

Submissions to the Annual Plan process 2020-21



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Respondent No: 1

Login: Anonymous

Email: n/a

Responded At: Mar 28, 2020 10:18:02 am

Last Seen: Mar 28, 2020 10:18:02 am

IP Address: n/a

Q1. **Name/organisation**

Tim Ferner

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. Let us know what else is important to you, for our future

In light of the pandemic, you need to reexamine your plan. The plan and subsequent budget are based upon several premises that no longer exist. This event has not changed New Zealand for the foreseeable future. It changed New Zealand forever. Tourism is never going to be what it once was. Consequently, all of the communities throughout New Zealand are going to feel the economic pain for a long time. You, collectively, are tone deal moving forward with a planned increase to rates for the people of Otago given the current situation. It would be irresponsible and neglegent to move forward without reevaluating the plan after the pandemic is over. In light of the economic inpact many in the community will be experiencing, it is irresponsible to further punish them with a substantial rates increase like this. Many in the community are, or will be living hand to mouth and dont enjoy the luxury of being salried employees like yourselves. Delaying the rates increase until the full effects of the CORVID 19 are able to be assessed is a more logical and prudent course of action.



Respondent No: 2

Login: Anonymous

Email: n/a

Responded At: Mar 28, 2020 16:15:42 pm

Last Seen: Mar 28, 2020 16:15:42 pm

IP Address: n/a

Q1. **Name/organisation** M Strumia

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

You dare to continue to propose a 9% rates increase even now, when this mutated virus is growing exponentially. Yet you propose an exponential increase in rates. We will not pay this. We will revolt. And you will not raise rates at all. None of your schemes apply any longer. We will have to rebuild from scratch, and you will not increase rates, nor will you evict us over non-payment, because: We. Will. All. Revolt. Consider your next moves carefully, and pay close attention to those councillors who votes against Ms Hobbs insanity. You have been warned. We will not tolerate this.



Respondent No: 3

Login: Anonymous

Email: n/a

Responded At: Mar 29, 2020 10:31:42 am

Last Seen: Mar 29, 2020 10:31:42 am

IP Address: n/a

Q1. **Name/organisation** David Keen

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

See below

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

See below

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

See below

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

See below

Q14. **Let us know what else is important to you, for our future**

Covid19 is having a huge impact on businesses and the rate paying public generally. It is not possible to predict what its longer term implications will be for the environment and for society. Covid19 has made current local body planning obsolete. The ORC should cap any and all rate increases at the level of general inflation for 2020/2021. A struggling community cannot afford any more. Next year, when the current crisis has abated, longer term planning will once more be possible.



Respondent No: 4

Login: Anonymous

Email: n/a

Responded At: Mar 29, 2020 14:48:35 pm

Last Seen: Mar 29, 2020 14:48:35 pm

IP Address: n/a

Q1. **Name/organisation** Kieren Griffiths

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

Why are you proposing a 9.1% rates rise in this current climate? Defer it until the following year, there is no reason to put this kind of unwarranted pressure on people in the current circumstances.



Respondent No: 5

Login: Anonymous

Email: n/a

Responded At: Mar 29, 2020 22:21:11 pm

Last Seen: Mar 29, 2020 22:21:11 pm

IP Address: n/a

Q1. **Name/organisation** Jean Cockram

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I strongly support the proposed work to better manage fresh water by working with catchment groups and communities who know about the issues in their local area. The regional plan for water management must be guided by advice from scientific experts rather than pressure from vested interests. We must manage this precious resource much better than we have up til now to ensure that it's safe for everyone to use and to preserve it for future generations. There is a real urgency to this work.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Understanding the impact of climate change and reducing greenhouse gas emissions are both urgent priorities. The clock is ticking and there is no time to lose on this. I fully support the proposed work in these areas.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Helping people to move away from their dependence on cars by providing affordable and regular public transport is a no-brainer. We need to move rapidly to a situation where public transport is an attractive option and becomes the norm. This will require leadership to encourage behaviour change. I want to see vibrant urban environments, designed for people (not cars).

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Pest management and biodiversity are both important. I support the planned work and would like to see it strengthened.

Q14. Let us know what else is important to you, for our future

I support the proposed rates increase to fund the ORC's work on environmental improvements across the region. There is no programme of work that I would be willing to see cut. I think the proposed rates are fair and reasonable.



Respondent No: 6

Login: Anonymous

Email: n/a

Responded At: Mar 30, 2020 11:50:37 am

Last Seen: Mar 30, 2020 11:50:37 am

IP Address: n/a

Q1. **Name/organisation** Kevin

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I like the idea of obtaining more data to make better decisions. I'm massively disappointing in the ORC needed to be called out by central government before doing what is needed. I look forward to a better RPS and updated plans.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

I like the idea of obtaining more data so we can make more informed decisions. I think the ORC are incapable of resilience. What I mean is, why is there still discussions of building or improving infrastructure to protect communities. We should accept we have lost the climate change war and now should be investing in planned retreat.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Disappointed there are no hard recommendations. My rates are going up over 12% and when next year rolls around you will claim success and be able just to reuse the same words.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

You use nice words and then follow them up by saying the environmental budget drops by almost half a million dollars. It appears everything else is more than the environment.

Q14. **Let us know what else is important to you, for our future**

Ever heard of SMART - an acronym that stands for Specific, Measurable, Achievable, Realistic, and Timely. Is the limited ORC better spent opposing district plans or freshwater / environment. I know which I prefer and I see which you prefer.



Respondent No: 7

Login: Anonymous

Email: n/a

Responded At: Mar 30, 2020 20:22:03 pm

Last Seen: Mar 30, 2020 20:22:03 pm

IP Address: n/a

Q1. **Name/organisation** lyndon

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Draft Annual Plan should be reviewed in the light of the current COVID 19 Crisis.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Draft Annual Plan should be reviewed in the light of the current COVID 19 crisis.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Draft Annual Plan should be reviewed in the light of the current COVID 19 crisis.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Draft Annual Plan should be reviewed in the light of the current COVID 19 crisis.

Q14. **Let us know what else is important to you, for our future**

Besides not selling off our local asset (Port Otago) and freezing new rates at last years level; Draft Annual Plan should be reviewed in the light of the current COVID 19 crisis and the serious economic impact on Dunedin City in particular. You will be aware that 7 councillors have already made this request on our behalf.



Respondent No: 8

Login: Anonymous

Email: n/a

Responded At: Apr 01, 2020 11:09:42 am

Last Seen: Apr 01, 2020 11:09:42 am

IP Address: n/a

Q1. **Name/organisation** Gavin

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

Important to me is the immediate cessation of the proposed 9+% rate increase, due to the current covid-19 shutdown, myself and many others are face very uncertain times and with a huge decrease in our incomes, whilst there are many nice to have things that the ORC does, this is not the time to continue with unnecessary things. If the ORC does anything this year it should look to what can be trimmed and reduce all costs possible whilst maintaining necessary services.



Respondent No: 9

Login: Anonymous

Email: n/a

Responded At: Apr 03, 2020 16:32:08 pm

Last Seen: Apr 03, 2020 16:32:08 pm

IP Address: n/a

Q1. **Name/organisation**

Gerrard Eckhoff

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

The management of fresh water is best left to the local community not administered from Dunedin

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Nothing we do will change the climate . During my time farming - the council has contributed nothing to my future safety or resilience and wont into the future . Im best determine my and my families future

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Incentivise those with the values still remaining . the rabbit plague is taking care of lowland shrubs and plants. What wildlife has the council saved so far? see my first sentence. It simply wont happen -sadly

Q14. **Let us know what else is important to you, for our future**

This survey is a complete nonsense as i can only answer your issues and your questions. I sent a full submission which is now to be refused as it isnt part of the ORS s attempt to carefully manage public opinion The ORCs reputation is at rock bottom due to a failure to understand the community esp the rural community. The rural urban divide is massive as 7 councilors recently said to the chair. This process is shameful. I say that after 9 years on council. I deepy regret my negative response to this survey but Im honest in my view



Respondent No: 10

Login: Anonymous

Email: n/a

Responded At: Apr 05, 2020 22:45:02 pm

Last Seen: Apr 05, 2020 22:45:02 pm

IP Address: n/a

Q1. **Name/organisation**

Gareth Mclachlan

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

not answered

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

The people who pollute the water should be charged it even if it costs millions. there should be a lot more testing every waterway big or small the top and the bottom of the of all property's to find out who is polluting it and more often.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Climate change is a thing to make people very wealthy the planets temperature just goes up and down over the years we should be concentrating on small things to help the planet.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

I know very little about the subject but whatever people want it should be At their cost, we already pay for a lot we don't use.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

The planet needs a lot of help because of the pollution over the many years. Back to whoever polluted it should pay for it like some businesses should have an insurance to cover any accidents what can affect the environment. Soon as I go bankrupt they can walk away. Wildlife needs all the help we can give it to. We have given it hello over the years.

Q14. Let us know what else is important to you, for our future

The public transport service should be quiet it is just not working it costs a lot of money for very little people travelling on it. Why should ratepayers pay for someone else's transport. There's gotta be a better way like maybe a text system so you know how many people want to go and where and maybe send something smaller even a taxi is probably cheaper than a bus with very little people and better on the Environment. One more Thing reducing costs A lot more user pays if you use it you pay for it. Ratepayers should not have to pay for other people's recreation and pleasures. Thanks for your time Gareth.



Respondent No: 11

Login: Anonymous

Email: n/a

Responded At: Apr 06, 2020 11:09:45 am

Last Seen: Apr 06, 2020 11:09:45 am

IP Address: n/a

Q1. **Name/organisation** Terry Drayton

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I assume you mean rivers and lakes. Yes minister outtake by farmers, do not out poison in them. Do not let them be totally diverted and empty in summer.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

More sustainable farming practices will go a long way. Planting more trees , this could be subsidised from rate intakes

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

A long list of changes needed here. Better organic waste collection for a start to minimise landfill. More centralised airhubs-Dunedin and Invercargill with rapid transport links. Less cars means less pollution, less congestion , less parking. I think our current urban population is sustainable but continued expansion and tourism is not.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

More tree planting, more variety. Less poisoning. Rabbit population has epidemic and orc continually ignores this. Bring back a local rabbit board , funded , shooting and trapping is most sustainable. Stop putting it back on land owners , it's a regional problem!!!

Q14. **Let us know what else is important to you, for our future**

Due to covid19 put a freeze on rates for next 12 months and reduce your expenditure.



Respondent No: 12

Login: Anonymous

Email: n/a

Responded At: Apr 06, 2020 15:15:28 pm

Last Seen: Apr 06, 2020 15:15:28 pm

IP Address: n/a

Q1. **Name/organisation** Kim Cameron

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

My thoughts are polluter pays. the burden of cost to clean up waterways should not be foisted upon the average ratepayer. Spend less money on hiring more staff to monitor rivers etc and fine those people/businesses who damage our waterways without any care for those of us who use them for swimming for instance. Farmers dont give me any extra money and dont actually benefit society on the whole. Very small trickle down effect whilst they cash in on high milk prices.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Doing a good job.Keep it up.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Encourage more people to live in suitable warm efficient housing on more than one level, ie solid apartments with no garden.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

As a volunteer for OPBG, HALO, and Trailcrew I think we need to keep on top of these issues otherwise it will all be for nothing.

Q14. **Let us know what else is important to you, for our future**

Trying to keep rates rises down. Most folk will find it harder as the years roll by and rates continue to rise.



Respondent No: 13

Login: Anonymous

Email: n/a

Responded At: Apr 06, 2020 15:51:42 pm

Last Seen: Apr 06, 2020 15:51:42 pm

IP Address: n/a

Q1. **Name/organisation**

Wendy

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

I support moves for climate change and believe any new initiatives should be put on hold at this time.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Fully support moves to look after our plants & wildlife but believe any new initiatives should be put on hold at this time.

Q14. **Let us know what else is important to you, for our future**

I believe that the council should only be carrying on with urgent works and placing on hold any works that have yet to be started or that are planned and cancelling any proposed rates increases for the coming year. (Given the hardship that ratepayers are under due to the Covid 19 pandemic).



Respondent No: 14

Login: Anonymous

Email: n/a

Responded At: Apr 07, 2020 15:51:21 pm

Last Seen: Apr 07, 2020 15:51:21 pm

IP Address: n/a

Q1. **Name/organisation** Evan Taylor

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

The suggested rates increase is not acceptable to me. There is an old adage that you must live within your means. What makes you think that you can continue to raise rates ahead of the rate of inflation. To say that you are responding to the Communities' needs is nonsense.



Respondent No: 15

Login: Anonymous

Email: n/a

Responded At: Apr 07, 2020 19:23:32 pm

Last Seen: Apr 07, 2020 19:23:32 pm

IP Address: n/a

Q1. **Name/organisation**

Bex Williams

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

I would like to see decent footpaths and parking in and around Warrington. There is good footpaths in Waitati, which is down the road, but in Warrington we have to put up with gravel footpaths (in a place that is more accessible to a wider range of people and has lots of children biking and walking around) which most people park on, because there is yellow lines on the opposite side of the road. Wouldn't it make sense to put the no parking lines in the side that doesn't have the foot path?

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

I would like to see a bike track from Warrington to Waitati as there is a lot of 'locals' that would like to bike between the two and it is far to dangerous for that at the moment.



Respondent No: 16

Login: Anonymous

Email: n/a

Responded At: Apr 08, 2020 12:03:07 pm

Last Seen: Apr 08, 2020 12:03:07 pm

IP Address: n/a

Q1. **Name/organisation** Craig Gordon

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 17

Login: Anonymous

Email: n/a

Responded At: Apr 08, 2020 13:17:27 pm

Last Seen: Apr 08, 2020 13:17:27 pm

IP Address: n/a

Q1. **Name/organisation** CP Shaw

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number** not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

Approximately 20% of people in Otago do not have internet access. ORC is denying these people the opportunity to participate in the democratic process.



Respondent No: 18

Login: Anonymous

Email: n/a

Responded At: Apr 09, 2020 14:56:23 pm

Last Seen: Apr 09, 2020 14:56:23 pm

IP Address: n/a

Q1. **Name/organisation**

Lloyd Meikle

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

I think Port Otago Ltd is our most important asset and must be retained by ORC, If it is sold off there will be no dividends and rates will not be subsidised. How if it is sold or partly sold I would expect it to be sold on the same lines as Napier Port in an IPO with preference to Otago rate payers and local Iwi



Respondent No: 19

Login: Anonymous

Email: n/a

Responded At: Apr 14, 2020 08:40:52 am

Last Seen: Apr 14, 2020 08:40:52 am

IP Address: n/a

Q1. **Name/organisation** Peter Dowden

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number** not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

agree

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

agree

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

agree

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

agree

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 20

Login: Anonymous

Email: n/a

Responded At: Apr 14, 2020 08:45:45 am

Last Seen: Apr 14, 2020 08:45:45 am

IP Address: n/a

Q1. Name/organisation

New Zealand Tramways Union Dunedin Branch
Inc/Whakakotahitanga Taramu ki Otepoti

Q2. Street number and street name

Q3. Town/city

Q4. Postcode

Q5. Email

Q6. Would you like to speak with ORC about your submission?

Q7. Would you prefer to be contacted by phone or email?

Q8. Phone number

not answered

Q9. Email

Q10. What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)

not answered

Q11. What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)

not answered

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

We support the improvement of drivers wages to the Living wage but we point out that bus cleaners, mechanics and office staff should also receive the Living wage if they are working on Otago Regional Council transport contracts. We also support Living Wage being extended to all workers of all Otago Regional Council contracts and suppliers and we ask the Otago Regional Council to fund and require this.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

not answered

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 21

Login: Anonymous

Email: n/a

Responded At: Apr 14, 2020 09:00:14 am

Last Seen: Apr 14, 2020 09:00:14 am

IP Address: n/a

Q1. **Name/organisation**

Bus Users Support Group Otepoti-Dunedin

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

We support the following statement in the Annual Plan: "We continue to work with our Connecting Dunedin partners, Dunedin City Council and NZTA, on how to encourage and incentivise more bus use." Bus Users Support Group Otepoti-Dunedin supports any move to lower fares or free fares to maximise use of and accessibility of the bus network. We offer the following "fair fares" policy on what needs to be done as a minimum. FAIR FARES - a policy discussion document by Bus Users Support Group Otepoti-Dunedin what to stop: - dad carrying his daughter from Corstorphine to Dunedin Hospital - people paying cash all the time because they can't afford to top up (or buy) a GoCard - people deterred from making short journeys that cross a zone boundary (Fairfield to Green Island, Uni to North East Valley - people deterred from using the bus for family outings or a string of errands because the car is cheaper two approaches: 1: free fares/playing strongest card 2: sticking within the model and adopting most generous/best practice provisions as used in other places around Aotearoa New Zealand list of must-dos to make bus travel affordable: - Keep GoCard one-zone fare about the same as it is - Make GoCard two-zone fares the same as one zone, three zone same as previous two zone, four zone the same as previous three zone, and so on - Make "half-fares" (for children and high school pupils) really half the adult fare - Make the GoCard fare the "basis fare" on which cash fares are calculated, not the other way around - To fund this reduction in fares, increase Adult one zone cash fare and round all cash fares up to the next dollar amount (this also serves objective of loading cash passengers more quickly and encouraging regular users of bus service to use cards) Present GoCard Zones travelled Adult Child Tertiary student / other concessions 1 \$1.92 \$1.15 \$1.72 2 \$2.53 \$1.52 \$2.28 3 \$4.44 \$2.66 \$4.00 4 \$7.58 \$4.55 \$6.82 5 \$11.41 \$6.85 \$10.27 Future GoCard Zones travelled Adult Child (truly half-fare) Tertiary student / other concessions 1 or 2 \$1.92 \$0.96 \$1.72 3 \$2.53 \$1.26 \$2.28 4 \$4.44 \$2.22 \$4.00 5 \$7.58 \$3.79 \$6.82 Present Cash Zones travelled Adult Child 1 \$2.60 \$1.60 2 \$3.40 \$2.10 3 \$6.00 \$3.60 4 \$10.20 \$6.10 5 \$15.30 \$9.20 Future Cash Zones travelled Adult Child (half, then rounded up) 1 \$4 \$2 2 \$4 \$2 3 \$6 \$3 4 \$11 \$6 5 \$16 \$8 "Deserving poor" versus actually poor: At the moment Otago Regional Council only gives concessions to students and a very limited number of beneficiaries with permanent disabilities (as well as those over 65 at peak times, who at off-peak times get free travel funded by Ministry of Social Development) - Extend concessions to all people of low income, that is all who hold Community Services Card, which includes all beneficiaries as well as many "working poor" and parents of multiple children on moderate incomes Unaffordable top-ups: The reasoning behind a minimum top up (currently \$10) is to reduce the number of people disrupting the loading of a bus while they top up. But it has an unfair effect of taking an appreciable amount out of a very low income person's weekly budget (ten dollars is a lot of groceries) - Have a lesser minimum top-up allowed for children and Community Service Card holders One Last Journey provision: - Allow "One Last Journey" on any card that has any value left on it at all, to be repaid and deducted from the next top-up Family travel Families are deterred from using the bus because the aggregate of adult and child fares ends up being more than the cost of running a car. - Have a "Weekends/School Holidays accompanied kids go free" policy - Link GoCards of family members together, so shared journeys have part of the fare rebated School travel Dropping kids off at school by car is clogging up our city roads. In Gisborne they made all school travel free. This should be looked at in Dunedin in the context of reducing the costs of increasing road capacity. The fare reductions suggested above should help but in addition: - fund free travel to the nearest school on the existing bus network (which would use spare capacity in outlying areas of the network) "We don't charge for Guide Dogs" A blind passenger has long been allowed to bring a guide dog on the bus. But many other passengers with disabilities need to bring an assistant to help them travel. These assistants should travel for free, so that there is equal access for all citizens to the service. - allow free travel for those assisting a person who can not travel alone "We don't charge for little kids" Babies and children under 5 have always had free travel. This is a bit like the case of Guide Dogs above, in that the baby can't travel alone, so the need for a parent to assist is acknowledged in the fact they only pay one fare between them. But what about children older than 5 who can not be allowed to travel alone? They should be at least allowed free travel, as if they were in a pram. This could be handled through the card system: - link parents' and children's cards so identical journeys to and from school get rebated

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

not answered

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 22

Login: Anonymous

Email: n/a

Responded At: Apr 14, 2020 09:48:32 am

Last Seen: Apr 14, 2020 09:48:32 am

IP Address: n/a

Q1. **Name/organisation**

Marlene McDonald

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I support Living Wage for all ORC contractors' staff.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Keep e scooters off bus routes

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

More fruit trees planted in urban areas and public places.

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 23

Login: Anonymous

Email: n/a

Responded At: Apr 14, 2020 11:33:24 am

Last Seen: Apr 14, 2020 11:33:24 am

IP Address: n/a

Q1. **Name/organisation**

Thomas Edward Churchill

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Should be able to be drank

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Is having a great affect on the shoreline beside where I live needs to be seen to be believed and needs atentshon now

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Need to be protected

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Need to be protected

Q14. **Let us know what else is important to you, for our future**

Every thing will be different after what we are going through right now and we have to change with the times and what will be thrown at us



Respondent No: 24

Login: Anonymous

Email: n/a

Responded At: Apr 15, 2020 10:16:49 am

Last Seen: Apr 15, 2020 10:16:49 am

IP Address: n/a

Q1. **Name/organisation**

Neil MCDONALD

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

It is imperative that our fresh water environments are healthy and functioning as it should be. The management of those waterways must be fully committed to. to approach it in second gear is simply not good enough.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

COVID_19 has shown us how we are impacting on the environment and the scientists will no doubt give us predictions on how slowed movement will eventually impact on climate change. I believe we need to look individually on how our movements - domestic and international hurt us. Increased encouragement to re-think travel, stay local and take better care of ourselves in terms of slowing the hell down.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

I am a supporter of improving and modernizing our urban environments . Anything that asks us to take a seat and smell the roses is great!

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

Strong investment to growth in a way that improves our enviroment.



Respondent No: 25

Login: Anonymous

Email: n/a

Responded At: Apr 16, 2020 07:55:50 am

Last Seen: Apr 16, 2020 07:55:50 am

IP Address: n/a

Q1. **Name/organisation**

Mike Rosenbrock

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

stop farming irrigation, stop pollution with harsher fines

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

nothing you can do so don't tax us further

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

should be in your remit, don't try any tax us further

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

look after the waterways first as above

Q14. **Let us know what else is important to you, for our future**

like all form of govt you try and find new ways to tax us saying it's for the betterment of all - yeah stop doing that



Respondent No: 26

Login: Anonymous

Email: n/a

Responded At: Apr 16, 2020 14:41:41 pm

Last Seen: Apr 16, 2020 14:41:41 pm

IP Address: n/a

Q1. **Name/organisation** Sue Bradley

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

I believe that it is time for the ORC to re-instate full time Pest control personal who are actively involved in the eradication of pests especially in the Central Otago area where rabbits are particularly out of control. There are many areas of public land that have massive numbers of rabbits and stoats and ferrets and even those diligent landowners who are trying to keep their properties free of pests are on a hiding to nowhere if the land surrounding them has no-one managing vermin. Many "lifestyle" property owners are also at a lose what to do as they are either absentee/holiday owners or do not have the skills necessary to tackle the problem. In the last 15 or so years since there was a pest control person employed by the council the problem of has slowly become worse until at this point we have a full-blown problem. Leaving it to individuals to sort out the problem is just not the answer anymore. Please consider hiring ORC employees to specifically tackle this problem.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 27

Login: Anonymous

Email: n/a

Responded At: Apr 16, 2020 17:05:52 pm

Last Seen: Apr 16, 2020 17:05:52 pm

IP Address: n/a

Q1. **Name/organisation**

Springwater Ag Limited

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Ok as long as burden is fair across Urban and Rural

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Ok as long as based on science and burden is fair across Urban and Rural

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

OK

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

OK

Q14. **Let us know what else is important to you, for our future**

Balance of economic verse socio outcomes



Respondent No: 28

Login: Anonymous

Email: n/a

Responded At: Apr 16, 2020 17:10:32 pm

Last Seen: Apr 16, 2020 17:10:32 pm

IP Address: n/a

Q1. **Name/organisation**

Springwater Ag Limited

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

My rates have gone up 8.10%, 6.40%, 9.7% over last 3 years and now proposing 6.6%. These increases in the current climate are just not sustainable

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

My rates have gone up 8.10%, 6.40%, 9.7% over last 3 years and now proposing 6.6%. These increases in the current climate are just not sustainable

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

My rates have gone up 8.10%, 6.40%, 9.7% over last 3 years and now proposing 6.6%. These increases in the current climate are just not sustainable

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

My rates have gone up 8.10%, 6.40%, 9.7% over last 3 years and now proposing 6.6%. These increases in the current climate are just not sustainable

Q14. **Let us know what else is important to you, for our future**

My rates have gone up 8.10%, 6.40%, 9.7% over last 3 years and now proposing 6.6%. These increases in the current climate are just not sustainable



Respondent No: 29

Login: Anonymous

Email: n/a

Responded At: Apr 17, 2020 08:34:59 am

Last Seen: Apr 17, 2020 08:34:59 am

IP Address: n/a

Q1. **Name/organisation**

Otago Rescue Helicopter Trust

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. Let us know what else is important to you, for our future

The Otago Rescue Helicopter Trust relies on community donations to support the continuation of the service in this region. Our target is to raise a total of over \$1m this year. The Trust records its grateful thanks to the Otago Regional Council for its ongoing annual sponsorship of \$350,000. The demands of the emergency rescue helicopter service are uniquely challenging. Otago's rescue helicopters serve one of the larger, more remote and mountainous regions in the country. Key to the success of the service for over 20 years has been the Trust's relationship with HeliOtago that is based on enduring mutual respect, trust and teamwork. The Trust is delighted to continue to work with Mr Graeme Gale and HeliOtago to continue to support the delivery of vital rescue helicopter operations across our large region. HeliOtago's pilots, highly trained intensive care paramedics, and its management all work together to maintain the rescue helicopter service on standby 24 hours a day, every day of the year. They respond to every emergency request often flying in challenging weather conditions and across difficult terrain to bring advanced medical capability and hospital transfers to those in need. The sound of the helicopter arriving is reportedly the best sound in often desperate situations. As reported to Council at our presentation in September, the 2018/2019 year was the busiest year on record and the current year to 30 June 2020 is on track on show even greater usage of the service. The present COVID-19 situation highlights again our community's reliance on the service being available to move critically ill patients to Dunedin hospital. The team is adhering to Ministry of Health guidance and continuing to provide the usual service over this time. Once again, thank you for your ongoing support; we look forward to updating you again in September. Yours sincerely Martin Dippie Chair Otago Rescue Helicopter Trust



Respondent No: 30
Login: colin campbell-hunt
Email: ccampbellhunt@gmail.com

Responded At: Apr 17, 2020 11:37:58 am
Last Seen: Apr 16, 2020 23:30:27 pm
IP Address: 118.148.24.236

Q1. **Name/organisation**

Otago Natural History Trust/Orokonui Ecosanctuary

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

i am making a submission by email with attachments

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 31

Login: Anonymous

Email: n/a

Responded At: Apr 17, 2020 21:00:52 pm

Last Seen: Apr 17, 2020 21:00:52 pm

IP Address: n/a

Q1. **Name/organisation**

Matthew peppercorn

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Stop cows shorting in the rivers by fencing and adding filter plants

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Build higher up Get better public transport Bring back parking. I can't do my job which involves going all over city and parking

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Dumb when at expense of parking

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Make more bird sanctuary's . Orikonui has increased birds in my garden by ten fold. Make cats extinct.

Q14. **Let us know what else is important to you, for our future**

Bike lane between waikouaiti and Waitati



Respondent No: 32

Login: Anonymous

Email: n/a

Responded At: Apr 19, 2020 21:30:08 pm

Last Seen: Apr 19, 2020 21:30:08 pm

IP Address: n/a

Q1. **Name/organisation** Brian Miller

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email ** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

At present there are no tests done for contaminants in any of the Mosgiel urban stormwater outlets that drain into both the Silver Stream and Owhrio Stream . This needs to be done with urgency, so that information can be gathered to determine what action is needed to lift the quality of the water in these two streams, that also feed into the Taieri river. My request is for regular testing for contaminants of the Mosgiel urban Storm water systems that drain into the Silver Stream and Owhiro.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. Let us know what else is important to you, for our future

The ORC Policy statements clearly indicate that stormwater must not contaminate other peoples property. This is clearly not being adhered to. When both the Silver Stream and Owhiro stream are in flood and have breached their banks, floodwater flows over rural land, and through rural homes. This floodwater contains contaminated stormwater from the Mosgiel urban stormwater systems that continues to pump while the streams have breached their banks. Why does the ORC allow stormwater to be pumped into these streams when they have breached their banks ? This is clearly in breach of ORC rules.



Respondent No: 33

Login: Anonymous

Email: n/a

Responded At: Apr 20, 2020 11:06:33 am

Last Seen: Apr 20, 2020 11:06:33 am

IP Address: n/a

Q1. **Name/organisation**

Saddle Hill Community Board

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

We approve of the collaborative approach to managing freshwater. There is much knowledge in the community. We do however consider the ORC needs more staff and expertise. We appreciate the monitoring work that is done in the Saddle Hill Community area but are concerned by the water quality of our waterways. Two examples are: Kaikorai Stream which running past the Green Island Waste Disposal and commercial premises and is has risk of being contaminated (especially in flooding conditions). Otokia Creek which often has poor water quality and is sometimes unable to be used recreationally. We also have huge concern of the effects to this waterway and wildlife in regards to the Smooth Hill Waste development. We request thorough investigation into this prior to any approvals being given. We appreciate the monitoring and opening up of Otokia Creek and Taylors Creek and hope that it continues to be well monitored in the future.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Climate change is very real to us in the Saddle Hill Community area. We have seen more flooding and extreme weather in recent times but of more concern is the coastal erosion. We understand there are roles for both DCC and ORC in this area and encourage strong collaboration. We understand that a lot of investigation has been done for South Dunedin and Ocean Beach but what to make clear that there are pressing issues in outlying areas as well. Between Brighton and Taieri Mouth the road is being undermined in several places. Consideration needs to be given to all parts of our communities. If Taieri Mouth road was to become impassable it would affect many residents. Hazard information needs be readily available to land owners so that they can make informed decisions.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

We encourage strong collaboration between Dunedin City Council and NZTA. In the Saddle Hill Community Board area, we need more effective and economical public transport for our residents. Public transport needs to be more attractive by having more buses and a reliable/ effective timetable. This would encourage people use it more than their own private transport. Our coastal communities (between Waldronville and Taieri Mouth would benefit from safer / wider roads to encourage more cyclists. The current situation indicates that our economies could become more localised. If this is the cause it is vital that there is collaboration and priority that protect and support our plants and animals to thrive. An inventory of our this is a good place to start. We encourage collaboration with our communities to tackle pest management but consider that ORC needs to be a strong leading force.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

We applaud the ECO Fund and the support given to community-driven environmental projects. As above, an Otago Inventory of biodiversity is seen as a positive step. We encourage thorough investigating of wildlife impacts of the Smooth Hill Development. We know there are the endangered Native Falcon (Karearea) nesting in the area and would appreciate hearing what the DCC and ORC plan to do in managing and minimising the effect of a Rubbish Tip next to their nesting site. We also have concerns about possible pollution from Smooth Hill having a negative effect to other wildlife in the nearby area. We are aware of and regularly see the yellow Eyed Penguins (Hoiho) on the beach stretching along our boundary along with Seals, Sea Lions and Little Blues penguins. Additional to these sites, both Kaikorai Estuary and the Otokia Creek Wetland area are prominent nesting and breeding locations for many birds including the Royal Spoonbill. We have when able, contributed to both welcoming these animals but also protecting by supporting community projects such as penguin boxes. We encourage to ORC to have a more active role in the protection of our plants and wildlife.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 34

Login: Anonymous

Email: n/a

Responded At: Apr 20, 2020 12:22:02 pm

Last Seen: Apr 20, 2020 12:22:02 pm

IP Address: n/a

Q1. **Name/organisation** Paul Pope, Chairperson of the Otago Peninsula Community Board

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number** not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Please refer to the attached 2020-21 Annual Plan submission from the Otago Peninsula Community Board.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Please refer to the attached 2020-21 Annual Plan submission from the Otago Peninsula Community Board.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Please refer to the attached 2020-21 Annual Plan submission from the Otago Peninsula Community Board.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Please refer to the attached 2020-21 Annual Plan submission from the Otago Peninsula Community Board.

Q14. **Let us know what else is important to you, for our future**

Please refer to the attached 2020-21 Annual Plan submission from the Otago Peninsula Community Board.



Respondent No: 35

Login: Anonymous

Email: n/a

Responded At: Apr 20, 2020 13:43:55 pm

Last Seen: Apr 20, 2020 13:43:55 pm

IP Address: n/a

Q1. **Name/organisation**

Tamara Thomas

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

It is important but we can't be too hard on farmers during this time.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Yes important but not really a priority at the moment (given the lower emissions by everyone during lockdown)

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

At this time, idealistic policies and projects are simply not a priority - we need to make things easier on farmers and the general population with easy policies and cheaper rates.



Respondent No: 36

Login: Anonymous

Email: n/a

Responded At: Apr 20, 2020 15:10:38 pm

Last Seen: Apr 20, 2020 15:10:38 pm

IP Address: n/a

Q1. **Name/organisation** Fleur Caulton

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 37

Login: Anonymous

Email: n/a

Responded At: Apr 20, 2020 22:00:04 pm

Last Seen: Apr 20, 2020 22:00:04 pm

IP Address: n/a

Q1. **Name/organisation**

Dawn & David Sangster

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Plan change 7A should not be a one size fits all. It can result in inferior environmental outcomes and slows farmers capacity to invest. The costs to renew permits are out of control. Too much money spent on consultants that could be used for more environmental benefit on farm. Affected parties are not engaging and are slowing consent renewals. Councillors do not agree with your strategy and too much media highlighting the split in Council feeling on the strategy. Good idea to invest in catchment groups and appreciate the presence of ORC at the Upper Taieri catchment group.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

We think you need to establish base line data so that you can set targets. You may like to revisit target dates as businesses are going to take time to recover after covid 19. It is important to have good plans and processes around flooding events as they can be devastating and very expensive to rectify.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

I suggest that you revisit this area as Wanaka/Queenstown are not going to be the fastest growing area anymore. Any area that has tourism is going to need support. More thinking is needed on how you can support these areas for the next few years.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

I would suggest that this area is well down the list of priorities. The Council needs to slash their budget and hold or reduce rates. You need to be looking at ways to save money and revisiting your strategic 3 year plan in the light of covid 19. People and Business have to survive and cash will be very important and we should not be having rates increases at this time. It is irresponsible.

Q14. Let us know what else is important to you, for our future

Work needed on PR. Too much negative commentary about Councillors having votes. Staff turnover seems to be high. Over reliance on consultants. On a positive note I would say all ORC staff that we engage with are always very helpful. At the moment all of NZ is focused on reducing costs and helping the economy recover. We think you need to revisit your plan as so much has changed in light of covid 19 and your previous work plan is not all relevant and critical at this time.



Respondent No: 38

Login: Anonymous

Email: n/a

Responded At: Apr 21, 2020 09:28:33 am

Last Seen: Apr 21, 2020 09:28:33 am

IP Address: n/a

Q1. **Name/organisation**

Otago University Students' Association (OUSA)

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

OUSA is supportive of the Council's intention to work collaboratively to manage freshwater. We believe it is important that the Council works with communities across the region.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

OUSA strongly supports the ORC in taking active steps towards mitigating the impacts of climate change on our communities, both by reducing emissions and implementing resilient methods to protect at risk communities. In particular, we encourage the ORC to look internally to reduce their own emissions. However, OUSA would like the ORC to lay out some more tangible or quantifiable goals in this area. These could be developed in conjunction with the DCC and other Councils within the Otago region to ensure continuity across the region. For low-emissions transport, OUSA encourages the ORC to continue working with the DCC to provide subsidised buses in Dunedin. Further, we encourage the ORC to consider introducing free buses for students. This not only encourages students to reduce their emissions through a sustainable service but would also enable students to live further away from the campus area, mitigating the burgeoning housing crisis in Dunedin North. Going forward, we encourage the ORC to move to more efficient bus systems, which are more environmentally efficient and less costly in the long run. The savings from this could be used to off-set the costs of subsidised services. Relatedly, we understand that the Bee Card bus payment system will be rolled out in Otago later this year. Alongside this, we encourage the ORC to introduce contactless card payment via pay wave for bus fares, as is available in many other cities around the world. We believe that this will make the buses more accessible to those who do not regularly catch them, or who are visiting the Otago region for a short period of time.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

In Dunedin, we are seeing increasing pressure on housing, especially around the tertiary precinct. Therefore, we encourage the ORC to work, in collaboration with communities, to facilitate the provision of more housing and better-quality housing across the Otago region. As discussed above, OUSA supports ORC's plan to incentivise lower-emissions travel. As part of the RPTP, we encourage the ORC to consider free bus fares for students and to continue working with the DCC, in doing so. We support the ORC's plan to pay its bus drivers a living wage.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

OUSA commends the ORC for recognising the disparity in its spending between biodiversity and biosecurity. We encourage the ORC to increase its spending on biodiversity protection, as this is a vital part of our eco-system.

Q14. Let us know what else is important to you, for our future

In terms of governance and engagement, we encourage the ORC to engage with a diverse array of groups, across the Otago region, including with students specifically. OUSA would be happy to provide a representative to sit on established committees in order to provide a student perspective on regional issues. In light of the COVID-19 pandemic, OUSA encourages the ORC to consider freezing its intended rates increase. We believe this will provide needed relief to Otago residents and businesses, especially those in areas like Queenstown, which are very tourism dependent. OUSA believes this will aid the Dunedin student population by lowering costs either directly, through reducing rental increases or indirectly, by reducing potential costs passed onto consumers by businesses. This is much needed in light of the reduced incomes and increased living costs as a result of COVID-19.



Respondent No: 39

Login: Anonymous

Email: n/a

Responded At: Apr 21, 2020 10:59:26 am

Last Seen: Apr 21, 2020 10:59:26 am

IP Address: n/a

Q1. **Name/organisation** Kate Fitzharris

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

I write in support of the Waitati to Waikouaiti cycleway. This project would provide active commuter transport for the growing populations in these communities. It would also link the communities, providing safe recreational opportunities for all age groups, from young to old. This cycleway would also create excellent local tourism opportunities for the current, and possible future, small local businesses. I am a resident of Waitati and currently there is no safe way to travel to Warrington except via car. The distance could be easily travelled by bicycle, or foot but the road (SH1) is not safe to do so, especially with children.



