

E37. Genetically modified organisms

[CIV-2016-404-002299: Federated Farmers of New Zealand Incorporated]

E37.1. Background

The outdoor use of genetically modified organisms has the potential to cause adverse effects on the environment, the economy and social and cultural wellbeing. The objectives and policies seek to protect the community and receiving environment from risks associated with genetically modified organisms. The application of a precautionary approach to the outdoor use, storage, cultivation, harvesting, processing or transportation of genetically modified organisms in Auckland means that:

- the outdoor release of a genetically modified organism is prohibited (this is to avoid the risk that significant adverse environmental effects will arise, including adverse effects on the economy, community and/or Mana Whenua resources and cultural heritage values); and
- outdoor field trialling of a genetically modified organism (with prior approval of the Environmental Protection Authority (EPA)) is a discretionary activity.

Pastoral farming, dairying, horticulture and forestry are important land uses in Auckland and are significant contributors to the local and regional economy. Aquaculture is also a growing primary industry in New Zealand. Therefore there is a range of outdoor genetically modified organisms that genetically modified organism developers could consider using in Auckland, including genetically modified food crops, trees, animals, aquaculture products and pharmaceutical crops. The potential for adverse effects, including accidental contamination, resulting from the outdoor use of genetically modified organisms poses a risk to the community and environment. By specifying classes of genetically modified organisms and applying standards to the outdoor use of genetically modified organisms, the risks associated with their use, storage, cultivation, harvesting, processing or transportation can be reduced.

Within Auckland, this will involve managing and limiting the outdoor use of genetically modified organisms. Further, rules and controls will be used to mitigate any adverse effects associated with contamination by genetically modified organisms beyond the subject site, thereby reducing the risks to the community, environment and economy. Accidental or unintentional migration of genetically modified organisms that result in genetically modified organism contamination and subsequent clean up and remediation can be expensive. The Council therefore requires a genetically modified organism consent holder to meet all potential costs associated with the activity and will secure long term financial accountability through appropriate standards and bonding requirements.

The Environmental Protection Authority is not obliged to set monitoring requirements as part of its approval process, and can only require monitoring where it is relevant to assessing environmental risk. Under section 35 of the Resource Management Act 1991, the Council has a duty to monitor, which can be expensive. Requiring a genetically modified organism consent holder to meet the costs of monitoring, via consent conditions, ensures the costs are met by the consent holder, rather than the community.

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

Genetically modified medical applications involving the use of viable and/or non-viable genetically modified organisms (including EPA approved releases, vaccines and medical research) are permitted under this Plan. Genetically modified medical applications are also regulated by other legislations, including the Hazardous Substances and New Organisms Act 1996 (HSNO), the Medicines Act 1981 and by the Ministry of Health.

The use of genetically modified veterinary vaccines is a permitted activity where the vaccines are non-viable, or if viable, their administration is a specific delivery dose supervised by a veterinarian. Any other use of viable genetically modified veterinary vaccines is a discretionary activity. Non-viable genetically modified veterinary vaccines tend not to persist in the environment, appear to be low risk and are difficult to monitor, making control by the Plan less appropriate. Viable genetically modified veterinary vaccines can have higher risks if their administration is not supervised or controlled by a veterinarian. An example is a viable genetically modified veterinary vaccine distributed by way of edible food or edible plants, which cannot be supervised by a veterinarian, and which may present higher risks to the environment and to the health and safety of people. In this circumstance the Council will have the discretion to require controls or to decline an application. The Council will also be able to respond quickly if there are compelling reasons for its use to benefit human or animal health and welfare. It is generally expected that if a discretionary activity consent is granted, it would apply as a consent for the use of the viable genetically modified veterinary vaccine on any land in the region, noting that specific conditions such as exclusions of specified areas may apply.

Approval from the Environmental Protection Authority is required as a precondition for all applications for resource consent. The duration of any consent granted will be aligned with the Environmental Protection Authority approval terms.

E37.2. Objective [rcp/dp]

[The regional coastal plan [rcp] provisions (for activities or resources in the coastal marine area) are not operative until the Minister of Conservation has formally approved the regional coastal plan part of the Auckland Unitary Plan.]

- (1) The environment, including people and communities and their social, economic and cultural well-being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of genetically modified organisms.

E37.3. Policies [rcp/dp]

[The regional coastal plan [rcp] provisions (for activities or resources in the coastal marine area) are not operative until the Minister of Conservation has formally approved the regional coastal plan part of the Auckland Unitary Plan.]

- (1) Adopt a precautionary approach by prohibiting the outdoor release of a genetically modified organism, and by making outdoor field trialling of a genetically modified organism and the use of viable genetically modified veterinary vaccines not of a specific dose and supervised by a veterinarian a discretionary activity.

- (2) Provide for the use of Environmental Protection Authority approved non-viable and/or viable genetically modified medical applications (including genetically modified vaccines) as a permitted activity.
- (3) Require that the holder of a resource consent granted for the outdoor field trialling of a genetically modified organism is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including through the use of bonds.
- (4) Require outdoor field trialling of genetically modified organisms to avoid, as far as can reasonably be achieved, risks to the environment or to the mauri of flora and fauna or to the relationship of Mana Whenua with flora and fauna from the use, storage, cultivation, harvesting, processing or transportation of a genetically modified organism.
- (5) Require all monitoring costs to be met by the consent holder.
- (6) Require that the outdoor use of genetically modified organisms does not result in migration of genetically modified organisms beyond the area designated by:
 - (a) ensuring adequate site design, construction and management techniques;
 - (b) preventing the escape of genetically modified organisms from transporting vehicles or vessels; and
 - (c) ensuring all heritable material is removed upon the conclusion of the activity.
- (7) Adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a genetically modified organism through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a genetically modified organism activity becomes available.
- (8) Require, where appropriate, more stringent measures than those required under the provisions of the Hazardous Substances and New Organisms Act 1996 to manage potential risks.

E37.4. Activity table

Table E37.4.1 Activity table specifies the activity status of the use of genetically modified organisms on land pursuant to section 9(3) of the Resource Management Act 1991 and the activity status of works, occupation and activity in the coastal marine area pursuant to sections 12(1), 12(2) and 12(3) of the Resource Management Act 1991.

Table E37.4.1 Activity table [rcp/dp]

[The regional coastal plan [rcp] provisions (for activities or resources in the coastal marine area) are not operative until the Minister of Conservation has formally approved the regional coastal plan part of the Auckland Unitary Plan.]

Activity		Activity status
(A1)	Research and trials within contained laboratories involving the use of genetically modified organisms, medical	P

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	applications involving the use of viable and/or non-viable genetically modified organisms (including genetically modified vaccines), veterinary applications involving the use of non-viable genetically modified organisms and any other genetically modified organism release or use not specifically provided for or prohibited	
(A2)	Genetically modified organism field trials on land and within the coastal marine area and any structure intended to house, or otherwise contain, plants and animals which are associated with the conducting of genetically modified organism field trials	D
(A3)	The use of any viable genetically modified veterinary vaccine of a specific dose supervised by a veterinarian	P
(A4)	The use of any viable genetically modified veterinary vaccine not otherwise provided for	D
(A5)	Genetically modified organism releases – food-related on land and within the coastal marine area and any structure intended to house or otherwise contain plants and animals which are associated with outdoor genetically modified organisms releases, except as specifically provided for	Pr
(A6)	Genetically modified organism releases – non food-related on land and within the coastal marine area and any structure intended to house or otherwise contain plants and animals which are associated with outdoor genetically modified organism releases, except as specifically provided for	Pr

E37.5. Notification

- (1) Any application for resource consent for the following activities must be publicly notified:
 - (a) genetically modified organism field trials on land and within the coastal marine area and any structure intended to house or otherwise contain plants and animals which are associated with the conducting of genetically modified organism field trials; or
 - (b) the use of any viable genetically modified veterinary vaccine not otherwise provided for.
- (2) Any application for resource consent for an activity listed in Table E37.4.1 Activity table and which is not listed in E37.5(1) above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.

- (3) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

E37.6. Standards

All activities listed as a discretionary activity in Table E37.4.1 Activity table must comply with the following discretionary activity standards. These standards are in addition to any controls/conditions imposed by the Environmental Protection Authority.

E37.6.1. Approvals

- (1) All genetically modified organism discretionary activities must:
- (a) have the relevant approval from the Environmental Protection Authority;
and
 - (b) be undertaken in accordance with Environmental Protection Authority approval conditions for the activity.

E37.6.2. Bond requirements

- (1) The Council requires the holder of a resource consent for an activity involving the use of a genetically modified organism to provide a bond in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the genetically modified organism activity (prior to, during and after the activity), and that this bond be available to pay or reimburse any costs incurred by, or on behalf of, the Council to avoid, remedy or mitigate any adverse environmental effects and any other adverse effects to, or on, third parties (including economic effects), that become apparent during the exercise or after the expiry of the consent.
- (2) The exact time and manner of implementing and discharging the bond will be decided by, and be executed to the satisfaction of, the Council.
- (3) All of the following matters will be considered when determining the amount and type of the bond:
- (a) what adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects;
 - (b) the degree to which the consent holder for the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects:
 - (c) the level of risk associated with any unexpected adverse effects from the activity;
 - (d) the likely scale of costs associated with remediating any adverse effects that may occur;

- (e) the timescale over which effects are likely to occur or arise; and
- (f) the extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

E37.6.3. Monitoring

- (1) A discretionary activity for a genetically modified organism may require monitoring during, and beyond, the duration of consent. Monitoring is to be carried out by either the Council, or the consent holder, with appropriate reporting procedures to the relevant regulatory authority.
- (2) A monitoring strategy for a discretionary activity for a genetically modified organism can include all of the following matters:
 - (a) inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based);
 - (b) testing of procedures (e.g. accidental release response);
 - (c) training programmes for new staff, and updates for existing staff;
 - (d) audits of sites and site management systems; and
 - (e) sample testing of plants, soils and water in neighbouring properties or localities for the presence of migrated genetically modified organisms.

E37.6.4. Reporting

- (1) Reporting requirements by the consent holder must be stipulated in the consent conditions.

E37.7. Assessment – controlled activities

There are no controlled activities in this section.

E37.8. Assessment – restricted discretionary activities

There are no restricted discretionary activities in this section.

E37.9. Special information requirements

- (1) An application for:
 - (a) the use of any viable genetically modified veterinary vaccine not otherwise provided for; or
 - (b) for genetically modified organism field trials on land and within the coastal marine area and any structure intended to house or otherwise contain plants and animals which are associated with the conducting of genetically modified organism field trials

must be accompanied by all of the following:

- (i) evidence of approval from the Environmental Protection Authority for the specific genetically modified organism for which consent is sought;
- (ii) details of the proposed containment measures for the commencement, duration and completion of the proposed activity;
- (iii) details of the species, its characteristics and lifecycle, to which the genetically modified organism activities will relate;
- (iv) research on adverse effects to the environment and economy associated with the activity should genetically modified organisms escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects;
- (v) evidence of research undertaken that characterises and tests the genetically modified organisms, and the certainty associated with the accuracy of that information;
- (vi) a management plan outlining on-going research and how monitoring will be undertaken during, and potentially beyond, the duration of consent;
- (vii) details of areas in which the activity is to be confined; and
- (viii) a description of contingency and risk management plans and measures.

BEFORE THE ENVIRONMENT COURT

Decision No. [2015] NZEnvC 89

IN THE MATTER of an appeal under Clause 14 of the First
Schedule to the Resource Management
Act 1991 (**RMA**)

BETWEEN FEDERATED FARMERS OF NEW
ZEALAND
(ENV-2013-AKL-000161)

Appellant

AND NORTHLAND REGIONAL COUNCIL

Respondent

Hearing at: Whangarei on 24 April 2015

Court: Principal Environment Judge LJ Newhook, sitting alone pursuant
to s279(1)(e) of the Act

Appearances: MR Christensen and R Gardner for the appellant
JA Burns for the respondent
GJ Mathias for Whangarei District Council
RA Makgill for Soil & Health Association of NZ Inc, GE Free
NZ (Northland) Inc (and the other parties under s274, numbers of
whom had written to the Court expressly opposing the Federated
Farmers' position).

Date of Decision: 12 May 2015

**DECISION OF THE ENVIRONMENT COURT ON JURISDICTION UNDER
THE RMA FOR POLICY STATEMENTS AND PLANS TO MAKE PROVISION
FOR CONTROL OF GENETICALLY MODIFIED ORGANISMS ("GMOs")**



- A. There is jurisdiction under the RMA for regional councils to make provision for control of the use of GMOs through regional policy statements and plans.**
- B. Costs reserved.**

REASONS FOR DECISION

Introduction and statement of the issue

[1] The current argument arises in one of a set of appeals concerning decisions on submissions about the proposed Regional Policy Statement for Northland. Almost all points in the appeals have been quickly settled in mediation, and the Court is in the process of considering draft consent orders on those. The subject matter of the present decision follows a hearing about what is almost the sole point remaining before final resolution of the appeals.

[2] The question before the Court is as to whether there is power under the RMA for regional councils to make provision for control of use of GMOs through regional policy statements and plans. Some parties endeavoured to extend the question by analogy to the promulgation of district plans as well. I have maintained the focus on regional instruments in this decision, because the appeal concerns a regional policy statement.

[3] Subject to the detail that follows, the argument is whether the regulation of GMOs in New Zealand is undertaken solely under the Hazardous Substances and New Organisms Act 1996 ("HSNO"), or whether some level of regulation may also be undertaken under the RMA. (No party sought to argue that the RMA in any way takes precedence over HSNO.)

[4] The argument is a strictly legal one, involving statutory interpretation. It does not address the merits of the RPS provisions under appeal.

[5] My approach, having heard the lengthy submissions on behalf of the parties, will be as follows:

- (a) The task should commence with consideration of the text of relevant sections of the two statutes, informed to the extent necessary by the purpose and context of them.



- (b) It is appropriate in taking that first step, to seek to reconcile the enactments if possible, and if it is not, then to consider which of the enactments should prevail.
- (c) There are various approaches available should it be necessary to consider which of the enactments should prevail, including “express repeal”, “express exclusion”, and in the last resort, “implied repeal”.

[6] One final introductory matter is that the relationship in question between the RMA and HSNO has been discussed in an Environment Court Decision on one occasion previously. That case was *NZ Forest Research Institute Limited v Bay of Plenty Regional Council*.¹ Having noted that s30 RMA makes no reference to “genetically modified organisms”, but only to “hazardous substances”, and noting the absence of a definition of a “genetically modified organism” in the RMA; also that HSNO is silent on any relationship between the two Acts concerning GMOs, the Court observed:

[15] Taken that far, the inclusion of *hazardous substances* in both pieces of legislation, and the complete absence of *genetically modified organisms* in the RMA, might be thought of some significance, perhaps leading to the conclusion that the omission is deliberate, and thus the RMA has no place in the management of GMOs.

[7] Mr Christensen, counsel for Federated Farmers, placed some emphasis on those findings early in his submissions, but very properly acknowledged that they were *obiter dicta*². I observe that I have the distinct sense that the point was not nearly as thoroughly argued as it was in the case before me, where in contrast it was the very subject matter of the argument I heard.

Text, purpose and context

[8] The term “*genetically modified organism*” is not defined in the RMA, but is defined in s2 of HSNO in the following terms:

Genetically modified organism means, unless expressly provided otherwise by regulation, any organism in which any of the genes or other genetic material –

- (a) have been modified by in vitro techniques; or
- (b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.

¹ [2013] NZEnvC 298, [2014] NZRMA 181.

² That is, not part of the reasoning for the decision in that case.



[9] The purpose, principles and matters relevant to the purpose of HSNO are set out in its sections 4, 5 and 6. They are as follows:

4 Purpose of Act

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.

5 Principles relevant to the purpose of the Act

All persons exercising functions, powers, and duties under this Act shall, to achieve the purpose of this Act, recognise and provide for the following principles:

- (a) the safeguarding of the life-supporting capacity of air, water, soil and ecosystems;
- (b) the maintenance and enhancement of the capacity of people and communities to provide for their own economic, social and cultural wellbeing and for the reasonably foreseeable needs of future generations.

6 Matters relevant to purpose of Act

All persons exercising functions, powers, and duties under this Act shall, to achieve the purpose of this Act, take into account the following matters:

- (a) the sustainability of all native and valued introduced flora and fauna;
- (b) the intrinsic value of ecosystems;
- (c) public health;
- (d) the relationship of Māori and their culture and traditions with the ancestral lands, water, sites, waahi tapu, valued flora and fauna, and other taonga;
- (e) the economic and related benefits and costs of using particular hazardous substance or new organism;
- (f) New Zealand's international obligations.

[10] Section 7 of that Act sets out a requirement for a precautionary approach to be taken where there is scientific and technical uncertainty about adverse effects. Section 8 requires all persons exercising powers and functions under the Act to take account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

[11] The purpose of the RMA is set out in s5 of that Act. It is well known, but I will set it out for the purposes of comparison with the relevant provisions of HSNO:

5 Purpose

- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources;
- (2) In this act, **sustainable management** means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while –
 - (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and



- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

[12] Section 6 RMA sets out, in some detail, seven matters of national importance which people are to recognise and provide for when exercising functions and powers under the Act, which include (in summary), natural character of the coastal environment and other water bodies; outstanding natural features and landscapes; areas of significant indigenous vegetation and significant habitats of indigenous fauna; public access to and along water bodies; the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga; historic heritage; and protected customary rights.

[13] Section 7 sets out other principles at a slightly lower level of importance than those under s6, and they include (in summary), kaitiakitanga; the ethic of stewardship; the efficient use and development of natural and physical resources; the efficient end use of energy; maintenance and enhancement of amenity values; intrinsic values of ecosystems; maintenance and enhancement of the quality of the environment; finite characteristics of natural and physical resources; the protection of the habitat of trout and salmon; the effects of climate change; and benefits to be derived from the use and development of renewable energy.

[14] Section 8 RMA concerns the Treaty of Waitangi, and is fairly similar to s8 HSNO, except that it commences with the words "*In achieving the purpose of this Act,*" a difference which is probably not important for present purposes.

[15] Sections 5, 6, 7 and 8 of each Act bear some similarities to each other.

[16] The RMA originally included a Part XIII, repealed by the enactment in 1996 of HSNO. Indeed, that Part was never in force, given absence of a required Order in Council. That former Part foreshadowed a Hazards Control Commission to assist in the control of hazardous substances and new organisms. Section 345(2) required the Commission to balance the benefits which might be obtained from hazardous substances and new organisms against the risks and damage to the environment and to the health, safety and economic, social and cultural wellbeing of people and communities. The Commission was (if formally established) to have regard to Part 2 RMA in carrying out its functions. It would have had a range of functions recorded under s347 RMA. Those functions were principally of an advisory, consultative, and recording nature, but were to involve licencing, monitoring and enforcement of hazardous substances or new organisms "if required by any legislation".



[17] Some similarities also exist between the two Acts as to the definition in each of “**effect.**”

[18] In HSNO, **effect** includes:

- (a) any potential or probable effects; and
- (b) any positive or adverse effects; and
- (c) any temporary or permanent effects; and
- (d) any past, present or future effects; and
- (e) any acute or chronic effect; and
- (f) any cumulative effect which arises over time or in combination with other effects.

[19] In the RMA, the meaning of **effect** is found in its own separate section, s3, which provides as follows:

In this Act, unless the context otherwise requires, the term effect includes–

- (a) any positive or adverse effect; and
- (b) any temporary or permanent effect; and
- (c) any past, present, or future effect; and
- (d) any cumulative effect which arises over time or in combination with other effects–
 - a. regardless of the scale, intensity, duration, or frequency of the effect, and also includes–
- (e) any potential effect of high probability; and
- (f) any potential effect of low probability which has a high potential impact.

[20] The two main differences between the respective provisions are, first that the issue of potential effects under the RMA is separated out from the definition section and incorporated into provisions relating to process, for instance s104 concerning consideration of applications for consent; secondly that cumulative effects are dealt with in somewhat more detail in the RMA. The first difference is probably semantic only, while the second may be of more significance for present purposes.

[21] RMA provisions concerning regional government plan-making have long included functions in respect of hazardous substances, but not concerning GMOs. Interestingly, while Part XIII RMA was repealed by HSNO in 1996, references to regional government control of hazardous substances were not.

