

## **Specific definitions**

**GROUND LEVEL** – S+SNZ generally supports this definition but would like to see a technical amendment to part (c) so that it reads:

*(c) If, in any case under paragraph (a) or (b), a retaining wall or retaining structure is located on the boundary, the level on ~~front~~ the surface of the retaining wall or retaining structure where it intersects the boundary.*

In most cases the ground level will be on top of the retaining wall/structure, or on the front face of an inclined retaining wall/structure. When the boundary is on or very close to the front face of a vertical retaining wall/structure, the ground level would be at the bottom of the wall.

**HEIGHT IN RELATION TO BOUNDARY** - S+SNZ generally supports this definition but would like to see it refined so that it reads:

*Means the maximum height of a structure, as identified in the relevant rule, relative to its distance from the boundary of a site or other specified location.*

This change would allow the local council to identify within the proposed rule, which structures would be subject to a height in relation to boundary standard.

**NET SITE AREA** - S+SNZ generally supports this definition but would like to see it refined so that part (b) reads:

*(b) any area of land, as identified in the relevant rule, used primarily for legal access to a rear site.*

This change would allow the local council to identify within the proposed rule, which part of the site (i.e. an access leg / access way up to 6m wide) would be excluded from a rear site.

“Rear site” is undefined but is an ordinarily understood term.

**ARCHAEOLOGICAL SITE** was removed from the final definitions list on the ground that it was a commonly understood term. It should be included by way of cross-reference to the definition in section 6 of Heritage New Zealand Pouhere Taonga Act 2014.

**ARTIFICIAL WATERCOURSE** is not included in the definitions table but occurs in the definition of **DRAIN**. Artificial watercourse needs to be defined as it is a wider term than **DRAIN** and, in the definition of **RIVER** in section 2 of the Resource Management Act **ARTIFICIAL WATERCOURSE** includes irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal. Artificial Watercourse should be defined and could be by cross-reference to the RMA.

**MHWS - MEAN HIGH WATER SPRINGS** has not been included because it “requires localised consideration”. The term can be defined universally, and local variation should not affect the definition.

*DAM* is not included in the definitions table on the ground that it is a plainly understood term. *DAM* is defined in section 7 of the Building Act 2004 (extracted below) and should be included by way of cross-reference:

- dam—
- (a) means an artificial barrier, and its appurtenant structures, that—
    - (i) is constructed to hold back water or other fluid under constant pressure so as to form a reservoir; and
    - (ii) is used for the storage, control, or diversion of water or other fluid; and
    - (iii) [Repealed]
  - (b) includes—
    - (i) a flood control dam; and
    - (ii) a natural feature that has been significantly modified to function as a dam; and
    - (iii) a canal; but
  - (c) does not include a stopbank designed to control floodwaters.

*MANA WHENUA* is included in the definitions table, notwithstanding that *te reo Māori* words were to be excluded, suggesting either an error in the table or that *te reo Māori* words can be included by way of cross-reference to legislation. S+SNZ prefers the latter approach and on that basis seeks inclusion of the definition of *WAHI TAPU* by way of cross-reference to section 4 of Te Ture Whenua Maori Act 1993 or section 6 of Heritage New Zealand Pouhere Taonga Act 2014.

*RIPARIAN ZONE* should be included in the definitions by way of cross-reference to clause 3 of the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017:

- riparian zone –
- means that margin and bank of a water body, including the area where direct interaction occurs between land and water systems, that is important for the management of water quality and ecological values.

### **Definitions to be standardised in future sets of planning standards**

S+SNZ consider that standardised definitions for the following terms be considered in future sets of planning standards, notwithstanding that they do not meet two or more of the criteria required to be considered in the definitions or are used in variety of ways:

*ANNUAL EXCEEDANCE PROBABILITY* – with changing global climate and increasing intensity of storms, greater consideration is being given to protection of property and this term may provide additional clarity when dealing with rainfall intensities.

*IMPERVIOUS AREA* – “impervious surface” did not meet the criteria but should be reconsidered in future sets of planning standards.

*ACCESS WAY / ACCESS LEG / ENTRANCE STRIP* - it would be good to have a standardised term to be used in conjunction with the definition of NET SITE AREA when considering rear sites.

*EPHEMERAL STREAM* – if, as suggested, this term is used in a variety of ways by Councils, then all the more reason to have standardisation. Typically, there are three types of stream: ephemeral, intermittent and permanent and standardisation would enable the terms to be used with the same meaning/understanding.

Please address any enquiries about this submission to the Chief Executive, Survey and Spatial New Zealand ( [REDACTED] ).

Rebecca Strang

A handwritten signature in blue ink, appearing to read 'R Strang', is positioned below the name 'Rebecca Strang'.

President  
Survey and Spatial New Zealand

## **FEEDBACK TO THE MINISTRY FOR THE ENVIRONMENT ON FIRST SET OF DRAFT THE NATIONAL PLANNING STANDARDS**

### **1. Introduction**

- 1.1. Fulton Hogan Limited ("Fulton Hogan") welcomes the opportunity to submit on the Ministry for Environment's ("Ministry") Draft National Planning Standards published June 2018 ("Planning Standards").
- 1.2. Fulton Hogan is a New Zealand civil contracting company that has been operating since 1933. Fulton Hogan specialises in civil construction, particularly (but not limited to) road construction and maintenance and asphalt surfacing. Fulton Hogan's civil contracting and construction operations operate throughout New Zealand, Australia and the South Pacific. Employing over 5,500 people, Fulton Hogan remains privately owned, having approximately 35% employee ownership.
- 1.3. Fulton Hogan's operations include:
  - a) Over 34 quarry sites across New Zealand (including both hard rock and gravel quarries) and river gravel extraction in the South Island;
  - b) Asphalt plants and bitumen plants as well as regional and branch depots around the country; and
  - c) Supporting the creation of infrastructure required to support growth in residential development, including installation of water and waste water infrastructure, construction and maintenance of bridge structures, rail construction and maintenance, airport runway construction and maintenance, ports hardstand areas, irrigation infrastructure, and precast / pre-stressed concrete fabrication amongst other things.
- 1.4. Fulton Hogan is also a major national land developer having undertaken many significant large scale greenfield residential developments.
- 1.5. Fulton Hogan has expended a significant amount of time and resource in planning processes across the country, including more recently the Auckland Unitary Plan and the Christchurch Replacement District Plan, in order to ensure that the planning framework supports the significant investment that Fulton Hogan has made in its existing operations and provides for its future growth.

### **2. Outcomes and Benefits**

- 2.1. Fulton Hogan is supportive of the Ministry developing the Planning Standards and from a user's perspective agrees with the Ministry's focussed outcomes.
  - a) Less time and resources required to prepare and use plans
  - b) Content is easier to access, and relevant content easier to find.
  - c) National consistency in plans, resulting in better implementation on the ground.
  - d) Council focus resources on plan content that influence local resource management outcomes important to the community.
  - e) Good planning practice is applied quickly across councils.
- 2.2. Fulton Hogan is keen to spend less time and resources making submissions on regional and district planning processes. To this end Fulton Hogan supports the proposal to introduce the Planning Standards as consistent and clear documents that set out consistent standards incorporating common definitions within and across all regions. We are also supportive of a plan development process supported by an

efficient council planning and resource management practices implemented by councils.

- 2.3. Fulton Hogan supports the staged approach that the Ministry is adopting to the development and implementation of the Planning Standards. A staged approach should allow opportunity for the inevitable creases in the Planning Standards to be identified and ironed out as an iterative process.

### **3. Standard - S-ASM Structure- area specific matters – zones**

- 3.1. Fulton Hogan is of the view that the Planning Standards should provide direction as to the types of zones available and to how these are to be used while maintaining a level of discretion with councils as to the application of these zones. Given the potential implications of zone descriptions (i.e. setting expectations around levels of amenity and potential for reverse sensitivity effects), clear guidance and understanding of zoning definitions and content is something to be strongly considered when developing the Planning Standards.
- 3.2. For Fulton Hogan, a key consideration for any zones included through the standards is the protection of existing activities that are established in the environment. This would help to avoid future conflicts when unrelated or conflicting activities cohabit in one area with the resulting reverse sensitivity problems. From our experience, reverse sensitivity issues are very time consuming and costly to councils, communities and industry from a time, engagement and economic perspective. Quarries provide a very topical example of reverse sensitivity matters from the perspective of communities, industry and councils. At present, we have a number of projects where compelling but competing objectives or goals are trying to be achieved.
- 3.3. Zones also have the potential to provide protection to a resource such as aggregate by identifying the resource, and clearly indicating to the community the intended land use (e.g. quarrying). While zones can provide protection, they can also drive up land costs. There is also the potential for the existence of a zone to restrict expansion of existing quarries or the establishment of new quarries outside the zone regardless of effect or suitability of the resource at the site.
- 3.4. On this basis further discussion and investigation into other methods that could be used for resource identification and protection should be considered as an alternative to zoning. For example, resource presence could be identified through the development of an overlay. This overlay would allow for early identification of areas where quarry activities could expand to or develop helping set community expectations about the possibility of quarrying in the district. It may also assist in avoiding the sterilisation of a high value resource through guiding land use development over or in close proximity to the resource.
- 3.5. Fulton Hogan are of the view that zoning may not suit quarrying in all districts and realise that there is a need for further investigation and analysis of this issue. On this basis, they would like to see discretion retained with plan makers as to whether quarry related zones are included in district plans or not, and not have quarrying or mining zones included in the national planning standards at this stage.
- 3.6. Reverse sensitivity effects on aggregate and quarry resources also has the potential to sterilise existing and future productive resource. This has the potential to reduce both private and public sector revenue, as central government holds significant ownership of crown mineral rights and derives significant revenues from these.

#### **4. Standard F-1 Electronic accessibility and functionality**

- 4.1. Fulton Hogan is very supportive of electronic accessibility and functionality particularly direct access to geospatial referenced planning documents that can more easily be kept current enabling Fulton Hogan more efficient assessment of the legislative parameters and authorisation processes that apply.
- 4.2. We are also of the view that the wider development and use of e-plans will not only support consistency and efficiency within councils but also enable efficient use with the corresponding positive community and economic effect.

#### **5. Definitions Standard CM-1& CM-2 Content and Metric Standards**

- 5.1. Fulton Hogan acknowledges there are significant benefits in having standardised definitions included in the Planning Standards to help reduce uncertainty and misunderstanding, which can lead to delays, drawn out consent processes and inefficiency from a user and council perspective.
- 5.2. However there are some standard definitions included in Table 29 (Standard CM-1) that could adversely impact Fulton Hogan's activities. We have identified and provided further explanation in Attachment 1. There are also some additional definitions that we believe could be included to help achieve the objectives of the Planning Standards. (More detailed comment of these additional definitions is also provided in Attachment 1).
- 5.3. Fulton Hogan considers that the inclusion of Metric Standards within the Planning Standards could generally be problematic if they are not broad enough to keep up with technology changes or future metric standard changes. For this reason Fulton Hogan considers that Metric Standards should sit outside the Planning Standards, by way of a separate national supporting document. This would allow for Metric Standards (e.g. noise) to be more easily updated as required, without the need to vary the Planning Standards.

#### **6. Effective Implementation**

- 6.1. Fulton Hogan considers that a key issue in the overall effectiveness of the proposed Planning Standards is the process for implementing these new Planning Standards. We believe there is a large disparity in the ability of local councils to fund the cost of implementing any significant changes in central government planning direction and requirements, such as those contemplated by the Planning Standards.
- 6.2. For this reason we believe that key to effective implementation of the Planning Standards is the need for comprehensive guidance material that addresses issues such as changes to plans in order to implement the mandatory standards. Preferably this guidance material should include community and industry input, to ensure the change process remains clear and transparent.

#### **7. Additional guidance material required - Industry practice**

- 7.1. Fulton Hogan is an active contributor and leader within the wider Aggregate and Quarry industry and is of the view that the Aggregate and Quarry industry needs to strongly consider the development and implementation of quarry industry standards.
- 7.2. To this end it would seem logical for the Aggregate and Quarry industry standards to be developed in parallel with the Planning Standards. Should future industry

discussions and consultation lead to increased guidance on industry practices and obligations, there will be a ready-made and accepted set of standards to include within the future stages of the Planning Standards development.

- 7.3. Fulton Hogan would support the national development of an aggregate and quarry standard or code of practice that considers the needs of alluvial and hard rock situations. With this industry led standard there would also be discussion on resource protection, to not only protect current resources but avoid possible resource sterilisation through future incompatible land use.
- 7.4. On this basis it is also important that the current Planning Standards (both structure and content) allow for future technical innovation and the development of industry led good management practice.

## **8. Other Comments**

- 8.1. Global political focus is on climate change and the increased natural hazard events Auckland 2011 – tornado, Auckland 2012 – tornado, 2013 Haast Pass – landslide, 2014 Northland – flooding, 2015 Wellington – flooding, 2017 Edgecumbe – flooding, 2018 Cyclones Fehi and Gita) , along with targeted action to lower carbon emissions that NZ Inc has signed up to plus ensuring affordable housing across our communities. Analysis by the Aggregate and Quarry Association shows that approximately 50% of New Zealand’s aggregate supply goes into horizontal infrastructure (e.g. roads) and the remainder split between buildings and vertical infrastructure. In our view it is important to provide security of current NZ aggregate supply to ensure NZ Inc continues to reach these goals. Key to this is having resources that are close to end users and markets to assist NZ Inc in meeting its carbon agreement goals as well as supply cost effective resources to create affordable housing and public infrastructure.

### **Releasing submissions**

Your submission may be released under the Official Information Act 1982 and will be published on the Ministry’s website. Unless you clearly specify otherwise in your submission, we will consider that you have consented to both your submission and your name being posted on the Ministry’s website.

Please check this box if you would like your name, address, and any personal details withheld.

Fulton Hogan Limited;

Date: 17 August 2018

Signature: \_\_\_\_\_



Don Chittock

South Island Resources and Sustainability Manager

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

(See Attachment 1)



Definition	Comment
<p><b>cleanfill</b> means an area used for the disposal of exclusively inert, non-decomposing material.</p>	<p>This definition seeks to cover both the area used for disposal and the content of cleanfill material. As drafted this definition could exclude materials such as concrete which is commonly used as a cleanfill material but could not be described as 'exclusively inert'.</p>
<p><b>NEW cleanfill material</b></p>	<p>Suggest that a new definition be included to specifically cover the material deposited as cleanfill, that aligns with the MfE definition of cleanfill material.</p>
<p><b>earthworks</b> means any land disturbance that changes the existing ground contour or ground level.</p>	<p>This definition using the associated definition of 'land disturbance' is very broad and needs to be amended as currently drafted it could include activities such as preparing a raised bed vegetable garden. Fulton Hogan considers that this definition will not assist councils who will be forced to further define earthworks through objectives, policies and rules.</p>
<p><b>functional need</b> means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment.</p>	<p>This definition should be of assistance when describing the rationale for locating quarries in environments where the rock or aggregate resource is located.</p>
<p><b>industrial activity</b> means an activity for the primary purpose of—  (a) manufacturing, fabricating, processing, packing, storing, maintaining, or repairing</p>	<p>This definition may address a key component of quarrying activity, namely the processing of rock and aggregate into a saleable product. However the relationship between quarrying, the processing of material and what land use category these activities sit in (i.e. rural, industrial etc.) needs to be</p>

Definition	Comment
<p>goods;</p> <p>or</p> <p>(b) research laboratories used for scientific, industrial or medical research; or</p> <p>(c) yard-based storage, distribution and logistics activities; or</p> <p>(d) any training facilities for any of the above activities</p>	<p>carefully considered due to the potential unintended consequences of these categorisations.</p>
<p><b>land disturbance</b> means the alteration to land, including by moving, cutting, placing, filling or excavation of soil, cleanfill, earth or substrate land.</p>	<p>This definition creates a difficult relationship with the definition of 'cleanfill'.</p>
<p><b>mining</b> has the same meaning as in section 2 of the RMA and Crown Minerals Act 1991</p>	<p>The definition of 'mining' would include winning aggregate or rock from a quarry. Fulton Hogan considers that a further specific definition of 'quarrying activity' is needed to avoid the unintended consequences the mining definition alone could have on how the range of activities that make up quarrying activities are addressed in plans.</p>
<p><b>quarry</b> means an area of land(as defined) where the excavation, with or without the processing, of minerals and other solid natural substances occurs</p>	<p>This definition focuses on the quarry site. Consideration needs to be given to the relationship with other relevant definitions contained in the Planning Standards (e.g. 'industrial activity' and 'mining') or that may be included in the Planning Standards or in plans (e.g. 'quarrying activity').</p>

Definition	Comment
NEW quarrying activity	Fulton Hogan suggests that a new definition of 'quarrying activity' be included that specifically incorporates the component parts of quarrying including the winning, processing, sale and transport of natural sand, gravel, clay, silt and rock. Alternatively if such a definition is not included, consideration should be given to how quarrying activities will be defined within plans in light of the other standard definitions (e.g. industrial activity and mining).

