

**BEFORE THE HEARING COMMISSIONERS
WAIKATO DISTRICT COUNCIL**

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions in relation to the
Proposed Waikato District Plan (Stage 1)

BY Federated Farmers of New Zealand Incorporated
(Waikato Province)

Further Submitter ID: FS1342

TO Waikato District Council

**STATEMENT OF EVIDENCE OF GAVIN KEITH FORREST ON
BEHALF OF FEDERATED FARMERS OF NEW ZEALAND
INC ON HEARING TOPIC 8B – GENETICALLY MODIFIED
ORGANISMS**

18 December 2019



**FEDERATED
FARMERS
OF NEW ZEALAND**

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INTRODUCTION

1. My name is Gavin Keith Forrest. I am the Federated Farmers of New Zealand (“**Federated Farmers**”) General Manager of Policy and Advocacy. I am authorised to present the views of Federated Farmers on Genetically Modified Organisms and Hearing Topic 8B.
2. I have a Bachelor of Agricultural Science degree from Massey University (Palmerston North) and come from a strong farming background, having farmed and overseen the management of a hill country sheep and beef property for nearly 40 years. I have represented the needs and interests of farming members on behalf of Federated Farmers across the nation for over 20 years in various staff and elected positions.
3. I have 10 years’ policy and legislative development experience in the Ministry and Agriculture and Forestry (“**MAF**”) and the Ministry for Primary Industries (“**MPI**”) and in Offices of the Ministers of the Crown responsible for these departments.
4. During my 16 years working for Federated Farmers I have gained significant experience in the implementation of the Resource Management Act (“**Act**”), including an understanding of the impact it has on farmers, communities and primary production.
5. I wish note at the outset, the significant contributions primary production makes to the economic, social, and cultural well-being of the wider Waikato Region.
6. Federated Farmers has taken a keen interest in the proposed Waikato District Plan (“**PWDP**”). Our staff, executive team and farmer members have been involved throughout the process. Federated Farmers’ submissions and further submissions set out our members’ views and their experiences with the management of the resources in the Waikato district. The PWDP will have a significant impact on our members’ lives as farmers, members of the local community, and as resource users.

7. This Statement of Evidence addresses the further submissions made by Federated Farmers on submissions assigned to Hearing Topic 8B Genetically Modified Organisms.
8. Federated Farmers made further submissions (FS1342) opposing all submissions asking for a new planning framework including objectives, polices and rules relating to Genetically Modified Organisms (“GMOs”) to be introduced into the PWDP.
9. I have read the s42A report on submissions and further submissions for Hearing 8B, prepared by Neil Taylor, dated 2 December 2019. Federated Farmers agrees with Mr Taylor’s assessment and recommendations to reject submissions and accept the further submissions opposing the introduction of GMO controls into the PWDP (paras 164 and 177).
10. The s42A hearing report acknowledges the hearing panel may not have jurisdiction to grant the relief sought by those submitters who seek a new management regime for GMOs (para 9). However, it proceeds on the basis that should the hearing panel determine that there the submissions are within the scope of the PWDP, the submissions will need to be assessed on their merits.
11. Federated Farmers agrees with Mr Taylor’s conclusion at para 161 that, if there is scope, submitters need to provide sufficient evidence to justify their claims that current controls and approval pathways are not sufficient to adequately safeguard the local environment and communities.
12. Federated Farmers understands the issue is whether this is a plan change or a full plan review, with a submission on GMOs being outside the scope of a plan change unless specifically referred to in the plan change. We note that the Hearing Panel is yet to make a decision on whether there is scope to add GMO controls into the PWDP. Federated Farmers considers that whether there is scope is a planning and legal question and I am not qualified to make a comment on either.

13. As stated in the Tompkins Wake legal opinion on Hearing Topic 8B dated 11 November 2019 (para 84), even if the Commissioners have jurisdiction to consider the submissions, it does not follow that the GMO Submissions should be accepted, they must be considered on their merits.
14. Federated Farmers has proceeded on the basis that if the Hearing Panel determines that there is scope the submissions will need to be assessed on their merits. The focus of my evidence is on establishing that the concerns raised by the submitters are either more appropriately addressed within current application and approval pathways or are better able to be addressed if, or when, potential or perceived risk becomes more tangible. In our view the costs of the proposed new planning approach significantly outweigh the benefits.
15. The key issue at stake is whether there should be provisions in the PWDP controlling GMOs in the Waikato, and whether the provisions would meet the s32 (or s32AA) test.

