Support Statement: Proposed Plan Change 18 – Genetically Modified Organisms (GMOs)

Date: 28 May 2016

To: Far North District Council / Whangarei District Council
   Attn: District Plan Department
   By email: taya.baxter@wdc.govt.nz

PRESENTED BY:

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GMOs – SYMPTOMATIC OF A LARGER SYSTEMIC THREAT TO OUR DEMOCRATIC INSTITUTIONS

1. At the heart of the Local Government Act 2002\(^1\) is our communities’ right to retain a decisive say in significant local matters that directly affect us. This is especially so with environmental and human health – including local food security\(^2\) (because if you don’t have your health, nothing else – economic wellbeing or otherwise - matters much, if at all).

1.1. As a vital part of New Zealand’s democratic institutions,\(^3\) it is critical that councils and citizens work together to actively and aggressively protect this right. This is particularly important if we’re to mitigate the real risk of being dictated to by ‘out of touch’, insensitive Government bureaucrats in Wellington, often with questionable agendas which are increasingly driven by personal and corporate profit-making greed. Our ability to accurately discern beneficial vs harmful agendas driven ‘from a distance’ also becomes more difficult in an Age of unprecedented converging climate, environmental, social, cultural, political and economic “crises”.\(^4\) Therefore, as urged by many notable experts,\(^5\) we must be extremely vigilant regarding emerging threats to our local decision-making authority.

1.2. To provide some context to recommendations in my original interventions,\(^6\) I highlight the following developments which magnify the compelling, urgent case for the highest possible standard of council GMO regulation. In other words, and consistent with a precautionary approach,\(^7\) I support:

   a. GMO release into our environment (including field trials) as a prohibited activity;\(^8\) and
   b. all other GMO activities (e.g. trials in containment) as a discretionary activity under only the most exceptional and compelling of circumstances, and with the most stringent consent requirements attached.
Inherent Risks of Concentrated Power: GMOs, Seeds, Pesticides and Weather Modification

2. My first point concerns the dangers of consolidated power in different domains in society (conversely, this may be expressed as a missed opportunity to increase democratization of different domains in society). The World Economic Forum Global Risks Report 2016 explains:

“…technologies are fusing in increasingly unpredictable ways, and potential nefarious uses are not always immediately apparent. Even if they were, innovation quickly outpaces the capacity for regulatory oversight. Breakthroughs in a range of technologies – from robotics to nanotechnology, artificial intelligence, genome sequencing, human advancements or meta materials – could destabilize security and shift balances of power.”

“Social stability is being challenged by multiple and profound transformations that affect most countries worldwide. These transformations result from fast-paced technological progress, globalization, wealth and income concentration…and a changing climate.”

“The adaptation of agriculture is critical to reduce the risk climate change poses to food systems. A number of strategies and technologies have emerged to increase resiliency… however, such approaches are not without their challenges…Market systems have a critical role to play too, especially through products such as index-based weather insurance or information systems…[E]nabling policies for…open trade arrangements and price stabilization can help address volatility in the system.” (My emphasis)

2.1. In this regard, it should be noted that there is a spate of mergers in the pipes between major agro-chemical and GMO companies which are raising alarms about the ‘reshaping’ of the crop and seed industry. More specifically, watchdogs and regulators are uneasy about the creation of mega-corporations with dangerously high levels of control over nearly everything we eat, ushering in a new era of GMO crops soaked in toxic pesticides harmful to environmental and human health.

2.2. The obvious harmful economic effect of reduced competition converging across and in these sectors is that such companies “are able to bend the market to their will” thereby corrupting the “critical role” that an otherwise even-handed market might play in terms of food security in a climate crisis adapting world. The additional point of interest for our councils concerning GMOs should be that a concentration of corporate power is now days often followed by an intensified audaciousness of industry behemoths to exert pressure on State policy makers and legislators to change regulatory regimes to suit their profit-making agendas at the expense of human rights and the highest interests of wider society.

