Tabled ad Public Forum 12/10/19

Media Release – Save Our Springs (12/12/2019)

Action

Save Our Springs have conducted a rally: 8.30 am to 10 am, Thursday December the 12th at the Tasman District Council (TDC) Building, 189 Queen Street, Richmond, Nelson. Save Our Springs have been joined by other groups, including Extinction Rebellion. At 9.30 am we entered the building where Kevin Moran, Spokesperson for Save Our Springs addressed the Council on our growing concern for Te Waikoropupū Springs.

State of denial

TDC staff are in denial that intensive dairy farming is causing the nitrate pollution at Te Waikoropupū Springs. It's the elephant in the room. TDC staff have taken no steps whatsoever to fix the problem. The Council is not fulfilling its legal duty to 'maintain or improve' the waters of Te Waikoropupū Springs. We would urge the Council to be wise and fiscally prudent and quickly address this legal and ethical issue. If the issue remains unaddressed the Council runs the risk of someone, sometime in the future, resorting to legal action which would be an expense for ratepayers.

Findings:

Over 4 years nitrate at Te Waikoropupū has risen from 0.4 mg/l to 0.52 mg/l, a 30% rise. Meanwhile the background level in water unaffected by farming is always low, often below the lab's limit of detection (0.003 mg/l).

Nitrate pollution at Te Waikoropupū now appears higher than ever before. It threatens both the tiny creatures in the aquifer who clean the water, and the flora of the Springs itself. Mats of floating algal weed are now spreading at the Springs.

Friends of Golden Bay (FoGB) has analysed 600 samples of water from the Takaka Valley. It sends all its test results to TDC but despite being given this wealth of data TDC have failed their legal obligation to 'maintain or improve' the water quality of Te Waikoropupū Springs.

This meticulous research gives new urgency to our campaign to protect Te Waikoropupū Springs.

TDC staff have made serious mistakes

PR spin by TDC staff has made much of previous high nitrate levels, up to 0.9 mg/l, in their historical record and has claimed present levels are therefore nothing unusual. But those previous high results are mistakes. This came to light when in September 2017 TDC staff got a result of 0.87 mg/l for their sample. By chance FoGB tested on the same day and got 0.44 mg/l, a normal figure. Subsequent inquiry revealed the cause. TDC staff had mixed up the caps on their sample bottles and contaminated their sample with acid.

We now look back at the historical record with fresh insight, and see these high results bearing no relation to the results either side of them. And we see they are simply mistakes and should be discarded. Once these spurious readings are removed from the historical record, it is apparent nitrate pollution is now higher than ever before.

Council must ensure that the staff nitrate testing program is evaluated and brought up to the highest professional standards.

Fertiliser Monitoring

Save Our Springs requests the Tasman District Council to:

- 1) Require records of all application of fertiliser in the aquifer recharge zone to be sent to TDC: What kind, where, when and how much.
- 2) Require the information to be sent within a week of the application.
- 3) Require that these records are made available to the public (not industry self-regulation because that's like putting a fox in charge of the chook house).
- 4) Start immediately and not wait for the WCO or any other delaying excuse.

Rationale:

This information is all available from the automatically generated GPS fertiliser-truck records, so it's not an onerous task.

Several NZ regional councils not only require records of fertiliser application, but also place limits on it. (E.g. Horizons Regional Council).

What farmers do that stays on their own land is their business, but when it leaches into everyone's rivers and groundwater it immediately becomes everyone's business.

The signs are that there is a crisis developing at Te Waikoropupu owing to fertiliser leachate so this calls for action without delay.

Despite 'official' records, and maximum application guidelines of 200 kg of N per hectare per year, there are plausible leaks from within the industry that often more like 450 kg/Ha is applied annually, and that there are over 8000 tonnes of urea applied in Golden Bay annually. This is what's getting into the groundwater and this is what's causing the problems.

We know from the FoGB records that water coming into the Takaka Valley flats contains very little nitrate - frequently less than the lab can detect. And we know how much nitrate is in the water emerging from the aquifer: too much already! So we know the nitrogen is coming from the farms in the recharge zone in the valley flats. We need to know reliably which of them is contributing how much so that we can take action to reduce the problem. Creating an up-to-date public record of how much nitrogen is applied is the cheapest, most reliable and fairest way to build the necessary information.

The only reason for objecting to this is a dishonest vested interest in stopping the truth from being established.

Councillors actually hold the power. They can tell their staff what to do. If they do nothing they are responsible for the outcome

If we achieve this it will actually set a precedent that all the box ticking and form filling and other excuses for doing nothing have to stop, and it will start some actual practical action to 'maintain or improve'.

Attachment A - Supplementary evidence of Dr Gerbeaux

BEFORE THE SPECIAL TRIBUNAL FOR TE WAIKOROPUPŪ SPRINGS WATER CONSERVATION ORDER

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of a Special Tribunal appointed under section 202 of the Act to consider an application for a Water Conservation Order made by Ngati Tama Ki Waipounamu Trust and Andrew Yuill in relation to Te Waikoropupū Springs

SUPPLEMENTARY EVIDENCE OF PHILIPPE JEAN ROBERT GERBEAUX FOR THE DIRECTOR-GENERAL OF CONSERVATION Dated 25 July 2018

Department of Conservation

PPL Shared Services

Private Bag 4715, Christchurch Mail Centre, CHRISTCHURCH 8053

Attention: N Yozin

Phone: (027) 207 3129 Counsel: P D Williams

DOC-5537804

,

Introduction

- 1. My full name is Philippe Jean Robert GERBEAUX.
- I have previously set out my qualifications and experience in my main evidence to the Special Tribunal (corrected) dated 17 April 2018.
- I am presenting this supplementary evidence for the Director-General of Conservation in relation to the applications for a Water Conservation Order over Te Waikoropupū Springs.

Code of Conduct

4. I confirm that I continue to be aware of and comply with the Code of Conduct in the Environment Court Practice Note 2014, and that this evidence is within may area of expertise or I have stated where it is not.

Scope of Evidence

- 5. This supplementary evidence relates to:
 - 5.1. Answering a question asked by Professor Harding on the last day of the hearing that can be summarised as:
 - 5.1.1. Whether the potential degradation in nitrate concentrations in the Springs waters could result in impacts on plant condition and plant diversity
 - 5.1.2. Whether a 0.55mg/litre value would cause any change for plants

Discussion

- 6. To address, the question I requested a report from the New Zealand experts on aquatic plants, Fleur Matheson, Cathy Kilroy & Paul Champion, of NIWA (Hamilton). The report is attached as a memo in Appendix 1.
- 7. I endorse the full content of the memo and wish to especially draw attention, in response to the request, to the following points:
 - Nitrogen and phosphorus are the primary nutrients that aquatic plants use for growth. In water, nitrogen and phosphorus occur in the bioavailable forms of

.

nitrate-nitrogen, ammoniacal-nitrogen, nitrite-nitrogen and dissolved reactive phosphorus. Nitrate-nitrogen is usually the most abundant form of bioavailable nitrogen in lake, river and spring waters.

- An increased supply of nitrate-N in the Te Waikoropupū Spring waters, from
 the current 10-year median concentration of 0.41 mg NO3-N/L to 0.55 mg
 NO3-N/L has the potential to increase the growth and biomass of some or all
 the aquatic plant taxa present.
- Increasing nitrate-nitrogen concentrations also increases the risk of stimulating growth of algae that live in the water column and cannot access phosphorus from sediments (e.g. filamentous algae) if there is also an increase in DRP (either temporary or more sustained).
- If plant growth is not constrained by the availability of phosphorus, then
 increased nitrate concentrations may increase the overall growth and abundance
 of aquatic plants but most likely those taxa that prefer more nutrient-enriched
 conditions.
- Taxa recorded from the Springs that prefer moderately nutrient enriched conditions include the diatoms Cocconeis placentula and Synedra ulna and the green alga Spirogyra, and the vascular aquatic plants, Nasturtium microphyllum, Callitriche stagnalis and Galium palustre. Taxa that are tolerant of high nutrient enrichment or are cosmopolitan include the golden alga Vaucheria sp.
- European authors report nitrate-nitrogen associations for several vascular plant species in the same genus as those found in Te Waikoropupū Springs in waters of much higher nitrate concentrations,i.e. Rorippa nasturtium-aquaticum (syn. Nasturtium officinale) with NO3-N of 3-6 mg/L, Lemna minor with NO3-N of 1-3 mg/L and Myriophyllum spicatum with NO3-N below 1 mg/L.
- In general, increased nutrient concentrations are considered to provide conditions more favourable to the growth of exotic as opposed to native vascular plants. Increased NO3-N concentration also increases the risk associated with incursions of other noxious vascular plants, like Lagarosiphon and Elodea, which are likely to grow and spread faster with increased nutrient supply.

- Setting a NO3-N limit closer to the current annual median concentration of water in the Springs increases the likelihood that any potentially detrimental alteration to the floral assemblage of the Springs is avoided, or at least managers will be able to respond to changes sooner. Regardless of the limit that is ultimately set it is recommended that the floral assemblage of the Springs is monitored and mapped regularly (e.g. annually), and comprehensively (i.e., taxonomic composition and relative abundance of each taxa), to ensure its protection and future persistence in an unaltered state.
- 8. Finally, I note that Dr Young in his evidence (see his paragraphs 84, 117 and 126), has included unequivocal statements on the influence of nutrients on growth and abundance of aquatic plants (and animals). Those statements concur with the information reported in my conclusion above, and in the NIWA memo in Appendix 1.

Dr Philippe Gerbeaux

Dated 25 July 2018

Appendix 1

See Annexure 1 (Memo to DOC by Matheson, Kilroy and Champion, NIWA, July 2018)



Memo

From	Fleur Matheson, Cathy Kilroy & Paul Champion, NIWA	
То	Phillipe Gerbeaux & Rosemary Miller, Department of Conservation	
Date	18 July 2018	
Subject	Implications of 0.55 mg/L nitrate-nitrogen limit for Te Waikoropupū aquatic flora	

Introduction

An application for a water conservation order for Ta Waikoropupū Springs has been lodged by Ngāti Tama Ki Ta Waipounamu and Andrew Yuill (hereafter 'the Applicant') with the Minister for the Environment. The Department of Conservation is seeking advice regarding the effect of an increase in nitrate-nitrogen (NO₃-N) concentration up to the suggested limit in Schedule 4 of the Applicant's draft Water Conservation Order on the aquatis flora of the Springs. The suggested NO₃-N limit is an annual median concentration of 0.55 mg NO₃-N/L.

