

Otago Regional Council
Private Bag 1954
Dunedin 9054
23rd July 2015

Dear Sir/Madam: Re Submission on Regional Policy Statement for Otago

Background

The Clutha Agricultural Development Board or now known locally as the AgBoard has been in existence for over 20 years. Over many years the Board have made many submissions to the ORC on various plans and reports. We have around 140 active current members consisting mainly of farmers and other associated rural agencies. Our farmer members have a strong vested interest in maintaining their own farm business and managing their environment prudently.

This submission will focus mainly on the soil resource, water quantity and biodiversity aspects.

The values of Otago's natural and physical resources are recognised, maintained and enhanced Objective 2.1 page 26 on wards

Regarding water policy 2.1.1, 2.1.2, 2.1.3. In general we support these policies. However the use of the word degraded in 2.1.1 (f) and 2.1.2 (c) needs clarification. What is the basis for assuming a water body has degraded?. Does degraded mean if the quality is greater than what the Plan Change 6a –Water Plan requires in Schedule 15 (table 1 and 2) and schedule 16. Or in other words the receiving waters exceed the levels set out in table 2.

Recommend that a qualifier is outlined what degradation means and or define it better in the RPS Glossary.

Regarding Policy 2.1.5 Managing for soil values.

There appears to be a lack of understanding what soil values mean and what this may involve to ensure sustainable soils and farm systems occur in Otago. There is no mention of erosion of the soil anywhere in this section whether it be man induced or by natural means. There is considerable soil erosion occurring all the time on farmland and non farm land which can be initiated by gravity, wind, man induced and the like along with the water influence. The water influence on erosion is covered under policy 2.1.1 (o).

Recommend a similiar policy be inserted as noted on policy 2.1.1 (o) in relating to the Land Use Capability class land subject to erosion (being mainly arable land) classes 1-4 eg..

“Mitigate the adverse effects of natural hazards, including erosion (or more specific soil erosion)”.

Under 2.1.5 part (b) and (c) it describes to maintain soil biodiversity and biological activity. These statements are considered insufficient in their intent as many soils in Otago at present may be below the threshold for biodiversity and biological activity due to for example poor drainage, site location, slope, parent material, their age to name some aspects. So just to maintain will not result in a long term sustainable soil system.

Recommended change for 2.1.5 is..

(b) Maintain and enhance soil biodiversity; and

(c) Maintain and enhance biological activity in soils; and

Section (j) states maintain highly valued soil resources. What does this mean to maintain. It is suggested the policy should be amended to take on board the importance of not only maintaining the resources but if it is “High Class” definition soil then it must be retained wherever possible and practical for primary production.

Recommended change for 2.1.5 (j) is..

“To maintain and retain highly valued soil resources”

Appendix one summary highlights basic facts on the present dilemma we have in Otago and New Zealand over the loss of High Class soils from Urban expansion. It also summarises some of the terminology used to describe the classification and importance of soil for food production. Further discussion will be noted under Highly valued soil resources p33.

Regarding Policy 2.1.6 Biodiversity values

We support these eight policies on page 30.

Further to section (h) re pest species we consider that more effort and initiative must to go into promoting more integrated pest management (IPM). This includes cultural , biological, chemical and physical methods to implement as practical which will result in cost effective biodiversity management.

Recommend additional clause add in for 2.1.6 eg new section (i)

“Avoid and manage pest species by using Integrated pest control methods”.

Otago’s significant and highly-valued natural resources are identified, and protected or enhanced Objective 2.2

Policy 2.2.14 Identifying highly valued soil resources page 38

In association with the four criteria listed to identify areas of highly valued soil resources it is recommended that the terminology used in the Glossary on page 148 be further refined and are consistent with the terminology used else where in NZ especially on District Plans. It

may be desirable to discuss this matter with Landcare Research soil scientists at the Canterbury Science centre.

Recommended that to be included in the definition of Highly versatile soils that the following amendment be noted (page 148):

“Land classified as Land Use Capability 1 or 2 and 3e in the New Zealand Land Resource Inventory”

We do not need to present our submission in person.

Yours sincerely

Dave Inder

Chairman

A handwritten signature in black ink, appearing to read 'D Inder'.