False Climate Crisis ‘Fixes’ – Geoengineering and GMOs
2.3. Sector and industry consolidation, however, doesn’t just end with GMO pesticides and agriculture. What we’re now observing globally is an alarming infiltration of these sectors by geoengineering\(^\text{19}\) agendas, and with it the emerging risk of market power concentrating among an ever-decreasing handful of companies that specialize in weather modification and GMO pesticide and agriculture production. These companies peddle their products as a (relatively) ‘quick fix’ solution to escalating climate crisis (for example, offering genetically modified crop seeds which are “abiotic-stress resistant”, i.e. resistant to drought, extreme temperature fluctuations, flooding, accumulated heavy metals in soils - like aluminium – and so on).\(^\text{20}\)

2.4. Now, designer GMO crops tailored to meet the anticipated needs of a more chaotic climate future might be expected as nothing more than a typical profit-driven capitalist response to fill the need to adapt to impending disaster (especially following last year’s urgent high level debates at the Climate Change COP21 conference in Paris about the urgent need to climate crisis mitigation and adaption measures). And, at first glance, you’d be right. However, on more thorough examination, a more insidious agenda begins to emerge.

2.5. For example: unlike drought, temperature extremes and flooding, the question has been asked, ‘why would GMO companies like Monsanto patent crop seeds to thrive in soils loaded with heavy metals?’

2.6. The answer is weather modification, which also happens to be aggressively promoted as a key component of climate crisis mitigation and adaptation.\(^\text{21}\) As it turns out, aluminium and other heavy metals are used in atmospheric Solar Radiation Management, cloud seeding and other weather modification activities.\(^\text{22}\) With an increased use of these technologies, there is a documented notable rise in the levels of these associated heavy metals in the soils of certain parts of the world (presumably, for example, contained in precipitation which falls to the ground post-deployment).\(^\text{23}\) And particular heavy metals like aluminium are known to have harmful environmental and human health effects.

2.7. So we have companies, like Monsanto, who are patenting crop seeds specifically designed to withstand these toxic substances which they fully expect will continue to be used in our environment. Now, this may just look like another opportunist business move which one might expect from any profit-driven corporation, but for the fact that in 2013 Monsanto brought Climate Corporation, a climate data company and weather insurance underwriter.\(^\text{24}\) This raises multiple questions concerning conflicts of interests and insider trading knowledge of GMO-producing companies like Monsanto,\(^\text{25}\) and therefore makes such companies and their agendas inherently untrustworthy. No longer can they be considered merely as capitalists who just happen to be responding to an obvious “disaster need”. On the contrary, growing evidence suggests they are in fact (to quote Naomi Klein\(^\text{26}\)) “Disaster Capitalists” who are not just intentionally and knowingly exploiting but actively manipulating the neo-liberal (so-called) “free” market at the expense of we, the wider civil society (the 99%) and the Life-support systems of our Planet (and, based on an ever-growing record of recent and historical revelations about insane pathological corporate behaviours of “system rigging”, it seems quite reasonable to assume that Monsanto is simply the tip of the iceberg).
2.8. So, to bring us back to my point, it’s this: while District Councils in New Zealand have practically zero influence over corporate merger manoeuvring and other insidious interference of the so-called “free” market, we must do everything in our power to maintain the highest domestic regulatory control.

2.9. I would urge councils to heed (a) the warnings of the World Economic Forum and scientific experts. As citizens’ awareness of and concerns about the issues are increasing, the imperative must be to establish a ‘pre-emptive regulatory strike’ to ensure as far as possible that such technology is decisively kept from our shores lest all the gains New Zealand achieves in protecting what we value is undone.

2.10. And for those who have been paying attention lately, central Government is becoming less and less reliable in that regard (see below at para 4 below), making protections at the local and community level even more important.

Trans Pacific Partnership Agreement

3. Secondly, the dangers of a concentration of corporate power that (a) perverts free choice in the agro-pesticide marketplace, (b) leads to undue political influence and (c) exposes citizens to GMO and geoengineering harms are amplified by provisions in the highly controversial TPPA:

“Companies like Monsanto and Syngenta depend on strong patenting regimes to control the market for genetically engineered crops... The [Intellectual Property] chapter in the TPPA requires all 12 TPP countries to join a number of global intellectual property treaties. One of those treaties is the International Convention for the Protection of New Varieties of Plants 1991 (UPOV 91). That agreement updated the 1978 treaty in several important ways that emphasize the rights of seed companies over farmers’ rights... [by requiring] IP protection to be provided for all plant varieties... for 20 to 25 years; and it stops farmers and breeders from exchanging protected seeds, a common practice of farmers in many countries around the world.”

… “The TPP also requires countries... to join the Patent Cooperation Treaty (PCT) and the Budapest Treaty... which would make it easier to apply for a patent, according to the Public Citizen/Third World Network analysis.” (My emphasis).

