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23 March 2018

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Attention: Proposed Regional Plan for Northland Hearing Panel

**Proposed Regional Plan for Northland – Response to Hearings Panel Minute No.1 dated 30 January 2018 on behalf of Whangarei District Council and Far North District Council**

On behalf of Whangarei District Council and Far North District Council, please find attached the following documents:

- Section 32 Evaluation for GMO provisions in the pRPFN.
- Attachment 1 – Proposed GMO provisions in the pRPFN.

We have provided both PDF and Word copies of these documents so that they are easily annotated by members of the Hearings Panel.

These documents are provided in response to the Hearings Panel minute No.1 dated 30 January 2018. Minute 2 provided an updated deadline of 4pm 23 March 2018.

If you require any further information or clarification regarding the attached documents, please do not hesitate to contact me directly in the first instance. Otherwise, we trust that we have provided all necessary information to respond to the request in minute 1 from the Hearings Panel.

Ngā Mihi,



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**B&A**

Urban & Environmental

## Genetically Modified Organisms (GMOs) – Section 32 Evaluation Report

### Prepared for Whangarei District Council and Far North District Council

#### Executive Summary

The proposed Regional Plan for Northland ('pRPFN') was publicly notified and did not include any provisions to regulate Genetically Modified Organisms ('GMOs'). This includes the management of GMOs in the Coastal Marine Area ('CMA'). This was despite opposition from members of the Te Tai Tokerau Māori Advisory Working Party and significant interest from other members of the public through the consultation on the draft regional plan.<sup>1</sup> No section 32 evaluation was provided by Northland Regional Council ('NRC') to justify the decision to not regulate GMOs in the pRPFN.

Whangarei District Council ('WDC') and Far North District Council ('FNDC') along with a number of other submitters made submissions regarding the non-inclusion of GMO provisions in the pRPFN. The Hearing Panel issued Minute 1 on 30 January 2018 which requested that section 32 Evaluations be prepared for provisions which were not assessed by NRC. Accordingly, this section 32 evaluation considers options for provisions for the management of GMOs in the CMA within the pRPFN.

There is jurisdiction under the Resource Management Act 1991 ('RMA') to manage GMOs. This has been confirmed by decisions from the Environment Court and High Court. The Proposed Regional Policy Statement ('Proposed RPS') includes provisions for the management of GMOs that are subject to appeal. Proposed Policy 6.1.2 of the RPS adopts a precautionary approach to the management of GMOs. Further, Auckland Council has adopted a precautionary approach to GMOs in the Auckland Unitary Plan, with these provisions being included in the recommendation of the Auckland Unitary Plan Independent Hearing Panel (chaired by Judge Kirkpatrick). WDC and FNDC have also adopted a precautionary approach to GMOs in their district plans via PC18 and PC131, which are currently subject to appeals.

The resource management issue to be addressed is that there is scientific uncertainty regarding the potential environmental effects of the use and discharge of GMOs within the CMA. GMOs may adversely affect the environment, economy, and social and cultural resources and values, and could result in significant costs.

Consideration has been given to the appropriateness of objectives for the management of GMOs in the pRPFN. The pRPFN currently only includes one objective in F.0.1 which effectively repeats the sustainable management purpose of the Act in section 5. It is considered that objectives should be included for the management of GMOs and two objectives have been proposed as outlined in **Attachment 1**. These proposed Objectives are considered the most appropriate to achieve the Part 2 purpose of the RMA.

Four management options have been identified and assessed in terms of their efficiency and effectiveness for achieving the proposed Objectives:

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<sup>1</sup> A summary of the feedback on the draft regional plan can be found here: <https://www.nrc.govt.nz/contentassets/506f48db06744ab782c65e56acd19dde/draft-plan-submission-summary-v4.pdf> 47 submissions were made regarding the non-inclusion of GMO provisions. These are summarised on page 126 of the summary document.

- Option A – Status Quo (no specific regulation)
- Option B – Control of GMOs in the CMA consistent with the Auckland Unitary Plan Approach.
- Option C – Control of GMOs to prohibit all use of GMOs within the CMA.
- Option D – Control of GMO Discretionary Consent for Release.

Management Option B is the preferred approach. The proposed provisions under this option are summarised below and detailed in **Attachment 1**:

GMO activities <sup>2</sup> not specifically provided for or prohibited in the CMA.	GMO field trials within the CMA (including any associated structure)	Use of GMO veterinary vaccine subject to specified requirements	Use of GMO veterinary vaccine not meeting specified requirements.	GMO releases (food and non-food related)– within the CMA (including any associated structures) except as specifically provided for.
Permitted	Discretionary	Permitted	Discretionary	Prohibited

Option B ensures consistency between the planning provisions of the various councils and adopts an adaptive management approach to GMOs in the CMA that adequately addresses the scientific uncertainty and potential for significant adverse effects on the environment, economy and social and cultural well-being. On this basis it is considered that Management Option B is the most efficient and effective option for achieving the proposed Objectives.

## Background

In 2003, Northland Regional Council, Whangarei District Council, Far North District Council, and Auckland Council, formed an Inter-Council Working Party on GMO Risk Evaluation and Management Options (**The Working Party**) in response to significant community concerns regarding the outdoor use of GMOs. As part of its investigations, the Working Party commissioned a number of reports to investigate the risks and benefits of GMOs, along with a comprehensive survey by Colmar Brunton to gauge public support for local or regional management of GMOs in July and August 2009. Since then, other councils within the Working Party, namely Auckland Council, Whangarei District Council and Far North District Council, have undertaken plan changes to include provisions in their planning documents to regulate the outdoor use of GMOs. All three councils have sought to prohibit the release of GMOs on land and made field trials a discretionary activity with performance standards in regard to liability and the posting of bonds. Auckland Council (as a Unitary Authority) has also sought to prohibit the release of GMOs in the CMA and made field trials within the CMA a discretionary activity with performance standards in regard to liability and the posting of bonds. Planning provisions relating to Whangarei District Council and Far North District Council and Auckland Council are all currently subject to appeals.

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<sup>2</sup> Including research within contained laboratories, medical applications, and veterinary applications involving use of non-viable genetically modified products.

## **Relevant Provision**

The pRPFN does not currently have any provisions relating to GMOs. Due to unresolved appeals on the GMO provisions in the proposed RPS, NRC reserved its decision on whether to include provisions that regulate GMOs in the plan, with the intent that these could be added later by way of a plan change if necessary.

To maintain consistency with other member councils on the Working Party and in anticipation of operative precautionary provisions in the RPS, Whangarei District Council and Far North District Council submitted on the pRPFN seeking that the Council should include provisions relating to GMOs in the CMA.

## **Legal Background**

### ***Resource Management Act 1991***

Section 6(a) in Part 2 of the Resource Management Act 1991 (“**RMA**”) requires that “the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development” be recognised and provided for as a matter of national importance. Section 7 requires that particular regard is given to kaitiakitanga; the ethic of stewardship; intrinsic values of ecosystems; maintenance and enhancement of the quality of the environment; protection of the habitat of trout and salmon; and the effects of climate change.

Section 12 of the RMA sets out restrictions on use of the CMA. The general presumption is that resource consent is required (coastal permit) to undertake any activities (such as the placement of a structure, the disturbance of foreshore or seabed or reclaiming or draining the foreshore) unless the activity is expressly allowed by a National Environmental Standard (“**NES**”) or a rule in a Regional Coastal Plan.

Section 15(1) of the RMA sets out that no person may discharge any contaminant into water unless expressly allowed by a NES, rule in a regional plan or proposed regional plan, or a resource consent.

Section 67(3) requires a regional plan to give effect to any national policy statement, New Zealand coastal policy statement, national planning standard, and any regional policy statement.

Section 66(2) requires that when Council is preparing a regional plan, they should “have regard” to any proposed regional policy statement; the Crown’s interests in the CMA; any management plans or strategies prepared under other Acts; regulations relating to ensuring sustainability of fisheries resources; and the extent to which the regional plan needs to be consistent with the plans of other adjacent regional councils. The Proposed RPS includes policy 6.1.2 which adopts a precautionary approach towards the effects of introducing GMO into the environment where they are scientifically uncertain, unknown, or little understood, but significantly adverse. Auckland Council (the adjacent unitary authority) also contains similar provisions promoting a precautionary approach to the management of GMOs.