[22] S30 RMA sets out the functions of regional councils under that Act. It provides as follows:

30 Functions of regional councils under this Act

- (1) Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:



- (a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region:
- (b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance:
- (c) the control of the use of land for the purpose of—
 - (i) soil conservation:
 - (ii) the maintenance and enhancement of the quality of water in water bodies and coastal water:
 - (iii) the maintenance of the quantity of water in water bodies and coastal water:
 - (iiia) the maintenance and enhancement of ecosystems in water bodies and coastal water:
 - (iv) the avoidance or mitigation of natural hazards:
 - (v) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:
- (ca) the investigation of land for the purposes of identifying and monitoring contaminated land:
- (d) in respect of any coastal marine area in the region, the control (in conjunction with the Minister of Conservation) of—
 - (i) land and associated natural and physical resources:
 - (ii) the occupation of space in, and the extraction of sand, shingle, shell, or other natural material from, the coastal marine area, to the extent that it is within the common marine and coastal area:
 - (iii) the taking, use, damming, and diversion of water:
 - (iv) discharges of contaminants into or onto land, air, or water and discharges of water into water:
 - (iva) the dumping and incineration of waste or other matter and the dumping of ships, aircraft, and offshore installations:
 - (v) any actual or potential effects of the use, development, or protection of land, including the avoidance or mitigation of natural hazards and the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:
 - (vi) the emission of noise and the mitigation of the effects of noise:
 - (vii) activities in relation to the surface of water:
- (e) the control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body, including—
 - (i) the setting of any maximum or minimum levels or flows of water:
 - (ii) the control of the range, or rate of change, of levels or flows of water:
 - (iii) the control of the taking or use of geothermal energy:
- (f) the control of discharges of contaminants into or onto land, air, or water and discharges of water into water:
- (fa) if appropriate, the establishment of rules in a regional plan to allocate any of the following:
 - (i) the taking or use of water (other than open coastal water):
 - (ii) the taking or use of heat or energy from water (other than open coastal water):
 - (iii) the taking or use of heat or energy from the material surrounding geothermal water:
 - (iv) the capacity of air or water to assimilate a discharge of a contaminant:
- (fb) if appropriate, and in conjunction with the Minister of Conservation,—



- (i) the establishment of rules in a regional coastal plan to allocate the taking or use of heat or energy from open coastal water;
- (ii) the establishment of a rule in a regional coastal plan to allocate space in a coastal marine area under [Part 7A](#);
- (g) in relation to any bed of a water body, the control of the introduction or planting of any plant in, on, or under that land, for the purpose of—
 - (i) soil conservation;
 - (ii) the maintenance and enhancement of the quality of water in that water body;
 - (iii) the maintenance of the quantity of water in that water body;
 - (iv) the avoidance or mitigation of natural hazards;
- (ga) the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity;
- (gb) the strategic integration of infrastructure with land use through objectives, policies, and methods;
- (h) any other functions specified in this Act.
- (2) A regional council and the Minister of Conservation must not perform the functions specified in subsection (1)(d)(i), (ii), and (vii) to control the taking, allocation or enhancement of fisheries resources for the purpose of managing fishing or fisheries resources controlled under the [Fisheries Act 1996](#).
- (3) However, a regional council and the Minister of Conservation may perform the functions specified in subsection (1)(d) to control aquaculture activities for the purpose of avoiding, remedying, or mitigating the effects of aquaculture activities on fishing and fisheries resources.
- (4) A rule to allocate a natural resource established by a regional council in a plan under subsection (1)(fa) or (fb) may allocate the resource in any way, subject to the following:
 - (a) the rule may not, during the term of an existing resource consent, allocate the amount of a resource that has already been allocated to the consent; and
 - (b) nothing in paragraph (a) affects section 68(7); and
 - (c) the rule may allocate the resource in anticipation of the expiry of existing consents; and
 - (d) in allocating the resource in anticipation of the expiry of existing consents, the rule may—
 - (i) allocate all of the resource used for an activity to the same type of activity; or
 - (ii) allocate some of the resource used for an activity to the same type of activity and the rest of the resource to any other type of activity or no type of activity; and
 - (e) the rule may allocate the resource among competing types of activities; and
 - (f) the rule may allocate water, or heat or energy from water, as long as the allocation does not affect the activities authorised by [section 14\(3\)\(b\) to \(e\)](#).

[23] Subject to some confined exceptions (eg concerning control of fisheries), it can be seen that the functions of regional councils under the Act are very broad, and cover a multitude of matters.

[24] S59 RMA provides the purpose of regional policy statements, in the following terms:



59 Purpose of regional policy statements

The purpose of a regional policy statement is to achieve the purpose of the Act by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region.

[25] S60 RMA provides process for the preparation and change of regional policy statements.

[26] S61 RMA lists matters to be considered by regional councils in policy statements as follows:

61 Matters to be considered by regional council (policy statements)

- (1) A regional council must prepare and change its regional policy statement in accordance with—
 - (a) its functions under [section 30](#); and
 - (b) the provisions of [Part 2](#); and
 - (c) its obligation (if any) to prepare an evaluation report in accordance with [section 32](#); and
 - (d) its obligation to have particular regard to an evaluation report prepared in accordance with [section 32](#); and
 - (e) any regulations.
- (2) In addition to the requirements of [section 62\(2\)](#), when preparing or changing a regional policy statement, the regional council shall have regard to—
 - (a) any—
 - (i) management plans and strategies prepared under other Acts; and
 - (ii) [Repealed]
 - (iii) relevant entry on the New Zealand Heritage List/Rārangi Kōrero required by the [Heritage New Zealand Pouhere Taonga Act 2014](#); and
 - (iv) regulations relating to ensuring sustainability, or the conservation, management, or sustainability of fisheries resources (including regulations or bylaws relating to taiapure, mahinga mataitai, or other non-commercial Maori customary fishing); and
 - (v) [Repealed]
 to the extent that their content has a bearing on resource management issues of the region; and
 - (b) the extent to which the regional policy statement needs to be consistent with the policy statements and plans of adjacent regional councils; and
 - (c) the extent to which the regional policy statement needs to be consistent with regulations made under the [Exclusive Economic Zone and Continental Shelf \(Environmental Effects\) Act 2012](#); and
- (2A) When a regional council is preparing or changing a regional policy statement, it must deal with the following documents, if they are lodged with the council, in the manner specified, to the extent that their content has a bearing on the resource management issues of the region:
 - (a) the council must take into account any relevant planning document recognised by an iwi authority; and
 - (b) in relation to a planning document prepared by a customary marine title group under [section 85](#) of the Marine and Coastal



Area (Takutai Moana) Act 2011, the council must, in accordance with [section 93](#) of that Act,—

- (i) recognise and provide for the matters in that document, to the extent that they relate to the relevant customary marine title area; and
 - (ii) take into account the matters in that document, to the extent that they relate to a part of the common marine and coastal area outside the customary marine title area of the relevant group.
- (3) In preparing or changing any regional policy statement, a regional council must not have regard to trade competition or the effects of trade competition.

[27] S62 RMA provides for contents of regional policy statements:

62 Contents of regional policy statements

- (1) A regional policy statement must state—
- (a) the significant resource management issues for the region; and
 - (b) the resource management issues of significance to iwi authorities in the region; and
 - (c) the objectives sought to be achieved by the statement; and
 - (d) the policies for those issues and objectives and an explanation of those policies; and
 - (e) the methods (excluding rules) used, or to be used, to implement the policies; and
 - (f) the principal reasons for adopting the objectives, policies, and methods of implementation set out in the statement; and
 - (g) the environmental results anticipated from implementation of those policies and methods; and
 - (h) the processes to be used to deal with issues that cross local authority boundaries, and issues between territorial authorities or between regions; and
 - (i) the local authority responsible in the whole or any part of the region for specifying the objectives, policies, and methods for the control of the use of land—
 - (i) to avoid or mitigate natural hazards or any group of hazards; and
 - (ii) to prevent or mitigate the adverse effects of the storage, use, disposal, or transportation of hazardous substances; and
 - (iii) to maintain indigenous biological diversity; and
 - (j) the procedures used to monitor the efficiency and effectiveness of the policies or methods contained in the statement; and
 - (k) any other information required for the purpose of the regional council's functions, powers, and duties under this Act.
- (2) If no responsibilities are specified in the regional policy statement for functions described in subsection (1)(i)(i) or (ii), the regional council retains primary responsibility for the function in subsection (1)(i)(i) and the territorial authorities of the region retain primary responsibility for the function in subsection (1)(i)(ii).
- (3) A regional policy statement must not be inconsistent with any water conservation order and must give effect to a national policy statement or New Zealand coastal policy statement.

[28] Ss65 and 66 provide for preparation and change of regional plans, and matters to be considered by the regional council in them. These are again very broad



in similar fashion to the sections relating to regional policy statements. Of some note, s66(1) requires regional councils to prepare and change any regional plan in accordance with its functions under s30, the provisions of Part 2, directions from the Minister for the Environment under s25A, obligations under s32, and any regulations.

[29] Counsel for Federated Farmers, Mr Christensen, stressed the repeal of Part X111 RMA by HSNO in 1996. He contrasted the retention of reference to control of hazardous substances in sections of the Act concerning regional policy statements and plans, with the complete absence of any provision relating to the control of GMOs.

[30] Mr Christensen then developed an argument that HSNO is a code for regulation and control of GMOs, based on the last two factors. He pointed to s142 HSNO about relationship with other acts:

142 Relationship to other acts

- (1) Nothing in this Act shall affect the requirements of the Biosecurity Act 1993 in relation to any organism.
- (2) Every person exercising a power or function under the Resource Management Act 1991 relating to the storage, use, disposal, or transportation of any hazardous substance shall comply with the provisions of this Act and with Regulations and Notices of Transfer made under this Act.
- (3) Nothing in ss(2) shall prevent any person lawfully imposing more stringent requirements on the storage, use, disposal or transportation of any hazardous substance and may be required by or under this Act where such requirements are considered necessary by that person for the purposes of the Resource Management Act 1991.
- (4) Nothing in this Act shall apply to any resource consent, being:
 - (a) a land use consent relating to the storage, use, disposal, or transportation of any hazardous substance; or
 - (b) a coastal permit to do something that would otherwise contravene s15 of the Resource Management Act 1991; or
 - (c) a discharge permit, –
where that resource consent was granted before the coming into force of any regulations made under this Act (other than regulations made under Parts 11-16) until such time as the conditions on the resource consent are reviewed in accordance with s128 of the Resource Management Act 1991.
- (5) For the purposes of this section, **resource consent** has the same meaning as in the Resource Management Act 1991.
- (6) Any controls prescribed under any other Act for any other hazardous substance shall not contravene the provisions or regulations made under ss75 and 76 unless –
 - (a) there is a provision in that Act that expressly provides that controls made under that Act for specified purposes may contravene the provisions and regulations made under this Act; and
 - (b) the controls are made for the purposes provided for in that Act.

[31] Mr Christensen submitted about the express reference to hazardous substances in that section, noting that HSNO directs how the RMA is to be interpreted in relation thereto. He noted the continuing absence of reference to GMOs.



[32] He submitted that this was analogous to the relationship between the RMA and the Building Act 2004, on the basis that he considered that such relationships were detailed in their respective pieces of legislation, in effect leaving regulation of GMOs as a point of difference. He referred to cross-references between the Building Act and the RMA, each to the other. Control of GMOs standing in contrast to such relationships, he submitted that HSNO is a code in relation to the control of GMOs, it being, he submitted, “*exhaustive*”. He submitted that therefore there was no role for local authorities to regulate and control them.

[33] The burden of the detail of submissions in opposition to the Federated Farmers’ position was carried by Mr Matthias, counsel for Whangarei District Council.³

[34] Mr Matthias submitted that it was inappropriate for Federated Farmers to have focussed almost solely on provisions relating to hazardous substances and new organisms in the respective pieces of legislation. He submitted that absence of careful comparison of the purposes of the two Acts was a notable oversight. He discounted the reference to Part XIII RMA because it had never actually come into force in the manner required, by Order in Council.

[35] Mr Matthias focussed on the provisions of s5 RMA, particularly in the regional context. He submitted that this was achieved by public law process which recognises two main concepts in the Act, namely the provision for the development of environmental policies to promote the goal of sustainable management, and the use of integrated environmental management to implement that goal. He noted that s5(2) contains a multitude of considerations, offering an environmental decision-maker considerable leeway for making policy and strategic decisions in order to attain the goal of the legislation. In that regard, consideration needed to be given to the functions of regional councils. In particular, he noted that in addition to protection of the biophysical environment, a regional council could incorporate social and economic development into its approach. In doing so it could take into account the potential effects of the use or release of GMOs not only in an ecological sense, but also in economic and social terms.

[36] Mr Matthias made reference to what he considered an important and relevant statement by the High Court in *Meridian Energy Limited v Southland District Council*⁴ at paragraph [23]:

³ Mr Burns, counsel for Northland Regional Council, adopted and supported the submissions on behalf of WDC and provided brief reasons which entirely aligned with Mr Mathias’s submissions.

⁴ [2014] NZHC 3178 (Justice Whata)



The RMA provides a comprehensive framework for the regulation of the use of land, water and air. It signalled a major change from the direct and control emphasis of the previous planning regime to the sustainable management of resources, with its composite objective of enabling people and communities to provide for their wellbeing while, among other things, mitigating, avoiding or remedying adverse effects on the environment. The Act is carefully framed to provide control of the effects of resource use, including regulatory oversight given to functionaries at national, regional and district levels. **In general terms, all resource use is amenable to its framework, unless expressly exempted from consideration.**

[emphasis added]

[37] Mr Matthias noted that the sentence I have emphasised in the quote is drawn from the decision of the Supreme Court in *West Coast ENT Inc v Buller Coal Limited*.⁵ The Supreme Court had identified that the effects of climate change could be exempted from consideration on a resource consent application because there had been specific provision in the Resource Management (Energy and Climate Change) Amendment Act 2004 which specifically directed local authorities not to have regard to the effects of discharges into air of greenhouse gases on climate change on certain applications, referring to s104E RMA. Mr Matthias emphasised the stated requirement for express exemption, and submitted that an example was to be found in s30(2) RMA, where regional councils have certain broad functions in respect of the coastal marine area that specifically exclude certain matters such as the taking, allocation, or enhancement of fisheries resources for the purpose of managing fishing or fishing resources controlled under the Fisheries Act 1996.

Analysis

[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.

⁵ [2014] 1 NZLR 32



[39] After consideration of all submissions, I have decided that the opposing parties are correct.

[40] I consider that the starting point is exemplified in the passage already quoted from *Meridian Energy Limited v Southland District Council*. Faced with that strong statement by the High Court, Federated Farmers sought to persuade me that it was merely *obiter dicta*, not one of legal principle. Federated Farmers criticised the opposition parties' submission essentially that the RMA does not expressly exempt controls related to GMOs such that the RMA can address control of GMOs.

[41] Mr Christensen for Federated Farmers submitted that the *Meridian* passage was *obiter* because the Court was considering whether the specific provisions of 1963 Manapouri – Te Anau Development Act over-rode the general provisions in s9 RMA. He submitted that the “*comments*” were made in the particular context of that case and not intended to be general statements of the law.

[42] I disagree, and accept the submissions of Mr Makgill for opposing parties that the statement by the High Court in *Meridian* is the *ratio decidendi* (rationale) for the decision. I consider that the statement was the starting point for the result reached in *Meridian*, past which the Court looked to see whether the provisions of the Manapouri-Te Anau Act were an exception, which is what the Court found, for six reasons, in that case. I also agree with Mr Makgill that *Meridian* is authority for the proposition that a statutory interpretation exercise of the kind before me should not be confined to assessment of whether express exemption occurs under the RMA, because express exemption may be found in the other legislation. I consider that to be correct in law, and that the exercise presently being undertaken should be to endeavour to identify whether either of the RMA or HSNO demonstrates express exemption from consideration of new organisms under the RMA.

[43] Federated Farmers cited a decision of the Environment Court *Petone Planning Action Group Inc v Hutt City Council*⁶ as supporting its argument focussing on apparent lack of express exemption in the RMA in relation to building code matters. Mr Makgill cited the *Petone* decision as further authority for the analysis not being confined simply to indications in the RMA – s7(2) of the Building Act 2004 having been identified as presenting such exemption in the *Petone* decision.

[44] I hold that not only was the passage quoted from the High Court Decision in *Meridian*, *ratio decidendi*, but also that statutory analysis seeking the identification

⁶ [2008] W 020/08



of express exemption from consideration of a topic under the RMA, should not be confined to that Act alone.

[45] The opposing parties argued strongly that the regulatory jurisdiction under HSNO is limited to the activity of introduction of new organisms to New Zealand. (A more careful phrasing of the proposition would have one cite s34 HSNO where the relevant wording refers to importation for release and/or release from containment of new organisms). I accept that the clear words of the section limit the regulatory considerations under HSNO to **new** organisms. If I were to accept Mr Christensen's 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. That apparently awkward proposition needs to be viewed against analysis of both pieces of legislation to ascertain whether there is exemption of RMA regulation of GMOs expressed in either statute.

[46] I have already referred to the provisions of s142 HSNO (Relationship to other Acts), which is where one finds reference the RMA. As already noted, s142 focuses on the issue of hazardous substances. It does not deal with GMOs.

[47] I can find no express exemption for consideration of control of new organisms under the RMA in either the RMA or HSNO. This is one factor pointing to HSNO not being an exclusive code for regulatory control of GMOs in New Zealand. There is nothing in the scheme of either Act, or the two read together, to call for an interpretative limitation to be placed on the definition of **natural and physical resources**, which is:

...includes land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures.

[emphasis added]

[48] The "awkward proposition" I have just referred to is not, logically on this statutory interpretation analysis, brought into play. I find that there is nothing present



in these pieces of legislation to prevent the establishment of objectives, policies and methods to achieve integrated management of natural and physical resources in the broad terms directed by the RMA.

[49] I consider that there is a readily identifiable policy reason for that in these pieces of legislation, read together. 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 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.

[50] There is a further decision of the High Court that I consider provides a strong pointer to a finding that the provisions of the RMA go significantly beyond the narrower provisions of HSNO. That case is *Bleakley v Environmental Risk Management Authority*⁷ in which the Court held at paragraph [243]:

[243] Given that the authority found that there was no such danger of escape, there was no obligation in law – and it certainly was not appropriate – for the Authority to venture into more orthodox pollution issues. It is true that the Act has an environmental protection purpose, as does the Resource Management Act, however that prima facie wide purpose is to be read in the context of its subject matter and specifics. It is to protect the environment against hazardous substances and organisms, and not on a wider scale. The wider scale is the role of others under general legislation in the RMA. Thus, if spraying milk on pastures were to raise a concern that heritable material might escape, that would be a concern for the Authority. If after Authority action, there was a risk of escape of heritable material, but there remained a risk of another environmental character – eg destruction of aquatic life in streams – that would be a concern to be dealt with under the Resource Management Act. It would not be an Authority matter, despite the breadth of the opening sections of the Act. It is a not unfamiliar judicial problem to reconcile legislation relating to specific activities, and a general legislation in the resource management field.

[51] Essentially, the High Court found against excluding the jurisdiction of a local authority should it deem it appropriate following an evaluation under s32 RMA, to, for instance, identify areas more (or less) suited to the establishment of activities involving approved GMOs. For instance, regional authorities might, with community input, consider particular regional approaches acknowledging social, economic and

⁷ [2001] 3NZLR 213 at paragraph [243]



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.⁸ Particular regional considerations would come in for study in a way not anticipated by HSNO.

[52] Mr Matthias gave further examples including policy positions representative of strong cultural concerns of Māori, and if thought appropriate “marketing and branding advantages” based on 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.

[53] Mr Matthias went on to refer to a statement found on the website of the Ministry for the Environment in relation to genetic modification and local government, which appeared to offer an opinion that councils’ functions under the RMA theoretically include addressing environmental risks arising from the development of GMOs in their regions. He also pointed to a Government paper on proposals for Resource Management reform in 2013 advising that “*the explicit function for councils to control hazardous substances and the ability for councils to control new organisms through the RMA will be removed. This is considered to be best managed under the Hazardous Substances and New Organisms Act 1996 and by the Environmental Protection Authority...*”. Needless to say I am not here concerned with future central Government policy; that is a matter entirely for Parliament. My finding on Mr Matthias’s reliance on these quotes is that while they may be indicative of policy thinking on the part of officials, I can place little weight on them for assistance with the interpretation of law currently found on the statute books.

Implied repeal

[54] I will address this topic purely for completeness and out of caution. Section 5(1) of the Interpretation Act 1999 requires that *the meaning of an enactment must be ascertained from its text in the light of its purpose.*⁹ This principle has properly been the foundation for many judicial exercises in statutory interpretation, including

⁸ s32(2) RMA

⁹ I acknowledge that this core statutory principle applies equally to the previous parts of this Decision, as much as it does to this one.



recently and importantly in the decision of the Supreme Court in *Terminals (NZ) Ltd v Comptroller of Customs*.¹⁰ It is widely accepted that the doctrine of implied repeal is one of last resort, to be applied only where all attempts at reconciliation have failed¹¹ (which I have found is not the case here).

[55] The Court of Appeal wrote of the principles of implied repeal in *R v McNeish*¹² in the following terms:

The general legal principles are well settled. One provision repeals the other by implication if, but only if it is so inconsistent or repugnant to the other that the two are incapable of standing together. If it is reasonably possible to consider the provisions so as to give effect to both, that must be done...

[56] Mr Christensen submitted on behalf of Federated Farmers, that the doctrine of implied repeal of relevant provisions of the RMA 1991 by enactment of HSNO in 1996, is open in the present circumstances. Having offered the careful concession that there is a presumption that Parliament does not intend that statutes contradict one another, but operate instead within their respective spheres where possible, Mr Christensen developed his argument about implied repeal. Moving to counter opposition arguments that regional social, economic or cultural matters in the RMA range beyond biophysical and health and safety matters in HSNO, Mr Christensen said:¹³

However, such an argument does not properly reflect the extent of controls which can be imposed on the development, field testing and release of GMOs by the EPA under HSNO. Those controls are extensive and detailed. They require the EPA to give wide consideration of socio-economic and cultural matters.

[57] Mr Christensen endeavoured to argue, without close analysis of such HSNO provisions, that one could draw the conclusion that HSNO and RMA can be interpreted as having overlapping rather than complementary roles. He further developed the argument by submitting that the expression *expressio unius est exclusio alterius* is apt.¹⁴ He submitted that the express mention of a role for local authorities regarding hazardous substances in ss30 and 31 RMA, and in s142 HSNO, and the absence of mention of a role for local authorities in either Act regarding GMOs, indicates that regulation of GMOs is removed from the control of local authorities.

