

BEFORE THE WHANGAREI AND FAR NORTH DISTRICT COUNCILS JOINT HEARINGS PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Plan Change 131 and Plan Change 18 -
Genetically Modified Organisms

AND

IN THE MATTER of the submissions and further submissions on
the above two plan changes

**STATEMENT OF PRIMARY EVIDENCE BY DR KERRY JAMES GRUNDY ON BEHALF OF
WHANGAREI AND FAR NORTH DISTRICT COUNCILS**

5 MAY 2016

CONTENTS

1. INTRODUCTION.....	3
2. CODE OF CONDUCT.....	3
3. SCOPE OF EVIDENCE.....	3
4. COMMUNITY CONCERNS.....	4
5. INTER-COUNCIL WORKING PARTY.....	5
6. DRAFT SECTION 32 REPORT.....	8
7. DRAFT DISTRICT/UNITARY PLAN PROVISIONS.....	10
8. LEGAL OPINIONS.....	13
9. SUBSEQUENT DECISIONS OF MEMBER COUNCILS.....	15
10. OTHER LOCAL GOVERNMENT INITIATIVES.....	16
11. CONCLUSIONS.....	17

Introduction

1. My name is Kerry James Grundy.
2. I am a qualified planner with 25 years experience. I have a Bachelor of Science, Post Graduate Diploma in Science, Master of Resource and Regional Planning, and a Doctor of Philosophy in Resource Management and Environmental Planning (all from the University of Otago).
3. I am a full member of the New Zealand Planning Institute and have on two occasions been awarded the Institute's Award of Merit in recognition of a meritorious contribution to the theory and practice of planning. The first in 1993 for the publication *Sustainable Development: A New Zealand Perspective* and again in 2003 for the Whangarei District Council Environmental Monitoring Strategy.
4. I work at Whangarei District Council as Team Leader for Futures (strategic) Planning and have worked there for the past 15 years. Prior to that I worked at the University of Otago for a period of 10 years whilst undertaking research on my post graduate degrees. During this time I researched and published extensively on the Resource Management Act, sustainable development/management, and other resource management and environmental planning issues.
5. I presently act as Convener of the Inter-council Working Party on GMO Risk Evaluation and Management Options (the Inter-council Working Party or Working Party) and have done so since its inception in 2003. The Working Party comprises Far North District Council (FNDC), Kaipara District Council (KDC), Whangarei District Council (WDC), Auckland Council (AC) and Northland Regional Council (NRC). Prior to amalgamation of former Auckland councils, Waitakere City Council, Rodney District Council and Auckland Regional Council were full members of the Working Party. Auckland City Council and North Shore City Council were observers on the Working Party.

Code of Conduct

6. I confirm that I have read the Code of Conduct for Expert Witness contained in the Environment Court Practice Note and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

Scope of Evidence

7. I have been asked by WDC and FNDC to provide background to the proposed GMO plan changes (PC131 and PC18) and an overview of the research from the Inter-council Working Party upon which both plan changes are based. I present evidence in my capacity as Convener of the Working Party.
8. My evidence largely relates to the undertakings of the Inter-council Working Party, along with actions of member councils in implementing recommendations from the Working Party, to manage risks from the outdoor use of GMOs. I will also refer to actions of other local authorities in New Zealand where I consider these have relevance to the proposed GMO provisions in the PAUP. The factual basis of my evidence rests upon the research and resulting documentation that the Working Party has produced. I will reference material to specific documents where necessary. Opinions, when expressed, are based on my professional expertise and not on personal opinion.
9. My evidence will illustrate that the Inter-council Working Party and its member councils have been subject to on-going community concerns over the risks from GMOs in the environment for a period of almost 15 years. In response to these concerns the Working Party and member councils have investigated the risks along with options to manage those risks for a period of more than 12 years. These investigations, in my opinion, have been comprehensive and rigorous. They have certainly been one of the most comprehensive and rigorous of any investigations into a planning issue that I have been involved with in my professional career.

10. My evidence will be structured as follows. I will first outline the community concerns over outdoor use of GMOs and how councils responded to those concerns by forming an Inter-council Working Party on GMO Risk Evaluation and Management Options. I will then give an outline of the research and documentation the Working Party produced as part of its investigations into risks and management options. This will be followed by a description of the section 32 analysis and proposed resource management plan provisions developed by the Working Party to manage the risks from GMOs in the environment, along with legal advice obtained to ensure the section 32 analysis and proposed plan provisions meet legislative requirements. I will then outline subsequent actions of member councils on the Working Party to implement those provisions through their RMA planning documents. Finally, I will briefly outline other local government initiatives concerning the regulation of outdoor use of GMOs that I consider relevant to these hearings and offer some brief concluding comments.

Community Concerns

11. There have been widespread and on-going concerns from the Northland/Auckland community regarding the potential release of GMOs to the environment over the past 14 years. This has been evidenced by numerous submissions on annual plans, Long Term Plans (LTP), district plans, a 7,000 plus signature petition to WDC, together with the results of the 2009 Colmar Brunton poll commissioned by councils on the Working Party and carried out across the whole of the Northland and Auckland regions.
12. The results of this poll showed significant dissatisfaction with the existing regulatory regime for GMOs and significant dissatisfaction with existing liability provisions under the Hazardous Substances and New Organisms Act (HSNO). The poll results showed strong support for local government to have a role in regulating use of GMOs and strong support for introducing a strict liability regime for users of GMOs, amongst other things. The aggregated regional results are included in Volume 2: Supporting Documents to the Draft Section 32 Report appended to the Joint Hearing Report as Appendix A. The main points arising from the survey are as follows:
- (a) Two thirds or more of the residents polled want local or regional councils to have a role in regulating GMOs in their areas, either by setting local rules or by a change of legislation at the national level. Support in the Auckland region averaged 68% and 74% in Northland.
 - (b) Around two thirds of the respondents also favoured regulation of at least a strength that would make users of these GMOs legally responsible for any environmental or economic harm - either through local regulation or by changes to national legislation (Auckland 64%, Northland 67%).
 - (c) The survey indicated that around half the residents (Auckland 44% and Northland 53%) want councils to have the right to prohibit GM plants and animals, either by setting local rules or allowing communities, through their councils, the right to reject use of a particular GMO in its area when the national regulator, the EPA, is processing applications.
 - (d) When questioned whether councils should set rules in addition to those set by the EPA, 40% of Auckland respondents supported this mechanism and 46% of Northland respondents were in support. Of those not supporting council setting rules, 28% in both Auckland and Northland favoured change to national regulation.
 - (e) Amongst those respondents who support their council setting rules, total prohibition is the most favoured level of regulation, with strict liability provisions the next most favoured, and prohibiting only GMOs for food production the third favoured.