Section 66(2A) requires that the council take into account any relevant planning document recognised by an iwi authority, to the extent that their content has a bearing on the resource management issues of the region.

These documents are addressed in the ‘planning documents’ section below.

### ***Hazardous Substances and New Organisms Act 1996***

Councils have jurisdiction under the RMA to set rules for GMOs that act in addition to those that may be set under the Hazardous Substances and New Organisms Act 1996 (“HSNO Act”) or by the Environmental Protection Authority (“EPA”), through inserting provisions into the District / Regional 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 / Regional 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.

The purpose of the HSNO Act are set out in sections 4, 5 and 6. These sections are as follows:

#### **4 Purpose of Act**

*The purpose of this Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.*

#### **5 Principles relevant to purpose of Act**

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

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

#### **6 Matters relevant to purpose of Act**

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

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

The purpose of the RMA is set out in section 5.

#### **5 Purpose**

*(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.*

*(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*

- (a) *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

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. The functions of the EPA under the HSNO Act are different from those for regional authorities under section 30 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 and complement each other, rather than duplicate functions. The HSNO Act and the RMA have different purposes and roles in relation to GMOs. The HSNO Act's purpose and role is to assess new organisms (including GMOs) for approval (or not) for introduction into New Zealand. Once released in New Zealand, they are no longer considered new organisms and the HSNO Act has no further role. The RMA, on the other hand, is a comprehensive statute that regulates the use of all natural and physical resources in an integrated manner over time so as to achieve the sustainable management of those resources. Natural and physical resources, as defined in the RMA, encompasses GMOs. Such a function includes regional and district considerations and responses.

### ***Jurisdiction to Regulate GMOs under the RMA***

The management of GMOs under the RMA has been subject to a number of appeals.

The Proposed RPS GMO provisions were appealed to the Environment Court. A preliminary hearing concerning jurisdiction took place in 2015 and a decision supporting jurisdiction to manage GMOs under the RMA was delivered by the Environment Court in May 2015. Federated Farmers appealed this decision to the High Court on points of law. A decision from the High Court was issued in September 2016 which reaffirmed jurisdiction to manage GMOs under the RMA. This was subsequently appealed again to the Court of Appeal, but this appeal was withdrawn in November 2017. As such it has been determined through the Courts that local authorities do have jurisdiction under the RMA to regulate GMOs in planning documents.

### **Planning Documents**

#### ***New Zealand Coastal Policy Statement***

Section 67(3) requires a regional plan to give effect to any national policy statement and New Zealand coastal policy statement. National policy statements are instruments issued under section 52(2) of the Resource Management Act 1991 and state objectives and policies for matters of national significance. Under the RMA, the only mandatory national policy statement is the New Zealand Coastal Policy Statement ("**NZCPS**"). Its purpose is to state policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand.

The relevant policy in the NZCPS that are directly relevant to GMOs are Policy 2 and 3:

#### ***Policy 2 The Treaty of Waitangi, tangata whenua and Māori heritage***

*In taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and kaitiakitanga, in relation to the coastal environment:*

*(a) recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations;*

*(b) involve iwi authorities or hapū on behalf of tangata whenua in the preparation of regional policy statements, and plans, by undertaking effective consultation with tangata whenua; with such consultation to be early, meaningful, and as far as practicable in accordance with tikanga Māori;*

*(c) with the consent of tangata whenua and as far as practicable in accordance with tikanga Māori, incorporate mātauranga Māori in regional policy statements, in plans, and in the consideration of applications for resource consents, notices of requirement for designation and private plan changes;*

*(d) provide opportunities in appropriate circumstances for Māori involvement in decision making, for example when a consent application or notice of requirement is dealing with cultural localities or issues of cultural significance, and Māori experts, including pūkenga<sup>2</sup>, may have knowledge not otherwise available;*

*(e) take into account any relevant iwi resource management plan and any other relevant planning document recognised by the appropriate iwi authority or hapū and lodged with the council, to the extent that its content has a bearing on resource management issues in the region or district; and*

*(i) where appropriate incorporate references to, or material from, iwi resource management plans in regional policy statements and in plans; and*

*(ii) consider providing practical assistance to iwi or hapū who have indicated a wish to develop iwi resource management plans;*

*(f) provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands, and fisheries in the coastal environment through such measures as:*

*(i) bringing cultural understanding to monitoring of natural resources;*

*(ii) providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua;*

*(iii) having regard to regulations, rules or bylaws relating to ensuring sustainability of fisheries resources such as taiāpure, mahinga mātaītai or other non commercial Māori customary fishing; and*

*(g) in consultation and collaboration with tangata whenua, working as far as practicable in accordance with tikanga Māori, and recognising that tangata whenua have the right to choose not to identify places or values of historic, cultural or spiritual significance or special value:*

*(i) recognise the importance of Māori cultural and heritage values through such methods as historic heritage, landscape and cultural impact assessments; and*

*(ii) provide for the identification, assessment, protection and management of areas or sites of significance or special value to Māori, including by historic analysis and*

*archaeological survey and the development of methods such as alert layers and predictive methodologies for identifying areas of high potential for undiscovered Māori heritage, for example coastal pā or fishing villages.*

**Policy 3 Precautionary approach:**

*(1) Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.*

*(2) In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:*

*(a) avoidable social and economic loss and harm to communities does not occur;*

*(b) natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and*

*(c) the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations.*

**Proposed Regional Policy Statement**

The operative RPS does not contain provisions relating to GMOs. However, following hearings on a proposed RPS, as part of a review the Hearings Commissioners recommended provisions be included prescribing a precautionary approach to GMOs in the environment. As outlined above, the jurisdiction to manage GMOs under the RMA was appealed and subsequently upheld by the courts. However, the Environment Court is still to hear the appeal on the substantive matters arising from the proposed RPS provisions.

Section 66(2) requires that when Council is preparing a regional plan, they should “have regard” to any proposed regional policy statement. The relevant provisions of the proposed RPS are as follows, and direct Councils to take a precautionary approach (notwithstanding that they are subject to appeal).

**2.6 Issues of significance to tangata whenua – natural and physical resources**

*The following issues have been identified by iwi authorities as regionally significant as they relate to the state of, and pressures on, natural and physical resources:*

...

*(m) The use of genetic engineering and the release of genetically modified organisms to the environment.*

**Explanation**

...

**GE / GMO management regime**

*The use of genetic engineering (GE) and release of genetically modified organisms (GMOs) to the environment is an issue of significance to tangata whenua in the region. GE / GMO is*



managed under the Hazardous Substances and New Organisms Act 1996. However, to recognise this as an issue for tangata whenua and to respond to community concern, the RPS includes a policy (Policy 6.1.2) which requires a precautionary approach be taken towards activities whose effects are scientifically uncertain, unknown, or little understood but potentially significant. This precautionary approach includes GE / GMO.

### **6.1.2 Policy - Precautionary approach**

Adopt a precautionary approach towards the effects of climate change and introducing genetically modified plant organisms to the environment where they are scientifically uncertain, unknown, or little understood, but potentially significantly adverse.

#### **Explanation:**

Climate change and the introduction of genetically modified plant organisms to the environment have a greater potential for significant but scientifically uncertain adverse effects than other natural processes and activities. Taking a precautionary approach means that where there are threats of significant or irreversible adverse effects, and there is scientific uncertainty as to the extent of those effects, decision-makers shall assume the threat of significant or irreversible effects is a reality. The response should be in proportion to the degree of significance and irreversibility of the threat and the degree of scientific uncertainty. When adopting a precautionary approach decision-makers may apply the following criteria:

Consideration of the degree of significance or irreversibility:

- the scale of the threat;
- the value of the threatened environment;
- whether the possible adverse effects are able to be managed or contained;
- the level of public concern; and
- whether there is a rational or scientific basis for the concern.

Consideration of the degree of scientific uncertainty:

- what would constitute sufficient evidence;
- the level of scientific uncertainty; and
- the potential to reduce scientific uncertainty.

### **6.1.5 Method – Statutory plans and strategies**

The regional and district councils should apply Policy 6.1.2, when reviewing their plans or considering options for plan changes and assessing resource consent applications, but should not include plan provisions or resource consent conditions that attempt to address liability for harm.