¹⁰ [2013] NZSC 139

¹¹ See, for instance, *Burrows & Carter Statute Law* 4th Ed, p453

¹² [1982] 1 NZLR 247

¹³ Submissions on behalf of Federated Farmers dated 9 March 2015, paragraph [36]

¹⁴ Interpreted by him to the effect that the express mention of one of them excludes all others.



[58] I have dealt with these issues in some measure in earlier sections of this decision. I refer to my findings about comparison of purposes and regulatory functions in each Act. I do not consider that these matters “overlap” as between these statutes, certainly not to the extent that there has been an implied repeal of the general RMA provisions by HSNO provisions. It is relevant again to refer to the decision of the Supreme Court in *Terminals NZ Limited v Comptroller of Customs*, in particular the following passage:¹⁵

The proper approach to statutory construction is set out in the Interpretation Act. The primary task is to interpret the text in light of this purpose. In undertaking this task, we accept that there may be some place for the old canons of construction. However, the maximum *expressio unius* does little more than draw attention to what might be seen as the obvious proposition that in many contexts mentioning a particular matter may warrant an inference that other relevant matters were intentionally excluded. But whether that is so or not depends on the context. The exclusion might have been accidental or there might have been good reason for it.

[emphasis provided]

[59] Given the absence of complete overlap, even if regulatory provisions of HSNO are more precise in some respects than the broad provisions in the RMA, I find that there is no context for taking this quite extreme approach. The reasons are found in the earlier section of this decision, and I will not repeat them.

Conclusion

[60] I find against the propositions advanced on behalf of Federated Farmers. I hold that there is power under the RMA for regional councils to make provision for control of the use of GMOs through regional policy statements and plans.

[61] Costs are reserved. Any application should be made in writing within fifteen working days of the date of this decision.

SIGNED at AUCKLAND this 12th day of May 2015



L. J. Newhook
Principal Environment Judge



¹⁵[2013] NZSC 139, at paragraph [74]

19 GENETICALLY MODIFIED ORGANISMS

CONTEXT

Genetic modification (GM) refers to a set of techniques that alter genetic makeup by adding, deleting or moving genes (within or between species) to produce new and different organisms. Genetically modified organisms (GMOs) are products of genetic modification. Another term often used to refer to the same technique is genetic engineering (GE).

A wide range of GM products are being researched and developed for commercialisation. While the GMOs commercialised to date are, in general, directed at reducing harvest losses by combating pests and viruses, research into future varieties is attempting to considerably widen the scope of applications. This includes improved growth in plants, improved tolerance to environmental conditions, and creating entirely new products and sectors of economic activity in agriculture, horticulture, plantation forestry, dairying, aquaculture and medicine.

The absolute and relative benefits associated with the development and use of GMOs is continually being redefined as this and other forms of applied biotechnology advance. However there remains scientific uncertainty with respect to potential adverse effects of GMOs on natural resources and ecosystems. The risks could be substantial and certain consequences irreversible. Once released into the environment, most GMOs would be very difficult to eradicate even if the funding were available for this, irrespective of the consequences. If the GMO is related to a food product, the “GE Free” food producer status of a district or region would likely be permanently lost, along with any marketing advantages that status confers.

The relevant legislation which applies to the management of GMOs in New Zealand is the Hazardous Substances and New Organisms Act 1996 (HSNO Act). The HSNO Act establishes the legal framework for assessments by the national regulator, the Environmental Protection Authority (EPA). This Act sets minimum standards (section 36) and provides for the EPA to set additional conditions that are to apply to a particular GMO activity.

While the HSNO Act provides the means to set conditions on the management of GMOs within a specific geographic area or irrespective of location, councils have jurisdiction under sections 30 and 31 of the Resource Management Act 1991 (RMA) to control land and water use activities involving field trials and the release of GMOs, to promote sustainable management under the RMA.

Local regulation can address key gaps that have been identified in the national regulatory regime for the management of GMOs, in particular the absence of liability provisions and the lack of a mandatory precautionary approach. Benefits of local level regulation, in addition to the controls set by the EPA, include:

- Ensuring GM operators are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation.
- Adoption of a precautionary approach to manage potential risks (economic, environmental, social and cultural) associated with the outdoor use of GMOs.
- Protection of local/regional marketing advantages through reducing risks associated with market rejection and loss of income from GM contamination of non-GM crops, and negative effects on marketing, branding and tourism opportunities.
- Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

Given a council’s general duties of care for its financial position and that of its constituents, there is a ready justification for councils to enforce mandatory conditions to provide for both financial accountability and avoidance of economic damage. These controls would act in addition to those that may be set by the EPA under the HSNO Act.

19.1 ISSUES

- 19.1.1 The outdoor use of GMOs can adversely affect the environment, economy, and social and cultural resources and values, and significant costs can result from the release of a GMO.

19.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 19.2.1 Manage risk and avoid adverse effects on people, communities, tangata whenua, the economy and the environment associated with the outdoor use of GMOs.

- 19.2.2 Provide the framework for a unified approach to the management of the outdoor use of GMOs in the Far North to address cross-boundary effects.
- 19.2.3 Ensure accountability by GMO operators for the full costs related to the monitoring of GMO activities, and any migration of GMOs beyond specified areas, including unintentional GM contamination.
- 19.2.4 Ensure accountability by GMO operators for compensation via performance bonds in the event that the activity under their operation results in adverse effects to third parties or the environment.

19.3 OBJECTIVES

- 19.3.1 The environment, including people and communities and their social, economic and cultural well being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.
- 19.3.2 The sustainable management of the natural and physical resources of the district with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.

19.4 POLICIES

- 19.4.1 To adopt a precautionary approach by prohibiting the general release of a GMO, and by making outdoor field trialling of a GMO a discretionary activity.
- 19.4.2 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to conditions that ensures that the consent holder is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including via the use of bonds.
- 19.4.3 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment from the use, storage, cultivation, harvesting, processing or transportation of a GMO.
- 19.4.4 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to a condition requiring that monitoring costs are met by the consent holder.
- 19.4.5 To require consent holders for a GMO activity to be liable (to the extent possible) for any adverse effects caused beyond the site for which consent has been granted for the activity.
- 19.4.6 To adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a GMO in the district through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a GMO activity becomes available.

19.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

- 19.5.1 Rules in the Plan to control GMO Field Trails and prohibit the release of GMOs in the Far North.
- 19.5.2 Where resource consents are required to undertake GMO activities protection of the environment, economy, society and cultural values may be achieved by imposing conditions of consent.

OTHER METHODS

- 19.5.3 The Council will liaise with other Councils in order to achieve an integrated approach to GMOs in Northland.
- 19.5.4 The Council will encourage all applicants to actively engage with the public and tangata whenua through early dialogue when developing land use proposals to ensure that adverse effects are avoided, remedied or mitigated.

COMMENTARY

The outdoor use of GMOs has the potential to cause adverse effects on the environment, economy and social and cultural wellbeing. The objectives and policies seek to protect the community and receiving environment from risk associated with any GMO activity.

The application of a precautionary approach to the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs in the district shall mean that:

- *The release of a GMO is prohibited (this is to avoid the risk that significant adverse environmental effects will arise, including adverse effects on the economy, community and/or tangata whenua resources and values); and*
- *Outdoor field trialling of a GMO (where the proponents of such activities have prior approval of the EPA) shall be a discretionary activity.*

Pastoral farming, dairying, horticulture and forestry are important land uses in the Far North and are major contributors to the local and regional economy. Therefore there are a range of outdoor GMOs that GMO developers could consider using in the district or region, including GM food crops, trees, animals, and pharma crops. The potential for adverse effects, including accidental contamination, resulting from the outdoor use of GMOs poses a “risk” to the community and environment. By specifying classes of GMOs and applying standards to the outdoor use of GMOs, the risks associated with their use, storage, cultivation, harvesting, processing or transportation can be reduced.

Within the Far North, this will involve managing and limiting the outdoor use of GMOs. Further, performance standards will be used to mitigate any adverse effects associated with contamination of GMOs beyond the subject site, thereby reducing the risks to the community, environment and economy.

Accidental or unintentional migration of GMOs that result in GMO contamination and subsequent clean-up and remediation can be expensive. Council therefore requires a GMO operator to meet all potential costs associated with the activity and will secure long-term financial accountability through appropriate standards and bonding provisions.

The EPA is not obligated to set monitoring requirements as a part of its approval process, and can only require monitoring where it is relevant to assessing environmental risk. Under section 35 of the RMA, a council has a duty to monitor, which can be expensive. Requiring a GMO operator to meet the costs of monitoring, via consent conditions, ensures the costs are met by the activity operator.

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. A council or a GMO proponent can initiate a plan change to change the status of a GMO activity.

19.6 RULES

Activities affected by this Section of the Plan must comply not only with the rules in this Section, but also with the relevant standards applying to the zone in which the activity is located (refer to **Part 2 - Environment Provisions**), and with other relevant standards in **Part 3 – District Wide Provisions**.

19.6.1 PERMITTED ACTIVITIES

An activity is a permitted activity if:

- (a) it complies with the standards for permitted activities set out in **Rules 19.6.1.1** below; and
- (b) it complies with the relevant standards for permitted activities in the zone in which it is located, set out in **Part 2 of the Plan - Environment Provisions**; and
- (c) it complies with the other relevant standards for permitted activities set out in **Part 3 of the Plan - District Wide Provisions**.

19.6.1.1 INDOOR USE AND RESEARCH INVOLVING GENETICALLY MODIFIED ORGANISMS

GMOs that are not specifically provided for in **19.6.2 Discretionary Activities** and **19.6.3 Prohibited Activities** below are a permitted activity. These include (but are not limited to):

- (a) Research within contained laboratories involving GMOs;
- (b) Veterinary Vaccines using GMOs; and
- (c) Medical applications involving the manufacture and use of non-viable GM products.

Note: Such activities may require consents and / or permits under other legislation / plans.

19.6.2 DISCRETIONARY ACTIVITIES

An activity is a discretionary activity if:

- (a) it does not comply with one or more of the standards for permitted activities as set out under **Rule 19.6.1.1**; but
- (b) it complies with **all rules of 19.6.2.1 Genetically Modified Organisms Field Trials, 19.6.2.2 Bond Requirements and 19.6.2.3 Monitoring Costs** below; and
- (b) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the zone in which it is located, set out in **Part 2 of the Plan - Environment Provisions**; and
- (c) it complies with the other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in **Part 3 of the Plan - District Wide Provisions**.

The Council may impose conditions of consent on a discretionary activity or it may refuse consent to the application. When considering a discretionary activity application, the Council will have regard to the assessment criteria set out under **Section 19.7**.

If an activity does not comply with the standards for a discretionary activity, it will be a non-complying activity unless it is a prohibited activity subject to **Section 19.6.3** below.

19.6.2.1 GENETICALLY MODIFIED ORGANISMS FIELD TRIALS

Outdoor field trialling of a GMO (where the proponents of such activities have prior approval of the EPA) shall be a discretionary activity.

Applications must provide:

- (a) Evidence of approval from the EPA for the specific GMO for which consent is sought.
- (b) Details of proposed containment measures for the commencement, duration and completion of the proposed activity.
- (c) Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.
- (d) Research on adverse effects to the environment and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.
- (e) Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.
- (f) A management plan outlining ongoing research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.
- (g) Details of areas in which the activity is to be confined.
- (h) Description of contingency and risk management plans and measures.

19.6.2.2 BOND REQUIREMENTS

Council requires the applicant for the resource consent to provide a performance bond (akin to a bank guarantee) in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity), and that this be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent.

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

Matters that will be considered when determining the amount of the bond are:

- (a) What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.
- (b) The degree to which the operator of the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.
- (c) The level of risk associated with any unexpected adverse effects from the activity.
- (d) The likely scale of costs associated with remediating any adverse effects that may occur.

- (e) The timescale over which effects are likely to occur or arise.
- (f) The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

19.6.2.3 MONITORING COSTS

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

A monitoring strategy for a GMO discretionary activity can include the following matters:

- (a) Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).
- (b) Testing of procedures (e.g. accidental release response).
- (c) Training programmes for new staff, updates for existing staff.
- (d) Audits of sites and site management systems.
- (e) Sample testing of plants and soils in neighbouring properties for the presence of migrated GMOs.

19.6.3 PROHIBITED ACTIVITIES

19.6.3.1 OUTDOOR RELEASE OF GENETICALLY MODIFIED ORGANISMS

Outdoor release of food-related and non-food-related Genetically Modified Organisms, not otherwise provided for in **Rules under 19.6.1** and **19.6.2 above** is a prohibited activity.

19.7 NOTIFICATION

All applications for resource consent under rule 19.6.2 must be publicly notified.

19.8 ASSESSMENT CRITERIA

The matters set out in s104 and s105, and in Part II of the Act, apply to the consideration of all resource consents for land use activities.

In addition to these matters, the Council shall also apply the relevant assessment matters set out below.

- (a) Site design conditions should ensure GMO sites are designed and managed in a manner that avoids or minimises risks of adverse effects from activities carried out on the site. This shall include provisions to prevent the migration of GMOs beyond the area designated for the activity.
- (b) Ensure the transportation of GMOs is carried out in a manner that minimises the risk of adverse effects by preventing the escape of GMOs from the transporting vehicles. Appropriate procedures must be in place to ensure that any vehicle visiting the site is thoroughly cleaned and checked prior to leaving the site to avoid unintentional GMO transportation.
- (c) Reporting requirements by the consent holder will be stipulated in the consent conditions.
- (d) Where necessary, more stringent measures than those required under the provisions of the HSNO Act may be imposed to manage potential risks. A review clause (pursuant to Section 128 of the Act) may be included in any conditions, where deemed necessary, to address any future changes in technology, and the scope of environmental, economic and cultural effects.
- (e) The duration of any consent will be aligned with EPA approval terms.

IN THE MATTER of the Resource Management Act 1991

**AND Proposed Plan Change 18 to the Far North District Plan and
Proposed Plan Change 131 to the Whangarei District Council District
Plan**

Relating to Genetically Modified Organisms.

COMMISSIONERS RECOMMENDATIONS REPORT:

RECOMMENDATIONS TO THE FAR NORTH DISTRICT COUNCIL AND THE WHANGAREI DISTRICT COUNCILS ON THE PROPOSED PLAN CHANGES

1.0 INTRODUCTION

This report sets out the recommendations that the appointed Hearings Commissioners (“**the Commissioners**”) have made to the Far North District Council (“**FNDC**”) and to the Whangarei District Council (“**WDC**”) in relation to Proposed Plan Change 18 and Proposed Plan Change 131 (“**the Plan Changes**”) to the operative Far North District Plan and the operative Whangarei District Plan (“**the District Plans**”) in accordance with the Resource Management Act 1991 (“**the RMA**”).

This report provides an account of the hearing process leading through to our separate recommendations to each of the Councils on the Proposed Plan Changes (“**PPCs**”).

2.0 OUR RECOMMENDATIONS

Our recommendations to the Councils are that the two Plan Changes (“**PPC 18 AND PPC 131**”) be approved, with some minor modifications, and that the submissions and further submissions be accepted, accepted in part, or rejected in accordance with our recommendations. This report

should be read in full for our reasons to approve the Plan Changes and we set out below a brief summary of those reasons:

- We have concluded that the benefits of the proposed Plan Changes provisions outweigh the costs and the risks of not acting are considered to be greater than the risks of acting.
- The proposed provisions to address the management of Genetically Modified Organisms (“**GMOs**”) within the two planning districts are the most appropriate method to achieve Part 2 of the RMA.
- The Section 32 reports underpinning the Plan Changes appropriately and adequately identify and assess the pros and cons of the chosen methods.
- We consider that the proposed objectives are the most appropriate means to achieve the purposes of the RMA and that the proposed policies, rules and methods are the most appropriate way to achieve the objectives.
- We consider that the regulation and management of GMOs is mandated under the RMA and that a precautionary approach with adaptive management response provisions is appropriate.
- Mana Whenua submissions and evidence have supported a precautionary approach, have generally supported the Plan Changes and in some instances have requested further restrictions to the extent of an overall prohibition.
- We consider that the proposed Plan Change provisions do not duplicate the Hazardous Substances and New Organisms Act 1996 (“**HSNO**”) provisions, rather they complement them.

3.0 BACKGROUND

A joint hearing report addressing details of the proposed Plan Changes and the associated submissions was prepared by FNDC Senior Policy Planner, Tammy Wooster and WDC Consultant Planner, David Badham, in accordance with Section 42A of the RMA. The report is hereinafter referred to as “**the Section 42A report**”. The Section 42A report included consideration of all of the relevant statutory considerations. The recommendations in the Section 42A report were that the Plan Changes be approved with some modifications partly as a response to the submissions and further submissions.

4.0 THE PLAN CHANGES IN MORE DETAIL

We were told that PPC 18 and PPC 131 have been developed collaboratively over the past 10 years with other local authorities in the Northland / Auckland region who had formed an Inter-Council Working Party on GMO Risk Evaluation and Management Options (“**The Working Party**”) in response to what they considered to be significant community concerns regarding the outdoor use of GMOs.

We were also told that as part of its investigations the Working Party commissioned a number of reports to investigate the risks and benefits of GMOs, along with a comprehensive survey by Colmar Brunton to gauge public support for local and/or regional management of GMOs, which resulted in the formulation of the relevant Section 32 Evaluation Reports and draft Plan provisions.

The Section 42A report also noted that;

“A comprehensive description of the background of the work commissioned by the Working Party is provided in section 1.2 of the Section 32 Evaluation [Appendix A] and further in the Statement of Evidence by Dr Kerry Grundy [Attachment 11]. We do not deem it necessary to duplicate this and rely on the existing statement in the Section 32 Evaluation and Dr Grundy to provide a comprehensive description of the background of the plan change for the Commissioners and submitters on behalf of each Council”.

A comprehensive description of the background to the work commissioned by the Working Party was provided to us and was made available via each of the Councils. The information in and attached to the Section 42A report provided a comprehensive description of the background of the Plan Changes and was available from either Council.

The Section 42A report advised all parties how to access the relevant information online.

5.0 APPOINTMENT

The WDC appointed us (Barry Kaye (Chair), Bill Smith and Willow-Jean Prime) as Independent Hearings Commissioners, while the FNDC appointed us (Barry Kaye (Chair), Bill Smith as Independent Hearings Commissioners, with FNDC Councillor Willow-Jean Prime being an internal Commissioner). This gave us delegated authority to hear the submitters, further submitters and the Councils' experts and to make recommendations to the respective Councils on the proposed Plan Changes and the submissions and further submissions thereto.

Prior to the hearing, we were provided with and considered the details of the Plan Changes and the submissions (including the further submissions), the Section 42A report and the expert evidence and other evidence that was pre-circulated.

6.0 THE JOINT HEARING

The joint hearing took place on 13 and 14 June 2016 in Whangarei and 16 June 2016 in Kaikohe. Lisa McColl, Jane Murdoch and Janette Bosman, Support Assistants ably assisted the Commissioners with the day to day management of the hearing process.

At the start of each day a Karakia was given by Commissioner Prime. At the completion of the hearing of evidence on 16 June we adjourned the hearing to enable advising Counsel for the two Councils and the Reporting Officers to provide in writing their responses to the evidence.

Those responses were provided on 28 June 2016 and after consideration of all the material before us we closed the hearing on 7 July 2016.

6.1 Submitters/Evidence

An overview of the parties who presented evidence and the nature of those are set out below.

Monday 13 June 2106

- Paul Waanders of WDC and Greg Wilson of FNDC.
Mr Waanders, Manager of the WDC Policy and Monitoring Department, provided an overview of the Plan Changes and highlighted the risk considerations, the need for a

precautionary approach and the need to recognise the cultural perspective on the GMO debate.

- Greg Wilson, Manager of the FNDC District Plan Team also provided us with submissions on the process leading up to the Plan Changes.
- Graeme Mathias, Legal Counsel for both Councils provided opening submissions which traversed the range of issues identified in the submissions as well as providing a succinct overview of the process underpinning the proposed Plan Changes.
- David Badham and Tammy Wooster – Reporting Officers for WDC and FNDC - relied upon their Section 42A report and other information they provided such as their Addendum 1 addressing additional submission points which had been omitted in error from the Section 42A report and out of scope changes.
- Doctor Kerry Grundy, Professor Jack Heinemann and Doctor John Small, all being witnesses for the Councils provided their expert evidence in support of the proposed Plan Changes. Doctor Grundy in particular noted his lengthy involvement with the process including a lead role in the Joint Council Working Party.
- Keir Volkerling spoke for Ngatiwai and Ngapuhi in supporting the Plan Changes generally.
- Soil and Health Association, GE Free Northland, and 15 other parties represented by Mischa Davis, Marion Thomson, Donald Nordeng, Marty Robinson, Vernon Warren (an expert planning witness), Claire Bleakley, Ngaire Hart. Collectively these witnesses provided strong support for the proposed Plan Changes and gave evidence traversing a range of matters in support of their case. They talked about crop contamination, buffer zones, effects on organic foods and certifications, GMOs as a threat to the local economy and the environment, significance to Iwi (Colmar Brunton survey 2009), the need for local plans to reflect local aspirations, why the RMA and the proposed Plan Changes are complementary to HSNO and not duplication and management issues with GMO releases and containment. Mr Vern Warren referred to Mr. Manhire's evidence noting that he was one of the most experienced people in the organic market sector in

NZ and that his views were of some significance as to the adverse effects of unmanaged GMO releases in particular. Mr Warren also noted that the Commissioners were required to rely upon Judge Newhook's recent decision in relation to whether or not Regional Plans could address GMO matters. He talked about the participatory process leading into the Plan Changes being promulgated and advised us that in his opinion District Plans should address GMOs and that the issue went beyond technicalities as the heart of the matter was around the effects on patterns of land uses. He supported the prohibited activity status for outdoor release of GMOs noting that a non complying activity status means rules are set up to intervene only when necessary and that approach did not take a precautionary view as required given the lack of certainty around many issues associated with GMOs. In his view non complying activity status was the 'doorway of uncertainty'. He also noted the submitter's support for the proposed bonding regime as third parties should not bear the costs of "pollution" and agreed with Mr Mathias in respect of the matters he addressed. He concluded that the proposed Plan Changes were underpinned by extensive research and analysis and that that the Plan Changes fit the purposes of the RMA.