- (f) All communities strongly favour making users of GMOs legally responsible for any economic or environmental harm that may result. Support for regulation to make users of GMOs strictly liable for any harm caused ranged from 63% to 72% for individual councils.
 - (g) Support for local regulation is strongest amongst Maori, particularly in the Northland region. It is also strongest amongst semi-rural and rural residents while urban views vary by region.
 - (h) The poll also found that there is clear support from the Auckland and Northland communities for only producing food that is GM free but strong support for leaving options open for GM plants and animals in the future.
13. As a consequence of on-going community concerns as outlined above, all councils in Northland and most in the Auckland region (prior to amalgamation) included policy statements in their LTPs mostly advocating a precautionary approach to the use of GMOs in the environment. Submissions to councils and precautionary statements in member councils' LTPs are outlined in *Community Management of GMOs II: Issues and Response Options 2005*, pages 1-3 which is included in Volume 2: Supporting Documentation to the Draft Section 32 Report appended to the Hearing Report as Appendix A.
 14. Consistent and strong opposition to the release of GMOs to the environment has been expressed by tangata whenua (as indicated in the Colmar Brunton poll) and included in almost all existing iwi and hapu management plans in Northland. Around ten iwi and/or hapu management plans from Northland identify GMOs in the environment as a significant issue. In addition, at a hui of Tai Tokerau iwi hosted by Te Runanga A Iwi O Ngapuhi in November 2012, representatives from iwi throughout Northland demanded robust local control of GMOs in the environment and a strong precautionary approach to releasing GMOs into the environment. Maori perspectives are outlined in the Draft Section 32 Report, 2013, pages 12-16, appended to the Hearing Report as Appendix A. Iwi and hapu in Auckland have expressed similar concerns in iwi/ hapu management plans and in submissions to the recent hearings on GMO provisions in the Proposed Auckland Unitary Plan.

Inter-Council Working Party on GMO Risk Evaluation and Management Options

15. Local authorities in the Northland/Auckland region responded to community concerns by forming an Inter-council Working Party on GMO Risk Evaluation and Management Options in 2003. As the name suggests, the Working Party is charged with evaluating risks to local bodies and their communities in the Northland/Auckland region from outdoor uses of GMOs together with response options to those risks, including regulation of GMO land uses under the Resource Management Act (RMA). The Working Party is only concerned with outdoor uses of GMOs, including field trials and releases to the environment. It is not concerned with GMOs in contained research facilities, in hospitals, or medicine produced in laboratories or hospitals.
16. As part of its investigations the Working Party commissioned a series of reports to investigate the nature and extent of risks local authorities and communities could expect to face from outdoor activities involving GMOs and the response options available to address those risks. These reports are included in Volume 2: Supporting Documentation to the Draft Section 32 Report, appended to the Hearing Report as Appendix A.
17. The first report (*Community Management of GMOs: Issues, Options and Partnership with Government, 2004*) examined the issue of whether local government had jurisdiction under the RMA to regulate GMOs. Based upon a legal opinion from Dr Royden Somerville QC, the report found that local authorities do have jurisdiction to manage land uses involving GMOs in the environment under the RMA in addition to regulation prescribed nationally under HSNO if such regulation meets the requirements of the RMA including a section 32 evaluation. This position was subsequently confirmed by Crown Law and Ministers for the Environment. It has also been tested recently in the Environment

Court and the decision from the Court (*Federated Farmers of New Zealand v Northland Regional Council* 2015 NZEnvC 89) confirmed earlier advice that there is jurisdiction for regional authorities to manage outdoor use of GMOs in planning documents under the RMA. Federated Farmers appealed this decision on points of law. A hearing in the High Court has been held and a decision is pending.

18. The report identified amendment of the HSNO Act as a preferred option for local government to address community concerns. (*Community Management of GMOs: Issues, Options, and Partnership with Government, 2004*, pages 33 to 38). Subsequently, the Working Party sent letters to the Labour led Government in December 2006 and to the National led Government in June 2010 and requested amendments to HSNO (amongst other things) to allow concerns of local communities and policy positions of local and regional authorities to be influential in national decision making under ERMA (now EPA).
19. The Working Party received responses from the then Labour Minister for the Environment, Hon David Benson-Pope, in March 2007 and the then National Minister for the Environment, Hon Dr Nick Smith, in August 2010. Both Ministers declined to amend HSNO but both stated that local authorities could regulate GMOs under the RMA provided that such regulation meets the requirements of the RMA. For example, Hon Benson-Pope stated on page 3 of his letter:

It is already possible for local authorities to use mechanisms under the Resource Management Act (RMA) 1991 to address land use relating to GMOs. However, such restrictions must meet the purposes of that Act and must be imposed consistent with the Act's requirements, notably the necessity test under section 32.

