#5

COMPLETE

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Page 1

Q1

CONTACT DETAILS

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Q2

PRESENTING YOUR SUBMISSION IN PERSON

I do not wish to speak to my submission

Q3

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

I prefer Option 1

Q4

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

I prefer Option 2

Q5

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

I prefer Option 2

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

Taking 5 years to develop a Climate Change Strategy is an utter waste of time nobody has. If this is not done immediately, it will cost the community much more than the rates increase incurred by speeding the process up. I would expect the Council to start taking climate change as a scientifically proven risk seriously and expect this work to be done in no more than 2 years.

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: BEVERLEY ANSELL

Postal Address: 10 GREENFIELD ST HECTOR

Email: b.kc.ansell@gmail.com

Phone: 0273A22233

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

Submission to: BDC – LTP 2021-2031

From Richard Arlidge
1 Hartmount Place
Punakaiki
03 7311 877 or 0274 510 888
Postal: CMB 3 RD1 Rūnanga, 7873
Email: whitecube1@gmail.com

YES - I would like to be heard

Climate Change Resilience and Environmental Sustainability

Climate change resilience is a key issue for low lying coastal areas in the Buller. Coastal communities face an increasing burden and currently there is a mismatch between the scale of our adaption challenge and the resources available to address it.

Suggested addition: **The impact of climate change in the Buller will be sea level rise generating accelerated coastal erosion and inundation. The vulnerable sand country (south to north) is Punakaiki River & Punakaiki Resort, Punakaiki village; Charleston to Tauranga Bay; Kawau Point to the Mokihinui; Little Wanganui to Kohaihai. Future sea level rise modelling shows much of this land being inundated from circa 2050 onwards.**

The Options
My preferred option is that Council carry out climate change work as soon as practical. Look at the work that Nelson CC and Tasman DC are doing on climate change resilience and adaptation. See also the work of the community based Nelson Tasman Climate Forum.

The BDC is currently allowing people to construct dwellings on concrete foundations in areas that will be inundated by sea level rises in the near future. These property owners will have the right to demand compensation from Council (all other ratepayers) as the Crown and the Council are aware of the risks of sea level rise for some time.

Wooden foundations may cost a little more but almost all of the capital outlay can be retained/recovered if the building can be moved to higher ground. The next question is - Where is the higher ground going to be?

Council must ensure new infrastructure will not be impacted by sea level rise. (see Punakaiki Water Supply below).

The Natural Environment – PROTECTED BUT NEGLECTED
The Climate Change Commission Draft Report (1 Feb) reads:
"Priority areas for action include …. planting more native trees to provide a long-term carbon sink". (Executive Summary: work must start now). …"Native forests can create a long-term carbon sink while providing a range of other benefits, like improving biodiversity and erosion control. Incentives are needed to get more native trees planted".

***"New permanent native forests** absorb carbon more slowly but will continue to do so for centuries until they reach maturity. Because of this, we consider that carbon removals from new permanent native forests have a role to offset the remaining long-lived gas emissions in sectors with limited opportunities to reduce emissions from 2050. For instance, this could include offsetting nitrous oxide emissions from agriculture and residual industrial process emissions".*

One third on New Zealand is in Crown ownership which is predominantly highlands and forested lands. The Crown conservation estate in the South Island runs from the Marlborough Sounds through Tasman, Buller, Grey, Westland, Fiordland and into Southland. These forests and wetlands are the lungs of Aotearoa sequestering carbon dioxide. The West Coast (Buller, Grey & Westland) is probably the only carbon negative area in New Zealand.

"**Carbon Negative**" is described as the reduction of an entity's carbon footprint to less than neutral, so that the entity *(region)* has a net effect of removing carbon dioxide from the atmosphere rather than adding it. *(Dr Janet Stevenson - University of Otago).*

If we are serious about reducing the impact of climate change we could divert the maximum amount of Central Government resources to be applied to eradicating the feral goats, deer, chamois, tahr, pigs and possums from our existing forest estate. Goats eat 25% or their body weight every 24 hours and feral deer eat 20% of their body weight daily. Possums are estimated to consume 20,000+ tonnes of vegetation every night - being 300g wet weight x 70 million possums. (*www.Landcare/Maanaki Whenua).*

The health of our forests has not been maintained and much of the Buller is **protected but neglected**. To date the Crown has been a negligent owner and manager of the lands in its care. Feral goats now occupy about 14% of New Zealand - about half of this on public conservation land. The total population size is unknown but is estimated to be several hundred thousand.
(https://www.doc.govt.nz/nature/pests).

The Defence Forces currently uses the Crown estate in goodie verses baddie type exercises. Instead the troops should be hunting goats, deer and pigs during the day and possums by night and trapping rats and stoats. What will the Defence Force have to defend if we allow sea levels to continue to rise?

If we do not make immediate and widespread efforts to eradicate these pest species then planting more trees will not lead to the increase in the amount of sequestration envisaged.

The slogan must be – **Plant More Trees - The Goats/Deer/Possums are Hungry**.

Stewardship Land
The debate around Stewardship Land will get even more complicated if those areas in regenerating native forests are retained by the Crown for carbon sinks.

If our recent experience of the Crown response when we requested a concession on a small area of stewardship land for a community facility at Dolomite Point is an example of how the debate will pan out then wider community ambitions may be thwarted.

Punakaiki Water Rates - Profits to Westport
The LTP shows annual water supply charges for Punakaiki increasing dramatically from the 2024-25 year. This may be due to an assumption that the Punakaiki River water supply will come on stream and be considerably more expensive to run. The proposed intake site does not take into account the effect of rising sea levels.

The Punakaiki water supply is maintained by Westreef and appears to be a cost plus contract. A Punakaiki based person could maintain the system at a much lower cost as there would be far less travel and time involved. This was the case a decade ago.

Westreef is owned by Buller Holdings Ltd which in turn supports the Pulse Energy Recreation Area.

The Punakaiki Recreation Reserve is now the Punakaiki Beach Camp and revenue from this enterprise goes to the Buller District Council.

Punakaiki residents have a community of interest that is not focused on Westport. The supply lines of power, phone, medical and emergency services are all delivered from Greymouth based entities. As the residents of Punakaiki rarely use the community facilities we pay for based in Westport or Reefton the BDC.

END

#17

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Page 1

Q1

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Phone number	**0272236900**

Q2 **I do not wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 1**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 2**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5

I prefer Option 1

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

Buller is so full of natural resources and beauty that it would be great to continue to ensure these resources are foremost available to residents to utilise and develop and protected for future generations. While outside investment does assist the community short term, I believe the community is more than capable of developing and providing for itself in most respects. I am so happy to see Climate Change planning in action. Once this strategy is in place I believe it will influence future decisions in every area of the community. Thanks for listening. :)

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name	Dale Ashworth on behalf of Youth Voice Kawatiri committee
Organisation	Youth Voice Kawatiri - currently under the 'umbrella' of Sport Tasman
Postal Address	PO Box 13
Town	Westport
Post code	
Phone	0272236900
Email	dale.a@sporttasman.org.nz

Have your say!

Presenting your submission in person

- (◆) I wish to speak to my submission
- ( ) I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website www.bullerdc.govt.nz.

Information Management (see page 5 of the Consultation Document for more information)

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

- (◆) I prefer Option 1
- ( ) I prefer Option 2
- ( ) I prefer neither option

Additional feedback

Climate Change (see page 6 of the Consultation Document for more information)

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan, with ongoing monitoring costs

- ( ) I prefer Option 1
- (◆) I prefer Option 2
- ( ) I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge (see page 7 of the Consultation Document for more information)

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

- (◆) I prefer Option 1
- ( ) I prefer Option 2
- ( ) I prefer Option 3
- ( ) I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

BULLER DISTRICT COUNCIL

Shaping our district

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider it its Long Term Plan?

Thank you for the opportunity to have our say. We have attached to this our four page written submission and supporting survey document.

Consultation closes 18 May
www.bullerdc.govt.nz
LTP@bdc.govt.nz
or complete your submission online at www.surveymonkey.com/r/21-31-LTP

Privacy Statement: In accordance with the Local Government Act 2002, all submissions (including your name and contact details) will be made available online as part of the LTP decision-making process. Please refer to www.bullerdc.govt.nz/privacy or contact Council for a copy of Council's Privacy Statement.

TO: **Buller District Council**
FM: **Kawatiri Youth Voice**
RE: **Long term plan**

12 May 2021

PURPOSE:

The purpose of this paper is to:
Firstly, support councils Long Term Plan, especially

- The Community Outcomes
- Option 2 of the Climate Change approach (as long-term solutions to climate and environment is important to rangatahi and immediate action is required)
- Ongoing work in the District Revitalisation (as this impacts rangatahi and we see the Kawatiri Youth Voice an important piece of the puzzle with invigorating and connecting communities)

Secondly, to secure the place and importance of the Kawatiri Youth Voice, in our region, for the next 10 years.

The importance of Kawatiri Youth Voice is to ensure that the voice of the rangatahi (and the future employees, voters, and rate payers) is heard in our region, that they are consulted on decisions that will affect their future outcomes and where appropriate initiatives directly impacting rangatahi are co-designed with them in a fully inclusive manner.

This funding request represents a $19.5k investment annually over a 10 year period by Buller District Council, to support the appointment of an ongoing Kawatiri Voice Youth Coordinator who supports the Kawatiri Youth Council with admin, funding, insight gathering techniques, community engagement and connections, event, and future planning support. This will secure the role and give it sustainability in to the future.

This financial contribution will assist the Kawatiri Youth Voice, and its supporting organisations (Buller Reap, Sport Tasman, West Coast Home Builders and BDC) to secure additional leverage funding through sponsorship, partnerships and external funding.

BACKGROUND:

The Kawatiri Youth voice has been in place for the last 20 months, supported by four community organisations - Buller Reap, Sport Tasman, West Coast Home Builders and BDC. We now call these parties the 'Advisory Group'. In the last 12 months we have focussed on letting the rangatahi take the lead by listening and understanding the voice of rangatahi in the Buller region through surveys, so we can utilise these insights to create traction in the community via community events, gathering ongoing insights and providing opportunities to the rangatahi to connect with the culture and environment.

ALIGNMENT TO COUNCIL

Like the council wanting community input and buy in, the Kawatiri Youth Voice want to listen to the youth of our community and be the voice on key decisions that directly affect or impact us.

As a group we won't just talk to them, lecture them on how to live or decide what's best for their future. We want them to talk to us, tell us how they'd like to live and what they feel is best for their future. Our approach is “By rangatahi for rangatahi.”

The Advisory Group’s **Vision** is**:** To engage youth for a positive future.

Our strategy is below and either through our annual planning or via insights gained from the rangatahi we have alignment and/or interest in supporting the following BDC Community outcomes;

However, more importantly, the Youth Voice group themselves have also come up with their own **Purpose, Vision, Values and main objectives**:

Our Purpose:
To be a sustainable group of youth that provides a voice for rangatahi in Buller, shares ideas which enact change and create events that support our community.

Our Vision:
To be an independent, diverse, collective voice, that strives to improve wellbeing and protect the futures of Buller youth.

Values:
Passionate
Accountable
Progressive
Inclusive
Supportive

Our main objectives are as follows:

- Advocate, support and strive for a stronger voice for young people.
- Engage and promote the ideas of active collaboration and participation in order to encourage young people to contribute to their communities.

- Create a space and a positive environment for young people to be encouraged to speak, be connected, be empowered and be involved with issues affecting them.
- Foster networks and build relationships with decision makers in order to influence change for young people.

USING INSIGHTS & LOCALLY LEAD APPROACH

The way we have structured the Kawatiri Youth Voice is to be seen as a contributor to the overall wellbeing of all rangatahi in the Buller region. Through the Locally Led Approach and ongoing insights we have undertaken the below in Westport, Reefton and Karamea over the last 12 months.

- Organised a total of 4 x youth focused community events
- Supported a total of 9 x community events
    - Of the above 8 x community events had a cultural or environment focus
    - We played a major part in Youth Week
    - We supported Neighbours days organised by Council
- Organised and facilitated 3 x youth surveys
- Engaged with 9 x schools across Buller
- Partnered with 7 X community organisations
- Employed 1 person as of Jan 2021
- Had growth in rangatahi wanting to be a part of Kawatiri Youth Voice due to increased profile and recruitment.

CONSIDERATIONS:

We acknowledge that in this current climate any investment is significant, so we have attempted to outline the key factors that need to be considered.

<u>If we proceed:</u>

- Confidence that Kawatiri Youth Voice aligns with Rangatahi in our Community.
- Confidence that we will continue to employ a part time Kawatiri Youth Voice Coordinator year round (0.5 FTE)
- Confidence we will continue to advocate and support community events that not only encourage community participation but put a larger emphasis on the wellbeing of our rangatahi.
- Confidence that we will continue to gain insights from the rangatahi in our region, consulting with them on what is important to them and what they would like to see in the future.
- Confidence that additional funding will be achieved to support Kawatiri Youth Voice activity.
- Confidence we will be in a position to co-design on projects with community organisations and councils that we believe are important to the rangatahi.
- Confidence that Kawatiri Youth Voice experiences will be designed for rangatahi by rangatahi.
- Greater rangatahi and community buy-in around the importance and benefits of understanding the voice of the youth leading to a higher level of influence and advocacy.
- Increased community collaboration and connection opportunities as identified through the Locally Lead approach.

<u>If we do not proceed:</u>

- Loss of the Kawatiri Youth Voice Coordinator leading to less support for the rangatahi to gather insights, run events and to collaborate with a community.
- The level of influence or advocacy by rangatahi for rangatahi will be lower in the community as we are not seen as key players due to the capacity.

- Less wellbeing opportunities provided to rangatahi.
- Less events and activities available for our rangatahi.
- Missed opportunities to connect local providers and community organisations that surround the rangatahi needs, desires or long-term goals.

RECOMMENDATION:

That Buller District Council provide annual funding of $19,500 over the next 10 years to support the Kawatiri Youth Voice employing a coordinator. This is calculated as $25 x 15 hours.

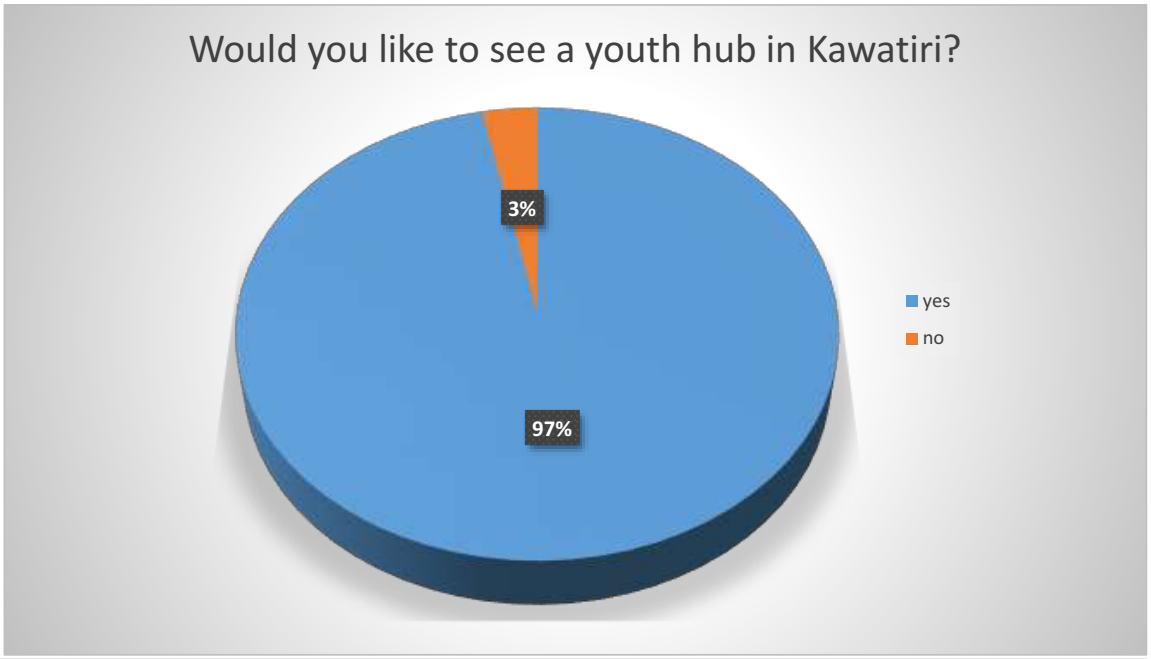
Note: The 'umbrella' organisation that employs the coordinator is decided by the Advisory Group, guided by an MoU, and is reviewed annually.

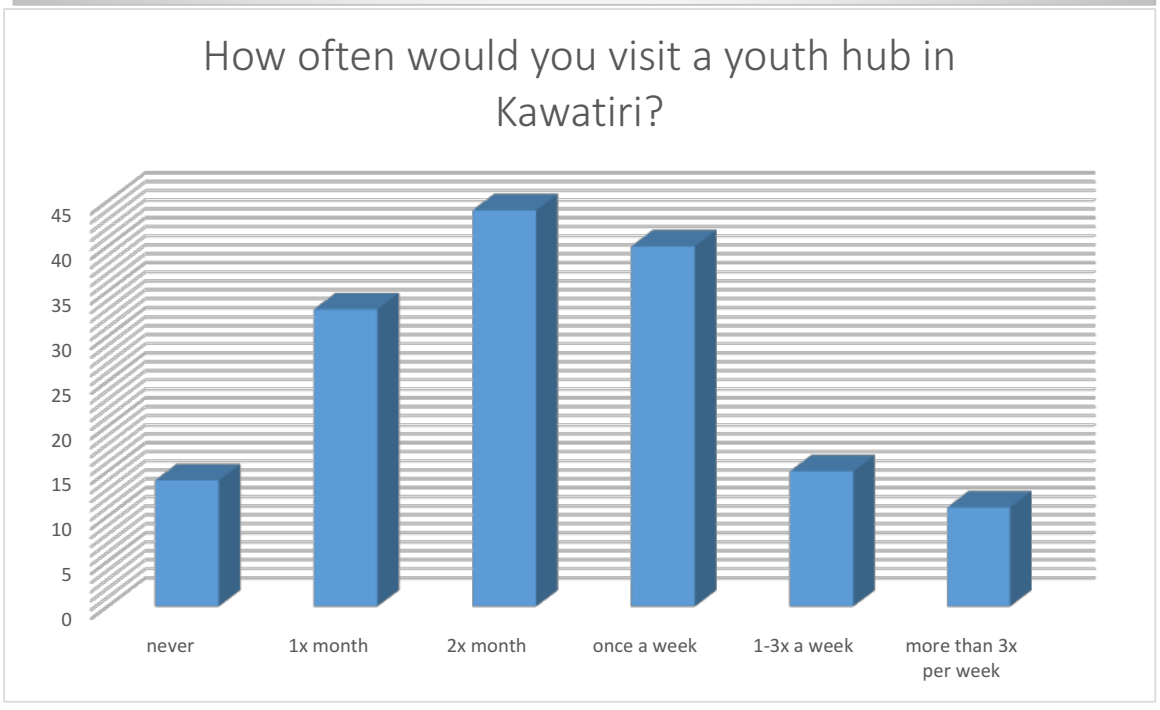
FURTHER SUPPORTING DOCUMENTATION:

Please find attached the latest of our youth surveys.

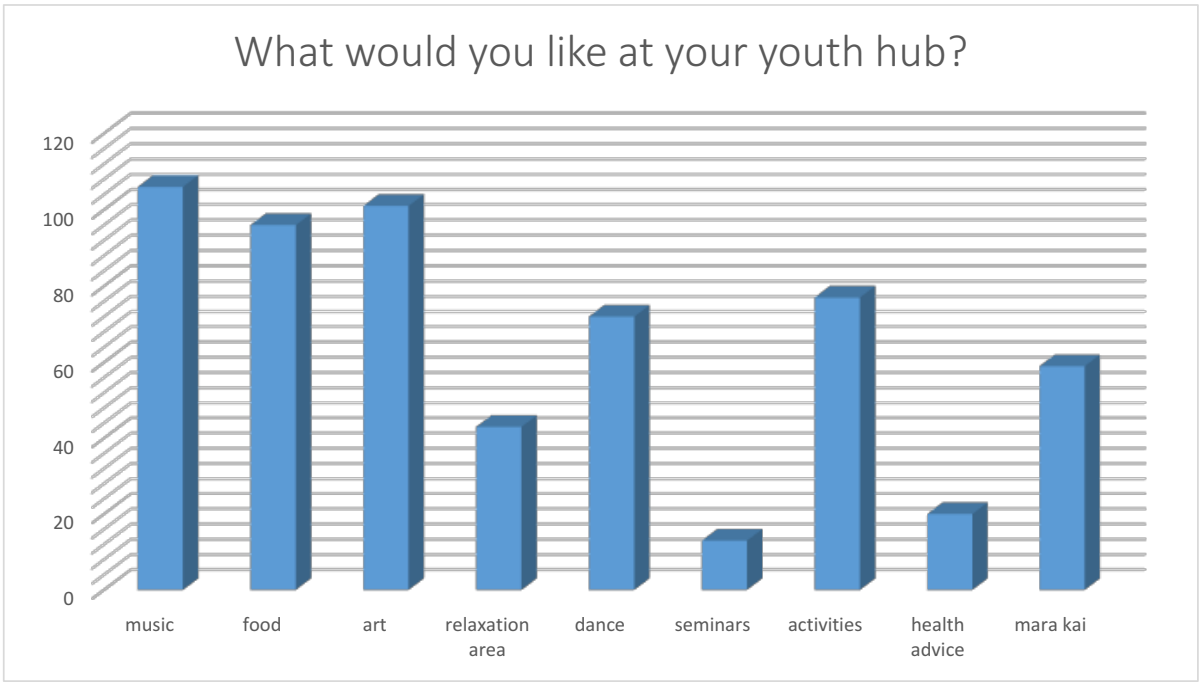
On Friday 18th December 2020, we held a youth event 'Kura Out' at the NUKU gardens behind the Salvation Army shop. We had various activities on offer, along with food and music. Plus we also took the survey to the Buller Marathon and Children's Day.

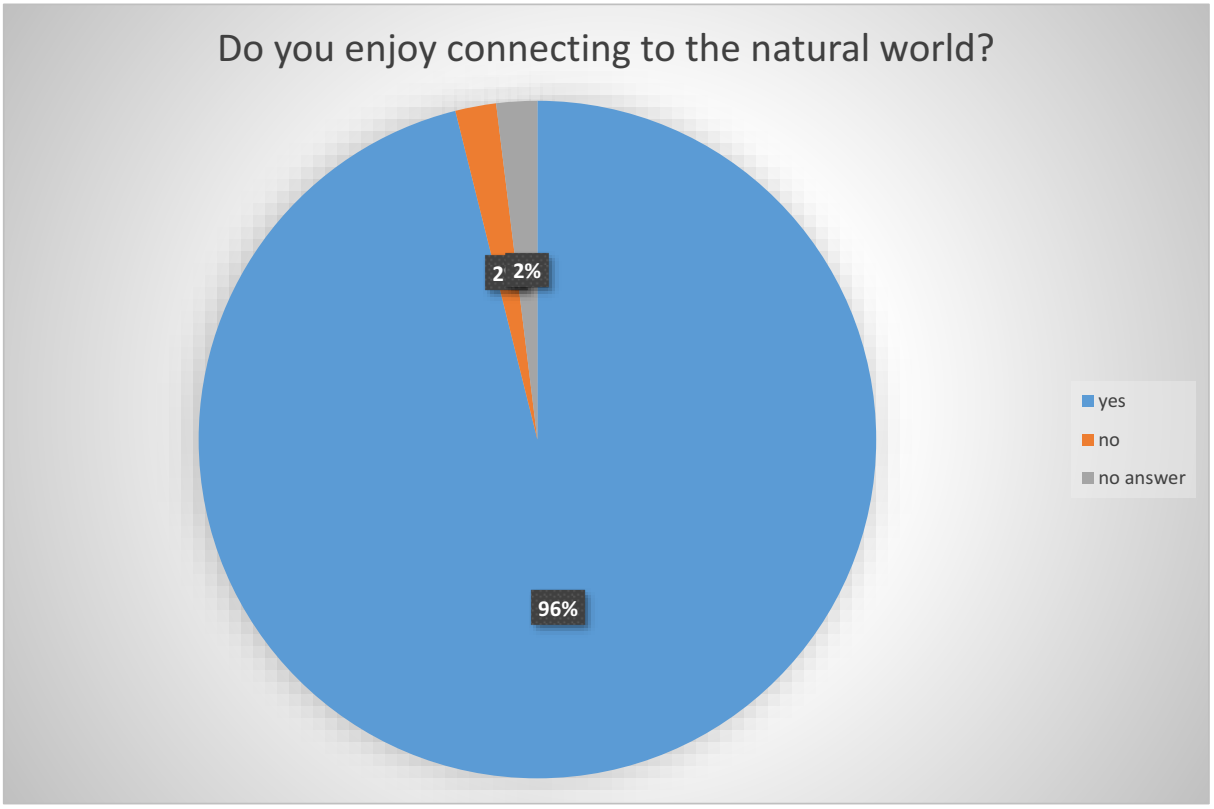
We have had 154 rangatahi fill out surveys regarding the possibility of a youth hub in Kawatiri. Note: Those small number that said 'no' to wanting a hub directly correlated with those that didn't enjoy natural world and didn't want to know about Maori culture. These are the results:

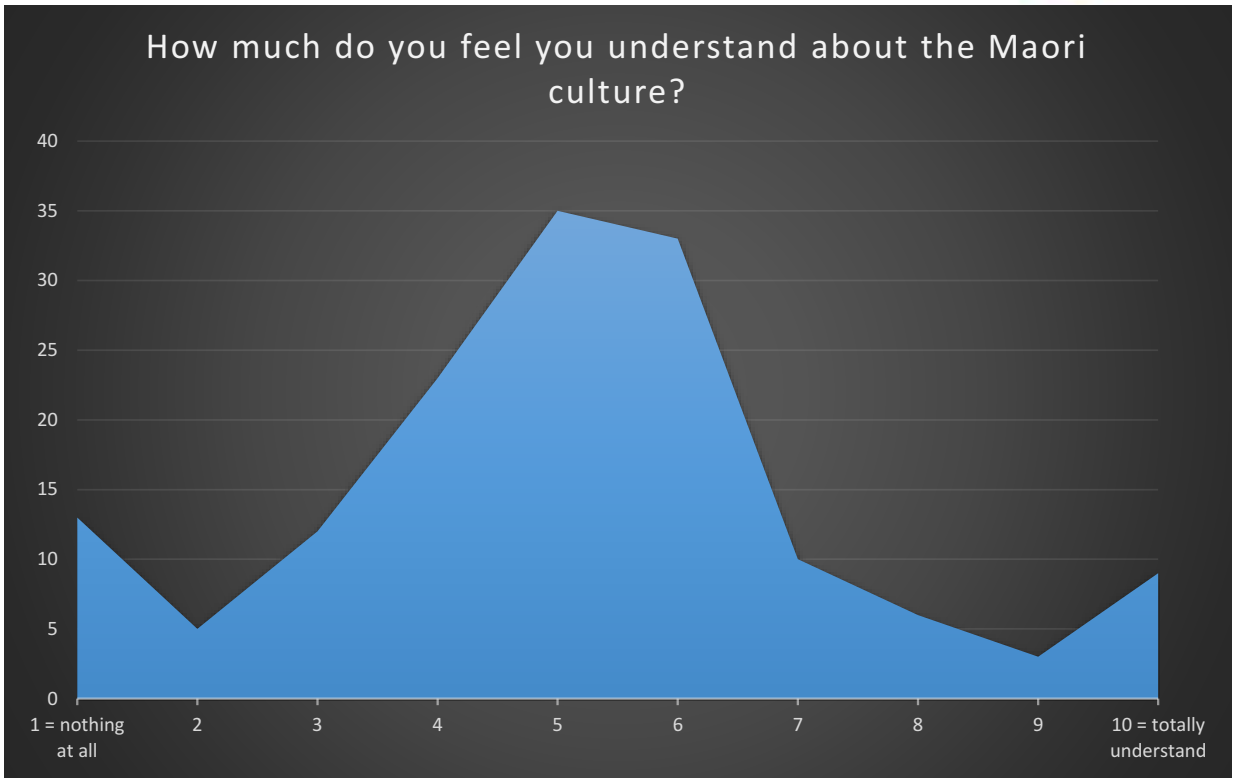


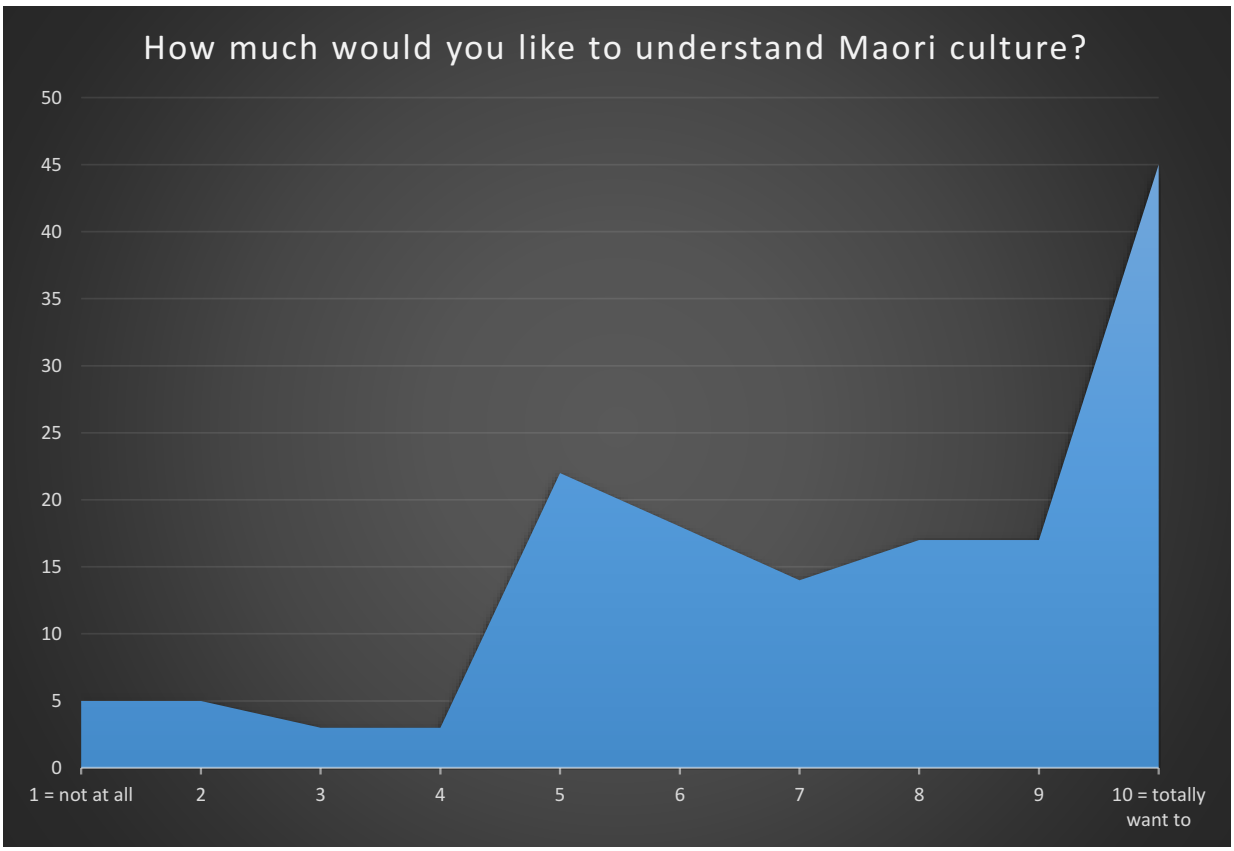


'Other' options included: boxing, exercise, cooking classes, bubble soccer, large board games and opportunities for youth.






How much do you feel you understand about the Maori culture?
40
35
30
25
20
15
10
5
0
1 = nothing at all
2
3
4
5
6
7
8
9
10 = totally understand


How much would you like to understand Maori culture?
50
45
40
35
30
25
20
15
10
5
0
1 = not at all
2
3
4
5
6
7
8
9
10 = totally want to

David Barnes

40 McKenna Road

Westport

davidbarnes@xtra.conz

021 159 159 3

SUBMISSION on the Draft 2021-2031 Long Term Plan

I am very concerned Council agreed to allow the Draft LTP to go out to consultation with a qualified audit report regarding assumptions made attached to it. Ratepayers should have had the opportunity to fully understand the implications of the audit report before any decisions on whether or not to send out the LTP for consultation were made.

My first comment on the DLTP is that the plan will only be adequate if it actually recommends deliverable and pragmatic solutions whilst keeping ratepayers at the forefront of decision-making. The core issue from my perspective comes down to council processes. In the business world, you adjust expenses to meet your expected income. A responsible and viable business does not commit to spending it cannot afford or has questionable income prospects.

The simple fact is, that BDC rates are ever increasing, yet service delivery is not improving at the same rate. Two reason for that are many unquestioned "Nice to have" projects along with sweeping Government requirements on Council placing costs which ultimately are beyond the ratepayers ability to pay. Local Government Minister Nanaia Mahuta's call to review local government is welcomed and probably overdue. It's overdue because of the simple fact above whilst infrastructure in many areas is woeful and creaking if not failing.

Council place too much reliance on advice from consultants who have a first concern to ensure their position is safeguarded and only then will the document be offered. Many such 'qualified' opinions are often based on theoretical considerations rather than dealing with things sensibly and realistically based on long term practical experience.

Reading through Westport Port and the Kawatiri Dredge chapter exposes much of the above. Sound strategy is lacking showing little understanding of the physics of Westport Harbour, the Buller River and Littoral Drift.

Of course, Kawatiri requires a strategic approach to stem operational losses with no eye to the future ... it always has. But the last 6 years have been full of politically motivated interference leading to ill-informed retrenchment, the dissipation of real experience and resources with consequent neglect.

In turn the resulting return-to-service required a complete reset, leading to continual unnecessary but essential expense. I have to say that the particular job of returning 'Kawatri' to service by the then Port Manager and Dredgemaster was exceptionally well done. The essential expertise at the heart of the dredging operation then left leaving an uphill task to retain an operational vessel. The expertise of the long term Dredgemaster, who I had to seek from South Africa in1996 due to the total lack of experience to be found in NZ was eagerly snapped up by the opposition and is now beginning to bite Councillors on the backside. The lack of support and understanding by Council has led to the situation we have today.

In the 10 years I was Harbourmaster/Port Manager I attended every monthly Harbour Committee meeting and I have to say that that form of Governance was effective. There was a two way flow of information which led to the Council Table dealing with things sensibly and realistically in a way that was based on practical, factual information rather than theoretical, grasping considerations.

That Harbour Committee format should be promptly reformed and adopted before any of the 3 ill conceived and potentially expensive proposals in the LTP are even considered.

The question of 'Vested Interests' has to be raised in that most of the Kawatiri report and subsequent Port Plans are heavily involved in support of, and to the advantage to, a proposed Commercial interest utilising money designated by the PGF for all Port Development.

There is a definite lack of understanding of the harbour dredging on the various berths and Bar to enable sustainable future growth which do not warrant the proposed, expensive and unnecessary projects on the Kawatiri to be undertaken. I warn Councillors to be extremely cautious in making those decisions. The statement that "*Initially it is expected the Port and Dredge Kawatiri will make a loss and it will take four years until this loss is recovered and the Port is profitable*" should ring the alarm bells loud and clear.

Fishing relies on 'West Coast Fishing' companies which provide jobs which are most welcome to the Town but revenues to both the Port and those workers involved will never be a significant source of income. Long overdue Port Facilities for the industry are much needed and warranted which will hopefully encourage more trade.

Information Management

Option 2 – Limiting Digitising to essential requirements rather than going to far back to historical matters which are not of urgent search requirements.

2.

CLIMATE CHANGE

I cannot comfortably sit alongside the statement in the consultation document that "Maintaining the status quo, with no specific resources or plan to address this challenge, is not considered to be an option given the changed legislative environment we are now operating in."

Like it or not Westport is situated on a "Delta Flood Plain" developed by the Buller River and exposed to the ravages of the Coastal elements and Tasman Sea. It has been so for thousands of years not just the last 50 on which most of todays emotionally charged rhetoric is based.

Westport itself has existed for nearly 200 years since the early 1830's, gradually developing as people have settled into the town we have today. Through that period of time it has survived Earthquakes and inundations of greater or lesser magnitudes, described by the media of the day more or less accurately but constrained within the means of dissemination. Today, we have instant, international access to any and everything by everybody which is consequentially greatly and emotionally distorted to suit the situation and personal opinions.

My career at sea has taken me all over the planet, I have visited 216 different ports of the world - many several times. In those travels I have experienced the vastly different conditions - geological, meteorological and those influenced by Man. It is those latter ones that I can see have been most ineffective and Westport falls into that category. The continual efforts to dredge and make the port fit the ships (and not the other way round) by the various Councils over the years is proof. The wonderful 'Tipheads' are a legacy which will stand as testimony in years to come to our particular local inability to combat and make the forces of nature do as we need. What makes this Council think it can do any better or has the means to succeed in future proofing the town against the forces of nature without bankrupting us.

Climate Change and Global Warming has and will continue to evolve over time ...it is not as instant or dramatic as many have said and its effects cannot be successfully mitigated longterm by planning such as proposed by the Climate Change Commission and no doubt followed by Buller District Council.

The Draft LTP does not have my backing to insidiously increase my rates to expend on such politically inspired projects.

#16

COMPLETE

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Page 1

Q1

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Phone number	**+64226944592**

Q2 **I wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 1**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 1**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

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Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

I would like to support the Carters Beach Reserve Sub Committee's application for money from the Reserves fund to enhance the hall, toilets and Reserve. Part of this funding could come from the District revitalization fund. I would like to speak to this part of my submission with Cody Frewin (Secretary Carters Beach Reserve Sub Committee Secretary)

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Elaine Bersemann.

Postal Address: 11 Corbett Street Hector

Email:

Phone: 7828504

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely E E Bersemann.

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Jennifer Berthold

Postal Address: 28 Greenfield St, Hector

Email: kiwijennibert@gmail.com

Phone: 0274037098

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

J A Berthold.

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: TREVOR BERTHOLD

Postal Address: 28 Greenfield ST Hector

Email: Kiwitrevorberta@gmail.com

Phone: 0274523839

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

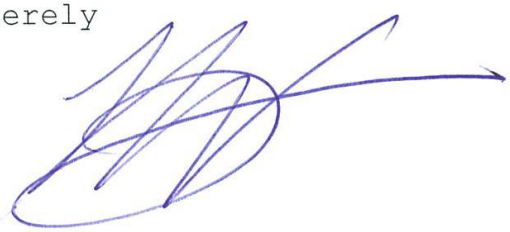
NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely



27th April 2021

Attention: Rachel Townrow

Group Manager, Community Services

By email: Rachel.Townrow@bdc.govt.nz

Kia ora Rachel,

Re: Coaltown – Te Ara Pounamu Funding

Te Ara Pounamu Ltd currently has a Memorandum of Understanding with Buller District Council to direct funding from Coaltown Museum to the Pounamu Pathway project for the first three years of operation commencing on 1 July 2021 at $150k p.a.

Due to unavoidable delays on the project, the Company will not be in a position to take over the premises on 1 July and would request that we push the funding out for an additional year. Consequently, we request that the funding be included into Year 4 of the Long Term Plan.

We are unable to give you a date of when we will be in a position to take over the premises, we are still hopeful that this will be later this calendar year, in which case we would see the commencement date of the 3 years of funding from the date on which we take over the building.

Ngā mihi

Penny Bicknell

CEO
Te Ara Pounamu Ltd
ceo@tearapounamu.org.nz

cc. Sharon Mason, CEO Buller District Council
Francois Tumahai, Chairman Te Runanga o Ngati Waewae

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Christine Billings

Postal Address: 14 Corbett Street Hector

Email: billingschristine25@gmail.com.

Phone: 0275935072

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

C Billings

#8

COMPLETE

Collector: 21-31 LTP (Web Link)
Started: Monday, May 10, 2021 2:47:47 PM
Last Modified: Monday, May 10, 2021 2:53:17 PM
Time Spent: 00:05:29
IP Address: 125.236.212.254

Page 1

Q1

CONTACT DETAILS

Name	**Maegan Bird**
Postal address	**2/67 Lighthouse Road, Cape Foulwind**
City/Town	**Westport**
Post code	**7892**
Email address	**maegan_bird@hotmail.com**
Phone number	**0221284420**

Q2 **I do not wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 1**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 2**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5

I do not prefer any of these options

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

I would like the council to consider Rangitahi/Youth in their long term plan. Young people need a safe space to hangout, develop their interests, connect with their support people, and spend time. I believe this idea needs council backing to prevent young people from just 'hanging out on the streets' and create a space they feel attached to.

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name: WARWICK & PAM BLAIR

Organisation:

Postal Address: 5/67 BULLER ROAD, RD 2

Town: WESTPORT Post code: 7892

Phone: 03 789 4200

Email:

Have your say!

Presenting your submission in person

- ◯ I wish to speak to my submission
- ☑ I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website www.bullerdc.govt.nz.

Information Management (see page 5 of the Consultation Document for more information)

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

- ☑ I prefer Option 1
- ◯ I prefer Option 2
- ◯ I prefer neither option

Additional feedback

Climate Change (see page 6 of the Consultation Document for more information)

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan with ongoing monitoring costs

- ◯ I prefer Option 1
- ☑ I prefer Option 2
- ◯ I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge (see page 7 of the Consultation Document for more information)

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

- ◯ I prefer Option 1
- ◯ I prefer Option 2
- ☑ I prefer Option 3
- ◯ I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: MICHAEL BLINCOE

Postal Address: 4 MAIN ROAD NGAKAWAU

Email:

Phone: 0397828003

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely 4 MAIN ROAD NGAKAWAU
Mike Blincoe

LONG TERM PLAN 2021 – 2031

INANGAHUA COMMUNITY BOARD SUBMISSION

Introduction

The Inangahua Community Board wish to make the following submission to the *Long Term Plan 2021 – 2031* (LTP) consultation document.

This is made in the knowledge of *Council's Draft Financial Strategy* direction which can be summarised as:

- Rates affordability is a strong consideration for our community
- Expenditure to be adequate to maintain existing services and quality and avoid deterioration of assets and capacity
- Council will explore external income opportunities to offset a high reliance on rates income.

Submission

	ITEM	DISCUSSION	ACTION REQUESTED
1.	Broadway Public Toilets	The community is keen to see this upgrade project go ahead as soon as possible.	That the Broadway public toilet upgrade go ahead in the 2021/22 financial year, and that the Board is engaged in the final design.
2.	Co-location of the Reefton Service Centre and the Reefton Visitor Centre	The Board sees this proposal as an opportunity to secure service provision for Reefton and the wider Inangahua area, with the potential to build on those services in future.	Proceed with the proposal to co-locate the Reefton Service Centre within the Reefton Visitor Centre.
3.	Reefton Pool	The Board acknowledges the inclusion of seed funding for stage 2 of the Reefton Pool upgrade and is pleased to see work on this community facility included in the draft LTP. It is noted that stage 2 involves working with the community on both what is wanted for the facility and raising funds to achieve this, and the Board supports this community involvement. The stage 1 upgrade of the Reefton Pool has delivered some great results. There is an issue with condensation	Provide seed funding for stage 2 of the Reefton Pool upgrade, as per the draft LTP. Make funds available in the 2021/22 financial year to address condensation, lighting, storage and seating.

		and lighting, which the Board requests is addressed as soon as possible. There are also some simple 'finishing touches', including storage and seating that would improve the user experience now.	
4.	Broadway Christmas Lights	There have been requests from some in the community for bigger Christmas lights on Broadway.	Make provision for Christmas lights on Broadway, befitting Reefton's status as "the town of light".
5.	Blacks Point Museum	The Board understands that the Blacks Point Museum will be making a submission requesting an increase to the funding they receive from Council. As an area that celebrates and promotes its history, the Museum is seen as a valuable asset for the Inangahua community.	Continue providing funding to the Blacks Point Museum, with an increase in funding.
6.	District Revitalisation	Over the past three years the Inangahua community has seen the benefit of Council investing in revitalisation across the district, both from the community-led and Council-led projects, and is pleased to see an intention for this to continue. The Board has recently begun a conversation about developing plans for areas of Reefton that could benefit from revitalisation funding (for example King George Jubilee Park), so that the revitalisation is done in a way that ensures value for money and a sustainable outcome. Springs Junction has also been identified as an area the Board would be interested in working with on revitalisation planning.	Retain funding for community-led revitalisation and continue to seek external funding and partnership opportunities, as per the draft LTP.