- Ms Philippa Guthrie, a policy analyst for the Ministry for the Environment ("**MfE**") presented the Ministry's evidence that had been filed. She had no specific expert qualification from what we could discern in her answers to questions from the Commissioners and advised us that the 'evidence' was a collaboration of various individuals in the Minister's Wellington offices none of whom was present to answer questions. Her main theme in the statement she took us through was that the proposed Plan Changes duplicate HSNO provisions and processes and was unnecessary. On that basis the Minister opposed the proposed Plan Changes per se. She stressed that the Environmental Protection Agency ("**EPA**") process of administering the HSNO legislation was rigorous and more than adequate notwithstanding it was a centralised administrative process with little input from local communities-notwithstanding the comments she made to the contrary in support of the inclusiveness of that EPA process. Our overall position is that the Minister's evidence was of marginal value and bordered on advocacy rather than being the expert evidence we needed which would have better helped us in getting to the essence of the Minister's position.

- Rachel Major owned an organic shop in Maungaturoto and spoke passionately about the dis-benefits of GMOs and the need to manage them through the proposed Plan Changes. While her statement was not expert evidence she provided helpful information that enabled us to understand the position of people like her who were strong supporters of organic methods and products. She spoke about Monsanto and sterile seeds caused by genetic modification. She also noted the issue was about the quality of food products and their nutritional value. She advised us that her research showed 70% of US food products were genetically modified. She was not convinced by arguments that GMOs could be contained. She was opposed to any provisions for GMOs but advised us that if the Plan Changes were all that the Councils could do then she supported them.
- Joint Submitters - GE Free New Zealand, Auckland GE Free Coalition, Clair Bleakley (presented a slide show as evidence), Ngaire Hart (Bee expert), Jon Carapiet, Charles Drace, P.Kirkwod and Michael Trott. These submitters presented comprehensive evidence opposing GMOs outside of containment and supporting the Plan Changes provisions. A range of examples were given illustrating their views that GMOs experiments were frequently disastrous and resulted in unpredicted outcomes.
- Catherine Murupaenga-Ikenn (delayed discussion Via Skype) addressed cultural grounds for supporting the proposals and spoke in relation to indigenous groups and their values.
- Ms. Margaret Hicks added to her written submissions in her presentation. She opposed field trials and spoke about Ethics referring to Socrates. Her view was that the targeted species cannot speak for themselves, thus the GMO process is unethical. GMOs are fundamentally wrong as they interfere with the natural makeup of living species. It is a misuse of science in her view. The precautionary approach is the only approach. She noted that the supporters for GMOs were dominantly commercial interests. She advised us that she believed all EPA field trial applications get approved. Her position was the GMO process represented an abuse of power.
- Steve Goldthorpe, an energy systems analyst, referred to Ms Hicks submissions and agreed that her views on ethics were sound. But he differed in that mankind was charged with being the custodians of the world. He considered that GMOs interfered with

creatures designed for a natural world. He was of the view that GMO releases should be prohibited unless there were no doubts as to adverse effects being avoided and where there was universal acceptance of GMOs in the global food market. He supported the use of RMA processes and that HSNO was not the only available method. He considered the Northland region to be agriculturally isolated from the rest of NZ and that it was appropriate and simple to have different rules for Northland. Overall he concluded that he supported the Plan Changes proposals.

Tuesday 14 June 2016

- Doctor Benjamin Pittman an expert witness for GE Free Northland and Soil & Health Association presented his evidence around a Maori view of the world. He is a well-known and respected expert in Maoritanga. He advised us how he claimed representation for a range of Maori groups noting kaitiakitanga and rangitiratanga status. He discussed the concept of 'mauri' noting everything is interconnected ultimately. The key issue he highlighted was the (unacceptable) notion of mixing 'mauri'. He said mixing of 'mauri' may be allowed if there were clearly proven beneficial outcomes. Even then high levels of risk management were needed. That was the key reason why he supported a precautionary approach. He referred us to s7 (a) of the Act and the obligations therein. He agreed with Commissioner Smith that a Rahui could ban GMOs and that the EPA was obligated as a Treaty matter to take a Rahui into account when making any decisions on GMOs. Doctor Pittman noted that the RMA processes properly involved communities unlike HSNO. He also advised us that there was a current (Maori) ban on GMOs on the regional area extending from Bombay in the south to Cape Reinga on the north. In answer to a question from Commissioner Willow Jean Prime he advised that ban came from a Hui in 2012 in Kaikohe where that ban was agreed to unanimously by all participants.
- Zelka Grammer for GE Free Northland & Soil & Health Association of New Zealand Inc advised us she supported the Plan Changes as they were sensible. There is a duty of care responsibility on Councils. She supported the bond provisions noting we need checks and balances. She advised us that the Rural Women NZ group she spoke for engaged in a range of rural activities. She referred to the 2012 Hui that Dr Pittman advised us of and noted that was a clear community direction to the Councils (and

Federated Farmers). Overall she supported the proposals even though she would like even tougher provisions.

- John Clark supported GM research when done safely but was against open air research. He sought that open air trials be prohibited and not a discretionary activity. He also sought that people carrying out GM research be financially accountable for the risks they introduce. He agreed with Professor Heinemann that there was insufficient information available to accurately assess risks. He provided us with many examples of failures or unexpected outcomes and a huge amount of information on a memory stick that he gave us to read. He referred to connections with climate change and the need to save seeds to enable protection of 'good' stock. He noted no matter what the 'promises' were about the benefits of GM crops the results had not proven to match the promises. His overarching relief was that open air research should not be a discretionary activity but prohibited.
- Federated Farmers ("FF") represented by Richard Gardner (internal lawyer and policy planner) and John Blackwell (President FF Northland) provided evidence. We note we were left unclear as to whether Mr Gardner's statement was evidence or submissions as FF's internal lawyer or a mix of those. Mr Gardner advised of FF's total opposition to the proposed Plan Changes. He also advised us that FF's had a neutral policy on GMOs for at least 20 years. We note here that we were at odds to reconcile "a neutral position" with "strong opposition". He said the role of managing GMOs was a central government role (taking a similar position to MfE). He advised us that we shouldn't manage GMOs but only manage the effects of GMOs. He did however agree that the Environment Court decision by Judge Newhook which we have already referred to was the current law and that accordingly councils' can manage GMOs through RMA provisions. He also though preferred that no decision on the Plan Changes be made until the High Court appeal by FFs on the Judge Newhook decision had been determined.
- He referred to Doctor Bellingham's evidence wherein a controlled activity status for GMOs was sought. Doctor Bellingham was not called as an expert witness by Mr Gardner and the evidence filed for these Plan Changes was evidence that Doctor Bellingham prepared for the hearings about GMO provisions in the Proposed Unitary Plan for Auckland. As that evidence was not specific to the proposed Plan Changes in

any manner or detail we have paid little attention to that noting that Mr Gardner's position on that was the same as Doctor Bellingham's in any event.

- We also note that Mr Mathias advised us in his right of reply in relation to our questions about the validity of some evidence that;

8.1 *In my submission, accepting that it is entirely up to the Committee as to what weight it gives any evidence or submissions it receives, such evidence and submissions presented to it where there was no appearance by the deponent or author should be disregarded. It is not appropriate to say that the evidence presented on the PAUP would be as applicable to the districts administered by WDC and FNDC. There should have been consideration of the actual districts to which the plan changes were directed. No such consideration was given. Further non-attendance means that the witnesses could not have their evidence scrutinised and they could not be questioned by the Committee. The legal opinion and evidence, as attached to the submissions for Pastoral Genomics as presented to the district plan change on the Hastings District Plan, the authors of which were not present at the Northland hearings, should be treated similarly.*

8.2 *Leaving to one side the issue of respect for the Committee itself, I believe it is not unreasonable to say that the presentation of such evidence, (as prepared for the PAUP) albeit on the same subject matter without witness being present, suggests that no consideration has been given to the actual plan changes you are considering. At the very least one might have expected a statement from the witnesses saying they had considered the plan changes and believed that the evidence presented on the PAUP applied in the same manner but there was not even that level of consideration. The manner in which the evidence was presented shows a contempt for the process that WDC and FNDC have pursued. Such evidence/submissions should be entirely disregarded.*

We agree with Mr Mathias in that respect.

- Mr Gardner submitted that the EPA process was rigorous and that the terms 'take into account' did in fact represent a precautionary approach. We have a differing view on that matter taken in the context of the proposed Plan Changes provisions and Mr Mathias's advice that the Councils are required to 'give effect to'.

Mr Gardner through questioning conceded that GMOs could potentially be seen as a regional planning issue. Also in reply to questions Mr Gardner noted that the Plan Changes were contrary to FFs position on 'endorsing farmer's rights).

Mr Gardner confirmed FF's opposition to the proposals and his position was unchanged having read the Section 42A and Section 32 reports.

- Michael Finlayson advised us that he had been in Herikino since 2000. He was a Landcare Programme member with a lengthy record of contributions to pest eradication (30,000 hours of his time). He talked about the unintended consequences of GMOs. He referred to NZ's clean green image and how GMOs adversely affect that image. Overall he advocated a precautionary approach and thus supported the Plan Changes.

Thursday 16 June 2016

- Pastoral Genomics represented by Doctor Dunbier who spoke as an employee rather than an expert. He accepted that the Environment Court decision of Judge Newhook set the legal ground upon which we had to make our findings and recommendations. He supported national level regulation rather than the proposals. He advised that in his experience local regulation has problems. HSNO was a comprehensive piece of legislation in his view and was adequate to the task. He thought that the Section 32 reporting was deficient and that Doctor Grundy and Professor Heinemann were biased. He believed it was not feasible to dovetail the RMA and HSNO approaches and consenting processes would become prolonged. He was of the opinion that GMO crops were likely to have less unintended consequences than other methods such as mutations and cross breeding. He questioned the credibility of much of the research and information referenced by opposing submitters. He thought much of the opposition was value based and not scientifically based. He said we should "bite the bullet and regulate the product and not the process".
- Arnold James Kalnins a retired architect owned a lifestyle block and was a staunch opponent of GMOs. He endorsed the GE Free NZ evidence. He noted his research showed GMO and non GMO farms can't coexist. He noted that GMOs were

unpredictable technology. He gave examples of GMO related disasters and noted that GMO releases can't be 'recalled'. In terms of a clean green image no GMOs at all was the best safeguard. Unpredictability was a characteristic of the GMO context. He noted "we shouldn't dabble with creation".

- John Sanderson from Kerikeri was involved with natural products (and an ex aircraft engineer). He supported the proposals noting that the Councils had acted after listening to the communities. He agreed the approach was not duplication (with HSNO) but complementary. He also noted once the EPA approves a product they have no jurisdiction and after that a Territorial Local Authority ("TA") can manage as proposed. His view was that the MfE evidence that only the EPA has adequate expertise was 'scaremongering' and also that they were disingenuous. He noted the reference by other opposing submitters to HSNO and the term 'take into account' did not equate to a needed precautionary approach. He also noted that bonds were appropriate as any liability under HSNO only existed once there had been a breach. Penalties couldn't recapture an inadvertent release of a GMO for example.
- Colonel Bob Jones advised us his background as a scientist for the US Army. He also noted he had spent 2 years researching GMOs. He preferred that the proposed Plan Changes take a tougher stance but supported what was proposed in any event. He wanted any trials to be prohibited activities. He noted in respect of Doctor Dunbier's evidence that while HSNO is a national statute that the effects of GMOs were local and that is where they should be managed. He also noted there was no consensus information that GMOs were safe no matter what any of the opposing submitters had said. The EPA hardly ever rejected any application in his understanding.
- James Valley advised us of his concerns about the dangers of GMOs. He noted he had help set up the Hamilton Safe Food Campaign. He also noted the differences between genetic selection and GMOs noting the former did not introduce foreign genes. He provided us with an overwhelmingly long list of research and references in support of his position opposing GMOs. Mr Valley sought that any EPA approved GMO experiments or field trials be prohibited and also that all GMO releases be prohibited. Apart from that he supported the proposed Plan Change. He requested an amendment to the proposed provisions (PC 18) seeking the addition of a clause stating that any application to

release a GMO that is transgenic (foreign genetic material added) must be publicly notified and automatically declined. He also addressed the definition of both 'transgenic' and 'GMOs'. He reconfirmed that he sought outcomes as set out in the submissions he filed which supported the Plan Changes subject to some amendments.

- Martin Robinson and his witnesses Charles Nathan and Diana Ellis who were called under his umbrella as they had not lodged submissions but in the interests of natural justice the Commissioners advised that approach was acceptable and thus their views could be made known. Mr Nathan turned out to be well informed and a person of some importance in a range of local and wider Maori/Iwi groups and had some status in that regard. He advised us of the same opposing GMO Hui mandate that Doctor Pittman had referred us to. He also referred us to a Kemp document from 2008 and a Hapu management plan which had a policy of containment. (page 10 of the Section 42A report referred to the relevant Hapu management plan). He said within the Hokianga rohe GMOs were opposed. He supported the precautionary approach. Diana Ellis referred us to a You Tube video by Arpad Pusztai which provided evidence against GMOs.
- Fiona Robinson from Kerikeri supported the proposed Plan Changes. She talked about the clean green image being one reason people come to NZ. She spoke about organics and how gene insertions infect cells. She noted our immune systems were not designed to cope with GMO food products. She sought an organic GM free NZ.

The Joint Section 42A report prepared by Ms Wooster and Mr Badham was taken as read at the hearing. It had been pre-circulated to submitters and ourselves.

After adjourning the hearing on the 16 June 2016 and before closing on the 7 of July Ms Wooster and Mr Badham provided a written response to the evidence that had been heard over the hearing duration and re-confirmed to us that, subject to some amendments to the original recommendations (on Plan Change provisions detail) to us, that the Plan Changes be recommended to the Councils for approval with the submissions and further submissions to be determined accordingly.

We also received written submissions in reply from Mr Mathias, the Counsel for the two Councils.

Mr Mathias addressed a number of matters following the Commissioners' directions at the time of adjourning the hearing. Those included the following points, some of which were also directly addressed by Ms Wooster and Mr Badham in their reply.

- (i) *What is the distinction between a genetically modified organism ("GMO") and a new organism and can the relationship between them in terms of the Hazardous Substances and New Organisms Act 1996 ("HSNO") and the Resource Management Act 1991 ("RMA") be clarified with particular relationship to the plan changes and in that regard is the existing definition of a GMO in the plan changes appropriate?*
- (ii) *Are there any provisions in the Regional Policy Statement ("RPS"), other than the GMO provisions which are under appeal, which is in any way relevant, either positive or negative, to the plan changes?*
- (iii) *What consideration was given to the use of the non-complying activity status in the plan provisions both in relation to the provisions of the plan changes and the S.32 analysis?*
- (iv) *What is the position of the S.42A reporting officers on the proposed use of the controlled activity status as proposed by Dr Bellingham in his evidence?*
- (v) *What is the status of the evidence and submissions presented by or on behalf of Federated Farmers and Pastoral Genomics where the evidence and submissions tendered was not in fact formally presented as either evidence or submissions to the Committee? Dr Bellingham's evidence to the Auckland Unitary Plan hearings was specifically referred to.*
- (vi) *What is the Council's position on the proposition of duplication between the HSNO and RMA regimes in relation to GMOs?*
- (vii) *Has their position on liability changed following submissions? How would the bonding regime envisaged by the plan changes apply?*
- (viii) *How would the containment of trials once an EPA approval had been granted work in a practical sense?*
- (ix) *What is the position of the S.42A reporting officers on the proposition that there be a total prohibition for both releases and trials as sought by some submitters?*
- (x) *Has GMOs been identified in the relevant planning documents as a significant issue?*
- (xi) *What is the difference in public participation opportunities under the different regimes*

provided by HSNO and the RMA? In particular making submissions on applications to EPA as against public engagement in planning processes under RMA.

- (xii) What provisions do the iwi/Hapu management plans listed in the Section 42A report have in regard to GMOs?*
- (xiii) Do provisions in iwi/Hapu management plans have any standing in relation to applications for approval to the EPA?*
- (xiv) Should the Committee consider the outstanding determination of the High Court on the appeal of the Environment Court decision?*
- (xv) What consideration should be given to the submission of Mr Valley in relation to transgenics and the definition of GMOs in the plan changes?*
- (xvi) How would monitoring work in terms of field trials with respect to access on adjoining or adjacent properties if required?*

We discuss our findings on these matters in the main body of this report.

6.2 Expert Evidence

Some evidence was pre circulated to us and that included;

- Evidence of Marty Robinson, Marion Thomson, Jon Manhire and Linda Zelka Grammer for Soil and Health Association of NZ Incorporated.
- An unsigned statement of evidence from the Ministry for the Environment.
- Statements of evidence from Doctor Kerry Grundy, Professor Jack Heinemann and Doctor John Small for the Far North and Whangarei District Councils.

We received limited expert planning evidence at the hearing with planning evidence received only from Mr Vern Warren, a very experienced qualified planner, who represented Soil and Health NZ.

We note particularly that it was unhelpful that both FF and the MfE requested potentially far reaching and fundamental amendments to the proposed Plan Changes but did not provide any expert planning analysis of the changes proposed in their submissions at the hearing.

An approach was taken by FF that the evidence presented to the hearings for GMOs in the Proposed Auckland Unitary Plan could be considered as evidence to the proposed Plan

Changes and without any of the experts who provided that evidence being in attendance to produce their evidence and to answer questions from the Commissioners.

In our opinion that is not an appropriate (or acceptable) approach and we consider that the request by that submitter in particular to adopt the use of the controlled activity approach for GMOs is not supportable by any expert evidence because of that failure.

7.0 SUBMISSIONS

The Section 42A report included a summary of the submissions and further submissions received to each of the Plan Changes and also included a copy of each submission. We have read all the submissions and have included below an overview of what the submitters requested and also what was raised at the hearing.

Collectively there were 589 submissions and 120 further submissions to the Plan Changes. The WDC received 284 submissions and 65 further submissions. The FNDC received 305 submissions and 55 further submissions. The submissions were categorised in sections as follows:

- Support - entire plan change as written.
- Support in part – specific amendment.
- Support in part – prohibited activity status.
- Oppose – entire plan change.
- Oppose in part – specific amendments.

When making our recommendations to the Councils, and when they make their subsequent decisions, under Clause 10 of the First Schedule of the RMA, it is necessary to give reasons for allowing or not allowing any submissions (grouped by subject matter or individually) either in part or wholly. The recommendations and the Council decisions may also include consequential alterations arising out of submissions and any other relevant matters considered relating to matters raised in submissions.

We took as read the Section 42A report that had been prepared by Council reporting officers. It had been pre-circulated to submitters and ourselves. The planning report was structured under headers identifying the different issues.

That report helpfully provided us with a tabulated reference to the issues.

Under each issue identification of the details contained within the submissions (and allied further submissions) was followed by a discussion on the submissions and a determination recommendation to us. We were able to question the submitters and experts as the hearing proceeded. We note that we agree with the recommendations made by the reporting officers. The principal parts of the Section 42A report that address the submissions and make recommendations has been adopted by us as the structure to be followed in our findings on the submissions to the Plan Changes. The final recommended versions of the proposed provisions are attached as Attachments A and B to this recommendation report.

The Commissioners wish to acknowledge the appearance of the submitters, and/or their representatives, and also the tabled information from submitters, at the hearing, both in support and opposition to either the whole or parts of the Plan Changes. The information that was provided from the submitters assisted us in understanding the issues and reaching our findings and recommendations.

8.0 STATUTORY CONTEXT

Section 74 of the RMA sets out the matters to be considered by a territorial authority in preparing or changing its district plan. These matters include doing so in accordance with its functions under Section 31, the provisions of Part 2 and its duty under Section 32. Further, also having regard to other documents, including regional planning documents, management plans and strategies prepared under other Acts and iwi planning documents.

Section 75 of the RMA, in addressing the contents of district plans, requires that a district plan must give effect to any national policy statement, any New Zealand Coastal Policy Statement any regional policy statement and must not be inconsistent with a regional plan.

Section 31 addresses the functions of territorial authorities under the RMA and includes:

- (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district;*
- (b) The control of any actual or potential effects of the use, development, or protection of land,...*

Section 32 RMA provides for the consideration of alternatives, benefits, and costs and requires that an evaluation must be carried out and that an evaluation must examine:

- (a) The extent to which each objective is the most appropriate way to achieve the purpose of this Act; and*
- (b) Whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.*

For the purposes of this examination, an evaluation must take into account the benefits and costs of policies, rules, or other methods.