24 August 2018

Planning standards  
c/- Ministry for the Environment  
PO Box 10362  
**WELLINGTON 6143**

**Via email: [planningstandards@mfe.govt.nz](mailto:planningstandards@mfe.govt.nz)**

Dear Sir/Madam

**RE: SUBMISSION ON THE DRAFT FIRST SET OF NATIONAL PLANNING STANDARDS**

Thank you for the opportunity to provide feedback on the draft first set of National Planning Standards.

**1. Introduction**

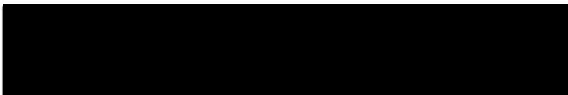
Napier City Council is in the early stages of reviewing the Napier District Plan. Based on our current programme, a draft plan will be released for consultation in mid-late 2019, with notification of the proposed plan scheduled for mid-late 2020. This programme will allow us to align the revised District Plan with the first set of National Planning Standards scheduled to be gazetted in April 2019. As such, we will likely be one of the first Councils in New Zealand to adopt and implement the first set of standards. We would appreciate early signals from the Ministry for the Environment (MfE) of any substantial changes to the draft standards intended to be made as a result of this consultation. This will ensure we align our draft plan with the final standards from the outset, removing the need for substantial re-writes later in the plan review process.

We consider that the first set of National Planning Standards can generally be adopted through our District Plan review. However, we have a number of concerns with the District plan structure standard and the mapping standard as addressed below. We ask that MfE considers these matters when finalising the first set of national planning standards.

**2. S-DP: District plan structure standard**

**2.1 Commercial zones**

We consider that the local and neighbourhood commercial zones should be reamed as "Local Centre" and "Neighbourhood Centre". These centres provide for a range of activities to support the local community, including commercial services and recreation facilities, and are



not restricted to commercial use. Further, residential activities above ground level may be appropriate in these centres to facilitate true mixed use nodes and live/work opportunities. In our view, the inclusion of “commercial” in the name of the zone is misleading and unnecessarily restrictive in terms of the function of these centres.

The current Napier District Plan includes a Large Format Retail zone. This zone was the consequence of a comprehensive Retail Strategy prepared in 2003, which has recently been reviewed. The Large Format Retail zone provides a dedicated area of the city for retail activities over 1,000m<sup>2</sup> GFA, and is intended to both protect the speciality retailing function of the Napier CBD, and reduce pressure on industrial zones to accommodate Large Format Retail activities. Retail under 1,000m<sup>2</sup> GFA, residential activities and offices are discouraged in the zone.

The existing Large Format Retail zone does not clearly align with any of the commercial zones in the draft national planning standard. Although we acknowledge that precincts can be utilised to provide for place-based variations to the standard zones, this approach is inappropriate when the objectives and policies of a precinct would fundamentally contradict the underlying zone. In the case of the Large Format Retail zone, this does not align with the centres in the zone hierarchy. Further, it would conflict with the purpose of the Commercial zone which is to *“provide primarily for a broad range of commercial activities. It also provides for activities that are not sensitive to the effects generated from commercial activities”* (emphasis added). This could result in confusion over the intended use of the land, and inefficiencies in plan implementation.

We therefore request either that Large Format Retail zone be added as an option to the suite of commercial zones, or alternatively, allow additional zones to be added to reflect local issues and strategies.

## 2.2 Rural zones

We understand that Hastings District Council are seeking to continue to use the terminology “Plains Production” for their primary production zone on the Heretaunga Plains. Although the template provides for a “Rural Production” zone, this does not reflect the special qualities of the Heretaunga Plains. The significance of the terminology “Plains Production” zone is well understood in the Hawkes Bay community and we therefore support Hastings District Council’s position on this matter.

## 2.3 Open Space zone

The template only allows for three open space zones (Open space, Sport and active recreation and Conservation), with place-based circumstances able to be addressed through precincts. In our view, the range of zones are not broad enough to reflect different management requirements across a range of parks, reserves and open spaces. This will

inevitably require multiple precincts throughout District Plans, which could be more efficiently addressed through a broader range of standard zones.

The NZRA have introduced a set of national parks categories and guidelines for categorising open space according to primary purpose. The categories also have an associated level of service framework. Most Local Authorities are adopting these for the purpose of managing and developing open space – reflected in Activity Plans, Reserve Management Plans and Open Space Strategies. Many have also used the NZRA categories for guidance on District Plan zones. For example, the Hastings District Plan has recently split their Open Space zones to align with the 7 NZRA categories. Early scoping of our District Plan review has also identified this approach as an option, to ensure consistency and efficiencies in managing reserves across different legislation. From a resource management perspective, this will enable provisions to be appropriately tailored to the primary purpose of a park. For example, the range of activities and building coverage may be broader/higher for neighbourhood parks compared with public gardens, however under the current template they would both be required to be zoned as Open Space.

We therefore request that consideration be given to aligning the Open Space zones in the template with the NZRA categories.

#### 2.4 Māori cultural zone

The proposed Māori cultural zone may be an appropriate method to provide for the ongoing operation and growth of existing marae and papakāinga. However, the spatial planning tool does not easily provide for land that may be subject to treaty settlements throughout the life of a District Plan. Further, a single Māori cultural zone does not provide for different resource management approaches for Māori land being subject to Te Ture Whenua Māori Act 1993, and Treaty Settlement Land.

Enabling marae, papakāinga and other activities on ancestral Māori land and Treaty Settlement Land through District-Wide rules would avoid the need for plan changes to rezone land to “Māori cultural zone” following treaty settlements, and would allow for different management approaches for ancestral and treaty settlement land. This approach may not be relevant or appropriate to all parts of New Zealand, including Napier/Ahuriri, however we consider that this option should not be excluded by the national planning standards.

The appropriate method and mechanism to provide for activities on māori land should be able to be determined at the community level between council and mana whenua through a District Plan review process, rather than being limited by the national planning standards.

#### 2.5 Sites of significance to māori

The template requires use of the terminology “sites of significance to māori” in the District-wide rules. We consider this may be problematic for the following reasons:

- local hapū may prefer alternative terminology, for example “significance to mana whenua” rather than “significance to māori”. For example, the Auckland Unitary Plan refers to “Sites and Places of Significance to Mana Whenua”. The Hastings District Plan chapter heading refers to “Wāhi Tapu, Wāhi Taonga and Sites of Significance”. The template does not allow for this flexibility to reflect local values or preferences.
- “sites” are only one component of section 6(e) of the RMA. Broader areas or ancestral landscapes may also be recognised and provided for in a District Plan. Although the standard allows for these to be included in the plan, the section heading could be misinterpreted as limiting management to discrete “sites”.
- Further, there is potentially an issue in implementation with the template definition of “site”. Together with the proposed mapping standard of a site of significance to māori as a geometry point rather than a polygon (further discussed below), this could limit the application of management provisions in a plan to the certificate of title area. This may be inappropriate and not reflect the true extent of the area of significance.
- the terminology also does not easily align with the Heritage New Zealand Pouhere Taonga Act 2014 definitions of wāhi tūpuna, wāhi tapu, or wāhi tapu areas.

We consider that there should be flexibility in the terminology and also structure of this section to respond to mana whenua values at a district/city level.

### 3. F-2: Mapping standard

Our GIS team have advised that from a technical perspective, the mapping standards are clear and easily implemented. However, we raise the following matters for consideration:

- Some of the zone colours are very similar and not easily distinguishable, in particular:
  - Low-density residential and Medium-density residential; and
  - Rural residential and Rural settlement.
 Although the differences may be visible when viewed in a legend, they’re unlikely to be clear when viewing an area on a planning map. For the standard colour template to be useful, and to avoid the need for GIS users to click on each site to confirm the zone, each zone should be easily distinguishable.
- The sites of significance to māori layer should be a polygon rather than a geometry point. These sites/places/areas are generally associated with District Plan provisions, such as additional earthworks controls, and therefore the extent to which those provisions apply need to be clear on the planning maps.

### 4. Future content for standards

The Ministry is seeking feedback on potential future content for standards, including on utilities provisions. We would appreciate being advised of any potential further standards as soon as possible so we can consider them in the current plan review process.

If you have any queries regarding matters raised in this submission, please contact Catherine Reaburn, Senior Policy Planner on [REDACTED] or [REDACTED]

Yours faithfully



Paulina Wilhelm  
**Manager: City Development**



**From:** brian mahon  
**To:** [Planning Standards Mailbox](#)  
**Date:** Friday, 17 August 2018 4:02:07 PM

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## **SUBMISSION - DRAFT FIRST SET OF NATIONAL PLANNING STANDARDS**

**Name:** Brian Mahon

**Address:**

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**Phone:**

[REDACTED]

**Email:**

[REDACTED]

**Submitter type:** Individual

### **CM-2: Draft noise and vibration metrics standard**

1. This is a submission in relation to the CM-2: Draft noise and vibration metrics standard.
2. The submitters are involved in proceedings with Auckland Council and others concerning the correct approach to the assessment of impulsive sound from gunfire.
3. The purpose of the submission is to address apparent confusion in the draft standard in relation to the measurement and assessment of impulsive sound such as gunfire and blasting, which are characterised as a peak sound level (with the descriptor  $L_{\text{peak}}$ ). Impulsive sounds are not properly assessed and measured by applying a rating level expressed in  $L_{\text{eq}}$  (for a continuous steady sound) or  $L_{\text{max}}$  in NZS 6802:2008 as implied in paragraph 4 of the draft standard.
4. Paragraph 3 of the draft standard states:

Any plan rule to manage an emission of noise must be consistent with noise measurement methods in the New Zealand Standards listed in table 30: Acoustic New Zealand Standards below.
5. Paragraph 4 of the draft standard states:

Any plan rule to manage **an emission of noise** must be consistent with the assessment methods in section 6 Rating Level and section 7 LMAX in New Zealand Standard 6802:2008 Acoustics – Environment Noise.

6. At least as it relates to impulsive sound, paragraphs 3 and 4 of the draft standards appear to be in conflict. This is because for impulsive sound such as gunfire or blasting (impulsive sound being transient sound having a peak level a very short duration, typically less than 100 milliseconds) should be described by the measurement of its peak level as indicated by the descriptor  $L_{\text{peak}}$  (refer clause 8.6, New Zealand Standard 6801:2008).

7. In comparison, the descriptor for a continuous steady sound is the  $L_{\text{eq}}$  which is a time average level i.e.  $L_{\text{eq}}$  is ‘a different thing’ from the peak level.

8. The assessment and determination of the rating level (as expressed in  $L_{\text{eq}}$  with adjustments for duration and special audible characteristics) and  $L_{\text{MAX}}$  in New Zealand Standard 6802:2008 will only be applicable and relevant if the type of sound is generally within the scope of NZS 6801:2008 and NZS 6802:2008.

9. Impulsive sound (gunfire and blasting) is generally outside the scope of NZS 6802:2008 (refer clause 1.2 NZS 6802:2008).

10. An (unintended) implication from the current drafting to the draft New Zealand standard may be a possible interpretation that gun clubs in New Zealand are subject to the assessment criteria requiring the calculation of a rating level (in  $L_{\text{eq}}$ ) and the application of  $L_{\text{MAX}}$  - when these are not the correct descriptors for impulsive sound.

11. It is submitted that it would not be logical to have a plan rule or draft national standard implying that emission of impulsive sound is to be assessed in a manner consistent (per paragraph 4 of the draft standards) with section 6 Rating Level and section 7  $L_{\text{MAX}}$  in New Zealand Standard 6802:2008 Acoustics – Environment Noise – when  $L_{\text{eq}}$  and  $L_{\text{max}}$  are not applicable to the assessment of impulsive sound.

It is important to ensure validity of any draft standard that the draft standard not “overreach” the application of a rating level to types of sounds (such as gunfire and blasting) not intended to be addressed by the descriptors  $L_{\text{eq}}$  or  $L_{\text{max}}$ .

12. In the New Zealand context in *Brooks v Western Bay of Plenty District Council*, the Environment Court expressly recognised (based on expert evidence) that general amenity noise standards in New Zealand Standard 6802:2008 were not applicable to impulsive noise.

### **Outcome sought**

13. Suggested drafting to resolve the conflict would be to amend clause 4 of the draft national standard (CM-2: Draft noise and vibration metrics standard) to read (or to same or similar effect):

Any plan rule to manage an emission of noise must be consistent with the assessment methods in section 6 Rating Level and section 7  $L_{MAX}$  in New Zealand Standard 6802:2008 Acoustics – Environment Noise, provided the emission of noise in question is generally within the scope New Zealand Standard 6802:2008.

14. The submitter requests to be heard in relation to this submission.

Date: 17 August 2018



**TŪWHARETOA**  
MĀORI TRUST BOARD

## **TŪWHARETOA MĀORI TRUST BOARD**

**Submission on:**  
***National Planning Standards***

**17 August 2018**



## INTRODUCTION

- 1 This submission is made by the Tūwharetoa Māori Trust Board (the **Trust Board**) on the National Planning Standards prepared by the Ministry for the Environment.
- 2 The Trust Board was established pursuant to the Māori Land Amendment Act 1924 and Māori Land Claims Adjustment Act 1926. The Trust Board later became a Māori Trust Board under the Māori Trust Boards Act 1955.<sup>1</sup>
- 3 By Deeds with the Crown dated 28 August 1992 and 10 September 2007 the Trust Board is the legal owner of Taupō Waters. The term Taupō Waters refer to property including the bed, water column and air space of Lake Taupō and the Waihora, Waihaha, Whanganui, Whareroa, Kuratau, Poutu, Waimarino, Tauranga-Taupō, Tongariro, Waipehi, Waitotaka, Hinemaiaia and Waitahanui Rivers and the Waikato River, from the outlet of Lake Taupō to a place known as Te Toka a Tia, downstream and inclusive of the Huka Falls.
- 4 The Trust Board is also a party to the Waikato River Deed with the Crown dated 31 May 2010 (the **Waikato River Deed**). The Waikato River Deed was given legal effect through the Ngāti Tūwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010 (the **Upper Waikato River Act**). The Waikato River Deed provides that the Crown and the Trust Board agreed to enter into the Waikato River Deed in recognition of “the interests of Ngāti Tūwharetoa in the Waikato River and its catchment and in Taupō Waters and to provide for the participation of Ngāti Tūwharetoa in the co-governance and co-management arrangements in respect of the Waikato River”.<sup>2</sup>
- 5 The Trust Board’s relationship to Taupō Waters is unique; it holds legal title as trustee and acts as kaitiaki for Taupō Waters. These fiduciary responsibilities over Taupō Waters to present and future generations underpins all the activities and aspirations of the Trust Board.
- 6 Please direct all communications in relation to this submission to the Trust Board to Maria Nepia, Natural Resources Manager at [REDACTED]).

## SUBMISSION ON NATIONAL PLANNING STANDARDS

- 7 The Trust Board supports the purpose of the planning standards to provide greater consistency of Resource Management Act 1991 plans and policy statements. However, the Trust Board offers the following recommendations on specific matters:

### Upper Waikato River Act

- 8 The Planning Standards must specifically provide for existing treaty legislation and regional or local statutory documents. For example, the Upper Waikato River Act and the Waikato River Vision and Strategy. This is particularly important in the Waikato Region where there are multiple natural resource settlements that apply to one regional council, one city council and 10 district councils.
- 9 Representation of the each of the treaty settlements is best provided from the iwi themselves. This would ensure consistency in description, application and expectation within the relevant council plans. However, special and explicit provision in the National Planning Standards should be provided for (distinct from the tangata whenua values section).

### Special Topics Chapter

- 10 Sections 12 to 16 of the Upper Waikato River Act have effect to the extent to which the content of the vision and strategy relates to matters covered by the Resource Management Act 1991. Also, that Sections 11 to 15 prevail over sections 59 to 77 of the Resource Management Act 1991. Sections as significant as this should be clearly noted in all planning documents to which they apply. This is required to clarify where there is inconsistency or conflict between national planning standards, national direction and regional direction (e.g. the Vision and Strategy).

---

<sup>1</sup> Māori Trust Boards Act 1955, section 10.

<sup>2</sup> Waikato River Deed, 31 May 2010, clause 8.

- 11 The Waikato River Settlement provides for any amendments to the Vision & Strategy to be included directly into the Regional Policy Statement, and consequently amended to ensure that the RPS is not inconsistent with the Vision & Strategy. The Waikato Regional Council is not required to undertake a Schedule 1 process to give effect to the amended, or reviewed, Vision & Strategy. The Trust Board recommends that the Planning Standards confirm this process as it applies to the Waikato Regional Council (which could be done through the suggested separate section).
- 12 The Trust Board supports the inclusion of catchments chapters as this would allow for better representation of catchment values. Achieving the objectives of the Vision & Strategy at a small scale would be better support catchment-based integration at a regional level.
- 13 The Trust Board recommends including a new chapter under part 1 (introduction) for Regional Policy Statements, Regional Plans and District Plans, to include regional direction that is specific or unique to a region (e.g. the Vision & Strategy). National direction that applies to specific regions is currently not provided for. The Trust Board further recommends that statutory objectives, policies and methods from other documents (e.g. the Vision and Strategy) are referenced in the national planning standards to then be included in all planning documents to which it applies.

