed via amendments to Introduction, Objective EW-O1 and Policy EW-P3.
GWRC, internal	Wording of relevant definitions.	Inclusion of new definitions relating to particular activities (e.g., 'trenching') and hazard mitigation works and structures.
GWRC	Consent status accorded earthworks in outstanding, significant and special areas.	Additional clarity with respect to the circumstances in which earthworks can be undertaken in outstanding, significant and special areas provided in policy and as signalled via consent status and applicable standards.
GWRC	Relative status accorded maintenance and construction of tracks	Separation of rules and finessing of consent status relating to maintenance and construction of tracks (EW-R2 to EW-R5) given greater effects 'envelope' associated with latter.
GWRC, internal	Clarity of exemptions for minor earthworks.	Additional clarity with respect to the circumstances in which earthworks can be undertaken in outstanding, significant and special areas provided in policy and as signalled via consent status and applicable standards.
GWRC, WIAL, internal	Integration between and application of 'general' earthworks rules and those that apply in development areas and particular zones.	Additional clarity with respect to the circumstances in which earthworks can be undertaken in outstanding, significant and special areas provided in policy and as signalled via consent status and applicable standards.
Transpower, Telcos, internal	Integration between and application of 'general' earthworks rules and those that apply with respect to infrastructure activities and in infrastructure corridors.	Additional clarity with respect to the (non) application of earthworks provisions with respect to infrastructure activities and provisions relating to earthworks in the National Grid Yard and Gas Transmission Pipeline corridors (EW-R22, EW-R23, EW-S15).

Fuel companies	Provision for earthworks associated with underground fuel storage tank replacement and removal.	Explicit provision made for earthworks associated with underground fuel storage tank replacement and removal as a permitted activity (EW-R1) subject to appropriate conditions.
GWRC, internal	Clarity of provisions relating to flood-prone areas.	Redrafting of provisions relating to hazard (and in particular flood) prone areas to provide additional clarity and certainty (EWP15 – EW-P17, EW-R16 – EW-R19).
GWRC, internal	Absence of performance standards relating to run-off.	It is not considered possible to craft an effective and enforceable standard relating to run-off. Rather, where objective standards are infringed, suitable matters of discretion and assessment criteria address erosion and sediment control considerations within the context of an appropriate policy (EW-P4).
GWRC, Transpower, Waka Kotahi, fuel companies, internal	Wording of particular standards.	Refinements made to the wording of certain standards (e.g., EW-S1, EW-S2, EW-S4, EW-S11, EW-S14), to provide greater clarity and certainty.