Aquatic flora

Te Waikoropupū Springs has a diverse aquatic flora consisting of diatoms, blue-green, green, golden and red algae, mosses, liverworts and vascular plants. The floral assemblage of the Springs is considered unique (Cromarty and Scott 1996), although none of the flora recorded from the Springs are listed as threatened or uncommon in New Zealand (de Lange et al. 2015; 2018; Rolfe et al. 2016). Of special note is the submerged growth of several liverwort and moss species that normally do not grow submerged, the extensive area of the main Spring occupied by mosses and liverworts (c. 30%) and the highly unusual growth form of the moss, Crotoneuropsis relaxa (see Fenwick and Smith 2016 for further details). The Springs contain 0.5% seawater (Fenwick and Smith 2016) so this likely contributes to its unique and diverse aquatic flora.

A summary list of the aquatic flora recorded in the Springs was compiled by Fenwick and Smith (2016) with information sourced from Michaelis (1977), Fife et al. (2004) and Doehring (2012). The list contains 18 algal taxa, nine mosses, five liverworts and six species of vascular plants. Five of the vascular plants are non-native but none are especially invasive. In addition, we have located a record of three further diatom species (Achanthidium minutissimum, Diatoma hiemale and Diatoma valgare) in samples collected from the Springs in 2005 (C. Kilroy pers. comm.) and November 2008 (Kilroy 2008). See Appendix 1 below for the updated list.

The recent reviews and records have added nine species to those identified in the earliest floral survey (Michaelis 1977). These species are: the three additional diatom species identified by Kilroy in 2005 and 2008 as well as the cyanobacterium *Chroococcidiopsis* sp., the red alga *Bostrychia harveyi*, the moss *Bryum blandum*, the liverworts *Chiloscyphus austrigenus* and *Radula ?buccinifera*, and the exotic (introduced) vascular plant *Galium palustre*. The latter species, *G. palustre*, was first reported within the Springs in 2005 (Strickland 2005) but no increase in its overall abundance was reported seven years later (Doehring 2012). Hand-weeding to remove watercress, *Nasturtium microphyllum*, has been carried out by the Department of Conservation since 2000. The weeding programme included *Juncus microcephalus* from 2006. Removal of *G. palustre* was also recommended (Strickland 2005).

Water quality

Young et al. (2017) analysed the water quality records for the Springs. They found that the median NO₃-N concentration for the Springs over the last ten years was 0.41 mg NO₃-N/L and that measured concentrations have ranged from 0.12 to 0.92 mg NO₃-N/L over the full 47-year sampling record. Between 1970 and 2017 there has been an overall increase in NO₃-N concentration of approximately 0.1 mg/L, which is equivalent to 0.6% per year. However, it appears that NO₃-N concentrations have decreased over the last 3-4 years. Assuming a continued increase of 0.6% per year and a 2017 concentration of 0.41 mg NO₃-N/L then the suggested annual median limit of 0.55 mg NO₃-N/L would be reached in 2065.

The suggested annual median NO₃-N limit of 0.55 mg NO₃-N/L is 34% higher than the median concentration for the last ten years. It is also higher than the range of annual median nitrate-nitrogen trigger values (0.40 to 0.50 NO₃-N/L) recommended by the Science Panel advising the Takaka Freshwater and Land Advisory Group for initiation of further management actions (Young et al. 2017).

Other relevant characteristics of the water quality of the Springs (from Young et al. 2017) are:

- water clarity is extremely high;
- dissolved oxygen concentrations are relatively low (50-64% saturation) reflecting the groundwaterfed nature of the system;
- waters have relatively high concentrations of calcium carbonate (i.e., high hardness, 190 mg CaCO₉/L);
- dissolved reactive phosphorus (DRP) concentrations are mostly in the range of 0.001–0.010 mg/L with the highest measured concentration being 0.08 mg/L and no evidence of any long-term changes;
- the ratio of nitrogen to phosphorus in the Spring waters is around 40:1;
- pH records from 1970 to 2016 range from 6.87 to 8.44 with an overall increase of 0.5 units during this period;
- chloride concentrations range from 16 to 125 mg/L and are positively correlated with flow rate;
- water temperature is cool and relatively constant at around 11.7°C.

Will the flora change in response to increased nitrate?

Nitrogen and phosphorus are the primary nutrients that aquatic plants use for growth. In water, nitrogen and phosphorus occur in the bioavailable forms of nitrate-nitrogen, ammoniacal-nitrogen, nitrite-nitrogen and dissolved reactive phosphorus. Nitrate-nitrogen is the usually the most abundant form of bioavailable nitrogen in lake, river and spring waters.

An increased supply of nitrate-N in the Te Walkoropupū Spring waters, from the current 10-year median concentration of 0.41 mg NO₃-N/L to 0.55 mg NO₃-N/L has the potential to increase the growth and biomass of some or all of the aquatic plant taxa present. Because vascular plants, in particular, but also some algae (Quinn et al. 2018), have the ability to source phosphorus for growth from fine sediment substrates the low water phosphorus concentrations and high N:P ratio may not necessarily preclude growth stimulation associated with increased water NO₃-N concentrations. Increasing nitrate-nitrogen concentrations also increases the risk of stimulating growth of algae that live in the water column and cannot access phosphorus from sediments (e.g. filamentous algae) if there is also an increase in DRP (either temporary or more sustained).

If plant growth is not constrained by the availability of phosphorus then increased nitrate concentrations may increase the overall growth and abundance of aquatic plants but most likely those taxa that prefer more nutrient-enriched conditions. Taxa recorded from the Springs that prefer moderately nutrient-enriched conditions include the diatoms Cocconeis placentula and Synedra ulna and the green alga

Spirogyra (Biggs 2000), and the vascular aquatic plants, Nasturtium microphyllum, Callitriche stagnalis and Galium palustre (Hill et al. 1999). Taxa that are tolerant of high nutrient enrichment or are cosmopolitan include the golden alga Vaucheria sp. (Holmes et al. 1999). Taxa that prefer low nutrient conditions include the diatom Achnanthidium minutissimum, the cyanobacterium Nostoc sp., the red algae Batrachospermum sp. and Hildenbrandia rivularis, and the mosses Acrocladium cuspidatum (syn. Calliergonella cuspidatum) and Fissidens rigidulus (Holmes et al. 1999; Biggs 2000). Haslam (1978) reported nitrate-nitrogen associations for several vascular plant species in the same genus as those found in Te Waikoropupū Springs, i.e. Rorippa nasturtium-aquaticum (syn. Nasturtium officinale) with NO₃-N of 3-6 mg/L, Lemna minor with NO₃-N of 1-3 mg/L and Myriophyllum spicatum with NO₃-N below 1 mg/L.

In general, increased nutrient concentrations are considered to provide conditions more favourable to the growth of exotic as opposed to native vascular plants. Exotic submerged vascular plants reported from New Zealand springs and that could pose an incursion risk to Te Waikoropupū Springs include *Ceratophyllum*, *Elodea*, *Egeria* and *Lagarosiphon* (Coffey and Clayton 1988; Scarsbrook et al. 2007). Of these, *Elodea* is common in Tasman District (but no records from Golden Bay), *Lagarosiphon* is present in the Takaka River but rare in Tasman generally, *Egeria* is known from Marlborough and *Ceratophyllum* has been eradicated from the South Island. In contrast, the current phosphorus concentrations in the Springs, combined with other unfavourable aspects of water chemistry are considered likely to preclude the establishment of the invasive alga, didymo (*Didymosphenia geminata*). Dissolved reactive phosphorus concentrations <0.002 mg/L seem to be necessary for didymo to bloom as well as sodium (Na+) concentrations <5 mg/L (C. Kilroy pers. comm.). The Springs have Na+ concentrations of around 60 mg/L (2600 µmol/L) (Michaelis 1976, Kim and Hunter 1997).

Conclusions

It is possible that the floral assemblage of Te Waikoropupu Springs could be altered if the annual median nitrate-nitrogen concentration increases to 0.55 mg NO₃-N/L. Taxa that prafer or tolerate more nutrient-enriched conditions may become more abundant and those that prefer less enriched conditions may decline. Taxa associated with increased nutrient enrichment include five species of algae (esp. *Vaucheria* sp.) currently known to be present in the Springs and four of the five exotic vascular plant species that are present, including one species that has been subject to removal by hand-weeding (*Nasturtium microphyllum*) and another (*Galium palustre*) for which this approach has been recommended. Increased NO₃-N concentration also increases the risk associated with incursions of other noxious vascular plants, like *Lagarosiphon* and *Elodea*, which are likely to grow and spread faster with increased nutrient supply. Setting a NO₃-N limit closer to the current annual median concentration of water in the Springs increases the likelihood that any potentially detrimental alteration to the floral assemblage of the Springs is avoided, or at least managers will be able to respond to changes sooner. Regardless of the limit that is ultimately set it is recommended that the floral assemblage of the Springs is monitored and mapped regularly (e.g. annually), and comprehensively (i.e., taxonomic composition and relative abundance of each taxa), to ensure its protection and future persistence in an unaltered state.

References

Biggs, B.J.F. (2000) New Zealand Periphyton Guideline: Detecting, Mohitoring and Managing Enrichment of Streams. Prepared for the Ministry for the Environment. 122 p.

Coffey, B.T.; Clayton, J.S. 1988 New Zealand water plants. A guide to plants found in New Zealand freshwaters. Ruakura Agricultural Centre, Hamilton, 63 p.

Cromarty, P.; Scott, D.A. (eds). (1996) A directory of wetlands in New Zealand. Department of Conservation, Wellington, New Zealand. http://www.doc.govt.nz/documents/science-and-technical/nzwetlands00.pdf

de Lange, P.J.; Glenny, D.; Braggins, J.; Renner, M.; von Konrat, M.; Engel, J.; Reeb, C.; Rolfe, J. (2015) Conservation status of New Zealand hornworts and liverworts, 2014. *New Zealand Threat Classification Series* 11. Department of Conservation, Wellington, 31 p.

de Lange, P.J.; Rolfe, J.R.; Barkla, J.W.; Courtney, S.P.; Champion, P.D.; Perrie, L.R.; Beadel, S.M.; Ford, K.A.; Breitwieser, I.; Schonberger, I.; Hindmarsh-Walls, R.; Heenan, P.B.; Ladley, K. 2018: Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington, 82 p.

Doehring, K. (2012) Aquatic vegetation monitoring 2012: Te Waikoropupu Springs. Cawthron Report No. 2111. 12 p.

Fenwick, G.; Smith, B. (2016) Biodiversity of Te Waikoropupü Springs. Assessment and vulnerabilities to reduced flows. Prepared for Ngati Tama ki Te Waipounamu Trust. NIWA Report No. 2016051CH. 41 p.

Fife, A.; Novis, P.; Glenny, D. (2004) Bryophytes and algae of Waikoropupü Springs—an identification guide. Landcare Research Contract Report prepared for Department of Conservation, Nelson. 18 p.

Haslam, S.M. (1978). River plants – the macrophytic vegetation of water courses. Cambridge University Press. 395 p.