3.1. Perhaps this is why the United Nations Special Rapporteur on the Right to Food has been highly critical of trade agreements that require the implementation of the UPOV 91, urging instead that countries “undertake a Human Rights Assessment (including the Right to Food) prior to signing any trade agreements.”

3.2. This is simply another illustration of oligarchic pathological greed, arrogantly executed through an attempted corporate coup d'état with the TPPA as its Trojan horse delivery mechanism for entrenching excessive corporate protections to the clear detriment of We, The People. It’s high time that aiding and abetting corporate externalization of production...
costs onto the ratepaying and taxpaying public (i.e. soft regulations with increased risk of environmental, social, cultural and economic harm associated with GMOs) should be seen for what it is: an unjustified and immoral form of corporate subsidy and welfare, and correspondingly an unacceptably high burden on We, The People.

Mistrust in Government Agencies

4. Third, fuelled by the Ministry of Foreign Affairs and Trade’s handling of the highly controversial TPP roadshow\(^32\) and other examples\(^33\) there is an increasing public cynicism and mistrust in our Government and its Agencies to be transparent, accountable, and to protect what we value.\(^34\)

Resource Legislation Amendment Bill 2015

4.1. Specifically relevant to GMO regulation, the Resource Legislation Amendment Bill 2015 has also led to speculation about Government agendas to limit council decision-making power. The Bill’s stated intention is to address “duplication between [the Resource Management Act 1991] and the hazardous substances management regime and other Acts.”\(^35\) Put differently, the Bill seeks (among other things) to “remove the explicit function of regional councils and territorial authorities to manage hazardous substances.”\(^36\)

4.2. Again, the above compounding situations would seem to make a ‘belts and braces’ approach to ensure compliance with the wishes of locally affected citizens, and to protect local decision-making, very much justified.

LEGAL RISKS

5. Peoples’ sensitivity to the inherent dangers of GMOs continues to steadily increase, energized no doubt by years of compelling corroborating evidence from all around the globe of GMO’s harmful effects. More importantly, however, while some propagandists originally ridiculed GMO objections as uninformed, abstract emotional responses by civil society, there are now very tangible legal implications for all responsible decision-makers.

5.1. An illustrative example is the proceedings\(^37\) which an international collective of environmental and social justice groups will be filing against Monsanto with the Hague in October this year.\(^38\) The proceedings will allege Monsanto’s crimes against humanity and the environment, more specifically “human and environmental damage caused by its products” through “a strategy of systemic concealment: by lobbying regulatory agencies and governments, by resorting to lying and corruption, by financing fraudulent scientific studies, by pressuring independent scientists, and by manipulating the media”.

5.2. Aside from their inherent untrustworthiness, this indicates that companies have failed to secure the necessary threshold of social licence to expose civil society to GMOs (and effectively use us as experimental guinea pigs). The increased willingness for campaigners at both local and international level to escalate their concerns legally to protect people and communities from the inherent dangers of GMOs is an important shift in the wider political
landscape that councils and all decision-makers must be mindful of.

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Section 3 of the LGA states, “The purpose of this Act is to provide for democratic and effective local government that recognises the diversity of New Zealand communities; and, to that end, this Act... (b) provides a framework and powers for local authorities to decide which activities they undertake and the manner in which they will undertake them; and (c) promotes the accountability of local authorities to their communities; and (d) provides for local authorities to play a broad role in meeting the current and future needs of their communities for good-quality local infrastructure, local public services, and performance of regulatory functions.”

See “The transformative potential of the right to food” - Report to the United Nations General Assembly of the Special Rapporteur on the right to food, Olivier De Schutter (24 January 2014) at https://documents-dds-
Rapporteur Schutter emphasizes that “democratiz[ing] food security policies” (p14 of the Report), ensuring “adequate nutrition” and protection of communities’ rights “to choose which food systems to depend on and how to reshape those systems” is necessary for “the full realization of the right to food” (p29 of the Report).

3 Remembering, however, that Aotearoa has our own particular brand of democracy, i.e. tempered by the rights guaranteed to tangata whenua, and the obligations of the Crown to tangata whenua, under Te Tiriti o Waitangi 1840.

4 See Attachment: World Economic Forum (WEF) Global Risks Report (GRR) 2016 – Figure 1, downloadable from https://www.weforum.org/reports/the-global-risks-report-2016.