The Board would also like to raise the following for Council's awareness and consideration:

1. Board members have received feedback from the community on the affordability of water rates as included in the LTP. This feedback has been particularly strong from the residents of Inangahua Junction, where it is considered that 32 households paying approximately $2000 each is unaffordable.
2. The Board continues to receive considerable feedback from community members who do not wish to see the Reefton water supply chlorinated.
3. The Board has received concerns about rubbish and recycling services at Springs Junction.

The Board wishes to speak to its submission.

REEFTON HISTORIC TRUST INC

27 April 2021

Letter of support for the Reefton Public Toilets Upgrade.

The Reefton Historic Trust Board, fully supports the proposed long overdue rebuilding of the Reefton Public toilets on Broadway, Reefton.

Reefton has reinvigorated itself with a focus on its historic Gold Town Heritage over a period of the last 20 years.

We are delighted to see that the proposed toilets not only offer contemporary facilities, but do so in a design, that has a more than a passing nod to the historical townscape.

Reefton has become a destination in its own right in recent years, largely due to the public and tourist interest in its heritage story, coupled with an extensive range of activities and events. Recently Reefton was granted Tohu Whenua status in recognition of its National importance.

Naturally it is not only Tourists to Reefton who have had a need for Toilet facilities, but all travelling public, for which Reefton is the Gateway to the West Coast and all that it has to offer.

Yours faithfully

Dave Hawes

Chairperson

Reefton Historic Trust Board

P.O. Box 31, Reefton, 7851 email : historic@reefton.nz

BULLER
DISTRICT COUNCIL
Te Kaunihera O Kawatiri

28 April 2021

LETTER OF SUPPORT FOR THE REEFTON PUBLIC TOILETS UPGRADE

The Inangahua Community Board is fully supportive of the proposed long overdue rebuilding of the Reefton Public Toilets on Broadway, Reefton.

As Reefton is the Gateway to the West Coast, the toilets are critical for the travelling public and consequently have the highest utilisation of any toilets in the Buller Region.

Tourism numbers have dramatically risen over the last 5 years, largely because of Reefton's revitalisation and of course by the promotion of the West Coast by Central and Local Government.

The current toilets were constructed in a perfunctory manner, in the 1960's and have received minimal improvement since. They are in stark contrast to the now sympathetically restored and revitalised Reefton townscape.

The current tourist expectation of toilet facilities, far exceeds that of the current building, be it in terms of not only its amenities, but also its aesthetics.

We are in full favour of the proposed plans and given that this project has been stalled for nearly two decades, due to lack of funding, we are imploring that the project commences forthwith.

Yours faithfully

John Bougen

Chairperson
Inangahua Community Board

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: KEVIN BUCKLEY

Postal Address: 2 IVES STREET HECTOR

Email:

Phone:

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

K. Buckley

#18

COMPLETE

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Last Modified: Tuesday, May 18, 2021 12:13:22 PM
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IP Address: 163.47.230.243

Page 1

Q1

CONTACT DETAILS

Name	**Sarah Campagnolo**
Company/Organisation (if applicable)	**PGF Services**
Postal address	**The Loft, Eastgate Mall**
City/Town	**Christchurch**
Post code	**8062**
Email address	**sarah.campagnolo@gmail.com**
Phone number	**0220716360**

Q2 **I do not wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 1**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 1**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5	I prefer Option 1
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Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

PGF Services Submission to the Buller Plan

The PGF Services (PGF) is the largest single treatment provider for problem gambling in Australasia with locations throughout New Zealand.

Qualified counsellors provide free, professional and confidential counselling for gamblers and others affected by gambling, and a dedicated public health team focus on problem gambling issues in the community using a public health approach.

PGF believes:

Vulnerable individuals, families and communities should be protected and supported. Social justice is at the heart of PGF's objectives. A just society is one where benefits and opportunities are equally accessible and equally shared and where all communities have the same opportunity and the same rights.

PGF's vision for Aotearoa New Zealand is: Families and communities are healthy and resilient in a just society.

PGF's mission is: Enhancing the mana of individuals, families and communities: to be free from gambling harm.

Community Outcomes – Social, Prosperity and Culture

Gambling harm impacts many parts of society and impacts on Community Outcomes that the Buller Council is prioritising. The attached White Paper discusses the impact that Class 4 gambling has on communities, especially communities vulnerable to job losses and poverty. Having a prosperous, well-connected community, that Buller is aiming for, needs to have a pragmatic approach to gambling harm and the pokies. Buller District's Class 4 review is due at the end of 2021, and we encourage the Buller Council to consider a strong approach to gambling harm reduction as part of the Long Term Plan Community Outcomes.

We currently have a counsellor doing monthly clinic based at Poutini Waiora in Westport. While she is still building the clinic (people experiencing gambling harm are very reluctant to seek help, often even more than other mental health or addictions), she speaks to at least 20 (different) people each trip who have experienced gambling harm. She is in contact with Probation services, other NGOs, and community organisations that all comment on the prevalence of gambling harm in the Buller District.

The Future of Harmful Gambling in Buller

A sustainable approach

Currently Buller is losing $2.2 million a year to pokies (or $6,000 a day). PGF recommends a consistent framework across all local community boards and local councils that will prioritise harm minimisation, reduce disparity in high deprivation areas, prioritise the needs and aspirations of Māori and whānau and encourage the reduction of pokie machines.

Ensuring a sustainable reduction in harm would require the Council to provide the framework and monitor its application. Regarding gambling policy, Buller Council should operate a true sinking lid on pokie machines and TAB venues.

True sinking lid

A sinking lid means a district-wide ban on any additional class 4 gambling venues or machines so this reduces the number of venues over time and would not affect existing venues or current community funding in the short term. This reduces the harm caused by gambling, including the social and economic harm caused in areas of high deprivation.

A 'true' sinking lid policy would not allow any relocations of pokie machines or venue mergers. Hamilton City Council introduced a 'true' sinking lid policy for pokies which PGF strongly endorses and encourages other councils to adopt. A true sinking lid is nation-leading and would demonstrate the Council's commitment to improving health and wellbeing for all Buller residents by reducing harm and disparities in opportunities.

A ban on any new venues and machines is preferable to a cap

A ban on any new venues and machines is preferable to a cap. It is possible that a cap on machine numbers or venues may result in a greater number of licensed venues and machines being located in poorer communities (i.e. venues shift from more prosperous localities, suburbs and town centres). This would ensure the Draft Plan would benefit all Buller residents.

Community funding

PGF recommends sustainable community funding. Buller Council could consider a policy that reduces the reliance on funding from pokies ensuring that CCOs and Local Boards do not receive funding from pokie trusts for community projects. This would ensure that organisations look at alternative funding options that prioritises harm minimisation, and reduction of disparity in high deprivation areas.

Please read the attached 'White Paper', created by PGF Group, Salvation Army Oasis and Hāpai Te Hauora, to bring about a discussion on how we can move past funding that relies on the harm of our vulnerable members of society.

Community empowerment
While PGF does not support the Class 4 community funding model, community empowerment could ensure a fairer and more equitable distribution of funding derived from gambling. Currently, for every $115 that is lost on a pokie machine in a community ($100 plus GST), only $40 will go back to the community and it's not necessarily from the community it came from. In 2019 in Buller District, the number was 36% (see attached information sheet). More money leaves communities than is returned to them in the form of grants. There is also concern that some Trusts and some TLA Councillors have vested interests in some venues.
Buller Council could work in with the current mental health and addictions sector to de-stigmatise harmful gambling and address co-existing problems. Individuals and affected others are inhibited from seeking help because of the stigma associated with harmful gambling and the lack of understanding in the mental health and justice sector of the associations between family violence, mental health and gambling.
Conclusion
Gambling harm is a contributing factor to the poverty and joblessness that affect Buller. PGF recommends that the Draft Plan include directions and focus areas that enable sustainable harm reduction in all Buller communities so that harmful gambling can be reduced. PGF recommends a Buller-wide framework for harm reduction, tangible investment in high need areas and a community empowerment approach.

POKIES BY NUMBERS
Buller District

PGF GROUP
Healthy and resilient communities in a just society

For more information visit: pgf.nz/tla

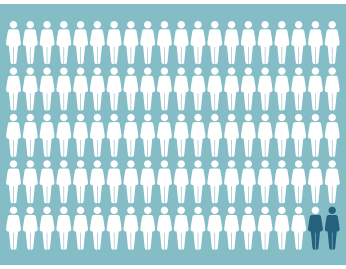
$2.2million
Total $ lost on Class 4 pokies 2019
- thats more than
$6,000 every day!

$62,779
Up from 2018

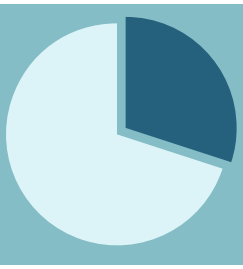
$813 thousand
returned as grants to the Buller community.

This figure includes grants made directly to Buller District only, and does not include grants that might have been shared with more than one Territorial Local Authority (TLA) or distributed by a national body.

Pokie trusts operate pokie machines in pubs, clubs and TABs. The societies, their machines and the pubs, clubs and TABs that operate them make up the Class 4 gambling sector.

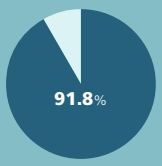


1.8%
of adults in NZ are **moderate** to **severe** risk gamblers



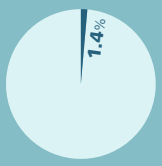
30%
OF ALL
Class 4 pokie losses come from those **moderate** to **severe** risk gamblers

Buller's ethnic group population vs national moderate to severe risk gamblers

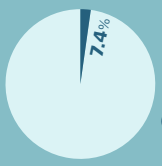


0.9% AT RISK GAMBLER
European/Other

8.6% AT RISK GAMBLER
Māori



7.6% AT RISK GAMBLER
Pacific



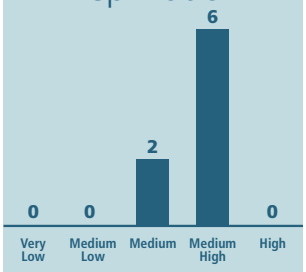
1.2% AT RISK GAMBLER
Asian

Council gambling policies should prioritise the needs of Māori, Pacific and Asian Peoples because these populations experience twice the rate of moderate and severe gambling harm than the general population.

8
Total # venues 2019
0 change from 2018

72
Total # machines 2019
0 change from 2018

2019 Venues by Deprivation



1.3%
adults in NZ use pokies at least once a week

PGF Group provides free and confidential counselling and support services

Asian Family Services
Together enriching lives
0800 862 342
www.asianfamilyservices.nz

MapuMaia
Providing Help. Enriching Lives.
0800 212 122
www.mapumaia.nz

PGF SERVICES
Counselling Advice Support
0800 664 262
www.pgf.nz

Ending community sector dependence on pokie funding

White Paper

Updated Friday 17 July 2020

CONTENTS

ABOUT THIS PAPER

PGF Group, Hāpai Te Hauora and the Salvation Army have long been concerned at the reliance many community groups have on grants from pokie trusts or societies to underpin their operations.

Many of these groups share our concerns because of the ethical dilemma it poses for them. The services that these organisations provide are largely essential to many people and they deserve to have certainty and sustainability in their funding providers. The current system of funding from pokies does not provide that surety, relying on a small group of people in our poorer communities putting money into the machines.

A number of important community social services and sporting groups rely on community funding and know that in doing so the money is often coming from the very whānau and communities they are trying to support into wellbeing.

The COVID-19 Level 4 lockdown and the consequent closure of hospitality businesses has starkly highlighted the dependency of community organisations on grants from pokie machine losses in the Class 4 gambling sector.

There is no better time to look at reforming this system for funding community services to give more direction and certainty in a whole of community approach.

At this time, the system needs to be substantially supported. We believe there should be a publicly funded continuation of grant distribution for a year from the time of the beginning of the alert level 4 lockdown and there are a number of ways this could be done.

Image source: ruapehudc.govt.nz

EXECUTIVE SUMMARY

- From losses of $939 million in pokie machines in pubs, clubs and TABs in 2019, a total of $241 million was paid out in grants to community and sports groups

Community	$120,812,075
Sports	$120,444,774
Total	**$241,256,849**

- Four of those groups received $1 million in one year. The top recipients in the calendar year 2019 are listed in the table below.

Community	
Supreme Sikh Council of New Zealand	$4,241,691
New Zealand Flying Doctor Trust	$2,513,000
Canterbury West Coast Air Rescue Trust	$1,952,267
Bruce Pulman Park Trust 2018	$1,947,789
Sports	
Auckland Rugby Union Inc.	$1,520,000
Waikato Rugby Union	$897,427
NZ Metropolitan Trotting Club	$747,677
Bay of Plenty Rugby Union	$707,914
Auckland City FC	$639,213

- Problem gamblers contribute between 30% - 60% of the amount paid out in community grants meaning that problem gamblers either lose the amount equal to grants or considerably more: $282m, $376m or $563m.
- Grants in 2019 totalled $289 million.
- Fifty percent of the 15,476 machines (7,700) are in the most deprived communities (decile 8-10 on the Ministry of Health measurement of deprivation).
- It is estimated that community groups and services would need up to approximately $60 million to continue uninterrupted services to their communities and the wider public, for six months.
- It is estimated that sports groups would need about $60 million to continue uninterrupted services to their respective disciplines for six months.
- However, government may want to review the larger Unions' needs in relation to measures they are taking themselves to manage the impact of COVID-19 level 4 and beyond.
- If pokie machine losses were replaced with a government grants programme, four things would be achieved:
  - Community and sports funding would be secured so services can continue to be delivered where they are needed.
  - Losses from the most deprived communities would stop being diverted to national public programmes and national sports interests.
  - Transparency about who gets what money and what it is used for would be provided.
  - Time would be provided to review the whole programme and manage the reintroduction of pokie machines in ways that did not exacerbate gambling harm and is manageable as the COVID-19 levels of lockdown are worked through.

THE POKIE SYSTEM

Trusts and Societies were created to collect gambling proceeds and distribute grants. Together with clubs they make up the Class 4 gambling sector.

There are currently 34 Trusts and Societies holding licenses for the 15,470 Class 4 pokie machines. It should be noted that this excludes the 3078 pokies in casinos and casinos are sited as the largest contributor to problem gambling for the Asian community. A Trust or Society may be based in one location but will have their machines in venues across New Zealand.

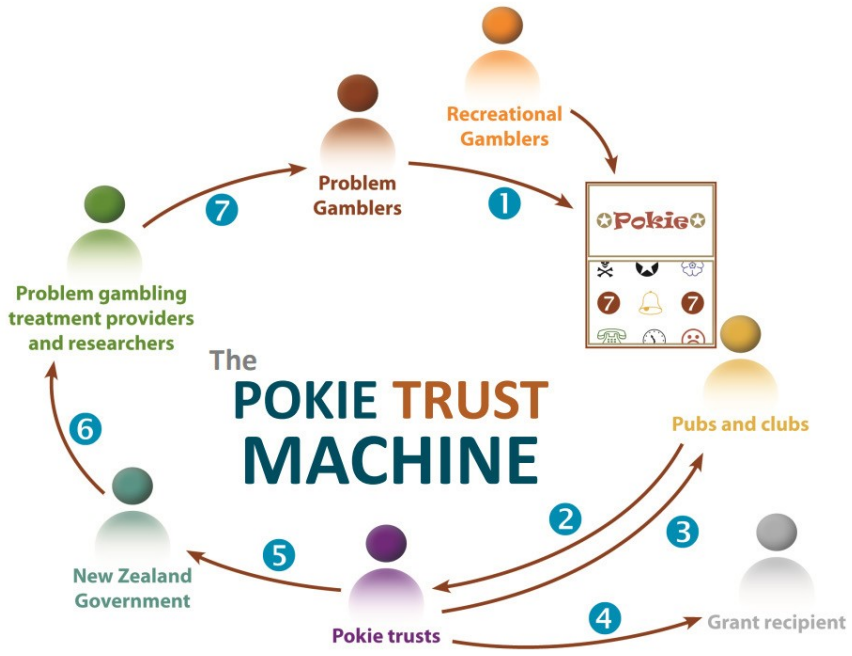
In the 2019 calendar year, Class 4 Trusts and Societies had a surplus of $124 million[1] to run their operations which largely incur processing, management and machine replacement and maintenance costs.

There are 205 clubs with 2,702 machines reported in Department of Internal Affairs (DIA) gambling statistics who retain all gambling proceeds for the purposes of the club.

At Territorial Local Authority (TLA) gambling policy reviews, the Class 4 sector are well heard and often with legal representation. They are also supported by groups who receive funding in the form of grants. The voice heard the least is that of the problem gambler and their family and community.

There is also significant risk of self-interest and inequity in the system when the Boards of the Trusts and Societies are self-appointed and only accountable to themselves when deciding which groups do and do not receive the proceeds of pokie losses.

1 Calculated using 40% of ex GST losses for the grants distributed and 16% of the ex GST losses for the venue payment



WHERE IS THE MONEY COMING FROM?

In the 2019 calendar year, $939 million (GST inc.) was lost in pokie machines in pubs, clubs and TABs (Class 4 gambling).

Only 1.3% of New Zealanders regularly use pub pokie machines[1], and 50% of the 15,476 machines (7,700) are in the most deprived communities (decile 8-10 on the Ministry of Health measurement of deprivation). It is therefore reasonable to conclude that the majority of the money being paid out by Trusts and Societies to community groups is coming from the poorest New Zealanders.

There are a range of estimates on how much of pokie machine expenditure comes from problem gamblers, outlined in the table at Appendix 1. The rate of losses from problem gamblers is at best equal, but most likely exceeds the amount paid out in community grants that go back to the families and communities who lost the $939 million in 2019.

At whatever percentage, it is evident that community grants come from a small number of people who cannot afford this level of losses and even less so now with the impacts of COVID-19.

We think there should be a publicly funded continuation of the Class 4 system payments for a year from the time of the beginning of the level 4 lockdown. This could be done in a number of ways, but services should get a roll-over to take them through this transition.

In doing so, groups can continue to support communities of interest or specific communities and provide wider population needs where for some time, there will likely be more not less demand.

The DIA estimate that 30% of Electronic Gaming Machine (EGM) expenditure is from problem and moderate risk-gamblers (2016). This is based on self-reported expenditure from National Gambling Study (NGS) participants. Self-reported EGM (pokie) gambling expenditure has historically been shown to be inaccurate.

Published sections of the NGS have already warned that self-reported expenditure does not often correspond to actual expenditure, especially for EGM gamblers[2]. The NGS self-reported EGM expenditure estimates for Class 4 gambling were $296m in 2012, $193m in 2013, and $157m in 2014; the actual expenditure recorded by the DIA was $854m, $826m, and $808m, respectively[3]. Similarly, an Australian study found respondents in the ACT reported an expenditure that was 45% of their actual spend[4].

A NZ study relating time and money spent gambling with quality of life measurements noted that their use of self-reported expenditure data likely underestimated losses, and their results would have been stronger if they had an objective way to measure expenditure[5]. Whatever estimate is applied, it is problem gamblers who support the community funding scheme and many of the recipients perform necessary and valuable services to the community and the public of New Zealand.

1 Health Promotion Agency (HPA) 2018. Kupe 2016: Health and Lifestyles Survey [data file]. Retrieved from http://kupe.hpa.org.nz/
2 Abbott, Bellringer, Garrett, & Mundy-McPherson, 2014, pp. 140–141; Bellringer, Garrett, Kolandai-Matchett, & Abbott, 2015
3 Bellringer et al., 2015, p. 72
4 Australian Institute for Gambling Research, 2001
5 Lin et al., 2010

THE FUNDING MODEL

The money lost on pokie machines is called Gross Machine Proceeds (GMP). GMP is the amount wagered, less the amount paid back as prizes. The money collected is applied in a complex model before it can be distributed in grants.

Venue Payments A Trust can pay up to 1.28% of the venue's turnover that week to a venue as commission, meaning higher earning venues can be paid proportionately more.

Prior to 2016, venues were paid on a fixed rate. Payments to all venues across the financial year must still not exceed 16% of losses for that year.

Problem gambling levy The levy is 0.78% of GMP and funds treatment services, public health and research.

Trust Operating Costs These must be kept as low as possible and only used for "reasonable" costs. The true proportion will be unique to each Trust based on their grant contributions etc. but estimated at 20%.

Regulator fees Fees are 3% and are paid to the Department of Internal Affairs.

Gaming duty Duty is 20% (GST inclusive, paid to the Crown): Section 12C of the Gaming Duties Act 1971.

Community grants Grants must be 40% of GMP but Trusts can pay more.

The table at Appendix 2 details the source of GMP and the amount distributed in grants for the year ended December 2019. The Department of Internal Affairs publishes GMP figures quarterly.

GRANT DISTRIBUTION

In the year to December 2019, a total of 13,000 organisations received approximately $241 million in grants (according to the PGF Group grants analysis system which uses discoverable published grants lists from the gambling societies and trusts rather than the theoretical figure 0f 40% of GMP).

PGF categorises grants into community services, community groups and sports groups.

Community services are classified as groups that provide paid and volunteer services. Community groups are classified as groups that service a discreet population and include faith-based groups but also include arts societies and some research groups.

Sports groups include everything from large Unions to local tennis clubs and children's sports. Grants are generally shared 50/50 between sports groups and community groups and services.

For grant recipients, many of which support laudable causes and communities, the Class 4 community funding programme represents revenue of between $250 million to $300 million per year. Few community recipients can see any alternative to meet their revenue needs.

2019 calendar year grants split

Community	$120,812,075
Sports	$120,444,774
Total	**$241,256,849**

CLASS 4 GRANTS FOR COMMUNITY SERVICES

The types of community groups that benefit from Class 4 funding include amateur dramatics, arts groups and recreational groups outside clubs.

It also includes health, mental health and social services groups, often working with vulnerable people and communities. Other groups might include groups like those involved in public-benefit research but who aren't providing any services, for example some medical researchers.

The community services which benefit from the community funding scheme are all services which the whole of the New Zealand public benefit from either directly or indirectly.

The existence of an ambulance service, for example, may not be used by each of us, but that it is there for those who do, is a benefit to all New Zealanders.

These groups of beneficiaries are more difficult to plan for because they are often small and are only known in their immediate communities.

A way of dealing with this is to provide more government support to the Community Organisation Grants Scheme (COGS). An alternative model is to utilise the regional community foundations.

Government guidance could be provided for the philanthropic sector on applications and criteria but recognising these programmes often service valuable niche and localised organisations. At current grant levels the funding programme would be about $60 million per annum. Community group dependency is significant.

A categorised list of community funding recipients can be found at Appendix 3.

CLASS 4 GRANTS FOR SPORT

Approximately $120 million, or about half of the money raised through the Class 4 community funding scheme, goes to sports.

National sports bodies and community sports groups are now highly dependent on Class 4 gambling losses. This dependency, in terms of the history of New Zealand sport is relatively contemporary.

While there may be long standing relationships and "rollover" application processes in place between some sports groups and some Trusts or Societies, this is not the case for all. For some groups the annual and uncertain application cycle limits development.

A categorised list of sport funding recipients can be found at Appendix 4.

IMPACT ON TAX COLLECTED

The benefits to government from gambling losses are made up of the:

- GST collected
- gaming machine duty and levy, providing problem gambling services and research
- community funding not demanded from Vote

The GST is a function of money spent and it seems very reasonable to assume that if the money spent on pokies in Class 4 was not spent there, it would be spent elsewhere, and with the possibility that a multiplier effect would see revenue to the government increased.

The gaming machine duty is an income/turnover tax proxy. As such, this may equal the amount of income tax the government collects through businesses paying income tax on the level of income that would have been spent on pokies (ex GST). This approximation may overstate or understate the tax take by the government from taxable business activity.

A multiplier effect may act in the government's favour in this regard if the money was going through non-pokie businesses. The levy is derived from gambling losses and is a function of the size of the problem. Gambling treatment services are not taxpayer funded.

Government dependency is not significant with opportunity money spent for the tax gathered from losses, to be spent on other consumables.

COVID-19

The grants system on which valuable community services survive is based on the assumption that it is acceptable for a small proportion of New Zealanders living in the poorest communities to lose money in support of a national benefit. Many community groups would rather not take pokie funding to deliver their programmes but have no other option.

There is little transparency about the application process and who gets what grants. In addition, some Trusts and Societies are approving grants from proceeds of pokie losses gathered from areas outside of which the community group may be operating. The Class 4 funding system may be seen as a way to keep the hospitality industry afloat at the time of this pandemic. The Gambling Act (2003) prohibits venues operating as pokie dens (section 69A(e) and 70 (1) (i)).

As lockdown levels change and pubs are permitted to operate, the license conditions for pokie machines must be maintained and monitored. If a pub with pokies does not reopen, then the machines cannot be moved to another location if the TLA gambling policy prohibits this. Nor can alternative venues increase their number of pokie machines, if the TLA policy precludes this.

Of note also is that gambling policy reviews are subject to TLA public consultation processes. As 50% of pokies are in the poorest areas in New Zealand and these areas are likely to be in need of significant COVID-19 income support for the foreseeable future, it would make sense to ensure that gambling harm is not further exacerbated, despite the need to support community and sports groups.

AN INTERIM SOLUTION

Pubs and clubs face a long and uncertain future before revenue streams return. Even if pubs return to some normal operation it is likely that social distancing rules for various levels of lockdown may preclude some or all pokie machines operating in the same way.

Both limited patronage and the limited number of machines able to be used at any one time will impact on gambling losses. This is positive. However, it will also flow into less revenue for the community grants programme.

Most Trusts and Societies have suspended grants, effective from COVID-19 alert level 4 lockdown.

An interim solution is for the Government to directly fund current community and sports grant recipients as part of its COVID-19 support packages. This could be done for a six month period while the whole programme is reviewed.

It is estimated that community groups and services would need up to about $60 million to continue uninterrupted services to their community groups and wider public, for six months. This will cover the period of level 4 lockdown through to September 2020.

It is estimated that sports groups would need about $60 million to continue uninterrupted services to their respective disciplines for six months. However, government may want to review the larger Unions' needs in relation to measures they are taking themselves to manage the impact of COVID-19 Level 4 and beyond.

If pokie machine losses were replaced with a government grants programme several things would be achieved.

Firstly, community and sports funding would be secured so services can continue to be delivered.

Secondly, there would be transparency about who gets what money and what it is used for. This does not mean that funding would only go to approved government projects but does mean there can be some equity oversight.

Importantly, losses from the most deprived communities would stop being diverted to national interests.

Finally, this will provide time to review the whole programme and manage the reintroduction of pokie machines in ways that does not exacerbate gambling harm and is manageable as the COVID-19 levels of lockdown are worked through.

ABOUT THE AUTHORS

PGF Group

The Problem Gambling Foundation is now trading as PGF Group, with Asian Family Services, Mapu Maia Pasifika Service, and PGF Services, part of this overarching brand. The organisation is a Charitable Trust operating nationally with services delivered under contract to the Ministry of Health (MoH) and funded from the gambling levy.

Established in 1988 as the Compulsive Gambling Society, the organisation started out as a telephone service then expanded to include face-to-face services as demand grew. In 2001, the Problem Gambling Foundation succeeded the Compulsive Gambling Society and today, we deliver treatment and public health services nationwide. We have a skilled and diverse workforce with staff who are qualified in clinical work and in health promotion.

PGF Services provide free counselling, advice and support to gamblers and their families and work to ensure that support for our Māori clients fits a kaupapa Māori way of working. Our specialist teams provide culturally and linguistically appropriate support to Asian and Pasifika communities living in New Zealand.

Hāpai Te Hauora

In 1996, Hāpai Te Hauora Tapui Ltd (Hāpai) was established as a regional provider of Māori public health services in the greater Auckland region. Hāpai was created from a tripartite Memorandum of Understanding between Te Rūnānga o Ngāti Whātua, Raukura Hauora o Tainui and Te Whānau o Waipareira Trust Board. The subsequent arrangement provided an integrated and collaborative entity that cemented regional Maori public health services in one place for Tāmaki Makaurau.

The mission and vision of Hāpai is to increase opportunities for Māori to enjoy good health and to be sustained by healthy environments. This is done by providing a strategic focus that is underpinned by our values, evidence based research, innovation and leadership for the advancement of health and well-being for all. Work is undertaken regionally and nationally to address health inequities and provide strategic solutions for long term outcomes across all areas of well-being.

The Salvation Army Oasis

For over two decades, The Salvation Army has provided help to those impacted by harmful gambling. The Salvation Army Oasis was formally established in June 1997 in Auckland in response to growing evidence that the proliferation of gambling opportunities was having a negative impact on society. Prior to this in 1992 and 1995, services to support gamblers were established in Wellington and then Christchurch after the opening of the Christchurch casino. Consequently, the Army's reducing gambling harm services have expanded to seven regions across New Zealand.

We are funded by the Ministry of Health to provide preventing and minimising gambling harm clinical and public health services. We have a diverse team of professional and clinically qualified and registered counsellors and public health practitioners. Our team support and encourage wellbeing and reduce gambling harm through education, self-reflection and creative and research based therapies. Public health workers provide accurate information and education to raise awareness and support community and professional groups, services and Government to be free from gambling harm.

APPENDICES

Appendix 1: Problem gambler contribution to annual GMP

Rate of problem gambler contribution to losses	2019 Losses	2019 Grants (40% of 2019 Losses less GST)	Contribution from problem gamblers
30% Department of Internal Affairs	$939 million	$292 million	$282 million
40% Australian Productivity Commission minimum	$939 million	$292 million	$376 million
60% Australian Productivity Commission maximum	$939 million	$292 million	$563 million

Appendix 2: 2019 GMP Sources and Distribution of Grants

2019 Calendar Year	$ Millions	Non-club Class 4 operating payments
Class 4 losses	939	
Club losses	98	
Non-club losses	841	
GST on non-club losses	110	
Non-club losses less GST	731	
GST exclusive Machine duty (23%)	168	
Non-club tax paid losses	563	
Grants (40% ex GST losses)		292
Venue payments (16% ex GST losses)		117
Levy (0.78% ex GST losses)		6
Fees (3% ex GST losses)		22
Total gambling society operating payments	437	437
Gambling society surplus to run the trust	126	
Percentage of ex GST paid losses available to trust	17%	

Appendix 3: 2019 Community Services and Community Groups sub-categories

Community groups	$37,838,195
Education	$23,466,718
Arts	$12,952,443
Health related	$10,446,792
Community services	$10,420,915
Faith based	$6,819,355
Search and Rescue (excluding surf clubs)	$6,656,072
Māori	$5,092,069
Kindergartens/Childcare/ Plunket	$2,452,638
Ambulance services	$2,401,716
Council	$1,516,343
Fire Services	$748,819
Total	**$120,812,075**

Appendix 4: 2019 Sport Groups sub-categories

Rugby	$19,982,236
Other sports	$19,861,454
Soccer	$11,295,064
Cricket	$8,908,166
Water sports	$8,046,758
Racquets	$6,012,940
Sports stadiums/ academies/events centres	$5,478,896
Hockey	$4,757,123
Basketball	$4,743,441
Netball	$4,524,828
Surf lifesaving clubs	$4,438,863
Bowling	$3,431,502
League	$3,179,766
Racing	$2,861,218
Cycling	$2,695,279
Special Olympics/sports for the disabled	$2,433,512
Gym sports	$2,341,199
Softball	$1,766,541
Athletics	$1,412,553
Equestrian/pony clubs	$1,303,274
Motorsports	$970,161
Total	**$120,444,774**

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Wendy Cawood

Postal Address: 39 Dole St Ngakawau

Email: wccawood21@gmail.com

Phone: 027 386 2575

Do you wish to speak to your submission?

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

W Cawood

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name B Chignell

Organisation

Postal Address PO Box 232

Town Westport Post code

Phone

Email

Have your say!

Presenting your submission in person

( ) I wish to speak to my submission (x) I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website www.bullerdc.govt.nz.

Information Management (see page 5 of the Consultation Document for more information)

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

( ) I prefer Option 1 (x) I prefer Option 2 ( ) I prefer neither option

Additional feedback

Climate Change (see page 6 of the Consultation Document for more information)

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan, with ongoing monitoring costs

(X) I prefer Option 1 ( ) I prefer Option 2 ( ) I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge (see page 7 of the Consultation Document for more information)

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

(X) I prefer Option 1 ( ) I prefer Option 2 ( ) I prefer Option 3 ( ) I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

BULLER DISTRICT COUNCIL

Shaping our district

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider it its Long Term Plan?

Consultation closes 18 May
www.bullerdc.govt.nz
LTP@bdc.govt.nz
or complete your submission online at www.surveymonkey.com/r/21-31-LTP

Privacy Statement: In accordance with the Local Government Act 2002, all submissions (including your name and contact details) will be made available online as part of the LTP decision-making process. Please refer to www.bullerdc.govt.nz/privacy or contact Council for a copy of Council's Privacy Statement.

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

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Have your say!

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(✓) I wish to speak to my submission ( ) I do not wish to speak to my submission

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www.bullerdc.govt.nz

BULLER DISTRICT COUNCIL – LONG TERM PLAN

Firstly – NUKU supports the Buller District Council Long term plan, also the focus with the Rangatahi Youth space in the kawatiri and wider Buller district.

Purpose:

To provide a sustainable, innovative ecosystem of ako (learning) for all rangatahi to enhance their mana, by growing their Hauora (wellbeing) and life skills. Through modern Maori techniques we will reconnect to the natural world, inspiring rangatahi to live their moemoea (dreams).

Vision:

To create a pa for He tangata (people) that weaves lives, grows connection to the natural world and becomes a model for modern Kura and community.

Values:

- Te Ao Marama
- Pure intention / Unconditional aroha
- Kaitiakitanga
- Environment
- Innovative
- Resilient enhancing
- Mana enhancing

NUKU would like to build a working relationship with council in achieving the districts long term plan in the development of our Rangatahi and community, enhancing one's own hauora enhances the community's and the environment.

NUKU is currently and planning for;

- Exploring / creating the concept of a youth space / hub
- Exploring the connection of hauora and the natural world via events & workshops
- Exploring innovation between nature and technology
- Developing life skills / natural connections in the community
- ECO – tourism – Skills development.

Further supporting documentation – Rangatahi youth survey

Co-Directors & Te Whare O NUKU

NUKU AOTEAROA TAPUI LIMITED

Contact: 02108775062

Facebook: @nukuaotearoa

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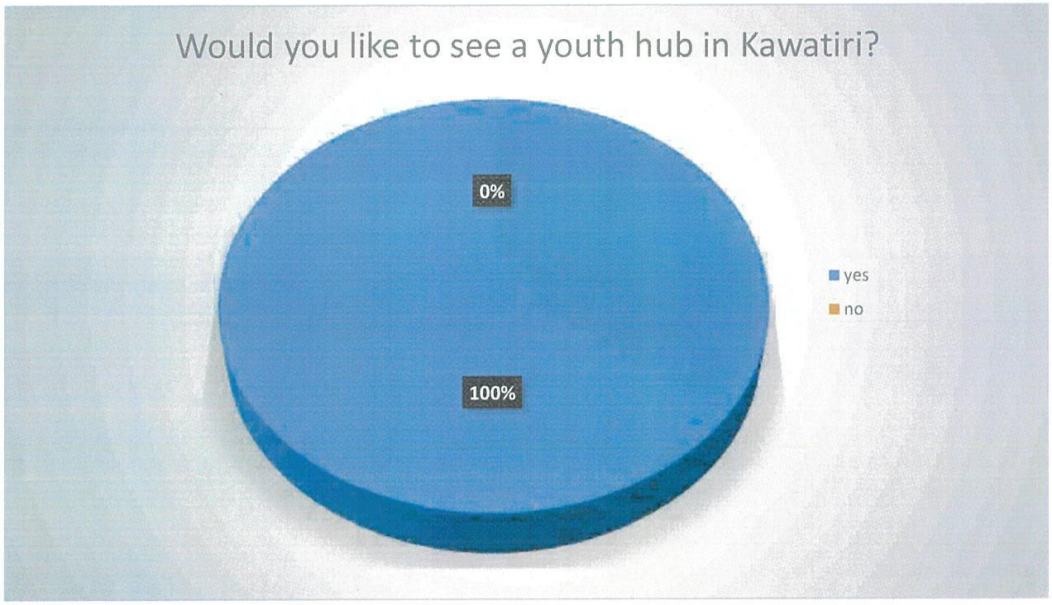
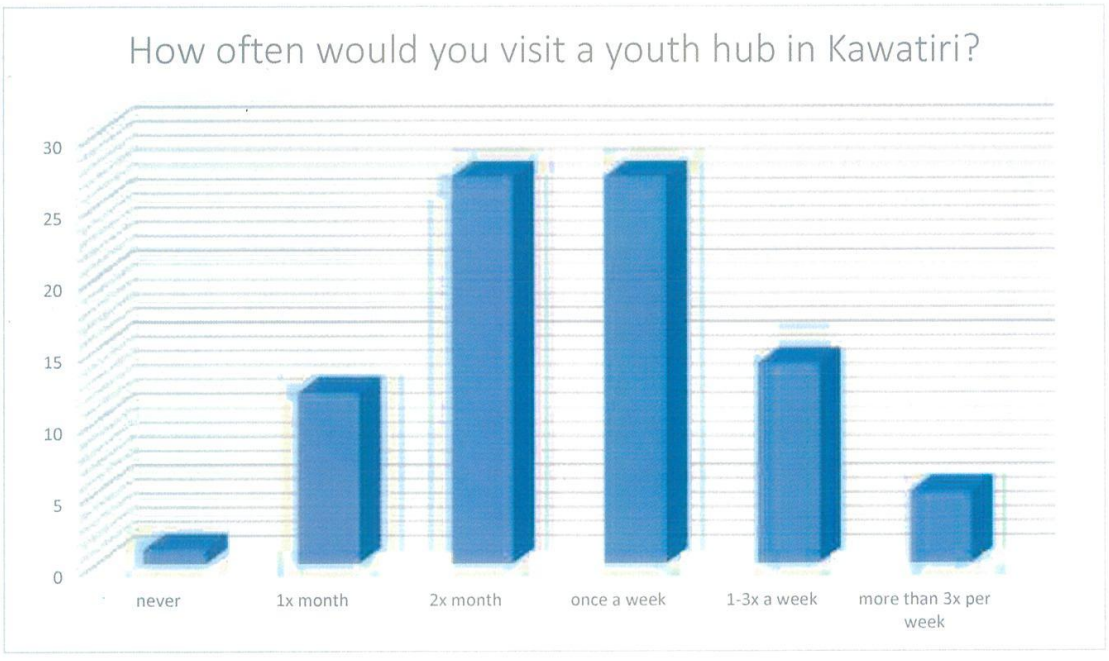
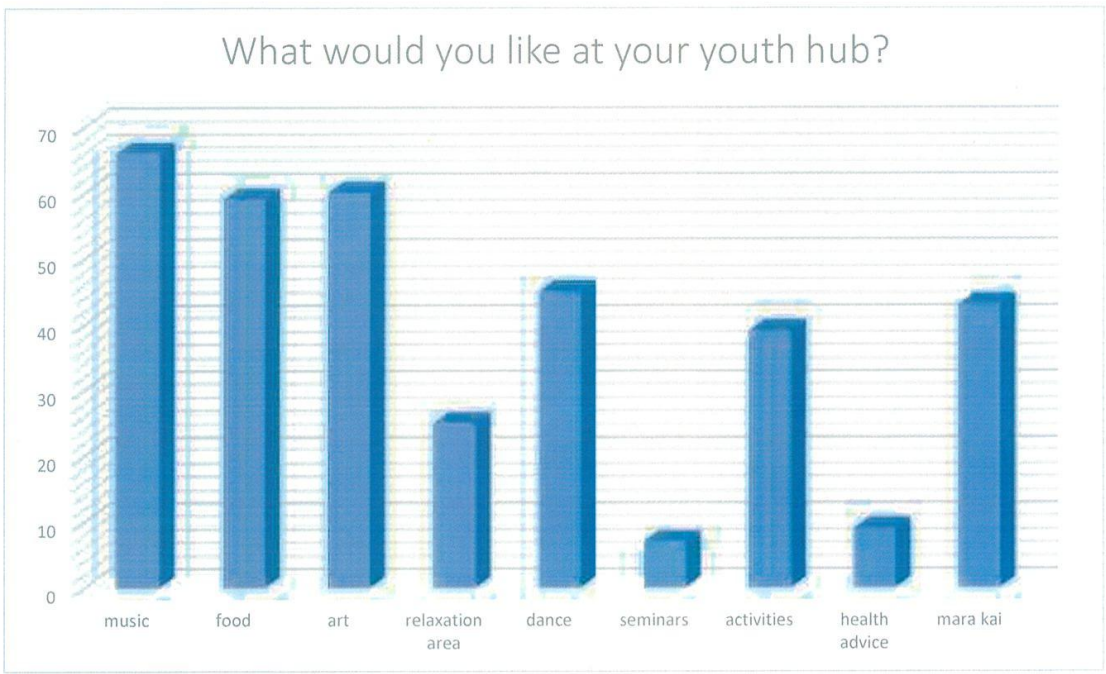
On Friday 18th December 2020, we held a youth event 'Kura Out' at the NUKU gardens behind the Salvation Army shop. We had various activities on offer, along with food and music. Plus we also took the survey to the Buller Marathon.