Part 2 of the RMA, being the purpose and principles of the statute, is the overarching part of the RMA. Regard is to be given to all matters within it.

Part 1 of Schedule 1 to the RMA applies to plan changes by local authorities. Clause 10 states a local authority must give a decision on the provisions and matters raised in the submissions received to the plan change and must include the reasons for accepting or rejecting any submissions. In doing so a local authority may address the submissions by grouping them according to the provisions of the plan change to which they relate or the matters to which they relate and, may include matters relating to any consequential alterations necessary to the plan change arising from the submissions. A local authority is not required to give a decision that addresses each submission individually. A local authority may also withdraw its plan change in which case that action is to be notified and reasons given for doing so (Clause 8D).

9.0 STATUTORY CONSIDERATIONS

We have carefully considered the statutory and other plans listed under section 6.0 of the Section 42A report and find that the Plan Changes as modified will be consistent with those documents listed.

9.1 General

The Councils had completed an evaluation of the Plan Changes with regard to Part 2 of the RMA which included the purpose of the Act as contained in Section 5, Section 6 - Matters of National Importance, Section 7 - Other Matters and Section 8 - Treaty of Waitangi.

The Councils had also considered Section 31 of the RMA which sets out the functions of territorial authorities in giving effect to the purpose of the RMA and an evaluation in accordance with Section 32 of the RMA.

Section 32(1) states that an evaluation must:

- Examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
- Examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
- Identifying other reasonably practicable options for achieving the objectives; and
- Assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
- Summarising the reasons for deciding on the provisions; and
- Contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.

An assessment under subsection s32(1)(b)(ii) must—

- Identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
- Economic growth that are anticipated to be provided or reduced; and

- Employment that are anticipated to be provided or reduced; and
- If practicable, quantify the benefits and costs referred to in paragraph (a); and
- Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

Any evaluation in terms of Section 32 is ongoing, and must be undertaken to confirm the appropriateness of the Plan Changes. We were told that the Section 32 Reports were completed prior to notification and that the Reporting Officers had no involvement in the preparation of the Section 32 Evaluation but that they had reviewed the Evaluation and supporting material referenced within it and considered the Evaluation to be comprehensive and to demonstrate careful consideration of the issues and options relevant to the proposed Plan Changes provisions.

We were provided with and have read the legal opinions of Dr Somerville that the Section 32 Evaluation was properly carried out and subsequently reassessed after the RMA amendments in 2014 and it met the new statutory criteria. While some submitters in opposition dispute that we find that the Section 32 reporting met the statutory requirements, was robust and reflected an iterative evolution that occurred over a period of analysis and evaluation of up to 14 years duration and was inclusive of the findings of a range of experts who we note also advised the Auckland Unitary Plan Hearings Panel on the same GMO related matters.

For the reasons set out in this recommendation report we have concluded that the Section 32 Evaluation does demonstrate that the proposed objectives are the most appropriate means of achieving the purpose of the RMA and that the proposed provisions are the most efficient and effective means of achieving the objectives.

9.2 National Policy Statements

There were no national policy statements relevant to the Plan Changes although a number of submitters did refer to the possible release of a National Policy Statement on Production Forestry. However, as no Statement has been released it does not have any legal effect and we do not believe that it is relevant to our consideration of the Plan Changes.

9.3 Proposed Northland Regional Policy Statement (PRPS)

The plan changes are subject to the PRPS and the Section 42A Report in section 6.0 outlined the Reporting Officers opinions which were that the provisions in the PRPS do not prevent the Plan Changes proceeding and that in any event, the PRPS provisions should be attributed little weight as they are still subject of an appeal.

We had read and were also told during the hearing of evidence that the Operative Regional Policy Statement (RPS) does not contain provisions relating to GMOs but that provisions had, after hearings, been included in the PRPS and that these provisions had been appealed firstly to the Environment Court and then to the High Court on points of law by FF. At the time of our hearing and making our recommendations to the Councils, the High Court had not released its decision and we have therefore taken the Environment Court decision as the current law when making our recommendations.

Responding to our questions we were told that the RPS does not exclude the District Councils' from regulating for GMOs within their areas and as a result of the evidence, submissions and legal advice we received we have concluded that the Plan Changes (as amended in accordance with the reporting planners recommendations) will remain consistent with the operative RPS.

9.4 Iwi and Hapu Management Plans

Section 74(2A) of the RMA requires territorial authorities to take into account any relevant planning document recognised by an iwi authority to the extent that its content has a bearing on the resource management issues of the district.

Although Iwi and Hapu Management Plans were referenced in the Section 32 Report it did not (at that time) provide a list of all of the relevant Iwi / Hapu Management Plans for the Far North and Whangarei Districts, and additional Iwi / Hapu Management Plans have been formally recognised by the Councils since the Section 32 Report was completed. A list of the formally recognised Iwi / Hapu management plans for each Council is provided below.

There are seven recognised Iwi / Hapu Management Plans in the Far North District:

- Ngati Kuta ki Te Rawhiti Hapu Management Plan fifth edition
- Ngati Rehia Enviromental Management Plan 2007

- Te Iwi o Ngatiwai Iwi Environmental Policy Document 2007
- Nga tikanga o te taiao o Ngati Hine 2008
- Nga ture mo te taiao o Te Roroa 2008
- Te U kai Po Te U Kai Po Iwi Environmental Management Plan o Nga Iwi o Whaingaroa 2011
- Te Kahukura a Ngati Korokoro, Ngati Wharara me Te Pouka 2008

There are four recognised Iwi / Hapu Management Plans in the Whangarei District¹:

- Ngatiwai – “Te Iwi o Ngatiwai: Iwi Environmental Policy Document 2007”
- Ngati Hine – “Ngati Hine Iwi Environmental Management Plan 2008”
- Patuharakeke – “Patuharakeke Hapu Environmental Management Plan 2014”
- Ngati Hau – “Hapu Environmental Management Plan 2016”

We were told that those documents generally oppose the release of GMOs to the environment, advocate a precautionary approach to GMOs and that some advocate local management of GMOs.

The opinions of the Reporting Officers after having reviewed each document and taking into account the provisions were that the proposed provisions of the Plan Changes were consistent with, and in some respects will help achieve the outcomes sought in the documents.

We heard evidence from a number of iwi representatives/witnesses who all spoke in support of the Plan Changes and the Councils’ actions in trying to protect the community. We were also told by Mr Charles Nathan that at a Hui in 2012 there was a unanimous vote to ban GMOs in the area from the Bombay Hills to Cape Reinga.

In respect of those matters Mr Mathias in his reply submissions advised that;

12.1 Part 2 of the RMA has a more broadly drawn sustainable management purpose. It specifically addresses people and communities providing for their social, economic and cultural well-being and for their health and safety while "safeguarding the life-supporting capacity of air, water, soil and ecosystems".

¹ It is noted that some iwi / hapu management plans transcend the Council boundaries and are recognised by both WDC and FNDC.

12.2 Further S.6 requires recognition and provision as matters of national importance (my emphasis)

(c) *The protection of areas of significant indigenous vegetation and significant habitat of indigenous fauna.*

(e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga.*

12.9 Further Part 2 requires particular regard to be had in the management of the use, development and protection of natural and physical reserves, to Kaitiakitanga

12.10 These principles it is submitted point to an enhanced role for Maori under the RMA than that provided for in HSNO.

Based on the advice we received and the evidence in front of us we have concluded that the overarching position of Iwi is to generally oppose GMOs. That is a fundamental Part 2 consideration that we have taken on board in reaching our recommendations.

9.5 Hazardous Substances and New Organisms Act 1996 (HSNO)

The majority of submissions in opposition to the Plan Changes related to the matter of jurisdiction, the role of the RMA and HSNO in the management of GMOs and that central government has sole responsibility to regulate GMOs through the EPA under HSNO. They also thought it is more efficient and effective to manage GMOs at the national level and that it was not appropriate to have duplication or more restrictive regulation at the local level under the RMA as the HSNO provides for satisfactory management of GMOs. Those in opposition who attended and spoke at the hearing reiterated this view.

The Reporting Officers focused their evidence on the provisions of the Plan Changes in terms of achieving the relevant requirements of the RMA. They did not provide a detailed analysis of the HSNO provisions which were set out in the FE decision by Judge Newhook which was attached as Attachment 10 to their report and discussed further in the legal submissions of Mr Mathias on behalf of both Councils.

We had read the decision of the Environment Court before the hearing and have referred to it during our deliberations and believe that it does provide a very clear exposition of how the

HSNO and RMA complement each other, rather than duplicate functions. The Court found that HSNO and the RMA have different purposes and roles in relation to GMOs. HSNO's purpose and role is to assess new organisms (including GMOs) for approval (or not) for introduction into New Zealand. Once released in New Zealand, they are no longer considered new organisms and HSNO has no further role. The RMA, on the other hand, is a comprehensive statute that regulates the use of all natural and physical resources in an integrated manner over time so as to achieve the sustainable management of those resources. Natural and physical resources, as defined in the RMA, encompass GMOs.

Both Reporting Planners gave evidence (via the Section 42A report, in answer to questions and in their reply comments) (which was not contradicted by any other planning expert at the hearing), that in their view, the Plan Change provisions prepared under the RMA were not in conflict with HSNO and that they considered that the provisions were complementary, and in some cases, additional to the controls on GMOs that can be applied by the EPA under HSNO. Their joint opinion was that the provisions represent an appropriate response, given the level of scientific uncertainty highlighted by Professor Heinemann, the economic analysis of Doctor Small and the level of concern expressed by the community.

Based on all the submissions and evidence that was put before us and taking into account the decision of the Environment Court and the advice to us that the Court decision establishes the current law that we must consider, we are of the view that the proposed Plan Changes do not duplicate what is provided in HSNO; rather that they complement the HSNO processes.

We note that there are other instances where Councils consider issues under the RMA which are also considered under other legislation such as the Building Act, Civil Aviation Act and Historic Places Act.

10.0 PRINCIPLE ISSUES IN CONTENTION AND FINDINGS

Having read the submissions, evidence and tabled evidence and the Section 42A Report and attachments and listened to the evidence presented at the hearing we consider now the principle issues in contention and our findings in respect of each issue.

10.1 The Overall Purpose and Scope of the Plan Changes

The overall purpose and scope of the Plan Changes was limited to a relatively confined and focused set of the effects associated with GMOs.

10.2 Jurisdiction

A number of submitters, including the MfE, FF and Pastoral Genomics who all had representatives attend the hearing, opposed the Plan Changes, in part, on the basis that there is no jurisdiction for local authorities to manage and control GMOs in New Zealand and that sole responsibility should be with central government and more specifically the EPA under HSNO.

We note that the issue of jurisdiction for local authorities to regulate GMOs under the RMA was recently subject to an appeal to the Environment Court in Federated Farmers of New Zealand v Northland Regional Council [2015] NZRMA 217. A copy of the decision was attached to the Section 42A report. In that decision, Principal Environment Court Judge L J Newhook determined that there is power under the RMA for regional councils to make provision to control the use of GMOs through regional policy statements and plans.

Although the decision is currently subject to an appeal to the High Court by FF based on points of law, the Environment Court decision, we were told, was the current legal position on jurisdiction and this was addressed by Councils' legal representative Mr Mathias in his statement to us. In addition Mr Gardner for FF and Doctor Dunbier for Pastoral Genomics did acknowledge that based on the Environment Court decision that the Councils do have jurisdiction.

We note also that although the MfE opposed the Plan Changes and had a representative present a statement at the hearing no expert evidence was presented by the MfE and it did confirm in paragraph 7 of the statement that the Court's finding is in line with statements from Government in the past and Crown law advice but did go on to say that local authorities must pass the statutory tests in the RMA and that the MfE maintains that the Councils have not passed the statutory tests.

In relation to the matter of duplication of regimes Mr Mathias in his reply submissions advised us as follows;

- 9.1 *While it is clear that both the RMA and HSNO have provisions in common and both record that amongst their purpose and principles is the protection of the environment and the health and safety of people and communities the focus of HSNO is clearly more limited than that of the RMA. It only applies to hazardous substances and new organisms. It has a specific focus on considering their risks and benefits before approving their introduction into New Zealand for research in containment, field trialling or release to the environment. Its focus is on the decision whether to allow importation into New Zealand rather than the on-going integrated management of the resource (GMOs) itself.*
- 9.2 *The consideration of effects under the two statutes is also different. The definition of effect in the RMA includes "any potential effect of high probability" and "any potential effect of low probability which has a high potential impact". These aspects are not included in the definition of effect under HSNO. Also cumulative effects are treated differently under the two statutes. Whilst both refer to cumulative effects which arise over time or in combination with other effects the definition in the RMA extends to other effects "regardless of the scale, intensity, duration, or frequency of the effect".*
- 9.3 *This feature, or point of differentiation, was considered by the Environment Court in considering the differences between the meaning of effect in the RMA and HSNO. The Environment Court found that cumulative effects are dealt with in somewhat more detail in the RMA*
- 9.4 *This point of difference was also identified by the Environment Court in NZ Forest Research Limited v Bay of Plenty Regional Council 14 where the Court held that ~~Section 3(f) of the RMA, extending the definition of effect to include "any potential effect of low probability, which has a high potential impact",~~*
- "... most certainly points to taking a precautionary approach -indeed it may go further than a precautionary approach would ordinarily be thought to require because it is premised on a given effect having a known low probability of occurrence, and an unknown likelihood of a possible high impact".*
- 9.5 *It is also submitted that there is a different risk assessment process between the two enactments. The evaluation of S.32 in the RMA is to assess 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.*
- 9.6 *Similarly the reference to risk in S.32(4)(b) of the RMA in the context of uncertain or insufficient information, requires local authorities to consider a precautionary management approach which would entitle them to take anticipatory measures and to*

consider alternatives in light of potential significant or irreversible harm that could result from proceeding on the basis of uncertain and/or inadequate information.

9.7 *It might be considered that this reference to risk is wider than the wording in S.7 of HSNO which refers to scientific matters when taking a precautionary approach.*

9.8 *The regulatory function/jurisdiction under HSNO is limited to the importation for release and/or release from containment of new organisms. When exercising that function to achieve the purpose of HSNO the focus is on the risks and benefits of importing GMOs into New Zealand at a national level. Assessment at a regional, (and therefore at a district level), follows upon a HSNO determination. There is a different functional approach involved.*¹⁵

9.9 *As the Environment Court stated at paragraph 50 of its decision, the High Court in Bleakley v Environmental Risk Management Authority¹⁶ recognised that RMA provisions go significantly beyond the narrower provisions of HSNO. Adverse effects on the environment resulting from applications which have been granted approval under HSNO will continue to be dealt with under the RMA.*

9.10 *As identified in both these decisions there are two regimes. While there are elements of duplication there are significant points of difference so providing for controls under the RMA is not simply a duplication of the HSNO regime. It would recognise, as identified by the Environment Court, the wider role that the RMA plays in the management of natural and physical resources.*

9.11 *HSNO is also an act which has a national rather than a community/district base as the area of its consideration. The RMA, on the other hand has a local and regional focus. This was addressed in my opening submissions so will not be traversed.*

Following from Mr Mathias's advice, and as we have noted elsewhere in this recommendation report, we consider that the Councils have met the appropriate statutory tests and overall, based on the Environment Court Decision and the submissions and evidence presented to us, we are of the unanimous opinion that the Councils have jurisdiction to manage and control GMOs within their respective District Plans.

If following the High Court Decision sought by FF we are found to be wrong in that regard (or if there are any changes to the relevant legislation) then the matter will no doubt be addressed through the appropriate statutory processes in any event.

10.3 Integrity of the Section 32 Evaluation

Based on the evidence we consider that the Councils have complied with the Act in regards to the Section 32 analysis. A number of submissions in opposition to the Plan Changes considered that the Section 32 analysis was not adequate for a number of reasons. Those reasons included;

- The evaluation does not meet the necessary requirements of Section 32 of the RMA.
- The scientific conclusions underpinning the Section 32 evaluation are outdated and wrong.
- The evaluation overstates the economic risks of GMOs and understates the potential benefits of GMOs.

At the hearing we heard from a number of submitters (FF, MfE and Pastoral Genomics) regarding this matter but we did not hear any expert planning evidence to refute the Reporting Officers' professional opinions. We were also told in evidence and at the hearing by Doctor Grundy (witness for the Councils) that the Section 32 Evaluation was one of the most extensive evaluations he had seen in his career. Doctor Grundy also told us that, contrary to the issue raised by some submitters that the evaluation was biased because Professor Heinemann and he had completed it, that neither he nor Professor Heinemann had any involvement in the preparation of the Section 32 analyses at any time. We were told that the Inter Council Working Party draft Section 32 Report was written by Mitchell Partnership in conjunction with Duenorth Ltd and Simon Terry Associates and that prior to publication of the central background report to the draft Section 32 Report an independent peer review was undertaken by an academic at Victoria University of Wellington.

Having read all the submissions and evidence on this matter and having read and listened to Professor Heinemann that there is scientific uncertainty regarding the use of GMOs, and as such there are scientific grounds to exercise precaution, as proposed by the Councils in the Plan Changes provisions we agree with his opinion and note that although Doctor Dunbier did

appear before us on behalf of Pastoral Genomics we did not hear any independent expert evidence to refute that of Professor Heinemann. Another issue regarding the Section 32 Evaluation related to the economic risks of GMOs and this was addressed in the expert evidence of Doctor Small. Again, we did not hear any expert evidence in opposition to his evidence although we do acknowledge that there was some economic evidence attached to the submissions and circulated evidence but for whatever reasons opposing parties did not call any expert to give evidence.

We rely on Doctor Small's evidence with regard to the potential economic costs and benefits of the proposal and his conclusion that there is a benefit from taking a precautionary approach to the release of GMOs and that the potential costs are modest.

Having taking into account all the submissions and evidence before us we are of the view that the Section 32 Evaluation prepared for the Plan Changes is comprehensive and demonstrates careful consideration of the preparation of the proposed provisions. Overall we consider that the evaluation demonstrates that the proposed objectives are the most appropriate to achieve the purpose of the RMA and that the proposed provisions are the most efficient and effective means of achieving the objectives.

10.4 Precautionary Approach and Non-Complying//Prohibited Activity Status

We heard a range of opinions and views on the appropriateness of a precautionary approach and the merits or otherwise of prescribing a prohibited activity status to the outdoor release of GMOs. FF, MfE and Pastoral Genomics represented the opposing position on both management of GMOs through the Plan Changes and the hierarchical activity status given to activities including prohibited activities. Supporting submissions generally were in accord with the proposal apart from some who sought greater or more stringent control of activities at all levels. A number of submitters sought prohibited activity status for field trials.

Mr Mathias provided us with some advice regarding the possible appropriateness of a non complying activity status for outdoor release of GMOs. He advised us that the use or not of non complying activity status was properly canvassed in the Section 32 assessment report. He noted that;

- (1) *In the first report prepared for the Inter Council Work Party ("ICWP") entitled "Community Management of GMOs: Issues, Options and Partnership with Government" prepared by Simon Terry Associates⁸ the report authors analysed the issue, (that being recorded as "cultivation of GM crops will cause trace contamination in non GM crops"), with a detailed consideration given to the precautionary approach in considering issues of liability and compensation. The authors prepared a detailed analysis of the response options available. Under Section 4.3.2 of this report – pages 27 through 29 - analysis was given to the controls available through the RMA. This identified that amongst the type of controls available was that of non complying status.*
- (2) *The second report commissioned for the ICWP entitled "Community Management of GMOs II: Risks and Response Options" prepared by Simon Terry Associates and Mitchell Partnerships⁹ contained a detailed analysis of the mechanisms available under the RMA as a response framework to the risk of GMOs.*
- (3) *Section 4 of this report (p.47 – 52) considered the process involved in decision-making and the availability of the RMA for GMO management. Included in that report at para 51 it identified that non complying activity status was a means of activity control – see p.51 paras 3 and 7.*

In Section 4.5 of this report discretionary and prohibited activities were given more detailed analysis, such categories of use having been identified in the context of activity categorisation ranging from permitted at one extreme to prohibited at the other. Particular analysis was given to the categories of discretionary and prohibited activities those having been identified as the most appropriate status for the activities which were under consideration.