Respondent No: 40

Login: Anonymous

Email: n/a

Responded At: Apr 21, 2020 11:13:11 am

Last Seen: Apr 21, 2020 11:13:11 am

IP Address: n/a

Q1. **Name/organisation**

Rafferty Parker

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I like to be able to swim in my local river without worrying about getting sick

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

I approve of both climate change mitigation and adaptation efforts

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

I'd like more buses and more trees.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Native plants and wildlife should be looked after

Q14. **Let us know what else is important to you, for our future**

I would really like a cycleway from Waitati to Warrington. I drive this route around 4 times a week but would cycle it if it was safe to do so with my son.



Respondent No: 41

Login: Anonymous

Email: n/a

Responded At: Apr 21, 2020 11:17:36 am

Last Seen: Apr 21, 2020 11:17:36 am

IP Address: n/a

Q1. **Name/organisation**

Amee Kathryn

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I would like cleaner rivers

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

We need to do our bit to prevent climate change. Particularly cost-effective measures are alternatives to car travel, and reforestation.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

I would like more buses, especially the Palmerston Dunedin route

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

We should do more to protect our native plants and wildlife.

Q14. **Let us know what else is important to you, for our future**

I support a lowering of the speed limit around the turn-off from SH1 to Waitati. I would also like a cycleway between Waitati and Warrington as that bit of road is dangerous and unpleasant to cycle.



Respondent No: 42

Login: Anonymous

Email: n/a

Responded At: Apr 22, 2020 09:18:26 am

Last Seen: Apr 22, 2020 09:18:26 am

IP Address: n/a

Q1. **Name/organisation**

Te Rūnanga o Ōtākou

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

We believe that is one of the single most important tasks delegated to regional councils (under the RMAAct91), one that is both honorable and deserving of the most serious attention by Council, staff and their communities. The freshwater values throughout Otago arise from natural sources in natural condition from rainfall, snow and glacial melt and discharge from upper catchment sources and discharge from reservoirs. It is from that point that our local and regional interests play their part, for cultural, social and economic purposes. The role of Council is to regulate that activity and maintain and improve water quality and quantity throughout the region for the benefit of the whole community and future generations. That important task is simply unobtainable if the planning framework is not fit for purpose and a reflection on the custodial duties that the Otago Regional Council has in respect of regulating water management and use to maintain one of the most important values Otago possesses, the freshwater (wai-maori) of the region, a duty within which Kai Tahu wish to play as a Treaty partner to the Crown and by delegation with the Otago Regional Council.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

The over whelming evidence points to a grim future for our children and their children with climate change scenarios that predict increasing temperatures and increasing extreme weather events as well as rising sea levels. Climate change and pathways to mitigate our anthropogenic negative influences must be central to ORC policy, plans and operational activity to identify, influence and bring about a reduction in carbon producing activity in the districts and region of Otago.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

The sprawl of urban growth across productive land particularly in the rapid growth areas of Otago including Dunedin needs to be managed to contain urban areas, to promote energy efficiency and protection of our good class soils, the three waters infrastructure of urban areas needs to avoid the pitfalls of poor design and negative impact of poor quality / degraded waters discharge to the nearest water way of coastal waters. Amenities and green spaces within urban areas is also important and the cultural narrative of place and values should be reflected in urban design.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

As with water, our success can be measured on how well we look after and maintain our indigenous biota, plant and wildlife, our attention to this duty is embedded in our kaitiaki ethic and duty to our environment and connection to nature and the natural world, ultimately we are a part of and not separate, if we degrade and fail to care for this natural resource, that ultimately impacts on our human experience and integrity. For this reason we also support the predator free 2050 objective as one way to restore and create an environment that provides inspiration and self fulfilling ambition to achieve predator free status across the region.

Q14. Let us know what else is important to you, for our future

Te Rūnanga o Ōtākou strongly supports the 'treaty partnership' approach to key tasks that the Otago Regional Council is responsible for, so that the cultural values and associations that are embedded in the Otago land, water, coast and air are reflected in policy direction across the region.



Respondent No: 43

Login: Anonymous

Email: n/a

Responded At: Apr 22, 2020 14:07:17 pm

Last Seen: Apr 22, 2020 14:07:17 pm

IP Address: n/a

Q1. **Name/organisation** Beth Linklater

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number** not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

While this work needs to continue Rigirous consultation and plans need to be Discussed and consultated with urban and rural communities.Given the current covid environment less haste and more care needs to be exerised. This should not be pushed ahead at all cost. Time frames ,abilities of communities to respond and costs need to be carefully considered. Regenerative farming springs to mind.This would take care of many of the environmental problems facing us.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Climate change. Given the current climate with covid big changes are already being seen around ait quality emissions etc. Regenerative farming would take care of many of these issues. Given that this is not going to change any time soon once again less haste and caution need to be applied. Flood protection in the lower clutha. This is essential and urgent. During the most recent flood the scheme was once again shown up to be ineadeaquate through lack of maintainence on an on going basis and if it wasnt for locals providing pumps which I understand we will not be paid for and local contractors making decisions when a flood bank was about to blow out and ORC staff were on holiday and not available during a local crisis we would all have suffered much more loss. This happens with every flood. Lack of ongoing care of ditches ,pumps and the basic infrastructure puts us all at risk. Less bums in seats and more on the ground staff are needed.Basic infrastructure needs maintained with no extras or nice to do projects.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Given the current covid climate much of this is now irrelevant . It is impossible to know what will be required in the way of transport/ urban development now. These plans need to be parked to one side untill the picture becomes clear as to our future. Pest control must continue.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

This is the only part of the plan that should be implemented along with flood protection. .

Q14. Let us know what else is important to you, for our future

No rates increases. No fee rises as outlined in your document. The current covid status is putting all under great strain and difficult times are ahead. Council needs to lead by example. Look at what is absolutely essential staffing levels, fees and wages and do a slash and burn in line with the current situation. We are in a major recession and now is the time to be very prudent and spend on essentials only. All those on over 100,000 need a 30% pay cut and make the purse fit . No more grandiose talk of a new building or wasting fees on investigating this. Listen to your rate payers and cut the purse in line with everyone else.



Respondent No: 44

Login: Anonymous

Email: n/a

Responded At: Apr 22, 2020 16:59:37 pm

Last Seen: Apr 22, 2020 16:59:37 pm

IP Address: n/a

Q1. **Name/organisation**

Arthur

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

Running busses that are empty most off the time is ridiculous a 5 year old could do better than dick heads like you



Respondent No: 45

Login: Anonymous

Email: n/a

Responded At: Apr 22, 2020 17:57:20 pm

Last Seen: Apr 22, 2020 17:57:20 pm

IP Address: n/a

Q1. **Name/organisation** Mark Crawford

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I believe that the increased consultation with community groups is well intended and a good practice, but it should not be the only basis of achieving the aim of maintaining and improving waterways. The practical aspects of what the community can put in place also needs to be supported by the science, in that every farm needs to have a farm environment plan in place, which has identified the amount of nutrient loading from this property and thus the level of risk it poses for the catchment it is in. The risks identified by this nutrient management budgeting should be incorporated into its FEP. Every farm is unique and so each property will have a differing level of nutrient loading, risk level and varying levels of mitigation's to implement. This cannot be done by a group. It also requires a level of audit or scrutiny by an independent body to ensure equity and a level of quality assurance. This needs to be spelled out in an implementation plan which the regional Council should provide guidance on

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

We have an opportunity to be cleaner and greener than a lot of other New Zealand places with our natural advantages, and so along with managed retreats for certain parts of our locality, and adapting water courses to handle more extreme events, one should also look to fund resilience in our community, what this means and the behaviours we as citizens will need to consider.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

A unique aspect of Otago is the Otago harbour. It is not enough to focus on sediment from the urban environment, Council should also focus on the waste and rubbish that finds its way into our water ways and then ultimately from our streets into the harbour. One only has to look at the rubbish at shopping malls and areas such as the Pak n Save and Warehouse complex as an example. These do not provide a visual experience that the city or the council can be proud of. If Government money was to be spent on providing walkways and a harbour complex to show off to the world, then one should clean up the backyard as well. Waste management should be an integral part of our better urban environment, not just tipped into waste fills or left on the streets by careless citizens with no sense of value.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

Dunedin has a unique opportunity to provide an eco tourism experience to both locals and the domestic and international traveller. To support this our native wild life needs to thrive, we have an ability to create pockets of pest free wildlife areas due the geography of Otago e.g. the peninsula, and every encouragement and support should be provided to ensure this happens. The Council just like it supports catchment groups in the freshwater initiative, should also do the same for wildlife and pest control groups with their expertise, providing a platform for cooperation and technical advice.

Q14. Let us know what else is important to you, for our future

Happy to talk to these points but only if people feel there is a need.



Respondent No: 46

Login: Anonymous

Email: n/a

Responded At: Apr 22, 2020 19:29:10 pm

Last Seen: Apr 22, 2020 19:29:10 pm

IP Address: n/a

Q1. **Name/organisation**

Protect Our Wildlife

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

We applaud the ECO Fund and the support given to community-driven environmental projects. We are aware of, and particularly interested in, and regularly see Seals, Sea Lions and Little Blues penguins on our beaches. Our purpose is welcoming these animals and protecting them by providing penguin nesting boxes and plantings. We encourage ORC to have a more active role in the protection of our vegetation and wildlife.

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 47

Login: Anonymous

Email: n/a

Responded At: Apr 22, 2020 19:50:09 pm

Last Seen: Apr 22, 2020 19:50:09 pm

IP Address: n/a

Q1. **Name/organisation**

Lee Kearon

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

status Quo is fine

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Status Quo is fine

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Please forget about any more cycle trails. Forget about redesigning George Street. Don't take away any more car parks. Please consider enlarging the bus loop to Outram, as we have lots of older people who want to leave their cars at home- and some younger ones too. It is often too hard and expensive to get parking in town or the hospital.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Plants are doing fine. Thanks for repairing the dog park in Mosgiel

Q14. **Let us know what else is important to you, for our future**

People really cannot afford to be paying any more rates, so please set aside any thought of pedestrianising or changing the Octagon, please!



Respondent No: 48
Login: Anonymous
Email: vickywills50@gmail.com

Responded At: Apr 23, 2020 09:05:39 am
Last Seen: Apr 23, 2020 09:05:39 am
IP Address: n/a

Q1. **Name/organisation** Vicky Wills

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?** not answered

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Bring in a rabbit virus ...need regional rabbit control plan ...too hard for the average small property owner ...at 70 years old do you expect me to go and get a gun get a licence ...needs URGENT ATTENTION

Q14. **Let us know what else is important to you, for our future**

AS i have said repeatedly endless consulting and surveys and science is all very well but a lot of this stuff just needs to be got on weigh in a grass roots practical way ...please



Respondent No: 49

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 11:55:35 am

Last Seen: Apr 23, 2020 11:55:35 am

IP Address: n/a

Q1. **Name/organisation**

Jacqueline Ruston

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Good our iconic lakes and rivers are being monitored. My only thought on this one is that city freshwater should be just as important, as often the smaller tributaries can get overlooked and they can be vital environments for tuna/eels and koura and whitebait etc. I would like to see nets put on culverts so that cigarette butts and litter do not make their way into the waterways. We see gutters full of butts in Port Chalmers during cruise ship season - and but for locals picking it up, it ends up in the ocean via culverts. If our inner city rivers were treated as taonga, it would be amazing for the wildlife and young people for swimming and paddling.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

I'd like to see more incentives for organic growing of crops and livestock and lobbying for freeing up of hemp growing for farmers. I'd like to see all the roadside effluent collection & farm effluent be combined with all the greenwaste to form supercompost and have that distributed to farmers very cheaply or free just to get them off the fertilizer and onto sustainable soil production. Apparently Canterbury has a surplus of this already - could we acquire their compost and distribute? Would help with food resilience. Also distribute to community gardens via councils. I would also like to see more monitoring of ship effluent. Where does the grey water get emptied? Who monitors the low sulphur fuel emissions from ship chimney stacks. This is frequently very dirty.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

I am happy that you are looking at the ground water level out in South D. And protecting valuable soil that food could be grown on. With this in mind I would like to see some light rail connectivity out there and some mid-rise housing - picture South D as the Venice of the south - connected by rail, with an inlet and marina and bridges. For the urban environments surrounding Ports - such as Port Chalmers, we need to have ship to shore power as soon as possible so that we do not have the air pollution and noise pollution that have been plaguing the West Harbour and Otago Peninsula. I would like to see ORC monitor and enforce clean air for this wildlife sensitive area. Not Port Otago, it is too important an issue to be way down the priority list.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

Does marine life count? No specific category, although Port Otago is one of our biggest assets. Music blaring from cruise ships and people playing crap shooting as they pass the Albatross colony. Grey water getting discharged who knows where. Rubbish documented as being dumped from cruiseships - which line? Should not have them come to our Port if they have dumped or been in any way careless about wildlife.

Q14. Let us know what else is important to you, for our future

Working in with Kiwi Rail to have commuter service from Taieri to town and Town to Port Chalmers. Its been great having traffic free roads, and this is one way we could achieve that. With a carriage for bikes (essential!) so once you in town you can easily get to work, school, shop.



Respondent No: 50

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 16:03:28 pm

Last Seen: Apr 23, 2020 16:03:28 pm

IP Address: n/a

Q1. **Name/organisation**

Stephanie Scott

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

See attached letter.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

See attached letter.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

See attached letter.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

See attached letter.

Q14. **Let us know what else is important to you, for our future**

See attached letter.



Respondent No: 51

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 16:27:10 pm

Last Seen: Apr 23, 2020 16:27:10 pm

IP Address: n/a

Q1. **Name/organisation** Jack Cowie

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

I support most of what is in the plan here, but I would like to see just a little more. Obviously the work on the RPTP is ongoing and the annual plan is not the place for high-level comments on the overall bus network. What I would note, though, is that while most of the improvements to Dunedin's bus network that were in the last RPTP have been implemented, a few services still have lower frequencies than the goal in this plan, and it feels like it's past time to improve them. In particular, I note the 5/6 service and the 10/11 service. Both of these run at a clumsy 40 minute frequency off-peak on weekdays. The RPTP has these at 20 minute frequencies. The 40 minute frequency makes it hard to remember the timetable -- as someone who often catches buses on George St, I tend to discount these services and catch others (3 or 8) simply because I know their times better. Frequencies of 30 minutes could also be useful (if operational considerations allow them) -- this would at least give these routes equal status with other routes that the RPTP says are of lower priority. The other route that could see improved service is the 15 (Ridge Runner). This runs hourly off-peak, but the RPTP has it increasing to half-hourly all day. Since the 19 bus was upgraded to half-hourly, this is the only route in the urban core (excluding outer areas such as Brighton/Abbotsford) with only hourly off-peak service. If my anecdotal perception of patronage is correct, this "trial" service has been moderately successful even at hourly frequencies and compares well with other quieter bus routes, and half-hourly frequency is well justified. If these suggestions were implemented, we would have a bus network where every urban area all the way out to Green Island (and three services to greater distances) would be covered by services at 30 minute frequencies or better. This would give a fantastic platform for the RPTP to consider wider issues, particularly with regards to some of the difficulties in the network, such as the Brighton/Abbotsford situation.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

not answered

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 52

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 17:10:46 pm

Last Seen: Apr 23, 2020 17:10:46 pm

IP Address: n/a

Q1. **Name/organisation**

Colin Scurr

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. Let us know what else is important to you, for our future

1. I submit to request that the General Rate be not increased this year. With the reduced economy of the Region resulting from the Covid-19 pandemic the removal of these funds from the rate payers at this time is not appropriate. If the Council wishes to increase its expenditure then it should borrow against the significant investments it holds. 2. I submit for the council to reconsider the rise in Targeted Rates. Major capital spending is not appropriate at this time. When funds are removed from communities to allow the Council to spend it will result in a net loss of employment as money left in the ratepayers hand will be spent locally and more effectively support local businesses. 3. I seek the removal of the expenditure on the Taieri River Spillway at Riverside from this years capital expenditure program which is for \$1,260,000. This item was in the Long Term Plan 3 years ago and questions on it could not be answered during consultation at the time. My questions on it during this consultation have also failed to get a response. The Spillway has had a lot of money spent on it in recent years and I fail to see the need for more expenditure at this time.



Respondent No: 53

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 17:44:27 pm

Last Seen: Apr 23, 2020 17:44:27 pm

IP Address: n/a

Q1. **Name/organisation**

Disabled Persons Assembly (DPA)

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 54

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 20:20:20 pm

Last Seen: Apr 23, 2020 20:20:20 pm

IP Address: n/a

Q1. **Name/organisation** Patricia Scott

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Otago has many beautiful lakes and rivers which are habitat for for a diverse fauna. I believe it is essential for the health of people and nature that the rivers and lakes are able to maintain a healthy ecosystem. However I am concerned about the deterioration of the quality and flows of Otago's rivers. I support the work being done by catchment groups and am pleased the ORC is planning to spend more on scientific research. I am conscious of the resistance from Federated Farmers and some in the wider farming community, to ORC proposals for minimum flows. The end of mining rights to take water from rivers ends in 2022 and this has been known for many years. Farmers have been entitled to use these mining rights to take water for irrigation, sometimes at the expense of maintaining a healthy flow of water in the rivers and the ORC is failing to uphold its mission if it does not enforce healthy minimum flows. Water quality has deteriorated over the years, particularly in smaller rivers draining land used for dairy farming. Nitrogen levels in smaller rivers are far too high,. The ORC must comply with the NPS on Freshwater. I I urge the ORC to continue with its programmes to improve water quality and raise minimum flows to a healthy level, in the face of pressure from some councillors and others to relax the standards because of the effects of Covid-19 on the economy. An economy that exploits the environment is not sustainable.

Q11. What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)

Climate Change is the biggest existential threat we face. The effects of Climate Change that the ORC will have to deal with directly are flooding, rising sea levels, public transport, and restoration of wetlands. I support the need for research but action is a premium. Collaboration with the DCC and other district councils is essential. While consultation is important ORC must offer leadership. While we must all work to reduce emissions the effects from the increased emissions of the last 30 years will continue to be experienced. Rather than huge spending on higher flood banks, pumps and sea walls, it may be that areas like the Taieri Plain and South Dunedin will be best to return to their original land form i.e. wetlands. Communities will need help to make massive adjustments to their place of dwelling and livelihoods. This must be funded by central government rather than local ratepayers.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

I fully support the need to protect our soils. The effects of Covid-19 and the Climate Change risks of flooding and sea level rise highlight our region's over dependence on road access for food supply and other goods. We need to strengthen local economies. Large areas of the region's high class soils have been lost to housing such that we can supply very little of local demand for fruit and vegetables from local growers. The future of tourism is uncertain due to Covid-19 so the growth of Queenstown and Central Otago may be slowed considerably. Public transport becomes even more important in a bid to reduce emissions from ICE cars. I strongly support the ORC proposals in this area

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

In the background material supplied to this topic there seems to be a reservations about controlling pests as acknowledged by the statement "our spending on biodiversity is light". I am not sure why the ORC chose this area to budget, biosecurity is a responsibility of the ORC and I fully support the work being done on wilding, pines and wallabies. The best way to promote biodiversity is by encouraging and supporting the farming community to adopt regenerative farming methods and to allow marginal land to return to wetland and native vegetation. This must be accompanied by pest control. Fortunately this is an area that lends itself to community action with many people volunteering on community projects. It is good that the ORC is prepared to work with and fund the community to restore the natural ecosystem and increase biodiversity.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 55

Login: Anonymous

Email: n/a

Responded At: Apr 23, 2020 23:55:09 pm

Last Seen: Apr 23, 2020 23:55:09 pm

IP Address: n/a

Q1. **Name/organisation**

David Ross

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

On one side you have the "We're all going to be flooded by metres of sea level rise" and on the other the deniers. The truth is somewhere between, probably in the denier's half.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

At present the buses run in radials out from the hub. Instead of going to terminuses, why can they not loop round the suburb? e.g. the St Clair bus could loop up Bedford, past St Clair Golf Club and down Middleton St. or maybe Ravenswood Rd Seaview Tce. Buses should make diversions past destinations, when something is on, e.g. Forbury Races, Autospectacular at Edgar Centre, House and Garden Show, Stadium, Logan Park cricket ground, etc. Try an inner loop: South Dunedin, Moana Pool, Olveston, Museum, Polytech, Teachers' College, University, Hocken, Settlers, Edgar Centre, Ice Stadium.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 56

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 11:46:14 am

Last Seen: Apr 24, 2020 11:46:14 am

IP Address: n/a

Q1. **Name/organisation**

Mountain Biking Otago

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

We would like the ORC to investigate linking Dunedin to the existing national cycle trail network (ie the Clutha Gold to the south and the Alps 2 Ocean to the north). These linkages (or their potential) should be included in the ORC Regional Land Transport Plan.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 57

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 11:59:49 am

Last Seen: Apr 24, 2020 11:59:49 am

IP Address: n/a

Q1. **Name/organisation**

School Strike 4 Climate Dunedin

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

We believe that climate change should not only be "...a consideration in everything we do." but rather a deciding factor in everything we do. Climate change has already caused an increase in severity and frequency in natural disasters. Instead of adapting to this, we need to prevent it. Climate change should be at the forefront of all of our minds, especially when making changes to the way we live and govern. We need to work quickly towards sustainable transport, industry, society and reaching a carbon zero state in an efficient manner. We believe that speed should not be sacrificed for thoroughness but that both can be achieved in a timely manner. This has been proved in our reactions to COVID-19 -- that when something is treated as an emergency we have the competency and power to instigate significant change.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

We support an increase in public transport and a decrease in the costs of public transport. We believe that a reliable, affordable and accessible public transport system is essential in healing the environment and moving forward, as a region. We urge the possibility of railways and trains to be explored thoroughly as sustainable alternative. We believe sustainability is the future and we believe Otago belongs in the future.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

We support community-driven environmental projects. We believe that in order to look after our plants and wildlife we need to work consciously and actively towards limiting the negative effects of urban developments and spread as well as effectively managing the runoff from farms. Climate change will alter not only the way we, as humans, live but will also effect animals and plant life. Plants are essential in the recovery of the earth. We support working to preserve much of our natural landscape.

Q14. Let us know what else is important to you, for our future

It's important we, collectively as a global and regional community, have a future. The climate crisis jeopardizes that future and so we believe it is vital to address it as it is: a crisis. Let us reiterate: climate change is only inevitable if we do not act, if we do not change, if we do not work consciously towards stopping it.



Respondent No: 58

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 12:02:16 pm

Last Seen: Apr 24, 2020 12:02:16 pm

IP Address: n/a

Q1. **Name/organisation**

Dunedin area Tracks&Trails Trust (in-formation)

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

Dunedin area Tracks & Trails Trust (DaT&T Trust) In-formation (Name to be determined) C/- 159 Hagart-Alexander Drive, Mosgiel Dunedin 9024 24 April 2020 Otago Regional Council Private Bag 1954 Dunedin 9054 RE: Annual Plan Attn: The Chair and Councillors of the Otago Regional Council Thank you for the opportunity to provide comment on your Annual Plan 2020. Our submission specifically relates to provision and support for the development of tracks and trails across our fabulous city. Given our Trusts In-formation status, we would also like to take this opportunity to introduce the Dunedin area Tracks and Trails Trust (DaT&T Trust). The Trust The concept of the DaT&T Trust (name yet to be determined) has come about as a result of several discussions between stakeholders in the tracks and trails realm across the city of Dunedin. There are many diverse stakeholders in this space! You may be aware, there are a handful of groups working toward the development of new big budget cycling trails including those from Oamaru to Dunedin, from Dunedin to

Waihola, around and over the Peninsula, the Three Peaks, and down the southern coast. There are also other groups and clubs using and maintaining a multitude of existing walking tracks and mountain bike trails, some requiring additional maintenance, others that would benefit from enhancement. We believe the opportunity exists to bring these stakeholders together, with the Dunedin City Council, to create a network of world class tracks and trails across Dunedin City. This concept has been supported by a growing number of stakeholders and as such we have progressed to the status of information with name yet to be determined. Likely Trustees of the DaT&T Trust are reputable experts in their fields and as a group these Trustees will ensure the Trust performs to the highest of standards. It is proposed key functions of the Trust will include, but are not limited to; strategic development, fundraising, resource and knowledge sharing, advocacy, promotion, and project management. A shared vision From discussions with stakeholders it is clear Dunedin City is not short on opportunity in the tracks and trails domain, nor enthusiasm. It is also clear, these different groups are seeking support, and would benefit from a shared vision for tracks and trails across Dunedin City. A shared vision that is supported by a robust strategic plan that emphasises collaboration, integration and partnerships. A vision that is aligned with the City Council's vision for a great small city that is connected, active and healthy. A vision that links local trails to the national trail network promoting regional and national tourism, but also enhances local 'stay-cation' opportunities. A vision that stakeholders are involved in from development through implementation and on to maintenance. Submission request one: The DaT&T Trust in-formation requests that councillors endorse the development of a shared vision and strategy for tracks and trails across Dunedin City. Collaboration The contribution existing groups could make to the development of a shared vision and strategy should not be underestimated and would likely be valuable and cost effective. This is particularly important currently, when times are tough, rate payers are hurting and council expenditure is constrained. A successful local community-council partnership in the development of a strategy is evidenced with Ara Toi, Dunedin City Council's Art and Culture Strategy. This strategy was developed by the DCC in partnership with the arts and culture collective Transforming Dunedin. Similarly, Queenstown's first trails strategy, 2004, was developed following a council-community meeting to assess interest in a network of recreational trails. This strategy has undoubtedly been a success and the latest Queenstown Trails Trust (QTT) Strategy 2015-2025 was again prepared in collaboration with the Department of Conservation, Queenstown Lakes District Council, tourism industry, walking and cycling groups, New Zealand Transport Agency and other stakeholders. The DaT&T Trust in-formation would like to propose a collaborative approach to the development of a shared vision and strategy for ALL tracks and trails across Dunedin City. The Trusts functions, as detailed earlier, could enhance the strategic development process immensely with ready access to: local expertise and experience in the development of diverse trails, access to additional funding streams, access to communities for engagement, and enthusiasm for progress. Submission request two: The DaT&T Trust in-formation requests that councillors endorse collaboration with the Trust to develop a shared vision and strategy for tracks and trails across Dunedin City. Opportunistic projects There is no underestimating the impact of COVID 19 on the economic and social wellbeing of our city, yet amidst the gut wrenching stories of loss lies a glimmer of opportunity. As you will be aware, Central Government is looking at all ways to kick start local economies. Funding opportunities are available through the Government Infrastructure Fund, the Provincial Growth Fund, the Cycleway Extension Fund, the Tourism Infrastructure Fund, NZTA's off-road shared paths programme, Department of Conservation Funding, and the Otago Conservation Review - with calls for proposals for new cycle trails across Otago. The proposed Southern Gateway Trail from the Octagon through the Caversham and Wingatui Rail Tunnels and across the Taieri to Waihola is currently in concept stage. This trail could be a key trail in the city's vision as it provides a critical link from Dunedin to the Central Otago trails. From Waihola the trail will continue to Lawrence (Clutha Gold Extension), from Lawrence to Roxburgh (Clutha Gold Trail), from Roxburgh to Alexandra (the Roxburgh Gorge Trail), then from Clyde to the Otago Central Rail Trail or on to Bannockburn (under construction) and further to the Queenstown Cycle Trails Network. The proposed 'northern gateway' linking Dunedin to Oamaru is another trail in concept stage that could be considered a key trail in the City's tracks and trails vision. With seed funding to progress feasibility studies, either of these trails could be 'shovel ready' soon and capitalise on the funding opportunities presently available. Is now the time to be investing in tracks and trails? Yes, activity is directly linked to personal wellbeing and has there ever been more people out and about in their sneakers, or on their bikes, around our city than there has been over the past four weeks? Submission request three: The DaT&T Trust in-formation requests that councillors consider a) endorsing the concept of the Southern Gateway Trail linking Dunedin to Waihola as an integral trail in Dunedin's trail network b) acknowledging a trail leading north from the city as also integral to a world class network of trails c) adding both these trails to the Regional Transport Plan. Submission request four: The DaT&T Trust in-formation requests that councillors endorse the use of flood stop banks on the SilverStream and Taieri River as part of the Southern

Gateway Trail route. In conclusion The time is right to invest in a vision for tracks and trails around our great small city. The DaTT Trust in formation is working to develop a comprehensive network of stakeholders in the tracks and trails realm of Dunedin. We believe these stakeholders would benefit from a shared vision and strategic plan to create a network of world class tracks and trails across our great small city. With ready access to local expertise and experience, the mechanism to enable resource and knowledge sharing, access to additional funding streams, strengths in advocacy, promotion, and project management the DaTT Trust in formation would welcome the opportunity to collaborate with the ORC in the establishment of a vision and strategy for Dunedin tracks and trails. The DaT&T Trust In-formation supports the development of the Southern Gateway Trail and a north bound trail as key trails in Dunedin's tracks and trails network and requests councillors endorse the use of flood stop banks on the SilverStream and Taieri River as part of the Southern Gateway Trail route – extending the Tunnels Trail to lead from the Octagon to Waihola. Again, thank you for this opportunity Sincerely Sarah Davie-Nitis Communications Manager On behalf of the Dunedin area Tracks & Trails Trust in formation



Respondent No: 59

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 13:35:16 pm

Last Seen: Apr 24, 2020 13:35:16 pm

IP Address: n/a

Q1. **Name/organisation**

Open Valley Urban Ecosanctuary (VUE)

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

We support ORC's "Managing freshwater" plan, in particular: -Supporting catchment groups and community mahi via funding to look after waterways. -Strengthening the water quality framework as part of the "Otago Regional Land and Water Plan" to introduce stricter rules around sediment run-off, acknowledging the impact sediment discharges have on waterways. -Hiring science expertise to expand monitoring and reporting. We would like to suggest: -Defining monitoring sites for scientific monitoring of water quality within creeks (i.e Lindsay Creek). -Ensure monitoring data is readily and easily available to community groups.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

We support ORC's "Climate Change - for a safe, resilient future" plan, specifically: -Gathering information to better understand climate change risks, to help communities deal with climate change and inform actions to take -Assessing CO2 emissions for the Otago region. -Exploring low-emission public transport options to reduce emissions. We would like to suggest: -Ensuring information gathered around climate change risks and CO2 emissions are disseminated to communities in easy-to-read formats. -Exploring incentives to encourage low-emissions travel that does not include public transport (e.g. walking, cycling and safety).

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

We support ORC's "Better Urban Environments" plan, specifically, -Encouraging urban development that doesn't encroach on highly productive land and has minimised impacts on water quality. -Ensuring capacity for development of future housing needs. -Greater controls and stronger management on the effects of sedimentation in urban areas. -Mapping of soil and climatic data in conjunction with social and economic data. -Encouraging more sustainable travel and more livable urban spaces whilst reducing carbon emissions. -Building an inventory of Otago's biodiversity and mapping ecosystems that can be readily shared with the community. -Support for community-led projects for pest management via funding and assistance and sharing of knowledge and resources with project collaborators. We would like to suggest: -Promoting urban green spaces as areas that can maintain, support and enhance biodiversity. -Ensuring biodiversity outcomes are not necessarily supported as an economic benefit, rather for improved biodiversity conditions for wildlife as well as physical and psychological health, social cohesion, environmental awareness and overall well being of people. -Ensuring support for community groups is sustainable over time.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

We support the ORC's "Looking after our plants and wildlife" plan, specifically, -Striving to provide services that are sustainable for communities. -Working with landowners to comply with the regional Pest Management Plan. -Implementation of the Pest Management Plan. -The building and development of the Otago inventory of biodiversity for community and landowner support. -The ECO fund to directly support community-driven, environmental projects. Support for the Predator Free Dunedin project. We would like to suggest: -Ensuring communities are continually supported in their mahi in a sustainable way to continue to protect the health of our ecosystems and wildlife. -Capacity and capability is maintained in communities and community groups as they grow. -Encouragement of biodiversity outcomes in private and public spaces, so landowners, residents, renters, businesses etc can look after our plants and wildlife in their own and public green and blue spaces (i.e in backyards and community spaces).

Q14. Let us know what else is important to you, for our future

-Continued management and support of all items covered above, particularly ensuring processes can adapt as situations (e.g. climate change, biodiversity enhancement, pest reduction) change over time. -Expanding the "Clean Heat Clean Air" to include larger cities and other suburbs (e.g North East Valley) especially to low-income households, and/or provide incentives to landlords to replace old, inefficient heating with more efficient or low emissions appliances for renters so good air quality can have positive environmental impacts in other areas.



Respondent No: 60

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 13:37:45 pm

Last Seen: Apr 24, 2020 13:37:45 pm

IP Address: n/a

Q1. **Name/organisation** Edgar Parcell

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

ORC needs to look more at certain areas as one policy will not suit all.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Climate change is here and how we deal with it is not be to strict on people with fire. More people will die because of the cold , than will of smoky towns, it only lasts for 3 weeks.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Less development, cutting up prime farm land for housing spoils landscapes, down grades water ways, more so than farming enterprises.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

What is ORC policy on looking after and controlling weeds and pest, ORC has achieved nothing in the last few years.

Q14. **Let us know what else is important to you, for our future**

This year in particular i think the 11% rate increase is a no no as a lot of people will suffer over the coming months, perhaps a 2% rate increase would be more in line with this time of COVID 19.



Respondent No: 61

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 13:49:13 pm

Last Seen: Apr 24, 2020 13:49:13 pm

IP Address: n/a

Q1. **Name/organisation** Central Otago Wilding Conifer Group

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

COWCCG believes that community-led initiatives can collectively achieve far more than council led directives, however the council must be prepared to play its role as the regulator. This means supporting catchment groups, and having strong rules in place surrounding freshwater, based on science, with the health of the ecosystem at the forefront of our objectives. A reduction in wilding conifers means there is more water available in Otago catchments, and we would like to see that water managed in a sustainable way to provide for communities and ecosystems/environments alike.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

COWCCG wishes to thank ORC for their continued support for our programme and for funding through targeted rates and the national programme. We would like to encourage ORC to continue to build their resources on the ground (especially staff) to implement the RPMP. Currently we have reasonably low confidence in ORC to implement the RPMP and follow up on breaches to the rules, and we often receive feedback that landowners are of the same opinion. The latest RPMP is a step in the right direction, however we feel ORC would be better positioned to connect with Otago communities and protect biodiversity through strong leadership in implementing the RPMP. Strong leadership and bold decision making will build stronger relationships with all stakeholders, as had been demonstrated in the leadership of New Zealand over the past few weeks. When it comes to wilding pines, bio security is biodiversity, as wilding pines displace native species. It's also water management, as wilding pines decrease the availability of water in catchments. A unified approach with our group, ORC and landowners working together will dramatically reduce future effects of wilding pines, and we need ORC to deliver on their RPMP in order for us all to move forward collectively.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 62

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 14:12:40 pm

Last Seen: Apr 24, 2020 14:12:40 pm

IP Address: n/a

Q1. **Name/organisation**

WAI Wānaka - Upper Clutha Lakes Trust

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Refer written submission

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Refer written submission

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Refer written submission

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Refer written submission

Q14. **Let us know what else is important to you, for our future**

Refer written submission



wanaka water project

Summary

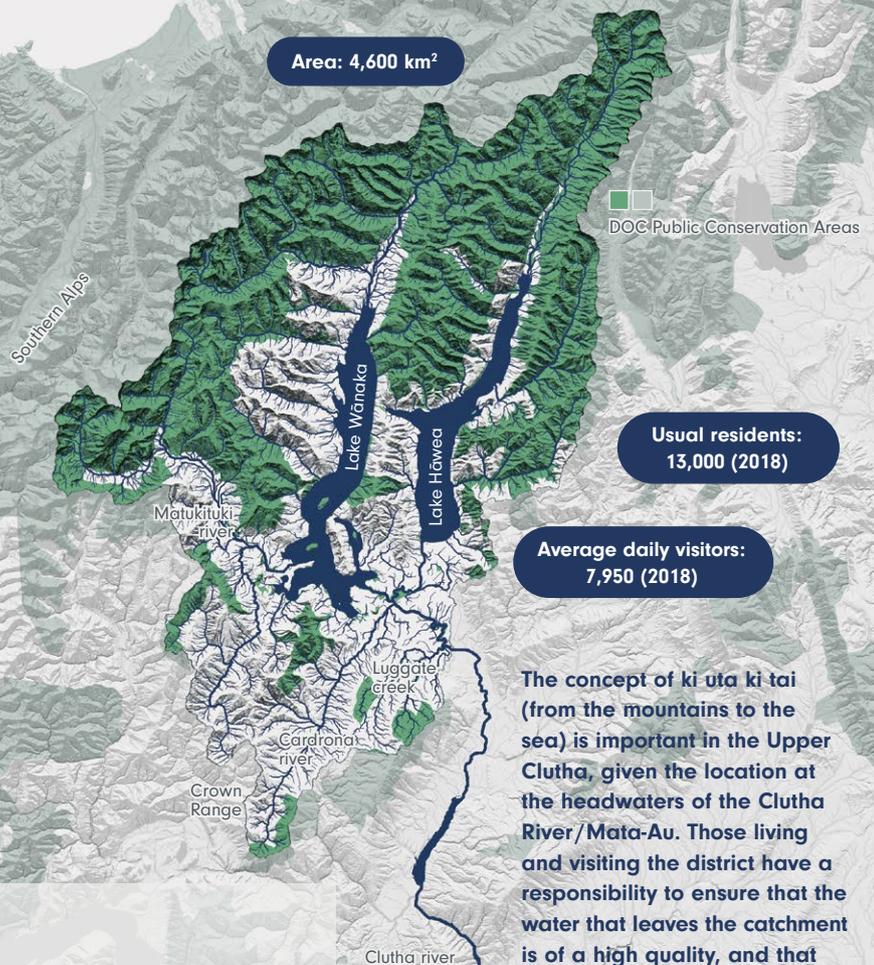
Upper Clutha Community Catchment Plan March 2020



Community Catchment Plan

THE UPPER CLUTHA CATCHMENT

The Community Catchment Plan addresses current and future risks to freshwater resources in order to prevent any decline in water quality and ecosystem function. Some actions are the responsibility of councils however we need the help of the community for many of them.



The concept of *ki uta ki tai* (from the mountains to the sea) is important in the Upper Clutha, given the location at the headwaters of the Clutha River/Mata-Au. Those living and visiting the district have a responsibility to ensure that the water that leaves the catchment is of a high quality, and that problems are not passed on to those downstream.

Why protect our catchment

Two key themes evolved from community input and national guidance. Within these two key themes, the Community Catchment Plan sets out a total of 9 objectives.