5 See “Dame Anne Salmond: A warning to New Zealanders keep hold of democracy” (13 July 2013), which warns of the declining state of New Zealand’s democratic protections – at http://m.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10897497. See also commentary by the WEF (in their last two year’s GRRs regarding the failure of national governance, particularly with respect to technologies “which offer tremendous potential for solving the world’s most pressing problems” but “[a]t the same time, they present hard-to-foresee risks”. This therefore necessitates oversight mechanisms which “need to more effectively balance likely benefits and commercial demands with a deeper consideration of ethical questions and medium to long-term risks – ranging from economic to environmental and societal.”: ref WEF GRR 2015, p9, at http://www3.weforum.org/docs/WEF_Global_Risks_2015_Report15.pdf. Ref also WEF GRR 2016, at n4.

6 Dated 3 September 2014.


8 See my original intervention, Point 12.

9 Aside from the obvious risks associated with concentrated political power in the hands of the few (refer for example to http://myemail.constantcontact.com/Presidents-Warn-of-the-Dangers-of-Concentrated-Power--of-Abandoning-God-.html?soid=1108762609255&aid=YPPyi64rGFk and the documentary “BREXZIT” concerning the European Union, at https://www.youtube.com/watch?v=UTMxfAxfQ0), see also the risks associated with the media (at http://www.mediareform.org.uk/about) and the banking sector (e.g. http://www.politico.eu/article/politico-finance-caucus-favors-breaking-up-banking-giants-big-banks-recession-crisis-bailout-europe/).

10 WEF GRR 2016, n 4.


13 WEF GRR 2016, p52, at n 4.

14 E.g. second largest drugs and chemicals company in the world, Bayer, is moving to buy the world’s biggest seed company Monsanto, a takeover bid that has antitrust regulators “leery of a huge new titan in the agricultural business”: “Bayer offers to buy Monsanto in global agrochemicals shakeout” (19 May 2016) at http://www.reuters.com/article/us-monsanto-m-a-bayer-idUSKCN0YA054; the proposed merger between Dow and DuPont, and China’s National Chemical Corporation’s acquisition of Syngenta A.G.: “Bayer Offers to Buy
20 See for example, consumer healthy food advocate Jeffrey M Smith’s conference address (17-19 August 2012) at https://www.youtube.com/watch?v=P5B62cbwP_E.
22 This is perhaps why United States National Farmers Union has asked its Department of Justice to “thoughtfully consider and apply critical review to any pending and future deals...that would break down marketplace competition in an already heavily concentrated agriculture sector.”: “Bayer Offers to Buy Monsanto for $62 Billion” at n 14.
24 See Shasta County (California, United States) Board of Supervisors’ hearing examining the evidence of environmental contamination from climate engineering programs (15 July 2014), at https://www.youtube.com/watch?v=O4WhYKP83zo; and documentary "Why in the World are They Spraying?” (2012), at https://www.youtube.com/watch?v=TGsi7JaV6gs.
26 Cloud-seeding and weather modification technology has been occurring for decades and is continuing around the planet – the most well-known probably being China’s operational national Weather Modification Office which has been conducting experiments since as early as 1958: See “Weather Engineering in China” (25 March 2008), at https://www.technologyreview.com/s/409794/weather-engineering-in-china/; also “China Leads the World in Weather Modification” (20 September 2012), at http://canadafreepress.com/article/china-leads-the-world-in-weather-modification. There are also numerous weather modification companies around the world who now openly advertise their geoengineering services – including publicly listing their past and current cloud seeding and other projects around the planet. For a list of companies, see http://www.geoengineeringwatch.org/list-of-companies-engaged-in-weather-modification/.
27 Often Government agencies are dismissive of the data which shows these disturbing changes in our soils are occurring, or they ridicule and demonize whistleblowers who attempt to bring such data to the public’s attention. But, as with the many other corporate-related scandals exposed in the past, the growing data is becoming more difficult for Governments to ignore or plead plausible deniability about. Ref Shasta County (California, United States) Board of Supervisors’ hearing examining the evidence of environmental contamination from climate engineering programs, at n20; and documentary “Why in the World are They Spraying?”, at n20.
29 Note also the link between agriculture, stock market trading on investments, the climate and weather modification: “Let’s say I had $5 million worth of crop, but I can do derivatives that are worth double that amount, and I can then control the effects to where I collect on the insurance that’s worth 10 million, as opposed to selling the crop for five million. Yes, I could definitely profit from that.”: see documentary “Why in the World are They Spraying?”, at n20.