- (4) *The third report commissioned from the same authors of the second report for the ICWP entitled "Community Management of GMOs: Recommended Response Options"¹⁰ contains further detailed analysis. This analysis supported the previously recommended activity categories of discretionary for field trials and prohibited for releases into the environment. In the appendix to this report there is a high level description of proposed rules based on such activity categorisation.*
- (5) *In the S.32 report the rationale for adopting the chosen activity categories is outlined in section 4.3.1 (see p.27 -29) with an assessment being made of the policies, rules and other methods in Table 2 on p.39 - 43.*

- (6) *Throughout the S.32 preparation process legal reviews were undertaken by Dr Somerville QC. His analysis and the rationale for adopting various activity status for GMOs land use is included in his first opinion dated 23 February 2004. ¹¹ At p.23 he identifies a check list for establishing district plan provisions.*
- (7) *In his third opinion dated January 2013, ¹² Dr Somerville focused on the legal implications of the proposed policies and rules following classification of GMO activities as prohibited or discretionary in order to achieve the objective of a precautionary approach to managing the risks of GMOs. He considered the evaluation that leads to this classification met the requirements of S.32 of the RMA.*
- (8) *It is submitted that the S.32 analysis is comprehensive and robust. It presents a clear logic to the classification of activities as permitted, discretionary and prohibited those being based on the level of risk posed by the different land use activities involving GMOs.*
- (9) *Throughout the process consideration has been given to the various statuses of activities in terms of the RMA. A sound basis is established for the classification as permitted, discretionary and prohibited in order to achieve the objectives of the RMA and, when necessary, the need for a precautionary approach to manage the risks of GMOs where such risk is identified is specified.*
- (10) *Dr Somerville has determined that the evaluation process leading to this classification met the requirements of S.32 of the RMA.*

We find that Mr Mathias has set out succinctly the relevant matters that we must consider in relation to this aspect of considering appropriate planning approaches and the appropriate hierarchy of land use activities and concur with the conclusions he reaches. In respect of outdoor field trials and the appropriate activity status we concur with the reporting planners where they state in that regard in the Section 42A report at para 90 that;

“We do not support the request for a prohibited activity status for field trials. In our view, it is important that the GMO provisions do not totally foreclose potential opportunities for the outdoor use of GMOs in the future, should new evidence demonstrate that a particular GMO is safe and significantly beneficial. Field trials are an important component in obtaining that evidence and a prohibited activity status unduly restricts them. We consider that a discretionary activity status is appropriate for field trials. In our opinion, a discretionary activity status provides flexibility for field trials to occur where they can be proven to be safe

and beneficial, while also providing scope for many of the concerns raised in the submissions, to be appropriately considered and addressed on a case by case basis”.

Accordingly we find that the proposed methods are appropriate and accord with sound resource management principles and approaches and in the context of the relevant planning districts, will deliver a planning framework that reflects the views of majority of the submitters who participated in this planning process.

10.5 Liability and Bonds

In regard to the issues around the appropriateness of the proposed provisions related to Liability and Bonds we again rely strongly on the advice of Mr Mathias. He advised us as follows in his reply submissions;

10.1 The policies for land use controls being imposed in relation to GMOs in the plan changes record that the Councils envisage any resource consent granted for field trials being subject to conditions to ensure the consent holder is "financially accountable" for any "adverse effects associated with the activity" and that such will be done "via the use of bonds". Further the policies identify that a resource consent granted would also require monitoring costs to be met by the consent holder with further provision for a consent holder to be liable for "adverse effects caused beyond the site".

10.2 The development of performance standards for the WDC plan change envisage a performance bond with an "approved trading bank" guarantee while the FNDC provision (Rule 19.6.2.2) details its requirement for a bond being "akin to a bank guarantee". If the question of the committee is directed at the limitation of bonding to a "trading bank" then consideration may need to be given as to whether any submission actually sought that the category of party who might provide guarantees could be wider than approved trading banks. The thrust of the submissions opposing the liability regime envisaged by the plan changes was not so much at the specification of the requirement of any bond to be from an approved trading bank but rather at the requirement of a bond. The Councils' position on liability has not changed following submissions.

10.3 While the category of entity which could be approved for bonding purposes might be wider than trading banks they are the usual entities that local authorities accept as guarantors of performance bonds.

10.4 Certainly the FNDC plan change is less prescriptive as to the party which is to provide the guarantee and in theoretical terms there would be no reason why the category of

guarantor could not be extended to include approved insurance companies albeit that insurance companies do not, or at least in WDC's experience, commonly provide this type of guarantee. In the current commercial world one finds this form of security being offered by trading banks rather than insurance companies.

10.5 As the provision of bonds is a point of submission, it being contended there should be no bonding, so the nature of the guarantor is seemingly within scope although it is not understood that any party specifically sought or gave evidence which would support a wider category of guarantor than that provided by the plan changes.

10.6 If the Committee considers a wider category of guarantors should be specified there would seem to be no bar to such provision within the plan changes.

We note that a number of submitters specifically addressed this matter and generally were in support of the proposed provisions in this regard noting that one of the prevailing reasons for that was the view that those provisions avoided transferring any subsequent liability to unknown third parties and keep the parties responsible for any adverse impacts as the liable party. In our finding, that is an appropriate approach and is consistent with basic principles of natural justice. It is also one of the tools available for use under Section 108 of the RMA.

10.5 Iwi Interests and Weighting in Terms of Relevant Statutory Context

The question was posed to Mr Mathias as to whether any provisions in Iwi/Hapu Management Plans have standing before the EPA given MfE argued that the EPA gives such matters adequate consideration.

Mr Mathias advised us that in relation to EPA processes and any consideration of Iwi interests under HSNO that;

12.3 In my submission they have no greater standing than any other submitter. Such plans have no identified status under HSNO.

12.4 This can be contrasted with the RMA where tangata whenua have a much greater role.

12.5 S.35A RMA requires district councils to keep a record of each iwi and Hapu within its district and the planning documents recognised by an iwi authority.

This gives a legislative acknowledgement of such plans which is not replicated in HSNO.

- 12.6 *S.36B RMA then entitles a local authority to enter into a joint management agreement with an iwi authority which can provide for the parties to jointly perform or exercise a local authority's functions in relation to a natural and physical resource.*
- 12.7 *The definition of such an agreement in S.2 RMA provides a wide scope for such agreements. They can cover broad or narrow RMA issues.*
- 12.8 *While Ss.6(d) and 8 HSNO require the EPA to take into account the relationship of Maori with their (inter alia) valued flora and fauna and the Treaty of Waitangi. These requirements are not as broadly drawn as similar provisions in Part 2 of the RMA.*
- 12.9 *Part 2 of the RMA has a more broadly drawn sustainable management purpose. It specifically addresses people and communities providing for their social, economic and cultural well-being and for their health and safety while "safeguarding the life-supporting capacity of air, water, soil and ecosystems".*
- 12.10 *Further S.6 requires recognition and provision as matters of national importance (my emphasis)*
- (c)The protection of areas of significant indigenous vegetation and significant habitat of indigenous fauna.*
- (e)The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga.*
- 12.11 *Further Part 2 requires particular regard to be had in the management of the use, development and protection of natural and physical reserves, to Kaitiakitanga.²⁹*
- 12.12 *These principles it is submitted point to an enhanced role for Maori under the RMA than that provided for in HSNO.*

We concur with Mr Mathias and note that we had evidence that Iwi / Hapu Management Plans and an identified Hui resolution clearly opposed GMOs in Northland.

11.0 WILL THE PLAN CHANGES ACHIEVE WHAT THEY SET OUT TO ACHIEVE

We find, from the submissions, evidence, the evidence at the hearing and our observations that the Plan Changes with minor amendments will achieve the purposes set out in the proposed objectives. The purpose of the Plan Changes is clear and they have significant support from the affected local communities. Opposing submitters represent organisational positions in the main and rely upon a regime under HSNO administered by the EPA whereby there is discontent by

many submitters that EPA processes do not adequately engage with local communities thus the support for a RMA regime which complements the HSNO regime through a local effects based regime directed to the local community context.

12.0 SECTIONS 31 AND 32 RMA

Before a plan change is publicly notified an evaluation must be carried out by the Council that must examine:

- The extent to which each objective is the most appropriate way to achieve the purpose of the RMA; and
- Whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

An evaluation must take into account:

- The benefits and costs of policies, rules, or other methods; and
- 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.

A report is required to be prepared summarising the evaluation and give reasons for that evaluation.

These Section 32 “tests” are fundamental to the consideration of any plan change and when discussed reference is usually made to relevant case law that is the Environment Court decisions relating to Nugent, Eldamos and Long Bay.² Those decisions have considered the Section 32 process in detail and serve to highlight the importance of it as the basis on which any plan change proceeds.

The Plan Changes were accompanied by two Section 32 Evaluations. We reviewed those reports and have considered the submissions raising issues about the rigorousness of the Section 32 assessments. We have reached the view that the Plan Changes are necessarily,

² *Nugent Consultants v Auckland City Council*, NZRMA 481, 1996; *Eldamos Investments v Gisborne District Council*, Decision WO47/05; and *Long Bay Okura Great Park Society Incorporated & Others v North Shore City Council*, AO78/2008.

and have been demonstrated satisfactorily to be, the most effective means of achieving the objectives of the Plan Changes.

The Section 31 RMA functions include requiring the control of any actual or potential effects of the use, development, or protection of land. The range of actual or potential effects arising from the Plan Changes has been addressed in the Plan Changes documentation and in the Councils' Section 42A report.

We are satisfied that all actual and potential adverse effects associated with the Plan Changes have been taken into account in preparing them.

We have found that the range of actual or potential effects arising from the Plan Changes have been properly addressed in the Plan Changes documentation and in the joint planning report.

We are satisfied that all actual and potential adverse effects associated with the Plan Changes have been taken into account in preparing the Plan Changes provisions and the modifications recommended by the reporting planners improve the Plan Changes.

Overall we conclude from the Section 32 Evaluation that the approach adopted in the Plan Changes meets the Section 32 tests of the RMA.

13.0 REPORTING PLANNERS AMENDMENTS TO THE PLAN CHANGES

The Reporting Planners recommended a number of amendments to the Plan Changes provisions following their consideration of the submissions prior to the hearing. At the end of hearing submissions on 16 June they requested time to consider all the submissions and evidence that had been heard and/or tabled and requested an opportunity to put their response in writing at a later date. After discussing the issue we decided to adjourn the hearing until 7 July 2016 when we closed so that Ms Wooster and Mr Badham could put their response in writing. This response was received on 28 June 2016 and included amended Plan Changes provisions reflecting the discussions during the hearing and also included the legal submissions in reply from Mr Mathias the Councils' legal adviser.

Ms Wooster and Mr Badham gave an overview of their joint response and said that they considered that the framework could be maintained with a few minor modifications which they provided.

14.0 CONCLUSIONS ON THE PLAN CHANGES

Our principal finding is that the Plan Changes should be approved, in accordance with our commentary above and the recommendations in Appendices A and B as set out below.

The Plan Changes should be amended in accordance with the recommendations of the Reporting Planners provided to us as part of their reply responses.

15.0 THE COMMISSIONERS' RECOMMENDATIONS ON THE PLAN CHANGES

Having had regard to the provisions of the Resource Management Act 1991 and in particular to Section 74, Section 75, Section 31 and Section 32;

and,

Having considered the actual and potential effects on the environment of the proposed Plan Changes and the avoiding, remedying and mitigating of those effects;

and

Having considered the details of the proposed plan changes, the submissions, the further submissions, the legal submissions and the evidence in support of those submissions and further submissions, and the Joint Section 42A report from the FNDC and WDC Reporting Planners at the hearing of the proposed Plan Changes and submissions;

and

Acting under a delegation from the FNDC and WDC to hear and recommend to them decisions on the proposed Plan Changes and the submissions and further submissions;

and

For the reasons set out in this report, our recommendations are as follows:

A Recommendations to the Far North District Council on Proposed Plan Change 18

That pursuant to Clauses 29 and 10 of Schedule 1 of the Resource Management Act 1991,

- The Proposed Plan Change 18 to the Far North District Plan be approved with modifications; and.
- Those submissions and further submissions which support the Proposed Plan Change are accepted to the extent that the Proposed Plan Change is approved with modifications; and
- Those submissions and further submissions which seek further changes to the Proposed Plan Change are accepted to the extent that the Proposed Plan Change is approved with modifications; and
- Except to the extent provided above, all other submissions and further submissions are rejected.

The consequential modifications to the text of the Plan Changes as a result of our recommendations for the Plan Change to be approved are attached as **Attachment A**.

B Recommendations to the Whangarei District Council on Proposed Plan Change 131

That pursuant to Clauses 29 and 10 of Schedule 1 of the Resource Management Act 1991,

- The Proposed Plan Change 131 to the Whangarei District Plan be approved with modifications; and.
- Those submissions and further submissions which support the Proposed Plan Change are accepted to the extent that the Proposed Plan Change is approved with modifications; and
- Those submissions and further submissions which seek further changes to the Proposed Plan Change are accepted to the extent that the Proposed Plan Change is approved with modifications; and
- Except to the extent provided above, all other submissions and further submissions are rejected.

The consequential modifications to the text of the Plan Changes as a result of our recommendations for the Plan Change to be approved are attached as **Attachment B**.

Hearings Commissioners Barry Kaye (Chair), Bill Smith and Willow-Jean Prime:

A handwritten signature in black ink, appearing to read "Barry Kaye". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Barry Kaye

Hearings Chair on behalf of Commissioners Smith and Prime

Dated: 31st July 2016

19 GENETICALLY MODIFIED ORGANISMS

CONTEXT

Genetic modification (GM) refers to a set of techniques that alter genetic makeup by adding, deleting or moving genes (within or between species) to produce new and different organisms. Genetically modified organisms (GMOs) are products of genetic modification. Another term often used to refer to the same technique is genetic engineering (GE).

A wide range of GM products are being researched and developed for commercialisation. While the GMOs commercialised to date are, in general, directed at reducing harvest losses by combating pests and viruses, research into future varieties is attempting to considerably widen the scope of applications. This includes improved growth in plants, improved tolerance to environmental conditions, and creating entirely new products and sectors of economic activity in agriculture, horticulture, plantation forestry, dairying, aquaculture and medicine.

The absolute and relative benefits associated with the development and use of GMOs is continually being redefined as this and other forms of applied biotechnology advance. However there remains scientific uncertainty with respect to potential adverse effects of GMOs on natural resources and ecosystems. The risks could be substantial and certain consequences irreversible. Once released into the environment, most GMOs would be very difficult to eradicate even if the funding were available for this, irrespective of the consequences. If the GMO is related to a food product, the “GE Free” food producer status of a district or region would likely be permanently lost, along with any marketing advantages that status confers.

The relevant legislation which applies to the management of GMOs in New Zealand is the Hazardous Substances and New Organisms Act 1996 (HSNO Act). The HSNO Act establishes the legal framework for assessments by the national regulator, the Environmental Protection Authority (EPA). This Act sets minimum standards (section 36) and provides for the EPA to set additional conditions that are to apply to a particular GMO activity.

While the HSNO Act provides the means to set conditions on the management of GMOs within a specific geographic area or irrespective of location, councils have jurisdiction under sections 30 and 31 of the Resource Management Act 1991 (RMA) to control land and water use activities involving field trials and the release of GMOs, to promote sustainable management under the RMA.

Local regulation can address key gaps that have been identified in the national regulatory regime for the management of GMOs, in particular the absence of liability provisions and the lack of a mandatory precautionary approach. Benefits of local level regulation, in addition to the controls set by the EPA, include:

- Ensuring GM operators are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation.
- Adoption of a precautionary approach to manage potential risks (economic, environmental, social and cultural) associated with the outdoor use of GMOs.
- Protection of local/regional marketing advantages through reducing risks associated with market rejection and loss of income from GM contamination of non-GM crops, and negative effects on marketing, branding and tourism opportunities.
- Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

Given a council’s general duties of care for its financial position and that of its constituents, there is a ready justification for councils to enforce mandatory conditions to provide for both financial accountability and avoidance of economic damage. These controls would act in addition to those that may be set by the EPA under the HSNO Act.

19.1 ISSUES

- 19.1.1 The outdoor use of GMOs can adversely affect the environment, economy, and social and cultural resources and values, and significant costs can result from the release of a GMO.

19.2 ENVIRONMENTAL OUTCOMES EXPECTED

- 19.2.1 Manage risk and avoid adverse effects on people, communities, tangata whenua, the economy and the environment associated with the outdoor use of GMOs.

- 19.2.2 Provide the framework for a unified approach to the management of the outdoor use of GMOs in the Far North to address cross-boundary effects.
- 19.2.3 Ensure accountability by GMO operators for the full costs related to the monitoring of GMO activities, and any migration of GMOs beyond specified areas, including unintentional GM contamination.
- 19.2.4 Ensure accountability by GMO operators for compensation via performance bonds in the event that the activity under their operation results in adverse effects to third parties or the environment.

19.3 OBJECTIVES

- 19.3.1 The environment, including people and communities and their social, economic and cultural well being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.
- 19.3.2 The sustainable management of the natural and physical resources of the district with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.

19.4 POLICIES

- 19.4.1 To adopt a precautionary approach by prohibiting the general release of a GMO, and by making outdoor field trialling of a GMO and the use of viable GM veterinary vaccines not supervised by a veterinarian^{294/1} a discretionary activity.
- 19.4.2 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to conditions that ensures that the consent holder is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including via the use of bonds.
- 19.4.3 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment, the mauri of flora and fauna, and the relationship of mana whenua with flora and fauna^{109/4} from the use, storage, cultivation, harvesting, processing or transportation of a GMO.
- 19.4.4 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to a condition requiring that monitoring costs are met by the consent holder.
- 19.4.5 To require consent holders for a GMO activity to be liable (to the extent possible) for any adverse effects caused beyond the site for which consent has been granted for the activity.
- 19.4.6 To adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a GMO in the district through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a GMO activity becomes available.

19.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

- 19.5.1 Rules in the Plan to control GMO ~~Field Trails~~ field trials^{159/2}, some GM veterinarian vaccines^{294/1} and to prohibit the release of GMOs in the Far North.
- 19.5.2 Where resource consents are required to undertake GMO activities protection of the environment, economy, society and cultural values may be achieved by imposing conditions of consent.

OTHER METHODS

- 19.5.3 The Council will liaise with other Councils in order to achieve an integrated approach to GMOs in Northland.
- 19.5.4 The Council will encourage all applicants to actively engage with the public and tangata whenua through early dialogue when developing land use proposals to ensure that adverse effects are avoided, remedied or mitigated.

COMMENTARY

The outdoor use of GMOs has the potential to cause adverse effects on the environment, economy and social and cultural wellbeing. The objectives and policies seek to protect the community and receiving environment from risk associated with any GMO activity.

The application of a precautionary approach to the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs in the district shall mean that:

- The release of a GMO is prohibited (this is to avoid the risk that significant adverse environmental effects will arise, including adverse effects on the economy, community and/or tangata whenua resources and values); and
- Outdoor field trialling of a GMO (where the proponents of such activities have prior approval of the EPA) shall be a discretionary activity, as will certain uses of GM veterinary vaccines.^{294/1}

Pastoral farming, dairying, horticulture and forestry are important land uses in the Far North and are major contributors to the local and regional economy. Therefore there are a range of outdoor GMOs that GMO developers could consider using in the district or region, including GM food crops, trees, animals, and pharma crops. The potential for adverse effects, including accidental contamination, resulting from the outdoor use of GMOs poses a “risk” to the community and environment. By specifying classes of GMOs and applying standards to the outdoor use of GMOs, the risks associated with their use, storage, cultivation, harvesting, processing or transportation can be reduced.

Within the Far North, this will involve managing and limiting the outdoor use of GMOs. Further, performance standards will be used to mitigate any adverse effects associated with contamination of GMOs beyond the subject site, thereby reducing the risks to the community, environment and economy.

Accidental or unintentional migration of GMOs that result in GMO contamination and subsequent clean-up and remediation can be expensive. Council therefore requires a GMO operator to meet all potential costs associated with the activity and will secure long-term financial accountability through appropriate standards and bonding provisions.

The EPA is not obligated to set monitoring requirements as a part of its approval process, and can only require monitoring where it is relevant to assessing environmental risk. Under section 35 of the RMA, a council has a duty to monitor, which can be expensive. Requiring a GMO operator to meet the costs of monitoring, via consent conditions, ensures the costs are met by the activity operator.

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. A council or a GMO proponent can initiate a plan change to change the status of a GMO activity.

19.6 RULES

Activities affected by this Section of the Plan must comply not only with the rules in this Section, but also with the relevant standards applying to the zone in which the activity is located (refer to **Part 2 - Environment Provisions**), and with other relevant standards in **Part 3 – District Wide Provisions**.

19.6.1 PERMITTED ACTIVITIES

An activity is a permitted activity if:

- (a) it complies with the standards for permitted activities set out in **Rules 19.6.1.1** below; and
- (b) it complies with the relevant standards for permitted activities in the zone in which it is located, set out in **Part 2 of the Plan - Environment Provisions**; and
- (c) it complies with the other relevant standards for permitted activities set out in **Part 3 of the Plan - District Wide Provisions**.

19.6.1.1 INDOOR USE AND RESEARCH INVOLVING GENETICALLY MODIFIED ORGANISMS

GMOs that are not specifically provided for in **19.6.2 Discretionary Activities** and **19.6.3 Prohibited Activities** below are a permitted activity. These include (but are not limited to):

- (a) Research within contained laboratories involving GMOs;
- (b) ~~Veterinary Vaccines using GMOs; and~~ The use of non-viable genetically modified veterinary vaccines and viable genetically **modified** veterinary vaccines with a specific delivery dose supervised by a veterinarian²⁹⁴; and

(c) Medical applications involving the manufacture and use of non-viable GM products.

Note: Such activities may require consents and / or permits under other legislation / plans.

19.6.2 DISCRETIONARY ACTIVITIES

An activity is a discretionary activity if:

- (a) it does not comply with one or more of the standards for permitted activities as set out under **Rule 19.6.1.1**; but
- (b) it complies with **all rules of 19.6.2.1 Genetically Modified Organisms Field Trials, 19.6.2.2 Bond Requirements and 19.6.2.3 Monitoring Costs** below; and
- (b) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the zone in which it is located, set out in **Part 2 of the Plan - Environment Provisions**; and
- (c) it complies with the other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in **Part 3 of the Plan - District Wide Provisions**.