SCOPE OF EVIDENCE

16. This evidence responds to the section 42A report conclusions outlined in section 13.1 and covers the following topics:
 - (a) Federated Farmers' views on gene technology/ genetically modified organisations;
 - (b) the role of the EPA and HSNO in adequately safeguarding the local environment and community;
 - (c) options available to Council, should there be a real risk of harm identified;

FEDERATED FARMERS PERSPECTIVE ON GE/GMO

17. Federated Farmers has a longstanding national policy on gene technology that was initially adopted at our National Conference in July 1998. The process for developing this policy involved seeking the views of our farmer members around New Zealand. (Policy attached as Appendix 1)

18. As outlined in our policy position, genetic modification is not new.

Benefits or positive effects

19. Humans have been practising genetic modification (intervening in nature's process) for centuries – achieving significant improvements in the characteristics of plants and animals for the economic and social benefit of humanity.
20. Genetic technologies (modification using *in vitro* techniques) have taken genetic modification into a new era providing significant opportunities to accelerate and improve upon the gains made using traditional breeding techniques.
21. The [2001 Royal Commission on Genetic Modification](#)¹ stated “Our major conclusion is that New Zealand should keep its options open. It would be unwise to turn our back on the potential advantages on offer, but we should proceed carefully, minimising and managing risks”. Federated Farmers concurs with these conclusions.
22. Keeping the door open on the potential advantages of genetic modifications is increasingly important as we face the potential perils of a climate change on primary producers' ability to produce enough food for a growing world population.
23. In Federated Farmers' view it is important that those that are totally opposed to GE and GMOs do not deny New Zealand the potential opportunities and benefits provided by these technologies. That does not mean we should ignore any legitimate and credible concerns they may have and, like all science, we should continually test our hypotheses.
24. Significant progress has been made with genetic modification technologies since 2001. Federated Farmers' perception is that much of the fear around GMOs was with respect to **transgenics**; that involves the transfer of genetic material from one species into different host species. We have now have **cisgenics**; moving genetic material within the same species (or a species that can naturally breed with it) and

¹ Page 2(Executive Summary)

<http://www.mfe.govt.nz/sites/default/files/media/Hazards/Royal%20Commission%20on%20GM%20in%20NZ-Final.pdf>

gene editing; a relatively new technique, used to change the DNA code down to the level of individual letters in precise locations, without inserting any foreign DNA.

25. People, other than just scientists, are beginning to grasp the relatively new concepts and opportunities of gene editing and the use of CRISPR technologies and gene drive - applications that have the potential to exterminate insects that carry pathogens (notably mosquitoes that transmit malaria, dengue, and zika pathogens); control invasive species or eliminate herbicide or pesticide resistance. In the New Zealand context this includes the potential to eradicate possums from New Zealand, permanently solve the wilding pine problem in a distinct location and possibly find a solution to Kauri dieback disease.
26. The term "GE Free" merits further investigation. A "GE free New Zealand" or "GE Free Region or District" in the purest sense is not possible and has not been possible for some time. It is also strongly arguable that it is not a desirable aim.
27. As outlined in the opening statement of the Executive Summary of Royal Commission's Report "Genetic modification has been used freely in New Zealand for more than a decade as a research tool, for medical purposes, and in food ingredients".
28. Genetic modification in human and veterinary medicine is seeing the accelerating use and release into the environment of GMOs, even in New Zealand.
29. Nevertheless, the views and aspirations of those that seek to produce and market their products as "GE free", a number of whom are Federated Farmers' members, should be respected.
30. Having noted that, the presence of a GE organism in a region (say GE conifers) does not prevent an apple grower from producing and marketing their apples as GE free.

