

PROPOSED INVERCARGILL CITY DISTRICT PLAN

Report No. 26

Soils, Minerals and Earthworks

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COUNCIL CHAMBERS
CIVIC ADMINISTRATION BUILDING

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TABLE OF CONTENTS

		Page
1.	Execu	utive Summary 1
2.	Introd	luction 2
	2.1	Report Author
	2.2	Peer Review
	2.3	How to Read this Report
	2.4	Interpretation2
	2.5	The Hearing Process
3.	Back	ground 5
-	3.1	Proposed issues, objectives and policies
	3.2	Proposed rule 6
4.	Statu	tory Context / Legislative Requirements
	4.1	Resource Management Act 19917
	4.1.1	Part 2 of the RMA 7
	4.1.2	Functions of Territorial Authorities under the RMA 8
	4.1.3	Consideration of alternatives, benefits, and costs
	4.2	Relevant Planning Policy Documents 8
	4.2.1	New Zealand Coastal Policy Statement
	4.2.2	National Policy Statements and National Environmental Standards 8
	4.2.3	Regional Policy Statement9
	4.2.4	Proposed Regional Policy Statement10
	4.2.5	Regional Plans11
	4.2.6	lwi Management Plans11
	4.2.7	Management Plans and Strategies Prepared under other Acts11
	4.3	Summary11
5.	Analy	rsis of submissions12
	5.1	Limitations on Quantity of Earthworks12
	5.1.1	Recommendation13
	5.2	Farm Landfills and Dead Holes15
	5.2.1	Recommendation15
	5.3	Effects of earthworks on airport operations16
	5.3.1	Recommendation16
	5.4	Minor Amendments
6.	Discu	ssion of Section 32 matters18
	6.1	Relevant Section 32AA matters18
	6.2	Section 32AA further evaluation19
	6.2.1	New Method19
	6.2.2	New Rule19
	6.2.3	Rule Changes19
	6.2.4	Removal of filled land from Planning Maps19
7.	Conc	luding comments20
Арр	endix 1:	Recommendations in response to submissions21
Арр	endix 2:	Recommended Changes to Proposed District Plan49

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1. EXECUTIVE SUMMARY

This report is on the Soils, Minerals and Earthworks provisions of the Proposed District Plan. Forty-five submission points and 11 further submissions were received on these provisions.

Southlands rural land, including Invercargill, is a highly valued natural resource that underpins the region's economy and the viability of the natural and physical environment. Maintaining or enhancing soil health and carefully using land resources across the region is essential to the community's health and economic, cultural, and environmental well-being.

The Soils, Minerals and Earthworks provisions of the Proposed District Plan have been strengthened from that of the Operative District Plan. The key change is the inclusion of a maximum limit for the volume of earthworks permitted to be undertaken in a 12 month period. This rule was the key concern for the majority of the submitters who raised concerns about the ability to undertake earthworks without triggering the need for resource consent. They considered the limits to be arbitrary and overly restrictive. Invercargill Airport Limited (IAL) further submitted in opposition to these submissions, raising concerns of bird strike resulting from standing bodies of water in close proximity to the Airport.

This report recommends some reasonably extensive changes to the rule in response to the submitters' concerns. The main changes include the exclusion of certain activities from the maximum earthworks limits, an increase in the volume of allowable earthworks, and a new rule on standing bodies of water. It is considered that the proposed recommendation should meet the majority of the submitters' concerns.

Part 2 of the Resource Management Act 1991 requires the Council to take measures to safeguard the life-supporting capacity of soils. It is considered that the provisions of the Proposed District Plan, along with the recommended changes, meet this function.

In this report:

- Part 2 considers several key procedural issues.
- Part 3 provides background information on the topic of Soils, Minerals and Earthworks.
- Part 4 summarises the various statutory provisions that apply to the consideration of the Proposed District Plan.
- Part 5 assesses the relevant issues raised by the submitters.
- Part 6 provides a discussion on the Section 32 matters.
- Part 7 sets out the overall conclusions.
- Appendix 1 sets out the recommendations on each of the submission points.
- Appendix 2 sets out the recommended changes to the text of the Proposed District Plan.

2. INTRODUCTION

2.1 Report Author

My name is Joanna Louise Shirley. I am a Policy Planner at the Invercargill City Council, a position I have held since February 2014. I hold a Bachelor of Environmental Management and am an associate member of the New Zealand Planning Institute. I have five years experience in the planning field as a Resource Management Officer, which has involved implementing the District Plan and producing various planning documents.

2.2 Peer Review

This report has been peer reviewed by Dan Wells from John Edmonds and Associates Ltd. Dan Wells is a resource management planner with a variety of experience throughout the plan change preparation process. Dan has a Bachelor of Resource and Environmental Planning (Hons) and a Post Graduate Diploma in Development Studies, both from Massey University.

2.3 How to Read this Report

This report is structured as follows:

- Interpretation (an explanation of some of the terms used).
- A summary of the hearing process.
- Background to the Soils, Minerals and Earthworks topic, and the provisions of the Proposed Invercargill City District Plan 2013.
- Description of the statutory framework within which the proposed provisions have been developed.
- Analysis of the submissions, including a discussion of the key issues raised through the submissions and further submissions received.
- Assessment of the proposed changes under Section 32 of the RMA.
- Concluding comments.
- Recommendations on individual submissions.
- Tracked changes of the Proposed District Plan provisions relating to Soils, Minerals and Earthworks.

To see my recommendation on an individual submission please refer to the table in **Appendix 1**. The table sets out the name and relevant submission number of those that submitted on the Soils, Minerals and Earthworks provisions; a brief summary of their submission and decisions requested, followed by my recommendation and the reasons for it.

2.4 Interpretation

In this report, the following meanings apply:

"Council" means the Invercargill City Council

"FS" means further submitter in Appendix 2

"Hearings Committee" means the District Plan Hearings Committee

- "Operative District Plan" means the Invercargill City District Plan 2005
- "Proposed District Plan" means the Proposed Invercargill City District Plan 2013
- "Provisions" is a term used to collectively describe Objectives, Policies and Rules
- "RMA" means the Resource Management Act 1991
- "RPS" means Southland's Regional Policy Statement
- "Submitter" means a submitter to the Proposed District Plan

2.5 The Hearing Process

A number of hearings are to be held to consider the submissions lodged to the Proposed Invercargill City District Plan 2013. The hearings have been divided up to ensure that submissions on similar issues have been grouped together and to enable the District Plan Hearings Committee to make decisions on the provisions relating to those issues. This report applies to the Soils, Minerals and Earthworks provisions of the Proposed District Plan.

The Hearings Committee comprises of accredited Invercargill City Councillors, with the assistance of an Independent Hearings Commissioner. This Committee is to consider the Proposed Plan and the submissions and further submissions lodged. The Hearings Committee has full delegation to issue a decision on these matters.

This report is prepared pursuant to Section 42A of the Resource Management Act 1991 (the "RMA"). Section 42A provides for a report to be prepared prior to a hearing, setting out matters to which regard should be had in considering a Proposed District Plan and the submissions lodged to it. This report highlights those matters that are considered appropriate by the author for the Hearings Committee to consider in making decisions on the submissions lodged. This report has been prepared on the basis of information available prior to the hearing.

While the Hearings Committee is required to have regard to this report, regard must also be given to the matters raised in submissions, and presentations made at the hearing. The comments and recommendations contained in this report are not binding on the Hearings Committee and it should not be assumed that the Hearings Committee will reach the same conclusions set out in the report having heard from the submitters and Council advisers.

The hearing is open to the public, and any person may attend any part of the hearing. Those persons who lodged a submission have a right to speak at the hearing. They may appear in person, or have someone speak on their behalf. They may also call evidence from other persons in support of the points they are addressing.

At any time during or after the hearing, the Hearings Committee may request the preparation of additional reports. If that is done, adequate time must be provided to the submitters to assess and comment on the report. The Hearings Committee may determine that:

- The hearing should be reconvened to allow responses to any report prepared, or
- Any responses be submitted in writing within a specified timeframe.

At the conclusion of the hearing process, the Hearings Committee will prepare a written decision. The decision is sent to all persons who lodged a submission. If not satisfied with the decision the submitters have a right of appeal to the Environment

Court. If an appeal is lodged, the RMA requires a copy to be served on all submitters with an interest in that matter. Any submitter served may, if they wish, become a party to the appeal either in support or opposition to it.

If there is an appeal, the Environment Court will provide an opportunity for mediation between the parties. If mediation is not accepted, or does not resolve the issues, a further hearing will take place before a Judge and Court appointed Commissioners.

Except on points of law, the decision of the Environment Court is final.

3. BACKGROUND

Southland's rural land, including Invercargill, is a highly valued natural resource that underpins the region's economy and the viability of the natural and physical environment. Maintaining or enhancing soil health and carefully using land resources across the region is essential to the community's health and economic, cultural, and environmental well-being.

The soils of the Invercargill district are mainly used for pastoral farming, with small areas of arable horticulture. Pressure for higher density of residential activity and other land use changes in the district's rural areas can adversely affect soil quality and health, undermining its productive capability and life supporting capacity. A study commissioned by the Council in 1993 classified the district's soils resource as ranging from Class $2-5^1$, with Class 2 arable horticulture soil being the most versatile found in the district. These versatile soils are delineated on the District Planning Maps and the provisions of the Plan seek to protect them from urban expansion and land use activities that can reduce their productive value.

Some land use activities can adversely affect soil quality and result in adverse environmental effects. The discharge of human waste from on-site wastewater systems into disposal fields can result in soils being overloaded with contaminants, untreated foul water coming to the surface, or discharges to surface water or groundwater. These issues usually occur in areas with poor drainage soils and a higher density of residential activity.

As well as potentially reducing the life supporting capacity and productive value of soil, earthwork and mineral extraction activities have the potential to generate adverse environmental effects, including noise, dust, visual and transportation effects. While it is recognised that some earthwork activities are inevitable, landfill operations and earthworks that significantly alter the soil profile need to be controlled in order to avoid adverse effects on the environment and public health.

Part 2 of the Resource Management Act 1991 requires the Council to take measures to safeguard the life-supporting capacity of soils.

3.1 Proposed Issues, Objectives and Policies

Section 2.13 of the Proposed District Plan contains the District Wide Issues, Objectives, Policies and Methods of Implementation relating to Soils, Minerals and Earthworks. This Section of the Plan has been strengthened from that of the Operative Plan in order to provide a more focused response to the issue.

Five significant resource management issues for soils, minerals and earthworks have been identified in the Proposed District Plan. These issues are:

- 1. Maintaining the productive capacity of rural land resources and sustaining the agricultural and primary sector activities dependent on them is of importance to the economic well-being of the district.
- 2. Subdivision, land use change and development can adversely affect the district's soil resource.
- Some land uses and land management practices can reduce the health, life-supporting capacity and productive value of soil, and lead to soil loss from erosion, which can cause increased sedimentation of waterways and coastal water.

¹ P D McIntosh and J R F Barringer, Landcare Research New Zealand Limited: 1993 Classification of Land for Horticulture, Forestry and Urban Use in Invercargill City.

- 4. Mineral extraction and earthworks activities, while important to economic well-being of Invercargill, may give rise to adverse environmental effects.
- 5. Use of on-site wastewater disposal systems within rural areas of Invercargill can give rise to adverse environmental effects on water, soil, amenity and public health, particularly where ground conditions are unsuitable or wastewater systems are inadequately maintained.

Four objectives and seven policies have been developed to address the significant resource management issues.

The objectives seek for soils to be sustainably managed and to provide for land use activities that avoid, remedy or mitigate adverse environmental and public health effects.

Both regulatory and non-regulatory policies are provided, ranging from the promotion of sustainable soil and land use development practices, to controlling land use activities and development in order to avoid adverse effects.

The district's versatile soils are recognised as an important resource that must be protected from urban expansion and land use activities that can reduce its productive value. Objectives and policies within the Rural 1 Zone and the Subdivision Section of the Plan are also provided on this issue.

3.2 Proposed Rule

Section 3.17 of the Proposed District Plan sets out the District Wide Rules for Soils, Minerals, and Earthworks. The main differences between the Proposed Rule and the Operative Rule are the inclusion of a maximum allowable limit for the movement of earth and a new activity status of non-complying for landfill and mineral extraction activities.

The rule provides for a smaller maximum volume of earthworks in zones located within the urban areas of the district as opposed to rural areas. The urban areas are considered more sensitive to the effects of earthwork activities, because of the smaller land parcels generally located within these areas, and higher density of development. This includes the Residential 1, 1A and 2 Zones, the Business 1, 2, 3, 4 and 5 Zones, the Industrial 1, 1A and 2 Zones, and the Otatara Zone, which are limited to 50m³ of earthworks over a 12 month period. The Rural 1 and 2 Zones have been provided with a maximum volume of 200m³ and all other zones are allowed 1000m³.

The maximum limit for earthworks was included in the Plan as an additional measure to control adverse effects from activities resulting in the movement, excavation and fill of material. It was previously found that significant earthworks could be carried out under the umbrella of permitted (e.g. landscaping), which resulted in adverse effects such as drainage issues and loss of amenity.

Landfill and mineral extraction activities have the potential to create significant adverse effects on the environment and therefore an activity status of non-complying was considered appropriate to ensure that the effects of the activity on the environment are no more than minor and that the proposals are fully considered in light of the objectives and policies of the Plan.

4. STATUTORY CONTEXT / LEGISLATIVE REQUIREMENTS

4.1 Resource Management Act 1991

In reviewing the District Plan, the Council must follow the process outlined in Schedule 1 of the RMA.

The First Schedule procedure includes notification for submissions (clause 5) and further submissions (clause 8), holding a hearing into submissions (clause 8(b)), and determining whether those submissions are accepted or rejected and giving reasons for the decisions (clause 10).

Clause 29(4) of the First Schedule to the RMA states that, after considering a plan, the local authority may decline, approve, or approve with modifications, the plan change, and shall give reasons for its decisions.