Healthy ecosystems

1. Maintain and improve water quality in lakes, rivers, wetlands and aquifers
2. Ensure natural waterway habitats are maintained and improved
3. The abundance and diversity of aquatic life is maintained and improved
4. Ensure water quantity in lakes, rivers, wetlands and aquifers is managed in a way that provides for:
 - Instream flows for natural variation
 - Maintenance of natural lake levels in Lake Wānaka
 - Establishment of volume/rate allocation limits for lakes, rivers and aquifers
5. Ensure ecological processes are functioning normally



Community wellbeing

6. Provide for safe and effective recreation
7. Social wellbeing by enabling:
 - Engagement with Government, ORC, QLDC, local community and visitors
 - Satisfactory drinking water supply
8. Economic wellbeing through sustainable agriculture, tourism and urbanisation
9. Cultural values provided for through:
 - Sustainable harvest of mahika kai species
 - Maintaining ease of access to all waterways
 - Maintaining connection to places of spiritual meaning
 - Achieving excellence in all aspects of water management

Clutha River
Mata-Au

Length: 338km
second longest in NZ

Discharge: 614 m³/s -
largest by volume in NZ

Risks to our catchment

The Community Catchment Plan assesses pressures arising from:



Rural development



Urban development



Increasing tourist and recreational activities



Introduction and spread of pest flora and fauna



Climate change

How does the CCP help?

The Community Catchment Plan recommends 56 actions. Some of these fall within the responsibility of the Otago Regional Council and the Queenstown Lakes District Council. Other actions will be led by the community.



Land management



Urban development



Ecosystem actions



Collaboration, behaviour change and partnerships



Mātauranga Māori

Assist landowners with farm planning and monitoring

Assist with development of Business Environment Plans

Educate public to prevent the spread of invasive species

Develop community engagement strategy

Identify cultural values with local runaka

Assist with development of landowner environment groups

Create education program on sediment management

Ensure future instream structures provide fish passage

Develop planning and assessment tools to guide multi-sector partnerships

Prevent further development on cultural sites or locations that may adversely effect such sites

Identify high risk areas for landslide, erosion and sediment loss

Develop stormwater design guidelines

Promote re-vegetation and expansion of existing wetlands

Build institutional capacity for integrated environmental initiatives

Support new technologies and innovation

Ensure all wastewater discharges are treated to global best practice standards

What can I do?

Email getinvolved@waiwanaka.nz to subscribe to our updates

Help by donating through our website www.waiwanaka.nz

Become a WAI ambassador and tell whoever you can about our work!

Volunteer your time for planting or anything else: getinvolved@waiwanaka.nz

Be part of our community on social media (Facebook [@WAIWanaka](https://www.facebook.com/WAIWanaka) and Instagram [waiwanaka](https://www.instagram.com/waiwanaka))

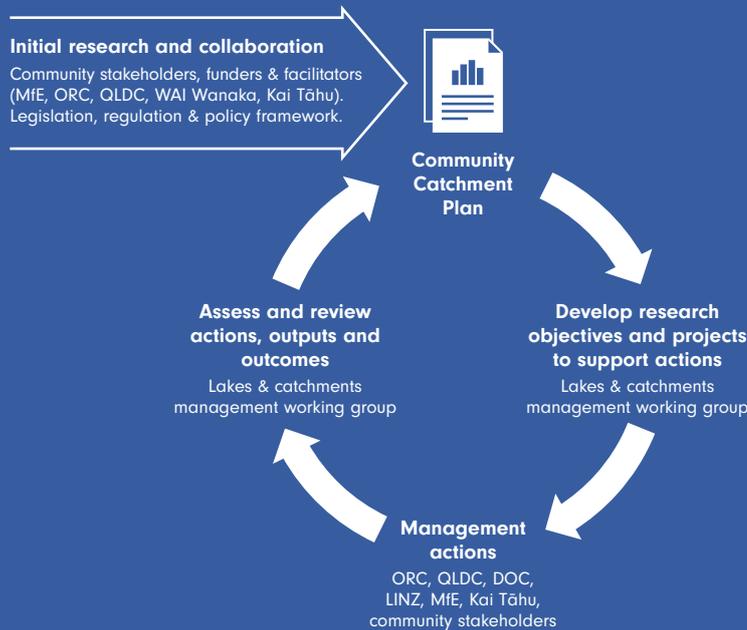
Download, read and share this leaflet or download the whole Community Catchment Plan (www.waiwanaka.nz)



A process for managing the Upper Clutha Catchment

The Community Catchment Plan is a community-led initiative.

PROCESS FOR MANAGING THE UPPER CLUTHA CATCHMENT



Who we are

In June 2018 Upper Clutha Lakes Trust (UCLT), now known as WAI Wanaka, commenced the Wānaka Water Project with project partners Otago Regional Council, Queenstown Lakes District Council, Te Kākano Aotearoa Trust and Catchments Otago. The Wānaka Water Project is funded by the Ministry for the Environment's Freshwater Improvement Fund, Sargood Bequest, Million Metres Streams Project (an initiative of Sustainable Business Network), Queenstown Lakes District Council and Otago Regional Council.

Working alongside the community, WAI has co-ordinated the development of an enduring Community Catchment Plan for the Upper Clutha. The development and implementation of this CCP addresses current and future risks to freshwater resources to prevent any decline in water quality and ecosystem function in an integrated way across the whole catchment.

OUR GOALS

- Work together to achieve desired outcomes for current and future generations
- Collaborate with community groups and organisations to ensure CCP recommendations are actioned and projects are properly scoped and well-resourced
- Increase monitoring and measurement of lakes, rivers, streams and aquifers to direct future action
- Encourage innovation and develop tools to help guide future decision making

The Sustainable Development Goals

The Community Catchment Plan references a number of relevant strategies and reports, including the UN's Sustainable Development Goals (SDGs) which address the global challenges we face. The nine goals shown here are particularly relevant to the management of land and water resources.



The nine relevant Sustainable Development Goals (SDGs)

Our partner: www.onenewzealand.co.nz

The full Community Catchment Plan (CPP) is available for download from our website

www.waiwanaka.nz

Keep up with our progress on Facebook @WAIWanaka or Instagram waiwanaka

And keep in touch or get involved here: getinvolved@waiwanaka.nz

 <p>LANDPRO Make the most of your land</p>		<p>Note: The Ministry for the Environment does not necessarily endorse or support the content of this publication in any way. Design: Edith Woischin (dumspark.com) Map: Ian Reese (xycarto.com) Map attribution: Rivers & watersheds: CC BY 3.0 NZ Ministry for the Environment; Lakes: CC BY 4.0 LINZ Data Service; DOC Areas: CC BY 3.0 NZ Department of Conservation.</p>
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APRIL 2020

ORC ANNUAL PLAN SUBMISSION



ORC ANNUAL PLAN 2020

WAI Wānaka is the new name for Upper Clutha Lakes Trust. WAI stands for Water Action Initiative. WAI Wānaka is an organisation where people who want to safeguard the health of our alpine waterways build communities that do.

In June 2018 WAI Wānaka commenced the five year Wānaka Water Project with partners Otago Regional Council, Queenstown Lakes District Council, Te Kākano Aotearoa Trust and Catchments Otago. The Wānaka Water Project is funded by the Ministry for the Environment's Freshwater Improvement Fund, Sargood Bequest, Million Metres Streams Project, QLDC and ORC.

Responsibility for our freshwater sits not only with national, regional and local agencies but also with the people and community groups within the Upper Clutha. The management of freshwater within the Upper Clutha catchment suffers from a lack of meaningful data and limited measurement of a range of attributes in and around the lakes. WAI Wānaka is advocating for a formal process that enables active management, includes all stakeholders, and where future decision making is supported by evidence.

WAI Wānaka continues to focus on projects that enhance the work of ORC and is encouraged by ORC's acknowledgement of the great work going on in Otago's catchment groups. We thank Marian Hobbs for visiting Wānaka in February 2020 to gain a better understanding of the existing partnership between our organisations.

Securing operational funding is vital to maintain project momentum and avoid volunteer fatigue. Given ORC's stated intention to invest further in collaborative community partnerships to link bottom-up community effort to science and expertise, this submission requests that ORC grant WAI Wānaka \$50,000 for the 2020/2021 financial year. This grant matches the operational support provided by QLDC in 2019. This investment in the Upper Clutha community will provide a significant return for ORC, as outlined in this submission.

WAI Wānaka's projects are connecting the many individuals, community groups, iwi, landowners and businesses undertaking positive work towards enhancing water quality, ecosystem function and reversing biodiversity loss within the Upper Clutha. Working together, we can achieve so much more.

MANAGING FRESHWATER

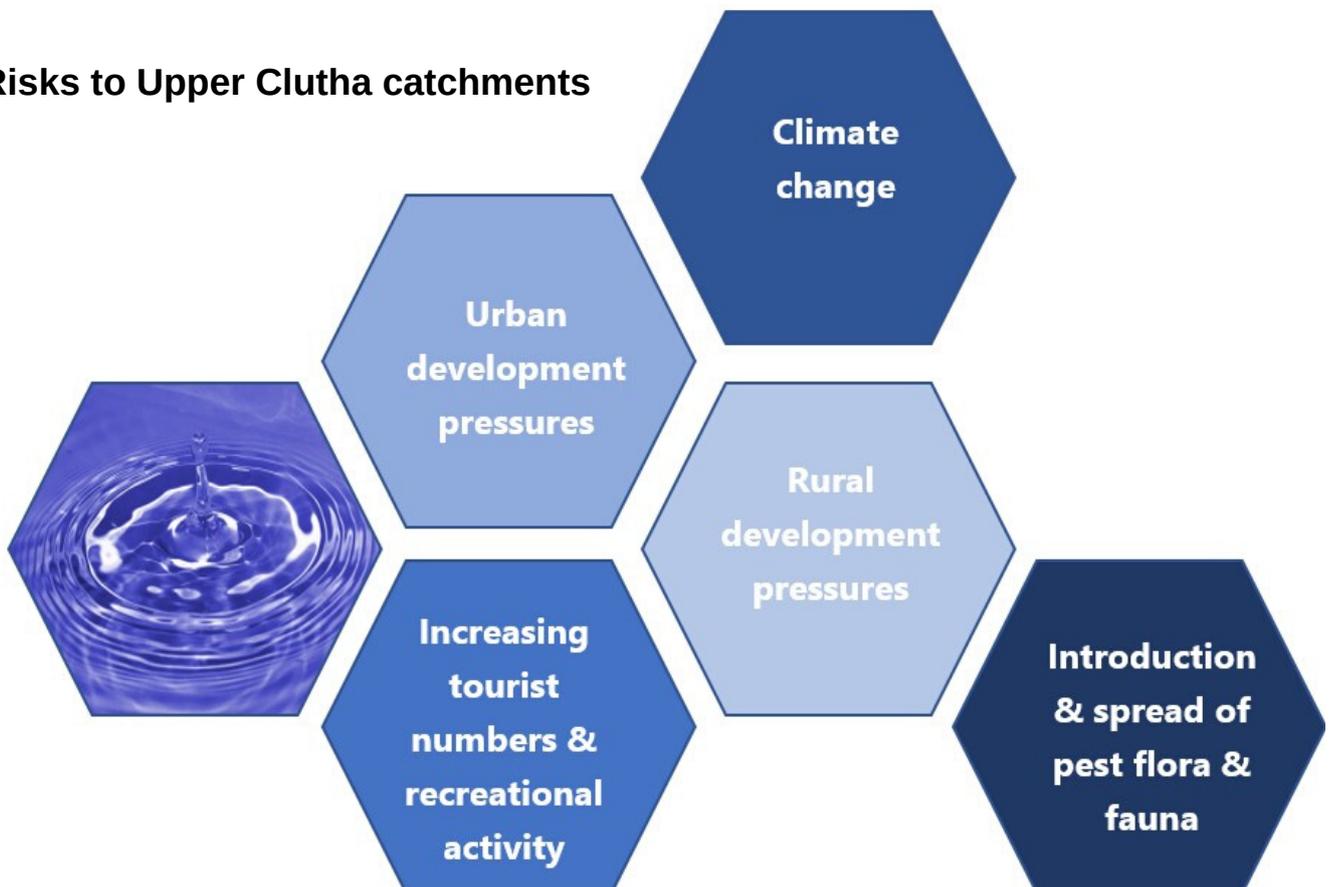
COMMUNITY CATCHMENT PLAN

Managing Freshwater is a key pillar of ORC's work. After 18 months of collaboration, the Wānaka Water Project has delivered a Community Catchment Plan (CCP) to improve and maintain the long-term environmental health of the Upper Clutha catchment area. The CCP is a technical document supported by substantial appendices. An "At a glance" version has been developed to assist with communicating the plan across the community, and is attached to this submission.

The CCP is a roadmap to direct community efforts to improve and maintain the long-term environmental health of the Upper Clutha catchment. The development and implementation of the CCP addresses current and future risks to freshwater resources to prevent any decline in water quality and ecosystem function in an integrated way across the whole catchment.

The next stage is to develop a process to ensure this community work becomes integrated into Regional and District policy and future plans. The current lockdown has delayed presentation of the completed CCP to the Upper Clutha community. At an appropriate time, we look forward to the opportunity to present the CCP to ORC Councillors and staff.

Risks to Upper Clutha catchments



CCP - OBJECTIVES

Two key themes evolved from community input and national guidance. The first is to ensure we have Healthy Ecosystems, which includes improving water quality in our lakes, rivers and wetlands, maintaining an abundance and diversity of aquatic life and protecting natural waterway habitats. The second is to support Community Wellbeing, which includes safe drinking water and recreation, maintaining economic wellbeing through sustainable tourism, agriculture and urbanisation and respecting the cultural values of water.

Within these two key themes, the CCP sets out a total of 9 objectives:



Healthy ecosystems

1. Maintain and improve water quality in lakes, rivers, wetlands and aquifers
2. Ensure natural waterway habitats are maintained and improved
3. The abundance and diversity of aquatic life is maintained and improved
4. Ensure water quantity in lakes, rivers, wetlands and aquifers is managed in a way that provides for:
 - Instream flows for natural variation
 - Maintenance of natural lake levels in Lake Wānaka
 - Establishment of volume/rate allocation limits for lakes, rivers and aquifers
5. Ensure ecological processes are functioning normally



Community wellbeing

6. Provide for safe and effective recreation
7. Social wellbeing by enabling:
 - Engagement with Government, ORC, QLDC, local community and visitors
 - Satisfactory drinking water supply
8. Economic wellbeing through sustainable agriculture, tourism and urbanisation
9. Cultural values provided for through:
 - Sustainable harvest of mahika kai species
 - Maintaining ease of access to all waterways
 - Maintaining connection to places of spiritual meaning
 - Achieving excellence in all aspects of water management

CCP - ACTIONS

The CCP makes clear that successful catchment management will require some changes in the way land and water are managed within the Upper Clutha. The plan also identifies current knowledge gaps and a range of actions to be integrated into ORC and QLDC plans.

Addressing the gaps and taking action requires a collaborative effort by Councils and other parties. Future opportunities include trialling new innovations and technologies that go beyond the traditional way of doing things.

The CCP recommends actions encompassing rural land, urban areas, local businesses, riparian margins, wetlands, invasive organisms, fish passage, habitat, and community engagement. The presentation of the CCP to ORC Councillors and staff will include detailed information on the actions being led by ORC.



Land management

Assist landowners with farm planning and monitoring

Assist with development of landowner environment groups

Identify high risk areas for landslide, erosion and sediment loss

Support new technologies and innovation



Urban development

Assist with development of Business Environment Plans

Create education program on sediment management

Develop stormwater design guidelines

Ensure all wastewater discharges are treated to global best practice standards



Ecosystem actions

Educate public to prevent the spread of invasive species

Ensure future instream structures provide fish passage

Promote re-vegetation and expansion of existing wetlands



Collaboration, behaviour change and partnerships

Develop community engagement strategy

Develop planning and assessment tools to guide multi-sector partnerships

Build institutional capacity for integrated environmental initiatives



Mātauranga Māori

Identify cultural values with local runaka

Prevent further development on cultural sites or locations that may adversely effect such sites

We are indebted to Landpro Limited for successfully leading the CCP project workstream and delivering the CCP on time and within budget. Key contributions were made by Dr. Simone Langhans (SABER Cultural Project) and the community members involved with the Shaping our Future Water Taskforce and its Upper Clutha report.

ANNUAL PLAN SUBMISSION

WAI Wānaka commends ORC's 2020-2021 Annual Plan Consultation Document for its strong emphasis on the environment and desire to achieve more by working in partnership with the community. Effective freshwater management of the Upper Clutha catchment area requires collaboration between QLDC, ORC, the community and other stakeholders.

Discussions with ORC during the development of the CCP identified multiple actions that will lead to improved environmental outcomes in the Upper Clutha, such as:

- More focus on science, including monitoring.
- Collaborative engagement and communication with the wider community on farm system change and environmental initiatives.
- Working with landowners to achieve good management practices, minimising sediment, pathogen, nutrient and pollutant discharges from properties to reflect the upcoming NES and NPS for Freshwater.
- Identifying high risk areas of catchment in terms of landslide, erosion and sediment loss using a combination of local knowledge, satellite and/or LIDAR technology.
- Trialling of new technology and adaptive management approaches.
- Research on Lake Snow, Lagarosiphon and Didymo directed at reduction and/or eradication.
- Supporting and extending education campaigns to prevent any further introduction and/or spread of invasive species identified in the ORC Pest Management Plan.
- Further research into appropriate chemical spray setbacks from waterways for weed control and fertiliser applications.
- Educating landowners and contractors on best practice and guidelines for weed control and fertiliser applications.
- Locating monitoring buoys on Lake Wānaka and Lake Hāwea to undertake research to improve understanding of lake hydrology.
- Establish an allocation limit for water abstractions from Lakes Wānaka and Hāwea, as well as rivers within the catchment.
- Wetland creation/restoration projects as sites for enhancing quality of urban run-off.

WAI Wānaka looks forward to continuing to work with ORC on these and other initiatives.

2020/2021 FUNDING

WAI Wānaka co-ordinates more than 5,000 volunteer hours annually, maintaining a focus on action through a range of project activities.

ORC's financial assistance will enable WAI Wānaka to carry out the following key projects during the 2020/21 financial year:

- **CCP Actions:** Scoping and getting underway with key projects in collaboration with science and regulatory stakeholders, including MfE, Catchments Otago, QLDC and ORC.
- **Catchment group coordination:** With funding assistance from RMPP Action Networks, WAI Wānaka has connected with 60 Upper Clutha landowners who have formed themselves into seven Catchment Groups. These groups determine their own priorities for each catchment, receiving a pool of funding to help with group facilitation and to provide access to experts, tools and resources. The science behind how the groups operate is based on a three year research project involving more than 75 farm business around NZ.¹
- **Business Environment Planning:** Building on the RMPP Action Networks model, WAI Wānaka and ONE New Zealand are working with like-minded businesses, initially in the construction, hospitality, tourism and accommodation sectors. The businesses involved aim to develop environment plans encompassing sustainability, carbon and waste minimisation. RMPP Action Networks funding is not available to support these groups.
- **Alpine Lakes Research and Education Centre:** WAI Wānaka thanks ORC for the lease of 185 Riverbank Road to establish a field centre to support research and citizen science. The need to improve understanding of the current state of our freshwater and the pressures on it, is essential groundwork for effective future management.
- **Lake Buoys:** Developing a project with local schools, with students learning about/using data from ORC's buoys.
- **Communications and engagement:** Refer communication strategy outline page 7.
- **Eels project:** Initial scoping in collaboration with multiple stakeholders.
- **Supporting other water action groups:** WAI Wānaka is well placed to broaden community-led water initiatives throughout Queenstown Lakes by assisting other groups to get underway, for example Lake Hayes and Wakitipu.

¹ Red Meat Profit Partnership Extension Design Project

COMMUNICATIONS

The Wānaka Water Project has a limited budget for communications. WAI Wānaka wishes to promote the CCP and the Upper Clutha's water quality story through a range of community engagement, education and behaviour change initiatives. WAI Wānaka's communications strategy has been developed using three key pillars: Catchment Knowledge, Catchment Management and Catchment Love.

Communications and engagement activities planned for the 2020/2021 financial year include:

- Development of a calendar of events, identifying opportunities for story telling and ways to connect the community with WAI Wānaka projects.
- Ongoing collaboration and alignment of messaging with Wānaka Water Project partners and stakeholders, including ORC. Examples include:
 - Climate change
 - Biodiversity
 - Stormwater discharges and contaminants
 - Communication with the wider community on farm system change and environmental initiatives
 - Education programs for developers, builders and earthworks contractors on sediment management, waste management and hazardous substances
- Regular website updates including updating progress on the CCP's action items.
- Developing interactive tools for school and community use to promote improved understanding of water. With the need to maintain social distancing, WAI Wānaka is currently looking at options to gamify water education.
- Creating simple animations, illustrations and infographics that build an appreciation of what having healthy waterways really means for our community.
- Working with influencers including runaka, catchment groups, developers, industry groups and resident associations. Engaging with each audience to build advocacy programmes alongside them.
- Online or in-person workshops, stakeholder updates, hui, speaker events, community meetings and participation/activation at community events eg ONE New Zealand Summit.
- Regular community focused, audience-specific communications via website, blogs, newsletters and social media on water based initiatives and actions.
- Setting specific targets to measure the success of each programme.

SCIENCE & COMMUNITY

The conditions influencing Otago's alpine lakes are currently not adequately measured, monitored, understood or actively managed. We know very little about how our large lakes function and even less about how to manage them in relation to their main threats, which include climate change, land use change and invasive species. A significant research programme is needed to inform the future management and monitoring of these lakes and their catchment areas.

WAI Wānaka believes that science lies at the heart of understanding how we balance the needs of our community alongside maintaining the health of our environment. Prior to COVID-19, priorities for lake communities included appropriate planning and location of urban development, management of surface run off, effective building and development rules and managing population and tourism growth. The COVID-19 lockdown period has provided time to reflect on ways in which our community might rebuild, with less focus on growth and a strong emphasis on sustainability. Measures to kickstart the economy must factor in the importance of safeguarding the natural resources our community depends upon.

One of WAI Wānaka's key projects is the establishment of the Alpine Lakes Research and Education Centre (ALREC) to connect science and the community. As well as providing a field station for researchers, students and citizen scientists, ALREC and WAI Wānaka will facilitate crossovers and connections across freshwater, carbon, soil, climate change, biodiversity and sustainability initiatives.

Research and education are equally important in preventing further degradation of the catchment. ALREC will provide the community with ready access to science and technology, building a strong collaborative model for the stewardship of our environments using entrepreneurship, innovation and technology to chart the course for a successful future. WAI Wānaka is hoping to establish a close working relationship with ORC's science team, ensuring alignment on objectives in order to maximise positive outcomes.

CURRENT KNOWLEDGE GAPS

WAI Wānaka encourages ORC to increase monitoring and research to help fill in the knowledge gaps identified in the CCP. Informing future water quality and ecosystem management requires:

- Comprehensive catchment specific understanding of the links between land use and/or land management practices and the health or state of receiving environments (rivers, streams, lakes, wetlands and groundwater).
- Improved understanding of current environmental state and trends.
- Consistent long-term research and monitoring of:
 - river and lake hydrodynamics, ecology and biodiversity.
 - river, lake and groundwater quality and quantity.
 - key climatic variables that could be used as indicators of the impacts of climate change.
- Utilisation of emerging sensing technologies for assessment of environmental state.
- Understanding the causes of invasive nuisance organism incursions or proliferations and identifying potential controls for management.
- Understanding the potential vulnerability for occurrence of new invasive nuisance organisms.
- Local scale understanding of climate change impacts on the Upper Clutha area.
- Understand the environmental, social and economic impacts of proposed changes in water allocation regime for Cardrona River and the Wānaka Basin Cardrona Gravel Aquifer.
- Understand the volume and impact of permitted takes.
- Maintaining good quality data on water use, which is essential for informing the development of water allocation policy and critical in making good decisions on water permit applications.
- Education of permit holders of the importance of data quality and how to collect good data.
- Local environment and climate specific urban design standards/guidelines.
- Understanding of urban and visitor population dynamics with particular regard to growth projections.
- Tracking of land management practice changes and land use changes over time.



ALPINE LAKES RESEARCH & EDUCATION CENTRE

WHY?

Accelerating urban, rural and tourism growth is impacting the Alpine Lakes and their catchment areas, putting ecosystem function at risk with potential for serious economic and social wellbeing consequences.

HOW?



SCIENCE AT THE HEART OF LOCAL ACTION

Safeguarding our unique landscapes underpins community wellbeing. Evidence-based decision making supported by a community catchment plan, applied research, monitoring and data. Research connects scientists, students, volunteers and citizen science through workshops and speaker events.

IDEAS, INNOVATION AND COLLABORATION

Connecting science, ideas and technology solutions. Developing strategies and solutions encompassing biodiversity, water, soil, carbon, ecosystem health, climate change, pest management, sustainability and environmental stewardship.

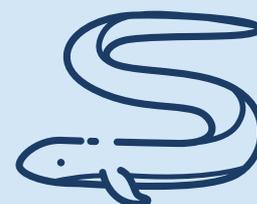


COMMUNITY PARTNERSHIP & CONNECTIVITY

Harnessing an engaged, motivated community and working alongside regulators, iwi, rural landowners, businesses, visitors, scientists to ensure all stakeholders are actively involved in protecting what we all value. An exemplar of knowledge transfer between scientists, rural and urban communities.

A ROAD MAP TO ENDURING ECOSYSTEM HEALTH

Bottom-up action that contributes to and integrates with upcoming regulatory and policy changes. Fast paced, leveraging community smarts, science, technology and learnings from within NZ and overseas. Boundary spanning approach involving diverse teams with wide sharing of results.



COLLECT : CONNECT : PROTECT

MILESTONES 2019/20

FEBRUARY 2019

- Research funding approved for two University of Otago students, a Masters student and one working through Wildland Consultants. A third University of Otago Masters project studying Lake Wānaka macroinvertebrates proceeded alongside the two funded projects.

MARCH 2019

- Water Survey launched. Key concerns identified were agricultural runoff, the use of pesticides, fertilisers and other chemicals, and issues related to population growth.
- Water Hui and Water Workshop held.

JUNE 2019

- 4,500 riparian plants in the ground thanks to Te Kākano volunteers.
- Literature Review complete, incorporating a state of the environment summary, high level policy and plan direction, identification of risks to the catchment.

AUGUST 2019

- Second Water Hui held.

OCTOBER 2019

- Stakeholder update held.

NOVEMBER 2019

- Achieved Year 2 \$60K "Love Lake Wānaka" fundraising target with Million Metres.

DECEMBER 2019

- Launch Cardrona Kaitiaki fundraising campaign with Million Metres.
- Wānaka Water Project research published by the NZ Freshwater Sciences Society.²
- Community Catchment Plan complete.

APRIL 2020

- At a Glance and CCP available on waiwanaka.nz website.
- CCP Actions on waiwanaka.nz website. Progress towards each action will be monitored and the website updated quarterly.

MAY 2020

- (TBC) CCP presentation to QLDC, ORC and public launch.
- (TBC) Stormwater research findings presented to the community.

TRUSTEES

Jeff Donaldson (Chair) Biosecurity and biodiversity specialist, who has been involved with freshwater management for over 30 years.

Dr Don Robertson Chair of Guardians of Lake Wānaka and member of Guardians of Lake Hawea. 40 years in marine fisheries, science and management, marine ecology, biodiversity and biosecurity.

Dr Amanda Bell has a focus on One Health – Health for water, environment, animals and people. Mandy is a member of the government's Fresh Water Leaders Group.

Calum MacLeod Deputy Mayor of QLDC, member of the Planning & Strategy committee and owner of Cinema Paradiso.

Storm McVay Storm has a legal background and is experienced in corporate, Crown and not for profit governance roles.

Kate Scott A resource management planner and an Executive Director of Landpro Limited interested in facilitating community engagement and change from the ground–up.

Jo Appleyard A Christchurch based partner at Chapman Tripp, focusing on commercial, employment and resource management matters.

Community members Ruth Harrison and Mike Saunders round out the Management Committee which meets monthly.

The Wānaka Water Project is governed by a Governance Group with representatives from key stakeholders QLDC, ORC, Te Kākano Aotearoa Trust and Catchments Otago.

Numerous working groups and volunteers support the work being done by WAI Wānaka.

Megan Williams Project Manager - Wānaka Water Project
Ph 027 229 1607 megan@waiwanaka.nz

Julie Perry Manager - WAI Wānaka
Ph 027 498 9698 julie@waiwanaka.nz

Katie Hart ALREC Project Lead
Ph 021 241 8324 katie@waiwanaka.nz

CONTACTS



Respondent No: 63

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 14:45:23 pm

Last Seen: Apr 24, 2020 14:45:23 pm

IP Address: n/a

Q1. **Name/organisation**

NZ Landcare Trust

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

not answered



Respondent No: 64

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 15:18:28 pm

Last Seen: Apr 24, 2020 15:18:28 pm

IP Address: n/a

Q1. **Name/organisation**

Lloyd McCall

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

not answered

Q8. **Phone number**

not answered

Q9. **Email**

not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

This is a priority area. Connecting with community groups is a must to gain on the ground support and enduring initiatives.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

This is in the future and not a priority as at now other than doing stock takes of at risk assets

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

It is important to ensure urban development includes sufficient infrastructure to minimise any effect on the environment. Urban Biodiversity enhancement is part encouraged but not a high priority other than maintaining existing commitments.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

Yes biodiversity is important but not a high priority in the current economic climate. Working with and encouraging landowners will give the best return in protecting the curretn biodiversity

Q14. Let us know what else is important to you, for our future

Instead of spending large sums on policy and compliance and consenting working with communities will achieve superior outcomes at a fraction of the cost. Increasing the ability for people to have non threatening discussions with the ORC would pay big dividends. Empowered liaison teams would achieve much more than internal rule making, consent management and compliance. You cannot educate via compliance. Given the current economic climate the council should be looking at ways of stimulating the regions economy. This would include the support of projects that provide employment and ways to improve the environment. Removing road blocks for new initiatives would be a good start. Having a proactive rather than negative approach at all levels of the council. The council should actively support new ideas. This may require improvement to the science team. The council needs to become part of the team on a larger scale than the highly successful Eco Fund



Respondent No: 65

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 15:22:30 pm

Last Seen: Apr 24, 2020 15:22:30 pm

IP Address: n/a

Q1. **Name/organisation**

Otago Chamber of Commerce

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

see attached

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

see attached

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

see attached

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

see attached

Q14. **Let us know what else is important to you, for our future**

see attached



Respondent No: 66

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 15:43:18 pm

Last Seen: Apr 24, 2020 15:43:18 pm

IP Address: n/a

Q1. **Name/organisation** Jillian Sullivan

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

For decades the ORC has failed to provide scientific data on what is happening with our freshwater systems. Now, here in the Maniototo, the need to set minimum levels for the Manuherikia is dogged by lack of data over the thirty years that the council and irrigators have known the river's needs must be met and allocations lowered to protect the river. I wholeheartedly support increased funding for scientists, hydrologists, ecologists and staff to establish healthy benchmarks for the ecosystems of our creeks, streams, rivers, wetlands, lakes and estuaries. We need rigorous monitoring and compliance to protect our waterways from excess nitrates and phosphates, from lowered levels and from sediment. For instance, the Ida Burn in the valley I live in is in a heavily silted and filthy condition. I have spent days walking this tributary, as I have walked the length of the Manuherikia and other tributaries. From its source and for kilometres, the Ida Burn is a crystalline, sparkling stream that is a dream to walk beside. The stream that runs through our village is heart wrenching to walk beside. Where has the proliferation of algae and the silt come from? My guess its from other streams, Hills Creek or Gorge Creek perhaps, that run into the Ida, and that flow through land that has now had the tussocklands turned into fertilized grazing. I would like to see the ORC take especial care of such important tributary streams such as the Ida Burn and Thompsons Creek, with monitoring, and a desire to help restore the streams to health.

Q11. What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)

With regards to climate change, I agree with Matt Sole that we need to research and understand what is the best resilient, ecological system for withstanding and functioning in sustaining our natural capital and our life support system. Decisions the council takes must take climate change into account. On farm storage of water to be supported as is planting of natives on land in the district. Education and support of landowners to plant crops that need less water, especially for the district wide growing of hemp for carbon sequestration and healthy products, as well as encouragement of regenerative farming systems to cut back on water use and retain carbon in the soil. Education and support for farmers to grow crops that support plant based eating, such as pea protein and oats for oat milk, rather than dairying, dairy support and beef systems, to help lower our carbon debt from agriculture and use less water and fertilizers.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

Better Urban environments The building industry is one where big savings can be made in energy use, and a report ten years ago, in a paper put out by the International Energy Agency, an autonomous body of 27 countries, of which New Zealand is a member, it was proposed that energy efficiency in building is such an important issue for countries that Government policies must regulate building codes. We must produce houses that are much more efficient than the minimum codes now applying. 'Globally, buildings account for close to 40% of total end use of energy,' the paper says. 'Given the many possibilities to substantially reduce buildings' energy requirements, the potential savings of energy efficiency in the building sector would greatly contribute to a society-wide reduction of energy consumption. The implications of such potential reduction should not be underestimated, as the scale of energy efficiency in buildings is large enough to influence security policy, climate preservation and public health on a national and global scale. Passive houses and zero-energy buildings should be the target for future buildings' codes. A path should be set up to reach this target no later than 2030,' the paper directs. For now, our building regulation's minimum code has much to do with the fact we build poorly performing homes in this country and pay huge prices for them. The longevity, the heat retention in winter and summer coolness of the original buildings of clay and stone in this area have much to show us for future house design. My own house is strawbale and highly functional in hot weather or cold, with low power bills. The use of lime plaster inside helps regulate humidity. I have since worked lime plastering inside new house builds in Queenstown and can vouch for their beauty and functionality in creating healthy homes. The use of earth, lime, straw and hemp ought to be encouraged in this district of extreme weather fluctuations.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

I support increased money towards research into district wide biodiversity, mapping the extent of biodiversity we have left, and funds for monitoring, education and support to protect what diversity we have left. Our wetlands and lowland shrublands need protection. We need to look after our precious and unique environment for the health and beauty of its own ecosystems and for our own generations to come

Q14. Let us know what else is important to you, for our future

For our future – that we learn to live as one part of the communities around us: people, plants, creatures, soil, land, water, sky, to know that we are all part of one ecosystem and by respecting this we have a chance to thrive. Thank you for this chance to submit.



Respondent No: 67

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 16:25:40 pm

Last Seen: Apr 24, 2020 16:25:40 pm

IP Address: n/a

Q1. **Name/organisation**

Gerard Hyland, on behalf of Dunedin Tunnels Trail Trust

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

The Trust requests the the ORC work with the Trust and other involved parties to enable and complete the Shared Path Cycleway from the Octagon to Waihola, over the Taieri Plains. This should be considered an integral part of the Regional Transport Plan for both urban and rural transportation.

Q13. **What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)**

not answered

Q14. **Let us know what else is important to you, for our future**

We request that the ORC transport group actively work with the Trust and involved parties to develop a first class Grade One trail suitable for connecting with and become a part of the New Zealand Cycle Trail.



Respondent No: 68

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 16:31:53 pm

Last Seen: Apr 24, 2020 16:31:53 pm

IP Address: n/a

Q1. **Name/organisation**

Predator Free Dunedin

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

not answered

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

not answered

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

Predator Free Dunedin (PFD) is a collaboration of 22 member organisations that, through an MOU, have agreed to work cooperatively to implement the Predator Free Dunedin Management Plan. Our aim is to achieve predator free status over c. 30,000 ha in and around Dunedin City. This compact area comprises of two large tongues of land separated by Otago Harbour, meeting in central urban Dunedin PFD is supportive of the Regional Pest Management Plan and Biosecurity Plan. These Plans set out an ambitious vision for Site Led Programmes at West Harbour-Mt Cargill, Otago Peninsula and Quarantine and Goat Islands. This supports long term goals of PFD, especially requirements for possum eradication from Otago Peninsula, and long-term possum suppression at West Harbour-Mount Cargill. PFD is currently a part of a working group developing a long-term Possum Control Plan (PCP) for West Harbour-Mt Cargill. This working group has formed in response to the ORC Biosecurity Strategy, and also includes staff from OSPRI, DCC and ORC. The long term plan for the PCP will be prefaced on maintaining a very low possum population after the conclusion of OSPRI's possum control (the purposes of which is to eradicate Bovine TB in the area). The PCP delivery model will draw on experience from successful post-TB possum control projects currently being run by other regional councils. PCP planning is well underway, and we are working well with ORC staff and other members of the working group. A collaborative approach to the operational delivery will be necessary, and ORC will be essential as part of the management and/or governance teams. ORC resources will also be required for some operational delivery and Biosecurity Act enforcement. ORC involvement with the West harbour / Mt Cargill site will be critical if it is to be used as a model for developing other post-TB PCP's in Otago. For the plan to be successful it is critical to "have boots on the ground" immediately on the completion of the TB work. OSPRI's possum control in the area is currently planned to be completed progressively throughout the 2020/21 year, so ideally the PCP will be underway by late 2020. Given the above, PFD is disappointed with the Biosecurity Operational Plan as a whole and especially in relation to Site Led Programmes. The deliverables in section 3.5.1, appear to simply echo the measures already in place in the Biosecurity strategy and the RPMP without laying out specific actions. The only KPI mentioned in this section is in regards to the adoption of a "whole of site plan" by December 2020. Section 4.2 sets out the action to develop a "Landowner-led possum control programme" for West Harbour-Mount Cargill. The associated KPI is "Develop a terms of reference and background scoping of the project by April 30th, 2021 (with a view to inclusion in a five year RPMP review)". The working group mentioned above has terms of reference in place already and a scoping document will be produced by the end of May 2020. Given the urgent need to be prepared for the end of the OSPRI TB programme the goal of 30 April 2021 is simply too late. For PFD, the PCP plan for West Harbour-Mount Cargill is of far greater priority than the Whole-of-Site plan and while a scoping document will be ready soon, we would like to see the timeframes for a PCP moved forward. Also of concern is the budget included in the Biosecurity Operational Plan. It is just \$95,000 for all of the Dunedin site lead programme. OSPRI are currently spending approximately \$1m per year on possum control in the West Harbour-Mount Cargill area, and while a PCP can be delivered for considerably less, it will still likely be in the in the range of \$300,000 to \$500,000 per year including management costs. While PFD has some funding secured until 2024, there will likely be a need for further contributions from ORC. Given the development of a PCP is a work in progress we will be able to provide more details at the hearing. There will also need to be consideration for funding the enforcement and other ORC measures for the Otago Peninsula and Quarantine and Goat Island sites. We look forward to being able to provide further detail on our submission at the hearing.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 69

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 16:36:35 pm

Last Seen: Apr 24, 2020 16:36:35 pm

IP Address: n/a

Q1. **Name/organisation** Janie Glasson

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

I wish to endorse Matt Cole's submission as representing my views and the views of COES, I believe the people of the Manuherekia Catchment would respond positively to the ORC spending some of its funds on a project that has practical benefits to the catchments freshwater quality into the future. It is my belief that town and country folk would work together as a river care group, to get to know what the River Scape needs and what could be done by a local group to improve the structure and public access to the river corridor from Alexandra all the way up to the Falls Dam. Some seeding finance could go a long way towards getting this exciting project off to a good start. We have the ECO sourced plants available, We have the planters. We have the Scientific knowledge, and we have the Recreation and Landscape blueprints to back up the public benefits. Freshwater Management would become one of the lasting legacy of such an insightful program initiated as part of your 2020 Plan and Budget, and would tick many of the boxes needing addressing as part of your Natural Diversity and Fresh Water Planning. Please feel free to make contact so we can flesh this out into a working plan and action plan?