#### **Tangata Whenua chapter**

- 14 The Tangata Whenua section (part two) should also provide for references or links to regionally specific legislation and statutory documents (e.g. treaty settlements, Vision and Strategy for the Waikato River).
- 15 The Trust Board is recognised as an iwi authority. The Trust Board supports the standardisation of the location of tangata whenua values within planning documents but the articulation of those values needs to be undertaken between the tangata whenua and local authorities. This process needs to be collaborative and tangata whenua need to have the final say on how those values, and the practical implications of those values, are reflected in the planning standards.

#### **CONCLUSION**

- 16 The Trust Board welcomes the National Planning Standards in the context of the feedback provided.

Nāku iti nei, nā



Topia Rameka

**Chief Executive**

**17 August 2018**

# Draft first set of National Planning Standards

## SUBMISSION FORM

The Government is seeking views on the draft first set of National Planning Standards.

For more information about the Government's proposals read our National planning standards consultation document available at <http://www.mfe.govt.nz/consultation/draft-national-planning-standards>.

**Submissions close at 5:00 pm on Friday 17 August 2018.**

### Making a submission

You can provide feedback in three ways:

1. Use the online submission form available at <http://www.mfe.govt.nz/consultation/draft-national-planning-standards>. This is our preferred way to receive submissions.
2. Complete this submission form and send it to us by email or post.
3. Write your own submission and send it to us by email or post.

### Publishing and releasing submissions

All or part of any written submission (including names of submitters) will be published on the Ministry for the Environment's website [www.mfe.govt.nz](http://www.mfe.govt.nz). Unless you clearly specify otherwise in your submission, we will consider that you have consented both your submission and your name being posted to the Ministry's website.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment. Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this consultation. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

## Submission form

The questions below are a guide only and all comments are welcome. You do not have to answer all of the questions. To ensure your point of view is clearly understood, please explain your rationale and provide supporting evidence where appropriate. The structure of this form is in line with the draft first set of national planning standards as shown in the overview section tables 1 and 2.

## Contact information

Name*	Marion Thomson
Organisation (if applicable)	Soil and Health Association of New Zealand
Address	██████████ ██████████ ██████████ ██████████
Phone	██████████
Email*	██

Submitter type*	Individual	<input type="checkbox"/>
	NGO	<input checked="" type="checkbox"/>
	Business / Industry	<input type="checkbox"/>
	Local government	<input type="checkbox"/>
	Central government	<input type="checkbox"/>
	Iwi	<input type="checkbox"/>
	Other (please specify)	<input type="checkbox"/>

[Click here to enter text.](#)

\* Questions marked with an asterisk are mandatory.

## Draft first set of National Planning Standards

1. Do you support the draft first set of National Planning Standards?

- Yes  
 No

[Click here to enter text.](#)

2. S-RPS: Regional policy statement structure standard

a. Parts 3 and 4 – Core policy statement provisions

S&H are interested in Part 4 – Themes – Environmental Risk. It is noted that this section does not provide any guidance on content. It is suggested that this be amended to clarify that this section covers:

- Hazardous substances and contaminated sites
- Natural hazards
- Genetically modified organisms

The reasons for this request are explained more fully in the attached letter on behalf of S&H dated 17 August 2018.

b. Part 5 – Evaluation and Monitoring

[Click here to enter text.](#)

3. S-RP: Regional plan structure standard

[Click here to enter text.](#)

a. Parts 3, 4 and 5 – Core plan provisions

S&H are interested in Part 4 – Themes – Environmental Risk. It is noted that this section does not provide any guidance on content. It is suggested that this be amended to clarify that this section covers:

- Hazardous substances and contaminated sites
- Natural hazards
- Genetically modified organisms

The reasons for this request are explained more fully in the attached letter on behalf of S&H dated 17 August 2018.

b. Part 6 – Evaluation and Monitoring

[Click here to enter text.](#)

4. S-DP: District plan structure standard

S&H are interested in Part 4 – District Wide Matters – Environmental Risk. It is requested that ‘Genetically modified organisms’ is added in as a sub heading in this section. The reasons for this request are explained more fully in the attached letter on behalf of S&H dated 17 August 2018.

5. S-CP: Combined plan structure standard

S&H are interested in Part 4 – Region Wide Matters (also includes some district matters) – Environmental Risk. It is requested that ‘Genetically modified organisms’ is added in as a sub heading in this section. The reasons for this request are explained more fully in the attached letter on behalf of S&H dated 17 August 2018.

6. S-IGP: Introduction and general provisions standard – Part 1 of all plans and policy statements

[Click here to enter text.](#)

a. Introduction chapter

[Click here to enter text.](#)

b. How plan works chapter

[Click here to enter text.](#)

c. Interpretation

[Click here to enter text.](#)

d. Plan integration

[Click here to enter text.](#)

e. Formation of standards with tangata whenua

[Click here to enter text.](#)

f. National direction

[Click here to enter text.](#)

7. S-TW: Tangata whenua structure standard – Part 2 of all plans and policy statements

a. Recognition of iwi/hapū chapter

[Click here to enter text.](#)

b. Tangata whenua local-authority relationships chapter

[Click here to enter text.](#)

c. Iwi and hapū planning documents chapter

[Click here to enter text.](#)

d. Consultation chapter

[Click here to enter text.](#)

e. Use of te reo Māori

[Click here to enter text.](#)

8. S-SD: Strategic direction structure standard – Part 3 of District plans

[Click here to enter text.](#)

9. S-DWM: District wide matters standard – Part 4 of District plans

[Click here to enter text.](#)

a. Natural Environment Values Chapter

[Click here to enter text.](#)

b. Environmental Risks Chapter

S&H are interested in the Environmental Risks Chapter S-ER. They request that a new section is inserted below Section 13 as follows:

“If the following matters are to be addressed in the plan, they should be located in the Genetically Modified Organisms section:

a. any provision required to manage environmental impacts of genetically modified organism use where this is not covered by other legislation or regulation.”

The reasons for this request are explained more fully in the attached letter on behalf of S&H dated 17 August 2018

c. Community Values Chapter

[Click here to enter text.](#)

d. Infrastructure and Energy Chapter

[Click here to enter text.](#)

e. Subdivisions Chapter

[Click here to enter text.](#)

f. General District Wide Matters Chapter

[Click here to enter text.](#)

10. S-ASM: Draft area specific matters standard – Part 5 of District plans, Part 6 – Combined plans

[Click here to enter text.](#)

- a. **Zone framework (individual and range)**  
Click here to enter text.
- b. **Purpose statements**  
Click here to enter text.
- c. **Additional special purpose zones and criteria**  
Click here to enter text.
- d. **Precincts chapter**  
Click here to enter text.
- e. **Development areas chapter**  
Click here to enter text.
- f. **Designations chapter**  
Click here to enter text.

**11. S-SAM: Schedules, appendices and maps standard – Part 6 – Regional policy statements, Part 7 – Regional plans, Part 6 – District plans, Part 8 – Combined plans**

Click here to enter text.

**12. F-1: Electronic accessibility and functionality standard**

Click here to enter text.

- a. **Standard baseline requirements**  
Click here to enter text.
- b. **Level 5 requirements**  
Click here to enter text.

**13. F-2: Mapping standard**

Click here to enter text.

- a. **Zone colour palette**  
Click here to enter text.
- b. **Symbology**  
Click here to enter text.

**14. F-3: Spatial planning tools (Regional) standard**

Click here to enter text.

- a. **Range of tools**  
Click here to enter text.
- b. **Zone**  
Click here to enter text.
- c. **Overlay**  
Click here to enter text.
- d. **Specific control**

[Click here to enter text.](#)

**e. FMU**

[Click here to enter text.](#)

**f. Airshed**

[Click here to enter text.](#)

**g. Area**

[Click here to enter text.](#)

**15. F-4: Spatial planning tools (District) standard**

[Click here to enter text.](#)

**a. Range of tools**

[Click here to enter text.](#)

**b. Zone**

[Click here to enter text.](#)

**c. Overlay**

[Click here to enter text.](#)

**d. Precinct**

[Click here to enter text.](#)

**e. Specific control**

[Click here to enter text.](#)

**f. Development areas**

[Click here to enter text.](#)

**g. Designation**

**16. F-5: Chapter Form standard**

[Click here to enter text.](#)

**a. Chapter form**

[Click here to enter text.](#)

**b. Rules**

[Click here to enter text.](#)

**c. Rule tables**

[Click here to enter text.](#)

**17. F-6: Status of rules and other text and numbering form standard**

[Click here to enter text.](#)

**a. Status of rules and other text**

[Click here to enter text.](#)

**b. Numbering**

[Click here to enter text.](#)

**18. CM-1: Definitions standard**

S&H have some suggested additional definitions that relate to Genetically Modified Organisms (GMOs). The requested definitions and the reasons for this request are explained more fully in the attached letter on behalf of S&H dated 17 August 2018.

a. Individual definition

[Click here to enter text.](#)

b. Additional definitions

[Click here to enter text.](#)

19. CM-2: Draft noise and vibration metrics standard

[Click here to enter text.](#)

a. Technical support

[Click here to enter text.](#)

20. Implementation

[Click here to enter text.](#)

a. ePlanning implementation

[Click here to enter text.](#)

b. Timing

[Click here to enter text.](#)

c. Support

[Click here to enter text.](#)

d. District plan structure guidance

[Click here to enter text.](#)

e. Regional policy statement and regional plan structure guidance

[Click here to enter text.](#)

f. District plan spatial planning tools and zone framework guidance

[Click here to enter text.](#)

g. Regional plan and policy statement spatial tools guidance

[Click here to enter text.](#)

h. Chapter form and status of rule and other text numbering guidance

[Click here to enter text.](#)

i. Additional guidance materials required

[Click here to enter text.](#)

21. Future content for standards

a. Utilities provisions

[Click here to enter text.](#)

## Other comments

22. Do you have any further comments you wish to make about the Government's proposal?

[Click here to enter text.](#)

## Releasing submissions

Your submission may be released under the Official Information Act 1982 and will be published on the Ministry's website. Unless you clearly specify otherwise in your submission, we will consider that you have consented to both your submission and your name being posted on the Ministry's website.

**Please check this box** if you would like your name, address, and any personal details withheld.

Note that the name, email, and submitter type fields are mandatory for you to make your submission.

## When your submission is complete

If you are emailing your submission, send it to [PlanningStandards@mfe.govt.nz](mailto:PlanningStandards@mfe.govt.nz) as a:

- PDF
- Microsoft Word document.

If you are posting your submission, send it to National Planning Standards, Ministry for the Environment, PO Box 10362, Wellington 6143.

**Submissions close at 5:00 pm on Friday 17 August 2018.**

17 August 2018

National Planning Standards Team  
Ministry for the Environment  
PO Box 10362  
Wellington 6143

By e-mail: [planningstandards@mfe.govt.nz](mailto:planningstandards@mfe.govt.nz)

**Re: Submission by Soil & Health Association of New Zealand Inc. on the Draft National Planning Standards**

Soil & Health Association of New Zealand Inc (Soil & Health) would like to thank the Ministry for the Environment for the opportunity to comment on the draft Standards. This letter has been prepared in support of the information included under the official submission form.

The following documents are **appended** to this letter for ease of reference:

- **Appendix A:** Example definitions relevant to Genetically Modified Organisms provisions (from Auckland Unitary Plan (Operative in Part) and the Genetically Modified Chapter of the Auckland Unitary Plan;<sup>1</sup>
- **Appendix B:** Joint section 32 report on proposed GMO provisions in January 2013, prepared by Auckland Council, Far North District Council, Kaipara District Council and Whangarei District Council; and
- **Appendix C:** Selected caselaw *Federated Farmers of New Zealand Inc v Northland Regional Council* [2015] 18 ELRNZ 603 appeal declined in *Federated Farmers of New Zealand Inc v Northland Regional Council* [2015] NZHC 2036 (Federated Farmers' appeal to the Court of Appeal was withdrawn).

**Soil & Health Association of New Zealand Inc.**

Soil & Health was founded in 1941. It has the largest membership supporting organic food and farming practices in New Zealand (approx. 2842) and is one of the eldest present-day organic organisations in the world.

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<sup>1</sup> The two appeals against the GMO definitions and provisions were resolved, and this part of the Auckland Unitary Plan is now operative.

Soil & Health promotes organic farming and works on many issues surrounding health, safe food, pesticides, genetic engineering, sustainable development and organic food production. The membership includes home gardeners and consumers, commercial growers and farmers, processors, retailers, restaurateurs, and health practitioners. Education and promotion of the use of compost to home gardeners and commercial farmers has been one of the organisations the core activities since its inception.

In 1942 the first issue of the Compost Club Magazine was printed, which over the years evolved into New Zealand's leading organic magazine, *Organic NZ*. This authoritative magazine is read by members and sold in retail outlets.

Publishing *Organic NZ* is a primary function, but the Association also engages in a range of work on behalf of its members and the public including supporting the development of research into organics; promoting organic production methods; working to curb pesticide and chemical use; and supporting local and national initiatives to reduce chemical contamination.

GMO activities have been of concern to Soil & Health, and its members, since the technology was developed in the 1980s. *Organic NZ* has published numerous articles about GMOs since the early 1990s concerning transgenic technology and related studies.

The magazine keeps members and readers up to date on of research concerning the use of genetically engineered crops, addressing such things such as increased herbicide use and the use of increasingly stronger and toxic herbicides. Among the regular articles published in *Organic NZ* on GMOs are those contributed by the group of Physicians and Scientists for Global Responsibility, which have been written and/or peer reviewed by scientists with expertise in the field.

Soil & Health's membership has consistently called for action to prevent or restrain using this technology freely in the environment, unless, or until, it can be proven to be safe, healthy and beneficial for people and the environment, and to ensure users of the technology take fiscal responsibility for any negative consequences.

Soil & Health has also pointed out the gaps in reliance on regulation under the HSNO Act alone and the desirability of an integrated approach under the RMA which has been confirmed in caselaw. Soil & Health has been a party to those cases. Soil & Health strongly supports a precautionary approach to the outdoor use of GMOs under the RMA.

## Current GMO provisions in New Zealand RMA plans

Judicial confirmation of local authority jurisdiction to regulate GMOs under the RMA is relatively recent<sup>2</sup> A nationwide review of regional policy statements and district and regional plans<sup>3</sup> indicates that:

- (a) Most RMA planning documents currently are silent on GMO use;
- (b) A small number of planning documents incorrectly imply GMO management is solely a function of the Environmental Protection Authority managed under the HSNO Act (e.g. Taranaki Regional Air Plan); and
- (c) There are six authorities who have included GMO provisions in their RMA planning documents include:
  - Bay of Plenty Regional Council (Bay of Plenty Regional Policy Statement);
  - Northland Regional Council (Northland Regional Policy Statement);
  - Auckland Council (Auckland Unitary Plan);
  - Far North District Council (Far North District Plan);
  - Whangarei District Council (Whangarei District Plan); and
  - Hastings District Council (Hastings District Plan).

The GMO provisions included in the Auckland Unitary Plan (Operative in Part), the Whangarei District Plan and the Far North District Plan (both operative) are relatively consistent, aside from minor formatting changes to fit the structure of each individual plan.

This consistency is the result of an Inter-council working party set up in 2003 to respond to community concerns about GMO use, which culminated in the preparation of a joint section 32 report on proposed GMO provisions in January 2013, prepared by Auckland Council, Far North District Council, Kaipara District Council and Whangarei District Council.

The Section 32 Report contains a set of example GMO provisions (including definitions), which were used as the basis for subsequent GMO plan changes introduced by each council set out at **Appendix B**.<sup>4</sup>

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<sup>2</sup> *Federated Farmers of New Zealand Inc v Northland Regional Council [2015] 18 ELRNZ 603 appeal declined in Federated Farmers of New Zealand Inc v Northland Regional Council [2015] NZHC 2036 (leave to appeal to Court of Appeal declined).*

<sup>3</sup> Sight was engaged by S&H to undertake a review of regional and district plans across the country to identify how many RMA plans contain GMO provisions (or how many councils are in the process of introducing GMO provisions). This investigation was undertaken in July 2018.

<sup>4</sup> Note that Kaipara District Council has yet to introduce a GMO plan change in line with the other Northland councils.

## **Suggested amendments for the current draft Standards**

Soil & Health is aware that this iteration of the Standards is focusing on standardising RMA plan structure and format to aid in plan navigation and comprehension. However, there is an opportunity to introduce references to GMOs as both a matter which territorial and local authorities may consider as a relevant and valid RMA issue in their planning documents and provide standardised planning definitions for terms relevant to GMOs. Soil & Health are of the view that standardised definitions for GMO Chapters is consistent with the intention and goals of standardisation expressed in s58B RMA.

There are two areas where the current Standards could be altered to include references to GMO provisions.

### **Definitions**

Standard GMO definitions have been developed and tested by the Auckland and Northland councils and Soil & Health supports the inclusion of these defined terms in the Standards. Including these definitions in CM-1: Draft Definitions Standard will ensure that at the very least territorial authorities are using the same terminology nationwide when drafting GMO provisions. The suggested definitions are as follows (consistent with definitions adopted by the Inter-Council Working Party):

#### ***Adaptive management approach***

A systematic, iterative process of decision making in the face of uncertainty, with an aim of reducing uncertainty over time through system monitoring and changes to management in response to the results of monitoring. This does not apply to genetically modified products that are not viable and are no longer genetically modified organisms, or products that are dominantly non-genetically modified but contain nonviable genetically modified ingredients, such as processed foods.