The Council may impose conditions of consent on a discretionary activity or it may refuse consent to the application. When considering a discretionary activity application, the Council will have regard to the assessment criteria set out under **Section 19.7-19.8**

If an activity does not comply with the standards for a discretionary activity, it will be a non-complying activity unless it is a prohibited activity subject to **Section 19.6.3** below.

19.6.2.1 GENETICALLY MODIFIED ORGANISMS FIELD TRIALS

Outdoor field trialling of a GMO (where the proponents of such activities have prior approval of the EPA) shall be a discretionary activity.

Applications must provide:

- (a) Evidence of approval from the EPA for the specific GMO for which consent is sought.
- (b) Details of proposed containment measures for the commencement, duration and completion of the proposed activity.
- (c) Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.
- (d) Research on adverse effects to the environment, **cultural values**^{PC131-284} and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.
- (e) Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.
- (f) A management plan outlining ongoing research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.
- (g) Details of areas in which the activity is to be confined.
- (h) Description of contingency and risk management plans and measures.

19.6.2.2 BOND REQUIREMENTS

Council requires the applicant for the resource consent to provide a performance bond (akin to a bank guarantee) in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity), and that this be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent.

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

Matters that will be considered when determining the amount of the bond are:

- (a) What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.
- (b) The degree to which the operator of the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.

- (c) The level of risk associated with any unexpected adverse effects from the activity.
- (d) The likely scale of costs associated with remediating any adverse effects that may occur.
- (e) The timescale over which effects are likely to occur or arise.
- (f) The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

19.6.2.3 MONITORING COSTS

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

A monitoring strategy for a GMO discretionary activity can include the following matters:

- (a) Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).
- (b) Testing of procedures (e.g. accidental release response).
- (c) Training programmes for new staff, updates for existing staff.
- (d) Audits of sites and site management systems.
- (e) Sample testing of plants and soils in neighbouring properties for the presence of migrated GMOs.

19.6.2.4 VIABLE GENETICALLY MODIFIED VETERINARY VACCINES

The use of viable genetically modified veterinary vaccines not supervised by a veterinarian shall be a discretionary activity.²⁹⁴⁷¹

19.6.3 PROHIBITED ACTIVITIES

19.6.3.1 OUTDOOR RELEASE OF GENETICALLY MODIFIED ORGANISMS

Outdoor release of food-related and non-food-related Genetically Modified Organisms, not otherwise provided for in **Rules under 19.6.1** and **19.6.2 above** is a prohibited activity.

19.7 NOTIFICATION

All applications for resource consent **under rule 19.6.2** must be publicly notified.

19.8 ASSESSMENT CRITERIA

The matters set out in s104 and s105, and in Part II of the Act, apply to the consideration of all resource consents for land use activities.

In addition to these matters, the Council shall also apply the relevant assessment matters set out below.

- (a) Site design conditions should ensure GMO sites are designed and managed in a manner that avoids or minimises risks of adverse effects from activities carried out on the site. This shall include provisions to prevent the migration of GMOs beyond the area designated for the activity.
- (b) Ensure the transportation of GMOs is carried out in a manner that minimises the risk of adverse effects by preventing the escape of GMOs from the transporting vehicles. Appropriate procedures must be in place to ensure that any vehicle visiting the site is thoroughly cleaned and checked prior to leaving the site to avoid unintentional GMO transportation.
- (c) Reporting requirements by the consent holder will be stipulated in the consent conditions.
- (d) Where necessary, more stringent measures than those required under the provisions of the HSNO Act may be imposed to manage potential risks. A review clause (pursuant to Section 128 of the Act) may be included in any conditions, where deemed necessary, to address any future changes in technology, and the scope of environmental, economic and cultural effects.
- (e) The duration of any consent will be aligned with EPA approval terms.

3 DEFINITIONS

Note: Any words included under this section shall have the meaning as defined here throughout this Plan unless specifically stated otherwise in the text of the Plan. Where the definition of a word is identified as being from the Resource Management Act 1991 (or any other Act), these words have been included in a Glossary.

GENETICALLY MODIFIED ORGANISM FIELD TRIALS (TESTS)

In relation to a genetically modified organism (GMO), the carrying on of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.

GENETICALLY MODIFIED ORGANISMS (GMOs)

Unless expressly provided otherwise by regulations, any organism in which any of the genes or other genetic material:

- (a) have been modified by in vitro techniques; or
- (b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.

For the absence of doubt, this does not apply to genetically modified (GM) products that are not viable (and are thus no longer GMOs), or products that are dominantly non-GM but contain non-viable GM ingredients (such as processed foods).

GENETICALLY MODIFIED ORGANISM RELEASE

To allow the organism to move within New Zealand free of any restrictions other than those imposed in accordance with the Biosecurity Act 1993 or the Conservation Act 1987.

A release may be without conditions under s34 of the Hazardous Substances and New Organisms Act 1996, (HSNO) or subject to conditions under s38A of the HSNO Act.

VETERINARY VACCINE

A biological compound controlled by the Agricultural Compounds and Veterinary Medicines Act that is used to produce or artificially increase immunity to a particular disease and has been tested and approved as safe to use by a process similar to that conducted for approval and use of medical vaccines.

GENETICALLY MODIFIED VETERINARY VACCINE

A veterinary vaccine that is a genetically modified organism as defined in this Plan.

VIABLE GENETICALLY MODIFIED VETERINARY VACCINE

A genetically modified veterinary vaccine that could survive or replicate in the environment or be transmitted from the inoculated recipient.

GMO.1

GENETICALLY MODIFIED ORGANISMS

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GMO.1.2 Eligibility Rules

1. Research within contained laboratories involving GMOs is a permitted activity.
2. Medical applications involving the manufacture and use of non-viable GM products are permitted activities.
3. Veterinary Vaccines using GMOs The use of non-viable genetically modified veterinary vaccines and viable genetically modified veterinary vaccines with a specific delivery dose supervised by a veterinarian are permitted activities.
4. The use of viable genetically modified veterinary vaccines not supervised by a veterinarian are discretionary activities.
5. Other GMO activities not requiring consent as a discretionary activity or listed as a prohibited activity are permitted activities.
6. Field Trials of GMOs (where the proponents of such activities have prior approval of the EPA) are discretionary activities.
7. Food-related and non food-related GMO Releases are prohibited activities.

Note: permitted activities may require consents and / or permits under other legislation / plans.

GMO.1.3 Notification

All applications for resource consent must be publicly notified.

GMO.1.1 Description & Expectations

The purpose of this chapter is to manage the outdoor use of Genetically Modified Organisms (GMOs). The outdoor use of GMOs can have adverse effects on people, communities, tangata whenua, social and cultural wellbeing, the environment and the economy.

Sources of risk from the outdoor use of GMOs include:

- Socio-cultural risk - concerns of Maori, such as mauri, whakapapa, tikanga, including the integrity of nature, the mixing of genes from unrelated species, and effects on indigenous flora and fauna.
- Environmental risk - including adverse effects on non-target species (e.g. birds and insects), genetically modified (GM) plants becoming invasive and disrupting ecosystems, and altered genes transferring to other organisms.
- Economic risk - the risk that cultivation of GM crops will cause economic damage, in particular through accidental or unintentional migrations of GMOs resulting in GM contamination appearing in non-GM crops and associated market rejection and loss of income, negative effects on marketing and branding opportunities, and costs associated with environmental damage.

There is a lack of information, including scientific uncertainty, concerning the effects of GMOs in the environment and risks of irreversible, adverse effects which could be substantial. In order to manage the effects of outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs, an adaptive precautionary approach to risk management is adopted for the Whangarei District.

The application of a precautionary approach shall mean that the Release of a GMO is prohibited and that Field Trials of a GMO (where the proponents of such activities have prior approval from the Environmental Protection Authority (EPA)) shall be a discretionary activity so as to avoid the risks of potential adverse effects. Some activities, such as research within contained facilities, some veterinary vaccines and certain medical applications are permitted activities. The classification is based upon a hierarchy of risks, from negligible for permitted activities to high risk for prohibited activities. Discretionary activities (Field Trials) are subject to development and performance standards, including a requisite for bonds to cover possible environmental or economic damage and monitoring requirements.

The application of an adaptive risk management approach is to avoid foreclosure of potential opportunities associated with a GMO development that could benefit the district. 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 the particular GMO activity would be of net benefit to the district and that potential risks can be managed to the satisfaction of Council. Council or a GMO developer can initiate a plan change to change the status of an activity.

It is anticipated that the objectives, policies, eligibility rules and general development and performance standards in this chapter will achieve the following results:

1. Adoption of a precautionary approach to manage potential risks (social, cultural, environmental and economic) associated with the outdoor use of GMOs.
2. Ensuring users of GMOs are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation.
3. Protection of local/regional marketing advantages through reducing risks of adverse effects associated with market rejection and loss of income from GM contamination of non-GM crops, and negative effects on marketing, branding and tourism opportunities.
4. Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

GMO.2

GMO Land Use Controls

GMO.2.1 Objectives

1. The environment, including people and communities and their social, economic and cultural well being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.
2. The sustainable management of the natural and physical resources of the district with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.

GMO.2.3 Information Requirements

Applications for GMO Field Trials are to provide:

- Evidence of approval from the EPA for the specific GMO for which consent is sought. The duration of any consent granted will be aligned with EPA approval terms.
- Details of proposed containment measures for the commencement, duration and completion of the proposed activity.
- Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.
- Research on adverse effects to the environment, cultural values and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.
- Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.
- A management plan outlining on-going research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.
- Details of areas in which the activity is to be confined.
- Description of contingency and risk management plans and measures.

GMO.2.2 Policies

1. Precautionary Principle

To adopt a precautionary approach by prohibiting Release of a GMO, and by making Field Trials of a GMO and the use of viable GM veterinarian vaccines not supervised by a veterinarian a discretionary activity.

2. Financial Accountability

To ensure that a resource consent granted for the Field Trials of a GMO is subject to conditions that ensures that the consent holder is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including via the use of bonds.

3. Risk Avoidance

To ensure that a resource consent granted for the Field Trials of a GMO is subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment, the mauri of flora and fauna, and the relationship of mana whenua with flora and fauna from the use, storage, cultivation, harvesting, processing or transportation of a GMO.

4. Monitoring Costs

To ensure that a resource consent granted for the Field Trials of a GMO is subject to a condition requiring that monitoring costs are met by the consent holder.

5. Liability

To require consent holders for a GMO activity to be liable (to the extent possible) for any adverse effects caused beyond the site for which consent has been granted for the activity.

6. Adaptive Approach

To adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a GMO in the district through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a GMO activity becomes available.

GMO.2

GMO Land Use Controls

GMO.2.4 General Development & Performance Standards

Without limiting the discretion reserved to Council on any application for consent, discretionary activities are to comply with the following minimum controls in order to establish in the district. The general development and performance standards are in addition to any controls/conditions that are imposed and monitored by the EPA under the Hazardous Substances and New Organisms (HSNO) Act.

1. Bond

Council requires the applicant for the resource consent to provide a performance bond, with an approved trading bank guarantee, in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity). This bond is to be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent. The form of, time and manner of implementing and discharging the bond shall be decided by, and be executed to the satisfaction of Council.

2. Monitoring Costs

All costs associated with monitoring required for discretionary activities will be borne by the consent holder. This includes any monitoring that is required to be undertaken beyond the consent duration, as required by a resource consent condition.

3. Assessment of Applications and Conditions

Where necessary, more stringent measures than those required under the provisions of the HSNO Act may be imposed to manage potential risks. A review clause (pursuant to Section 128 RMA) may be included in the conditions, where deemed necessary, to address any future changes in technology, and the scope of environmental, economic and cultural effects. An application for a discretionary activity may be granted with or without conditions, or be declined by the Council having regard to the relevance of the following matters:

• Site Design, Construction and Management

Site design conditions should ensure GMO sites are designed and managed in a manner that avoids or minimises risks of adverse effects from activities carried out on the site. This shall include provisions to prevent the migration of GMOs beyond the area designated for the activity.

• Transport

Ensure the transportation of GMOs is carried out in a manner that minimises the risk of adverse effects by preventing the escape of GMOs from the transporting vehicles. Appropriate procedures must be in place to ensure that any vehicle visiting the site is thoroughly cleaned and checked prior to leaving the site to avoid unintentional GMO distribution.

• Monitoring

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

• Reporting

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

GMO.2.5 Particular Matters

Matters that will be considered when determining the amount of bond required are:

- What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.
- The degree to which the operator of the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.
- The level of risk associated with any unexpected adverse effects from the activity.
- The likely scale of costs associated with remediating any adverse effects that may occur.
- The timescale over which effects are likely to occur or arise.
- The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

A monitoring strategy for a GMO discretionary activity can include the following matters:

- Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).
- Testing of procedures (e.g. accidental release response).
- Training programmes for new staff, updates for existing staff.
- Audits of sites and site management systems.
- Sample testing of plants, soils and water in neighbouring properties or localities for the presence of migrated GMOs.



Definitions

The following definitions shall be inserted into the District Plan in Chapter 4. Meaning of Words -

Field Trials (tests) ** - means, in relation to a genetically modified organism, the carrying on of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.

Genetically Modified Organism and GMO** - means, unless expressly provided otherwise by regulations, any organism in which any of the genes or other genetic material:

(a) have been modified by *in vitro* techniques; or

(b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by *in vitro* techniques.

N.B. For the absence of doubt, this does not apply to GM products that are not viable (and are thus no longer GM organisms), or products that are dominantly non-GM but contain non-viable GM ingredients (such as processed foods).

Release** - means to allow the organism to move within New Zealand free of any restrictions other than those imposed in accordance with the Biosecurity Act 1993 or the Conservation Act 1987.

A Release may be without conditions (s34, HSNO Act) or subject to conditions set out s38A of the HSNO Act.

Environmental Protection Authority and EPA* - means the Environmental Protection Authority established by section 7 of the Environmental Protection Authority Act 2011.

Hazardous Substances and New Organisms Act and HSNO - means the Hazardous Substances and New Organisms Act 1996.

Veterinary Vaccine: means a biological compound controlled by the Agricultural Compounds and Veterinary Medicines Act that is used to produce or artificially increase immunity to a particular disease and has been tested and approved as safe to use by a process similar to that conducted for approval and use of medical vaccines.

Genetically Modified Veterinary Vaccine: means a veterinary vaccine that is a genetically modified organism as defined in this Plan.

Viable Genetically Modified Veterinary Vaccine: means a genetically modified veterinary vaccine that could survive or replicate in the environment or be transmitted from the inoculated recipient.

* Definition taken from the Resource Management Act 1991

**Definition taken from the Hazardous Substances and New Organisms Act 1996

29.1 HAZARDOUS SUBSTANCES AND GENETICALLY MODIFIED ORGANISMS DISTRICT WIDE ACTIVITY

29.1.1 INTRODUCTION

Hazardous substances are used in a wide range of activities occurring within the Hastings District, from dry-cleaning clothes, manufacturing industrial products, to controlling pests and plant diseases in the agricultural sector. The use of hazardous substances creates the potential for adverse effects on human health, property or the natural environment. The potential for adverse effects can be exacerbated where the hazardous facilities are located adjacent or near to particularly sensitive environments, such as the Heretaunga Plains Unconfined Aquifer or where used or stored in large quantities.

This section of the District Plan also addresses the issue of the release of Genetically Modified Organisms (GMOs) within the District. The outdoor use of GMOs can have adverse effects on people, communities, tangata whenua, social and cultural wellbeing, the environment and the economy. The introduction of these provisions to the Plan reflects the level of control desired by the community to manage the effects of GMO land use activities. Through community input into the preparation of the Plan, the adoption of provisions to do with the management of GMOs was identified as important to the Districts food producers. As a group they have highlighted concerns regarding the Districts international reputation and marketability associated with GMOs. To counter this approach, during the preparation of this Plan no evidence has been provided by GMO proponents that there will be a GMO market ready within the next ten years (life of this plan). Council's decision to introduce these provisions around the land use management of GMOs is therefore based on a preferred level of environmental risk management determined by the Hastings community. A precautionary approach to the management of GMOs has therefore been adopted. The application of a precautionary approach will mean that Release or Field Testing of any GMO even where the prior approval has been obtained from the Environmental Protection Agency (EPA) is prohibited, so as to avoid the risks of potential adverse effects. This framework does not preclude laboratory testing from being carried out and other technologies from being investigated that may improve production. It is recognised that the community's attitude may change and/or there may be future GMO development opportunities that could result in a net benefit to the District and where the effects can be satisfactorily managed. For this reason a review policy has been built into these provisions to ensure regular consideration of new information on the benefits and/or adverse effects of a GMO activity which might become available.

The use of hazardous substances and genetically modified organisms in New Zealand is primarily managed by the Hazardous Substances and New Organisms Act 1996 (HSNO). The purpose of the HSNO 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'. The HSNO Act is administered by the Ministry for the Environment and implemented by the Environmental Protection Authority. The new Ministry of Business, Innovation and Employment is also involved with enforcement in terms of hazardous substances.

Hazardous Substances

The HSNO Act provides the general framework for controlling hazardous substances during their entire life-cycle. Requirements apply from manufacturing or importing a substance, through its use, to disposal. This 'cradle-to-grave' approach is intended to ensure that the specific adverse effects posed by hazardous substances are managed consistently and comprehensively.

The Resource Management Act 1991 (RMA) provides scope for additional controls for hazardous substances located on particular sites. Through Section 30 and 31, Regional and District Councils share the function of:

The control of any actual or potential effects of the use, development, or protection of land, including for the purpose of –

- i) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances.*

On the basis of Ministry for Environment advice the Hastings District Plan takes the approach that hazardous facilities are generally managed adequately through the HSNO Act. Compliance with this legislation will generally ensure that any adverse effects arising from an accident or incident will be internalised within the hazardous facility site. The District Plan therefore seeks to avoid any duplication of regulation with the HSNO Act. An extra layer of protection can however be applied appropriately under the RMA to particularly sensitive environments or in relation to major hazardous facilities, in order to further minimise the potential for adverse effects impacting on the environment or the community. In the case of the Hastings District, the Heretaunga Plains Unconfined Aquifer is considered to be a sensitive environment, while major hazardous facilities will be assessed as to their appropriateness via the resource consent process.

Genetic Modification

The HSNO Act requires that before any GMO can be imported into the country, developed in containment, tested in the field or released into the environment, approval must be obtained from the Environmental Protection Authority (EPA).

Similar to the management of hazardous substances, the RMA provides the scope for District Plans to place additional controls on the use of GMOs, if that control can be justified under Section 32 of the RMA. It is considered that the prohibited status for all GMO land use activities is necessary to reflect 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. As the Council has adopted a prohibited status for the Release and Field Testing of all GMOs, while approval could be sought and obtained from the EPA their use would be unable to be carried out within the Hastings District.

29.1.2 ANTICIPATED OUTCOMES

It is anticipated that the following specific outcomes will be achieved:

- | | |
|--------------|--|
| HSAO1 | Avoidance of the potential effects to the community and the environment from the use, storage and transport of hazardous substances. |
| HSAO2 | Appropriate precaution is taken in the management of hazardous substances over the Heretaunga Plains Unconfined Aquifer. |
| HSAO3 | There is no unnecessary duplication of regulation between the Hazardous Substances and New Organisms Act 1996 and the District Plan with regard to the regulation of Hazardous Substances. |
| HSAO4 | Activities utilise hazardous substances where necessary for their operations, in appropriate locations. |
| HSAO5 | Avoidance of the potential effects from the 'release' or 'field testing' of Genetically Modified Organisms (GMOs) on the community. |

29.1.3 OBJECTIVES AND POLICIES

OBJECTIVE HSO1 To protect the community and natural environment from the adverse effects associated with the manufacture, use, storage or transportation of hazardous substances.
Relates to Outcomes HSAO1 and HSAO2

OBJECTIVE HSO2 To enable activities to utilise hazardous substances where necessary for their operations, in appropriate locations.
Relates to Outcome HSAO2

POLICY HSP1 *Ensure that where activities involving hazardous substances are located in proximity to the sensitive environment of the Heretaunga Plains Unconfined Aquifer, they are designed and managed to reduce risks to the environment and community.*
Relates to Objective HSAO1

Explanation

The protection of the quality of the drinking water, irrigation water and natural watercourses that emanate from the Heretaunga Plains Unconfined Aquifer is critical to the health and economic welfare of the Hawke’s Bay community. Industrial Zoned land and intensive horticultural and viticulture operations are located over the unconfined area of the aquifer. Additional protection to that provided by HSNO regulation is therefore considered appropriate to apply to this area to ensure that this critical ground water resource is not contaminated. For this reason the storage, handling or use of Arsenic (As) within the Heretaunga Plains Unconfined Aquifer is a Prohibited Activity via the adoption of Rule HS8.

POLICY HSP2 *To ensure that activities are able to utilise hazardous substances in compliance with relevant regulation as necessary to their operation, without being compromised by ‘reverse sensitivity’ (that is, by residential or other sensitive activities moving closer and seeking higher amenity levels, including reduced risks from hazardous substances).*
Relates to Objective HSAO2

Explanation

It is accepted that, provided the use of hazardous substances is undertaken in accordance with HSNO and other relevant regulation, there will be no undue risk to the community. The land use interfaces surrounding existing hazardous facilities need to be managed to ensure that these activities are not compromised by more sensitive activities establishing in close proximity (reverse sensitivity). This policy will be particularly applicable in the case of residential development or other sensitive land uses seeking to establish in proximity of existing activities utilising hazardous substances. This policy does not apply to existing situations where industrial or commercial activities utilising hazardous substances and residential zones or activities are located in close proximity to each other.

