I hereby give notice that an ordinary meeting of the Waiheke Local Board will be held on:

**Date:** Thursday, 31 January 2019  
**Time:** 5.15pm 
**Meeting Room:** Local Board Office 
**Venue:** 10 Belgium Street  
Ostend  
Waiheke

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**Waiheke Local Board**

**OPEN AGENDA**

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**MEMBERSHIP**

Chairperson
Cath Handley

Deputy Chairperson
Paul Walden

Members
Shirin Brown
John Meeuwsen
Bob Upchurch

(Quorum 3 members)

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**Safia Cockerell**  
Democracy Advisor - Waiheke  

24 January 2019

Contact Telephone: 021 283 8212  
Email: safia.cockerell@aucklandcouncil.govt.nz  
Website: www.aucklandcouncil.govt.nz

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**Note:** The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. Should Members require further information relating to any reports, please contact the relevant manager, Chairperson or Deputy Chairperson.
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1 Welcome

Kua uru mai a hau kaha, a hau maia, a hau ora, a hau nui,
Ki runga, ki raro, ki roto, ki waho
Rire, rire hau…pai marire

Translation (non-literal) - Rama Ormsby
Let the winds bring us inspiration from beyond,
Invigorate us with determination and courage to achieve our aspirations for abundance and sustainability
Bring the calm, bring all things good, bring peace….good peace.

2 Apologies

At the close of the agenda no apologies had been received.

3 Declaration of Interest

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have.

4 Confirmation of Minutes

That the Waiheke Local Board:

a) confirm the ordinary minutes of its meeting, held on Thursday, 13 December 2018, as a true and correct record.

5 Leave of Absence

At the close of the agenda no requests for leave of absence had been received.

6 Acknowledgements

At the close of the agenda no requests for acknowledgements had been received.

7 Petitions

At the close of the agenda no requests to present petitions had been received.

8 Deputations

Standing Order 7.7 provides for deputations. Those applying for deputations are required to give seven working days notice of subject matter and applications are approved by the Chairperson of the Waiheke Local Board. This means that details relating to deputations can be included in the published agenda. Total speaking time per deputation is ten minutes or as resolved by the meeting.

8.1 Submission on the rollout of the 5G network and the impacts on human health - Michael Fleck and Susan Pockett

Te take mō te pūrongo
Purpose of the report
1. To provide Michael Fleck and Susan Pockett the opportunity to address the board on the rollout of the 5G network and the impacts on human health.
Michael Fleck and Susan Pockett will be in attendance to present to the board on the roll out of the 5G network and its impact on human health.

Recommendation
That the Waiheke Local Board:

a) thank Michael Fleck and Susan Pockett for their attendance and presentation.

Attachments
A Deputation - Rollout of the 5G network and the impacts on human health supporting material .......................................................... 95

Public Forum
A period of time (approximately 30 minutes) is set aside for members of the public to address the meeting on matters within its delegated authority. A maximum of 3 minutes per item is allowed, following which there may be questions from members.

Rabbit control on Waiheke - Terry Cammell
Terry Cammell and Gordon Cuthbert will be in attendance to address the board on their concerns around rabbit control on Waiheke.

Recommendation
That the Waiheke Local Board:

a) thank Terry Cammell and Gordon Cuthbert for their attendance and presentation.

Dust issue on Taraire Street - Deja Finn
Deja Finn will be in attendance to address the board on his concerns around dust from the unsealed Taraire Street.

Recommendation
That the Waiheke Local Board:

a) thank Deja Finn for his attendance and presentation.

Attachments
A Photos of dust on Taraire Street........................................................................ 131
10 Extraordinary Business

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

“An item that is not on the agenda for a meeting may be dealt with at that meeting if-

(a) The local authority by resolution so decides; and

(b) The presiding member explains at the meeting, at a time when it is open to the public,-

(i) The reason why the item is not on the agenda; and

(ii) The reason why the discussion of the item cannot be delayed until a subsequent meeting.”

Section 46A(7A) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

“Where an item is not on the agenda for a meeting,-

(a) That item may be discussed at that meeting if-

(i) That item is a minor matter relating to the general business of the local authority; and

(ii) the presiding member explains at the beginning of the meeting, at a time when it is open to the public, that the item will be discussed at the meeting; but

(b) no resolution, decision or recommendation may be made in respect of that item except to refer that item to a subsequent meeting of the local authority for further discussion.”
Endorsement of Electric Island Waiheke
File No.: CP2019/00353

Te take mō te pūrongo
Purpose of the report
1. To seek the board’s endorsement of Electric Island Waiheke as a key organisation in leading Waiheke to fossil fuel free status by 2030.

Whakarāpopototanga matua
Executive summary
2. Electric Island Waiheke attended the public forum of the Waiheke Local Board on 6 December 2018, requesting endorsement for their work and a letter of support. The board resolved as follows:

Resolution number WHK/2018/242
That the Waiheke Local Board:

a) thank Doug Wilson and Darleen Tana for their attendance and presentation.

b) agree in principle to endorse Electric Island Waiheke and request Electric Island Waiheke to draft a letter requesting support for consideration at the 31 January 2019 business meeting.

3. Electric Island Waiheke was formed in October 2018 to make Waiheke Island fossil fuel free by 2030.

4. The organisation is in the process of becoming a charitable trust with an establishment board of experienced local business people.

5. The goals of Electric Island Waiheke align with the Waiheke Local Board Plan, the principles of Essentially Waiheke and with the Auckland Climate Change Plan.

6. There do not appear to be any significant risks which would give rise to advice against the board endorsing Electric Island Waiheke.

Ngā tūtohunga
Recommendations
That the Waiheke Local Board:

a) endorse Electric Island Waiheke in its efforts to make Waiheke fossil fuel free by 2030.

b) delegate the Chair, Cath Handley to review and approve a letter of support for Electric Island Waiheke.

Horopaki
Context
7. Electric Island Waiheke has made a request to the Waiheke Local Board for endorsement, and for a letter of support. The letter of request is included as Attachment A in this agenda report.
8. Electric Island Waiheke came together in October 2018, as a result of a concerned group of islanders wanting to take action on climate change. The organisation was launched officially on 30 November 2018 at an event at the Waiheke Returned Services Association Clubrooms, with the stated goal of making Waiheke fossil fuel free by 2030. This would mean that all petrol and diesel powered vehicles and machinery on the island would be converted to electricity within 12 years. Electric Island Waiheke’s vision is for Waiheke Island to become the world’s first electric vehicle-only residential island in the world.

9. Electric Island Waiheke is in the process of becoming a charitable trust and includes the following establishment board: Maxwell Parkin (Chair), Douglas Wilson (Secretary), Vern Whitehead, Darleen Tana and Mark Russell. Further biographical information is detailed in the Electric Island Introduction which is included in this agenda report as Attachment B.

10. Electric Island Waiheke plans to implement its vision in the following manner:
   - run an extensive promotional campaign to promote the uptake of electric vehicles (EVs) on the island and to dispelling the myths around EVs.
   - work with local groups and individuals to promote the use of EVs and advise on what to expect from an EV, including how to purchase, maintenance and repair on EV.
   - Electric Island Waiheke will be putting together packages with automotive retailers to facilitate easy purchase of EVs for islanders.
   - develop public charging opportunities which it sees as critical for informing, promoting and reassuring EV owners that the infrastructure is in place for the new technology.

Tātaritanga me ngā tohutohu
Analysis and advice

11. Electric Island Waiheke appears to be a credible organisation which has an establishment board with the necessary skills and expertise to transition the island to a future with less reliance on petrol and diesel energy sources.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views

12. The main council group impacted will be Auckland Transport. Potential future direction could include policy in support of electric infrastructure for cars, commercial vehicles and ferries. Provision for electric vehicles is being progressed and the Waiheke Resources Trust has requested provision of vehicle parking on a road reserve site in Oneroa with a fast charging station.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

13. The Waiheke Local Board supports initiatives which minimise the impact of climate change and the Waiheke Local Board Plan 2017 on page 25, states that the board will:
   “Partner with community organisations and businesses to explore and support sustainable and low carbon initiatives.”

14. The Essentially Waiheke Refresh 2016 was a major community consultation undertaken by the board on the future of the island. The vision of Electric Island Waiheke strongly aligns with the principles of Essentially Waiheke which came through from consultation.

15. The initiative also aligns strongly with Auckland Council’s Climate Action Plan which the Waiheke Local Board had input into during the recent update.

16. Endorsement of Electric Island Waiheke would therefore be consistent with the current direction of the board.
**Tauākī whakaaweawe Māori**  
**Māori impact statement**

17. The impacts of climate change will affect all peoples, marine and terrestrial environments and the community will benefit from mitigating these effects. Electric Island Waiheke intends to work with mana whenua and tangata whenua organisations on Waiheke to progress its fossil fuel free goals.

**Ngā ritenga ā-pūtea**  
**Financial implications**

18. There currently are no financial implications for the local board by endorsing Electric Island Waiheke and no funds have been requested. Should Electric Island Waiheke apply for funding in future, any application would be considered in line with the board’s contestable Community Grants Programme alongside other applications.

**Ngā raru tūpono me ngā whakamaurutanga**  
**Risks and mitigations**

19. There is a risk that endorsing one organisation to lead this fossil fuel free status, could deter other groups from progressing climate change initiatives. This risk can be mitigated by delivering clear messaging in the local community that the board may also endorse other groups which are aligned with the direction of the board.

20. There do not appear to be any significant risks which would give rise to advice against the board endorsing Electric Island Waiheke.

**Ngā korēngā ā-muri**  
**Next steps**

21. Subject to board approval, a letter of support will be drafted for review and approval by the board chair.

**Ngā tāpirihanga**  
**Attachments**

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<tr>
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Mark Inglis

To: Vern Whitehead
Subject: RE: Waiheke Local Board endorsement of Electric Island Waiheke initiative

Dear Waiheke Local Board,

We would like to thank you for the support shown to our Electric Island Waiheke initiative by the Waiheke Local Board.

It has been greatly appreciated.

Now that we are moving from our public launch to a fully-functioning group, we seek a more formal endorsement by the Waiheke Local Board for our group.

As we are starting to deal with electricity lines companies and EV public charging station suppliers and the like, we now seek a letter of support from the Board.

It would be appreciated if you could include this request on the agenda for the next meeting of the Board, on January 31.

Thanks for your consideration.

Sincerely

Vern Whitehead, for Electric Island Waiheke
Electric Island Waiheke – An Introduction

Waiheke Island aims to be fossil-fuel-free by 2030

Vision and Establishment

Electric Island Waiheke (E IW) came together in October 2018, as a result of a concerned group of islanders wanting to accelerate the uptake of electric vehicles on the island, and assist action on climate change. The group was launched officially on 30 November 2018 with the stated goal of making Waiheke fossil-fuel-free by 2030. The aim is that all petrol and diesel powered vehicles and machinery will be converted to electricity, including hydrogen, within 12 years. E IW’s plan to transform Waiheke Island into the world’s first electric vehicle-only residential island in the world has been sparked into action.

Special guest at the launch was Christina Bu, the secretary general of the Norwegian Electric Vehicle Owners Association, who challenged Waiheke to follow in Norway’s footsteps in the switch to electric vehicles.

Establishment Board

Electric Island Waiheke is in the process of forming a charitable trust and includes the following establishment members:

Chair Max Parkin - Retired in November 2007. Max brings vast experience and a life-long involvement with the dairy industry to the board table. A former CEO of Southland Dairy Cooperative and General Manager of Kiwi Dairy Products Max was also the Group General Manager Manufacturing and Milk Supply for Fonterra. With numerous directorships including Hubbard Foods, Taura Ingredients Ltd, Combined Technologies, and New Image Group, Max was appointed a Distinguished Fellow of the New Zealand Institute of Food Science in 2010. BSc, FNZIFST

Secretary Doug Wilson – Retired last year after 10 years as Chief Information Officer of the NZ Automobile Association. He has been on the island since 1999. In earlier times, he was the CEO of Wang and Public Sector Director at Microsoft.

Board Members

Vern Whitehead – has lived on Waiheke for almost 30 years and is the publisher director of Auto Media Group which produces the authoritative electric vehicle magazine/website EVTalk for New Zealand and Australia. Vern is a former long-term president and life member of the Waiheke Island Rugby Club. Vern has been involved in charity fund-raising for the Waiheke Hospice.

Darlene Tana - Director of Ecycles NZ Ltd is a creative and entrepreneurial business professional who helps companies realise their power through the talents of their people. Experienced working in large organisations (15,000+) with lead responsibility
Electric Island Waiheke – An Introduction

for diverse domains spanning talent management and strategic change programs. Particularly skilled at getting buy-in across all stakeholder groups and driving work through to results.

Mark Russell – Moved from Ireland to New Zealand in 1999 and from Auckland out to Waiheke in 2013. He works as a change coach, helping software teams from various organisations to embrace change and work toward more inspiring goals. He was trained as Climate Reality Leader by Al Gore’s Climate Reality Project in Pittsburgh, USA in 2017 and supports the Electric Island initiative for the positive contribution it will make to bringing about a carbon neutral Waiheke.

Initial Plan

Electric Island Waiheke will start by running promotional campaigns promoting the uptake of electric vehicles (EVs) on the island, dispelling the myths around EVs. With the rise in demand for EVs worldwide there will be a much greater supply and choice of new and used vehicle brands on the NZ market. In two years new EVs will be on a par in price with diesel and petrol vehicles. In the meantime, used imported EVs are ideal for the island’s conditions, with a limited road network and the ability to charge overnight at home. EIW will be encouraging automotive retailers to facilitate easy purchase packages of EVs for Waiheke residents.

We will also work with local groups – including Piritahi Marae – and individuals to promote the use of EVs.

Public charging opportunities are also critical for informing, promoting and reassuring EV owners that the infrastructure is in place for the new technology. Daytime top-ups for local/visitor cars and commercial vehicles doing high mileage will be required. EIW is already identifying sites and partners for the establishment of fast charging stations.

International Exemplars – the future

There are successful models for Waiheke around the world including the island of Hvaler in Norway, which in 2017 opened Norway’s “first and only full-scale micro-grid” using solar and wind generation. This means that the power supply can go into ‘island mode’ if the local electricity grid goes down. It can run until the grid is back up again, at which point it will automatically switch back to grid-connected mode.

Christina Bu has introduced EIW to the people running the Hvaler project as she believes that Waiheke could be a testbed/example for the adoption of alternative power options in New Zealand.

In March, one or more members of EIW will be attending “Electric Planet Oslo”, an international conference on innovative solutions for moving the world away from reliance on fossil fuels to new electric-powered alternatives. EIW will also bring back
Electric Island Waiheke – An Introduction

successful island solutions from places like Hvaler that may be trialled on Waiheke as an example for the rest of New Zealand.
Te take mō te pūrongo

Purpose of the report

1. To seek the board’s endorsement of the Waiheke Kelp Forest Regeneration Project (WKFRP) in its work regenerating seaweed habitats in selected locations on the northern coast of Waiheke Island.

Whakarāpopototanga matua

Executive summary

2. Mark Russell, leader of the WKFRP, attended the public forum of the Waiheke Local Board on 22 November 2018, requesting endorsement for the team’s work and a letter of support. The board resolved as follows:

- **Kelp Forest Regeneration - Mark Russell**
  - Resolution number WHK/2018/217
  - MOVED by Chairperson C Handley, seconded by Member J Meeuwsen:
    - That the Waiheke Local Board:
      - a) thank Mark Russell for his attendance and presentation.
      - b) support in principle the Kelp Forest Regeneration project.

3. The WKFRP team was formed in October 2018 to develop solutions to the kina barrens in the Hauraki Gulf. Kina barrens are areas of depleted seaweed habitat, which are prevalent on the north side of Waiheke. Further background information on the project is included in this agenda report as Attachment A.

4. The team comprises Mark Russell, a local resident and experienced change coach, Dr Tim Haggitt of Auckland University, Adam Whatton of Waiheke Dive and Snorkel and a number of community volunteers.

5. The goals of the WKFRP align with the Local Board Plan, the principles of Essentially Waiheke and the objectives of Project Forever Waiheke, a group promoting sustainable tourism, which the board endorses.

6. Given the alignment between the goals of the project and the direction of the board, it appears to be appropriate for the board to endorse the WKFRP, provided the board can be assured that all project risks will be appropriately mitigated and managed.

Ngā tūtohunga

Recommendations

That the Waiheke Local Board:

- a) endorse Waiheke Kelp Forest Regeneration Project which aims to regenerate seaweed habitats in the Hauraki Gulf
- b) delegate the Chair, Cath Handley to review and approve a letter of support for the Waiheke Kelp Forest Regeneration Project Team.
Horopaki
Context

7. The Waiheke Kelp Forest Regeneration Project Team has made a request to the Waiheke Local Board for endorsement, and for a letter of support.

8. The WKFRP team came together in October 2018, as a result of a concerned group of islanders wanting to take action on the depletion of kelp forests around the coast of Waiheke Island.

9. Mark Russell, who is leading the project, moved from Ireland to NZ in 1999, and from Auckland out to Waiheke in 2013. He works as a self-employed change coach, helping software teams, and the organisations they operate in, to embrace change and work toward more inspiring goals. He was trained as Climate Reality Leader by Al Gore’s Climate Reality Project in Pittsburgh, USA in 2017. He has initiated this project to help learn about regenerating the local marine environment in the short term, and it's potential to lead to climate change mitigation efforts in the long term.

10. Tim Haggitt Ph.D is a marine ecologist at University of Auckland and Leigh Marine Laboratory, where he co-supervises students in marine ecology. His core area of research expertise lies in subtidal rocky reef and soft-sediment community ecology. Tim Haggitt has 12 years’ experience in marine consulting and research and provides specialist technical advice on marine community diversity and functioning and other areas. Tim conducted the assessment of sites for potential marine reserves for the Waiheke Local Board in its previous term. The team also includes a number of volunteers who are local residents.

11. Adam Whatton is co-owner of Waiheke Dive & Snorkel, and has two roles in the project. Professionally he will be contracted to produce a Standard Operating Procedures (SOP) manual which will be used to guide the training of volunteer divers and manage all of the dives. He is also a member of the volunteer divers group.

12. The WKFRP is a project of the Hauraki Gulf Conservation Trust, which will support, guide and umbrella the initiative.

13. The project is setting out to pilot an approach to reversing the occurrence of kina barrens in the Hauraki Gulf Marine Park and beyond. If the team can establish on a small scale that its unique approach for controlling kina populations leads to the regeneration of seaweed habitat, larger-scale projects could naturally follow. The project has the potential to make a positive contribution to the health of shallow sub-tidal rocky reef marine ecosystems within the Hauraki Gulf.

14. The methodology to be employed is for humans to replace the actions of the currently-absent natural predators of kina, such as mature snapper and rock lobster. A team of volunteer divers and snorkelers will regularly visit the pilot sites located near Enclosure Bay and Palm Beach on Waiheke Island, and remove the kina there, to reduce their numbers down to levels that would potentially represent a more balanced marine environment. With the kina removed, the kelp should have greater potential for regeneration in the selected locations.

15. Kina numbers will be reduced by picking them up and moving them out of range of the experiment sites, or by taking them ashore and giving them as food to the local marae and other organisations on the island that run community meal services and community kitchens.

16. Volunteer divers will stick to a daily catch limit of 50 kina per person, which should achieve the aims over the limited area of the pilot sites.

17. In conjunction with this conservation work, the team will be telling the story to the island community and other interested communities around the Hauraki Gulf using social media, mainstream media, and community meetings.
Tātaritanga me ngā tohutohu

Analysis and advice

18. The Waiheke Kelp Forest Regeneration Pilot Project holds the potential to address a serious issue in the marine environment of the Hauraki Gulf. The project is being undertaken by a committed group of experienced volunteers with the scientific backing of a known expert in the field. The Hauraki Gulf Conservation Trust has a proven history of supporting successful conservation projects on Waiheke and in the Gulf.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera

Council group impacts and views

19. The council’s Infrastructure and Environmental Services Division (I&ES) is responsible for the Gulf receiving environment. A project report should be sent to the board at the end of the pilot and forwarded to I&ES for review. A successful pilot would have implications for the rest of the Gulf and for New Zealand as a whole.