#### ***Genetically modified organism***

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

- have been modified by in vitro techniques; or
- 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.

**Genetically modified veterinary vaccine**

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

**Genetically modified organism field trials**

The carrying out 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 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 section 34 of the Hazardous Substances and New Organisms Act 1996 or subject to conditions set out in section 38A of Hazardous Substances and New Organisms Act 1996.

**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

**Environmental Risk**

The Standards propose the introduction of an 'Environmental Risk' section into the structure of regional policy statements, regional plans, district plans and combined plans. Although these sections provide very little guidance as to what the content of these sections should be, there is an opportunity to clarify that the appropriate place to insert future GMO provisions is in the Environmental Risk section of RMA plans. It is noted that Section E37 of the Environmental Risk section of the Auckland Unitary Plan (Operative in Part) contains Auckland's GMO provisions, so the inclusion of GMO provisions in the Environmental Risk section of the Standards would be consistent with this approach.

The table below outlines the sections of the Standards where references to GMO provisions could be included:

Section of the Standards	Suggested amendment
S-RPS: Draft Regional Policy Statement Structure Standard  Part 4 – Themes Environmental Risk	It is noted that this section does not provide any guidance on content. It is suggested that this be amended to clarify that this section covers: <ul style="list-style-type: none"> <li>• Hazardous substances and contaminated sites</li> <li>• Natural hazards</li> <li>• <u>Genetically modified organisms</u></li> </ul>
S-RP: Draft Regional Plan Structure Standard  Part 4 – Themes Environmental Risk	It is noted that this section does not provide any guidance on content. It is suggested that this be amended to clarify that this section covers: <ul style="list-style-type: none"> <li>• Hazardous substances and contaminated sites</li> <li>• Natural hazards</li> <li>• <u>Genetically modified organisms</u></li> </ul>
S-DP: Draft District Plan Structure Standard  Part 4 – District Wide Matters Environmental Risk	It is requested that ' <u>Genetically modified organisms</u> ' is added in as a sub heading in this section.
S-CP: Draft Combined Plan Structure Standard  Part 4 – Region Wide Matters (also includes some district matters) Environmental Risk	It is requested that ' <u>Genetically modified organisms</u> ' is added in as a sub heading in this section.

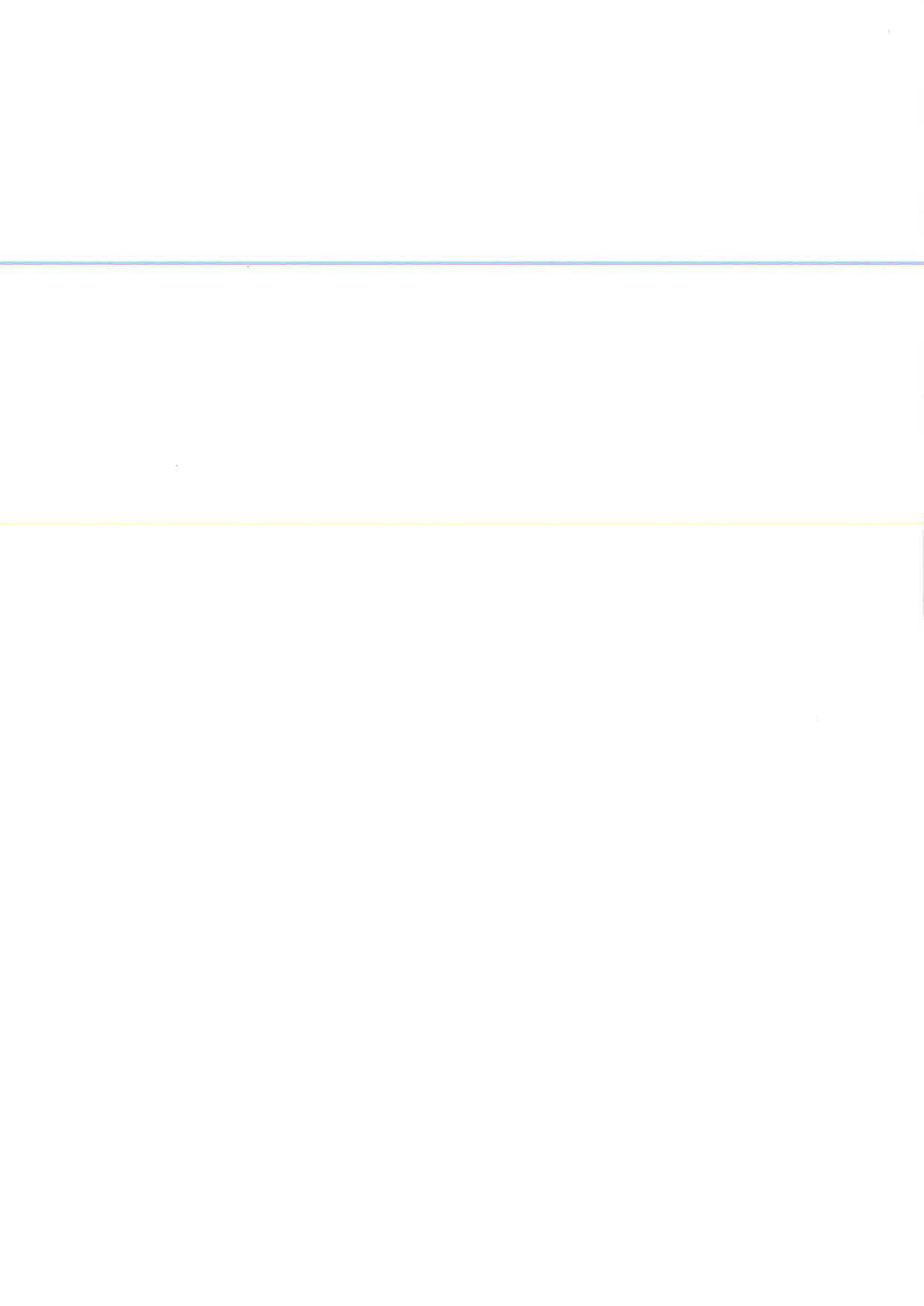
Section of the Standards	Suggested amendment
S-DWM: Draft District Wide Matters Standard (Environmental Risks Chapter S-ER)	New section (below Section 13): <u>If the following matters are to be addressed in the plan, they should be located in the Genetically Modified Organisms section:</u> a. <u>any provision required to manage environmental impacts of genetically modified organism use where this is not covered by other legislation or regulation</u>

Yours sincerely



**Pherne Tancock**  
Barrister

**APPENDICES**  
**TO SOIL & HEALTH ASSOCIATION NEW ZEALAND**  
**SUBMISSION**



# APPENDIX A

## AUCKLAND UNITARY PLAN DEFINITIONS

### **Adaptive management approach**

A systematic, iterative process of decision making in the face of uncertainty, with an aim of reducing uncertainty over time through system monitoring and changes to management in response to the results of monitoring.

### **Genetically modified organism**

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

- have been modified by in vitro techniques; or
- 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.

This does not apply to genetically modified products that are not viable and are no longer genetically modified organisms, or products that are dominantly non-genetically modified but contain nonviable genetically modified ingredients, such as processed foods.

### **Genetically modified veterinary vaccine**

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

### **Genetically modified organism field trials**

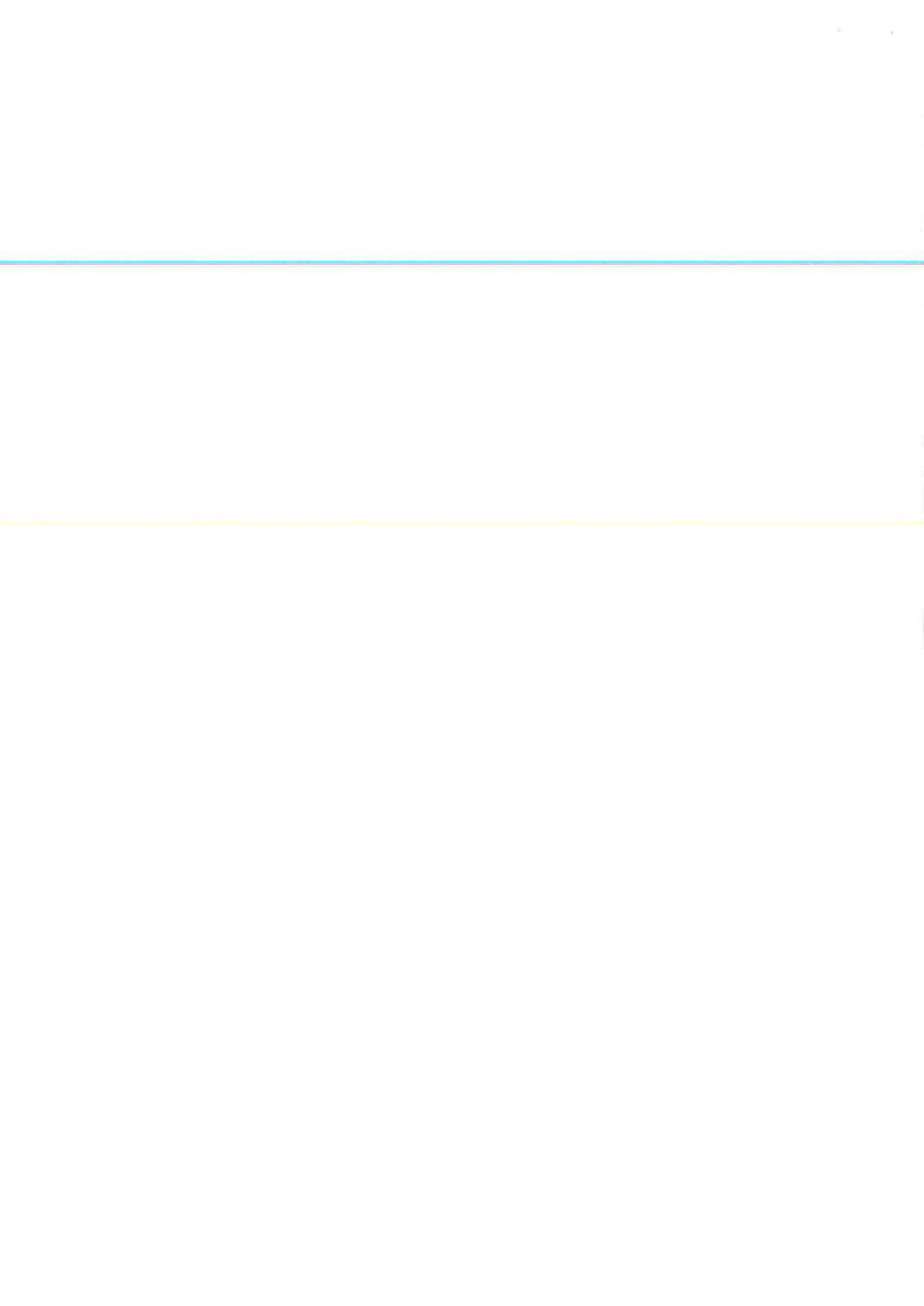
The carrying out of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.

### **Genetically modified organism 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 section 34 of the Hazardous Substances and New Organisms Act 1996 or subject to conditions set out in section 38A of Hazardous Substances and New Organisms Act 1996.

### **Genetically modified medical applications**

The manufacture, trialling or use of viable and/or non-viable genetically modified organisms for medical purposes recognized as medicines under the Medicines Act 1981 and approved as safe to use by the Ministry of Health, including EPA approved releases, except for the outdoor cultivation of pharmaceutical producing organisms.



## **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.

## E37 Genetically modified organisms

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

## E37 Genetically modified organisms

	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.

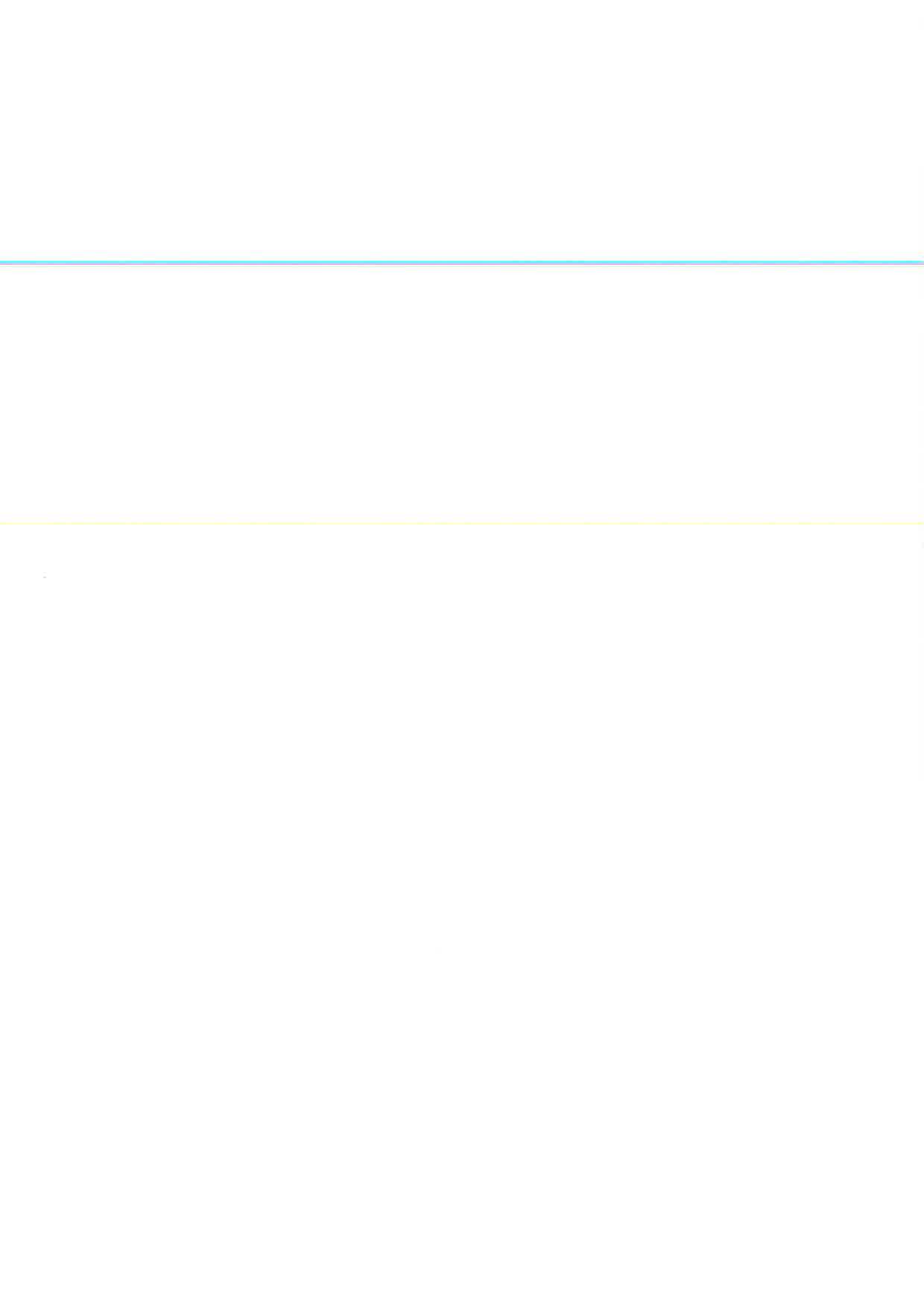
#### **E37.9. Special information requirements**

- (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:

## E37 Genetically modified organisms

- (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.



# **APPENDIX B**

**JOINT SECTION 32 REPORT ON PROPOSED GMO PROVISIONS**

**DATED JANUARY 2013**



**Auckland Council, Far North District  
Council, Kaipara District  
Council and Whangarei District Council**

**Draft  
Proposed Plan Change to the  
District / Unitary Plan**

**Managing Risks Associated with Outdoor  
Use of Genetically Modified Organisms**

**Draft Section 32 Report**

**January 2013**

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## VOLUME 2 - SUPPORTING DOCUMENTATION TO THE SECTION 32 REPORT

- Community Management of GMOs: Issues, Options and Partnership with Government. Simon Terry Associates, March 2004.
- Community Management of GMOs II: Risks and Response Options. Simon Terry Associates and Mitchell Partnerships, May 2005.
- Community Management of GMOs III: Recommended Response Option. Simon Terry Associates and Mitchell Partnerships, September 2010.
- Colmar Brunton Genetically Modified Organisms - Survey Results for Aggregated Northland Area, November 2009.
- Colmar Brunton Genetically Modified Organisms - Survey Results Prepared for Auckland Regional Council, November 2009.
- Letter from Working Party to Minister for the Environment, December 2006.
- Response from Minister for the Environment to the Working Party, March 2007.
- Letter from Working Party to Minister for the Environment, June 2010.
- Response from Minister for the Environment to the Working Party, August 2010.

# 1. INTRODUCTION

## 1.1 Scope and Purpose of the Report

This report has been prepared by the Auckland Council, Far North District Council, Kaipara District Council and Whangarei District Council (**"the Northern Councils"**) to fulfil the statutory requirements of section 32 of the Resource Management Act 1991 (**"RMA"** or **"the Act"**). The report relates to the proposal to introduce new provisions via a Plan Change to the Northern Councils' respective District / Unitary Plan, to manage outdoor activities involving genetically modified organisms (**"GMOs"**).