#### **Explanation:**

Method 6.1.5 implements Policy 6.1.2. The method discourages councils from attempting to

*change the liability regime for potential harm from genetically modified plant organisms because there is no strong basis for regional or local liability controls.*

### **Far North and Whangarei District Plans**

Far North and Whangarei District Councils have collaboratively prepared and notified Plan Change 18 ('**PC18**') and Plan Change 131 ('**PC131**') to their respective district plans. The wording of PC18 and PC131 are generic and provide the same precautionary approach with adaptive responses to the outdoor use of GMOs, albeit with some variation in structure to allow for formatting differences in the WDC and FNDC district plans. The plan provisions are based upon, and are in substance the same, as those outlined in the document "Draft Proposed Plan Change to the District/Unitary Plan" produced by the Working Party (with formatting differences). The GMO provisions in the Auckland Unitary Plan (Operative in Part) ('**AUP (OP)**') are also the same but extend into the CMA as Auckland Council is a unitary authority. The AUP (OP) is discussed in further detail below.

PC18 and PC131 were both notified in July 2014. Hearings were held in June 2016 and a decision from the hearings panel released in July 2016 and adopted by FNDC and WDC in September 2016. The decisions version of the plan provisions has been appealed to the Environment Court and is still awaiting a hearing on the appeal. No date has currently been set for a hearing on the PC18 and PC131 provisions.

PC18 and PC131 are both supported by technical evidence. This includes a statement of Evidence by Professor Jack Heinemann.<sup>3</sup> This clearly demonstrates that there is scientific uncertainty regarding the use of GMOs, and as such there are scientific grounds to exercise precaution as is proposed in the PC18 and PC131 provisions. Further, a statement of evidence from Dr John Small supports PC18 PC131.<sup>4</sup> Dr Small's evidence concludes that there is a significant economic benefit from taking a precautionary approach to the release of GMOs and that the potential costs are modest.

### **Auckland Unitary Plan**

In addition to the matters that a regional plan is required to give effect to under section 67(3) of the RMA, the council is also required to have regard to the extent to which the regional plan needs to be consistent with the regional policy statements of adjacent regional councils, pursuant to section 66(2)(d). As the management of GMOs could give rise to cross boundary issues, and there has historically been a co-operation and joint approach to investigating the risks associated with GMOs through the Working Party, it is considered that the pRPFN should have regard to the provisions in the AUP (OP) to ensure a consistent approach.

The GMO related provisions in the AUP (OP) are located in a number of chapters.

Policy B8.3.2 promotes a precautionary approach towards activities within the coastal environment whose effects are uncertain unknown or little understood, but could be significantly adverse. This

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<sup>3</sup> A copy of Professor Heinemann's evidence can be viewed at this link:

<http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/DistrictPlan/DistrictPlanChanges/Documents/PC-131-GMO/5-Hearing/Section-42a-Joint-Hearing-Report.pdf>

<sup>4</sup> A copy of Dr Small's evidence can be viewed at this link:

<http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/DistrictPlan/DistrictPlanChanges/Documents/PC-131-GMO/5-Hearing/Section-42a-Joint-Hearing-Report.pdf>

policy is consistent with policy 3 of the NZCPS. It is not subject to appeal.

Chapter B10 provides regional policy statement objectives and policies for environmental risk. This includes an objective and policy in B10.5 and further explanatory text in B10.6. These provisions are subject to appeal.

Chapter E37 provides provisions for the management of GMOs. These provisions are generic and provide the same precautionary approach with adaptive responses to the outdoor use of GMOs as PC18 and PC131, albeit with some variation in structure to allow for formatting differences in the AUP (OP). The other key difference is that these provisions also relate to the CMA as the Auckland Council is a unitary authority that has jurisdiction over the CMA, whereas the Far North and Whangarei District Councils do not.

### ***Iwi Management Plans***

Section 66A(a) of the RMA requires council to take into account any relevant planning document recognised by an iwi authority, to the extent that its content has a bearing on the resource management issues of the district.

There are 12 Iwi / Hapu Management Plans in the Northland Region<sup>5</sup>:

- Te Iwi o Ngātiwai Iwi Environmental Policy Documents 2007
- Ngātiwai Aquaculture Plan 2005
- Ngati Rehia Environmental Management Plan 2007 (updated 2015 yet to be formally lodged with council)
- Hapū Environmental Management Plan 2014
- Ngā Tikanga mo te Taiao o Ngāti Hine 2008
- Kororareka Marae Environmental Hapū Management Plan 2009
- Te Uri o Hau Kaitiakitanga O Te Taiao 2012
- Whakatakoto Kaupapa Mo Te Hapū o Ngāti Kuta ki Te Rawhiti
- (Ngāti Korokoro, Ngāti Wharara, Te Poukā) Hapū Environmental Management Plan 2008
- Kia Matau, kia mohia e ora ana Te U Kaipo 2011
- Hapu Environmental Management Plan 2016
- Whatitiri Resource Management Plan 2016

These documents generally oppose the release of GMOs to the environment and advocate a precautionary approach to GMOs. Some advocate local management of GMOs. Having reviewed each document and taking into account the provisions, it is considered that the proposed GMO provisions sought by the Far North and Whangarei District Council are consistent with, and in some respects will help achieve, the outcomes sought in these documents.

### **Recent RMA Amendments**

The Resource Legislation Amendment Act 2017 obtained Royal Assent on 18 April 2017. Some

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<sup>5</sup> Sourced from pRPFN section 32 report, pages 25-26.

changes took immediate effect, others (mainly relating to the majority of changes to the resource consent process) came into force six months after enactment, on 18 October 2017.

Section 116 of the Amendment Act included a new section 360D for the RMA:

*360D Regulations that prohibit or remove certain rules*

- (1) *The Governor-General may, by Order in Council made on the recommendation of the Minister but subject to subsection (2), make regulations to prohibit or remove specified rules or types of rules that would duplicate, overlap with, or deal with the same subject matter that is included in other legislation.*
- (2) *Subsection (1) does not apply to rules or types of rules that regulate the growing of crops that are genetically modified organisms.*
- (3) *In subsection (2), genetically modified organisms has the meaning given in section 2(1) of the Hazardous Substances and New Organisms Act 1996.*
- (4) *Regulations made under this section may require that rules inconsistent with those regulations be withdrawn or amended—*
  - (a) *to the extent necessary to remove the inconsistency; and*
  - (b) *as soon as practicable after the date on which the regulations come into force; but*
  - (c) *without using any of the processes under Schedule 1 for changing a plan or proposed plan.*
- (5) *If regulations include a requirement under subsection (4), their withdrawal or amendment must be publicly notified by the local authority not later than 5 working days after they have been withdrawn or amended.*
- (6) *Regulations made under this section—*
  - (a) *may specify, in relation to a rule made before the commencement of the regulations,—*
    - (i) *the extent to which a matter that the regulations apply to continues to have effect; or*
    - (ii) *the period for which a matter that the regulations apply to continues to have effect; and*
  - (b) *may apply—*
    - (i) *generally; or*
    - (ii) *to any specified district or region; or*
    - (iii) *to any specified part of New Zealand.*
- (7) *Section 360(2) and (4) applies to regulations made under this section.*

It is understood that the intent of this regulation-making power in 360D was to reduce duplication between different legislation by removing or prohibiting rules where a council makes rules that either needlessly duplicate, or overlap with, the provisions of another Act.<sup>6</sup> Sub-section (2) specifically excludes rules that relate to rules that regulate the growing of

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<sup>6</sup> See page 8 of this MfE fact sheet:

<http://www.mfe.govt.nz/sites/default/files/media/Fact%20Sheet%201%20-%20New%20Options%20for%20national%20direction.pdf>

crops that are GMOs. Previous versions of the draft Amendment Act did not include this exclusion. It is understood that this was a late exclusion negotiated by the Government of the time and the Māori Party, who were specifically opposed to central government overruling local authority decisions to regulate GMOs within their districts and regions. It is considered that Section 360D(2) provides further justification that local authorities do have the jurisdiction to manage GMOs within their planning documents.

### **The Problem, Opportunity and / or Requirement**

The resource management issue to be addressed is that there is scientific uncertainty use of GMOs within the CMA may adversely affect the environment, economy, and social and cultural resources and values, and could result in significant costs, as has been extensively researched through the Working Party's investigations.