Hill, M. O.; Mountford, J. O.; Roy, D.B.; Bunce, R. G. H. 1999 Ellenberg's indicator values for British plants. ECOFACT Volume 2 Technical Annex.

Holmes, M. T. H.; Newman, J.R.; Chadd, S.; Rouen, K. J.; Saint, L.; Dawson, F.H. (1999) Mean Trophic Rank: A Users Manual. Research and Development Technical Report E38. Environment Agency, UK. 134 p.

Kilroy, C. (2008). Diatom species in algae sample collected from Pupu Springs, 20 November 2008.

Kim, J.P.; Hunter, K.A. (1997). Aqueous chemistry of major ions and trace metals in the Takaka-Cobb River system, New Zealand. *Marine and Freshwater Research* 48: 257-266.

Michaelis, F. (1976) Physicochemical features of Pupu Springs. New Zealand Journal of Marine and Freshwater Research 10: 613-618.

Michaelis, F. (1977) Biological features of Pupu Springs. New Zealand Journal of Marine and Freshwater Research 11: 357-373.

Quinn, J.; Rutherford, K.; Wilcock, B.; Depree, C.; Young, R.; Schiff, S. (2018) Nutrient-periphyton interactions along a temperate river and response to phosphorus input reduction. Proceedings of 4th International Conference on Water Resources and Wetlands, Tulcea, Romania, 5-9 September 2018.

Rolfe, J.R.; Fife, A.J.; Beever, J.E.; Patrick J. Brownsey, P.J.; Hitchmough, R.A. (2016) Conservation status of New Zealand mosses, 2014. *New Zealand Threat Classification Series* 13. Department of Conservation, Wellington. 12 p.

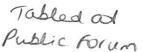
Scarsbrook, M.; Barquín J.; Gray, D. (2007) New Zealand coldwater springs and their biodiversity. Science for Conservation 278, 72 pp.

Strickland, R. R. (2005) Aquatic plants monitoring Pupu Springs. Prepared for the Department of Conservation, Nelson/Mariborough Conservancy. Cawthron Report No. 1013. 4 p.

Young, R.G.; Fenwick, G.; Fenemor, A.; Moreau, M.; Thomas, J.; McBride, G.; Stark, J.; Hickey, C.; Newton, M. (2017) Ecosystem health of Te Waikoropupū. Prepared to support decision making by the Takaka Freshwater Land Advisory Group. Cawthron Report No. 2949, 47 p. plus appendices.

Appendix 1. Updated floral taxa list for Te Waikoropupū Springs. *denotes exotic species

Major group	Genus species	Reference
Diatoms	Achnanthes (cf. petersenii) sp.	Michaelis 1977 (Kilroy 2008)
	Achnonthidium minutissimum	Kilroy 2008
	Cocconeis placentula	Michaelis 1977, Kilroy 2008
	Cymbelia (kappii) sp.	Michaelis 1977 (Kilroy 2008)
	Gomphonema sp.	Michaelis 1977
	Diatoma hiemale	Kilroy 2008
	Diatoma vulgare	C. Kilroy pers. comm.
	Navicula sp.	Michaelis 1977
	Synedra (ulna) sp.	Michaelis 1977 (Kilroy 2008)
Cyanobacteria (blue-green	Chroococcidiopsis sp	Fife et al. 2004
algae)	Entophysalis rivularis	Michaelis 1977
	Nostoc parmeloides	Michaelis 1977
	Nostoc verrucosum	Michaelis 1977
	Microcoleus? sp.	Michaelis 1977
	Oscillatoria? sp.	Michaelis 1977
Chlorophyta (green algae)	Chaetophora elegans	Michaelis 1977
	Spirogyra sp.	Michaelis 1977
Chrysophyta (golden algae)	Vaucheria sp.	Michaelis 1977, Fife et al. 2004, Doehring 2012
Rhodophyta (red algae)	Batrachospermum sp.	Michaelis 1977
	Bostrychia harveyi	Fife et al 2004
	Hildenbrandia rivularis	Michaelis 1977
Mosses	Acrocladium cuspidatum syn.	Michaelis 1977, FKe et al. 2004
	Calliergonella cuspidata	• 0 0000 000 000
	Bryum blandum	Fife et al. 2004
	Cratoneuropsis relaxa	Michaelis 1977, Fife et al. 2004, Doehring 2012
	* = = ====	(all as Hypnobartlettia fontana)
	Cyatophorum bulbosum	Michaelis 1977, Fife et al. 2004
	Drepanocladus aduncus	Michaelis 1977, Fife et al. 2004
	Echinodium hispidum	Michaelis 1977, Fife et al. 2004
	Fissidens rigidulus	Michaelis 1977, Fife et al. 2004
	Hypopterygium filiculaeforme	Michaelis 1977
iverworts	Chiloscyphus austrigenus	Fife et al. 2004
	Lophocolea austrigena	Michaelis 1977
	Lophocolea minor	Michaelis 1977
	Neesioscyphus phoenicorhizus	Michaelis 1977
	Radula ?buccinifera	Fife et al. 2004
/ascular plants	*Callitriche stagnalis	Michaelis 1977
	*Gallium palustre	Doehring 2012
	*Juncus microcephalus	Michaelis 1977, Doehring 2012
	*Lemna disperma	Michaelis 1977 (as L. minor)
	Myriophyllum triphyllum	Michaelis 1977 (as M. elatinoides), Doehring
		2012
	*Nasturtium microphyllum	Michaelis 1977, Doehring 2012 (as Rorippo
		nasturtium-aquaticum),



<u>Submissions In Support of the Mapua Boat Clubs Request for Permission to Apply For Consents</u> <u>Over Council Freehold Land</u>

12/12/19

What the MBC wants to do:

The MBC is spearheading a community project to build a replacement community boat ramp for the Mapua / Ruby Bay community in the Waterfront Park.

The provision of a community boat ramp was considered by the Council in preparing the Masterplan but was rejected because of:

- 1. Cost
- 2. Health and Safety Risks
- 3. Risk to sewer / wastewater pipes
- 4. Traffic Parking and Congestion

These reasons are raised again in the current report. The report writer is wrong to do so because:

The Report writer acknowledges at paragraphs 4.23 that the site is one that should effectively be reserved by Council because it would be suitable and may be the eventual location of the Regional Boat Ramp.

If it is Council's genuine belief that the site is a viable site for a regional boat ramp, which will attract more and larger boats with attendant trailers and vehicles from a greater geographical area then not one of the objections to the boat clubs proposals for a community boat ramp in this report are sustainable.

Cost:

The current proposal does not require the council to pay for anything. Cost is not a valid objection the MBC's request.

Health and Safety:

The report does not cite any specific risk, nor does it refer to any capacity to eliminate, mitigate or protect from any perceived risks.

The Harbourmaster, having considered tidal movements and flow rates, has commented on the preferred site stating

"...Mapua would be an ideal location, and so long as navigation safety is given priority in the ramp design then the Waterfront Park would be a good location" (8/11/2018).

The proposed ramp would mitigate the risk of harm from boats and swimmers sharing common areas as they do now at the wharf and at Grossi Point.

As Council considers the Waterfront Park a viable site for the regional boat ramp this objection against a community boat ramp is untenable.



Risk to Sewer / Wastewater Pipes:

MBC have engaged Opus to consider and develop its proposals. Opus confirm assets such as sewer and wastewater pipes are regularly built around and over and that there are well established methodologies for safely doing so. The detail specific for this site will be developed as the project progresses but it is simply wrong to say that it cannot be done or that it poses an unacceptable risk to the sewer and wastewater pipes.

That position is in direct conflict with the agreement on this point reached with the Deputy Mayor King, CEO Dowding and approved by TDC engineers that:

"Tasman District Council staff agree that a boat ramp in Mapua over the sewer pipes is possible with the right engineering design to protect the pipes under and in the vicinity of the boat ramp"

In her addendum to the notes the CEO records "Further Info: Richard Kirby has confirmed his agreement with this statement provided the additional wording highlighted above is included"

Again, as the council considers the Waterfront Park a viable site for the regional boat ramp this objection against a community boat ramp is untenable.

Traffic Parking and Congestion:

Boaties who would use the community ramp already use Grossi Point. They park there at present and use the land opposite the Waterfront Park for overflow parking. The Council and Waterfront Action Group is keen to move all boatie parking there instead of Grossi Point. The proposed ramp would assist in this and would solve parking issues at Grossi Point without creating any new issues.

Again, as Council considers the Waterfront Park a viable site for the regional boat ramp this objection against a community boat ramp is untenable.

The Land – Not Subject to or Restricted by Local Government Act 2002:

There will be a whole raft of consents applied for simultaneously and the detail of many matters raised in the report will properly be dealt with in those applications. This request is not the consent application, it is a request for permission to apply.

The activity is a permitted activity under the TRMP. If the MBC owned the land it would not need permission.

The land is known as Waterfront Park but it is not a park or reserve.

Section 138 of the Local Government Act 2002 has no application as this is not a disposal or lease of a park or reserve. Any decision to lease the land is a commercial decision just as it is for say the properties owned by the Council on the wharf. No consultation is required.

In any event there is no prohibition on the granting of a licence which is does not create any interest in land and would avoid any issue with any settlement in the Nelson Tenths case – in the unlikely event that the claiming parties had any desire to accept a contaminated site once the matters is finally decided (estimated time frame 5 to 10 years).

40% To Be retained as Public Space:

The change to Council's freehold land will essentially be to the surface of the ground – it will become the sealed accessway to the new ramp at the waters edge. It will remain within the



definition of Public Space and will not reduce the 60% which may be disposed of by Council in due course under the deed entered with Central Government in 2004.

Again, as the Council considers the Waterfront Park a viable site for the regional boat ramp this objection against a community boat ramp is untenable.

The Cap:

The proposed activity will not disturb the cap and ultimately give even greater protection to the underlying toxic material by placing it below a sealed surface.

Again, as the council considers the Waterfront Park a viable site for the regional boat ramp this objection against a community boat ramp is untenable.

Community Support:

The Masterplan 2018 consultation showed clear and overwhelming support for a boat ramp at the Waterfront park. If all possible overlap between individual supporting submitters is removed (that is assume that the 164 individual submitters were also included in the 403 signatories to the MBC submission) that still leaves 403 submissions in favour out of 568 total submitters (but probably an even higher number in support). There is no justification for further consultation and, at this stage no statutory requirement for it in respect of Council's freehold land.

Reputational Risk:

Council's reputation has already been damaged by the way it has pushed ahead with commercial development in the interests of regional income from visitors and tourists at the wharf which as separated the local community from its boat ramp and local activities and values. Council staff have admitted they did not even know that the sea scouts occupied and used space at the wharf for their boats, an activity they have had to stop because of the commercial and tourist developments.

Mayor Kempthorne agreed that we had lost a community asset and that the Waterfront Park was the ideal space for it to be replaced.