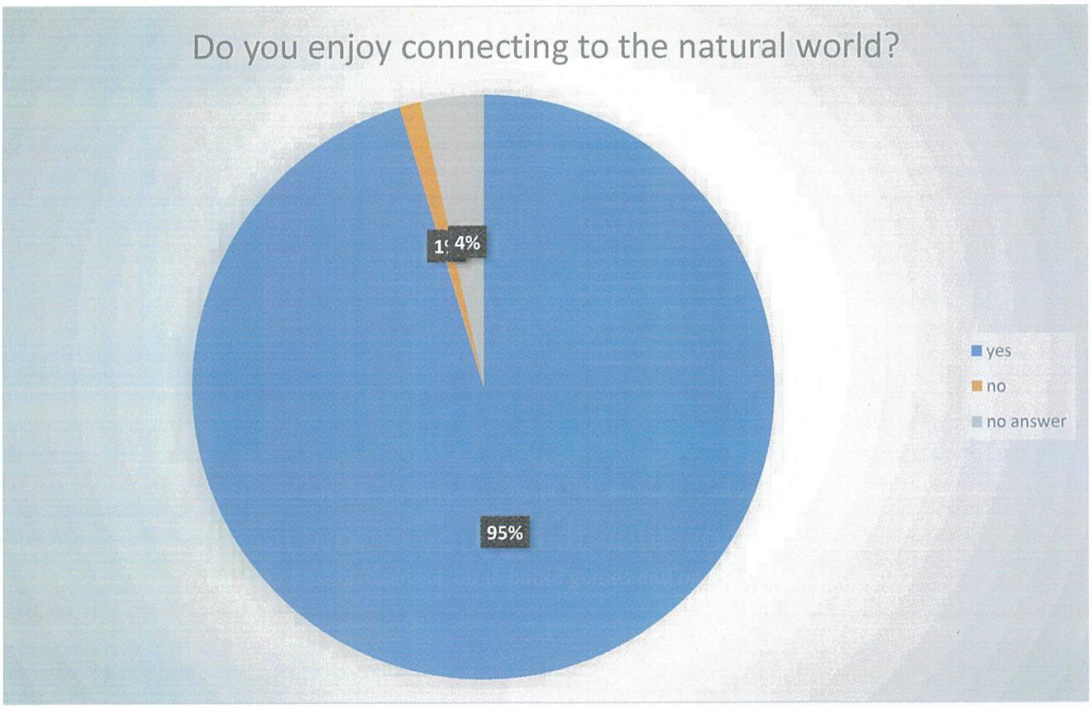
We have had 86 rangatahi fill out surveys regarding the possibility of a youth hub in Kawatiri. These are the results:

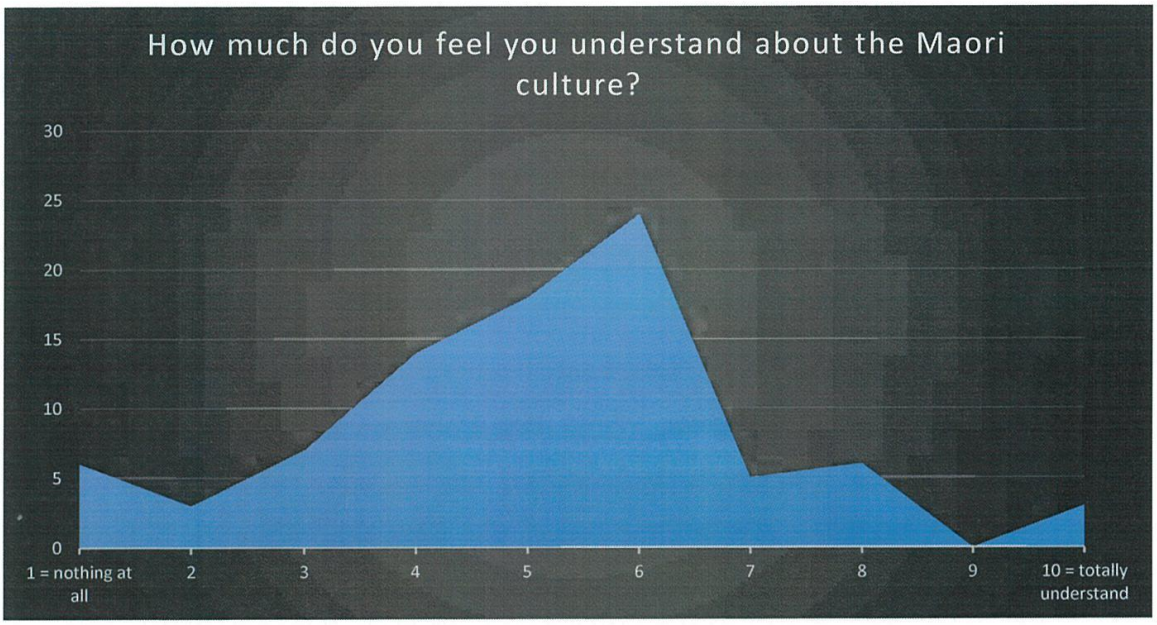


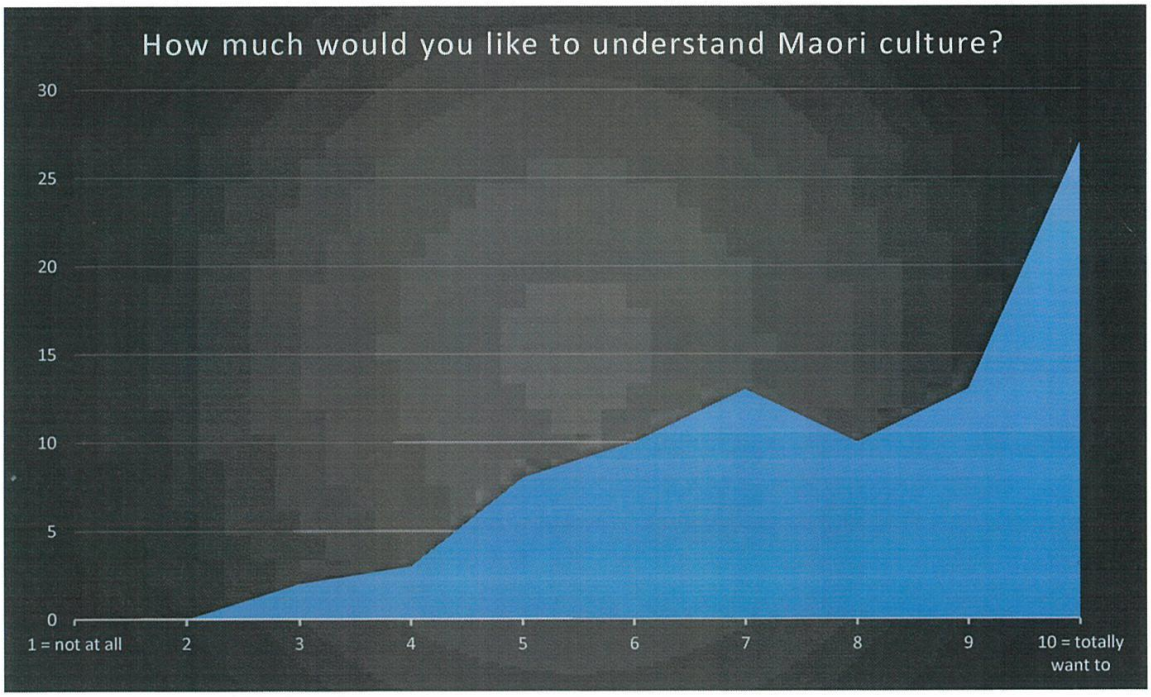




'Other' options included: boxing, exercise, large board games and opportunities for youth




How much do you feel you understand about the Maori culture?
30
25
20
15
10
5
0
1 = nothing at all
2
3
4
5
6
7
8
9
10 = totally understand


How much would you like to understand Maori culture?
30
25
20
15
10
5
0
1 = not at all
2
3
4
5
6
7
8
9
10 = totally want to

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Annette Climo

Postal Address: 15 River road

Email:

Phone:

Do you wish to speak to your submission? No

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

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I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

aclimo

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Bruce Coleman

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Email: ~~vivandbr~~ vivandbruce@xtra.co.nz

Phone: 7828595

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

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Yours sincerely

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: V.V Coleman

Postal Address: 17 Corbett St Hector

Email: ~~V~~ Vivandbruce@xtra.co.nz

Phone: 7828595

Do you wish to speak to your submission? No

Key issues you would like to discuss: No

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

V.V Coleman

#11

COMPLETE

Collector: 21-31 LTP (Web Link)
Started: Saturday, May 15, 2021 10:14:42 AM
Last Modified: Saturday, May 15, 2021 10:45:21 AM
Time Spent: 00:30:38
IP Address: 222.153.82.156

Page 1

Q1

CONTACT DETAILS

Name	**Chris Cooper**
Company/Organisation (if applicable)	**Carters by the sea**
Postal address	**27 Marine Parade, Carters Beach**
City/Town	**Westport**
Post code	**7825**
Email address	**csea1@mail.com**
Phone number	**021356414**

Q2 **I do not wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 1**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 2**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5 **I prefer Option 1**

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

After 4 years of submissions to the LTP with no result, can the council invest funds into resurfacing the footpaths on Marine Parade from Tasman St to Golf Links Road. The footpaths are basically now gravel and are a hazard to walk on and aesthetically a disgrace alongside the outstanding cycle trail across the now revitalised domain.
Also there is significant stormwater discharge onto the domain from Marine Parade via the under road sumps that do not work anymore. Soakpits should be installed at these points on the domain such as the one that was installed across the road at 27 Marine Parade in Sept 2019. It is particularly bad on roadside of the playground.
Also the car park outside Donaldos requires extending towards the play ground due to the increase in size of motorhomes that stick out into the road. Someone will get injured crossing the road to the shop one day.
Regards
Chris Cooper

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Margaret Corrie

Postal Address: 16 Greenfield.

Email:

Phone: 03 7828181

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

M. A. Corrie

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Paul Corrie

Postal Address: 16 greenfield st Hector

Email:

Phone: 03 7828181

Do you wish to speak to your submission? No

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

P Corrie

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Anne Crawford

Postal Address: 1 Main Road Ngakawau

Email: hector.potteryextra.co.nz

Phone: 027 6828107

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

Anne Crawford

#14

COMPLETE

Collector: 21-31 LTP (Web Link)
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Last Modified: Monday, May 17, 2021 1:48:29 PM
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Page 1

Q1

CONTACT DETAILS

Name	**Norman Crawshaw**
Company/Organisation (if applicable)	**Personal**
Postal address	**39A Queen Street**
City/Town	**WESTPORT**
Post code	**7825**
Email address	**nrcrawshaw@hotmail.com**
Phone number	**+6437898866**

Q2 **I do not wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 1**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I do not prefer any of these options**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5	**I prefer Option 1**
WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge	

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

I request Council to consider the establishment of a History/Heritage centre to house tactile archives and similar, thus ensuring their preservation and allowing public access.

WHY IS THIS NEEDED

Government at national level regards the preservation and management of its historical heritage and the public access to these, as an essential aspect of its activity, hence the establishment of Archives NZ.. Regional and District Councils have a similar duty at regional and district level.

WHO WOULD BENEFIT

There is a need to preserve, protect and retain for the public of Buller for residents, visitors, researchers (amateur and professional) and future generations. This is becoming more and more important as more and more people are becoming interested in their own and their family's history and culture.

Additionally, the government has now decreed that History, with an emphasis on local history, is to become a compulsory aspect of the national curriculum at all levels.

Without the availability of such a centre, Buller students, especially those of coastal Buller) will be severely disadvantaged as on the wider West Coast, Hokitika, Greymouth and Reefton have such centres. The establishment of such a centre in Westport would ensure the continuity of access and support for present and future students of this district.

WHAT COULD BE INCLUDED

The proposed centre would be a repository for a wide range of tactile heritage items.This could include such things as Council archives, historical newspapers, books, photographs, club and society historical archives/documents, donated birth, death and marriage certificates, church and school records (original or photocopies). NB These are merely examples not a definitive list.

ADDITIONAL BENEFITS

Such a centre could become a visitor attraction in its own right and encourage researchers from other areas to visit, thus contributing to the economy of the district. It could also sell and produce educational resource material for use in schools, thus providing a useful revenue stream

SUMMARY

History and heritage provide us with a window to the past and allow us to better understand our present culture and society. There is a need for this to be preserved and be accessible for the present and future generations.

The proposed centre would serve as both a guardian of resources and a gateway through which the wider community, both present and future, can access and be a part of their regional identity, culture and heritage.

NOTE

This is a personal submission. However, as secretary of Buller Grey Power,I am aware that many of our 500+ members would be supportive of this proposal.

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: GEOFFREY ROBERT DARK

Postal Address: 17 RIVER ROAD, HECTOR

Email: jollyroger8000@gmail.com

Phone: 021 734131

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

G Dark.

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name Veronica L de Friez

Organisation n/a

Postal Address 16 Golf Links Rd, Carters Beach

Town Westport Post code 7825

Phone 021 321 264

Email veronica@raconteur.co.nz

Have your say!

Presenting your submission in person

- ○ I wish to speak to my submission
- ✓ I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website **www.bullerdc.govt.nz**.

Information Management *(see page 5 of the Consultation Document for more information)*

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

- ✓ I prefer **Option 1**
- ○ I prefer **Option 2**
- ○ I prefer neither option

Additional feedback

Climate Change *(see page 6 of the Consultation Document for more information)*

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan, with ongoing monitoring costs

- ○ I prefer **Option 1**
- ✓ I prefer **Option 2**
- ○ I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge *(see page 7 of the Consultation Document for more information)*

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

- ○ I prefer **Option 1**
- ○ I prefer **Option 2**
- ✓ I prefer **Option 3**
- ○ I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name: Veronica de Friez

Organisation: Westport Whitebait Festival Trust

Postal Address: 16 Golf Links Rd, Carters Beach

Town: Westport Post code: 7825

Phone: 021 321 264

Email: veronica@raconteur.co.nz

Have your say!

Presenting your submission in person

☑ I wish to speak to my submission ☐ I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website **www.bullerdc.govt.nz**.

Information Management *(see page 5 of the Consultation Document for more information)*

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

☐ I prefer **Option 1** ☐ I prefer **Option 2** ☑ I prefer neither option

Additional feedback

Climate Change *(see page 6 of the Consultation Document for more information)*

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan, with ongoing monitoring costs

☐ I prefer **Option 1** ☐ I prefer **Option 2** ☑ I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge *(see page 7 of the Consultation Document for more information)*

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

☐ I prefer **Option 1** ☐ I prefer **Option 2** ☐ I prefer **Option 3** ☑ I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

BULLER DISTRICT COUNCIL

Shaping our district

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider it its Long Term Plan?

As attached

www.bullerdc.govt.nz
LTP@bdc.govt.nz
or complete your submission online at
www.surveymonkey.com/r/21-31-LTP

Privacy Statement: In accordance with the Local Government Act 2002, all submissions (including your name and contact details) will be made available online as part of the LPTP decision-making process. Please refer to **www.bullerdc.govt.nz/privacy** or contact Council for a copy of Council's Privacy Statement.

From: The Westport Whitebait Festival Charitable Trust

To: Your Worship the Mayor and Council Members of Buller District Council

Along with a new steering group, Chair Graham Howard-Mills and Festival Director Veronica de Friez, are revamping and rejuvenating the Westport Whitebait Festival (Festival). The Festival is to be held over Labour Weekend.

Our vision is to strengthen our local community's pride and connectedness with our region.

By agreeing to commit to financially supporting the festival over the next three years, Council can help the Westport Whitebait Festival to revitalise the community of Buller District by enabling and growing a vibrant event

Our mission statement is:

> *...to create a unique West Coast experience for locals and visitors by providing an entertaining, memorable,and thrilling festival to savour the West Coast flavour. Through the Festival we aim to develop community pride for this spectacular part of Aotearoa, to stimulate tourism and to boost the local economy.*

To successfully create this event we have developed a Business and Marketing Plan, which includes our increased but realistic budget. We have submitted these as part of an application to the DWC Regional Events Fund for the sum of $300,000.00 over three years. This will allow our Festival and community to thrive.

The new revitalized Festival will include:

- A Friday evening grand opening (in discussion with a potential sponsor) followed by a night market: stalls, late night retailers, a Taste Kawatiri whitebait experience and local music, located along the car free main street, dressed with lights, bunting and flags. A buzz will go through the town center as Westport's main street revels in a back to the 50's late night Friday night experience for one and all.

- Saturday morning is for children and youth, co-organised by Youth Voice. And for all ages, information and discussion sessions are on offer. Saturday afternoon the Festival moves to Victoria Square, where under the Great White Marquee we'll hold the ever popular whitebait cooking demomstrations, whitebait filleting and cooking competitions for adults and youth, and of course locally made whitebait patties by the dozen are there to be enjoyed. Come Saturday night the Marquee transforms into a canvas club of bar, dance area and casual seating under lights. We'll have top of the line New Zealand bands performing...top entertainers, top venue, top food and wine.

[redacted]

The Festival lives and breathes community engagement. Partnerships with such groups as Te Ha O Kawatiri, Youth Voice, REAP, Love Kawatiri, and New Coasters play a central part in creating this event with, in and for the community. We're all-inclusive - providing disabled toilets at the Festival, activities for the young and young at heart, along with many opportunities for local entertainers, stallholders and hospitality providers. We want to provide the community with a Festival to remember, and one that is looked forward to by future generations.

The Festival will create opportunities for the local tourism, hospitality, entertainment, retail and adventure tourism industries. There are potential business leverage and added-value opportunities in some of the activities we are exploring.

Te Tiriti O Waitangi is respected with Ngati WaeWae and Te Ha O Kawatiri fully supportive of our endeavours. The multi-cultural make-up of Westport's local community is to be reflected in many of the elements within the Festival – stories, food, entertainment and of course music and dance.

The Westport Whitebait Festival acknowledges our environment is taonga. The Festival recognises Te Mana o te Wai, without which whitebait could not survive. The Festival will share information on the ecology, the sustainability and the developing farming of whitebait in our informative sessions to be held at NBS Theatre.

Our aim is to establish a unique and entertaining Buller District experience to stimulate domestic tourism, boost the local economy, raise the profile of the West Coast and develop pride for this special part of Aotearoa/New Zealand.

In recognition of the benefits the Festival will bring to the community and the number of outcomes met in terms of social, cultural, environmental and economic benefits, we respectfully request the sum of $10,000.00. This amount will allow for proactive growth, while also future-proofing the Westport Whitebait Festival.

Nga mihi nui.

Graham Howard-Mills
Chair
Westport Whitebait Festival Trust
027 473 3248

Veronica de Friez
Festival Director
Westport Whitebait Festival
Director
021 321 264

#9

COMPLETE

Collector:	21-31 LTP (Web Link)
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Last Modified:	Thursday, May 13, 2021 10:59:48 AM
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IP Address:	121.74.74.24

Page 1

Q1

CONTACT DETAILS

Name	**Veronica de Friez**
Company/Organisation (if applicable)	**Westport Whitebait Festival Trust**
Postal address	**16 Golf Links Road,Carters Beach**
City/Town	**Westport**
Post code	**7825**
Email address	**veronica@raconteur.co.nz**
Phone number	**021 321 264**

Q2 **I wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I do not prefer any of these options**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I do not prefer any of these options**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5 **I do not prefer any of these options**

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

I have 2 pages submitted - please confirm these have been received. Thank you Veronica

#21

COMPLETE

Collector: 21-31 LTP (Web Link)
Started: Tuesday, May 18, 2021 2:27:28 PM
Last Modified: Tuesday, May 18, 2021 2:42:46 PM
Time Spent: 00:15:17
IP Address: 49.224.76.26

Page 1

Q1

CONTACT DETAILS

Name	**De b**
Postal address	**P.o.box 185**
City/Town	**Westport**
Post code	**7892**
Email address	**punakaiki@hotmail.com**

Q2

PRESENTING YOUR SUBMISSION IN PERSON

I do not wish to speak to my submission

Q3

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

I prefer Option 2

Q4

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

I prefer Option 2

Q5

I prefer Option 2

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

Cycleways are important. Let's get more citizens out on bikes safely. Alma rd has so many near misses between car and car on blind corners but buggies, pedestrians and bicycles need somewhere to go. Build a cycleway and improve visibility on corners. So much development going in we need it now before the fences go up and no room to move on this.
Don't support mines that communities don't want. Barrytown mine is an environmental disaster and will b unliveable for the residents.keep coast rd the scenic gem it is.
More education and legislation around packaging, rubbish and recycling. Businesses should reduce unsuitable products so that they don't end up in landfill miles away burdening taxpayers and the environment.
Loving the palm trees, support for youth and improving of community facilities that increase well being and joy.

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: G Dodsworth

Postal Address: 15 Corbett st

Email:

Phone: 021011329

Do you wish to speak to your submission? N.L

Key issues you would like to discuss: ?

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

G Dodsworth

NORTHERN BULLER COMMUNITIES SOCIETY INC.

30A Main Road
Ngakawau
WESTPORT 7824

Phone/fax 03 782 8276
Email nbcrc@actrix.co.nz
Registered Charity No. CC26073

26

To//
Draft Long Term Plan Submission
Buller District Council
PO Box 21
Westport 7866

07th May 2021

SUBMISSION TO BULLER DISTRICT COUNCIL DRAFT LONG TERM PLAN – COMMUNITY SERVICES

This letter is a submission to the Draft Long Term Plan of the Buller District Council for the continued financial support of the Northern Buller Communities Society in the provision of visitor and tourism information along with its public area maintenance and beautification services in Northern Buller. In previous years we have received Annual Plan funding for the provision of tourism information services, assistance for our public area mowing and beautification services and for the maintenance of the public toilets in Granity. We are proud of what we are achieving with this level of local body funding and feel that the Buller District Council and ratepayers are getting real value for money from our group in this area.

TOURISM INFORMATION SERVICES:
District Promotion and Tourism Support.
Seeking $6000 annual contribution from the Long Term Plan
In November this year, it will be 12 years since we moved our Resource and Information Centre to the Ngakawau Hall. We recorded a total of over 1116 visitors to the Centre in the year ended March 2021. The impact of Covid-19 reduced the number of visitors through our doors considerably, however we have been able to focus on domestic tourism to our region and are ideally placed to work with the local industry to build on the 19% that made up our "out of area" visitors last year. We certainly saw a surge in domestic tourism to Northern Buller in the early months of this year. We aim to encourage people to stay longer and do more in the region and we have found this easier to do with domestic travellers seeming to have more time on their hands than international visitors. We are keen to link in to the Pounamu Pathway Project as it is woven in to our communities over time. We feel we can add value as the midway point between Karamea and Westport. We have a good relationship with the Karamea Resource Centre and always encourage people to go further north into the Karamea area. We also generate local employment from our services with our two Centre Assistants. We have provided all requested KPI's to council annually for the support received.

PROPERTY:
Property Mangement Amenities and Reserves.
Seeking $4432 annual contribution from the Long Term Plan.
Our Beautification Committee continues to work hard maintaining the Granity Band Rotunda site, corner gardens and nearby railway reserve areas. We also care for the Community orchard in Back Rd.
We have kept up our mowing services on the Railway Reserve strip along Torea St south and several areas north along State Highway 67 to Ngakawau. This is done by volunteers using Society equipment and fuel. Following several years of fundraising, we recently purchased a much-needed new mower to enable safer and more reliable continuation of this service to our communities. The new mower is valued at over $25,000 and will be $432 per annum to insure.

PUBLIC TOILETS:
Seeking $1350 annual contribution from the Long Term Plan
In previous years we have been provided with funding for the cleaning and maintenance of the public toilets which are located in the Lyric Theatre in Granity. The toilets have been upgraded and re-opened as part of the Lyric Theatre restoration project. We submit to the LTP that ongoing funding from 2020/21 be continued for these public toilets.

We would like to sincerely thank council for its past support of the work that we do to provide visitor information, public area beautification, toilets and local resources to Northern Buller.

Yours sincerely

Lynne Duncan
Chairman
Northern Buller Communities Society Inc

#22

COMPLETE

Collector: 21-31 LTP (Web Link)
Started: Tuesday, May 18, 2021 3:06:14 PM
Last Modified: Tuesday, May 18, 2021 3:13:14 PM
Time Spent: 00:06:59
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Page 1

Q1

CONTACT DETAILS

Name	**Lawrence EADE**
Company/Organisation (if applicable)	**Cape Foulwind Staple 2 Limited**
Postal address	**PO Box 245,**
City/Town	**WESTPORT**
Post code	**7866**
Email address	**larry@eade.co.nz**
Phone number	**+64220386120**

Q2 **I wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I do not prefer any of these options**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 2**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

I prefer Option 2

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

Want to make a presentation regarding facilitating zonings in the Cape Foulwind precinct that enable light to general industrial uses + residential development. There is already a lot of residential construction going on at the moment - this construction is being approved under existing rural zoning

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Grant Elley

Postal Address: 36 River rd Hector

Email: gelley @ xtra.co.NZ

Phone: 7828882

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely G R Elley

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Murray Ewers

Postal Address: 13 corbett

Email:

Phone: 03 2808115

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

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I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: Carol Judith Fitzsimmons

Postal Address: 3 Main Rd Ngakawau.

Email: fitzy1964@yahoo.co.nz

Phone: 03 7828110 / cell mobile 021063362[illegible]

Do you wish to speak to your submission?

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

Carol J Fitz

#2:

CO5 RLETE

Collector:	21-41 LTR v3 eu LisWb
Started:	TBeyGat , 5 at 1k, 2821 : 0) 90) k R5
Last Modified:	TBeyGat , 5 at 1k, 2821) 03. 024 R5
Time Spent:	8803. 02:
IP Address:	1847.117. 6769

Rar e 1

Q1

CONTACT DETAILS

Name	**Scott Freeman**
RPy/acaGGdeyy	**PO Box 185**
Ci/t lTPYs	**Westport**
RPy/ hPGe	**7825**
EmaicaGGdeyy	**scottjfreeman@yahoo.co.nz**
RUPse sBmued	**027 308 6420**

Q2 **I do not wish to speak to my submission**

RMESENTINF (Op M Sp g5 ISSION IN REMSON

Q3 **I do not prefer any of these options**

INf OM5 ATION 5 ANAF E5 ENT wyee oar e) Pn/Ue CPsyBda/iPs DPhBmes/ nPdmPde isnPdma/iPsbOo/iPs 1 - A rBccaoodPahU/P isnPdma/iPs masar emes/ imoeemes/a/iPs ishdBGdsr Gr i/iyisr accoaoedGa/a asGdehPdGyOo/iPs 2 - Imoeemes/ a oadiacisnPdma/iPs masar emes/ yt y/em asG sP/ Gr i/iye /Ue oaoeddehPdGy

Q4 **I prefer Option 2**

CLI5 ATE CHANF E wyee oar e 6 Pn/Ue CPsyBda/iPs DPhBmes/ nPdmPde isnPdma/iPsbOo/iPs 1 - A y/ar eG aoodPahU/P GevedPo a y/da/er ih oeas, Yi/UPsr Pisr mPsi/Pdsr hPy/yOo/iPs 2 - ImmeGa/ed GevedPo a y/da/er ih oeas, Yi/UPsr Pisr mPsi/Pdsr hPy/y

Q5

I prefer Option 1

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

Footpaths for Alma Road. It is narrow and well used by walkers etc from an rapidly growing population in the area. Put new subdivision reserve contribution monies from subdivisions on Alma Road towards this.

#1

COMPLETE

Collector: 21-31 LTP (Web Link)
Started: Sunday, April 18, 2021 10:58:13 PM
Last Modified: Sunday, April 18, 2021 11:00:52 PM
Time Spent: 00:02:38
IP Address: 203.211.109.55

Page 1

Q1

CONTACT DETAILS

Name	**Nick**
Postal address	**125 Romilly Street**
City/Town	**Westport**
Post code	**7825**
Email address	**ngearnz@gmail.com**

Q2

PRESENTING YOUR SUBMISSION IN PERSON

I do not wish to speak to my submission

Q3

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

I prefer Option 1

Q4

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

I prefer Option 2

Q5

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

I prefer Option 1

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

Respondent skipped this question

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name: PETER GIBSON.

Organisation:

Postal Address: 99 OPARARA ROAD.

Town: KARAMEA Post code: 7893

Phone: 7826 123

Email: peterwgibson@xtra.co.nz

Have your say!

Presenting your submission in person

☑ I wish to speak to my submission ☐ I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website **www.bullerdc.govt.nz**.

Information Management *(see page 5 of the Consultation Document for more information)*

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

☑ I prefer **Option 1** ☐ I prefer **Option 2** ☐ I prefer neither option

Additional feedback

Climate Change *(see page 6 of the Consultation Document for more information)*

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan, with ongoing monitoring costs

☐ I prefer **Option 1** ☑ I prefer **Option 2** ☐ I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge *(see page 7 of the Consultation Document for more information)*

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

☑ I prefer **Option 1** ☐ I prefer **Option 2** ☐ I prefer **Option 3** ☐ I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

SUBMISSION TO COUNCIL RE DUMP STATION AT KARAMEA

At present their is no Public Dump Station in Karamea. Vehicles are required to return to Westport and use the Council or Supermarket facilities.

The only exception is for cassettes which can be empted at the rear of the Domain Pavilion. The Karamea Reserve Subcommittee have a policy of allowing this only for campers who book for a minimum of two nights as their septic tank facility is limited.

There has been a significant increase in caravan and campervan numbers in Karamea , with the Domain Camping Ground indicative of this patronage with substantially increased demand Enquiries for a Dump Station are numerous and travellers are not impressed with the lack of such a facility. Illegal dumping has occurred.

A submission was made to Council's Annual Plan in 2019 for a Dump Station , and rejected " As Karamea has not reticulated sewerage system there would be additional operational and maintenance costs which fall outside Council's planned budget"

It is suggested that with greatly increased (and encouraged) visitor numbers to Karamea , a lot of whom would welcome a Dump Station rather than having to curtail their visit , this decision of Council should be reconsidered.

In 2019 the N.Z.Motor Caravan Assn Inc advised that they were prepared to support this

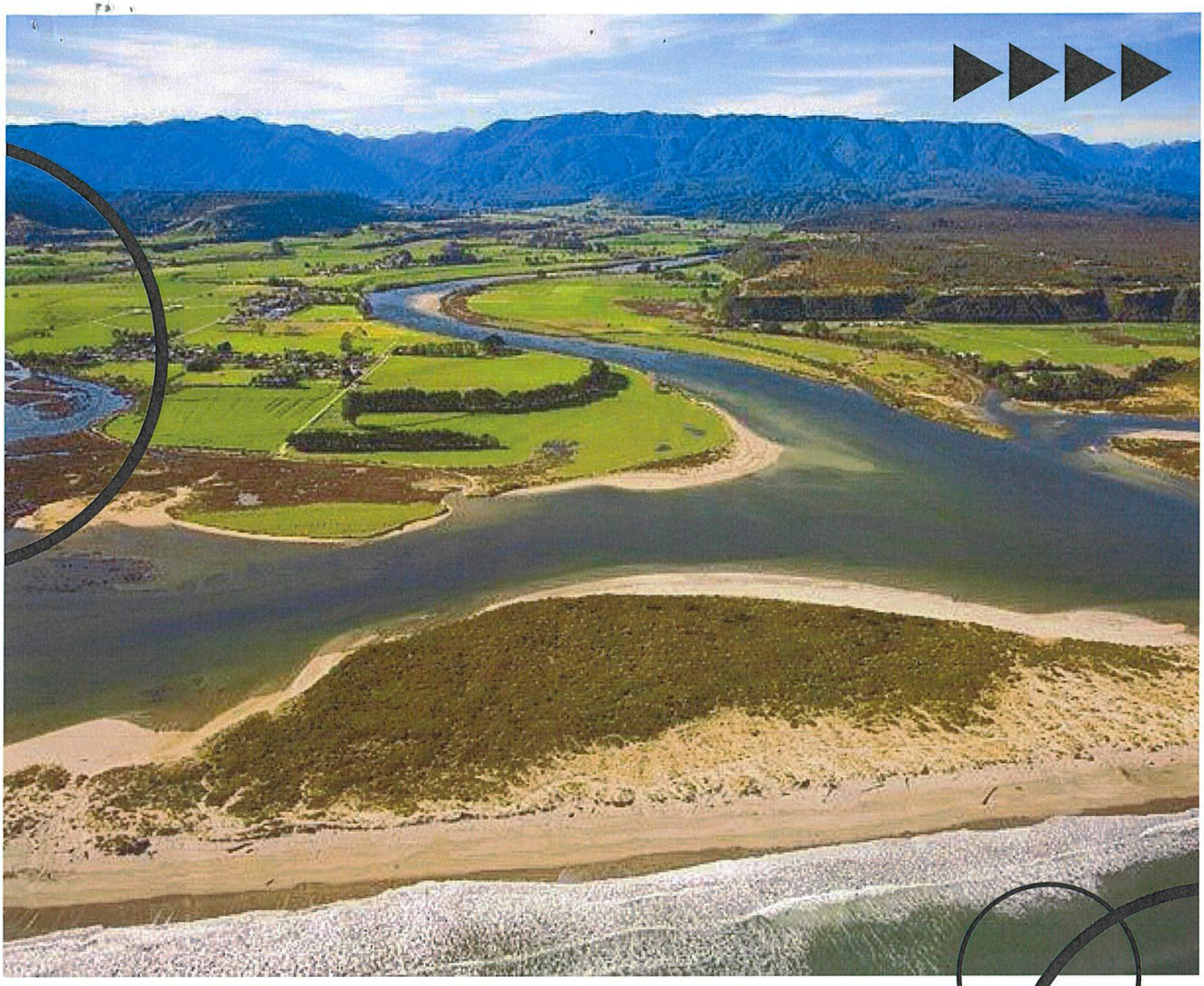
proposal by providing a precast dump station with signs and contribute up to $10,000 plus GST towards this public project in Karamea. Similar to their contribution towards the Westport project in 2016 , the dump station would have to be built to NZS 5465 specifications and be available 24/7 free of charge to the public. They have reconfirmed that they are happy to look at assisting in the installation of a Dump Station at Karamea. With this support the initial cost should not be significant

It is recognised that there will be ongoing operational and maintenance costs .mainly for waste disposal . and these could be minimal if the waste could be disposed of locally , possibly at Little Wanganui sewerage plant or by the local contractor. These costs would presumably be paid from general rates , as with the Westport Sites.

The site for a Dump Station is preferably isolated main road with good visibility and easy access and exit. A possible site is the WestReef premises on Oparara Road , adjacent to Bakers Creek with reduction of the speed limit to 50 kph to improve safety. Another site could be at Little Wanganui adjacent to the main one way bridge , with water available nearby. Investigation by Council personnel would be welcomed.

This item is included in the Karamea Commu nity Plan (copy attached) in the section "To enhance the sustainability and prosperity of the Community by improving our Infrastructure"and is recommended for consideration by Council

Peter Gibson
15 May 2021



KARAMEA COMMUNITY

KOHAIHAI TO LITTLE WANGANUI 2017-2022

OUR LIVING PLAN

OUR LIVING PLAN

Our Community Plan is a fluid living document that is edited annually to reflect the changing needs and energy of the people of Karamea. This is version 5 of the 2017-2022 plan reviewed in March 2021.

It's impossible to list all of the many valuable groups, clubs and associations that build our invisible web of community, and the countless random acts of kindness that make Karamea such a special place to live.

ACRONYM KEY

DoC - Department of Conservation

CSK - Clean Streams Karamea

KEEP - Karamea Estuary Enhancement Project

OVT - Ōpārara Valley Trust

ORP - Ōpārara Reserve Project

KAS - Karamea Area School

RKET - Residents Karamea Educational Trust

KYI - Karamea Youth Initiative

KWMG - Karamea Waste Management Group

KRR - Karamea Rata Reserve

KCAC - Karamea Community Arts Council

KELC - Karamea Early Learning Centre

KCM - Karamea Centennial Museum

KWML - Karamea War Memorial Library

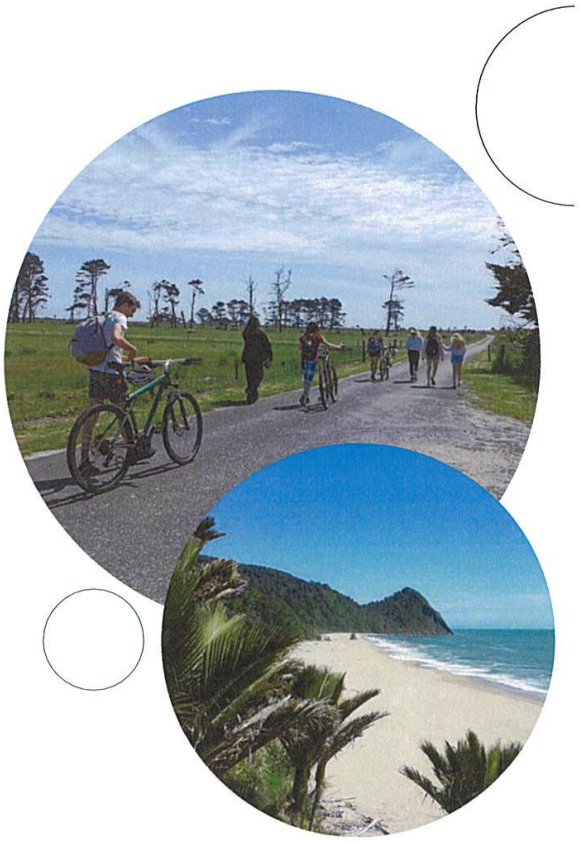
FoKAS - Friends of Karamea Area School

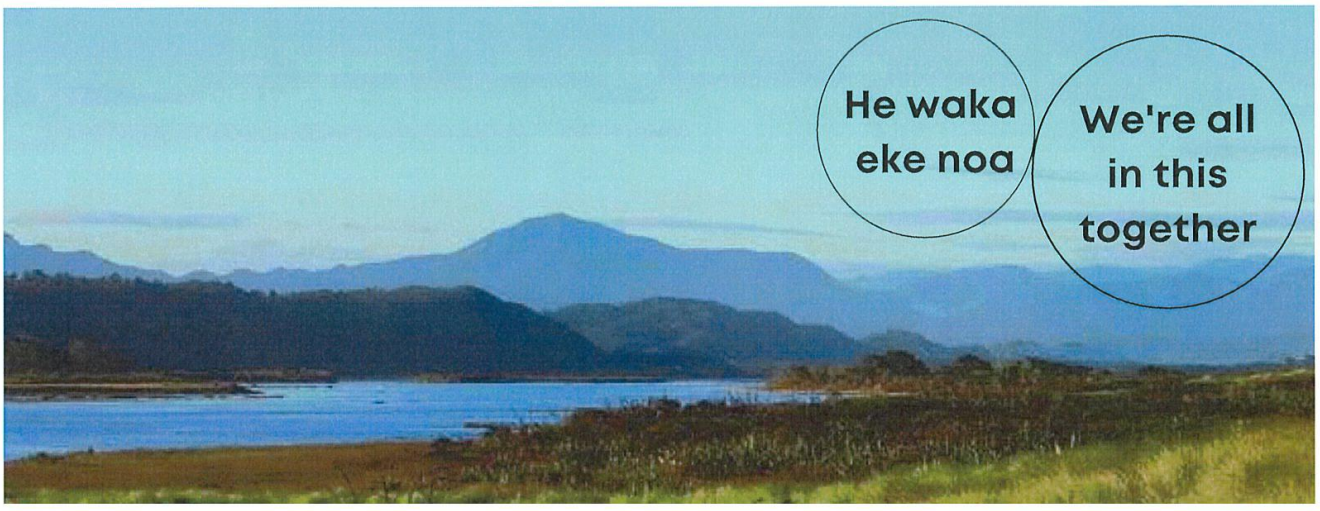
KFM - Karamea Community Radio Station

ASK - Abundance Share Karamea

R & D - Research & Development

CLDP PM - Community-led Development Programme Partnership Manager





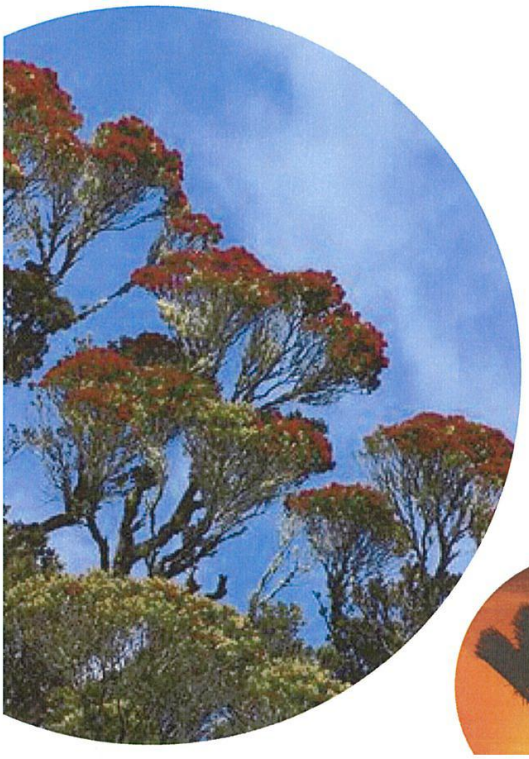
To achieve an inclusive self supporting community culture in Karamea, ensuring that no one is left out unless by personal choice. We want to be a community where all of our members flourish.

Karamea is a hospitable, safe,and productive community where residents can live, share, play, celebrate, prosper and welcome others.

MISSION

VISION

VALUES



Trust, Respect, Integrity Transparent, Accountable. Communicate, Involve, Engage Participate, Empower

ECONOMIC WELLBEING

TO ACHIEVE SUSTAINABLE ECONOMIC DEVELOPMENT

Ideas & Dreams

Explore prospects for horticulture, food and beverage enterprises.

Improve marketing of Karamea, its products and businesses including its branding and packaging.

Establish viable small business enterprises, eg. printing, guiding, microbrewery, hemp farm.

Focus on restoring and protecting the Ōpārara Basin.

Expand and enhance the weekly summer market and improve its appearance and marketing.

Status

- R & D Various CSK & LW Hall
- Concept
- Concept, ongoing
- Active - OVT, ORP, CSK, KAS
- Active - Shed & KCAC

■ = Concept ▲ = Research & Deveolpment ● = Active Community-led Project

ENVIRONMENTAL WELLBEING

TO PROTECT OUR ENVIRONMENT AND ENHANCE AWARENESS OF AND RELATIONSHIPS WITH ITS UNIQUE AND DISTINCTIVE GEOGRAPHICAL AND PHYSICAL CHARACTERISTICS

Ideas & Dreams	Status
Support Clean Streams Karamea to develop and implement riparian planting practices to protect our waterways.	Active - CSK
Create a Rata Reserve at the entrance to Karamea.	Active - KRR
Establish a recycling centre to reuse materials, and divert waste.	Active - KWMG
Establish an Ōpārara Sanctuary from the Source to the Sea.	Active - ORP, KAS, CSK
Establish river monitoring and habitat protection practices to ensure species survival	Concept - KAS
Develop and run educational programmes focused on our local landscapes, flora and fauna.	Concept, various
Support the Karamea Estuary Enhancement Project.	Active - KEEP

EDUCATION & LEARNING

TO IMPROVE ACCESS TO COMMUNITY EDUCATIONAL OPPORTUNITIES ACROSS THE LIFESPAN

Ideas & Dreams	Status
Support Karamea Youth Initiative	Active - KYI
Establish a holiday and summer school programme for kids.	Concept - KYI, KELC, KAS
Develop Karamea Centennial Museum displays and promotion.	Active - KCM
Secure an Early Childhood Education teacher in Karamea.	Concept - KELC
Educate community about reducing, reusing and recycling our waste.	Active - KWMG
Support Karamea War Memorial Library.	Active - KWML
Support Karamea Early Learning Centre.	Active - KELC
Support annual Winter School in July.	Active - KCAC

COMMUNITY HEALTH & WELLBEING

TO INCREASE COMMUNITY WELLBEING BY IMPROVING ACCESS TO HEALTHY FOOD AND WELLBEING SERVICES

Ideas & Dreams	Status
Establish edible landscapes and growing spaces for community food, reflection, relaxation and knowledge sharing.	Active - KCGC
Develop a community garden for everyone to enjoy.	Active - KCGC
Explore the feasibility of an integrated holistic wellbeing centre.	Concept
Improve existing health services, e.g. establish a Karamea Helpline and attract a permanent resident doctor.	Concept
Support locally grown produce and sharing of abundance.	Active - ASK, Yurt Team

SOCIAL & CULTURAL WELLBEING

TO ENHANCE SOCIAL CONNECTIONS BY INCREASING SOCIAL, CULTURAL AND RECREATIONAL OPPORTUNITIES WITHIN OUR COMMUNITY.