Section 32 of the Act requires that before adopting any objective, policy, rule or other method, the Council shall have regard to the extent to which each objective is the most appropriate way to achieve the purpose of the Act, and whether the policies, rules or other methods are the most appropriate for achieving the objective. A report must be prepared summarising the evaluation and giving reasons for the evaluation. This report is an evaluation of the *"Proposed Plan Change to the District / Unitary Plan – Managing Risks Associated with the Outdoor Use of Genetically Modified Organisms"* (**"Plan Change"**) as required by section 32 of the Act. It should be read together with the text of the Plan Change. The Plan Change applies to proposed provisions for land use and for activities in the Coastal Marine Area (**"CMA"**).

For the purposes of the Plan Change, the "Northern Peninsula" is defined as the geographic area from the southern boundary of the Auckland Council to the northern tip of New Zealand.

As the risks associated with the outdoor use of GMOs are not constrained by jurisdictional boundaries a unified approach from all Northern Councils provides an optimal framework. However, individual councils are able to tailor the generic provisions to their specific District / Unitary Plan, and particularly with regard to ensuring that the generic provisions give effect to, or address the absence of, provisions of the relevant Regional Policy Statement.

This report (and the accompanying Plan Change) outlines the mechanisms proposed by the Northern Councils in respect to managing risks associated with the outdoor use of GMOs, including in the CMA. The next step to inserting the Plan Change provisions governing GMO activities into the relevant District / Unitary Plan is targeted consultation and discussion with key interest groups and the community. Feedback received during consultation will assist the Northern Councils in refining the Resource Management Issue, and in determining the appropriateness, costs and benefits of the Plan Change.

This section 32 report is a working draft. It will continue to be refined and adjusted in relation to any consultation that occurs, or in relation to any new information that may arise. It will be finalised at the time a Plan Change or a Notified Proposed Plan is formally introduced.

## 1.2 Development of the Plan Change

The Plan Change has been progressively developed over the last 10 years. During this time community concerns over the potential use of GMOs in the Northern Peninsula have been demonstrated through numerous submissions on annual plans,

Long Term Council Community Plans (“**LTCCP**”), Long Term Plans (“**LTPs**”), district plans, and a 7,000 plus signature petition to Whangarei District Council in 2001/2002 which called for “*Whangarei District and environment to be free of any genetic engineering trials or crops grown within our district*”. In addition, tangata whenua have expressed on-going concerns over genetic engineering in iwi/hapu management plans and other forums. A comprehensive Colmar Brunton survey of community attitudes to GMOs commissioned by Northland and Auckland councils in 2009 revealed significant community concern over GMOs in the environment and support for local/regional management of GMOs in the Northern Peninsula.

As a consequence of on-going community concerns, all councils in Northland and three in the Auckland Region (prior to November 2010 amalgamation) included policy statements in their LTCCPs/LTPs<sup>1</sup> that provided for a precautionary approach to the use of GMOs in the environment.

Local authorities in the Northern Peninsula responded to community concerns about GMO use by forming an Inter-council Working Party on GMO Risk Evaluation and Management Options (“**the Working Party**”) in 2003<sup>2</sup>. The focus of the Working Party is to evaluate risks to local bodies and their communities in the Northern Peninsula from the outdoor use of GMOs, together with response options to those risks, including regulation of GMO land and water uses under the RMA.

As part of its investigations, the Working Party commissioned a series of reports to investigate the nature and extent of risks local authorities could expect to face from outdoor activities involving GMOs, and the response options available to address those risks. The reports and results of the Colmar Brunton survey commissioned form part of the section 32 evaluation and should be read in conjunction with this section 32 report. They are provided in Volume 2 to this document and include:

- *Community Management of GMOs: Issues, Options and Partnership with Government.* Simon Terry Associates, March 2004.
- *Community Management of GMOs II: Risks and Response Options.* Simon Terry Associates and Mitchell Partnerships, May 2005.
- *Community Management of GMOs III: Recommended Response Option.* Simon Terry Associates and Mitchell Partnerships, September 2010.
- Colmar Brunton Genetically Modified Organisms Survey, aggregated results prepared for the Northland Area and Auckland Regional Council.

The first report (Simon Terry Associates, 2004) investigated options for local authority management of GMOs. The second report commissioned (Simon Terry Associates and Mitchell Partnerships, 2005) examined in detail risks to local authorities and communities from outdoor use of GMOs and response options to manage those risks. It also recommended a joint community consultation programme as the next stage in the GMO evaluation process, to ascertain the level of risk the community was prepared

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<sup>1</sup> The Far North District Council, Whangarei District Council, Kaipara District Council, Northland Regional Council, Rodney District Council, Waitakere City Council (“GE free in field and food”) and Auckland Regional Council.

<sup>2</sup> The Working Party initially comprised the Far North District Council, Kaipara District Council, Rodney District Council, Whangarei District Council, Waitakere City Council, Northland Regional Council and Auckland Regional Council. Auckland City Council and North Shore City Council were observers on the Working Party. Following the amalgamation of Auckland Regional Council and the seven previous city/district councils in 2010, the new Auckland Council became a representative on the Working Party.

to accept in respect to GMO use and whether regulations in respect to the management of GMOs should be set (and in what form) at the local level in addition to national level regulation.

The third report (Simon Terry Associates and Mitchell Partnerships, 2010) extended the earlier research by examining options available to councils under the RMA for managing the outdoor use of GMOs and identified a preferred response option (via a plan change).

The reports commissioned by the Working Party, and the results from the community survey undertaken (as recommended in the second report and detailed in Section 2.4 of this document) informed the development of the Plan Change and this section 32 evaluation.

### **1.3 Structure of the Report**

This report has been prepared to meet the evaluation requirements of section 32 of the RMA and is set out in six sections as follows:

- Section 1:** This introduction.
- Section 2:** Provides a background to the rationale for the Plan Change, including outlining the potential use of GMOs in the Northern Peninsula, benefits and risks associated with the outdoor use of GMOs, identifies gaps in the national regulatory regime for GMOs and the absence of assurance of a precautionary approach, and outlines community opinions in respect to outdoor GMO use.
- Section 3:** Describes the scope of the Plan Change and defines the significant Resource Management Issue.
- Section 4:** Provides an evaluation of the Plan Change against the RMA and the section 32 legislative framework.
- Section 5:** Outlines the next steps recommended to progress the Plan Change and this draft section 32 report.
- Section 6:** Is the conclusion.

## 2. GENETICALLY MODIFIED ORGANISMS

### 2.1 Introduction

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. 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 GM uses. 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.

GM techniques have been in wide use in laboratory-based research in New Zealand since the 1980s. The techniques are used by research institutes, private companies, universities and medical organisations primarily to:

- Identify genes and understand their functions.
- Investigate pests and diseases in animals and plants.
- Understand, diagnose and treat human disease.
- Investigate the control of environmental problems.
- Teach and educate future users of GM techniques.

New Zealand also conducts research into the social and environmental impacts of GM.

Most GM use in New Zealand is in contained environments, such as laboratories, and it is predominantly used as a tool for research. At present there are no GM crops grown commercially in New Zealand and only two field trials operating.<sup>3</sup>

Pastoral farming, horticulture and forestry are the predominant land uses in the Northern Peninsula, and are major contributors to the local economy. Aquaculture is also a rapidly growing industry with the Northern Peninsula due to the area’s extensive coastline, isolation from heavily populated and polluted areas (particularly north of the urban Auckland area), temperate climate and high water quality. The Northern Peninsula is an ideal area for growing seafood and further development of the aquaculture industry is expected in the future. Therefore it is anticipated that GMO developers will consider the outdoor use of GMOs in the Northern Peninsula that relate to these activities. Potential GMO activities of relevance include GM food crops, trees, grasses, animals and pharma crops, but exclude research within contained laboratories involving GMOs, medical applications involving the manufacture and use of GM

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<sup>3</sup> Trials are being conducted by Scion (a Crown Research Institute) involving two species of pine and with a focus on herbicide tolerance, reproductive traits, growth and quality traits, while AgResearch has approval to conduct experiments on nine different types of pasture animals and is mostly trialling GM cattle for a range of potential attributes and uses.

products, and food containing GM products that are not viable. Field trials and outdoor releases to the environment are the focus of the Plan Change.

## 2.2 Benefits and Risks

This section outlines the benefits and risks associated with the outdoor use of those types of GMOs which could be subject to approval under the Hazardous Substances and New Organisms Act 1996 ("the HSNO Act") and could be trialed or released within the Northern Peninsula. Potential risks are addressed in more detail than benefits as benefits do not influence the design of mechanisms to manage GMOs to the same extent that risks do.

### 2.2.1 Benefits

As outlined, the Northern Peninsula's main land- and water-based industries are dependent upon the productive and environmental characteristics of a range of plants and animals. GM is one of the techniques available to change the existing characteristics of plants and animals, and carries the potential to improve productivity in agriculture, horticulture, plantation forestry, aquaculture and medicine.

Research and development into GMOs and associated benefits that could be used outdoors in the Northern Peninsula includes:

- Increased productivity in plants and animals, including forage grasses, horticulture produce, trees, cattle and fish.
- Environmental management and pest control.
- Biopharming<sup>4</sup>.

Details of the benefits and risks associated with the outdoor use of GMOs are contained in Simon Terry Associates (March 2004) and Simon Terry Associates and Mitchell Partnerships (May 2005) (Appendix 1) and are summarised below.

#### Increased Productivity in Plants and Animals

The scope of GM research being undertaken with the objective of enhancing the productive capacity of plants and animals, or to produce new products or varieties, includes the following:

- Grasses research targeting cultivars that produce more biomass, have better resistance to drought, or result in lower greenhouse gas emissions. These would be principally intended for use in the dairy sector.
- Research on GM trees investigating the modification of genetic traits of trees such as *Pinus radiata* to improve wood quality and develop herbicide resistant trees (reducing use of toxic chemicals and potentially reducing the number of times a crop needs to be sprayed). A focus on breeding for resistance to diseases is also developing.

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<sup>4</sup> Biopharming is a sub-sector of the biotechnology industry that involves the process of genetically engineering plants so that they can produce certain types of proteins. The proteins can then be harvested and used to produce pharmaceuticals.

- Research on a range of horticultural crops is ongoing with the aim of developing varieties that are pest or herbicide resistant, have enhanced growth or storage characteristics, and are tolerant of a wider range of environmental conditions (for example, drought).
- The development of transgenic<sup>5</sup> cattle has a range of focuses, from higher performing animals to deriving new specialist milks (such as those that are hypoallergenic).
- GM salmon are a focus of research in the United States and were experimented with in the Marlborough Sounds in the 1990s. Research targets include temperature and disease resistance, along with increased body mass.
- New hormones, vaccines and diagnostic products for sheep using GM techniques, and the development of transgenic sheep modified to produce greater amounts of wool.

### **Environmental Management and Pest Control**

Scientists at Landcare Research and Massey University are using GM technology in the laboratory to assist in the protection of endangered and other native animal species, including the kakapo, kiwi, tuatara, and black and bush robins. The GM technology is used in a variety of ways, including assessing the genetic variation between species for taxonomic (classification) purposes.

GM is also being investigated for pest control, including:

- Research using genetically modified bacteria from the gut of wasps to produce a toxin that could kill wasp species.
- Possum control with GM carrots that deliver an oral contraceptive that results in infertility in female possums. Plants, bacteria or nematode parasites could then be genetically modified to produce possum-specific 'infertility proteins' so that the growth of the possum population is halted.
- Releasing sterile blowflies which will mate with fertile females and ensure they cannot lay any eggs. This could provide an environmentally friendly way of controlling flies that cause sheep strike.

### **Biopharming**

In the United States, investment in plant biopharming is being made on the basis that plants, including GM varieties, will prove capable of reproducing certain pharmaceutical and industrial substances at costs lower than alternative production routes. This application of GM techniques is still at an early stage of development but will ultimately increase the range of potential GMOs that developers may wish to cultivate in the Northern Peninsula. These include GMOs that produce pharmaceutical proteins (so-called pharma crops) and GMOs that provide the raw feedstock for industrial uses (such as biofuels and plastics). An example of such an application in the outdoor developmental stage is corn that produces proteins for a vaccine to combat porcine transmissible gastroenteritis (in field trial phase in the United States).

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<sup>5</sup> Produced from a genetically manipulated egg or embryo.

## 2.2.2 Risks

GM is one of a number of applied biotechnology techniques that together are forecast to offer benefits in many sectors (as outlined above). However, there are risks (both known and unknown) and scientific uncertainty with respect to GM techniques. These risks could be substantial and certain consequences irreversible. GM is a relatively new and fast developing technology and its effects, particularly over the long term, are not completely understood. There is a lack of scientific certainty and/or agreement over many issues relating to GMOs ranging from the safety of GM food products to long term environmental effects and effects on ecosystems and ecological processes from releases of GMOs into the environment.

Sources of risk from the outdoor use of GMOs in the Northern Peninsula include:

- Economic risk through accidental or unintentional migration of GMOs resulting in GMO contamination appearing in non-GM crops/species.
- Environmental risks such as adverse effects on non-target species, invasiveness of GM plants and altered gene transfer.
- Cultural effects arising from the mixing of genes from unrelated species, ecological effects, threats to the integrity of nature, and adverse effects on mauri, whakapapa and tikanga involving kaitiakitanga.

These are summarised below.

### Economic Risks

The key economic risk associated with the outdoor use of GMOs is economic damage through trace GM contamination appearing in non-GM crops and/or species beyond a GMO operator's boundary (termed "spillover" effects).

Specific risks (both real and perceived) that are capable of causing economic damage associated with GMO contamination in the Northern Peninsula include:

- Market rejection and loss of income from:
  - An individual company's product due to trace GM contamination.
  - One type of product from a region or country due to trace contamination from a GM product.
  - One type of product from a region or country due to concern about inability to separate GM and non-GM products.
  - Perceived contamination of a non-GM product.
- Negative effects on marketing and branding opportunities, including to regional initiatives such as the "Naturally Northland" brand, and to tourism.
- Costs associated with environmental damage, such as clean-up costs for invasive weeds and pests in reserves, parks, open space and the CMA.
- Opportunity costs (i.e., foreclosure of future options for organic or conventional farming).

High levels of consumer resistance to GM foods in Europe and the wealthier Asian nations such as Japan and Korea, has led to market rejection of conventional foods due to trace GM contamination. Major food retailers and manufacturers in Europe and Asia have responded by adopting GM free sourcing policies, and there is a trend towards greater labelling of foods for the use of GM feed in the production of meat and dairy goods.

Market resistance to GM produce has had major economic impacts. For example, within a few years of introduction of GM crops, almost the entire \$300 million annual United States maize exports to the European Union ("EU") and the \$300 million annual Canadian rape exports to the EU had disappeared. In 1996 GM canola was introduced in Canada and two years later CAD\$300 - 400 million of annual sales to Europe ceased. Similarly, GM contamination of pollen has resulted in lost markets for Canadian Honey.<sup>6</sup>

The scale of potential financial loss resulting from trace or perceived contamination can be substantial and potentially irreversible. For example, in 2003 a Japanese pizza maker rejected corn which routine testing showed to have 0.05% trace contamination (probably from seed stock). The Gisborne based company, Sunrise Coast, which supplied the corn product estimated losses in the order of \$500,000. For organic farmers, GM contamination means that the produce cannot be sold as organic and lower returns must be sought in alternative markets.<sup>7</sup>

More examples of economic harm associated with GMO contamination are detailed in *Community Management of GMOs II: Risks and Response Options*, (Simon Terry Associates and Mitchell Partnerships, 2005) provided in Volume 2 to this report.

### **Environmental Risks**

Research into potential environmental effects of GMOs is limited due to the relative newness of the technology, the limited range of GMOs that have gained commercial approval, and gaps in research and monitoring information. Based on the current state of knowledge, and noting that the potential for, and consequences of, environmental effects will vary in magnitude and significance depending on the organism, GM trait and the receiving environment, key potential environmental risks associated with the outdoor use of GMOs in the Northern Peninsula include:

- Effects on non-target species (plant, animal or microbial) - either directly by harming or killing the organism, or indirectly through the food web affecting organisms that are not directly exposed to the GMO. Overseas research has found that BT insecticide producing crops have had toxic effects on non-target insect populations including butterflies, and beneficial pest predators such as ladybirds and lacewings<sup>8</sup>. Similarly, a government trial in the United Kingdom found that the cultivation of GM herbicide resistant crops reduced wildlife populations and damaged biodiversity<sup>9</sup>.

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<sup>6</sup> Simon Terry Associates and Mitchell Partnerships, *Community Management of GMOs II: Risks and Response Options*, 2005, p. 13.

<sup>7</sup> Simon Terry Associates and Mitchell Partnerships, *Community Management of GMOs II: Risks and Response Options*, 2005, p. 13.

<sup>8</sup> Antoniou M, Robinson C, and Fagan, J. *GMO Myths and Truths: An evidence-based examination of the claims made for the safety and efficacy of genetically modified crops*. June 2012, Earth Open Source, UK: 51-52.