If the Council deny the current request despite all previous objections having being dealt with and on the basis of this self-contradictory and flawed report it begins to look as though the only reason for blocking a community project in a community space to create a community asset is an obstinate refusal to consider new information and accept that previous decisions may have been mis-informed.

I urge you therefore to reject the recommendation the report and to vote in favour of option 3.

M P Crehan 91 Aranui Road Mapua 12 December 2019

Tabled ad
Public forum
12/12/19

Tamaha Sea Scouts appeal to have TDC approve permission for an application for a replacement boat ramp to be built on the Māpua Waterfront Park.

The Tamaha Sea Scouts operation and future planning has been greatly restricted by the commercial aspirations of TDC at the Māpua Wharf. The effective closure of the community boat ramp to make way for Shed 4 due to health and safety reasons is in contradiction with the Scouts continued operation in this area. A new solution is sort after and the Waterfront Park proposal is the only viable solution, not only for the future of the Tamaha Sea Scouts but also for most of the affected parties and, the local and regional boating community at large.

Tamaha Scout Group was registered as a Scout Group within the Nelson Provincial District, in the Mohua Area on 26th August 1930. The group changed to become a Sea Scout Group and purchased yachts in 1989 and 1990. Since that time, it has instructed hundreds of local youth from its location on the Māpua Wharf. It operates 12 yachts, including two one tonne cutters, a patrol boat and 11 kayaks out of its storage shed situated on the Māpua Wharf next to the Jellyfish Restaurant.

In 2012 plans for TDC's Shed 4 got underway. Tamaha was not consulted and often during the construction had to cancel sailing sessions due to being locked out from its boats. In 2015, contrary to what the Mapua community had previously been told, the boat ramp was shut to the public sighting health and safety issues. The Māpua Boat Club and Tamaha Sea Scouts negotiated and easing of this, sighting water safety issues and the continuation of the Sea Scouts operation from the Māpua Wharf.

Shed 4 opened on the 15th December 2015. In 2017 the Jellyfish restaurant was maintained, and its outside decking area extended. Again, Tamaha was misrepresented and disregarded and, despite objection, planter boxes were installed outside the Jellyfish which made backing trailers through a congested café and restaurant area extremely difficult. Numerous requests to have one bollard removed to ease this situation have, until recently been ignored and rejected.

Since the restrictions on the use of the boat ramp the Māpua Boat Club and the Tamaha Sea Scouts have been working on a way forward to solve the problems that TDC has created for the community groups that use Māpua to access the water.

In 2018 the Māpua Waterfront Area Masterplan was published, not only did it reject the suggestion of a replacement community boat ramp on the Māpua Waterfront Park but also, in year 5-10 of the plan, it proposed closing access to Grossi Point for power boats.

TDC needs to understand that with a growing population and, with the Closing of Delaware Bay Estuary boat access north of Nelson, that closing all boat access to the sea, in the seaside village of Māpua is just adding to a critical shortage of boat launching facilities in the Nelson/Tasman District. One regional boat ramp will only scratch the surface of what is actually needed. Not to mention that the future of the Tamaha Sea Scouts and the Māpua Boat Club is riding on the decision that TDC makes now.

We again implore TDC to make the right decision and give permission to apply for consent to construct the access to a community boat ramp over the council's land.

Thank you.

TDC Full Council Meeting (Public Forum)

Tabled at Public Forum 12/12/

12 December 2019

Martyn Barlow

I am speaking to the agenda item today from the Mapua Boat Club, a request for Council's approval as landowner for the club to lodge a consent to build a boat ramp at the waterfront park.

The Club is not asking for consent to build a boat ramp but simply asking for the landowner's approval as the landowner, to lodge a consent, nothing more nothing less.

All issues raised in the staff report will have to be addressed during the consent when lodged.

Please don't be confused by the content of the report and the reasons why the staff report recommends option 1 and not option 3. Yes you have 3 options - Decline, Defer or Approve

A boat ramp is an activity consistent with the use of the park as public space; under the 2004 deed with the government and the definition of public space and recreational use under the reserves act. And it will still be a public space.

There is no reason for the landowner not to give its approval to the MBC to lodge a consent.

None of the factors raised in the staff report affect your decision that you have to make today as land owner.

Why because they will all be dealt with during the consent process. Giving approval as the landowner for the club to lodge a consent does not circumvent the consent process and therefore the concerns or issues raised in the report are irrelevant in this decision.

But let's just deal with those issues anyway.

Masterplan and councils' preferred option to take a long term view, and conduct a regional boat ramp feasibility study is great news for the region as we are not served well for access to the waters of Tasman Bay.

However its not a regional boat ramp we seek in Mapua, but a community ramp that replaces the one at the wharf we no longer have access to due to the commercial development.

The regional boat ramp is mentioned throughout the report, irrespective of what this study concludes your decision to approve today does not affect this – if the study concludes that Mapua is the best location for a regional boat ramp, then we the MBC are going to ensure that comes to fruition, if the study concludes that Rough Island or Motueka are the best places to develop a regional boat ramp – we will still be seeking a community boat for our coastal village of Port Mapua.

Carparking – will not create an issue at Port Mapua, that issue already exists, and ramp users will not add to the issue as they predominantly use the ramp in the early hours before the sea breeze arrives late morning, which is very different to the time that it is used by commercial users visiting Mapua; the master plan says, "car parking and boat trailer parking will also be permitted on the remediated land along Tahi Street" which has more than enough capacity.

Sewer pipes – Councillors just as they were to make a decision regarding the Clubs submission on the master plan in 2017 were told by staff you cannot build over council assets; this was and is incorrect information from staff. Since then MBC and council staff have had several meetings and discussions about the mains pressure sewer council asset. In an email from Janine Dowding after our meeting on 28 May

2019 it states "Tasman District Council staff agree that a boat ramp in Mapua over the sewer pipes is possible with the right engineering design to protect the pipes under and in the vicinity of the boat ramp." That design will be dealt with in the consent process

Community support – in the Masterplan consultation submissions were overwhelmingly in favour of the MBC proposal; for the question "develop a boat ramp in the waterfront park" there were 292 submitters responses to that question and 30% more submitters supported this option, 165 for and 127 against. In addition to the 165 submitters supporting the proposal the Boat Club also had 403 signatures on their submission from the community supporting the proposal.

The MDCA has passed several motions in support of the boat club and there is support from all but one member of the Waterfront Working Group that a solution to the community boat ramp issue needs to be sought to progress the implementation of the masterplan.

Cost – we are not asking for money we are only asking for you as the landowner to give approval for us to lodge a consent...... we are not asking for money!

We are fully aware that we will have to be guided by the outcome of the regional boat ramp study, participate in the reserves review for Waimea Moutere and lodge a consent and go through that process, your decision today doesn't not conflict with any of those processes or diminish the need for us to participate.

For 4 years we have been trying to get a resolution for a replacement community ramp with overwhelming community support since access was cut to our existing boat at Port Mapua wharf - I urge you to please choose option 3 and give your approval as landowner.

Thank you



Mapua Boat Club

11 August 2019

Chief Executive Officer
Tasman District Council
Private Bag 4
Richmond 8050

Email: Janine.Dowding@tasman.govt.nz

Mapua Community Replacement Boat Ramp

Dear Janine,

Following discussions with Tasman District Council, Iwi, neighbouring residents and other affected parties the Mapua Boat Club proposes instructing planners to apply for the necessary consents to build a community boat ramp consisting of an unsealed accessway leading to a concrete ramp on the southern side of the Mapua Waterfront Park.

The Mapua Boat Club seeks the agreement and consent of the Tasman District Council in its capacity as owner of the land to the commencement of the consent applications.

Please note that what is being sought by this request is only Tasman District Council's consent to the applications being made by the Mapua Boat Club. The Tasman District Council is not being asked to support the application nor is it being asked to limit itself in any way in any response it may choose to make to the applications once lodged or in any steps or actions it may wish to take during the subsequent process of determining the applications.

Yours Sincerely

Clare Kininmonth Secretary

Mapua Boat Club

Martyn Barlow

From:

Martyn Barlow

Sent:

Tuesday, 10 December 2019 12:43 PM

To:

Kit Maling (kit.maling@tasman.govt.nz)

Subject:

FW: Boat ramp update meeting

Hi Kit

Please see the email below from Janine Dowding following our meeting on 28th May 2019.

Please let me know any gueries.

Thanks

Martyn

Martyn Barlow | Executive Director Tasman Bay Food Co

PO Box 38, 61 Factory Rd, Brightwater, Tasman 7051 p: +64 3 543 5340 | m: +64 21 314 161 |

email | website | facebook

From: Janine Dowding [mailto:Janine.Dowding@tasman.govt.nz]

Sent: Tuesday, 28 May 2019 5:22 p.m.

To: Mike & Clare Kininmonth < warm sand@xtra.co.nz >; Sandie Hutchinson < Sandie.Hutchinson@tasman.govt.nz >;

Richard Kempthorne < Richard. Kempthorne@tasman.govt.nz >; The Secretary Mapua Boat Club

<mapuabcsecretary@gmail.com>; Richard Kirby <Richard.Kirby@tasman.govt.nz>; 'Tim & Jill Robinson'

<ti>mjillrobinson@gmail.com</ti><ti>mikecrehan@hotmail.com</ti><ti>Tim King <</td>Tim.King@tasman.govt.nz

Subject: Notes of Meeting today

Please find my notes of the meeting today.

Regards

Janine

Notes of meeting with Mapua Boat Club 28 May 2019

Present: Deputy Mayor Tim King, Janine Dowding (TDC), Commodore Tim Robinson (MBC), Mike Crehan (MBC), Mike Kininmonth (MBC)

Apologies: David Scott (TSS), Martyn Barlow (MBC), Andrew Butler (MBC), Mayor Richard Kempthorne.

It was agreed to work through the agenda proposed by MBC.

- Janine's response to David Scott's letter of December 2018.
 Janine confirmed that a reply had been prepared in December but not sent. She had provided the response to David and apologised for the oversight. David had acknowledged receipt and had asked further questions on which he had been referred to appropriate staff (Andrew Ellis and Richard Hollier)
- 2) Peer review by Richard Kirby Members of the MBC believed that the additional information provided by Richard (in response to the OPUS proposal) presented additional barriers. Janine explained that he was providing context that he considers

helpful. MBC did not see it that way and expressed their concern that they are likely to experience continuous objections from Council. This led to discussion and debate on MBCs view that Council has responsibility for replacing a boat ramp that they removed. It was apparent that this is not a point of agreement between the parties so we focused on the matters we could agree on.

a) MBC would like to know that they are not going to continually experience hard "no"s from council. They would like TDC to confirm that a boat ramp at Mapua is possible. The group agreed some wording (shown below but excluding highlighted section) on which she will seek confirmation from the Engineering Service Manager, Richard Kirby:

Tasman District Council staff agree that a boat ramp in Mapua over the sewer pipes is possible with the right engineering design to protect the pipes under and in the vicinity of the boat ramp Accepting that Council has not formed a view on the location of the regional boat ramp; and This conclusion does not feature any consideration of cost.