Likewise, Hon Dr Smith stated on page 1 of his letter:

The Government's position is that GMOs are most appropriately controlled by the Hazardous Substances and New Organisms Act 1996 (HSNO Act).... However, this does not preclude a council from restricting or preventing the use of GMOs in their region, provided that this action meets the relevant requirements of the Resource Management Act 1991 (RMA).

Letters from the Working Party to both Governments, and their responses, are included in Volume 2: Supporting Documentation to the Draft Section 32 Report, appended to the Hearing Report as Appendix A.

20. Failing amendment to the national legislation the report argued that provisions in planning documents formulated under the RMA would be the most appropriate mechanism to regulate activities involving GMOs in the environment at a local or regional level. There are a range of approaches to regulating such land uses, including total prohibition, selective prohibition, spatial management areas, or case specific regulation through scrutiny of discretionary or non-complying activities.
21. The second report (*Community Management of GMOs II: Risks and Response Options, 2005*) examined in greater depth the risks to local government and their communities in Northland and Auckland posed by GMO releases to the environment and GMO field trials. A series of risks to councils and their constituents were identified and can be classed under three general headings.

Environmental risks include:

- Adverse effects on non-target species, including indigenous flora and fauna;
- GM plants becoming invasive and disrupting ecosystems;
- Altered genes transferring to other organisms; and
- Development of herbicide or pesticide resistance creating 'super-weeds' or 'super-pests'.

Economic risks include:

- Loss of income (and/or legal action) through contamination (or even perceived contamination) of non-GMO food products triggering market rejection of produce;
- Negative effects on marketing and branding opportunities, including damage to regional marketing initiatives such as the 'Naturally Northland' brand, and damage to tourism;
- Costs associated with environmental damage, such as cleanup costs for invasive weeds and pests in reserves, parks, and open space.

Socio-cultural risks include:

- Effects on Maori cultural beliefs (the concepts of whakapapa, mauri, tikanga, and kaitiakitanga, for example);
- Ethical concerns, such as mixing genes from different species and use of human genes;
- Effects or perceived effects on human health of food derived from GMOs.

These risks are described in more detail in *Community Management of GMOs II: Risks and Response Options, 2005*, pages 4-27.

22. Against these risks, important gaps in the national level regulation of GMOs were identified. A key gap is that there is no liability under HSNO for damage arising as a result of an activity carried out in accordance with an approval from EPA. Common law actions will very rarely be an effective remedy so affected parties will tend to bear any losses arising from unexpected events and ineffective regulation of GMOs. While economic damage resulting from GM contamination will in the first instance fall on individual constituents, such damage can occur across wide groupings of producers and thus become a community concern. Councils may also be exposed to damage and financial costs.
23. Further, there is no requirement under HSNO for applicants to prove financial fitness and no requirement for bonds to be posted in order to recover costs should damage occur. In consequence, parties who may cause damage but do not have sufficient resources to cover resulting costs are not held financially accountable and, once again, costs will tend to fall on affected parties (private persons, communities and local authorities).
24. Another important gap in the national legislation is that HSNO makes the exercise of precaution a matter for the Environmental Protection Authority's (EPA) discretion. Precaution is an option, not a requirement. The EPA is required only to *consider the need for caution*, and only where there is scientific and technical uncertainty. This results in a lack of surety of outcome for local government and their communities in regard to the level of precaution the EPA will adopt and apply to its decision making, if at all.
25. The deficiencies in the national assessment framework are outlined in *Community Management of GMOs II: Risks and Response Options, 2005*, pages 31-46.
26. The Report then proceeds to outline and evaluate various options that are available under the RMA to address the above risks. All options (apart from the do-nothing option) involve inserting provisions in territorial authority district plans or in regional policy statements or regional plans to address in differing ways the potential risks arising from GMO land uses.
27. Firstly, the liability issues could be addressed by way of performance standards in plans or conditions attached to resource consents that require financial accountability for environmental damage and avoidance of economic loss. Consent conditions may be able to be used to recover financial losses. The use of bonds to cover potential damage is also available under the RMA and could be made mandatory in planning documents.
28. Secondly, the risks posed by different classes of GMOs could be addressed by designating different GMO land uses as either discretionary or prohibited activities in planning documents. The Report

outlines four options including making all GMO land uses discretionary activities, prohibiting all GMO land uses, along with two different combinations of discretionary and prohibited activities.

29. The evaluation of management options is outlined in *Community Management of GMOs II: Risks and Response Options, 2005*, pages 47-84.
30. The Report emphasises that decisions to prohibit GMO land uses are reversible. That is, if particular GMO land uses were shown in the future to be advantageous to the district whilst not imposing substantial costs or risks those land uses could be removed from the prohibited status and deemed to be permitted or discretionary activities. On the other hand, decisions to allow GMO land uses are by and large irreversible. Once released to the environment GMOs are most likely there for ever, irrespective of the consequences. In addition, once GMOs are released commercially, the district's/region's GE Free status is permanently lost, along with any marketing and branding advantages that GE Free status afforded.
31. Following the Colmar Brunton survey in 2009, a further report was commissioned by the Working Party to analyse and report on a preferred regulatory option under the RMA to manage GMOs at a local/regional level (*Community Management of GMOs III: Recommended Response Option, 2010*). This work is an extension of the analysis in the earlier reports taking into account the results of the Colmar Brunton survey. The report identifies a preferred response option for managing GMOs under the RMA should councils on the Working Party choose to pursue this path. In essence, the report recommends a regulatory approach through district/regional planning documents based upon strong precaution whilst retaining future opportunities.
32. Under the proposed regime, field trials would be designated discretionary activities whilst releases to the environment would be prohibited activities. This distinction relates to the lower level of risk posed by field trials versus releases to the environment. If, at some time in the future particular GMOs were shown to be beneficial to the district or region and the risks acceptable, the prohibitive status could be changed to discretionary. Discretionary approvals could also have conditions attached requiring strict liability and/or bonds for potential costs, along with monitoring requirements.