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Climate Change needs actions on the ground so the we as caring members of your region can become involved, and so we have something to show our children that we cared for the Planetary effects that our lifestyles have created. Tree Planting and Plantations are an obvious choice. Why are we not making use of the Millions of liters of treated effluent, that is spilt daily into the Clutha, to grow a significant forest of suitable ECO sourced trees to provide a carbon sink for our future zero carbon goals, and a visual expression of our actions, taken now for all our futures. Please feel free to make contact to take my suggested actions further.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

The ORC and the CODC with the Sustainable Futures Forum could be seen to attempt a Limit setting discussion that brings together all our Community Knowledge to address our Urban Impacts on our quality of life and its side effect for our Natural Capital and the Central Otago Environments ability to continue to provide resources and employment to an ever growing population. This would make for a good series of lectures for U3A once we get back together. A good time to bring together a program.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

Wild Life and Plants are partners in the same Ecology. I have an affinity with plants going back through a career spanning 58 years, mostly to do with NZ's Natural Landscapes. When I hear we have plants and wildlife that are found only in Central Otago my instinct is to want to know what I can do to insure they survive to enhance the experience of living in this landscape, for me and my children. The residential fish need well protected river environs, in particular wetlands. The birds need planted corridors that they can move along, and feed on. The lizards need undisturbed rock scapes, with associated flora, to hide and nest amongst. The ORC needs a set of guidelines for landowners in central that highlight area of Wetland, Vegetation, and Rockscapes that need to be left undisturbed and enhanced or covenanted for their intrinsic value and Biodiversity.

Q14. Let us know what else is important to you, for our future

An ORC that makes its mission and values known to the wider community, so that we can agree or disagree but at least know that you are serious about your mandate from government to protect our environment for all of us who choose to live and enjoy our environs. I for one need to know that as a local government you are on a path towards better guardianship of our natural resources. If you show me that this is what you want for Central Otago then I will support and work alongside you to the best of my abilities.



Respondent No: 70

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 16:38:06 pm

Last Seen: Apr 24, 2020 16:38:06 pm

IP Address: n/a

Q1. **Name/organisation**

Brian Turner

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Less extraction and more effort to prevent contamination. Siltation, slime, weed and so on are much more prevalent than use to be the case. Invertebrate life has diminished. In many waterways there are fewer fish and insects. The cause is low flows, pivot irrigators and run-off - nitrate and phosphate etc. Prolific tussock grasslands where have you gone?

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

In all sorts of ways the effects and dangers of climate change have been spoken and written about for decades, and they continue to be. So there is no excuse for the populace at large and elected councillors/staff to be unaware of, or deny, what's been happening here.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

Mandatory use of public transport as often as possible. Fewer coal fires. In urban areas walking and cycling before petrol/diesel driven vehicles should and need to be given more encouragement wherever possible.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

Stop depletion of natives. Re-introduce some, control others. Just about everywhere now - and especially in the valleys - there are far too many cattle. Natural values have taken a hammering. So much of what's environmentally damaging/destructive is termed 'progress' and 'development'. It isn't, it often results in degradation, destruction and depletion. As a society, as a species, in many ways, especially in respect to our treatment of the natural world and what evolved over centuries, we continue to delude ourselves. This is bemusing because it's not as if little has been written about what's been happening and who has been doing it and why. Scores of books have been written, and continue to be, about this. Take Edmund Leach's 1967 Reith Lectures entitled 'A Runaway World'; take Ronald Wright's 2004 Massey Lectures published as 'A Short History of Progress' in which he writes about 'the runaway growth in human population, consumption and technology' and how they've 'placed tremendous demands on earth, air and water - the very elements of life.' He says 'The urgent question of the twenty-first century is how, or whether, this can continue.' I put it to our councillors that it's past time that you more carefully attended to what we're sanctioning and doing to our landscapes and waterways and overall natural values.

Q14. Let us know what else is important to you, for our future

There's nothing more important than you more seriously contemplate what we've been doing to our wonderful region's natural values and diversity and why. A great deal has been written by many NZ writers and scientists that has continued to be dismissed or ignored. Why?



Respondent No: 71

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 16:48:59 pm

Last Seen: Apr 24, 2020 16:48:59 pm

IP Address: n/a

Q1. **Name/organisation** Landscape Connections Trust

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

We support the notion that Council will provide support to catchment groups. However, we suggest catchment groups take a more integrated approach and consider freshwater, biodiversity and ecosystem services at a catchment scale. Strong science and data should inform ground-up participative planning.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

We support the Council's initiatives but would like to see more work done to actively integrate climate change mitigation into land use choices. Land occupiers should be incentivized to deliver ecosystem services for their local communities and for communities who are impacted by their decisions. For example, landowners upstream of vulnerable coastal settlements should be incentivised to reduce overland water flow and soil erosion. Sensible and holistic catchment planning will enable this.

Q12. **What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)**

not answered

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

We are supportive, and thankful for the EcoFund. This is an excellent fund which provides great support to the various NGOs across Otago. Thank you. LCT is currently a part of a working group developing a long-term Possum Control Plan (PCP) for West Harbour-Mt Cargill. This working group has formed in response to the ORC Biosecurity Strategy, and also includes staff from ORC, OSPRI, DCC and PFD. The long term plan for the PCP will be prefaced on maintaining a very low possum population after the conclusion of OSPRI's possum control (the purposes of which is to eradicate Bovine TB in the area). The PCP delivery model will draw on experience from successful post-TB possum control projects currently being run by other regional councils. PCP planning is well underway, and we are working well with ORC staff and other members of the working group. A collaborative approach to the operational delivery will be necessary, and ORC will be essential as part of the management and/or governance teams. ORC resources will also be required for some operational delivery and Biosecurity Act enforcement. ORC involvement with the West harbour / Mt Cargill site will be critical if it is to be used as a model for developing other post-TB PCP's in Otago. For the plan to be successful it is critical to "have boots on the ground" immediately on the completion of the TB work. OSPRI's possum control in the area is currently planned to be completed progressively throughout the 2020/21 year, so ideally the PCP will be underway by late 2020. Given the above, LCT is disappointed with the Biosecurity Operational Plan as a whole and especially in relation to Site Led Programmes. We would like to speak to Council about the importance of this programme, and the need to more adequately resource this programme. The Operational Plan is not reflective of the ambition outlined in the RPMP and the Biosecurity Strategy, and this is disappointing.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 72

Login: Anonymous

Email: n/a

Responded At: Apr 24, 2020 17:08:14 pm

Last Seen: Apr 24, 2020 17:08:14 pm

IP Address: n/a

Q1. **Name/organisation**

Generation Zero

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?**

Q8. **Phone number**

not answered

Q9. **Email**

Q10. What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)

1 Freshwater Freshwater sources and uses in Otago are greatly varied. Almost a quarter of New Zealand's total lake surface area is in Otago – the Western Otago lakes are valued for recreational opportunities. Annual rainfall differs greatly across the region from less than 400mm near Alexander to 2400mm at the Clutha headwaters. Otago generates 17% of New Zealand's hydroelectricity. Given the breadth of this variation in both sources and uses, Generation Zero supports proactive and progressive action on freshwater management. 1.1 We support the Otago Regional Council's proposal for collaborative community partnerships – especially in supplying scientific knowledge to on-the-ground groups. Getting this part of the plan right is perhaps the most important measure to be implemented moving forward. One especially important place for Otago Regional Council to begin is regarding treaty partnerships with local iwi and hapū – including, Kai Tahu, Kati Mamoe and Waitaha. 1.2 The case study of the Columbia River basin reveals an effective partnership for building indigenous capacity for co-management of natural resources. This project brought together four first-nation tribes who were using the same water catchment for resource-gathering, and therefore were the first to see (and respond to) ecological development or issues. Local government provided scientific and professional training to the first-nations groups, thereby incorporating on-the-ground knowledge with indigenous knowledge in the management process. This allowed government and first-nation groups to pool resources, and build capacity and capability in freshwater management at a regional level. By collaborating and drawing from the same freshwater pool of resources, they were able to develop in-house expertise over time and support their own water-quality monitoring systems. Empowering iwi (and community groups) with scientific knowledge and practice will greatly reduce the burden on skilled workers in New Zealand, who are in short supply and frequently overcommitted. Addressing iwi right in freshwater management is a challenging task, but too important not to do well. Generation Zero has seen Kai Tahu treated more as a stakeholder than a partner – and when viewed as one interested party among many, their voice is diminished. 1.3 By supplying community groups who regularly use or monitor water catchments with scientific resources and knowledge, there is the co-benefit of gathering information on the unique factors influencing the environmental health of each site. While Generation Zero supports the proposed solar powered monitoring buoys due to its information gathering on ongoing ecological processes and longer-term changes, it is important to note that there is no single or 'minimums-based' solution to maintaining freshwater management. This is due to the unique ecology, water uses, geology and climate affecting each catchment. This means Iwi, community groups, and local authorities will need to oversee the planning processes at each catchment to make sure the proposed management correlates with the issues presented at each site. 1.4 One of the biggest challenges facing freshwater management in the Otago region is run-off from agriculture and forestry taking place near catchments. An example of this is the Owaka river, which runs through the most intensive farming area in the region and 70% of the catchment is under pasture. By working directly with farmers and farming communities (especially by providing scientific training and resources) Generation Zero believes there is a fantastic opportunity to address knowledge gaps and improve catchment water quality in agricultural areas. An example of this can be seen in Motueka, where the effects of increasing farming activity resulted in dangerous levels of E. Coli in the Sherry river catchment. Farmers and scientists worked together to test the water, targeting the areas where more run-off was entering the river catchment. By identifying cattle creek-crossing as a key culprit of contamination, bridges were repurposed or built for moving stock, reducing E. Coli levels by 50 per cent. The success of the project resulted in the forming of the Sherry Catchment group, which works with individual farmers for specific plans for each property. This would be a fantastic option for farmers in the Otago region, where farmers face the difficulty of maintaining fences to keep stock from accessing waterways.

Q11. What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)

2 Climate change Generation Zero believes that the ORC must provide specific goal orientated approaches for mitigating and managing the effects of climate change. Although we agree that assessing the impacts of climate change in the Otago region is a good starting point, specified climate action plans and inventories must be introduced. These climate action plans must present comprehensive actions by Otago to lower their carbon footprints and pursue long-term social, economic and environmental agendas. The solutions Generation Zero have put forward in this section demonstrate the role that greenhouse gas emissions reduction targets can have in regions overall development. 2.1 The Queenstown District is New Zealand's fastest growing area. When accommodating for an increasing population Generation Zero believes green growth

is an important opportunity. Specifically, Guangzhou, China planned for increasing population and rising demand for energy with a multi-sector, low-carbon plan for green growth, targeting industry, infrastructure and buildings. With energy consumption already high and demand increasing in urban and industrial areas, the Otago region can aim to reduce its carbon emissions and therefore manage the impacts of climate change, while maintaining growth by focusing on industrial planning, architecture (including improved planning and management of the Lower Clutha Flood protection scheme), government agencies and residential communities. The co-benefits of this plan provide environmental, social, economic and health related advantages. For instance, the plan promotes environmental improvements by strengthening forest carbon sequestration with afforestation (benefiting Otago's biodiversity). In constructing new rail transits within the Otago region and improving the bus networks, the plan also reduces the reliability of personal vehicles. Due to the plan's initiatives, Guangzhou's air quality standard was met 85% of days in 2015, an increase of 8% compared to the prior year. Air quality is a major issue central Otago continues to face, highlighting the strong advantages of implementing low carbon, green growth initiatives.

2.2 A second climate change initiative that provided considerable co-benefits was Singapore's Climate Action Plan, providing the framework for both mitigating and adapting to climate change impacts. As a dense and low-lying city state (similar to Otago's coastal settlements such as Dunedin), Singapore understood that they must be conscious of its energy consumption as it is vulnerable to the impacts of climate change. The Climate Change Plan allowed Singapore to use its density to its advantage, by ensuring building efficiency and low-carbon transport while at the same time also prioritizing adaptive measures. Results have already shown that the plan's dual focus on mitigation and adaptation is displaying impressive results, reducing the city's environmental footprint and increasing its resilience to climate change, something which would greatly benefit the Otago region. Under the plan, the use of solar power will increase, residents will have access to new career opportunities with the creation of jobs in green industries, the green economy is expected to rise by boosting GDP and the construction of bike paths will enable an active commuting option for residents contributing to general health and wellbeing of the Otago region.

2.3 Extreme rainy days are likely to become more frequent in Otago by 2090 under the highest emissions scenario. Specifically, seasonal projections show winter rainfall increasing by 4-10% in Dunedin and 4-27% in Queenstown by 2090. ORC therefore needs to partner with the national government to not only improve the management of its flood protection schemes but to potentially also implement projects to increase the flow capacity of flood prone rivers responsible for local flooding with Otago (Including lake Wakatipu and Wanaka).

2.4 Reducing emissions in line with the Paris agreement would mean that the worst climate scenarios won't come to pass, but even with limited global warming sea level rise and coastal flooding is bound to worsen. Particularly, NZ tide records estimate an average rise in relative mean sea level of 1.7 mm per year throughout the 20th century. Generation Zero therefore supports the ORC's plan to assess Otago coastlines and what this means for low-lying areas. Although again, we believe specific projects must be put in place. In the case of Hong Kong, the drainage services department invested \$2.7 billion in flood defence infrastructure, including underground storage tanks, river widening and large drainage tunnels in dealing with sea level rise. This may be an opportunity that shows considerable benefits for many of Otago's coastline townships alongside managing and improving engineered coastal responses to climate change.

2.5 Generation Zero believes the ORC needs to work with both the Ministry for Environment and the Climate Change Commission to develop adaptation plans for Otago's coastal areas in relation to the effects of climate change. For instance, in areas such as Dunedin, current management schemes in dealing with the impact of coastlines are implementing coastal hazard responses such as the St Clair seawall. Engineered responses to coastal hazards ultimately affect longshore sediment transport, creating what is known as the 'end effect erosion', where an eddy pool of currents erode a section of the beach adjacent to the wall. Figure 1: St Clair seawall: red line outlining the beaches equilibrium state. Soft beaches (St Clair) adopt an equilibrium shape when adjacent to a headland (the seawater pool area at St Clair). Equilibrium state is where no more erosion occurs as the shoreline is everywhere in line with the incoming waves. A beach that has been unable to reach this state will continue to erode until it can do so. This explains why St Clair has encountered issues since its first occupation in the 1800's. Figure 2: St Clair seawall: yellow lines outlining the implementation of a breakwater instead. Instead, a change can be made by pushing out the headland into the sea by a way of breakwater. Light yellow lines indicate where the edge of the beach would be as a result of the breakwater (darker yellow). This results in increased beach width with the sea wall being sheltered from permanent sand. Although this may present greater coastal benefits than otherwise shown by the current seawall initiative, the implementation of breakwaters and other engineered responses may simply slow down the effect of erosion. It is for this reason that Generation Zero believes the ORC must collaborate with the Ministry of Environment and the Climate Change Commission in adopting initiatives to better prepare coastal communities in relation to the impacts of climate change on water inundation.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

3 Urban development 3.1 Central Otago is well known for some of the worst air pollution in NZ. Strengthening the existing 'clean heat, clean air' subsidy program is therefore of great importance. This saw drastic changes, however, was operated on a 'first in first served' basis due to the subsidy cap of \$120,000. Getting a larger GOVT subsidy to accommodate for more households will show considerable benefits in areas such as Alexandra and Clyde. Low-income households were also accounted for by paying little to no cost in improving their heating source (great benefit of the program).

3.2 Generation Zero supports the use of rates and parking charges to reduce bus fares. Encouraging modal shift to public transport will result in many positive benefits such as a reduction in transport poverty and mitigation of Dunedin's greenhouse gas emissions. It is important to ensure that all people in Dunedin are able to access affordable public transport to mitigate "the severe social consequences of transport poverty, not only for the people who are directly affected by it, but also for society as a whole". Many studies have shown that access to "public transport can reduce absolute poverty mainly by increasing economic efficiency. Decreasing costs and fares and promoting opportunities for the marginalized people of the society" would have a positive impact on many households in Dunedin. Reducing bus fares also reduces transport-related social exclusion: "the process by which people are prevented from participating in the economic, political and social life of the community because of reduced accessibility to opportunities, services and social networks, due in whole or in part to insufficient mobility in a society and an environment built around the assumption of high mobility."

3.4 Recycling funds raised through parking revenue will also encourage modal shift -- a key best practice objective in urban and transport planning. This method of increasing public transport ridership has proven effective in Queenstown where patronage increased 64% in 2017/18 and 182% in 2018/2019, compared to Dunedin's 8% increase. Mode shift such as that experienced in Queenstown has a number of benefits including improved public health and safety, economic.

3.5 Generation Zero supports the DCC and ORC collaborating to reduce the cost of public transportation through the introduction of flat fares and fare capping.

3.6 Generation Zero supports the DCC lobbying the NZTA to change the current farebox recovery ratio. The Farebox Recovery Ratio (FRR) is not designed for growth. If a council wants to grow patronage and their public transport network, this increases costs, 50% of which must be covered by fares. This is counterproductive as increased fares make Public Transport less accessible despite any improvements to the network. The Farebox Recovery Ratio block Dunedin from meeting its public transport potential.

3.7 Ensuring bus services services are being maximised and coming up with effective pricing strategies is a must for the future of Dunedin. For instance, implementing incentives so people are using public transport as an alternative to private vehicles will be critical in reducing emissions created from transport in Dunedin.

3.8 The following measures Generation Zero recommends (reliant on the removal of the Farebox Recovery Policy) to incentivise public transport include:

- Daily Fare Caps
- Tertiary Student Discounts
- Increasing the free transfer time period to 1 hour
- Free travel for children under 12 and everyday \$0.99 child fares for those who are 12 to 15 years old
- Free weekends for families travelling together
- Weekend and Six-Hour unlimited pass add-ons for ORBUS Cards
- Introducing a Disposable paper-based ORBUS Card for Visitors
- Providing \$6 credit on all new ORBUS Cards

Case Studies: Vancouver, British Columbia A publicly-funded study commissioned by Vancouver City Council, at the School of Regional and Community Planning within the University of British Columbia recommended a variety of measures to make fare collection more efficient and cost-effective while addressing distinct income levels among the end users of the public transport system in Vancouver in the summer of 2016.² These measures included a minimum of two zones for which a fare is paid, the introduction of differential pricing for peak and off-peak hours, the introduction of an extra dollar surcharge on every individual fare collected for the busiest zone in the city during peak hours, and the introduction of a super pass tier to guarantee unlimited ridership across all zones on evenings and weekends (as well as unlimited bike-sharing privileges). Additionally, the study recommended the adoption of decreasing cost per kilometre and a maximum fare cap of about \$5 per day for regular (non-pass) fare users, as well as a rebate system to return a dollar or two to passholders who travelled outside of peak hours, the standardisation of cost to the passenger's wallet across all concession monthly passes. Alternatively, the study proposed free travel for certain times of day for regular fares and passholders, and a 'select your perk' programme for superpass tier holders where additional family members and group members could be added onto one's pass for no extra fee during evenings and weekends. The conclusion emphasised that messaging was most important to clarify to the public why the adoption of frequent public transport use would contribute to progressive mobility outcomes, including minimisation of the city's carbon footprint. Key opportunities:

- Minimum zone fares
- Peak and off-peak pricing
- Surcharge pricing for busiest zones during peak
- Introduction of a super-pass tier for

unlimited travel • Decrease cost per kilometre • Maximum fare cap per day • Off peak rebates • Free travel periods • ‘Select your perk’ programme for super-pass tier holders • Rolling out messaging to win over the hearts and minds of the public Toronto, Ontario Chin, Lai and Chow published the first case study on fare pricing policy specific to Toronto in the Transportation Research Record, funded by the Canada Research Chairs. The study confirms that a simple distance-based formula will be inadequate to provide for all subsections of Toronto’s population. The authors recommend further study of congestion-dependent pricing and schedule-based dynamic pricing when calculating fares. The authors contend that fixing fares across zones to around \$2 and considering some population sections for a distance-based add-on of about 6 cents per kilometre as a reasonable marker for future consideration by the Toronto Transit Commission and Metrolinx, the provincial agency which operates the city’s automated fare payment system, Presto. Key opportunities • Looking beyond a distance-based formula • Exploring congestion-dependent pricing and schedule-based dynamic pricing • Fixed fare pricing with some distance-based add-ons

3.6 The overall accessibility of the Dunedin City is reliant on effective and enjoyable public transport. The implementation of cheaper fares and other incentives is likely to encourage Dunedinites to utilise the public transport options currently available to them. As the city’s population grows, which is likely due to the hospital rebuild, greater public transport will be necessary in order to decrease urban congestion on the roads. These incentives are also incredibly valuable when it comes to the ORC looking towards a Carbon Zero future. Decreasing the number of private vehicles on the road, and replacing them with buses is much more sustainable due to the lowering of the overall carbon footprint. This sustainability can only increase as we move to a green transport future in terms of electric buses or the tram services.

3.7 Generation Zero also recommends the ORC replacing the current bus fleet with electric buses by the end of 2021.

3.8 Generation Zero supports the ORC transferring public transport governance to the DCC> For more information refer to the Public Transport Governance report.

Q13. What are your thoughts on 'Looking after our plants and wildlife'? (See more about this topic by clicking here)

4 Biodiversity & biosecurity Conserving biodiversity is not only focused on protecting native species and habitats but is also about maintaining nature's capacity to deliver the goods and services that we all depend on, and whose loss comes at a high price. Generation Zero therefore agrees that addressing the level and balance of resources to be effective in both biodiversity and biosecurity in the future is of great importance for the Otago region. However, as mentioned in the ORC annual plan, spending on biodiversity is light. By increasing spending in this area and adopting specific innovative goals and objectives to control pest management in the region, ORC will see a rise in natural capital that is better managed sustainably for the benefit of future generations. Biodiversity policies implemented by the ORC must be integrated to sectoral policies and be taken into account in wider policy concerns. Efforts have previously been made at a national scale in the direction of incorporating biodiversity strategies as an integral part of Otago's approach for smart, inclusive and sustainable growth. These include the NZ biodiversity strategy 2000-2020 and the Predator Free 2050 initiative. The ORC biodiversity strategy should encompass and fully acknowledge the economic value of ecosystem services and the need to restore them for the benefit of the region's economy as well as its wellbeing.

4.1 Generation Zero agrees that maintaining and restoring ecosystems and their services is an important objective for the ORC to focus on. Healthy ecosystems provide a stream of goods and services fundamental to society, such as food, fibres, clean water, healthy soils and protection against floods and erosion. When accommodating for rising populations, concern arises surrounding degrading ecosystems, drastically reducing the ability to deliver such valuable services. This issue is further heightened by the fact that these services are mostly public goods, meaning their economic value is not recognised. The EU Biodiversity Strategy 2020 implemented a strategic framework which Generation Zero believes would hold substantial benefits to Otago's biodiversity and biosecurity. For instance, ORC should map and assess the state of ecosystems and their services to better access the economic value of such services and promote integration of these values. This integration can be done through developing a Green Infrastructure Strategy to promote the development of green infrastructure in Otago's urban and rural areas, including through incentives to encourage up-front investments in green infrastructure projects and the maintenance of ecosystems services. This can be done through improved partnerships and better targeted use of funding streams.

4.2 A second strategy is the possibility of increasing the contribution of agriculture and forestry into biodiversity. Specifically, improving the integration of biodiversity conservation into key policies for these sectors. Although efforts have previously been made to integrate biodiversity into the common agricultural policies, it is important to step up these efforts for greater integration throughout Otago. For instance, in the case of forestry, actions aimed to encourage forest holders to adopt forest management plans that integrate biodiversity measures and foster innovative mechanisms to finance the maintenance and restoration of ecosystem services that are generated by sustainably managed multifunctional forests must be undertaken. Generation Zero also believes particular attention should therefore be involved in engaging stakeholders in the delivery of this target.

4.3 When protecting Otago's biodiversity, combating invasive alien species is of great importance. So much so that the implementation of eco sanctuaries have been introduced to assist in the recovery of some of the region's almost extinct native species. In order for these initiatives to work outside the sanctuary the Otago region have adopted a number of schemes to manage this, including the Halo Project and Predator Free Peninsula (all aligning with the goals of Predator Free Dunedin, 2050). Although not all alien species are harmful, many can be invasive, spreading rapidly across the natural environment, displacing and out-competing native species. According to the Ministry of Environment climate change projections, warmer temperatures in the Otago region, particularly with milder winters, will increase the spread of pests and weeds. Generation Zero therefore agree with the ORC that injecting more resources into pest management as they rise to the challenge of implementing the new pest management plan is therefore a vital step for Otago. However, in eradicating pests it is fundamental for the ORC to ensure the appropriate habitat is available for these native/endangered species. If not, the process of pest management is somewhat useless. Through community education alongside the initiatives mentioned in sections 4.1 and 4.2 the ORC can successfully manage the region's biodiversity and biosecurity for the benefit of future generations.

Q14. Let us know what else is important to you, for our future

not answered



Respondent No: 73

Login: Anonymous

Email: n/a

Responded At: Apr 27, 2020 22:01:10 pm

Last Seen: Apr 27, 2020 22:01:10 pm

IP Address: n/a

Q1. **Name/organisation**

Raewyn van Gool

Q2. **Street number and street name**

Q3. **Town/city**

Q4. **Postcode**

Q5. **Email**

Q6. **Would you like to speak with ORC about your submission?**

Q7. **Would you prefer to be contacted by phone or email?** not answered

Q8. **Phone number** not answered

Q9. **Email** not answered

Q10. **What are your thoughts on 'Managing freshwater'?(See more about this topic by clicking here)**

Supportive of modest level funding for catchment groups. Any relationship between ORC and Catchment Groups needs to be such that catchment groups are clearly autonomous from ORC. Development of urban based catchment groups needs to be encouraged. At macro level, water quality needs to be at FMU level. There may be more than one catchment group within a FMU and if so, they all need to understand the desired outcome for the FMU, while also recognising the issues within their sub-catchment. No/limited work to be done on urban water quality????? With the EPA calling in the Omnibus plans, reductions should be able to be made in the budget for 2020/21 as ORC will no longer be in charge of the process, and therefore workstreams should be reduced accordingly. Given the situation with COVID-19 there needs to be a reassessment of both financial impacts and planning impacts due to changes required in the way ORC needs to interact within the business and with the public, and with regard to the potentially significantly changed regional economic fundamentals.

Q11. **What are your thoughts on 'Climate change - for a safe, resilient future'?(See more about this topic by clicking here)**

Climate Change should be a lower priority than Biodiversity and plants and wild life. i.e. continue with proposed flood protection/works/investigations. However as air quality appears to be so far down the list of ORC priorities that it hardly registers, then CO2 emissions should be treated the same way. Given the situation with COVID-19 there needs to be a reassessment of both financial impacts and planning impacts due to changes required in the way ORC needs to interact within the business and with the public, and with regard to the potentially significantly changed regional economic fundamentals.

Q12. What are your thoughts on 'Better urban environments'?(See more about this topic by clicking here)

Support protection of productive land. ORC needs to network with the likes of CODC, industry groups etc to share information such as economic analyses etc rather than re-invent the wheel re data where it already exists. Mapping biodiversity - results need to be ground truthed, where imaging is used to determine areas of biodiversity etc. Better urban environments: needs to consider the waste/recycling stream - seriously. Otago cannot claim to be clean and green (if that is it desire) based solely on the farming landscape, while the urban waste is far short of acceptable standards overseas. ORC and CODC need to be aligned in this. Landfills are one of the biggest toxic legacies we are leaving future generations. Given the situation with COVID-19 there needs to be a reassessment of both financial impacts and planning impacts due to changes required in the way ORC needs to interact within the business and with the public, and with regard to the potentially significantly changed regional economic fundamentals.

Q13. What are your thoughts on 'Looking after our plants and wildlife'?(See more about this topic by clicking here)

Possums need to be added to the list of pests. We are now seeing possums on our land for the first time in the 7.5years we have lived here. Given the situation with COVID-19 there needs to be a reassessment of both financial impacts and planning impacts due to changes required in the way ORC needs to interact within the business and with the public, and with regard to the potentially significantly changed regional economic fundamentals.

Q14. Let us know what else is important to you, for our future

SOE Reporting: Support using a FMU approach. Regional Planning & Strategy (incl. Urban Development Strategy): Given the situation with COVID-19 there needs to be a reassessment of both financial impacts and planning impacts due to changes required in the way ORC needs to interact within the business and with the public, and with regard to the potentially significantly changed regional economic fundamentals. Otago regional mayoral forum: COVID-19 has shown that meetings can be successfully held digitally, meetings should be held via Microsoft Team/Zoom etc. This would contribute to a lower cost than people having to travel etc. This entire plan needs to be revisited in light of the changed process due to Plans being called in and processes changed. Are all workstreams still valid? How do you justify a 75% increase in some consent fees from \$1000 to \$1750? This should split and increased over three years if there is legitimate justification for it. Given the situation with COVID-19 there needs to be a reassessment of both financial impacts and planning impacts due to changes required in the way ORC needs to interact within the business and with the public, and with regard to the potentially significantly changed regional economic fundamentals. There needs to be flexibility built in to the Proposed Plan to react to any fundamental changes in regional population centres and or economic situations, due to the extraordinary time we are now living in, due to impacts from COVID-19.

SUBMISSION for ORC Annual Plan 20/21

The Otago Regional Council faces complexities to make sound decisions under the RMA 1991, alongside the highly dynamic situation of Climate Change. ORC faces resistance from the public, when what is known through scientific research, threatens people's societal and cultural values. To quote Max Hastings (The New Zealand Project 2017) "What is needed instead is an appeal to values (grounded in factual accuracy), which 'can have a profound influence on people's motivation to engage with bigger-than-self problems' ".

ORC must move back to its role of stewardship, rather than moving the Council away and exposing the environment in Central Otago to what Kate Raworth (Donut Economics 2017) described as "rational economic man", a self-centred version of humanity at the heart of economic theory, HOMO ECONOMICUS. If we head towards the end of 2020, the POST-COVID era, continuing to imagine, conduct and justify ourselves as HOMO ECONOMICUS, "we stand little chance of meeting the human rights of all, within the means of our living planet". Raworth, Page 126, **Meeting Ourselves all over again**, "three images keep cropping up time and time again: humanity as a community..... depending on each other throughout the cycles of our lives. As sowers and reapers ... embedding us within the web of life, making clear that our societies co-evolve with the living world on which we depend. As acrobat ... exemplifying our skill of trusting, reciprocating and co-operating with each other to achieve things that none of us could do alone." According to Raworth, Rational Economic Man does not emerge from an historical image of humankind, but from an economic theory. "It is time to redraw ourselves as people who thrive by connecting with each other, and with this living home of ours (the environment) that is not ours alone".

Max Hastings, said something not dissimilar: "... to aim to make the values of care, community and creativity central in New Zealand politics..." --- chimes with what research says is important for action on environmental issues. The specific values of care, community and creativity are useful in this context, since action on the environment requires deep care for nature, an interest in the long-term survival of the human community, and creative policy solutions".

I submit that regardless of what it intended for the Proposed Annual Plan 20/21, Council's responsibility has to be to take a hard look at the role it has played in allowing the environment, including the biodiversity- of Central Otago to become critically degraded. This cannot continue.

COVID-19 is what happens when the natural world's needs are not respected by humankind—but to quote the Director of the Centre for Sustainability, University of Otago, "COVID-19 has nothing on what's coming".

30 years ago I swam with my sons in many of our Otago rivers and lakes and did not once get violently sick with water poisoning. Now I can look up the LAWA website to see if our rivers are safe for human use, but if it's rained since your water samples were taken, the results on the LAWA web page will be wrong. After rain, our rivers will most probably have too high levels of ecoli for us to safely kayak or swim. Our rivers will be unsafe for human use! NB: Water poisoning is worse than food poisoning.

The Otago Regional Council must reprioritize elements within its plan and strengthen its stewardship role in environmental protection: through funding, adequate staffing levels, robust ongoing scientific research, giving discretionary status to certain activities before granting consent, enforcement and compliance, and establishing a well-supported program for community involvement---to ensure that community values are being represented at every level. Values- and evidence-based action on climate change, freshwater management (including community involvement in restoration of wetland areas, and riparian plantings), mapping and protection of critically endangered flora and fauna, must be the focus from now on for Council.

Taranaki Regional Council has mapped all its waterways and has Council programmes for riparian planting. Environment Bay of Plenty was paying farmers to not dairy farm on certain land when here in Central Otago, our CODC was allowing not notified land use changes (from sheep and beef to dairy) to proceed and ORC remained silent. LINZ has been leasing out our mapped riverbed land to farmers (with useless fences so cows can stand in our Manuherikia River & pee and poo), again silence from ORC.

It is understood by many that this opportunity will not come again, given the climate change timeline.

A respectful integration of Maori world views into environmental policy may well provide powerful solutions to the crises facing us in the fields of climate change, water, and resource management.

Yours faithfully

Lynne Stewart

Respondent No: 75

Hi, I am writing this letter to prompt the councils and government to take action over our very precious camping life in New Zealand. We have lost our way with respect to the wonderful life style that we once had in the family camping holidays.

To put it simply the camp grounds are far too expensive for the general campers and particularly for larger families.

To some extent the camp grounds have in my opinion got a little greedy and appear to charge what they like as they often have a monopoly. However their overheads are very high and a lot of this is driven by the very high rates that are imposed on them by councils. Often the rates are extremely high as the land values are high being close to the sea etc.

We have seen a big change in the camping scene over the last 10 years with many camp grounds closing as they are simply not getting campers and an increase in "Freedom " camping. Freedom camping has increased because campers simply cannot afford to stay in camp grounds. I am a pensioner and I could spend all of my NZ superannuation on just the camp grounds and have no food.

A small number of camps have reduced their charges but up to a half over winter and now they are getting patronage.

Two strong recommendations from me :

1. Councils/Government review the rating system for campgrounds so that they pay minimum or no rates as a public service to the district.
2. Campground owners study the market and reduce their charges to a reasonable amount once rates have been reduced. If they cut their charges they would attract more people in to their camps. It is better to have people coming in at a reduced price than none at all.

I hope you will see this letter as a positive way forward for campers, towns and cities and campground owners. It is a good opportunity now to kick start the campgrounds as they are going to struggle big time with no overseas tourists and just now no campers at all.

Kind regards

John and Tina Peters

NZMCA members and Motorhome owners

MJS

24 April, 2020

Otago Regional Council

Consultation Document for the 2020-21 Annual Plan

Freepost 497

Private Bag 1954

Dunedin 9054

Dear Sir or Madam:

Feed back on Proposed 2020 21 Annual Plan.

Thank you for the opportunity to a say on our 2020 21 Annual Plan.

These are extraordinary times and Covid 19 has highlighted how fragile and connected we are. It has also revealed some telling short comings in our obsession and over reliance in monetary economy and the expense of the wider community and our life sustaining environmental economy.

Our current economy is working against people and the environment. They are not separate they are all part of a connected system collectively provisioning for the needs of the environment and people. Our biosphere and environment is under significant pressure from over extraction and pollution exceeding environmental limits. We seek certainty for our way life within the cycles and vagaries our natural world and yet we continue to put our environment under serious functional threat of collapse and still demand certainty?

We need social and ecological renewal within a systems thinking framework. We need to look to our Kiā tahu ma whenua and learn from them about kaitiaki. A kaitiaki is a guardian, and the process and practices of protecting and looking after the environment are referred to as kaitiakitanga.

Guardianship is our purpose, duty and responsibility.

While very fortunate as a self-employed consultant archaeologist through this lockdown period on a small parcel of rural land that we regeneratively grow and harvest from, we have observed some very special insights from our surrounding environment.

We have experienced

- Sustained quietness like never before.
- Visual clarity out into the landscape – seeing and experiencing things in landscape normally obscured and unseen before now.
- Bird song intensity and species never seen in our area before – Owl, fantail, brown creeper

- Meeting of locals for the first time that like us have been locals in the area for some time.
- Engaged and appreciated the natural environment and our gardens with refreshed insight and more respectful appreciation of its rhythms and changes.
- We have very fortunately needed little and our wants have been for little missing mostly engagement with our grandchildren.
- We have recognised the value, importance and sacrifice of our health and medical personnel along with the checkout and shelf stockists.
- We are seeing the importance and contribution of the income physical work side of the economy and the negative unproductive side of the rental economy.

In this time of challenge and uncertainty to our way of life, we have a step change opportunity, pause for reflection giving rise to reassessment of what are our real needs and wants are, so in this light, some new discussion and thinking on how we can do things differently. A renewal of ideas and whole of biosphere thinking around living within our environmental limits.

- Managing Freshwater
 - Our water ways are over allocated and our land use practises rural and urban are degrading catchments. We need research to understand and benchmark healthy ecological function of our creeks, streams, rivers, wetlands, lakes and estuaries. With monitoring and compliance to restore and retain health ecological function within ecological thresholds. We need broad community representative management and oversight of our rivers and waterways.
 - “Irrigated land has increased by 100% in only 15 years. It is now the single biggest water user in the country, accounting for nearly half of all water taken out of the ecosystem.”
 - Sediment in our water ways needs to be quantified and researched to understand how to keep it out of our water ways. It is one of the most toxic influences on macro invertebrate health in our water ways.
- Climate Change – for a safe, resilient, but not certain future.
 - We need to plan for community resilience and local supply chains. We need to look at land management – building shrub and bush cover in the uplands and gully catchments to capture, retain and slow flood events. Harvesting and increasing water yield. Increasing carbon sequestering and ecological restoration and biodiversity, soil health and function – ecological capital and servicing.
 - We need to research and understand what is the best resilient ecological system for withstanding and functioning in sustaining our natural capital and our life support system.
- Better urban environments
 - We need to recognise we have a carrying capacity and endless growth cannot be balanced with a finite environment. We need to identify limits and protect our life supporting soils and lands from inappropriate urban sprawl. Our soils need to be protected from prescription box chemical input farming. We need to be researching and adopting regenerative land use practises to sustain and enhance the life provisioning capacity of living soils.