Further Info: Richard Kirby has confirmed his agreement with this statement provided the additional wording highlighted above is included

- b) Tim R noted that when it comes to cost, Council should not assume that other sources of funding will not be available to support the overall cost.
- 3) Tim K noted that as MBC goes forward they should consider a submission to the review of the Mapua Strategic Development Masterplan and any linkages to the Waimea Moutere Reserves Management Plan. Further info: The current action plan for the Masterplan is for the period 2018-2023 so review is 4 years away. The Waimea Moutere Reserves Management plan is next and we expect that the process timing for submissions towards the end of this year. As the Mapua waterfront land is not officially classified as a reserve, it will be considered in that review.
- 4) Janine will find out the timing for the Regional Boat Ramp Study: Further info: This work will commence in the next financial year i.e. After 1 July 2020
- 5) Mike advised that Robert Cant at TDC had advised that there was nothing in relation to the land that would prohibit a boat ramp going on it. Further info: Beryl Wilkes advised that she had provided some information as to what consents would be required. The following is an excerpt from the email trail between Beryl and Claire Kininmonth:

Re: R/C's required for Mapua Boat Club

Sorry to take so long to get back to you.

Without having all the information this is a preliminary list of the consents likely to be required:

- The site is within a Cultural heritage Precinct so the applicant needs to confirm if an authority from Heritage New Zealand for the work has been obtained or written confirmation from them is provided that that an authority is not required;
- Consent under the NES for Contaminated Sites (Specific management Plan for this site);
- Coastal permit for occupation and disturbance of the Coastal Marine Area with a boat ramp and pontoon;
- Land use consent for a building in the Coastal Environment Area;
- Land Use consent to construct a boat launching ramp in an Open Space Zone (I think that the access, parking and turning area and boat launching activity falls within the permitted activity in the Recreation Zone);
- If the area of land disturbance exceeds 1,000m2 the a land disturbance consent would also be required.

There are wastewater pipes buried beneath the seafloor in the vicinity of the ramp so an early discussion with Engineering would be good.

Happy to discuss the above if need be.

Janine Dowding

Chief Executive Officer **DDI** 03 543 7205 | <u>Janine.Dowding@tasman.govt.nz</u>

Private Bag 4, Richmond 7050, NZ





This e-mail message and any attached files may contain confidential information, and may be subject to legal professional privilege. If you are not the intended recipient, please delete.

Kininmonth, Mike - contractor (PI)

From:

Dan Cairney < Dan.Cairney@tasman.govt.nz>

Sent:

Wednesday, 30 August 2017 5:00 PM

To:

Mike & Clare Kininmonth

Cc:

'Tim & JIll Robinson'; abfires@gmail.com; 'Java Thirty'; 'Martyn Barlow'

Subject:

RE: Meeting with TDC Harbourmaster Tuesday 29th Aug 2017 as site of proposed

Mapua Community Boat Ramp

Hi Mike,

Thank you to you and your member delegation for meeting with me yesterday evening, and also for your well prepared meeting summary.

I know that maritime safety is always a priority with your members, and I appreciate the "boat club" acknowledging and being happy to work through the potential issues raised with the proposed boat ramp at Waterfront Park. For navigation safety reasons I am very keen to see separation between swimmers and boats so I agree with point 7 in the context that a well-managed ramp at Waterfront Park could offer a solution to the problem of swimmers and boats sharing the water at Grossi Point. As discussed it would be even better if the Mapua ferry could also move onto the new ramp area and therefore be away from the majority of the swimmers at Mapua wharf.

I am hoping to do the tidal flow monitoring work before the 21st September, at this stage I am trying to recruit the help of the TDC Hydrologists on the 9th of September.

I will keep in contact regarding this work and will also be in contact regarding future site visits.

I also look forward to working with your members to design a signboard that shows boaties the local hazards by including aerial photos of the Mapua entrance as well as navigation aids and bylaw related requirements. Thank you also for offering to produce a list of known accidents and incidents in the region, this information will be a great help us to target our future local navigation safety initiatives.

Best regards,

Dan

Dan Cairney

Harbourmaster

DDI 03 543 8433 | **Mobile** 027 246 1904 | <u>Dan.Cairney@tasman.govt.nz</u> Private Bag 4, Richmond 7050, NZ





This s-mail message and any attached files may contain confidential information, and may be subject to legal professional grinlege. If you are not the intended recipient, please delets

From: Mike & Clare Kininmonth [mailto:warm_sand@xtra.co.nz]

Sent: Tuesday, 29 August 2017 8:40 p.m.

To: Dan Cairney <Dan.Cairney@tasman.govt.nz>

Cc: 'Tim & JIII Robinson' <timjillrobinson@gmail.com'>; abfires@gmail.com; 'Java Thirty' <javathirty@gmail.com'>;

'Martyn Barlow' < mbarlow@tasmanbay.co.nz >

Subject: Meeting with TDC Harbourmaster Tuesday 29th Aug 2017 as site of proposed Mapua Community Boat Ramp

Hi Dan,

Many thanks for attending today. In attendance was, yourself, John Leydon, Andrew Butler, Mike Kininmonth and Kathryn Barlow. Key points were;

- 1. You have sought specialist help from marine services to conduct tide flow tests on next spring tide approx. 21st Sept. They will take several tests including main stream by Boulivant Island, to site of proposed boat ramp. Tests to be carried out at high and low tides. John will provide assistance. Results to be forwarded to MBC.
- 2. You are going to arrange for a number of TDC Councillors to view the location/tidal effects/H & S from the "Sentinel". John would also like to attend.
- 3. That you would like the MBC to maintain a register (or note any maritime issues in the minutes of their monthly meetings) that could be forwarded onto you on a regular basis. I will forward this request to the Committee and they will respond.
- 4. That in the future, you would look at providing (supporting) an initiative for a display board(s), warning sailors/boat operators, of local hazards and identifying landmarks/maritime marks in the Mapua Channel /sand bar etc, which would be prominently displayed boat ramp and wharf area.
- 5. That you have a sign warning swimmers of the dangers is swimming in the vicinity of boat propellers. Sign in wharf and Grossi Point initially.
- 6. That in the future, there is a possibility of a deputy harbormaster role in the Tasman region.
- 7. That, you support in principle a community boat ramp at the Waterfront Park. Ideally, from a public safety point of view, a boat ramp located on Rabbit Island would be your preferred solution, but the Waterfront Park is the "next best thing".
- 8. That the MBC proposal for a floating pontoon, would cause safety concerns, ie floating debris and public safety. The MBC recognises this and has deleted this option from their concept plan.

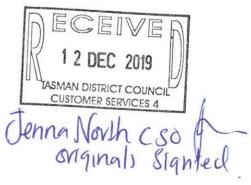
Please let me know if I've missed anything.

Kind Regards

Mike K

Mike and Clare Kininmonth 20B Tahi Street Mapua 7005

5G PETITION TO TDC/12/19.
Kia Ora
Please And enclosed 14 sheets (some
Please find enclosed 14 sheets (some double-sided, so 25 in total) of signatures, 481 in total.
These have been checked to ensure that they
are indeed Tasman Rosidents.
The petition is still running so more will be added later. For this reason we have submitted
hotoropies. The originals have been sighted.
Tora Jef (on belay of 59 free Golden Bay)
RECEIVED



We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advoc

A moraroriani on the proposed 3G rollout until such evidence can be established, is		the sensible and ethical course of action. We ask that TDC advocates
for this and proposes it to national government as a matter of urgency.		
PRINTED NAME	ADDRESS	SIGNATURE
I CHRISTINE ALEXANDER	13 Himsetha hanz , Takaka 7110	Christin Havander
Mary Mry		1
(xener) whale	37 Central Takahad horan	Walley Comments
JUICE CHANGE	6	SMI Man
Mala Om	10 labyrith lane Talkaka	mala Du
TRIESA Jam RJ	9 A Rotata Rd Tallalla	
Murray Korjers	75 Frusar Road Ranghasata Tukaka	to the
しゃったから	λ .	7,050
Jun Kerbell	767 Bird Kord, Cliffon	guestrey.
Marins	196 CLEMULE : OKO	
UPTOS TOLIFBO	245 McCallum Road, Talcala	Tenor I
Deklina 2 motivees	73 Richmond Rd Pohiaz	1 p.t. tow
Leberra Reide	46 Gibbs Rd Colling on d	R
Kuniko Koyama	93 Pich Sweet Motherca	L B L
(Amende Wet	20 Rochard Rd	of there
LACAS MATT	20 TOCKIANIS RI.	RAN
trang bater	100 Rongi horesty pol	PLXX
Cath Welst	432 Rid Read TAKAGA	1 De Haelist
Adelina Martin	11 Lithion of Ref Fehora	131:21/01/26
Stephen Miles	1141 TAKAKA / CONSNING TINY	M. Nike
	58 Falloner vd Takaka	1 ml Mount
TOMOKO KIRITAMA	5 Modeing Bird Ridge	She in the second
San Spent	10 orders / hon works rd.	Control of the Contro
Shut Moxon	Sts Did Road Cition.	that Mathe (24)

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

Tubi Forter (23)	26 Sunbeit Crescent	Trudi Perster
1 April 1	8	ophin tothauser
Worker	1300 Apreve Valley Rd	Lucy Kecah
7	5	KOTT BROUWED'T
The second second	201 Paton & Bed no ord	CARINA VA LAGORDOGT
	14 EDIN BURGH ST	CALDWAR B. GOIMAN
	11	MINE CACE
	95 UPFER ROCKMANDS Red	FIRES CARC
The U	727 Birds Rd. Curton	Molisso Thurston
For off	251 Patos Rock Road Takaka	Inogen Grant
KENNU	R	The same
When	7 Edina bural Strakely	XLQZIGS V& Strays
Lowell A	131 CHELDARY VALLEY TAYAND 7186	VIVIEN STRATION
a Healin	14 Les WateReld Rd Massa	Anne & David Preston
in tour	Kithod K	WIE THURER
(Street)	35 Abri-Tasman brive Takaka	Invaded Ather
Marshan-	8 Ovekaka from Works Rd RD2 Takaka	Carolyn Simon
sher o.	washboursel	Siens Morgan
Commence of the Commence of th	Central Tababa Rosal	tades Hamilton
S. Nacol.	1945 TAKAKA VALLEY HISHWAY	Shery Malder
0		
CAC CAS	asman St O	Bridget Foromon
Facts ,	1232 Main Road Dapaway	trues, taylor
Suy Sant.	BIRD ROAD CLIFTON	LUCY JAME SMITH
SIGNATURE	ADDRESS	PRINTED NAME
	nt as a matter of urgency.	for this and proposes it to national government as a matter of urgency.
rse of action. We ask that TDC advocates	A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates	A moratorium on the proposed 5G rollout un