Under Section 74 of the RMA, in relation to changes to the District Plan, Council must consider Part 2 of the RMA (purposes and principles), Section 32 (alternatives, benefits and costs), and relevant regional and district planning documents.

4.1.1 Part 2 of the RMA

Part 2 of the RMA (ss5-8) sets out its purpose and principles of the Act.

Section 5 states that the purpose of the RMA is to promote the sustainable management of natural and physical resources, which means managing the use, development and protection of natural and physical resources in a way or at a rate which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety. Under Section 5(2), specific reference is made to sustaining the potential of natural and physical resources (excluding the end use of minerals) and safeguarding the life-supporting capacity of soil.

The provisions of the Proposed District Plan meet the purpose of the RMA, in particular with regards to safeguarding the life supporting capacity of soils.

Section 6 of the RMA sets out matters of national importance which must be recognised and provided for. There are no matters of particular relevance to soils, minerals and earthworks.

Section 7 of the RMA sets out "other matters" for which particular regard shall be had. It is considered that the provisions relating to Soils, Minerals and Earthworks in the Proposed District Plan demonstrate particular regard to these matters:

- (b) The efficient use and development of natural and physical resources.
- (c) The maintenance and enhancement of amenity values.
- (f) Maintenance and enhancement of the quality of the environment.
- (g) Any finite characteristics of natural and physical resources.

Section 8 of the RMA obliges persons exercising functions and powers under the RMA to take account of the principles of the Treaty of Waitangi. Representatives from Te Ao Marama Inc have been part of the Plan Review process as members of the Council's Plan Group that worked on developing the Proposed District Plan.

Consultation with Iwi has also occurred. The provisions relating to Soils, Minerals and Earthworks recognise the relationship of Maori and their culture and traditions with their ancestral lands.

4.1.2 Functions of Territorial Authorities under the RMA

Section 31 of the RMA states the functions of a territorial authority under that Act. One of the functions set out in Section 31(1)(a) is:

"The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district."

Under Section 31(1)(b) of the RMA a territorial authority is required to " ... control ... any actual or potential effects of the use, development, or protection of land ..."

Provisions of the Proposed District Plan seek to control land use activities and development in order to protect the life supporting capacity of the district's soil resource and avoid adverse effects on the environment.

4.1.3 Consideration of alternatives, benefits, and costs

Section 32 of the RMA states the Council's obligations in assessing the alternatives, benefits and costs.

Whilst a Section 32 report was released at the time of notification of the Proposed District Plan, the Council is required to carry out a further evaluation through the hearing, consideration and deliberation process before making its decision on the Plan Change. Section 6 of this report includes my evaluation of the Proposed District Plan Provisions in accordance with Section 32AA.

4.2. Relevant Planning Policy Documents

The RMA specifies a number of documents that need to be considered in a decision on a Proposed District Plan and the weight that should be given to these. These are addressed in the following section.

4.2.1 New Zealand Coastal Policy Statement

Section 75 of the RMA requires that a District Plan must give effect to any New Zealand coastal policy statement. There are no provisions of direct relevance to the soils, minerals and earthworks provisions, however it is noted that the provisions seek to ensure that adverse environmental effects from earthwork activities are avoided, remedied or mitigated, including activities that are located within the coastal environment.

4.2.2 National Policy Statements and National Environmental Standards

In accordance with Section 75 of the RMA, a District Plan must give effect to National Policy Statements.

Section 44A of the RMA prescribes how District Plans must be amended if a rule conflicts with a National Environmental Standard.

There are no National Policy Statements or National Environmental Standards that directly relate to the Soils, Minerals and Earthworks provisions.

4.2.3 Regional Policy Statement

Under Section 75 of the RMA, a District Plan must give effect to an Operative Regional Policy Statement (RPS).

The following RPS provisions have been given effect to in the development of the soils, minerals and earthworks provisions of the Proposed District Plan:

5.8 SOILS

Objective 8.1 - To promote the sustainable management of all soils.

Objective 8.2 - To avoid, wherever practicable, adverse effects arising from sedimentation and nutrient runoff from land into water bodies.

Objective 8.4 - To avoid contamination of soils.

Objective 8.5 - To avoid, remedy or mitigate any adverse effects of the use or development of land on wahi tapu, wahi taoka and archaeological sites.

Policy 8.1 - Maintain and enhance Southland's soil resource by avoiding, remedying or mitigating the adverse effects of activities.

Policy 8.2 - Provide for the sustainable management of the most versatile soils of the Region.

Policy 8.3 - Develop indicators of land sustainability to measure soil resource trends in partnership with landowners, land occupiers, communities and agencies.

Policy 8.4 - Recognise and provide for Maori cultural and traditional spiritual values and consult the takata whenua, when making statutory decisions on soil issues and preparing a Regional Sustainable.

Policy 8.5 - Promote land use practices which avoid the contamination of soils.

Policy 8.7 - Reduce the adverse effects of pest plants and pest animals on the soil resource.

5.10 BUILT ENVIRONMENT

Objective 10.5 - To minimise the adverse effects of the built environment on natural and physical resources.

5.16 SOLID WASTE

Objective 16.1 - To minimise adverse social, cultural, economic and environmental effects of solid waste disposal.

The provisions of the Proposed District Plan promote sustainable management of the district's soil resource. The District Planning Maps identify the most versatile soils of the district which are supported by policies that aim to protect the life supporting capacity of the soil for future generations. Regulatory controls have been developed

to help ensure that adverse effects from earthwork activities are avoided, remedied or mitigated.

4.2.4 Proposed Regional Policy Statement

In accordance with Section 74, regard needs to be given to any proposed Regional Policy Statement. The Proposed Southland Regional Policy Statement was notified in May 2012. The following provisions have been given regard to in the development of the soils, minerals and earthworks provisions of the Proposed District Plan.

Objective RURAL.1 – Achieve sustainable land use of Southland's rural areas, in respect of:

- agriculture and primary sector activities.
- subdivision, use and development activities.
- earthworks and vegetation clearance activities.
- the use of soil resources.
- activities related to mineral extraction.
- on-site wastewater systems.

Objective RURAL.2 – Maintain and enhance the life-supporting capacity, mauri and health of soils and avoid or mitigate soil erosion and the adverse effects of soil disturbance.

Policy RURAL.1 – Recognise that use and development of Southland's rural resources enables people and communities to provide for their economic, social and cultural well-being.

Policy RURAL.4 – Avoid loss of high value soils from productive use, through inappropriate subdivision, use and development.

Policy RURAL.5 – The effects of rural land development shall be sustainably managed and land management practices encouraged so that:

- soil properties are maintained or enhanced;
- soil erosion is minimised;
- soil compaction and nutrient and sediment loss is minimised;
- soil disturbance is reduced;
- water quality is maintained or enhanced;
- indigenous biodiversity is maintained or enhanced.

Policy RURAL.6 - Provide for the use of onsite wastewater disposal systems in rural areas provided adverse effects, including cumulative effects, are avoided or mitigated.

Environment Southland's submission sought consistency between the terms used in the Proposed District Plan and The Proposed Regional Policy Statement. In particular they requested that the use of the term "versatile soils" be replaced with the term "high value soils". I recommend accepting this submission (See submission point 18.77 in Appendix 1).

4.2.5 Regional Plans

In accordance with Section 74 of the RMA, a District Plan must not be inconsistent with a Regional Plan. Of relevance is the Regional Effluent Application Plan for Southland.

The purpose of this Plan is to avoid where practicable, remedy or mitigate the adverse effects on soil and water ecosystems from the discharge of effluent and associated sludges into land. The soil, minerals and earthwork provisions of the Proposed District Plan require that on-site wasterwater disposal systems are appropriately designed for the specific conditions of the site, in order to avoid adverse effects. The ability to dispose of wastewater is also a matter of consideration for the Council when an application is received to subdivide a site and/or build on an undersized allotment.

4.2.6 Iwi Management Plans

Section 74 of the RMA requires that a local authority must take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority.

Ngāi Tahu has lodged an Iwi Management Plan with the Council. The relevant document is the *Ngāi Tahu Ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 – The Cry of the People - Te Tangi a Tauira*. The ability of the Southland Plains soil resource to meet current and future demand is an important issue for Ngāi Tahu Ki Murihiku. This is recognised by the policies set out in Te *Tangi a Tauira* relating to wastewater disposal, solid waste management, subdivision and development, earthworks, and mining. The Proposed District Plan seeks to protect the productive capability and life supporting capacity of Invercargill's soil resource which is consistent with these policies.

4.2.7 Management Plans and Strategies Prepared under other Acts

A District Plan is required to have regard to management plans and strategies prepared under different Acts. For the soils, minerals and earthworks provisions, the non-statutory spatial plan, The Big Picture, (prepared under the Local Government Act) is considered relevant. The Spatial Plan sets out in mapped form the long term direction for the city.

The location of versatile soils is a dimension of the Spatial Plan which was considered in the delineation of the proposed zones. The Proposed District Plan seeks to control urban expansion into areas containing versatile soils, which is consistent with the Spatial Plan.

4.3 Summary

It is considered that the purpose and principles of the RMA are met by the Soils, Minerals and Earthworks provisions set out in the Proposed District Plan. The proposed provisions fall within the functions of local authorities. The requirements of Section 32 of the RMA have been met through the evaluations carried out prior to notification and in this report. The various documents required to be considered have been appropriately addressed in the preparation of provisions relating to Soils, Minerals and Earthworks.

5. ANALYSIS OF SUBMISSIONS

Forty-five submission points and 11 further submissions were received on the Soils, Minerals and Earthworks Provisions of the Proposed District Plan. These submissions are summarised in table format, along with recommended responses, in Appendix 2 of this report.

The key issue raised by a number of the submitters was in regard to the limitations placed on the quantity of earthworks. In their opinions the restrictions are overly onerous and will make it difficult to undertake activities without triggering the need for resource consent. Invercargill Airport Limited (IAL) did not fully agree with these submissions, commenting that earthworks can result in standing bodies of water in close proximity to the airport which can attract birds and become a safety hazard to flying aircraft. These matters are discussed in detail below:

5.1 Limitations on Quantity of Earthworks

A large number of the submitters raised concerns with regard to the introduction of maximum limits placed on earthwork activities. The majority of the submitters were of the opinion that the limits were arbitrary, not effects based, and would severely limit that ability to undertake works. Some of the submitters sought no limitations while others recommended amending the quantities to provide for a larger scope of earthwork activities.

The limits have been designed so as to allow for a smaller volume of earthworks within the urban areas of the district and a greater volume for zones located within rural areas. The urban areas are considered more sensitive to the effects of earthwork activities, because of the smaller land parcels generally located within these areas, and higher density of development.

I do not accept that the quantity limits should be completely deleted. Earthwork activities can create adverse effects on the environment such as dust, drainage, transportation and visual effects, and change in soil profile. The maximum limits provide the Council with a mechanism to control these effects and to ensure that resources are managed sustainably.

I accept, however, that the Rule as notified will limit the ability to undertake certain activities that are unlikely to create significant adverse effects, and will result in a large number of resource consents for activities that are already controlled through other regulations i.e the building consent process, bylaws etc. Placing limits on earthworks under the Code of Practice for Land Development Bylaw, for example, will result in a number of resource consents for works such as the building of roads and maintaining and upgrading of pipes. These activities are essential to the development and functioning of the city and are important to the economic and social well-being of the district. It is important for the rule to achieve the right balance between providing for land use activities and avoiding, remedying, or mitigating adverse effects. I therefore recommend amending the rule to allow for certain activities to be permitted without limitations.

Ballance Agri-Nutrients submitted that it should be made clear by the rule that the quantities apply on a "per site" basis and believe that the quantities should be based on the size of the site and underlying land uses permitted by the Zone. I acknowledge that larger sites are likely to require a larger volume of earthworks and will have a greater capacity to absorb adverse effects. The maximum quantities as

notified do not provide much flexibility for larger landholdings, particularly in the urban zones, which will be limited to 50m³ of earthworks in a 12 month period. I therefore consider that it is reasonable to amend the quantities to reflect the size of the site. This change along with the recommended permitted activities will provide for a suitable level of earthworks to occur without triggering the need for resource consent.

A submission from Federated Farmers considers that the maximum 200m³ limit placed on the Rural Zones is too restrictive and will limit the ability to undertake day to day farming activities. They request that the rule is amended to allow for a maximum 2000m³ of earthworks to occur in a 12 month period. I partly agree.

The Proposed District Plan provides for up to 1000m³ of earthworks in "other zones", which includes the Airport Operations, Airport Protection, Hospital, Industrial 3, Industrial 4, and Seaport Zones. These zones are generally located in lower density areas of the district and reflect the larger land parcels held within these areas. Similar to these "other zones" the Rural 1 and 2 Zones also contain large land parcels and are less densely populated. I therefore consider that it is appropriate to increase the permitted volume in the Rural 1 and 2 Zones to 1000m³. This limit is consistent with neighbouring zones and is suitable for the activities expected to occur within these areas of the District.

In addition to the maximum 1000m³ limit, earthworks such as the cultivation of farm land and the excavation and stockpiling of material, including gravel, from a borrow pit should be permitted without limitations. These activities are expected to occur on farm land and are seen as part of the working environment. Some anomalies in the Rules and Definitions Sections of the Plan have been identified in relation to these activities. I therefore recommend amendments to both the Rules and Definitions Sections of the Plan, so as to clarify the activity status of the cultivation of farm land and removal and use of material from a borrow pit.

5.1.1 Recommendation:

That the rule is amended to provide for certain activities as permitted without being subject to volume limits and to increase the maximum volume of earthworks allowed within each zone. Changes are also recommended to the definition of borrow pit and mineral extraction and two new definitions are recommended.

It is considered that these changes provide an appropriate balance between providing for land use and avoiding, remedying or mitigating any adverse effects arising from earthwork and mineral extraction activities.