The absolute and relative benefits associated with the development and use of GMOs is continually being redefined as this and other forms of applied biotechnology advance. However there remains scientific uncertainty with respect to potentially significant adverse effects of GMOs on natural resources and ecosystems. The risks could be substantial and certain consequences irreversible, and could include the following:

- Environmental risks, including adverse effects on other species and ecosystems by way of GM species becoming invasive and disrupting ecosystems; altered genes transferring to other organisms; and development of herbicide or pesticide resistance;
- Economic risks, including loss of income associated with actual or perceived contamination of non-GMO food products; negative effects on marketing and the international NZ 'green' image; and costs associated with environmental damage; and
- Social and cultural risks, including effects on Māori cultural beliefs; ethical concerns; and actual or perceived effects on human health of GMO foods.

Once released into the environment, most GMOs would be very difficult to eradicate even if the funding were available for this, irrespective of the consequences. If the GMO is related to a food product, the "GE Free" food producer status of a district or region would likely be permanently lost, along with any marketing advantages that status confers.

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

- Ensuring GM operators are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation;
- Adoption of a precautionary approach to manage potential risks (economic, environmental, social and cultural) associated with the use of GMOs within the CMA;
- Protection of local/regional marketing advantages through reducing risks associated with market rejection and loss of income from GM contamination of non-GM species, and negative effects on marketing, branding and tourism opportunities; and

- Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

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

### **Appropriateness of the Objectives in achieving the purpose of the Act**

Section 32(3)(a) of the RMA requires the evaluation to examine the extent to which each objective is the most appropriate way to achieve the purpose of the Act. This section of the report considers the role of the objectives in achieving the purpose of the Act and in achieving the sustainable management of natural and physical resources in Northland.

As currently drafted, the pRPFN includes only one objective in F.0.1. This essentially replicates the sustainable management purpose of the RMA in section 5 and provides no further guidance as to which specific objectives are appropriate to address resource management issues and to achieve the purpose of the RMA in the Northland region context. This is then supported by a limited number of policies in section D of the pRPFN which set out how the overall sustainable management purpose objective will be achieved. This policy framework and the reasons for including one objective is explained in section 1.5 of the NRC section 32 Evaluation.

Given the significance of the management of GMOs to the Northland region and the local communities it encapsulates, it is appropriate that consideration is given to objectives for the management of GMOs in the pRPFN. An analysis in this regard is provided below.

### **Options**

Two options have been identified in terms of objectives for the management of GMOs in the pRPFN:

- ***Option 1 – No objective for the Management of GMOs (Status Quo)***: this option represents the status quo in the notified version of the pRPFN. As such there is no objective for the management of GMOs in the pRPFN and the only objective would be F.0.1.
- ***Option 2 – Include two objectives for the Management of GMOs (Preferred Option)***: this option would see the inclusion of two proposed objectives which are consistent with the WDC, FNDC and Auckland Council approaches to the management of GMOs. The two objectives are worded as follows (see full recommended text in **Attachment 1**):

#### F.0.2.1

##### Objective

"The coastal marine area is protected from potential adverse effects associated with the use, occupation, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.

#### F.0.2.2

##### Objective

The sustainable management of the natural and physical resources of the coastal marine area with respect to the use of GMOs, a significant resource management issue identified by the community."

The proposed Objectives in option 2 are assessed below in terms of their appropriateness of achieving Part 2 of the Act. No separate assessment is provided for option 1 as this option represents no objective, and the objective proposed in F.0.1 simply repeats the section 5 purpose of the Act without responding to the specific issue relating to the management of GMOs.

## **Part 2 of the RMA**

### **5 Purpose**

*(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.*

*(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

F.0.2.1 seeks to protect the CMA from potential adverse effects of GMOs by the adoption of a precautionary approach in response to the scientific uncertainty regarding the management of GMOs and their potential for significant adverse environmental effects. This objective seeks to safeguard the life-supporting capacity of the CMA, a natural resource, in order to meet the reasonably foreseeable needs of future generations while avoiding potentially significant adverse effects on the environment associated with the release of inappropriate GMOs.

F.0.2.2 seeks promote the sustainable management of the CMA from the risk of the use of GMOs. This has been identified as a significant resource management issue for the Northland community, through previous consultation and feedback for the previous Working Party plan changes and as is evident in the draft pre-notification feedback and submissions from various parties on the pRPFN.

Overall, the proposed Objectives meet Section 5 of the Act as they promote sustainable management of the CMA by taking a precautionary approach in response to the scientific uncertainty and potential for significant adverse effects relating to the release of GMOs.

The Objectives also ensure unacceptable risks to the community from release of GMOs in the CMA are avoided. The Objectives recognises the value of natural and cultural resources in the Northland Region, and the need to protect these values within the CMA from the use of GMOs.

The Objectives will sustain the physical resources of the Northland Region, now and for future generations, in particular the life supporting capacity of air, water and soil ecosystems, and through the adoption of effective policies, rules and methods, significant potential adverse effects on the environment can be avoided.

The Objectives will enable people and communities to provide for their social, economic and cultural well-being and for their health and safety by protecting existing primary producers from possible economic harm through GMO contamination and loss of markets, protecting marketing and branding advantages and price premiums for primary producers, marketing and branding advantages for the tourism sector, and respecting socio-cultural differences, particularly the cultural values of Māori. The evidence of Dr Small referred to earlier in particular demonstrates the significant economic benefit that a precautionary approach would have in terms of marketing and branding advantages.

The Objectives adopt a precautionary approach to the management of GMOs. The essence of the precautionary principle involves assessing and responding to potential risks or effects before they eventuate. There are uncertainties about the scope and scale of risks arising from the use of GMOs. This scientific uncertainty is demonstrated in the evidence of Professor Heinemann referred to previously. Where the risks are high or difficult to assess or quantify by conventional risk analysis, or the potential effects are significant or uncertain, caution should be exercised before permitting and/or undertaking the activity in question, until more is known about the risks and potential effects. The adoption of a precautionary approach, as set out in Objective 1.4.1, to manage the outdoor use of GMOs to minimise the risk to the environment, economy and sociocultural resources and values, is inherent in the Act. The Objectives also reflect community preferences (reflecting social, cultural and economic values) for a precautionary approach to address the issue of outdoor uses of GMOs.

#### *6 Matters of National Importance*

*In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:*

- (a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*
- (f) the protection of historic heritage from inappropriate subdivision, use, and development:*
- (g) the protection of protected customary rights:*
- (h) the management of significant risks from natural hazards.*

It is considered that the proposed objectives appropriately recognise and provide for the matters of national importance in section 6 of the RMA.

In particular, will ensure the relationship of Māori and their culture and traditions with their



ancestral lands, water, sites, wāhi tapu and other taonga are recognised and provided for.

The cultural effects associated with the outdoor use of GMOs in the Northern Peninsula have most clearly and consistently been raised by Māori. While there is no single Māori view on GM, cultural concerns consistently expressed by the majority of Māori in Hui, surveys and in Iwi and Hapu Management Plans on GMOs 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.

## **7 Other Matters**

*In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—*

*(a) kaitiakitanga:*

*(aa) the ethic of stewardship:*

*(b) the efficient use and development of natural and physical resources:*

*(ba) the efficiency of the end use of energy:*

*(c) the maintenance and enhancement of amenity values:*

*(d) intrinsic values of ecosystems:*

*(e)[Repealed]*

*(f) maintenance and enhancement of the quality of the environment:*

*(g) any finite characteristics of natural and physical resources:*

*(h) the protection of the habitat of trout and salmon:*

*(i) the effects of climate change:*

*(j) the benefits to be derived from the use and development of renewable energy.*

Overall, the objectives meet Section 7 of the Act because they have particular regard to the relevant matters in section 7. In particular, the objectives have given particular regard to the concept of kaitiakitanga with regard to the desire of Māori to protect the environment from the scientific uncertainty and potentially significant physical and cultural adverse effects of GMO releases.

The proposed objectives provide for the intrinsic values of ecosystems by protecting ecosystems within the CMA from the introduction of GMOs where there is scientific uncertainty as to their effects on the environment.

## **8 Treaty of Waitangi**

*In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).*

Having taking into account the principles of the Treaty of Waitangi pursuant to section 8 of the

RMA, it is considered that the proposed objectives are consistent with and appropriately take into account the relevant provisions of the Treaty of Waitangi for the reasons discussed above. NRC would also be better meeting their Treaty obligations by showing partnership and enabling Māori to exercise kaitiakitanga on this issue which has been clearly identified as an issue of significance to mana whenua.