31. Furthermore, GE and non-GE crops can co-exist². This is achieved through similar mechanisms to those used to produce certified organic produce and to grow certified seed.
32. Therefore, the term 'GE-free' is somewhat symbolic and is not practically achievable as an actual policy unless it is confined to a particular product.
33. Where concerns around co-existence of GM and non GM in a commercial sense are expressed by those opposed to genetic modification these will be tested by the Environmental Protection Authority ("EPA") before any decision is made on release and control conditions.
34. The key outcomes Federated Farmers seeks, based on our position on genetic modification and other policies, is that:
 - a) Farmers will have the choice to use those technologies and farming systems that have been approved as safe, be they organic, traditional or through the use of biotechnology (genetic modification including gene editing).
 - b) These farming systems can work together in a tolerant community (co-existence).
 - c) Farmers can take the best techniques from each and any of these systems as the techniques are not mutually exclusive and they each have something to offer.
 - d) Regulation is efficient, effective, enabling and fit for purpose.
 - e) At the appropriate regulatory point, the use of genetic modification should be assessed on a case by case basis however this would not apply to aspects of the technology which are in the future deregulated.

Costs

35. It is the view of Federated Farmers that the decision sought by the submitters (submitters listed in Council's "Appendix 1: Table of submission points") will not achieve these outcomes.

² USDA FACT SHEETS <https://www.usda.gov/topics/farming/coexistence/coexistence-factsheets>

36. It is Federated Farmers' view that the proposed rules will unnecessarily hinder farmers' abilities to use the tools of modern science. Of even more concern, it will raise costs and barriers that will stifle innovation.
37. We are concerned that, if the proposed approach by submitters is adopted, landowners and land managers in the Waikato district could be denied opportunities to one day better manage or even eradicate pests such as possums, rats, wasps, wilding pines and potentially also Kauri dieback disease. It could also hinder opportunities to reduce the environmental footprint of agriculture such as through reduction of greenhouse gas emissions, reduced nitrogen leaching and lower water demand.
38. Federated Farmers' further submission in opposition to the proposed GMO provisions can be summarised into three key points:
 - (a) The risk related issues raised in the submissions are already considered (using a precautionary approach) by the EPA. After that, any residual issues can be managed using existing powers under the RMA or by engaging with the Regional Council to amend provisions in the Biosecurity Act (Pest Management Strategies) when they are known.
 - (b) Another level of regulation (as is proposed by the submitters) will undermine Waikato's position as a leader in agricultural science, will erode scientific capability, reduce economic opportunities and will limit access to new technologies to address climate change, predator control, water quality and competitiveness.
 - (c) Regardless of scope, there is no justification (in terms of s32 of the RMA) for including the provisions sought by the submitters.

Risk management

39. The EPA must undertake a risk assessment, consult publicly and consider issues such as scientific uncertainty, irreversibility and information gaps. The EPA is obliged to exercise caution – to take a precautionary approach. It is worth understanding that if a GMO is released in New Zealand, it will have been subject to greater scientific and public scrutiny as a new organism than new non-GM organisms.

Section 32

40. Federated Farmers is concerned a number of submissions are essentially seeking to 'cut and paste' provisions from other regions into the PWDP without any analysis as to how these may fit within the Waikato context. In preparing the s42A Report, Auckland Unitary Plan GMO provisions were identified as worth closer consideration given the proximity to Waikato (para 92). In conducting a 'light' section 32 evaluation as to how the Auckland Unitary Plan provisions may work within the Waikato context (section 9.5, s42A report) Mr Taylor forms an opinion that the submissions asking for a complete Auckland text should be rejected (para139).
41. Federated Farmers extends support to that recommendation and consider that the findings would have strong application to the Far North and Whangarei provisions also, given the similarities between the approaches. Federated Farmers understands that further and more robust analysis should be undertaken if the Hearing panel reaches a different conclusion.
42. An additional cost concern for Federated Farmers relates to what the introduction of the proposed provisions may mean in respect of Council's monitoring, compliance and enforcement obligations. This is covered in more detail later in the statement.