Amend Rule 3.17.2 as follows:

Earthworks and Filling Activities

- **3.17.2** Subject to Rule 3.1 Biodiversity, Rule 3.8 Heritage, and Rule 3.10 Natural Features, Landscapes and Townscapes, it is a permitted activity to undertake the following land use activities which fill or recontour land.
 - (A) Gardening, agriculture, landscaping, and including such practices as drainage, tilling, harrowing, ploughing, fertilising, mulching, silage making, farm tracks, repairing storm or flood damage and planting.

- (B) Movement, deposition or removal of material when it is a necessary consequence of building a structure for which a building consent has been obtained on that site.
- (C) Deposition of material for the purpose of forming hard surfaces such as accessways and paths.
- (D) Removal and deposition of material for the purposes of work in compliance with Council's Bylaw 2013/1 Code of Practice for Land Development and Subdivision Infrastructure.
- (E) Activities associated with the construction, operation, maintenance, repair and upgrading of infrastructure utilities.
- (F) The cultivation of farm land.
- (G) The excavation, stockpiling and use of material from a borrow pit.
- (H) All other earthworks, excluding landfills, provided that the quantity of earth moved in a 12 month period shall not exceed
 - (a) 50m³ per site up to 1000m², plus 50m³ each 1000m² thereafter, in the Residential 1, 1A, 2 and 3, Business 1, 2, 3, 4 and 5, Industrial 1, 1A and 2, and Otatara Zones.
 - (b) <u>1,000m³ per site in all other zones.</u>

Mineral Extraction

- **3.17.7** Subject to Rule 3.10 Natural Features, Landscapes and Townscapes, Rule 3.1 Biodiversity and Rule 3.8 Heritage, the excavation, stockpiling and use of material from a borrow pit is a permitted activity.
- **3.17.8** Except as provided for in Rule 3.17.7 3.17.2(G) above, all land use activities involving the extraction of minerals is a non-complying activity.
- **3.17.9** Any application for resource consent <u>under Rule 3.17.8</u> is to be accompanied by a plan for rehabilitation of the area likely to be affected by the application.

Amend Section Four as follows:

Borrow Pit: Means the excavation and stock piling of material from the ground for use on the property on which it is extracted. This excludes the extraction of minerals, with the exception of industrial rock and building stones. without undertaking any extraction of minerals or other such processes, on the property on which it is extracted.

Industrial Rocks and Building Stones: Includes aggregate, basalt, diatomite, dunite, granite, limestone, marble, perlite, pumice, sandstone, serpentine, slate, sand and gravel.

Mineral: Means a naturally occurring inorganic substance beneath or at the surface of the earth, whether or not under water; and includes all metallic minerals, non-metallic minerals, fuel minerals, precious stones, industrial rocks and building stones, and a prescribed substance within the meaning of the Atomic Energy Act 1945.

Mineral Extraction: Means to take, win, or extract, by whatever means, a mineral existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance; but does not include prospecting or exploration; and "to mine" has a corresponding meaning. Mining includes quarrying but does not include extraction from borrow pits.

5.2 Farm Landfills and Dead Holes

Federated Farmers believe that the re-contouring of land relating to fencing, farm landfills and dead holes should be a permitted activity. They consider that these activities are already adequately controlled by Environment Southland's Regional Plan.

The definition of earthworks in Section Four of the District Plan excludes the digging of holes for the erection of posts and therefore fencing will not trigger the earthworks rule.

Under Rule 3.17.4 of the Proposed District Plan any landfill is a non-complying activity, including farm landfills. But under Southland's Regional Water Plan farm landfills and dead holes are permitted subject to performance criteria (Rules 54 and 55). It is important that consistency is provided between Plans where it is possible and practical to do so.

The Council's primary concern with regard to landfills is amenity related, including effects of dust, odour, transportation, change in soil profile etc. These activities can generate significant adverse effects on the environment and need to be controlled. However, farm landfills and dead holes are small in scale and are often isolated activities which do not generate the same level of adverse effects as what can be expected from a commercial landfill operation.

The Regional Water Plan requires farm landfills and dead holes to be located at least 100 metres from a dwelling or land holding boundary. This addresses the Council's primary concern with regard to adverse effects on neighbouring properties. I therefore agree with Federated Farmers that this matter is already adequately addressed by Environment Southland, and consider that the Council only needs to become involved in regulating farm landfills and dead holes if the maximum quantities of earthworks are going to be exceeded. This can be done by changing the definition of landfill and by including two new definitions, setting out the meanings of farm landfill and dead hole.

5.2.1 Recommendation

Amend Section Four Definitions as follows, in order to exempt farm landfills and dead holes from the definition of "landfill".

Farm Landfill

Farm Landfill means a landfill located on a rural property used to dispose of household waste generated on that property. It does not include the disposal of any hazardous waste, dead animal material or any waste generated from any industrial or trade process on that property.

Landfill: Means a site used for the deposition of solid waste, including material that does not meet the definition of "cleanfill", on to or into land. This excludes farm landfills and dead holes.

Dead Hole (Offal Pit)

Means a hole excavated on a rural property to be used only for the purpose of disposing of dead animal or plant matter generated on that property.

5.3 Effects of earthworks on airport operations

Invercargill Airport Limited has submitted against Rule 3.17.2 commenting that earthworks can result in standing bodies of water in close proximity to the airport which can attract birds and become a safety hazard to flying aircraft. They have requested an amendment to the rule which will limit earthworks that will result in standing pools of water greater then 10m² in the Airport Protection and Otatara Zones.

The significant vegetation within Otatara means that there is already extensive bird life within Otatara, but the submitters' concerns are partly accepted. I do not believe that it is practical or necessary to impose this restriction across the entire Otatara Zone. I consider that a more practical response is to focus on the airport approach path, restricting earthworks on properties within Otatara where they are located within the 46 amsl obstacles limitation surface area. It is accepted that the restriction should apply to the Airport Protection Zone, which is located fully within the approach path.

5.3.1 Recommendation

Amend Rule 3.17 as follows:

- 3.17.2 On sites within the Airport Protection Zone or the Otatara Zone where they are identified within the 46 amsl obstacle limitation surface (Planning Map 35), no earthworks are to result in standing bodies of water greater than 10m².
- 3.17.7 In addition to the matters listed in Rule 3.17.6, applications for earthworks that do not comply with Rule 3.17.2 shall address the following:
 - (a) Any effect on the operation of the airport resulting from the congregation of birds
 - (b) <u>Methods to avoid, remedy, or mitigate potential conflict with the safe</u> and efficient operation of aircraft.

Note: Written approval of Invercargill Airport Limited is required as an affected party.

5.4 Minor Amendments

It is recommended that Rule 3.3 Contaminated Land and Rule 3.9 Utilities² are cross referenced to Rule 3.17.2 (notified rule number). This is a minor change and will result in no consequence to the intention and outcome of the provisions. It is considered that this change creates a more user friendly document. The effects of

² Previously 3.9 Infrastructure. Report 19 recommended that the term "Infrastructure" is replaced with "Utilities".

the amendments are suc the First Schedule of the	ch that they can b RMA.	e made at this stag	ge under Clause 16	(2) of

6. DISCUSSION OF SECTION 32 MATTERS

Section 32 of the RMA establishes the framework for assessing objectives, policies and rules proposed in a Plan. This requires the preparation of an Evaluation Report. This Section of the RMA was recently amended (since the notification of the proposed District Plan) and the following summarises the current requirements of this section.

The first step of Section 32 requires that objectives are assessed to determine whether they are the most appropriate way to achieve the purpose of the RMA (as defined in Section 5).

The second step is to examine policies and rules to determine whether they are the most appropriate way to achieve the objectives. In this instance, the objectives are those proposed by the District Plan. This assessment includes requirements to:

- Identify the costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions (including effects on employment and economic growth)
- Identify other reasonably practicable options for achieving the objectives; and
- Assess the efficiency and effectiveness of the provisions in achieving the objectives.

An Evaluation Report was released at the time of notification of the Proposed Plan.

Section 32AA of the RMA requires a further evaluation to be released with decisions outlining the costs and benefits of any amendments made after the Proposed Plan was notified.

Section 32 states that Evaluation Reports need to contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal. This means that if in its decision the Hearings Committee recommends minor changes from what was in the Proposed Plan, a further evaluation can be relatively brief.

6.1 Relevant Section 32AA Matters

Listed below are the matters considered relevant for further evaluation under Section 32AA of the RMA.

- New method on environmental advocacy.
- Inclusion of a new Rule on standing bodies of water within the Airport Protection Zone and the airport flight path within the Otatara Zone.
- Rule change to permit certain activities which are exempted from the maximum quantity limits for earthworks.
- Rule change to increase the maximum allowable limit of earthworks.
- Removal of filled land from the District Planning Maps.

Some changes to the wording of the provisions and the inclusion of new definitions are also recommended that are minor in scale and do not change the intent of the provisions. These changes are within the scope of the original Section 32 Report and I do not consider it necessary to make a further evaluation under Section 32AA in these instances.

6.2 Section 32AA Further Evaluation

The Soils, Minerals and Earthworks Section of the original Section 32 report is relevant to this report. The detail of the proposed changes to which this evaluation refers are set out in Appendix 2.

6.2.1 New Method

A new method on initiating environmental advocacy for the ongoing maintenance and care of on-site wastewater disposal systems is recommended. Poorly maintained wastewater disposal systems can adversely affect soil health, the environment, and public health. The Council is currently involved in developing a pamphlet for new land owners on living in the country, which includes information on how to maintain and properly care for their on-site wastewater disposal systems. This method reflects Council's current processes and will have positive benefits on the land owners, the community, and the environment. This method gives effect to Objective 4 and Policy 5 of the Proposed District Plan.

6.2.2 New Rule

A new rule is recommended on standing bodies of water. The rule will limit the area of standing bodies of water within the Airport Protection Zone and the airport approach path within the Otatara Zone to $10m^2$. This will restrict earthwork activities on properties within these areas which may frustrate land owners. However, the risk of bird strike caused by the congregation of birds over standing bodies of water is a concern and methods to avoid, remedy or mitigate such effects are reasonable and necessary. Bird strike on aircraft can have significant economic and social impacts which can result in damage to aircraft, disruption of aircraft operations, injury, and in extreme cases loss of life. The benefits resulting through the imposition of this rule are considered to outweigh the additional regulation imposed on the land owners and the additional costs and frustration that this may cause.

6.2.3 Rule Changes

Several changes are recommended to the rule which will exempt certain activities from the maximum limits imposed on earthworks and will increase the level of earthworks permitted. This change will provide for a wider scope of earthwork activities to occur but will still provide a suitable level of control so as to ensure that adverse effects are avoided, remedied or mitigated. Less regulation will help encourage development which will have a positive benefit on the economy and community as a whole.

6.2.4 Removal of filled land from Planning Maps

It is recommended that the data relating to filled land is removed from the District Planning Maps. This information can become quickly outdated, resulting in information that is not accurate and is potentially misleading. Information on filled land will still be available to the public through the LIM process, building consent process, and public enquiries. It may be perceived by the public that the Council is withholding information, however, it is considered that this change will result in less errors and misconceptions about properties being made.

7. CONCLUDING COMMENTS

Several changes are recommended in response to the submitters' concerns. The key changes to the notified provisions include the exclusion of certain activities from the maximum earthwork limits, an increase in the volume of allowable earthworks, and a new rule on standing bodies of water. It is considered that the proposed changes will meet the majority of the submitters' concerns by providing for a wider scope of earthwork activities to occur, while at the same time providing a suitable level of control to ensure that adverse effects are avoided, remedied or mitigated.

Part 2 of the Resource Management Act 1991 requires the Council to take measures to safeguard the life-supporting capacity of soils. It is considered that the provisions of the Proposed District Plan, along with the recommended changes, meet this function.

APPENDIX 1 – RECOMMENDATIONS IN RESPONSE TO SUBMISSIONS

Submitter	Summary of Submission	Recommendation
GENERAL		
24.34 South Port NZ Ltd	The submitter agrees that there should be a focus on the protection of quality soils within the Invercargill District, but considers that this same level of protection should not be afforded to areas of land where the soil has been highly modified such as reclaimed areas of land such as the Port land. This chapter should recognise that it only applies to areas of high quality soil. DECISION SOUGHT Ensure that this chapter and ensuing objectives, policies and rules do not apply to areas where soil has been highly modified such as reclaimed areas of land such as the Seaport Zone.	Reject The protection of high value soils is only one aspect of the soils, minerals and earthworks provisions. Mineral extraction and earthworks activities can give rise to adverse environmental effects, and therefore needs to be controlled and managed accordingly. This is identified as a significant resource management issue for the District.
56.21 Jenny Campbell	The submitter broadly discusses the issues of solid waste disposal and the need to keep as many resources out of the landfill as possible. The submitter suggests various methods that could be introduced to increase public awareness and reduce the amount of waste being diverted to landfill. DECISION SOUGHT Not stated.	The submission is noted; however the points raised are largely outside of the scope of the Soils, Minerals and Earthwork provisions of the District Plan. The Works and Services Department of the Council is responsible for the management of Solid Waste, which they carry out in accordance with their duties under the Local Government Act 1974 and the Waste Minimisation Act 2008. The Council's Solid Waste Management Plan 2011 sets out the Council's goals and strategic direction with respect to solid waste activities and can be viewed on the Council's website.
64.34 Department of Conservation	The submitter considers these provisions are consistent with Part 2 of the RMA. The submitter also supports the requirement to consider the rules covering biodiversity, heritage and natural features and landscapes. DECISION SOUGHT Retain the objectives, policies, methods and rules. FS32.4 Placer Investments Ltd - Oppose submission 64.34 The further submitter considers that the mineral extraction provisions should remain as in the Operative District Plan.	Accept (with amendments) Amendments are recommended to the notified provisions. View the changes in Appendix 2. It is considered that these changes are consistent with Part 2 of the RMA.