Appendix one

A brief Overview of High Class soils and soil quality in Otago

This brief overview is to provide a better understanding of some of the criteria and parameters when identifying and classifying soils for high value primary production. The terminology used is also discussed with some background data on urban expansion onto High Class soil areas in NZ & Otago.

Land Use Capability summary for Otago

LUC 1	3.09	(000 ha)	1.6 % of national total
LUC 2	47.27	(000ha)	3.9 % of national total
LUC 3	342.90	(000ha)	14.1% of national total
LUC 4	431.02	(000ha)	15.6% of national total

LUC Class 1-4 are classified as suitable for arable use

LUC Class 1 and 2 are also called highly versatile soils.

A general definition of High Class land (modified from McIntosh 1995 and updated by T Webb Landcare research) is..

‘Land that is capable of being used intensively to produce a wide variety of crops, including arable crops’

A specific definition of high class land is:

Land that meets all the topographic, climatic and soil attributes within the definition of high class land in table 1 (after T H Webb and others paper).

High class land should have high versatility. **Versatility** is defined as the ability of land to support production and management of a range of crops on sustained yield basis, according to specified requirements (Webb and Wilson 1994). High versatility ensures that a wide range of plants may be grown for commercial purposes within an agro-climatic area. Versatile soils are rare in NZ (accounting for only about 5.5% of NZ).

Furthermore, it is also important to note that most but not all, LUC classes 1 and 2 qualify as high class land. LUC 3 and 4 provide a very small proportion in NZ.

Chapman states that “Versatile soils are classified as LUC 1, 2 or 3e on the NZ Land Inventory Worksheets (as amended in the 1986 second edition), provided that land classified as class 3e is further described as containing well drained and moderately well drained soil, in accordance with the Soil Description Handbook (by Milne et al).

The Dunedin City Council District Plan describes High Class soils as:

“Soils that are capable of being used intensively to produce a wide variety of plants including horticultural crops. This requires good soil and other resource features, including land and climatic factors, soil physical factors, soil water factors and soil chemical factors that in combination are capable of producing a wide range of crops.

Judge Treadwell has also provide some interesting definition/clarification on High Class soils.

Present Inventory and losses of High Class land in NZ and Otago

While urbanisation has long been a cause of concern for the loss of high quality food production land, lifestyle blocks have more recently received attention as potentially locking productive land out of future production (R. Andrew and JR Dymond).

Total High class land in Otago including all the criteria used to classify it was 87.8 (000ha) of which 0.4% of the High Class land is now occupied by urban development.

Putting it another way this means that 21% of new urbanisation in Otago is now on High Class land.

With respect to Lifestyle blocks in Otago it is estimated that 10% of High Class land is occupied by lifestyle blocks. Loss of high class land to lifestyle block development has far outstripped loss to urbanisation in recent years. In NZ this equates to one-tenth of NZ most productive land has already been converted to lifestyle sections, and this has increased rapidly in the last ten years.

References cited

Andrew, R; Dymond, J. R 2012: Expansion of lifestyle blocks and urban area onto high-class land: an update for planning and policy. Landcare Research Palmerston North. 13 Dec 2012.

Chapman, R.K 2010. Soil Assessment for the Kingseat Village Structure Plan site-May 2010. Evidence submitted to Franklin District Council.

Dan Bloomer 2011, Versatile Soils-Productive Land. Report to Hawkes Bay Regional Council.

McIntosh, P. D. 1995 : Defining high class soils. New Zealand soil News 43; 106-107

Milne, J.D.G; Clayden, B; Singelton, P.L; Wilson, A. D. 1995: Soil Description Handbook (revised edition) Manaaki Whenua Press, Lincoln, New Zealand.

Rutledge, D. T; et al 2010: Thought for Food: Impacts of urbanisation trends on soil resource availability in New Zealand. Proceedings NZ Grassland Association Conference 72.

Treadwell. Environment Court. W142/96 Canterbury Regional Council vs Selwyn District Council.

Webb, T. W; Jessen, M. R; McLeod, M; Wilde, R. H: Identification of High Class Land.

Webb, T.H; Wilson, A. D. 1995. A Manual of land characteristics for land evaluation of rural land. Landcare Research Science Series 10. 32p.

Note. The above papers can be provided from the AgBoard if required.