20. The results of the pilot could also be presented to the Hauraki Gulf Forum.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe

Local impacts and local board views

21. The Waiheke Local Board supports initiatives which restore and protect our natural environment and the Waiheke Local Board Plan 2017 on page 25, states that the board will:

“Support academic and citizen science programmes to help understand and improve the health of the aquatic environment.”

“Ensure a co-ordinated approach of all agencies involved in developing and delivering animal and plant pest management plans.”

22. The Essentially Waiheke Refresh 2016 was a major community consultation undertaken by the board on the future of the island. The key purpose of WKFRP strongly aligns with the principles of Essentially Waiheke which came through from the consultation.

23. The initiative also aligns with Project Forever Waiheke, a group endorsed by the board, whose mission is to ensure that Waiheke’s unique community and environment are protected for the future.

24. Endorsement of the Waiheke Kelp Forest Regeneration Project Team would therefore be consistent with the current direction of the board.

Tauākī whakaaweawe Māori

Māori impact statement

25. The kaitiaktanga of Tikapa Moana (Hauraki Gulf) is central to local mana whenua and tangata whenua organisations in the Gulf. The WKFRP team is consulting with these groups and working directly with Piritahi Marae on culturally appropriate food practices and distribution of the kina.

26. A number of the volunteer divers and snorkelers are members of Piritahi Marae and will be part of the team which formally presents the project to the marae committee on 11 March 2019.

27. A meeting is currently being organised with the Ngāti Paoa Trust Board environmental officer to engage with the trust over the pilot.

Ngā ritenga ā-pūtea

Financial implications

28. There are no immediate financial implications by endorsing the WKFRP and no funds have been requested. Should the WKFPT apply for funding in future, any application would be
considered in line with the board’s Community Grants Programme alongside other applications.

**Ngā raru tūpono me ngā whakamaurutanga**

**Risks and mitigations**

29. There is a limited risk in the board endorsing an experimental project which could fail. Given the methodology of kina removal from the selected sites, and the associated scientific expertise, this risk of failure is low. Should a final project report be forwarded to I&ES, staff would be able to assess the project outcomes and make recommendations for possible improvements and opportunities for transfer to other locations.

30. There is a reputational risk for the board if it endorses a project of central concern to Māori without ensuring that the WKFRPT has meaningfully engaged with mana whenua and tangata whenua. The project team should provide reassurance to the board that it has consulted appropriately with mana whenua and tangata whenua groups as reflected in paragraphs 25 – 27 above.

31. There is a risk of potential harm to local volunteers who are engaging in the kina removal activity. The team has applied for Foundation North funding for the project, which includes a budget for Adam Whatton of Waiheke Dive & Snorkel to produce a Standard Operating Procedures (SOP) manual for use by the project which will address health and safety issues. The WKFRPT should assure the board that this manual and the associated safety procedures are in place, and in use, before the trial begins.

**Ngā koringa ā-muri**

**Next steps**

32. Subject to board approval, a letter of support will be drafted for review and approval by the board chair.

**Ngā tāpirihanga**

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</table>

**Ngā kaihaina**

**Signatories**

<table>
<thead>
<tr>
<th>Author</th>
<th>Mark Inglis - Local Board Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoriser</td>
<td>Helgard Wagener - Relshp Mgr - Great Barrier and Waiheke</td>
</tr>
</tbody>
</table>
Kelp Forest Regeneration — Project Background

Mark Russell  Follow
Dec 31, 2018 · 2 min read

What is the project all about? We are setting out to pilot an approach to reversing the occurrence of urchin barrens habitat in the Hauraki Gulf Marine Park and beyond.

![Map of Hauraki Gulf Marine Park]

If we can establish on a small scale that the approach of human intervention to control urchin populations leads to the regeneration of seaweed habitat, larger-scale projects that would naturally follow have the potential to make a big positive contribution to the health of shallow sub-tidal rocky reef marine ecosystems with the Hauraki Gulf.

What form will it take? The project is a limited area pilot of controlling urchin populations to reverse the phenomena known as urchin barrens. We aim to establish that this approach will promote the regeneration of seaweed and kelp habitat in the Hauraki Gulf.

The scientific basis for our project will be overseen by Dr Tim Haggitt and collaborators from the University of Auckland.

How will it work? Simply put, humans will replace the actions of the currently-absent natural predators of urchins — such as mature snapper and rock lobster. A team of volunteer divers and snorkelers will regularly visit the pilot sites located near Enclosure Bay and Palm Beach on Waiheke Island, and remove the urchins there, to reduce their numbers down to levels that would potentially represent a more balanced marine environment.

How will we reduce the urchin numbers? By picking them up and moving them out of range of the experiment sites, or by taking them ashore and giving them as food to the local marae and other organisations on the island that run community meal services and community kitchens.
How many urchins will the project take? Volunteer divers will stick to the daily catch limit of 50 urchins per person, which should achieve our aims over the limited area of our pilot sites. (Subsequent projects run over a wider scale would need to apply for exemptions to the daily catch limits, but this is beyond the scope of our current project).

What else is involved? Hand in hand with this conservation work is the work of telling the story to the island community, our stakeholders, and other interested communities around the Hauraki Gulf. So while some of our work will be in the water working with urchins, some of it will be on social media, some will be in mainstream media, and some will involve getting out into our communities and telling the many stories of the state of our Hauraki Gulf and what we all can be doing about it.

Would you like to get involved? If so, please get in touch by leaving a message through this site. Thanks.
Recommendations of the Transport Forum

File No.: CP2019/00273

Te take mō te pūrongo
Purpose of the report

1. To consider the recommendations of the Waiheke Transport Forum held on 6 December 2018.

Whakarāpopototanga matua
Executive summary

2. The Waiheke Transport Forum was established by the Waiheke Local Board on 22 November 2018 (attachment D).

3. The forum is an advisory group which considers proposals on transport matters, provides local input on transport initiatives and makes recommendations to the Waiheke Local Board.

4. At its inaugural meeting on 6 December 2018 the forum considered an agenda (attachment C) consisting of two reports:
   a) the first meeting of the Waiheke Transport Forum - meeting procedures, dates, and accessibility appointment
   b) consultation on Belgium Street roadmarking.

5. The minutes of the forum are attached and include several recommendations to the Waiheke Local Board (attachments A and B).

6. These include:
   a) appointment of an accessibility representative to the Waiheke Transport Forum (resolution number WAI/2018/3)
   b) circulation of the Waiheke Transport Forum agenda and the minutes to the Piritahi Marae Committee with an open invitation to attend the meetings and address any items on the agenda (resolution number WAI/2018/4)
   c) endorsement of the proposed road marking of an eastbound cycle lane on Belgium Street, Ostend, as recommended by Auckland Transport (resolution number WAI/2018/4).

Ngā tūtohunga
Recommendations

That the Waiheke Local Board:

a) appoint an accessibility representative to the Waiheke Transport Forum.

b) approve the circulation of the Waiheke Transport Forum agenda and minutes to the Piritahi Marae Committee with an open invitation to attend the meetings and address any items on the agenda.

c) endorse the proposed road-marking of an eastbound cycle lane on Belgium Street, Ostend, as recommended by Auckland Transport.
Ngā tāpirihanga
Attachments

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<td>B</td>
<td>Unconfirmed minutes of the Waiheke Transport Forum 6 December 2018</td>
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<td>C</td>
<td>Waiheke Transport Forum agenda 6 December 2018</td>
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<td>D</td>
<td>Resolutions establishing the Waiheke Transport Forum</td>
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Ngā kaihaina
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</table>
7 The first meeting of the Waiheke Transport Forum - meeting procedures, dates, and accessibility appointment

That the Waiheke Transport Forum:

a) approve the recommended meeting dates be the first Thursday of every second month, other than during school holidays, commencing 14 February, subject to maximum availability of members.

b) recommend to the Waiheke Local Board the appointment of an accessibility representative to the Waiheke Transport Forum.

c) recommend to the Waiheke Local Board that the agenda and the minutes of the Waiheke Transport Forum are circulated to the Piritahi Marae Committee with an open invitation to attend the meetings and address any items on the agenda.

CARRIED

8 Consultation on Belgium Street roadmarking

That the Waiheke Transport Forum:

a) recommend to the Waiheke Local Board that it endorse the proposed road-marking of an eastbound cycle lane on Belgium Street, Ostend, as recommended by Auckland Transport.

CARRIED
Waiheke Transport Forum

OPEN MINUTES

Minutes of a meeting of the Waiheke Transport Forum held in the Waiheke Local Board Office, 10 Belgium Street, Ostend, Waiheke on Thursday, 6 December 2018 at 5:08PM.

PRESENT

<table>
<thead>
<tr>
<th>Presiding Member</th>
<th>Members</th>
<th>Until 6.32pm</th>
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<tbody>
<tr>
<td>Cath Handley</td>
<td>Shirin Brown</td>
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<td></td>
<td>Michael Cox</td>
<td></td>
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<td></td>
<td>Grant Crawford</td>
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<td>Melanie Dale</td>
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<td>Tony King Turner</td>
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<td></td>
<td>Linda Simpson</td>
<td></td>
</tr>
</tbody>
</table>
Presiding Member Cath Handley opened the meeting and welcomed everyone present. Member Shirin Brown led the meeting with a karakia.

1 Apologies

There were no apologies.

2 Declaration of Interest

There were no declarations of interest.

3 Confirmation of Minutes

As this was the inaugural meeting of the Waiheke Transport Forum, there were no minutes to confirm.

4 Deputations

There were no deputations.

5 Public Input

There was no public input.

6 Extraordinary Business

There was no extraordinary business.

7 The first meeting of the Waiheke Transport Forum - meeting procedures, dates, and accessibility appointment

Note: The recommendation was dealt with in parts.

MOVED by Member M Cox, seconded by Member A Ison:

That the Waiheke Transport Forum:

a) approve the recommended dates for Waiheke Transport Forum meetings in 2019 of: 14 February, 2 May, 1 August, 7 November to be held at the Waiheke Local Board Office commencing at 5pm.

Resolution number WAI/2018/1

MOVED by Member T King Turner, seconded by Member M Felton, an amendment by way of replacement:

That the Waiheke Transport Forum:

a) approve the recommended meeting dates be the first Thursday of every second month, other than during school holidays, commencing 14 February, subject to maximum availability of members.

CARRIED
Resolution number WAi/2018/2

MOVED by Member L Simpson, seconded by Member A Ison:

That the Waiheke Transport Forum:

b) recommend to the Waiheke Local Board the appointment of an accessibility representative to the Waiheke Transport Forum.

CARRIED

Note: clause c) was added to the original recommendation.

Resolution number WAi/2018/3

MOVED by Member S Brown, seconded by Member G Crawford:

That the Waiheke Transport Forum:

c) recommend to the Waiheke Local Board that the agenda and the minutes of the Waiheke Transport Forum are circulated to the Piritahi Marae Committee with an open invitation to attend the meetings and address any items on the agenda.

CARRIED

Note: Presiding Member C Handley vacated the chair at 6.32pm and left the meeting.

Member S Brown assumed the Chair at 6.32pm.

8 Consultation on Belgium Street roadmarking

Resolution number WAi/2018/4

MOVED by Member L Simpson, seconded by Member A Cox:

That the Waiheke Transport Forum:

a) recommend to the Waiheke Local Board that it endorse the proposed roadmarking of an eastbound cycle lane on Belgium Street, Ostend, as recommended by Auckland Transport.

CARRIED

9 Consideration of Extraordinary Items

There was no consideration of extraordinary items.

Member S Brown closed the meeting with a karakia.

6.54 pm

The Presiding Member thanked Members for their attendance and attention to business and declared the meeting closed.

CONFIRMED AS A TRUE AND CORRECT RECORD AT A MEETING OF THE WAIHEKE TRANSPORT FORUM HELD ON

DATE: .................................................................

CHAIRPERSON: ..................................................
I hereby give notice that an ordinary meeting of the Waiheke Transport Forum will be held on:

Date:  Thursday, 6 December 2018
Time:   5:00PM
Meeting Room:  Waiheke Local Board Office
Venue:           10 Belgium Street
                 Ostend
                 Waiheke

Waiheke Transport Forum
OPEN AGENDA

MEMBERSHIP

Chairperson  Cath Handley
Deputy Chairperson  Shirin Brown
Members  Michael Cox
         Grant Crawford
         Melanie Dale
         Martin Felton
         Chris Howard
         Andrew Ison
         Tony King Turner
         Linda Simpson

(Quorum 5 members)

Lisa Young
Local Board PA Liaison

3 December 2018

Contact Telephone: 09 980 5328
Email: lisa.young@aucklandcouncil.govt.nz
Website: www.aucklandcouncil.govt.nz

Note:  The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. Should Members require further information relating to any reports, please contact the relevant manager, Chairperson or Deputy Chairperson.
Waiheke Transport Forum
06 December 2018

Terms of Reference

Purpose

To form an advisory group which considers proposals on transport matters and provides local input on transport initiatives.

Proposed Scope:

To provide:
- a forum to consider presentations on transport issues and proposed projects on Waiheke.
- input into a 10 Year Transport Plan.
- community input on design and planning of roads, cycle-ways and footpaths.
- advice on community engagement on local transport projects.

Persons able to make presentations to the forum include:

- members of the community.
- members of transport organisations.
- officers of council family organisations.
- elected members.

Meeting Frequency

Meetings will be held on either a monthly or quarterly basis dependent on a decision by forum members at the first meeting of the forum.

Structure

An advisory group constituted as a subcommittee of the Waiheke Local Board made up of the following members:

- two local board members including the chair of the Waiheke Local Board.
- one Auckland Transport Elected Member Relationship Manager.
- one ex-officio position for the Waiheke Officer in Charge, New Zealand Police.
- up to seven community members to be selected from public applications and invitations to community organisations including the following:
  - Cycle Action Waiheke
  - Transport Operators
  - Walking Groups
  - School representatives
  - Residents Associations
- other council or Auckland Transport officers may be invited as necessary
- subject matter experts may be co-opted as necessary depending upon expertise required for each agenda.

Officer Support

Officer Support will be provided by the following staff:

- Programme Manager, Waiheke and Gulf Islands
- Relationship Manager, Aotea Great Barrier and Waiheke Local Boards
Administration
1. As a subcommittee of the Waiheke Local Board, standing orders will apply and subcommittee administration will be undertaken using the council’s Infocouncil application.
2. Written proposals must be submitted by the agenda closing date to the Waiheke Local Board email address using the prescribed format and documentation.
3. Recommendations for proposed actions will be put forward to the Waiheke Local Board business meeting by means of formal resolution.
4. Agenda, prior notification of meetings, public forum and deputations are to be undertaken as per Waiheke Local Board standing orders.
5. The forum will agree on meeting dates for 2019 at its first meeting.

Quorum
- A quorum is made up of five committee members.

Budget and Delegated Authority
- There is no allocated budget for the Waiheke Transport Forum.
- Delegated Authority – nil (advisory only).
- Waiheke Local Board Office facilities, staff and catering may be available as necessary to support the activities of the forum.

Mana Whenua Involvement
- Mana Whenua organisations will be sent the minutes of each meeting and invited on a case-by-case basis.

Review
- The operations of the forum will be reviewed one year after commencement.
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<td>Confirmation of Minutes</td>
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<td>4</td>
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<td>79</td>
</tr>
<tr>
<td>9</td>
<td>Consideration of Extraordinary Items</td>
<td></td>
</tr>
</tbody>
</table>
1 Apologies

At the close of the agenda no apologies had been received.

2 Declaration of Interest

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have.

3 Confirmation of Minutes

This is the inaugural meeting of the Waiheke Transport Forum, so there are no minutes to confirm.

4 Deputations

At the close of the agenda no requests to present deputations had been received.

5 Public Input

A period of time (approximately 30 minutes) is set aside for members of the public to address the meeting on matters within its delegated authority. A maximum of 3 minutes per item is allowed, following which there may be questions from members.

At the close of the agenda no requests for public input had been received.

6 Extraordinary Business

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

“An item that is not on the agenda for a meeting may be dealt with at that meeting if-

(a) The local authority by resolution so decides; and

(b) The presiding member explains at the meeting, at a time when it is open to the public,-

(i) The reason why the item is not on the agenda; and

(ii) The reason why the discussion of the item cannot be delayed until a subsequent meeting.”

Section 46A(7A) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

“Where an item is not on the agenda for a meeting,-

(a) That item may be discussed at that meeting if-

(i) That item is a minor matter relating to the general business of the local authority; and

(ii) the presiding member explains at the beginning of the meeting, at a time when it is open to the public, that the item will be discussed at the meeting; but
Item 13

(b) no resolution, decision or recommendation may be made in respect of that item except to refer that item to a subsequent meeting of the local authority for further discussion.”
Recommendations of the Transport Forum

Te take mō te pūrongo / Purpose of the report
1. To provide guidance to members of the Waiheke Transport Forum on procedural matters, meeting dates for 2019 and the appointment of an accessibility representative.

Whakarāpopototanga matua / Executive summary
2. The Waiheke Transport Forum, will consider transport matters which fall within the remit of Auckland Transport for the Waiheke Local Board area.
3. The forum is a subcommittee of the Waiheke Local board which is subject to Waiheke Local Board standing orders.
4. The report recommends that an accessibility representative be appointed to the forum and suggests a process for doing so.
5. The report provides forward planning dates for 2019 meetings namely: 14 February, 2 May, 1 August and 7 November.
6. Advice is provided for the inaugural meeting such as the election of the chair, the size of the quorum and advance notice of agenda items.

Ngā tūtohunga / Recommendations
That the Waiheke Transport Forum:

a) approve the recommended dates for Waiheke Transport Forum meetings in 2019 of: 14 February, 2 May, 1 August, 7 November to be held at the Waiheke Local Board Office commencing at 5pm.

b) approve the establishment of an accessibility representative on the Waiheke Transport Forum.

Horopaki / Context
7. This report provides procedural information to guide the new members of the Waiheke Transport, in deciding on procedural matters.

8. The Waiheke Transport Forum can consider transport-related actions, improvements, proposals and initiatives associated with roading, cycling, walking, horse-riding, ferries, wharves, and coastal matters which fall within the statutory scope of Auckland Transport. Regional transport initiatives which may have an impact on the islands and seas of the Waiheke Local Board area can also be considered. A map of the area under the jurisdiction of the Waiheke Local Board is included in this report as Attachment A. The forum can also identify and refer actions for the Waiheke 10 Year Transport Plan and consider strategies for meaningful community engagement on transport matters. The terms of reference for the forum are contained in Attachment B.