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27 This Forum cautioned in 2015 that one of the global risks was “Massive and widespread misuse of technologies (e.g. 3D printing, artificial intelligence, geoeengineering, synthetic biology, etc.)”: see http://www3.weforum.org/docs/WEF_Global_Risks_2015_Report15.pdf, p54.

28 Companies like DuPont and Dow were among (depending on the reports) 500-600+ “corporate advisers” who were allowed access to the TPP text when the public and State politicians were denied access during TPP negotiations: e.g. see “TPP Corporate Insiders” http://www.flushthetpp.org/tpp-corporate-insiders/; Also, “The chief agricultural negotiator for the US [was] the former Monsanto lobbyist, Islam Siddique.”: see “Monsanto, the TPP and Global Food Dominance” (28 November 2013) at http://www.truthdig.com/report/page2/monsanto_the_tpp_and_global_food_dominance_20131128.

29 According to an analysis by Public Citizen and Third World Network.

30 “TPP Fine Print: Biotech Seed Companies Win Again” (16 November 2015), http://www.iatp.org/blog/201511/tpp-fine-print-biotech-seed-companies-win-again. As at publication date, TPP countries New Zealand, Brunei, Malaysia and Mexico were not yet members of the UPOV 91. The full name for the Budapest Treaty is the “Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure”. As at publication date, Malaysia, New Zealand and Vietnam have not joined the Budapest Treaty.

31 “TPP Fine Print: Biotech Seed Companies Win Again”, at n30.

32 The Roadshow, and the associated Select Committee investigation into the TPP, were both criticized by many as a sham. For example, see “Clowns call TPPA Roadshow a Joke” (7 March 2016), at http://www.scoop.co.nz/stories/CU1603/S00140/clowns-call-tppa-roadshow-a-joke.htm.

33 E.g. New Zealand Petroleum and Minerals’ active enabling of petroleum exploration despite local opposition and international warnings that we should cease new fossil fuel production to avert the worst effects of climate crisis – for example, see “Crown going ahead with offering offshore blocks” (26 March 2016) at http://gisborneherald.co.nz/localnews/2239727-135/crown-going-ahead-with-offering-offshore; the Ministry for Primary Industries’ failure to prosecute fishing vessel skippers even when the Ministry had knowledge of systemic illegal fish dumping: for example, see “Labour calls for independent inquiry into illegal fish dump” (19 May 2016), at http://pacific.scoop.co.nz/2016/05/labour-calls-for-independent-inquiry-into-illegal-fish-dump/; and more generally the drop in NZ’s Transparency International Corruption Perceptions Index ranking - see “New Zealand drops again in the 2015 Corruption Perceptions Index” (27 January 2016), at http://www.transparency.org.nz/2016/Corruption-Perceptions-Index-2015-details.

34 The WEF GRR 2016 also highlights this point: “The perceived inability of governments to respond to major global challenges - from climate change and internet governance to food security - is eroding confidence in authorities.” (p41 at n 4).


36 See the Bill’s explanatory note at n35.

37 Announced at the COP21 climate change conference December 2015, Paris.

INTRODUCTION

1. Please find below my interventions regarding the Ministry for the Environment’s (MfE’s) Freshwater Consultation proposals as contained in its consultation document (the Consultation Document).

UNDERLYING POLICY DRIVER – WATER AS NECESSARY FOR HUMAN LIFE

2. Despite some balancing statements elsewhere in the Consultation Document (e.g. p8), the proposals give an impression that the main imperative driving the proposals is economic.¹

2.1. This is perhaps understandable with GDP (Gross Domestic Product) as the primary tool by which New Zealand measures “progress”.² However, I would suggest that policy makers’ starting point and top priority should be to fully recognize the environmental protection and associated human rights imperatives.³ In other words, water is required for human life: citizens’ require adequate access to safe, clean water for personal consumption, sanitation and food security as a human right.⁴

2.2. The imperative for sustaining life is mentioned on p6. However, it’s relegated to the end of the last paragraph under this section. Page 11 also refers to the priority of safeguarding the “life-supporting capacity” of water, but as a delegated responsibility of councils (as opposed to central Government). Page 32 mentions “The provision of clean, safe drinking water is a fundamental requirement for human health and a right of all New Zealanders”, but under the heading of clean, safe drinking water for “marae and papakainga”. This human right should be protected for
Māori, but also for the vulnerable (e.g. children, those with health issues and our elderly) and for everyone.