- We need to return to funding public good science and research, free of vested and captured interests. Guardianship is not about ownership and control. It is about community stewardship, kaitiakitaka of our environment and society.
- Revisit urban design around passive energy networks and public transport. Look at sustainable energy efficient smaller building design, reducing carbon and ecological footprint.
- Looking after our biodiversity
 - We need baseline inventories of biodiversity especially in our most modified catchments. Otago has some of the highest levels of endemism in New Zealand but tragically has also some of the highest extinction rates through extensive modification of rare and endangered ecological systems.
 - Our unique dryland systems are mostly in the valley floors and the poor control of off boundary effects from irrigation runoff and over spray; so called pasture improvement are critically modifying small often lineal dryland terraces adjoining intensified land use without due recognition of the adjoining ecological values. Resulting from an absence of any baseline ecological knowledge, lacking because of wilful blindness through the absence of any biodiversity inventory and subsequent monitoring.
 - No wetlands are protected on private land and most of ORC's significant wetlands are either on DOC land or ephemeral dryland systems. Our rules regarding wetland protection boarder on negligent.

We need to partner and engage with Kāi Tahu in understanding their values, and interests and recognising them and kaitiakitaka.

Through the wellbeing of our environment we will thrive. We are guardians for our future generations. ORC needs to lead with the community in new discussion and policy development around repurposing, social and ecological renewal.

Yours sincerely,

Matthew Sole

SUBMISSION for ORC Annual Plan 20/21

By Evelyn Skinner,

(This submission replaces any material which may have come to the council via the online survey platform which had not been completed by me.)

Thank you for the opportunity to make this submission. I would like to acknowledge the many authors who have provided me with the material needed, for in thinking of possible solutions in this POST-COVID world, we must realise “we are at the beginning of an era. It will be our burden and our opportunity to be pioneers.” (Faris, I.E. Medical Officer of Health, Otago-Southland, 1918-1919)

Far from considering the Otago Regional Council “intellectually bankrupt”, as Councillor Michael Laws did in July 2018, I would rather acknowledge the complexities faced by the present Council, the paucity of evidence upon which to make sound decisions under the RMA 1991, and alongside the highly dynamic situation of Climate Change, together with the resistance Council faces from the public, when what is known through scientific research, threatens people’s societal and cultural values. To quote Max Hastings (The New Zealand Project 2017) “What is needed instead is an appeal to values (grounded in factual accuracy), which ‘can have a profound influence on people’s motivation to engage with bigger-than-self problems’ ”.

Over the last 30 years, by moving away from its role of stewardship, the Council has exposed the environment in Central Otago to what Kate Raworth (Donut Economics 2017) described as “rational economic man”, a self-centred version of humanity at the heart of economic theory, HOMO ECONOMICUS. Solitary, calculating, competing and insatiable-this is the dominant model we continue to allow to influence our society. If we head towards the end of 2020, the POST-COVID era, continuing to imagine, conduct and justify ourselves as HOMO ECONOMICUS, “we stand little chance of meeting the human rights of all, within the means of our living planet”. Kate Raworth, an economist, might have been suspected of having gazed into a crystal ball, given what she wrote Page 126, in the section entitled **Meeting Ourselves all over again**, “three images keep cropping up time and time again: humanity as a community.....

depending on each other throughout the cycles of our lives. As sowers and reapers.....embedding us within the web of life, making clear that our societies co-evolve with the living world on which we depend. As acrobats.....exemplifying our skill of trusting, reciprocating and co-operating with each other to achieve things that none of us could do alone.” According to Raworth, Rational Economic Man does not emerge from an historical image of humankind, but from an economic theory. “It is time to redraw ourselves as people who thrive by connecting with each other, and with this living home of ours (the environment) that is not ours alone”.

Max Hastings, writing with New Zealand specifically in mind, said something not dissimilar: “.....to aim to make the values of care, community and creativity central in New Zealand politics---- chimes with what research says is important for action on environmental issues. The specific values of care, community and creativity are useful in this context, since action on the environment requires deep care for nature, an interest in the long-term survival of the human community, and creative policy solutions”.

I submit that regardless of what it intended for the Proposed Annual Plan 20/21, Council’s responsibility has to be to take a hard look at the role it has played in allowing the environment- including the biodiversity- of Central Otago to become critically degraded.

COVID-19 is what happens when the natural world’s needs are not respected by humankind—but to quote the Director of the Centre for Sustainability, University of Otago, “COVID-19 has nothing on what’s coming”.

It behoves the Council to utilize this opportunity, to reprioritize elements within the plan, and to strengthen its stewardship role in environmental protection: through funding, adequate staffing levels, robust ongoing scientific research, ascribing a discretionary status to certain activities before granting consent, enforcement and compliance, and establishing a well-supported program for community involvement---to ensure that community values are being represented at every level. Values- and evidence-based action on climate change, freshwater management (including community involvement in restoration of wetland areas, and riparian plantings), mapping and protection of critically endangered flora and fauna, must be the focus from now on for Council.

It is understood by many that this opportunity will not come again, given the climate change timeline.

In no small way, a respectful integration of Maori world views into environmental policy may well provide powerful solutions to the crises facing us in the fields of climate change, water, and resource management.

As a region, it will be our burden, and our opportunity to become pioneers.
Thankyou.

Respondent No: 78

Otago Regional Council,
70 Stafford, St
Dunedin. 9016

5/4/2020

Otago Regional Council Annual Plan Submission

Chairperson HOBBS, Marion, LAWS, Michael, HOPE (NEE KNOWLER), Carmen Felicity, WILSON, Kate, MALCOLM, Kevin, FORBES, Alexa, KELLIHER, Gary, CALVERT Hilary, DEAKER Michael, NOONE Andrew, ROBERTSON Gretchen and SCOTT Bryan.

1 My first submission is for the ORC to establish a viable plan to rid Lake Dunstan and tributaries of the unnecessary abundance of lake weed.

Previously the BOP Regional Council have attempted mechanical harvesting in Lake Rotorua.

This information is readily available to the ORC,

Please investigate this option including what nutrients are contained within the weeds and whether they could be on-used for other purposes like animal and/or poultry food, a possible fertiliser et al.

2 My second submission is for the water quality entering Lake Dunstan from both sources to be monitored and the results posted on your website and subscribable Facebook groups like Cromwell Business Network.

3 My third submission is to facilitate meetings within the community at night to enthuse/educate et al on 1 & 2 above as it is a localised problem that should and can be addressed by the residents of Cromwell and surrounding areas.

4 Please put a total of \$6,000,000 in your Annual Draft plan to provide for the above described duties of ORC.

Kindly acknowledge this emailed submission Marion, and yes, I do want to be heard in support of my submission.

Regards

Gordon J Dickson AAMINZ, MNZIQS & Co-Chair NCOMONZ

23rd April 2020

Otago Regional Council : Annual Plan 2020/2021

The Otago Chamber of Commerce (the Chamber) welcomes the opportunity to provide a submission on the Otago Regional Councils 2020 Annual Plan.

The Chamber has made submissions on a number of issues relating to Otago Regional Council, and been involved in discussions with the Council. We thank you for your open dialogue with us. We look forward to supporting and working with the Otago Regional Council and share its intent to expand and strengthen our local economy. The Chamber also believes it is important that as the Council in preparing the 10 years plan focuses on the future of the region and addresses the challenges remains mindful of matters such as the impact of population growth and climate change, resource management the environment and significant activities.

We appreciate the time, effort and thought that has gone into the consultation plan which was confirmed and socialised before the impacts of Covid-19 hit our communities.

We are currently in unprecedented times. Many parts of society, with just cause, are crying out for assistance. The financial and social impact will be significant and will have a long-lasting impact on us and our economy. The Board of the Otago Chamber of Commerce also believes that it is an opportunity for Local Government and local businesses to work together to get better outcomes for the region and its people.

1 Proposed Rating Change:

Given the significance of the current financial situation on people and business, there is a need to re consider alternative options around rates' increase. This includes deferment, using reserves, increasing debt, and selling non-core assets or non-strategic assets to fund business as usual activities. The current environment is already challenging enough for people and business and this will add significantly to their stress and financial burden.

The question then becomes – 'How can we do all of this and still have a zero or minimal percent rates increase?' Council has three main options:

- **To rely on the balance sheet of Council.**
- **Sell down non-core or non-strategic assets.**

- **Review what is essential and the way that we are delivering services.** Unfortunately, this process will take time and would not have the impact required in the short term. It could also slow the recovery if it is not well thought through.

As per our previous conversations, we would encourage the Council to reconsider their priorities given that the environment we are currently in is significantly different to when the plan was put together,

We support the Council's application to the "shovel ready projects" as requested by Central Government. We support and encourage the Chair, Councillors and CEO to continue to advocate strongly for the projects identified in our application.

Equally there is the opportunity to re prioritise current Council plans to grow the economy, keep people employed and provide certainty to **business without leading to further business disruption or loss of productivity at this essential recovery time for business re-engagement.**

What can Local Government do to make a difference to the Otago business community?

- **To continue to spend during, and more importantly after, the crisis.** Central Government has provided short-term relief for many business owners with the wage subsidy scheme. However, when this subsidy finishes the real impact will start to be felt by the business community.
- **To continue to invest in the infrastructure of the region and our community.** We do not want to see the halting of projects across the Region. This is an opportune time to fast track new projects that will add value to the Region in the longer term.
- **The spending, and any additional spending, must be adding value to the community and the region.** We still need to ensure that ratepayers are getting good value for money.
- **To reprioritise your existing budgets.** It would also be an opportune time to look at other activities and determine if they are required as they are, or if they can be done or funded differently.
- We are supporting a zero percent rates increase.

However, within these provisos:

- Need to ensure that Otago Regional Council spends with an eye to minimising further disruption to the businesses that are hurting, particularly retail.
- Continue to work regionally with other Councils to share potential projects and increase productivity outcomes in project leadership and management.
- A need for a Regional Economic Recovery plan working with business

- We would encourage a continued focus on wellbeing. There is an opportunity to play a significant role in supporting emotional, financial and physical safety of the regions people during these turbulent times.

Given the success of the 'Buy Local' campaign, we would encourage the Otago Regional Council to also support this through their procurement processes, both through altering settings to favour local procurement, and also in its decision making for day to day purchases, on consultants and on project work allocation.

While the current situation may feel like we are in the eye of the storm and that there is no clear way forward, we am hoping that as a Region we can all work better together and be able to look back with pride in 18 months and say that we did the best we could for our community and businesses.

The Chamber submission is made in the positive spirit of continuing a partnership with the Otago Regional Council that supports and encourages business friendly innovation and regeneration for the benefit of all Otago residents. It is submitted on the basis that it provides feedback and the opportunity to further engage with the Council on a number of issues.

We are committed to working alongside the Council to achieve our shared objectives of attracting and encouraging the development of business opportunities in Otago. During these unprecedented times we are committed to working together with Council on what will be a long and hard recovery from the short and long-term ramifications of Covid-19. We share the passion and vision of Council of 'a healthy environment, a connected, engaged and proud community, a strong economy and a resilient region'.

We are both 'working with our communities, and everything we do is for the future of Otago.'

Respondent No: 80

Submission to ORC Annual Plan 2020-2021



**Orokonui Ecosanctuary's governing body
The Otago Natural History Trust**

Support for ORC's Biodiversity Strategy

- The ORC's new Biodiversity Strategy provides **inspirational leadership** for the many diverse and poorly-coordinated community initiatives in the region.
- The **Regional Biodiversity Liaison Group** is a crucial first step to bring together the many independent community-led initiatives in the region. These are typically limited in geographic focus and/or specific function (predator control, habitat, education ...). **The RBLG is needed now**
- A **biodiversity coordinator** will improve biodiversity outcomes by facilitating closer coordination and collaboration between groups. **This too is needed now.**
- A key task for the RBLG and coordinator will be to develop (special) objectives and strategies for biodiversity restoration over the next 10-20 years. **Regional Biodiversity Forums** will give communities ownership of these future plans.
- ORC is well placed to foster and support **collaborative projects and partnerships** between groups. The **Orokonui to the Octagon** project is an example.
- **Research** to guide biodiversity restoration **must cover the entire range of relevant phenomena**: not just predator management but also restoration of appropriate habitat, and requirements for species recovery.

Support for Wildlands' Strategies for Biodiversity Recovery

- We endorse the Report's recommendations for **ORC to play an active role** in leading community efforts at biodiversity recovery. We believe the Council is uniquely well placed to **create partnerships** with and between the many groups now struggling to make their best contribution to biodiversity recovery.
- In particular, we endorse a role for ORC to use **Regional Parks** to foster biodiversity recovery at landscape scale. This must include more than predator control and encompass habitat restoration and indigenous species re-introductions. Our ambition is to build a **Sanctuary to the City Corridor** (Orokonui to the Octagon) and a regional park could play a key role in making this happen.
- We endorse the use of targets to assess progress but urge that targets be set not just for predator numbers – these are just a means to an end. **Targets for biodiversity recovery** are the ones we must meet.
- We endorse the importance of **baseline and ongoing monitoring** to track progress; again, this must involve more than predator controls and **include biodiversity outcomes** too. The same is true of planning – we need **plans for biodiversity recovery** not just predator control.
- We agree that **research must be mobilized** to ensure a sound basis in science and accumulated Maturanga. Orokonui has a long tradition of research into the restoration of indigenous species of fauna and flora. We are also initiating research into the dispersal of indigenous species (kaka) beyond the sanctuary – an essential step in biodiversity recovery beyond the fence. The research agenda must include **research into the mechanisms of biodiversity restoration** (nesting success, genetic diversity, dispersal patterns, risk analysis)

Orokonui is a key partner in Council's Biodiversity Strategy

- **Orokonui plays a literally central role** in helping the Council meet its objectives to
 - ✚ “maintain or enhance ... indigenous biological diversity ... [and] areas of predominantly indigenous vegetation, ... [and] habitats of indigenous species” (Regional Policy Statement 3.1.9)
 - ✚ “protecting or restoring habitat for indigenous species, ... [and] regenerating indigenous species, ... [and] improving the health and resilience of ecosystems supporting indigenous biological diversity” (RPS 3.1.12)
- Orokonui is literally central to these aspirations because **it is the source** from which birds and other native species will return to the region that have not been seen for a century or more (Biodiversity Plan Objectives 1 and 2 – **see annex**).
- And because it is the most powerful instrument in the region: to **educate** people on the importance of biodiversity restoration; to **experience** the peace and beauty of an ecology that once was here and could be again; and to **confront** them with the realisation of what has been lost. As such, Orokonui makes a uniquely strong contribution to Biodiversity Plan Objective 3: *making people aware and proud of Otago's biodiversity*.
- The unique ecology within the sanctuary also *adds value to the regional economy* (Objective 4), attracting nearly 10,000 visitors to Dunedin every year, half from New Zealand, half international.
- **Orokonui has been the leader** in promoting the cause of biodiversity recovery in Otago – and beyond. **It has inspired** many other community-based conservation groups and the ambitious Predator Free Dunedin partnership (which includes Orokonui's governing body, the Otago Natural History Trust)
- Orokonui has a 10-year proven track record of delivering an integrated programme of conservation, advocacy, volunteer recruitment and training, education and research that has powered up investment from central government 8-fold. **Orokonui is unique for spanning the entire range programmes required for biodiversity restoration. In its second decade, Orokonui has ambitious plans to extend these programmes beyond the fence and into the Dunedin region.**
- The **Orokonui Knowledge Group brings together academic researchers and practitioners** to guide the many years of research done at the sanctuary, **monitoring** progress in species reintroductions, **studying** the processes of population growth and dispersal.

The Orokonui Trust (ONHT) is excited at the new phase of regional biodiversity recovery that is just beginning. We believe we bring powerful resources and expertise to support Council's Biodiversity Recovery Strategy and we look forward to playing an active role as a partner in Council's plans.

Orokonui needs help

Orokonui generates nearly all its own funding

These substantial contributions to the region now cost ratepayers next-to-nothing. In the year ending March 2019 consolidated revenues for the sanctuary and the Orokonui Foundation totaled \$1.16 million. These substantial revenues have been more than exhausted by expenditures until just the last two years, resulting in accumulated liabilities of deferred maintenance. The Trust gratefully acknowledges that the sanctuary owes its very existence to the Council's support in the initial establishment of the sanctuary over a decade ago, and is grateful for the generous support of the Department of Conservation over its first decade of life. The latter has been phased out since 2016. Orokonui is now effectively self-funding.

Orokonui is facing significant financial demands in the years ahead

This submission is written in the middle of the Covid19 lockdown. The sanctuary is closed to visitors that provide the major source of our revenues. We are working hard to come through this crisis with an organization that can resume our contribution to Biodiversity recovery in the region. At the moment we hope to be successful in this effort.

But in the longer term, we are facing large scale demands to re-invest in the physical fabric of the sanctuary that will be beyond our capacity to finance.

1. The Trust has just received a report on **the fence and perimeter road** around the sanctuary from Mr John Cox, a consulting engineer/hydrologist (**attached**). The ability of the perimeter to protect the vulnerable species inside the sanctuary is absolutely vital. Orokonui has experienced the damage that can result when stoats got into the sanctuary and eradicated a population of tieke/saddleback. A significant invasion by predators into the predator-free area surrounded by the fence has the potential to be catastrophic, doing extensive damage to populations of native bird and lizard species that have been built up over the past 12 years. Costs of re-establishing these populations would run into many hundreds of thousands of dollars. Preliminary estimates of the cost of remediating three areas of significant risk **total \$336,000, an estimate that is likely to rise.**



2. A Strategic Asset Management Plan has been prepared for the sanctuary by Murray Gray, Strategic Asset Manger at the University of Otago. This identifies the costs required to **sustain the sanctuary's current asset base** at designed levels of functionality. This is estimated to require **\$1.6 million** over the next 20 years.
3. Once the perimeter of the sanctuary is strengthened to the best extent possible, the Trust also has ambitions to build a **second building** to allow expansion of its very successful education programmes. Designs for a 340sq.m. building have been completed by Tim Heath. No costings have yet been done for the building but it is likely to be in 7 digits.

We hope that ORC will play an important part in helping us meet these demands. **Improving the security of the fence will be our first priority and we hope that the government programme to finance post-covid recovery of construction with 'shovel ready' projects can be used to do this.**

I am happy to discuss our submission further if requested
Colin Campbell-Hunt, Chair Otago Natural History Trust

Orokonui's Contributions to ORC's Biodiversity Strategy

Outcome 1 All indigenous species and ecosystems are maintained	Orokonui's contributions
Indigenous species are not at significant risk from pests	<ul style="list-style-type: none"> • Fenced sanctuaries are currently the best way to protect NZ's indigenous species on the mainland • Making a powerful contribution to reversing the decline to extinction of many indigenous threatened species • Species not easily seen elsewhere include kiwi, kaka, takahe, tuatara, robin, Otago jewelled gecko, green skink, Otago skink, rifleman, fern bird and 13 rare plant species. • Orokonui will always offer the most secure habitat for indigenous species. Some will never be safe outside the fence. • Orokonui protects the regeneration of a coastal Otago ecology for decades and centuries to come
Potential impacts from climate change are understood and prepared for	<ul style="list-style-type: none"> • The 9km fence is critical to the sanctuary's mission. Risk of wash outs from extreme storms is being assessed and investment will be needed to ensure sustainable security
Habitat fragmentation is minimised and ecological corridors are maintained or enhanced	<ul style="list-style-type: none"> • Orokonui will be the secure staging post for re-introduction of native species into corridors being created by Predator Free Dunedin • 307 ha of a coastal Otago multi-species forest ecology that is kept free of all introduced mammals and predators • Establishing a corridor "Orokonui to the Octagon" is a major objective of our Strategy to 2030.
The extent and life-supporting capacity of habitat that supports indigenous species is maintained	<ul style="list-style-type: none"> • "Take Orokonui Home" a major initiative in Orokonui Strategy to 2030 targeted at 33,000 larger gardens in Dunedin to restore habitat suitable to the return of native species

Outcome 2 Threatened indigenous species and ecosystems are enhanced	Orokonui's contributions
Biodiversity efforts of stakeholders and communities are coordinated and Synergistic	<ul style="list-style-type: none"> • Strong governance of a large community project sustained over more than a decade • 2600 members of Otago Natural History Trust • Otago Natural History Trust trustees, directors and advisors include experienced people from business, the University, conservation consultants, and government (DOC) • Part of network of other sanctuaries throughout NZ – Sanctuaries of NZ Inc. - that share experience in biodiversity restoration • Partner in Predator Free Dunedin, Dunedin Host, Wild Dunedin Festival • MOU with Kati Huirapa ki Puketeraki, Otago University, Otago Polytechnic, Predator Free Dunedin, Landscape Connections Trust, Natural History NZ.
Opportunities to get involved in biodiversity management exist and are known about	<ul style="list-style-type: none"> • 13000 hours of volunteer activity pa • Regular features in ODT – Wildways columns • 16,000 visitors to the sanctuary pa. are inspired by what can be achieved

<p>Outcome 3 People are aware and proud of Otago's biodiversity</p>	<p>Orokonui's contributions</p>
<p>Organisations and communities have good information and understanding of Otago's biodiversity</p>	<ul style="list-style-type: none"> • For 10 years, Orokonui has been the leading advocate for bringing native species back to Dunedin and the South Island. • An inspirational example to its visitors of the natural world as it was before humans came. • Source of experience and advice on predator control, habitat restoration, education, community engagement and governance for newly emerging community conservation groups and the community at large. • Research on the viability of returning species that formerly inhabited Otago, and on ecologies that might approximate what previously existed. • 15 scientific papers published so far on Orokonui ecology • Over 100,000 visitors since establishment. • Regular features in ODT –Wildways • Frequent talks and seminars to community groups • Used for teaching and research by over 10 University Departments and Polytech programmes
<p>Biodiversity contributes to Otago's reputation and sense of place School programmes</p>	<ul style="list-style-type: none"> • Active education programme: 7,000 school visitors pa with leading roles in Town Belt and NE Valley Conservation Projects. • Ambitious plans to expand education programme at all schools in Otago, and adult education. Advanced planning for a dedicated education building.

<p>Outcome 4 KaiTahu’s role as kaitiaki is acknowledged and supported</p>	<p>Orokonui’s contributions</p>
<p>Kai Tahu are ORC’s Treaty partner in biodiversity management</p>	<ul style="list-style-type: none"> • Long-standing MOU with Kati Huirapa ki Puketeraki • Kati Huirapa Runanga appoints one trustee to Orokonui’s governing Trust (Otago Natural History Trust)
<p>Mahika kai and taoka species are enhanced</p>	<ul style="list-style-type: none"> • Kaitiaki species include Haast Tokoeka kiwi (kohanga population and crèche), kaka, takahe, tuatara, robin, Otago jewelled gecko, green skink, Otago skink, rifleman, fern bird and 13 rare plant species. • Haast Tokoeka Kohanga is only managed population that is breeding
<p>The importance of Mahika kai and taoka species to Kai Tahu is widely understood</p>	<ul style="list-style-type: none"> • Recent introduction of regular written reports on kaitiaki species to Kati Huirapa Runanga, in addition to reports through membership of ONHT Trust board. • Pa Harakeke native plant garden

Outcome 5 Otago's Biodiversity adds value to the regional economy	Orokonui's contributions
Otago's biodiversity is used to market our products	<ul style="list-style-type: none"> • Until recent Brook Waimarama sanctuary in Nelson, the only large fenced sanctuary operating in the South Island • Nearly 10,000 visitors pa from outside Dunedin • Employs 12 eft. • Powerful leverage for public investment: while supported by DOC Orokonui raised \$8 for every \$1 of government (DOC) investment • Financial sponsorships from over a dozen local businesses and organisations
Ecosystem services are maintained and enhanced	<ul style="list-style-type: none"> • 10 years of successful grant applications to community and national trusts
Biodiversity contributes to Otago's reputation and sense of place	<ul style="list-style-type: none"> • Nearly 10,000 visitors pa from outside Dunedin • Wildlife is primary appeal for Australian tourism • Hosting overseas students in tourism and postgraduate programmes • Must-see destination for visiting dignitaries: Government Ministers, Prince Charles, Jane Goodall, Dr Xi (the David Attenborough of China), Mayor of Shanghai • 70K Facebook views per month; 6500 Facebook likes, second only to Te Toitu at 6,900. • Success of sponsorship campaign with business demonstrates appeal of association with the Orokonui brand. • NZ Gardens Trust 5 star rating • Qualmark Gold Enviro Award

Orokonui Ecosanctuary Vulnerability Assessment on Sanctuary Perimeter Fence Final Report



Prepared by
John Cocks Limited in conjunction **Dave Crow**, Geology Department, University of Otago
April 2020

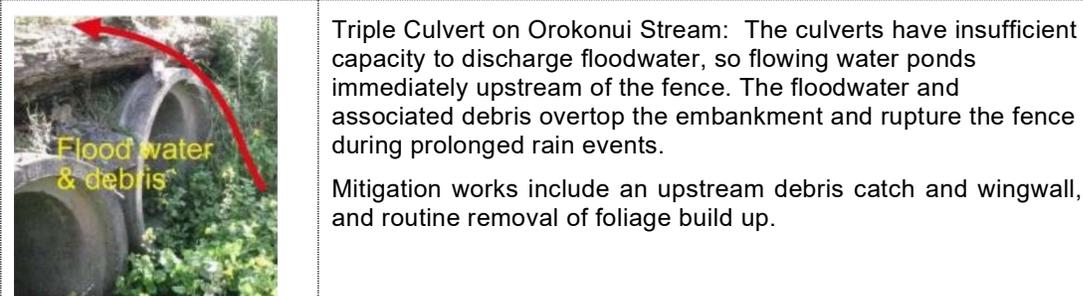


Executive summary

A risk assessment exercise has been carried out to assess the vulnerability of the Orokonui Ecosanctuary perimeter fence with respect to physical hazards. Three sections of the perimeter fence have been identified as having a high or medium risk of failure because of land movement, flood water activity, or a combination of both. Mitigation of risks at these sections, and other fence line risks, requires maintenance of fence line infrastructure, advocacy / affected party vigilance with risks managed by external parties, emergency response preparedness, and capitals works. The primary components of fence line infrastructure are the fence, the perimeter road, culverts, the road-side drains.

In order of priority, the three section are: Eiger section at the northern end; Blueskin Road section to the west of the Visitor Centre; and Triple Culvert section on Orokonui Stream. Some potential mitigation options are presented for consideration.

	<p>Upper Eiger section: Fence is actively tilting where it was constructed in unconsolidated fill. The fill will continue to creep downslope, pulling the fence with it, and has potential to fail catastrophically in a major rain event.</p> <p>Options to mitigate risk include: removing the stays (which are aggravating the tilting), and driving buttress posts inside the fence or realigning the fence</p>
	<p>Lower Eiger section, issue 2: Base of slope receives flood water and associated debris in large rain events, and the debris accumulates against the fence. The fence was breached during the 2017 rain storm.</p> <p>Mitigation work includes building a culvert at the base to carry stormwater and debris, building a vehicle gate to allow maintenance works inside the fence, and trimming and stabilising cut slopes.</p>
	<p>Blueskin Road section: a range of issues with flood water run-off from above the Ecosanctuary boundary, in relation to slope collapse, excess flood debris, and insufficient drainage channel capacity. All these could affect the fence along this stretch.</p> <p>Mitigation works include improving the boundary road drainage, enlarging culvert 37 and fitting a swing gate, and liaising with DCC about improving Blueskin Road drainage and private property stormwater drainage.</p>



Triple Culvert on Orokonui Stream: The culverts have insufficient capacity to discharge floodwater, so flowing water ponds immediately upstream of the fence. The floodwater and associated debris overtop the embankment and rupture the fence during prolonged rain events.

Mitigation works include an upstream debris catch and wingwall, and routine removal of foliage build up.

Any or all of the above issues could arise in a major storm, and emergency remedial action could be substantially hindered by:

- (a) slope collapses and washouts along the perimeter road that prevent vehicular access; and/or
- (b) lack of vehicular access inside the perimeter fence for clearing of flood-transported debris near to the key vulnerable points.

All culvert swing gates pose a significant risk because of terrestrial predator incursion.

Other significant risks were identified.

- The health and safety of staff needs to be factored into the risk matrix, in particular to inspections and operational activities and any emergency repairs during storms or immediately afterwards whilst hazards are being assessed.
- Inadequate or poor perimeter road and drainage infrastructure compromises access and aggravates water induced damage.
- The cumulative effect of risks that individually are relatively small may create a high, or extremely high, risk situation.

Mitigation activities are to revise the health and safety plan, to maintain an annual work plan, and to develop an emergency response plan.

Governance risks were identified as:

- Inadequate attention to health and safety of staff and volunteers
- Inadequate fence line infrastructure provisions
- Inadequate response at times of emergency
- Failure to develop and maintain a fence line infrastructure strategy
- Failure to develop and maintain annual work plans
- Failure to provide adequate financial and human resources to support infrastructure plan.

Mitigation measures were identified as:

- Develop, implement and report against a dedicated fence line infrastructure strategy and plan, and ensure that adequate financial and human resources are allocated to support them.
- Emergency response strategy, which includes prioritising safety of staff
- Self-review that considers emergency response and health and safety of staff and volunteers, and a fence line infrastructure plan, and the adequacy of provisions in the Trust Deed and board policies.

Management risks were identified as:

- Inadequate human resourcing for infrastructure
- Inadequate staff training
- Inadequate resources and preparedness for emergency response
- Inadequate protection or failure of the maps website
- Failure to maintain or loss of infrastructure and related records.
- Failure to maintain investment in infrastructure monitoring



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Issue	Date	Description	Prepared	Reviewed
1	29/01/2020	Draft for client	J Cocks	D Crow
2	27/02/20	Draft Final	J Cocks	D Crow
3	27/03/20	Final	J Cocks	D Crow

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1 Introduction

1.1 Purpose

The Otago Natural History Trust (the Trust) requires an assessment of the fence surrounding the Orokonui Ecosanctuary (the Sanctuary), including its culverts, that:

- Identifies the points on the perimeter that are at risk from hydrographic and geological events. These to include the rising probability of extreme events due to changing climate. To include also assessment of secondary flow paths following a breach.
- Proposes the priority that should be attached to each of these points of vulnerability
- Suggests strategies that might best mitigate each of these risks, with an indicative budget. To include alternative strategies to allow fish passage around culverts.
- Provides a maintenance schedule that will minimise risks to the integrity of the fence.

The terms of reference form Appendix A.

1.2 Scope and Outputs

The vulnerability assessment has involved:

- Developing forms of asset register, one for culverts and another for the fence
- Developing a risk classification method for identifying points on the fence at risk from hydraulic or geological events
- Discussions with staff and others, and fence line inspections
- Populating the asset register with the gathered information
- Classifying culverts and lengths of fence for risk
- Identifying measures to mitigate the risks, which include maintenance activities
- A workshop with staff that reviewed assessment findings and prioritised risks
- Estimating indicative costs for selected mitigation measures.

The risk classification method is presented in Appendix D.

Each asset register comprises an Excel workbook with one spreadsheet per culvert or one spreadsheet for a length of fence (approximately 60 - 100m). Extracts from the registers are given in Appendix F for purpose of illustrating its form. Further work is required to complete the registers and continuing work to maintain them. Importantly, work on vulnerability has focussed on lengths of fence line that have been breached or otherwise suffered damage and, as a result, the report focusses on these higher risk lengths. This focus should not detract from continual review of the full fence line and fully developing and maintaining the register.

The work has been carried out on a voluntarily basis.

1.3 Structure

This report comprises four more sections, viz:

Section 2, which provides an overview of the Sanctuary fence line infrastructure and the physical environment in which it is located

Section 3, which provides the results of the vulnerability assessment in terms of risks to security of the fence line infrastructure and reasons for and consequences of these risks.

Section 4, which provide measures that would mitigate those risks identified as high or medium, and indicative budget costs.

Section 5, which provides a conclusion.



2 Orokonui Ecosanctuary

2.1 Overview

The Sanctuary is an area of land protected by a predator-proof fence line (the fence). Most of the land is covered in native bush and the remainder in native grassland or exotic forest.

The Sanctuary forms a large part of the Orokonui Stream water catchment (refer Appendix B). The catchment is steep and bush clad, and the streams rise and fall according to the time of year and rainfall events.

A consequence of the topography, the climate, the geology and the soils is that slips occur on the hillsides and streams flood, which has resulted in culvert blockages and fence line breaches. With over 12 years of Sanctuary operation, knowledge of the more vulnerable lengths of fence line and culverts has developed.

A risk assessment and periodic reviews involving people with applicable knowledgeable contribute to risk understanding, and the design of applicable risk mitigation measures.

An outline of selected aspects of geology, hydrology, and climate is given in Appendix C.

2.2 Fence Line Infrastructure

2.2.1 Fence

The fence line has been constructed along levelled land, which includes benched hillsides where the fence is along a contour and smoothed ridgelines or slopes where the fence trends perpendicular to the land contour. The levelled land along the full fence line is used as a vehicle access road and for surface water runoff drainage. The road is outside the fence line and suitable only for off-road vehicles. The drainage is provided by open drains formed either inside the fence line (which makes access for maintenance difficult) or outside the fence line.

The fence was designed to be predator proof. It is 8.7km long, approximately 2 metres high and covered with a wire mesh with 6mm aperture. It encloses 307 hectares of land.

The security of the fence can be put at risk by: falling trees, ground instability and slippage, and soil erosion by surface water.

2.2.2 Culverts

Where the fence line crosses permanent or ephemeral water courses, culverts convey the water into or out of the Sanctuary.

All culverts have fine screens with 6mm aperture in order to be predator proof. The screens on permanently flowing streams are fitted to swing gates, which open with rising water pressure and close with falling water pressure.

The primary objectives for the culverts are:

- to convey water (both normal flows and flood flows) from upstream catchments flow into the Sanctuary catchment;
- to convey water (both normal flows and flood flows) from within the Sanctuary catchment flow out of the catchment;
- to prevent mammalian predators (such as cats, stoats, rats and mice) entering the Ecosanctuary at all times; and ideally
- to allow native fish to pass into and out of the Sanctuary catchment via the culverts.



During times of high or prolonged rainfall stream flow increases causing branches and foliage to wash downstream. Furthermore, erosion can destabilise slopes and stream beds leading to soil, gravel, stones and boulders moving downstream, and fluidisation and erosion of slip material can lead to a high bedload in the streams. These materials on occasions have filled stream channels, blocked culverts, jammed swing gates, and clogged mesh. During heavy storms, culverts have overflowed resulting in fence breaches, and slips have occurred, again resulting in fence breaches.

2.2.3 Perimeter Road and Vehicle Access

The perimeter road provides vital vehicle and foot access along the outside of the fence line. Normally, only a short section of the road (part of the “Eiger section”) is too steep for safe travel by vehicle.

Road vehicle access onto the perimeter road is available at the Visitor Centre entrance and via a private formation on a paper (public) road called Cedar Drive at the western end of the Blueskin Road section. Otherwise, access is cross-country, which is nominal off Moponui Road and considerable from Orokonui Road.

Vehicle gates into the Sanctuary are located at four places along the 8.7 km fence line, one at the Visitor Centre entrance, one off Cedar Drive, one near the Triple Culvert, and one towards the Eiger Section below Mopanui Road.

The perimeter road and access points are shown in Appendix H.

2.3 Other Matters affecting Vulnerability

2.3.1 Permissions

Permissions are needed for activities that are important for avoiding, reducing or mitigating vulnerability. These include:

- resource consents for structures in waterways (eg culverts) and working in waterways
- approvals to cross private land.

2.3.2 Development outside Sanctuary

Development outside the Sanctuary but within the water catchment has the potential to affect vulnerability because it increases surface water runoff, alters locations where surface water runoff crosses into the Sanctuary, and may increase land instability.

2.3.3 Resources

The Sanctuary has developed a website that includes a topographical map, aerial photographs taken over a number of years, stream catchment maps, fence line information, culvert information and other information. Some fence line posts and all culverts are numbered according to a reference system.

3 Vulnerability Assessment Results

3.1 Overview

Three sections of the perimeter fence have been identified as having a high or medium risk of failure because of land movement, flood water or both. These in order of priority are:

- A. Eiger section
- B. Blueskin Road section (in part)
- C. Triple culvert section.

In addition, all culvert swing gates pose a significant risk because of terrestrial predictor incursion.

The at-risk sections and the swing gate culverts are shown in Figure 3.1.