Draft Section 32 Report

33. In February 2012 all councils on the Working Party, except for the NRC, agreed to collaborate on producing a joint section 32 report to support a possible joint plan change to those council's land use planning documents (district and unitary plans). The section 32 analysis and draft plan provisions were to be based on the three reports commissioned by the Working Party (*Community Management of GMOs I, II and III*), the Colmar Brunton telephone survey of Auckland and Northland, existing iwi and hapu environmental management plans, any supplementary research and analysis required, and legal advice on content and process and a legal review (opinion) of the completed outcomes by Dr Royden Somerville QC. The section 32 report and draft plan provisions along with the legal opinion were completed in January 2013. These documents are appended to the Hearing Report as Appendix A and are titled Draft Proposed Plan Change to the District/Unitary Plan 2013, Draft Section 32 Report 2013, Volume 2: Supporting Documentation to the Draft Section 32 Report 2013, and Legal Opinions from Dr Royden Somerville QC, 2013.
34. When evaluating possible district/unitary plan provisions, the earlier documents produced by the Working Party were brought together and configured to meet the requirements of section 32 of the RMA. Section 32 requires a local authority to undertake an evaluation of proposed provisions when formulating a planning document, or a change to a planning document, under the RMA. Essentially, the evaluation is to determine whether the proposed objectives are the most appropriate to achieve the purpose of the Act – the sustainable management of natural and physical resources – as set out in section 5, Part II of the Act, and whether the policies, rules or other methods are the most appropriate, efficient and effective for achieving the objectives. This may involve consideration of alternative methods to those proposed. The evaluation is also required to take into account the costs

and benefits of the proposed provisions and the risk of acting or not acting if there is uncertain or insufficient information about the subject.

35. As described above, the Working Party carried out a thorough evaluation of the necessity for regulation of GMOs at a district and/or regional level in concert with national regulation over an extended period of 10 years. The section 32 analysis and report shows that the provisions outlined in the proposed plan change do meet the purpose of the RMA and are the most appropriate to achieve that purpose, that the benefits of the proposed provisions outweigh the costs, and the risks of not acting are greater than the risks of acting. I agree with that finding.
36. The section 32 evaluation confirmed there are significant risks to local government and their communities from outdoor use of GMOs, including environmental, economic and socio-cultural risks. These risks are difficult to quantify through normal risk analysis given the uncertainty (including scientific uncertainty) and lack of information about those risks. Genetic modification is a relatively new and fast developing technology. There is a lack of scientific agreement on the long term effects of releasing GMOs into the environment and a lack of information on long term environmental consequences. There is uncertainty and disagreement as to the short and long term economic benefits and dis-benefits from GMO crops and animals. And there are different cultural views as to the appropriateness of GM technology and GMOs. The views of Maori are particularly relevant.
37. In addition, the potential adverse effects of releasing GMOs into the environment could be significant – including possible major (and long term) harm. Moreover, these effects could be irreversible. Once released to the environment it is, in most instances, impossible to eradicate such organisms. They are, in effect, there for ever, whatever the consequences.
38. Given the above circumstances, along with community preferences expressed in the Colmar Brunton survey and in public submissions to, and lobbying of, councils in Northland/Auckland, the section 32 analysis and report have concluded that a strong precautionary approach to the release of GMOs to the environment is warranted. Such an approach is legitimised by, and indeed inherent to, the RMA, particularly section 32(4)(b), [now 32(2)(c)] which requires a section 32 evaluation to take into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods, and section 3 – the meaning of effect – which provides for any future effect and any potential effect of low probability which has a high potential impact.
39. To this end, the section 32 evaluation and report support the prohibition of releases of GMOs to the environment and the requirement for consent as a discretionary activity for GMO field trials. The section 32 analysis also supports provisions that set strict liability rules for all potential economic and environmental harm and the requirement for bonds and proof of financial fitness. However, the section 32 evaluation and report acknowledge the desirability of keeping future options open, and thus support an adaptive risk management approach that would enable on-going review of prohibiting the release of GMOs, and the change of activity status to discretionary or permitted should new information come available, or scientific consensus be achieved, that shows that the benefits of releasing a particular GMO, or class of GMOs, outweigh the risks for the Northland/Auckland region.
40. Such a precautionary approach to risk management is supported by the courts. In particular, *Coromandel Watchdog of Hauraki Inc v Chief Executive of the Ministry of Economic Development* (CA285/05 2007) examined the appropriate use of the prohibited activity status in planning documents. In this case the Court of Appeal overturned lower court decisions and held that local authorities do not need to consider that an activity be forbidden outright, with no contemplation of any change or exemption, before prohibited activity status is appropriate. Instead, a local authority can use the prohibited activity status for activities for which, having undertaken the processes required by the RMA, it could rationally conclude that prohibited activity status was the most appropriate status. The court accepted as valid, several examples of this. The Court judged the most significant of these to be when a planning authority has insufficient information about an activity and wishes to take a

precautionary approach, even though it does not rule out the possibility of that activity being permitted in the future when further information may become available. It stated at paragraph [34](a):

“Where the Council takes a precautionary approach, if the local authority has insufficient information about an activity to determine what provision should be made for that activity, the most appropriate status for that activity may be prohibited activity. This would allow proper consideration of the likely effects of the activity at a future time during the currency of the plan when a particular proposal makes it necessary to consider the matter, but that can be done in the light of the information then available.”