POLICY HSP3 *Ensure that major hazardous facilities are appropriately sited and managed in order to reduce risks to the environment and community.*
Relates to Objectives HSAO1 and HSAO2

Explanation

Major hazardous facilities have the ability to adversely affect the environment and community if they are not appropriately sited and/or

managed. HSNO and associated regulation aims to internalise the effects of hazardous substances to within the site/building they are located on. However, through deeming all major hazardous facilities a Discretionary Activity, it will allow Council the discretion to determine whether proposed locations and methods of risk management are appropriate. This includes opportunity to consider risks to neighbouring property and the community from fire or natural hazard events affecting the hazardous facility.

OBJECTIVE HSO3 **To avoid any unnecessary duplication of regulation between the Hazardous Substances and New Organisms Act 1996 and the District Plan.**
Relates to Outcome HSAO3

POLICY HSP4 *To not regulate the use, storage or transportation of hazardous substances, in the District Plan where adequate levels of community and environmental protection is already provided by the Hazardous Substances and New Organisms Act 1996 or other legislation and regulation.*
Relates to Objective HSAO3

Explanation

The previous District Plan contained a comprehensive hazardous substances regulation including rules requiring screening via the Hazardous Facilities Screening Procedure or HFSP. In the late 1990s the HSNO Act had not been fully implemented with transitional provisions still applying and there was belief that hazardous substances also required regulation under the RMA. Current advice from the Ministry for the Environment is that the HFSP is out of date and is a duplication of HSNO regulation. In addition to this the HFSP is difficult to use and was not often used in the assessment of activities under the District Plan. Given this there is a need for change in the management of hazardous substances under the District Plan and part of this change is to avoid the duplication of regulation. Notwithstanding this however, there is still the need to consider the potential impacts of major hazardous facilities and the appropriateness of their location with regard to community and environmental risk.

OBJECTIVE HSO4 **To protect the community and their social, economic and cultural wellbeing and environment from the adverse effects associated with the outdoor release or field testing of Genetically Modified Organisms through the adoption of a precautionary approach.**
Relates to Outcome HSAO5

POLICY HSP5 *To adopt a precautionary approach to the management of Genetically Modified Organisms by prohibiting the field testing or release of a Genetically Modified Organism.*
Relates to Objective HSAO4

HSP6 *To adopt a resource management framework for the management of Genetically Modified Organisms (GMOs) that is District specific taking into account environmental, economic and social well-being considerations.*
Relates to Objective HSAO4

Explanation

In addition to the environmental risks associated with the release of GMOs, there are economic risks caused by the sensitivity of export markets for high value produce to potential GMO contamination. The export of high value produce is critical to Hastings District as one of New Zealand's most significant horticultural and viticultural areas; agriculture is also an

important component of the District's economy. Providing for the wellbeing of the community by giving certainty in prohibiting the field testing or release of GMOs is therefore justified. It is considered that the prohibited status is necessary to reflect social and cultural attitudes amongst the Hastings community. This is founded on a 2012 Colmar Brunton survey that found 84% of respondents believe that Hawkes Bay should remain a GE free food producing region. Although regulating GMOs in the District Plan could be considered a duplication of the HSNO Act 1996, the Hastings District community in seeking a precautionary approach, has requested greater certainty than can be provided by HSNO.

POLICY HSP7*Relates to**Objective HSAO4*

To review the Plan provisions relating to Genetically Modified Organisms (GMOs), particularly if there is new information on benefits and/or adverse effects of a Genetically Modified Organism activity and/or there is a general community acceptance to the use of Genetically Modified Organisms that have proven to be safe and economically beneficial without adversely affecting the environment and the general social and economic wellbeing of the community.

Explanation

The necessity and relevance of the prohibited activity status for field testing and release of GMOs will be reconsidered at the next plan review. If in the meantime GMO use is proven to be safe and advantageous and the community is accepting that a precautionary approach is no longer warranted, then their prohibited activity status may be overturned by a plan change. This could either be in relation to GMOs in general, or to a specific GMO for which there is a demand for in the community and which poses a low risk with regard to adverse effects and to the economic viability of the production and marketing of GE free produce.

29.1.4 METHODS

The Anticipated Outcomes set out in Section 29.1.2 will be achieved and the Objectives and Policies set out in Section 29.1.3 will be implemented through the following Methods:

- HASTINGS DISTRICT PLAN** The Rules contained in the Hazardous Substances DWA Section of the Hastings District Plan work to ensure that additional precaution is exercised in the use and storage of hazardous substances over the Heretaunga Plains Unconfined Aquifer, but generally acknowledge the HSNO Act as providing the appropriate regulation to manage the effects of hazardous substances.
- HASTINGS DISTRICT COUNCIL BYLAWS** A number of bylaws have provisions relating to risks from hazardous substances. Part 11 – Fire Control regulates the storage of combustible materials. Part 13 – Nuisances contains regulation surrounding offensive matter and refuse. Part 14 – Public Places covers the disposal and transportation of hazardous substances in public places. Part 16 – Refuse regulates the disposal of hazardous substances by Council collection and at Omarunui Landfill. Part 21 – Water Services regulates discharges, including trade wastes, hazardous substances, waste water and storm water into the Hastings District Council infrastructure and then into the receiving environments.
- HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT 1996** HSNO requires that hazardous facilities may require a location test certificate, approved handler test certificates and/or a stationary container test certificate, dependant on the type and quantity of hazardous substances held at a site.
- The HSNO Act requires that when considering an application, the EPA must assess the environmental risks. It must examine issues such as the risk of an organism escaping from a laboratory or the risk of contamination of surrounding plants by pollen from GMOs. In the case of field tests, the EPA must require that they are carried out under strict conditions to reduce any potential risk to the environment. It must also ensure that genetic material is not released outside the field test site and that this material is destroyed once the test is finished.
- OTHER LEGISLATION** Other legislation that includes provisions relating to the use, storage, disposal or transportation of hazardous substances includes: the Building Act 1991, Health and Safety in Employment Act 1992, Transport Act 1992 and the Civil Defence Act 1983.
- RADIATION PROTECTION ACT 1965 AND RADIATION PROTECTION REGULATIONS 1982** The use, storage and transport of radioactive material is controlled and licensed by the Ministry of Health through the Office of Radiation Safety.

**CODES OF PRACTICE AND
NEW
ZEALAND/AUSTRALIAN
STANDARDS**

A variety of Codes of Practice and New Zealand/Australian Standards covering various aspects of the hazardous substance industry have been developed by the relevant industries, often in association with local authorities, the Department of Labour, the Environmental Protection Authority or the Ministry for the Environment. Codes of Practice are an approved means of complying with HSNO and are designed to provide guidance on how to eliminate or minimise the risk associated with hazardous substances. A good example of this is the EPA approved code of practice “Management of Agrichemicals NZS 8409:2004”.

**COMPLIANCE AND
MONITORING**

Monitoring will be undertaken to ensure that the conditions of resource consents are complied with. In general the appropriate authorities to direct complaints regarding the location or appropriate management of hazardous facilities to (aside from any relating to the rules or standards in this Plan section) will be the Environmental Protection Authority or the Ministry of Business, Innovation and Employment.

**INTEGRATED
MANAGEMENT**

Hastings District Council will work with the Hawke’s Bay Regional Council, adjacent local authorities and other statutory agencies and industries where appropriate for the assessment and management of hazardous facilities.

**HAWKE’S BAY REGIONAL
COUNCIL**

The Hawke’s Bay Regional Council (HBRC) also has involvement in the management of hazardous substances. The HBRC have responsibility for hazardous substances as they relate to the discharge of contaminants to air, water and land as defined by section 15 of the RMA. The HBRC will also have responsibility for the use, storage, and transportation of hazardous substances where these are associated with the control of the use of land of any river or lake under section 13 of the RMA. They also assist in the safe disposal of hazardous substances.

**RESOURCE MANAGEMENT
(NATIONAL
ENVIRONMENTAL
STANDARD FOR ASSESSING
AND MANAGING
CONTAMINANTS IN SOIL
TO PROTECT HUMAN
HEALTH) REGULATIONS
2012**

All territorial authorities are required to give effect to and enforce the requirements of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

These Regulations provide a nationally consistent set of planning controls and soil contaminant values, and ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed -and if necessary the land is remediated or the contaminants contained to make the land safe for human use.

Resource consent information and monitoring data can be collated to inform the identification of land affected by contaminants in soil.

29.1.5 RULES

The following table sets out the status of activities involving hazardous facilities:

RULE TABLE 29.1.5 – HAZARDOUS SUBSTANCES AND GMOs		
RULE	LAND USE ACTIVITIES	ACTIVITY STATUS
HS1	The Storage, Handling or Use of Hazardous Substances (excepting Arsenic (As) and Major Hazardous Facilities) within the Heretaunga Plains Unconfined Aquifer.	P
HS2	The Storage, Handling or Use of Hazardous Substances in all other areas (excepting Major Hazardous Facilities).	P
HS3	Activities involving Genetically Modified Organisms that are not classified as Field Trials or Releases. This includes (but is not limited to) research within contained Laboratories, Medical and Veterinary Applications and Food containing Genetically Modified Products that are not Viable.	P
HS4	Permitted activities not meeting the Specific Performance Standards and Terms in Section 29.1.6.	RD
HS5	Major Hazardous Facilities	D
HS6	The outdoor Release of Genetically Modified Organisms	Prohibited
HS7	The outdoor Field Testing of Genetically Modified Organisms	Prohibited
HS8	The Storage, Handling or Use of Arsenic (As) within the Heretaunga Plains Unconfined Aquifer RMU.	Prohibited

29.1.6 SPECIFIC PERFORMANCE STANDARDS AND TERMS

The following Specific Performance Standards and Terms apply to the activities specified below.

29.1.6A THE STORAGE, HANDLING OR USE OF HAZARDOUS SUBSTANCES WITHIN THE HERETAUNGA PLAINS UNCONFINED AQUIFER

(i) Impervious surfaces

All hazardous substances shall be stored and handled on areas which have impervious surfaces. In Industrial Zones, this impervious surface requirement also applies to fuel operated machinery and vehicles.

Note: Underground tanks and pipelines are considered to contain hazardous substances within an impervious surface.

Outcome

The quality of groundwater in the Unconfined Aquifer will be protected from the adverse effects of hazardous substances.

(ii) Stormwater

Facilities shall be provided to prevent hazardous substances from being washed or spilled into natural ground or entering any storm water systems or storm water ground soakage up to a 1% AEP (Annual Exceedance Probability) rain event.

29.1.7 ASSESSMENT CRITERIA – RESTRICTED DISCRETIONARY AND DISCRETIONARY ACTIVITIES

For Restricted Discretionary Activities, the following criteria identify those matters which Council has restricted its discretion over in assessing Resource Consent applications. For Discretionary Activities, the following criteria identify those matters which Council may assess the activity against. However, for Discretionary Activities, Council's assessment is not restricted to these matters.

29.1.7A 1. RISK ASSESSMENT

A risk assessment shall be provided, focussing on the following issues:

- (i) Assessment of the probability and potential consequences of an accident leading to the release or loss of control of hazardous substances. This assessment should focus on the ability of the design and management of the site to avoid accidents, such as spill containment measures, fire safety and fire water management, emergency management, site drainage and off-site infrastructure (e.g stormwater drainage system, sewer type and capacity) and the disposal of waste containing hazardous substances.
- (ii) Potential risk and effect on people and neighbouring activities, with emphasis on sensitive activities such as residential zones, educational facilities and community facilities.
- (iii) Potential risk and effect on natural ecosystems and the life supporting capacity of land and water, including the Heretaunga Plains Unconfined Aquifer, waterbodies and sources of potable water.
- (iv) Potential risk and effect on sites of significance to Tangata Whenua, sites of historical or archaeological significance, Recommended Areas for Protection, Outstanding Natural Features and Landscapes or Significant Landscape Character Areas.
- (v) The potential for natural hazards to impact on the operation of the hazardous facility.
- (vi) The potential for cumulative adverse effects of hazardous substances.

2. ALTERNATIVE LOCATIONS

The inclusion of evidence that alternative locations for the activity have been considered, having particular regard to locations both within the sites and outside of the site.

3. DISTRICT PLAN

Consistency with the Objectives, Policies and Methods of the relevant Zone and of Section 29.1.3 of the Hastings District Plan.

4. RECORD OF EXISTING ACTIVITY

The record of compliance and acceptable risk management of any existing activity where expansion of an existing activity is proposed.

29.1.7B HAZARDOUS FACILITIES WITHIN THE HERETAUNGA PLAINS UNCONFINED AQUIFER NOT MEETING THE SPECIFIC PERFORMANCE STANDARDS AND TERMS IN SECTION 29.1.6.

In addition to the matters listed in 29.1.7A 1-4, an application will be assessed according to the matters listed below:

(a) Stormwater and sewerage

The availability of fully reticulated stormwater and sewage disposal systems or on-site treatment systems for the treatment of contaminated wastewater or stormwater from buildings and yards.

(b) Solid and liquid waste

The method of disposal of both solid and liquid waste and the volume of waste disposal.

GMO.1

GENETICALLY MODIFIED ORGANISMS

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GMO.2.5 Particular Matters

GMO.1.2 Eligibility Rules

1. Research within contained laboratories involving GMOs is a permitted activity.
2. Medical applications involving the manufacture and use of non-viable GM products are permitted activities.
3. Veterinary Vaccines using GMOs are permitted activities.
4. Other GMO activities not requiring consent as a discretionary activity or listed as a prohibited activity are permitted activities.
5. Field Trials of GMOs (where the proponents of such activities have prior approval of the EPA) are discretionary activities.
6. Food-related and non food-related GMO Releases are prohibited activities.

GMO.1.3 Notification

All applications for resource consent must be publicly notified.

GMO.1.1 Description & Expectations

The purpose of this chapter is to manage the outdoor use of Genetically Modified Organisms (GMOs). The outdoor use of GMOs can have adverse effects on people, communities, tangata whenua, social and cultural wellbeing, the environment and the economy.

Sources of risk from the outdoor use of GMOs include:

- Socio-cultural risk - concerns of Maori, such as mauri, whakapapa, tikanga, including the integrity of nature, the mixing of genes from unrelated species, and effects on indigenous flora and fauna.
- Environmental risk - including adverse effects on non-target species (e.g. birds and insects), genetically modified (GM) plants becoming invasive and disrupting ecosystems, and altered genes transferring to other organisms.
- Economic risk - the risk that cultivation of GM crops will cause economic damage, in particular through accidental or unintentional migrations of GMOs resulting in GM contamination appearing in non-GM crops and associated market rejection and loss of income, negative effects on marketing and branding opportunities, and costs associated with environmental damage.

There is a lack of information, including scientific uncertainty, concerning the effects of GMOs in the environment and risks of irreversible, adverse effects which could be substantial. In order to manage the effects of outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs, an adaptive precautionary approach to risk management is adopted for the Whangarei District.

The application of a precautionary approach shall mean that the Release of a GMO is prohibited and that Field Trials of a GMO (where the proponents of such activities have prior approval from the Environmental Protection Authority (EPA)) shall be a discretionary activity so as to avoid the risks of potential adverse effects. Some activities, such as research within contained facilities, veterinary vaccines and certain medical applications are permitted activities. The classification is based upon a hierarchy of risks, from negligible for permitted activities to high risk for prohibited activities. Discretionary activities (Field Trials) are subject to development and performance standards, including a requisite for bonds to cover possible environmental or economic damage and monitoring requirements.

The application of an adaptive risk management approach is to avoid foreclosure of potential opportunities associated with a GMO development that could benefit the district. 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 the particular GMO activity would be of net benefit to the district and that potential risks can be managed to the satisfaction of Council. Council or a GMO developer can initiate a plan change to change the status of an activity.

It is anticipated that the objectives, policies, eligibility rules and general development and performance standards in this chapter will achieve the following results:

1. Adoption of a precautionary approach to manage potential risks (social, cultural, environmental and economic) associated with the outdoor use of GMOs.
2. Ensuring users of GMOs are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation.
3. Protection of local/regional marketing advantages through reducing risks of adverse effects associated with market rejection and loss of income from GM contamination of non-GM crops, and negative effects on marketing, branding and tourism opportunities.
4. Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

GMO.2

GMO Land Use Controls

GMO.2.1 Objectives

1. The environment, including people and communities and their social, economic and cultural well being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.
2. The sustainable management of the natural and physical resources of the district with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.

GMO.2.3 Information Requirements

Applications for GMO Field Trials are to provide:

- Evidence of approval from the EPA for the specific GMO for which consent is sought. The duration of any consent granted will be aligned with EPA approval terms.
- Details of proposed containment measures for the commencement, duration and completion of the proposed activity.
- Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.
- Research on adverse effects to the environment and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.
- Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.
- A management plan outlining on-going research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.
- Details of areas in which the activity is to be confined.
- Description of contingency and risk management plans and measures.

GMO.2.2 Policies

1. Precautionary Principle

To adopt a precautionary approach by prohibiting Release of a GMO, and by making Field Trials of a GMO a discretionary activity.

2. Financial Accountability

To ensure that a resource consent granted for the Field Trials of a GMO is subject to conditions that ensures that the consent holder is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including via the use of bonds.

3. Risk Avoidance

To ensure that a resource consent granted for the Field Trials of a GMO is subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment from the use, storage, cultivation, harvesting, processing or transportation of a GMO.

4. Monitoring Costs

To ensure that a resource consent granted for the Field Trials of a GMO is subject to a condition requiring that monitoring costs are met by the consent holder.

5. Liability

To require consent holders for a GMO activity to be liable (to the extent possible) for any adverse effects caused beyond the site for which consent has been granted for the activity.

6. Adaptive Approach

To adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a GMO in the district through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a GMO activity becomes available.

GMO.2

GMO Land Use Controls

GMO.2.4 General Development & Performance Standards

Without limiting the discretion reserved to Council on any application for consent, discretionary activities are to comply with the following minimum controls in order to establish in the district. The general development and performance standards are in addition to any controls/conditions that are imposed and monitored by the EPA under the Hazardous Substances and New Organisms (HSNO) Act.

1. Bond

Council requires the applicant for the resource consent to provide a performance bond, with an approved trading bank guarantee, in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity). This bond is to be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent. The form of, time and manner of implementing and discharging the bond shall be decided by, and be executed to the satisfaction of Council.

2. Monitoring Costs

All costs associated with monitoring required for discretionary activities will be borne by the consent holder. This includes any monitoring that is required to be undertaken beyond the consent duration, as required by a resource consent condition.

3. Assessment of Applications and Conditions

Where necessary, more stringent measures than those required under the provisions of the HSNO Act may be imposed to manage potential risks. A review clause (pursuant to Section 128 RMA) may be included in the conditions, where deemed necessary, to address any future changes in technology, and the scope of environmental, economic and cultural effects. An application for a discretionary activity may be granted with or without conditions, or be declined by the Council having regard to the relevance of the following matters:

- **Site Design, Construction and Management**

Site design conditions should ensure GMO sites are designed and managed in a manner that avoids or minimises risks of adverse effects from activities carried out on the site. This shall include provisions to prevent the migration of GMOs beyond the area designated for the activity.

- **Transport**

Ensure the transportation of GMOs is carried out in a manner that minimises the risk of adverse effects by preventing the escape of GMOs from the transporting vehicles. Appropriate procedures must be in place to ensure that any vehicle visiting the site is thoroughly cleaned and checked prior to leaving the site to avoid unintentional GMO distribution.

- **Monitoring**

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

- **Reporting**

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

GMO.2.5 Particular Matters

Matters that will be considered when determining the amount of bond required are:

- What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.
- The degree to which the operator of the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.
- The level of risk associated with any unexpected adverse effects from the activity.
- The likely scale of costs associated with remediating any adverse effects that may occur.
- The timescale over which effects are likely to occur or arise.
- The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

A monitoring strategy for a GMO discretionary activity can include the following matters:

- Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).
- Testing of procedures (e.g. accidental release response).
- Training programmes for new staff, updates for existing staff.
- Audits of sites and site management systems.
- Sample testing of plants, soils and water in neighbouring properties or localities for the presence of migrated GMOs.



Definitions

The following definitions shall be inserted into the District Plan in Chapter 4. Meaning of Words -

Field Trials (tests) ** - means, in relation to a genetically modified organism, the carrying on of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.

Genetically Modified Organism and GMO** - means, unless expressly provided otherwise by regulations, any organism in which any of the genes or other genetic material:

(a) have been modified by *in vitro* techniques; or

(b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by *in vitro* techniques.

N.B. For the absence of doubt, this does not apply to GM products that are not viable (and are thus no longer GM organisms), or products that are dominantly non-GM but contain non-viable GM ingredients (such as processed foods).

Release** - means to allow the organism to move within New Zealand free of any restrictions other than those imposed in accordance with the Biosecurity Act 1993 or the Conservation Act 1987.

A Release may be without conditions (s34, HSNO Act) or subject to conditions set out s38A of the HSNO Act.

Environmental Protection Authority and EPA* - means the Environmental Protection Authority established by section 7 of the Environmental Protection Authority Act 2011.

Hazardous Substances and New Organisms Act and HSNO - means the Hazardous Substances and New Organisms Act 1996.

* Definition taken from the Resource Management Act 1991

** Definition taken from the Hazardous Substances and New Organisms Act 1996

