In the matter of: Proposed Auckland Unitary Plan

To: The Auckland Unitary Plan Independent Hearings Panel

Under the Resource Management Act 1991

Submitters: Federated Farmers of New Zealand Sub 6523

TOPIC 024 GMO Issues

Statement of Primary Evidence of by Dr Mark Bellingham

25 August 2015

SUMMARY STATEMENT

1. The Environment Court has determined that GMOs are within the jurisdiction of the Resource Management Act 1991 and within the scope of policies and plans under the RMA. I note that the jurisdiction decision is under appeal by Federated Farmers of New Zealand to the High Court and that the matter of scope remains under appeal before the Environment Court.
2. I agree with the RPS Objectives and Policies and the District/Regional Objective in the Proposed Auckland Unitary Plan, as proposed in the strike-through attached to Mr Smitheram's evidence.
3. I consider that the District/Regional Policies C: 5.17 Policies and rules H: 4.19 duplicate the assessment and approvals procedures for GMOs in the Hazardous Substances and New Organisms Act 1996 and are generally unnecessary in the Unitary Plan. No GMOs can be imported into New Zealand, or field trialled or released in the Auckland Region without approval (or refusal) and controls through the HSNO Act processes.
4. The only appropriate controls on GMO activities in the Unitary Plan relate to bond requirements for controlled activities.

INTRODUCTION

5. My name is Robert Mark Bellingham. I am a Senior Planner and Senior Ecologist with Terra Nova Planning Ltd.

6. I hold a PhD in Planning from Auckland University and I am a full member of the New Zealand Planning Institute. I have been a practicing planning and ecological consultant for over 25 years. I have also lectured in Environmental Planning at Auckland and Massey Universities. I have served on the Ministerial Advisory Committees for the Review of Protected Area Legislation (1989-90) Oceans Policy (2002-4), and as an Auckland Regional Councillor. From 1992-6 I served on the Landcare Research Weeds & Pest Division's Scientific Advisory group that considered GMO research on possums and other pest species.
7. I have read and agree to comply with the Environment Court's Expert Witness Code of Conduct (Consolidated Practice Note 2014). This evidence is within my area of expertise, except where I state that I am relying on some other evidence. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

FEDERATED FARMERS' SUBMISSION POINT TO THE PAUP

8. The Federated Farmers' submission proposes the removal of chapters B:6.6, C:5.17 and H:4.19 as there was no justification for these chapters being in the PAUP and that they were out of scope of the RMA.

EVIDENCE

9. I agree with the RPS Objectives and Policies and the District/Regional Objective in the Proposed Auckland Unitary Plan, as proposed in the strike-through attached to Mr Smitheram's evidence.
10. I consider that the District/Regional Policies C: 5.17 Pols. 1 and 5, and rules H: 1 and 2a require amendment to provide for GMOs that been approved for general release by the EPA following field trials under HSNO Act as a controlled activity.
11. Dr Heinemann's and Dr Small's evidence primarily address GM crops and possible adverse effects of these crops. But they do not appear to address GM issues that may be more relevant to pastoral farming in Auckland, including the use of GM organisms in biosecurity.
12. Mr Smitheram and Dr Grundy have relied on that evidence to support their planning evidence and the presumption that all general releases of GMOs should be a prohibited activity.
13. I note in Mr Smitheram's evidence (page 13.17 – 13.20), he adopts Professor Heinemann's advice that GM veterinary vaccines may be released into the environment provided that "*the vaccines have demonstrated efficacy and have been cleared by processes similar to medical vaccines"*, and in (para. 3.23) that is proposed in the changes to the PAUP H:4.19 new 2aa that these GM veterinary vaccines have a permitted activity status for their general release.

14. I understand that the HSNO approvals process administered by the EPA will already have applied a precautionary approach when it approves a GMO for use, unless there is no risk at all. This is similar to that used for general release approvals for medical or veterinary vaccines. Therefore it does not make sound planning sense to apply a precautionary approach for GMOs on the same matters that have been addressed through the HSNO process or by essentially ignoring the HSNO process and prohibiting their release when this has been approved. The HSNO process will have reasonably established the potential risks and benefits.

15. The evidence of Dr Grundy and Mr Smitheram fails to consider the possibility that following field trials, a GMO may be approved for general release with or without conditions from the EPA subject to S. 38 & 38A-L of the HSNO Act 1996, As such it meets the purposes of that Act, and therefore would meet the Auckland RPS objectives and policies.

16. The prohibited activity status for the general release of GMOs adopted by Mr Smitheram and Dr Grundy is not appropriate as this duplicates the GMO-specific assessment processes of the HSNO Act that applies to all GMO field trials and releases.

17. The Councils' S.32 report (p.42) states in relation to the Prohibited Activity status for outdoor GMO releases:

> *Prohibited activity status would not be subject to the option, as under a discretionary approach, that the EPA could call in an application or it could be referred directly to the Environment Court. Therefore the Council and the community it represents would retain the capacity to determine its own policy in terms of outdoor release of GMOs.*
>
> *(Table 2: Assessment of the proposed policies, rules and other methods under sections 32(3)(b) and 32(4)(a) of the Act. Evidence of Kerry Grundy Topic 024)*

18. This appears to promote prohibited activity status as a method to further delay release of GMOs, but the authors of the S.32 report may not have fully considered the appropriate path for those approved through HSNO.