## Conclusion

On the basis of the above assessment, it is considered that the Objectives outlined in option 2 represent the most appropriate way to achieve Part 2 of the Act. Consideration has been given to the alternative (status quo) option 1. It is determined that option 2 is more appropriate than option 1 as the Objectives give more direction regarding the management of GMOs in the CMA rather than simply restating the purpose of the Act. This is important as the Objectives in option 2 provide the basis and direction for the policies and rules that are assessed below and outlined in Attachment 1.

## Management Options

This section summarises the management options for GMOs within the CMA. The approach taken is to identify the different approaches to management of GMOs and then as a sub set of this explore the methods and rules best applied to achieve this management direction.

The key difference between the options identified is the specific control of GMOs in the CMA, and the associated activity status applied.

### Option A: Status Quo (no specific regulation)

Overview: No specific objectives, policies or rules are included in the pRPFN which relate to the use of GMOs in the CMA.

Background: NRC has, as stated<sup>7</sup> on its website reserved its decision on including provisions in the Plan on regulating genetically modified organisms (GMOs). Due to the outstanding appeals on the matter at the time of notification of the pRPFN. NRC will review whether it will proceed with a plan change to include provisions regulating GMOs once the appeals have concluded. A GMO release in the CMA would therefore be a discretionary activity given it would be a discharge without a specific rule (refer to section 15 of the RMA).

GMO activities <sup>8</sup> not specifically provided for or prohibited <sup>9</sup> in the CMA.	GMO field trials within the CMA (including any associated structure)	Use of GMO veterinary vaccine subject to specified	Use of GMO veterinary vaccine not meeting specified requirements.	GMO releases (food and non-food related)– within the CMA (including any associated
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<sup>7</sup> [http://consult-nrc.objective.com/portal/planning\\_and\\_policy/proposed\\_regional\\_plan/prp?pointId=1941857](http://consult-nrc.objective.com/portal/planning_and_policy/proposed_regional_plan/prp?pointId=1941857) and page 32 of the section 32 report <https://www.nrc.govt.nz/contentassets/506f48db06744ab782c65e56acd19dde/section-32-proposed-regional-plan-september-2017-final---web.pdf>

<sup>8</sup> Including research within contained laboratories, medical applications, and veterinary applications involving use of non-viable genetically modified products.

<sup>9</sup> Including research within contained laboratories, medical applications, and veterinary applications involving use of non-viable genetically modified products.

		requirements <sup>10</sup>		structures) except as specifically provided for.
Discretionary	Discretionary	Discretionary	Discretionary	Discretionary

**Option B: Control of GMO consistent with the Auckland Unitary Council Approach (preferred approach)**

Overview: Objectives, policies or rules are included in the pRPFN relating to the use of GMOs in the CMA consistent with those in the AUP (OP).

Background: This option acknowledges that not all categories of outdoor GMO carry the same level of risk, and therefore do not need to be regulated with the same degree of precaution. Field trials are proposed to be considered as Discretionary Activities as there are strict controls around GMO trials that can be applied, although the Discretionary status allows for greater protection through the ability to impose a comprehensive suite of conditions on these activities. GMO releases are proposed to be a Prohibited Activity due to the level of risk and uncertainty surrounding these activities, and therefore applying a precautionary approach. Periodic reviews can still allow for particular classes or individual GMOs to be included as Discretionary Activities in the future (through a Plan Change process) should sufficient evidence become available. Veterinary vaccines would be provided for as a Permitted Activity as they do not tend to persist in the environment and therefore appear to be low risk.

The provisions have also been proposed in the Far North, and Whangarei District Plans (subject to minor formatting to match the structure of each district plan) as they relate to land based GMO activities, therefore these provisions will provide a uniform framework between all authorities across the Northern Peninsula. As well as providing a clear and consistent framework for industry across the region, this approach will ensure cross-boundary effects between districts, and between land and the CMA, can also be consistently considered.

GMO activities <sup>11</sup> not specifically provided for or prohibited in the CMA.	GMO field trials within the CMA (including any associated structure)	Use of GMO veterinary vaccine subject to specified requirements	Use of GMO veterinary vaccine not meeting specified requirements.	GMO releases (food and non-food related)– within the CMA (including any associated structures) except as specifically provided for.
Permitted	Discretionary	Permitted	Discretionary	Prohibited

**Option C: Control of GMO to Prohibit all use of GMOs**

<sup>10</sup> Of a specific dose supervised by a veterinarian

<sup>11</sup> Including research within contained laboratories, medical applications, and veterinary applications involving use of non-viable genetically modified products.

Overview: Objectives, policies, and rules are included in the pRPFN prohibiting the use of all GMOs in the CMA.

Background: under this option no application would be able to be made to the regional council for any use of GMOs in the CMA, including field trials or any other GMO activity that is considered to be low risk (such as veterinary vaccines). This approach has not been used in any other planning document in the Northern Peninsula.

GMO activities <sup>12</sup> not specifically provided for or prohibited in the CMA.	GMO field trials within the CMA (including any associated structure)	Use of GMO veterinary vaccine subject to specified requirements	Use of GMO veterinary vaccine not meeting specified requirements.	GMO releases (food and non-food related)– within the CMA (including any associated structures) except as specifically provided for.
Prohibited	Prohibited	Prohibited	Prohibited	Prohibited

**Option D: Control of GMO Discretionary Consent for Release**

Overview: Objectives, policies or rules are included in the pRPFN relating to the use of GMOs in the CMA consistent with those in the Auckland Unitary Plan, with the exception of GMO releases to be provided for as a Discretionary Activity.

Background: This option differs from Option B above as it provides for GMO releases as a Discretionary Activity instead of prohibiting these activities. Providing for GMO releases as a Discretionary Activity will transfer greater liability to NRC to understand and potentially remediate the adverse effects of GMO releases, where supporting information on the adverse effects of releases may be insufficient.

GMO activities <sup>13</sup> not specifically provided for or prohibited in the CMA.	GMO field trials within the CMA (including any associated structure)	Use of GMO veterinary vaccine subject to specified requirements	Use of GMO veterinary vaccine not meeting specified requirements.	GMO releases (food and non-food related)– within the CMA (including any associated structures) except as specifically provided for.
Permitted	Discretionary	Permitted	Discretionary	Discretionary

**Screening the Management Options**

<sup>12</sup> Including research within contained laboratories, medical applications, and veterinary applications involving use of non-viable genetically modified products.

<sup>13</sup> Including research within contained laboratories, medical applications, and veterinary applications involving use of non-viable genetically modified products.

As the intent of the provisions is to apply a precautionary approach to the use of GMOs in the CMA, and to provide consistency of provisions across the Northern Peninsula, those options that do not provide for these matters are not considered to be an appropriate management option to achieve the outcomes sought. These options have therefore been excluded as identified

**Option A: Status Quo** – This option is not considered to adequately address the issue of appropriate control of GMO activities as it is inconsistent with higher order policy documents with no specific provisions or policy framework in the pRPFN to give direction on the control of GMOs, or additional level of caution to be applied to any GMO-related activity. This will not adequately apply the precautionary approach in light of scientific uncertainty as to the safety of GMO releases and the potential for significant adverse environmental, economic, social and cultural effects.

**Option C: Control of GMO to Prohibit all use of GMOs** – This option does not allow for consent to be applied for in relation to any use of GMOs in the CMA. This option would be inconsistent with land-based provisions in the Northern Peninsula with respect to the Far North District, Whangarei District, and Auckland Councils, and CMA-related controls for Auckland Council as a unitary authority. The option also does not allow for the controlled use of GMOs which may have evidence available to support their use with appropriate controls in place, or for activities considered low-risk such as the use of veterinary vaccines subject to specified requirements. In this regard, the GMO provisions need to be adaptive as well as precautionary. It is important that the GMO provisions do not totally foreclose potential opportunities for the outdoor use of GMOs in the CMA in the future, should sufficient new evidence demonstrate that a particular GMO is safe and provides a net benefit.

## High Level Objectives

Section 32 of the Act requires an assessment of the efficiency and effectiveness of the provisions in achieving the objectives. The NRC section 32 has done this by assessing the management options against a set of high level objectives or measures.<sup>14</sup>

In this instance, an assessment of specific objectives for the management of GMOs has been undertaken above under the heading “Appropriateness of the Objectives in Achieving the Purpose of the Act”. This has demonstrated that the two proposed Objectives in F.0.2.1 and F.0.2.2 as drafted in **Attachment 1** are the most appropriate in terms of achieving the purpose of the Act. With this in mind, it is therefore considered appropriate to undertake the assessment of the efficiency and effectiveness of the provisions in terms of achieving these proposed Objectives as this is what Section 32 specifically requires.