9. The forum is an official subcommittee of the Waiheke Local Board and as such must use Waiheke Local Board standing orders, a copy of which is attached as Attachment C. Members should familiarise themselves with standing orders before the first meeting.
10. The following persons have been appointed to the forum:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>The sitting chair</td>
<td>Chair Waiheke Local Board</td>
</tr>
<tr>
<td>The sitting deputy chair</td>
<td>The deputy chair of the Waiheke Local Board will act as alternate when the chair of the local board is sick or on leave</td>
</tr>
<tr>
<td>Shirin Brown</td>
<td>Member Waiheke Local Board</td>
</tr>
<tr>
<td>Bob Upchurch</td>
<td>Member Waiheke Local Board (alternate when Member S Brown is sick or on leave)</td>
</tr>
<tr>
<td>Melanie Dale</td>
<td>Auckland Transport representative - Auckland Transport Elected Member Relationship Manager</td>
</tr>
<tr>
<td>Sergeant Martin Felton</td>
<td>New Zealand Police representative</td>
</tr>
<tr>
<td>Tony King Turner</td>
<td>Community representative - member Cycle Action Waiheke</td>
</tr>
<tr>
<td>Grant Crawford</td>
<td>Community representative - member Waiheke Tourism Forum</td>
</tr>
<tr>
<td>Linda Simpson</td>
<td>Community representative - Trustee Waiheke Walking Trust</td>
</tr>
<tr>
<td>Christopher Howard</td>
<td>Community representative - committee member Omiha Welfare and Recreation Society</td>
</tr>
<tr>
<td>Andrew Ison</td>
<td>Community representative - Manager Waiheke Bus Company</td>
</tr>
<tr>
<td>Michael Cox</td>
<td>Community representative - manager Waiheke Executive Transport</td>
</tr>
</tbody>
</table>

Tātaritanga me ngā tohutohu / Analysis and advice

**Election of Chairperson and Deputy Chairperson**

11. The chairperson and deputy chairperson of the forum will be elected at a subsequent meeting using System B from Waiheke Local Board standing orders, as cited in clause 1.11.1 page 23. In the interim, the chair of the local board will preside. Further information on the procedures for electing the chairperson and deputy chairperson will be provided for the relevant meeting.

**Introductions by Waiheke Transport Forum members**

12. Provision will be made in the agenda for new members of the forum to introduce themselves, share some information on their background, their reason for standing and their vision for transport on Waiheke.
Approval of meeting dates for 2019

13. It is recommended that the forum meets quarterly at 5pm at the Waiheke Local Board office, on the first Thursday of the month, every three months (except for February). The following dates are suggested for 2019:
   - 14 February
   - 2 May
   - 1 August
   - 7 November.

Establishment of accessibility representative

14. Six of the maximum seven community representatives have been appointed. Accessibility to footpaths, public transport, beaches and ferries is a key challenge on semi-rural Waiheke Island. A need has been identified for a representative on the forum to consider transport issues through an accessibility lens and to advocate for improved public access in the local board area. It is recommended that the position of accessibility representative be established on the forum, with applications to be considered at the next meeting of the forum.

Explanation of procedures affecting forum members

15. The agenda will close two calendar weeks before the meeting date.

16. Members of the public and representatives of community, the council, government and transport forum organisations are eligible to submit presentations to the forum using the presentation template which is attached to this report as Attachment D. Additional documents providing extra information on the project such as a power point presentation, a site plan, consultants reports, letters of support can be attached to ensure that presenters are well prepared and forum members well informed on each project.

17. An agenda containing presentations from the public in the deputations section and staff reports on proposals in the reports section, will be circulated during the week before the meeting.

18. Meetings will take place at the Waiheke Local Board Office using the standard Waiheke Local Board open agenda and will be open to members of the public, except when there is a confidential agenda.

19. The forum may resolve to exclude the public from a meeting. The grounds for exclusion are those specified in Section 48 of the Local Government Official Information and Meetings Act 1987 where:
   - discussion in open forum would be likely to result in the disclosure of information for which good reason for withholding would exist.
   - discussion in open forum would be contrary to the provisions of a specified enactment.
   - discussion in open forum would constitute contempt of court or of the House of Representatives.
   - the exclusion of the public from the whole or the relevant part of the proceedings of the meeting is necessary to enable the forum to deliberate in private on its decision or recommendation.

20. Requests to speak at public forum may be accepted at the discretion of the chair before the meeting and each speaker may have up to three minutes to present, followed by questions from forum members.

21. Each deputation can present for up to 10 minutes, with a maximum of two speakers, followed by questions from forum members.
22. Under standing orders, forum members cannot pass a resolution about a deputation, or public forum item, at the same meeting. However, members can call for additional information. After each presentation, members will discuss the benefits and risks of the proposal and can request additional information through the Relationship Manager (as representative of the Chief Executive) on topics such as project feasibility, costings, risks, or alignment with existing programmes. The information will be prepared for the next meeting of the forum and presented as a report on the agenda.

23. Under the reports section of the agenda, members will consider transport project reports requested at previous meetings and can make resolutions to the Waiheke Local Board recommending specific actions for these projects.

24. The chair may invite subject matter experts from the council, Auckland Transport, iwi and other organisations as required to advise on agenda items.

25. A report will be submitted to the Waiheke Local Board after each forum meeting detailing matters for investigation and recommendations for approval by the local board.

26. A quorum will be made up of five members and the chair will have a casting vote.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe / Local impacts and local board views

27. Board members have indicated support for this proposal and believe that the transport forum would provide meaningful community input into transport matters on Waiheke.

28. Agreement has also been reached that the proposals presented at the forum can contribute to Waiheke’s proposed 10-Year Transport Plan.

Tauākī whakaaweawe Māori / Māori impact statement

29. Development of transport initiatives on Waiheke is an area of interest for mana whenua - consequently minutes of the transport forum will be circulated to mana whenua representatives.

30. A mana whenua representative will be invited to attend the transport forum when matters of interest are on the agenda.

Ngā ritenga ā-pūtea / Financial implications

31. There is no budgetary allocation required for the transport forum and the forum has no delegated authority. Any financial resources required to support approved recommendations will be approved by the board from existing budgets.

Ngā tāpirihanga / Attachments

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<td>C</td>
<td>Waiheke Local Board Standing Orders (refer to aucklandcouncil.govt.nz)</td>
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<tr>
<td>D</td>
<td>Presentation Summary Template</td>
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Ngā kaihaina / Signatories

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The first meeting of the Waiheke Transport Forum - meeting procedures, dates, and accessibility appointment
The first meeting of the Waiheke Transport Forum - meeting procedures, dates, and accessibility appointment
Terms of Reference – Establishment of Transport Forum

Purpose

To form an advisory group which considers proposals on transport matters and provides local input on transport initiatives.

Proposed Scope:

To provide:
- a forum to consider presentations on transport issues and proposed projects on Waiheke.
- input into a 10 Year Transport Plan.
- community input on design and planning of roads, cycleways and footpaths.
- advice on community engagement on local transport projects.

Persons able to make presentations to the forum include:

- members of the community.
- members of transport organisations.
- officers of council family organisations.
- elected members.

Meeting Frequency

Meetings will be held on either a monthly or quarterly basis dependent on a decision by forum members at the first meeting of the forum.

Structure

An advisory group constituted as a subcommittee of the Waiheke Local Board made up of the following members:

- two local board members including the chair of the Waiheke Local Board.
- one Auckland Transport Elected Member Relationship Manager.
- one ex-officio position for the Waiheke Officer in Charge, New Zealand Police.
- up to seven community members to be selected from public applications and invitations to community organisations including the following:
  - Cycle Action Waiheke
  - Transport Operators
  - Walking Groups
  - School representatives
  - Residents Associations
- other council or Auckland Transport officers may be invited as necessary
- subject matter experts may be co-opted as necessary depending upon expertise required for each agenda.
Terms of Reference – Establishment of Transport Forum

Officer Support

Officer Support will be provided by the following staff:

- Programme Manager, Waiheke and Gulf Islands
- Relationship Manager, Aotea Great Barrier and Waiheke Local Boards
- Local Board Advisor, Waiheke Local Board
- Waiheke Local Board PA/Liaison

Administration

1. As a subcommittee of the Waiheke Local Board, standing orders will apply and subcommittee administration will be undertaken using the council’s Nutocouncil application.
2. Written proposals must be submitted by the agenda closing date to the Waiheke Local Board email address using the prescribed format and documentation.
3. Recommendations for proposed actions will be put forward to the Waiheke Local Board business meeting by means of formal resolution.
4. Agenda, prior notification of meetings, public forum and deputations are to be undertaken as per Waiheke Local Board standing orders.
5. The forum will agree on meeting dates for 2019 at its first meeting.

Quorum

- A quorum is made up of five committee members.

Budget and Delegated Authority

- There is no allocated budget for the Waiheke Transport Forum.
- Delegated Authority – nil (advisory only).
- Waiheke Local Board Office facilities, staff and catering may be available as necessary to support the activities of the forum.

Mana Whenua Involvement

- Mana Whenua organisations will be sent the minutes of each meeting and invited on a case-by-case basis.

Review

- The operations of the forum will be reviewed one year after commencement.
Consultation on Belgium Street roadmarking

File No.: CP2018/23642

Te take mō te pūrongo / Purpose of the report
1. To seek feedback from the Waiheke Transport Forum on the installation of an eastbound cycle lane on Belgium Street.

Whakarāpopototanga matua / Executive summary
2. Auckland Transport is proposing to install an eastbound cycle lane on Belgium Street.
3. Feedback is requested from the Waiheke Transport Forum on the proposal which is detailed in Attachment A.

Ngā tūtohunga / Recommendation
That the Waiheke Transport Forum:

a) recommend to the Waiheke Local Board that it endorses the proposed road-marking of an eastbound cycle lane on Belgium Street, Ostend, as recommended by Auckland Transport.

Horopaki / Context
4. Auckland Transport is proposing to undertake road-marking on Belgium Street as proposed in the document “Belgium Street and the Surrounding Network – Pedestrian and Cycle Improvements June 2017”. Concept plans for the proposal are attached to the report as Attachment A.

5. The road-marking proposal is one of a number of measures proposed for the Belgium Street precinct in the report cited above. Whilst the plan is titled Option Two, the options under discussion in this report are simply to install the eastbound cycle lane or not to install the cycle lane.

Tātaritanga me ngā tohutohu / Analysis and advice
6. The key change proposed is to reduce the width of the median strip which is currently marked along Belgium Street and install an eastbound on-road cycle lane on the northern side of the street between Wharf Road and Ostend Road. The cycle lane is 1.8m wide and is adjacent or on-street car parking. The cycle lane will be delineated by a painted line on the road, clearly indicated by cycle symbols in green boxes.

7. The cycle lane will improve cycle amenity through the Belgium Street shopping centre.

8. Belgium Street is not considered wide enough for cycle lanes on both sides of the road. Auckland Transport considers that introducing a cycle lane for eastbound cyclists on the northern side provides the best safety option.

9. The proposal is presented to the Waiheke Transport Forum for its feedback.
Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe / Local impacts and local board views

10. Board members have indicated support for the transport forum and have advised that the transport forum members should be consulted on this matter as per the agreed terms of reference.

Tauākī whakaaweawe Māori / Māori impact statement

11. There are no specific implications for Māori in relation to this proposal. The proposal is likely to provide better road safety for all cyclists.

Ngā ritenga ā-pūtea / Financial implications

12. The costs of the proposed road-marking will be borne by Auckland Transport via its Transport Safety Fund.

Ngā tāpirihanga / Attachments

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
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<tbody>
<tr>
<td>A</td>
<td>Proposed Belgium Street Road-marking</td>
<td>81</td>
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</tbody>
</table>

Ngā kaihaina / Signatories

<table>
<thead>
<tr>
<th>Author</th>
<th>Mark Inglis - Local Board Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoriser</td>
<td>Helgard Wagener - Relshp Mgr - Great Barrier and Waiheke</td>
</tr>
</tbody>
</table>
Waiheke Local Board resolutions establishing the Waiheke Transport Forum

Extract from minutes of a meeting of the Waiheke Local Board held in the Local Board Office, 10 Belgium Street, Ostend, Waiheke on Thursday, 22 November 2018 at 5.16pm.

C1 Appointment of members of the Waiheke Transport Forum

The report was provided. A copy has been placed on the official minutes and is available on the Auckland Council website as minutes attachments.

Resolution number WHK/2018/1

MOVED by Chairperson C Handley, seconded by Deputy Chairperson P Walden:

That the Waiheke Local Board:

a) appoint the chair and Member S Brown as local board members of the Waiheke Transport Forum.

b) authorise the appointment of Member B Upchurch as the alternate local board member to attend the Waiheke Transport Forum when an appointed member is sick or on leave.

c) appoint Tony King Turner, Michael Cox, Linda Simpson, Andrew Ison, Christopher Howard and Grant Crawford as community representatives of the Waiheke Transport Forum.

d) appoint Auckland Transport’s Elected Member Relationship Manager as the Auckland Transport representative of the Waiheke Transport Forum.

e) appoint the Officer-in-Charge, Waiheke Island, New Zealand Police as the New Zealand Police representative of the Waiheke Transport Forum.

f) authorise the appointment of alternate representatives by Auckland Transport and the New Zealand Police to attend the Waiheke Transport Forum when the appointed representative is sick or on leave.

g) decline any late member applications for the Waiheke Transport Forum.

h) note that the report and resolutions become public information upon the closing of November 2018 business meeting of the board, however the attachment will remain confidential to protect the privacy of natural persons.

CARRIED

Extract from minutes of a meeting of the Waiheke Local Board held in the Local Board Office, 10 Belgium Street, Ostend, Waiheke on Thursday, 25 October 2018 at 5.15pm.

15 Establishment of a transport forum

Resolution number WHK/2018/2

MOVED by Deputy Chairperson J Meeuwsen, seconded by Member S Brown:

That the Waiheke Local Board:

a) approve the establishment of the Waiheke Transport Forum as a sub-committee of the Waiheke Local Board.

b) approve the proposed terms of reference of the transport forum (Attachment A of the agenda report) with the addition of a police representative as a member.

c) agree to the late submission of the recommendations of the first meeting of the transport forum at the November business meeting of the Waiheke Local Board.

CARRIED
Approval of feedback on the Proposed Regional Pest Management Plan

File No.: CP2019/00375

Te take mō te pūrongo
Purpose of the report
1. To approve the board’s feedback on the Proposed Regional Pest Management Plan.

Whakarāpopototanga matua
Executive summary

2. At its meeting on 22 November 2018, the Waiheke Local Board resolved as follows:

Resolution number WHK/2018/226

That the Waiheke Local Board:

a) receive a summary of consultation feedback from Waiheke residents on the Proposed Auckland Regional Pest Management Plan.

b) provide feedback on the recommended changes to the Proposed Regional Pest Management Plan after further deliberation.

3. Subsequently the board prepared feedback which is included as Attachment A of this agenda report. The feedback was forwarded to Infrastructure and Environmental Services on 4 December 2018.

4. This report recommends formal approval of this feedback.

Ngā tūtohunga
Recommendation

That the Waiheke Local Board:

a) approve the feedback on the Proposed Regional Pest Management Plan

Ngā tāpirihanga
Attachments

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
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<tbody>
<tr>
<td>A</td>
<td>Waiheke Local Board Feedback Proposed Regional Pest Management Plan</td>
<td>59</td>
</tr>
</tbody>
</table>

Ngā kaihaina
Signatories

Authors | Mark Inglis - Local Board Advisor

Authorisers | Louise Mason - GM Local Board Services
            | Helgard Wagener - Relshp Mgr - Great Barrier and Waiheke
## Feedback on Staff Responses to the Proposed Regional Pest Management Plan

<table>
<thead>
<tr>
<th>Key Programmes</th>
<th>Submitter Suggestion</th>
<th>Proposed staff response</th>
<th>Staff recommendation</th>
<th>Recommended amendments to proposed plan</th>
<th>Board feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pests on parks</td>
<td>Suggest working with communities/community groups</td>
<td>The operational implementation of buffer rules around parks will involve a proactive communications and engagement component to encourage landowners to recognise and voluntarily remove pest plants, supported by rule enforcement when required. The natural environment targeted rate will also provide for enhanced facilitation of community conservation groups through Pest Free Auckland.</td>
<td>Accept</td>
<td>Retain approach from proposed plan</td>
<td>The board supports the staff recommendation</td>
</tr>
<tr>
<td>Suggest expansion of sites included in parks programme</td>
<td></td>
<td>The budget determined through the natural environment targeted rate does not provide for control and enforcement at all sites identified in the proposed plan. The spatial extent of the parks programme has been reduced to fit the targeted rate budget, with the highest ecological value sites retained. Enforcement is less cost-effective than on-park control. Therefore, the recommended approach is to prioritise on-park control, and extend enforcement only to highest priority sites.</td>
<td>Reject</td>
<td>Reduce spatial extent of site-led programme to fit within the budget provided through the Natural Environment Targeted Rate</td>
<td>The board supports the staff recommendation to target the sites of highest ecological value.</td>
</tr>
<tr>
<td>Suggest public communications and engagement</td>
<td></td>
<td>The operational implementation of buffer rules around parks will involve a substantial communications and engagement component to encourage landowners to recognise and voluntarily remove pest plants, supported by rule enforcement when required.</td>
<td>Accept</td>
<td>Retain approach from proposed plan</td>
<td>The board supports the staff recommendation</td>
</tr>
<tr>
<td>Kauri dieback</td>
<td>Support the closure of Waitakere Ranges</td>
<td>The proposed plan was drafted prior to the announcement of the ōrāri and subsequent closure of the ranges. The operative plan will be updated to reflect these events.</td>
<td>Accept</td>
<td>Update operative plan to reflect the council’s support of the ōrāri and park closures.</td>
<td>The board supports the staff recommendation</td>
</tr>
<tr>
<td>Suggest additional park or track closures.</td>
<td></td>
<td>High risk tracks have been closed within the Hunua Ranges, to protect Hunua kauri. At time of writing a small number of further closures have been made on the North Shore. The council may choose to close or re-open tracks over the next 10 years outside of the Regional Pest Management Plan framework. The operative plan will be updated to reflect park closures, but not all sites suggested by submitters may be included.</td>
<td>Accept in part</td>
<td>Update operative plan to reflect the council’s support of the ōrāri and park closures.</td>
<td>The board supports the staff recommendation and supports track closures to protect kauri subject to all relevant formal approvals.</td>
</tr>
<tr>
<td>Suggest further</td>
<td>The proposed approach recognises that kauri dieback management is challenging due to</td>
<td></td>
<td>Accept</td>
<td>Retain approach from proposed</td>
<td>The board encourages</td>
</tr>
<tr>
<td>Item 14</td>
<td>Approval of feedback on the Proposed Regional Pest Management Plan</td>
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<tr>
<td><strong>Pest spread to Hauraki Gulf Islands</strong></td>
<td>Disagree with inclusion of cats as a pest (variety of reasons including animal welfare, concern over implications for companion animals).</td>
<td>Accept</td>
<td>Accept in part</td>
<td>The board supports the best practice control of cats whether owned or unowned. In areas of high biodiversity value. The board recommends continuous improvement of trapping procedures. The board will give final feedback when final wording is confirmed.</td>
<td></td>
</tr>
<tr>
<td><strong>Suggest public communications and engagement</strong></td>
<td>The operational implementation of the plan will involve a substantial communications and engagement component to encourage voluntary behaviour change to reduce pest spread to islands. Rule enforcement would be used as a last resort.</td>
<td>Accept</td>
<td>Retain approach from proposed plan</td>
<td>The board supports the staff recommendation.</td>
<td></td>
</tr>
<tr>
<td><strong>Do not support use of toxins</strong></td>
<td>The Regional Pest Management Plan sets outcomes for pest management in the region but does not specify methods, therefore this submission theme is not applicable to the statutory plan. The council always seeks to use best practice methods which comply with all relevant legislation and minimise the use of toxins where possible.</td>
<td>Accept</td>
<td>Reject (not applicable)</td>
<td>The board supports the staff recommendation but requests that staff ensure that the RPMP align with, and defers to, board policy on dispensation for the use of agrichemicals and toxins on council land.</td>
<td></td>
</tr>
<tr>
<td><strong>Aotea Great Barrier</strong></td>
<td>Staff acknowledge that working with the Aotea Great Barrier community will be pivotal to this programmes success. Operational delivery of the programme will therefore include in-depth community engagement.</td>
<td>Accept</td>
<td>Retain approach from proposed plan</td>
<td>The board supports the staff recommendation.</td>
<td></td>
</tr>
<tr>
<td><strong>Do not</strong></td>
<td>The Regional Pest Management Plan sets</td>
<td>Accept</td>
<td>Reject (not applicable)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Item 14</td>
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</tr>
<tr>
<td><strong>Support use of toxins</strong></td>
<td>Outcomes for pest management in the region but does not specify methods, therefore this submission theme is not applicable to the statutory plan. The council always seeks to use best practice methods which comply with all relevant legislation and minimise the use of toxins where possible.</td>
<td>Applicable</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Suggest Auckland Council collaboration with the Department of Conservation</strong></td>
<td>The council and the Department of Conservation have existing collaborative relationships at all levels from operational field staff to senior managers, and will look to strengthen and extend these relationships over the lifetime of the plan.</td>
<td>Accept</td>
<td>Retain approach from proposed plan.</td>
<td>The board supports the staff recommendation</td>
<td></td>
</tr>
<tr>
<td><strong>Kawau Island</strong></td>
<td>Suggest working with Kawau community</td>
<td>Accept</td>
<td>Retain approach from proposed plan.</td>
<td>The board supports the staff recommendation</td>
<td></td>
</tr>
<tr>
<td>Staff acknowledge that working with the Kawau community will be pivotal to this programme’s success. Operational delivery of the programme will therefore include in-depth community engagement.</td>
<td></td>
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</tr>
<tr>
<td><strong>Do not support inclusion of wallabies (variety of reasons such as animal welfare, heritage value on Kawau) Note that more than twice the number of submitters supported wallaby control.</strong></td>
<td>Staff acknowledge that some people value wallabies on Kawau for their historic and cultural significance. The cost benefit analyses accompanying the proposed plan concluded that the benefits that can be expected from the proposed approach outweigh the loss of these values. The council always seeks to use best practice methods which comply with all relevant legislation and are as humane as possible.</td>
<td>Reject</td>
<td>Retain approach from proposed plan.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Do not support use of toxins</strong></td>
<td>The Regional Pest Management Plan sets outcomes for pest management in the region but does not specify methods, therefore this submission theme is not applicable to the statutory plan. The council always seeks to use best practice methods which comply with all relevant legislation and minimise the use of toxins where possible.</td>
<td>Accept</td>
<td>Reject (not applicable)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Waitheke Island</strong></td>
<td>Suggest working with Waitheke community</td>
<td>Accept</td>
<td>Retain approach from proposed plan.</td>
<td>The board supports the staff recommendation</td>
<td></td>
</tr>
<tr>
<td>Staff acknowledge that working with the Waitheke community will be pivotal to the success of this programme. The proposed plan seeks to support the community-led initiative Te Korowai o Waitheke.</td>
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</tr>
<tr>
<td><strong>Do not support the use of toxins</strong></td>
<td>The Regional Pest Management Plan sets outcomes for pest management in the region but does not specify methods, therefore this submission theme is not applicable to the</td>
<td>Accept</td>
<td>Reject (not applicable)</td>
<td>The board supports the staff recommendation but requests that</td>
<td></td>
</tr>
<tr>
<td>Rural possums</td>
<td>Do not support use of toxins</td>
<td>The Regional Pest Management Plan sets outcomes for pest management in the region but does not specify methods; therefore this submission theme is not applicable to the statutory plan. The council always seeks to use best practice methods which comply with all relevant legislation and minimise the use of toxins where possible.</td>
<td>Reject</td>
<td>Reject (not applicable)</td>
<td>The board supports the staff recommendation. It is critical that the containment programme is maintained for Waiheke and other possum-free islands in the Hauraki Gulf but that the methodology is adapted to prioritise high value areas.</td>
</tr>
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</tr>
<tr>
<td>Suggest working with landowners and community groups</td>
<td>Operational planning will consider where outcomes might be achieved through resourcing of community possum control activity. Contracted works may be more suitable for this programme in many instances due to contractors typically being able to suppress possums to lower levels, over larger areas than is usually practical for community activity. The natural environment targeted rate will also provide for enhanced facilitation of community conservation groups through Pest Free Auckland, which can complement contracted works.</td>
<td>Accept in part</td>
<td>Retain approach from proposed plan</td>
<td>The board supports the staff recommendation.</td>
<td></td>
</tr>
<tr>
<td>Suggest</td>
<td>Although the proposed landscape-scale</td>
<td>Accept in</td>
<td>Amend</td>
<td>The board</td>
<td></td>
</tr>
</tbody>
</table>
### Urban Management

