

Timaru District Plan Review

Topic 7 Soils, Minerals and Earthworks

Discussion Document, November 2016



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1.0 Introduction

1.1 Purpose

Timaru District Council has commissioned this report to identify the 'issues' with how the Timaru District Plan 2005 manages soils, minerals and earthworks. The report subsequently identifies the potential 'options' to address these issues and the strengths and weaknesses of each option.

Please note that the Rural Zone is being dealt with under a separate topic and there is an element of crossover between soils, minerals and earthworks and intensive rural activities.

The report is intended to inform and provide a basis for public consultation on this matter and to some degree stimulate debate. The report forms part of a suite of public consultation measures that may be used to inform a potential change to the District Plan.

This report does not consider earthwork activities within specially identified areas, such as outstanding landscapes or significant ecological sites.

1.2 Report Format

The remainder of the report has been set out as follows:

Section 2	identifies and describes the issue.
Section 3	summarises the relevant statutory matters.
Section 4	briefly explains the current Timaru District Plan approach to soils, minerals and earthworks.
Section 5	discusses some potential options to deal with soils, minerals and earthworks.

This document outlines the issues our district faces in relation to soils, minerals and earthworks. We welcome your feedback on this topic.

Richard Lyon Pleasant Point/Temuka Ward Councillor

2.0 Issue Identification

Issue 1

Do higher quality soils need to be specifically protected in a manner different to other soil types within the Rural area, and if so how?

The District Plan currently protects high quality soils through a specific Rural 2 zoning which differentiates it from the lower quality soils in the downlands and plains areas, which have a Rural 1 zoning. The high quality soils are often referred to as Class I and Class II soils. The boundary between the two zones generally follows the boundary of the Class II soils, which often means that properties are split zoned. The Rural 1 and 2 Zones have many of the same activity controls, but there is a difference with how subdivision is controlled respectively in these zones. Given the limited differences between the two zones, there is a question whether the Rural 2 Zone sufficiently protects the soil and / or whether these high quality soils actually require specific protection.

Issue 2

Should mining and quarrying be more or less controlled in the District Plan?

The quarrying of aggregate, limestone, bluestone and clay from land is an important activity which assists with the economic well-being of the District. Quarrying however can give rise to significant dust, traffic and visual effects on the environment. The District Plan currently provides for limited extraction of aggregate as a permitted activity. Quarrying and subsequent infilling are also subject to Regional Council control. The District Plan and regional plans are based on different issues associated with extraction although there is often overlap in the actual conditions on consents. The question arises whether the current level of control in the District Plan adequately addresses the landuse effects that may arise from quarrying and mining.

To avoid duplication of controls and consenting, the District Plan currently permits the extraction of gravel from riverbeds where it is permitted by a regional plan or has been given consent by Canterbury Regional Council. However aspects of this activity such as traffic, dust and noise may not be adequately addressed through the regional consent alone.

It is possible that in the future there will be a demand for exploration and extraction of minerals not currently mined or even discovered within the District. Is the level of control within the District Plan sufficient to avoid, remedy or mitigate the effects that might arise from such an activity?

Issue 3

Should earthworks (excluding quarrying) be controlled within all parts of the District?

The District Plan currently does not contain specific limits on earthworks, undertaken either as part of subdivision and development of land, or as a separate activity. The District Plan however permits or controls certain types of earthworks within Rural Zones, such as the construction of tracks or earthworks within riparian margins. The Council does receive complaints about new tracking in rural areas, with the primary concern being the visual impact of scarring on hillsides. The only existing control on earthworks outside Rural Zones is where land is filled to a depth of one metre or greater. Earthworks, being the cutting of land or the filling of land (both above and below natural ground level); has the potential to adversely impact the environment. This can be from either short term or permanent effects such as dust, heavy traffic movement, vibration, noise, erosion and diversion of natural drainage channels resulting in displacement of flood waters onto adjoining properties. Whilst earthworks which are part of a subdivision are able to be controlled through conditions other activities such as the building of irrigation canals and storage ponds or bunding for screening purposes are not controlled as these structures do not require consent.

3.0 Statutory Matters

Section 5 of the Resource Management Act 1991 sets out the purpose of the Act and defines sustainable management as including "sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonable foreseeable needs of future generations" and "safeguarding the life-supporting capacity of air, water, soil and ecosystems". Section 7 of the Act sets out the matters to which particular regard is to be had, including the efficient use and development of natural and physical resources and any finite characteristics of natural and physical resources. It is through these two sections of Part II of the Act, that there is a direction for the appropriate management of soil and mineral resources of the District and the adverse effects arising from their use.