Maori Perspectives

43. Federated Farmers acknowledges that Maori perspectives and cultural issues are relevant considerations when considering GMOs. In opposing the submissions, Federated Farmers was not dismissing submitters' cultural concerns, but rather we considered that those concerns were able to be addressed within existing legislated frameworks without the need to duplicate that in the PWDP.
44. As summarised in section 7.1 of the s42A report, submitters raise concerns that contamination from GMOs could have significant adverse effects on cultural wellbeing by harming cultural values. Engagement in the GMO application process, consideration of cultural and spiritual

beliefs by relevant authorities, and a strong risk management framework (including the adoption of a precautionary approach) are identified within the extracts of the Waikato-Tainui Environment Plan and Maniapoto Environment Plan (“**the Environment Plans**”) appendixes to the s42A report, as ways to address these concerns.

45. It is acknowledged these are relevant and important concerns. The question is the extent to which they can be satisfactorily addressed as part of the EPA process. The Environment Plans outline the expectations by iwi of the relevant authorities and agencies. There is nothing to suggest these expectations should be interpreted as only applying to, or only being able to be met by, territorial authorities. The EPA is legislatively mandated to control GMOs, and its role includes having regard to such matters as effects on the natural environment and on issues of concern to tangata whenua.
46. There are also obligations on decision makers to consider Māori perspectives in their decision-making under the HSNO Act, the Biosecurity Act and if it is required to be used, the RMA.
47. The EPA achieves this in two ways. The first is to encourage applicants to engage with Māori, early and on an on-going basis, in order to develop a robust impact assessment regarding their application. The second is within the decision-making framework itself. Attached as Appendix B is the framework that guides the EPA in the undertaking of its statutory and other obligations to Māori (He Whetu Mārama).
48. Decision making is guided by four key principles of Partnership, Protection, Participation, and Potential. Stated outcomes include **informed decision making**, where by the EPA policy process and decision making is fully and effectively informed by Māori perspectives and **productive relationships** whereby the EPA maintains relationships that ensure Māori are productively involved in its decision making and associated activities.
49. Federated Farmers considers that the application of these principles, together with the precautionary approach, achieve the objectives, policies and actions or methods contained in both of the Environmental

Plans. Accordingly, in our view, cultural concerns are being taken into account by the EPA during the application and decision-making processes.

Waikato-Tainui Environment Plan (s42A - Appendix 2)	Maniapoto Environmental Plan (s42A – Appendix 3)	Environmental Protection Agency
Objective 15.3.5 - A precautionary approach to the introduction of new organisms and GMOs shall be adopted	Objective 25.3.4 - To adopt a precautionary approach to the introduction and use of new organisms and GMOs in recognition of Maniapoto tikanga and kawa	HSNO Act, Section 7 - Precautionary approach <i>All persons exercising functions, powers, and duties under this Act including, but not limited to, functions, powers, and duties under sections 28A, 29, 32, 38, 45, and 48, shall take into account the need for caution in managing adverse effects where there is scientific and technical uncertainty about those effects</i>
Policy 15.3.5.1 - Applications for new organisms and GMOs must demonstrate that there are no risks to humans, indigenous ecosystems, indigenous species, or primary production.	Policy 25.3.4.1 - Applications for new organisms and GMOs must demonstrate that there are no unacceptable risks to humans, indigenous ecosystems, indigenous species or primary production	HSNO Act section 4 - Purpose of Act <i>The purpose of this Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.</i>
Method (a) Applicants will engage with Waikato-Tainui prior to the submission of applications to the Environmental Protection Authority and/or other regulatory agency.	Action (a) Ensure resource users, resource managers, applicants and decision makers give effect to Maniapoto values and interests in any proposal to develop new or genetically modified organisms Action (b) Require relevant agencies engage and consult with Maniapoto to ensure that Maniapoto values and interests are explicitly considered in decision-making criteria	1. EPA application guidance material 2. He Whetu Marama
Method (b) The relevant authorities will work with Waikato-Tainui to ensure that all cultural and spiritual beliefs are appropriately recognised, respected and thoroughly considered.	Action (e) Increase Maniapoto participation in decision-making on applications to introduce or develop a new and/or genetically modified organism	He Whetu Marama
Method (c) All efforts must be made by the relevant authorities to ensure that the effects of current and future introduced pests, new organisms, and Genetically Modified Organisms are minimised on taonga species, areas of significant indigenous vegetation, spiritual and/or cultural significance, and on the ecosystems in which these species and areas of significance occur.	Action (d) New organisms and GMOs demonstrate no unanticipated effect, and no effect on non-target species, or a minimal effect that may be acceptable to Maniapoto, before new organisms and GMOs are introduced into the Maniapoto rohe. Action (c) Require relevant agencies to demonstrate that the effects of new organisms, and GMOs, are negligible or minimised on taonga species, areas of significant indigenous vegetation, and on the ecosystems in which these species and areas of significance occur	1. HSNO Act, section 5 Principles relevant to the purpose of the Act and section 6 Matters relevant to the purpose of the Act 2. He Whetu Marama