## Evaluating the Management Options

### Certainty

With regard to the risks of GMOs and particularly to the general release of these, the level of uncertainty that surrounds the impacts of GMOs means that significant adverse effects could arise if an appropriate level of precaution is not taken.

### Time and time lags

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<sup>14</sup> See page 18 of the NRC section 32 report

<https://www.nrc.govt.nz/contentassets/506f48db06744ab782c65e56acd19dde/section-32-proposed-regional-plan-september-2017-final---web.pdf>

As other Councils in the Northern Peninsula have adopted provisions relating to the control and use of GMOs it is considered an appropriate time to also address these under the pRPFN to ensure that a consistent approach is achieved at the same time. For example, if provisions relating to GMOs are not included in the pRPFN at this time, over the life of the plan or even the time in which a plan change could be enacted, there is the potential for GMO activities to occur in the CMA. Additionally, given the nature of GMOs, any adverse effects are likely to be complex to manage as the outdoor use of GMOs is not constrained by jurisdictional boundaries. Therefore, not including provisions within the pRPFN at this time also jeopardises the ability of adjoining jurisdictions from achieving outcomes sought in their policy documents.

### ***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".

There are less costs to the Council to include the proposed provisions at this time when compared with undertaking a separate plan change at a later date once the proposed RPS provisions are confirmed. The GMO provisions can be introduced at the same time as the introduction of the new regional plan, these costs are reduced in comparison to a standalone plan change solely to address GMOs.

While there may be less cost to Council associated with introducing these provisions, there would be costs associated with monitoring of activities which may not be a requirement of EPA approval, or in response to community request, and exposure to clean-up costs. Other risks associated with not addressing the control of GMOs include potential adverse socio-cultural effects including effects on tangata whenua cultural values and economic well-being; environmental risks such as adverse effects on non-target species; invasiveness of GM plants and altered gene transfer; and economic losses to constituents from GMO contamination. These are significant risks.

While it is acknowledged that benefits could be achieved from GMOs, including increased productivity in both plants and animals, environmental management and pest control, and biopharming (the modification of organisms for pharmaceutical purposes), the degree of scientific uncertainty associated with the use of GMOs and potential scale of the risks involved currently outweigh the benefits, and these uses should be controlled by a precautionary approach consistent with that applied by Whangarei District, Far North District and Auckland Councils. At such time that greater scientific certainty and consensus is achieved about the environmental risks, and it can be demonstrated that the economic benefits would outweigh environmental and cultural effects, a Plan Change could be sought to enable release of GMOs into the CMA.

The do-nothing approach also 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.

In summary, the information behind the policies and methods promoted in provisions adopted by other Councils in the Northern Peninsula is based on international and national evidence and there is little risk associated with the proposed provisions in **Attachment 1** going ahead. They are consistent with a precautionary approach that prohibits activities in the face of uncertainty, particularly where the potential costs are significant and may be irreversible. The provisions are also adaptive. The discretionary activity status for field trials is part of the wider adaptive management approach taken as it is important the proposed GMO provisions do not totally

foreclose potential opportunities for the outdoor use of GMOs in the future, should new evidence demonstrate that a particular GMO is safe and provides a net benefit. The risk of not acting (not adopting the proposed policies and rules) is that the significant Resource Management Issue remains unresolved and the resources of the Northern Peninsula are not managed sustainably or consistently across the various local authorities.

### ***Ability to deliver a precautionary approach***

As above, a precautionary approach is considered important due to the inherent uncertainty and risk of significant environmental, economic, social and cultural effects posed by outdoor use of GMOs. While the HSNO Act makes reference to exercising precaution, this is not a requirement of the HSNO Act. There are also no national policy statements or environmental standards relating to GMOs. Therefore, with no other national guidance documents there are significant gaps in the national regulation of GMOs, in particular the absence of adequate liability provisions and applicant financial fitness requirements, the absence of a mandatory precautionary approach, and a lack of surety of outcome for local government and communities.

Conversely, the RMA provides a statutory framework for the regulation of activities on land and within the CMA that the Courts have ruled inherently contains a precautionary approach. In particular, under the meaning of effect, section 3(f) states that the term "effect" includes "any potential effect of low probability which has a high potential impact." The application of the precautionary approach is also replicated in the higher order planning documents such as policy 3 of the NZCPS and policy 6.1.2 of the proposed RPS<sup>15</sup> Given the scientific uncertainty that surrounds aspects of GMOs, where the risk is known but the probability of significant adverse effects is unknown, or if neither the nature of the risk nor the probability is known, then a precautionary approach as provided for under the RMA is an appropriate approach in guiding decision making.

By introducing provisions relating to the control of GMOs in the CMA, NRC will have a meaningful opportunity to exercise precaution, that is in line with the actions of other councils in the Northern Peninsula, and consistent with the provisions of the NZCPS and the proposed RPS provisions relating to GMOs.

Adopting a precautionary approach does not require the same level of control to be applied to all aspects of GMOs. 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, with the plan change process available to provide for the ability to include any future approvals of GMOs by the EPA. In the absence of this testing by the EPA, it would be very difficult for NRC to meet their requirements under section 30 of the RMA to obtain the information required to adequately inform policy, if this information was even available.

While EPA approval may provide specific information on a particular GMO release, this information will only inform the local impact that a GMO release could have, and not the wider implications of this elsewhere throughout the region as a whole. Therefore, general release of

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<sup>15</sup> This policy in the proposed RPS is subject to appeal as it relates to GMOs.

GMOs as a Discretionary Activity will still provide further financial burden to the Council in order to consider the more widespread impacts of allowing GMO releases, beyond the consideration of a resource consent application. Instead, a Prohibited Activity status means that an applicant will still have the ability to undertake a private plan change, but at this point the onus is on the applicant to provide information to confirm the wider impacts of allowing a particular GMO to be released, with the costs borne by the applicant rather than the Council (and ratepayers). A Prohibited Activity status will also ensure that community determined outcomes can be achieved by the Council, as with a Discretionary Activity an application may be called in by the Minister, removing the local decision-making opportunity.

A Prohibited Activity status is also considered appropriate as it still provides for an adaptive decision-making framework. The status does not automatically preclude the future inclusion of provisions relating to general GMO releases provided that the Council is satisfied the information available to it is sufficient to understand the impacts of allowing for the particular activity.

### **Appropriateness, Costs and Benefits of Policies, Rules and Other Methods**

Two reasonably practicable options have been identified for achieving the proposed Objectives. These are identified below and assessed in the table. These two options represent the management options that remain following the “screening of management options” undertaken previously.

**Management Option B:** Precautionary approach with adaptive management (preferred option): This option is consistent with the Whangarei District and Far North District Plan Changes and Auckland Council AUP (OP). The proposed provisions are as drafted in **Attachment 1**. This would seek to adopt a precautionary approach by:

- prohibiting the general release of a GMO in the CMA.
- making outdoor field trials of a GMO, and the use of viable genetically modified veterinary vaccines not of a specific dose and supervised by a veterinarian a discretionary activity, and to ensure that a resource consent granted for the outdoor field trials of a GMO is subject to conditions that ensures 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.

**Management Option D:** Discretionary Activity Consent for GMO release: This option would enable resource consent applications as a discretionary activity for general releases subject to an AEE assessment.