Submitter	Summary of Submission	Recommendation
	The further submitter further considers that the submission is not in accordance with Part 2 of the RMA.	
	DECISION SOUGHT Replace Proposed provisions on Mineral Extraction with those in the Operative District Plan.	
77.37 Te Runaka o Waihopai and Te Runaka of Awarua	The submitter notes that there is no reference to the impact of earthworks on potential unknown or known lwi sites. DECISION SOUGHT Add: "Earthworks can affect heritage including archaeological sites and sites of cultural importance to lwi."	Accept The effect of earthworks on archaeological sites and sites of cultural importance is an issue which should be considered at the time of resource consent. This is recognised in Policy 5 of the Tangata Whenua provisions. Including the consideration of these matters through the resource consent process will enable the imposition of conditions such as the accidental discovery protocol.
		 Amend Rule 3.17.5 as follows: (F) Any effect on sites of heritage <u>and/or archaeological</u> significance, <u>cultural importance to lwi</u>, outstanding natural features and landscapes and/or significant indigenous biodiversity.
105.3 ICC – Environ- mental Health and Compliance Services	The submitter acknowledges the history of problems with on-site wastewater management systems in the district and supports references made to these systems in the issues, objectives and policies. The submitter believes that there should be more methods and zone specific rules relating to these systems within the Plan. DECISION SOUGHT	Accept in part (a) Accept - It is agreed that collaboration with Environment Southland on issues relating to soils, minerals and earthworks is valuable. It is recommended that Method 6 is amended to include collaboration.
	 Amend 2.13 to include: a. A method of implementation that the Council will work with ES to assess, collect information and look at options to remedy issues. b. A method of implementation to carry out area surveys to assess the extent of any problems and to work out the best options to mitigate issues. c. Zone specific rules for on-site wastewater disposal systems which includes criterion such as approved design, operation and maintenance. 	 (b) Reject – The Council monitors the effectiveness of wastewater disposal systems through other legislation and it is therefore not necessary to include this as a method in the District Plan. (c) Accept in part - Building consent is required for on-site domestic wastewater systems. As part of this process the building consent officers ensure compliance with AS/NZS 1547:2012 – On-site domestic wastewater management. AS/NZS 1547 provides performance objectives, requirements and criteria to achieve sustainable and effective on-site domestic wastewater

Submitter	Summary of Submission	Recommendation
		management, and to protect public health and the environment. It is considered that this process is sufficient to ensure that on-site wastewater systems are appropriately designed, sited, operated and maintained.
		For new subdivisions and developments which exceed the maximum residential density it is appropriate to consider the likely future use of the site and ensure that a wastewater system can be designed and operated effectively on the site for the intended activity. This is already provided for in the Proposed District Plan under Rules 3.18.4 (Subdivision), 3.33.9 (Otatara Zone), and 3.39.6 (Rural 2 Zone). It is recommended that Rule 3.38.11 (Rural 1 Zone) is amended to also include effluent disposal as a matter to be considered when assessing an application for resource consent to exceed the maximum residential density.
		Recommended changes
		Amend Method 6 as follows:
		Method 6 - Consult <u>and collaborate</u> with landowners and occupiers, iwi, other councils, Central Government and other organisations, internal Council departments and local community and business groups.
		Add new matter to Rule 3.38.11.
		Add the following to Rule 3.38.11
		(I) Effluent disposal.
447.44		
117.14 Southern District	The submitter supports the objectives and policies but would like to see additional wording to ensure assessments and characterisation of risks to	Accept in part.
Health Board	both the environment and public health are considered. DECISION SOUGHT	The effects on pubic health are a relevant consideration and it is therefore appropriate to recognise this in the provisions. The relief sought to Objectives 2 and 3 are therefore accepted. Policy 4 is
	Support with amendments: a. Including the term "public health effects" into Objectives 2 and 3 and Policy 4.	inclusive off all adverse effects and therefore the inclusion sought by the submitter is not considered necessary. Public health should, however, be recognised in the explanation to the Policy.

Submitter	Summary of Submission	Recommendation
	b. Including reference to "appropriate maintenance" in Policy 5 Onsite Waste Water Disposal.	Poorly maintained effluent disposal systems can result in loss of soil quality and adversely effect the environment and health of people. An amendment to Policy 5 and the inclusion of a new method is therefore recommended in order to encourage ongoing maintenance of these systems.
		Amend the following provisions
		Objective 2: The extraction of Invercargill's mineral resources is managed in such a way as to avoid, remedy or mitigate adverse environmental <u>and public health</u> effects.
		Objective 3: Earthworks in Invercargill are carried out in such a way as to avoid, remedy or mitigate adverse environmental and public health effects.
		Policy 4 Explanation: Land-based mineral extraction (including gravel extraction) is an appropriate rural land use activity, so long as adverse environmental and public health effects including cumulative effects are avoided, remedied or mitigated. The potential adverse effects of mineral extraction activity include, but are not limited to, effects on rural amenity, landscapes and natural features, biodiversity, water quality, soil resources and the roading network.
		Policy 5 – On-site wastewater disposal: To require that on-site wastewater disposal systems are designed for the specific conditions of the subject site and to encourage the ongoing maintenance of these systems.
		Method x – Initiate environmental advocacy for the ongoing maintenance and care of on-site waste water disposal systems.

Submitter	Summary of Submission	Recommendation
65.128 ICC Environ- mental and Planning Services	The submitter notes that there may be areas of filled land that are not shown on the Hazard Maps. DECISION SOUGHT Review the data used to map the Filled Land on the Hazard Maps and amend maps where necessary.	Accept in part The planning maps are a snapshot of the land which, to the best knowledge of the Council, has been filled as at the date the Plan becomes Operative. The Council does not have full knowledge of all of the areas of fill within the district or the extent to which a site has been filled. As new information becomes available, or new resource consents are granted, these sites are identified on the Council's GIS system, but the Planning Maps are not updated. In my opinion it is misleading and inaccurate to only show a snapshot of filled land at the time the Planning Maps become operative. I consider there are three ways to resolve this: (1) by undertaking a Plan Change as new information becomes available; (2) adding an explanation within the Planning Maps setting out that the information shown is only current at the date the Plan became operative and to contact the planning department for more up to date information; or (3) to remove filled land from the Planning Maps. My preference is option 3. I consider that it is misleading, and not much benefit to the users of the Plan, showing potentially out of date information. Filled land will still be identified on the Council's GIS system and on the property files. This information will be passed on to the public via public enquirers, the building consent process, and LIM applications. This is provided for by Method 8 of the Soils Minerals and Earthworks provisions. Recommendation Remove the filled land data from the District Planning Maps.
18.77 Environment Southland	The Introduction, Policies 2 and 3 and Method 1 refer to "versatile soils" and the identification, delineation and protection of them. The submitter considers that Policies 2 and 3 are unclear when soils have a range of versatilities for a range of land uses. The submitter believes a more consistent approach would be to replace the term "versatile soils" with the term "high value soils". This would align with the PSRPS 2012, particularly Policy RURAL 4-Loss of high value soils from productive use.	Accept. Consistency between plans provides a more user friendly document. It is recommended that the term "versatile soils" is replaced with "high value soils" and that the following definition is added to Section Four of the Plan:

Submitter	Summary of Submission	Recommendation
	The submitter also believes that the explanation attached to Policy 3 of the	High Value Soils: Soils identified as Class 2 arable horticulture in the
	District Plan "the District does not have high quality soils" is incorrect as	PD McIntosh and J R F Barringer's study Classification of Land for
	the District has Class 2 soils (NZLRI) with a range of versatilities for	Horticulture, Forestry and Urban Use in Invercargill City. These soils
	different land uses.	are known to be highly productive and suitable for multiple uses such
		as growing a wide range of crops, pasture and forest and of high
	DECISION SOUGHT	versatility for pastoral farming.
	That Section 2.13 of the District Plan be amended by	
	1. Replacing all reference in the Introduction, Policies 2 and 3 and Method 1 to "versatile soils" with "high value soils".	It is agreed that the explanation to Policy 3 is misleading. The following amendment is recommended:
	2. Amending the Explanation to Policy 3 by removing the wording "the	Policy 2
	District does not have high quality soils".	Policy 3 Explanation: The district does not have high quality sails but there are
	3. Making any other consequential amendments.	Explanation : The district does not have high quality soils but there are areas of highly versatile soils, particularly to the north, that are an
		important resource that should be kept available for the production of
		food.— The district's high value soils are an important resource that
		should be kept available for the production of food. Urban expansion
		typically reduces high value soil stocks either by reducing the total area
		or impairing the remaining soils. Such changes are effectively
		irreversible, because top soils can take thousands of years to develop.
SECTION 2.13 -	ISSUES, OBJECTIVES AND POLICIES	
INTRODUCTION		
18.76	The submitter suggests that a map identifying areas with poor draining	Reject
Environment	soils is added to the Plan as supporting information for paragraph 7 of the	
Southland	Introduction. This will assist plan users when assessing a site for	The Council has limited information available on the drainage
	development which relies on on-site wastewater disposal systems.	properties of local soils. A study was undertaken in 2007, but was
		indicative only and did not involve field examinations or soil testing. It
	DECISION SOUGHT	would therefore be misleading to include this information on the
	Add a map identifying areas with poor draining soils.	Planning Maps as it is not site specific. Individual site assessment is
		required at the time of building consent and may, depending on the
	FS34.9 ICC - Environmental Health and Compliance Services - Support submission 18.76	proposal, be required at the time of subdivision and land use consent.
		It is not considered necessary to map areas with wastewater disposal
	The further submitter supports the idea of adding a map identifying poor	systems. These are generally located within the rural areas of the
	drainage areas in the District Plan and also identifying areas with on-site	district where reticulated services are not available. This information
	wastewater disposal systems to assist users to assess a site for future developments in these areas.	can be found by looking at the Council's property file.

Culturalities	Commence of Codemication	December detion
Submitter	Summary of Submission	Recommendation
65.32	Support in part. The submitter considers that the background should	Accept
ICC Environ-	acknowledge that failures of on-site effluent disposal systems also affect	
mental and	the health of the soil and its ability to support agricultural activities.	Amend paragraph seven of the introduction as follows:
Planning		
Services	DECISION SOUGHT Include "the health, life-supporting capacity and productive value of the soil".	Some rural areas within the district have a history of problems with on-site wastewater disposal. These areas generally include areas with poor draining soils and a higher density of residential activity than other rural areas. On-site wastewater disposal system failures can have adverse impacts on the amenity of these areas and, the public health of residents, and the health, life supporting capacity and productive value of the soil.
2.13.1 ISSUES		
58.1	The submitter disputes Issue 1 and considers that no evidence has been	Reject
Donald Moir	provided to support the claim that the economic well-being of the district is	
	related to the productive capacity of its soils. The submitter notes that	High value soils are capable of being used intensively to produce a
	there are few areas of unsubdivided productive farm land close to the city,	wide variety of crops, including arable crops, which contribute to the
	but acknowledges the presence of significant areas of open farm land	overall productivity of land. The study by McIntosh and Barringer
	between Invercargill and Bluff for which there is little or no demand for	showed the northern area of Invercargill as containing the most
	residential development. The submitter states that the boundaries of the	versatile soils, requiring protection to preserve their character and
	district have been largely set to encompass the area that is more related to	productive capability. As high value soils are limited and comprise such
	residential rather than agricultural land use.	a small proportion of the district's soil resource it is important that these
		are maintained and protected for future generations. Various studies
	DECISION SOUGHT	throughout New Zealand have demonstrated the importance of soil
	Remove Issue 1.	dependent industries on the economic wealth of the country, which rely
		on the productive capability of the land.
	FS4.32 Federated Farmers - Support in part submission 58.1	
	The further submitter believes that soil type is only an indicator of the	
	overall productivity of a farming operation, another is the flexibility to make	
	land use decisions in response to changing markets and input/output	
	factors. The further submitter states that while some uses of land or	
	changes to land use may be considered a negative effect, this should be	
	balanced against the need to ensure that landowners have the ability to	
	make land use decisions in response to the pressures of farming, and to	
	make decisions that reflect constantly changing economic pressures.	