<sup>9</sup> Antoniou M, Robinson C, and Fagan, J. *GMO Myths and Truths: An evidence-based examination of the claims made for the safety and efficacy of genetically modified crops*. June 2012, Earth Open Source, UK: 84.

- Invasiveness - increased persistence, invasiveness and competitiveness of GMOs with existing native or exotic plant species which could alter population dynamics and ecological balances.
- Rare events - an incident that introduces consequences or effects of a disastrous magnitude in circumstances where little was known about the risk in advance. For example, the emergence of bovine spongiform encephalopathy (“**BSE**”) in United Kingdom cattle when it was not considered possible for the disease to transfer to humans through consumption of meat products.
- Development of herbicide or pesticide resistance creating “super-weeds” or “super-pests”. Overseas experience with GMOs has resulted in the development of herbicide tolerant volunteers and weeds. There are now GM herbicide tolerant canola varieties being grown commercially in North America which are resistant to three different herbicides. Hybrids of canola and weed species containing two herbicide tolerant transgenes have also been identified<sup>10</sup>.

It is noted that unintended environmental effects may only manifest later, being triggered by different environmental conditions, and that new generations of GMOs will increase the levels of unpredictability of ecological risks associated with current GMOs as they will differ markedly from the properties of known crops/species that form the baseline for current risk assessment. There is also uncertainty with respect to the effect of GMOs on soil ecosystems and effects arising from the use of plants to produce pharmaceuticals and other materials.

More examples of environmental effects associated with GMO contamination are detailed in *Community Management of GMOs II: Risks and Response Options*, (Simon Terry Associates and Mitchell Partnerships, 2005) provided in Volume 2 to this report.

### **Socio-cultural Risks**

Cultural beliefs and attitudes are informed by and defined through knowledge systems (sciences, including ecology, agriculture and medicine, and technologies), spiritual beliefs and relationships (rights and responsibilities) to other human beings and cultures, and to the non-human world.

In that regard, the potential range of socio-cultural impacts (whether positive or negative) arising from the outdoor use of GMOs encompasses a wide terrain, including environmental and public health, ethics and social justice and they may be far-reaching in their effects on a community, its practices, future opportunities and relationship with the world (human and non-human).

The cultural effects associated with the outdoor use of GMOs in the Northern Peninsula have most clearly and consistently been raised by Māori. This is unsurprising as Māori make up a considerably greater proportion of the population in Northland than is represented nationally<sup>11</sup>. While there is no single Māori view on GM, cultural concerns

<sup>10</sup> Antoniou M, Robinson C, and Fagan, J. *GMO Myths and Truths: An evidence-based examination of the claims made for the safety and efficacy of genetically modified crops*. June 2012, Earth Open Source, UK: 74-76.

<sup>11</sup> For example, in the Far North District 39.6% of population identify as Māori, 23.6% in Whangarei District and 21% in Kaipara District, compared with 14% nationally (Census 2006).

consistently expressed by the majority of Māori in Hui, surveys and in Māori institutional policy on GM include:

- Transgenics (breaking down of species barriers and mixing of genes from unrelated species) is a breach of the integrity of species and an offence to whakapapa.
- A breach of whakapapa is the resulting harm to the environment or community health, resulting in local iwi feeling they have failed to fulfil their duties as kaitiaki.

Overseas experience in countries that have adopted GMO production has sometimes resulted in a number of adverse social and cultural effects. For example, some farming communities in parts of North America have experienced serious social and cultural effects from GM contamination, resulting in widespread and on-going litigation over liability and compensation for loss of income, loss of market premiums and patent infringements. This has affected all levels of the industry (farmers, seed suppliers, manufacturers, exporters, retailers, consumers and the major biotech companies), and fragmented the farming community.<sup>12</sup>

The introduction of high tech, GM industrial farming into small third world farming communities has had a profound effect on the social mores and cultural values and traditions of farming in those countries. For example, in India the introduction of GM crops, mainly cotton, and the high price of seed and licensing, along with the necessity of purchasing new seed each year, has pauperised many farmers.<sup>13</sup> The practice of saving seed in developing countries is ingrained in their farming practices and farming culture and is often essential to economic survival. Having to purchase new seed every year along with an annual licence fee to foreign biotech companies is a profound change of farming practice and farming culture. Moreover sharing GM seed is prohibited under licencing arrangements and can result in prosecution through the courts.

## 2.3 Risk Management and Precaution

The use of GMOs is controlled at the national level by the HSNO Act. It establishes the legal framework for assessments by the national regulator, the Environmental Protection Authority (“EPA”). The EPA is responsible for regulating all research, development, importation, field testing and release of GMOs, and must hold public hearings on any applications to field test, conditionally release or release a GMO.

The HSNO Act sets minimum national standards against which proposed GMO activities are to be judged, and provides for the EPA to set conditions specific to approved GMO activities once it has weighed the costs and benefits. However, neither the HSNO Act nor any government policy statements provide meaningful guidance as to how high level provisions in the HSNO Act are to be interpreted nor the outcomes expected.

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<sup>12</sup> Warwick H, Meziani G. *Seeds of Doubt: North American Farmers experiences of GM Crops, Soil Association*, UK 2002. Saskatchewan Organic Directorate, presentation to the Canadian House of Commons, standing committee on agriculture and agri-food, 29 January 2002.

<sup>13</sup> Doherty A, Lopez Villar J, Freese B (eds) *Agriculture and Food: who benefits from GM crops – an analysis of the global performance of GM crops (1996 – 2006)*. Friends of the Earth International, January 2007: 42-54.

The HSNO Act and the EPA methodology that derives from it make many important features subject to their discretion. Those sections that focus on the actual evaluation generally require that the EPA only “take into account” and “consider” a variety of matters.<sup>14</sup> There are thus remarkably few limitations on the outcomes the EPA can deliver.<sup>15</sup>

The lack of surety over the outcomes that the EPA will deliver is especially important with respect to the degree to which precaution will be exercised. The precautionary principle was devised essentially as a response to analysis of the long-term effects of certain substances and organisms that had demonstrated alarming adverse effects that were unforeseen when first approved.<sup>16</sup> The wording that has been the basis for most of the international agreements incorporating the precautionary principle in law is that established at the Rio Earth Summit in June 1992, and specifies:<sup>17</sup>

“Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

However, the HSNO Act does not embrace the precautionary principle, nor does it mandate that the EPA be precautionary. Instead, as the regulator itself states with respect to section 7:<sup>18</sup>

“The wording in the Act is very permissive, such that the [EPA] would be acting lawfully in deciding that caution was not warranted, provided it explained why. In practice, the [EPA] has generally exercised caution.”

Precaution is thus an option for the EPA, not a requirement, and if it is utilised, there is still uncertainty over what level of precaution will be adopted.

The wide uncertainty of outcome posed by the HSNO process raises difficulties for councils given their LGA responsibilities, including those relating to the LTPs. As Local Government New Zealand has noted:<sup>19</sup>

“It is not apparent how the management framework outlined within [HSNO] will allow communities to preserve the opportunities they have identified, and agreed to pursue, as part of their own strategic goals. For example, a district (or a grower association) may wish to brand and market its grapes, wine, oranges, apples, lamb, milk, cut flowers or other crop or produce as GE Free.”

The core issue is a community’s tolerance for risk. There is no objective standard as to what is a correct level of risk as it is not an objectively determinable factor. However, as communities are the ultimate risk bearers, a council will look to ensure it can meet standards indicated by its constituents – rather than leave outcomes as uncertain.

<sup>14</sup> The notable exception is section 36. This requires that if a release would be “likely” to cause “significant” harm to the environment or human health, it may not be made. As it is difficult to imagine responsible decision-makers approving a release which they thought at the time was likely to cause significant harm, it is also difficult to view this as a strong bottom line.

<sup>15</sup> See Sustainability Council *Submission in Respect of Revisions to the ERMA Methodology* (October 2003).

<sup>16</sup> See Parliamentary Commissioner for the Environment *Key Lessons from the Long History of Science and Technology: Knowns and Unknowns, Breakthroughs and Cautions* (2001), and Colborn, T., Dumanoski, D. and Peterson Myers, J. *Our Stolen Future* (1996), Penguin Books.

<sup>17</sup> Principle 15 of the Rio Declaration on Environment and Development, to which New Zealand is a signatory.

<sup>18</sup> ERMA (2002) *Approach to Risk*, p. 3.

<sup>19</sup> LGNZ (2003) *Submission to Parliament with respect to the New Organisms and Other Matters Bill*, p. 8.

Even when there is a common understanding on appropriate risk levels, a further issue highlighted by local government is the potential for councils and their constituents to suffer financial and economic costs as a consequence of outdoor GMO activities. Under the HSNO Act, an agent using GMOs is not financially liable to cover costs resulting from a GMO activity, as long as it abides by the conditions of an EPA approval.

Common law actions will very rarely be an effective remedy so affected parties will tend to bear any losses arising from unexpected events and ineffective regulation of GMOs. While economic damage resulting from GM contamination will, in the first instance, fall on individual constituents, such damage can occur across wide groupings of producers and thus become a community concern. Councils may also be exposed to financial costs as the government is only obliged to eradicate the unauthorised presence of a GMO, not one that was approved and is later shown to be invasive.

Similarly, the HSNO Act does not require the EPA to ensure that an applicant is financially fit and so able to pay compensation should adverse effects result from the activity. The HSNO Act instead places a heavy reliance on controls and penalties for breaching these but this requires the regulator accurately foreseeing all the circumstances in which something could go wrong, and being able to prescribe for these in advance. However, an important source of risk now recognised in respect of GMOs is unexpected adverse effects. A liability regime based on "perfect" foresight is therefore not suited to these risks.<sup>20</sup>

The absence of adequate liability provisions and the lack of surety of outcomes for local government are key gaps that have been identified in the national regulatory regime for GMOs. Where a local authority has determined that particular GMO risks are of concern to its community and that a precautionary approach is warranted, it can take action using other statutes. The RMA provides communities with the ability to set rules that embody community determined outcomes, including the level of risk it is willing to accept with respect to activities such as the management of GMOs.

## **2.4 Consultation**

### **2.4.1 Community Concerns Regarding GMO Use**

Community concern over the outdoor use of GMOs began to feature in the LTCCPs of many of the Northern Councils from 2003 and 2004. Submissions to the Northland Regional Council, Whangarei District Council and Far North District Council in particular evidenced large numbers of submitters (in relative terms) focusing on the GMO issue and these almost universally advocated a precautionary stance.<sup>21</sup> In response, the Northern Councils established the Working Party to evaluate risks to local authorities and their communities, and to identify response options to those risks, including regulation of GMO use on the land and in the water, under the RMA. Subsequently, the former Auckland Regional Council responded to "overwhelming opposition to GMOs" in submissions by adopting in principle in its LTCCP, a policy of opposing the release of GMOs as a precautionary approach.<sup>22</sup>

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<sup>20</sup> Simon Terry Associates and Mitchell Partnerships, *Community Management of GMOs II: Risks and Response Options*, 2005, p. 21.

<sup>21</sup> Simon Terry Associates and Mitchell Partnerships, *Community Management of GMOs II: Risks and Response Options*, 2005, p. 2 and 3.

<sup>22</sup> "The ARC has adopted a policy, in principle, that it is opposed to the release of genetically modified organisms (GMO) in the field and in the production of food", ARC, LTCCP 2009 to 2019, p 86; and "ARC Regional Strategy and Planning Chair Paul Walbran says the Council adopted the policy in

To ascertain community views on the management of GMOs in the Northern Peninsula, and to gauge the level of support for local/regional regulation under the RMA (as recommended in Simon Terry Associates & Mitchell Partnerships (2005)), a Colmar Brunton survey was undertaken in July and August 2009. The results for each jurisdiction participating in the survey<sup>23</sup> were presented in separate reports, and were also aggregated to the regional level (provided in Volume 2 to this report). These results form part of the section 32 evaluation. Key results from the survey found:<sup>24</sup>

- Two thirds or more of the residents polled want local or regional councils to have a role in regulating GMOs in their areas, either by setting local rules or by a change of legislation at the national level. Support averaged 68% in the Auckland region and 74% in Northland.
- Around two thirds of the respondents also favoured regulation of at least a strength that would make users of these GMOs legally responsible for any environmental or economic harm - either through local regulation or by way of changes to national legislation (Auckland 64%, Northland 67%).
- The survey indicated that around half the residents (Auckland 44% and Northland 53%) want councils to have the right to prohibit GM plants and animals, either by setting local rules or allowing communities, through their councils, the right to reject use of a particular GMO in its area when the national regulator, the EPA (formally ERMA), is processing applications.
- When questioned whether councils should set rules in addition to those set by the EPA, 40% of Auckland respondents supported this mechanism and 46% of Northland respondents were in support. Amongst those respondents who support their council setting rules, total prohibition is the most favoured level of regulation (ranging from 39 - 57% across all council areas), with strict liability provisions the next most favoured (ranging from 22 - 32%), and prohibiting only GMOs for food production the third favoured (a range of 18-27%).
- Within the Auckland Region there is considerable variation in support for local regulation between individual council areas. For the Waitakere, Auckland and Franklin communities, levels of support for local regulation were significantly higher than for not utilising local regulation while for Manukau, North Shore and Rodney, the levels of support for and against local regulation were more evenly matched.
- However, all communities strongly favour making users of GMOs legally responsible for any economic or environmental harm that may result. Support for regulation to make users of GMOs strictly liable for any harm caused ranged from 63% to 72% for individual councils.
- Support for local regulation is strongest amongst Māori, particularly in the Northland Region. It is also strongest amongst semi-rural and rural residents

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principle as a precautionary approach because there are significant uncertainties about GMOs, and issues that are yet to be understood and resolved", ARC, Media statement: *ARC adopts anti-GMO policy position*, 19 February 2007.

<sup>23</sup> All Working Party members with the exclusion of Northland Regional Council commissioned the survey.

<sup>24</sup> This summary is adapted from that presented in the media release prepared by the Working Party on GMO Risk Evaluation and Management Options. For a full interpretation and the detailed results, see [www.wdc.govt.nz](http://www.wdc.govt.nz).

while urban views vary by region. Rural residents are more likely to favour prohibiting GMOs in both Northland and Auckland than are semi-rural or urban residents. Females are more likely to support local regulation than are males, and support is greater amongst 18 - 39 year olds than older age groups.

- The poll also found that there is clear support from the Auckland and Northland communities for only producing food that is GM free but strong support for leaving options open for GM plants and animals in the future.
- While the results showed an even stronger opinion against people being able to produce GM plants and animals simply if they choose to, views were divided over the economic impacts of GMOs. Across the Auckland region, residents believed GMOs would harm local food industries but that there would be economic benefits overall, while Northland respondents saw GMOs harming local food industries and not providing economic benefits for their districts.

#### 2.4.2 Māori Perspectives

As outlined in Section 2.2.2, Māori make up a considerably greater share of the population of Northland than is represented nationally. Local iwi have been active participants in the development of GMO policies for the Northern Peninsula and their stances generally reflect the concerns voiced at the national level. For example, the Ngatiwai Trust Board supports adoption of a precautionary approach and locally determined controls on GMOs that take full account of Tikanga Māori based values:

"Formulation of a policy on genetic engineering which commits supporting a precautionary approach towards GE."<sup>25</sup>

"Genetic engineering is abhorrent to the values of Tangata Whenua and the risks associated with experimentation in the District are unacceptable. Choices are able to be made irrespective of the legislation [HSNO Act] as to how the WDC should regulate genetic engineering consequences within its jurisdiction. Tikanga Māori based values should play a significant part in determining planning responses."<sup>26</sup>

The relief sought by the Ngātiwai Trust Board was that GM activities be prohibited throughout the Whangarei District. Ngātiwai was also one of three iwi parties to an appeal which aimed to secure local controls on GMO activities through amendment to the Far North District Plan.

Similarly, in 2011 Ngāti Te Ata Waiohua sought that the Auckland Council declare the region GMO free and adopt policies which support this position.<sup>27</sup>

Ngāpuhi, the largest iwi in New Zealand with over 122,000 constituents, submitted on the Northland Draft Regional Statement in June 2012 with specific regard to GMOs. Ngāpuhi sought that a strong precautionary GMO policy be adopted and:<sup>28</sup>

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<sup>25</sup> Ngātiwai Trust Board submission to the Whangarei District Council's LTCCP 2004 -2014.

<sup>26</sup> Ngātiwai Trust Board submission to the Proposed Whangarei District Plan.

<sup>27</sup> Ngāti Te Ata Waiohua Issues and Values, 29 November 2011, p. 16.

<sup>28</sup> Te Runanga A Iwi O Ngāpuhi submission to the Draft Regional Policy Statement, 25 June 2012.

“That a provision classing all GE experiments and releases as a prohibited activity until outstanding issues such as liability, economic costs, benefits, environmental risks, cultural effects and significant consultation with iwi, Hapu and Whanau are resolved.”

The Auckland Independent Māori Statutory Board requested that an excerpt from Wai 262 and Waitangi Tribunal *Factsheet 3: Taonga Species* be tabled at the Working Party meeting of 10 February 2012. The excerpt included a recommendation to amend the HSNO Act to:<sup>29</sup>

“...require that all those exercising functions, powers and duties under the Act to recognise and provide for the relationship between kaitiaki and their taonga species.”