41. Subsequent to completion of the Working Party’s Draft Section 32 Report, an amendment to the RMA set out additional requirements for the section 32 evaluation, including a new requirement that the assessment of costs and benefits specifically consider anticipated effects on economic growth and employment. The Working Party commissioned a supplementary section 32 evaluation to meet these new requirements along with a legal opinion from Dr Somerville QC as to its adequacy in meeting the new requirements. The Supplementary Section 32 Evaluation and associated legal opinion are appended to the Hearing Report as Appendix A.
42. The supplementary evaluation specifically addressed the effects of the proposed plan provisions on economic growth and employment. It found that the present prospect for economic growth and employment, given the existing GMOs that are commercially grown globally, is minimal and that the prospect for economic loss and reduced employment because of risks from contamination of conventional and organic produce is greater. It found also that should a GMO be developed that promises economic growth and increased employment without risks to existing producers the potential to make a plan change to allow such a GMO results in a small opportunity cost when compared to the existing economic benefits of remaining GE free.
43. The legal review of the supplementary section 32 evaluation by Dr Somerville QC found it sufficient to address the amendment to section 32.

Draft District/Unitary Plan Provisions

44. The draft plan provisions are in the form of a plan change to councils’ RMA planning documents. The provisions are in a generic form that could be adapted to each council’s particular plan allowing, of course, for formatting differences. The provisions relate to land uses and to use of coastal waters. Land use provisions can be incorporated into territorial authorities’ district plans whilst provisions relating to both land uses and water uses can be incorporated into Auckland Council’s Unitary Plan. The plan provisions relate only to outdoor uses of GMO - either releases to the environment or outdoor field trials. They do not include the use of GMOs in contained facilities, such as hospitals, universities, or research institutions, nor to medicines or food products not containing viable GMOs.
45. As determined by the section 32 analysis, the plan provisions are based upon a precautionary approach to the outdoor use of GMOs with the level of precaution related to the level of risk arising from the particular use in question. A precautionary approach, based upon the precautionary principle that has evolved globally, is an adaptive approach to risk management that requires decision makers to exercise caution, including the prohibition or postponement of an activity, when faced with uncertainty (including scientific uncertainty) and insufficient information, particularly in situations of high potential costs and irreversibility.
46. Based upon such an approach, the plan provisions provide for veterinary vaccines as permitted activities under the RMA (i.e. they require no planning permission), outdoor field trials as discretionary activities (i.e. they require a consent from council), and releases to the environment as prohibited activities (i.e. no consent can be applied for or granted). This classification is based upon a hierarchy of risks, from negligible for permitted activities through to higher risk for prohibited activities. Discretionary activities (outdoor field trials) are subject to development and performance standards,

including the requirement for bonds to cover possible economic or environmental damage and ongoing monitoring requirements. GM veterinary vaccines are now proposed to be treated differently as a result of submissions and advice from Professor Heinemann. Auckland Council agreed with the new approach as a result of Professor Heinemann's advice and submissions to the hearings on the Proposed Auckland Unitary Plan.

47. To avoid foreclosure of potential opportunities associated with a GMO development that could benefit the district or region, there is the ability to review a particular GMO activity if it were to become evident during the field trial stage or in light of other new information that a particular GMO activity would be of net benefit to the district or region and that potential risks can be managed to the satisfaction of council and the community. A council or a GMO developer can initiate a plan change to alter the status of a GMO activity from prohibited to discretionary or permitted. A change to discretionary status for a particular GMO or class of GMOs could then be subject to the prescribed performance standards set out in the plan change, particularly the liability and monitoring provisions.
48. By adopting this approach, the planning provisions in the Draft Proposed Plan Change address community preferences for a strong precautionary approach to the outdoor use of GMOs based upon a level of risk the community, as the ultimate risk bearers, has indicated it is prepared to carry, whilst at the same time keeping future opportunities open should new information on costs and/or benefits become available. These provisions arose from, and are supported by, the section 32 evaluation and accompanying section 32 report.
49. The proposed plan change is supplementary and not duplicative of the HSNO Act as the provisions are precisely targeted to fill identified gaps in the national regulatory regime (such as the lack of robust liability provisions and a mandatory precautionary approach), and set standards to ensure community determined outcomes are achieved. The section 32 analysis shows they are the most efficient option for a council to address the significant resource management issue before it, and are also consistent with the revised purpose statement of the Local Government Act.
50. That the two statutes (RMA and HSNO) do not result in duplication but rather complement each other is supported by the recent Environment Court decision, *Federated Farmers of New Zealand v Northland Regional Council (2015 NZEnvC 89)*. The Environment Court found that HSNO and RMA have different purposes and roles in relation to GMOs. HSNO's purpose and role is to assess new organisms (including GMOs) before approval can be granted (or not) for their introduction into New Zealand - containment, field trials and releases. Once released into the environment they are no longer considered new organisms and are no longer regulated under HSNO. HSNO is in effect a licensing regime for the introduction of new organisms (including GMOs) into New Zealand.
51. The RMA, on the other hand, is a comprehensive statute that regulates the use of all natural and physical resources (unless expressly exempt) in an integrated manner so as to achieve the sustainable management of those resources. Such integrated management can include GMOs. And it can include regional and district considerations in addition to national considerations. For example the Court stated:

[38] The question that needs to be addressed is as to whether the two pieces of legislation provide separate codes, with HSNO being the only code to address GMOs. As against this, it can be asked whether consideration of the control of GMOs can be addressed under the undoubted comprehensive RMA framework for promotion of the sustainable management of natural and physical resources including the avoiding, remedying or mitigating of any adverse effects of activities on the environment, while HSNO plays a more confined role in the overall legislative picture, addressing the more limited issue of the granting of approvals to import, develop, field test, or release, new organisms, somewhat as a more one-off regulatory transaction. Federated Farmers advocated the former situation and the parties opposing it, advocated the latter.
52. The Environment Court accepted the latter approach. It further stated:

[45]... If I were to accept... [the] argument that HSNO is the exclusive code for control of GMOs, there would seem the creation of a disparity under the RMA between control of new organisms on the one hand and all other organisms on the other. This could be thought contrary to the broad regulatory approach under the RMA described in the **Meridian** decision. To explain the concern a little more, the overall legislative scheme of things would then be to the effect that there would be no requirement to regulate the potential adverse effects of GMOs beyond the act of approving them for release, thereby elevating animals and plants containing GMOs into a special category not amenable to regulation under the RMA as are animals and plants already present in New Zealand. Further, that integrated management of them would not be possible...