2.13.2 OBJECTIVES			
88.5 Federated Farmers	Oppose Objective 1. The submitter believes that soil resource management is better addressed by those managing the land than through further regulatory protection. DECISION SOUGHT Amend the wording of the Objective as follows: Landowners are encouraged to manage Invercargill's soils are managed sustainably.	Reject Both regulatory and non regulatory methods are important to ensure that soils are managed sustainably. It is considered that the wording as notified is appropriate at objective level as it provides a high level of direction. Policy 1, which supports this objective, promotes a non-regulatory application which seeks to promote sustainable soil and land use development, and management practices.	
77.38 Te Runaka o Waihopai and Te Runaka o Awarua	Support Objectives 2 and 3 in part. The submitter considers that there is a need to consider public health effects. DECISION SOUGHT Add: "And public health effects"	Accept Amend Objectives 2 and 3 as follows: Objective 2: The extraction of Invercargill's mineral resources is managed in such a way as to avoid, remedy or mitigate adverse environmental and public health effects. Objective 3: Earthworks in Invercargill are carried out in such a way as to avoid, remedy or mitigate adverse environmental and public health effects.	
90.7 H W Richardson Group Ltd	Support Objective 3 in part. The submitter considers it appropriate to enable potential adverse effects of earthworks to be avoided, remedied or mitigated. DECISION SOUGHT Retain Objective 3.	Accept (with amendment) A minor change is recommended in response to submission point 77.38. The change does not alter the intent of the objective.	
88.6 Federated Farmers	Support Policy 1. The submitter believes the most efficient and effective role for Council is in the provision of information to landowners to meet the aims set out in this policy, and to promote the underlying values identified for the soil types within the District boundaries. Land owners can then make fully informed land use decisions based on the information provided and the economic and or environment pressures they are faced with. DECISION SOUGHT Adopt the policy as proposed.	Accept	

F0.0	The sub-sitted and see Delieu O. They consider that the control of the con-	Delega
58.2 Donald Moir	The submitter opposes Policy 3. They consider that the majority of those areas containing Versatile Soils is already heavily subdivided, and disagrees that there is a need to protect these soils for the production of food.	Reject For the same reasons as set out above in submission point 58.1.
	DECISION SOUGHT	
	Remove Policy 3.	
65.32 ICC Environ-	Support Policy 3 subject to amendment of typo.	Accept
mental and Planning	DECISION SOUGHT Reword Policy 3 as follows:	Amend Policy 3 as follows:
Services	"To protect the district's versatile soils from the expansion of urban development"	Policy 3 Protection for Versatile Soils: To protect the district's versatile soils from the expansion of urban development over the district's versatile soils .
88.7 Federated Farmers	Oppose Policy 3 in part. The submitter considers that this proposed policy is unnecessary given a robust non-regulatory application of Policy 1 Soil. The submitter explains that while there should be an appropriate emphasis on considering the irreversible effects of losing high value soils from	Reject For the same reasons set out above in submission point 58.1.
	productive use and a need to protect areas important for primary production, this must be balanced against an individual's right to manage their own property decisions, and Council policies and planning should provide for managed growth in rural communities.	The Council has identified areas for managed growth and has zoned these accordingly. Areas within the Rural 2 Zone have also been identified for long term urban development. These areas are set out in the Outline Development Plan, provided in Appendix XV of the District Plan.
	DECISION SOUGHT Delete the proposed policy.	
90.8 H W Richardson Group Ltd	Oppose Policy 4 in part. The submitter considers the explanation requires amendment to recognise that earthworks can be managed via a range of means or mitigation to address potential adverse effects arising from earthworks regardless of their scale and/or location.	Reject in part Policy 4 is specific to mineral extraction activities rather than earthwork activities. The relief sought by the applicant is more appropriately
	The submitter also considers the explanation should recognise that earthworks are necessary for appropriate land use and development that	located within the explanation to Policy 6, however, not all of the wording sought is considered necessary.
	supports social and economic well being within the District. DECISION SOUGHT	Amend the explanation to Policy 6 as follows: Policy 6
	Amend the Explanation to Policy 4 Mineral Extraction as follows:	Explanation: Some modification of the landscape is inevitable in order

Explanation: The topography of the City often means that land modification, through earthworks, generally precedes the development of land.

Land-based mineral extraction (including gravel extraction) is an appropriate rural land use activity, so long as adverse environmental effects including cumulative effects are avoided, remedied or mitigated. The potential adverse effects of mineral extraction activity include, but are not limited to, effects on rural amenity, landscapes and natural features, biodiversity, water quality, soil resources and the roading network.

Earthworks should therefore be managed through the implementation of a robust methodology and works supervision procedures to avoid adverse effects. Particular consideration should be given to the avoidance or mitigation of effects on water and soil quality and public health.

to provide safe and stable building platforms and roads with a suitable gradient. Earthworks are therefore necessary for land and economic development within the District. These activities can, however, give rise to adverse environmental effects and, therefore, The the effects of land fill operations and significant alterations to the soil profile need to be addressed through controls in order to avoid adverse effects on the environment and public health.

2.13.4 METHODS OF IMPLEMENTATION

65.34 ICC Environmental and Planning Services The submitter considers that a method should be added to acknowledge that the Hazard Maps show some areas of filled land.

DECISION SOUGHT

Add method of implementation to acknowledge the presence of information of filled land on the District Hazard Maps.

Reject

See response to submission point 65.128 above.

2.14 SUBDIVISION - ISSUES, OBJECTIVES AND POLICIES

OBJECTIVE 3

88.9 Federated Farmers

The submitter believes that while there should be an appropriate emphasis on considering the irreversible effects of losing high value soils from productive use and a need to protect areas important for primary production, this must be balanced against an individual's right to manage their own property decisions, and council policies and planning should provide for managed growth in rural communities.

DECISION SOUGHT

Delete the proposed objective.

Reject

Productive soils support the economic and cultural life of Southlanders and must be preserved and enhanced to provide for future generations. This is particularly important for Invercargill as high value soils are limited and comprise only a small proportion of the Districts soil resource. Subdivision and development of high value soils can result in the loss of high level production and therefore it is important that subdivision and development is undertaken in a way that achieves efficient use of soil and land resources. This involves avoiding negative outcomes such as the loss of high value soils.

The Council has identified areas for managed urban growth and has zoned these accordingly. Areas within the Rural 2 Zone have also

been identified for long term urban development which are set out in the Outline Development Plan, included as Appendix XV of the District Plan.

2.40 RURAL 1 ZONE

POLICY 4

88.46 Federated Farmers

Oppose in part. The submitter explains that while there should be an appropriate emphasis on considering the irreversible effects of losing high value soils from productive use and a need to protect areas important for primary production, this must be balanced against an individual's right to manage their own property decisions, and Council policies and planning should consolidate subdivision and future growth around existing settlements rather than restricting land use decisions in the rural area.

DECISION SOUGHT

Amend the wording of the policy as follows:

"To maintain the life supporting capacity and productive value of the soil resource, while providing for development and legitimate land use in the Rural 1 Zone."

Reject

For the same reasons as set out above in submission point 88.9.

SECTION 3.17 – RULES

24.65 South Port NZ Ltd

Oppose Rule 3.17.1. The submitter considers that the Seaport Zone should also be exempt from the rules which relate to soil disturbance and earthworks, as is currently the case in the operative District Plan. The submitter considers that limitations with respect to the earthworks would severally limit the ability of the Port to undertake its existing and planned developments and provides an example of work that could not comply with the proposed limitation of earthworks of 1000m³. The submitter considers the limitations placed on the Seaport Zone are inappropriate, given that the effects of soil disturbance and earthworks activities are fully contained within the Seaport Zone.

As noted in the submitter's comments on Section 2.13, there should be a focus on the protection of quality soil within the Invercargill District. It is deemed inappropriate to have the same protection on reclaimed land. Therefore 3.17.1 should not apply to the Seaport Zone.

Reject

The Smelter zone is isolated from the rest of the district and is owned or leased by NZAS. The effects of earthwork activities will therefore be largely contained within the zone and will have less of an effect on the surrounding environment.

The Seaport Zone is highly visible from the township of Bluff, located adjacent to and within Bluff Harbour. Effects from earthwork activities, such as dust and visual effects, have the potential to extend into the township of Bluff, adversely affecting amenity values. An amendment is recommended, in response to submission point 15.27, which will allow for certain activities to occur without being limited to maximum quantity limits. This will provide for a larger scope of earthworks to occur in addition to the 1000m³ limit.

13.16 Z Energy Ltd	The submitter considers that it is not clear why the Smelter Zone is exempt, but that this does not extend into the Seaport Zone. DECISION SOUGHT Amend the earthworks rules (3.17) to also exempt the rules from applying to the Seaport Activity. Oppose in part Rule 3.17.2. The submitter is concerned that the installation and removal of underground petroleum storage systems is controlled by and subject to the NES and that this rule will result in an extra layer of legislation. The submitter also suggests that the quantity of earth removed for these activities is not subject to additional restriction. DECISION SOUGHT Amend 3.17.2 by adding the following: "(F) the removal and/or replacement of underground petroleum storage tanks" OR Amend the definition of earthworks by adding the following: "This does not include earthworks undertaken in association with the removal of underground petroleum storage tanks."	Reject The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) has a very specific function of protecting human health from contaminants in the soil. It does not restrict the Council from imposing additional controls in their Plans on other matters they have control over. The soils, minerals and earthworks provisions serve a different purpose to the NES and therefore should apply to this activity.
15.27 Ballance Agri- Nutrients Ltd	Oppose in part Rule 3.17.2. The submitter acknowledges the need to manage effects associated with earthworks activities but consider that the 50 cubic metre annual limit on earthworks within the Industrial 2 Zone advanced by Rule 3.17.12(a) is unnecessarily restrictive and unjustified. The submitter considers that the rationale behind these limits and the differentiation between the volumes for the various zones is not readily apparent, and is particularly concerned by the 50 cubic metre limit proposed for the Industrial 2 Zone and the arbitrary nature of these limits generally. The submitter also considers the wording of the rules prescribing these limits is also ambiguous as they make no reference to being on a "per site" basis.	Accept See discussion in Section 5 of the Report. It is agreed that the rule, as notified, is onerous with respect to certain activities which are permitted within the zone, and that the Rule should be amended to provide more flexibility. It is considered that this can be done by exempting certain earthwork activities from the maximum quantity limits and by increasing the limits to better reflect the activities of the zone and the size of the site. Amend Rule 3.17.2 as follows: Subject to Rule 3.1 Biodiversity, Rule 3.8 Heritage and Rule 3.10 Natural Features, Landscapes and Townscapes, it is a permitted activity to undertake the following land use activities which fill or recontour land.

Presuming the limits are intended to be prescribed on a "per site" basis, the submitter considers that the volume of earthworks able to be carried out as a permitted activity should be based on sound information and be linked to site area in recognition that larger sites are likely to require larger volumes of earthworks and have greater capacity to absorb potential effects.

DECISION SOUGHT

- i. Amend Rule 3.17.2 based on the area of the site, the underlying land uses permitted by the zone and that the volumes better reflect this.
- ii. Any similar amendments to like effect.
- iii. Any consequential amendments that stem from the amendment set out above.

FS11.7 HW Richardson Group Ltd - Support in part submission 15.27

The further submitter supports the submission insofar as it seeks to amend the permitted volume of earthworks within the various zones proposed. The further submitter considers the proposed thresholds for earthworks are not effects based and restrictive when compared to other Districts and the earthworks quantities for the Industrial 1 and 2 Zones, and Rural 1 and 2 zones should be revised upwards.

- (A) Gardening, agriculture, landscaping, and including such practices as drainage, tilling, harrowing, ploughing, fertilising, mulching, silage making, farm tracks, repairing storm or flood damage and planting.
- (B) Movement, deposition or removal of material when it is a necessary consequence of building a structure for which a building consent has been obtained on that site.
- (C) Deposition of material for the purpose of forming hard surfaces such as accessways and paths.
- (D) Removal and deposition of material for the purposes of work in compliance with Council's Bylaw 2013/1 Code of Practice for Land Development and Subdivision Infrastructure.
- (E) Activities associated with the construction, operation, maintenance, repair and upgrading of infrastructure utilities.
- (F) The cultivation of farm land.
- (G) The excavation, stockpiling and use of material from a borrow pit.
- - (a) 50m3 per site up to 1000m2, plus 50m3 each 1000m2 thereafter, in the Residential 1, 1A, 2 and 3, Business 1, 2, 3, 4 and 5, Industrial 1, 1A and 2, and Otatara Zones.
 - (b) 1,000m³ per site in all other zones.

18.99 Environment Southland

The submitter seeks clarification on Rule 3.17.2 as to whether it would apply to the construction or enhancement of stopbanks.

The submitter also notes that the proviso refers to "earth", not any other kind of material, and furthermore, the proviso refers to the amount of material "moved", not the amount of fill.

Accept

See discussion in Section 5 of this report and submission point 15.27.

It is recommended that the rule is amended to exclude certain activities from the maximum quantity limits. The construction, operation, maintenance, repairs and upgrading of utilities is included as one of these exempted activities. "Utilities" is a term recommended in Report

DECISION SOUGHT

Clarify the circumstances in which this rule would apply to the construction of stopbanks and if required, amend the rule so that it does not apply to their construction, repair or upgrading.

No. 19 Infrastructure and includes stopbanks managed by the Council or Environment Southland. The definition is as follows:

Utilities: means any activity or structure relating to

- (A) The supply or distribution of electricity
- (B) Water supply
- (C) Stormwater
- (D) Street lighting and lighting of public land
- (E) The receiving and sending of communications, including telecommunications or radiocommunications
- (F) Navigation aids
- (G) Data recording and monitoring systems, including but not restricted to meteorological facilities
- (H) Roading and street furniture
- (I) The railway network
- (J) Sewage collection, treatment and disposal
- (K) The distribution or transmission by pipeline of natural or manufactured gas, petroleum, biofuel, or geothermal energy;
- (L) Flood Alleviation, including but not restricted to stopbanks, detention dams and associated drainage works managed by the Council and/or Environment Southland.

The points raised by the submitter with regard to the wording of the provisions are accepted. It is considered that Rule should be amended to refer to "earthworks", which is inclusive of excavation and filling activities.

Amend Rule 3.17.2 as follows:

Earthworks and Filling Activities

3.17.2 Subject to Rule 3.1 Biodiversity, Rule 3.8 Heritage and Rule 3.10 Natural Features, Landscapes and Townscapes, it is a permitted activity to undertake the following earthwork activities the following land use activities which fill or recontour land.

.