19. The S.32 identifies the costs of the release Prohibited Activity status as:

> *By prohibiting certain activities from establishing, new developments/technologies face uncertainty and delay in seeking approval by way of a plan change. This could result in foreclosure of potential opportunities associated with a GMO development that could benefit the Northern Peninsula. This cost is remedied through the ability to reverse a prohibited activity in a plan. A council or a GMO developer can initiate a plan change to make it subject to discretionary provisions, if it were to become evident during the field trial stage and in light of new information that a particular GMO activity would be of net benefit to the Northern Peninsula. The lead time involved in gaining an EPA approval would not be dissimilar from that required to achieve a plan change. The change would however be specific to a particular class or GMO variety.*

20. The prohibited status imposes significant potential costs (in the wider context) on the rural sector as there are real risks of opportunities being forgone through a (no doubt) protracted plan change process. A prohibited activity status would lead to duplication of the hearings process that would have already occurred under HSNO for the same organism and the same activity.

21. Consequently I consider that it would be appropriate for the Unitary Plan policies and rules to make provision for the field trialling and release of GMOs as they will have been assessed under the HSNO Act process and declined or approved for release under s. 38 & 38A-L of the HSNO Act 1996. Considering that HSNO has a more focussed assessment of effects than the RMA or the Unitary Plan, a controlled activity status would be appropriate.

22. This approach would require the following strike-through and underline changes to the GMO strike-through text for this hearing - PAUP DP Policies 1 &5:

    C: 5.17. Policy 1:

    Adopt a precautionary approach ~~by prohibiting~~ to the general release of a GMO, ~~and by making outdoor~~ field trialing of a GMO, and the use of viable GM veterinary vaccines not supervised by a veterinarian.

    C: 5.17. Policy 5: (Changes to policy chapeau)

    Require that ~~Ensure the~~ outdoor field trials ~~use~~ of GMOs do~~es~~ not result in migration of GMOs beyond the area designated by:

23. This would require the following changes to the GMO strike-through text rules so that the Unitary Plan could address bond requirements as a matter for control:

4.19 Genetically modified organisms

Introduction

The resource consent status indicates the levels of risk considered acceptable by the community for that particular GMO activity and class.

Veterinary vaccines are exempt from the need to obtain resource consent or comply with the performance standards applicable to discretionary activities. This is because they tend not to persist in the environment, appear to be low risk and are difficult to monitor, making control by the District / Unitary Plan less appropriate.

A relevant EPA approval is required as a precondition for all applications for resource consent. The duration of any consent granted will be aligned with EPA approval terms.

1. Activity table

GMOs on land and within the CMA

[rcp/dp]

1. The following table specifies the activity status of activities for GMOs on land and within the CMA. A site may contain more than one of the listed activities.

Activity	Activity status
GMO activities not specifically provided for or prohibited, including research within contained laboratories and medical applications involving use of non-viable GM products.	P
Veterinary Vaccines	P
GMO Field Trials on land and within the CMA and any structure intended to house or otherwise contain plants and animals which are associated with the conducting of GMO field trials.	~~D~~ C
GMO Releases – Food-Related on land and within the CMA and any structure intended to house or otherwise contain plants and animals which are associated with outdoor GMO releases.	~~Pr~~ C
GMO Releases – Non Food-Related on land and within the CMA and any structure intended to house or otherwise contain plants and animals which are associated with outdoor GMO releases.	~~Pr~~ C

2. Land use controls

1. ~~Discretionary a~~Activities are to comply with the following controls in order to establish in the region. The ~~general development and performance standards~~ bond requirements may be ~~are~~ in addition to any controls/conditions imposed by the EPA.

2.1 Approvals

1. All GMO ~~discretionary~~ controlled activities shall:
   a. Have the relevant approval from the EPA.
   b. Be undertaken in accordance with EPA approval conditions for the activity.

2.2 Matters for Control - Bond requirements

1. Council requires the applicant for the resource consent to provide a performance bond (akin to a bank guarantee) in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity), and

that this be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent.

2. The exact time and manner of implementing and discharging the bond shall be decided by, and be executed to the satisfaction of Council.

3. ~~Method for determining the amount and type of bond required –~~ Matters that will be considered when determining the amount and type of the bond are:
   a. What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.
   b. The degree to which the ~~operator~~ consent applicant for ~~of~~ the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.
   c. The level of risk associated with any unexpected adverse effects from the activity.
   d. The likely scale of costs associated with remediating any adverse effects that may occur.
   e. The timescale over which effects are likely to occur or arise.
   f. The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

~~3. Monitoring~~

~~1. A GMO discretionary activity may require monitoring during, and beyond the duration of consent.~~
~~Monitoring is to be carried out by either the Council or consent holder with appropriate reporting procedures to the relevant regulatory authority.~~

~~2. A monitoring strategy for a GMO discretionary activity can include the following matters:~~
   ~~a. Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).~~
   ~~b. Testing of procedures (e.g. accidental release response).~~
   ~~c. Training programmes for new staff, updates for existing staff.~~
   ~~d. Audits of sites and site management systems.~~
   ~~e. Sample testing of plants, soils and water in neighbouring properties or localities for the presence of migrated GMOs.~~

4. Reporting

1. Reporting requirements by the consent holder will be stipulated in the consent conditions.

5. Special information requirements

1. Applications for GMO field trials are to provide:
   a. Evidence of approval from the EPA for the specific GMO for which consent is sought.
   b. Details of proposed containment measures for the commencement, duration and completion of the proposed activity.
   c. Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.
   d. Research on adverse effects to the environment and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.

e. Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.

f. A management plan outlining on-going research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.

g. Details of areas in which the activity is to be confined.

h. Description of contingency and risk management plans and measures.