Ideas & Dreams	Status
Improve dissemination of information throughout the community and continue to support to contribute to karamea.nz.	Active - Chronicle, KFM CLDP PM
Establish a loop walking/bike track around the Karamea river and estuary.	Concept
Ongoing support to improve facilities and conservation at the Ōpārara Reserve.	Active - ORP, CSK, KAS, DoC, RKET
Support community art studio on Wharf Rd.	Active - various
Create regular community events, e.g. monthly pot luck meals, competitions for food and beverages, movie evenings, live music.	Active - various
Establish Māori cultural education and a cultural space for hangi.	R & D - CLDP PM, KCGC
Establish recreation parks for biking, skate-boarding, pump track.	Concept
Establish a community sound system suitable for a variety of events.	Active - RKET, FoKAS
Prepare for Karamea's 150th Birthday Celebrations in November 2023.	R & D - KCM

SUSTAINABLE INFRASTRUCTURE

TO ENHANCE THE SUSTAINABILITY AND PROSPERITY OF OUR COMMUNITY BY IMPROVING OUR INFRASTRUCTURE

Ideas & Dreams	Status
Develop Market Cross as the heart/hub of the community (Stage 1 of the Town and Country Plan).	Active - various
Improve and develop safe walking and cycling opportunities.	Concept
Upgrade the Ōpārara Valley for tourism	OVT & DoC
Explore the feasibility of a locally-owned power generation system and become energy independent in 10 yrs.	Concept
Cover and heat the swimming pool.	R&D - KAS
Build an RV dump station	Concept

KEYSTONE CLD PROJECTS & EVENTS

Project | Event	Economic	Environmental	Education & Learning	Health & Wellbeing	Social & Cultural	Infrastructure
Ōpārara Source to Sea Sanctuary	✓	✓	✓	✓	✓	✓
Karamea Area School Rebuild			✓	✓	✓	✓
Clean Streams Karamea	✓	✓	✓	✓	✓	✓
Karamea Youth Initiaitive	✓	✓	✓	✓	✓	
Karamea War Memorial Library			✓	✓	✓	✓
Karamea Rata Reserve		✓	✓	✓	✓	✓
Winter School			✓	✓	✓	
Karamea Art & Craft Exhibtion	✓		✓	✓	✓	
Karamea Estuary Enhancement Project		✓	✓	✓	✓	
Karamea Community Radio			✓	✓	✓	✓
Karamea Waste Management Group	✓	✓	✓	✓	✓	✓
Community Sound System			✓	✓	✓	
Karamea Community Garden		✓	✓	✓	✓	✓
Karamea Centennial Museum	✓		✓		✓	✓
150th Birthday Celebration	✓		✓		✓	
Community Website			✓	✓	✓	
Karamea Early Learning Centre	✓		✓	✓	✓	✓
Karamea Information & Resource Centre	✓	✓	✓		✓	✓

BULLER DISTRICT COUNCIL

SUBMISSION FORM
Draft 2021-2031 Long Term Plan

Shaping our district

Name: PETER GIBSON

Organisation: MARKET CROSS COMMUNITY GROUP INC

Postal Address: P.O BOX 118

Town: KARAMEA Post code: 7893

Phone: 7826123

Email: peterwgibson@xtra.co.nz

Have your say!

Presenting your submission in person

- [x] I wish to speak to my submission
- [x] I do not wish to speak to my submission

Council is considering options for the following three major items in it's draft 2021-2031 Long Term Plan. Please read the corresponding Consultation Document for further information and provide your views. More information is available on Council's website **www.bullerdc.govt.nz**.

Information Management *(see page 5 of the Consultation Document for more information)*

Option 1 - A full approach to information management implementation including digitising all paper data and records
Option 2 - Implement a partial information management system and not digitise the paper records

- [x] I prefer **Option 1**
- [ ] I prefer **Option 2**
- [ ] I prefer neither option

Additional feedback

Climate Change *(see page 6 of the Consultation Document for more information)*

Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costs
Option 2 - Immediately develop a strategic plan, with ongoing monitoring costs

- [ ] I prefer **Option 1**
- [x] I prefer **Option 2**
- [ ] I prefer neither option

Additional feedback

Westport Port and Kawatiri Dredge *(see page 7 of the Consultation Document for more information)*

Option 1 - Ring-fence the port
Option 2 - Operate as a Council cost centre
Option 3 - Consider special purpose governance structure for the Kawatiri Dredge

- [x] I prefer **Option 1**
- [ ] I prefer **Option 2**
- [ ] I prefer **Option 3**
- [ ] I do not prefer any of these options

Additional feedback

Please take the time to have your say and help 'Shape our District' by reading the draft 2021-2031 Long Term Plan's Consultation Document and providing feedback to the three things we are consulting on. We also encourage feedback on other items relating to the LTP - see over.

www.bullerdc.govt.nz

BULLER DISTRICT COUNCIL

Shaping our district

FURTHER FEEDBACK – do you have any other items or requests that you would like Council to consider it its Long Term Plan?

FUNDING FOR THE COST OF ELECTRICTY FOR THE LIGHTING (DAY & NIGHT) OF THE PUBLIC TOILETS AND HAND DRYERS AND GROUND MAINTENANCE

THE SUM OF $2500 IS REQUESTED TO PROVIDE THIS SERVICE ON OUR PROPERTY AT KARAMEA

www.bullerdc.govt.nz
LTP@bdc.govt.nz
or complete your submission online at
www.surveymonkey.com/r/21-31-LTP

Privacy Statement: In accordance with the Local Government Act 2002, all submissions (including your name and contact details) will be made available online as part of the LTP decision-making process. Please refer to **www.bullerdc.govt.nz/privacy** or contact Council for a copy of Council's Privacy Statement.

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: DEREK GILBERT

Postal Address: 24 IVES ST.

Email: -

Phone: 021-1328848

Do you wish to speak to your submission? NO

Key issues you would like to discuss: NO

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: KEVIN GILBERT

Postal Address: 14 CORBETT ST HECTOR

Email:

Phone:

Do you wish to speak to your submission? NO

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

I have a good understanding of the Society's proposed administration of this community-owned supply and of the measures it will take to ensure compliance with the NZ Drinking Water Standards and the Health Act.

I support the Society's submission and request that it be given due consideration in the upcoming LTP deliberations.

Yours sincerely

Kevin Gilbert

BULLER DISTRICT DRAFT LONG TERM PLAN SUBMISSION - 2021

Name: BELINDA GIRL & MAURICE FLANAGAN

Postal Address: 11A MAIN RD

Email: belindagirl2012@gmail.com.

Phone: 0272695007

Do you wish to speak to your submission?

Key issues you would like to discuss:

NGAKAWAU-HECTOR WATER SUPPLY

As a resident connected to the Ngakawau-Hector water supply, I am writing in favour of the submission to this Draft Long-Term Plan by the Ngakawau-Hector Water Society Incorporated.

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Yours sincerely

#13

COMPLETE

Collector: 21-31 LTP (Web Link)
Started: Sunday, May 16, 2021 6:51:03 PM
Last Modified: Sunday, May 16, 2021 6:58:26 PM
Time Spent: 00:07:22
IP Address: 122.57.250.194

Page 1

Q1

CONTACT DETAILS

Name	**Allwyn Gourley**
Company/Organisation (if applicable)	**KARAMEA SWIMMING CLUB**
Postal address	**RD 3, 58 Baker Creek Road**
City/Town	**Karamea**
Post code	**7893**
Email address	**jeag@xtra.co.nz**
Phone number	**0223429136**

Q2 **I do not wish to speak to my submission**

PRESENTING YOUR SUBMISSION IN PERSON

Q3 **I prefer Option 2**

INFORMATION MANAGEMENT (see page 5 of the Consultation Document for more information)Option 1 - A full approach to information management implementation including digitising all paper data and recordsOption 2 - Implement a partial information management system and not digitise the paper records

Q4 **I prefer Option 1**

CLIMATE CHANGE (see page 6 of the Consultation Document for more information)Option 1 - A staged approach to develop a strategic plan, with ongoing monitoring costsOption 2 - Immediately develop a strategic plan, with ongoing monitoring costs

Q5

I do not prefer any of these options

WESTPORT PORT AND KAWATIRI DREDGE (see page 7 of the Consultation Document for more information)Option 1 - Ring-fence the portOption 2 - Operate as a Council cost codeOption 3 - Consider special purpose governance structure for the Kawatiri Dredge

Q6

FURTHER FEEDBACK - do you have any other items or requests that you would like Council to consider in its Long Term Plan?

On behalf of the Karamea Swimming Club I would like to apply for an annual grant of $10,000.00 to help pay for the cost of the power and chemicals that is needed to run the community swimming pool. Power and chemical costs are steadily increasing and are essential for the future of the this crucial asset in the community. It has been recently upgraded and is an amazing asset for our young people to learn to swim and also for the health and well being of the wider community.

Mary Wilson

From:	Linda Grammer <linda.grammer@gmail.com>
Sent:	Tuesday, 18 May 2021 11:55 am
To:	BDC_Long Term Plan
Cc:	BDC_Info; Ian Mulholland
Subject:	CORRECT VERSION Linda Grammer & Ian Mulholland submission to BDC draft Long Term Plan 2021/31(attached) Physicians & Scientists 5 November 2019 letter to all councils GE/GMOs issue
Attachments:	2019 PSGR Letter to Councils.pdf

Attention BDC:
Please find below the correct version of our submission. Please use this version of our submission (which contains additional paragraphs on some additional topics (very concerned about some of the BDC proposed approaches, detailed in the BDC draft LTP 2021/31).
Thank you
Cheers
Linda Grammer
Ian Mulholland
Seddonville

Submission to:
Buller District Council
draft Long Term Plan 2021/31

Submission by:

Linda Grammer & Ian Mulholland
Seddonville

Contact details:

Linda Grammer
& Ian Mulholland
c/o
PO Box 50
Westport 7866

tel: 782 1350 (after 11am only please)

Email (preferred contact)
linda.grammer@gmail.com
ian2mulholland@hotmail.com

Thank you for the opportunity to make a submission, so that together we can achieve sound biosecurity, biodiversity,

environmental, economic, cultural, historical, and public health outcomes.

I am a member of Rural Women NZ and Ian is the Civil Defence Coordinator for Seddonville as well as the chairman of the Seddonville Holland Memorial Library committee.

We wish to be heard.

Please notify us well in advance of the BDC draft LTP 2021/31 hearings. We note that we were NOT informed (the last time we submitted in response to a BDC public consultation, asking to be heard) of the hearing (which is unacceptable). Council should make it easy for its ratepayers and other key stakeholders to participate!

Response to BDC's specific questions on the 3 highlighted items on the BDC draft LTP submission form:

1. Information management

We prefer Option 1 - full digitisation of all paper data and records. However, if cost is prohibitive then full digitization may need to be incremental (undertaken in stages).

Additional feedback:

In our view, council needs to lift its game regarding the manner in which it deals with inward correspondence. Too often emails (information requests including Local Government Official Information & Meetings Act requests) sent to the BDC formal email address are ignored.

Also, on at least two occasions during the last 4 years when we have made submissions to various draft planning documents (clearly stating that we wished to be heard) we were not subsequently contacted by anyone at council to notify us of

-the time of the relevant council hearing
-to be given (as working people) options for attendance (speaking time)

It took persistence (various phone calls and emails to council) to manage to obtain a time to speak. This is unacceptable.

We know that BDC staff and councillors do work hard. There is some systemic issue/ internal problem within council regarding the way

in which council handles information/ inward correspondence that needs rectifying.

Council staff and elected representatives are meant to read submissions from local residents/ ratepayers closely. That includes (while reading a submission) noting if the individual, community group or business, Iwi/hapu wishes to speak to their submission and then follow through (council staff take the appropriate steps to facilitate their participation).

We do want quality infrastructure, facilities, and services that meet ratepayers and residents needs. However, good service should also include treating Buller residents and their views with respect, council staff showing empathy and flexibility to ensure residents can participate in the democratic process.

2. Climate change
We ask council to prioritize Option 2. However, we do question the accuracy of the statement "environmental sustainability touches on almost everything we do" (under the heading of "Climate change- resilience and environmental sustainability" in the draft LTP synopsis document). This is particularly inaccurate given BDC's pro development statements under the heading of "Our reality, setting the scene" including (in particular) point #4 (see our detailed response to BDC's point #4 further along in our submission).

If council had been prioritizing "environmental sustainability" in the past, BDC would not have granted approval (several years ago) to Rangitira Developments Ltd/ Stevenson Mining for a huge new open cast coal mine on Te Kuha above Westport.

Background: With the strong support of former BDC Mayor Gary Howard the BDC granted access to approximately 100 hectares of the Westport Water Conservation Reserve reserve for Stevenson Mining (who had lodged a controversial application for resource consent to develop a coal mine on Te Kuha, the beautiful mountain directly above Westport).

Stevenson Mining not only exaggerated the number of jobs that would be provided but simultaneously dramatically downplayed the adverse environmental impacts of their proposed activities on ecologically significant public conservation land and the special purposes Reserve.

Following a legal challenge to the granting of access, BDC rescinded access and the mining company sought clarification of the law in the High Court.

Fortunately the application for this ill-advised proposal for the ecologically significant public conservation land on Te Kuha above Westport was wisely declined by the relevant Ministers in 2018 and a subsequent Court of Appeal decision upheld the view that the Reserves Act takes precedence over the Crown Mineral Act and protects the special features of Te Kuha (including rare endemic native species) from destruction.

see
2 June 2018 Press Release
Minister of Energy Resources Hon Megan Woods and Minister of Conservation Hon Eugenie Sage

Government declines application to mine conservation land at Te Kuha
https://www.beehive.govt.nz/release/government-declines-application-mine-conservation-land-te-kuha#:~:text=An%20application%20to%20mine%20coal,Resources%20Megan%20Woods%20announced%20today.&text=The%20Council%20is%20the%20decision,mining%20access%20to%20that%20area.

Anyone looking up towards the forested mountain top from Westport, from the iconic lower Buller Gorge Scenic Reserve, or the mouth of the Kawatiri river might assume that the agency looking after this place on our behalf is the Department of Conservation. The forest is spectacularly beautiful with many rare native plants, great tramping and big rimu trees. Great spotted kiwi live here, along with a host of other species threatened and at risk of extinction: South Island fernbird, West Coast green gecko and the beautiful and rare Forest ringlet butterfly (Dodonidia helmsii).

However, only a 12 hectare sliver of the approximately 140 hectares that would be destroyed by the proposed mine is actually conservation land. Instead, most of it sits under the auspices of BDC as a special purposes Reserve. This was set aside way back in the day for water conservation; intended but not used for the Westport water supply. And the result is that a large area of land full of 500 year old trees which looks like conservation land, acts like conservation land, and ought to be conservation land – is not.

Basically, when Stevenson Mining asked the Buller District Council if they could dig up the water reserve to mine coal, BDC said yes, initially. Forest & Bird sought a judicial review of that decision. That was because this is still public land, and the Council has restrictions on what they can do. The Reserves Act of 1977 (which is administered by the Department of Conservation) requires the Council to maintain the natural resources of the reserve. It'd be hard to do that while destroying the place.

A new coal mine on Te Kuha would have done "irreparable damage to an area with very high, unique and nationally significant conservation values" and not only destroyed a large % of the land area comprising the Westport Water Conservation Reserve but probably would have created significant contamination of waterways above Westport.

We expect better from this council and we do ask that BDC do everything in its power to protect not only beautiful Te Kuha (home of Great Spotted Kiwi, the rare Forest ringlet and other precious taonga) but the Westport Water Conservation Reserve in perpetuity.

We also would like to convey our disappointment with the Mayor Jamie Cleine for writing (on council letter head last year) to the Provincial Growth Fund asking for financial support for Stevenson Mining. We urge the current Mayor of BDC to withdraw his ill-advised letter of support for Stevenson Mining (now that the Court of Appeal decision has been released) and to desist from referring to the proposed open cast coal mine as a "boutique" mine.

We thank BDC for noting (in the draft LTP 2021/31) that "addressing the challenges of climate change resilience and environmental sustainability requires a focus by Council that has not previously been prioritised." Well done BDC for acknowledging that (an important first step is acknowledging past mistakes and inaction, in order to move towards much needed improvement in the sustainability/ environmental/climate change sphere).

Further additional feedback on Climate change (and the urgent need for council to do everything in its power to ameliorate climate change) below at *.

3. Kawatiri dredge
We are pleased that BDC has made the wise decision to hold onto

this important local asset (the dredge). We urge council to ensure that best environmental practice is being followed by those operating the dredge (in order to protect the lower reaches of the Kawitiri river and any native species).

Response to BDC section "Our reality, setting the scene"

In response to BDC point # 3 ("continuing support for the tourism industry and specific initiatives such as the Pounamu Pathway and other recreational, environmental, or cultural initiatives through advocacy, advice, or other forms of support", p. 2 BDC draft LTP 2021/31 Consultation Document

In our view, council should be stressing that it prioritizes supporting truly sustainable tourism including eco-tourism (not tourism that harms local communities and/or undermines conservation/ historical values).

Tourism is not benign (as we have seen recently with attempts by commercial tourism operator Mokihinui Lyell Backcountry Trust trying to appropriate local historic backcountry huts inland from Seddonville, causing significant environmental harm, and charging exorbitant fees for a hut- Mokihinui forks- that was formerly free as well as a major bedbug infestation of huts along the historic Mokihinui pack track and route of "Old Ghost Road" cycleway/ tramping track!)

We would like to table with council the latest report recently released by the Parliamentary Commissioner for the Environment

Parliamentary Commissioner for the Environment Simon Upton

"Not 100% - but 4 steps closer to sustainable tourism"

See pp 68-71 in which the recent report strongly critiques the (inappropriate and environmentally harmful) commercial tourism development at the Oparara in northern Buller.

We (as well as Buller Tramping Club) do oppose the proposed "upgrade"/ commercial tourism development of this fragile and unique place or any further commercial tourism development along

the historic Mokihinui pack track/ route of "OGR" including but not limited to the Mokihinui Ecological Area.

See also (for your information)

From Nine To Noon, 19 February 2021

"Tourism is not benign & must change: Environment commissioner"

https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018784289/tourism-is-not-benign-and-must-change-environment-commissioner

In our view, commercial tourism proposals in particular must be carefully scrutinised by BDC and other local authorities/organisations like the Department of Conservation that they are appropriate for the Buller and will not have adverse impacts on communities, conservation and historical/biodiversity values.

We mention this to BDC because we are aware that BDC has given significant funds to commercial tourism operator Mokihinui Lyell Backcountry Trust despite the disrespect shown to local Seddonville/ Mokihinui residents by MLBT, the utter lack of robust community consultation, and disregard for best environmental practice during the construction of the "Old Ghost Road" cycleway/tramping track over the historic Mokihinui pack track.

We do realise that DOC has been complicit in allowing MLBT to get away with various acts of

environmental vandalism (including the felling of the iconic, healthy, beautiful, 500+ yr old kahikatea at Mokihinui forks and significant damage to the large roots of the ancient rimu on top of County hill on the lower reaches of the historic Mokihinui pack track.

However, BDC support (financial and otherwise) for maintaining or enhancing walking/tramping/cycleways on existing forestry roads, railway beds and similar formed tracks/roads is supported. A prime example of a worthy project is the restoration of the historic bridges in the Chasm Creek walkway (the bridges have been closed for way too long). Restoration of the historic bridges or creation of new swing bridges would enable locals and visitors to walk or cycle the full length of the Chasm creek walkway, getting people off the road (which is particularly busy in summer, with some tourists exhibiting dangerous driving).

We totally oppose any new cycleways on public conservation lands (including Ecological Areas and National Parks) given our negative experience with commercial tourism operator Mokihinui Lyell Backcountry Trust regarding the "Old Ghost Road". Cycleways inherently require more infrastructure than tramping tracks/routes and cause more environmental harm.

Issues with commercial tourism operator Mokihinui Lyell Backcountry Trust

We provide details below for councillors and staff not familiar with the controversy about this cycleway/tramping track constructed between the historic Mokihinui pack track and historic Lyell dray road (and adverse environmental and historical impacts, as well as loss of quiet enjoyment by locals).

There have been major issues and zero public consultation, as well as

- major environmental problems / harm caused by the construction of the "OGR" over the historic Mokihinui pack track and historic Lyell dray road (and through the Mokihinui Ecological Area)

-major problems with the failure of DOC Westport/ Kawitiri and MLBT to consult with local communities in Seddonville/ Mokihinui / wider Buller

-failure of MLBT to adhere to best environmental practice during construction phase of the trail and controversial felling of the iconic, noble, healthy, 50 metre+ tall, 500+ yr old kahikatea tree at Mokihinui forks

-failure of the Department to adequately monitor MLBT to ensure MLBT compliance with the Management Agreement/ MOU between DOC and MLBT (regarding environmental and historical values). MLBT did not adhere to best environmental practice and damaged historic/heritage values on the historic Mokihinui pack track.

-complicity of the Department in environmental vandalism on our public conservation lands in the Seddonville area (between Seddonville and the Lyell) and DOC unethical handing over of our local historic backcountry huts (Goat Creek hut and Mokihinui Forks hut to commercial tourism operator MLBT with zero public consultation). Mokihinui Forks hut inappropriately went from being free to MLBT putting it in its "Old Ghost Road" booking system and charging $35 a night!)

Buller Tramping Club and many local Seddonville/Mokihinui residents had to fight hard (over a period of years) to remove historic Mokihinui Forks hut from the "OGR" booking system (the hut went from being free to MLBT charging $25 a night) and protect historic Goat Creek hut and its environs from commercial tourism operator MLBT.

Recently BTC and various locals had to fight to get the Department to terminate the arrangement with MLBT (former DOC Operations Manager Bob Dickson controversially ended the Memorandum of Understanding between Buller Tramping Club and DOC regarding BTC management of historic Goat Creek hut and then handed over management to MLBT with zero public consultation).

Good news: fortunately, both historic Goat Creek hut and Mokihinui Forks hut are now (due to the efforts of local people) being managed by the Department and once again free. This means access is free and enduring, certain and sure. BTC, Federated Mountain Clubs local Executive members and local Seddonville/St Helens/ Mokihinui residents will keep a close on DOC to ensure that these historic huts are properly maintained).

For more information, see

Wake planned after DoC fells 500-year-old tree

22 Feb, 2013 04:38 PM
https://www.nzherald.co.nz/nz/wake-planned-after-doc-fells-500-year-old-tree/OWH4EN6EZ4CAYCU3UG6JD7Y3PA/

Protest over felling of ancient tree

Te Ao Māori
10 Apr 2013

https://www.rnz.co.nz/news/te-manu-korihi/132433/protest-over-felling-of-ancient-tree

Cycleway runs into environmental gripes

Jul 15 2013

https://www.stuff.co.nz/the-press/8917967/Cycleway-runs-into-environmental-gripes

The Department and MLBT falsely claimed that the large kahikatea was "dangerous" and in "ill health", felling it against the wishes of local people and those who whakapapa to Ngati Waewae.

We note that commercial tourism operator MLBT trustees contain pro development mining interests (including Anne Brewster of Stevenson Mining, actively pushing for a huge open cast coal mine on ecologically significant public conservation lands on Te Kuha and in approximately 100 ha of the Westport Water Conservation Reserve).

While we do support the Kawitiri Coastal Trail (between Westport and Carters Beach) we ask that BDC keep a close eye on their adherence to best environmental practice as there is no mention (on the KCT website) of this Trust prioritizing protection of indigenous biodiversity (only "heritage" and "business opportunities" and it is proposed that the walking track/cycleway be continued through sensitive coastal/forest areas as far south as the Waitakere (Nile) river /Charleston.

see

https://www.kawatiricoastaltrail.co.nz/commercial-business-opportunities/

see

https://www.kawatiricoastaltrail.co.nz/construction-updates-and-milestones/

(nothing about best environmental practice, which is disappointing)

"Construction updates and milestones"

"The overarching vision for the Kawatiri Coastal Trail has been to link and engage communities and catalyse economic, social and cultural opportunities in the Buller District. Support for the project has been strong, and this is evident from the ever growing number of contributors. "

Despite being keen trampers (and our support of the walking /cycling trail between Westport and Carters Beach in principle (getting cyclists off the dangerous state highway south from Westport) we do urge BDC to do what it can to ensure KCT prioritizes best practice environmental protection during further construction of the trail. Hopefully, given

the width of the KCT to date there won't be as many conflicts between walkers/ trampers and cyclists (it is now quite nerve racking/dangerous to walk or tramp the historic Mokihinui pack track given the number of irresponsible mountain bikers travelling at speed and not giving way to walkers. Mokihinui Lyell Backcountry Trust and DOC have exacerbated the problem by failing to have proper NZ Mountain Biking Code signage at both the Seddonville and Lyell entrance to the historic pack tracks/dray road/ route of "OGR".

We note that Bob Dickson, former Operations Manager DOC Westport/ Kawitiri (with various highly controversial poor decisions resulting in significant environmental harm) has been engaged as the "environmental manager" for KCT with oversight over the Kawitiri Coastal Trail. Mr. Dickson left DOC shortly after a highly controversial decision to use explosives on a archeologically and geologically significant sandstone cave/ overhang in Paparoa National Park, adjacent to the Truman track
see
18 October 2019
https://www.stuff.co.nz/environment/116680157/department-of-conservation-accused-of-blast-now-think-later-in-national-park

https://www.scoop.co.nz/stories/HL2005/S00025/doc-admits-blasting-blunder-on-truman-track.htm
5 May 2020
https://www.scoop.co.nz/stories/HL2005/S00025/doc-admits-blasting-blunder-on-truman-track.htm

BDC draft LTP point #4

In response to point #4 "Advocating to central government and facilitating the process to enable low value conservation land to be used for higher value purposes, as well as optimising the use of stewardship land."

This is an completely unacceptable statement, particularly when the review of stewardship lands (to actually determine its true conservation value) promised by central government (and as advocated by Federated Mountain Clubs) has not yet been done.

We oppose extractive industries or inappropriate hydro-schemes (like the controversial proposal for the unique and beautiful Waitaha river/Morgan gorge). We question what BDC means when it proposes using our stewardship lands in the Buller for "higher value purpose"- please clarify what is meant by this?

We oppose "optimising the use of stewardship land" when the proposed "use" of stewardship land is not defined and likely to involve harmful development or extractive industries.

It sounds very much like what BDC is proposing would undermine biodiversity and conservation values, this is unacceptable and contradicts BDC statements elsewhere in the BDC draft LTP. We remind BDC of its statement on p. 6 under the heading of "Climate Change- resilience and environmental stability"- "addressing the challenges of climate change resilience and environmental sustainability requires a focus by Council that has previously not been prioritized."

So called "development" and "use" of stewardship land is likely to involve felling of native trees/clearance of native vegetation, possibly including carbon sinks in forests and wetlands- this is unacceptable.

General comment on the BDC draft Long Term Plan:

Buller District Council is not currently adequately prioritizing protection of our biosecurity, unique biodiversity, wider environment, existing valuable GE/GMO free status and GE/GMO free primary producers and their valuable enterprises, our food sovereignty and historical/cultural values. BDC itself acknowledges this in the draft LTP 2021/31 (as mentioned above BDC states on p. 6 "Climate change- Resilience and environmental sustainability that "addressing the challenges of climate change resilience and environmental sustainability requires a focus by Council that has not previously been prioritised."

In the BDC draft LTP 2021/31 document, we note that council places the "Environment" at the very bottom of the list of desirable Community Outcomes. Under the column "What success will look like" the wording is rather weak and quite inadequate ("our distinctive environment and natural resources are healthy and valued"- what does this mean??)

Under the column "Priorities and projects" one bullet point states "drive for a balance between development, biodiversity, and sustainability". In this sentence it appears "development" comes first, our unique biodiversity (including indigenous flora and fauna) comes a poor second. What is meant by sustainability is not spelled out/detailed.

Council appears to not adequately recognize that all primary production (including agriculture, horticulture, forestry etc) is underpinned by healthy soils/ a healthy environment. Protecting our soils (including the best of West Coast soils), waterways, indigenous biodiversity, Coastal Marine Area (CMA), and wider environment is paramount.

Extractive industries like existing coal mines have their place (for production of steel and other valuable resources, done to best practice standards with full remediation with local eco-sourced native species) but as this government has decreed (given the situation with climate change) there should be no new coal mines, particularly on the conservation estate/ stewardship land or in Water Conservation/Special Purpose Reserves, given their production of greenhouse gases and other pollutants.

We remind BDC that Council is obligated under the Resource Management Act (RMA 1991) to manage natural and physical resources in a truly sustainable manner (this includes finite resources like soils and waterways). It is disappointing that by far the main references to the natural environment in the draft LTP focus on "development", extractive industries, and monetary concerns.

The colour image on "District revitalisation" (p.9 in the synopsis draft LTP document) doesn't mention or illustrate environmental protection. Yes, it mentions (in the text) that ratepayers and residents told you that they "wish for clean water and our natural environment to be valued and protected" but then the environment, "valued and protected" is not mentioned in the District Revitalisation colour image/ chart.

There is certainly no mention of environmental protection and enhancement. Specifics are needed:

-improvements/ protection and enhancement of indigenous biodiversity

- protection/enhancement of the Kawitiri river (particularly water quality and the need for weed eradication and suitable local eco-sourced native riparian plantings)

-the need to eradicate or at least suppress noxious weeds (like the serious infestation of wild Prunus trees- including Taiwan cherry- at the mouth of the Kawitiri, spoiling the environment adjacent to the Kawitiri river trails and north beach, which is infested with a number of pest plants.

This area could be a haven for native birds and other indigenous biodiversity- but these highly dominant weedy trees must go!

-robust ground based feral control projects

-support for Landcare and other environmental community groups

The BDC draft LTP (synopsis document) also states on p. 9 "Finally, through focusing effort on working collaboratively and in partnership with iwi, and through building local and regional capabilities and alliances, we will deliver environmental, recreational, and socio-economic benefit across all our communities."

In our view, the new LTP 2021/31 needs to specifically state that BDC will prioritize working collaboratively with various key stakeholders (including local farming families and environmental/conservation organisations) not just with local mana whenua (iwi). We do realise that BDC has particular obligations under Te Tiriti o Waitangi and these must be honoured to the letter.

RELEVANT ENVIRONMENTAL LEGISLATION

Our understanding is that local authorities/councils (including BDC) are obligated under the RMA to actually practice sustainable integrated management and protect finite resources, indigenous biodiversity, our biosecurity, etc and deliver on the "Four well beings" stipulated in the Local Government Act (environmental, cultural, economic and social).

Local authorities including BDC also need to be in compliance with the National Environmental Standards for Plantation Forestry (NES-PF), and NZ Coastal Policy Statement (including its precautionary clause #3).

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."-END excerpt from the NZ Coastal Policy Statement (clause 3)**

All councils/ local authorities also need to act on their duty of care/ obligation to protect ratepayers/residents, our existing GM/GMO free primary producers (agriculture, horticulture, forestry, apiculture etc), economy, food sovereignty, finite resources like soils, etc.

Now is the time for BDC to show leadership on important biosecurity/ environmental/conservation issues and listen to the concerns of ratepayers & residents.

IMPORTANT EMERGING ISSUE:

GE/GMOs (Genetically Modified Organisms)

We urge BDC to address the significant risks of any outdoor use of GE/GMOs to our District (including experiments/ field trials) to our biosecurity, unique biodiversity, wider environment, existing GM/GMO free status and primary producers and their valuable enterprises/access to key markets/ premiums, food sovereignty, and the public health.

At any point, an overseas multinational, private company, NZ Crown Research Institute etc can apply to the EPA in Wellington to undertake an outdoor GE/GMO field trial in any region (including the Buller/West Coast).

Given that central government has failed to amend the HSNO Act to fix serious deficiencies as regards GE/GMOs (deficiencies identified by Local Government NZ and many councils). Deficiencies in HSNO include inadequate liability provisions and no mandatory requirement for the EPA to take a precautionary approach to outdoor GE/GMO applications. It is critical that BDC works to create a much needed additional tier of local protection against the risks of outdoor use of GE/GMOs (as many other councils have done).

The legal and planning context is now clear regarding Genetically Modified Organisms (this includes controversial and risky "gene edited organisms") - case law from Principal Environment Court Judge Newhook (May 2015) and High Court Justice Mary Peters (August 2016) and the Northland Environment Court case (Whangarei District Council vs Northland Regional Council)

see June 2020
ENV-2019-AKL-000177 - Whangarei District Council & Far North District Council v Northland Regional Council

Northland Regional Council made a formal decision in June 2020 to place precautionary and prohibitive GE/GMO provisions in the Coastal Marine Area of the new Regional Plan for Northland.

This complements the Whangarei District Council and Far North District Council's precautionary and prohibitive GE/GMO policies and rules in the operative District Plans, precautionary and prohibitive GE/GMO provisions on land and in the Coastal Marine Area in the operative Auckland Unitary Plan, and precautionary GE/GMO provisions and other wording in the operative Northland Regional Policy Statement- which contains precautionary GE/GMO Policy 6.1.2 and Method 6.1.5 as well as identifying the GE/GMOs issue as an Issue of Significance for Northland tangata whenua, an issue of concern for Northland communities, and the risks of outdoor use of GE/GMOs to indigenous biodiversity of particular concern to Tai Tokerau mana whenua. See Appendix below **

The agreed wording by relevant parties (in the above recent Environment Court case) will achieve the sustainable management purpose of the Resource Management Act (RMA) and give effect to the New Zealand Coastal Policy Statement and National Environmental Standards for Plantation Forestry (NES-PF).

The decision by Judge Newhook validates and strengthens the case law, and confirms that both the Hazardous Substances and New Organisms (HSNO) Act and the Resource Management Act (RMA 1991) have complementary roles to play in the management of GMOs in the environment.

It has been confirmed that regional and district councils have the right to make planning decisions about the outdoor use of genetically modified organisms (GMOs) in their regions. Environment Court Judge Newhook determined way back in May 2015 that there is jurisdiction under the Resource Management Act for councils to make provision for GMOs through various plans (District, regional policy statements and regional plans.

The information above (including case law) will assist BDC is achieving sound resource management. The decision confirms the view that the RMA allows local bodies to manage any potential use of GMOs as part of their land use (resource management) planning function.

This case law applies to all councils and planning documents in NZ.*

The above mentioned case law and actions taken by many councils (including councils in Bay of Plenty, Nelson, and Hawke's Bay - Hastings District Council has achieved outright prohibition of any outdoor use of GE/GMOs in the District Plan) and the Resource Legislation Amendment Act 2017 (in which Parliament recognized the right of local councils to create enforceable GE Free Zones) confirms that local authorities have authority/ jurisdiction/ the right to control GMOs under the RMA via local planning instruments. This is an integral part of truly sustainable integrated management.

See
1 August 2018 Hastings District Council panui "Council and Iwi welcome GMO decision"
https://www.hastingsdc.govt.nz/our-council/news/archive/article/1038/council-and-iwi-welcome-gmo-decision

and
Whangarei District Council GE/GMO web page
Genetic engineering Review

detailing the work of the Northland/ Auckland INTER COUNCIL WORKING PARTY ON GMO RISK EVALUATION & MANAGEMENT OPTIONS
https://www.wdc.govt.nz/Council/Council-Documents/Reports/Genetic-Engineering-Review

"Three major reports commissioned by the working party have identified a range of risks involved with the trialling and release of GMOs. They also include approaches to managing those risks.

GMO Reports [link to documents]

Environmental risks

- **GMOs becoming invasive and affecting other species including native flora and fauna**
- **the development of herbicide or pesticide resistance creating 'super-weeds' or 'super-pests'**
- **long term effects on ecosystem functioning.**

Socio-cultural risks

- **effects on Maori cultural beliefs of whakapapa, mauri, tikanga**
- **ethical concerns about mixing genes from different species including human genes**
- **concerns about the long term safety of genetically engineered food.**

Economic risks

- **loss of income through contamination (or perceived contamination) of non-GMO food products**
- **negative effects on marketing and branding opportunities such as 'clean and green' or 'naturally Northland'**
- **costs associated with environmental damage such as clean-up costs for invasive weeds or pests.**

Associated with these risks are limited liability provisions under the Hazardous Substances and New Organisms (HSNO) Act."-END excerpt from the ICWP on GMOs webpage

GENE EDITED ORGANISMS

We stress that gene edited organisms (CRISPR controversial technique) are GMOs, under NZ law and as ruled by the highest court in the EU. Gene edited organisms have been shown (various independent reports and peer reviewed scientific papers (see

Appendix below at **) to have unexpected/unforseen, off target adverse effects and in our view should not be allowed in the Buller District/ West Coast or wider NZ.

We note that NZ has a Zero Tolerance Policy for any GE/GMO content in imported seeds (including adventitious presence). But the risk is that someone will apply to the EPA for an outdoor GE/GMO experiment/ field trial or release on the West Coast (potentially in the Buller).

Genome editing has been shown to be imprecise, and can cause unexpected and unpredictable effects. Many studies have now shown that genome editing can create genetic errors in the genome-edited organism, such as "off-target" and "on-target" effects.

These effects can lead to unexpected and unpredictable outcomes, such as changes in protein composition, in the resulting GMO. Genome editing techniques can create unintended changes to genes that were not the target of the editing system. These are called "off-target effects." For example, the CRISPR-Cas9 system can make unintended edits to the host's DNA at additional sites to the target location.

Reputable reports/fact sheets on gene editing are available. You can find some of these here:
http://emergingtech.foe.org.au/synthetic-biology/
and also in the attachments (below please see the 5 November 2019 letter to all councils from Physicians & Scientists for Global Responsibility Charitable Trust (NZ) as well as our following email, containing an attachment with the report "GENE EDITING myth & reality- a guide through the smokescreen").

FORESTRY

It is important for BDC to be aware that (given the importance of forestry on the West Coast) the Forest Stewardship Council (FSC) and PEFC (Programme for the Endorsement of Forest Certification) prohibit the use of any GE/GMO trees, due to the serious ecological risks, their adherence to the Precautionary Principle, and market aversion.

The FSC and PEFC are global certification bodies for truly sustainable forestry. The National Environmental Standards for

Plantation Forestry (NES-PF) also prohibits the use of any GE/GMO trees or rootstocks in NZ.

Part of that threat comes from the dangers of genetic pollution from GE/GMO pine pollen, or horizontal gene transfer which could have unintended adverse impacts on the environment (including harm to NZ soils).

Another risk is lowered productivity from toppling and snapping of pines that already are prone to that problem. GE/GMO pines could also cost a neighbouring forester or property owner their hard won Forestry Stewardship Council (FSC) or PEFC certification. A prestigious global certification body, the FSC only endorses truly sustainable forestry practices, and its position on GE is very clear- "we do not allow genetic engineering of trees."

The FSC has identified a number of other legitimate scientific concerns about the safety and appropriateness of planting genetically engineered trees including asexual transfer of genes from GMO's with antibiotic resistance to pathogenetic micro-organisms, increased resistance of target insect pests, reduced adaptability to environmental stresses, increased weediness or invasiveness in GMO trees with new features, and the spread of herbicide resistance genes. These hazards, and the uncertainties about them, are the reason for the prohibition of the use of GMO's in certified forests, stated in the FSC Principles and Criteria.

GE/GMO trees would threaten the existing tree stocks, and native trees on adjacent public conservation land/National parks with possible sterility or pathogens from cross pollination. Recent trials in the Phillipines show GE pollen carries for miles from plantations so here in the rimu forests could be killed off from a rogue GE or gene edited organism with a sterility gene.

The important Emerging Issue (GE/GMOs) is particularly relevant here, due to the Climate Change issue and the fact that various proponents of the biotech industry are pushing for outdoor use/experimentation with GE/GMO trees and grasses.

We urge BDC to do everything in its power to help ameliorate climate change and protect indigenous biodiversity.

We share the concerns of many Buller/West Coast ratepayers/ residents about climate change (as well as any outdoor use of GE/GMOs) and would like to see BDC join other councils (as well as the relevant agencies in NZ government) in prioritizing swift and appropriate action to combat climate change (while continuing to

oppose any outdoor use of GE/GMOs, including risky, controversial, and unproven GE/GMO/gene edited grasses, trees, or animals).

Plans by irresponsible parties (including overseas multinational companies) to develop GE/GMO grasses, trees or animals (without being held liable for unintended/unforseen adverse impacts of EPA approved activities) are ill-advised and of particular concern.

It would be impossible to prevent such new organisms from contaminating our existing GMO free agriculture, horticulture, apiculture, forestry, as well as the wider environment/ finite resources like soils and waterways. Vectors for GE/GMO contamination including soils, water, wind, pollen, seeds, vegetative material, insects, animals, machinery, human error, extreme weather events including floods, etc.

Buller District Council (under the leadership of former Mayor Pat O'Dea) was one of the first councils in NZ to achieve symbolic GE Free Zone status (other councils include Nelson City, Napier, Auckland and Northland councils).

We also oppose the use of risky and controversial sterility technology "gene drive". While we strongly support robust protection of native flora and fauna, use of such risky new technologies on our public conservation lands (or elsewhere) would be counter productive and potentially create much bigger problems than the one it is trying to solve.

GENE DRIVE

We share the concerns of many councils, environmental groups/ NGOs, organisations and Iwi/ hapu (particularly in Te Tai Tokerau,Tāmaki Makaurau and Hawke's Bay) about the risks of "gene drive", a particularly dangerous type of sterility experimentation (in the case of possums, completely unsuitable and unethical, as the risks are huge and possums are indigenous just across the ditch in Australia).

See
"Reckless Driving: Gene Drives and the end of Nature" by Civil Society Working Group on Gene Drives

https://etcgroup.org/content/reckless-driving-gene-drives-and-end-nature

(controversial new sterility technology, touted by the biotech industry as the "answer" to kill "all possums "with "negligible risk". However, proponents of this controversial new technology refuse to take responsibility for any unintended/unforseen adverse impacts/ effects (and they would not be liable for harm caused to NZ's biosecurity/ unique biodiversity/ wider environment/ existing GM free primary producers/ economy etc... as long as they are in compliance with any minimal conditions that might be set by the EPA).

See also

Sustainability Council of NZ publications regarding gene drive

30 July 2018

http://www.sustainabilitynz.org/gene-drive-gmos-would-need-nzs-neighbours-to-agree/

http://www.sustainabilitynz.org/a-constitutional-moment-gene-drive-and-international-governance/

5 October 2018

article by Simon Terry/ Stephanie Howard of the Sustainability Council of NZ

published in New Scientist magazine

https://www.newscientist.com/article/2181693-how-should-we-control-the-power-to-genetically-eliminate-a-species/

Forest and Bird's updated precautionary GE/GMOs policy specifically states the societies opposition to any genetic modification (including gene editing) of indigenous flora and fauna.
See
https://www.forestandbird.org.nz/resources/genetic-modification-policy

https://www.forestandbird.org.nz/sites/default/files/2020-08/Genetic%20Modification%20Policy.pd

The immediate past Minister of Conservation Hon Eugenie Sage clearly stated her opposition to any outdoor use of GE/GMOs, including gene edited organisms/ CRISPR or "gene drive", which has been conveyed in no uncertain terms to both the Department of Conservation and Predator Free 2050 Ltd.

"Gene editing is an unproven technology for predator control. Gene technologies are problematic and untested and have significant risks.

"They have no social licence to operate. There is a lot at stake and there is a need for the utmost caution.

"There would be serious questions around the risks to New Zealand's GE-Free reputation from being associated with any field trials of gene technology."
-Minister of Conservation Hon Eugenie Sage

To date proponents of these hazardous new genetic technologies

- refuse to be personally and financially liable for unintended or unforseen adverse impacts of an EPA approved outdoor GE/GMO experiment/field trial or release.