Policy/Rule/Method	Assessment under section 32(4)(a) of the Act		Assessment under section 32(3)(b) of the Act
	Benefits	Costs	Having regard to their efficiency and effectiveness, the appropriateness in achieving the objective
Option #1			
To adopt a precautionary approach by prohibiting the general release of a GMO in the CMA.	This approach specifies what outdoor GMO activities can be undertaken in the	The prescriptive nature of the approach results in prescriptive rules, thus foreclosure of potential	This approach will achieve the proposed Objectives as it will incorporate a prescriptive rule regime that



	<p><b>Northland Region /Coastal Area</b>, and <b>prohibits</b> those activities that are considered inconsistent with the proposed Objectives.</p> <p>The outdoor use of GMOs has the potential to cause adverse effects on the environment, economy, and social and cultural well-being. As the level of risk inherent in the release of a GMO is not tolerable to the community for economic, environmental and cultural reasons, this option adopts a precautionary approach by <b>prohibiting</b> the outdoor release of GMOs (other than vaccines). This will provide certainty to the community as to the nature of GMO activities that cannot be undertaken, and avoid the risk to the environment, economy and socio-cultural values from such activities.</p> <p>The approach requires outdoor field trials to gain consent as a <b>discretionary</b> activity enabling Council the ability to decline an activity where the potential risks are deemed to be too great, and to attach conditions to a consent approval to address liability and monitoring requirements.</p> <p>Community consultation has determined that a precautionary approach in the management of GMOs is warranted. The policy achieves this. If the community were to depend on the EPA approval process as currently is the case, there is no requirement for the EPA to be precautionary, and community</p>	<p>opportunities associated with certain GMO developments that could benefit the district or region. This cost is remedied through the ability to reverse a <b>prohibited</b> activity in a plan. A council or a GMO developer can initiate a plan change, if it were to become evident during the field trial stage, and in light of new information, that a particular GMO activity would be of net benefit to the <b>Northland Region/Coastal Area</b>. The lead time involved in gaining an EPA consent would be similar to that required to achieve a plan change. Processing a plan change would however result in costs to the Council and/or the applicant, and would be specific to a particular class or GMO variety.</p> <p>Administration costs to the Council to receive and process an application for a field trial as a discretionary activity and associated compliance monitoring costs. This cost is partially remedied as the application costs and costs of monitoring are fully recoverable from the applicant. General compliance costs are also generated by all other activities under a plan.</p>	<p>prohibits outdoor releases of GMOs in order to protect against potentially significant adverse effects where there is scientific uncertainty. This is appropriate as it recognises that the outdoor use of GMOs is a significant resource management issue to the Northland Region community, including tangata whenua, and ensures potential adverse effects will be addressed at the outset, and are appropriately avoided, remedied or mitigated.</p> <p>There are significant benefits to be gained by this policy, and the relatively minor opportunity costs incurred by prohibiting GMO releases can be largely remedied through the ability to initiate a plan change. The prescriptive rule regime provides certainty to the community, including Māori, and achieves both efficiency and effectiveness that is not achieved with the status quo.</p> <p>This approach is also effective as the direction it provides is very clear that general releases of GMOs are prohibited. It is also consistent with the approach adopted by other Councils in the Northland Region.</p> <p>If a particular GMO or group of GMOs demonstrates potential to provide net benefits then a plan change could make them subject to discretionary activity status. This approach is therefore efficient and effective in ensuring any potential future benefits of GMOs are provided for.</p>
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	preferences may not be achieved.		
To adopt a precautionary approach by making outdoor field trialing of a GMO, and the use of viable genetically modified veterinary vaccines not of a specific dose and supervised by a veterinarian a discretionary activity, and to ensure that a resource consent granted for the outdoor field trialing of a GMO is subject to conditions that ensures 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.	<p>Due to the weak liability and financial assurance arrangements under the HSNO Act, councils are exposed to meeting the costs of clean-up if the polluter does not pay. The Ministry of Primary Industries is only obliged to clean up illegal releases, not those approved by the EPA that have unexpected effects. Further, GMO contamination could have a potentially significant impact on returns to non-GM growers in the district or region and could affect other parts of the country as well.</p> <p>This approach requires the consent holder to be financially accountable for adverse effects to the extent possible, reducing risk to the community and environment, and provisions for potential clean-up costs to be met.</p> <p>The community has indicated a desire that a liability regime be implemented that requires those engaging in a GM release to pay compensation for any harm caused by an approved release, as this is not provided for under the HSNO Act.</p> <p>This policy is designed to avoid the costs for clean-up being met by the Council or its constituents, and greatly reduces the burden of proof required by Council to obtain compensation, as well as the time and costs involved in doing so.</p>	Some costs for the Council in respect to administering the bond, clean-up activities, and any remediation required.	<p>This approach is efficient and effective in achieving the proposed Objectives by ensuring that costs of damages associated with outdoor field trials or GM vaccines that have not been properly managed are recoverable.</p> <p>This approach also provides for medical applications involving the manufacture and use of non-viable GM products, and vaccines, where these are not supervised or controlled appropriately, as specified to be considered a permitted activity.</p> <p>The benefits of ensuring the consent holder is financially accountable for any adverse effects associated with a GMO activity far exceed the cost. This approach ensures that the environment is protected from adverse effects associated with outdoor field trials as it enables the Council to manage any potential effects through conditions, and is therefore efficient and effective in achieving the Objectives.</p> <p>Overall, this approach is appropriate to ensure that a suitable level of accountability can be achieved commensurate with the desired outcomes in relation to the issue.</p>
Option #2 – Enable GMO field releases as a discretionary activity	It is recognised that while GM techniques are expected to offer benefits	There is a cost to Council to monitor compliance with conditions. There is	Overall, this approach is not considered appropriate to achieve the proposed

<p>subject to AEE assessment</p>	<p>in many sectors, there are risks associated with their use. These risks could be substantial and certain consequences irreversible. This policy enables Council to apply more stringent measures than those required under the provisions of the HSNO Act, to manage potential risks.</p>	<p>an opportunity cost in forgoing the potential release of GMOs, however traditional non- GM techniques as well as new techniques (for example MAS) are currently capable of producing the same deliverables as GM varieties.</p> <p>There is also a potential cost should there be unforeseen damage caused by the GMO's in respect to administering, clean-up activities and any remediation required.</p>	<p>Objectives as the resource consent process does not provide sufficient ability for Council to fully understand the potential adverse effects of allowing GMO releases. Given that the effects may be irreversible or very difficult to remedy, Council needs to be sure that sufficient information is available to inform a GMO release.</p> <p>The scope of the resource consent process is such that only site-specific information is likely to be obtained, and the expense of further investigation will fall to Council (and the community). The consideration of outdoor GMO releases as a Discretionary Activity is also inconsistent with the approach being taken by other Councils in the Northland Region. Therefore, this approach is not considered to be either an efficient or effective way to achieve the outcomes sought.</p>
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### ***The Preferred Option***

**Management Option B is the preferred option.** The application of the precautionary approach to the use of GMOs in the CMA is consistent with the approach taken within the AUP (OP), PC18 and PC131 and promotes consistency in terms of the management of GMOs within the Northern Peninsula. It also appropriately responds to the scientific uncertainty associated with the outdoor release of GMOs in the CMA and the potential to cause significant adverse effects on the environment, economy, and social and cultural well-being.

## Genetically Modified Organisms (GMOs)

### B Definitions

Definitions have the same meaning in the singular and plural. Terms defined in the Resource Management Act 1991 are not repeated.

<u>Genetically Modified Organism (GMO)</u>	<p><u>Unless expressly provided otherwise by regulations, any organism in which any of the genes or other genetic material:</u></p> <p><u>(a) have been modified by in vitro techniques; or</u></p> <p><u>(b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.</u></p> <p><u>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 non-viable genetically modified ingredients, such as processed foods.</u></p>
<u>Genetically Modified Organism Field Trials (tests)</u>	<p><u>The carrying on of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.</u></p>
<u>Genetically modified organism release</u>	<p><u>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.</u></p> <p><u>A Release may be without conditions (s34, HSNO Act) or subject to conditions set out s38A of the HSNO Act.</u></p>
<u>Genetically Modified Veterinary Vaccine</u>	<p><u>A veterinary vaccine that is a genetically modified organism as defined in this Plan.</u></p>
<u>Genetically modified medical applications</u>	<p><u>The manufacture, trialling or use of viable and/or non-viable genetically modified organisms for medical purposes recognised 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.</u></p>
<u>Viable Genetically Modified Veterinary Vaccine</u>	<p><u>means a genetically modified veterinary vaccine that could survive or replicate in the environment or be transmitted from the inoculated recipient.</u></p>

## C Rules

### *Legal effect of rules*

Under Section 86B of the Resource Management Act 1991 (RMA), all rules have immediate legal effect from notification of the Proposed Regional Plan.

#### Interpretation of rules

The rules have the force and effect of regulations in statute, which means they are legally binding. They determine whether the proposed activity can be undertaken without a resource consent (permitted activities) or whether it requires resource consent. The rules may also make some activities prohibited, which means a resource consent application cannot be made for that activity. An activity needs to comply with all relevant rules in the Regional Plan, unless the rule itself states otherwise.