Table 1: How the Environmental Protection Agency can meet iwi expectations and requirements as prescribed in respective Environment Plans

Justification considerations

50. Federated Farmers considers that there is insufficient justification to introduce provisions for GMOs in the PWDP for the following reasons:
- a) The requested planning response is a significant departure from the notified PWDP, which did not identify GMOs as a resource management issue and did not include any provisions.
 - b) The Waikato Regional Policy Statement does not identify GMOs as a resource management issue and does not include any policy direction or implementation methods to guide WDC in this matter.
 - c) There are no current, imminent or future risks that need to be managed with respect to the introduction of GMOs in the district or the region as a whole – certainly none that require immediate decisions.
51. In our view, the Council does not need to make an evaluation as to whether rules are required until it has identified risks which it considers have not been addressed by the EPA. This will depend on the nature of the organism and the genetic changes which have been made and should be assessed on a case by case basis. Only then should the appropriate assessment be made as to whether rules are required under the Biosecurity Act or the Resource Management Act.
52. The GMO topic has been introduced via the submission process. Support is extended to the analysis in the s42A report at para 143, which states that given submissions call for prohibited activity rules (which would not allow the release of GMOs even where they have EPA approval), a higher level of public engagement might be appropriate than may otherwise be accepted for lesser changes to the plan.

Implementation considerations

53. The s42A report, under Section 11, raises important issues with regards to implementation should GMO provisions be included into the district plan. Federated Farmers agrees with the issues raised. The lack of in-house capacity and capability with regards to consenting, monitoring and enforcement processes does not support having another layer of

regulation at the local level. Councils lack the specialist scientific capabilities of the national regulator; this would make assessment and regulation of GMOs difficult, without buying in expert advice. Council does not have a mandate from its ratepaying community to take on this considerable extra cost and responsibility.

54. Federated Farmers strongly opposes the fundamental premise of the submitters that “strong precautionary and prohibitive” GM specific provisions are warranted at this time. It may well be that once the EPA has considered the use of a GE organism in the environment and put in place conditions and controls (including the imposition of bonds) that there are no further matters of concern that need to be considered.
55. It is Federated Farmers submission that an immediate response is unnecessary and using current powers under the Resource Management and Biosecurity Acts provide a more efficient option for the council or Regional Council, if required, to manage any residual (and unlikely) adverse effects, while preserving opportunity for the use of GMOs which may benefit the district economically, socially and/or environmentally.
56. Council retains the power to introduce a Plan Change to manage the identified risk or any scientific uncertainty which may remain, though we consider this need very unlikely. We note that the provisions of a proposed plan change take immediate effect until such time as the plan change is withdrawn or incorporated into the operative plan
57. Implementing policies and rules in a blanket fashion as requested by the submitters would:
 - (a) Undermine the Waikato region’s leadership in agricultural science and innovation.
 - (b) Limit the opportunity to use new genetic technologies such as gene editing to:
 - i. address climate change, water quality and predator control;
 - ii. improve productivity;
 - iii. innovate to create new products, enhance the attributes and health outcomes of food; as well as remediate the environment, manage our biosecurity risks and incursions.