The District Plan Review must give effect to the Canterbury Regional Policy Statement 2013. The policy statement sets outs the matters relating to the maintenance of soil quality and the prevention of soil erosion. It directs that district plans should control the adverse effects of subdivision and landuse within rural areas to maintain the productive potential, ensure that the ability to utilise the soil resource is not foreclosed and to avoid soil loss or erosion. The policy statement also encourages the promotion of landuse practices that will maintain and improve soil quality and avoid soil erosion. There is no longer a specific requirement for district councils to protect higher quality soils over any other soil types.

Several regional plans also address these matters. The Canterbury Land and Water Regional Plan 2015 contains policies and rules addressing soil erosion in hill and high country areas, the excavation of land, the filling of land and the extraction of gravel from rivers. Discharges of dust to air are controlled under the Canterbury Air Regional Plan 2015.

A draft National Environment Standards on Plantation Forestry is being considered by the Government. The draft National Environmental Standard proposes to control all earthworks, soil disturbance and quarrying associated with plantation forestry and would replace existing district plan rules for plantation forestry activities. As of the date of this report, a final decision is still to be made as to whether the draft National Environmental Standard will be implemented.

4.0 Timaru District Plan

The protection of high quality soil is primarily addressed in the District Plan through zoning, with the Rural 2 Zone comprising land identified as having high quality Class I or Class II soils. The differences between this zone and the Rural 1 Zone relate to how activities that may damage soil are controlled within each zone and the minimum allotment size necessary for subdivision. There are no differences in the standards that are required for permitted activities within these zones.

The differences are set out in the table below:

Activity	Rural 1 Zone	Rural 2 Zone
Tracks or bridges outside of road reserves	Permitted	Discretionary
Mining, quarrying, extraction of soil, rock, shingle, gravel and sand materials not in riverbeds in quantities less than 100 cubic metres	Permitted	Non- Complying
Mining, quarrying, extraction of soil, rock, shingle, gravel and sand materials not in riverbeds in quantities over 100 cubic metres	Discretionary	Non- Complying
Prospecting and exploration as defined in the Crown Minerals Act 1991	Permitted	Controlled
Allotment Size	40ha*	10ha

* This zone also enables the creation of Rural Living sites between 1000m2 and 2ha, with an accompanying 10ha allotment.

Mining and quarrying generally require consent as a discretionary activity within the Rural 3 and 5 Zones. The exception is gravel extraction from a riverbed in the Rural 5 Zone and any extraction of gravel or shingle in the Rural 3 Zone where these activities are either permitted by a regional plan or have gained a regional council consent.

Controls on general earthworks in the Rural Zones are limited, with the primary control being setbacks from waterways, wetlands and the coastal marine area. The other controls relate to earthworks in areas above 900m or within Outstanding Natural Landscapes.

The District Plan requires the owner of a site where filling of 1m depth or more is to occur to notify the Council, so that the land can be identified on the Council's Hazard Register. Beside this general rule, there are no controls on earthworks within urban areas.

5.0 Options

In this section options for addressing the issues identified in Section 2.0 are briefly described below, followed by a brief assessment of their strengths and weaknesses. Please note other options exist for the identified issues that have not been reflected here to keep the document concise.

Issue 1

Do higher quality soils need to be specifically protected in a manner different to other soil types within the Rural area, and if so how?

The options for addressing this issue are either:

- the retention of the existing Rural 2 Zone and rules;
- the retention of the Rural 2 Zone with changed rules;
- an amalgamation of the Rural 1 and 2 Zones with the same activity status as the Rural 1 Zone; or
- an amalgamation of the Rural 1 and 2 Zones with the new rules to protect the soil resource generally within the rural area.

Option 1 - Status quo

• The retention of the current zoning and associated rules as unchanged.

Strengths	Reasonably effective in relation to the protection of high quality soils.The different zones are well understood by the residents of the District.
Weaknesses	 Potential for further increases in fragmentation of rural land. Split zoning of properties may increase compliance costs for land owners. The boundaries of the different soil qualities may not be accurate given the age of the data used.
	 Fails to recognise that as a result of modern farming practices, productivity is not solely reliant on soil quality. Fails to protect or recognise the value of the remainder of the soil resource in the District (other than high quality) and the importance of ensuring that it is not foreclosed from future productive uses.

Option 2 - Amend

• The retention of the current zoning with an increase in the minimum allotment size in the Rural 2 Zone to reduce the fragmentation of land within this zone.

Strengths	 Provides greater protection of the soil resource for the Rural 2 Zone and less fragmentation of land with high quality soils.
Weaknesses	 Less flexibility for landowners wanting to subdivide Rural 2 Zone land for diversification of production.

Option 3 - Amend

• The amalgamation of the Rural 1 and 2 Zones, with the Rural 1 Zone standards prevailing.

Strengths	 Larger base minimum allotment size may assist in preventing the further fragmentation of land with higher quality soils. Reduces issues associated with split zoned properties.
Weaknesses	 Greater potential for lifestyle subdivision leading to less protection of high quality soils.