- **Description:** Possum control applies only to rural areas, the council may also undertake possum control in high ecological value parks or strategic peninsulas within urban areas. The council also facilitates community-led possum control through Pest Free Auckland. Staff acknowledge this is not well reflected in the formatting of the proposed plan.

- **Recommendation:** Supports the staff recommendation.

- **Comment:** It is critical that the containment programme is maintained for Waiheke and other possum-free islands in the Hauraki Gulf but that the methodology is adapted to prioritise high value areas.

<table>
<thead>
<tr>
<th>Freshwater Pests</th>
<th>Suggest freshwater management should focus on management of sediment and other pollutants</th>
<th>Management of freshwater pollutants falls outside the scope of the Regional Pest Management Plan.</th>
<th>Reject</th>
<th>Retain approach from proposed plan</th>
<th>The board supports the staff recommendation</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Suggest additional sites for management</th>
<th>Suggest additional sites for management</th>
<th>The budget determined through the natural environment targeted rate does not provide for an increase in control beyond that provided for in the proposed plan. Community activity at other freshwater sites will instead be supported primarily through the Pest Free Auckland initiative. Site selection was based on a combination of ecological priority, existing community activity and ability to manage other pressures at the site, such as nutrient enrichment.</th>
<th>Reject</th>
<th>Retain approach from proposed plan</th>
<th>The board supports the staff recommendation</th>
</tr>
</thead>
</table>

| Suggest new species | For species that were not included in the proposed plan, it is not possible for the council to include new pests in the final plan at this stage (see below in "other" section for further explanation). Some species were included in the proposed plan at a regional level but not in the site-led programme due to their current absence from those sites. In some cases it may be useful to add species to the site-led programme, even if they are not currently at those sites, to support potential future management in case of incursions. | Accept | Consider additional species for inclusion in site-led programme | The board supports the staff recommendation and wants expansion around high value sites to include invasive species such as mohi-plant, morus, climbing asparagus, tradescantia and Japanese honeysuckle. There must be recognition of prior major investments in plant pest control. |
|---------------------|------------------------------------------------------------------------------------------|-------|--------------------------------]|------------------------------------------|

| Other | Disagree with inclusion of cats as a pest variety | Many submitters expressed concerns regarding risks to pet cats. In many instances these are perceived rather than actual risks, with submitters assuming much more extensive cat control than is likely in practice. | Accept | Staff are not recommending any changes to the current proposed methods. Staff are |
|--------|--------------------------------------------------|-------------------------------------------------|-------|----------------------------------|------------------------------------------|

The board will give final feedback when final wording is confirmed. The board supports the
#### Attachment A

**Item 14**

<table>
<thead>
<tr>
<th>Reason for Consideration</th>
<th>Action Taken</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| In addition, the council always seeks to use best practice methods which comply with all relevant legislation and guidance provided by the SPCC, Ministry of Primary Industries and the National Animal Welfare Advisory Committee. While staff consider the approach set out in the proposed plan remains sound, staff are exploring options for mitigating these concerns in the wording of the final plan. Considering changes to how these controls are described, in particular:  
  - the possibility to refer to unowned cats rather than pest cats;  
  - ways in which the spatial extent of the proposed approach can be clarified. | Accept | The board supports the staff recommendation |
| Suggest add new pest (included myrtle rust, marine pests, additional pest plants and animals) It is not open to the council to insert a new pest in the final plan now. This is due to Biosecurity Act process requirements as well as general principles of consultation. Following adoption of the operative plan it is open to the council to add new species during the lifetime of the plan through a partial plan review under section 100D of the Biosecurity Act. | Reject | Retain approach from proposed plan |
| **Additional substantive changes to plan**  
Table 2 below highlights other substantive changes that may be required to the Proposed Regional Pest Management Plan to fit within the available budget provided by the Natural Environment Targeted Rate, or in response to submissions (these points are not covered above as they did not receive a large amount of public feedback). Less significant changes may be required as staff work through submissions. | Accept in part | New species may be added to parks site-led programme, subject to further consideration. |
| Pests on parks Some of the suggested parks may have merit for inclusion in the plan to ensure parks are comprehensively protected from pest plant impacts. Further work is required to review suggestions and to recommend possible additions. It is not open to the council to add new species which were not included in the proposed plan, but in some instances it may be possible to add species to the site-led programme. | Accept | Consider amending mapped areas of buffers to remove these situations. May require re-wording of rule construction. |
| Amend buffer boundaries to incorporate small pockets of land that are encircled by buffer but do not | Accept | The board supports the staff recommendation |
### Approval of feedback on the Proposed Regional Pest Management Plan

#### Item 14

<table>
<thead>
<tr>
<th>Category</th>
<th>Feedback Description</th>
<th>Recommendation</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pest spread to Hauraki Gulf Islands</td>
<td>Suggest moth plant be eradicated from the Hauraki Gulf</td>
<td>Reject</td>
<td>Remove Hauraki Gulf good neighbour rule for moth plant. Retain moth plant eradication programme for Aotearoa Great Barrier, and sites which fall within buffer areas around priority parks/land.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The board does not support this recommendation and believes that the Hauraki Gulf Islands good neighbour rule should be retained and that budget from the targeted rate should be allocated to the control of moth plant in high value sites.</td>
</tr>
<tr>
<td></td>
<td>Suggest stricter rules to prevent pest spread to islands</td>
<td>Accept in part</td>
<td>Staff are exploring options to mitigate submitter concerns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The board supports the staff recommendation and supports the implementation of stricter measures including the Waiheke KDD Protection Plan.</td>
</tr>
<tr>
<td>Other</td>
<td>Query whether the proposed Good Neighbour Rule for rabbits is fair</td>
<td>Accept</td>
<td>Remove proposed rabbit good neighbour rule from final plan and manage rabbits through available biocontrol agents and advice provision.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>The board does not support the staff recommendations and requests retaining the rabbit good neighbour rule.</td>
</tr>
</tbody>
</table>

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**Attachment A**

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**Approval of feedback on the Proposed Regional Pest Management Plan**

**Page 65**
Te take mō te pūrongo
Purpose of the report
1. Attached are copies of the record of proceedings of the Waiheke Local Board workshops held on 6 December and 13 December 2018.

Ngā tūtohunga
Recommendation
That the Waiheke Local Board:

a) note the record of proceedings of the Waiheke Local Board workshops held on 6 December and 13 December 2018.

Ngā tāpirihanga
Attachments

<table>
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<tr>
<td>A</td>
<td>20181206 Waiheke Local Board Workshop proceedings</td>
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<tr>
<td>B</td>
<td>20181213 Waiheke Local Board Workshop proceedings</td>
<td>73</td>
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</table>

Ngā kaihaina
Signatories

<table>
<thead>
<tr>
<th>Author</th>
<th>Safia Cockerell - Democracy Advisor - Waiheke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Louise Mason - GM Local Board Services</td>
</tr>
<tr>
<td></td>
<td>Helgard Wagener - Relshp Mgr - Great Barrier and Waiheke</td>
</tr>
</tbody>
</table>
Waiheke Local Board Workshop proceedings

Workshop record of the Waiheke Local Board held in the Waiheke Local Board Office, 10 Belgium Street, Ostend on Thursday 6 December 2018, commencing at 9.00am.

PRESENT
Chairperson: Cath Handley
Members: John Meeuwsen
Shirin Brown
Paul Walden  (From 11:12pm until 2:39pm)
Apology: Bob Upchurch
Also present: Janine Geddes, Helgard Wagener, Mark Inglis, Safia Cockerell

<table>
<thead>
<tr>
<th>Workshop Item</th>
<th>Governance role</th>
<th>Summary of Discussions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Land Transport Plan</td>
<td>Input into regional decision making</td>
<td>Collated and finalised board feedback on the Regional Land Transport Plan.</td>
</tr>
<tr>
<td>feedback session</td>
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<tr>
<td>Mark Inglis (Local Board Advisor)</td>
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<tr>
<td>Member Discussions</td>
<td>Local Initiatives/Specific Decisions</td>
<td>Members used this time to discuss a number of local issues.</td>
</tr>
<tr>
<td>Quick Response Round Two</td>
<td>Local Initiatives/Specific Decisions</td>
<td>Considered the applications for the Waiheke Quick Response Round Two and provided</td>
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<tr>
<td>Agus Castro Pons (Grants Advisor)</td>
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<td>direction on the allocation of the fund.</td>
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<tr>
<td>Harbormasters</td>
<td>Keeping informed</td>
<td>Discussed:</td>
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<tr>
<td>Marc Davis (Operations Manager)</td>
<td></td>
<td>• Moorings in Anzac Bay</td>
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<tr>
<td></td>
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<td>• Summer activity with boaties, compliance and application</td>
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<td>• Delegation of powers over summer</td>
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<td>• Boating speeds</td>
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<td>• BAU compliance</td>
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<td>Waiheke Area Plan working party</td>
<td>Local Initiatives/Specific Decisions</td>
<td>Discussed:</td>
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<tr>
<td>meeting</td>
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<td>• Community Consultation update</td>
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<tr>
<td>Michele Perwick</td>
<td></td>
<td>• Mana whenua update</td>
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<tr>
<td></td>
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<td>• Topic papers – update</td>
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<td></td>
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<td>• Programme</td>
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### Attachment A

#### Item 15

<table>
<thead>
<tr>
<th>(Principle Planner)</th>
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<tbody>
<tr>
<td>Beth Tauroa (Principle Advisor)</td>
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<tr>
<td>Warren Macennan (Manager Planning - North/West)</td>
<td></td>
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<tr>
<td>Peter Varri (Team Leader North West and Islands)</td>
<td></td>
</tr>
<tr>
<td>Councillor Mike Lee</td>
<td></td>
</tr>
<tr>
<td>Liane Ngamane (Independent Māori Statutory Board)</td>
<td></td>
</tr>
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</table>

#### Matiatia Plan Project Team Meeting #2

- John Nash (Programme Manager)
- Melanie Dale (Elected Member Relationship Manager)
- Chris Morgan (Group Manager Strategic Development)
- Gary Wilton (Parks & Places Specialist)
- Bridget Velvin (Senior Maintenance Delivery Coordinator)
- Chris Lock (ATEED)
- Gareth Willis (Manager Ferry Service)
- Pippa Sommerville (PSR Portfolio Manager)
- Ngati Paoa
- David Smith (DMI)

<table>
<thead>
<tr>
<th>Local Initiatives/Specific Decisions</th>
<th>Reached agreement on the Stage 1 Matiatia Plan for stakeholder engagement in the new year.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Agree local consultation content for the 2019-2010</th>
<th>Local Initiatives/Specific Decisions</th>
<th>Agreed local consultation content for the 2019-2010 Local Board Agreement.</th>
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</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Local Board Agreement</td>
<td>Local Initiatives/Specific Decisions</td>
<td></td>
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<tr>
<td>-----------------------</td>
<td>-------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Janine Geddes</td>
<td>• Provided an update on Stakeholder Consultation to date.</td>
<td></td>
</tr>
<tr>
<td>(Senior Local Board</td>
<td>• Outlined pool size and preliminary carparking findings.</td>
<td></td>
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<tr>
<td>Advisor)</td>
<td>• Discussed potential considerations that arise from the preliminary findings.</td>
<td></td>
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<tr>
<td>Jastine Joseph</td>
<td>• Outlined potential next steps.</td>
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<td>(Financial Lead)</td>
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</table>

Waiheke Island Community Pool

<table>
<thead>
<tr>
<th>Sunny Karan (Sport and Recreation Lead) Consultants</th>
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</thead>
<tbody>
<tr>
<td>Pippa Sommerville (PSR Portfolio Manager)</td>
</tr>
<tr>
<td>John Nash (Programme Manager)</td>
</tr>
</tbody>
</table>

The workshop concluded at 4:06pm
Waiheke Local Board Workshop proceedings

Workshop record of the Waiheke Local Board held in the Waiheke Local Board Office, 10 Belgium Street, Ostend on Thursday 13 December 2018, commencing at 9.00am.

**PRESENT**

**Chairperson:** Cath Handley

**Members:**

- John Meeuwsen
- Shirin Brown
- Paul Walden (until 11:15am)

**Apology:** Bob Upchurch

**Also present:** Janine Geddes, Helgard Wagener, Mark Inglis, Safia Cockerell

<table>
<thead>
<tr>
<th>Workshop Item</th>
<th>Governance role</th>
<th>Summary of Discussions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Discussions</td>
<td>Local Initiatives/Specific Decisions</td>
<td>Members used this time to discuss a number of local issues.</td>
</tr>
<tr>
<td>Wawata Estate Thompson’s Point subdivision</td>
<td>Local Initiatives/Specific Decisions</td>
<td>Communicated with the local board what their plans are and answered any queries the board had about this significant development.</td>
</tr>
<tr>
<td>Regional Land Transport Plan feedback</td>
<td>Local Initiatives/Specific Decisions</td>
<td>Member’s reviewed and provided input into the board’s draft feedback on the Regional Land Transport Plan and 10-year Transport Plan.</td>
</tr>
<tr>
<td>Mark Inglis (Local Board Advisor)</td>
<td></td>
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<tr>
<td>Agenda runthrough</td>
<td></td>
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The workshop concluded at 12:14pm
Governance Forward Work Programme
File No.: CP2019/00248

Whakarāpopototanga matua
Executive summary
1. Attached is a copy of the Governance Forward Work Programme for Waiheke which is a schedule of items that will come before the board at business meetings and workshops over the next 12 months.

Ngā tūtohunga
Recommendation
That the Waiheke Local Board:
a) note the Governance Forward Work Programme.

Ngā tāpirihanga
Attachments
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
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<tr>
<td>A.</td>
<td>Governance Forward Work Programme</td>
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Ngā kaihaina
Signatories

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<tr>
<th>Author</th>
<th>Safia Cockerell - Democracy Advisor - Waiheke</th>
</tr>
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<tbody>
<tr>
<td>Authorisers</td>
<td>Louise Mason - GM Local Board Services</td>
</tr>
<tr>
<td></td>
<td>Helgard Wagener - Relshp Mgr - Great Barrier and Waiheke</td>
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<tr>
<td>Meeting (workshop or business meeting)</td>
<td>Date</td>
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</table>
List of resource consents

File No.: CP2019/00249

Whakarāpopototanga matua
Executive summary

1. Attached are the lists of resource consent applications related to Waiheke Island received from 1 to 7 December 2018, 8 to 16 December 2018, 17 to 21 December 2018, 7 to 11 January and 12 to 20 January 2019.

Ngā tūtohunga
Recommendation

That the Waiheke Local Board:

a) note the lists of resource consents lodged related to Waiheke Island from 1 to 7 December 2018, 8 to 16 December 2018, 17 to 21 December 2018, 7 to 11 January and 12 to 20 January 2019.