H) All other earthworks, excluding landfills, provided that the quantity of earth moved earthworks undertaken in a 12 month period shall not exceed:

		T
		3.17.3 It is a discretionary activity to undertake any land use activities including cleanfill activities that fill or recontour land, earthworks that and do not comply with any of the provisions of Rule 3.17.2 above.
52.11 NZ Police	Support Rule 3.17.2 in part. The submitter opposes the quantity limits for earthworks associated with service trenches, or foundations works for masts and equipment buildings. DECISION SOUGHT Retain Rule 3.17.2, particularly (E) and delete the limitation on the rule in terms of the quantity of earthworks. FS5.28 Invercargill Airport Ltd - Oppose in part submission 52.11 The further submitter considers that the removal of thresholds for limits on earthworks are appropriate in some situations. The further submitter is particularly concerned that earthworks can result in standing bodies of water in close proximity to the airport which can attract birds and become a safety hazard to flying aircraft. DECISION SOUGHT A permitted threshold of 10m2 should be established for earthworks within the Airport Protection Zone and the Otatara Zone.	Accept in part See discussion in Section 5 of this report and the above recommendation to submission point 18.99. It is not considered reasonable to delete the quantity limits in their entirety as some limits are necessary to control adverse effects. It is recommended, however, that earthwork activities undertaken as a necessary consequence of a building consent and activities associated with the construction, operation, maintenance, repair and upgrading of utilities are exempted from the maximum quantity limits. This recommendation should meet the concerns of the submitter. The matter raised by the further submitter is discussed in submission point 103.65.
53.78 NZ Transport Agency	The submitter is concerned that the introduction of quantity limits could have unintended consenting implications for contractors undertaking works on State highways. The introduction of quantity limits Rule 3.17.2 (E) (a), (b) and (c) makes it likely that resource consent may be needed when upgrading and maintenance works are undertaken on State highways. On occasion earthworks and filling activities may need to take place outside State Highway designations and these works would be subject to these Plan rules. The submitter notes that Infrastructure Rule 3.9.1 permits infrastructure, and Rule 3.9.2 permits the operation, maintenance, upgrading and replacement of existing infrastructure and states that is not required to comply with any other rules or standards in the Plan. The submitter suggests a cross reference or link to these rules from Rule 3.17.2 (E) may help with Plan interpretation.	Accept in part. See discussion in Section 5 of this report and the above recommendation to submission point 18.99. The definition of utilities includes roading. It is therefore recommended that activities associated with the construction, operation, maintenance, repair and upgrading of roading will be a permitted activity and will not be subject to any quantity limits. It is noted that Report No.19 Infrastructure recommended an amendment to Rule 3.9.1. The recommendation sought to remove part of the rule which states that infrastructure is not required to comply with any other Rules or Standards in this Plan. A recommendation in Report No 14 General Issues recommended that an introductory

DECISION SOUGHT

Introduce a link or cross reference at Rule 3.17.2 (E) to Infrastructure Rules 3.9.1 and 3.9.2 and/or clarify that the Infrastructure rules of the Plan have precedence under the Soils, Minerals and Earthworks section of the Plan.

FS5.29 Invercargill Airport Ltd - Oppose in part submission 53.78

The further submitter is particularly concerned that earthworks can result in standing bodies of water in close proximity to the airport which can attract birds and become a safety hazard to flying aircraft.

DECISION SOUGHT

A permitted threshold of 10m2 should be established for earthworks within the Airport Protection Zone and the Otatara Zone.

FS12.14 PowerNet Ltd - Support submission 53.78

The further submitter considers that there is currently ambiguity between Rules 3.9.2 and 3.17.2 and that this should be addressed particularly in relation to the "operation, maintenance, repair and upgrading of new network utility activities".

FS25.27 Transpower NZ Ltd -Support in part submission 53.78

The further submitter considers that the Infrastructure section could be a "complete code" for infrastructure that overrides the zone rules, but not those relating to Biodiversity, Soils Minerals and Earthworks, or Natural Features, Landscapes and Townscapes, given the policy direction in NPSET.

statement be added to the beginning of the Rule Section of the Plan clarifying how the district wide and zone rules should be applied. Both of these recommendations will help in the interpretation of the rule. No further clarification is therefore considered necessary.

The concern raised in FS5.29 is addressed in submission point 103.65.

58.6 Donald Moir

The submitter considers that earthworks that can typically be expected to accompany works carried out under Bylaw 2013/1 Code of Practice for Land Development and Subdivision Infrastructure will routinely exceed the above limits.

DECISION SOUGHT

Amend 3.17.2 so that earthworks limits do not apply to works carried out under bylaw 2013/1 Code of Practice for land Development and Subdivision Infrastructure.

Accept

See discussion in Section 5 of the report and submission point 15.27.

It is recommended that the removal and deposition of material for the purposes of work in compliance with Council's Bylaw 2013/1 Code of Practice for Land Development and Subdivision Infrastructure is exempt from the maximum earthwork limits.

71.57 NZAS Ltd	Support Rule 3.17.2 in part. The submitter suggests a minor amendment to clarify what exact provisions do not apply in the Smelter Zone.	Accept
NEAO EIU	DECISION SOUGHT	Amend Rule 3.17.1 as follows:
	Amend 3.17.1 as follows: "Rules 3.17.2 – 13.17.6 do This rule does not apply in the Smelter Zone."	Rules 3.17.2 – 13.17.6 do This rule does not apply in the Smelter Zone.
	FS7.32 South Port New Zealand Ltd - Support submission 71.57 The further submitter supports the submissions and submits that this exemption should also apply to the Seaport Zone.	The Seaport Zone is discussed in submission point 24.65 above.
87.51 Transpower NZ	Support Rule 3.17.2 in part. The submitter considers the volume of earthworks permitted is insufficient and seeks a greater volume of	Accept in part
Ltd	earthworks for works associated with the National Grid.	See discussion in Section 5 of this report and submission points 15.27 and 18.99.
	DECISION SOUGHT	
	(i) That the Rule 3.17.2 be amended as follows: (A) "Movement, deposition or removal of material when it is a necessary consequence of building a structure for which a building consent has been obtained on that site.	It is recommended that the rule is amended to exclude certain activities from the quantity limits and provide a greater volume of earthworks to occur as a permitted activity (See submission point 15.27). This should help to meet the concerns of the submitter.
	(E) Activities associated with the construction, operation, maintenance, repair and upgrading of infrastructure.	
	Provided that the quantity of earth moved shall not exceed: (a) 50m³ over 12 months in the Residential 1, 1A, 2 and 3, Business 1, 2, 3, 4 and 5, Industrial 1, 1A and 2, and Otatara Zones. (b) 200m³ over 12 months in the Rural 1 and Rural 2 Zones (c) 1,000m³ over 12 months elsewhere,	
	(d) Or the earthworks are temporary in nature and the land is restored to pre-existing contours at the end of the work."	
	And any consequential amendments.	
	FS5.30 Invercargill Airport Ltd - Oppose in part submission 87.51 The further submitter opposes the submission on the grounds that it considers large quantities of material could be excavated within close	

proximity to the airport as a permitted activity. This could create areas of standing water that attracts birds and subsequently becomes a safety hazard to flying aircraft.

The further submitter is concerned that there is no definition of "temporary earthworks" in the proposed Plan, which potentially could result in large scale construction projects, taking months to years to complete being considered "temporary"

88.87 Federated Farmers

Oppose Rule 3.17.2 in part. The submitter explains that earthworks are a legitimate and essential part of the day to day operations of a farm, and it is expected that earthworks and ground disturbances will occur within the rural zone. The submitter considers that many on farm earthworks activities have little or no adverse impact on the environment and would prefer that it is the adverse effects that are managed through specific rules rather than these expected rural land uses.

In particular the submitter considers that any recontouring of land related to fencing, farm landfills and dead holes should be permitted activities in the Rural Zone. These are activities controlled through the Southland Regional Council's Regional Plans and should be permitted through compliance with the earthworks and cleanfill provisions of this Zone.

DECISION SOUGHT

- Delete and redraft the rule to enable the continuation of earthwork activities required for day to day operations of a farm; either by removing the volume controls and focusing more on effects or by increasing the maximum volume in the Rural Zone to 2,000m³.
- Delete volume limits relating to earthworks necessary for normal farm activities in the Rural Zones; and
- Provide for earthworks related to farm landfills, dead holes, and fencing in the Rural Zones.

Accept in part.

See discussion in Section 5 of this report and submission point 15.27.

It is recommended that the rule is amended to provide for farm cultivation without being subject to the maximum quantity limits. This will provide for day to day farming activities involving planting, tending, improving or harvesting of crops or plants and the preparation of ground to promote their growth. In addition to this, the excavation, stockpiling and use of material from a borrow pit is permitted. This allows for the excavation and stockpiling of material from the ground for use on the same property. Changes to the rule and definition of mineral extraction and some additional definitions are considered necessary to provide for gravel extraction from a borrow pit and in order to make it clear that this activity is permitted under the earthwork rule.

The definition of earthworks excludes digging of holes for the erection of posts and therefore fencing does not trigger the earthworks rule.

It is also recommended that the maximum quantity of earthworks is increased from 200m³ to 1000m³ in the Rural Zones. This reflects the larger land holdings within these areas. It is considered that 1000m³ of earthworks together with the exempted activities is more than sufficient to provide for farming activities.

It is agreed that the matter of farm landfills and dead holes are adequately addressed in the Regional Council's Water Plan (Rules 54 and 55), particularly with regard to distance from dwellings, and that it would be onerous for the Council to include rules on these also. It is therefore recommended that farm landfills and dead holes are

excluded from the definition of "Landfills". This will not exempt these activities from the maximum limits for earthworks, but it is considered that 1000m³ is more than sufficient to allow for this.

Amend Section Four of the Plan as follows:

Borrow Pit: Means the excavation and stockpiling of material from the ground for use on the property on which it is extracted. This excludes the extraction of minerals or other such processes with the exception of industrial rock and building stones. without undertaking any extraction of minerals or other such processes, on the property on which it is extracted.

Farm Landfill

Farm Landfill means a landfill located on a rural property used to dispose of household waste generated on that property. It does not include the disposal of any hazardous waste, dead animal material or any waste generated from any industrial or trade process on that property.

Industrial Rocks and Building Stones: Includes aggregate, basalt, diatomite, dunite, granite, limestone, marble, perlite, pumice, sandstone, serpentine, slate, sand and gravel.

Landfill: Means a site used for the deposition of solid waste, including material that does not meet the definition of "cleanfill", on to or into land. This excludes farm landfills and dead holes.

Mineral: Means a naturally occurring inorganic substance beneath or at the surface of the earth, whether or not under water; and includes all metallic minerals, non-metallic minerals, fuel minerals, precious stones, industrial rocks and building stones, and a prescribed substance within the meaning of the Atomic Energy Act 1945.

Mineral Extraction: Means to take, win, or extract, by whatever means, a mineral existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance; but does not include prospecting or exploration; and "to mine" has a corresponding meaning. Mining includes quarrying but does not include extraction from borrow pits.

90.25	The submitter considers the thresholds proposed by Rule 3.17.2 are	Dead Hole (Offal Pit) Means a hole excavated on a rural property to be used only for the purpose of disposing of dead animal or plant matter generated on that property. Accept in part.
H W Richardson Group Ltd	arbitrary, not effects based and restrictive when compared to other District Plans.	See discussion in Section 5 of the Report and submission point 15.27.
	DECISION SOUGHT Amend Rule 3.17.2 to: a. Amend (C) to include roads AND b. Change the threshold for Industrial 1, 1A and 2 Zones from 50m³ to 200m³ AND C. Change the threshold for Rural 1 and 2 Zones from 200m³ to 1,000m³ AND/OR Any similar amendments with like effect and any consequential amendments to the Proposed Plan that stem from the relief sought.	It is recommended that the rule is amended to exclude certain activities from the quantity limits and provide a greater volume of earthwork to occur as a permitted activity. The proposed new limits together with the exempted activities are considered reasonable.
91.24 PowerNet	Oppose Rule 3.17.2. The submitter opposes the introduction of limitations on the quantities of earthworks within the various zones on the basis that the limits are arbitrary, not effects based and comparably restrictive in terms of providing for the operation and maintenance of a reliable electricity distribution network. The submitter notes ambiguity between rules 3.9.2 and Rule 3.17.2 and as such the submitter would like the reference to "operation, maintenance, repair and upgrading" to be removed from rule 3.17.2 or a statement exempting earthworks associated with the construction of new Network Utility activities.	

DECISION SOUGHT

EITHER

Amend Rule 3.17.2 as follows:

"...(E) Activities associated with the construction, operation, maintenance, repair and upgrading of infrastructure.

Provided that the quantity of earth moved shall not exceed:

- (a) 50m3 over 12 months in the Residential 1, 1A, 2 and 3, Business 1, 2, 3, 4 and 5, Industrial 1, 1A and 2, and Otatara Zones.
- (b) 200m3 over 12 months in the Rural 1 and Rural 2 Zones.
- (c) 1,000m3 over 12 months elsewhere."

OR

An exemption is provided for earthworks associated with Network Utility Operations. Such an exemption should include the following:

"Earthworks associated with the construction of new network utility activities are exempt from the earthworks thresholds in all zones."

OR

Any similar amendments with like effect.

Any consequential amendments to the Proposed Plan that stem from the relief sought.

FS5.28 Invercargill Airport Ltd - Oppose in part submission 91.24

The further submitter considers that the removal of thresholds for limits on earthworks are appropriate in some situations. The further submitter is particularly concerned that earthworks can result in standing bodies of water in close proximity to the airport which can attract birds and become a safety hazard to flying aircraft.

DECISION SOUGHT

A permitted threshold of 10m2 should be established for earthworks within the Airport Protection Zone and the Otatara Zone.