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

for this and proposes it to national government as a matter of urgency. PRINTED NAME A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates Wees. New C Malpy www. ADDRESS OH Sanderlane 02 2267 SVINTO STUMBER IN SOUL ONWA (0/100 hampela, 1 St Nelson 200 84160 Steet グロスケメイトろ Q なってい Posse 000 Mobretr 770 VIOMeVE NOT JALL docke Moulese SIGNATURE 2 2002

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

PRINTED NAME for this and proposes it to national government as a matter of urgency Des Sol HITCHNAN VIOLA. 108c ADDRESS 3 00 くるよう SOAZA The contract Real JOKA Rd プススへ 500 S. Motreka SMAN OWN SOTIMO order ite OF MONES SIGNATURE

for this and proposes it to national government as a matter of urgency. about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible healtheffects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

X	XXX	×	\times \times	× .
DD MARSH TOMORA	PELLINGE WY JONES	12 3	English Lines	PRINTED NAME A NOTE OF THE PR
425 Cleaner Road Mohape. 425 Cleaner Road Mohape. 36 CANSINALANDER DE HOLLONGER 150 A Princes De Hollon 150 Higher Height Rish Flor	Reg Hintel Du when St,	71:32	142 /hours value to they	ADDRESS 1523 HACK PANK ROLL
The state of the s	Ellina M. Janes		B B Co.	SIGNATURE JOHNSHIP KNOK

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

for this and proposes it to national government as a matter of urgency	nt as a matter of urgency.	
PRINTED NAME	ADDRESS	SIGNATURE
Starey Holmes	12 Kever, Street,	Army la-
1). E. Nordham	190 Martin Kord MMD	SHILE
elichele Physis	39 Travalor SX Mahrelos	
Stare Marked	2 2	Constant of the second
Hamish Metchen	502 High St Maturals	Nat C
Bridget O'lean	195 Kind beach Rd, RD1, 11mo	
Same Newswigh	MONTOMONN POLICY TO BUZING WA	H Xous Now Tron
Frendon Ound.	Stran Street Whitehar	
Gent Goita	1 75150 G	
CARNETI RANGI	13 YORK ST	SA THE STATE OF
FIGNIA CRAIG	200 Wain Road lovies Mailere	The Course
Louis Allerine	392 aporo Rd Tasmon	
Jenna Heijword	12) takapa hili highway	Marriago
in Townskers	18- 15-54 JU. 13-01-9-10-10-10-10-10-10-10-10-10-10-10-10-10-	
C. Walt One	(8 White R) Hope	P. P. ChrydxX
THURS!	H196 57	
BARA WOYDICHOVA	Rivaka	Merganet
Aurila Comins	WHITH OF NET	
STEP MANIAIS	198 marchine Valley Rd RAZ Instructor /197	4000
Dioreca weig	TO CITE TO TOSINGEN NEXTON	TOTO CONTRACTOR OF THE PARTY OF
Gemma Roberts	# 2 Les Wakefeld Brive Magnes	(Alexandra)
JOUNNEY BIGHENNOY	6 lever St Manuals	10 (ala 1802)
Lovator Co Baroa	30 & hardhau	BULL
1	7	
MINTHEN JAMES TORUM	2 Mass READ, MARIZA WALL MOTHER	Mary 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

X

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

24	100 Rang Shorenta Ko	1 around Marshall
Hem Kith	254 Para Valleyred Talerich	Kerran Emterbrook
The state of the s	83 Commercial) St	Sohned Part
1XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	56 Relara Valley Road Toukoka	Jasmin Summers
A STANK	# 46 Gibbs Rd Collingwood	1 EUIN MONON
The World	of Takaka Rd Ta	Brian Dodols
	491 Paleavan bush Road Collingwood	Kays Rlown
We home o	166 Collegerosel- puporge, Man Rd	Diheral Rucells
Charles /t	12 Upper Raulands rd rdi Tahella	managala 6 marchée
Child sep 6	145 CLATON ROL PUT TOUGHCA	Certiny School
& Exe	145 Cliffen Lot RDI Tokek	Alan MoLeon
Tulcolle	41 Ore take I on works Rd. Orekens	melissa Kollo
N. Carlotte	PARIAN COCCURCANOS MICHINA	REMCIATIONES
Fight- William	6A Feary Crescont Tolocks	FORCE TO TO THE
Meyta)		Mental Error
(HOSNES-A)	(olli	Brita spoorties
RUL	12 Upper Rochant el 7185 Talaka	Hansiw. Lohr
U. Liener flac 1	12 Uppe Roddowd Rd. HPS Takaka	U Werner - Lohr
13 Tenns.	171Abol Tasman By. 7183 takaka.	ZANE PERRY
NOW BAR	6/26 Abel Tomas Dince	NIECI NICOMINNESS
& Man Lasson	11 5091	Liam Eloelie Wichtine
Lahrence US	For & Cres	Sonny Pizebor Camita
Ana Riunia	97 audust Rd & Ramano, RD2 Takaka	Ana Rowing
entrolly.	297 Colling wood- hyenesa ld Colling wood.	CHERRY WYLD
SIGNATURE	ADDRESS	PRINTED NAME
	nt as a matter of urgency.	for this and proposes it to national government as a matter of urgency.
the sensible and ethical course of action. We ask that TDC advocates	250.2076	A moratorium on the proposed 5G rollout until such evidence can be established, is

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

HARLENA ROSCENIA VARENTA VAREN	M RO ROLLADOR COSC. MARCHER CONSTRUCTION M	
Hay Show	Meinen E ST ARAPARA VALLET DE Me (ALLUMZOA) TALE TOKCKA (Allumwood Hun	HONG WILDSON HONG WILDON
Jan Willemser	Collinguos	HENDENSO HENDENSO HENDENSO
SIGNATURE CO. ROLLALOS	ADDRESS 21 Follows Rd Polyard 31 Follows Rd Polyard	for this and proposes it to national government as a matter of urgency. PRINTED NAME ADDRESS ADDRESS ADDRESS ADDRESS ADDRESS

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

A moratorium on the proposed 5G rollout until such evidence can be established, is		the sensible and ethical course of action. We ask that TDC advocates
for this and proposes it to national government as a matter of urgency.		
PRINTED NAME	ADDRESS	SIGNATURE
Sacantlanibrooke	9274 Callom Rd Takaka ROI	Starn brooks.
Jeroby Orchitars	43 Abel Tasman Dinje Takaka	Day Brown
VICTORIA DAVIS	1430 Takaka-C. Wh the Takaka	HM)aus
harcon hineran	JA WARILORAN ST TAKARA	hotorn's in
Howhar wallace.	E.V. & Takaka.	All Wallaco.
Chris Garside	100 Rocklands Rol Tobala	
The Boss	1060 Palous DONE RJ. Whomocre	
Janine Coedidoed	2) Abel Jasman Dazve	Way .
Lanja Pernauic	1860 Patauc with id invariance	
Dawy 2500	1 Takaka 1	
Heather Smith	ALC Combes RA REMUSES AR	Roll O Sal
Andrew Smith	810 Long Plain M. Tababa	Make
BRENT SHEVENGON	(27 Commercial Street Talkaka	
Suentry von Surferen	238 MC Shane RD RDI TAKAKA	A PARTY
Charber McGirny	& Lake Colo Takaka	Mark
CARES XCZTAR	POIN TOPE	theres. B
Letto Chare	1234 takaka - Collygorock Huy	XX.
Sunshing H Apples	11 Highertho Lave Iskaka	CAA COLUMN
MARGENA BOCKERS	103 Peragua Valley Rd Talkaka	Moderns
Crabielle Baker	1141 Tulkaka Callingwood Huy	08.0
Stoken Miller	1141 Takaka-(.ilingwood Hung	The Miller
大はい 000000	103 PANAMANA VALLEY NO TAKANA	72 delay
Koss Doyle	2679 Moto eka Valley High Mich	K3/8/1-
Zara Koczes	1777 Collingwood Puponer Marin Col	TROPINE (DI
C		

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

A moratorium on the proposed 56 rollout un	A moratorium on the proposed 56 rollout until such evidence can be established, is the sensible allo etilical course of action, we ask that the	ואר טו מרנוטוו. עער מאת נוומר וייל ממאטרמינים
for this and proposes it to national government as a matter of urgency.	ent as a matter of urgency.	
PRINTED NAME	ADDRESS	SIGNATURE
Paul Garginlo	14 York St Modyeles	Our
Samuel Proffer	83 PURU Springs hord alkelly	3
MARTING MAUERICK	966 Page RO, TAKAKA FILO	
Rosena Jorganson	ar Si	Morgan
de	105 ABOR TARMAN DR LAKAKA	Hillham!
LINDA SHARP	1053 Abei Tasman Dr. RDI Takaka	1 Star
Annabelle Solmand	246 Pupu Valley Rd Takorka.	Ko X
	80 Hours In Greek TRAIN	
Mate BURNESS	14 Edinburgh St Takaka	Rate Burren
Amarda Clarke	414 Hamana Rd Takaka	Millorce
Barry Venley	105 Reclards Rd	Bany Joulines.
Candy Nalger	+4 Hambrook Rd Takens	C. C.
Kerstin Knight	17 Rototai Dad Talkaka	
LOUISE COLONAN	414 Humaina Roud Takaka	Thurs Deven
LYNNE COOPER	A4 Graser RD Rove: Locate.	X. Cooks
We.	75 Dronworksrd P.J.Z Takoka	1. V. V.
Torker	137 Commercial St. Totoka	H TOSPECT
Wordy Kirk	27 Nastages Ra Tarexa	Mark of
Carol Souther	`	Con service in
Taldme Yearsen	110 Tangmere Rd, Takaka.	A At
STAC BY FOR	HATICE CANE, DOMANO	
Ton Clearwater	801 Ray Cha Cha Road RDI land	No.
7-ce Brathanton	22 Abel susman Dr Jakaka	200 NOTWESTON
Tolo	is as Ra Istació	1000 24

for this and proposes it to national government as a matter of urgency. about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