2.3. It’s a subtle yet important calibration in the policy message that must be made to engender public confidence: Although the undoubtedly related, the superior environmental and human rights values regarding water must be protected first and foremost, before economic considerations; and this must be a top priority for both central and local Government so that message is compelling and consistent.

**IWI AND HAPŪ RIGHTS AND INTERESTS IN FRESH WATER**

**Te Tiriti o Waitangi**

3. Page 6 of the Consultation Document states as one of the Government’s long-term visions for fresh water, “Our use of fresh water respects iwi/hapū values and honours the Treaty of Waitangi (Te Tiriti o Waitangi)”.

3.1. This statement appears to conflate the two separate “Te Tiriti” and “Treaty” instruments. When referencing its “Tiriti” or “Treaty” obligations, or when encouraging others to honour “Te Tiriti” or “the Treaty”, the Crown needs to be clear which version of that instrument it’s referencing. To do otherwise is to perpetuate confusion in both the public and private sectors of society.

**Iwi participation**

4. The Consultation Document states on p27 that “The Government’s position is that no-one owns fresh water”. This is an appropriate position consistent with water as a resource of the collective “commons” necessary for all environmental and human life. It follows that fresh water allocation must:

a. Ensure Human rights-based agendas take precedence over profit-making agendas; and

b. Be preceded by obtaining the fully informed consent of those citizens who have human rights and interests in relation to the water at issue - with greater weight given to those living locally and who will be more directly affected.

4.2. Furthermore, this basic framework must ensure implementation of hapū and iwi rights, interests and responsibilities as guaranteed by Te Tiriti and as elaborated by Articles 19, 25, 28, 29 and 32 of the United Nations
Declaration on the Rights of Indigenous Peoples\(^5\) (UNDRIP) – particularly in relation to obtaining tangata whenua free, prior and informed consent.

4.3. In this regard, I support the Government’s proposal to improve the freshwater management system to “recognize and provide for iwi and hapū rights and interests”.\(^6\) However, despite the fact that Te Tiriti gave the Crown certain “governing powers”,\(^7\) the Waitangi Tribunal also cautioned that in determining complex matters (like water allocation) the Government ought not to balance Māori Te Tiriti rights “out of existence”.\(^8\) This is also consistent with Article 46 of the UNDRIP which states among other things that:

“2. ... The exercise of the rights set forth in this Declaration shall be subject only to such limitations as are determined by law and in accordance with international human rights obligations. Any such limitations shall be non-discriminatory and strictly necessary solely for the purpose of securing due recognition and respect for the rights and freedoms of others and for meeting the just and most compelling requirements of a democratic society.”

4.4. The Government must ensure that this proper context is provided in all its public information, including on MfE’s website.

Iwi and Councils

5. I support the proposal to provide for ‘mana whakahono a rohe’ (p29 of the Consultation Document), including the protection of existing Treaty settlement arrangements. However, it would be helpful if more information was provided about the merits of a ‘mana whakahono a rohe’ mechanism as compared with “iwi participation arrangements”\(^9\) (aside from the obvious distinction that the former is initiated by iwi).

Water Conservation Orders

6. Page 30 of the Consultation Document proposes Resource Management Act amendments to “require water conservation order (WCO) applications to provide evidence of consultation with relevant iwi...”. While this is supported as a necessary starting point (bearing in mind that the standard regarding indigenous peoples rights is the higher standard of free, prior and informed consent), the Government needs to ensure that the evidence is of true consultation to internationally recognized standards. All too often, Māori experience is of applicants claiming to have consulted us when in fact all they’ve done is email us with little or no follow up, or attend engagement meetings with a closed mind.
Ongoing Dialogue

7. I support the ongoing Crown dialogue with iwi (e.g. via the National Iwi Chairs Forum Iwi Leaders Group) on outstanding matters that need further development and resolution.

FRESH WATER AND OUR ENVIRONMENT – SIGNIFICANT INFRASTRUCTURE

8. Page 15 of the Consultation Document proposes the provision of further evidence regarding significant infrastructure like hydro-electricity generation dams. This concerns councils’ ability under the National Policy Statement for Freshwater Management (NPS-FM) to “set freshwater objectives below a national bottom line” if certain conditions are met.10 Quite rightly, this has caused concern for some hapū and iwi.