Ngā tāpirihanga
Attachments

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<tr>
<th>No.</th>
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<tr>
<td>A</td>
<td>Resource consent applications received from 1 to 7 December 2018</td>
<td>83</td>
</tr>
<tr>
<td>B</td>
<td>Resource consent applications received from 8 to 16 December 2018</td>
<td>85</td>
</tr>
<tr>
<td>C</td>
<td>Resource consent applications received from 17 to 21 December 2018</td>
<td>87</td>
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<tr>
<td>D</td>
<td>Resource consent applications received from 7 to 11 January 2019</td>
<td>89</td>
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<tr>
<td>E</td>
<td>Resource consent applications received from 12 to 20 January 2019</td>
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Ngā kaihaina
Signatories

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<tr>
<th>Author</th>
<th>Safia Cockerell - Democracy Advisor - Waiheke</th>
</tr>
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<tbody>
<tr>
<td>Authorisers</td>
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</tr>
<tr>
<td></td>
<td>Helgard Wagener - Relshp Mgr - Great Barrier and Waiheke</td>
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## Resource consent applications received from 1 to 7 December 2018

<table>
<thead>
<tr>
<th>Application No.</th>
<th>Date Lodged</th>
<th>Application Type</th>
<th>Applicant Name</th>
<th>Address</th>
<th>Description</th>
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<tbody>
<tr>
<td>DIS60330940</td>
<td>Dec 3, 2018</td>
<td>Discharge Consent Application</td>
<td>Russell Graham Thom</td>
<td>75 Great Barrier Road Waiheke Island Auckland 1081</td>
<td>New wastewater treatment and disposal system associated with a new dwelling (main consent is BUN6033038).</td>
</tr>
<tr>
<td>LUC60331016</td>
<td>Dec 4, 2018</td>
<td>Land Use Consent Application</td>
<td>Penelope Thompson</td>
<td>62 Palm Road Waiheke Island Auckland 1081</td>
<td>Adds and alters to an existing dwellings deck area with a new roof structure enclosing the outside deck living area.</td>
</tr>
<tr>
<td>LUC60331056</td>
<td>Dec 4, 2018</td>
<td>Land Use Consent Application</td>
<td>Ryan Downtown</td>
<td>26 Man O’War Bay Road Waiheke Island Auckland 1971</td>
<td>Seasonal Tasting Facility.</td>
</tr>
<tr>
<td>DIS60331267</td>
<td>Dec 6, 2018</td>
<td>Discharge Consent Application</td>
<td>Jonathan Rees</td>
<td>39 Kennedy Point Road Waiheke Island Auckland 1081</td>
<td>Wastewater treatment and disposal (main consent is BUN60331265).</td>
</tr>
<tr>
<td>LUC60331266</td>
<td>Dec 6, 2018</td>
<td>Land Use Consent Application</td>
<td>Jonathan Rees</td>
<td>39 Kennedy Point Road Waiheke Island Auckland 1081</td>
<td>Retrospective resource consent for the installation of an Eco-pod sleepout and for a small garden shed below an existing dock (main consent is BUN60331265).</td>
</tr>
<tr>
<td>LUC60331281</td>
<td>Dec 6, 2018</td>
<td>Land Use Consent Application</td>
<td>Michael Browne</td>
<td>18 Anzac Road Waiheke Island Auckland 1971</td>
<td>Construct an in-ground barrier pile wall and reinstates pedestrian access steps to a residential site.</td>
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<tr>
<td>LUC60331327</td>
<td>Dec 7, 2018</td>
<td>Land Use Consent Application</td>
<td>Otariu Grove Partnership</td>
<td>324 Waiheke Road Waiheke Island Auckland 1971</td>
<td>Change of use, patronage, and new shed.</td>
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<tr>
<td>Application No.</td>
<td>Date Lodged</td>
<td>Application Type</td>
<td>Applicant Name</td>
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<td>DIS0331403</td>
<td>Dec 10, 2018</td>
<td>Discharge Consent Application</td>
<td>Simon Andrew Harkness</td>
<td>168 Ocean View Road Waiheke Island Auckland 1081</td>
<td>New domestic wastewater treatment and disposal system associated with a new dwelling (Main consent is BUN600331389).</td>
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<tr>
<td>LUC0331401</td>
<td>Dec 10, 2018</td>
<td>Land Use Consent Application</td>
<td>Simon Andrew Harkness</td>
<td>168 Ocean View Road Waiheke Island Auckland 1081</td>
<td>New residential dwelling (main consent is BUN600331389).</td>
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<tr>
<td>LUC0331507</td>
<td>Dec 11, 2018</td>
<td>Land Use Consent Application</td>
<td>Whelan Building Limited Attn: Tim Whelan</td>
<td>65 The Strand Waiheke Island Auckland 1081</td>
<td>Height in Relation to Boundary infringement (retrospective).</td>
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<tr>
<td>LUC0331570</td>
<td>Dec 12, 2018</td>
<td>Land Use Consent Application</td>
<td>Waiheke Island Playcentre Attention: Haley Pope 5A Albert Crescent Waiheke Island Auckland 1081</td>
<td>Construct an entry addition and an outdoor play building for the Playcentre.</td>
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<tr>
<td>LUC0331588</td>
<td>Dec 13, 2018</td>
<td>Land Use Consent Application</td>
<td>Marcus Johannes Hitzbleck</td>
<td>50 Tiri Road Waiheke Island Auckland 1081</td>
<td>Adds a and alts to an existing dwelling of a laundry addition and a louvred pergola over an existing deck area.</td>
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<tr>
<td>TRE0331566</td>
<td>Dec 13, 2018</td>
<td>Tree Consent Application</td>
<td>Philip Samuel Newland</td>
<td>117 The Strand Waiheke Island Auckland 1081</td>
<td>Removal of Pohutukawa to ground level.</td>
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<tr>
<td>DIS0331615</td>
<td>Dec 14, 2018</td>
<td>Discharge Consent Application</td>
<td>Karapiro Properties Limited</td>
<td>6 Totara Road Waiheke Island Auckland 1081</td>
<td>Replacement of current groundwater take consent (permit 35139) for tanker filling which expires in 2020 under the new name of Karapiro Properties Ltd with the same conditions and a new expiry date.</td>
</tr>
<tr>
<td>LUC0331692</td>
<td>Dec 14, 2018</td>
<td>Land Use Consent Application</td>
<td>Dane Mark Fuller</td>
<td>52 Burrell Road Waiheke Island Auckland 1081</td>
<td>Convert carport to garage.</td>
</tr>
<tr>
<td>WAT0331616</td>
<td>Dec 14, 2018</td>
<td>Water Consent application</td>
<td>Karapiro Properties Limited</td>
<td>6 Totara Road Waiheke Island Auckland 1081</td>
<td>Replacement of current groundwater take for tanker filling (permit 35139 which expires 31 December 2020) under the new name Karapiro Properties Ltd with the same conditions and a new expiry date.</td>
</tr>
</tbody>
</table>
### Resource consent applications received from 17 to 21 December 2018

<table>
<thead>
<tr>
<th>Application No.</th>
<th>Date Lodged</th>
<th>Application Type</th>
<th>Applicant Name</th>
<th>Address</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>LUC60332031</td>
<td>Dec 17, 2018</td>
<td>Land Use Consent Application</td>
<td>Peter Brent Johnston</td>
<td>4 Matai Road Waiheke Island Auckland 1081</td>
<td>Retrospective approval to construct two accessory buildings (storage sheds).</td>
</tr>
<tr>
<td>DIS60332033</td>
<td>Dec 19, 2018</td>
<td>Discharge Consent Application</td>
<td>Bruce Alexander Wighton</td>
<td>40 Matapana Road Waiheke Island Auckland 1081</td>
<td>New domestic wastewater treatment and discharge system associated with a new residential dwelling (Main consent is BUN60322031).</td>
</tr>
<tr>
<td>LUC60332032</td>
<td>Dec 19, 2018</td>
<td>Land Use Consent Application</td>
<td>Bruce Alexander Wighton</td>
<td>40 Matapana Road Waiheke Island Auckland 1081</td>
<td>New residential dwelling (main consent is BUN6032031).</td>
</tr>
<tr>
<td>LUC60332037</td>
<td>Dec 19, 2018</td>
<td>Land Use Consent Application</td>
<td>Steven Ingram</td>
<td>86 Hill Road Waiheke Island Auckland 1081</td>
<td>Land use consent associated with Lot 110: New deck extension and height in relation to boundary infringement arising from subdivision (main consent is BUN60318032).</td>
</tr>
<tr>
<td>LUC60332127</td>
<td>Dec 20, 2018</td>
<td>Land Use Consent Application</td>
<td>Christopher Roland</td>
<td>17-19 Wilma Road Waiheke Island Auckland 1081</td>
<td>Construct three bay shed that is 12 x 10 metres in size, clad in colour steel with 1 pa door and a roller door. A building permit exists for this ref # BCO10279645.</td>
</tr>
<tr>
<td>Application No.</td>
<td>Date Lodged</td>
<td>Application Type</td>
<td>Applicant Name</td>
<td>Address</td>
<td>Description</td>
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<tr>
<td>DIS60332636</td>
<td>Jan 7, 2019</td>
<td>Discharge Consent Application</td>
<td>Paul Anthony Bond</td>
<td>24 Belgium Street Waiheke Island Auckland 1081</td>
<td>A new wastewater treatment and discharge system associated with a new retail development (main consent is BUN60332633).</td>
</tr>
<tr>
<td>LUC60332379</td>
<td>Jan 7, 2019</td>
<td>Land Use Consent Application</td>
<td>Ewen James Stevenson</td>
<td>520 Cowes Bay Road Waiheke Island Auckland 1971</td>
<td>Helipad at 520 and 510 Cowes Bay Road</td>
</tr>
<tr>
<td>LUC60332445</td>
<td>Jan 7, 2019</td>
<td>Land Use Consent Application</td>
<td>Paul Anthony Bond</td>
<td>24 Belgium Street Waiheke Island Auckland 1081</td>
<td>A two storey, 80m² building is proposed within the frontage of the subject site which will be used as a yoga studio and a lunch bar with an inclusive retail activity. Proposal does not meet the front yard and landscaping provisions of the Commercial 2 land unit (main consent is BUN60332633).</td>
</tr>
<tr>
<td>SUB60332447</td>
<td>Jan 7, 2019</td>
<td>Subdivision Consent Application</td>
<td>Bert Verreyssen</td>
<td>33 South Pacific Road Rakino Island Auckland 1010</td>
<td>2 lot freehold subdivision.</td>
</tr>
<tr>
<td>LUC60332507</td>
<td>Jan 8, 2019</td>
<td>Land Use Consent Application</td>
<td>Gwyn Thomas</td>
<td>87 Donald Bruce Road Waiheke Island Auckland 1081</td>
<td>Additions and alterations to an existing dwelling.</td>
</tr>
<tr>
<td>TRE60332504</td>
<td>Jan 8, 2019</td>
<td>Tree Consent Application</td>
<td>Geoffrey William Anderson</td>
<td>62 Burrell Road Waiheke Island Auckland 1081</td>
<td>Removal of several whitley wood and red Matipo to allow for safe driveway access. Replacement planting to mitigate for loss.</td>
</tr>
<tr>
<td>TRE60332505</td>
<td>Jan 8, 2019</td>
<td>Tree Consent Application</td>
<td>Peter John Kaiser</td>
<td>21 Miro Road Waiheke Island Auckland 1081</td>
<td>Prune one branch of a To Toki tree that overhangs the fence and towards the neighbours roof.</td>
</tr>
<tr>
<td>TRE60332565</td>
<td>Jan 8, 2019</td>
<td>Tree Consent Application</td>
<td>Marion Jocelyn Valk</td>
<td>69 Donald Bruce Road Waiheke Island Auckland 1081</td>
<td>Prune back vegetation overhanging public road and garage.</td>
</tr>
<tr>
<td>TRE60332713</td>
<td>Jan 10, 2019</td>
<td>Tree Consent Application</td>
<td>Arorbros</td>
<td>29 Great Barrier Road Waiheke Island Auckland 1081</td>
<td>Crown thin out Totara tree.</td>
</tr>
<tr>
<td>TRE60332714</td>
<td>Jan 10, 2019</td>
<td>Tree Consent Application</td>
<td>Paula Boyd</td>
<td>10 Tiri View Road Waiheke Island Auckland 1081</td>
<td>Pruning back of trees from overhead power lines in the vicinity of no. 6 Tiri View Road.</td>
</tr>
<tr>
<td>Consent Number</td>
<td>Date</td>
<td>Applicant</td>
<td>Address</td>
<td>Purpose</td>
<td></td>
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</tr>
<tr>
<td>TRE60332716</td>
<td>Jan 10</td>
<td>Paul Joseph Haly</td>
<td>182 Awaawaroa Road Waiheke Island Auckland 1971</td>
<td>Pruning lower branches of 5 Puriri trees circling a picnic table on the Esplanade Reserve adjacent to the entry way into 182 Awaawaroa Road Eco Village.</td>
<td></td>
</tr>
<tr>
<td>TRE60332800</td>
<td>Jan 11</td>
<td>Paul Francis Dunne</td>
<td>3 Ocean Road Waiheke Island Auckland 1081</td>
<td>Prune back tree limb overhanging driveway so cars can enter safely.</td>
<td></td>
</tr>
<tr>
<td>TRE60332801</td>
<td>Jan 11</td>
<td>Duthco Trustees (TC) Limited &amp; Patel Pike &amp; Associate Trustee</td>
<td>38 Karaka Road Waiheke Island Auckland 1081</td>
<td>Removal of one Kanuka and the pruning of another to reduce leaf contamination affecting drinking water take from roof.</td>
<td></td>
</tr>
</tbody>
</table>
### Resource consent applications received from 12 to 20 January 2019

<table>
<thead>
<tr>
<th>Application No.</th>
<th>Date Lodged</th>
<th>Application Type</th>
<th>Applicant Name</th>
<th>Address</th>
<th>Description</th>
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<tr>
<td>CST60332903</td>
<td>Jan 14, 2019</td>
<td>Coastal Consent Application</td>
<td>Auckland Transport</td>
<td>ROAD Ocean View Road Waiheke Island Auckland 1081</td>
<td>Minor extension of existing Matatia Ferry Terminal building to include new toilet facilities. The extension will be above the existing wharf.</td>
</tr>
<tr>
<td>TRE60332875</td>
<td>Jan 14, 2019</td>
<td>Tree Consent Application</td>
<td>Love Mngohol Chile</td>
<td>110 Hill Road Waiheke Island Auckland 1081</td>
<td>Delivered to Waiheke office: 1) to remove two dead karuka trees, another whose branches are hanging precariously over house. 2) To remove four ponga trees to enable building of retaining wall to help land. 3) We have already nursed six natives to maturity and will plant two natives to replace each tree removed. See details on attached documents.</td>
</tr>
<tr>
<td>LUC60332932</td>
<td>Jan 15, 2019</td>
<td>Land Use Consent Application</td>
<td>William Stewart Wright Carruthers</td>
<td>11 Newton Road Waiheke Island Auckland 1081</td>
<td>Additions and alterations to an existing dwelling.</td>
</tr>
<tr>
<td>CST60332972</td>
<td>Jan 16, 2019</td>
<td>Coastal Consent Application</td>
<td>Auckland Transport</td>
<td>Wharf Ocean View Road Waiheke Island Auckland 1081</td>
<td>Minor extension of existing Matatia Ferry Terminal building to include new toilet facilities. The extension will be above the existing wharf.</td>
</tr>
<tr>
<td>SUB60332974</td>
<td>Jan 16, 2019</td>
<td>Subdivision Consent Application</td>
<td>John Broughton Adams</td>
<td>7 Junction Road Waiheke Island Auckland 1081</td>
<td>Boundary relocation and ROW with 7, 11 and 13A Junction Road.</td>
</tr>
<tr>
<td>LUC60333128</td>
<td>Jan 18, 2019</td>
<td>Land Use Consent Application</td>
<td>Mark Ronald Chamberlain</td>
<td>5 View Road Waiheke Island Auckland 1081</td>
<td>New single storey three bedroom residential dwelling.</td>
</tr>
<tr>
<td>TRE60333083</td>
<td>Jan 18, 2019</td>
<td>Tree Consent Application</td>
<td>Wawata Estate Limited</td>
<td>306 Sea View Road Waiheke Island Auckland 1081</td>
<td>Removal of 16 protected species growing within the footprint of a new road network.</td>
</tr>
<tr>
<td>TRE60333089</td>
<td>Jan 18, 2019</td>
<td>Tree Consent Application</td>
<td>J &amp; G Harrop Limited</td>
<td>4 Burrell Road Waiheke Island Auckland 1081</td>
<td>Prune a Phutukawa tree.</td>
</tr>
<tr>
<td>TRE60333120</td>
<td>Jan 18, 2019</td>
<td>Tree Consent Application</td>
<td>Ministry of Education</td>
<td>7-11 Donald Bruce Road Waiheke Island Auckland 1081</td>
<td>Removal of four Phutukawa, one Karuka and one Hohora tree(s) within Te Huruhi Primary School grounds affecting approved OPW consent works (OPW60324344).</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
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<tr>
<td>17</td>
<td>Tree Consent Application</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Remove dead Kanuka tree and top Dogwood tree.

Name: Tin Le Coueur

Address: 10 Konaha Road, Waiheke Island, Auckland 1081

Reference: TRE80333122

Date: 16-01-2019
## ATTACHMENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Attachment</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>A</td>
<td>Deputation - Rollout of the 5G network and the impacts on human health supporting material</td>
<td>95</td>
</tr>
<tr>
<td>9.2</td>
<td>A</td>
<td>Photos of dust on Taraire Street</td>
<td>131</td>
</tr>
</tbody>
</table>
The Precautionary Principle and the Rollout of 5G Wireless Technology -
Summary, Actions and Links for Waiheke Local Board

Introduction

We invite the Waiheke Local Board to review the attached links documenting
the current international campaign to halt the introduction of 5G wireless
technology into our communities.

This is a matter of urgency, as telecommunications companies ramp up their
promotion of 'necessary' and 'safe' high intensity RFR (radio frequency
radiation) delivery systems and personal devices, while denying or ignoring
scientific evidence verifying deadly effects on personal health and the
environment.

Untapped malaise about 5G and its attendant infrastructure, is gathering
momentum around the world. More and more communities are taking action
to rein in the proliferation of 4G and 5G small cells, set to add millions of new
towers and antennas to our already radiation-saturated environment.

Turning a blind eye to public sentiment regarding health, environment,
aesthetics, historic preservation etc., and convinced that no one and nothing
can stop them, the telecommunication giants continue to foist 4G (and soon
5G) small cells on municipalities around the country. In response, communities
are organising to halt or slow this roll-out, and to keep 4G and 5G small cells
and antennas far from homes.
We invite our local and national elected representatives to join us in educating
New Zealand communities and generating appropriate legislation that protects
our health and our environment.
Please review our recommendations and the relevant links.

We welcome your questions, your recommendations, and your support.

Michael Fleck, M.A.
Susan Pockett, M.Sc., Ph.D.
5G Free Waiheke
Recommendations (Actions)

1. Request a report from Council on 5G safety, and invite us to a subsequent Local Board meeting to review and discuss. We recommend Council's head of health, safety and well-being, Oliver Sanandres Cmiosh: oliver sanandres@aucklandcouncil.govt.nz.

2. Support our (5G Free Waiheke) deputation to the next meeting of Auckland Council's Environment and Community Committee. One or two Board members, please join us, along with a Gulf News reporter.

3. Draft a submission to the Ministry for Environment and Ministry of Health calling for a moratorium on terrestrial 5G roll-outs in New Zealand, invoking the Precautionary Principle until independent research into health and safety is conducted, and the outdated 1998 regulations are revised.

4. Support the international appeal against space based 5G, and lobby central government to do likewise: refuse permission for space-based 5G systems to broadcast onto NZ territory. https://www.5gspaceappeal.org/

5. Support our declaration of Waiheke Island as a 5G Free Zone

References supporting the Deputation to the Waiheke Local Board from 5G Free Waiheke residents group.

Please review the following links.
We welcome your questions, your recommendations, and your support.

1. For the best summary of this issue, please read:
   https://www.activistpost.com/tag/bn-frank (also attached in the scan)
2. For the most recent scientific summary on RFR (radio frequency radiation) and associated health and ethical issues, read Sue Pockett's peer-reviewed paper published in the NZ Medical Journal, December 2018. (also attached as hard copy).
3. The New Zealand website for 5G updates is http://www.5G.org.nz
4. See Sue Kedgley's Pakuranga speech, 2009:
“It’s my observation that if a community is organised, telcos will step back and start to consult. If it isn’t, they will just go straight ahead and erect their towers and equipment. “In the case of Atawhai and Titahi Bay, which organised major protests, the telcos halted the construction of their towers and have come up with new consultation process, involving the establishment of a working group comprised of representatives of council, consumers and telcos to work out what sites are least harmful and least intrusive to a community. “That’s what needs to happen here. You need to set up a working group to work out where your community would agree to construct cell towers that are least harmful and intrusive to your community. But we also need to revise our national standard and make it a precautionary one.” --Sue Kedgley

5) Why are people in US and UK communities opposed to future 5G wireless service?
Already some U.S. cities like Seattle and Portland have sued the federal government, charging federal over-reach on an issue where neighbourhoods, residents and their local governments should have the final say.