The Factsheet notes that iwi and hapu are obliged to act as kaitiaki (cultural guardians) towards taonga species of flora and fauna within their tribal areas, and refers to the Tribunal recommendation that the HSNO Act be amended:<sup>30</sup>

“so that greater weight is given to kaitiaki interests when decisions are made about genetically modified organisms.”

Following a recent Hui to discuss GMOs, Tai Tokerau iwi were unanimous in their decision for wanting robust local control, and at the very least a precautionary approach be reflected through the Northland Regional Policy Statement to protect both local communities and local environments.<sup>31</sup>

Sections 66(2A)(a) and 74 (2A) of the RMA require that councils, when preparing or changing a regional or district plan, must take into account any relevant planning document recognised by an iwi authority. A number of current iwi and hapū planning documents in the Northern Peninsula make statements opposing the release of GMOs and advocate a precautionary approach to GM, including those of Ngāti Hine, Ngātiwai, Te Roroa, Ngāti Kuta, Ngāti Torehina, Ngāti Korokoro and Ngāti Whaarare, and Ngāti Rehia<sup>32</sup>. For example, Te Iwi o Ngātiwai Iwi Environmental Policy Document includes the following policies regarding GMOs for the Ngātiwai rohe<sup>33</sup>:

1. No genetically modified organisms, or products produced from such organisms, will be introduced.
2. The adoption of the precautionary approach by councils to genetically modified organisms, requiring that all risks be fully understood before these organisms are utilised.

<sup>29</sup> Page 96, Wai 262: Waitangi Tribunal Report. Te Taumata Tuatahi.

<sup>30</sup> Taonga Species, Waitangi Tribunal *Ko Aotearoa Tēnei* – Factsheet 3 [www.waitangitribunal.govt.nz](http://www.waitangitribunal.govt.nz)

<sup>31</sup> Media Release: Tai Tokerau Iwi Organise To Challenge GE/GMO Concerns In Northland, 20 November 2012.

<sup>32</sup> Ngā Tikanga mo te Taiao o Ngāti Hine: Ngāti Hine Iwi Environmental Management Plan 2008, Te Iwi o Ngātiwai Environmental Policy Document 2007, Draft Ngā Ture mo Te Taiao o Te Roroa: Te Roroa Iwi Environmental Policy Document 2008, Ngāti Kuta ki Te Rawhiti Hapū Environmental Management Plan 2007, Ngāti Torehina Hapu Environmental Management Plan 2007, Te Kahukura a Ngāti Korokoro, Ngāti Whaarare me te Pouka; Ngā Hapū o Te Wahapū o Te Hokianga nui Kupe: Hapū Environmental Management Plan 2008, Ngāti Rehia Environmental Management Plan 2007.

<sup>33</sup> Te Iwi o Ngātiwai Environmental Policy Document 2007: p71.

A number of other iwi planning documents identify GM as an issue, including documents by Ngāti Whātua Ngā Rima o Kaipara, Te Kawerau a Maki, Ngai Tai, and Hauraki Iwi.<sup>34</sup>

### **2.4.3 Summary**

Community consultation with respect to the outdoor use of GMOs has been comprehensive and includes community feedback obtained through the robust LTCCP and LTP processes, a Colmar Brunton survey, and through iwi participation in Hui, submissions to various strategies and documents, and in iwi/hapu management plans. This comprehensive process has resulted in the inclusion of policy statements that provide for a precautionary approach in a number of LTCCPs and LTPs in the Northern Peninsula, and has identified the communities' desire for district/regional wide regulation.

## **2.5 Synopsis**

The Northern Peninsula is an important agricultural production region and contains areas of ecological significance. A wide range of GMO products are being researched and developed, including ones that GMO developers/operators may consider introducing to the Northern Peninsula.

A range of benefits are projected to be available from the outdoor use of GMOs, though GMOs applicable to New Zealand's needs remain to be developed in most cases. As well as benefits, there are also potential risks, including economic risks, environmental risks and socio-cultural risks that are largely unknown, and could be substantial and irreversible. Potential risks could also extend beyond the boundary of the GMO operators activities and result in significant costs to the wider area.

Key gaps identified in the national regulatory regime for GMOs are the absence of adequate liability provisions and applicant financial fitness requirements, and a lack of surety of outcome for local government. The RMA allows precisely targeted rules to be set under a District / Unitary Plan so that specific concerns can be addressed without compromising other activities. Local level regulation under the RMA provides communities with the ability to set rules that embody community (including Māori) determined outcomes, including the level of risk it is willing to accept with respect to activities such as the management of GMOs.

Consultation with the community (including under the LTP processes) has been comprehensive and has determined that the community (including Māori) desire a precautionary approach to the outdoor use of GMOs across the district/region to address what has been identified as a significant resource management issue.

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<sup>34</sup> Te Wahapū o Kaipara Manaakitanga: South Kaipara Takiwa Environmental Protection and Management Plan Ngāti Whātua Ngā Rima o Kaipara, Kawerau a Maki Trust Resource Management Statement 1995, Ngai Tai Kaitiaki/Resource Management Principles and Operational Policies, and Whaia te Mahere Taiao Hauraki: Hauraki Iwi Environmental Plan 2004.

### **3. THE PLAN CHANGE**

#### **3.1 Introduction**

The fundamental purpose of the Plan Change is to apply a precautionary approach to managing the outdoor use of GMOs to minimise the risk to the environment, economy and socio-cultural resources and values. The purpose is also to ensure a financial liability regime is in place requiring GMO operators to meet any costs arising from any unexpected adverse effects associated with their activities, including clean-up costs, economic compensation/remediation and on-going monitoring costs. This will, to some extent, address the gaps identified in the national regulatory regime to provide the level of protection sought by the community against risks associated with the outdoor use of GMOs.

The Plan Change comprises the introduction of a significant Resource Management Issue, Objectives, Policies and Methods, including rules which will define how the outdoor use of GMOs are to be managed, including in the CMA. The Plan Change does not involve the management of all GMOs, but rather is limited to the outdoor use of GMOs, in particular field trials and releases.

Field trials (tests) are defined by the HSNO Act as:<sup>34</sup>

“in relation to an organism, the carrying on of 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.”

Releases (food-related and non-food-related) are defined as:<sup>35</sup>

“...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](#).”

GMOs that are not classified as field trials and releases are not addressed by the Plan Change. This includes research within contained laboratories involving GMOs, medical applications (using non-viable GM products) and food containing GM products that are not viable.

The new provisions are to be inserted into the District / Unitary Plan as a new chapter or section. A definition for GMOs, field trials and releases is to be inserted into the Definitions / Interpretation section/chapter of each respective plan.

#### **3.2 Significant Resource Management Issue**

The significant Resource Management Issue that the community has identified is addressed by the Plan Change as follows:

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<sup>34</sup> Section 2 (Interpretation), HSNO Act.

<sup>35</sup> Section 2 (Interpretation), HSNO Act.

**Issue**

*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.*

To respond to the significant Resource Management Issue identified, the Plan Change acknowledges that the Northern Councils have insufficient information about the outdoor use of GMOs and will therefore apply a precautionary approach. The precautionary approach inserts provisions that prohibit classes of GMO activity that in absence of additional information are identified as “too high risk”, and establishes a financial liability regime for those engaging in a GMO activity.

### **3.3 Objectives and Policies**

The Plan Change introduces the following Objectives and Policies to the District / Unitary Plan:

**Objectives**

- 1.4.1** *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.*
- 1.4.2** *The sustainable management of the natural and physical resources of the district/region with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.*

**Policies**

- 1.4.1.1** *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.*
- 1.4.1.2** *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.*
- 1.4.1.3** *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.*
- 1.4.1.4** *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.*
- 1.4.1.5** *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.*

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

Note; equivalent provisions in respect to activities in the CMA are introduced to the Unitary Plan (Objective 2.3.1 and Policies 2.3.1.1 to 2.3.1.6).

## **3.4 Related Provisions**

### **3.4.1 Activity Rules**

#### **Permitted Activity Status**

The Plan Change permits GMO activities that are not classified as field trials and releases, and are not specifically addressed by the Plan Change. This includes (but is not limited to) research within contained laboratories involving GMOs, medical applications (using GM products) and food containing GM products that are not viable.

All veterinary vaccines are listed as a Permitted Activity in the Plan Change and are exempt from the need to obtain a resource consent. This is because they do not tend to persist in the environment, appear to be low risk and are difficult to monitor.

#### **Discretionary and Prohibited Activity Status**

Not all categories of outdoor GMO use need to be regulated with the same degree of precaution. Different types of GMOs carry different risks, therefore the Plan Change groups similar GMOs together which can be expected to have similar types of effects that council may be required to avoid, remedy or mitigate.

The Plan Change classifies GMO outdoor uses into the following categories:

- Field Trials - **Discretionary Activity**.
- Food-related GMO Releases - **Prohibited Activity**.
- Non-food-related GMO Releases - **Prohibited Activity**.

Field trials are designed with the objective of ensuring that no altered genetic material leaves the test site and this greatly reduces the risks of harm arising. However breaches of trial conditions that could lead to GMOs escaping the trial site have occurred in New Zealand. Making all field trials a discretionary activity provides greater protection for the community by making the GMO operator financially accountable should adverse effects arise from a breach of conditions.

Given the high levels of potential harm and the uncertainties surrounding the extent of costs and benefits that could be expected from GMO releases, the Plan Change takes a precautionary approach and makes GMO releases a prohibited activity. Adopting an adaptive risk management approach, periodic reviews can be undertaken as to whether particular classes or individual GMOs should be made discretionary activities. Field trials could be considered a limited discretionary or restricted discretionary activity if a specific council determines this is appropriate in the context of their respective plan.

Discretion would be limited to the general development and performance standards provided in the Plan Change.

At the point a set of GMOs demonstrates the potential to provide net benefits, a change to the specific District / Unitary Plan can then make these subject to discretionary provisions. An application requirement is that the EPA has already approved such a release. Council's role is limited to determining whether there are additional conditions that would make release in the district or region permissible, or whether to decline the application.

### **3.4.2 General Development and Performance Standards**

The Plan Change provides minimum general development and performance standards that apply to:

- Possession of relevant approvals from the EPA and compliance with conditions set by the EPA.
- Recovery of all costs associated with any monitoring required during and beyond the consent duration.
- Bond requirements to ensure funds are available for payment to address any adverse environmental effects and any adverse effects to third parties (including economic effects).

### **3.4.3 Definitions**

A definition for GMOs, field trials and releases is to be inserted into the definitions/interpretation section/chapter of each respective plan.

## 4. SECTION 32 EVALUATION

### 4.1 Introduction

The Plan Change affects land that is within the jurisdiction of Far North, Whangarei, and Kaipara District Councils, and land and water within the jurisdiction of the Auckland Council. Section 66 (matters to be considered by a regional council) and section 74 (matters to be considered by a territorial authority) of the RMA state that any Plan Change to a District or Regional Plan must be made in accordance with the functions for regional and territorial authorities set out in sections 30 and/or 31, the provisions of Part 2, the duties under section 32 of the Act, and any regulations. Section 80 provides for combined plans.

Section 32 of the Act requires that before adopting any objective, policy, rule or other method, the Council shall have regard to the extent to which each objective is the most appropriate way to achieve the purpose of the Act, and whether the policies, rules or other methods are the most appropriate for achieving the objective. Section 32 also specifies what the evaluation must examine:

(3) An evaluation must examine—

- a) the extent to which each objective is the most appropriate way to achieve the purpose of the 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.

(4) For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—

- a) the benefits and costs of policies, rules, or other methods; and
- b) 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.

This section of the report provides a section 32 evaluation of the Plan Change provisions in the context of the RMA framework and should be read in conjunction with the preceding sections of this report. This section is set out as follows:

- Alternative planning strategies that have been considered to address the significant Resource Management Issue (Section 4.2);
- The risk of acting or not acting if there is uncertain or insufficient information (Section 4.3);
- The appropriateness of the Plan Change provisions (Section 4.4); and
- The benefits, costs and appropriateness of policies, rules and other methods (Section 4.5).

## 4.2 Alternative Means to Address the Issue

Section 32 of the RMA requires that alternatives to a Plan Change be considered. In respect to the consideration of alternatives, the Quality Planning Guidance “Section 32 – Methods of Implementation”<sup>36</sup> notes:

Section 32 does not explicitly require the consideration of alternative means. However, it does require that the evaluation shows that, having regard to effectiveness and efficiency, the proposed policies, rules, or other methods are the ‘most appropriate’. This implies that some consideration of the effectiveness and efficiency of alternative provisions is required.

In 2011 the High Court held that the “most appropriate” method does not need to be the superior method<sup>37</sup>.

The following three alternative approaches have been identified to address the significant Resource Management Issue:

- Do nothing (i.e. “status quo”).
- Central Government amendment to the HSNO Act.
- Local Authority regulation through the RMA.

An assessment of the alternative options considered is outlined below and summarised in Table 1.

### 4.2.1 Do Nothing

The “do nothing” option does not address the significant Resource Management Issue and is not the most appropriate way of achieving the Objectives. The Objectives adopt a precautionary approach to protect the environment from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs. The intent of the Objectives is to reduce environmental, economic and cultural risks, and to establish rules setting financial accountability standards for GMO operators. The current lack of provisions in the District / Unitary Plan with respect to GMO activities does not protect the environmental, economic or socio-cultural resources of the Northern Peninsula, nor does the absence of provisions reflect the level of control desired by the communities (including Māori) to manage GMO activities. The “do nothing” option does not achieve the purpose of the Act as it does not provide for the sustainable management of the resources in the Northern Peninsula.<sup>38</sup>

Under national legislation, if a GMO operator has inadequate financial resources to cover environmental damage resulting from its activities, the burden tends to fall on local government and/or its constituents. This type of situation has been previously encountered by local government in respect to “Orphan Contaminated Sites” (abandoned sites contaminated with hazardous chemicals) where in most cases local

<sup>36</sup> Last updated in 2008; [www.qualityplanning.org.nz/plan-development/implementation.php](http://www.qualityplanning.org.nz/plan-development/implementation.php)

<sup>37</sup> *Rational Transport Soc Inc v New Zealand Transport Agency* HC Wellington CIV-2011-485-2259, 15 December 2011.

<sup>38</sup> Simon Terry Associates and Mitchell Partnerships, *Community Management of GMOs III Recommended Response Option*, 2010, pg. 6 – 8.

government and new land owners have been left with the responsibility and cost for the clean-up.

The “do-nothing” option will result in no costs to the Council in terms of time and resources required to implement a plan change and similarly, no costs for potential submitters who would otherwise become involved in the plan change process, and no costs for council to administer the new rules. However, a council is potentially financially and legally exposed, as discussed below in Section 4.3 and 4.5.

The do-nothing approach does not address concerns raised by the community regarding outdoor GMO risk (as evidenced by the 2009 Colmar Brunton survey and submissions on annual plans, LTCCPs, LTPs and district plans), or concerns raised by Māori.

#### **4.2.2 Central Government Amendment to the HSNO Act**

The preferred method of enabling councils to exercise local control on the use of GMOs would involve central government remedying the identified gaps in the national level regulation, and providing communities with the ability to veto or add local level conditions to any approval for a GMO activity that is granted by the EPA through the HSNO Act process.<sup>39</sup>

An amendment to the HSNO Act to remedy the deficiencies from a local government perspective would be an efficient response to address the significant Resource Management Issue. In particular, amendments to the HSNO Act could be made to provide councils with the ability to ensure that their policies in relation to GMO activities are binding on the scope of EPA decision-making and approvals issued. This would provide a simpler means for local government to achieve the same regulatory outcomes as are currently able to be put in place under the RMA. Reform to the HSNO Act could provide for:

- The ability for local authorities to issue policy statements on GMO activities so that the EPA would be required to accommodate these policy statements in its decisions;
- The option to examine individual applications in tandem with EPA assessments, and, if required, to set stricter controls to apply within a local authority’s jurisdiction; and
- A strict liability regime, along with financial fitness requirements, that ensures the developers and users of GMOs are responsible for all environmental and economic harm that may result from outdoor uses of GMOs.

Such reforms would provide local authorities the opportunity to work in tandem with the EPA, and provide a more direct means of achieving desired community outcomes. The Working Party has sent letters to both the present Government and the previous Labour administration in 2006 and 2010 respectively, outlining local government and community concerns, and requesting changes to the HSNO Act to alleviate those concerns. However, the current Government (similar to the previous Labour administration) has indicated that it has no plans to amend the HSNO Act or establish alternative arrangements that would address the concerns of local government, nor do

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<sup>39</sup> Simon Terry Associates, *Community Management of GMOs: Issues, Options and Partnership with Government*, 2004, p 33.

they propose to provide any mechanism for councils to influence the outcomes of EPA assessments beyond those available to any other submitter. The letters sent to both Governments from the Working Party and the responses form part of the section 32 evaluation and are provided in Volume 2 to this report.