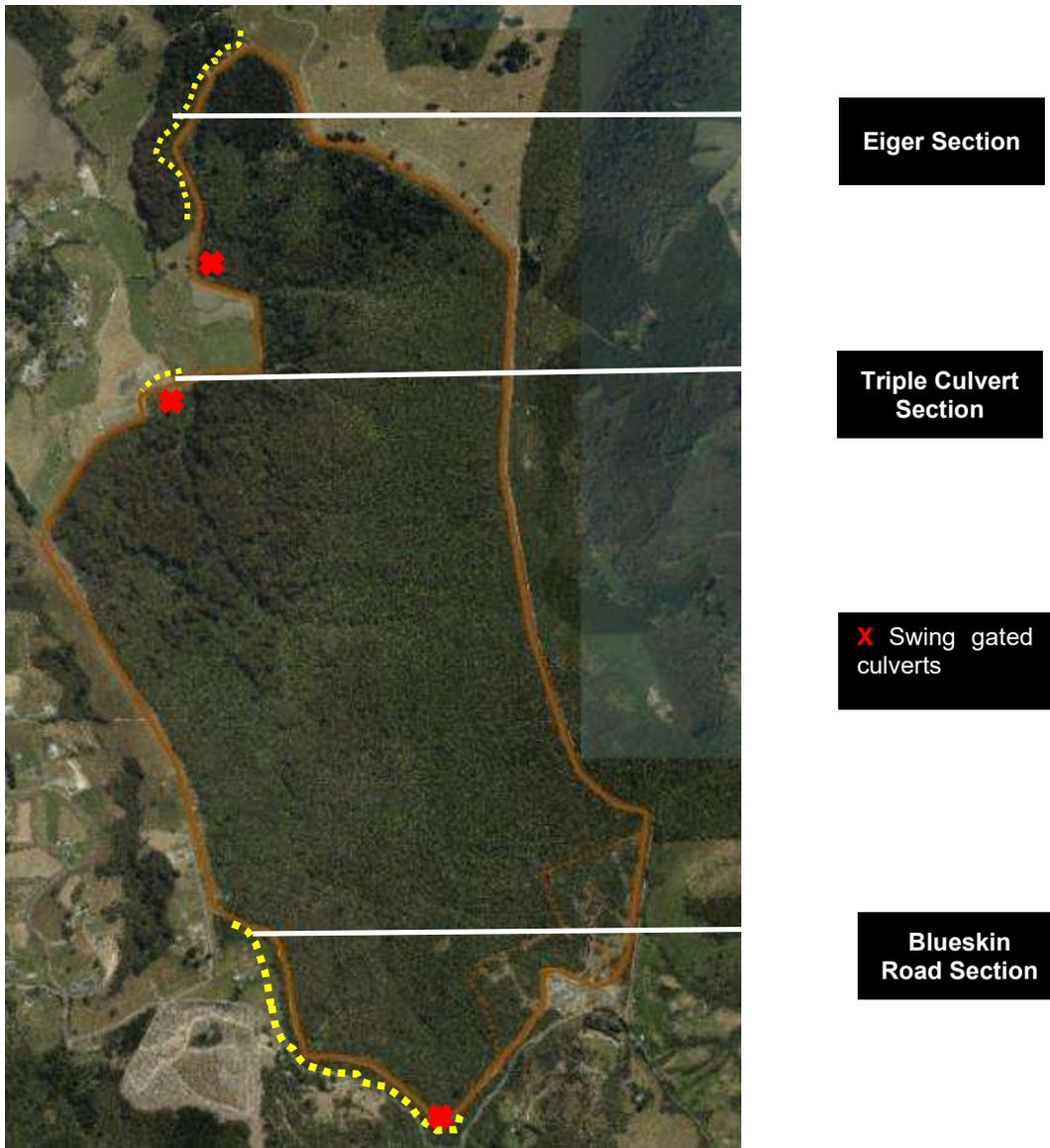


Figure 3-1: Identified At-risk lengths of fence

3.2 Eiger Section

The Eiger Section comprises the fence line between Culvert 17 and Culvert 21 (Figure 3-2)). The fence line between Culverts 18 and 20 is steep and, between Culverts 17 and 18, the steepest on the perimeter. Perimeter access from C17 to C18 is provided by a zig zag road on private land because the fence line road is too steep for safe vehicle use. Refer to Figure 3-2.

From C18 to C22 and beyond, the stormwater drain is on the inside of the fence. Upslope of the drain is a steep cut slope, which is prone to slips. The ground beyond the cut slope is prone to slips, and covered with felled pines and blue gums and secondary growth. Also, the ground has a number of former farm tracks. Surface water runoff is concentrated by farm tracks, which enhances the chance of slips, and felled trees and thick secondary growth inhibit mapping of surface runoff flow paths and springs.

Holes have appeared in the road and drain between C20 and C22. This length of fence line is on the toe of an ancient landslip (Appendix C). The holes may be a consequence of collapsing underground waterways or cavities in the ancient slip debris.

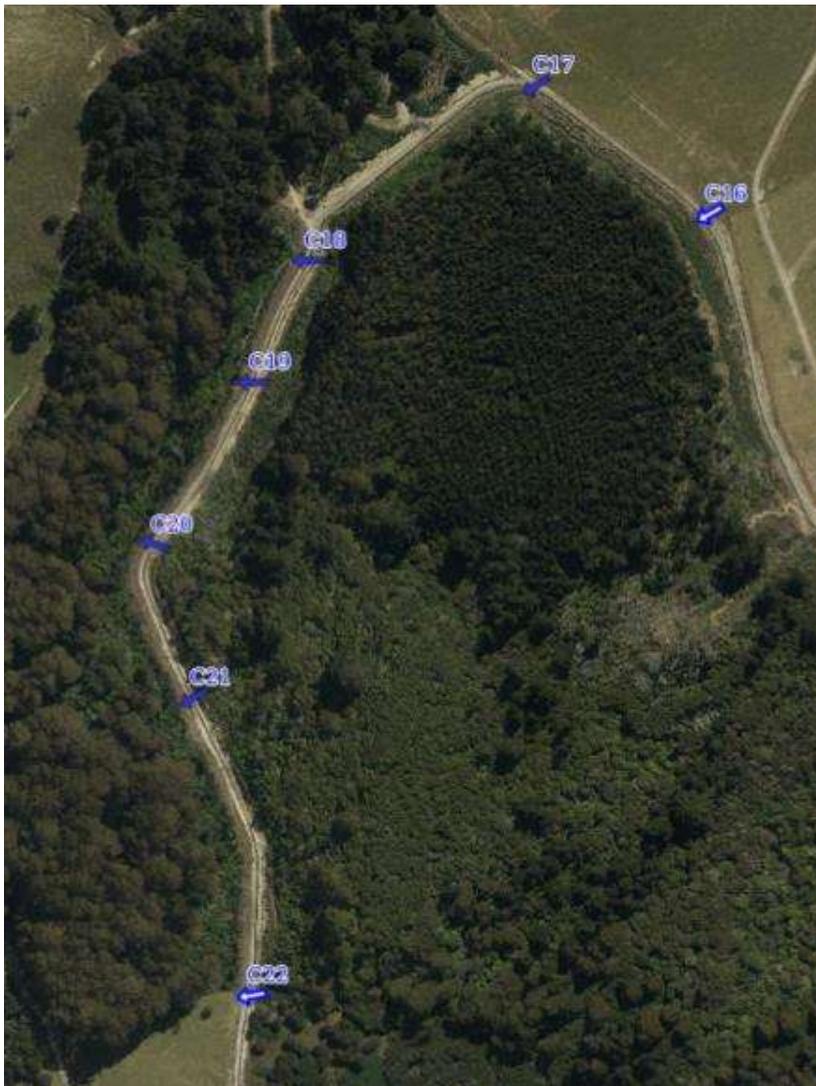


Figure 3-2: Eiger Section



Normally, the drain from C18 to C20 is dry. During light storm events or prolonged wet periods, water runs in the drain and exits through the fixed screen culverts. During heavy storm events, the water scours the drain invert and erodes the cut slopes resulting in a significant bed load, which rapidly blocks the culvert inlet screens and accumulates beyond Culvert 20 where the drain grade is almost flat. During the July 2017 storm, a slip opposite Culvert 18 occurred, which added greatly to the bed load in the drain. The accumulating bedload deposited just beyond Culvert 20 and water pressure caused the fence to be breached. Again, in the November 2018 storm event, a substantial bed load accumulated against the fence just beyond Culvert 20. The fence was not breached.

Factors that exacerbate the consequences of fence line breach and road damage are:

- Remoteness and length of access road beyond public road access
- Potential for future ground movement associated with the ancient slip
- No vehicular access to inside the fence line
- Old vehicle tracks, felled trees, and dense scrub modifying surface water runoff patterns, including concentrating flows.

A summary of risks and reasons for these is given in Table 3-1.

Table 3-1: Eiger Section

Reference	Risk	Reason
Fence plaques 863-913 C17 to C18 approx.	Fence tipping over Erosion of soil beneath fence.	Fence is built on uncompacted fill (although bases of posts appear embedded in original ground). Fill is moving away from fence into gully. Post-props on inside of fence are moving with fill, and pulling fence over. The fence length is the steepest along the perimeter, which aggravates movement.
pl 913-973 C18 to C20 approx.	Erosion debris build up against fence resulting in breach of fence by netting uplift or rupture.	Cut slopes inside the fence and land upslope are prone to slips. Erosion of cut slopes and slip debris results in debris flow down the steeply graded stormwater drain inside the fence. At the sudden change to a gentle grade at pl ???, debris drops out of the water and builds up against the fence.



Figure 3-3 Eiger Section - Steep ground



Figure 3-4 Soil and fence movement

3.3 Blueskin Road Section

The Blueskin Road section crosses a steep hillside (Appendix G). A bench was formed by a cut and fill operation during construction. Parts of the fence and access road are on filled ground. The stormwater drains are at the bases of the cut slopes.

During the July 2017 storm, C38 overflowed. A fill slope failure nearby, which breached the fence line, was attributed to resulting ground saturation. During a number of heavy rain events, Culvert 41 has overflowed. This has occurred even when the mesh screen on the entrance has been removed for the duration of high rainfall events. The culvert has inadequate hydraulic capacity.

The only secure drainage path for surface water from the water catchment above, which is considerable, is though Culvert 45 because it has a swing gate. The secondary drainage path for culverts 42 to 38 is long and not designed for peak storm flows. Culvert 37 has no secondary flow path. Ground upslope of the fence line is prone to slips.

The Orokonui Stream enters the Sanctuary through Culvert 45. The stream is steep and fast flowing. The access road crosses the culvert on an embankment. The downstream side of the embankment is steep. Should the culvert be overtopped, the embankment would be scoured and the fence line at risk of being breached. Upstream of the culvert is a boulder dam. Collapse may result in the boulders blocking the culvert, causing water to overtop the embankment. During the July 2017 storm, the culvert was observed to be surcharging.



A summary of risks and reasons for these is given in Table 3-2.

Table 3-2: Blueskin Road Section

Reference	Risk	Reason
Culvert 37	Culvert blockage, stormwater overflow and water pressure rupturing fence or destabilising road formation	Culvert is in a deep gully with no secondary flow (overflow) path. Potentially surface water collected in the drain from the high point between Culverts 42 and 43 could be directed to this culvert (road side distance 650m). The water catchment is large and, consequently, there is potential for large flows. Locations where surface water spills from road side drain over the road are near Culvert 38 (where drain overflow resulted in a collapse of the downslope bank in the July 2017 storm) and between Culverts C41 and C42 where road grade is almost flat.
Fence line north of Culvert C38	Culvert overflow, resulting in bank saturation and collapse	Road side drain is indistinct and not well graded to carry flow from Culvert 38 as a secondary flow path to Culvert 37
Culvert 41	Culvert overflow aggravating risks above	Culvert has overflowed in the past because of insufficient hydraulic capacity. There is a large catchment upslope with surface water runoff influenced by Blueskin Road (see below)
Culvert 43	Culvert blockage and water pressure rupturing fence or destabilising road formation	Culvert is in a shallow gully with no secondary flow (overflow) path. Surface water collected in the drain from the high points towards Culvert 42 and Culvert 44 is be directed to this culvert. The water catchment is small and, consequently, flows should be small.
Culvert 45	Bedload movement and blockage of culvert; flood water overflowing embankment causing erosion and fence rupture	Orokonui Stream has high velocity flow during heavy rainfall. Flood water has been observed to approach the top of the upstream embankment. Stream bed has boulders that could move and block the culvert. The downstream embankment is steep, with high erosion potential.
Culvert 37 to Culvert 42+	Upslope bank collapse or toppling trees damaging fence or blocking roadside drain or road.	The upslope bank is high and steep. The steepness of the cut slope and the uncontrolled surface water runoff from Blueskin Road exacerbate this risk. Consequences include no vehicle assess, slip debris or fallen trees damaging fence, and stormwater saturating fill slopes resulting in their collapse. Refer to Appendix G
Culvert 37 to Culvert 45	Increasing surface water runoff as a result of changes in land use outside the Sanctuary. Surface water runoff collecting on Blueskin Road with concentrated discharges causing downslope slips and, potentially, damage to the fence and access road.	There is a considerable area of land on the hillside above the Sanctuary fence line. Land use is changing, with clearing of bush and building of roads. These activities increase surface water off and concentrate flows via roads, tracks and stormwater drains. The roadside drain westward from Orokonui Creek is shallow or non-existent. The driveway uphill of C42 (approx.) discharges concentrated surface water, which has spilt over Blueskin Road and contributed to failure of the roadside bank. There have been a number of failures along the section of road above this length of fence line. Appendix G



Figure 3-5: Upslope bank collapse (minor)



Figure 3-6: High cut slopes



Figure 3-7: Soil overlying rock



Figure 3-8: Trees perched above access road



Figure 3-9: Inadequate drainage along Blueskin Road



Figure 3-10: Slip beside Blueskin Road (photo February 2020)

3.4 Triple Culvert Section

The Triple Culvert Section comprises the fence line either side of Culvert 28. Orokonui Stream drains most of the Sanctuary, as illustrated in Appendix B. The culvert comprises three pipes each with a swing gate on the outlet, as illustrated in Appendix G.

During the July 2017 storm, the stream flows exceeded the hydraulic capacity of the culvert, the backwater rose above the embankment level, and the rising pressure on the fence line to the west of the culvert resulted in a breach.

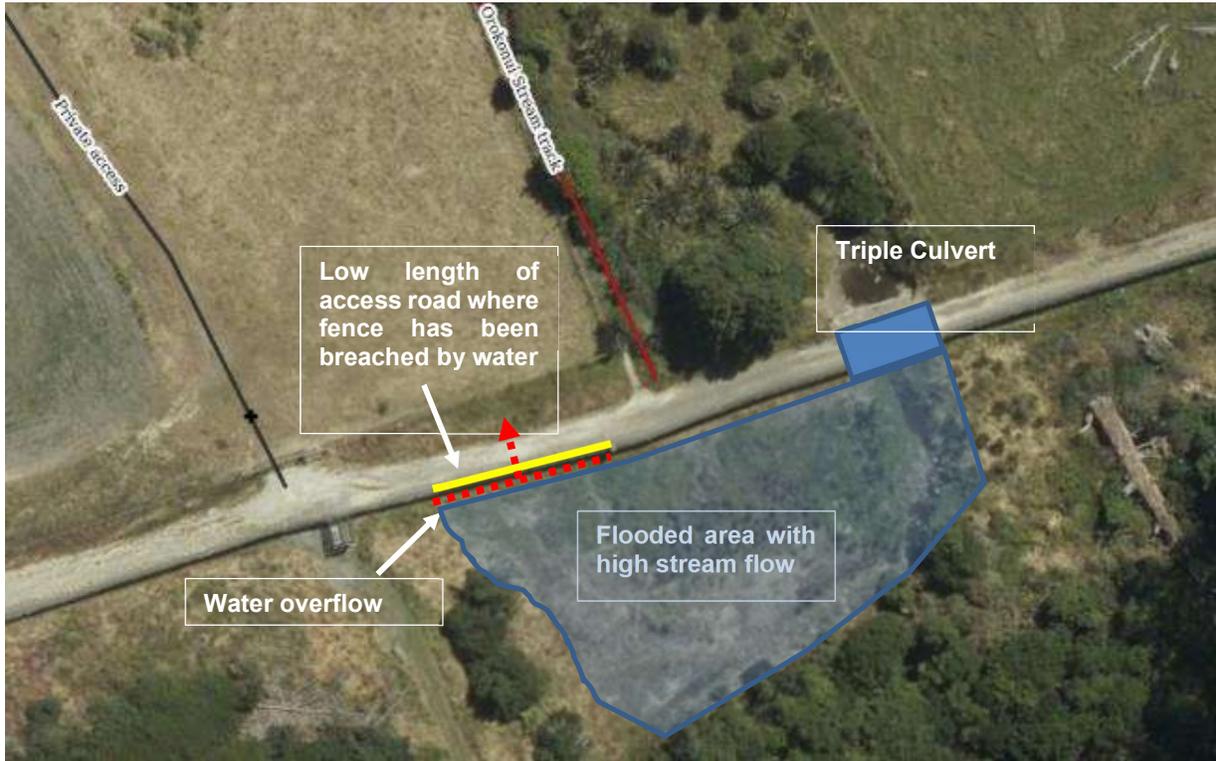


Figure 3-11: Triple Culvert

A summary of risks and reasons for these is given in Table 3-3.

Table 3-3: Triple Culvert Section

Reference	Risk	Reason
Culvert 28	Floodwater build up behind culvert results in build-up of water and flood debris against fence. Fence rupture by netting uplift.	Capacity of the 3 culverts is insufficient to take peak flood flows. Climate change is likely to increase this risk. Capacity is reduced by plant growth and soil build up on the upstream side of the culverts. Flood debris build up against the culverts further reduces i
Culvert 28	Culvert capacity is reduced by flood debris, plant growth and sediment build up. Bank erosion and collapse.	Plant growth and sediment are reducing hydraulic capacity of culverts. The rotting headwall pole is resulting in bank collapse. Dry stone walling is deteriorating.
Culvert 28	Growth upstream clogs secondary flow path to low section on fence line and flood water spills at culvert / greater damage.	Flaxes and other plants are growing vigorously. Previous overflows have lifted fence wire, which has been relatively straight forward to repair. Spilling over culvert with downstream headwall gone could lead to back scour and greater damage.



Figure 3-12: Rotting headwall pole, collapsing dry stone wall and plant obstruction

3.5 Swing Gated Culverts

Identified problems with swing gate culverts are:

- culvert screen blinding as a result of debris washed down stream with flood;
- culvert blockage partly or wholly with debris or bed load build up;
- culvert swing gates jamming open;
- culvert swing gates being open with higher flows, creating an entry path for predators;
- embankments with culverts being vulnerable to scour and erosion, particularly during flood events; increasing the potential for burrowing animals to enter the Sanctuary.

The problems create a high risk of terrestrial predator incursion. Separate reports have investigated swing gate culverts (Fluent Solutions 2017, JCL 2017, JCL 2018)



3.6 Other Risks

A summary of other fence line risks and reasons for these is given in Table 3-4.

Table 3-4: Other Fence Line Risks

Reference	Risk	Reason
Perimeter Road	Vehicle access and, possibly, foot access, in time of dire need to a location on the fence line is not possible because of road damage or obstacles.	The road provides access for fence inspection, maintenance and repair. On some lengths of fence line there is no alternative access, notably the length below Blueskin road and the length from C17 to C22, which includes the Eiger. Road vehicle access locations from public roads to the perimeter road are shown in Appendix H.
Fence line Gates	Access inside the fence line is not available in an emergency.	Machine access inside the fence may be necessary for fence repair or slope stabilisation as a consequence of slope failures that undermine the fence or otherwise pose a risk to fence security. Lengths of fence line most at risk are those inside the fence line with steep cut slopes above the road (C18 to C22 and C36 to C42) steep fill slopes below the road (from C17 to C18 and C36 to C42). Road vehicle gates in the fence line are shown in Appendix H.
Fence line below Mopanui Road	Culvert screen block by rabbit poo. Fence damage from stormwater.	Mopanui Road, after it turns to the west, generates stormwater, which flows onto the fence line. The fence line road has no drainage. Gravel gets washed onto fence and into culverts. Rabbit poo gets washed to the culverts and rapidly blocks the fine screens on the inlets. This location is indicated in Appendix H.

A summary of other risks fundamental to managing vulnerability and reasons for these is given in Table 3-5.

Table 3-5: Governance and Management Risks

Reference	Risk	Reason
Governance / management	Inadequate infrastructure provisions	Self-review taking account of the results of the vulnerability assessment results.
	Failure to develop and maintain an infrastructure strategy	Work in progress
	Failure to develop and maintain annual plans	Work in progress
Emergency response	Safety of staff and volunteers Unpreparedness increases chances of predator incursion	Emergency is typically associated with a natural disaster such as a heavy rain, earthquake, storms, and landslides. An emergency could result because of fire.
Health & Safety	Staff, volunteer or contractor safety is compromised during	Use of vehicles on the perimeter road where it is steep or slippery is hazardous, clearing swing gates on culverts in flood conditions is hazardous, working in a slip prone area



Reference	Risk	Reason
	inspections, repairs or emergency works	during a rain storm event is hazardous, traversing the road during high winds is hazardous as trees or branches may fall.
Resources for infrastructure management	<p>Inadequate human resourcing</p> <p>Inadequate staff training</p> <p>Inadequate protection or failure of the maps website</p> <p>Failure to maintain or loss of infrastructure and related records.</p> <p>Failure to maintain investment in infrastructure monitoring</p>	<p>Primary focus for staff is conservation and management of volunteers and visitors</p> <p>Self-review</p> <p>Self-review</p> <p>The website with maps and other infrastructure information is a valuable resource. Loss of this would compromise planning, and routine and emergency operations</p> <p>Fence line has security wire and swing gates have opening detectors and alarms. Refer to needs identified in <i>Remote Surveillance report</i>, Dec 2019 Tony Stewart (Appendix I)</p> <p>Fence line movement monitoring near Eiger. Work in progress by OU Dept of Surveying</p>

3.7 Risk Prioritisation

The risk prioritisation method give in AS/NZS 4360 was used as a guide for reviewing the identified risks presented for the three sections of fence line (Eiger, Blueskin Road and Triple Culvert) in terms of consequences and likelihood at a workshop at Orokonui.

A result was that the identified risks, with three exceptions, were all considered as extreme.

Additional risks were identified as follows.

- The health and safety of staff needs to be factored into the risk matrix, in particular to inspections and operational activities and any emergency repairs during storms or immediately afterwards whilst hazards are being assessed.
- The cumulative effect of risks that individually are relatively small may create a high, or extremely high, risk situation.

Appendix J provides a record of the workshop.



4 Risk Mitigation and Budget Costs

4.1 Risk Mitigation

Risk mitigation: steps taken to reduce the probability of occurrence or the magnitude of the consequences¹ (Handbook Environmental risk management—Principles and process HB 230:2004 Standards Australia/Standards New Zealand)

A risk mitigation strategy involves a mix of steps, which may include the activities of:

- removing the risk by eliminating either the likelihood of occurrence or the consequences
- reducing the risk by reducing the likelihood of occurrence, the consequences or both
- accepting the risk and managing the consequences
- the above activities as interim steps before long term steps or steps on a staged mitigation strategy.

Mitigation options for each of the identified at-risk sections along the fence line are presented in Tables 4-1, 4-2 and 4-3.

Table 4-1: Eiger Section

Reference	Risk	Mitigation options
Fence plaques 863-913 C17 to C18 approx.	Fence tipping over Erosion of soil beneath fence.	Remove post stays Install steel L shape braces on outside of fence with low arm pegged into solid ground. Drive piles into stable ground beside existing posts and brace the two. Realign the fence on stable ground Routine maintenance Drive additional piles and rails (ie retaining wall) Realign the fence on stable ground
Fence plaques 913-973 C18 to C20 approx.	Erosion debris build up against fence resulting in breach of fence by netting uplift or rupture.	Install culvert with swing gate downslope of C20 designed to carry bed load / debris Install vehicle gate in fence to allow access for removal of slip debris. Reduce angle of cut slopes and stabilise soil with plants Map surface water flow paths within water catchment above and implement flow dispersal and erosion prevention measures

Table 4-2: Blueskin Road Section

Reference	Risk	Mitigation Options
Culvert 37	Culvert blockage, stormwater overflow and water pressure rupturing fence or destabilising road formation	Install swing gate or Wastop valve on culvert (to remove risk of fine screen blockage) Duplicate culvert (if required after hydraulic assessment)

¹ HB 230:2004 Handbook Environmental risk management—Principles and process, Standards Australia/Standards New Zealand)



Reference	Risk	Mitigation Options
Fence line north of Culvert C38	Culvert overflow, resulting in bank saturation and collapse because of no secondary flow path	Establish deeper roadside drain with full capacity grade to C37.
Culvert 41 & Culvert 42	Culvert overflow aggravating risks above	Increase capacity of Culvert 41 <i>work in progress</i> Establish deeper roadside drain with capacity for full secondary flow and fall to C38
Culvert 43	Culvert blockage and water pressure rupturing fence or destabilising road formation	Upslope cut off drains to divert flow to C42 and C44.
Culvert 45	Bedload movement and blockage of culvert; flood water overflowing embankment causing erosion and fence rupture	Course screen to protect culvert from large bedload (<i>work in progress</i>). Stream inspections and removal of debris and stabilisation of unstable bed material
Culvert 37 to Culvert 42+	Upslope bank collapse or toppling trees damaging fence or blocking roadside drain or road.	Maintain drain free of debris and foliage Remove trees at risk of falling
Culvert 37 to Culvert 45	Increasing surface water runoff as a result of changes in land use outside the Sanctuary. Surface water runoff collecting on Blueskin Road with concentrated discharges causing downslope slips and, potentially, damage to the fence and access road.	Monitor development in water catchment. Liaise with DCC about being an affected party with resource consent applications. Liaise with DCC about Blueskin Road drainage improvements

Table 4-3: Triple Culvert Section

Reference Fence / culvert number	Risk	Mitigation
Culvert 28	Floodwater build up behind culvert results in build-up of water and flood debris against fence. Fence rupture by netting uplift. Swing gates reduce culvert capacity. Culvert capacity is reduced by flood debris,	Renew headwall pole, install invert protection, and renew dry stone wall (<i>work in progress</i>). Install buoyance on swing gates (work in progress) Install debris deflectors upstream of culverts Maintain upstream invert and banks clear of growth, debris and sediment build up.



Reference Fence / culvert number	Risk	Mitigation
	plant growth and sediment build up. Bank erosion and collapse. Growth upstream clogs secondary flow path to low section on fence line and flood water spills at culvert / greater damage	Construct streamlined inlets and wingwalls Maintain secondary flow path clear of growth, debris and sediment build up

Mitigation options for swing-gated culvert risks and other risks are presented in Tables 4-4, 4-5 and 4-6.

Table 4-4: Swing Gate Culverts

Reference	Risk	Mitigation
Swing Gate Culverts	Terrestrial predators access Sanctuary through open gates. Gates opened by high stream flows remain open because of debris that prevents closure	Improve closure of swing gates (work in progress as trial) Install Wastop valves Improve gate monitoring and surveillance

The Trust commissioned an engineering consultant to investigate swing gate culvert improvements. The report² identified improvements of: inlet bar screens, swing gate duplication, inlet flow improvement works, and upstream debris screens or catches. The report indicated a need for an assessment of flood flows and assessments of the hydraulic capacities of the main culverts (Triple Culvert and two other culverts with swing gates). Ball park cost estimates were provided for the preferred solutions, which amounted to \$80,000 + gst.

Following this work, other sanctuaries were contacted to learn their views on swing gates and risk management solutions. The sanctuaries were: Tawharanui; Shakespear; Rotokare; Zealandia; The Brook and Sanctuary Mountain Maungatautari. All sanctuaries advised that swing screen culverts are recognised as weak points and managed them as such (i.e. routine inspections) and some have added weights to decrease opening frequency and assist full closure.

The Department of Conservation (DOC) has the Burwood Takahē Centre, a fenced sanctuary for the Takahē Recovery Programme. Under the DOC-Fulton Hogan Partnership, Fulton Hogan initiated an Engineering Challenge for the design of a predator proof culvert. The winning design utilised a proprietary 'non return valve' product called WaStop instead of a swing gate. The supplier of the product visited the Sanctuary and provided a preliminary cost estimate of \$26,000 to \$33,000 for such an installation on one pipe.

Given the significant capital investments associated with above solutions and the lack of evidence that these would improve the situation, a lower-cost mitigation measure of weighting swing gates (as used at Zealandia) is being planned.

² Vermin Security for Stormwater Pathways Fluent Solutions, 20 September 2017



Table 4-5: Other Physical Infrastructure

Reference	Risk	Mitigation
Perimeter Road	Vehicle access and, possibly, foot access, in times of dire need is not possible because of road damage or obstacles.	Annual survey of access road and document maintenance needs. Post flood event survey of access road and document maintenance needs. Maintain roads with metalled surface and camber away from fence line Install surface water interceptor drains along road Maintain roadside drains Secure access along the zig zag road beside Eiger by easement or other means. Prepare an Emergency Plan that includes a record of surrounding land owners and contact details, and keep neighbours informed and maintain associated records.
Fence line Gates	Access inside the fence line is not available in an emergency.	Install additional gates as needed
Fence line below Mopanui Road	Culvert screen block by rabbit poo. Fence damage from stormwater.	Construct fence line road drains. Double screen the culverts.

Table 4-6: Other Related Risks

Reference	Risk	Mitigation
Governance	Inadequate infrastructure provisions Catastrophic fence failure at one or more points. Failure to provide adequate financial and human resources to support infrastructure strategy and plans.	Develop, implement and report against a dedicated infrastructure (fence line and culverts) strategy and plan, and ensure that adequate financial and human resources are allocated to support them. Emergency response strategy, which includes prioritisation of risks to staff. Self-review to include emergency response and health and safety, and to provide for an infrastructure plan in the Trust Deed by way of a rule or policy provision.
Emergency response	Safety of staff and volunteers Unpreparedness increases chances of predator incursion	Prepare an emergency response plan (ERP). Matters to include are health and safety procedures (identified in the H&S plan and detailed in the ERP); hazards and consequences schedule with response options; practice schedules, access options, land owners, land held, contact details and standing agreements; vehicle needs for access, DCC contacts, ORC contacts, emergency repair kit and implementation procedures (e.g. fence, culvert screens, gravel stock pile). Maintain a store of lightweight and manageable temporary fencing materials.



Reference	Risk	Mitigation
		On-going maintenance of the plan as land-owners change, DCC regulations change, contractors change, etc.
Health & Safety	Staff, volunteer or contractor safety is compromised during inspections, repairs or emergency works	Health and safety plan that lists key hazards and measures to avoid, reduce or mitigate these during operation, maintenance and emergency. Follow safety in design procedures with all mitigation design measures.
Management	Inadequate human resourcing for infrastructure Inadequate staff training Inadequate protection or failure of the maps website Failure to maintain or loss of infrastructure and related records. Failure to maintain investment in infrastructure monitoring	Implement infrastructure (fence line and culverts) strategy and plan Staff dedicated to infrastructure management. Service contract/s. External provider; provide in collaboration with similar organisations. Fence line has security wire and swing gates have opening detectors and alarms. Refer to Remote Surveillance report, Dec 2019 Tony Stewart (Appendix 1) for mitigation measures. Fence line movement monitoring near Eiger. Work in progress by OU Dept of Surveying.

4.2 Budget Costs

Indicative budget costs have been estimated for the mitigation work identified in Tables 4-1, 4-2 and 4-3. These are recorded in Table 4-7. When a risk mitigation project is being planned, specific project costs should be estimated.

Table 4-7: Indicative Budget Costs

Item	Estimated cost	Engineering costs	Contingency	Total
Upper Eiger Section	\$23,000	\$6,000	\$7,000	\$36,000
Lower Eiger Section	\$72,000	\$18,000	\$22,000	\$112,000
Blueskin - new culvert 37	\$20,000	\$5,000	\$6,000	\$31,000
Blueskin – roadside drainage from culvert 42 to culvert 37	\$57,000	\$15,000	\$17,000	\$89,000
Blueskin - swing gate modifications at Culvert 45	\$2,000	\$500	\$500	\$3,000
Triple culvert - swing gate modifications	\$4,000	\$1,000	\$1,000	\$6,000
Triple culvert – debris deflectors upstream	\$6,000	\$2,000	\$2,000	\$10,000
Triple culvert - wing walls upstream	\$16,000	\$4,000	\$5,000	\$25,000
Other work				
Road cross-drains	\$5,000	\$1,500	\$1,500	\$8,000



Item	Estimated cost	Engineering costs	Contingency	Total
O&M manual	\$8,000			\$8,000
Emergency plan	\$8,000			\$8,000
Revise health and safety plan <i>Note 1</i>				
Rapid repair package <i>Note 1</i>				
Total capital works				\$336,000
Annual operation & maintenance activities on the perimeter road and drains	\$45,000	\$12,000	\$14,000	\$71,000

Note 1: Estimated costs to be determined.

Mitigation costs for governance and management items have not been estimated.

Costs Factors

Indicative costs comprise the cost of construction (capital cost), and the cost of operation and maintenance (annual operating cost).

Indicative costs for all items except the O&M manual and Emergency Plan include percentage allowances as follows:

- Design and construction management 25%
- Contingency (including site investigation) 30%

The design and construction management percentage is an allowance for detailed design, tender document preparation, and construction management.

The contingency percentage is an allowance for unforeseen costs, which may include further site investigations.

No specific allowances have been made for:

- goods and services taxes
- obtaining resource consents or any other specific approvals
- any investigation work other than that covered by the allowance noted above
- further work required to confirm technical feasibility of an option
- cost of finance and depreciation.
- depreciation



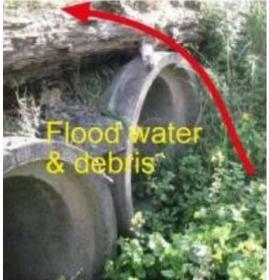
5 Conclusion

A risk assessment exercise has been carried out to assess the vulnerability of the Orokonui Ecosanctuary perimeter fence with respect to physical hazards. Three sections of the perimeter fence have been identified as having a high or medium risk of failure because of land movement, flood water activity, or a combination of both. Mitigation of risks at these sections, and other fence line risks, requires maintenance of fence line infrastructure, advocacy / affected party vigilance with risks managed by external parties, emergency response preparedness, and capitals works. The primary components of fence line infrastructure are the fence, the perimeter road, culverts, the road-side drains.

In order of priority, the three section are: Eiger section at the northern end; Blueskin Road section to the west of the Visitor Centre; and Triple Culvert section on Orokonui Stream. Some potential mitigation options are presented for consideration.

<p>Fence tilt</p> <p>Fill creep</p>	<p>Upper Eiger section: Fence is actively tilting where it was constructed in unconsolidated fill. The fill will continue to creep downslope, pulling the fence with it, and has potential to fail catastrophically in a major rain event.</p> <p>Options to mitigate risk include: removing the stays (which are aggravating the tilting), and driving buttress posts inside the fence or realigning the fence</p>
<p>Flood water & debris</p>	<p>Lower Eiger section, issue 2: Base of slope receives flood water and associated debris in large rain events, and the debris accumulates against the fence. The fence was breached during the 2017 rain storm.</p> <p>Mitigation work includes building a culvert at the base to carry stormwater and debris, building a vehicle gate to allow maintenance works inside the fence, and trimming and stabilising cut slopes.</p>
<p>Flood water & debris</p>	<p>Blueskin Road section: a range of issues with flood water run-off from above the Ecosanctuary boundary, in relation to slope collapse, excess flood debris, and insufficient drainage channel capacity. All these could affect the fence along this stretch.</p> <p>Mitigation works include improving the boundary road drainage, enlarging culvert 37 and fitting a swing gate, and liaising with DCC about improving Blueskin Road drainage and private property stormwater drainage.</p>



	<p>Triple Culvert on Orokonui Stream: The culverts have insufficient capacity to discharge floodwater, so flowing water ponds immediately upstream of the fence. The floodwater and associated debris overtop the embankment and rupture the fence during prolonged rain events.</p> <p>Mitigation works include an upstream debris catch and wingwall, and routine removal of foliage build up.</p>
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Any or all of the above issues could arise in a major storm, and emergency remedial action could be substantially hindered by:

- (c) slope collapses and washouts along the perimeter road that prevent vehicular access; and/or
- (d) lack of vehicular access inside the perimeter fence for clearing of flood-transported debris near to the key vulnerable points.

All culvert swing gates pose a significant risk because of terrestrial predator incursion.

Other significant risks were identified.

- The health and safety of staff needs to be factored into the risk matrix, in particular to inspections and operational activities and any emergency repairs during storms or immediately afterwards whilst hazards are being assessed.
- Inadequate or poor perimeter road and drainage infrastructure compromises access and aggravates water induced damage
- The cumulative effect of risks that individually are relatively small may create a high, or extremely high, risk situation.

Mitigation activities are to revise the health and safety plan, to maintain an annual work plan, and to develop an emergency response plan.

Governance risks were identified as:

- Inadequate attention to health and safety of staff and volunteers
- Inadequate fence line infrastructure provisions
- Inadequate response at times of emergency
- Failure to develop and maintain a fence line infrastructure strategy
- Failure to develop and maintain annual work plans
- Failure to provide adequate financial and human resources to support infrastructure plan.

Mitigation measures were identified as:

- Develop, implement and report against a dedicated fence line infrastructure strategy and plan, and ensure that adequate financial and human resources are allocated to support them.
- Emergency response strategy, which includes prioritising safety of staff
- Self-review that considers emergency response and health and safety of staff and volunteers, and a fence line infrastructure plan, and the adequacy of provisions in the Trust Deed and board policies.

Management risks were identified as:

- Inadequate human resourcing for infrastructure
- Inadequate staff training
- Inadequate resources and preparedness for emergency response
- Inadequate protection or failure of the maps website
- Failure to maintain or loss of infrastructure and related records.
- Failure to maintain investment in infrastructure monitoring



Mitigation measures were identified as:

- Implement fence line infrastructure strategy and plan
- Staff dedicated to infrastructure management and service contract/s.
- Staff training including emergency response training
- A store of lightweight and manageable temporary fencing materials for emergency response
- External provider for website, which may be in collaboration with a similar organisation.
- those given in the Remote Surveillance report, Dec 2019 Tony Stewart (Appendix I).
- Fence line movement monitoring near Eiger (Work is in progress by OU Dept of Surveying).

Indicative budget costs were estimated for the capitals works identified above, and annual operation and maintenance activities on the fence line road and drains. These were:

- Total capital works \$336,000
- Operation & maintenance activities \$71,000/year.

These costs do not include GST, and do include allowances for engineering and a contingency. They were estimated for the purpose of the asset management plan, which is being developed. When a risk mitigation project is being planned, specific project costs should be estimated.

Mitigation costs for governance and management items have not been estimated.



Appendix A: Terms of Reference



OROKONUI ECOSANCTUARY

600 Blueskin Rd,
Waitati, Dunedin
PHONE: +64 3 4821755
EMAIL: info@orokonui.org.nz

20th June 2018

Dear John

Re: Vulnerability report on the Orokonui Sanctuary Perimeter Fence

The Otago Natural History Trust (Orokonui Ecosanctuary) asks that you undertake a study of the fence surrounding the sanctuary, including its culverts, and report to the Trust as follows:

- Identify the points on the perimeter that are at risk from hydrographic and geological events. These to include the rising probability of extreme events due to changing climate. To include also assessment of secondary flow paths following a breach.
- Propose the priority that should be attached to each of these points of vulnerability
- Suggest strategies that might best mitigate each of these risks, with an indicative budget. To include alternative strategies to allow fish passage around culverts.
- A maintenance schedule that will minimise risks to the integrity of the fence

We are very fortunate to have someone with your expertise willing to help us in this vital assessment of the risks to the sanctuary's fence. The whole existence of the sanctuary and the many programmes that use it relies on this thin line of defence from predators. We are greatly in need of your expert advice on how to limit these risks.