6) Call for update to IARC -- Grade 1: definitely causes cancer.

7) Members of the Mill Valley, California, City Council voted unanimously last week to block deployments of 5G towers in the city's residential areas by activating an urgency ordinance. The legislation, which is active immediately, allows authorities to enact regulations affecting the health and safety of residents. San Anselmo and Ross have already adopted similar ordinances. Mill Valley blocks faster, smaller cell phone towers over cancer fears

5G -- Unsafe. Unethical, Unnecessary.
We have had enough Radiation!
Support Your Local Wireless Free Zone
5G Free Waiheke
OVERVIEW

The public has no understanding of what so-called “small cells” and 5G are, and that these antennas are going to beam high levels of microwave radiation directly into homes 24/7. The public is largely unaware of the many bills at the Federal and state levels poised to remove our rights to weigh in on the placement of these Wireless Telecommunications Facilities (WTFs). While installing more wireless infrastructure throughout neighborhoods may be a goal of the telecom industry, it is by no means a necessary public service, and more and more people are opposed to it.

What are “small cells” for?
“Small cells” in neighborhoods are not about bringing broadband to underserved communities or “filling in gaps in coverage”. They are intended to serve as the “backbone” infrastructure for the Internet of Things, “smart cities,” driverless cars, and whatever other applications the private sector can dream up – most of which will not improve our quality of life, but will in fact, wreak havoc on it.

Telecom wants to remove regulations for cell tower siting
To deploy 4G/5G “small cells” Telecom is aggressively seeking to rid itself of all regulations. Telecom wants the benefits of a regulated utility, but none of the responsibilities. For more on this please see.
http://scientists4wiredtech.com/regulation/kushnick-primer/

Are antennas next to homes even necessary for 5G?
Verizon’s CEO stated clearly that these small cells transmit well over half a mile. So “small cells” can, and should be situated on macro towers far from where people live, sleep and heal. Verizon’s statement can be heard here.
https://youtu.be/FwAsr1pC13Q

Why communities should decide for themselves
If a community wants to protect its residents and prefers fiber to all homes, it should be able to make that choice. The balance and regulation of both wired and wireless broadband must be determined by local communities - not by Telecom, regulatory bodies, or by state or federal governments.
Furthermore, no two communities are the same. The arid, flat, topography of California, which is currently struggling with droughts and wildfires, is completely different from New England states, which are cold, mountainous and moist regions. One deployment plan cannot possibly be right for all regions.

We cannot afford to walk into the future with an agenda dictated by corporate greed. The stakes are too high.

Our homes. Our streets. Our communities. Our choice!!!

FIBER

"Fiber is safer, faster, more reliable, and far more cyber secure and energy efficient than wireless." Ronald M. Powell (Ph.D.)

Internet and Telecommunications data can be transmitted either through wires or through the air "wirelessly". Wired transmissions are faster, safer, more reliable, and far more cyber secure and energy efficient than wireless transmissions. So in the best of all worlds, we would rely on wired transmissions for the vast majority of our Internet and Telecommunications needs, and reserve wireless for short communications when out-and-about. Unfortunately, that is not the infrastructure Telecom is designing for us.

The best way to move data from point A to point B is through fiber optic cables. The wireless companies know this, which is why they put fiber to the base of the poles. 95% of all Internet and telecommunications traffic is transmitted through fiber. Only the last 5% of the trek is what we are discussing here. Should the fiber stop at the pole and be spewed wirelessly through the air the remainder of the way, or should it be sent through fiber optic cables?

So why does Telecom want to stop the fiber at the poles? They will make more money if they transmit it wirelessly the last bit, from the pole to the home. Here's why. The parent companies of both Verizon and AT&T consist of both a regulated state utility that handles copper and fiber, and another company, unregulated, which handles wireless infrastructure and communications. Over 20 years ago, the parent companies committed to upgrading copper to fiber and our
rates went up to pay for this. But realizing that it would more profitable for them to move these $400-600 billion of collected fees over to the wireless companies, Telecom changed course and built out wireless instead.

As a regulated utility, Telecom companies would have to provide service at a reasonable cost to customers, and would have to serve everyone. As a wireless company, they can charge customers whatever they want, and cherry pick whom they serve.

For more on this please see, https://medium.com/@kushnickbruce/5g-wireless-is-the-new-fiber-optic-bait-and-switch-scandal-646246b8f34d

What all cities and communities should have is fiber optic municipal broadband. Then the private sector could compete by delivering video or other services through the municipally owned fiber.

The bottom line is that 5G will impact the people of the United States so profoundly (and in our opinion, adversely) that we must allow communities to decide for themselves what kind of future they want.

Fiber to the home gives people choice. People can choose to connect the devices in their own homes through either wired or wireless technology. With wireless (relatively) confined to their premises, their choice will not impact their neighbors. This is not so with Wireless Telecommunications Facilities (WTFs) in front of homes, which indiscriminately radiate everyone.

**FIBER CONTINUED...Resources**

Overview of why we need fiber and bibliography with further resources.

https://whatis5g.info/fiber-optics/

Closing The Digital Divide – Fiber vs. Wireless  Aug. 2018 | Kate Kheel

America Needs More Fiber  Feb. 2018 | Susan Crawford,
Professor of Law at Harvard University | Wired.
"We should be driving forward upgrades to fiber optic networks running right to
homes and businesses, by lowering the barriers to fund shared fiber networks
everywhere. We could be facilitating increased use of bonds, local financing, and tax
breaks, and reducing the risks of investments and the costs of capital by issuing
government guarantees, all aimed at attracting private investment in the shared fiber
optic lines needed for 5G to function."
https://www.wired.com/story/america-needs-more-fiber/

Re-Inventing Wires: The Future of Landlines and Networks  Jan. 2018 |
Dr. Timothy Schoechle | National Institute of Law and Public Policy
This link gives an overview of the book we are delivering today.
"Hard-Wired Telecommunications Infrastructure to Support Economic Growth, Bridge
the Digital Divide and Diminish Risks to Security, Privacy, Public Health and the
Environment."
http://gettingsmarteraboutthesmartgrid.org/wires.

Connected Communities – Wired Networks for Crossing the Digital Divide  Why
Community Owned Fiber is the Smart Choice
http://connected-communities.ca

Dividing Lines  Why is Internet Access Still a luxury in America?
A Docu-Series put out by National Digital Inclusion Alliance (NDIA)
This website documents clearly how Telecom and our government have not only
neglected to bring broadband to rural America, but have created the “digital divide”
by enacting laws and regulations that have the effect of preventing the delivery of
fast, reliable, and safe fiber to all homes, businesses, and farms.
https://www.dividinglines.org
Reinventing Wires: The Future of Landlines and Networks  Feb. 5th, 2018

Bruce Kushnick Primer
Why do we still not have a fiber optics system if we paid for it in our rates?
Bruce Kushnick has spent decades following Telecom/FCC actions with regard to fiber. He has an in-depth understanding of how consumers have paid out billions in rate increases for fiber optic networks that Telecom never delivered on. Furthermore, the FCC has been completely complicit and has turned a blind eye to Telecom's shoddy accounting and broken promises.
https://www.youtube.com/watch?v=g0zFEx514E

Opinion: FCC Set to Waste Billions on the Wrong Rural Broadband Providers
Mar. 20th, 2018 | Mathew Marcus | Institute for Local Self Reliance
Author Mathew Marcus explains why our captured government needs to stop throwing money at the "Big 4" – Verizon, AT&T, T-Mobile, and Sprint – to "bridge the digital divide". The private sector will just not deliver on fast, safe, reliable, cyber secure and energy efficient fiber to all homes.

For more on why these small wireless facilities outside our homes are not the best solution for high-speed broadband coverage, please see,
https://www.youtube.com/watch?v=JVO1VXH4nQA&feature=youtu.be&t=13m1s
US EMBASSY IN MOSCOW RADIATED WITH LEVELS LOWER THAN 5G (1953-1978)

From 1953 to 1978 microwave radiation was beamed at the US embassy in Moscow. This radiation was linked to Deaths and Illnesses of US diplomats and their families living and working in the embassy. The levels of radiation that people were exposed to were lower than what is planned with Wireless “small cells” next to homes.

HEALTH

“When we have substantial risk of multiple existential threats to every single technologically advanced country on earth, failure to act vigorously means there is a very high probability of complete destruction of these societies.”

Martin L. Pall, (Ph. D.) Professor Emeritus of Biochemistry and Basic Medical Sciences

Grassroots Environmental Education has put together a very useful PDF compilation of studies showing adverse health effects from wireless radiation. The studies are organized by effects:

I. Effects On Fetal And Newborn Development
II. Effects On Young Children
III. Brain Tumors
IV. Parotid Gland Tumors
V. Other Malignancies
VI. Effects On DNA
VII. Neurological/Cognitive Effects
VIII. Effects On Male Fertility
IX. Electromagnetic Sensitivity
X. Effects On Implanted Medical Devices
XI. Miscellaneous Articles
http://www.grassrootsinfo.org/emergingscience.php

5
5G: Great risk for EU, U.S. and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them  May 17th, 2018
Martin L. Pall Martin L. Pall Ph.D. Professor Emeritus of Biochemistry and Basic Medical Sciences: "We know that there is a massive literature, providing a high level of scientific certainty, for each of eight pathophysiological effects caused by non-thermal microwave frequency EMF exposures."

5G Wireless Technology: Millimeter Wave Health Effects  Aug. 7th, 2018
Dr. Joel Moskowitz, Ph.D. Director Center for Family and Community Health School of Public Health University of California, Berkeley

"With the deployment of fifth generation wireless infrastructure (aka 5G), much of the nation will be exposed to mmWaves for the first time on a continuous basis...the health consequences of 5G exposure will be limited to non-thermal effects produced by prolonged exposure to mmWaves in conjunction with exposure to low- and mid-band radiofrequency radiation. Unfortunately, few studies have examined prolonged exposure to low-intensity mmWaves, and no research that I am aware of, has focused on exposure to mmWaves combined with other radiofrequency radiation."
https://www.saferemr.com/2017/08/5g-wireless-technology-millimeter-wave.html

WILDLIFE

Growing electromagnetic radiation from our digital world – though imperceptible to humans – is wreaking havoc on the natural world. We do not yet know to what degree and in what ways this deluge of frequencies and modulations – carrying mega amounts of data through our atmosphere – is affecting each being on the planet. But what is increasingly clear is that wireless expansion is not sustainable.
If we then add 5G mmWave frequencies and the massive densification of wireless infrastructure to the current stew of modulated frequencies, the future for wildlife looks bleak.
A 2014 letter to the CTIA, from the US Department of Interior states that the FCC standards for cell phone radiation are outdated and do not adequately protect wildlife. The FCC standards were set in 1996, and though a docket was opened in 2013 to consider the decades of new science, the FCC has yet to review the standards. http://www.saferemr.com/2014/03/dept-of-interior-attacks-fcc-regarding.html

Environmental and Wildlife Effects  Sept. 4th, 2018
Physicians for Safe Technology (PST)
https://mdsafetech.org/environmental-and-wildlife-effects/

Wireless Silent Spring  Oct. 2018 | Dr. Cindy Russell MD | VP Community Health SCCMA
"IN THE WAR ON INSECTS: NATURE BECOMES SILENT
"Our ill-fated desire to control nature as well as our tendency to ignore our own complicity in its destruction for profit was the focus of a seminal 1962 book, 'Silent Spring.' This publication is widely credited with ushering in the modern environmental movement. (1) Rachel Carson, a marine biologist, and author of "Silent Spring," was first a lover of nature and a poet. Through her astute observations of nature, careful documentation and gifted writing, she was able to bring attention to the devastating and long lasting effects of pesticides which continue to impact all wildlife and species, including humans.
http://www.sccma-mcms.org/Portals/19/SilentSpringAtticle_color_pr2.pdf?fbclid=IwAR0Of9cmpdDC19EDz5-u7wY0cZ-pB1kv-JZVheV5ipJ5cJVuPa2Tg_nPXtw

Bees, Butterflies And Wildlife: Research On Electromagnetic Fields And The Environment

Human Generated Radiation is Harming Wildlife
https://whatis5g.info/environmental-impacts/
DO "SMALL CELLS" CONSTITUTE A VIOLATION OF ADA RIGHTS?

Putting wireless "small cell" facilities that emit radiofrequency/microwave radiation in front of the homes of people that already have Electromagnetic Sensitivity violates their rights under the American Disabilities Act (ADA). ADA requires that people who suffer from a disability be protected and accommodated, and it is illegal to create an access barrier, especially in their own homes!! Forcing these levels of microwave radiation into their homes is like putting sugar in the drinking water of people with diabetes. Furthermore, these towers prevent many people from using public rights-of-way.

WILL SMALL CELLS ENABLE MASSIVE DATA HARVESTING?

YOU BET!!

5G will be the backbone infrastructure of the Internet of Things, Smart Cities and driverless cars, all of which will enable and be dependent on massive, 24/7 data collection. Should the choice to enable this kind of data mining belong to government, to Telecom or to the people of Maryland?

Silicon Valley siphons our data like oil. But the deepest drilling has just begun
Aug. 23rd, 2018 | Ben Tarnoff | The Guardian
"Personal data is to the tech world what oil is to the fossil fuel industry. That’s why companies like Amazon and Facebook plan to dig deeper than we ever imagined."
"Our laptops, tablets, smartphones, and wearables see a lot of our lives – but not quite everything. For Silicon Valley, however, anything less than total knowledge of its users represents lost revenue. Any unmonitored moment is a missed opportunity."

Report: Without safeguards, Internet and IoT may create surveillance states in near future  Bradley Barth | SC Media
"A catastrophic worldwide cyberattack, the emergence of an IoT-enabled surveillance state, and the weakening of encryption were among the chief security and privacy fears expressed by experts who were polled for a sweeping new report about the internet and its future impact on mankind."


**Predicting the Top 2018 Security Threats and Privacy Wars** Sue Smith
Newsfactor Network

"Forcepoint foresees that 'privacy wars' are about to erupt, and with good reason. As businesses and government entities collect and mine more and more of our personal data, tensions are brewing between individual rights and security for all." This article gives four predictions:
1. We will see "a broad and polarizing privacy debate, not just within governments, but between ordinary people. (need end-quote; not sure where it belongs)
2. A data aggregator will be breached in 2018 using a known attack method.
3. Attackers will target vulnerabilities in systems, which implement blockchain technology.
4. In 2018, the Internet of Things (IoT) will become a target for mass disruption.

https://www.newsfactor.com/story.xhtml?story_id=110003SMTGE0&full_skip=1

**TELECOM POWER GRAB – WHAT’S GOING ON IN OTHER BRANCHES OF GOVERNMENT?**

The wireless Telecom industry is doing everything possible to remove "barriers" and speed the deployment of 5G and other wireless technologies at all levels of our government simultaneously.

At the Federal level there are roughly 60 Bills pushing wireless expansion – not including bills removing our privacy.

Current Federal Actions on 5g:
https://www.telecompowergrab.org/legislation.html
Other Federal Bills

About 22 states have been saddled with Telecom “small cell” bills.

And the FCC is paving the way for it all.
https://www.telecompowergrab.org/legislation.html

The following is a statement written by Mayor Liccardo of San Jose, who served on the FCCs Broadband Deployment Advisory Council (BDAC), until he quit due to its industry-weighted representation and stance.

“...the [Telecom] industry is waging a war for those poles, at all levels. Big Telecom and its allies in the White House have quietly carried out a campaign to secure rapid and cheap access to those poles, at taxpayer expense. Here in California, state legislators recently advanced a bill...that would allow wireless service providers to install their equipment on public street poles at below-market rates — and to do so nearly wherever and whenever they choose — all in the name of “streamlining” local permit approvals... At the federal level, Trump administration appointees to the Federal Communications Commission have publicly cheered these proposals, while releasing their own draft regulations to carry out additional industry-friendly rules nationally.” San Jose Mayor Sam Liccardo |OpEd, New York Times

Also see,

Interestingly, San Jose Mayor Sam Liccardo recently quit the FCC Broadband Advisory Board (BDAC) saying, “The group [BDAC] seems to be working for the interests of the telecom industry and not the public." (Ya think??)
NO BUSINESS CASE

Though Telecom expects to put billions into the economy and to profit handsomely from 5G, many experts question whether this will indeed be the case.

5G is being escorted in with much hype and fanfare, but where’s the business case? According to Bloomberg Technology, 5G “may not be worth it”.

According to a Deloitte study, in order to build 5G, there will need to be a $130-$150 billion dollar investment in fiber to the poles over the next 5-7 years. How and if this will be financed is not yet clear.
https://medium.com/@kushnickbruce/5g-wireless-is-the-new-fiber-optic-bait-and-switch-scandal-646246b8f34d

"Carriers are plotting their strategies and densifying their networks as they prepare for the highly anticipated arrival of 5G. But how they’ll actually make money from next-generation technologies and services is about as clear as the air in New Delhi.”
https://www.fiercewireless.com/wireless/editor-s-corner-if-they-build-5g-money-will-come-right

“A BROKEN BACKBONE? 5G is intended to be the 'backbone infrastructure' for the IoT. This article explores whether 5G is even feasible.”

JOB LOSS

We are told 5G will bring jobs and boost the economy, but many studies are coming down on the other side of this debate. Building the infrastructure may temporarily add jobs, but once up, those jobs will disappear. Moreover, with 5g and the Internet of things, robots will increasingly replace humans in the workforce.
"While industrial robots have already displaced hundreds of thousands of jobs in the US since 1990, they are about to take over millions more from human hands in the next decade, said a renowned US economist."

Study: Robots set to displace millions of U.S. workers by 2025  Christopher Matthews | AXIOS.
"Acemoglu and Restrepo say that if automation proceeds at predicted rates, millions of jobs could be lost while wage growth is reduced by up to 2.6% between 2015 and 2025." https://www.axios.com/study-robots-set-to-displace-millions-of-us-workers-by-2025-1513301203-8b7f4002-3876-4a19-80de-39834a472dbd.html

Please also see the following:

Robots will destroy our jobs – and we're not ready for it  Dan Shewan  The Guardian
"Two-thirds of Americans believe robots will soon perform most of the work done by humans but 80% also believe their jobs will be unaffected. Time to think again."

**FCC’S OUTDATED RADIOFREQUENCY/MICROWAVE RADIATION GUIDELINES**

"Fact: There Are No Safety Standards. Currently there are no national or international 'standards' for safe levels of the radiation emitted by wireless or microwave devices. Instead, the US government adopted 'guidelines' developed by industry based on decades old research. Guidelines have a much lower certainty than a 'standard' as proper long term safety testing was not done to ensure the public was protected from all possible harm." Environmental Health Trust

For more in depth coverage of the FCC RF guidelines, please see.

OUR SAFETY SHOULD BE NUMBER 1

Traffic safety should be a top priority. We know that poles are susceptible to falling and causing damage and power outages during windstorms. This photo was taken after the 2018 windstorm in Baltimore which took down numerous poles in the city. Imagine if this were a pole outfitted with a “small cell” atop, and all the accessory equipment needed for these “antennas” - a refrigerator-sized power supply with a cadmium nickel battery, radio units, fans, wires and a smart meter.

Please also see, Wall of Shame – Photo Gallery of “Small Cells” for more about what lives on these poles alongside these antennas. https://whatis5g.info/photo-gallery-of-small-cells/

WILL SMALL CELL FACILITIES HELP “BRIDGE THE DIGITAL DIVIDE”? 