102.16	Support Rule 3.17.2 in part.	Accept
Chorus NZ Ltd and 104.15 Telecom NZ Ltd	The submitter supports the exclusion from earthworks provisions for the construction, operation, maintenance, repair and upgrading of infrastructure.	See discussion in Section 5 of the Report and submission point 18.99 where it is recommended that utilities are exempted from the maximum limits placed on earthwork activities.
	The submitter opposes the quantity limits as being unreasonably small.	
	DECISION SOUGHT Retain 3.17.2, particularly 3.17.2(E) and delete the limitation on the rule.	
	FS5.28 Invercargill Airport Ltd - Oppose in part submission 102.16 and 104.15 The further submitter considers that the removal of thresholds for limits on earthworks are appropriate in some situations. The further submitter is particularly concerned that earthworks can result in standing bodies of water in close proximity to the airport which can attract birds and become a safety hazard to flying aircraft. DECISION SOUGHT A permitted threshold of 10m2 should be established for earthworks within the Airport Protection Zone and the Otatara Zone.	
103.65 Invercargill Airport Ltd	Oppose Rule 3.17.2. The submitter considers that limits on earthworks creating standing pools of water around the airport should be set out in the Plan. DECISION SOUGHT Include a provision within 3.17.2 which limits the earthworks that will result in standing pools of water greater than 10m2 in the Airport Protection and the Otatara Zones.	Accept in part See discussion in Section 5 of this report for reasons for the recommendation. It is recommended that the decision sought is applied to the Airport Protection Zone and properties within the airport approach path located within the Otatara Zone. Recommendation Amend Rule 3.17 as follows: 3.17.2 On sites within the Airport Protection Zone or the Otatara Zone where they are identified within the 46amsl obstacle limitation surface (Planning Map 35), no earthworks are to result in

		 3.17.7 In addition to the matters listed in Rule 3.17.6, applications for earthworks that do not comply with Rule 3.17.2 shall address the following: (a) Any effect on the operation of the airport resulting from the congregation of birds. (b) Methods to avoid, remedy, or mitigate potential conflict with the safe and efficient operation of aircraft. Note: Written approval of Invercargill Airport Limited is required as an affected party.
88.88 Federated Farmer	Support Rule 3.17.3 in part. The submitter supports a discretionary activity status for activities not compliant, providing the maximum threshold for Rule 3.17.2 is increased to a maximum volume of 2,000m3 in the Rural Zone. DECISION SOUGHT Amend the maximum volume for a permitted activity in Rule 3.17.2 to 2,000m3, and adopt this rule as proposed.	Accept in part See discussion in Section 5 of the Report and submission point 15.27. It is recommended that certain activities, including the cultivation of farmland and borrow pits, be exempt from the maximum limits placed on earthwork activities, and that the volume of earthworks is increased to 1000m³. This is considered to be a reasonable increase which is sufficient to provide for day to day farming activities. Earthworks beyond 1000m³, in addition to the exempted earthwork activities, have the potential to create adverse effects and therefore need to be assessed by the Council through the resource consent process.
91.25 PowerNet Ltd	Oppose Rule 3.17.3. In the event that the relief sought by the submitter in relation to Rule 3.17.2 is rejected, the submitter considers that resource consent for a controlled activity is more appropriate in relation to network utility operations and that a new Rule should be inserted into the plan to provide for such activities. DECISION SOUGHT Insert new Controlled Activity Rule It is a controlled activity to undertake any earthworks associated with electricity distribution activities that do not comply with any of the provisions of Rule 3.17.2 above.	Reject The relief sought by the submitter in submission point 91.24 is accepted in part. It is recommended that the construction, operation, maintenance, repair and upgrading of utilities is permitted activity, which is inclusive of the supply and distribution of electricity.

71.58 NZAS Ltd

Oppose Rule 3.17.4. The submitter considers the rule is unclear whether changes to existing landfills will be assessed as a non-complying activity in accordance with this rule.

DECISION SOUGHT

Amend 3.17.4 as follows:

"Any new landfill is a non-complying activity.

Explanation: This rule does not apply to the expansion of a landfill if the landfill existed at the time this Plan came into force."

Reject

If land use consent has been granted for a landfill activity prior to the rule becoming operative then it can continue to operate in accordance with the application and consent conditions. Expansion beyond that consented would require new resource consent. Section 10 of the RMA applies to all other landfill activities operating under existing rights. These can continue to operate under Section 10 of the RMA where the effects of the use are the same or similar in character, intensity, and scale to those which existed before the rule became operative or the Proposed Plan was notified. Existing use right are lost if the activity is discontinued for a continuous period of more than 12 months. The Council is not aware of any legally established landfills currently operating under existing use rights.

88.89 Federated Farmers

Oppose Rule 3.17.4. The submitter considers that farm landfills are a legitimate, expected and essential part of the day to day operations of a farm, and the adverse effects are controlled through the Southland Regional Council's Regional Plans and should be permitted through compliance with the earthworks and cleanfill provisions in the Rural Zone of the ICC District Plan.

The submitter considers that where there are specific concerns that are not addressed though the Southland Regional Plan, Federated Farmers prefers these adverse effects are identified and managed through specific rules rather than designating landfills in the Rural area a non-complying activity.

DECISION SOUGHT

Rule 3.17.4 is deleted, and farm landfills are specifically provided for as a permitted activity in Rule 3.17.2.

Where Council has concerns with potential adverse effects from farm landfills that are not addressed through the Southland Regional Plan, these effects are dealt with specifically.

Accept in part

For the same reasons as set out in submission point 88.87.

87.52 Transpower NZ Ltd

Support in part Rule 3.17.5. The submitter considers that the need to provide a management plan is specifically related to landfills or cleanfills, and will not generally be required for earthworks such as those associated with the National Grid.

DECISION SOUGHT

(i) That the Assessment Matters 3.17.5 be amended as follows:

"Assessment Matters 3.17.5

Applications under Rules 3.17.3 and 3.17.4 above shall address the following matters, which will be among those taken into account by the Council:

....

- (H) Any management plan for the <u>a</u> proposed <u>landfill or cleanfill</u> facility, which addresses:
 - (a) The methods proposed to ensure that inappropriate material is not deposited.
 - (b) The proposals to monitor the filling operation.
 - (c) Site rehabilitation.
 - (d) The proposed systems for record keeping in relation to the operation and monitoring of the filling operation.
 - (e) Proposals for ongoing monitoring of the filled site.
 - (f) Proposals for hazard mitigation including any contamination.
 - (g) The visual or amenity effects of the fill such as changes to landform and shading."
- (ii) And any consequential amendments.

117.42 Southern District Health Board

The submitter supports Rule 3.17.5(B) subject to amendment. The submitter would like to see the term "nuisance" removed as the submitter believes this has connotations of civil torts and is not appropriate within RMA based plan rules.

DECISION SOUGHT

Support with amendment

a. In (B), delete word "nuisance".

Reject

It is not only landfill and cleanfill activities that may require a management plan. Other earthwork activities resulting in a large quantity of material being excavated or filled may require a management plan to ensure that the activity is carried out appropriately and that adverse effects are avoided, remedied or mitigated.

If an applicant considers that the scope of the activity does not justify the requirement for a management plan, then they can simply address this point by stating that in their application.

Accept

Amend Rule 3.17.5(B) as follows:

(B) Potential effects of dust and noise nuisance.

87.53 Transpower NZ Ltd

Support Rule 3.17.6 in part. The submitter considers that the rule should be amended to clarify that if a building or structure is proposed to be erected on a site, a plan for rehabilitation is not considered necessary as effects will be managed through the development of the site or potentially short term mitigation measures such as the dust suppression.

DECISION SOUGHT

(i) Amend Rule 3.17.6 as follows:

"Rule 3.17.6

Any application for resource consent (except when the site is subject to future development) is to be accompanied by a plan for rehabilitation of the area likely to be affected by the application."

(ii) And any consequential amendments.

Accept in part

See discussion in Section 5 of the report.

It is recommended that earthwork activities associated with buildings that have obtained building consent are exempt from maximum quantity limits. Resource consent will, therefore, not be required so the amendment sought is not necessary.

76.1 Placer Investments Ltd

Oppose Rule 3.17.8. The submitter believes that the proposed change in status for the extraction of minerals from discretionary to non-complying, coupled with the Tiwai Peninsula classification as an outstanding natural feature and landscape, will effectively stop further mineral exploration on the Tiwai Peninsula. The submitter considers that because of the historic use and current state of Tiwai Peninsula it is unclear why the extraction of minerals is a non-complying activity, particularly given the potential economic benefits that mining in the area can have.

DECISION SOUGHT

EITHER

Amend 3.17.8 as follows:

"Except as provided for in 3.17.7 above, all land use activities involving the extraction of minerals is a non-complying discretionary activity"

OR

Retain the non-complying activity status for the extraction of minerals with the exception that mineral extraction at Tiwai Peninsula is discretionary.

FS8.11 Department of Conservation - Oppose submission 76.1

The further submitter considers the non-complying activity status for mineral extraction to be appropriate. The further submitter notes that the rule covers mineral extraction across the district and is not specific to Tiwai Peninsula.

Reject

An activity status of non-complying does not prohibit an application for resource consent being made or granted, but does provide an additional gateway test under Section 104D of the RMA. Under Section 104D a consent authority may grant resource consent for a non-complying activity only if it is satisfied that the adverse effects of the activity on the environment will be minor or that the application is not contrary to the objectives and policies of the Plan or Proposed Plan. Mineral extraction activities can result in significant adverse effects on the environment and it is therefore appropriate to impose an activity status of non-complying.

Tiwai Peninsula is a high value area, identified on the District Planning Maps as an outstanding natural feature and landscape, an area of significant indigenous biodiversity, and within the coastal environment. It is therefore very important for the Council to ensure that any activity within this area will have no more than a minor effect on the environment.

The further submitter also notes that the Tiwai Peninsula is a significant site, being an outstanding natural feature and landscape, an area of significant indigenous biodiversity, is within an area of the coastal environment of high natural character and is public conservation land managed by Department of Conservation

DECISION SOUGHT

Decline relief sought.

SECTION FOUR DEFINITIONS

90.29 H W Richardson Group Ltd

Oppose in part. The submitter considers that the definition of "Cleanfill" should be consistent with that proposed in the Regional Water Plan for Southland.

DECISION SOUGHT

Amend the definition of cleanfill as follows:

"Cleanfill: Means any material that when buried will have no or minimal adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock and other inert materials from construction or demolition activities such as concrete or brick that are free of:

- 1. Combustible, putrescible, degradable or leachable components.
- 2. Hazardous substances.
- 3. Products or materials derived from the treatment, stabilisation or disposal of hazardous waste. and waste treatment, hazardous waste stabilisation or hazardous waste disposal practices.
- 4. Materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances.
- 5. Liquid waste."

Accept in Part

The relief sought to bullet point 3 is accepted. All other changes are rejected. The rejected additions add no value to the definition. The term "minimal" is not quantifiable and leaves the definition open to public debate.

Amend "Cleanfill" definition as follows:

Cleanfill: Means material that when buried will have no adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of:

- Combustible, putrescible, degradable or leachable components.
- Hazardous substances.
- Products or materials derived from the treatment, stabilisation or disposal of hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices.
- Materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances.
- Liquid waste.

90.31	The submitter considers that activities undertaken as part of construction	Point
H W Richardson	The submitter considers that activities undertaken as part of construction,	Reject
	operation and maintenance of roading projects should be explicitly excluded from the definition of "Landfill". The submitter considers the	The provisions of the Dian each to avoid the depositing of cold weets
Group Ltd		The provisions of the Plan seek to avoid the depositing of sold waste
	definition should also be Landfill as proposed as part of Plan Change 14 to	on to or into land. The exemption sought would allow for the
	the Regional Water Plan.	uncontrolled depositing of solid waste in association with the formation of a road, driveway, or track, or within a road reserve. This would not
	DECISION SOUGHT	be acceptable and is inconsistent with the objectives and policies of the
	Amend the definition of landfill as follows:	Plan.
	"Means a site used for the deposition of solid waste, including material that	
	does not meet the definition of "cleanfill", on to or into land <u>but excludes a</u>	
	cleanfill site, earthworks associated with any road, driveway or track, and	
	any area within a road reserve containing a formed road that is used for the	
	deposition of roading material".	
	aspectation of reading material .	
90.33	The submitter considers that it is necessary to insert a definition of "cleanfill	Reject
H W Richardson	site" to ensure there is clarity in terms of the amendments it suggested	
Group Ltd	relating to the definition of "landfill", and to be consistent with Plan Change	The amendment suggested in submission point 90.31 is rejected. The
	14 to the Regional Water Plan for Southland.	Plan does not use the term "cleanfill site". The relief sought is
		therefore rejected.
	DECISION SOUGHT	
	Insert a definition of "Cleanfill Site"	
	Cleanfill Site means land used for the permanent disposal of cleanfill and	
	no other type of material but excludes earthworks on the same landholding,	
	earthworks associated with any road driveway or track, and any area within	
	a road reserve containing a formed road that is used for the deposition of	
	roading material.	

APPENDIX 2- RECOMMENDED CHANGES TO THE PROPOSED DISTRICT PLAN

(Underline indicates recommended additions, strikethrough indicate recommended deletions.)

SECTION TWO ISSUES, OBJECTIVES AND POLICIES

2.13 Soils, Minerals and Earthworks

Within the rural areas of the district agriculture and other rural activities occur on a variety of scales, making use of the productive soils of the area. Pressure for a higher density of residential activity and other land use changes in the district's rural areas can conflict with existing rural land uses and the amenity of these rural areas.

The soils of the district are mainly used for pastoral farming, with small areas of arable horticulture. Safeguarding the life-supporting capacity of the soil will assist in meeting the reasonably foreseeable needs of future generations.

Soils have been identified in: Classification of Land for Horticulture, Forestry and Urban Use in Invercargill City³.

The district's soils range from Class 2 to Class 5. Class 2 arable horticultural soil was the most versatile soil found in the district by the McIntosh study. These soils are delineated on the District Planning Maps <u>as high value soils.</u>

Environment Southland also has an important role particularly in relation to controlling the use of land for the purpose of soil conservation. To this extent, the district's soils resource should be managed in an integrated manner.

Subdivision and land use activities could significantly and adversely affect the soil resource.

Some rural areas within the district have a history of problems with on-site wastewater disposal. These areas generally include areas with poor draining soils and a higher density of residential activity than other rural areas. On-site wastewater disposal system failures can have adverse impacts on the amenity of these areas and, the public health of residents, and the health, life supporting capacity and productive value of the soil.

There are currently a small number of mineral extraction activities occurring within the district, mainly in the Omaui, Greenhills, Awarua Bay and Otatara/Sandy Point areas. The potential for further mineral extraction activities in the district may give rise to adverse environmental effects.

Earthworks activities, including filling activities, have the potential to generate adverse environmental effects that are similar to mineral extraction activities, including noise and dust effects, and effects on the transportation network.