-are indifferent to the fact that under the Hazardous Substances and New Organisms (HSNO) Act there are inadequate liability provisions and no mandatory requirement for the EPA to take a precautionary approach to outdoor GE/GMO applications. ie. they do not support/ actively oppose the concept of "the polluter shall pay" and the Precautionary Principle. Local Government NZ and many councils have identified serious deficiencies in the HSNO Act, which has led many councils to take action to protect their regions and communities from the risks of any outdoor use of GE/GMOs.

NZ is a signatory to the Cartegena Biosafety Procol
(the Precautionary Principle, as formulated in the Cartagena Protocol on Biosafety to the Convention on Biological Diversity, was based on the presumption that living modified organisms (LMOs or GMOs) were likely to have adverse effects on the environment and human health).

In our view, we need to focus on regenerative agriculture/horticulture and forestry, and support humane, robust ground based feral control. Some of the greatest impacts for global warming in New Zealand are in land management, and therefore one of the most pressing areas for immediate constructive action to address harmful climate change (obviously the new LTP 2021/31 should oppose any new coal mines on public conservation lands or stewardship land given their major contribution to greenhouse gas emissions).

Adoption of existing sound and sustainable farming methods like regenerative/organic (and Forest Stewardship Council -FSC- and Programme for the Certification of Forestry-PEFC certified forestry) has many advantages including protecting our food sovereignty, access to key markets and premiums, and protecting the right of Buller/ West Coast ratepayers/ residents to grow and eat GE/GMO free food (as well as assisting in the reduction of greenhouse gas emissions).

We ask that BDC ensure that the new LTP 2021/31 contains a precautionary and prohibitive GE/GMOs policy. This would help protect native forests and valuable non GM exotic species, help to defend the rights of forest dependent communities and tangata whenua from the unknown and irreversible risks of experimenting on or releasing genetically engineered (GE) trees. We oppose any genetic modification of indigenous taonga like manuka and ask that councils not only uphold their obligations regarding Te Tiriti o Waitangi but are mindful of WAI262 (claim on indigenous flora and fauna).

If sound and sustainable methods (in primary production) are more widely adopted it would protect our ability to nourish ourselves (food supply/sovereignty, protect the public health, achieve truly sustainable forestry, and create safe habitat for endangered species, as well as increase our ability to reach the 2050 emissions targets proposed by the Climate Change Commission in NZ.

GMO/ gene edited organisms present unique risks and adverse impacts may be irreversible.

There are simple solutions to help address climate change that do not require risky experimentation with GE/GMOs, for example, simply adding seaweed into the diet of cows/cattle.
see
"Feeding cows seaweed could cut their methane emissions by 82%" The Guardian (UK)
"Researchers found that cows belched out 82% less methane after putting small amount of seaweed in their feed for 5 months"
https://www.theguardian.com/environment/2021/mar/18/cows-seaweed-methane-emissions-scientists?fbclid=IwAR3E3t_vwjuch5CFoeaknpC9mG_2-WGSmU_Cp5IPdN8P2I1AKsG0bo8-N5U

Please find attached 5 November 2019 Physicians & Scientists for Global Responsibility Charitable Trust (NZ) letter which was sent to all councils in NZ (including Buller District Council, Grey District Council and Westland District Council, as well as WCRC) on the topic of GE/GMOs. We would have hoped that BDC and the other District Councils and WCRC would have already studied this material and taken action in response to the threat of outdoor use of GE/GMOs.

Thank you, we look forward to your response and continuing to participate in this important process so that together we can achieve
-sound biosecurity, environmental, economic, food sovereignty, and conservation/ biodiversity outcomes
-give our region a strong marketing advantage

PROTECTION AND ENHANCEMENT HISTORICAL BUILDINGS/ ASSETS

We support District revitalisation that prioritizes protection and enhancement of historical assets/ buildings and our historical and cultural values.

We ask council to prioritize the well being of our rural communities like Seddonville, as well as urban centres like Westport and Reefton, by protecting our historical buildings and other assets. These historical assets are of critical importance, we have lost too many already (including the Seddonville hall with its matai flooring, and the old Westport cinema). Please help residents/ ratepayers ensure that our history (including but not limited to historical buildings) are not lost to communities and future generations.

CARNEGIE LIBRARY (WESTPORT)

We support the full restoration of the historic Carnegie library in Westport so it can once again be enjoyed by locals and visitors alike. We ask BDC that set aside adequate funds for this purpose (identified in the draft LTP 2021/31). We would support more money being designated to restore (and earthquake strengthen) the beautiful Carnegie library. We also ask that council applications for additional funding from central government are made in a timely fashion to ensure that as much money as possible is obtained from outside the Buller (from whatever sources are available) for our lovely library.

It is very sad that the Carnegie library (Westport) was allowed to deteriorate to its current state but we look forward to the restoration and re-opening of this historic building. This will benefit not only Buller residents but visitors from far and wide (both domestic and international).

REDUCE OR ELIMINATE USE OF TOXIC HERBICIDES AND PESTICIDES

We urge BDC to prioritize (in the new LTP 2021/31) elimination or reduction of the exposure of Westport/Buller residents to toxic herbicides and pesticides (this should include a blanket ban on the spraying of such substances aerially and on the roadside).

There are non-toxic and organic alternatives to dangerous herbicides and pesticides that should be used instead (as well as mechanical means and use of appropriate animals and tools). Pine oil based products work well to kill various weed species.

Toxic herbicides (including glyphosate) and pesticides not only undermine human health (and present a risk to children, pets etc) but also harm beneficial insects including bees. Integrated pest management (IPM) should be encouraged in horticultural/ farming enterprises (for non-organic properties).

It is of concern that on a number of occasions (while walking in the area near or on the Kawitiri trails at the mouth of the Buller river) individuals have been seen spraying herbicides with no warning signs or protective gear. This is unacceptable.

While we greatly appreciate all the hard working volunteers donating their time to keep footpaths or walkways/ cycletrails open, or working to suppress or eradicate pest plants, or releasing native trees/ shrubs that have been planted. But in our view they

should be required to erect signage (well back, on either side of their activities) when they are spraying and then (after the fact) leave up signage to let people know that spraying of poisons/ herbicides has occurred. Children and dogs are particularly vulnerable to being exposed to sprays/ poisons (although many adults also have sensitivities), and it is off putting (when you feel like doing some hand weeding of pest plants like wild cherry seedlings or wild ginger) when you don't know when or where someone has been spraying herbicides!

In 2015 the International Agency for Research on Cancer (IARC) classified glyphosate as a "probable human carcinogen".

If New York City can ban use of glyphosate in public parks and reserves, so can BDC!

The New York City Council voted unanimously on Thursday — Earth Day — to ban the use of chemical pesticides on city property, more than six years after similar legislation was first introduced in the chamber.

The new ban, an amendment to an existing city law limiting use of pesticides, was aimed primarily at the weed killer glyphosate, known by its commercial name RoundUp. RoundUp, the most popular weed killer in the world, has been linked in some scientific studies to certain cancers.

The legislation requires all city agencies to use only biological, or naturally derived, pesticides to control pests and weed growth.

See

https://www.ny1.com/nyc/all-boroughs/news/2021/04/22/city-council-bans-use-of-chemical-pesticides-in-public-areas

There is also a very clear and concerning link between GE/GMOs/ gene edited organisms and toxic poisons/ pesticides (and herbicides, a lot of GE/GMO crops are engineered to be "tolerant"/ resistant to proprietary herbicides that have been shown to harm soils, mycorrhizal activity and other soil life).

We urge BDC to prioritize immediate reduction of Buller residents exposure to toxic herbicides and pesticides (this should include a blanket ban on the spraying of such substances aerially and on the

roadside). As mentioned above, there are non-toxic and organic alternatives to dangerous herbicides and pesticides.

See also
8 April 2021

Glyphosate Exposure During Pregnancy Causes Hormonal Changes in Baby Girls

A new peer-reviewed pilot study on women exposed to glyphosate during pregnancy increases scientists' understanding of how the chemical acts as an endocrine disruptor in female infants

https://childrenshealthdefense.org/defender/glyphosate-pregnancy-hormonal-changes-baby-girls/

15 April 2021

Glyphosate-based herbicide hacks hormones of baby girls after exposure in the womb

https://www.gmwatch.org/en/news/latest-news/19758-glyphosate-based-herbicide-hacks-hormones-of-baby-girls-after-exposure-in-the-womb

Glyphosate-based herbicide

hacks hormones of baby girls

after exposure in the womb

New groundbreaking pilot study

EXCERPT: [Study authors Prof Shanna Swan and Prof Jia Chen wrote:] "These preliminary findings suggest that glyphosate is an endocrine disruptor with androgenic effects in humans. Given the increasing glyphosate exposure worldwide, larger studies should evaluate glyphosate's developmental effects on endocrine and reproductive systems."

Glyphosate hacks hormones of baby girls after exposure in the womb – new groundbreaking pilot study

Sustainable Pulse, 7 Apr 2021
https://sustainablepulse.com/2021/04/07/glyphosate-hacks-hormones-of-baby-girls-after-exposure-in-the-womb-new-

groundbreaking-pilot-study/#.YHB-yi1Q3o0
[links to sources at this URL]

A group of international scientists from the U.S. and EU have released a peer-reviewed pilot study that suggests the anogenital distance of baby girls is becoming more male-typical, due to their mothers being exposed to glyphosate[-based herbicide] when they are in the womb.

The study, which was published on Monday, in the well-respected Elsevier peer-reviewed Journal 'Environmental Pollution', is a major breakthrough in our understanding of glyphosate as a hormone hacker (endocrine disruptor).

Prof. Shanna Swan and Prof. Jia Chen, who are two of the Study authors and are both Professors at Department of Environmental Medicine and Public Health at Icahn School of Medicine at Mount Sinai in New York, sent the statement below to Sustainable Pulse;

"In this pilot (N=100), we examined the concentration of glyphosate and its breakdown product (AMPA) in urine collected in mid-pregnancy in relation to anogenital distance at birth. We found that higher exposure to these pesticide-derived chemicals was associated with a longer (more male-typical) anogenital distance in girls, an association we also observed in an earlier rodent study. These preliminary findings suggest that glyphosate is an endocrine disruptor with androgenic effects in humans. Given the increasing glyphosate exposure worldwide, larger studies should evaluate glyphosate's developmental effects on endocrine and reproductive systems."

As highlighted by the Professors, this new human study follows on from a peer-reviewed paper released in 2019, during the pilot phase of the Global Glyphosate Study, which showed that exposure to glyphosate-based herbicides in rats was also associated with androgen-like effects, including a statistically significant increase of anogenital distance (AGD) in males and females, delay of first estrous and increased testosterone in females.

Anogenital distance, the distance between the anus and the genitals, is a sensitive marker of prenatal endocrine disruption affecting the genital tract development. Exposure to different

chemicals including pesticides has been linked previously to altered AGDs and other endocrine effects.

There have also been a number of other studies that have recently revealed the damage being caused by glyphosate on reproductive health.

Glyphosate is the most used herbicide in human history. 18.9 Billion pounds (8.6 Billion Kilograms) of glyphosate-based herbicides (GBHs) have been sprayed worldwide since 1974. Glyphosate use has also increased 15-fold since genetically modified crops were introduced in 1996.

In 2015 the International Agency for Research on Cancer (IARC) classified glyphosate as a "probable human carcinogen".

Buller River
We urge BDC to do everything in its power to improve the water quality of the lower Kawitiri river. It is very disappointing that effluent and other pollutants are still discharged into the river. It is disturbing (after a walk in the Westport domain on a hot summers day to not be able to swim in the river near the bridge- the warning signs are very clear that pollution levels in the river are often way too high for safe swimming.

PROTECTION OF NOTABLE TREES (REGISTER)
We urge council to ensure that there is specific wording/ policy in the new LTP 2021/31 of the commitment by council to protect notable trees (native and exotic). We ask that the Notable Tree Register be updated and that the process to add trees to the register is straight forward and inexpensive. We ask that council work with local communities to identify and protect notable heritage trees. The loss of the iconic, beautiful, ancient, 500+ yr old rata trees near the Karamea stop bank was an outrageous act of environmental vandalism by West Coast Regional Council and this sort of incident must never occur again in the Buller. We ask that BDC support local initiatives in the Karamea area and wider Buller to support planting of suitable eco sourced native trees including southern and northern Rata.

Coastal Marine Area
Buller District has a considerable amount of coastline. We are pleased that work is being done to contain/clean up the hazardous refuse tip right on the edge of the sea at Hector but more needs to

be done to protect our coastline and protect marine species like Hectors dolphins. We ask that the new Long Term Plan 2021/31 contain appropriate wording/ policy to indicate a strong commitment by council to help protect and enhance our coastline and the marine species who call it their home.

NZ Coastal Policy Statement (including its precautionary clause #3).

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."-END excerpt from the NZ Coastal Policy Statement (clause 3)**

Thank you, please keep us informed- we wish to be heard.

Nga mihi

Linda Grammer
Ian Mulholland
Seddonville

Further information:

RISKS OF GE/GMO GRASSES

NZ Crown Research Institute (CRI) AgResearch has controversially recently advocated outdoor experimentation with controversial and risky gene edited ryegrass (despite no indication that this would be wise use of taxpayer dollars or help address climate change and the impossibility of keeping such a GMO separate from non GMO grasses).

This NZ CRI (who has a history of poor compliance with conditions of approval set by the EPA for other GE/GMO experiments) is currently involved in experimentation with gene edited/GMO ryegrass in the USA.

AgResearch has recently advocated outdoor experimentation with controversial and risky gene edited ryegrass. There is no evidence from overseas that this would help address climate change and this NZ CRI fails to grasp the impossibility of keeping such a GMO separate from non GMO grasses. This NZ CRI (who has a history of poor compliance with conditions of approval set by the EPA for other GE/GMO experiments) has been involved in experimentation with gene edited/GMO ryegrass in the USA (no benefit shown to date).

There have been a number of instances of GE/GMO grass contamination in the USA, despite "good intentions". As per usual, those responsible for the contamination were not held accountable for even an attempt at "clean up".

See
25 June 2018
High Country News
"GMO grass is creeping across Oregon- Missteps by agri-business giants allowed the invasion. Now they're off the hook for the cleanup".
https://www.hcn.org/issues/50.11/plants-genetically-modified-grass-creeps-across-eastern-oregon

29 August 2019
The Oregonian

Escaped GMO bentgrass creates bitter divide in Eastern Oregon still

https://www.oregonlive.com/news/erry-2018/07/75efd8154b4980/escaped_gmo_crop_creates_rift.html

Appendix**

The Northland

- "Regional Policy Statement" (RPS) includes a precautionary GE/GMOs policy/ approach (Policy 6.1.2 and Method 6.1.5), as well as the GE/GMOs issue being appropriately identified as an Issue of Significance (concern) to Tai Tokerau tangata whenua, and issue of concern to communities. The RPS mention that the risks of any outdoor use of GE/GMOs to indigenous biodiversity is of particular concern to Maori. Section D.1.1. of the operative RPS (Tangata whenua section) also states that "An analysis of effects on tangāta whenua and their taonga/ cultural values is required when 4)the use of genetic engineering/GMOs is proposed and the release of genetically modified organisms to the environment,"

-the operative Regional Plan (Northland) includes precautionary and prohibitive GE/GMO provisions in the Coastal Marine Area (CMA).

Further background:

The Northland "Regional Policy Statement" (RPS] calls on all Councils to apply precautionary GMO policies when reviewing their plans. (NRPS 2018, 6.1.2 and 6.1.5)

6.1.2 - Precautionary Approach

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

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.
ENDS

next:

https://www.hastingsdc.govt.nz/our-council/news/archive/article/1038/council-and-iwi-welcome-gmo-decision

Council and Iwi welcome GMO decision

Hastings district will remain a GM-Free food producing region despite an appeal through the Environment Court seeking to overturn the Hastings District Council's district plan.

In 2015 the council became the first in New Zealand to secure Genetically Modified Organism (GMO) free status, but this was appealed by Federated Farmers through the Environment Court.

In its recent ruling, the Environment Court issued a consent order upholding the council's decision to prohibit the outdoor release and field trials of GMOs – a decision welcomed by the council and Ngāti Kahungunu Iwi Inc who have worked together to protect and safeguard the environment.

Hastings mayor Sandra Hazlehurst said that a Colmar Brunton poll conducted in 2012 showed that 84 per cent of Hawke's Bay residents surveyed wanted the region to have GM-Free status for its food production.

"We are delighted with this outcome that supports our growers, our people and local iwi in the common desire to protect our environment and give our region a strong marketing advantage when promoting our products for export.

"It positions us to grow our regional economy and create jobs as well as ensure safe farming practices and food safety.

"As a council we heard the message loud and clear from the wider community that they supported GM-Free food production for Hastings, and this decision is a positive result that we have been able to bring about through our planning processes."

Mayor Hazlehurst said the policy decision by council also supported Ngāti Kahungunu Iwi's stance, with the two organisations closely aligned on the issue.

For Ngāti Kahungunu, being a GE-Free food producing region was part of its 25-year iwi vision to safeguard the natural environment and its resources, said chairman Ngahiwi Tomoana.

"This status reflects our relationship with our ancestral lands, water and taonga within our rohe.

"It is also consistent with our role as kaitiaki over the natural world and our resources, keeping them safe from damage through genetic modification."

The rules in the district plan would prohibit the release and field trials of GMO crops, but would not prohibit GMOs involved in laboratory research or GMO-based products for medicinal or veterinary use.

1 August 2018

REFERENCES:

a number of recent scientific publications have reported viable pine pollen spreading up to 60 kilometres.

Research published last year showed that pine pollen travels up to 41 kms in as little as 3 hours in moderate winds. At higher wind speeds pollen can travel this distance in 45 minutes, reaching altitudes of 610 metres.

Pine pollen remains viable for at least 24 hours. If the field trial were allowed, high winds would facilitate the spread of GE pollen far and wide. Pollen-producing structures have previously been identified on badly managed GE tree seedlings at Scion's Rotorua site, so this possibility cannot be ruled out.

In addition, the GE process itself will alter tree's growth patterns in totally unforeseen ways that could allow for unexpected pollen release.

Williams, C. G. (2010). Long-distance pine pollen still germinates after meso-scale dispersal.American Journal of Botany 97(5): 1-11. DOI: 10.3732/ajb.0900255

An up-to-date study undertaken in India established pollen drift over 600 kilometres:

Singh, G. et. al., "Pollen-Rain from Vegetation of Northwest India." New Physiologist, 72, 1993, pp. 191-206.

FURTHER BACKGROUND

Part of that threat comes from the dangers of transgenic pollution from GE pine pollen, or horizontal gene transfer which could have unintended adverse impacts on the environment (including harm to NZ soils). Another risk is lowered productivity from toppling and snapping of pines that already are prone to that problem. GE pines could also cost a neighbouring forester or property owner their hard won Forestry Stewardship Council (FSC) certification. A prestigious global certification body, the FSC only endorses truly sustainable forestry practices, and its position on GE is very clear- "we do not allow genetic engineering of trees."

The FSC has identified a number of other legitimate scientific concerns about the safety and appropriateness of planting genetically engineered trees including asexual transfer of genes from GMO's with antibiotic resistance to pathogenetic micro-organisms, increased resistance of target insect pests, reduced adaptability to environmental stresses, increased weediness or invasiveness in GMO trees with new features, and the spread of herbicide resistance genes. These hazards, and the uncertainties about them, are the reason for the prohibition of the use of GMO's in certified forests, stated in the FSC Principles and Criteria.

Quotes from world renowned geneticist Dr. David Suzuki on the risks of GE trees:

"We have no control over the movement of insects, birds and mammals, wind and rain that carry pollen and seeds. Genetically engineered trees, with the potential to transfer pollen for hundreds of miles carrying genes for traits including insect resistance, herbicide resistance, sterility and reduced lignin, thus have the potential to wreak ecological havoc throughout the world's native forests."

"GE trees could also impact wildlife as well as rural and indigenous communities that depend on intact forests for their food, shelter, water, livelihood and cultural practices. "As a geneticist, I believe there are far too many unknowns and unanswered questions to be growing genetically engineered plants - food crops or trees - in open fields. GE trees should not be released into the environment in commercial plantations and any outdoor test plots or existing plantations should be removed."

-Dr. David Suzuki, The Suzuki Foundation

PSGR

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5 November 2019

Copies to **All New Zealand Councillors**
District Health Boards and Public Health Units
All MPs and other appropriate recipients

For the attention of all New Zealand Regional Councils and Councillors

As recently elected representatives of residents in your region we acknowledge your responsibility and concerns for sustainable land use, limiting the consequences of releasing genetically engineered organisms into your environment, and preserving the reputation and integrity of regional economies for exporting clean, safe products that New Zealand overseas markets buy from us knowing they are free of genetically engineered DNA.

Physicians and Scientists for Global Responsibility is a Charitable Trust established to provide independent scientific assessment and advice on matters relating to genetic engineering and other scientific and medical matters. In this capacity, informative letters have been regularly addressed to all New Zealand Councillors since 2003.

It is important that Councillors know what genetically engineered organisms are and the reasons for the need for precaution particularly in the face of recent commercial pressure for the release of genetically engineered ryegrass in the New Zealand environment and deregulation of gene editing such as CRISPR (cas9).

The High Court of New Zealand and equivalent courts in the European Union have supported regulation of gene edited products as genetically engineered organisms (GEO). Consumers, producers and exporters benefit from protections to preserve non-engineered production and maintain the integrity of food safety and labelling systems.

Councillors should also be aware of the tremendous efforts for close to two decades made by Councils in Northland, Auckland, the Bay of Plenty and Hawkes Bay to protect ratepayers from the risks of releasing genetically engineered organisms into the New Zealand environment. These policies and protections are included in regional plans as an important local tier of oversight.

One concern for councils taken up by Local Government NZ has been the request for government to introduce strict liability to moderate commercial risk-taking that is 'socialised' on ratepayers. As some vested interests lobby for 'deregulation' there is also a growing call for the BioEthics Council to be reinstated, to advise on ethical issues such as gene editing in humans and farm animals.

This situation has led us to send the following material. We ask all re-elected and new councillors to read and absorb so that each representative can meet their duty of care to those in their region from a sound knowledge base.

Please note that the terms *genetic engineering* and *genetic modification* are used synonymously as in *genetically engineered* (or *modified*) *organisms* (*GEOs / GMOs*). The more recently proposed *Gene Editing* includes techniques such as CRISPR (cas 9). *Transgenic* and *biotechnology* are terms also used for the technologies.

Biotechnology has made important advances adding much of value to our scientific heritage. However, the technologies of genetic manipulation are seriously flawed, require effectual oversight and comprehensive regulation, and comprise only a very small part of biotechnology applications.

PSGR uses the term genetic engineering (GE) because it most closely represents the changes made when novel DNA is inserted into plant life.

PSGR's principle concern is with such novel manipulation of organisms being released into the New Zealand environments, both physical and human.

Once released into an environment, manipulated novel DNA is irretrievable.

As of September 2019, the Ministry of Primary Industries' website clearly states: *"No genetically modified seeds or nursery stock have been approved for release into New Zealand, so we have strict import rules to ensure no unapproved GM material arrives in the country."*[1] PSGR maintains that this should remain the status quo.

Moving genes between species involves the patenting of plants and animals. It has extended property rights into biology, providing the potential for direct control over much agricultural production and the food supply.[2]

In 1994, four major seed companies controlled 21% of the global market. Subsequently, mergers and the buying up of smaller companies means four transnational seed companies and four transnational agrochemical firms now control a large measure of their respective markets globally. Pesticide corporations producing genetically engineered seeds dominate the agricultural input market, effectively controlling the world's seed, pesticide and biotechnology industries.

Monsanto was claimed the world's largest seed producer, helped in this by owning the now-defunct patent and selling the glyphosate-based herbicide Roundup for use on its crops genetically engineered to withstand spraying with the chemical. Bayer, the second largest agrochemical company in the world, purchased Monsanto for $63 billion in 2018, a merger approved by the Canadian government. Bayer now owns 33% of the global seed market and 23% of the agrochemical market.[3]

In the US, the overuse of glyphosate associated with genetically engineered crops has aided the development of resistance to glyphosate in weed species, and to those species replicating to spread over millions of hectares of farmland.

Commercial plantings of transgenic food crops were first grown in the mid-1990s. It was soon apparent that they threatened the environment; e.g. glyphosate-resistant rye grass was established in Australia by 1998.[4]

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[1] https://www.mpi.govt.nz/importing/plants/seeds-for-sowing/genetically-modified-seeds-and-nursery-stock/
[2] See also http://www.psgr.org.nz/22-glossary/frontpage/1-welcome
[3] https://cban.ca/gmos/issues/monsanto/
[4] Volume 46, Issue 5 October 1998, pp. 604-607 'Evolved resistance to glyphosate in rigid ryegrass (Lolium rigidum) in Australia' Powles et al, DOI: https://doi.org/10.1017/S0043174500091165

Because of the horizontal gene transfer of the resistance to glyphosate DNA, crops that are resistant to another toxic herbicide, dicamba[5], are being developed. Herbicide resistance, or herbicide tolerance, engineered into food crops is aimed at allowing farmers to spray freely without killing the crop. Scientists predict wide-spread heavy use of dicamba will also lead to weeds resistant to that chemical.

The above developments raised concerns for many in New Zealand.

The Inter-Council Working Party on Genetically Modified Organisms (GMO) Risk Evaluation and Management Options (ICWP)

Northland Councils acted by establishing the ICWP in response to community concerns about transgenic organisms. The Far North, Whangarei and Kaipara District Councils, Auckland Council and Northland Regional Councils are represented on the working party. Find out more on http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/Genetic-Engineering/Pages/default.aspx

Three major reports commissioned by the Working Party identified a range of risks involved with trialling and releasing genetically engineered organisms into the environment. The ICWP also gave approaches to managing the risks:

Genetically engineered organisms have become invasive and can affect non-target species including indigenous flora and fauna with long-term effects on ecosystems.

There may be effects on Maori cultural beliefs of whakapapa, mauri, tikanga.

There are ethical concerns about mixing genes from different species including human genes and the long-term safety of such novel food.

Economic risks include the loss of income through contamination, or perceived contamination, of conventional food products, with negative effects on marketing and branding opportunities such as 'clean and green' or 'naturally Northland', and the costs associated with environmental damage, e.g. clean-up costs for invasive weeds or pests which are seen as coming from the public purse.

There are limited liability provisions under the Hazardous Substances and New Organisms (HSNO) Act 1996.[6] Challenges have been made to the right of Councils to have "precautionary statements" in their Regional Policy Statements and a cautionary approach with their Plans, and Councils' rights have been upheld in New Zealand Courts.

What is genetic engineering?

Genetic engineering (GE) is the artificial, direct alteration of an organism's DNA. It usually involves genes being taken from a natural host and inserted into a new host; for example, fish genes into tomatoes and strawberries,[7] rat genes in lettuce, and genes from the cecropia moth into apples. It can also involve genetically engineering resistance genes for herbicides used by farmers, councils and home gardeners. The purpose is to insert a desired trait into a plant that does not have that trait.[8]

[5] http://www.panna.org/sites/default/files/dicamba-NCAP.pdf
[6] https://www.boprc.govt.nz/media/321876/environment-court-decision-18-dec-2013-env-2012-339-000041-part-one-section-17.pdf
[7] http://thegreendivas.com/2011/06/10/waiter-theres-a-fish-in-my-tomato-a-gmo-story/
[8] https://www.nationalgeographic.com/environment/global-warming/food-how-altered/

The application of genetic engineering technologies alters the DNA of a living organism in ways that are much more radical than the generally incremental, slow processes of natural evolution.

PSRG sees fundamental research into these and other aspects of molecular biology as important to New Zealand; for example, using the technologies to produce pharmaceutical and industrial materials.

PSGR also sees that health and scientific professionals in New Zealand, indeed worldwide, have grave concerns about aspects of genetic engineering technologies. As we have said above, biotechnology has added much of value to our agricultural and scientific heritage. However, the trial and error approach to evaluating the effects of genetic manipulation is inappropriate and dangerous when novel organisms enter the natural environment.

The natural complex inter-relationships between organisms are genetically determined in ways about which we have too little knowledge. You can read more on www.psgr.org.nz and http://www.psgr.org.nz/faqs.

Currently, a New Zealand Crown Research Institute, trading as Scion, runs a limited scale open field trial of genetically engineered trees near Rotorua, some of which involve pine trees. Wilding pines[9] are a major and expensive problem for many New Zealand Councils and were recently in the news again. While claims are made of novel DNA being engineered not to procreate, it needs only a failure of 0.01 percent or less for procreation to take place. There is no guarantee failure cannot occur. Can Councils and government afford the potential cost/s of failure?

Other experiments in New Zealand are carried out in strict containment.

Approving engineered organisms for release into the New Zealand environment is the responsibility of this country's Environmental Protection Authority (EPA). However, once the EPA approves a genetically engineered organism for release their responsibility ends. There is no independent monitoring of effects, good or adverse.

New Zealand's history of genetic engineering experimentation outside of a laboratory is poor. A field trial of genetically engineered tamarillos was grown at the Kerikeri HortResearch station. At the time, lax security allowed the engineered crop to potentially cross-pollinate with commercial tamarillo crops.[10] Claims, counter claims and denials abounded, but these of themselves revealed that the dangers were known. A HortResearch spokeswoman is reported to have confirmed that trials of genetically engineered tamarillos were being done at Kerikeri and that "the fruit isn't even allowed to hit the ground." 'Hitting the ground' would potentially allow for cross contamination with tamarillos grown nearby. Promised monitoring after the experiment was reported as poor or non-existent. A Royal Commission on Genetic Modification (est. 2000)[11] acknowledged that public concern about the Kerikeri trial was justified.

PSGR maintains that the risks revealed – proven overseas in abundance – should not be allowed to contaminate the New Zealand environment. This is where Councils have a right to have a say. Councils in Northland, Auckland and Bay of Plenty have precautionary statements in their Plans.

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[9] https://www.doc.govt.nz/nature/pests-and-threats/common-weeds/wilding-conifers /
[10] The history of experimentation warrants airing. Modified tamarillos attract anti-GE protesters, 30 June 2000, Angela Gregory https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=105549; https://www.beehive.govt.nz/node/14500
[11] https://www.mfe.govt.nz/sites/default/files/media/Hazards/Royal%20Commission%20on%20GM%20in%20NZ-Final.pdf

A 2012 Colmar Brunton poll found 84 per cent of Hawke's Bay residents surveyed wanted a status free of genetically modified organisms for the region's food production. Hastings District Council secured GMO-free status in 2015. Federated Farmers appealed the decision through the Environment Court which upheld the Council's decision to prohibit the outdoor release and field trials of GMOs. Council and Ngati Kahungunu Iwi Inc worked closely to protect and safeguard the environment.[12]

Other polls have shown that a significant portion of the population does not want genetically engineered / modified organisms released into the environment.[13] Can Councils and government afford the potential cost/s of ignoring public opinion?

Proposed changes to the Resource Management Act could bar Councils from protecting their region

PSGR opposes the changes based on the record of past decisions made by New Zealand's central government and regulatory authorities.

New Zealand is in a unique position in that our borders are bounded by extensive distances of sea. Contamination is virtually impossible by air-borne DNA coming over those seas. We can potentially protect this country's environment and retain it as Clean Green and 100% Pure.

New Zealand's Ministry of Primary Industries requires testing of imported seed for the presence of transgenic seed for specific species and varieties of the following genera: Brassica, Glycine, Medicago and Zea.[14] In testing hundreds of kilograms of imported maize seed for sowing annually[15] the presence of transgenes has been found in sweet corn and maize multiple times.[16]

Food imports contaminated by viable transgenic organisms represent a risk to the international food and feed trade.[17] New Zealand imports around 200,000 tons of animal feed annually. This includes engineered crops claimed as "non-viable" which are inspected, although PSGR understands they are not tested by the Ministry of Primary Industries

Some plants are genetically engineered with one trait, some with more than one. This latter is known as 'gene stacking'. Monsanto's Smartstax includes eight introduced traits. The most common traits are herbicide resistance and using genes from the soil bacterium *Bacillus thuringiensis* to produce a Bt insecticide.

Glyphosate resistance

Since the first marketing of glyphosate in the 1970s, over 250 species have become resistant to its effects. It simply no longer kills them. In 2015, New Zealand had 12 glyphosate resistant species; three resisting multiple chemicals.[18] This resistance included glyphosate resistance in perennial ryegrass and Italian ryegrass. Some populations are also resistant to glufosinate which is used in genetic engineering of plants.

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[12] https://www.nzherald.co.nz/the-country/news/article.cfm?c_id=16&objectid=12099940. https://trueearth.co.nz/pure-hawkes-bay/.
[13] http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/Genetic-Engineering/Documents/GE-Poll/GE-Poll-Results-Auckland-Region.pdf; http://purehawkesbay.org/wp-content/uploads/2012/06/OverwhelmingSupportforGMFreeHawkesBay.pdf.
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[16] http://www.biosecurity.govt.nz/regs/imports/plants/gmo/corn-maize
[17] https://www.euractiv.com/section/agriculture-food/news/fao-study-cases-of-gmo-contamination-rise/ FAO study: Cases of GMO contamination rise, Philippe Collet, 20 March 2014 (updated: 27 Mar 2014)
[18] https://resistance.nzpps.org/index.php?p=herbicides/introduction

Releasing resistant genetically engineered plants would contaminate the New Zealand environment. As we have said, once novel DNA is released into the environment, it is irretrievable.

Since engineered crops resistant to glyphosate were commercialised in the mid-1990s glyphosate use in the US has increased dramatically and its effectiveness has diminished.[19]

The industry solution is to use chemicals such as 2,4-D and dicamba, both of which belong to a chemical class that has been associated with increased rates of diseases, including non-Hodgkins lymphoma.[20]

Another industry solution is to develop genetically engineered crops which scientists see as creating new generations of increasingly more intractable weeds controlled with yet more herbicides, leading to an era of much increased use of and dependence on pesticides.

Introduced genes can transfer to other species in a process called horizontal gene transfer (HGT)

Transgenic DNA has crossed between corn/maize varieties, between canola varieties, and between engineered crops and wild relatives.

Just five years after the release of the first genetically engineered commercial crops in Alberta, Canada, chemical and DNA testing confirmed canola volunteers had acquired resistance to three chemicals: Roundup, Liberty and Pursuit.[21] In Argentina, transgenic soy and corn/maize comprise 100% of production of those crops. A 2019 official figure of 340,000 tonnes was given for soybeans imported into New Zealand. Are these or any other imported genetically engineered crops extensively tested? A survey by Friends of the Earth found agricultural chemical use between 1990 and 2013 has risen from 3 to 12 litres per hectare largely due to engineered crops.

Genetically engineered High Metabolisable Energy (HME) ryegrass

Of particular concern for New Zealand is the potential introduction of genetically engineered HME ryegrass.[22]

English perennial ryegrass is the principal seed used for permanent pasture for grazing, hay and silage. New Zealand's exported ryegrass seed meets a substantial percentage of global demand, contributing significantly to the economy; perennial ryegrass being dominant in herbage seed production, supported by an international reputation as a supplier of high-quality seeds. In 2018, pasture seed exports earned NZ$98m; 45% of total exported seed sales.[23]

Export markets - the US, Australia, Europe, Japan, China and South America - look for purity and trueness to type, qualities based on our solid reputation and the fact that we are free of the engineered gene/s contamination that has resulted overseas from growing genetically engineered crops. A key part of this success is the voluntary seed certification and isolation distance management systems (SCID) being operated for the industry by AsureQuality Limited, a State-owned enterprise[24]. Pasture seeds - primarily ryegrass and clovers - also support our livestock and dairy industry, which represents 60 percent of NZ's exports.

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[19] http://www.ers.usda.gov/amber-waves/2015-may/managing-glyphosate-resistance-may-sustain-its-efficacy-and-increase-long-term-returns-tocorn-and-soybean-production.aspx#.VtTiPECqCul

[20] http://www.ucsusa.org/food_and_agriculture/our-failing-food-system/industrial-agriculture/the-rise-of-superweeds.html#.VtYadkCqCuJ

[21] https://www.organicconsumers.org/old_articles/ge/superweed.phpl; http://weedscience.org/mutations/mutationdisplayall.aspx

[22] https://www.agresearch.co.nz/news/hme-ryegrass-making-steady-progress/

[23] 16 February 2018 https://farmersweekly.co.nz/#

[24] https://www.govt.nz/organisations/asurequality-limited/

PGG Wrightson and the New Zealand taxpayer are partners to the development of an engineered ryegrass and field trials are being run in the US.

Perennial ryegrass is a highly out-crossed, wind-pollinated species, and is subject to extensive gene flow. A significant concern is the possibility of novel genes being taken up in other plants nearby. The potential rate of natural cross-pollination reduces with distance, but it is not known how many times cross-pollination can continue by a hop, skip and a jump, or for what distances, or for what period of evolutionary time.

For example, while most of the gene flow occurred within two kilometres in the direction of prevailing winds, researchers found evidence from a monitored planted area of a RoundUp-resistant transgene from genetically engineered bentgrass (Agrostis stolonifera L) in a related species (Agrostis gigantea) growing 14 km away and in wild-growing plants of the same species 21 km away.[25]

For anyone not convinced that transgenes in pollen can travel that far, 'Pollen-Rain from Vegetation of Northwest India,' reported pine pollen found in Northern India over 600 km from the nearest pine trees. New Zealander, Faranty Desborough, an experienced pilot, speaking to the Hawkes Bay Times in October 2003 said, "I have flown in a thermal at 7000 feet altitude over a corn field that was being harvested and was surrounded by corn husks that were being sucked up by the thermal." A southerly wind will carry sand from the Sahara Desert to settle on cars in London and just four days after the first bombing raid over Iraq in 2003, traces of depleted uranium from fired weaponry were detected in New York.

Once in the atmosphere, pollen and other particles can travel the globe. Perennial ryegrass cross-pollinates freely with annual and Italian ryegrass. Consequently, many hybrid ryegrasses have developed. Ryegrasses are typical of invasive weed species found in rural and urban riparian zones. Grass seeds can germinate after passing through an animal's digestive system. Seeds recovered from faeces 12-24 hours after feeding proved viable and seedlings started to emerge one week after planting. Seeds have also been transported in the wool of sheep and, in the case of perennial ryegrass, remained in the wool for 1-2 months.

Recent proposals for developing ryegrass include not using genetic engineering while another suggests we adopt engineered ryegrass. It is a position that needs the strictest scrutiny. It would be impossible to protect the genetic purity and trueness to type of perennial ryegrass from artificially created engineered genes. Escapees can simply go on spreading and contaminating. We cannot guarantee control over their movement: by human or mechanised traffic; by insects, birds and mammals; by wind, rain or flooding. Genetically engineered plants can potentially wreak ecological havoc. Can Councils afford the potential cost/s of allowing engineered ryegrass in their region?

Speaking on a DVD - A Silent Forest: The Growing Threat, Genetically Engineered Trees – Dr David Suzuki of The Suzuki Foundation, says: "As a geneticist, I believe there are far too many unknowns and unanswered questions to be growing genetically engineered plants – food crops or trees – in open fields." The ideas of genetic engineering are dangerous because we don't have a clue what the long-term impact is going to be.

Exports and tourists

A Ministry for the Environment report, *Our clean green image: What's it worth*? asked 'Is the environment valuable?' It confirmed the New Zealand clean green image is what sells, that New Zealand companies need to understand who their customers are and what really makes a difference to those customers.

[25] Evidence for landscape-level, pollen-mediated gene flow from genetically modified creeping bentgrass with CP4 EPSPS as a marker, Lidia S. Watrud et al PNAS October 5, 2004 101 (40) 14533-14538; www.pnas.org/content/101/40/14533.

This applies to Councils serving their local industries and communities. Common-sense should tell us that the practical thing to do is to protect our environment, our economy and the well-being of New Zealanders. Why endanger that by releasing engineered genes into the environment?

This country's primary exports are dairy products, meat, fruit and fish. About 95% of our agricultural produce is exported. New Zealanders and many overseas markets want 'GE-free' foods. Germany, strongly anti-GE, buys our meat and dairy products worth some NZ$756 million/pa. Japan buys around 11% of our exports and has refused imports because of potential contamination.

A prime indicator of why New Zealand should not release or grow genetically engineered organisms is because insurance companies will not insure against damage and governments are reluctant to legislate on liability. When Minister for the Environment, David Benson-Pope confirmed that if transgenic contamination occurs in New Zealand it will be those affected by the pollution who will pay - local councils and growers.

An increasing number of Councils are looking at how to handle genetically engineered organisms in their region. Concerns cover contamination, and the impact on local industry, agriculture, health and tourism. It is vital Councillors understand the risks and act accordingly to meet their duty of care. Can Councils and government afford the cost of no action?

Fortunately, New Zealand has strong bio-safety laws and application procedures. Despite this, not all the decisions made are considered wise by independent scientists and experts. Government and regulators are heavily lobbied by industries. By having precautionary statements in hand, Councils can look after their immediate duty of care, their residents and environment.