Nope. In order for wireless “small cell” facilities to function, they need fiber to the pole. Although all areas by now should have fiber, since it was paid for years ago in rate increases (which are still being assessed), much of rural America is still without fiber. So in order to “bridge the digital divide”, Telecom would have to lay out billions for fiber, an expenditure they are not likely to make in the foreseeable future. And if
they do, well then that fiber should go all the way to the home and not just stop at the utility poles!!

ENERGY DRAIN

Armed with an astronomical amount of data generated from the 5G-enabled IoT, Smart Cities, and driverless cars, our government and industry expect we will be better equipped to save energy. But what they fail to include in their analyses is the mega energy footprint of the IoT itself. It is not at all clear that the IoT will ever succeed in offsetting its own fast growing and unbounded energy consumption.

Estimates are that there will be approximately 50 billion IoT “things” by 2020 – an order of magnitude higher than what we have today. Not considered in the energy consumption analysis is:

1) energy consumed by these devices, including the energy needed to mine and manufacture them (aka embodied energy). 80% of the energy used in a given device is consumed before that device has ever been used.
2) energy needed to power the networks and data centers to which they are connected
3) far more energy is needed to move data wirelessly than through fiber or cable.

Please see https://whatiss5g.info/fiber-optics/

When all these things are taken into consideration, it’s evident that energy consumption will skyrocket with 5G and the IoT.
Please also see, http://whatiss5g.info/energy-consumption/
DECLINING PROPERTY VALUES NEAR CELL TOWERS

Many people do not want to live next to a cell tower, or a Wireless Telecommunications facility (WTF) with good reason. The following articles, videos, and studies deal with declining property values around cell tower installations. https://www.emfanalysis.com/property-values-declining-cell-towers/

LIABILITY – WHO WILL BE HELD ACCOUNTABLE?

Who will be held liable in the event of harm from a wireless “small cell” facility? Who will assume financial liability for future injury, fire, loss of health, and property devaluation due to the close proximity of cell antennas to homes, workplaces, and schools? By melding private property (these Telecom owned WTFs) onto city-owned poles, liability is then transferred to the city. For more, please see, https://ehtrust.org/?s=liability

FIRES, HURRICANES AND DISASTER RELIEF – WILL CELL TOWERS SERVE US?

Cell towers don’t hold up under disaster conditions. They failed in the fires in California as well as in the hurricanes in Puerto Rico and Texas.

77 Cell Towers Failed in the First Hours of The October 2017 Fires in northern California. In this video, a Crown Castle/Verizon representative explains that residents with copper, legacy landline phones received the reverse-911 warnings to evacuate. The Wireless alerts failed to get through. https://www.youtube.com/watch?v=6bhOSvk8cTo&feature=em-upload_owner

The following article was published about 10 days after Hurricane Maria, at which point 86% of cell sites were still not functional.
Presently, Over 86% of Cell Sites in Puerto Rico Are Still Not Operating in Aftermath of Hurricane Maria

Texas suffered as well:

"Wireless networks along the Texas coast suffered outages as a result of Hurricane Harvey, federal regulators said, leaving customers in some counties with limited or no cellphone service."

MILLIMETER WAVE FREQUENCIES AND PHASED ARRAYS

5G will make use of millimeter Wave (mmW) frequencies never before used for public Internet and Telecommunications technology. "Small cell" antennas will also make use of Phased Arrays - hundreds of tiny cell antennas working together to strengthen the mmW frequencies.

"MmWaves can transmit large amounts of data over short distances. The transmissions can be directed into narrow beams that travel by line-of-sight and can move data at high rates... Although antennas can be as small as a few millimeters, 'small cell' antenna arrays may consist of dozens or even hundreds of antenna elements." Joel Moskowitz Ph.D.
http://www.saferemr.com/2017/08/5g-wireless-technology-millimeter-wave.html

Studies on millimeter wave (mmW) frequencies to be used in 5g
https://ehtrust.org/scientific-research-on-5g-and-health/

"Since little research has been conducted on the health consequences from long-term exposure to mmWaves, widespread deployment of 5G or 5th generation wireless infrastructure constitutes a massive experiment that may have adverse impacts on the public's health." Joel Moskowitz Ph.D.
OUR KIDS ARE PAYING FOR 5G WITH THEIR LIVES!!

Research on our current technology is showing profound effects on our brains and humanity. Suicide, loneliness, and depression are reaching epidemic proportions. Professor Jean Twenge from San Diego State University says “young people are on the brink of the worst mental health crisis in decades.”

“When interaction becomes a strange and unfamiliar thing, then we will have changed who and what we are as a species.” David Byrne | MIT Review

Rates of affected people will likely increase as every object takes up residence in the Cloud and we are corralled into a tech-infested world.
https://whatis5g.info/brains-and-humanity/

5G — BURIED DEEP IN E-WASTE

What will happen when the Internet of Things produces orders of magnitude more e-waste than what we already generate? According to a report from Electronics Take Back Coalition, in 2010, we disposed of 142,000 computers and over 416,000 mobile devices in the US every day. With 5G/IoT, every “thing” will join the ranks of e-waste. Items such as clothing, pacifiers, diapers etc. which now when discarded, produce just garbage, in an IoT world will include their embedded toxic chips rendering the production and disposal of all things far more toxic.

And the demise of all these things will be hastened by cyber vulnerabilities not able to be patched and thereby creating an ongoing “need” for new products – leaving us mired in yet more e-waste.

Where will all this e-waste go, and can our earth “digest” this amount of toxic waste? For more on e-waste, please see,
http://whatis5g.info/e-waste/
5G - DEATH KNELL FOR CYBER SECURITY

Cyber security has been ranked by the World Global Research Report as the third greatest global risk in 2018 topped only by natural disasters and extreme weather events. With the arrival of the IoT and billions of new Internet-connected machines, appliances, sensors, "things," robots, and devices, etc.- all enabled and supported by 5G - cyber security has become a near impossibility.

Cyber security expert, Bruce Schneier, writes:

"With the advent of the Internet of Things and cyber-physical systems in general, we've given the Internet hands and feet: the ability to directly affect the physical world. What used to be attacks against data and information have become attacks against flesh, steel, and concrete."

Restated: “Give the Internet hands and feet, and it will have the ability to punch and kick.”

Cyber-attacks are a top three risk to society, alongside natural disaster and extreme weather | Danny Palmer

"Nations' reliance on the internet and connected services means the potential damage from cyber-attacks is one of the biggest risks facing the world today, according to a report from the World Economic Forum (WEF)."

Report: Without safeguards, Internet and IoT may create surveillance states in near future

"A catastrophic worldwide cyber attack, the emergence of an IoT-enabled surveillance state, and the weakening of encryption were among the chief security and privacy fears expressed by experts who were polled for a sweeping new report about the Internet and its future impact on mankind." Bradley Barth
5G will bring more cell towers

Marie Fisch, the Palm Beach resident due to have a third cell phone tower installed near her bedroom window, has written to the Ministry of Business, Innovation and Employment (MBIE) over its plans to install more towers in order to upgrade New Zealand to a 5G network.

Anxious about the radiation she may receive after Auckland Council gave resource consent without notifying her for another cellular mast on a neighbouring property, Ms Fisch asks the ministry how it will regulate for health concerns and adequately process future consent applications.

MBIE released a discussion document ‘Preparing for 5G in New Zealand’ in March, seeking industry feedback on how the Government and industry players should upgrade the country to a ‘fifth generation’ (5G) network, likely to be here by 2020. The paper notes that ‘just as has happened in Ms Fisch’s case – telecommunications providers will likely need to install more towers in much higher densities to establish a future 5G network.

In her submission, Ms Fisch asks: “How will local governments be equipped to ascertain whether high density sites are safe so close to homes when there is no conclusive evidence of their safety yet?”

The document posed logistical, regulatory and investment questions primarily aimed at the big three providers - Vodafone, Spark and 2 Degrees.

Essentially offering the companies a chance to outline the future of the network, it says that 5G “will be central to future economic growth, employment, education, transport and more”.

Ms Fisch, who complained in March over the council’s non-notified approval of a 2 Degrees tower 25 metres from her bedroom, also has concerns over the application of the national environmental standard for telecommunications facilities, which sets guidelines for safe exposure limits.

“My understanding is that the industry standards and regulations are set by the same agent, therefore posing a severe conflict of interest,” she writes. “How can the establishment of standards be tested by and regulated by an independent scientist?”

Though the council has stood firm on its approval of the 2 Degrees tower, Ms Fisch says she will continue to be vocal about cell phone radiation.

“I want to raise these issues to protect other people, because the ministry is prioritising businesses over public health and communities, and seeking to move forward with advances in 5G without adequately considering those factors in the decision-making process,” Richard Foster
Introduction

This century has thus far seen the widespread adoption of wireless devices that utilise radio-frequency radiation (RFR) in the microwave range – cordless and cellular phones, Wi-Fi routers, tablets, wireless baby monitors, wireless “gaming” consoles, the new so-called “smart” electricity meters… the list goes on.

All of them licensed and sold to us without any serious consideration given to their impact on our health.

At the moment, the majority of people’s exposure to RFR in the microwave range comes from their own choice to use devices such as cordless or cellular phones, wireless routers and the like rather than safer hard-wired alternatives. Using wireless devices is a choice that entails health risks but most people are unaware or in denial about this, largely thanks to the telecommunications industry’s very effective “spinning” of the science relating to cellular phone use and cancer. (See: https://www.8rf-device.com.au/o2o/big-wireless-phones-kill-dad-dot-com/primesafe-investigation/)

That said, many people who choose NOT to use cell phones etc. are still exposed to biologically unprecedented amounts of RFR if they live close to cellular phone towers or other wireless infrastructure – in part because New Zealand has among the poorest standards for RFR emissions in the world.

Thus, we are paying a collective price for our growing addiction to wireless devices, an addiction cleverly abetted by the telecommunications industry. In fact, our access to safe copper landline phone system is now under threat by proposed changes to the Telecommunications Act and as I write Radio Spectrum Management (a business unit of the NZ of Ministry of Business, Innovation and Employment (MBIE)) is “consulting” the public on “5G”, the proposed next generation of cellular infrastructure designed to deliver faster wireless download speeds. (The consultation closes on April 30, 2018, after we go to press.)

The wireless industry is now pushing the idea that 5G is the ultimate in wireless “convenience”. (In his column “5G Wireless: A Ridiculous Front for Global Control” Jon Rappoport cites an article from CNET that states: “You’ll be able to download a season’s worth of ‘Stranger Things’ in seconds.”)

However, adoption of 5G would entail more wireless infrastructure; in fact Radio Spectrum Management admits that the density of cell phone towers in urban areas in NZ would have to double to support 5G even for a 5G system that employs RFR frequencies that are 6 Gigahertz (GHz) or lower. If higher frequencies (such as the 26 GHz frequency discussed in the consultation document) were to be used, the density of wireless infrastructure would have to increase still further.

That’s bad news for everyone – except people who are so addicted to their digital devices that they don’t care if using them comes with a price tag of higher risk of degenerative disease and early death for themselves and others.

Which is another way of defining what addiction really is.

For the rest of us, whose health takes precedence over convenience, further proliferation of wireless infrastructure is very bad news indeed. Published research has already shown increased cancer rates in people living closer to cellular phone infrastructure and an epidemic of brain and other cancers caused by cellphones.

We need to stop 5G NOW before it’s too late. No one really needs to be able to download umpteen hours of a TV programme in a few seconds. We don’t need a technology that could facilitate one million wireless connections per square kilometre at the cost of the health of people who live in that area. This must stop. A healthy environment in which we can live healthy, happy, productive lives is what we urgently need.

Not what they are planning for us.

Katherine Smith, Editor
Public health and the radio frequency radiation emitted by cellphone technology, smart meters and WiFi

Susan Pockett

ABSTRACT

This paper argues that the prevailing official narrative in New Zealand concerning the relationship between public health and the radio frequency emissions (RF) from cellphone technology, WiFi and electricity smart meters is scientifically and ethically flawed. The main regulatory document in the area, NZS2772.1:1999, is 20 years out of date and ignores existing laboratory evidence disproving its core assumption that the only biological effect of non-ionising radiation is tissue heating. This and further laboratory evidence for harmful effects of RF continues to be ignored, nominally on the contradictory grounds that (a) cellphone manufacturers say their products now emit less RF than early models, so early lab studies exposed tissue to RF levels higher than those now relevant (b) given the lack of actual data on population exposures either then or now, all laboratory evidence is unconvincing anyway. The official narrative further opines that since there exist both laboratory and epidemiological studies concluding that RF is not biologically harmful, as well as studies concluding that RF is harmful, the appropriate response is to count up the number on each side, declare the “weight of evidence” to be such that “causation is not proven” and, pending unspecified further studies, continue exposing to unmonitored levels of RF the entire population of the country, none of whom has given informed consent to participate in the experiment. This approach is obviously unethical. It is also unacceptable scientifically. First, the algebraic model is flawed: studies that do find a harmful effect of RF are not invalidated by differently constructed studies that fail to find an effect. Secondly, while causation is relatively easy to study in the laboratory, it is difficult if not impossible to prove epidemiologically, given that (1) the very narrative under discussion has ensured that there is now no unexposed control group and (2) interpretation of timeline correlation studies is hampered by changes in the way new cancer registrations have been recorded over the years and the perennial problem of multiple possible causal factors. The present paper concludes that a precautionary approach is justified, and ends with a number of specific suggestions on how to start implementing such an approach.

See recommendations, page 103
Public health and the radio frequency radiation emitted by cellphone technology, smart meters and WiFi
Susan Pockett

ABSTRACT
This paper argues that the prevailing official narrative in New Zealand concerning the relationship between public health and the radio frequency emissions (RF) from cellphone technology, WiFi and electricity smart meters is scientifically and ethically flawed. The main regulatory document in the area, NZS 2772.1:1999, is 22 years out of date and ignores existing laboratory evidence disproving its core assumption that the only biological effect of non-ionising radiation is tissue heating. This and further laboratory evidence for harmful effects of RF continues to be ignored, nominally on the contradictory grounds that (a) cellphone manufacturers say their products now emit less RF than early models, so early lab studies exposed tissue to RF levels higher than those now relevant (b) given the lack of actual data on population exposures either then or now, all laboratory evidence is unconvincing anyway. The official narrative further opines that since there exist both laboratory and epidemiological studies concluding that RF is not biologically harmful, as well as studies concluding that RF is harmful, the appropriate response is to count up the number on each side, declare the "weight of evidence" to be such that "causation is not proven" and, pending unspecified further studies, continue exposing to unmonitored levels of RF the entire population of the country, none of whom has given informed consent to participate in the experiment. This approach is obviously unethical. It is also unacceptable scientifically. First, the algebraic model is flawed; studies that do find a harmful effect of RF are not invalidated by differently constructed studies that fail to find an effect. Secondly, while causation is relatively easy to study in the laboratory, it is difficult if not impossible to prove epidemiologically, given that (1) the very narrative under discussion has ensured that there is now no unexposed control group and (2) interpretation of timeline correlation studies is hampered by changes in the way new cancer registrations have been recorded over the years and the perennial problem of multiple possible causal factors. The present paper concludes that a precautionary approach is justified, and ends with a number of specific suggestions on how to start implementing such an approach.

Properties of the various standard divisions of the electromagnetic spectrum are summarised in Table 1.

Electromagnetic radiation is generally divided into two classes: ionising and non-ionising. Ionising radiation (gamma rays, x-rays and ultraviolet light) has enough energy to knock electrons off molecules, and is known as carcinogenic. Non-ionising radiation (visible and infrared light, microwaves and radio waves) carries less energy than needed to knock electrons off molecules, and in the past has been thought to affect biological tissue only by means of heating it. Hence many of the regulatory standards used around the world permit exposure of the public to non-ionising radiation up to limits based solely on intensities that cause tissue heating. Much of North America and Western Europe, Japan, Australia and New Zealand rely on guidelines put out in 1998 by the International Commission on Non-Ionising Radiation Protection (ICNIRP). 1 ICNIRP guidelines allow exposure of the public to radiation at the frequencies emitted by cellphone towers and WiFi transmitters up to a power density of 30 watts per square meter.
Table 1: Divisions of the electromagnetic spectrum.

<table>
<thead>
<tr>
<th>Region of spectrum</th>
<th>Frequency (Hz)</th>
<th>Frequency (GHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma ray</td>
<td>$10^2$–$10^4$</td>
<td>$10^3$–$10^4$</td>
</tr>
<tr>
<td>X-ray</td>
<td>$10^4$–$10^6$</td>
<td>$10^4$–$10^6$</td>
</tr>
<tr>
<td>Ultraviolet light</td>
<td>$10^6$–$10^8$</td>
<td>$10^7$–$10^8$</td>
</tr>
<tr>
<td>Visible light</td>
<td>$4$–$7\times10^8$</td>
<td>$4$–$7\times10^7$</td>
</tr>
<tr>
<td>Infrared light</td>
<td>$10^9$–$10^{12}$</td>
<td>$10^9$–$10^{12}$</td>
</tr>
<tr>
<td>Microwave</td>
<td>$10^{12}$–$10^{15}$</td>
<td>$10^{-15}$–$10^{-12}$</td>
</tr>
<tr>
<td>Radio wave</td>
<td>$10^{15}$–$10^{18}$</td>
<td>$10^{15}$–$10^{18}$</td>
</tr>
</tbody>
</table>

The relevant regulatory document in New Zealand is NZS 2772.1:1999, a pdf of which can be purchased from the Standards New Zealand website for $128.70 + GST. Since New Zealand law can be downloaded for free, this charge underlines the fact that NZS 2772.1:1999 is not a statutory document, merely a set of recommendations. To emphasise the commercial nature of the document, NZS 2772.1:1999 starts with the statement “Standards New Zealand will vigorously defend the copyright in this Standard. Every person who breaches Standards New Zealand’s copyright may be liable to a fine not exceeding $50,000 or to imprisonment for a term not to exceed three months. If there has been a flagrant breach of copyright, Standards New Zealand may also seek additional damages from the infringing party, in addition to obtaining injunctive relief and an account of profits.” This point being made, NZS 2772.1:1999 goes on with a disclaimer “There is scientific research, including epidemiology, which has suggested associations between some adverse health effects and exposure to RF [radio frequency] fields at levels lower than the basic restrictions specified in this Standard, however causation has not been shown.”

The aim of the present article is to discuss some of the scientific research referred to by this disclaimer, and as a result argue that current public policy in New Zealand is inadequate to protect public health.

Evidence from laboratory studies

Early laboratory studies in this area were largely concerned to investigate the underlying assumption of documents like NZS 2772.1:1999 that heating is the main, if not only, biological effect of non-ionising radiation.

In fact evidence disproving this hypothesis was already plentiful by 1999.

As far back as 1967, a paper in Nature reported that microwaves cause lymphoblastoid transformation of lymphocytes in vitro at intensities specifically shown not to result in any changes in temperature. In 1974, well-controlled interventional experiments showed that microwaves caused chromosome damage in both hamster and human cell cultures, again at measurably non-thermal intensities. By 1993 at least two major reviews had been published summarising a plethora of further evidence for non-thermal effects of microwave radiation. None of these papers is cited in NZS 2772.1:1999’s summary of existing evidence, which discusses only studies reporting negative or inconclusive findings.

Since 1999, considerable further work has appeared. In 2005, Belyaev reviewed 115 papers showing harmful non-thermal effects of RF on a variety of biological factors. Five years later, the same author reviewed the complex dependence of many of the reported effects on various physical and biological parameters, none of which is controlled in a number of studies that purportedly fail to replicate the original findings.

