

# Submission to National Policy Statement on Highly Productive Soils

Kokalito Fine Foods Ltd

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## Background

Kokalito Fine Foods Ltd is an organic vegetable and fruit producer and processor based in Golden Bay in the Tasman District. The family operated company is located on a 30-ha property which is largely classified class A, highly productive soils.

I, Klaus Thoma, currently company co-director with my wife at Kokalito Fine Foods, have a professional, academic background in soils science which I have practiced in Germany, Australia and here in New Zealand in private practice and in a research capacity for the last 22 years. My particular expertise is soil and land capability mapping, water quality management of intensively used catchments, agricultural extension work and waste water irrigation.

Upon my arrival here in New Zealand in 1991 (after 12 years as a research officer with the then South Australian Department of Agriculture) I submitted on the then 'Proposed Tasman Resource Management Plan' highlighting the precarious protection of highly productive soils in the Tasman District but really by implication, throughout New Zealand. The submission was rejected and after years of frustrating mediation I filed a reference 'Klaus Thoma vs Tasman District Council', ENV-2006-WLG-13 with the Environment Court aimed at the 1) better protection of highly productive soils, and 2) comprehensive identification of these elite soils in the Tasman District. My reference was partly successful mainly by the Environment Court direction that Tasman District Council establish location and extent of highly productive soils in the TDC jurisdiction.

After analyzing the MPI and MfE discussion document on the proposed national policy statement for the protection of highly productive land, I like to express my support for the NPS- HPL. The document reflects well the issues although it is long overdue in my opinion.

*I concur with the wording of the NPS HPL:*

### **Objective 1: Recognising the benefits of highly productive land**

To recognise and provide for the value and long-term benefits of using highly productive land for primary production.

### **Objective 2: Maintaining the availability of highly productive land**

To maintain the availability of highly productive land for primary production for future generations.

### **Objective 3: Protecting from inappropriate subdivision, use and development**

To protect highly productive land from inappropriate subdivision, use and development, including by:

- avoiding subdivision and land fragmentation that compromises the use of highly productive land for primary production;
- avoiding uncoordinated urban expansion on highly productive land that has not been subject to a strategic planning process; and
- avoiding and mitigating reverse sensitivity effects from sensitive and incompatible activities within and adjacent to highly productive land.

*I specifically support the following points in your consultation document:*

- 1) Rural life-style blocks lead to land use changes away from production here in Tasman. Changes are subdivision creep, reverse sensitivity, trend towards smaller uneconomic units and lower development cost of often flat and easily accessible class 1 land.
- 2) Legal instruments (RMA and TRMP) have not sufficiently prevented land fragmentation in Tasman and probably NZ. Tighter regulation of subdivision and other land fragmentation pathways is needed
- 3) The need to internalise externality cost in food production will lead to regionalization of food production. Support by government could be in the form of regional food production consultations and policy and research support. This process is in line with many other OECD countries.
- 4) As mentioned, reverse sensitivity is often the end product of poor land use planning. Here in Golden Bay there is plenty of LUC class 4 land and higher available to provide for housing and other non-productive land uses.
- 5) I support the format of the National Policy Statement on highly productive land over and above the other options.
- 6) Assuming that Class 1&2 land stock is more limited than currently assumed, the land resource becomes ever more strategic and may then have to be prioritised for nationally important food production. I would expect this situation to be more urgent in the South Island and in particular in the top of the South as shown in my evidence.
- 7) Policy1: The small resource base of Class 1 in particular, calls for detailed mapping across NZ and should be undertaken at more arm's length at regional.
- 8) Appendix A: A good example of default classifications for highly productive soils is the Dr. Campbell's Golden Bay soils survey series which resulted from ENV-2006-WLG-13.

*In the following, I would like to make some additional points which originated from my 2006 Environment Court case and which were subsequently validated.*

- 1) The extent of Class 1 & 2 soils is most likely overestimated because of historic survey limitations (low survey resolution, classification inconsistencies). In particular, Class 1 & 2 soils occupy at best ~5% of NZ's land base and only 2.9% in the South Island. A high-resolution survey undertaken here in Golden Bay showed class 1 & 2 soils to drop from 2.9% area (South Island) to ~ 1.7% (see in my evidence in ENV-2006-WLG-13).
- 2) Despite numerous attempts by government (notably 'Environment 2010' and other initiatives by MfE etc), Class 1 land stock is still declining showing that a non-regulatory approach is not working.
- 3) Academic literature is predicting peak phosphorus (50% resource depletion) to occur within the next 15 -30 years allowing for widely debated modelling assumptions. Increasing scarcity of a non-renewable input like phosphorus leads to the need for higher resource use efficiency of P. Elite soils are better able to convert fertilizer inputs than lower class soils % (see in my evidence in ENV-2006-WLG-13).
- 4) A significant proportion of highly productive soils are located on alluvial flood plains. Exponential rise of sea levels will lead to a reduction of high production soils due to sea water/river intrusion, increasing flood risks and often rising groundwater level further inland.
- 5) Human population projections (even in NZ) have significantly increased in the last 15 years putting more pressure on the sustainable production capacity of high production soils.
- 6) There is sound support in the academic literature, supported and also shown by Kokalito Fine Foods, that organic production platforms show high resource (input) use efficiency while achieving high yields. This is of particular importance in the context of peak phosphorus and also imminent peak potassium (50% resource depletion).

**I like to be heard with this submission.**

Regards,

Klaus Thoma

Kokalito Fine Foods Ltd