PRINTED NAME	ADDRESS	SIGNATURE
pip were well	10 (11/2 PS) 101 (11/2 PS) 11/2 (11/2 PS) 11/3 (11/	PMWC PMWC
JDYKES	Strimule or it de Rivers	
L'	River West Book Rd Browlelis	Kan k
UP MCM	STO OR TRIME	
ee stightlan	1	A CA
X TAKES CANONING	CIG Lodder Sona Remains	
\		2 1 CM
H	1718 MC RCAD RAWSED	By ote.
The day of the thousand	19 19 19 19 TON TON TON TO RE	60 (70
Alissia Michaerson	Croperty Ro News	DO DIMON, ME
THINA JEAGUES.	7 70	
Ta Working .	of Metant & State Hoon	CAR S
. [188 allen Old motieta	Model .
100 K		The wal.
1000000 (2000)	We thin west	
2	DECK OF COMPANY OF THE PROPERTY OF THE PROPERT	750
2		Elean The Control of
		C. Draw
thickey condition	13 Inexlis St Moteration	
		,

Sign of Sign o

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health for this and proposes it to national government as a matter of urgency. A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

כן ניווי פוות לונילסמבט נרנס וופנוסוופו פטאברווווים	national government as a matter of digency.	
RINTED NAME	ADDRESS	SIGNATURE
Ute Kiking	9 Hocking bird Ridge RD1 Takeks 7183	WH Kling
J. Walkers	Par V	Long
PRIED WEBSTER	20 HILL VIEW ROBERT	O Musse"
160010 Di Hmar	12313 MC Callum RD, RD1 Tabalia 7183	1 C. Dittmas
Essette Polito	103 Commercial St. Takaka	Stopatho
Roll Klestie	Taked	the following
PETER GAY	1908 Tophelles College Hoy. Talkake, 7183.	Hay.
E. Chimock.	Parapara 7182	R. T.
Emma Aroha	Parapara 782	
RALT SOHR	BRABCIH ABATA TAX AXA AIR	C SG
young Hogo	264 Mc Shave Road RDI Takaka	(anators
DAVID ALEXANDRE	127 COMMERCIAL ST	
1300 11 Miteman	Rangihoreto RD2 Tokak	
Dorbara, Cornell	McCallums Rd Kotinga	the land
with sanford	O	latt San Gorch
CINADIONIR VOJECRIX	41 OHEWARD LOOK BONNES ROTTHERED	
Rophila Rabberth	so their in langua	
ROSEMARY NOEDHAM	1236 Takaka colling wood think RDZ Takaka	e R-1/SR
Rainer Knesler	South " on a Collinguage	K thous
CAROL PRICE	1072 Takeka Volley they RDI. Takaya	(and) face
たるか、ころん	Meshane Rd RDU Takaka	A CONTRACTOR OF THE PROPERTY O
hannel Seout	2.5 Harle Large ROI Largard	A CONTRACTOR OF THE CONTRACTOR
12 fullentes	HAKONIKE CARE TONON	Brailie .

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

	for this and proposes it to national government as a matter of urgency.	nt as a matter of urgency.	
	PRINTED NAME	ADDRESS	SIGNATURE/
	Ashley Mead	80 And Tasman Drive Takaka	A. mend
	Tanis Marson	8 COMMP/ CIEN ST THURKA	The Co
	Sw Hitch cock	Long Plain Rd Kotings	&C Witchrook
	Cam Roberton - Indan	682A Abel Tarman Drive Tokaka	(and the
	9/6	Commercial St. Talkal	8600
	Bachela Rabbits	Para a	There is
	JAYASHEII MCFADGEN	iso Howatha La Takaka	200
	Jacky Blue	20 Carlyle Chaten, Takaka	Mucal
	Sama otha Genett	345 East Takaka Rd, Takaka	Allowell
	MICHAGE CARC COR	as after towards to	
	ANGELA CARR	45 UPRED LOCKLAND'S RD	XXXX
	michael can and	as uppor Rocklands read	M. a.T.
	KEND C COLL	95 WPDER ROCKIAND & FORT	Keny Catt
	Avail Brown 39	95 UPPAR ROCKLANDS ROAD	a Berman
	Monney Dorney	275 tuatober Trock Rd Takok-	S
	Tovid Dwyer	275 tuetober (red Rd, 10/2014)	J. Comp.
	Buled Parkers	35 Abel Towner Dine Takele	200 C
	FADNE CLUZERO	DAN	
•	DAY10 3017	Road CL	is all off
X	Jonathan Scott	l l	1880
	JOEY DAMSELL	42 Abel Tazman Dr. Ve, Takaka	6 Stende
	DANIEC ANTECC.	31 WAITARU RA TAMANA	X
	Sam namer	128 Commercial ST, Test at a	Mene.
			(22)
S	ANOTO I OF IS THE P	ないっている トネヤマラをよう つずら	CHIEF AND CONTROL CARDINARY!
44			

X

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

tudit Johnstopp	Canil Societs	2) Sames	nd Hu	ABBIE GREENE	CORRA DAMO	00	Claudia Minauez	S. Ca	Cars Mae/frem	Combinelle Raker	Robert Blunsten	Sinsan Halkin	CANCAR LAND	Susy Newson	Robin Hoogenboom	Z.	Romina	e Closs	Know Know Kes	VIYTO	Hera Livingston	Jan Worgant	Susan Snelamve	PRINTED NAME	for this and proposes it to national government as a matter of urgency.	A moratorium on the proposed 56 rollout until such evidence can be established, is n
267 Packend Rd ROI TAKAKA	664 MCGILLIMS Rd Takaka	37 TANKER OF	75 Iron Works Ra One Lake	1195 TAKAREOLUNGWOOD HYWY JAKAKA	117 Long Hain Road, Takaton 1183	PLAIN ROAD - TARA	Plain	14 Harbey Rd Newschard	713 Dry Road, Colling Chood 7073	1141 Takaka-Collingwood Livy	264 Misher Rd RDI Takaka 7185	3/10 Aca CRS2. 7110	25 HAILE CANE	73 Notypi St, 7110	Mototipi	b	I live in comparyons	1869 Takeka. Collinguad Huy	11 Water Rd, Takaka TIIC	482 Long Plain Rd, RDI Takaka 7183	Falconer Rd RD2 TARAK	94 Bey Vista Dr RDI TOKOKA FIRS	al Rickards Ko, RDI Takaka	ADDRESS		til such evidence can be established, is the sensible and edilical coars
Warder (23)	Self Mill		S. M. Harry	Charles I was a second	Chillipse Garage		Child Alley Milk	The state of the s		OR MESTER S	Company of the Compan	I show I		554 634	XXX -			the service of the se	Comment of the Commen				M. Market	SIGNATURE		

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have PETITION TO TASMAN DISTRICT COUNCIL RE. 5G TECHNOLOGY VICIN とり くなっていこける

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

A moratorium on the proposed 5G rollout until such evidence can be established,	200	is the sensible and ethical course of action. We ask that TDC advocates
for this and proposes it to national government as a matter of urgency.	nt as a matter of urgency.	
PRINTED NAME		SIGNATURE
GULATA MORATI	119 Abel Tasagan dr.	Standard Piece
URSUS SCHWARZ	1891 TANAWA-COLLINGWOOD HW	U.Schwer
June Jan Eder	1114 Comercial Street takestea	S 4 8
Kees news	as street to	xnew.
Joseph Availo	1891 Takok - Col Hhasis	00
ANDREW TARCE	118 Commercial st Charach	
CAILS SULSE	432 Rid de PARAGA	75/8/10
PETER BANHAN	3) CENTRAL TAKAKA RD, TAKAKA	1 topa
Virte Clearer.	GO Wilder Rd.	
David Komo	190 Dominion La KD, ilpor Mayles	
SIM MICCOLO	33 Washing Rd. Characo	Det Who ex
JOSH THOMOSOM	2 6 COMMARCCIAI ST AKAKA	TOXO /
AVREL Caro	129 Clifton Rd takaka	Hell
Legel Bonney	58 falconer Rd Polyaga	W D hay
DAVID KIELL OOL	18 WES	titus 1. Rellan
Smilla Tools	13 Rochfort Orive Bichmond	muchan
Mesle Toot	Rockfort Drive	William
Klaus Toot	13 ROCLECT Drive Richmond	1/1/000/
David Today	117 cook Rd. RDI Collinguation	
Darbhie Kurt	1 Swile Rose Richmone	X
Alginory Harry	* F	
Subject Roberts	14 Bayete, hotelas	
clemater inspotally	36 OMETAKA INON WORD / S	A CONTROL OF
100000	1 State State	

4.4

ング・シング

0

ADARTA RAIT

トタグウアの

1 BB DA

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

	effects. In the absence of studies showing that increasing fivir fadiation in our	CIA	COCCOUNTY
	A moratorium on the proposed 5G rollout until such evidence can be established, is t	I such evidence can be established, is the sensible and etnical coul	he sensible and ethical course of action. We ask that IDC advocates
	for this and proposes it to national government as a matter of urgency.		,
	PRINTED NAME		SIGNATURE /
	REINHOLD DOECHLE	267 Packard KA Takaka	
	Exchand Gall	264 Wishemp Ray Takeks	
	KW MOYWY	308 Hamama Kol Takaka	BURK
	RIUC MOVIONI	308 Hamama Co Takaka	May May May
	JAKEN APPOINTED	1 Contain Rol Jakoka	(The Drewton
_	Canole FOUREIER	600 Totavandi Rd	
	Terc Archibaly	TOPACTOS PLACE - NACUA	
	Darohore Dijk	58 Dodson ld Jakaka	1000 D
	Thorola (Saraa	DCS COSTAN ACI.	A CONTRACTOR OF THE PARTY OF TH
	anine Sint - Dulia	293 radial Road Latera	A MINUSTER STATE OF THE STATE O
	MARKENA ODSTARS	103 Posapor Valley Red	1º Modges
	スパターのつである	153 Poraspers Volley Res	Many of ar
<u> </u>	Lun (Catholoe	1	n. +
	Antonia Leanor Ording mingues	THO LONG PHOIN ROBO LAKAKA	Luchia Leonol Oras myses
	Chloe offentelle ortiz mingues	770 Long Plain Road Takata	chlor charles or mingues
	Carrie possiz missaude	.720 Long Plain Road Tukaka	Carla Leonie on Orling mining
	ctis mingues	ong Plain Ro	lea fabrian ortiz missayment &
	Tara Sally "O	Dr.	The Marine
	Sanctor	5 Notion It maintherps	
	Tane Carrol	3 Paraclise Way Pohara	A Solumel
	Matin Blair	7A Kin Great Wesser	
	Michele Hart	52 Waithou Rd Takaka	MIC CART
	たかいなう へのうならら	PO BOX 195 Takata 1142	I want the
	ACTION LOCKED	274 Rownania Ra	10/10/10/22