Option 4 - Amend

• The amalgamation of the Rural 1 and 2 Zones, with new standards to protect the soil resource generally, such as limiting the ability for further subdivision, site coverage requirements for buildings and hardstand areas.

Strengths	 Addresses impervious surface area.
	 Less fragmentation of the soil resource by subdivision.
	 Protects all types of soils, regardless of landuse classification.
	 Reduces issues with split zoned properties.
Weaknesses	 Reduced choice in rural living opportunities.



Issue 2

Should mining and quarrying be more or less controlled in the District Plan?

The options for addressing this issue are either:

- to leave the rules as they currently are, where depending on the location, mining or quarrying of land is either permitted up to 100m3 per site per year, or requires consent as a discretionary activity regardless of the volume;
- provide for mining and quarrying that meets regional plan standards or has regional consent as a permitted activity; or
- provide a more permissive regime permitting higher volumes to be taken as a permitted activity provided specific standards are met.

Option 1 - Status quo

• Retention of the current zone rules that permit small scale mining or quarrying within any given year in most of the rural area, with consent required for greater volumes or other locations.

Strengths	 Minor quarrying is enabled. Most quarrying and mining can be managed through consenting. Enables scrutiny of any extraction activity that exceeds permitted limit to ensure potential adverse effects are addressed. Ensures only limited effects.
Weaknesses	 May increase compliance costs through requiring consents otherwise permitted by regional planning documents. Limited extraction possible on an annual basis.

Option 2 - Amend

• Provide for mining and quarrying that either meets similar standards to the regional plan or has gained regional council consent.

Strengths	 May potentially limit compliance costs for applicants due to reduced consenting requirements.
Weaknesses	 Adverse effects not considered by regional plans such as traffic, noise and visual amenity effects may not be properly addressed.

Option 3 - Amend

 Provide for mining and quarrying activities with a higher permitted volume but include minimum standards setting limits for truck movements per day, noise generation, hours of operations, noise, dust and setbacks from sensitive activities and setback of activities that are sensitive to mining and quarrying. Standards requiring financial contributions for damage to roading could also be introduced. Depending on the limits chosen for the thresholds, non-compliance with standards would result in the activity being either a discretionary or non-complying activity.

Strengths	 Manages the activities that create the most significant environmental effects and limits potential for new sensitive activities to establish. Provides more certainty around level of anticipated effects for a permitted activity. Potential for reduction in overlap with Regional Council functions.
Weaknesses	 Potential increase of compliance costs, depending on the thresholds chosen for the various standards.

Issue 3

Should earthworks (excluding quarrying) be controlled within all parts of the District?

The options for addressing this issue are either:

- the retention of the small number of controls as currently contained within the District;
- leaving the Rural earthworks controls as they are but introducing new rules and standards for other areas of the District; or
- the inclusion of new earthworks controls for all zones.

Option 1 - Status quo

• Retention of current the rules and standards.

Strengths	Limited compliance costs associated with consents.
Weaknesses	No control over earthworks if no subdivision involved.Fails to meet the Regional Policy Statement requirements to manage earthworks to avoid soil loss or erosion.
	 Fails to address other adverse effects that can arise from earthworks including diversion of overland stormwater flow.
	 Existing filled sites rule relies on people advising the Council when they are undertaking works.

Option 2 - Amend

• Leave earthworks rules as they are currently for rural areas, but introduce controls for other parts of the District such as the Residential Zones.

Strengths	 No change to compliance costs for earthworks undertaken in Rural Zones. Provides greater certainty in other areas of the District as to the level of permitted effect anticipated from earthworks and enables effects to be addressed including avoidance of impacts on neighbouring properties.
Weaknesses	 Not effective in rural areas where large scale earthworks can create amenity and environmental impacts. Does not fulfil the Regional Policy Statement requirement to manage earthworks to prevent soil loss or erosion. Increase in compliance costs as consent would be required for earthworks in zones, other than rural.

Option 3 - Include

• Introduce rules to control earthworks within all zones that set permitted thresholds for volume, depth of cut and depth of fill, slope, setbacks from sensitive activities, including requirements for dust control and erosion and sediment control plans. An option could be to exempt activities where they are permitted by a regional plan or have obtained regional council consent.

Strengths	 Sets well known trigger points for earthworks to be assessed through consent. Meets requirements under the Regional Policy Statement to control earthworks to prevent soil loss or erosion. Enables the District Plan to control the adverse effects of earthworks in all zones. Provides certainty over the level of permitted effect when earthworks are being undertaken.
Weaknesses	 Increased compliance costs as consents would be required for activities that may have not needed them before e.g. farm tracks. The option of permitting activities that either comply with or have consent under a regional plan, may mean that effects on amenity values, including visual amenity may not be able to be addressed.

Note: Earthworks as part of subdivision will need to be specifically subject to control – refer to Topic 2: Subdivision.



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