If an activity is covered by more than one rule, then the more specific rule for the relevant activity, area or resource applies. This does not apply where a proposal includes a number of activities which trigger separate specific rules. In that case, all rules are considered when assessing the proposal.

Unless the rule states otherwise, all rules that regulate discharges (Section 15, RMA) apply to the whole region including the coastal marine area. For example the rules relating to the discharge of GMOs within the CMA are specifically controlled by Rules in C.1.8.

Rules in section E 'Catchments' take precedence over other rules (whether more or less restrictive). With the exception of the rules contained within Chapter C.x.x in relation to GMOs.

To make it easier to apply for resource consents and to reduce the number of separate resource consents required to undertake any particular activity, this Plan has, where practicable, adopted the concept of 'rule bundling'. Rule bundling is used in this Plan to combine several permissions which may be required under Section 9 and Sections 13 to 15 of the RMA into one rule. One application for resource consent can therefore be made under the bundled rule.

From time to time, central government makes regulations. These must be read in conjunction with the plan provisions because the regulations are generally not repeated in the plan and in most cases the regulations prevail over rules in the plan.

An exception is the application of a precautionary approach to the use, storage, cultivation, harvesting, processing or transportation of genetically modified organisms in Northland has been identified by the community as a priority, requiring additional control at a regional and district level. Within the Northland region this means that field trialling of a genetically modified organism within the CMA (with prior approval of the Environmental Protection Authority (EPA)) requires consent from the Regional Council and the release of a genetically modified organism is prohibited (and cannot be applied for). 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.

District Plan provisions are also applicable and control and prohibit outdoor trials and release of genetically modified organisms on land (outside the CMA).

### **C.1 Coastal activities**

This is an index and guide to the rules in this section. It does not form part of the Plan. Refer to specified rules for detailed requirements.

## General structures

Rule	Page
C.1.1.1 'Existing Structures-permitted activity'	29
...	

## GMOs in the CMA (including discharges subject to section 15)

Rule	Page
<u>C.1.8.1 General – permitted activity</u>	xx
<u>C.1.8.2 GMO Field Trials- discretionary activity</u>	xx
<u>C.1.8.3 GMO Veterinary Vaccines- permitted activity</u>	xx
<u>C.1.8.4 Viable GMO Veterinary Vaccines - discretionary activity</u>	xx
<u>C.1.8.5 GMO releases – prohibited activity</u>	xx

### C.1.1 General structures

#### C.1.1.1

#### Existing structures – permitted activity

The following structures in the coastal marine area that:

...

### C.1.8 GMOs in the CMA (including discharges subject to section 15)

#### C.1.8.1

#### General – permitted activity

Research and trials within the contained laboratories involving the use of genetically modified organisms, medical applications involving the use of viable and/or no-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.

#### The RMA activities this rule covers:

- Erection or placement or alteration of structures (s12(1)(b)).
- Damage, destruction or disturbance of the foreshore or seabed (s12(1)(c), (e) and (g)).
- Deposition onto the foreshore or seabed (s12(1)(d)).
- Introduce or plant any exotic or introduced plant in, on, or under the foreshore or seabed s12(1)(f)
- Occupation of space in the common marine and coastal area (s12(2)(a)).
- Activities in the coastal marine area (s12(3)).
- Discharge of contaminants (s15(1)(a)).

#### C.1.8.2

## GMO Field Trials- discretionary activity

Genetically modified organism field trials within the coastal marine area (including any structure intended to house, or otherwise contain, plants and animals which are associated with the conducting of genetically modified organism field trials) are a discretionary activity provided:

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

Note: 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;

The following information shall be provided in support of the application:

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

## Notification:

Any application for resource consent under rule C.1.8.4 must be publicly notified:

The RMA activities this rule covers:

- Erection or placement or alteration of structures (s12(1)(b)).
- Damage, destruction or disturbance of the foreshore or seabed (s12(1)(c), (e) and (g)).
- Deposition onto the foreshore or seabed (s12(1)(d)).
- Introduce or plant any exotic or introduced plant in, on, or under the foreshore or seabed s12(1)(f)
- Occupation of space in the common marine and coastal area (s12(2)(a)).
- Activities in the coastal marine area (s12(3)).
- Discharge of contaminants (s15(1)(a)).

### **C.1.8.3**

#### **GMO Veterinary Vaccines- permitted activity**

The use of any viable (and non-viable) genetically modified veterinary vaccine of a specific dose supervised by a veterinarian are a permitted activity.

The RMA activities this rule covers:

- Erection or placement or alteration of structures (s12(1)(b)).
- Damage, destruction or disturbance of the foreshore or seabed (s12(1)(c), (e) and (g)).
- Deposition onto the foreshore or seabed (s12(1)(d)).
- Introduce or plant any exotic or introduced plant in, on, or under the foreshore or seabed s12(1)(f)
- Occupation of space in the common marine and coastal area (s12(2)(a)).
- Activities in the coastal marine area (s12(3)).
- Discharge of contaminants (s15(1)(a)).

### **C.1.8.4**

#### **Viable GMO Veterinary Vaccines - discretionary activity**

The use of any viable genetically modified veterinary vaccine not otherwise provided for is a discretionary activity provided:

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

The following information shall be provided in support of the application:

- Evidence of approval from the EPA for the specific GMO for which consent is sought. The duration of any consent granted will be aligned with EPA approval terms.



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

#### **Notification:**

Any application for resource consent under rule C.1.8.4 must be publicly notified.

#### **The RMA activities this rule covers:**

- Erection or placement or alteration of structures (s12(1)(b)).
- Damage, destruction or disturbance of the foreshore or seabed (s12(1)(c), (e) and (g)).
- Deposition onto the foreshore or seabed (s12(1)(d)).
- Introduce or plant any exotic or introduced plant in, on, or under the foreshore or seabed s12(1)(f)
- Occupation of space in the common marine and coastal area (s12(2)(a)).
- Activities in the coastal marine area (s12(3)).
- Discharge of contaminants (s15(1)(a)).

#### **C.1.8.5**

##### **GMO releases – prohibited activity**

Genetically modified organism releases – both food-related and non-food related 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

#### **The RMA activities this rule covers:**

- Erection or placement or alteration of structures (s12(1)(b)).
- Damage, destruction or disturbance of the foreshore or seabed (s12(1)(c), (e) and (g)).
- Deposition onto the foreshore or seabed (s12(1)(d)).
- Introduce or plant any exotic or introduced plant in, on, or under the foreshore or seabed s12(1)(f)
- Occupation of space in the common marine and coastal area (s12(2)(a)).
- Activities in the coastal marine area (s12(3)).
- Discharge of contaminants (s15(1)(a)).

## **D Policies**

### ***D.7 Genetically modified organisms (GMOs)***

#### **D.7.1 Precautionary principle**

To adopt a precautionary approach by prohibiting outdoor *genetically modified organism release* and by making *genetically modified organism field trials* and the use of viable genetically modified veterinarian vaccines not of a specific dose and supervised by a veterinarian a discretionary activity.

#### **D.7.2 Medicinal and veterinary**

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.

#### **D.7.3 Financial Accountability**

To ensure that a resource consent granted for the *genetically modified organism field trials* of a *genetically modified organism* 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.

#### **D.7.4. Risk Avoidance**

To ensure that a resource consent granted for *genetically modified organism field trials* are subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment, the mauri of flora and fauna, and the relationship of mana whenua with flora and fauna from the use, storage, cultivation, harvesting, processing or transportation of a *genetically modified organism*.

#### **D.7.5. Monitoring Costs**

To ensure that a resource consent granted for the *genetically modified organism field trials* is subject to a condition requiring that monitoring costs are met by the consent holder.

#### **D.7.6. Liability**

To require consent holders for a *genetically modified organism* 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.

#### **D.7.7. Adaptive Approach**

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

#### **D.7.8 Mitigation Requirements**

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.

## **F Objective**

### **F.0.1**

#### **Objective**

Manage the use, development, and protection of Northland's natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while:

- 1) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations, and
- 2) safeguarding the life-supporting capacity of air, water, soil, and ecosystems, and
- 3) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

### **F.0.2.1**

#### **Objective**

The coastal marine area is protected from potential adverse effects associated with the use, occupation, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.

### **F.0.2.2**

#### **Objective**

The sustainable management of the natural and physical resources of the coastal marine area with respect to the use of GMOs, a significant resource management issue identified by the community.