Section 42A Report Soils, Minerals and Earthworks

March 2015

³ P D McIntosh and J R F Barringer, Landcare Research New Zealand Limited: 1993 *Classification of Land for Horticulture, Forestry and Urban Use in Invercargill City*

2.13.1 Issues

The significant resource management issues for soils, minerals and earthworks are:

- Maintaining the productive capacity of rural land resources and sustaining the agricultural and primary sector activities dependent on them is of importance to the economic well-being of the district.
- 2. Subdivision, land use change and development can adversely affect the district's soil resource.
- 3. Some land uses and land management practices can reduce the health, life-supporting capacity and productive value of soil, and lead to soil loss from erosion, which can cause increased sedimentation of waterways and coastal water.
- 4. Mineral extraction and earthworks activities, while important to economic well-being of Invercargill, may give rise to adverse environmental effects.
- 5. Use of on-site waste water disposal systems within rural areas of Invercargill can give rise to adverse environmental effects on water, soil, amenity and public health, particularly where ground conditions are unsuitable or waste water systems are inadequately maintained.

2.13.2 Objectives

- **Objective 1:** Invercargill's soils are managed sustainably.
- **Objective 2:** The extraction of Invercargill's mineral resources is managed in such a way as to avoid, remedy or mitigate adverse environmental and public health effects.
- **Objective 3:** Earthworks in Invercargill are carried out in such a way as to avoid, remedy or mitigate adverse environmental <u>and public health</u> effects.
- **Objective 4:** On-site wastewater disposal systems are designed, sited, operated and maintained in such a way as to avoid adverse environmental and public health effects.

2.13.3 Policies

- **Policy 1** Soil: Promote sustainable soil and land use development and management practices, particularly those that:
 - (A) Maintain or improve soil properties.
 - (B) Minimise soil loss from erosion or earthworks.
 - (C) Minimise soil compaction and nutrient loss.
 - (D) Reduce soil disturbance.
 - (E) Maintain or improve water quality.
 - (F) Maintain or improve indigenous biodiversity.

Explanation: The soil resource is the basis of much of the region's economic activity and wealth and, for day to day production of food. Promotion of the sustainable use of Invercargill's soils will help ensure the soil resource is working to its full potential and provide the desirable range of productive uses.

Policy 2 Versatile High Value Soils: To identify the versatile high value soils of the district and to delineate these on the District Planning Maps.

Explanation: The versatile soils district's high value soils are particularly important because they comprise such a small proportion of the soil resource of the district.

Policy 3 Protection for Versatile High Value Soils: To protect the district's versatile high value soils from the expansion of urban development over the district's versatile soils.

Explanation: The district does not have high quality soils but there are areas of highly versatile soils, particularly to the north, that are an important resource that should be kept available for the production of food. The district's high value soils are an important resource that should be kept available for the production of food. Urban expansion typically reduces high value soil stocks either by reducing the total area or impairing the remaining soils. Such changes are effectively irreversible, because top soils can take thousands of years to develop.

Policy 4 Mineral Extraction: To require that mineral extraction and processing activities are undertaken in a manner that avoids, remedies or mitigates any potential adverse effects.

Explanation: Land-based mineral extraction (including gravel extraction) is an appropriate rural land use activity, so long as adverse environmental <u>and public health</u> effects including cumulative effects are avoided, remedied or mitigated. The potential adverse effects of mineral extraction activity include, but are not limited to, effects on rural amenity, landscapes and natural features, biodiversity, water quality, soil resources and the roading network.

Policy 5 On-site wastewater disposal: To require that on-site wastewater disposal systems are designed for the specific conditions of the subject site and to encourage the ongoing maintenance of these systems.

Explanation: Appropriate design, siting and operation can minimise the risks to people and the environment of malfunctioning or poorly maintained on-site wastewater systems.

Policy 6 Filling and recontouring: To control land use activities and development which propose to fill or recontour land, or move or remove significant quantities of soil.

Explanation: Some modification of the landscape is inevitable in order to provide safe and stable building platforms and roads with a suitable gradient. Earthworks are therefore necessary for land and economic development within the District. These activities can, however, give rise to adverse environmental effects and, therefore, The the effects of land fill operations and significant alterations to the soil profile need to be addressed through controls in order to avoid adverse effects on the environment and public health.

Policy 7 Record of Filled Land: To keep a record of land within the Invercargill city district that is known to have been filled.

Explanation: A public record of this information will assist landowners and developers.

2.12.4 Methods of Implementation

- **Method 1** Delineating the district's areas of versatile <u>high value</u> soils on the District Planning Maps.
- **Method 2** Assessment criteria for earthworks and mineral extraction in relation to resource consents.
- **Method 3** Recognise sectorial responses such as Ministry for the Environment published guidelines.
- **Method 4** Rules to protect soils for agricultural use by limiting residential development.
- **Method 5** Rules for earthworks, filling and mineral extraction activities.
- **Method 6** Consult <u>and collaborate</u> with landowners and occupiers, iwi, other councils, Central Government and other organisations, internal Council departments and local community and business groups.
- Method 7 Identify cross-boundary issues e.g. on-site effluent disposal issues.
- **Method 8** Providing information on filled land on property files and Land Information Memorandum reports.
- **Method 9** Information gathering and consent monitoring.
- **Method 10** Initiate environmental advocacy for the ongoing maintenance and care of on-site wastewater disposal systems.

2.14 SUBDIVISION

Objective 3: Subdivision and development preserves the productive capability of rural land and versatile high value soils.

SECTION THREE RULES

District Wide

3.17 Soils, Minerals and Earthworks

Earthworks and Filling Activities

- 3.17.1 Rules 3.17.2 13.17.8 do This rule does not apply in the Smelter Zone.
- 3.17.2 On sites within the Airport Protection Zone or the Otatara Zone where they are identified within the 46amsl obstacle limitation surface (Planning Map 35), no earthworks are to result in standing bodies of water greater than 10m².

3.17.2

- 3.17.3 Subject to Rule 3.17.2 (above), Rule 3.1 Biodiversity, Rule 3.3 Contaminated Land, Rule 3.8 Heritage, Rule 3.9 Utilities and Rule 3.10 Natural Features, Landscapes and Townscapes, it is a permitted activity to undertake the following earthwork activities the following land use activities which fill or recontour land.
 - (A) Gardening, agriculture, landscaping, and including such practices as drainage, tilling, harrowing, ploughing, fertilising, mulching, silage making, farm tracks, repairing storm or flood damage and planting.
 - (B) Movement, deposition or removal of material when it is a necessary consequence of building a structure for which a building consent has been obtained on that site.
 - (C) Deposition of material for the purpose of forming hard surfaces such as accessways and paths.
 - (D) Removal and deposition of material for the purposes of work in compliance with Council's Bylaw 2013/1 Code of Practice for Land Development and Subdivision Infrastructure.
 - (E) Activities associated with the construction, operation, maintenance, repair and upgrading of infrastructure utilities.
 - (F) The cultivation of farm land.
 - (G) The excavation, stockpiling and use of material from a borrow pit.
 - (H) All other earthworks, excluding landfills, provided that the quantity of earth moved earthworks undertaken in a 12 month period shall not exceed
 - (c) 50m3 per site up to 1000m2, plus 50m3 each 1000m2 thereafter, in the Residential 1, 1A, 2 and 3, Business 1, 2, 3, 4 and 5, Industrial 1, 1A and 2, and Otatara Zones.
 - (d) 1,000m³ per site in all other zones.
 - (a) 50m³ for lots up to 1000m2 plus 50m3 per 1000m2 therafter over 12 months in the Residential 1, 1A, 2 and 3, Business 1, 2, 3, 4 and 5, Industrial 1, 1A and 2, and Otatara Zones.

- (b) 200m³ over 12 months in the Rural 1 and Rural 2 Zones.
- (c) 1,000m³ over 12 months elsewhere.

3.17.3

It is a discretionary activity to undertake any land use activities including cleanfill activities that fill or recontour land earthworks that ,and do not comply with any of the provisions of Rules 3.17.2 and 3.17.3 above.

3.17.4

3.17.5 Any landfill is a non-complying activity.

3.17.5

- <u>3.17.6</u> Applications under Rules <u>3.17.3</u> and <u>3.17.5</u> above shall address the following matters, which will be among those taken into account by the Council:
 - (A) The effects on the life supporting capacity of the district's soil resource, in particular the soil profile after development.
 - (B) Potential effects of dust and noise nuisance.
 - (C) Traffic generation and its effect on neighbouring properties and the transportation network.
 - (D) Effects on natural water flows and established drainage networks.
 - (E) The nature and volume of any fill material proposed.
 - (F) Any effect on sites of heritage <u>and/or archaeological</u> significance, <u>cultural</u> <u>importance to lwi</u>, outstanding natural features and landscapes and/or significant indigenous biodiversity.
 - (G) Any effect on the future development potential of land for permitted activities
 - (H) Any management plan for the proposed facility, which addresses:
 - (a) The methods proposed to ensure that inappropriate material is not deposited.
 - (b) The proposals to monitor the filling operation.
 - (c) Site rehabilitation.
 - (d) The proposed systems for record keeping in relation to the operation and monitoring of the filling operation.
 - (e) Proposals for ongoing monitoring of the filled site.
 - (f) Proposals for hazard mitigation including any contamination.
 - (I) The visual or amenity effects of the fill such as changes to landform and shading.

- 3.17.7 In addition to the matters listed in Rule 3.17.6, applications for earthworks that do not comply with Rule 3.17.2 shall address the following:
 - (c) Any effect on the operation of the airport resulting from the congregation of birds
 - (d) <u>Methods to avoid, remedy, or mitigate potential conflict with the safe and efficient operation of aircraft.</u>

Note: Written approval of Invercargill Airport Limited is required as an affected party.

3.17.6

Any application for resource consent is to be accompanied by a plan for rehabilitation of the area likely to be affected by the application.

Mineral Extraction

3.17.7

Subject to Rule 3.10 Natural Features, Landscapes and Townscapes, Rule 3.1 Biodiversity and Rule 3.8 Heritage, the excavation, stockpiling and use of material from a borrow pit is a permitted activity.

3.17.8

<u>3.17.9</u> Except as provided for in Rule—<u>3.17.7</u> <u>3.17.3(G)</u> above, all land use activities involving the extraction of minerals is a non-complying activity.

3.17.9

<u>3.17.10</u> Any application for resource consent <u>under Rule 3.17.9</u> is to be accompanied by a plan for rehabilitation of the area likely to be affected by the application.

ZONE SPECIFIC

3.38 RURAL 1 ZONE

- **3.38.11** Applications under Rules 3.38.9 and 3.38.10 above shall address the following matters, which will be among those taken into account by the Council:
 - (A) The reasons for a higher density of residential activity.
 - (B) The effect on open space and amenity values of the Rural 1 Zone.
 - (C) The size and location of structures.
 - (D) The extent to which solar gain to the living areas is achieved.
 - (E) The extent to which practicable outdoor living is achieved.
 - (F) Vehicle access, manoeuvring and parking.
 - (G) Effects of the proposal on stormwater flows.
 - (H) The extent to which the development incorporates qualities of good urban design.
 - (I) Effluent disposal

SECTION FOUR DEFINITIONS

Borrow Pit: Means the excavation and stock piling of material from the ground for use on the property on which it is extracted. This excludes the extraction of minerals, with the exception of industrial rock and building stones. without undertaking any extraction of minerals or other such processes, on the property on which it is extracted.

Cleanfill: Means material that when buried will have no adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of:

- Combustible, putrescible, degradable or leachable components
- Hazardous substances
- Products or materials derived from the treatment, stabilisation or disposal of hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices
- Materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances
- Liquid waste.

Dead Hole (Offal Pit)

Means a hole excavated on a rural property to be used only for the purpose of disposing of dead animal or plant matter generated on that property.

Earthworks – As per recommendation made in Report 16 Biodiversity:

Means the disturbance of land surfaces by the removal or <u>depositing_deposition_of</u> material, excavation, filling or the formation of roads, banks, tracks. <u>"Earthworks" includes preparing the ground for building foundations or service trenches. "Earthworks" includes or_the cultivation of farm land. "Earthworks" it—does not include the digging of holes for the erection of posts, planting of trees or other vegetation.</u>

Farm Landfill

Farm Landfill means a landfill located on a rural property used to dispose of household waste generated on that property. It does not include the disposal of any hazardous waste, dead animal material or any waste generated from any industrial or trade process on that property.

High Value Soils: Soils identified as Class 2 arable horticulture in the PD McIntosh and J R F Barringer's study *Classification of Land for Horticulture, Forestry and Urban Use in Invercargill City.* These soils are known to be highly productive and suitable for multiple uses such as growing a wide range of crops, pasture and forest and of high versatility for pastoral farming.

Industrial Rocks and Building Stones: Includes aggregate, basalt, diatomite, dunite, granite, limestone, marble, perlite, pumice, sandstone, serpentine, slate, sand and gravel.

Landfill: Means a site used for the deposition of solid waste, including material that does not meet the definition of "cleanfill", on to or into land. <u>This excludes farm landfills and dead holes.</u>

Mineral: Means a naturally occurring inorganic substance beneath or at the surface of the earth, whether or not under water; and includes all metallic minerals, non-metallic minerals, fuel minerals, precious stones, industrial rocks and building stones, and a prescribed substance within the meaning of the Atomic Energy Act 1945.

Mineral Extraction: Means to take, win, or extract, by whatever means, a mineral existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance; but does not include prospecting or exploration; and "to mine" has a corresponding meaning. Mining includes quarrying but does not include extraction from borrow pits.

PLANNING MAPS

- Remove filled land data from the Planning and Hazard Information Maps.
- Change legend and any references to "versatile soils" to "high value soils".

OTHER

It is recommended that the term "versatile soils" throughout the Plan is replaced with "high value soils".