8.1. I support this proposal, but would emphasize that:

a. National freshwater management “bottom lines” progressively lose their credibility the more exceptions are employed. Put another way, with each exception the term becomes increasingly meaningless as a ‘bottom line’ per se, and becomes more of a guideline. MfE might wish to review their “bottom line” terminology, because we should be as honest as possible with our language.

b. There needs to be more transparent, comprehensive and true accounting of the externalized environmental, social, cultural and economic costs of “significant infrastructure” production. This is critical if people are to make fully informed consumer choices (e.g. between a company that produces electricity with a hydro dam, using coal, or using wind).

c. In assessing exceptions, the Government should give more weight to available alternatives to the proposed ‘significant infrastructure’. Climate crisis compels us to think harder and be more innovative about mitigating and adapting to the challenges we face. The Government also needs to consider what greater contribution it could be making to alleviating risks to fresh water quality and availability – for example:

i. Speeding up construction of a national infrastructure that supports more diverse renewable and free energy production and uptake by a greater number of citizens;
ii. Addressing the tragic waste of potable water being flushed down toilets when grey water could just as well be used – or people could be supported to transition to composting toilets; and/or

iii. Incentivising the building of water tanks to passively collect rainwater, even in urban areas.

**ECONOMIC USE OF FRESHWATER – TRANSFERRING CONSENTS**

9. Page 24 proposes to investigate a “package of measures to better enable transfers between users so allocated water and discharge allowances can move to high value uses” (“higher value” meaning higher economic returns per unit of water used or nitrogen discharged).

9.1. I support this investigation. However, on the face of it, the transfer mechanism might possibly have similarities with another transfer mechanism – the Emissions Trading Scheme (ETS). The ETS has failed to achieve its stated aim of significantly reducing Greenhouse Gas Emissions, and - as essentially a scheme to legitimize pollution - is fundamentally morally flawed. I would urge the Government to ensure the proposed fresh water transfer scheme is both effective in achieving its stated aims and also has moral integrity.

**FRESHWATER FUNDING**

10. At p33 of the Consultation Document MfE expresses concerns about “competing expenditure priorities”. While I have some empathy for the Government’s affordability dilemma, there are also financial and economic measures the Government could employ to increase its revenue. An obvious move, in the spirit of the ‘Panama Papers’ exposé, and in light of the urgent need for a more equitable distribution of wealth in society, would be to reduce New Zealand tax evasion and avoidance (especially by large businesses) which would apparently bring in billions of dollars more in revenue. Another solution might be to instigate a “Robin Hood tax” on financial institutions. There are many other creative ideas, but the Government has to be willing to challenge orthodox economic thinking and explore innovative solutions.

**TECHNOLOGICAL RISKS TO WATER QUALITY**

11. Page 8 of the Consultation Document states “Addressing diffuse pollution is our greatest challenge for improving water quality.”
11.1. There is one significant pollution risk that is continuing to gain international interest and attention, especially in the context of climate crisis mitigation and adaptation.\textsuperscript{12} Geoengineering technology\textsuperscript{13} is already under the monitoring eye of MfE and the Ministry of Foreign Affairs and Trade (MFAT).\textsuperscript{14} The scientific dialogues on solar radiation management and other weather modification technologies include the use of aluminium and other chemicals. Such chemicals are known to be harmful to environmental and human health – particularly if used in different combination which multiplies their toxicity several fold. Should they be allowed to pollute our environment, waters and soil, it would be disastrous.

11.2. MfE recognizes that geoengineering technologies are in their scientific development phases, and admits that geoengineering regulation is a “significant problem”.\textsuperscript{15} On the other hand, MfE does not believe that such technology is operational yet anywhere in the world, let alone New Zealand. MfE’s confidence in this regard is partly buoyed by international agreements which prohibit geoengineering, and because MfE has yet to receive what it believes to be “credible” evidence of any domestic activity.

11.3. However, MfE’s confidence flies in the face of easily accessible reports and other evidence of cloud-seeding and weather modification technology which has been occurring for decades and is continuing around the planet – the most well-known probably being China’s operational national Weather Modification Office which has been conducting experiments since as early as 1958.\textsuperscript{16} Moreover, there are numerous weather modification companies around the world who now openly advertise their geoengineering services – including publicly listing their past and current cloud seeding and other projects around the planet.\textsuperscript{17} As a technology which has been described as “a meteorological equivalent” of GMO technology,\textsuperscript{18} the ethical, policy and practical implications are profound.