Jean Anderson
On behalf of
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List of GE crops and information on them http://www.isaaa.org/gmapprovaldatabase/cropslist/

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*How Gene Drive Organisms Could Entrench Industrial Agriculture and Threaten Food Sovereignty
http://www.etcgroup.org/sites/www.etcgroup.org/files/files/etc_hbf_forcing_the_farm_web.pdf

The Union of Concerned Scientists
*Sustainable Agriculture https://www.ucsusa.org/food/sustainable-agriculture
*Failure to Yield: Evaluating the Performance of Genetically Engineered Crops
http://www.ucsusa.org/food_and_agriculture/our-failing-food-system/genetic-engineering/failure-to-yield.html#.VtneykCqCul
*High and Dry: Why Genetic Engineering Is Not Solving Agriculture's Drought Problem in a Thirsty World
http://www.ucsusa.org/food_and_agriculture/our-failing-food-system/genetic-engineering/high-and-dry.html#.VtnfKECqCul

Ends

From:	Linda Grammer
To:	BDC_Long Term Plan
Cc:	BDC_Info; Ian Mulholland
Subject:	further info as part of our submission to BDC draft LTP 2021/31 ."GENE EDITING myth & reality- a guide through the smokescreen"
Date:	Tuesday, 18 May 2021 1:23:20 am
Attachments:	010b1026f294638ea501f7ceb6f347a7.pdf

Further information as part of our submission to the BDC draft LTP 2021/31

Submittors:
Linda Grammer and Ian Mulholland
Seddonville

(We wish to be heard)

Tēnā anō koutou katoa:

For your information, please see the attached report "GENE EDITING myth & reality- a guide through the smokescreen"

and (information for council regarding Climate change)

https://rodaleinstitute.org/wp-content/uploads/rodale-white-paper.pdf

"Regenerative Organic Agriculture
and Climate Change
a Down to Earth Solution to Global Warming"

Thank you.

also available on request: (in attachment)

"The Rise of Superweeds- and what to Do About it"
Policy briefing
Union of Concerned Scientists (USA)

Submitted by Linda Grammer and Ian Mulholland
(this Evidence is part of our submission to the BDC draft LTP 2021/31

GENE EDITING
MYTHS AND REALITY

A guide through the smokescreen

THE GREENS/EFA in the European Parliament

Written by Claire Robinson, MPhil
Editor, GMWatch.org
Technical advisor: Dr Michael Antoniou
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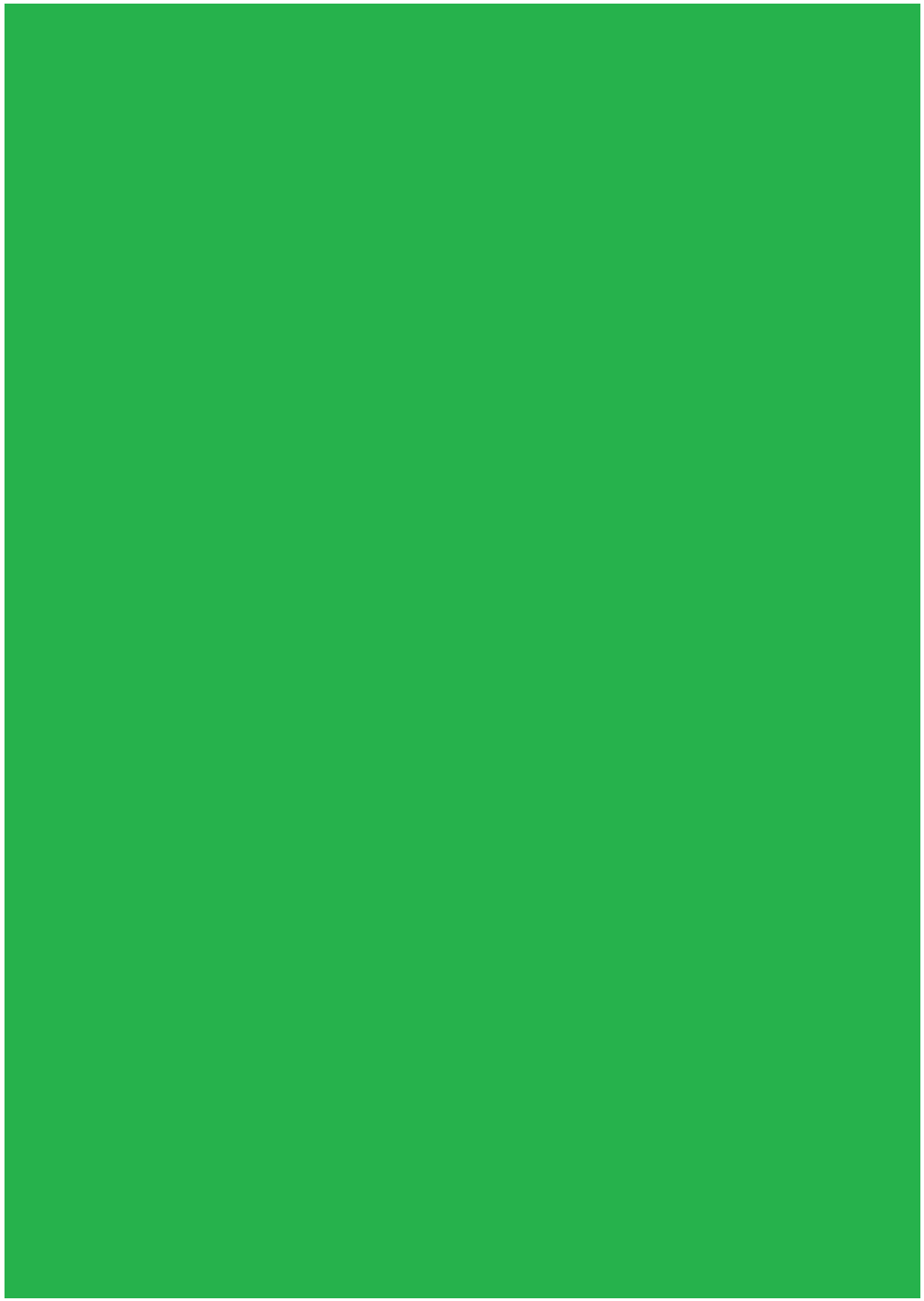
CONTENTS



INTRODUCTION

An unprecedented drive is under way to promote new genetic modification techniques that are collectively termed gene editing – most notably CRISPR/Cas. The agricultural biotech industry claims that these techniques can provide solutions to our food and farming problems, including the challenges posed by climate change, pests, and diseases.

This guide looks at the claims and shows them to be at best misleading and at worst deceptive. Each of the eight chapters focuses on one claim about gene editing and presents the evidence proving it to be false.

In the EU, all of the claims are brought with the intention of questioning the existing GMO regulations and getting GMOs engineered with gene editing excluded from them. These regulations exist in order to protect public health and the environment and to give consumers and farmers the right to know what they are eating and planting in their fields.

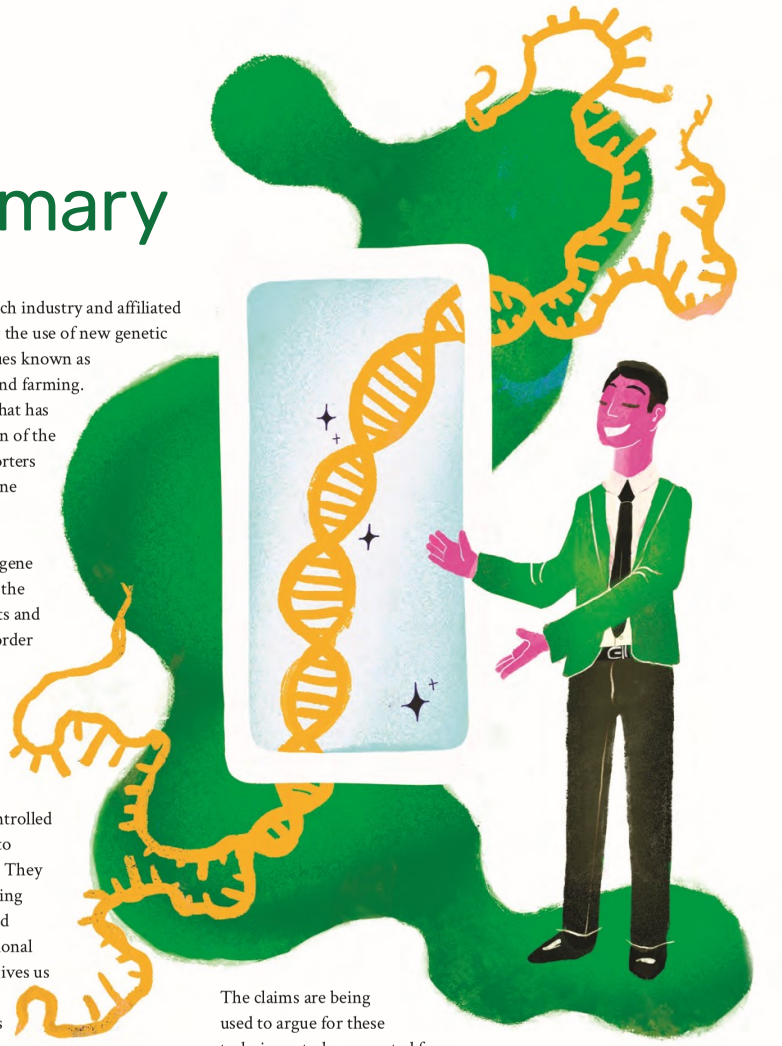
It is worth noting that those who want to exclude gene editing from the GMO regulations also question those regulations as they apply to older-style GMOs. They say GMOs are beneficial and safe, and cast doubt on the need for safety assessments and labelling.

However, to exempt gene editing from the GMO regulations – or to dismantle the regulations for all GMOs – would be a step backwards and a dangerous weakening of EU health and environmental standards. This is because many of the risks attached to older-style GMOs still apply to gene-edited GMOs, and they also present new and special risks.

This guide focuses mainly on gene editing in plants because this is the area that has caught the imagination of GMO developers, researchers, and the media worldwide, though some information on livestock gene editing is also included.

It shows that gene editing is a costly and potentially dangerous distraction from the real solutions to the challenges faced by our food and farming sectors. These are mentioned throughout and form a major focus of the final chapter.

Summary



The agricultural biotech industry and affiliated groups are promoting the use of new genetic modification techniques known as gene editing in food and farming. The main technique that has caught the imagination of the industry and its supporters is the CRISPR/Cas gene editing technique.

The industry is using gene editing to manipulate the genomes of crop plants and livestock animals, in order to confer new traits. They make a range of claims for these techniques – for example, that gene editing is precise, safe, and so highly controlled that it only gives rise to predictable outcomes. They also say that gene editing is widely accessible and quicker than conventional breeding, and that it gives us the tools to enable us to meet the challenges of environmental degradation and climate change.

However, none of these claims stand up to scrutiny, as shown by the evidence presented in this guide. All are exposed as false or misleading.

The claims are being used to argue for these techniques to be exempted from the EU's GMO regulations. This would mean that products of these techniques would not be subjected to safety testing, traceability, or GMO labeling, and EU countries could not ban their cultivation. As a result, these GMOs would end up on our fields and plates untested and unlabelled, and farmers and food producers – including those operating under organic systems – would have no way of avoiding them.

The misrepresentation begins with the terminology used to describe them. Contrary to industry claims, gene-editing techniques are not breeding techniques, but are genetic modification techniques that share some of the same methods as old-style genetic modification.

Gene editing causes many unintended changes and genetic errors

Also contrary to the claims made, these techniques are not precise or controlled, nor do they have predictable outcomes.
In addition to the intended genetic change, gene editing causes many unintended changes and genetic errors. This can include the inadvertent addition of foreign DNA from other species, or even entire foreign genes, into the genome of gene-edited organisms, even when the intention is specifically to avoid this.

The effects of these changes on the composition of gene-edited crops, foods, and animals, as well as the consequences to health and the environment, have not been investigated and remain unknown. In food crops, they could include the production of unexpected toxins and allergens, or altered levels of existing toxins and allergens.
The industry says that the changes made by gene editing in crops and livestock animals are small and the same as could happen in nature. But this claim is proven false by the worrying surprises that have already come to light. For example, the company that developed gene-edited hornless cattle claimed they were free from unintended effects of the gene editing. But the cattle were revealed by US regulators to contain bacterial DNA and foreign genes that confer resistance to antibiotics.

Also, CRISPR gene editing of rice plants was shown to cause a wide range of unintended mutations, both at the intended editing site and at other locations in the genome.

The researchers who made this discovery warned that CRISPR gene editing "may be not as precise as expected in rice". They added, "early and accurate molecular characterization and screening must be carried out for generations before transitioning of CRISPR/Cas9 system from lab to field" – something that is not generally done by developers.

Given the inherent inaccuracy of gene-editing techniques and the challenges of producing gene-edited plants or animals that perform as expected, claims that gene editing can produce useful traits far more quickly than conventional breeding are highly questionable. Even if the time taken to gain regulatory approval is excluded, it is unlikely that the time needed to commercialize gene-edited crops will be significantly shorter than with conventional breeding. Moreover, achieving useful traits in crops or animals is not just a matter of speed – it is a question of using the best tools for the job, and GM approaches are not an efficient route.

Despite years of research and permissive regulatory regimes in some countries, only two gene-edited products have successfully made it to market and neither was produced with the much-hyped CRISPR/Cas tool.

The claim that gene editing, in particular through CRISPR/Cas, will make agricultural innovation accessible to publicly funded breeding programmes is disproven by the fact that the technology is already owned and controlled by a very few large corporations, led by Corteva and Monsanto/Bayer. While evaluation and research licences can be obtained cheaply or free of charge, commercial licences and associated royalty payments on product sales will remain too expensive for anyone apart from large multinationals. Gene-edited products are also patented: in crop plants, patents cover seeds, plants, and often the harvest, raising issues of consolidated control of the food supply, farmers' autonomy, and loss of food sovereignty.

A form of emotional blackmail is being used to convince policymakers of the moral imperative to embrace new GM technologies. The promise is that these technologies will enable the development of crops that require less pesticide and are adapted to climate change.

A form of emotional blackmail is being used to convince policymakers of the moral imperative to embrace new GM technologies

However, the same promises were also made for first-generation GM crops and proved false. New GM techniques are unlikely to succeed where "old GM" failed, because desirable traits such as pest and disease resistance and adaptation to climatic changes are genetically complex traits that cannot be achieved by manipulating one or a few genes.

Conventional breeding, in contrast, continues to be highly successful in achieving such traits and far outstrips GM approaches.

It is not enough to focus on genetics as the solution to agricultural problems – whole systems approaches are needed. This would entail a large-scale shift to proven-successful agroecological systems of farming, which include low-input, genuinely sustainable, and regenerative methods. These methods are already available and only need to be properly supported to enable broader rollout

Gene editing is a costly distraction from these systems-based solutions. Its exclusion from EU GMO regulations would serve to boost a questionable experiment with unknown consequences for people, animals and the environment. It would also deprive European consumers, farmers and breeders of the right to know where these GMOs are and impede advances in non-GM approaches, including organic and agroecological systems. It would represent a significant weakening of EU health and environmental protections and undermine the rollout of proven effective and sustainable solutions to our food and farming challenges.

Gene editing is a costly distraction from real, systems-based solutions

1. Gene editing is genetic engineering, not breeding

MYTH

Gene-editing techniques are "new breeding techniques", "precision breeding" or "breeding innovation".

REALITY

Technically and legally, gene-editing techniques are genetic modification techniques, not breeding methods.

The agricultural biotechnology industry and its lobbyists often refer to new genetic modification (GM) techniques, especially gene editing, as "breeding innovation", "precision breeding techniques" and "new breeding techniques".[1,2,3,4] They strenuously try to avoid the terms "genetic modification" and "genetic engineering". Corteva, the company that controls the use of CRISPR gene editing in crop plants, even argues that "CRISPR-produced plants are not GMOs".[5]

European institutions also avoid the terms "genetic modification" and "GMO". The Council of Ministers introduced the term "novel genomic techniques",[6] which the Commission adapted to "new genomic techniques".[7] The Commission also talks about "new techniques in biotechnology".[8]

The use of the term "breeding" appears to be an attempt to give an air of naturalness to the new genetic engineering techniques and thus convince the public to accept them. It may also be an attempt to make the application of GMO regulations appear counterintuitive and illogical: If gene-edited products are not GMOs, why should they be regulated as GMOs?

However, gene-editing techniques are not breeding techniques. They are technically and legally GM techniques, give rise to genetically modified organisms (GMOs), and fall within the scope of EU GMO laws, as confirmed by the European Court of Justice ruling of 2018.[9,10]

EU law defines a GMO as an organism in which "the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination".[11] This wording accurately describes the way in which older-style transgenic and new GMOs, such as gene-edited plants, are produced. Genetic modification employs artificial techniques that require direct human intervention in the genome. In contrast, the terms "mating and/or natural recombination" describe natural processes used in conventional plant and animal breeding.

EU law defines a GMO as an organism in which "the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination"

EU GMO law exempts some GMOs, such as those produced using a decades-old technique called mutation breeding (also called random mutagenesis), from its requirements for authorisation, traceability and labelling. But this is only possible if they were produced using techniques that have a "long safety record".[9] This is clearly not the case with gene editing.

HOW DOES GENE EDITING WORK?

Old and new GMOs have more in common than proponents would have us believe. Of three steps involved in genome editing – gene delivery, gene editing, and whole plant regeneration in tissue culture – the first and last essentially remain the same. The first step, delivery of foreign genetic material into the plant cells (also called GM transformation) is usually done with the help of small circular DNA molecules (plasmids) that are introduced into the cells using a soil bacterium called Agrobacterium tumefaciens or a method called particle bombardment. The plasmid then inserts itself into the plant cell's DNA.

Regarding the "editing step", the majority of gene-editing applications involve first cutting the DNA with enzymes, called nucleases, which are supposed to act only at chosen sites in the genome of a living cell.

These gene-editing applications are called "site-directed nuclease" or "SDN" procedures. The SDN creates a double-strand break in the DNA. The enzymes most commonly used for this cutting are the Cas family of proteins (for CRISPR) and FokI (for TALENs and Zinc Finger Nucleases).[12]

The cutting event triggers alarm signals in the cell, as broken DNA is dangerous to the organism. So the cell initiates a DNA repair process to mend the double-strand DNA cut. While the initial break in the DNA can be targeted to a specific site in the genome, the subsequent "repair" is carried out by the cell's innate repair mechanisms and cannot be controlled by the genetic engineer.'

While the initial break in the DNA can be targeted to a specific site in the genome, the subsequent "repair" cannot be controlled by the genetic engineer

The repair is often not clean or precise, but can result in "chromosomal mayhem" in the genome, to cite the title of a commentary on studies on CRISPR/Cas gene editing in human embryos.[13]

The result of the repair is called the "edit". Researchers must select from many edited organisms to obtain the one they desire.[12]

Some divide SDN procedures into SDN-1, SDN-2, and SDN-3.[14] They can be defined as follows:

• SDN-1 refers to disruption of the function of a gene (also known as gene knockout). The repair of the double-strand break in the DNA results in either a deletion (removal) of part of the gene or the insertion of additional DNA base units, which are taken from the genome of the organism that is being edited. This disrupts the sequence of the gene and thus knocks out its normal function.

• SDN-2 refers to gene alteration. While the break is repaired by the cell, a repair template is supplied that is complementary to the area of the break, which the cell uses to repair the break. The template contains one or several DNA base unit sequence changes in the genetic code, which the repair mechanism exchanges into the plant's genetic material, resulting in a mutation of the target gene. The mutated gene will then produce an altered protein product with an altered function.

• SDN-3 refers to gene insertion. The DNA break is accompanied by a template containing a gene or other sequence of genetic material. The cell's natural repair process uses this template to repair the break, resulting in the insertion of new genetic material (foreign DNA, which can include a whole new gene). The aim is to confer novel functions and characteristics on the organism.

Another gene-editing technique is oligonucleotide-directed mutagenesis (ODM). ODM does not cause a double-strand break in the DNA. Instead it involves the introduction of short sequences of synthetic DNA and RNA – called oligonucleotides – into the cells. The oligonucleotide interacts with the cell's DNA, tricking the cell's repair mechanisms into altering the cell's own DNA to match that of the oligonucleotide.

All these techniques will change the biochemistry of the plant – this is the aim of gene editing – so that a new trait can result.

GENE EDITING IS GENETIC MODIFICATION

Although GM and conventional breeding will result in the creation of new varieties, the two are distinct methods and are not interchangeable. Gene editing is clearly a GM technique but conventional breeding is not, however hard the agricultural biotech industry tries to blur the boundaries.

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2. Gene editing is not precise and causes unpredictable genetic errors

MYTH

Gene-editing tools such as CRISPR/Cas bring about changes in the genome in a precise and controlled way, with predictable outcomes.

REALITY

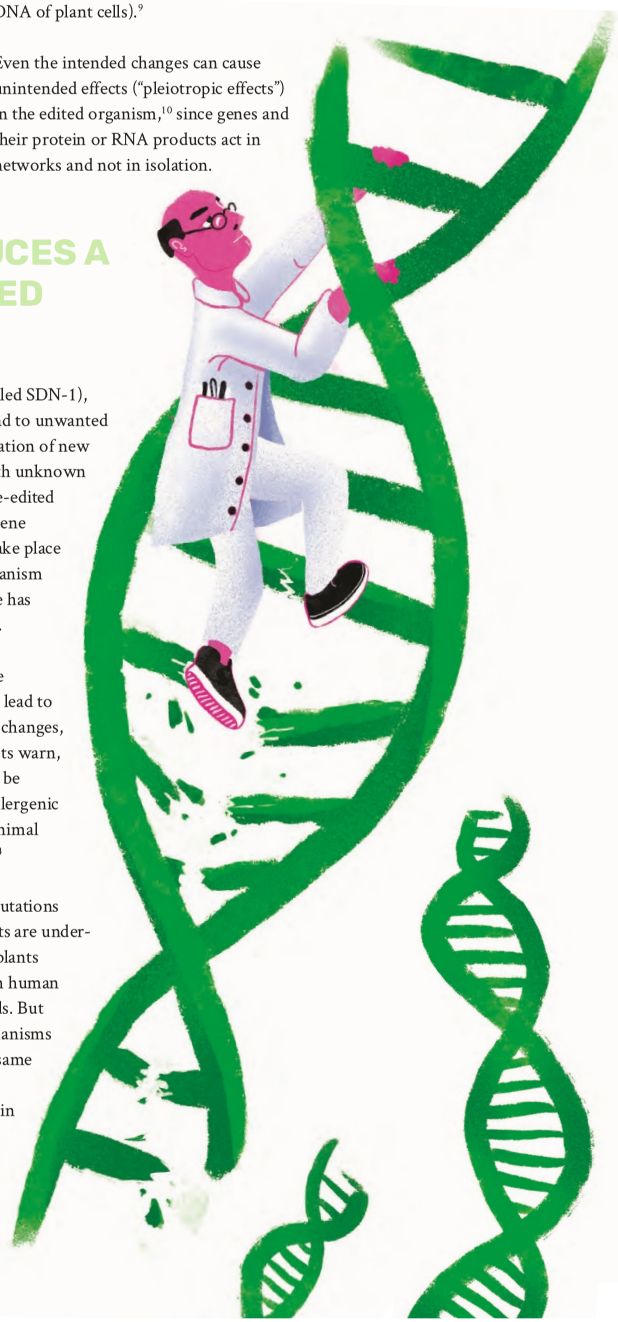
Gene editing is not precise, but causes many genetic errors, with unpredictable results, in addition to any intended genetic change.

The agricultural biotech industry and its allies claim that gene-editing tools such as CRISPR/Cas bring about changes in the genome in a precise and controlled way.[1,2,3] Some even claim that they bring about only the specific intended changes and nothing else.[4,5] They argue that gene-edited products should therefore be excluded from the regulatory oversight applied to older-style transgenic GMOs,[3,5] where (in most cases) DNA is introduced from another species into a part of the genome that cannot be determined beforehand.

However, these claims do not survive scrutiny.A large and ever-growing number of scientific studies in human, animal and plant cells show that gene editing is not precise but gives rise to numerous genetic errors, also known as unintended mutations (DNA damage). These occur at both off-target sites in the genome (locations other than that targeted for the edit) and on-target (at the desired editing site). The types of mutation include large deletions, insertions, and rearrangements of DNA.[6,7,8]

These mutations occur at various stages of the process, including stages that gene editing has in common with old-style transgenic GM methods, such as tissue culture and GM transformation by Agrobacterium tumefaciens infection (in which this soil bacterium is used to insert the foreign genetic material into the DNA of plant cells).[9]

Even the intended changes can cause unintended effects ("pleiotropic effects") in the edited organism,[10] since genes and their protein or RNA products act in networks and not in isolation.



GENE EDITING PRODUCES A RANGE OF UNINTENDED MUTATIONS

Even the simplest application of gene editing (so-called SDN-1), which is intended to destroy a gene function, can lead to unwanted mutations.[11,12,13] These mutations can lead to the creation of new gene sequences producing new mutant proteins, with unknown consequences to the health of consumers of the gene-edited organism. In addition, alterations in the pattern of gene function can take place within the organism whose genome has been modified.

> Unwanted mutations can lead to the creation of new gene sequences producing new mutant proteins, with unknown consequences to the health of consumers of the gene-edited organism

In plants, these alterations can lead to compositional changes, which, scientists warn, could prove to be toxic and/or allergenic to human or animal consumers.[6,8,14]

Unintended mutations and their effects are under-researched in plants compared with human and animal cells. But since the mechanisms of gene editing and subsequent DNA repair are the same between animals and plants, there is every reason to believe that the types of unintended mutations seen in human and animal cells will also be found in plants. Recent research in rice plants attests to this fact.[15]

A study on rice varieties found that CRISPR gene editing caused a wide range of undesirable and unintended on-target and off-target mutations. The researchers were aiming to improve the yield of already high-performing varieties of rice by disrupting the function of a specific gene, in an SDN-1 (gene disruption) procedure.[15] They were trying to produce small insertions and deletions of DNA base units in the genome. However, what they got was quite different. In many cases they found large insertions, deletions, and rearrangements of DNA, raising the possibility that the function of genes other than the one targeted could have been altered.[15]

> In plants, alterations in the pattern of gene function can lead to compositional changes, which could prove to be toxic and/or allergenic to human or animal consumers

As for the hoped-for increased yield, the opposite was found – yield was reduced.[15] This should not come as a surprise, as yield is a genetically complex trait that involves the functioning of many, if not all, gene families of the plant. Thus altering the function of one gene to improve yield could be viewed as a futile exercise.

The researchers warned that CRISPR gene editing "may be not as precise as expected in rice". They added, "early and accurate molecular characterization and screening must be carried out for generations before transitioning of CRISPR/Cas9 system from lab to field".[15] Developers do not generally do this, or if they do, the results are not published.

The researchers concluded, "Understanding of uncertainties and risks regarding genome editing is necessary and critical before a new global policy for the new biotechnology is established".[15]

INADEQUATE SCREENING FOR UNINTENDED MUTATIONS

Most studies that look for unintended mutations in gene-edited plants grossly underestimate the number of mutations resulting from gene editing and associated processes such as tissue culture (growth of plant tissues or cells in a growth medium). This is true both for studies that conclude that gene editing causes many such mutations and those that conclude that it causes few or none. The reason is that the authors of these studies use inadequate detection methods – short-range PCR and short-read DNA sequencing – to look for mutations. They only look at short stretches of the DNA around the targeted editing site and computer programme-predicted off-target sites.

As Kosicki and colleagues found in a study on human cells, short-range PCR and short-read DNA sequencing can miss major genetic errors, such as large deletions and insertions

and complex rearrangements of DNA.[16,17] The researchers concluded that a combination of long-range PCR and long-read DNA sequencing is needed to spot the full range of unintended mutational effects.[16] FDA scientists have made the same recommendation, with regard to gene-edited animals.[18]

This principle applies to plants just as much as animals, since the mechanisms of gene editing and the subsequent repair that forms the "edit" are the same.

In a scientific review, Kawall and colleagues confirmed that the "vast majority" of studies on gene-edited plants used biased detection methods to screen for genetic errors, meaning that they will miss many such errors. Among studies on gene-edited animals, none included a thorough analysis of genetic errors.[6]

CIBUS'S CANOLA: "PRECISION" GENE EDITING OR ACCIDENT IN A PETRI DISH?

In September 2020, the biotech company Cibus claimed that its herbicide-tolerant SU Canola (oilseed rape) was not gene-edited but was the result of random mutation caused by tissue culture – effectively, an accident in a laboratory Petri dish. This claim came after the company had for many years said (including to regulators) that SU Canola was made with its "precision gene editing" technique, called oligo-directed mutagenesis (ODM).[19,20,21] In fact, ODM constitutes the very foundation of its business model.[22]

> The vast majority of studies on gene-edited plants used biased detection methods to screen for genetic errors

Indeed, numerous public records point to the fact that Cibus used gene editing in the process of engineering SU Canola.[19,20,23] But it turned out that the oligonucleotide used was designed to produce a different genetic change from the one that was found to confer herbicide tolerance in SU Canola and that Cibus described in its patent application.[21] So the "precision" tool did not work as intended, leading Cibus to announce that the crop was not gene-edited after all.

It would appear that Cibus made that claim only to evade EU GMO regulations. The timing is remarkable: Shortly before Cibus made its statement,[20] a scientific paper had been published, reporting the development of the first publicly available detection method for SU Canola.[24] However, under EU law, even if the specific mutation that confers the herbicide tolerance was not the intended result of the ODM editing process, the fact that the ODM tool was used to develop the SU Canola means that it is a GMO. Since it has no EU authorisation, its presence in EU imports would be illegal.[23]

This episode raises questions about Cibus's honesty and transparency. But more importantly, it shows that the precision and control claimed for the ODM gene-editing technique was false.

"OLD" MUTAGENIC GM TECHNIQUES ARE USED IN GENE EDITING

First-generation genetic engineering techniques are still often used to introduce CRISPR editing tools into plant cells. Plasmids containing genes encoding the CRISPR/Cas editing tool are introduced into the cells using either Agrobacterium tumefaciens infection or particle bombardment.[6] In addition, tissue culture is used to grow the plant cells. All three processes are highly mutagenic.[25] The mutations caused by these processes will be in addition to the unwanted mutations caused by the gene repair process (the actual "edit").

> A study on CRISPR gene-edited rice has found that many off-target mutations resulted from tissue culture, and yet more resulted from Agrobacterium infection

A study by Tang and colleagues on CRISPR gene-edited rice illustrates the mutagenic nature of these processes. The study found that many off-target mutations resulted from the tissue culture, and yet more resulted from Agrobacterium infection (around 200 per plant). In contrast, seed saved from non-GM rice plants had only 30–50 spontaneous mutations per plant.[9] Thus the study found that the CRISPR process, taken as a whole, caused large numbers of off-target mutations and far more than conventional breeding.

Ironically, this study is often cited as an example of the precision of this gene-editing tool. This is because it found that the CRISPR editing tools themselves did not introduce many off-target mutations into the plants' DNA.[9] However, this finding is likely not accurate, due to the researchers' use of inadequate screening methods (see "Inadequate screening for unintended mutations", above) – they did not use long-read DNA sequencing. Also, the findings must be viewed in the context of the above-mentioned separate study on rice that found that CRISPR gene editing caused a wide range of unintended on-target and off-target mutations.[15]

THREAT TO HEALTH AND ENVIRONMENT

Based on the above evidence, gene editing is neither precise nor controllable, but could inadvertently produce traits that threaten public health and the environment.

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3. Gene editing causes genetic changes that are different from those that happen in nature

MYTH

Changes brought about by gene editing are the same as could happen in nature or mutation breeding.

REALITY

Gene editing causes genetic changes that are different from those that happen in nature or mutation breeding and their consequences are poorly understood.

Lobbyists claim that gene editing techniques "generally create plant products that may also be obtained using earlier breeding methods"[1] such as mutation breeding, or that could result "from spontaneous processes in nature".[2]

Mutation breeding (also called random mutagenesis) is a decades-old technique in which seeds are exposed to chemicals or radiation to induce mutations in the hope that one or more may result in a useful trait. The lobbyists say that gene editing is more precise than muta

tion breeding, yet mutation bred plants are exempted from the requirements of the GMO regulations, so gene-edited plants should also be exempted.[3]

However, claims that gene editing can produce organisms that could arise in nature or through mutation breeding are entirely theoretical.

No one has proven that any given gene-edited organism is the same as a naturally occurring vor mutation bred organism, either at the level of the genome or in terms of its molecular composition (the proteins and natural chemicals that make up the structure and function of the organism).

Indeed, if someone were to produce a gene-edited organism that was the same as a naturally bred one, this would call into question any patent on the gene-edited organism, as patents require an "inventive step".

NO EVIDENCE THAT CHANGES FROM GENE EDITING ARE FEWER THAN FROM CONVENTIONAL OR MUTATION BREEDING

Dr Michael Antoniou, a molecular geneticist based at a leading London university, said that claims that the mutations induced by gene editing are the same as could happen in nature or mutation breeding are scientifically unfounded. Moreover, he said there is no evidence demonstrating that gene editing is more precise, in the sense of causing fewer mutations, than conventional breeding or mutation breeding.

He said "Gene editing can cause large deletions, insertions, and rearrangements in DNA, which can affect the function of multiple genes at off-target and on-target sites." I am not aware of any studies using reliable screening methods that compare the frequency of these types of large-scale DNA damage in conventionally bred, mutation bred, and gene-edited plants. What we do know is that there is clear experimental evidence showing that assumptions that gene editing only causes small insertions and deletions at off-target and on-target sites are false."[4]

> "Gene editing can cause large deletions, insertions, and rearrangements in DNA, which can affect the function of multiple genes at off-target and on-target sites"
> - Dr Michael Antoniou

MUTATIONS FROM GENE EDITING ARE DIFFERENT IN TYPE FROM THOSE FROM CONVENTIONAL OR MUTATION BREEDING

Evidence shows that mutations induced by gene editing are not the same as those induced by chemicals or radiation in mutation breeding. For example, a scientific review shows that gene editing can produce changes in areas of the genome that are otherwise protected from mutations.
In other words, gene editing makes the whole genome accessible for changes.[5]

Dr Michael Antoniou says that mutations induced by mutation breeding will more often than not occur in areas of the genome that are non-coding and non-regulatory and therefore are unlikely to affect gene function.

With gene editing, in contrast, mutations are more likely to happen at locations in the genome that directly affect the function of one or more genes. First, there is intentional targeting of a gene's coding region or its regulatory elements to alter its function. Gene editors will preferentially target sites that are relevant for protein production and gene regulation for alterations, since the objective is to change a trait. Second, much of the off-target mutation-causing activity of the gene-editing tool will occur at locations within the genome with a similar DNA sequence to the intended target site. This means that if the intended gene editing target site is a gene's coding region or its regulatory elements, off-target mutations will occur in other genes with a similar DNA sequence.

As a result, off-target and unintended on-target mutations are likely to affect important protein-coding gene regions and gene regulatory activity.

A separate scientific review shows that gene-editing techniques enable complex alterations of genomes that would be extremely difficult or impossible to achieve with conventional breeding or mutation breeding. In gene editing, so-called multiplexing approaches allow the targeting and alteration of multiple gene variants, which can be members of the same or different gene families.[6]

In summary, gene editing can cause specific unintended effects and can be used to generate novel genetic combinations that cannot readily be achieved using conventional breeding or mutagenesis techniques. It can overcome genetic limitations that exist in conventional breeding.[6]

These unique attributes of gene-editing applications show that they pose unique risks, justifying strict regulation.

REDESIGNING NATURE

CRISPR inventor Jennifer Doudna has made clear that the aim of CRISPR gene editing is not to replicate or enhance nature but to redesign and replace it. She wrote:
"Gone are the days when life was shaped exclusively by the plodding forces of evolution. We're standing on the cusp of a new era, one in which we will have primary authority over life's genetic makeup and all its vibrant and varied outputs. Indeed, we are already supplanting the deaf, dumb, and blind system that has shaped genetic material on our planet for eons and replacing it with a conscious, intentional system of human-directed evolution."[7]

> The limitations imposed by natural processes may help, rather than impede, evolution

However, given that scientists do not fully understand the function of the vast complex networks of genes and their products that constitute a healthy functioning organism, they are not remotely close to being able to predict the outcome even of a single gene manipulation. Thus it is difficult to see how a new era in human-led predictable, directed evolution has dawned. From this perspective, when it comes to evolutionary processes, it is arguably genetic engineering that is a "deaf, dumb, and blind system", rather than nature.

The limitations imposed by natural processes may help, rather than impede, evolution.

NOT NATURE-IDENTICAL

The evidence shows that the genetic changes brought about by gene editing are different from those that would happen in nature or mutation breeding and their outcomes and the risks attached to them are poorly understood.

With this in mind, gene editing must remain under the EU's GMO regulations and the risk assessment should be broadened to take account of the special risks attached to the technology.

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4. Gene editing is risky and its products can be unsafe

MYTH

The precision and control of gene editing mean that it is safe-by-design.

REALITY

The unintended outcomes of gene editing lead to risks, which are poorly understood.

Claims that gene editing is "breeding", that it is "precise", and that outcomes are "nature-identical" are often made to imply that gene-edited organisms will be safe-by-design.

Some GMO developers have gone further, explicitly claiming that gene-edited plants are just as safe as conventionally bred ones.
Bayer claims that compared with conventional breeding, CRISPR/Cas gene editing is "simpler, faster and more precise, with no impact on the safety of the final crop compared to traditional plant breeding".[1]
And Corteva says that CRISPR-edited plants are "as safe as plants found in nature or produced through conventional breeding".[2]

> Some GMO developers claim that gene-edited plants are just as safe as conventionally bred ones

The agbiotech industry argues that it would therefore be "disproportionate" to subject these products to GMO regulatory requirements aimed at ensuring their safety.[3] Corteva sees no need to conduct safety testin on its gene-edited crops

and says it tests CRISPR-produced plants in "the same way" as it tests conventionally bred plants.[4]

However, as we have seen in previous chapters, gene editing is not precise, nor are the outcomes identical to those of conventional breeding. While the initial cut in the DNA can be targeted to a specific region of the genome, the subsequent DNA repair process causes unwanted mutations both at on-target and off-target sites in the genome.[5,6,7]

> Unintended genetic changes will alter the pattern of gene function within the organism

Techniques common to both gene editing and older transgenic GM methods, such as tissue culture and GM transformation, will lead to additional mutations (see chapter 2).

These unintended genetic changes will alter the pattern of gene function within the organism. In plants, this can alter biochemical pathways and lead to compositional changes, which, scientists warn, could include the production of novel toxins and allergens or altered levels of existing toxins and allergens.[8,9,10]

GENE EDITING CAN UNINTENTIONALLY ADD FOREIGN DNA IN THE GENOME

The presence of unintended mutations has been well documented in human and animal cells and has begun to gain more attention in plants.[11] However, another unwanted outcome of gene editing has received little attention and it is unclear to what extent it occurs in animal and plant cells and what the effects might be.

> Edited mouse genomes unintentionally acquired bovine or goat DNA

This outcome was highlighted in a study by Japanese researchers. The study found that even SDN-2 (gene alteration) applications of CRISPR/Cas gene editing, which aim not to introduce foreign DNA, resulted in the unintended incorporation of foreign and contaminating DNA into the genome of gene-edited organisms.[12] This unwanted result is not restricted to CRISPR but has been found with other types of gene editing, too.[13]

Specifically, the researchers looked at the effects of CRISPR/Cas gene editing in mouse cells and embryos and found that edited mouse genomes unintentionally acquired bovine or goat DNA. This was traced to the use, in standard culture medium for mouse cells, of foetal calf serum and goat serum extracted from cows or goats.[12]

Even more worrisome, amongst the DNA sequences inserted into the mouse genome were bovine and goat retrotransposons (jumping genes) and mouse retrovirus DNA12

(retroviruses include cancer-causing "onco-retroviruses" and human immunodeficiency virus, HIV, which can lead to AIDS). Thus gene editing is a potential mechanism for horizontal gene transfer (the transfer of genetic material by any method other than "vertical" transmission of DNA from parent to offspring) of disease-causing organisms, including, but not limited to, viruses.[14]

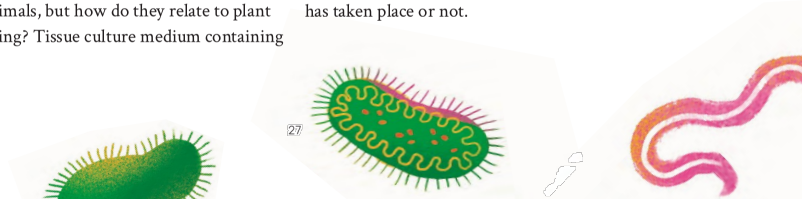
> Gene editing is a potential mechanism for horizontal gene transfer of disease-causing organisms, including, but not limited to, viruses

The study also found that DNA from the genome of E. coli bacteria can inadvertently integrate into the target organism's genome. The source of the E. coli DNA was traced to the E. coli bacterial cells used to produce the vector plasmid. The plasmid is a small circular DNA molecule that carries the genes giving instructions for the manufacture of the CRISPR/Cas components (and in SDN-2 applications, the DNA repair template) into the cells. Importantly, the researchers used standard methods of vector plasmid preparation, so this type of contamination could happen routinely.[12]

These findings are clearly relevant to gene-edited animals, but how do they relate to plant gene editing? Tissue culture medium containing components from animals is not used in making gene-edited plants, so the presence of animal DNA is not a concern.

However, in cases where genetic engineers deliver the gene-editing tool into plant cells encoded by a plasmid, there are two ways in which foreign DNA can become inadvertently integrated into the genome of the plant being edited. First, the plasmid encoding the gene-editing tool, either as a whole, or fragments thereof, can become integrated. Second, DNA from the genome of the E. coli bacteria used to propagate the plasmid can often contaminate the final plasmid preparation used in the gene-editing process, and thus could end up being integrated into the gene-edited plant's genome.

Foreign plasmid or bacterial genomic DNA could be inadvertently incorporated during plant gene editing. Therefore regulators must legally oblige developers to conduct appropriate in-depth molecular genetic characterisation of their products to ascertain if such an outcome has taken place or not.



SDN DISTINCTIONS NOT USEFUL FOR JUDGING RISK

The distinction between SDN-1, -2, and -3 is not useful for differentiating levels of risk for each type of gene-edited organism. This is because SDN-1, -2, and -3 refer to the intention of the gene editing and not the actual outcome, whereas the outcome of a gene-editing event can be very different from the intention.

Also, even small changes in the genome can cause large effects.[15,16] The London-based molecular geneticist Dr Michael Antoniou said, "The size of genetic changes does not determine risk, since small genetic changes may result in dramatic and novel effects. For example, a small deletion or insertion following a gene-editing event could result in creating a new gene sequence, which can give rise to a novel mutant protein with unknown functional consequences. This is why all of the mutations caused by gene editing must be assessed on the basis of what they do, as well as what type and how numerous they are."

The size of genetic changes does not determine risk, since small genetic changes may result in dramatic and novel effects

SDN-1 and -2 applications are often assumed to be less disruptive than SDN-3 because there is no intention to permanently integrate foreign DNA into the genome. However, there is no evidence that the mutations caused are fewer, smaller, or less risky in type. In fact, major mutations, including large deletions, insertions, and rearrangements of DNA, have been found to be generated even by SDN-1 procedures.[17,18]

Indeed, all types of gene editing – SDN-1, -2, and -3 – can be carried out at multiple locations of the genome using multiplex approaches, which target several genes at once, or in repeated, sequential applications.[19,20,21] Thus claims that the changes made are "small" and "similar to what might happen in nature" are misleading, as several individually small changes can combine to produce an organism that is very different from the parent organism. While even small changes can produce large effects, a number of small changes made via gene editing can result in even greater changes, which increases the possibility of unintended alterations in the edited plant's biochemistry and overall composition, with unknown consequences for both crop performance and the health of the consumer.

Thus the risks of both small and large changes must be carefully assessed. Although unwanted genetic changes have been studied in gene-edited organisms to some extent, no safety studies have been carried out with gene-edited products. Such studies are compulsory under EU laws before a GMO product can be placed on the market.

GENE-EDITED CATTLE CONTAINED ANTIBIOTIC RESISTANCE GENES

Claims of nature-identical or safe-by-design gene-edited products should be viewed with scepticism, as demonstrated by the case of the gene-edited hornless cattle.

In 2019 researchers at the US Food and Drug Administration (FDA) analysed the genomes of two calves13 that had been gene edited by the biotech company Recombinetics using the TALEN tool in an SDN-3 (gene insertion) procedure. The aim of the genetic manipulation was to prevent the animals from growing horns by inserting into their genome the POLLED gene, taken from conventionally bred hornless cattle.

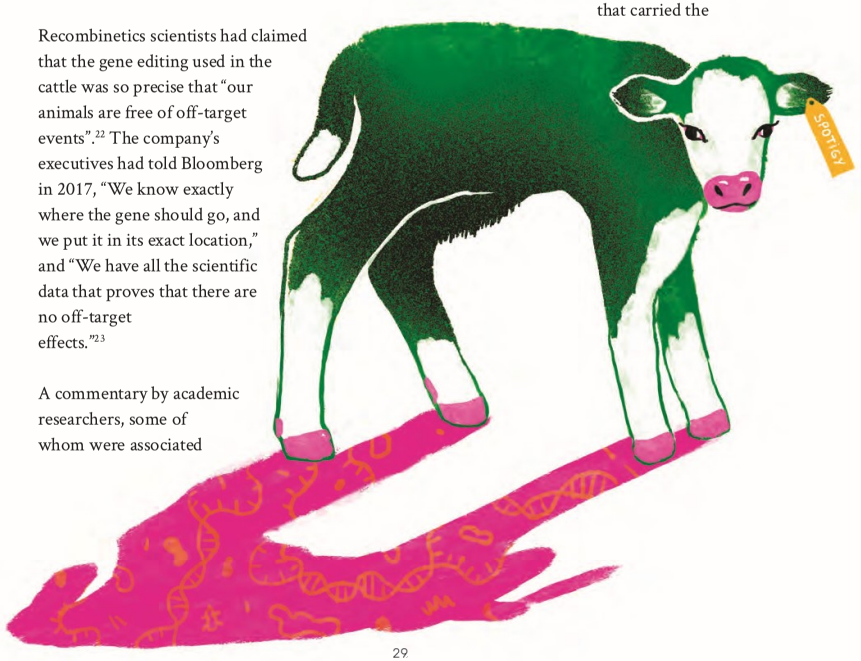
These claims were proven false by what the FDA scientists found

Recombinetics scientists had claimed that the gene editing used in the cattle was so precise that "our animals are free of off-target events".[22] The company's executives had told Bloomberg in 2017, "We know exactly where the gene should go, and we put it in its exact location," and "We have all the scientific data that proves that there are no off-target effects."[23]

A commentary by academic researchers, some of whom were associated with Recombinetics, claimed that the gene editing used in the cattle was precise, that the changes brought about are largely identical to what could have arisen naturally, and that any animals with unwanted traits would be excluded from breeding programmes.[24]

However, all these claims were proven false by what the FDA scientists found.