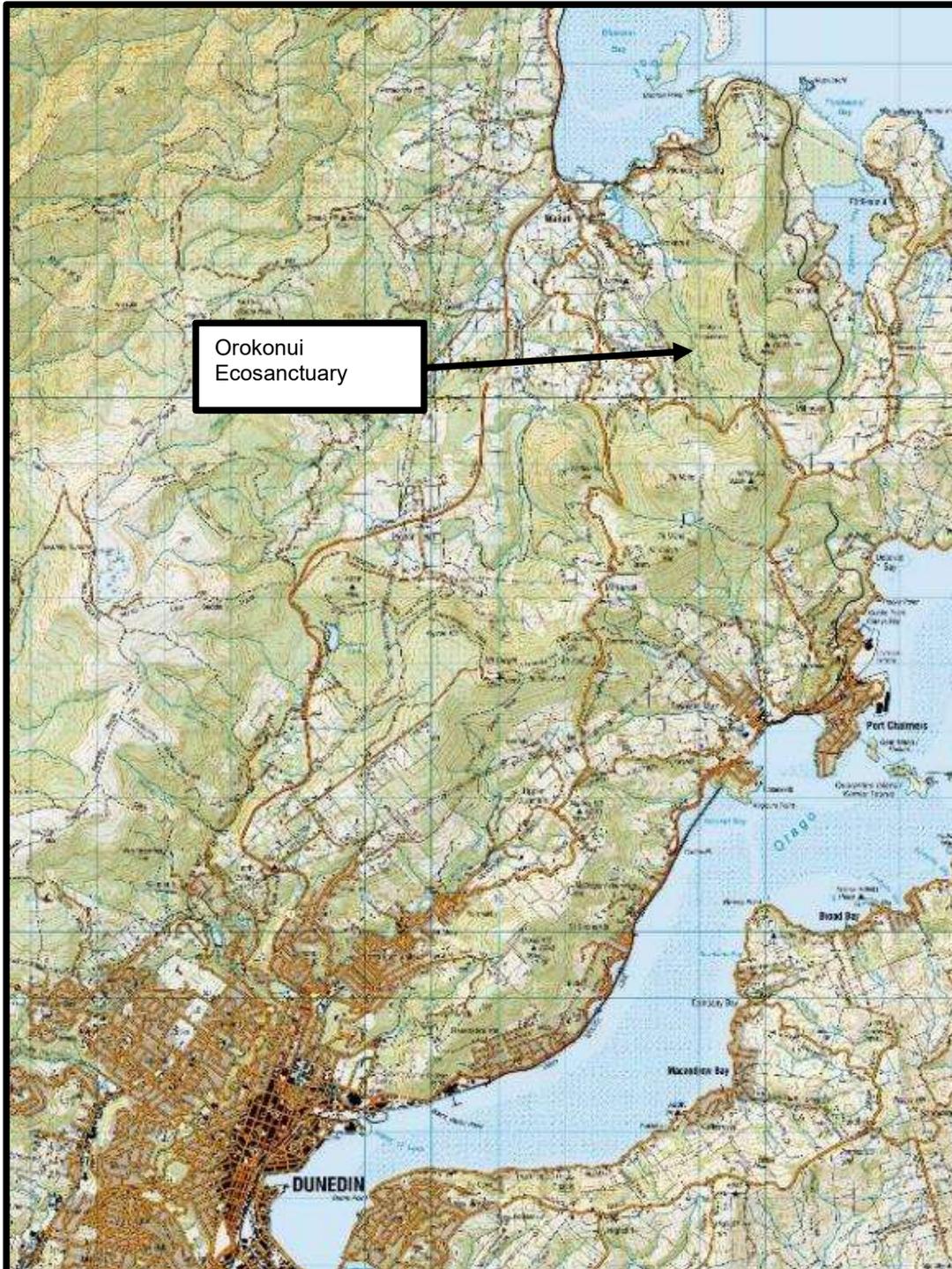
I would like to have some preliminary report ready for the Annual General Meeting of the Trust on 31st July if that is possible.

Thank you very much for helping us. We await your quotation for the work.

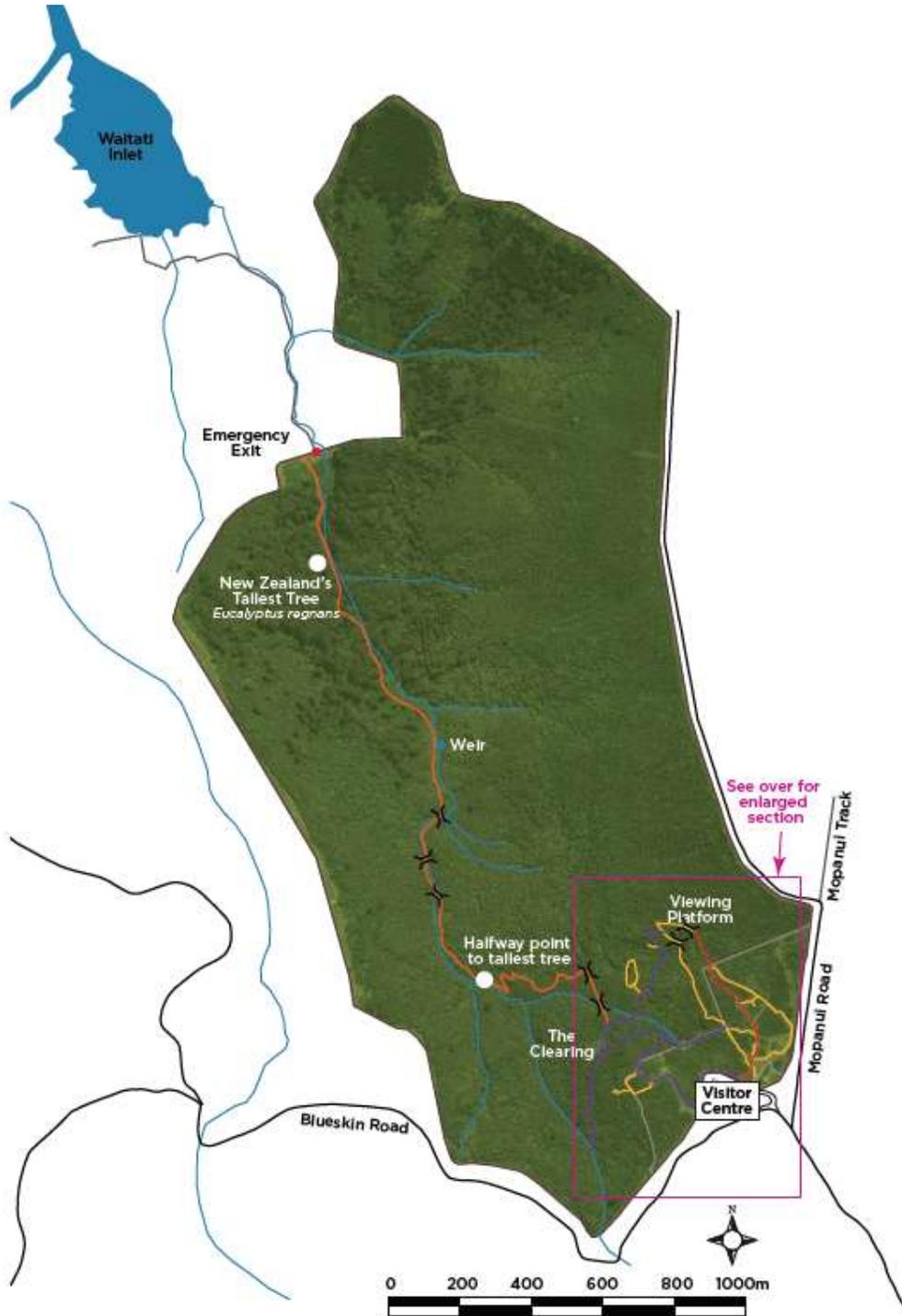
Colin Campbell-Hunt

Chair, Otago Natural History Trust

Appendix B: Location



Source: Land Information New Zealand (LINZ) and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 International licence



Orokonui Ecosanctuary Area



Appendix C: Physical Context

Geology
Climate



Geology

Orokonui Ecosanctuary Geological Overview

Dave Craw

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Purpose

These notes are intended to provide a geological context for on-going engineering and geotechnical work by John Cocks, related to the stability and integrity of the Ecosanctuary fence. In particular, these notes provide some background information on the geological features in and around the Eiger area at the northern end of the Ecosanctuary.

Disclaimer

The notes have been prepared for a non-specialist audience by a general geologist who does not have qualifications for detailed geotechnical evaluations.

General geological setting

The landscape of the Orokonui Ecosanctuary is dominated by ridges and streams that have been cut into the ten million year old Dunedin Volcano. These volcanic rocks form the basement for the Ecosanctuary, upon which a thin veneer of surficial material has been deposited over the past million years. This surficial material has been moving downslope over the past million years, with the last main stages of this process ceasing about ten thousand years ago. However, some downslope movement still persists on steeper slopes.

The key features of the surface geology are summarised in Figure 1. The basement volcanic rocks were weathered over ten million years to yield rocks that are now variably altered to clay. Erosion of this weathered rock has progressively liberated boulders of the less-altered volcanic rock, and these boulders coat most slopes. During periods of cold climate over the past million years, wind-blown silt (commonly called loess) was deposited as a blanket over the landscape. The last silt deposition event was about about twenty thousand years ago, and thick silt deposits (up to 5 metres) coat some flat slopes on ridges. However, deposits of silt on slopes that were saturated with water (and ice) moved downslope and incorporated volcanic boulders to form sheets of mass-flow deposits several metres thick. These moved at a rate of metres per year. Some of these mass-flow deposits became landslides that moved at rates of tens of metres per year or more in more catastrophic events.

The cold-climate mass-flow deposits largely stabilised when the climate warmed and water drained from them and they became cemented with silt and clay. However, the upper portions of these mass-flow deposits are still actively creeping (rate centimetres per year) on steep slopes. Shallow groundwater moving through this creeping zone facilitates this downslope movement. In addition, more catastrophic landslide events have occurred, possibly within the last thousand years, to reactivate the old mass-flow material.

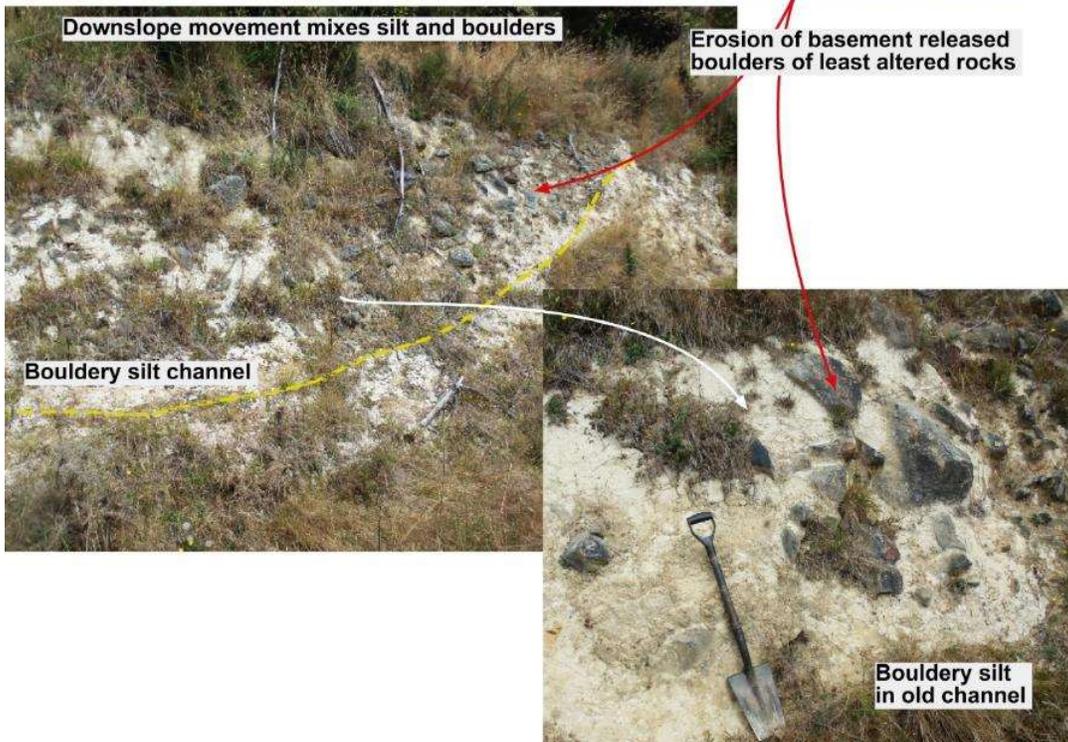




Figure 1. General summary of the key geological features at the Orokonui Ecosanctuary. The surficial deposits of silt, boulders, and combined bouldery silt are relevant to long-term integrity of the Ecosanctuary fence.

Mass-flow deposits of the Eiger area at the Ecosanctuary northern boundary

The Eiger area is characterised by some of the steepest slopes on the Ecosanctuary margin, and there is evidence of a long history of mass-flow activity. Principal features relevant to the fence are identified below and illustrated in Figures 2-5.

(a) Cold-climate mass-flow deposits.

A large mass-flow deposit that may have involved some catastrophic land-sliding has been identified from aerial photography and some ground-checking (Figures 2 and 3; yellow outline). The deposit is up to ten metres thick, and is locally channelised into the underlying basement. Outcrops of the deposit exposed by fence construction show that the deposit is largely cemented by silt and clay. There is no evidence that this deposit is still moving in its entirety, and it is assumed to be a relic of cold-climate mass-flow. However, the abundant hummocky ground and water seeps associated with it show that there is complex internal structure that is channeling shallow groundwater. This water movement is mainly near the base of the mass-flow deposit, near to the interface with the underlying bedrock.

(b) Surficial creep zone

The upper 1-2 metres of the above mass-flow deposit is more friable and loose than the underlying cemented material (Figure 4). This surface zone is likely to be still creeping at slow rates under the forest. There is a moderately distinct boundary between the upper and lower zones, and shallow groundwater appears to travel downslope near to that boundary. That water discharges from construction cuts made for the fenceline, and some discharge points have been enlarged as the water preferentially removes silt from between boulders (Figure 4).

(c) Historic(?) catastrophic landslides

Two possible catastrophic landslides apparently reactivated parts of the cold-climate deposits, as outlined in red in Figures 2 and 3. The most significant of these for long-term fence integrity is immediately upslope of the fence line (Figure 5). Water seepage at the fence line below this feature, and below the surficial friable zone, may be related to the structure of this deposit. The age of this catastrophic event is not known, but the topographic expression is well-defined and so it is presumed to be relatively young from a geological perspective (perhaps last thousand years). The implications of such events for the human time-scale of fence integrity is not yet known.

(d) Modern construction cuts

All the above features contribute to general instability of the modern construction cuts along the fenceline at the base of the Eiger slope (Figure 6). The surficial material has poor cohesion, especially when wet, and the complex history has caused complex flow paths for shallow groundwater. Consequently, this material is prone to collapse in metre-scale to ten-metre-scale landslides, either by creeping or potentially by catastrophic events. Smaller events are unlikely to reach the fence across the inside access track, but larger ones may reach that far. Irrespective

of the magnitude of these failures, they will contribute sediment (silt, boulders) to the fence line.

(e) Modern construction fill

Some redistribution of surficial material occurred during construction of the fence, and this was combined with fallen logs and other organic debris to form a relatively unconsolidated deposit. The fence was emplaced in some of this material on the steepest part of the Eiger (Figure 7). This material is currently slipping downslope, creating instability for the fence (Figure 7). The instability has been enhanced by water-saturation of the soft fill material at the boundary between the fill and the more-consolidated surficial material below the fill (Figure 7).

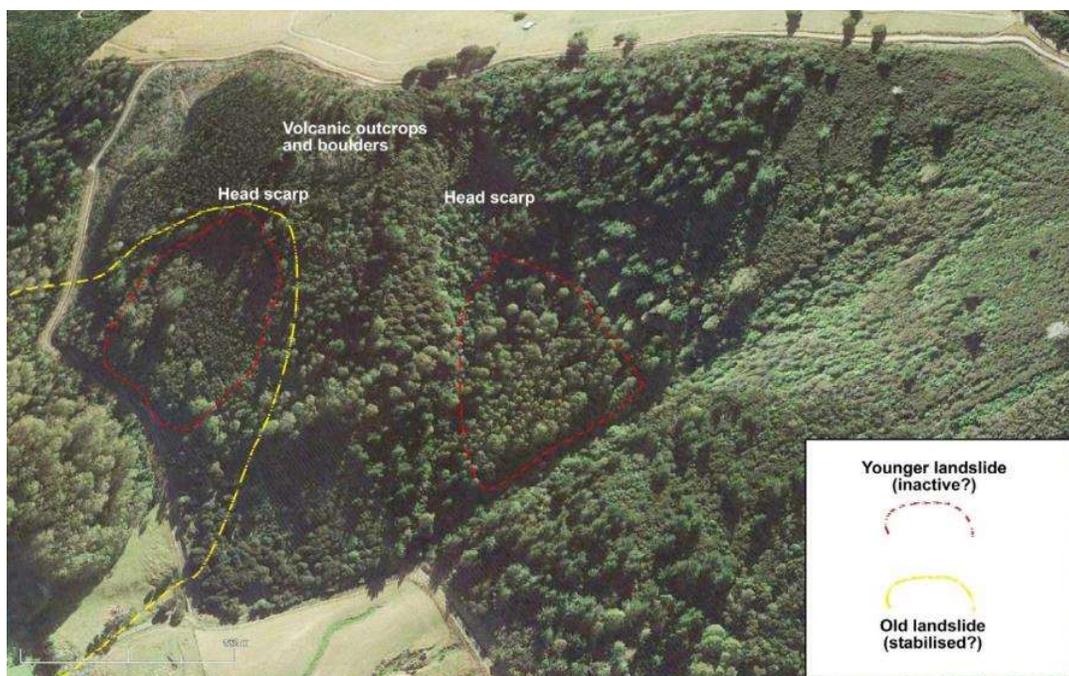


Figure 2. Oblique aerial view (GoogleEarth) of Eiger area, showing inferred mass-flow features.

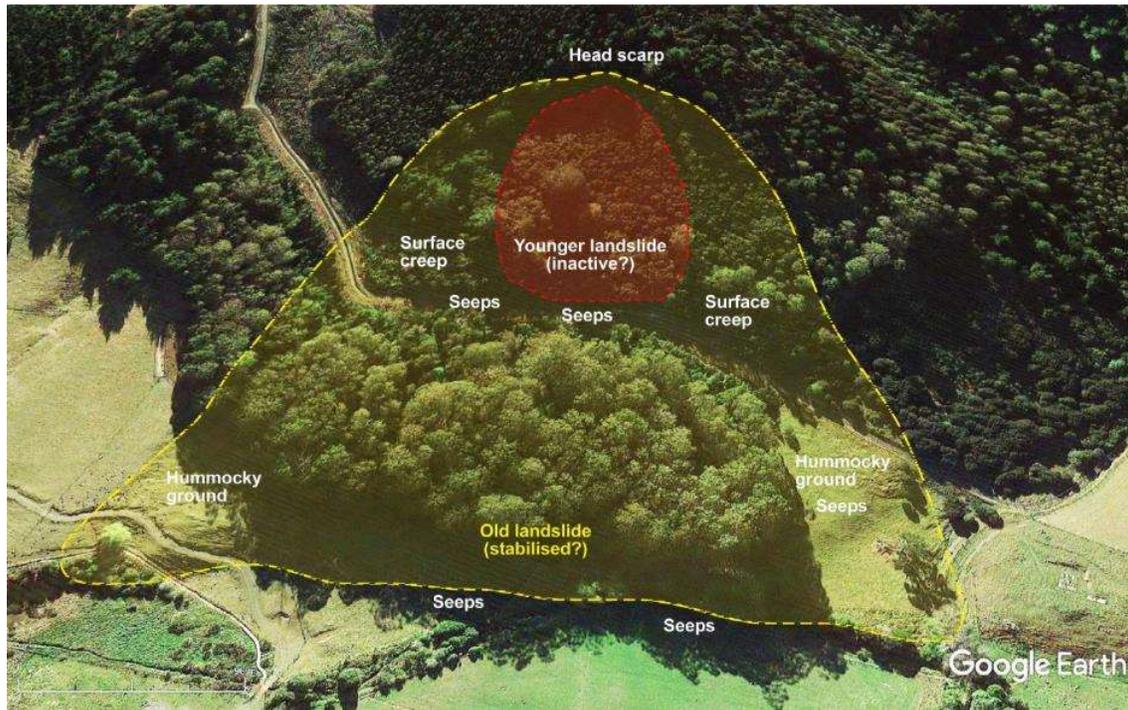


Figure 3. Oblique aerial view (GoogleEarth) of Eiger area, showing principal inferred mass-flow features relevant to long-term fence integrity.

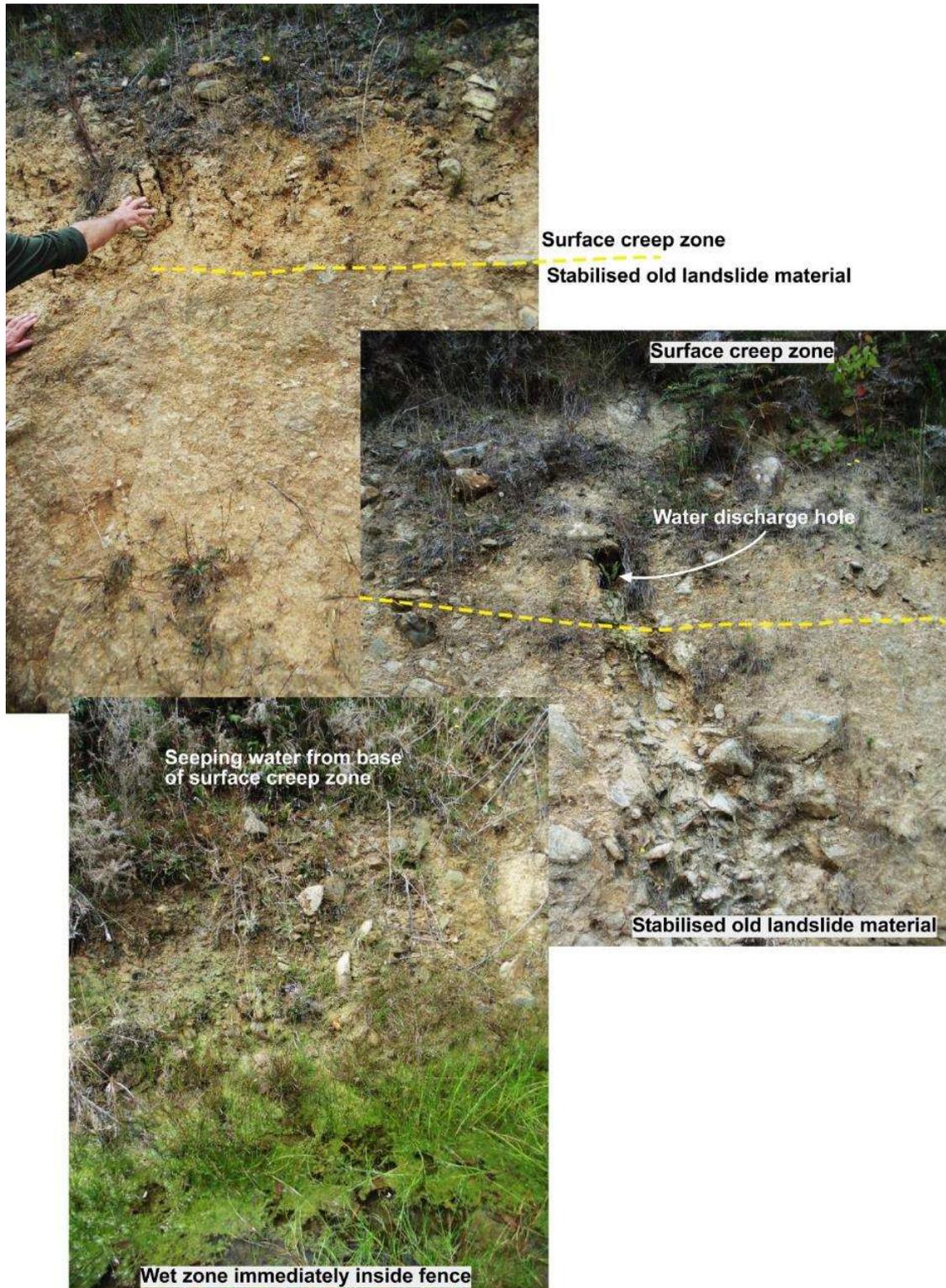


Figure 4. Friable and water-permeable surface creep zone on top of older and more impermeable mass-flow material, exposed in Fence construction cuts at the Eiger area.



Figure 5. LIDAR topographic data (from Otago Regional Council) colour-coded for height above sea level, and superimposed on oblique aerial view of the Eiger area. The prominent relatively young landslide feature (as in Figures 2 and 3) is indicated with red line, and related features are shown in photographs.



Figure 6. Photograph of unstable construction cut in mass-flow deposits near to the fence in the Eiger area.

Orokonui Ecosanctuary

Fence instability at Posts 896-907

Subsidence of fill emplaced during fence construction, with incorporated rotting *Pinus* logs

Fill 0.5-2 m thick is sliding downslope on underlying hard substrate, lubricated by soft wet clay

Rate of movement: average 1-2 millimetres/year

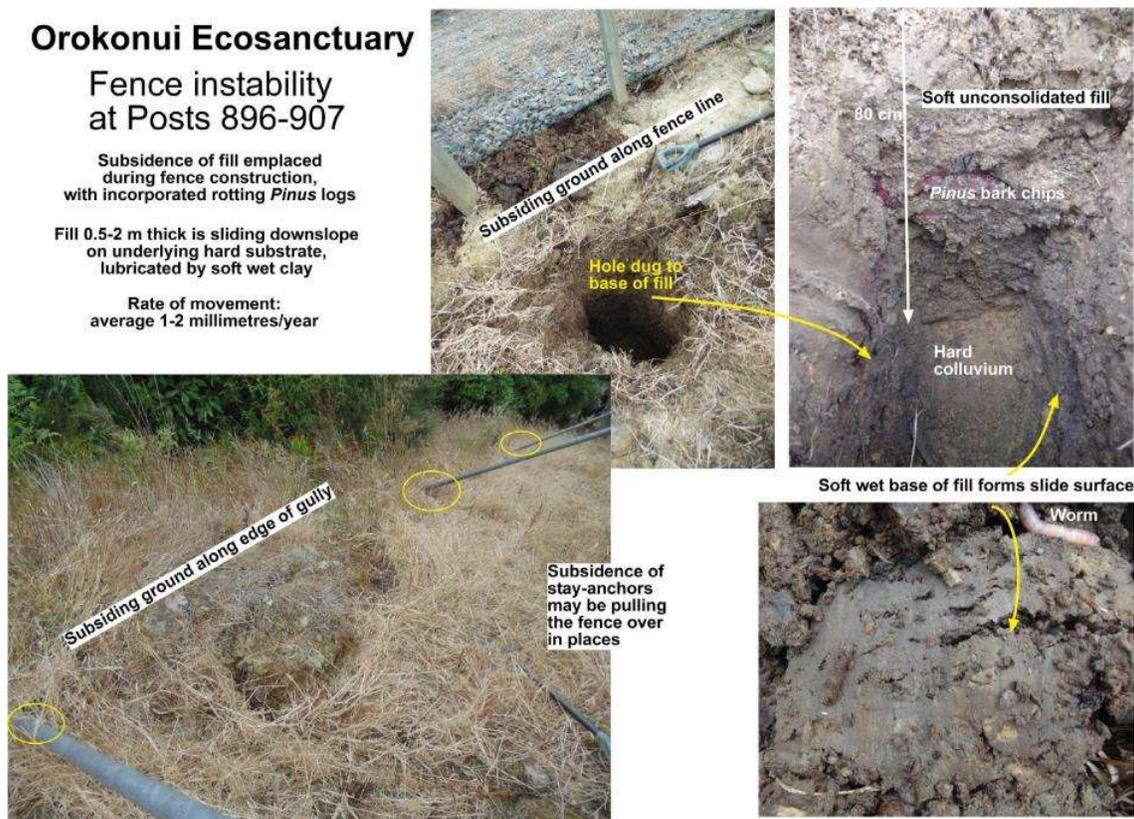


Figure 7. Key features of unconsolidated construction fill in which the fence has been emplaced on the Eiger slope.

Implications for fence stability in the Eiger area

The wide variety of slope stability features in the Eiger area means that surface processes that could affect fence integrity are likely to occur on widely differing time scales. It is inevitable in the geological long-term that all these surficial deposits will be unstable. Figure 8 provides a “best-guess” outline of the sorts of time scales on which different parts of the Eiger area are likely to display instability. The aim of this poorly-quantified depiction is to provide some basis for prioritising remediation activities. The key conclusions from this depiction are:

- the steepest part of the Eiger, and the base of that slope, is the most vulnerable area and is likely to affect fence integrity in the short-term.
- The near-horizontal portion of the fence across the old landslides is potentially vulnerable to slips from above in the medium term.
- Larger-scale landsliding could potentially affect the whole Eiger area in the long-term.

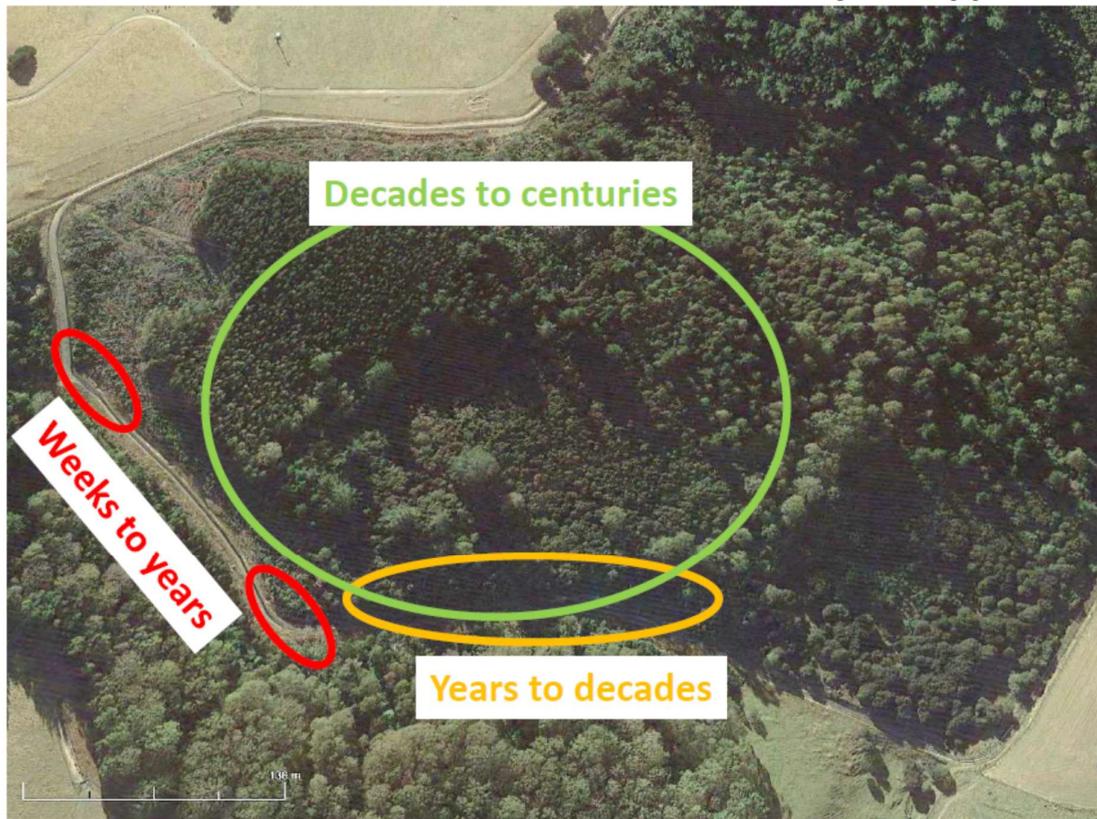


Figure 8. Highly-generalised estimates of time scales of likely slope instability issues affecting the fence in the Eiger area.

All these features are controlled at least partially by subsurface water saturation. Activation of more rapid and/or catastrophic downslope movement is therefore likely to be related to major rain events, especially protracted events (weeks) that fully saturate the surficial material.

The following sections outline some more specific issues and scenarios that could arise from these observations.

(a) Unconsolidated fill at Posts 896-907, Eiger steep slope

The most unstable material with active and visible downslope movement is clearly affecting the fence already (Figure 7). The cartoon in Figure 9 shows the principal features of this situation at this site in more detail. Potential, albeit highly speculative, implications for fence integrity arising from this instability are indicated in Figure 10.

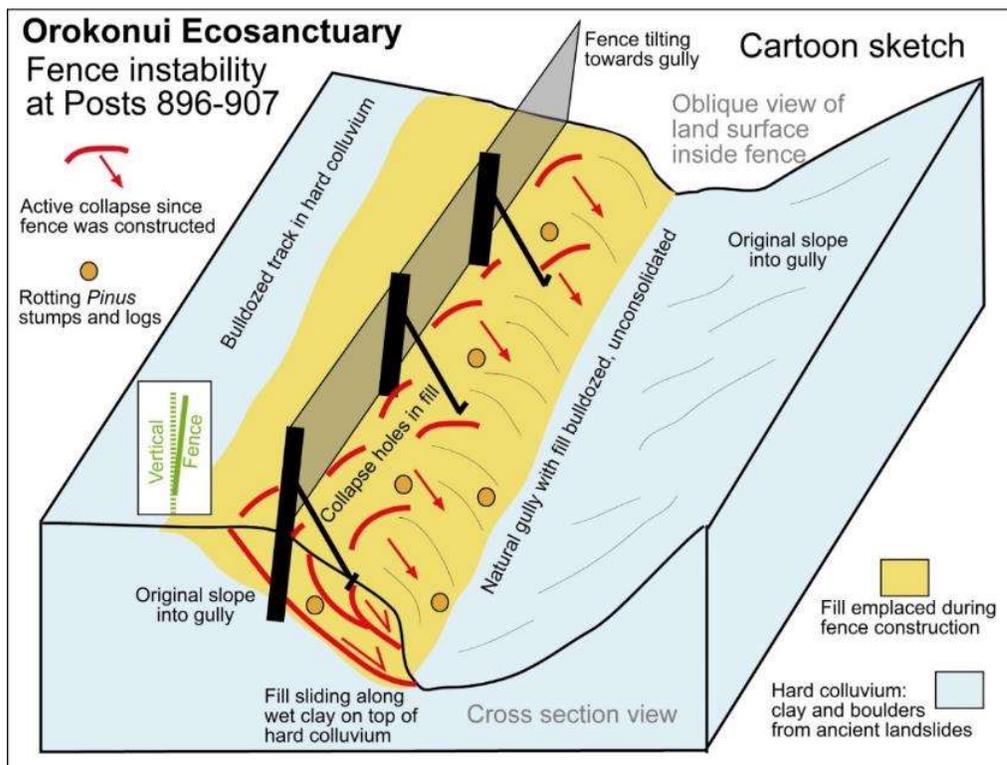


Figure 9. Cartoon representation (not to scale) of slope instability causing the fence to tilt on the steepest portion of the Eiger.

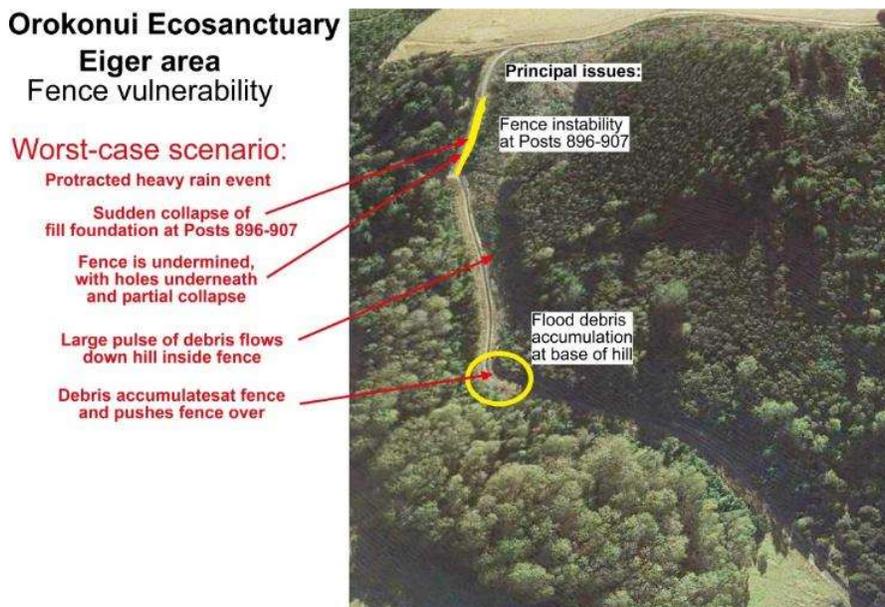


Figure 10. Speculative depiction of a “worst-case scenario” of slope instability on the Eiger section of the fence in a major rain event. It is assumed in this scenario that the

unconsolidated fill material in Figure 9 collapses catastrophically, rather via the downslope creep that is currently occurring.

(b) Reactivation of old landslide deposits

The old landslide deposits in the Eiger area are prone to reactivation in the medium-term (Figure 8). Small landslides near the fence have been made more likely by imposition of cut slopes during fence construction (Figure 6). Larger landslides similar to the one in Figure 5 are inevitable in the long-term, as depicted speculatively in Figure 11.