58. Federated Farmers does not consider genetic modification to be the only answer to all of these issues but we will need all of the tools in the toolbox if we are to make meaningful and timely progress.

Decisions sought

59. Federated Farmers seeks the following decisions from the Hearing Panel:

Reject the insertion of any provisions for genetically modified organisms (GMOs) into the Proposed District Plan for Waikato.

This is on the basis that no real risk of harm has been established, existing approval pathways adopt strong consultation processes, take a precautionary approach and incorporate Maori perspectives into their decision making, concern remains that implementation and opportunity costs would far outweigh any benefits of including provisions at this time.

Gavin Forrest, 18 December 2019

FEDERATED FARMERS POLICY POSITION ON GENETIC MODIFICATION



Our general policy on gene technology was initially adopted at our National Conference in July 1998 and is detailed below. The process for developing this policy involved seeking the views of farmers around New Zealand.

- Humans have been practising genetic modification for centuries. We have sought to improve the characteristics and yields of plants and animals by selection and breeding. Modern advances in gene technology have taken this further by providing new ways of improving plants and animals. Many of these results could be achieved by traditional breeding methods, but gene technology is a faster and more specific method of achieving a desired modification. Gene technology has the potential to benefit New Zealand producers, providing appropriate controls exist to ensure the safety of human health and the environment.
- Federated Farmers supports the principle and application of gene technology within agriculture, providing appropriate controls exist. Gene technology involves altering the genetic material of organisms to introduce desirable characteristics.
- Federated Farmers recognises that this technology can provide benefits to New Zealand producers. These benefits include the potential for: higher yields, precisely determined product attributes, higher quality and safer food, more sustainable environmental management practices, improved input efficiencies, better understanding of plant and animal functions, improved animal disease and plant pest management tools.
- Federated Farmers endorses individual farmer's rights to determine what technologies are used in their production system subject to appropriate regulatory oversight.
- Federated Farmers recognises and supports the regulatory frameworks established to scientifically assess and manage any risks to the health and safety of people and the environment from the application of gene technology. Specifically Federated Farmers supports the assessment of applications on a case by case basis.
- Federated Farmers recognises the consumer's right to acquire information relating to the products they are purchasing. Federated Farmers encourages active risk communication by regulatory bodies and the supply of information by marketers to ensure consumer confidence.
- Federated Farmers recognises that gene technology involves significant issues of intellectual property. Federated Farmers is concerned that New Zealand has access to the benefits of this intellectual property.
- Federated Farmers will comment on any individual case of gene technology when considered appropriate.

He Whetū Mārama

He Whetū Mārama is a framework that guides the Environmental Protection Authority in the undertaking of its statutory and other obligations to Māori.

Wawata

The unique relationship of Māori to the environment informs EPA decision making.

Mātāpono

He Whetū Mārama is guided by four key Treaty of Waitangi principles.

The principle of **PARTNERSHIP** requires that the EPA acts reasonably, honourably, and in good faith to ensure the making of informed decisions on matters affecting the interests of Māori.

The principle of active **PROTECTION** requires the EPA to take positive steps to ensure that Māori interests, knowledge, and experience are valued in its decision making and activities.

The principle of **PARTICIPATION** informs the development of EPA strategy, policy, and process that enables the effective engagement and input of Māori.

The principle of **POTENTIAL** recognises that EPA decision making and activities have impacts on the direction for future growth and development in a Māori cultural and economic setting.

Tukunga Iho

INFORMED DECISION MAKING

EPA policy, process, and decision making is fully and effectively informed by Māori perspectives.

- Cultural and Treaty assessment of applications and proposals.
- Ngā Kaihautū advice and assessment of the decision-making process generally and for specific applications or proposals.
- Decision-maker and staff training and guidance to support the effective input of Māori perspectives.
- Operational policy, process, and guidelines that provide for the effective involvement of Māori.

PRODUCTIVE RELATIONSHIPS

The EPA maintains relationships that ensure Māori are productively involved in its decision making and associated activities.

- Applicant and industry relationship management and engagement facilitation.
- Iwi partnership management.
- Te Herenga maintenance and management.
- Applicant training and guidance.
- Māori training and guidance.