53. Instead the Court favoured an alternate approach. It stated in this regard:

[49] Once having been approved for import and release into New Zealand under HSNO, regional authorities can provide for use and protection of them together with other resources in a fully integrated fashion, taking into account of regional needs for spatial management that might differ around the country for many reasons, not the least of which might include climatic conditions, temperatures, soils, and other factors that might drive differing rates of growth of new organisms and/or of other organisms, as just a few of perhaps many examples. I agree with the opposition parties that the RMA and HSNO offer significantly different functional approaches to the regulation of GMOs.

[51] ...For instance, regional authorities might, with community input, consider particular regional approaches acknowledging social, economic and cultural wellbeing (amongst other things), somewhat beyond the more limited policy considerations for regulation of import and release of new organisms under HSNO. These aspects in s5 RMA are underpinned by the statutory requirements for preparing and publishing evaluation reports under s32, including by way of just one example, the requirement for assessment of benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of proposed provisions, including opportunities for economic growth and employment. Particular regional considerations would come in for study in a way not anticipated by HSNO.

[52] Mr Mathias gave further examples including policy positions representative of strong cultural concerns of Maori, and if thought appropriate "marketing and branding advantages" based upon an approach to limiting the use of GMOs in an area, for instance by encouraging price premia for agricultural production and tourism activities in the locality. I accept these submissions.

54. As can be seen from these pronouncements from the Environment Court, HSNO and the RMA do not duplicate functions. They have separate and complementary roles in the overall management of GMOs.

55. Based upon the extensive investigations undertaken by the Inter-council Working Party, the main benefits from, and support for, regulatory action by local authorities in addition to national regulation include, but are not limited to, the following:

- (a) An assured, community determined level of risk at the local/regional level compared to lack of surety at the national level. The Northland/Auckland communities (as the ultimate risk bearers) have indicated that they want a strong precautionary approach to the risks from GMOs as opposed to HSNO's weaker requirement for the EPA to *consider* the necessity for caution. This applies to all risks, including environmental, economic, social and cultural.
- (b) The avoidance of potential major financial exposure for constituents and councils from possible GM contamination and/or eradication or control of unwanted GMOs, whilst retaining opportunities to benefit from GMOs in the future should such opportunities arise. This can be achieved at very low relative costs to councils compared to the potentially significant costs that councils and constituents could face.

- (c) A strict liability regime, including bond and financial fitness rules, that provides (to the extent possible) for users of GMOs to pay the cost of any damages (environmental and economic) resulting from that usage (which HSNO does not impose). Linked to this is a duty of care to existing conventional and organic farmers that their social and economic well being will not be adversely affected by the introduction of GMOs, e.g. widespread contamination of non-GMO crops such as has occurred overseas.
- (d) Local and regional marketing and branding advantages, based at least in part on the GE Free status of the area, in order to seek price premiums for agricultural production and underpin tourism activities. Northland/Auckland is not a region of large scale food commodity production nor does it have a future in large scale commodity production. Its future lies in quality products aimed at the top end of the market with associated premium prices. At present GM food products do not command a price premium – rather they can result in a reduction in price – in the global market.
- (e) A policy position that is representative of the strong cultural concerns of Maori regarding GMOs indicated in iwi and hapu resource management and environmental documents and in other forums, including submissions from Maori on Northland/Auckland planning documents and the results of the Colmar Brunton poll in 2009. Given the high proportion of Maori in the Northland/Auckland region, this is of greater significance than nationally.
- (f) A consistent regulatory regime across the whole (or most) of the Northland and Auckland regions so that cross boundary inconsistencies are reduced to a minimum. Whilst KDC is not undertaking a similar plan change regulating GMOs as the other councils on the Working Party following its placement in statutory management, it was a supportive and active member of the Working Party prior to this and may well become one again when an elected council is back in place.

Legal Opinions

- 56. The Working Party commissioned Dr Royden Somerville QC to provide legal advice during its investigations into the risks and management options relating to the outdoor use of GMOs in the Northland/Auckland region. It also obtained three legal opinions (reviews) from Dr Somerville at various points during the course of those investigations. These opinions are appended to the Hearing Report as Appendix A.
- 57. In the first of these opinions, *Interim Opinion on Land Use Controls and GMOs, 2004*, Dr Somerville made the following findings (amongst others):
 - (a) Pursuant to the RMA, local authorities have jurisdiction to control land use activities involving outdoor field-testing and the release of genetically modified organisms (GMOs) for research or commercial use, to promote the sustainable management of natural and physical resources of the district/region.
 - (b) A precautionary approach to managing risks involving GMO-related land uses is possible pursuant to section 3(f), section 5(2)(a)(b) and (c), section 7, and section 32(4) of the RMA.
 - (c) A strong precautionary management objective which involves a policy of establishing GMO-exclusion areas within which GMO-related land uses are prohibited is available to local authorities.
- 58. Dr Somerville's second opinion, *Opinion on Land Use Controls and GMOs, 2005*, examined the second report commissioned by the Working Party, *Community Management of GMOs II: Risks and Response Options, 2005*, and assessed its robustness as a basis for developing specific draft plan provisions to manage the outdoor use of GMOs. He made the following findings (amongst others):

- (a) The report contains sufficient information to undertake the development of plan provisions. It identifies risk management options available pursuant to the RMA, and the consequences of potential adverse environmental effects (including on economic conditions) from using land for GMO-related activities. It also highlights the ability to include financial instruments in a plan as an efficient and effective risk management method.
- (b) Subject to a consultation programme with the community, from a legal perspective the report provides a sufficient foundation for the preparation of a specific chapter in a proposed plan with an objective of managing risks associated with GMO-related land uses, and policies and methods to implement that objective in order to promote sustainable management of the land resources pursuant to the RMA.
- (c) The way the work has evolved means that at this stage it focuses on options for the council rather than suggesting specific draft plan provisions. Notwithstanding that, I am satisfied that there is sufficient information in the report to undertake a section 32 analysis if the council were to proceed to consult with the community and develop objectives and policies for inclusion into its plan to manage the level of environmental risk the community is prepared to accept in order to promote the sustainable management of the land resources of the district/region.