#### **4.2.3 Local Authority Regulation through the RMA**

Councils have jurisdiction under the RMA to set rules for GMOs that act in addition to those that may be set under the HSNO Act or by the EPA<sup>40</sup>, through inserting provisions into the District / Unitary Plan pursuant to sections 66 and 74 of the RMA. There is nothing in the HSNO Act to preclude a local authority imposing greater levels of control in its District / Unitary Plan for RMA purposes than those imposed by the EPA under the HSNO Act. The preparation of a section 32 report is therefore entirely appropriate to evaluate possible local/regional management of outdoor GMOs.

Given a council's general duty of care for its financial position and that of its constituents, there is a ready justification for councils to set mandatory conditions to provide for both financial accountability (through bonds and insurance requirements) and avoidance of economic damage. The RMA also provides communities with the ability to set rules that embody community determined outcomes, including the level of risk it is willing to accept with respect to activities such as the management of GMOs. Further, Council under section 35 of the RMA has a duty to undertake monitoring and may set conditions to provide for monitoring at the cost of the applicant.

Establishing controls on GMOs under the RMA requires a plan change or plan review<sup>41</sup>. The Environment Court is able to consider whether the objective, policies and methods in a plan change are valid pursuant to the relevant provisions of the RMA.

The functions of the EPA under the HSNO Act are different from those of local authorities under sections 30 and 31 of the RMA.

Overall, it is concluded that the relevant RMA provisions are not in conflict with those of the HSNO Act and the two statutes can operate side by side.

#### **4.2.4 Assessment of Alternatives Considered**

Table 1 provides an assessment of the advantages, and costs and risks associated with the three alternative options considered.

By way of summary, the "do nothing" approach does not address the significant Resource Management Issue and does not protect the natural, cultural and economic resources of the Northern Peninsula. Further, doing nothing does not address concerns raised by the community, including concerns raised by Māori. This option is not considered appropriate.

Central Government amendment to the HSNO Act to address gaps in the regulatory regime could address the concerns of local authorities and their communities in Northland/Auckland. However, the Government has consistently indicated since the formation of the Working Party in 2003 that it has no plans to do so. This option is therefore not considered the most appropriate.

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<sup>40</sup> For further discussion, see Simon Terry Associates, *Community Management of GMOs: Issues, Options and Partnership with Government*, 2004.

<sup>41</sup> Sections 65, 73, 79 and 80.

Of the existing statutes available to local government, the RMA offers the most durable, binding and well-targeted instrument for regulating the outdoor use of GMOs. Local authorities have jurisdiction under the RMA to set rules for GMOs that act in addition to those set under the HSNO Act or by the EPA. Given the statutory powers available to local government, the RMA is considered the most appropriate mechanism to resolve the significant Resource Management Issue.

**Table 1: The advantages, costs and risks of the alternatives considered.**

<b>OPTION</b>	<b>ADVANTAGES</b>	<b>COSTS AND RISKS</b>
<p><b>Do nothing</b></p> <p>This option is <b>not recommended.</b></p>	<p>No further work is required in processing a Plan Change. No costs for the Council in terms of time and resources to process the Plan Change and no cost for potential submitters who may become involved in the process.</p> <p>No constraint on GM operators who have EPA approval and are considering undertaking activities in the area.</p> <p>Potential economic benefit from GMO operations.</p>	<p>Retaining status quo does not protect environmental, economic or cultural resources or reflect the level of control desired by the community to manage GMO activities.</p> <p>Does not provide a Northern Peninsula-wide approach to addressing the issue and does not address future resource management issues in respect to the use of GMOs in the area.</p> <p>Does not address community concerns regarding outdoor GMO use.</p> <p>Does not address the concerns of tangata whenua regarding outdoor GMO use.</p> <p>Potential to lose "GM free" status and thus any marketing advantage this confers.</p> <p>Under the HNSO Act there are no requirements to provide liability against unanticipated events, therefore constituents are exposed to economic losses from GM contamination.</p> <p>Reliance on EPA conditions in respect to monitoring required for the activity. Costs of monitoring, and any costs required for clean-up, should a GMO activity cause an unexpected effect, could fall on the Council.</p>
<p><b>Central Government Amendment to the HSNO Act</b></p> <p>This option is <b>not recommended.</b></p>	<p>Provides ability for local authorities to add local level conditions to any EPA approved activity in the district or region.</p> <p>Option to examine specific applications with the EPA, and set stricter controls if necessary or prohibit a specific GMO from the district or region.</p> <p>Opportunity to work in tandem with the EPA.</p>	<p>Requires Government to address the issue. There has been no indication from Government that this will happen.</p> <p>Uncertainty on when, and if this will eventuate, and whether the appropriate amendments will be made to address community and local government concerns.</p>

OPTION	ADVANTAGES	COSTS AND RISKS
	Option to put in place a strict liability regime to compensate for potential environmental and economic harm.	
<p><b>Local Authority Regulation through the RMA</b></p> <p>This is the recommended option.</p>	<p>Addresses key gaps in the HSNO Act in respect to liability provisions.</p> <p>Can address risks of adverse effects on the environment, economy, and socio-cultural values.</p> <p>Community determined outcomes can be set based upon a preferred level of risk determined by the community.</p> <p>Provides a prescriptive set of rules to ensure only the specified GMO activities can occur, and so specific concerns are addressed without compromising other activities.</p> <p>Council can enforce higher standards for control through consent conditions, including bond requirements, monitoring requirements and compliance with performance standards.</p> <p>Can operate in addition to the HSNO Act and can operate alongside.</p> <p>Well drafted provisions will provide certainty to the community and the Council in respect to GMO use and the management of potential effects.</p> <p>Integrity of District / Unitary Plan maintained.</p> <p>Allows for full public participation.</p>	<p>The Environment Court may determine that the significant Resource Management Issue defined in the Plan Change can be addressed by the EPA pursuant to the HSNO Act.</p> <p>Costs associated with implementing the Plan Change and resource consent applications for GMO activities.</p> <p>The Plan Change provides prescriptive provisions. Any changes would require a new plan change.</p> <p>Reduces certainty of being allowed to operate for GMO developers considering undertaking their activity in the area.</p> <p>Transaction costs (monetary) and opportunity costs (time delays) associated with a GM proposal having to go through both the HSNO Act and resource consent and / or Plan Change process.</p> <p>There are no National Policy Statements or Environmental Standards to give effect to in respect to GMOs under the RMA.</p>

### 4.3 Risk of Acting or Not Acting

Section 32(4)(b) of the RMA requires the s32 evaluation to take into account the risk of acting or not acting, specifically "if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods".

As outlined in Section 2, the outdoor use of GMOs is characterised by risks (both known and unknown) and uncertainty as to the outcomes that will result from an EPA assessment of an activity. In response, a precautionary approach is proposed to manage the risks and costs associated with the outdoor use of GMOs and to meet relevant community specified outcomes.

### 4.3.1 Ability to Deliver a Precautionary Approach

While precaution is not a requirement under the HSNO Act, the appropriateness of its application has been recognised under International Treaty, for example the United Nations Convention on Biodiversity and its Cartagena Protocol (“**the Protocol**”), which New Zealand is a signatory to.<sup>42</sup> The Protocol focuses exclusively on living GMOs and reaffirms the precautionary approach set out in Principle 15 of the Rio Declaration, specifically in Article 10.6.<sup>43</sup> While the Protocol’s focus is the conservation and sustainable use of biological diversity, the principle it sets is equally applicable to other risks arising from GMOs, and is equally valid at the national and regional / district level.

The RMA is the principal statutory instrument designed to regulate land and water use (and thus the outdoor use of GMOs) and when considering it, the courts have ruled that a precautionary approach is inherent in the Act. In particular, section 3(f) states that the term “effect” includes “Any potential effect of low probability which has a high potential impact.”<sup>44</sup>

Traditional risk assessment relies on an ability to identify the nature of risk events and the probability they will occur in order to adequately regulate for them. With respect to the release of GMOs, while certain effects can be clearly anticipated, in many respects regulators are left with uncertainty as to what the effects will be (when the nature of the risk is clear but the probabilities are unknown), or simply uninformed (if neither the nature of the risk or the probability is known). In this situation, a precautionary approach is useful in guiding decision making.

In order for a council to have a meaningful opportunity to exercise precaution using RMA instruments, it needs to complete a Plan Change before the EPA has approved release of a GMO. The time required to complete a Plan Change is such that GMOs could be introduced to a council’s area and expose constituents and the environment to many of the risks outlined in Section 2.2.2 before a Plan Change could be enacted. Thus with respect to the issue of acting or not acting if there is uncertain or insufficient information about the subject matter, there are clear benefits from acting in advance (as further detailed later in this subsection).

Field trials can be treated as discretionary activities under a precautionary approach as the national legislation already prescribes strict conditions, including prohibiting the flow of altered genes from the trial site and requiring removal of heritable material upon completion.

The appropriate precautionary approach to GMO releases however is to prohibit these under an adaptive management regime. The following lists important information considerations that bear on this judgement:

- No national policy statements or national environmental standards have been issued under the RMA to guide council responses to GMO proposals,

<sup>42</sup> The Protocol covers the transboundary movements of living GMOs, or living modified organisms.

<sup>43</sup> Article 10.6 states “Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate, with regard to the import of the living modified organism in question as referred to in paragraph 3 above, in order to avoid or minimize such potential adverse effects.” The Cartagena Protocol on Biosafety to the Convention on Biological Diversity (Text and Annexes), Montreal 2000.

<sup>44</sup> Simon Terry Associates and Mitchell Partnerships, *Community Management of GMOs II: Risks and Response Options*, 2005, Section 4.4.

including consideration of potential risks to conventional and organic crops, bio-diversity, and the environment.

- The government has set no other national policy with respect to the assessment of potential GMO releases and has not provided directives to the EPA to guide its interpretation of the HSNO Act.<sup>45</sup>
- There is no international or national guidance on how to address outstanding liability issues.<sup>46</sup>
- The EPA has not yet had to respond to a proposed release of a food-related GMO, and so has yet to show how it would assess the complexities that arise with a food GMO in particular.<sup>47</sup>

Consequently, local authorities have no guidance to assist them to manage risks from GMO activities on a regional or district-wide basis in order to meet their duties and functions under sections 30 and 31 of the RMA. There would be significant inefficiency for a council to endeavour to collect and create the information required (if available or sufficient) to develop effective policy and planning instruments in this context.

At the point the EPA approved a particular GMO release, there would then be a sizable body of information to help a council assess local impacts of that GMO. However, even then, the EPA is tasked simply with assessing the costs and benefits of a particular release proposal: the EPA is not expected at any stage to propose or define a national strategy for GMOs. The issues confronting a council however involve the broader question of the expected impacts of GMOs in general, and clearly include questions of local strategy such as the costs and benefits of an area remaining free of any GMO release.

The information required to undertake this wider assessment cannot be required of an agent seeking to undertake a particular release and so would present an additional uncompensated expense to the council were release activities to be made discretionary and a proponent lodged an application to the council. By making GMO releases a prohibited activity, a council ensures that any such assessment is either made at a time a council judges sufficient information is available, or acquisition of the information is an expense more fully covered by a release proponent through a private plan change. If the latter, then the onus is placed on the proponent to show that there is not only a national benefit (as the EPA is required to determine before issuing a consent) but that there is also a benefit to the area under the council's jurisdiction.

A prohibited activity status for releases also ensures community determined outcomes can be delivered by a council. If they were a discretionary activity, the Minister for the Environment could call in an application under the RMA and the Minister would then decide the application - rather than the council. If an activity is prohibited, the Minister cannot intervene as no application can be made.

It is the ability to revise the activity status of particular GMOs or classes of GMOs as better information becomes available that ensures the proposed approach is adaptive. As the EPA and other authorities build up the basis for analysis, and as more field trials

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<sup>45</sup> Such directives may be issued under HSNO s17.

<sup>46</sup> Policy development has in recent year been focused at the international level with respect to the Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, Secretariat of the Convention on Biological Diversity, Montreal, United Nations, 2011.

<sup>47</sup> The EPA has approved the use of GMO flu vaccine for horses but it has not been deployed and the assessment did not raise many of the issues that arise in the case of food-related GMOs.

and market analyses are undertaken, the basis for decision-making at a later point will improve.

The legal authority for the proposed approach is the case between Coromandel Watchdog of Hauraki Inc and Chief Executive of Ministry of Economic Development.<sup>48</sup> In this case the Court of Appeal overturned the lower courts' decisions and held that prohibited activity status can be appropriate even when local authorities do not consider that an activity be forbidden outright and are not contemplating any change or exception. Instead, a local authority can use the prohibited activity status for activities for which, having undertaken the processes required by the RMA, it could rationally conclude that this was the most appropriate status.<sup>49</sup> However, the court agreed with the lower courts that, if a local authority has sufficient information to undertake the evaluation of an activity at the time the district plan is being formulated, it is not an appropriate use of the prohibited activity classification to defer the evaluation required by the Act.<sup>50</sup> That can be contrasted with the precautionary approach, where the local authority forms the view that it has insufficient information about an aspect of an activity, but further information may become available during the term of the plan.

With respect to the outdoor use of GMOs, the prohibited activity status is required because of the communities' desire to take a precautionary approach as a matter of policy due to lack of sufficient information currently available on the potential effects of GMOs on a district/regional wide basis.

In summary, a council cannot use the prohibited status to defer evaluation of an activity when formulating its plan if it has sufficient information to undertake that evaluation. However, with respect to the outdoor use of GMOs, it can defer evaluation as currently there is insufficient information about the activity, but further information may become available at a future time.

#### **4.3.2 Proportionate Action and Difficulties Arising From Inaction**

Having demonstrated that a precautionary approach is available under the RMA and that a Plan Change is required to provide this, the following sets out why such action is reasonable and proportionate relative to not acting.

As detailed in Table 1 in Section 4.3.5, there are costs associated with establishing the Plan Change provisions. While there will be some transaction and opportunity costs for a GMO proponent having to undertake two processes (EPA approval and Plan Change process), there is unlikely to be any significant opportunity cost, such as lost economic benefit from a GMO activity that would be prohibited. This is because of the ability to further amend the plan should a particular GMO or class of GMOs be shown to have clear net benefits for a jurisdiction. The transaction and opportunity costs to a GMO proponent would be small in relative terms and there need not be a delay in the

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<sup>48</sup> [2008] NZRMA 77 (CA).

<sup>49</sup> The judgment stated: "Where the council takes a precautionary approach. If the local authority has insufficient information about an activity to determine what provision should be made for that activity in the local authority's plan, the most appropriate status for that activity may be prohibited activity. This would allow proper consideration of the likely effects of the activity at a future time during the currency of the plan when a particular proposal makes it necessary to consider the matter, but that can be done in the light of the information then available". It also stated: "Where it is necessary to allow an expression of social or cultural outcomes or expectations. Prohibited activity status may be appropriate for an activity such as nuclear power generation which is unacceptable given current social, political and cultural attitudes, even if it were possible that those attitudes may change during the term of the plan". Brookers Resource Management, Vol.1, A77A.06.

<sup>50</sup> Brookers Resource Management, Vol.1, A77A.06.

benefits being available to a jurisdiction as such a change could proceed after field trial data had been obtained and while the EPA was hearing an application at the national level for a release to be made. Overall, in regard to the costs or the loss of potential benefits, the risk of acting is limited. Future options are not foreclosed.

In contrast, the risks and potential costs of not acting are substantially higher. As outlined in Table 1, the “do nothing” approach will not protect the environmental, economic or cultural resources of the Northern Peninsula, or reflect the level of control desired by the community (including Māori) to manage GMO activities. Risks of not acting include:

- Adverse environmental effects including weediness and invasiveness, and effects on non-target species.
- Councils exposed to clean-up costs associated with any GMO activities as the Ministry of Primary Industries is only obliged to clean up illegal releases. Clean-up costs are potentially substantial.
- Constituents exposed to economic losses from GM contamination. This includes opportunity costs associated with the foreclosure of options for branding an area as GM Free. Councils owe a duty of care to constituents.
- Adverse socio-cultural effects including effects on tangata whenua cultural values and economic well-being.
- Monitoring, both during and after consent duration, may be required by the Council, and this can be expensive.

Another way of considering this question is to examine the extent to which a council can in practice “do nothing”, and yet remain unencumbered financially.

A first issue for a council whose community has become concerned about GMO activities is whether it will need to arrange monitoring. If monitoring has not been required by the EPA, or is not in the form constituents seek, then a council can face a call from constituents to undertake this as a part of its duties under sections 35(2)(d) and (e) of the RMA. Such a call would become mandatory if a constituent succeeds in obtaining an enforcement order through the Environment Court.

The EPA can require monitoring where it is relevant to assess environmental risk. However, it is economic risks that are often a particular source of concern, and information from monitoring could be needed to underpin claims for compensation due to GM contamination. Therefore, in the event of a GM activity being undertaken within a council's jurisdiction, the prospect that the council will be required to monitor (for economic effects in particular) is quite high.

Monitoring can be expensive but a council can require the GMO operator to meet the costs under either the RMA or the LGA. The LGA is the simpler option as it does not involve a plan change – otherwise required under the RMA route.

However, those concerned about harm caused by any GMO contamination will require more than just monitoring provisions are in place. They will be particularly concerned to have mechanisms in place to promote financial accountability and clarify liability, and