11.4. Therefore, I would urge our Government to heed (a) the warnings of the World Economic Forum\textsuperscript{19} and scientific experts, and (b) the recommendations coming out of New Zealand Universities for civic engagement in public debates specifically concerning geoengineering.\textsuperscript{20} As citizens’ awareness of and concerns about the issues are increasing, the imperative must be to establish a ‘pre-emptive regulatory strike’ to ensure as far as possible that such technology is decisively kept from our shores lest all the gains New Zealand achieves in protecting our fresh water is undone.
TRANS PACIFIC PARTNERSHIP AGREEMENT

12. Several iwi authorities, including the Ngāti Kuri Trust Board to which I affiliate, have raised concerns about the reported implications of the Trans Pacific Partnership Agreement (TPPA) in regards to the protection of hapū, iwi, State and wider society rights and interests.21 With respect to the good policy and regulatory work that risks being undone in the area of fresh water protection, I would call upon the Government to ensure it has full social licence of New Zealand citizens before ratifying the TPPA.

Nāku noa,

Catherine Murupaenga-Ikenn
Of the Te Rarawa and Ngāti Kuri Māori peoples,
1 Ref opening paragraph under “The importance of fresh water” p6, consultation document.
2 I would encourage New Zealand to move to a measuring tool which recognizes a more comprehensive spectrum of human and societal wellbeing values, instead of the very narrow range of economic indicators upon which the GDP is based. Indeed, many countries have moved or are moving in this new direction.
3 This format is an innovation adopted by a number of countries” – including Equador and Bolivia who have incorporated the rights of Pachamama into their constitutions: for Equador, see https://www.constituteproject.org/constitution/Ecuador_2008.pdf; see also “Rights of Nature” page at Pachamama Alliance website, http://www.pachamama.org/advocacy/rights-of-nature; “Constitutionalize our right to a clean environment: David Suzuki” (24 September 2014), http://theindependent.ca/2014/09/24/constitutionalize-our-right-to-a-clean-environment-david-suzuki/.
4 “On 28 July 2010, through Resolution 64/292, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of all human rights." This resolution is downloadable at http://www.un.org/es/comun/docs/?symbol=A/RES/64/292&lang=E.
6 Consultation Document p27.
7 Consultation Document p27.
10 Consultation Document, p15.
11 See http://www.robinhoodtax.org/how-it-works.
12 Including dialogues which occurred at the 2015 COP21 climate conference meeting, Paris.
13 MFE defines geoengineering as “the deliberate large-scale intervention in the Earth’s natural systems to counteract climate change”: ref “Info at MFE” email dated 15 March 2016 to Catherine Murupaenga-Ikenn.
14 “Climate Change Analysis Team”/ "Info at MFE” email dated 23 March 2016 to Catherine Murupaenga-Ikenn.
15 “Info at MFE” email dated 15 March 2016 to Catherine Murupaenga-Ikenn.
17 For a list of companies, see http://www.geoengineeringwatch.org/list-of-companies-engaged-in-weather-modification/.
19 This Forum cautioned in 2015 that one of the global risks was “Massive and widespread misuse of technologies (e.g. 3D printing, artificial intelligence, geoengineering, synthetic biology, etc.)”: see http://www3.weforum.org/docs/WEF_Global_Risks_2015_Report15.pdf, p54.
20 Professor Malcolm Wright, deputy Pro Vice-Chancellor of Massey University’s College of Business; Professor Damon Teagle of the University of Southampton; Pam Feetham (also of Massey University) published a report in 2014 that states that “Because even the concept of climate engineering is highly controversial, there is a pressing need to consult the public and understand their concerns before policy decisions are made.” Professor Wright believes that giving the public a voice so early in technological development is unusual, but increasingly necessary. “If these techniques are developed the public must be consulted...”": see “Climate engineering – What do the public think?”, published in “Nature Climate Change” 12 January 2014. See http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle_uuid=536E4B82-C78D-9F68-89D8-CE947A65F0AC. Saadi Radcliffe of Victoria University in 2014 concluded that current geoengineering law “lacks certainty and clarity. [His paper] proposes that the law would be more effective through a legally binding amendment to the London Convention and Protocol, stronger domestic legislation and the removal of economic incentives.”: see “Geoengineering: ocean iron fertilisation and the law of the sea”, Victoria University LLM research paper, http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/4554/thesis.pdf?sequence=2.