59. In his final opinion, following the community consultation undertaken by the Working Party, Dr Somerville examined the proposed draft district/unitary plan provisions and accompanying section 32 evaluation and report as to their robustness and ability to withstand legal challenge (*Outdoor Use of Genetically Modified Organisms (GMOs) 2013*). He made the following findings (amongst others):

- (a) The plan provisions commissioned by the Inter-council Working Party on GMO Risk Evaluation and Management Options provide for a precautionary approach to the way the use of natural resources is managed for the outdoor use of GMOs in order to achieve the purpose of the RMA.
- (b) The evaluation contains a rationale for prohibiting the general release of a GMO in district and unitary plans pending the availability of sufficient information about the risk of any potential effects of the activities on the environment. The evaluation also reflects community values in respect of the environmental risks the community is prepared to accept at the moment.
- (c) The evaluation also addresses the application of the precautionary approach by using a discretionary activity classification in respect of the field trials of GMOs. These RMA controls relate to risk management approaches which are additional to those the EPA can utilise during the field trials contained in the HSNO Act.
- (d) The RMA allows for additional controls to those provided for by HSNO in order to address environmental risks in respect of field trials. The evaluation addresses the benefits of having the ability to impose bonds, reviews, financial contributions and other adaptive management approaches in respect of field trials. It also covers the benefit of addressing risks in respect of local authority liability issues which may arise out of the outdoor use of GMOs.
- (e) In my opinion the evaluation meets the mandatory requirements in section 32(3) and (4) of the RMA. The proposed plan provisions give a clear indication of the way the local authorities will manage the risk of potential adverse environmental effects from the release of outdoor GMOs in order to achieve the purpose of the RMA.
- (f) In my opinion the evaluation allows the local authorities to make a judgement about using a prohibited activity status which would be consistent with the reasoning of the Court of Appeal in *Coromandel Watchdog of Hauraki Inc v Ministry of Economic Development*. The Court was addressing the situation where a planning authority had insufficient information about a proposed activity and wished to take a precautionary approach and prohibit the activity even though it did

not rule out the possibility of that activity being permitted in the future. The Court recorded the view that there may be a number of occasions when prohibited activity status may be justified. Two occasions which appear to be relevant are set out at paragraphs [34](a) and (d):

(a) Where the council takes a precautionary approach. If the local authority has insufficient information about an activity to determine what provision should be made for that activity in the local authority's plan, the most appropriate status for that activity may be prohibited activity. This would allow proper consideration of the likely effects of the activity at a future time during the currency of the plan when a particular proposal makes it necessary to consider the matter, but that can be done in the light of the information then available.

(d) Where it is necessary to allow an expression of social or cultural outcomes or expectations. Prohibited activity status may be appropriate for an activity such as nuclear power generation which is unacceptable given current social, political and cultural attitudes, even if it were possible that those attitudes may change during the term of the plan;

Subsequent Decisions of Member Councils on the Working Party

60. Proposed Auckland Unitary Plan.

Auckland Council has included GMO provisions in its Proposed Unitary Plan based upon the Draft Plan Change, Section 32 Report and legal opinions produced by the Inter-council Working Party. The provisions in the Proposed Auckland Unitary Plan are the same as the provisions in the proposed Whangarei and Far North District Councils plan changes (although formatted differently and extend into the coastal marine area). The hearing of submissions took place in September 2015. A decision from the Independent Hearings Panel on the GMO provisions is expected in July 2016.

61. Proposed Plan Change Whangarei District Council

Whangarei District Council notified a change to its District Plan on 15 July 2014. The provisions regulating the outdoor use of GMOs included in the plan change are based upon the Draft Plan Change, Section 32 Report and legal opinions produced by the Inter-council Working Party and are the same as those in the Proposed Auckland Unitary Plan and Far North District Council plan change.

62. Proposed Plan Change Far North District Council

Far North District Council notified a change to its District Plan on 15 July 2014. The provisions regulating the outdoor use of GMOs included in the plan change are based upon the Draft Plan Change, Section 32 Report and legal opinions produced by the Inter-council Working Party and are the same as those in the Proposed Auckland Unitary Plan and Whangarei District Council plan change.

63. Proposed Northland Regional Policy Statement

The Northland Regional Council is currently reviewing its Regional Policy Statement. The Proposed Regional Policy Statement as amended by Council decisions (following the hearings) contains precautionary provisions regarding outdoor use of GMOs. These provisions are currently under appeal by Federated Farmers of New Zealand. A preliminary hearing on whether there is legal jurisdiction to include GMO provisions in regional planning documents took place in April 2015 and a decision from the Environment Court was released on 12 May 2015 (2015 NZEnvC 89). The Court found that there was jurisdiction under the RMA for regional councils to make provision for control of the outdoor use of GMOs through regional policy statements and plans. This decision was appealed on points of law by Federated Farmers of New Zealand. A hearing in the High Court has taken place and a decision is pending

Other Local Government Initiatives

64. Bay of Plenty Regional Policy Statement

Bay of Plenty Regional Council included a precautionary statement on GMOs in the introductory part of its Proposed Regional Policy Statement. It also included policies and methods relating to applying a precautionary approach to managing natural and physical resources but did not specifically refer to GMOs. The reference to GMOs in the introductory statement was appealed by Scion (NZ Forest Research Institute) and went to a hearing in the Environment Court in November 2013. A decision from the Court was released on 18 December 2013 which largely supported the provisions with some wording changes designed to make them less prescriptive. Thus, the Environment Court has supported the inclusion of a precautionary approach to the outdoor use of GMOs in a RMA planning document. The Court also indicated that the Council may propose more directive regulation in the future, including objectives, policies and rules, if it considers it necessary, and justifiable.