At one of the target sites of the gene-editing procedure within the calves' genome, the POLLED gene had inserted as planned. However, at the other intended gene editing site, two copies of the entire circular plasmid DNA construction that carried the



POLLED sequence, which acted as the repair template DNA in the SDN-3 procedure, had been unintentionally integrated. These unintentionally integrated plasmids contained complete gene sequences that confer resistance to three antibiotics (neomycin, kanamycin, and ampicillin).[13]

It is not known if the presence of these antibiotic resistance genes could affect the health of the animal or of people who consume its products. However, one risk that merits investigation is that these genes could transfer to disease-causing bacteria, which would then become resistant to antibiotics, threatening human and animal health.[25]

The Recombinetics scientists had missed these unintended effects because they used inadequate analytical methods.[22] Tad Sontesgard, CEO of Acceligen, a subsidiary of Recombinetics that owned the animals, said, "It was not something expected, and we didn't look for it". He admitted that a more complete check "should have been done".[23]

As a result of the FDA scientists' discovery, Brazil cancelled its plans to create a herd of the gene-edited hornless cattle.[26]

> Developers cannot be trusted to self-regulate and determine for themselves whether the changes induced by gene editing are safe

Developers cannot be trusted to self-regulate and determine for themselves whether the changes induced by gene editing are safe or the same as could happen in nature. Strict regulation must be in place to ensure thorough screening for unintended effects. As commonly used screening methods will miss many mutations, a combination of long-range PCR and long-read DNA sequencing must be used, as noted in chapter 2. In addition, safety studies must be conducted to better understand the risks to public health and the environment posed by the gene-edited organism.

WHY GENE EDITING RATHER THAN BREEDING?

The failure of the gene-edited hornless cattle venture raises an obvious question: Why didn't the developers simply cross the gene into the elite Holstein breed through breeding, instead of gene editing the Holstein?

The team of academic scientists cited above, some of whom were associated with Recombinetics, wrote that in principle, conventional breeding could achieve this end, but in practice the cost would be prohibitive: "No breeder can afford to undertake this approach."[24] In a separate paper, Recombinetics scientists cited a shortage of breeding sires producing commercially available POLLED semen and the poor "genetic merit" of polled Holstein sires – they said breeding for the POLLED trait brings along other undesirable traits such as poor milk yield.[22]

The supposedly slow speed of conventional breeding programmes relative to gene editing was cited by both sets of authors.[22,24]

However, this does not seem to be true for Europe.[27] According to a breeder of polled Holsteins in Pennsylvania, USA, Europeans "aggressively selected for the trait, and now they are years ahead of us as far as polled genetics. Animal welfare legislation in Europe based on consumer pressure will drive even further use of polled."[27]

Hendrik Albada, co-owner of the Hul-Stein Holstein herd in the Netherlands, said polled sires are popular in Europe based on genetic merit alone – almost 10% of the cows in Germany in 2015 were bred to a polled bull.[27]

It seems that conventional breeding has already achieved what GMO advocates claimed could only be done quickly through gene-editing technology. The cost and time involved are not prohibitive; polled cattle are produced with high genetic merit; and good progress has been made in availability of polled sires.

This example shows that society needs to critically evaluate claims that gene editing is the only or best solution to a given problem.

ORGANISMS WITH UNWANTED MUTATIONS MAY NOT BE REMOVED FROM BREEDING PROGRAMMES

GMO developers often claim that gene-edited organisms with genetic errors and unwanted traits will be eliminated from breeding programmes,[24] or that the errors can be removed by subsequent backcrossing; thus they are nothing to worry about.

> Experience with first-generation GM crops shows that backcrossing as conducted by GMO developers does not reliably remove unwanted traits

However, the case of the gene-edited cattle that turned out to unexpectedly contain antibiotic resistance genes (see above) shows that GMO developers cannot be relied upon to identify genetic errors and unwanted traits13 and that strict regulation must be in place to enforce thorough screening.[28]

Experience with first-generation GM crops shows that backcrossing as conducted by GMO developers does not reliably remove unwanted traits and that crops with such traits have reached the market.

For example, in the case of glyphosate-tolerant NK603 maize, an increase in certain compounds was found in the GM crop compared with the non-GM parent, which could prove either protective or toxic, depending on context. In addition, metabolic imbalances were found in the GM maize, which could affect nutritional quality.[29] These unwanted changes may explain adverse health impacts observed from consumption of the maize.[30] In the case of GM MON810 Bt insecticidal maize, it contained an allergen, zein, that was not present in the parent crop.[31] It is possible that the developer did not notice these changes, or if they did, deemed them unimportant.

With GM vegetatively propagated crops, such as potatoes, bananas, and fruit trees, the presence of large numbers of unwanted mutations is inevitable. This is because propagation takes place not by seeds produced by sexual reproduction (pollination), but by various asexual methods, including growing from tubers (e.g. potatoes), cuttings (e.g. bananas), and grafting (e.g. fruit trees such as apples) – generating a new plant from a part of the parent plant. This means that mutations caused by genetic engineering processes (including gene editing) cannot be bred out by backcrossing and will persist into the final marketed product.

GENE-EDITED ORGANISMS NOT SAFER THAN OLDER-STYLE GMOS

It is a common misconception that gene-edited organisms are safer than older-style GMOs. But there is no scientific basis to this notion, as confirmed by Bayer scientist Dr Larry Gilbertson, who said that the risks of new techniques like gene editing and older techniques of genetic modification are the same: "I don't think there's a fundamental difference in the risk between these two technologies since they're both fundamentally just changes in DNA."[32]

> "The risks linked to the use of those new techniques/ methods of mutagenesis might prove to be similar to those which result from the production and release of a GMO through transgenesis"
> - European Court of Justice

In 2018 this scientific reality was reflected in the European Court of Justice ruling that gene-edited organisms (called in the case "new techniques/ methods of mutagenesis") must be regulated in the same way as older-style GMOs. The court explained:

"The risks linked to the use of those new techniques/ methods of mutagenesis might prove to be similar to those which result from the production and release of a GMO through transgenesis, since the direct modification of the genetic material of an organism through mutagenesis makes it possible to obtain the same effects as the introduction of a foreign gene into the organism (transgenesis) and those new techniques make it possible to produce genetically modified varieties at a rate out of all proportion to those resulting from the application of conventional methods of mutagenesis."[33]

Gene-editing techniques pose new and different risks compared with older-style transgenic GM techniques. Some scientists therefore argue that the EU's risk assessment guidelines should be expanded to take these risks into account.[8,15,16] Interestingly, neither the Bayer scientist, nor the European Court of Justice, nor the scientists who warn of the special risks of gene editing support the notion that gene-edited organisms are safer than older-style transgenic GMOs. These claims are based on marketing concerns, not science.

COMPARING GENE EDITING WITH MUTATION BREEDING IS MISLEADING

Advocates of gene editing claim that it is more precise and thus safer than mutation breeding.[34] But this claim is misleading because it is the wrong comparison. Although mutation breeding is used alongside conventional breeding, it is a minority method that cannot be equated to conventional breeding. The standard method of conventional breeding is cross-breeding and selection of desired traits. The process can be made quicker and more efficient by using the biotechnologies known as marker assisted selection and genomic selection[35,36] (use of these technologies does not in itself result in a GMO). Standard conventional breeding has an undeniable history of safe use and is the technique that should be used as the comparator to gene-edited crops.

> Just how risky mutation breeding is for health and environment remains unknown because controlled studies have not been done

As we have seen in chapter 3, gene editing is different from mutation breeding and would lead to different risks. Just how risky mutation breeding is for health and environment remains unknown because controlled studies have not been done, though there is suggestive evidence that it may be less risky than gene editing.[8]

Nevertheless, for the plant itself, mutation breeding is widely recognized as risky, unpredictable, and inefficient at producing beneficial mutations. Plant cells can be killed by exposure to the chemical or radiation, while many of the resulting plants are deformed, non-viable, and/ or infertile.[37,38,39]

Mutation breeding is recognised under EU law as genetic modification. It is exempted from the requirements of the regulations because (despite the absence of research on risk) it is deemed to have a history of safe use.[40] But this clearly does not apply to gene editing, which has no history of use, let alone safe use.[8]

REGULATORY OVERSIGHT CRUCIAL

Gene editing technology produces unintended outcomes, which can pose risks to human and animal health and the environment. Even if developers are optimistic that unwanted outcomes can be eliminated, they do not:

- properly screen for them – arguably because that would defeat the purpose of using gene editing to gain time
- reliably remove them
- always have the ability to remove them (with vegetatively propagated crops).

For these reasons, stringent regulatory oversight is crucial, as FDA scientist Steven M. Solomon recommended for gene-edited animals in the US,[28] and as the European Court of Justice has ruled with regard to all gene-edited organisms in the EU.[33]

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5. Gene-edited products are detectable

MYTH

Gene-edited products cannot be distinguished from products developed through conventional breeding.

REALITY

Methods can be developed to detect all products of gene editing, provided information on the genetic change is available.

Industry associations have claimed that many gene-edited products cannot be distinguished from products developed with conventional breeding.[1] And according to Bayer, a change made through gene editing is "indistinguishable from a conventional breeding breakthrough or a natural mutation".[2]

The objective of these claims seems to be to persuade the EU authorities not to even try to apply the EU's GMO regulations to gene editing.

However, already-available, standard GMO detection techniques allow unambiguous detection and identification of a wide range of genetic modifications, from the smallest – e.g. a point mutation of a single nucleotide (DNA base unit) – to the largest, e.g. insertion of large genetic sequences, provided information on the genetic change is available. Also, any patented seed product can be distinguished from other products. Otherwise it would be impossible to enforce patent rights.

> Any patented seed product can be distinguished from other products

In fact, patents generally encompass specific genomic sequences independently of how they are derived. For example, crops developed through mutation breeding can be identified on the basis of the specific sequences that characterise them and that are described in the patent.

When these specific sequences are known, not only the developer but also others can develop specific detection methods for these crops. This has been done for Cibus' SU Canola. Cibus has developed its own detection method to identify its product, and submitted it to Canadian authorities,[3] but the authorities refused to make it available to Canadian NGOs on grounds that it was confidential business information. However, a team of scientists has developed an open-source detection method for this GM crop based on publicly available information.[4]

> When the specific sequences that characterise a crop are known, not only the developer but also others can develop specific detection methods

SU Canola represented a particularly challenging case, since the alteration in its genetic blueprint consists of only a "single base pair" (DNA base unit) change within a specific gene. The researchers confirmed that a single base pair change can be detected with standard GMO detection technology based on polymerase chain reaction (PCR) methodology. Thus it is likely that detection methods can be developed for most, if not all, gene-edited organisms, according to the researchers, provided enough information on the nature of the edit is available.[4]

They stated: "Our work demonstrates that it may be possible to develop event-specific, GMO regulation compliant detection methods for virtually any gene-edited organism based on information disclosed by the developer or gathered from the public domain."[4]

UNKNOWN GENE-EDITED CROPS

Critics of the open-source SU Canola test have focused on the fact that it does not detect the GM method used. Some – like the European Plant Science Organisation (EPSO) – also said that it does not solve the problem of unknown genetic modifications.[5]

However, EU law does not require that detection tests are able to specify the GM method used to develop the crop. A scientific review by researchers from Germany's Federal Office of Consumer Protection and Food Safety (BVL) and Julius Kühn Institute recognised that GMO detection methods generally do not allow any conclusions on the process used, whether they be gene-editing techniques or older-style transgenic genetic modification techniques. However, the researchers commented that "bioinformatics and statistical considerations might help to evaluate whether a detected sequence was potentially introduced by genome modification".[6]

> The detection of unknown GMOs has never been solely reliant on the detection methods used in the laboratory

The detection of unknown GMOs has never been solely reliant on the detection methods used in the laboratory. The EU's Joint Research Centre said in 2017 that the most efficient way to test imports for unknown GMOs was to check authorisations in other countries, patent applications, scientific publications, and other information to apply a targeted approach. The laboratory detection test can then be used to provide confirmation of information gathered through other means.[7]
In addition, it is unlikely that a large number of unknown gene-edited crops will be in circulation. Seed companies talk about gene editing when they use it because they want to be able to profit in the marketplace from the use of these new GM techniques.

So far, only two gene-edited crops have been commercialised : Cibus's SU Canola and Calyxt's "high oleic" asoybean with an altered oil profile. Thus far it has proved possible to track a significant number of gene-edited products developed worldwide for commercial markets, as the Julius Kühn Institute in Germany has done for a peer-reviewed publication.[8]

Also, the potential for unknown GMOs to slip through official controls is not new. The same is true for the GM crops that have been successfully regulated in Europe and other countries for the last two and a half decades.

Today's strategies for screening for unknown GMOs do not capture all of them. They only identify those that carry certain common genetic sequences that are used as "screening targets". But the number of GM crops lacking common sequences has been increasing in recent years. It is possible that currently there are unauthorised GMOs in the marketplace that have not been detected because they do not carry any common sequences. No one claims that for this reason, the EU GMO legislation is impossible to enforce and thus useless. By analogy, no one would suggest legalising burglary because criminal laws do not prevent all burglaries.

Unknown gene-edited crops are just another category of GM products that GMO screening methods can miss and that must be detected by event-specific methods such as the one developed for SU Canola. The presence of gene-edited products in the commercial food system does not create a new set of circumstances that demands fundamental changes in the regulatory regime for GMOs.

The researchers who developed the test for SU Canola believe it may be possible in the future to develop screening methods for various classes of gene-edited crops.[4]

TRANSPARENCY REQUIRED

In the meantime, transparency must be demanded from developers of gene-edited organisms. Under the EU's GMO regulations, agricultural biotech companies are required to provide a detection method and "reference" sample material for each GMO that is authorised, though the sector has not yet submitted any gene-edited GMOs to be marketed in the EU.

> It cannot be the job of governments, civil society, or academia to fill knowledge gaps created by industry secrecy

Meanwhile researchers at North Carolina State University are calling for a coalition of biotech industry, government and non-government organizations, trade organizations, and academic experts to work together to provide basic information about gene-edited crops to lift the veil on how plants are modified and provide greater transparency on the presence and use of gene editing in food supplies. They believe that such transparency is crucial to building public trust and confidence in gene-edited products.[9]

However, the primary responsibility for transparency over gene-edited products lies with their developers. It cannot be the job of governments, civil society, or academia to fill knowledge gaps created by industry secrecy.

Once information has been disclosed by the developer, it should be organised in a publicly accessible resource. We can use what is already there – the Biosafety Clearing-House of the Cartagena Protocol on Biosafety,[10] the EUginius GMO database of the Federal Office of Consumer Protection and Food Safety (BVL) in Germany and Wageningen Food Safety Research in The Netherlands,[11] and the register set up by the European Commission for EU-authorised and withdrawn GMOs.[12] The EU must ensure that countries wishing to export to the bloc participate in these registers.

The European Commission's register of EU-authorised GMOs is required by EU law to also "contain, where available, relevant information concerning GMO which are not authorised in the European Union".[13] The Commission and/or member states should work with international partners to meet this requirement.

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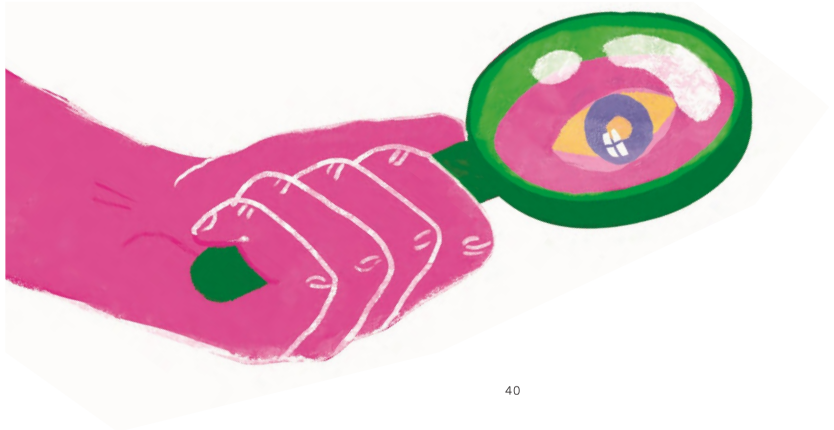

6. Gene-editing technology is owned and controlled by big corporations

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Gene editing, and the CRISPR tool in particular, puts the power of genetic engineering into the hands of hundreds of thousands of scientists, including those working in publicly funded institutes and small companies.

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Gene editing technology for agricultural use is already firmly under the control of the multinationals that dominate the seed and agrochemicals markets. Corteva has become the main gatekeeper of CRISPR patents in the agricultural arena.

Advocates claim that gene-editing techniques, especially those using the CRISPR/Cas system, can democratise genetic engineering because they are cheaper and easier to apply than older genetic modification techniques. Jennifer Doudna, one of CRISPR's inventors, said the technology "became a democratising tool that allowed labs to do experiments that in the past had been prohibitive for various reasons, whether due to expense or just technical difficulty".[1] Bayer calls CRISPR the "most 'democratic'" gene-editing tool, which is so "cheap and simple" that it can be used by "universities and institutes that do not have major research budgets".[2]

It is further argued that if gene editing were exempted from the EU's burdensome and expensive-to-comply-with GMO regulations, it would be removed from the control of the big agbiotech multinationals and be made available to public research institutes and universities, non-profit organisations, and small and medium-sized enterprises (SMEs).[3,4] The seed industry claims that GMO regulations "prevent most of Europe's plant breeding companies from developing and using these methods".[5]

TECHNOLOGY PATENTS

Claims of democratisation through new GM techniques must be viewed in the light of the fact that these techniques are patented, as are their products – the plants and animals developed using them. Patents are monopoly rights. Patent holders have the right for up to 20 years to prohibit others from exploiting the patented invention or to charge royalties for its use. This is not just about limiting commercial exploitation, but also further innovation. Exclusive patent rights prohibit others from building on the protected invention, as research exceptions to patent rights are usually very strictly formulated.

> Patent holders have the right for up to 20 years to prohibit others from exploiting the patented invention or to charge royalties for its use

The Broad Institute of MIT and Harvard, the University of California, the University of Vilnius in Lithuania, and the University of Vienna are the main institutional "inventors" of CRISPR technology.[6,7,8,9] Between them they have filed (and fought each other over[9]) hundreds of foundational patents, some of which have already been granted in Europe.[6]

LICENSING AGREEMENTS

Once technology patents are granted, patent owners can conclude licensing agreements with companies allowing them to use the technology in certain areas or in a specific application. These agreements can be exclusive or non-exclusive. Other companies can obtain licensing agreements only if the rights to use the patents are granted non-exclusively to a licensee. An overview of CRISPR-based gene-editing technology licensing agreements was published in Science in 2017.[8]

In the areas of CRISPR gene-edited plants and livestock, licensing agreements reached by patent owners, the Broad Institute and the University of California (or its spinoff company Caribou Biosciences), with licensees DowDuPont (now Corteva) and Bayer/Monsanto, are particularly important.[6,8] DowDuPont concluded licensing agreements not only with one of the holders of the foundational CRISPR technology patents (the Broad Institute), but also with all relevant institutions, including the companies Caribou Biosciences and ERS Genomics, and the University of Vilnius.[3,6]

CARIBOU BIOSCIENCES AND ERS GENOMICS

Corteva (the agricultural division spun off from DowDuPont) is the main gatekeeper for CRISPR patents in the agricultural arena[10] and has gained unprecedented market power due to its ability to grant access to this patent pool.[6] To understand why, we need to learn the history of the CRISPR licensing agreements.

> The story begins with two biotech startups co-founded by the inventors of CRISPR technology

The story begins with two biotech startups co-founded by the inventors of CRISPR technology. The first, Caribou Biosciences, was co-founded in 2011 by one of the inventors of CRISPR-based gene-editing technology, Jennifer Doudna from the University of California. The second, ERS Genomics, was co-founded in 2013 by another CRISPR technology inventor and patent owner, Emmanuelle Charpentier, as a "licensing engine" that "exists to make the [CRISPR] technology more broadly available under appropriate commercial licences". ERS Genomics has signed non-exclusive and exclusive licensing agreements with companies operating in different fields.[8]

DuPont (later DowDuPont and now Corteva) concluded its licensing agreement with Caribou Biosciences in 2015. In the deal, DuPont received exclusive rights for CRISPR technology applications in major row crops and non-exclusive rights in other agricultural

applications.[11] In 2016 Caribou reached a deal with the company Genus in which the latter received an exclusive licence to use CRISPR technology in certain livestock species.[12]

DuPont also reached an exclusive licensing agreement in 2018 with ERS Genomics. The agreement gave DuPont exclusive rights to use CRISPR technology in the agricultural area. ERS Genomics also granted sub-licensing rights to DuPont. DuPont's agricultural division was spun off in 2019 as an independent entity named Corteva. Thus Corteva achieved its dominance of the CRISPR technology in the agricultural field.

DEMOCRATISATION OR PATENT CARTEL ?

Jean Donnenwirth of DowDuPont (now Corteva) presented the company's agreements on 5 November 2018 at a meeting between the EU Commission and various interest groups, according to Dr Christoph Then of Testbiotech, who was present. According to Donnenwirth, DowDuPont succeeded in combining 48 basic patents into a common patent pool (35 patents from the Broad Institute, 4 from the University of California, 2 from the University of Vilnius, and 7 from DowDuPont).[6]

Donnenwirth said that access to this number of patents is necessary for full use of the technology in plant breeding. DowDuPont can offer bundled, non-exclusive licenses giving access to this patent pool. The conditions include appropriate fees, reporting obligations, compliance with guidelines, and confidentiality.[6] The first company to licence CRISPR technology under these conditions in 2018 was the US company Simplot, which develops GM potatoes.[13] In 2019, a French company, Vilmorin & Cie, followed.[14]

Christoph Then commented, "DowDuPont has unprecedented market power thanks to the possibility of granting access to this patent pool: What is on the one hand touted as a 'democratisation' of patent law turns out, on closer examination, to be a means of controlling competitors and protecting a dominant position. DowDuPont becomes, so to speak, the gatekeeper of an international patent cartel."[6]

PATENTS ON "NEW GM" CROPS DOMINATED BY DOWDUPONT, BAYER/MONSANTO

The 'democratic' credentials of gene editing are determined not only by access to the technologies but also by access to their products – gene-edited crops and seeds. But just like the technologies, the products are circumscribed by intellectual property rights.

According to Christoph Then, patent applications involving new and old genetic engineering relate to plants with modified growth and yield, composition, or resistance to disease, as well as technical modifications of the nucleases. As a rule, the patents cover methods, seeds, plants and often also the harvest.[6]

Both Bayer/Monsanto and DowDuPont have applied for patents on glyphosate-tolerant plants produced with the CRISPR-mediated gene-editing process. This means that the core agricultural GMO business – the marketing of herbicide-tolerant plants such as soy, corn, oilseed rape/canola and cotton – can continue to be protected by new patent applications in the future.[6]

Both Bayer/Monsanto and DowDuPont have applied for patents on glyphosate-tolerant plants produced with the CRISPR-mediated gene-editing process

The owners of the patents are largely the same multinationals that dominate the GMOs and agrochemicals markets. Christoph Then wrote in 2019 : "DowDuPont leads the field in the new genetic engineering methods for crops, with around 60 international patent applications, while Bayer/Monsanto follows in second place with more than 30. Calyxt… comes in at more than 20. Syngenta and BASF are also involved, and a few patents have also been applied for by traditional breeding companies such as Rijk Zwaan and KWS."[6]

A 2016 review of the intellectual property rights landscape by Egelie and colleagues found that "larger industry players, with Dow and DuPont at the forefront, already appear to be more in control of the technology's agricultural and food applications."[15]

LOST ACCESS TO TRADITIONAL CULTIVARS

In a discussion dominated by concerns about gaining access to CRISPR technology, it is easy, as pointed out by Maywa Montenegro de Wit of the University of California, to forget the crucial issue of farmers "losing access to traditional cultivars that might be displaced with expanded markets in new biotech crops, or mined as genetic resources for breeding gene-edited varieties".[1] There is a danger that farmers will be forced to pay for access to gene-edited seeds and breeds, but lose access to non-GM seeds and breeds in the process.

ACCESS TO THE TECHNOLOGY FOR SMES ACTING ALONE IS ILLUSORY

Could the de-regulation of gene editing help empower small and medium size enterprises (SMEs) to develop the gene-edited crops and foods that will enable us to meet the challenges of climate change?[4,16]

This prospect is highly unlikely, according to molecular geneticist Dr Michael Antoniou, who has many years' experience of developing patented biotech products for medical research with SMEs and larger companies.[4]

He explained that different types of licences exist for technologies like CRISPR gene editing, which industry-based researchers (including those working in SMEs) must take out at different stages of product development. These include evaluation, research, and commercial licences. Evaluation licenses are granted to researchers by the patent owners or their sub-licensing affiliate companies to allow the researchers to do preliminary work to see if the technology could be useful. If the researchers want to pursue a particular application, they can apply to the patent owners for research licenses.[4]

Evaluation and research licences are often granted quite cheaply, and fees can even be waived altogether, since the technology owners want it to be used to develop a product that can be commercialised.
Even when evaluation and research licence fees are charged, a typical SME could afford them.[4] But at the commercialisation stage, things can quickly get very expensive, with technology patent holders demanding high payments for use of the technology, in the form of commercial licence fees and royalty payments on product sales.

As an example, Corteva has made a commitment to allow free access to the CRISPR technology for "universities and nonprofit organizations for academic research". The company has claimed that this will put the CRISPR technology "in the hands of many", resulting in "a wide array of benefits for the global food supply".[3] But scientists will only be able to use CRISPR for basic non-commercial research, not for developing commercial products. Maywa Montenegro de Wit concluded: "Despite the opening up of CRISPR IP [intellectual property] for non-commercial research, CRISPR's commercial development remains tightly bound up in patents and licensing agreements – a landscape already showing strong signs of agroindustry dominance."[1]

> "Despite the opening up of CRISPR IP for non-commercial research, CRISPR's commercial development remains tightly bound up in patents and licensing agreements"
> - Maywa Montenegro de Wit

Plant breeders using conventional breeding to develop a new plant variety can protect it through plant breeders' rights. But if they decide to use CRISPR (whether or not the technology is regulated as GM), they will need to learn to navigate a far more complex and expensive process. They will have to compensate the CRISPR patent holder(s) both at the research and development stage and also at the commercialisation stage.
Patent and licensing fees will raise the cost of variety development considerably.

Patenting fees can easily accumulate to six-figure sums, since patents must be applied for – and patent lawyers engaged – in each territory where intellectual property rights are sought. The patenting process can drag on for years, with lawyers' fees rising all the while.[4]

GAME FOR BIG PLAYERS

Due to the expense involved, SMEs on their own will never be able to afford the patents and commercial licensing agreements that govern gene editing.
So the system in the agricultural biotech market is, and will remain, that researchers based in small companies or universities, often with industry funding, "invent" a GMO and partner with investors and/or a large company to patent the product, obtain regulatory approval, and bring it to market. The inventors and their institutions enjoy a profit-sharing arrangement with the investors or large partner company. Often in this process, the SME is bought up by larger companies.[4]

> At the end of the day, gene editing is a game for big players and will remain so

This business model is not considered a cause for lamentation. On the contrary, it is celebrated as a path to success for all involved, including the individuals and SME that invented the product.[4]

However, at the end of the day, gene editing is a game for big players and will remain so. The notion that CRISPR will grant small players access to the technology is a myth.

PATENTS THE DRIVING FORCE OF OLD AND NEW GENETIC ENGINEERING

Experience with genetic engineering to date shows that patent law has been the driving force behind development. The advent of genetic engineering marked the first time that patent law was systematically applied to plant breeding. Large agrochemical companies, which had previously protected their pesticides with patents, now also applied for patents on GM seeds and at the same time bought up many plant breeding companies.[17]
With new genetic engineering techniques, this strategy has continued and been expanded. Already, corporations such as Corteva and Bayer/Monsanto control large parts of the seed market.[17] Patented genetic engineering techniques such as CRISPR gene-editing technology help them extend and deepen this control.[6]

> The advent of genetic engineering marked the first time that patent law was systematically applied to plant breeding

Therefore gene-editing technology will not make genetic engineering accessible to publicly funded breeding programmes, but will further consolidate power within the big multinationals.

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7. Gene editing is not a fast or reliable route to desired outcomes

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Gene editing achieves desired traits more quickly than conventional breeding.

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There are many lengthy steps in bringing a gene-edited product to market, even without considering regulation, and conventional breeding is more successful in achieving desired traits.

Gene editing is promoted as the fastest and most efficient way to achieve plant breeding goals.[1,2] According to Corteva, "CRISPR-produced plants can be developed in just a few years versus what often takes decades",[3] and Bayer insists that useful crops can be developed "in a fraction of the time compared to older methods".[4]

The companies often suggest it is onerous regulations that hold back what would otherwise be rapidly introduced gene-edited products. Corteva argues that "treating CRISPR-produced crops as GMOs would substantially slow down their path to market and adoption of CRISPR innovation in agriculture."[3]

However, while breeding a new plant variety is generally a lengthy process, there is no evidence that producing a viable gene-edited variety will be any quicker. Even in countries with light-touch regulations like the US and Canada, only very few gene-edited products have made it to market. A gene-edited tomato approved by the Japanese government in 2020, which was engineered to contain a compound said to lower blood pressure, took 15 years to develop.[5] That is the same time period that experts estimate is needed to develop a sexually propagated non-GM crop – or an older-style transgenic GM crop.[6,7,8]

PROCESS FOLLOWING THE "EDIT" TAKES TIME

As shown in chapter 2, gene editing and its associated processes (such as tissue culture) lead to many unintended effects, some of which will affect plant performance and growth as well as the desired trait. So gene-edited plants need to go through a laborious process of screening, selection and backcrossing with the parent lines to remove any obvious undesired mutations.

In addition, several years of greenhouse and field trials must be done to ensure that the desired trait expresses in a stable way through the generations and that the plant copes with environmental stresses, such as bad weather conditions and pest attacks.

Moreover, genetically modified products are normally only placed on the market once patents are granted – and the patenting process can take years. This means the overall process before products can be commercialised can be lengthy.

All this is without the time needed to put the plant through regulatory processes.

Gene-edited plants need to go through a laborious process of screening, selection and backcrossing with the parent lines to remove any obvious undesired mutations

UNIMPRESSIVE RECORD

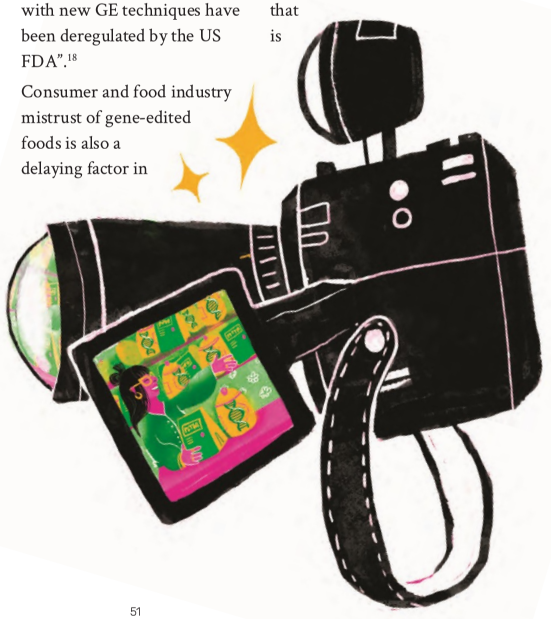
While gene editing is presented as a cutting-edge new technology, it has actually been around for some years. In 2012, Jennifer Doudna and Emmanuelle Charpentier proposed that CRISPR could be used for programmable editing of genomes[9] and it was first shown to work in plants in 2013.[10] The editing tool later named TALENs was described in 2009–2010.[11,12] Regarding crops engineered with the editing tool called oligonucleotide-directed mutagenesis (ODM), maize was described in 2000[13] and rice in 2004.[14]

Yet to date, despite the permissive egulatory systems in place in North and South America,[15] only two gene-edited plants have made it to market – neither of which were engineered using the much-touted CRISPR technology. These are Calyxt's altered-fat-profile soybean, engineered with TALENs,[16] and Cibus' herbicide-tolerant canola/oilseed rape, engineered with ODM. The ODM maize[13] and rice[14] do not appear to have been commercialised anywhere in the years since they were announced in 2000 and 2004. The same is true of a non-browning mushroom, engineered with CRISPR/Cas,[17] as well numerous other products. According to Testbiotech, "around 80 plants developed with new GE techniques have been deregulated by the US FDA".[18]

To date, only two gene-edited plants have made it to market – neither of which were engineered using the much-touted CRISPR technology

Consumer and food industry mistrust of gene-edited foods is also a delaying factor in commercialisation. The gene-edited tomato approved by the Japanese government has not yet been commercialised, reportedly due to food producers shying away from the technology in the face of consumer rejection. A survey of about 10,000 people by the University of Tokyo found that 40% to 50% did not want to eat gene-edited crops or animal products, with just 10% showing interest in trying them.[5]

This record suggests that gene editing is not the efficient and speedy route to obtaining successful agricultural traits that is



claimed. The unimpressive record of products brought to market in countries like the US and Canada shows that it is not regulations that slow market access, but factors inherent in the development of GM products, as well as market rejection.

During the 20 years that gene editing has existed, there has been much research activity – often generously funded with taxpayer money – but very few marketable products. In the meantime solutions have already been found to problems such as extreme weather conditions linked to climate change. These solutions rely on already proven and available approaches.

In the meantime solutions have already been found to problems such as extreme weather conditions linked to climate change

For example, while research on gene-edited saline-tolerant crops struggles to progress beyond the early stages,[19] farmers in India have rapidly and successfully remediated soil that was made saline by a devastating tsunami. The key was found in organic soil regeneration methods and local seeds adapted to the conditions.[20]

Also, conventional breeding has consistently outstripped genetic engineering techniques (old and new) in producing crops tolerant to stresses such as drought,[21] floods,[22] pests,[23] and diseases.[24] For more examples of successful alternatives to GM approaches, see chapter 8.

IS SPEED DESIRABLE?

Speed in bringing new products to market and fast replacement of products is a business model that is interesting for some seed/agrochemical companies and livestock breeders, but less relevant for farmers, who may be better served with robust, locally adapted varieties and breeds that they can use over a long timespan. In addition, it does not serve consumers, whose primary concern is a safe, wholesome, and accessible food supply.

In cases where speed is important, gene editing is not the quickest or most reliable way to produce crops with desired traits. In contrast, conventional breeding has proven highly efficient and successful in producing such crops.

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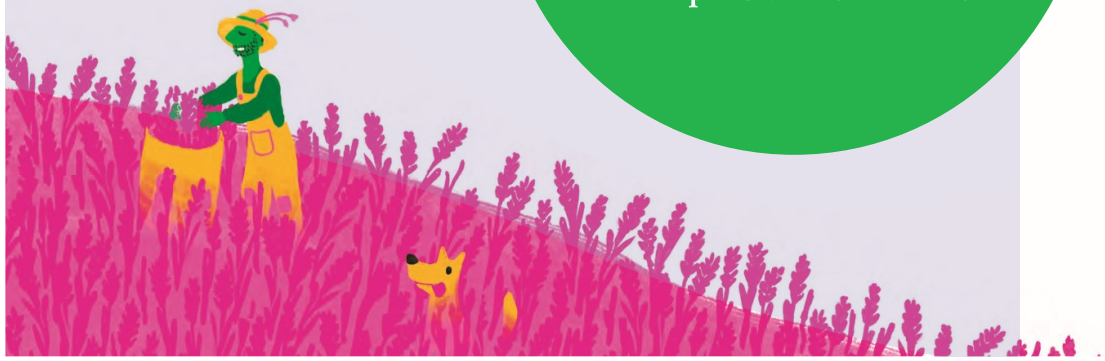
8. Gene editing is a risky and expensive distraction from proven successful solutions to food and farming problems

MYTH

Gene editing is necessary to grow food that is better for people and the environment, so not applying it would be morally reprehensible.

REALITY

We need to scale up proven successful solutions – conventional breeding and agroecology – from which genetic engineering is an expensive distraction.



Industry lobbyists claim that the use of gene editing is of "unprecedented importance" to deal with climate change and scarcity of natural resources such as arable land and water. They say it is necessary to develop crops that are pest- and disease-resistant and can adapt to difficult climatic conditions such as drought, heat, and salinity.[1,2]

According to Bayer, gene editing is "fundamental in achieving the goals of the EU Green Deal"[3] that aims to tackle both climate change and environmental degradation and make the EU economy sustainable. The company says that if the EU fails to "reverse legislation" that blocks gene editing, it could: "miss out on one of the most promising innovations of our lifetime to enable more sustainable resilient food systems".[4]

Bayer says the EU could "miss out on one of the most promising innovations of our lifetime to enable more sustainable resilient food systems".

The EU seed industry association, which Bayer is part of, says it is the EU's "prohibitive" GMO laws that prevent innovation "for a more sustainable agri-food system at the pace that is urgently needed".[1]

Such arguments create a context in which genetic engineering is viewed as the moral imperative – and rejection, or even just regulation, as morally reprehensible.

NEW TECHNIQUES, OLD CLAIMS

Claims that genetic engineering can help farmers to deal with adverse conditions and protect the environment are not new. First-generation transgenic GM crops were promoted on the basis of claims that they would be adapted to difficult climatic conditions, such as drought, and reduce pesticide use.[5]

These promises proved false. Regarding drought, a transgenic GM drought-tolerant maize from Monsanto was released in 2011, but the US Department of Agriculture (USDA) said it was no more effective than conventionally bred varieties.[6] Farmer adoption of varieties in which the drought tolerance was achieved via GM has "lagged behind" varieties in which it was achieved by conventional breeding.[7]

The claim of reduced pesticide use also proved to be false Herbicide-tolerant GM crops are sold by agrichemical companies in tandem with their proprietary herbicides. They have increased the use of chemical weedkillers, including products containing the "probable carcinogen" glyphosate.[8,9]

> Herbicide-tolerant GM crops are sold by agrichemical companies in tandem with their proprietary herbicides

Insecticide-producing GM crops (so-called Bt crops) rapidly lost effectiveness against targeted pests, fell victim to Bt toxin-resistant and secondary pests, and are now used in combination with chemical insecticides.[10,11,12,13,14,15,16,17,18] These include highly toxic neonicotinoid insecticidal seed treatments, the use of which has risen in parallel with Bt crops in the USA.[16]

GENE EDITING APPROACHES TO PEST CONTROL SET TO FAIL

Agricultural biotech companies are promoting the newer techniques of gene editing as a way to manage insect pests that would reduce the need for chemical insecticides. Proposed approaches include altering plant composition in order to repel pests.[19]

However, these approaches may meet the same fate as older-style GM crops – as pests can rapidly evolve resistance to environmental stresses, whether they consist of sprayed-on chemical pesticides, built-in pesticides like Bt toxins, or plants genetically engineered to repel pests.

In the UK, Rothamsted Research's so-called "whiffy wheat" trial, in which wheat was genetically engineered to release an aphid-repelling chemical found in mint, failed after £2.6 million of public money was spent on the project. The aphids rapidly got used to the smell.[20]

Ironically, previous government-funded research undertaken by Rothamsted and others demonstrated that aphid levels can be kept below economically significant levels by maintaining diverse field margins and hedgerows.[21] This innovative research was based on an understanding of agroecology. But seemingly, it has been ignored by GM researchers and their institutions.

CONVENTIONAL BREEDING AND GOOD FARMING PRACTICES WORK BETTER TO FIGHT PLANT DISEASES

Seed industry associations say that gene editing is a way to fight plant diseases while reducing pesticide use. One promotional video claims that wheat can be gene edited to make it resistant to rust and powdery mildew diseases.[22]

However, powdery mildew-resistant wheat has already been developed through conventional breeding, helped by marker assisted selection.[23] Progress has been made in gene mapping for powdery mildew resistance in wheat, to help breeders who want to use these techniques.[24]

Rust-resistant wheat varieties have also been developed via conventional breeding.[25,26,27] According to the International Maize and Wheat Improvement Center (CIMMYT), its "rust-resistant varieties now cover more than 90% of the wheat farming area in Kenya and Ethiopia".[28]

> The key to controlling both crop diseases and insect pests lies in prevention through good farming practices

Attempts to achieve disease resistance through gene editing are unlikely to match these conventional breeding successes. Disease-causing microorganisms, like insect pests, have great genetic diversity and thus adaptability, so they can easily "break" a resistance based on changes in one or a few genes.

Moreover, the key to controlling both crop diseases and insect pests lies in prevention through good farming practices such as crop rotation,[29] which is often ignored in monocrop, industrialised agriculture.

GENE EDITING CANNOT CONFER DESIRABLE COMPLEX TRAITS

Conventional breeding continues to outstrip GM in developing crops with durable resistance to pests and diseases, drought tolerance, enhanced nutritional quality, and tolerance to salinity.[30,31,32,33] This is because these are genetically complex traits, meaning that they are the product of many genes working together in a precisely regulated way. Such traits will be extremely difficult or impossible to achieve by manipulating one or a few genes, which is all that gene editing and genetic modification in general can achieve, even using multiplex approaches.

> Genetically complex traits will be extremely difficult or impossible to achieve by manipulating one or a few genes

GM has largely succeeded only in producing crops with genetically simple traits such as herbicide tolerance or the ability to express an insecticide. Gene editing is set to continue on the same path. The gene-edited crops commercialisation pipeline is mainly characterised by genetically simple traits, such as or herbicide tolerance, or modified composition to increase product shelf life or provide raw materials for processing industries.[34] These traits do not improve the sustainability or climate resilience of agriculture, but allow developers to continue to sell GM seeds with agrochemicals and help industry to optimize its manufacturing processes.

It is not surprising, then, that thus far the only gene-edited crops that have made it to market are Calyxt's soybean and Cibus' SU Canola. The soybean has an altered fat profile to avoid creating unhealthy trans fats when cooking food at high temperatures.[35] The canola has been engineered to enable increased herbicide use without killing the crop – the opposite to the claimed reductions in pesticide use from gene-editing technology.

GENE EDITING CAN BRING ADDITIONAL RISKS

Gene editing plants for disease resistance brings other risks, too, some of which have already come to light. Attempts to use CRISPR gene editing to produce virus-resistant cassava plants failed, and in the process broke their already-existing natural resistance to a different, more widespread virus.