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precaution

	A moratorium on the proposed SG rollout until cuch cuid casing twin i adiation ill our envir		recautionary Principle must be followed.
	for this and proposes it to national government as a matter of urgency.	stabilsned, is	the sensible and ethical course of action. We ask that TDC advocates
	PRINTED NAME	ADDRESS	SIGNATURE
	Coel Nick	72 has shed south	
,	Tess Tosterone	Stock	Red
	Marion Lee-Kouminste	6 Wilkinson St. Wilhuka	Mark Minds
	MOBBIE JAMESON	72 SANDT BAY ROAD	J. C. Marie C.
	AJ Carnole		*
	KYIN SIMI	Piwaka.	S MO
	Divo Tamos	38 Mutton Height edi, Not.	MA Li O
	DOIAN F. DUFFY	hart TAP!	The Market
	CERROL WILLS	an Clover Road West	MINI
×	C MAIN	15+ year gaving makers you want a hall tower	entered son (ii)
×	1	Soft in the land state and	The Market of the second of th
	SACAT CIRCO	30 Research orchard Rd. 1201.	X and City of .
	MAX HAWKE	538 Kingles-Sandy bay KD2	
	Mary Eller Hanker	- Sarah bay	Con Marine
	Critical todays	538 Ringer - Sixty Sty RDP	
	governo tologr	30= Harahan, boludka 7197	1020
	Rick Davis	32 WHAKAREWA ST MOTHERA	
	Rachel Jan 15	Poole Street Motreles	
	Joseph Smith	Roble street motuela	The state of the s
-	Dusan Tre 11099	398 West Bare Fd Motreller	1 SON SKILL
	Arichard Morris Sour	27 Comeon St / 1/2/Jan	So Par
		St Sanderland Drive	mick
	10 2 U O N	34 Sanderiane Drive	2500
	CYLOT DAIWA	Lougias KDI	(2) the

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -A moratorium on the proposed 5G rollout until such evidence can be established is the se effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

A included from the proposed 56 rollout until such evidence can be established, is	ntil such evidence can be established, is the sensible and ethical cou	the sensible and ethical course of action. We ask that TDC advocates
for this and proposes it to national government as a matter of urgency.		
PRINTED NAME	ADDRESS	SIGNATURE
Melanie Strike	159 old House, RD2 upper thoutese 7,75	
WAS DICHOUS	189 Makuska VIII Hakingy RDI Makuska	
ISAAC Black	2'lds Wriesteiner () Maping	
Gemma Black	14 Catherine Road Maprie	COMPANY OF THE PROPERTY OF THE
Vide VOS	538 Rivales-Soroly Rid ROZ	
Anna Urmanchy	27 Anoversa Crostant, Kacker	theman()
James Tekhen	502 high street mathet	Alba -
Andre Neame	19 Herring stream od, RDI 7191	Caro
Garre Kerk S.M.	6 Hustrouse St dince Niceters	Alberta .
Contract Contract	30 Sattles Hill AK-200	Cours C
Loane Jennices	23 Tuketutu (Troce	Solve Co
mat Joines -	183 who she Rend Ripersa.	NO TO
Wandy Sain	14 Hold ser ay the RP2 UTO	Walley Car
Yarisad backy	46 Brout of Aldermore.	A Berly
Ariache Verner	1544 mothers of over nest bookerd	Merse.
Lours Latiner	33 Sandalana Dik	to the total of th
Jucke Troughton	2379 Goostal Hlway Roz marini	- MANO
Jack Transton	1, (,	
madelyane troughton	2300 coastal Highway RD2 mariri	
/ /		(21)



about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -PRINTED NAME for this and proposes it to national government as a matter of urgency. We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. PETITION TO TASMAN DISTRICT COUNCIL RE. 5G TECHNOLOGY VIKK htraprased and Hoos CINCI DIAN IF 700 ASTA RESIDENT IN CREEDY ADDRESS TOTALA STREET TOTALS SKEET TICHANIBOA LAZZAS SIGNATURE



なるそう

RESIDENTS ONLY SIGN REASO

PETITION TO TASMAN DISTRICT COUNCIL RE. 5G TECHNOLOGY

for this and proposes it to national government as a matter of urgency. about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

PRINTED NAME	ADDRESS	SIGNATURE
The Vanc St	WE THE TO STANK	- Sand
TOTAL BRILLIA	TO STATE OF THE	John John John John John John John John
S MC FALLOW	DUCK TOLLING WAS A FINE	TO T
Koelie To Tratice	2005	
KACK DOELREE	100 ABC HOMAN OF THE STA	
Deatrice Bourni	7 Bunday RM	- Freday
Trans Toromas	No Karen haventa De Valaro	a something
Des	046 East Tolegas 2.0	the standard and an
	199 62 Rampara Kel Paramera.	
MARCON TOUGHA	ST TAKAL	Aprile Tileur
Shay Stephone	90 Trawavas St Mother	She in the same of
1) Brian Dodds	2	COND Suid
ELHINE JONIOUM	B ARAPETA PLAC	V 2004
Coll School Con	20 Renzilues to Rol	1 Shall
TOO NOT TO NOT N	F 72	2000
Comer Niccoli	2	K Res
Tayle Viden	Mc (all on the Kerila	Million
Time Grane	ressen	スス
Shaw to Division	151 KK KK Rad	Je de la company

Λ

PETITION TO TASMAN DISTRICT COUNCIL RE. 5G TECHNOLOGY ーまいろそろ マンーえら 大田というでくし

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

(25)	BIS ABRITASMAN CHIVE	Moine Muck
	678 Able towns on we	Cock Vander by
Danie D.	19 MO MONTHE TOSMON Drive.	The works
Sall of	RD 7 Rusamahar	Bruce & Dooley 1
2 Mhanthase	& O 45 N CO 125 KO 1250Kg	Liam (+ (See) 10) 11 50741
So dist	91 Cen Tal Takaka Kd	Brian Bodds A
		\ VICK LAWSON
Mangal	38 POHARA VALISH RD	() ~ ()
Red & -	171Abel Tasiran Dr. DU. Tokala 7185	ZANG PERRY
THO	231 PACKINED RO MOTURIAI	KATHA HEERAMANECK
Fata Burners	14 Fdinburgh St Takaker	KATE BURNESS
S	\$ 158 Kastura Zor	一 。
1 BA		Nathe Sins
Control of the second	38 Ponais Valley Good	lauren Clarko
	97 Arden St Jack Jolson	Stephy Model
Christic Tocal	251 Clenner Rel. K.O. I Takaka	C. Jacob
子につるのかと	6 PAGE RQ. TAXAUX 7110	A. PURUCUEC
The Sould In the second	(8 labyante lane Takaka	Sita Krenck
Margan May	482 Long Plain Rd. RDI Takaka	
The Co	TAKAKA 7183 432 ONE SPEC BR	YIONA CAMERON
+ 100 x	MUDURUA 1182	30
2 Total	92 Mc Callium Rd Takaka 7183	Doving Pheloble
	13 Wadsworth St TAWARA	Niña Pentecost
Mind Websel	1 D DODSON ROAD TAKAKA	WENDY WEBSTER
SIGNATURE	ADDRESS	PRINTED NAME
	nt as a matter of urgency.	for this and proposes it to national government as a matter of urgency.
he sensible and ethical course of action. We ask that TDC advocates	til such evidence can be established, is the sensible and ethical cour	A moratorium on the proposed 5G rollout until such evidence can be established, is t

We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

H. Shashah (11)	u Humanita case, Takaka	HANNAN ABOUZABRAH
Kes	11 Higwarts lave, Takake	Flirat Clotand
MI Krown	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Merche Mergarer
(Sellion	171 1 the Stoney Par Rais restore	SMONS (SHOOKS
	300 SOUTH KAROPIROAD WIFELLING TON	< JACK PALL NOER
(With the)	1075 Takcaka Vla Hidawac	Rice Milliam a
ASSA CONTRACTOR	687 McCalling, Rd. Takada	FUNNALOR BUDGESON
N STRAN	31 Waita PU Pa	Sanlaca Berrall
0000	Jaka Ca	Sast non tade kinox
	The Santatu bails have Porker	Hawley Gale
	P.O.BOX 6030 RIVARA (7)46	STUMP DEW
Hooks	46 Bishop Rd Parapara	Lisa Rodley
SIGNATURE		PRINTED NAME
	nt as a matter of urgency.	for this and proposes it to national government as a matter of urgency.
the sensible and ethical course of action. We ask that TDC advocates	stablished, is	A moratorium on the proposed 5G rollout until such evidence can be established, is

for this and proposes it to national government as a matter of urgency about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates

for this and proposes it to national government as a matter of urgency.	nt as a matter of urgency.	
		7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7
PRINTED NAME		SIGNATURE
1 5 1 3 7 W	1 Back RARDI East Jahr	the true was
ングスクストン	SK KING ST NEWSON	
OCAC CAHISES	1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
P	Abol 185mg	to a collabor
	j	

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health for this and proposes it to national government as a matter of urgency. A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible and ethical course of action. We ask that TDC advocates effects. In the absence of studies showing that increasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed. TO THE TASMAN DISTRICT COUNCIL: We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have

~ 70

PRINTED NAME	ADDRESS	SIGNATURE
NEW NEW	1554 State Hower, 60 GB	(100Z.
Michael Scothern	olden Byn UNZ	That.
Palace Mark	578 Able Tasman Mue GB N7	
Swidy Column Syrkin	35 Bird spart (-B	i nave
Fluxed Pendelost	13 Caleston Street	
DENAS EST	10 from crs Ichara	In 18th
Tinla (chroudes)	DIY REAL COLLEGE WORK	THE STATE OF THE S
Cuzan Consender	718 DRY RODD / Collingward	
Janna Moeltaen	7/3 Dry Road Collingwood	Mee
Martine Singh U	to Rotata Rel	B
Dick Soft	1424 the Taskar Onic	000
		Đ
	•	

PETITION TO TASMAN DISTRICT COUNCIL RE. 5G TECHNOLOGY CNLI VICZ IT 大つと ムアカ 大声とこカマー

about 5G technology and act on their behalf to address them. Scientific studies show clear evidence to link EMF radiation to serious, irreversible health -We ask that the elected representatives of our district, Tasman, recognize the valid concerns that constituents have reasing EMF radiation in our environment will be safe, the Precautionary Principle must be followed.

		,
THUSE (1)	67 Main Rd, Norwella	Hovey Tuhi
A Distriction of the second of	4	2
1800	eet)	Sharm Boingon
THE WE	S Shelle M Bay Ro	Costrolina Alker
	2 Tokongana Mrive	
Tanal.	18 A hydro Stocet Mohudes	larissa chalmess
	320 hardy Inesa Nesson	(Janua Mener
100	SOZ hjustad nepull	time Helden
SIGNATURE		PRINTED NAME
		for this and proposes it to natio
oc or action, sec ass.	A moratorium on the proposed 5G rollout until such evidence can be established, is the sensible allu etilical coals	A moratorium on the proposed
the consible and othical course of action. We ask that TDC advocates	effects. In the absence of studies showing that increasing EMF radiation in our environment will be said, the increasing that increasing EMF radiation in our environment will be said, the increasing that increasing the said of the sai	effects. In the absence of studie