Reading this literature is not easy. One difficulty is that different studies use different metrics to quantify the amount of RF delivered: power density in watts (W) per square metre or microwatts (μW) or milliwatts (mW) per square centimetre; electric field strength in volts per meter; specific absorption rate in watts per kilogram. Another problem is that, because US government funding in the area was reportedly shut down in the late 1970s, a good deal of the work was done in...
the former Soviet Union and published in Russian; only a summary of this is available in English.5 However, these are relatively trivial problems compared with the more fundamental complexities the work reveals. Essentially, average RF power density is not the best predictor of biological effect. For some parameters, short pulses of RF such as those emitted by electricity smart meters have worse effects than continuous irradiation.8,9 Within any given temporal emission pattern dose-response curves are counterintuitive, showing dose windows where biological effects are greater than those caused by either larger or smaller doses.10-12 Nithy et al.13,14 summarise repeated attempts to replicate Frey's 1975 report15 that 30 min of exposure to either pulsed or continuous 1.2 GHz waves with average power densities a fifth of that permitted by ICNIRP guidelines increased the permeability of the rat blood brain barrier (BBB) to fluorescein. These attempts were apparently unsuccessful, until it was realised that an inverted-U shaped dose response curve held—at which point it became clear that the parameters involved in mobile phone use are particularly effective at damaging the BBB. Given that the BBB is vitally important in protecting brain neurons from environmental influences, this effect may underpin later findings from Kaplan's lab that exposure of rats to RF levels perfectly legal under NZS2772.1 causes death of pyramidal neurons in the CA region of hippocampus.16 Since a properly functioning hippocampus is essential for memory formation, this suggests that levels of RF exposure currently legal in New Zealand might well contribute to the development of dementia.

Even more worryingly, there seems to be no lower limit on the amount of RF that can cause harm. Exposure of quail eggs to 900 MHz (0.9 GHz) RF at doses as low as 0.0025 watts per square meter (cf NZS2772.1:1999's 10 watts per square meter) causes significant oxidative stress—overproduction of free radicals/reactive oxygen species—and oxidative damage to DNA.17 Given that oxidative stress is "common for many types of cancer cell that are linked with altered redox regulation of cellular signalling pathways"18 and has also been linked to atherosclerosis, Alzheimer's disease, arthritis and diabetes, there would seem to be significant reason for concern about allowing the public to be routinely exposed to 4,000 times the level of RF known to cause oxidative stress (10 W/m² = 4,000 times 0.0025 Watts/m²).

In summary, there is laboratory evidence that RF at power densities a tiny fraction of those permitted by NZS2772.1:1999 causes (a) overproduction of free radicals (b) opening of the blood brain barrier (c) damage to DNA (d) death of hippocampal neurons and (e) transformation of lymphocytes to immortal cell lines that spontaneously replicate. Obviously all of these provide plausible mechanisms by which RF exposure might cause any number of disease states, including cancer.

Does all this translate to proven carcinogenesis in lab animals? Surprisingly little has been published on that question, perhaps partly because rats live for only about two years at best, which may not be enough time for cancer to develop. One 1997 report showed that genetically lymphoma-prone mice were more likely to develop lymphomas if exposed to pulsed 900 MHz RF.19 But later, Adey and colleagues reported that intermittent exposure of rats to 836 MHz RF for two years had either no effect20 or (counterintuitively) a protective effect21 on the formation of CNS cancers, with exposed rats developing fewer tumours than controls. As with the in vitro experiments, precise details of exposure parameters may be important in determining biological effects.

Epidemiological evidence

Epidemiology is a discipline beset by multiple problems. To ask whether some agent causes a particular harm, the most scientifically watertight methodology is to expose a test group of subjects to the putative agent and compare them with a control group who have never been exposed. Ideally both groups should be uniform with regard to all other possible causes of the harm, or at least randomised from a heterogeneous population. However, this approach becomes significantly problematic when the subjects under study are human. Deliberately exposing humans to potential harm is generally considered unethical if the participants give their informed consent to participate in the experiment. But when no informed consent is ever solicited, there
are multiple, non-randomised factors that might contribute to any increased incidence of harm, and (thanks to the increasingly inexorable exposure of everyone to RF from mobile phones and their base stations, smart meters and WiFi) there now exists no unexposed control group, epidemiology is reduced to studying timelines and trying to draw correlative conclusions.

In this regard, one question that on the face of it should be relatively easy to answer is whether or not the incidence of brain cancers has increased since the introduction of mobile phones. Here, despite the fact that a 2008 editorial in the journal Surgical Neurology cites no fewer than seven published reports detailing an increase in the incidence of nerve sheath and brain tumors, particularly very malignant forms such as glioblastoma multiforme, we have repeatedly been assured that the incidence of brain cancer has not increased since the introduction of mobile phones. But quite apart from a concerning refusal even to acknowledge the existence of the many papers that do show increases, a number of confounds render insecure a conclusion from the rest of the literature that the incidence of brain cancers has not increased since introduction of mobile phones.

First, papers in this area need to be read quite closely, because the conclusions in their abstracts sometimes fail to reflect the data reported. For example, Woch et al. report data that clearly indicate an increased risk of brain cancers related to mobile phone use. They then raise and demolish in their discussion section all reasonable arguments against the validity of this conclusion (implying that they believe their own data do show an increased risk). Yet in the abstract of the paper they say “These data do not indicate a pressing need to implement a precautionary principle by means of population-wide interventions to reduce RF exposure from mobile phones.” Aydin et al. also adopt this approach. Further examples are described by Rundi and Cherry.

A second type of confound is pointed out by Hardell and Carlberg. The Swedish Cancer Register shows no statistically significant increase in the incidence of brain cancers between 1998 and 2013, which fact has repeatedly been used to dismiss epidemiological evidence of a risk. However, the Causes of Death Register for the same population shows a highly statistically significant annual percentage change of +22.6% between 2008-2013. This appears to be a localized fault with the Swedish Cancer Register, since Hardell and Carlberg report that the Danish Statens Serum Institut Cancerregisteret reveals an increase in age-standardised incidence of brain tumours of +42.2% among men and +46.1% among women during 2009-2012.

The problem with the Swedish Cancer Register is never clarified, but some general possibilities are suggested by the New Zealand Ministry of Health’s database of new cancer registrations. Here cancers diagnosed at death only started to be registered in 1972, cancers diagnosed in private hospitals were not reliably registered until 1974 and in 1994 the Cancer Registry Act mandated reporting of cancers by diagnostic laboratories, leading to a sharp increase in registration rates. Overlapping with this latter increase, introduction of PSA testing in the early 1990s coincided with a sudden increase in the diagnosis of prostate cancers. In the early 2000s some conditions began to be considered malignant (eg, polycystic ovary in 2003) while others ceased being considered malignant (eg, superficial transitional cell carcinoma of the bladder in 2005). Since many cellphone users seem to have gradually switched over the last decade from holding their phones against their ears to texting or using speaker mode, exposure of trunk organs is now probably greater than exposure of the brain. But the above administrative changes preclude any clean time-line correlation of total cancer rates with changes in cellphone use.

Returning to published work, what about case-control studies of brain tumours? Khurana et al22 meta-analysed 11 peer-reviewed epidemiologic studies and conclude that using a cellphone for 10 years or more approximately doubles the risk of being diagnosed with a brain tumour on the same side of the head as that preferred for cellphone use. This study specifically includes no participants who are also included in the pooled case-controlled studies of Hardell et al, which found odds ratios for glioma of 5.9 for analogue cellular phones, 3.7 for digital cellular phones and 2.3 for cordless phones.

In contrast, the largely industry-funded 15 country INTERPHONE study23 reports
overall odds ratios (ORs) that are actually less than 1.0 for gliomas in all centres except Australia, France and New Zealand, where <5% industry funding is declared and odds ratios are not specified in the final report. An OR <1.0 implies either a deficit in methodology or a genuine protective effect of cellphone use. Most commentators have assumed the methodological deficit explanation, although some of the animal data cited in the previous section do suggest the possibility of a genuine protective effect at some exposure parameters. One obvious methodological problem with the INTERPHONE study is that amount of cellphone use was determined simply by asking participants to recall the number of hours a week they had used a cellphone over the last n years. Memory is notoriously unreliable, so this methodology could introduce bias in either direction. There is no way of knowing whether such bias contributes to the results, but the highest decile of cumulative time that mobile phones were recalled as being used (>1,640 hours) was associated with significantly increased probability of glioma (OR 1.4; 95% CI 1.03–1.88).

Finally, Kundr and Hutter\(^7\) review a number of studies on the health effects of mobile phone base stations (cell towers) and as a result recommend exposure limits 10,000 times lower than NZS2772:1:1999.

**Discussion**

So why do regulators still use the 1998 ICNIRPPEEF exposure limits? One answer is that, while the above emphasises papers that do show harmful effects of weak RF fields, there are also published reports in the literature concluding that RF has no harmful effects. The critical question for public policy is how this dichotomy should be interpreted.

A priori, there are four possible conclusions:

1. Most studies showing no harmful effects of RF are flawed.
2. Most studies showing harmful effects of RF are flawed.
3. Most studies on both sides are OK as far as they go. The important thing is the weight of evidence. This is presently such that causation is not proven. More research is needed.
4. Most studies on both sides are OK as far as they go. Abundant evidence already exists that RF at some intensities and configurations has harmful effects on some aspects of biological function. Therefore a precautionary approach is needed.

How does each of these conclusions stack up?

Conclusion 1 (that many or most studies showing no harmful effects of RF are flawed) is actually supported by a certain amount of published evidence. For example, statistically speaking, papers funded by the wireless industry are twice as likely as papers not funded by the wireless industry to report no harmful effects of RF.\(^2\) Sometimes scientists funded by the wireless industry deliberately design their studies to produce the answer the know their funders want.\(^8\) Sometimes honestly done industry funded work is suppressed if it produces the 'wrong' answer.\(^9\) Pearce\(^7\) summarises a number of documented situations in which epidemiologists have failed to declare conflicts of interest in relation to studies of other putative harms, and there is no reason to suppose that the wireless industry is any less active in this regard than the tobacco, pharmaceutical and chemical industries.

Conclusion 2, that most of the peer-reviewed papers which do show harmful effects of RF are less than credible, is on the present author's understanding not supported by any published evidence. Yet it appears to be a core tenet of the official narrative that the entire corpus of work cited in the Evidence from Laboratory Studies section of the present paper can legitimately be ignored, on the grounds that no data exist on actual population exposures to RF.

Importantly, this approach avoids attacking the scientific validity of the lab studies on their own terms. Rather it argues that, since the emissions of cellphones have reportedly decreased over the last decade or so, all the lab experiments showing harmful effects of emission levels current a decade ago would have to be redone using current emission values before the results could reasonably be taken into account in setting policy. Further, since the wireless industry keeps shifting the goalposts in this regard, there is reason to believe that it will always
be possible to dismiss future lab studies as not demonstrably reflective of the current exposure environment.

This position is problematic. For one thing, the non-specific demand for population exposure figures sets an impossibly high bar. The RF output of cellphones varies with brand, year of manufacture and, most importantly, distance from a cell tower: the further any given phone is from a tower, the more RF it emits in an attempt to handshake with the tower. Actual measurement of emissions in, for example, a crowded city street populated by hundreds of people all walking purposefully about with their noses in their devices, is not feasible.

The “PhoneGate” scandal, which recently revealed that measurements made by the French Government in 2015 showed 99% of the hundreds of phones tested emitting significantly more than the RF figures claimed by the manufacturer, suggests that it is not possible to estimate emissions with any degree of accuracy. There appear to be no official measurements at all available for cell tower emissions, perhaps partly because these (a) depend on both the configuration of individual antennae and local topography and are thus unique to each tower, (b) vary depending on traffic—the more cellphones are attempting to contact a particular tower at any given moment, the more RF the tower emits—and (c) again, the industry keeps changing the goal posts (3G, 4G, now 5G).

WiFi emissions come in either 2.4 GHz or 5 GHz frequencies, at intensities that depend entirely on (i) how many and what kinds of WiFi routers are active in the vicinity at any given moment, (ii) the distances between these routers and the measuring instrument and (iii) what concrete or earth barriers there are in the intervening space.

An arguably even greater problem concerns the fineness of the spatial grain that would be necessary in any meaningful measurement of population exposure. Figure 1 shows power density at various distances from an electricity smart meter. A smart meter is essentially a radio transmitter mounted on the wall of a dwelling: mesh smart meters transmit measurements of electricity usage in their dwelling to neighboring meters in the mesh, then collector smart meters collate the electricity use figures from all surrounding mesh meters and send the results directly to the electricity company. The figures used to construct Figure 1 are taken from a 2008 application submitted by Merix (on behalf of Mighty River Power) for a resource consent allowing installation of smart aka ‘advanced’ meters throughout the Hauraki Gulf islands. The resulting consent allows each meter to emit 250mW bursts of RF, 96 times a day, 2.47, at the power densities shown in Figure 1.

Figure 1: RF emissions from an electricity smart aka advanced meter operating according to parameters allowed by Auckland Council.
Attachment A

Item 8.1

Figure 1 demonstrates that during the brief emission periods, these meters routinely expose people in their vicinity to very much more than the 0.25µW/cm² of RF reported to cause overproduction of free radicals and indeed at short distances from the meter to considerably more than even NZS2772.1:1999's recommended limit of 1,000µW/cm². This latter fact was hidden from the bureaucrat granting the consent by averaging emitted power over six minutes, during most of which time the meter is not emitting. This practice is reasonable on the assumption that tissue heating is the only biological effect of RF, but otherwise akin to contending that a single bullet is harmless, because if you average the energy it imparts over a month, being hit by a bullet is no worse than being brushed by a feather.

All of this renders the demand for current population exposure levels safely unfulfillable.

But in any case, the main official narrative in New Zealand at present is essentially Conclusion 3: Weight of evidence, causation not proven, more research needed (but don’t ask us for funding to do it, you’ll have to get that from the industry). When analysed a little more closely, this conclusion appears to be based on an algebraic model. The implicit assumptions are that each negative study cancels out one positive study, with an algebraic sum of zero indicating no effect. Therefore, the argument seems to go, we should continue exposing the public to RF and doing epidemiological studies to see if it harms them, until either papers delivering one answer significantly outnumber papers delivering the other answer, or causation is proven. Unfortunately there are a number of problems with this position, too.

First, it is completely unethical. What university or hospital Ethics Committee would approve such deliberate experimentation on human subjects who, so far from having given informed consent to participate in the experiment, will insist on doing things like demonstrating in the streets in a fruitless attempt to prevent the erection of cell towers metres from their homes?

Secondly, the algebraic model is overly open to manipulation. Given the preponderance of industry-funded studies showing no effect, it might reasonably be seen that all Big Wireless has to do to tip the weight of evidence in their favour is fund more studies than can be done without their funding. Given the depth of the industry's pockets and the current scarcity of government funding for any sort of research, this might not prove too difficult.

Thirdly, definitive proof of causation is problematic in general. Psychologist Daniel Wegner argues that any cause-effect attribution is based on three factors: (i) the timing of the perceived cause, which must occur before the perceived effect, but not too far before it. This makes attribution of cause especially difficult for long-latency disorders like cancer. (ii) The consistency of the perceived cause with the perceived effect. This boils down to the existence of plausible mechanisms. The laboratory studies documented above show that RF produces a plethora of biological effects likely to result in cancer and any number of other diseases. (iii) The exclusivity of the perceived cause, i.e., the absence of any other possible cause of the perceived effect. (As mentioned earlier, this is a perennial Problem for epidemiology).

In this light, the wireless industry's familiar mantra “causation not proven” carries little weight. If a particular harm (cancer, for example) has increased since the introduction of a suspected agent (RF of the sort emitted by cellphones and their base stations, WiFi and smart meters)—and the suspected agent has been repeatedly shown to produce biological effects likely to result in that harm (overproduction of free radicals, opening of the blood brain barrier, damage to DNA, transformation of cultured cells to immortal cell lines that spontaneously replicate)—the jury should no longer be out on whether the public should be protected from the agent.

Finally, the “weight of evidence” argument fares no better. If even a fraction of the peer-reviewed papers describing harmful effects of low-level RF are reporting good science, it is unethical to ignore them. Positive results do not go away just because it is possible to design slightly different studies that return negative results.

Conclusion 4 is therefore the author's preferred response to the available evidence. The biological effects of RF are clearly complicated, but there is no longer any reasonable doubt that under some
circumstances, RF levels common in the present environment do have harmful biological effects. Like its cousin ionising radiation, RF is undoubtedly useful. However, until more is known about when and how RF does or does not cause harm, the precautionary principle must be applied as energetically with RF as it is with ionising radiation. In fact, even NZS2772:1:1999 counsels this approach (albeit in the weakest terms imaginable), advocating “minimising, as appropriate, RF exposure which is unnecessary or incidental to achievement of service objectives or process requirements, provided this can be readily achieved at modest expense”.

The next section offers some concrete suggestions about how to make a start on a genuine implementation of the precautionary principle with regard to RF.

Recommendations
1. For government regulators and their advisors
   - Drag NZS2772:1:1999 into the 21st century. Stop ignoring evidence that heating is NOT the only biological effect of RF. Do not allow the committee considering the revision of NZS2772 to be dominated by bureaucrats with no scientific training, representatives of the wireless industry or scientists with a history of acting as paid industry consultants. Dare to break step with the rest of the English speaking world: look to Europe, China and Russia for examples of more biologically sensitive regulations.
   - Once NZS2772:1:1999 has been revised, incorporate the revision into a coherent statute, which takes the precautionary principle seriously and sets legally enforceable limits on RF emissions. Repeal legislation permitting telcos to erect cell towers on roadside berms without a permit. Do not allow telcos to adopt measures explicitly designed to “migrate their customers” away from copper landlines. Especially in areas where fibre is not available, force Chorus to invest in replacement of aging copper line networks. Extend to all public transport existing legislation banning the use of cellphones on airplanes—the issue is not whether radio emissions affect the vehicle's navigation instruments, it is whether sitting in a metal box surrounded by radio transmitters impacts passengers’ health.
   - Monitor compliance—pending the above, at least compliance with NZS 2772:1:1999 as it stands. Measure the emissions of a selection of cellphones, at various distances from a cell tower. Do not then emulate the French Government by refusing until threatened with legal action to make public the power densities measured at distances from the phone relevant to its carriage in a bra or pants pocket. If radiation values a few cm away from any phone do exceed the 1.000W/m² limit specified by NZS2772:1:1999, take appropriate action.
   - Ahead of regulatory reform, schools and universities could proactively lead the way in adopting safer practices. Make campuses cellphone and WiFi free zones, with internet access provided by cables LANs.
2. For physicians
   - Ask your patients where they carry their cellphones. See if you can predict from the answer the location of their primary cancer.
   - If you find that you can, do something about it. Communicate with colleagues. Collate data. Write a paper for the NZMJ.
3. For everyone
   - Find out whether you have an electricity smart meter. If no meter readers come round any more, you probably do. To find out for sure, DO NOT peer closely at the meter (see Figure 1). Ask the power company. If you do have a smart meter, persevere until you find a power company willing to replace it with a dumb meter (ie, a smart meter from which the radio transmitter has been removed). In the meantime, avoid sleeping or sitting for long periods just through the wall from a smart meter.
VIEWPOINT

- If you must use a cellphone, avoid lengthy conversations. Do not hold the device against your ear; use speaker mode or text. If you need a long chat, use a landline—preferably not one accessed through a cordless phone. All cordless phones emit RF, although cordless landlines emit less than cellphones.
- Do not carry in your clothing any cellphone that is not either in airplane mode or switched off. Cellphones not in one of those conditions continually emit RF, even when not in use. Figure 1 illustrates how much more intense these emissions are very close to the phone.
- Do not use a WiFi-enabled laptop on your lap, for the same reason.
- Preferably obtain your home internet access through a cable, instead of via WiFi. Failing that, turn off household WiFi at night.
- Stop even taking an active phone into the bedroom at night. Jet alone sleeping with it under your pillow.
- Restrict cellphone use to emergencies.
- Gradually phase out device use altogether.

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