The experiment also resulted in the propagation of mutated viruses that, if they had escaped the laboratory, could have led to "the development of a truly pathogenic novel virus", according to the researchers.[36] The lead researcher questioned on Twitter whether this was a "risk" worth taking in fields. Meanwhile, non-GM programmes for breeding and supplying virus-resistant cassava have proven successful over many years, but struggle for funding.[33]

Currently, so-called gene drives, a particular application of gene-editing technology, are being promoted as a way to eradicate insect pests.[19] But the risks posed by gene drives are unpredictable and the impacts potentially severe.[37]

SYSTEMS, NOT JUST GENES

When it comes to solving challenges of pests, diseases, or climate change, it is crucial to look at whole farming systems rather than employing a reductionist approach that only looks at genes, especially genetic engineering approaches that only manipulate one or a few genes. As well as robust crops providing stable yields under adverse conditions, we need resilient farming systems that cope with a variety of environmental stresses. Such systems include soil building with organic matter to retain moisture and planting a diversity of crops to prevent pest and disease problems.

> Agroecology projects in the Global South and other developing regions have produced dramatic increases in yields and food security

Successful systems approaches include :

• The organic system. In the longest-running trial comparing organic and conventional grain cropping systems (including GM crops), the Rodale Institute Farming Systems Trial, researchers found that organic systems produce yields that are competitive with conventional systems after a 5-year transition period. Yields in the organic systems were up to 40% higher in times of drought. The trial also found that organic systems use 45% less energy and release 40% fewer carbon emissions. Crop rotations were used instead of pesticides to control pests.[38]

• The System of Rice Intensification (SRI). SRI is an agroecological method of increasing the productivity of rice by changing the management of plants, soil, water, and nutrients. The benefits of SRI include yield increases of 20–100%, up to a 90% reduction in the amount of seed required, and water savings of up to 50%.[39]

• Agroecology projects in the Global South and other developing regions. These projects have produced dramatic increases in yields and food security.[40,41,42,43,44,45]

OVER 400 INTERNATIONAL SCIENTISTS SAY AGROECOLOGY IS THE WAY FORWARD

In 2008 a ground-breaking study on the future of farming was published. Sponsored by the World Bank and the United Nations and conducted by over 400 international scientists, the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) did not endorse GM crops as a solution to world hunger.

The report noted that yields of GM crops were "highly variable".
It added that safety questions remained over GM crops and that the patents attached to them could undermine seed saving and food security in developing countries. The report concluded that the key to food security lies in agroecology.[46]

EXPENSIVE DISTRACTION

GM approaches have been shown to be an expensive distraction from already-available approaches to solving challenges of climate change, pests, and diseases. These approaches, based on the science of agroecology, are also the most sustainable way to end our dependency on chemical pesticides.

The need to reduce pesticide use is pressing, but this goal will not be achieved by looking to companies that sell these products. In fact, the agricultural biotech companies promoting gene editing (for example, Corteva, Bayer, Syngenta, and BASF) are also agrochemical companies and their business model is built on selling seeds in a package with pesticides and other chemical inputs.

The need to reduce pesticide use is pressing, but this goal will not be achieved by looking to companies that sell these products

Resources should instead be directed towards making proven-successful agroecological methods more widely available to farmers.

In a time of climate and ecological breakdown, this – not risky genetic engineering technologies owned and promoted by agrichemical companies – is the moral imperative.

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CONCLUSION

The evidence presented in this report shows that gene editing is imprecise and that its outcomes are uncontrollable. Numerous types of unintended mutations have been shown to arise from gene editing, including large deletions, rearrangements and insertions at on-target and off-target sites of the genome. These will cause altered gene function, leading to compositional changes in plants that could result in toxicity or allergenicity. Gene editing in animals has also been shown to have unpredictable and potentially dangerous outcomes.

In gene editing, unlike with transgenic technology, traditional mutagenesis or conventional breeding, any region of the genome can be targeted. In addition, given that gene editing will be used simultaneously or sequentially to target one or more genes, the risks will be compounded with each step.

Inadequate screening by developers could result in harmful traits persisting in products reaching the marketplace. In order to protect health and environment, all types of unintended effects of gene-editing techniques should be taken into account in a detailed process- and product-based risk assessment, as some scientists recommend.

Given the uncertainties and risks attached to gene editing, it is unacceptable to weaken the regulations governing these genetic manipulation techniques. Rather, the existing protocols for GMO risk assessment should be extended and strengthened to take account of gene editing's particular risks.

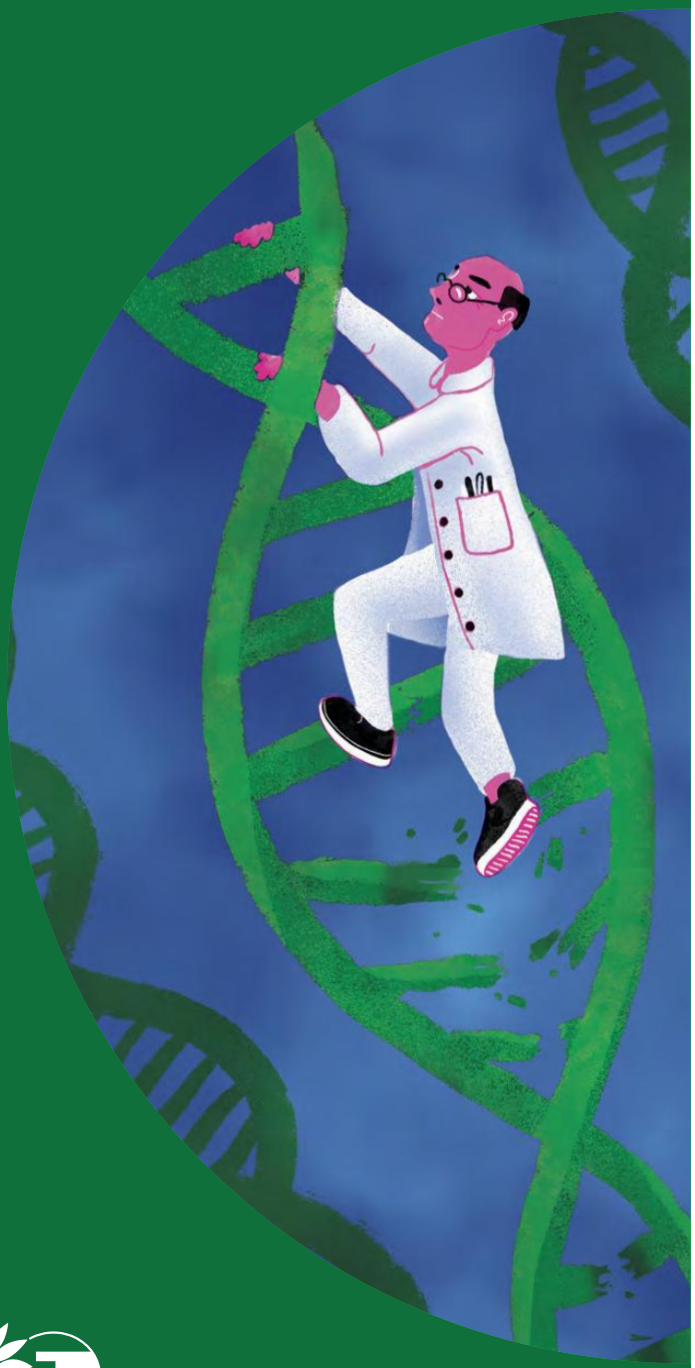
In particular, broadening the risk assessment to include new molecular analysis tools ("omics") would help to identify important unintended changes in transgenic and gene-edited GM crops.

Given that gene editing can only manipulate a limited number of genes, it will fail to deliver on desirable complex genetic traits such as drought tolerance, pest resistance and disease resistance, which involve multiple gene families working together.

Furthermore, ownership and control of gene-editing technology is in the hands of a very few large corporations, which means that it will not democratize agriculture but will instead lead to further consolidation of the seed industry and threaten food and seed sovereignty.

In the interests of public health, the environment, and a resilient food system, gene editing must remain under the current EU GMO regulations. Furthermore, risk assessment guidance should be tightened to take into account the particular risks posed by this technology.

The climate and sustainability crises demand that we implement proven-successful agroecological solutions to the problems in our food and farming systems, rather than pursuing risky and expensive gene editing approaches.



THE GREENS/EFA in the European Parliament

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1047 Brussels, Belgium
www.greens-efa.eu
contactgreens@ep.europa.eu

From: Linda Grammer
To: BDC_Long Term Plan
Cc: BDC_Info; Ian Mulholland
Subject: further Evidence (as part of the submission to the BDC draft LTP 2021/31 regarding controversial Stevenson Mining/ Rangitira Ltd application/ proposal for large open cast coal mine Te Kuha above Westport
Date: Tuesday, 18 May 2021 3:27:11 pm
Attachments: image001.png
2018-05-28 Linda Grammer evidence.docx

att: BDC draft LTP 2021/31 team

Further information as part of our submission to the BDC draft LTP 2021/31

Submittors:

Linda Grammer and Ian Mulholland

Seddonville

(We wish to be heard)

Tēnā anō koutou katoa:

For your information, please see the attached Evidence (Linda Grammer Evidence submitted to the Environment Court in May 2018 regarding Stevenson Mining/ Rangitira Ltd proposal for a large open cast coal mine on Te Kuha

ENV-2017-CHC-090 - Royal Forest and Bird Protection Society of NZ Inc v BDC & WCRC

This Evidence is supplementary to our submission to the BDC draft LTP 2021/31 and relevant to the Climate Change, sustainability, indigenous biodiversity, Outstanding Landscapes and other environmental issues

Submitted by Linda Grammer and Ian Mulholland

(this Evidence is part of our submission to the BDC draft LTP 2021/31

Chrissie McKee

Case/Hearing Manager

Environment Court of New Zealand | Land Valuation Tribunal

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Website: https://environmentcourt.govt.nz/

THE ENVIRONMENT COURT
CHRISTCHURCH

ENV-2017-CHC-90

IN THE MATTER of the Resource Management Act 1991

AND IN THE MATTER of an appeal under section 120 of the Resource Management Act

BETWEEN THE ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED
(Appellant)

AND

WEST COAST REGIONAL COUNCIL and BULLER DISTRICT COUNCIL
(Respondents)

AND

STEVENSON MINING LTD
(Applicant)

ENV-2017-CHC-90
Forest & Bird v Buller District Council and West Coast Regional Council

WITNESS BRIEF

LINDA GRAMMER

DATED: 20 MAY 2018
SUMMARY

I am opposed to the proposal to develop and operate a new open-cast coal mine* at the south-western part of the Mt William Range (Mt Te Kuha, lower Kawatiri river / Buller Gorge) within Mining Permit 41-289 and strongly support the appeal lodged by the Royal Forest and Bird Protection Society to the Environment Court.

My name is Linda Grammer. I am a member of Rural Women NZ and the Buller Tramping Club, and live north of Westport.

I strongly support the position of Federated Mountain Clubs (our national organisation) on the proposed new coal mine on Te Kuha, due to Te Kuha's high ecological, recreational, and cultural values.
See
https://www.fmc.org.nz/2017/12/10/federated-mountain-clubs-says-no-to-te-kuha-mine/

I understand that the proposed coal mine's "footprint" would cause significant destruction of 12ha of (high ecological value) public conservation land and adversely impact on the natural values and mauri of the Westport Water Conservation Reserve (100 ha).

As a member of the public, I expect our public conservation lands of high ecological value and Westport Water Conservation Reserve (Westport residents water supply) to be protected from degradation caused by mining.

I urge Buller District Council (in keeping with section 32 of the Reserves Act) to protect the Westport Water Conservation Reserve's valuable natural features. I understand that under Section 32 of the Reserves Act BDC is required to "protect the features of scenic, natural and biological features of the reserve". I understand Forest and Bird is appealing a recent decision on this matter.

In my view, our local councils (Buller District Council and West Coast Regional Council) have failed (by approving the Stevenson Mining Ltd application) to honour their obligation to manage natural and physical resources in a truly sustainable manner and have acted contrary to the the requirements of the RMA.

I also note that Buller District Council states (in the BDC draft Long Term Plan 2018-28) under "Sustainable Environment"

-"The distinctive character of the environment is retained"

-Natural environment valued & protected

-Quality of natural environment improved and maintained

-The distinctive character of the environment appreciated and retained

I supported all of the above points in my recent submission to the BDC draft LTP 2018/28 but BDC's support for a new open-cast coal mine on Te Kuha contradicts all of the above, which is of concern to local residents and ratepayers like myself.

(see Appendix for page #"s from the BDC draft LTP 2018/28)

In recent years, too much degradation of pristine landscapes in the Buller has been allowed to occur. We now have ugly, linear scars across the faces of the formerly pristine Lyell Range and Mt Rochfort face. The landscape of the Stockton Plateau, including the expansion of the Rockies Mine, is increasingly unattractive. Sub-alpine environments do not heal easily due to slow vegetative growth at high altitudes. We have already lost too much of the natural beauty of our District, which international visitors acclaim, and many local people love and treasure.
Te Kuha's high ecological values and beauty must be protected from inappropriate development like a new open- cast coal mine.

I welcome the Department of Conservation decision to join Forest and Bird's appeal, with Expert Witnesses detailing the Department's legitimate concerns about the proposed mine's adverse effects on Te Kuha's high ecological values including significant indigenous vegetation, significant habitat of indigenous fauna, intactness and ecological integrity, and rare species of conservation concern.

I urge the Department of Conservation to refuse access to Stevenson Mining Ltd/ Rangatira Developments for a new open cast coal mine on Te Kuha.

High Ecological Values of Te Kuha need Protection

I want to see the distinctive character of Te Kuha retained and it's high ecological values (which I understand are not disputed by any party) and rare endangered species/ endemic species protected in perpetuity. In my view the Stevenson Mining proposal for a new mine on Te Kuha is unnecessary and (given the extent of the environmental damage it would cause) the claims by the applicant about the benefits for Westport are exaggerated.

The fact is that on the Denniston plateau the Sullivan mine and Escarpment are lying idle, the proposal for new open cast coal mine in a pristine area (Te Kuha) is ridiculous when other coal mines that exist in degraded areas are not being fully utilized.

I am concerned about what would result in not only the highly visible degradation of an Outstanding natural landscape that this new open cast coal mine would cause, but the destruction of habitat for endangered and rare species and adverse impacts on the water supply for the people of Westport.

The proposed new mine would not only destroy an Outstanding Landscape but destroy the habitat of these and other rare and endangered native species:

Great Spotted Kiwi, kiwi, South Island fernbird, kakariki, rifleman, forest gecko, speckled skink, rare eyebright plants, the largest known population of the rare forest ringlet butterfly as well as the following unique endemic native species including a recently discovered new species of tiger beetle as well as a unique leaf-veined slug. The mine would also cause the destruction of 500 year old native trees including rimu in an area beloved by trampers and hunters (of feral pest animals).

The proposed mine could push Great Spotted kiwi and other endangered species such as South Island fernbird and the West Coast green gecko closer to extinction. This must not be allowed to happen.

Stevenson Mining has yet again (I understand this is the second time that Stevenson has applied to construct a mine at this site, previously without success) overstated the benefits of a new coal mine on Te Kuha to the local community. Short term jobs (for a period of about 15 years) do not justify destroying public conservation lands of high ecological and cultural significance (in an Outstanding Landscape).

If development is to be beneficial to the District over the long term, it must not be at the expense of the natural environment, endangered and endemic native species. I do not find the lawyer's (representing Rangitira Developments) claim that Rangatira will undertake robust "mitigation" and "environmental compensation" within our public conservation lands/ reserve and on adjacent land credible.

How do you "mitigate" felling 500 year old rimu trees within the short time frame (15 years) of the application?
It is impossible.

The applicant's mining proposal is for an area that is the last, untouched portion of the highly unique Brunner coal measures, being part of the north-west Nelson Cretaceous peneplain. Coal mining has already caused extensive destruction to unique ecosystems in the Buller District, with toxins including heavy metals and acidic mine drainage adversely affecting downstream waterways. The Te Kuha area and the town of Westport must be protected from companies like Stevenson Mining/ Rangatira.

In my view, promises that the applicant will "undertake pest control" on our public conservation lands on Te Kuha or the Westport Water Conservation Area is no compensation if Rangitira is allowed to destroy the actual home/

habitat of endangered rare (and endemic) species. The native species (indigenous flora and fauna) are not protected by allowing mining to occur on our public conservation lands or Water Conservation Reserve, even if ground based feral control is done on adjacent areas and at the mine site.

Claims by the applicant that the site can be quickly remediated are not credible. The destruction of the beautiful rimu forest (35 metres high in places) would take hundreds of years to recover. The scars will be visible from Westport including the beautiful walks at the mouth of the Buller river. The beautiful rimu forest at Te Kuha, home of Great Spotted Kiwi and other rare and endangered indigenous flora and fauna must be protected in perpetuity.

I support the evidence of the Crown experts who note the harm that this proposal will do to endangered and rare native species and those with geological expertise who note the unsuitability of the site for an open cast mine. I understand this proposal has been turned down before by BDC. If the applicants proposal is allowed to proceed, it would have a significant and negative permanent impact on rare and threatened (and endemic) animal and plant species.

WATER QUALITY- DEGRADATION THAT WOULD BE CAUSED BY THE PROPOSED MINE

Te Kuha waterways are unmodified and of high value (and should remain this way).

The proposed mine would cause degradation of the Westport Water Conservation Reserve and toxic discharges to side creeks and the Kawatiri/ Buller river. Stevenson Mining Ltd's own aquatic ecologist stated (when he gave evidence at the Westport hearing):

"The mine would discharge extra sediment and heavy metals into tributaries of West and Camp creeks which become part of Coal creek and discharge into the Buller River."- Ian Boothroyd, 19 September 2017 Westport News

Large-scale opencast mining in particular permanently changes natural landscapes and destroys high value ecological areas. It can result in significant water pollution. The loss of habitat means the loss of aquatic habitat and associated aquatic flora and fauna (which is unacceptable).

The proposed mine access road would be through a mix of old-growth indigenous forests on the lower slopes leading up to the plateau, and the

indigenous shrublands and herb fields characteristic of the Buller plateau, crossing wild, beautiful and unmodified streams carrying the purest water.

The adverse effects to the Te Kuha waterways include but are not limited to: Loss of pristine, beautiful waterways (also visited and enjoyed by trampers and hunters), loss of quiet enjoyment, loss of water quality, loss of indigenous aquatic species and habitat, adverse impacts on the water quality of the Buller River, with potential negative implications for white baiting. I am mindful of what has happened to the beautiful Ngakawau river (below an existing mine site), which is still (despite recent best practice efforts to clean up the river) highly degraded.

ADVERSE IMPACTS ON TOURISM AND LOCAL PEOPLE

The huge draw card of our indigenous ecosystems and the beautiful landscapes in which they are found is central to the current surge in tourism that helps drive the NZ economy. That's why (along with the way many local residents highly value Te Kuha and the Westport Water Conservation Reserve) it makes so much sense to protect them.

The biodiversity and productive ecosystems / ecosystem services of Te Kuha and the Westport Water Conservation Reserve must be protected as these are highly important to the health and wellbeing of the people of Westport

The proposed mine will damage Westport's important "West Coast: Untamed Natural Wilderness" Brand and make tramping in the Buckland Peaks unpleasant (as the view from Caroline Terrace/ Virgin Flat/ Buckland peaks will be adversely effected with a devastating visual impact). The negative visual impact would be during the day and potentially by night as the applicant can easily apply for a new resource consent to do permanent 24/7 night shift, which has been granted in the past to Bathurst Resources.

Not only would having a new open cast coal mine on the West coast have a negative effect on NZ's global image but it will damage the national image of Westport and its suitability as a destination for tourism (and in particular eco-tourism).

The main street of Westport (Palmerston) has various attractive signs proclaiming "WEST COAST- UNTAMED NATURAL WILDERNESS". Approval of this application for a destructive, extractive new coal mine on highly visible (from Westport and surrounding area)

public conservation lands would damage this valuable brand. It would delay the badly needed transition to a West Coast economy that is not dependent on the polluting extraction of non-renewable resources.

Aside from the significant threat to biodiversity – unique native species, the web of life in this particular place – the proposed mine on Te Kuha would have devastating visual impact when seen from Westport, the mouth of the Kawatiri river (where locals and tourists go to recreate), and the surrounding mountains, including (as already mentioned) the spectacular Buckland Peaks on the southern side of the Buller gorge.

This mine, if given the green light, would be a symbolic visual sore shaping the image and reputation of Westport among other New Zealanders and international tourists for generations.

The proposal, while needlessly harmful to the Westport-Buller Gorge environment, also flies in the face of the biggest challenge of our time – climate change. New Zealand has committed to act. Regardless of where coal is burned if it's burned it increases global climate disruption.

The Buller region, the Coast, and many Kiwis & their families, who almost by definition love the outdoors, can do better than open-cast coal mining, which is permanently destructive, polluting, harms valuable ecosystems, and simply outdated.

NOISE & LIGHT POLLUTION

Noise pollution from the proposed mine will be a problem for some Westport residents, dependent very much by wind direction. Light pollution is likely to be a problem for Westport residents including those who live near the Orawaiti/ Sargeants Hill area if the application goes ahead during the stated hours that Stevenson Mining has sought permission for (early in the day and late in the afternoon/ evening). Night pollution (from lighting towers and vehicles) would also be a problem as Stevenson Mining is likely to apply for a new resource consent for permanent night shift 24/7 (as other mining companies like Bathurst has done- they do not let valuable mining equipment lie idle overnight).

On top of all the unacceptable adverse impacts that a new open cast mine on beautiful Te Kuha would cause, the truth is we can't afford to burn coal that would be obtained from Te Kuha without going over 2 degrees, and staying within 2 degrees is Government policy

CLIMATE CHANGE

Buller District is already feeling the effects of climate change, with severe storms and coastal erosion threatening local communities and (for example) the Granity school.

Allowing this mine to proceed would not only destroy valuable high value ecosystems and harm rare endangered (and endemic) native species but burning the coal mined would contribute to taking us over 2 degrees (Paris Climate Change Agreement) and staying within 2 degrees is government policy in New Zealand. So why would a new coal mine, especially in such a pristine environment (Te Kuha) be permitted?

In addition to the permanent damage that the proposed open cast coal mine would cause to the unique ecological values and indigenous biodiversity/ Outstanding Landscape of Te Kuha, and damage to water quality (side creeks, the Buller river, the Westport Water Conservation Reserve), our growing tourism industry, the peace and quiet/ well being of the people of Westport, the contribution a mine would make to climate change is unacceptable.

Background:
NZ is a signatory to the Paris Agreement 2015, which agreed to do everything possible to keep temperature rise to less than 2 degrees, and if possible less than 1.5 degrees. Information is readily available at the IPCC website
Intergovernmental Panel on Climate Change
http://www.ipcc.ch/
and at
http://www.mfe.govt.nz/climate-change/why-climate-change-matters/global-response/paris-agreement

Thank you for the opportunity to be heard in Westport. Please keep me informed of any hearing. I have some photographic evidence I would like to table on the day. Thank you.

ENDS

* The open-cast coal mine's "footprint" would cover 144ha, including 12ha of conservation land, 100ha of the Westport Water Conservation Reserve and the remainder on private land.

Original submission by Linda Grammer available online:

http://www.wcrc.govt.nz/our-services/resource-consents-and-information/Documents/Submitters%20Evidence/Grammer,%20Linda%20%E2%80%93%20Updated%20Written%20Submission.pdf
Date:
Monday, 25 September 2017 hearing Westport

and

MEMORANDUM IN RE RESOURCE CONSENT APPLICATION (Wi Pere Trust entity) TO MINE TE KUHA - MY ANCESTRAL MOUNTAIN

TO: Ms Linda Grammer Buller District

FROM: Ms Iri Sharon Rose Sinclair BA LLB – Nihorere whanau-whanui
25th September 2017

APPENDIX:

In my recent submission in response to the Buller District Council draft Long Term Plan 2018/28 I supported the following content

P. 44 it states under the heading "Sustainable environment"

"the distinctive character of the environment is retained"

see also

on p. 47 Sustainable Environment

"Water management and quality"
"Visitor level of appreciation"

and then

"Council Advocates"

-Natural environment valued & protected

-Quality of natural environment improved and maintained

Climate Change
p. 27 "Climate change, it affects us all"
p. 28 "what council is doing about climate change" (in my view BDC needs to do more)

p. 51
Point 4 (Sustainable Environment)
The distinctive character of the environment appreciated and retained.

What does council want to achieve?
-An appropriate balance between development and protection that promotes the diversity and sustainability of our natural environment

How will council contribute to achieving these objectives?
-Develop policies and implement practices that enhance our environmental sustainability and natural diversity
-Recognise and preserve the essential elements of the district's landscape that contributes to Buller's unique natural identity

p. 52
Point 5 (Prosperity)
A thriving resilient and innovative economy creating opportunities for growth and employment

What does council want to achieve?
Support sustainable responsible development, innovation and excellence

How will Council contribute to these objectives?

-Develop within a regulatory framework that supports sustainable economic growth without compromising the environment

Comment: a new open cast coal mine on Te Kuha does not fit the above stated goals/ criteria

From: Linda Grammer
To: BDC Long Term Plan
Cc: BDC Info
Subject: further Evidence (Iri Sinclair submitted Evidence as part of Linda Grammers Evidence re: Te Kuha) as part of Linda Grammer/Ian Mulholland submission to BDC draft LTP 2021/31
Date: Tuesday, 18 May 2021 3:36:02 pm
Attachments: Te Kuha Submission - Nihorere whanui.docx
nihorere whakapapa.pdf

att: BDC draft LTP 2021/31 team

Further information as part of our submission to the BDC draft LTP 2021/31

Submittors:

Linda Grammer and Ian Mulholland

Seddonville

(We wish to be heard)

Tēnā anō koutou katoa:

For your information, please see the attached Evidence (Iri Sinclair Evidence submitted to the Environment Court as part of the Evidence by Linda Grammer in May 2018 regarding Stevenson Mining/ Rangitira Developments Ltd proposal for a large open cast coal mine on Te Kuha above Westport

ENV-2017-CHC-090 - Royal Forest and Bird Protection Society of NZ Inc v BDC & WCRC

This Evidence is supplementary to our submission to the BDC draft LTP 2021/31 and relevant to the Climate Change, sustainability, indigenous biodiversity, Outstanding Landscapes and other environmental issues as well as council obligation to respect Te Tiriti o Waitangi and act on the concerns/ wishes of local mana whenua regarding indigenous biodiversity and other natural values (as well as cultural)

Submitted by Linda Grammer and Ian Mulholland

(this Evidence is part of our submission to the BDC draft LTP 2021/31

Chrissie McKee

Case/Hearing Manager

Environment Court of New Zealand | Land Valuation Tribunal

| 20 Lichfield Street | PO Box 2069 | WX11113 | Christchurch
E-mail: Chrissie.McKee@justice.govt.nz

Website: https://environmentcourt.govt.nz/

MEMORANDUM IN RE RESOURCE CONSENT APPLICATION BY RANGATIRA HOLDINGS LTD (Wi Pere Trust) TO MINE TE KUHA - MY ANCESTRAL MOUNTAIN

TO: Ms Linda Zelka Grammer
Seddonville
Buller District

FROM: Ms Iri Sharon Rose Sinclair BA LLB

26th September 2017

Tena koe,

Thank you for contacting me about this resource consent application, which I was completely unaware of, and taken aback to learn of. Please find below some points I wish you to put to the consent authority considering the application, which are pertinent to my status as tangata whenua of the land which Rangatira Holdings Ltd seeks resource consent to mine.

I submit that the application for resource consent/s should be declined. My reasons are set out below – but in summary concern Resource Management Act (1991) sections 6(e), 7 and 8, and the Fourth Schedule to the Act which sets out the requirements for an Assessment of Effects etc.

Thank you for being so kind as to agree to including the following information on behalf of myself and our whanau whanui, hapu & iwi etc as part of your own submission opposing this resource consent application. Nga mihi nunui ki a koe!

Please let me know how you go. If there is any opportunity for me to speak to my submission I would be happy to do so – either in person or via skype etc. As you know I reside in Otautahi Christchurch where I work for our Wairewa Runanga Natural Resources Komiti, as I am also Ngati Irakehu. I thank you for contacting me from the bottom of my heart.

No reira e hoa, kai te mihi, kai te mihi, kai te mihi!

Heoi ano, na

Iri Sinclair BA LLB
Papa Associates
Resource Management

Ko Tuhuru te tangata

Ko Arahura te awa

Ko Poutini te taniwha

Ko Pounamu te taonga

Ko Mawhera te whenua

Ko Ngati Waewae, Poutini Ngai Tahu nga hapu

Waitaha, Ngati Mamoe, Kai Tahu oku iwi!

Ti hei Mauri Ora!

I am a Resource Management Consultant, with a law degree from the University of Canterbury specialising in natural resource (environmental) law. I also have a Bachelor of Arts degree (Art History and Anthropology) from the University of Auckland. I am Ngai Tahu and work and reside in my turangawaewae Te Waipounamu. I am a former member of Nga Tauira Maori, the Maori Students Association of the University of Auckland – Te Whare Wananga o Tamaki Makaurau.

Following the enactment of the Resource Management Act 1991 I was employed as the Kaitakawaenga/Iwi Planner by the West Coast Regional Council (WCRC) and also acted as the Secretary of the Treaty Partnership planning committee 'Te Komiti Rangapu'. That standing committee included elected Regional Councillors and hapu representatives from throughout Te Tai Poutini.

I designed and managed the tangata whenua consultation process for the West Coast Regional Policy Statement, and the West Coast Regional Coastal Plan. The WCRPS chapter 'Issues of Significance to Poutini Ngai Tahu' was penned by myself after a thorough consultation process and sign off by tangata whenua.

My appointment to that role was requested and endorsed by Arahura Kahui Kaumatua and my esteemed Uncle Mr Eli Weepu of Arahura Pa, and our tribal hapu council (Runanga). During my five year tenure at the WCRC I also developed a publication for the Council - 'Tangata whenua Consultation Guidelines for Resource Consent Applicants' which every resource consent applicant received. I was also seconded at that time to Maruwhenua – the Maori Secretariat of the Ministry for the Environment.

In 2004 I returned to study at the University of Canterbury and graduated LLB in 2009. My specialty is Natural Resource Law, and my lecturer in this subject was Dr David Round. I am also interested in Jurisprudence and the Common Law.

Since that time I have worked as a Resource Management Consultant. Presently I work for Wairewa Runanga and Te Kete o Wairewa Ltd undertaking a range of work in Canterbury.

Ka nui taku mihi mahana ki a koutou.

I request that the consent authority considering the application by 'Rangatira Developments Ltd' decline ALL of the resource consents sought for the Te Kuha mining project enterprise, for the following reasons.

The Arahura Deed of Purchase (1860) includes a map which defines my tribal rohe or area recognised by the Crown – extending from Kahurangi Point (North of Karamea) south to Piopiotahi (Milford Sound, Fiordland) from the coast inland to the peaks of the Southern Alps.

This year my iwi Ngai Tahu commemorate the 20th anniversary of the settlement of the Ngai Tahu claim to the Waitangi Tribunal by the Crown. Our hui a tau (AGM) is on 23rd November 2017 at Tuahiwi Pa.

Regrettably the fact of our Treaty settlement two decades ago has not engendered any greater understanding of our people and our culture and traditions on the West Coast (Te Tai Poutini) by developers, as evident by the resource consent application concerning a proposal to mine my ancestral mountain Te Kuha.

We have a saying in my Nihorere whanau: "We fight from the Coast".

The proposed 116 ha mine footprint is located over two different types of publicly owned Crown. I understand that the land tenure of this 'public' or Crown land includes the following:

(1) Public conservation land administered by the Department of Conservation (DOC) as Stewardship land under the Conservation Act 1986; and
(2) Land managed by the Buller District Council under the Reserves Act 1977 as 'Local Purpose (Water Conservation) Reserve'.

Much of the proposed site (approximately 100 hectares) is land held by the Buller District Council as a water conservation area. It seems logical that this land would have been designated a water conservation area for the important purpose of providing a safe potable fresh water supply for the town of Westport.

Any alternative usage of this parcel of land must therefore be ultra vires the regulations or statutes under which the Crown and local government in Buller originally set aside the area and deigned it a 'Water Conservation Reserve area'. Even if this alternative purpose – land disturbance and other activities related to coal mining – was

valid at law, it is my submission that the application needs to be declined in its entirety under the Resource Management Act 1991 as a matter of law.

Water quality issues are a hot topic in local government circles in Aotearoa New Zealand, in the wake of the outbreak of waterborne disease in the Hawkes Bay due to the negligence of the Hastings District Council. A more recent outbreak of waterborne disease in the Hawkes Bay region indicates that Council's with legal duties regarding potable water supply to their communities and ratepayers really need to take their legal responsibility for protecting healthy water sources most seriously indeed. Typhoid is a potentially fatal disease. A number of residents in that district are now ill and have been hospitalised for urgent treatment according to recent news reports.

We have a whakatauake which reflects our Maori world view of the importance of health and wellbeing of people and communities, and thus it follows that wai Maori or drinking water must be protected for the community of Westport:

He aha te mea nui? He tangata, he tangata, he tangata! Translated this proverb asks the question: What is the most important thing? It is people, it is people, it is people!'

Our rich gold and coal mining history here in Te Tai Poutini is widely known and has been written about in many published tomes. Gold was in fact discovered by Chief Tarapuhi the eldest son of Tuhuru.

Some of the negative 'legacy' issues arising from the historical mining that took place in the 19th century throughout the West Coast region continue to be problematic, with acid and heavy metal leachate from old mine workings creating serious health risks in numerous waterways, which do not meet National Standards for safe contact (eg swimming, whitebaiting etc). An example of this is at Paroa in the Grey District.

The West Coast Regional Council maintains a register of contaminated sites as required by law. The remediation of these sites is financially costly and often imposes a burden on the present generation of ratepayers.

Therefore, consent authorities ought to have these facts at front of mind when considering applications for mining activities and other activities which could have a downstream effect or a cumulative effect on water quality now or in the future, which is necessary for potable public water supply.

On the face of it, it seems obvious that this proposal to carry out mining operations on land set aside for fresh water conservation is at odds with the RMAct (1991), in particular the overarching sustainable purpose of the Act.

At any rate, it would appear, that the Buller local authorities historically in their wisdom saw fit to set aside this land specifically to safeguard the water supply of the Westport and surrounding communities.

It also needs to be taken into account that West Coast tangata whenua have in the past expressed concern that identified toxic sites which are contaminated by toxic waste and/or leachate or discharges from old mine workings or tailings etc, need to be remediated as a priority. Creating problems for future generations of West Coasters is not a good idea, and I can confidently say that it is not something that we Poutini Ngai Tahu people have ever supported. Our world view is neatly set out in the WCRPS which I cite in support of this part of my submission.

In addition, the West Coast Regional Policy Statement contains issues of significance to the tangata whenua, which are required to be taken into account in the consideration and determination of resource consent applications, including that of the application in question.

I might add, that I was working as 'Kaitakawaenga – Iwi Planner' for the West Coast Regional Council in the early 1990's following the enactment of the Resource Management Act (1991). It was my responsibility to arrange the consultation hui and wananga for Poutini Ngai Tahu, and also to act as the Secretary of the 'Komiti Rangapu – Treaty Partnership Committee' which was then a Standing Committee of the West Coast Regional Council. If I remember rightly the relevant chapter in the West Coast Regional Policy Statement (WCRPS) was entitled "Issues of Significance to Poutini Ngai Tahu".

The WCRPS will have by now undergone a statutory review. However, I am confident that the issues as stated back then therein remain the same. Therefore, I refer the Hearings Commissioner/s and the Applicant 'Rangatira Holdings Ltd' to the WCRPS which I cite in support of my submission that this resource consent application to establish a mining operation on our maunga Te Kuha must be declined in full.

Turning now to the other land that would be impacted if these consents were granted, I understand that the remaining area within which the resource consent applicant wants to operate a coal mine is on Conservation Land held by the Crown for the purposes of conservation.

Mining purposes and conservation purposes are in my view mutually exclusive concepts.

The privatisation by stealth by the Crown in the guise of DOC on the West Coast and throughout New Zealand, by way of 'public-private' partnerships has drawn the wrath of ordinary Kiwi's concerned at the loss of public access to our National Parks and other conservation lands, as private organisations such as the 'Old Ghost Road Trust' etc have been seen to enter contractual agreements with the Minister of Conservation to build tourist facilities, new bridges and roads, fell ancient Kahikatea and other native trees, and encourage hoards of mountain cyclists in the Buller back country between Lyell in the Buller (Kawatiri) Gorge and Mokihinui-Seddonville, in the Mokihinui Ecological area, which is dangerous for people like me – Ngati Waewae – who like to walk in peace in the bush.

Perhaps the new MMP coalition Government will revisit the Conservation Act (1987) and review changes to that and other pieces of legislation and regulations which have eaten away at public access to bush walks, tramping, deerstalking and hunting in our beautiful natural native forest areas in Te Tai Poutini, through granting leases, licenses and concessions to private business interests who profit from their exploitation of the public conservation estate. I live in hope.

My concerns regarding the proposal relate in particular to my being tangata whenua and a direct descendent of Tuhuru & Papakura of Ngati Waewae, Poutini Kai Tahu.

Tuhuru was the paramount chief of Te Tai Poutini whose mana extended over the Kawatiri or Buller District including Te Kuha and the environs of our maunga Te Kuha. This fact has been recognised by numerous official enquiries, and the Crown eg Young Commission in the 19th century which held hearings in Greymouth at which my tupuna gave evidence, and the Waitangi Tribunal.

My whanau come from the Mataamua line – the matriarchal chiefly line. My Great-Grandmother Kura Arapata Horau was a member of the Mawhera Land Committee in the early 20th Century. She married my Poua Tame West and together they farmed our whanau land beside the famous Arahura River.

My late Aunt Rt Hon Whetu Tirikatene Sullivan was the first Minister for the Environment in the 1972 Labour Government and was the second longest serving Member of Parliament for the Labour Party. Her father Sir Eruera Tirikatene was my Grandmother's first cousin – their respective mothers were sisters (Kura Arapata Horau & Tini Arapata Horau who married Mr Tregerthen (anglicised to Tirikatene).

My cousin Rt Hon Sandra Lee Vercoe QSM was the Minister of Conservation in the Labour-Alliance Government led by Prime Minister Rt Hon Helen Clark.

We are all direct descendants of Papakura through Nihorere who was born here about the time of the Battle of Waterloo, and we have over 70 generations of custom, usage and tino rangatiratanga here in Te Tai Poutini and Te Wahi Poenamu. Ka tangi te titi, Ka tangi te kaka!

I give my pedigree or whakapapa as it relates to my turangawaewae Te Kuha, to show my tangata whenua status under the RMAct (1991):

Tuhuru=Papakura
/ I
Nihorere = Te Niho (Ngati Rarua Rangatira) *from North of Kahurangi Point where he was still living when Heaphy was guided into our tribal area by our relative Kehu et al from Ngati Apa in 1846.*
/
Kapaki Wikitoria (the daughter of Nihorere) = Pokaka aka Arapata Horau (*after whom Albert Street in Greymouth is named – as it was the site of their town residence. Arapata Horau was the Native Assessor for Greymouth which was the equivalent of a District Court Judge. He and Kapaki gifted the land for the first Anglican Church in Greymouth which was lost in a fire).*
/
Kura Arapata Horau = Tame Whakamaua Pihawai West
/
Roka Te Hakamatua Pihawai West = Cyril Seymour Johnson
/
Iri May Johnson = Albert Joseph George Barber
/
Sharon Rose aka Iri Sinclair nee Barber.

It must be emphasised that when Heaphy staggered (with the assistance of dedicated Maori guides without whom he would have died), down the West Coast in 1846 he found our people had cultivated hundreds of acres on the south bank of the Kawatiri (Buller) River in both taro and potatoes. This was a practical demonstration of our sovereignty or mana motuhake, mana whenua, te tino rangatiratanga over the northern West Coast which we call Te Tai Poutini. Interestingly during that 1846 whitebait season, Mr Heaphy also saw one of our tohunga conducting traditional customary rites relating to the self-management of our whitebait fishery on the Kawatiri or Buller River.

My pepeha set out above upholds these facts.

If resource consent is granted, there will be major detrimental environmental effects upon my role as a kaitiaki for Te Kuha, and the role my whanauka play in taking care of our environment properly, to uphold the mana of our illustrious tipuna.

There are numerous rare and threatened species of flora and fauna in the application area at Te Kuha, which are 'Taonga Species' as identified in the Ngai Tahu Settlement Act. Others are 'taonga' in the sense that word is used in Te Tiriti o Waitangi (see s.8 RMAct 1991).

Te Kuha is a mighty mountain which is part of an outstanding ancestral Maori landscape highly visible from Westport and the lower Buller Gorge, where our fighting Pa was – as is recorded on historic maps, and known to archaeologists and the former NZ Historic Places Trust, now called 'Heritage New Zealand'..

I am unaware as to whether the West Coast Regional Council followed through on the WCRPS by undertaking a 'Silent File' project such as that included in the Canterbury Regional Policy Statement, which Komiti Rangapu agreed to do in the 1990's. However, I refer you to the 'Mahaanui Iwi Management Plan 2013 which is recognised in all planning documents by Environment Canterbury (ECAN) and the Christchurch City Council, which contains information relating to the Silent File register. This Iwi Management Plan (IMP) has been written by the Ngai Tahu Papatipu Runanga in the Canterbury and Horomaka or Banks Peninsula/Lake Ellesmere rohe.

I have sincere concerns that the application site may include wahi tapu and other sites of significance to myself, my whanau and our hapu and iwi, which cannot be made certain without some research into the matter, and a full and proper site visit etc. In any event, the removal of our mountain top is non-negotiable and cannot be allowed to proceed under any circumstances.

The Assessment of Effects is inadequate due to inadequate consultation with tangata whenua, and no full and proper AEE in terms of the special relationship of tangata whenua and our culture and traditions with our lands, waters and other taonga under the RMAct 1991.

Lastly, I would ask the Commissioner/s to ask the applicant company – which I understand has a relationship to the Wi Pere Trust, whether the Directors and Shareholders of the applicant legal entity, or the related Trust, would be happy for myself, or one of our Ngai Tahu or hapu companies, or Trusts named after one of our illustrious tipuna, to make an application for a resource consent to remove the top off our other sacred mountain Hikurangi in our ancestral homelands of Te Tairawhiti, for the purposes of mining coal or some other activity?

My tipuna Rt Hon H.K Taiaroa MP (and for a brief period Mr Ihaia Tainui MP the tipuna of my Uncle Eli Weepu of Arahura Pa) sat in the Upper House of Parliament after 1867 with Wi Pere MP and were all on the Native Affairs Select Committee when Fenton CJ and Premier Fox ran the Law Courts and Colonial then Settler Government respectively. The Maori Members of Parliament all knew each other well and supported each other.

I would never entertain the notion of going into another tribal rohe to takahia upon the mana of the chiefs of that place.

Worse still is that we are related to Te Aitanga a Mahaki. According to our tipuna Tikao (a recognised whakapapa expert and the inaugural Chairman of the Kotahitangi Maori Parliament at Papawai Marae), our Ngai Tahu whakapapa is senior to Ngati Porou who are our much loved relations whom we left behind in Te Tairawhiti to take care of our sacred mauka Hikurangi, while we came South to Aoraki (Mt Cook), to Te Kuha overlooking the Kawatiri River, to Tuhua standing beside our Arahura River, and Mt Tutoko in the southern part of Tai Poutini.

Whāia te iti kahurangi ki te tūohu koe, me he maunga teitei.

Pursue excellence – should you stumble/bow your head, let it be to a lofty mountain.

This submission has been made on behalf of my lofty mountain Te Kuha!

No reira, Ka nui te mihi ki a koutou

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FILE: 318