65. Hastings District Plan

Hastings District Council notified its reviewed district plan in November 2013. It contained provisions relating to GMOs similar to those proposed by the Working Party, i.e. GMO releases were prohibited and GMO field trials were discretionary activities with liability requirements attached. Hearings on submissions on the GMO provisions took place in May 2015. Council decisions on recommendations from the hearings commissioners were released in September 2015. The Proposed District Plan as Amended by Council Decisions was notified on 12 September 2015 and contains provisions that prohibit the release of GMOs to the environment as well as the field trialling of GMOs. Reasons for its decisions included the following at p.38 of the Decision Report on GMOs:

5) The Council considers a precautionary approach to the management of GMOs is available and appropriate in this instance, because it has insufficient information available about any specific GMO proposal that may be allowed to establish in the District or its potential effects and what provision should be made to address those specific effects. This will allow proper consideration of the likely effects of the activity at a future time if necessary, in light of information then available. For this reason a review policy has been built into this strategy framework;

6) It is considered that this policy framework is a direct reflection of social and cultural expectations that Hastings will remain a GM-free District. GMO activities are unacceptable given current social and cultural attitudes among the Hastings community and it is important for the District Plan to reflect the community's expectations. This is consistent with the decision in Coromandel Watchdog which recognised that certain policy responses might be appropriate to reflect such expectations or outcomes;

The GMO provisions in the Hastings District Plan have been appealed to the Environment Court by Federated Farmers of New Zealand.

66. Hauraki Gulf Islands Section of the Auckland City District Plan.

The Hauraki Gulf Islands Section of the Operative Auckland City District Plan 1996 prohibited GMOs from 1996 to 2013. These provisions were challenged by Federated Farmers of New Zealand when the plan was reviewed during 2006-2013. This challenge was settled by Consent Order in 2013 and the Proposed Auckland City District Plan (Hauraki Gulf Islands) 2013 became 'operative in part' on 7 October 2013. The Operative Plan 2013 contains provisions regulating GMOs. There is an objective and rule that prohibit new organisms. New organisms are defined as in the HSNO Act. GMOs are included as new organisms until the EPA has given approval for a full release, i.e. a release without controls. A GMO remains a new organism while in containment, being field trialed, or when approved for conditional release, i.e. with controls attached. Thus, the provisions in the Islands Section of the

Auckland City District Plan prohibit GMOs in containment, field trials of GMOs, and conditional releases of GMOs.

Conclusions

67. From the comprehensive investigations and research undertaken by the Inter-council Working Party over an extended period of more than ten years, the Working Party found that there are many unresolved risks associated with releasing GMOs into the environment. These include environmental risks, economic risks (including issues over liability), and socio-cultural risks (including the safety of GMO food products). There is also a lack of full information regarding the risks, benefits and costs from the outdoor use of GMOs, including a lack of scientific agreement on the long term effects of GMOs on the environment and a lack of agreement from agro-economists on the benefits and dis-benefits from adopting the commercial use of GMOs. I agree with these findings.
68. Given New Zealand's dependence on primary produce and tourism to provide overseas exchange and maintain its standard of living, the Working Party considers it would be unwise to ignore these risks or fail to give them adequate credence. At the very least, a highly precautionary approach to the release of GMOs to the environment seems warranted. The Working Party has recommended that a strong precautionary approach should be maintained until there is sufficient information available (including scientific information) on the long term environmental consequences of releasing GMOs into the environment; agreement amongst producers and the community on the short and long term economic benefits and dis-benefits from the commercial use of the technology; and increased acceptance of genetic modification by tangata whenua and the community in general. It is also my professional opinion that this is the appropriate course of action.
69. Central Government, both previous National and Labour led Governments, has been lobbied by the Inter-council Working Party to consider various ways of addressing the risks to local government and its constituents. Central Government has declined to do so. However, both previous Labour and National led Governments have stated that local government has jurisdiction to regulate GMOs in the environment through planning documents under the RMA, if supported by a section 32 analysis. More recently the present National led Government has indicated it wishes to amend the RMA to remove the ability of local authorities to regulate GMOs but that has yet to eventuate.
70. An increasing number of local authorities in New Zealand are examining ways of addressing the risks from outdoor use of GMOs through their resource management documents formulated under the RMA. The Inter-council Working Party and its constituent councils resolved to undertake such a task and have produced draft unitary/district plan provisions and a draft section 32 analysis of those provisions. The section 32 analysis, and associated legal opinions, has shown that a strong precautionary approach to the outdoor use of GMOs is warranted and reflects the preferences of communities and tangata whenua in Northland and Auckland. The section 32 analysis and associated legal opinions show that the proposed plan provisions do meet the purpose of the RMA, are the most appropriate to achieve that purpose, that the benefits of the proposed provisions outweigh the costs, and the risks of not acting are greater than the risks of acting. I agree with these findings.
71. Constituent councils on the Working Party have subsequently included provisions in their planning documents based upon the Draft Proposed Plan Change, Draft Section 32 Report and legal opinions produced by the Working Party. These plan changes are currently proceeding through the statutory processes prescribed under the RMA and in the case of Auckland Council, the Local Government (Auckland Transitional Provisions) Act 2010.
72. Based upon all of the above, it is my professional opinion that the provisions in the proposed plan changes (PC131 and PC18) should be retained in their entirety, except for possible amendments to the way GM veterinary vaccines are regulated, along with minor wording changes if required.