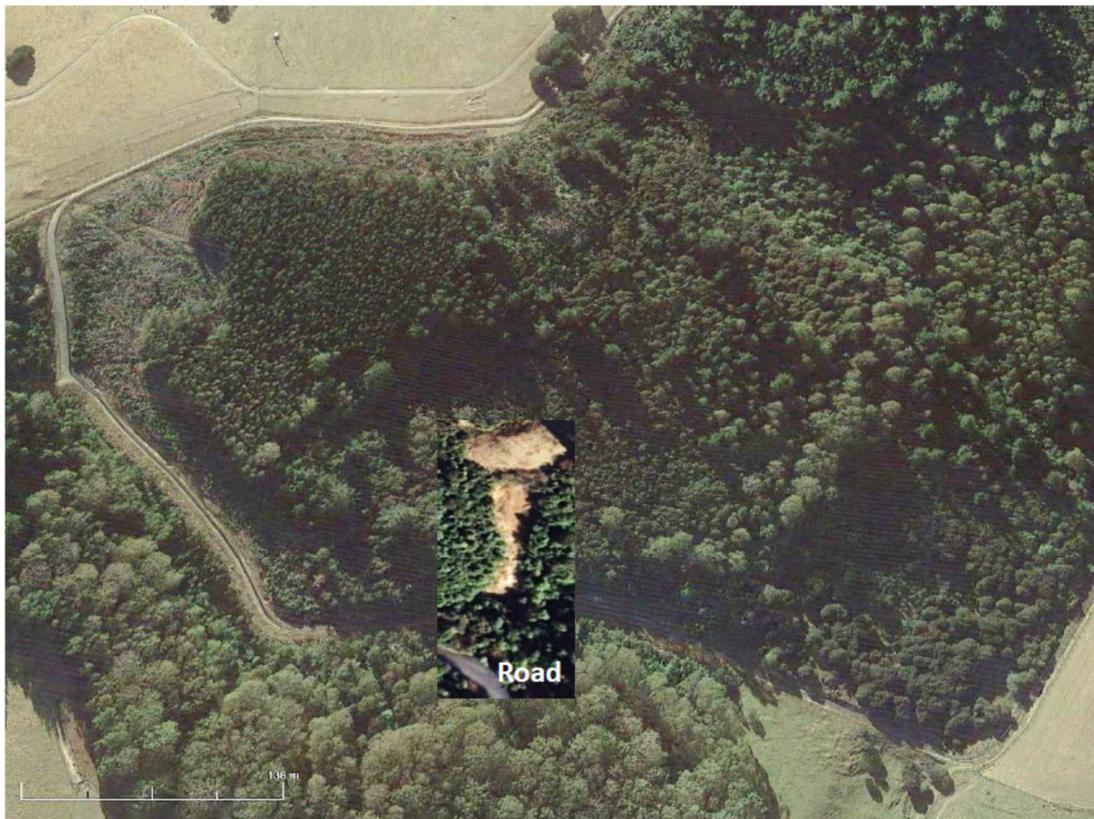


Figure 11. Depiction of the kind of landslide reactivation event that could happen in the Eiger area. A typical landslide that occurred in similar surficial material in a protracted rain event in April 2007 (Leith Valley, Dunedin) has been overlaid on the Eiger slope at the same scale. The last real landslide event on the Eiger (Figure 5) was larger than this Leith Valley example, and that event caused localised steepening of the slope with unconsolidated material in the position of the superimposed Leith valley landslide in this depiction.



Climate

Information about likely impacts of climate change are provided on the Ministry for the Environment website. <https://www.mfe.govt.nz/climate-change/likely-impacts-of-climate-change/how-could-climate-change-affect-my-region/otago> From this, information about impacts for Dunedin's climate are given below.

Rainfall

Rainfall will vary locally within the region. The largest changes will be for particular seasons rather than annually.

Otago is expected to become wetter, particularly in winter and spring. Seasonal projections show winter rainfall increasing by 4 to 10 per cent in Dunedin and 4 to 27 per cent in Queenstown by 2090. According to the most recent projections, extreme rainy days are likely to become more frequent in Otago by 2090 under the highest emissions scenario.

Wind

The frequency of extremely windy days in Otago by 2090 is likely to increase by between 2 and 5 per cent. Changes in wind direction may lead to an increase in the frequency of westerly winds over the South Island, particularly in winter and spring.

Storms

Future changes in the frequency of storms are likely to be small compared to natural inter-annual variability. Some increase in storm intensity, local wind extremes and thunderstorms is likely to occur.



Appendix D: Risk Classification

Objective

Develop a method of classifying the risks of:

- Culvert overflow and fence breach; and
- Ground instability and fence breach.

Method

A method was developed based on a likelihood and priority assessment matrix presented in the NZ Geomechanics New June 2018 (*Assessment of landside hazard in the road /rail corridor on the Kaikoura Coast*, NCTIR Slope Geotechnical Team) as likelihood and priority assessment matrices.

a) Culvert - risk of overflow and fence/embankment breach; hydraulic risk

Hydraulic Risk Matrix	Observations		
	C1	C2	C3
E1	High Risk	High Risk	High Risk
E2	High Risk	Medium Risk	Medium Risk
E3	Medium Risk	Medium Risk	Low Risk

Experience

- E1 Culvert overflow and fence breach experienced
 E2 Culvert overflow and no fence breach experienced
 E3 Culvert overflow not experienced

Calculations

- C1 Capacity is less than estimated runoff and no safe secondary flow path exists
 C2 Capacity is less than runoff and safe secondary flow path exists
 C3 Capacity exceeds runoff and safe secondary flow path exists

b) Fence - risk of fence breach from cause other than culvert overflow; geotechnical risk

Geotechnical Risk Matrix	Observations		
	O1	O2	O3
E1	High Risk	High Risk	High Risk
E2	High Risk	Medium Risk	Medium Risk
E3	Medium Risk	Low Risk	Low Risk

Experience

- E1 Fence breach experienced
 E2 Fence impacted and no fence breach experienced (eg slip has built up against fence)
 E3 Fence impact not experienced

Field observations or reported risks

- O1 Slopes above or below fence show signs of distress / features that may generate distress, or literature reports risk (scale of any failure significant and direct); include debris flow along secondary flow path



- O2 Slopes above or below fence show signs of distress / features that may generate distress, or literature reports minor risk (scale of any failure not significant or a significant effect is indirect)
- O3 No slope distress seen, or reported in literature

c) *Other risks to fence line / Sanctuary barrier integrity*

- Perimeter road
- Perimeter road drainage
- Public access to perimeter road
- Private access to perimeter road

d) *Other risks to fence line / Sanctuary barrier integrity*

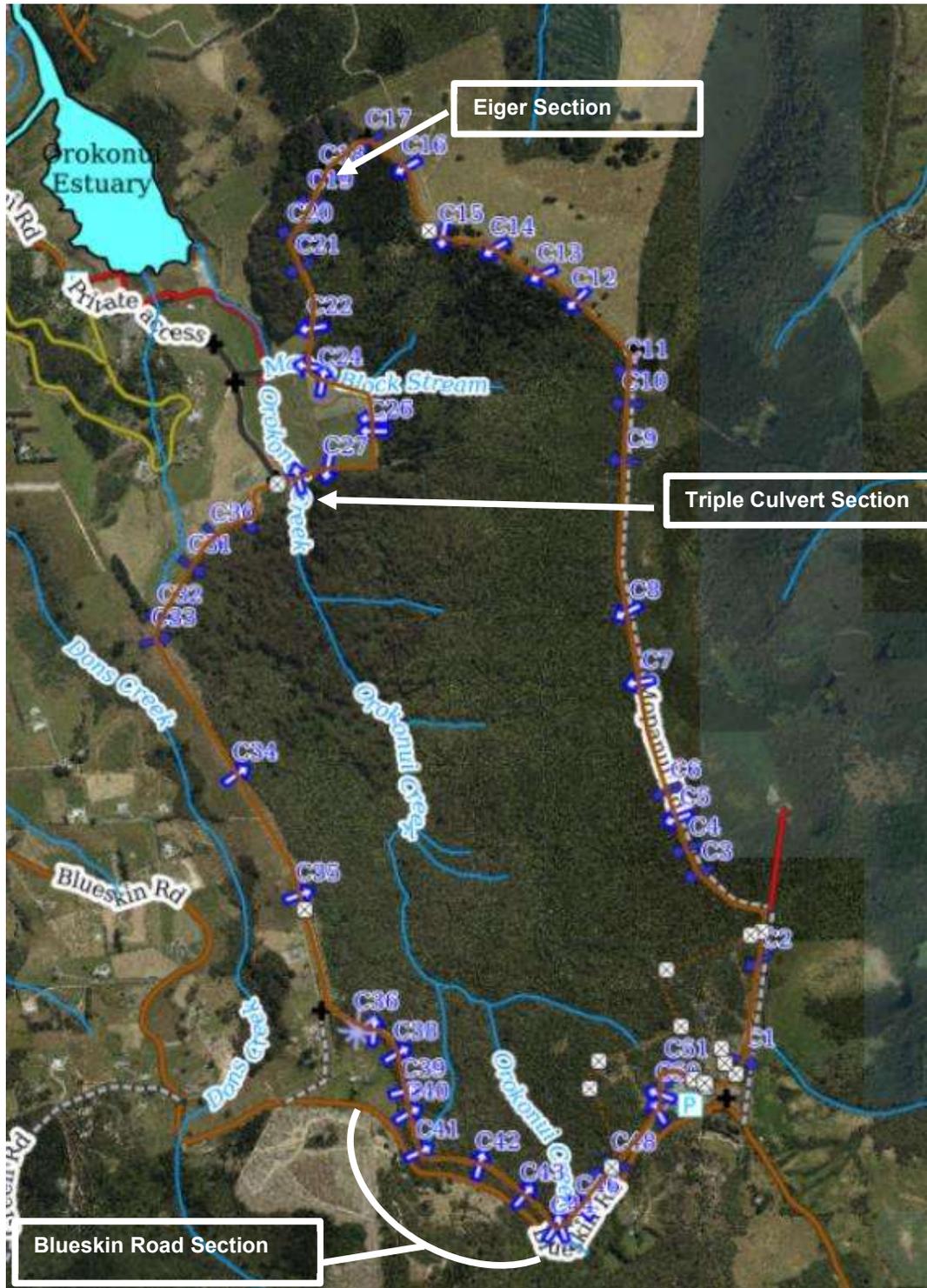
- wind load on fence
- tree / branch falling onto fence
- burrowing animals
- piping of water through embankment
- cavities in fill e.g. rock fill, settlement
- sabotage
- underground stream e.g. loess issue of gully erosion between Maree and Triple culverts
- rats jumping from outside tree inside
- a bird of prey drops a live predator inside the fence
- personnel error e.g. gate left open.

Risk prioritisation method

- scale of risk
- mitigation issues



Appendix E: Fence Line and Culverts





Appendix F: Asset Register Examples



Cat	Description	Record	Units	Comment						
A	Culvert Features									
	reference number	C28		Orokonui Creek, Triple Culvert						
	Flow direction - in or out of sanctuary	out								
	length									
	diameter (ID), mm	1050	mm							
	material	SJ concrete								
	screen type	swing gate								
	Head wall depth (invert to road level)									
	Head wall type									
	Secondary flow path	Fence breakout								
Observations										
5/7/18: hole between fence and horizontal timber over pipes; upstream side										
photos										
										
B	Hydraulic Features									
	Culvert capacity (w/o screen)	7	m ³ /s							
	Culvert capacity (w screen)									
	Screen capacity (fixed screens)	n/a								
	Catchment Area w/o secondary flows	365	ha							
	Catchment Area w secondary flows	365	ha							
	Runoff - 20 year return	6 to 14	m ³ /s		varies with runoff factor interpretation					
	Catchment groundcover	bush								
	Catchment slope, average	15	%							
	Catchment features				Features that may influence runoff eg road and associated ditches etc					
Culvert overflow/ fence breakout design										
C	Risks to fence security				Likelihood	Consequence				
	hydraulic based risks									
	culvert hydraulic overload	occurred in July 2018 storm			very likely	culvert overflow and breakout through fence, fence damage				
	blockage (soil, rock, foliage)	tbd			likely	increases overflow rate				
	geotechnical based risks									
flow path around / over culvert	not observed			unknown	destabilize road/bank					
D	Risk of predatory access via culvert									
	Swing gate culverts - outflow									
	gate does not close	observed, recorded			very likely	predator access				
	Swing gate culverts - inflow	n/a								
	gate does not close									
washed in during high flow										
Embankment perforation										
E	Native Fish Migration features									
	insert advice from freshwater ecologist									

Culvert 28 record



Cell	Description	Record	Units	Comment	
A	Inter-culvert Length	913-973		moderately steep to steep grade to narrow	
	Culverts, numbers	C20, C19, C18			
	Fence length		60 m		
	road width				
	road grade			moderately steep to steep grade to narrow	
	road formation				
	surface				
	subgrade				
	ground slope beyond road & fence line				
	outside fence / roadline	1V-3.5H		tbd	
	inside fence	1V-2.8H		tbd	
	catchment cover				
	outside fence / roadline	established bush			
	inside fence	bush, rosen			
	Roadside drain				
	dimensions	inside fence			
	grade				
	invert foundation material	bedrock, rtanor			
	Drain catchment (descriptive)				
	primary or secondary flow	n/a			
	secondary flow or cover				
	Observation				
	drain invert cover	no fallage		deep cover 919-921	
	roadside embankment (inside fence)	cut slope failure			
	natural slope grade	n/a			
	cut slope grade	1V-1H approx		Cut slope failure in July 2018 storm; lots of water down slope	
	drain breakout / over flow point			steep hole in cut slope approx PL 928	
	large trees near fence				
	inside / outside fence	tree both sides of road			
	height etc.				
				Old farm track starts approx PL 913 approx; ridges uphill - appear to be actual drainage path	
				Walked along this to forest; many felled trees; trees in swampy sections. Old slip at tree margin	
	photos	refer to photo record			
B	Hydraulic Features				
	Roadside drain catchment				
	with or without secondary flow		m ²		
	with secondary flow		m ²		
	Catchment ground cover	Reg bush			
	Catchment slope				
	Runoff with or without secondary flow		l/s		
	1 year, 10 year, 100 year return				
	Runoff with secondary flow		l/s		
	1 year, 10 year, 100 year return				
	Road drain capacity		l/s	potential capacity is well maintained	
C	Risks to fence security / access road			Likelihood	Consequence
	hydraulic based risks				
	ditch over flow / built too small	appears to contain flow; contains erosion debris		likely	debris dam in ditch, fence damage / breach
	geotechnical based risks				
	ditch cover	cover occurring		likely	slur rate depending on ditch; possible damage to fence foundation
	up slope slip	July 2017 flood		very likely	slip blocks culverts and debris settles in dip (plaque 1023); fence damage / breakout
	down slope slip	July? Op. pl 913; culvert damage		very likely	destabilise road or take out road
	tree tapping risk				
D	Matters to check / site inspection				

Fence line record between Plaques 913 to 973



Appendix G: High Risk Fence Line Sections



Eiger Section



Triple Culvert Section



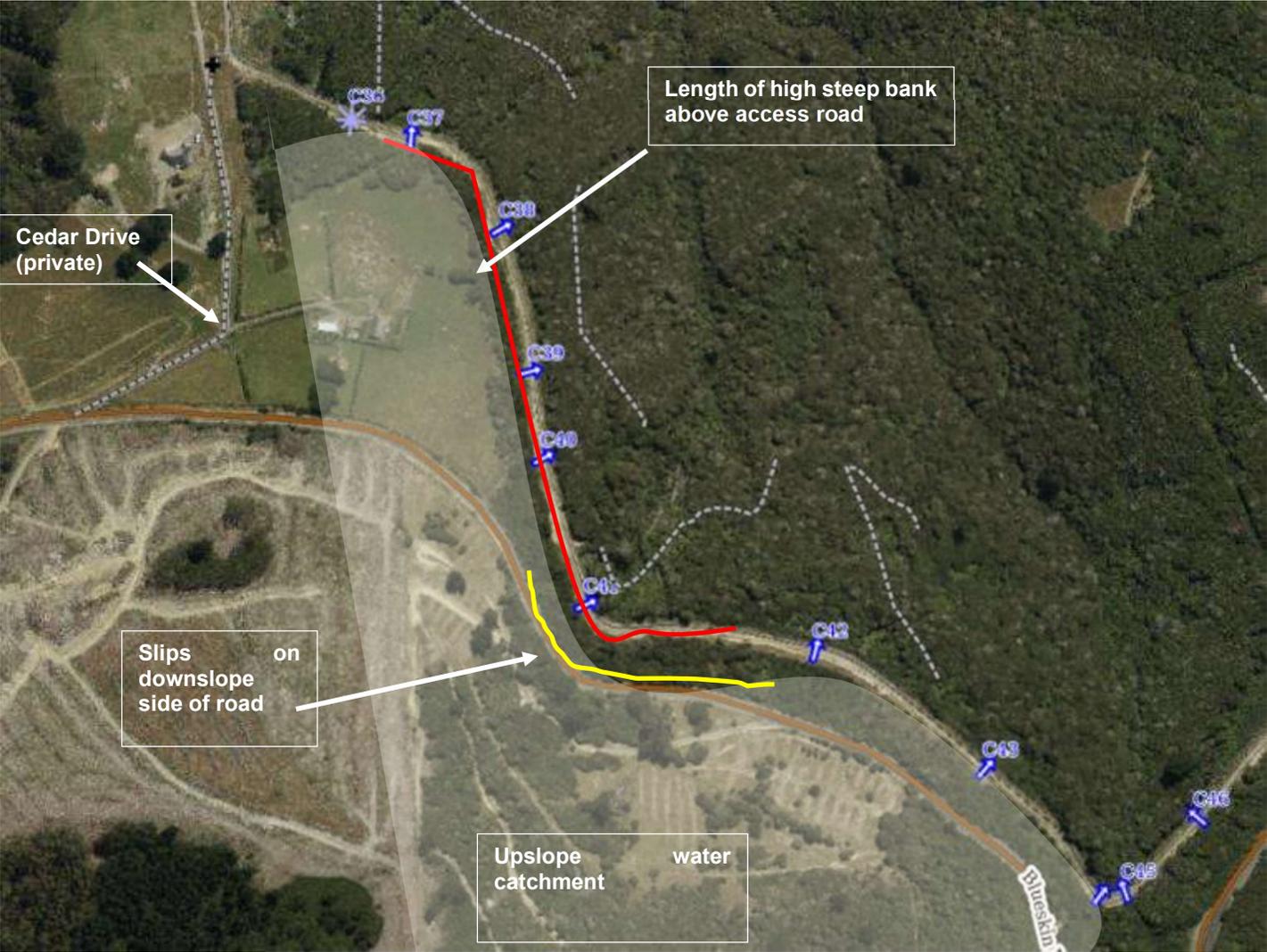
Triple Culvert Outlet



Swing Gates

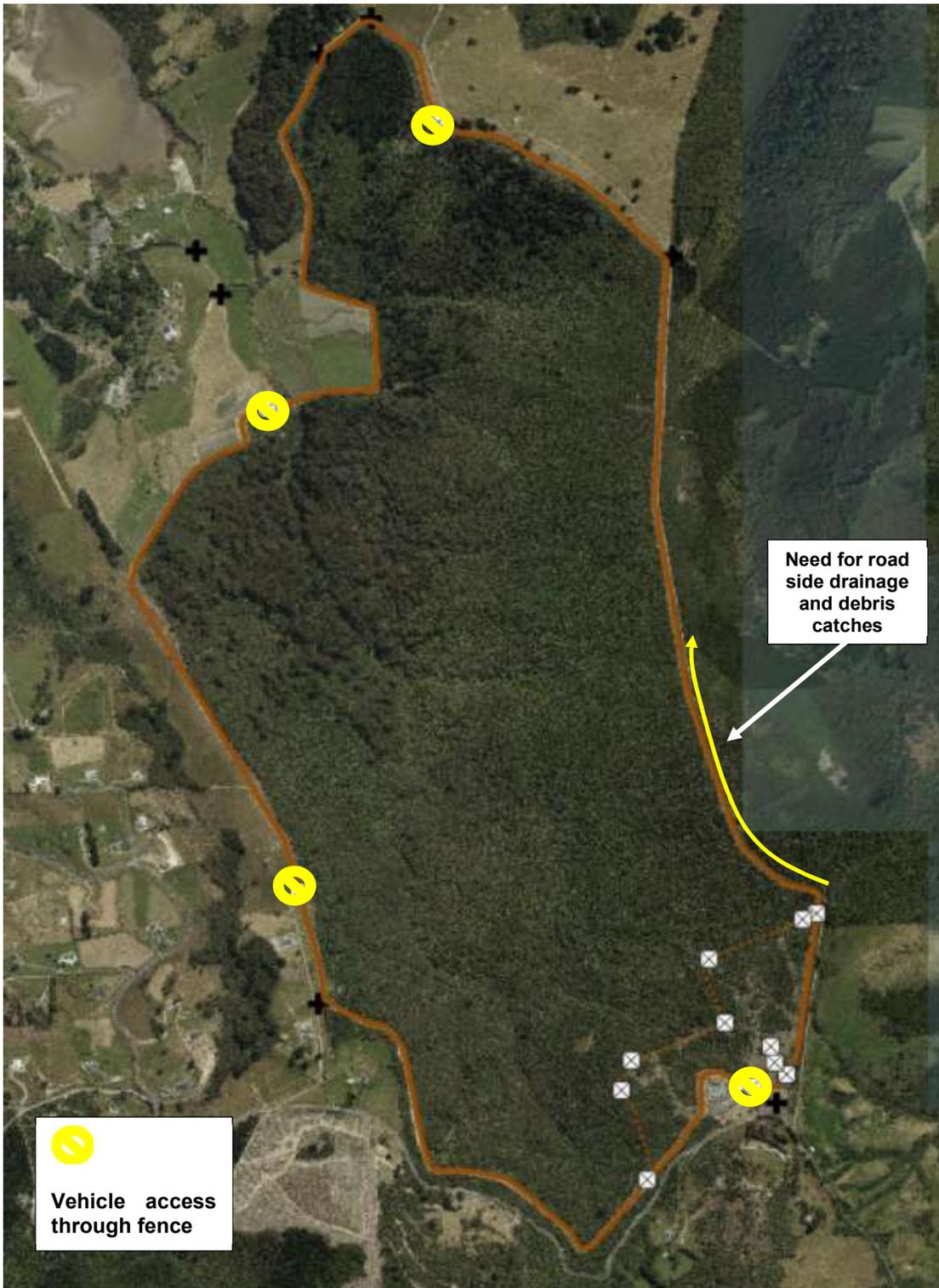


Blueskin Road Section





Appendix H: Fence Line Access Locations





-  Road vehicle access from public road to fence line road. Otherwise access is cross-country, ranging from nominal off Mopanui Road to considerable off Orokonui Road.
-  Cross-country vehicle access to fence line road not available



Appendix I: Remote Surveillance

Author: Tony Stewart, 2019

This is a brainstorming document to promote discussion about how remote surveillance techniques might be used to save staff time and alert staff to problems in the sanctuary.

Solutions should be supported by local companies.

Where working solutions are not available "off the shelf", perhaps all the NZ Sanctuaries could combine to develop them?

It would also be useful if one solution could cover a number of requirements. Then staff would need only go to one place to see, say, a list of gates left open, traps that had sprung, and fence posts that were tilting.

5.1 Priority

5.1.1 Fence perimeter cameras

(a) Culvert cameras

Culvert cameras enable staff to request photos of culverts to check that gates are not jammed open with debris, potentially allowing predators to enter the sanctuary.

The existing cameras are old smartphones adapted to act as remote cameras. They are not expected to last long, replacement phones are different sizes requiring reworking of their enclosures, and support depends on just one person. An off-the-shelf product stocked and supported in NZ is required.

Questions:

1. Would video (webcam) be better than still photos?
2. Culverts are potential points of illegally entry into the sanctuary. Is some form of motion detection required?

(b) Other vulnerable points around the fence

Remote cameras could be placed along the fence at sections vulnerable to damage. Should these be still pictures or video?

Potential solutions

Some trail cameras have the ability to accept requests for photos and forward them as picture text messages or emails through the cell phone network. Although the camera is high quality, forwarded pictures are usually of lesser quality. Cost \$500 to \$1000 each.

A New Zealand company, iDefigo, make what looks to be a very good camera that works through the cell phone network <http://www.idefigo.com/wire-free-cameras/>. It has a very low power consumption and even incorporates a solar panel. I've asked for information, but haven't received it. Not cheap - believed to be over \$2000.

Other alternative are available overseas but probably not supported in NZ.

5.1.2 Security for Jewelled Gecko enclosure

Jewelled Gecko are valuable - approx \$9,000 - and sought after by smugglers. A webcam would allow staff to monitor activity around the enclosure and its presence would deter thieves. Ideally it would operate day and night recording movement that could be reviewed if geckos were stolen.

ACE security have been contacted and recommend, not cameras, but pressure pads on the ground just inside the enclosing fence. A quote is being prepared.

5.1.3 Public Webcams

Webcams that take video for viewing by the general public:

(a) Bird feeder webcam

A webcam at the platform bird feeder used to provide video on a screen at the reception desk. The webcam has failed.



Often there is little or no activity at the feeder. It has been suggested that a better alternative would be to display pre-recorded videos of bird feeder activity.

(b) Portable webcam

A portable webcam that could be quickly moved to points of interest, such as a takahe nest. The video would be displayed on a screen in the Visitor Centre, or possibly even streamed over the internet like the “Royal Cam” from the Albatross Centre at Tairaroa Head. Cost: Probably around \$100 - \$1500. Plus battery and possibly a solar panel.

5.1.4 **Kiwi creche gates**

Students at the polytechnic are developing a system that will inform when the gates in the kiwi creche fence are not locked. They are currently testing this

5.1.5 **Kill trap monitoring**

Approximately 130 kill traps are distributed within the sanctuary to catch predators that find a way in. These are checked periodically, but it could mean some time between a predator being caught and staff becoming away of its presence. The Halo Project was going to install sensors and radio transmitters in their traps which would send immediate notification when traps went off. The rest of Predator Free Dunedin was likely to follow suit with the same technology for compatibility. However, the Halo Project has dropped the idea because of running costs associated with the technology they had chosen. There are a number of alternatives, but it makes sense for us to be compatible with the rest of Predator Free Dunedin. Rather than quickly adopting our own solution, perhaps we should wait to see what they come up with. There are also indication that the price, around \$100 per trap, will drop dramatically in the next year or so. See also **Other Predator Detection Methods** in the next section.

5.2 **Possible**

5.2.1 **Forest fire detection**

To send an alarm if a fire starts within the sanctuary. The earliest possible detection ensures a rapid response to minimise the spread.

5.2.2 **Fence wind speed detection**

High winds could damage the predator exclusion fence. If staff could remotely sense wind velocity they would only need drive around the fence to check the fence when necessary. There is a weather station near the garage at the top of the sanctuary, but wind velocities there are not necessarily as great as exposed sections of the fence. Additional detectors at exposed sections would solve this problem. Question: How many would we need, and where would they be placed?

5.2.3 **Webcam at valley floor**

A webcam at the valley floor that could be remotely paned and tilted would allow staff to check for events such as:

- Visitor locked in pedestrian cage (that happened about a year ago)
- Flooding on the upstream side of the triple culvert, probably caused by trapped debris.

5.2.4 **Other Predator Detection Methods**

(a) Cameras with artificial intelligence

There is evidence that cameras are better at detecting the presence of predators than traps, particularly trap shy predators. We could consider installing these around the sanctuary. The Cacophony Project have developed a thermal camera with artificial intelligence which they claim is very reliable at detection predators and distinguishing them from desirable fauna such as kiwi. For a review see <https://cacophony.org.nz/trial-results-ai-heat-camera-more-sensitive-and-cheaper-trail-cameras-possum-detection>. They are expensive at \$2899 plus battery and solar panel - see <https://www.2040.co.nz/collections/thermal-camera-for-predators>.



Grid-I, a much cheaper alternative <https://predatorfreenz.org/ambitious-plans-grid-detector/> was floated last year but does not appear to have progressed. Anticipated price was \$200-\$250.

(b) Paw detection

An electronic version of a tracking tunnel card, PAWS, is being developed:

https://www.landcareresearch.co.nz/data/assets/pdf_file/0004/66487/Blackie_Novel_automated_pest_detection.pdf

5.3 Dreaming

5.3.1 Improved surveillance box system

The existing system, consisting of 6 independent monitoring units, monitors gates around the fence and sends alerts to the duty phone when a gate is left open too long.

It suffers a number of defects. If a unit fails we may not know about it until the next weekly status report is requested. Occasionally text messages 'get lost' and can take hours/days to reach the duty phone. Worst case, it may be up to a week before a fault is recognised.

There is no easy way to determine the overall status – requests must be sent to all 6 units. Glenfern Sanctuary has integrated its gate monitoring with its trap monitoring. The one web page shows the status of both.

5.3.2 Fence post tilt detection

Tilt sensors on fence posts could report when a post was leaning over. Possible causes include high winds and ground movement.

5.3.3 Culvert gate angle and water level

The existing surveillance system has a switch to determine whether a culvert gate is open or closed. Potentially this could be replaced by two sensors, one to measure how far the gate was open (by measuring the angle of the gate) and the other a water level sensor. Alerts would only be sent when the water level dropped below the bottom of the gate.



Appendix J: Risk Workshop Record



Vulnerability Assessment of the Orokonui Sanctuary Perimeter Fence

Workshop

Date: 17 February 2020

Time: 10am to 12 noon

Place: Ecosanctuary Visitor Centre

Record

Present: Amanda Symon, Elton Smith, Kelly Gough, Geoff Clark, Tony Stewart, Dave Crow, John Cocks
 Dave and John gave a PowerPoint presentation for agenda items 1, 2 and 3 below.

Item 4 involved those present forming two groups and undertaking a risk prioritisation exercise, broadly as outlined in HB 230:2004 Environmental risk management—Principles and process.

The table below provides a summary record.

1	Introduction	
2	Background	<p>Purpose of assessment, purpose of workshop, Fence line definition</p> <p>Feedback</p> <ul style="list-style-type: none"> • Vehicle access through fence exists at 4 locations – to be confirmed and to correct report •
3	Findings	<p>Go through findings (ie identified risks) for approx. ¾ hr</p> <p>Feedback</p> <ul style="list-style-type: none"> • Mopanui Road after turn to left (ie turning west) generates lots of water in a storm, which flows onto fence line. Road has no drainage. Gravel gets washed of and onto fence / into culverts. Also rabbit poo gets washed to culvert and rapidly blocks the fine screens on the inlets. • C41. Near this culvert, cracks are appearing outside fence in the road (filled ground) • Graeme Bennett owns the land at the north of the sanctuary, including the zig zag road at the Eiger section. Formal agreement is needed for access using zig zag road and the track across the paddock from the lower Orokonui road to the fence line. Access across the paddock is not to occur after May because ground is soft and cuts up easily. • 2 slips on zig zag road have occurred in past; blocked access • HSWA: significant implications for emergency work; risks to staff should be factored into prioritisation • Test pits would identify where fence line is in fill (only one excavated, which was on the upper Eiger Section). • Triple culvert: partial blockage has contributed to overflow • Insurance – fit for purpose?
4	Priorities	<p>Workshop session in 2 groups for approx. ¾ hr</p> <p>See Attachment for worksheets and summaries.</p> <p>One group completed the worksheet, providing its assessment of likelihood and consequence of the identified risks. The results indicate that:</p> <ul style="list-style-type: none"> • Each of the 3 identified most at-risk sections were confirmed as high-risk sections • The triple culvert and Eiger Section had a higher risk score than the Blueskin Road Section.



		<p>The worksheet and reference sheets are attached.</p> <p>The other group principally considered the consequences (see Attachment) and estimating these. Key points (additional to those of the other group) that arose in the discussions were:</p> <ul style="list-style-type: none"> • Temporary (emergency) access may be hindered by washouts on the perimeter road distant from a fence breach. Any changes to fence alignment (e.g., on Eiger) may require changes in legal boundaries for permanent access. Current good-will “permanent” access across private land, e.g., to Eiger on zig-zag; Triple Culvert (summer only) may not really be permanent, but requesting legal easements could potentially “sour” the current good-will. • Cumulative effects of a storm around the perimeter fence need to be considered, especially with respect to the at-risk sections outlined above. For example, a single minor fence breach in itself may not be more than a ‘high risk’ but multiple such breaches at the same time will constitute a higher risk.
5	Mitigation	<p>There was insufficient time to work through the mitigation tables. However, mitigation points were raised during previous items (as noted above and below).</p>
		<p>Map of access routes for routine work and emergency work; include land owners and permissions needed.</p> <p>Maintain store of materials for emergency closure of a fence breach</p> <p>Water level detectors and warning device</p> <p>Logic path: issue – solution – funding</p>
6	Wrap up	
		<p>Actions:</p> <ul style="list-style-type: none"> • All – go through mitigation options in the handout or the draft report and mark up with “tick” if okay, “x” if not okay, and other ideas • John to prepare timetable for Amanda, which will include: <ul style="list-style-type: none"> ○ Issue final draft report ○ Presentation to board by authors • John and Dave to prepare draft final report, which will include additional risks noted under Item 3 and 4 above, and associated mitigation measures



Attachment One Group's Output

Eiger section

Reference	Risk	Ci	Cii	Ciii	Civ	Cv	Cvi	Likelihood	Score	Score/ 6	Risk	Priority
pl 863-913/C17-C18	Fence tipping over	1	2	1	4	4	3	B	15B	B 2.5		3
	Erosion of soil fence breach.	4	3	1	4	4	3	B	19B	B 3.2		4
pl913-973: C18-C20	Fence line breach	1	3	1	1	2	2	A	10A	A 1.7		2=

Blueskin road Section

Reference	Risk	Ci	Cii	Ciii	Civ	Cv	Cvi	Likelihood	Score	Score / 6	Risk	Priority
Culvert 37	Overflow, fence rupture; road collapse	1	2	1	4	4	1	C	13C	C 2.2		8
Fence nth of C38	overflow, bank collapse	4	3	1	4	4	3	C	19C	C 3.2		10
Culvert 41	overflow as above	1	2	1	1	4	1	C	10C	C 1.7		6
Culvert 43	Blockage rupturing fence or road	4	4	3	1	4	2	D	18D	D 3		11
Culvert 45	culvert blocks; overflow	1	1	1	4	4	1	C	12C	C 2		7
C 37-C 42+	bank collapse treefall	1	4	1	1	4	3	C	14C	C 2.3		9
C37 to C45	land use change, stormwater, slips	1	1	1	1	4	1	A	9A	C 1.3		5

Triple Culvert

Reference	Risk	Ci	Cii	Ciii	Civ	Cv	Cvi	Likelihood	Score	Score / 6	Risk	Priority
C28	Bank overflow	3	1	1	2	2	1	A	10A	A 1.7		2=
	Bank erosion	3	3	1	2	2	2	C	13C	C 2.2		8=
	Culvert blockage	1	1	1	2	2	1	A	8A	A 1.3		1



Risk Prioritisation Worksheets
 Fence line breach or damage

Qualitative measure of Consequences

Level	Descriptor	Description						Example
		Ci	Ci	Ciii	Civ	Cv	Cvi	
		Fence breach	Ground breach	Breach Length	Access for temporary repair	Access for permanent repair	Culvert	
1	Catastrophic	Netting & posts broken	Major foundation repair	> 1 panel	Helicopter / foot	Off sanctuary land to repair; land perm, road formation.	Washout/major repair	BS road slip taking out section / blocking fence line road; no alternative vehicle access/DCC involvement
2	Major	Post/s broken	Major foundation repair	1 panel	Land permission; road formation	Land permission; road formation needed	Washout/minor repair	Eiger base washout
3	Moderate	Netting rupture	Large opening	< 1 panel	Road formation	Road formation	No culvert directly involved	
4	Minor	Netting lifted	Small opening		Land permission.	Land permission		
5	Insignificant				Public road	Public road		

Qualitative measure of likelihood

Level	Descriptor	Description	Example
A	Almost certain	Breach has occurred in the past: no change to risk	Eiger at base
B	Likely	Culvert overflow / no breach: slip damage /no breach	Eiger at top
C	Possible	Potential for culvert overflow or slip occurrence	BS section: upslope development
D	Unlikely		
E	Rare		



Qualitative risk analysis matrix: Level of risk

Likelihood	Consequence				
	Catastrophic	Major	Moderate	Minor	Insignificant
Almost certain	Extreme Risk A 1	Extreme Risk A2	Extreme Risk A3	High Risk A4	High Risk A5
Likelihood	Extreme Risk B1	Extreme Risk B2	High Risk B3	High Risk B4	Medium Risk B5
Possible	Extreme Risk C1	Extreme Risk C2	High Risk C3	Medium Risk C4	Low Risk C5
Unlikely	Extreme Risk D1	High Risk D2	Medium Risk D3	Low Risk D4	Low Risk D5
Rare	High Risk E1	High Risk E2	Medium Risk E3	Low Risk E4	Low Risk E5

- E Extreme risk
- H High risk
- M Moderate risk
- L Low risk



Respondent No: 81

From: General enquiry <noreply@jotform.com>
Sent: Thursday, 9 April 2020 12:35 p.m.
To: Customer Services <customerservices@orc.govt.nz>
Subject: Re: Contact Us form - Kathy Buckham

Contact Us form	
Name	Kathy Buckham
Email	[REDACTED]
Phone Number	General
Enquiry Type	enquiry
Your message	<p>I cannot see any mention in the agenda regarding the proposed rates increase.</p> <p>It is disingenuous to say there was not enough time to arrange a meeting to reduce your budget expenses. You are having a meeting now so arrange it now.</p> <p>It is simply unimaginable that the council could even think of increasing the rates at this time. All capital works should be put on hold and a thorough assessment of costs undertaken.</p> <p>You may like to look at what other councils are doing, eg QLDC.</p> <p>The councillors and senior staff should all take a 30% reduction in remuneration in line with most workers in New Zealand.</p> <p>I am considering starting a petition to gather support for a substantial reduction in costs.</p> <p>I look forward to at least a 10% decrease in my rates accounts.</p>

You can [edit this submission](#) and [view all your submissions](#) easily.

Respondent No: 82

From: Jackie & Laurie Dalziel

Sent: Saturday, 11 April 2020 5:43 p.m.

To: Customer Services <customerservices@orc.govt.nz>

Subject: Otago Region Annual Plan

I live in Mosgiel. I and many other people, including farmers who are having extreme difficulty in getting stock killed at works (many lambs that would normally be fattened on the farm are being sold as stores) are strongly apposed to the proposed 9% rate rise during this difficult time caused by the Covid19 crisis. I have discussed this with many people (on the phone) and they all agree that your 9% price rise proposal is ludicrous!

Furthermore it is so important that all your members (who are not farmers) take time out to interact with farmers (the majority of whom are greenies) and better understand actions they are taking to reduce water pollution etc. The vast majority of farmers have changed their practices to look after their land. Comments such as “farmers don’t own their land” as was allegedly reported in the ODT does not encourage the cooperative approach needed between farmers and the Otago Regional Council.

Laurie Dalziel

Respondent No: 83

Submission to the ORC on the Annual Plan 2020-21

I have read the proposals for Otago under the plan as indicated

I strongly submit that no rate increase should occur.

The plan appears to be a top down proposal from those, isolated from the world most ratepayers inhabit

I concur with a lot of the objectives but there seems to be no understanding that the world has changed. I reject the published notions that the environmental concerns should take precedence over the well being of our people. Yes , they often go hand in glove but as mentioned earlier budgets and plans cannot be locked in just because the ORC has preconceived “plans” . The ORC allows a high degree of capture of process by environmental groups (Im sure staff/council will disagree but that is widespread public perception)

The ORC must ensure the economy of the region functions as an absolute priority. The best environmental outcomes occur from 1st world countries - not 3rd world countries

What or where evidence is there to show that our region will flourish should continuing rate increases occur?

What is the measurable outcome the ORC has in place to determine whether or not such policies are actually working as a result of direct ORC input and management . I submit the best outcomes are ones that are implemented with community leadership and buy in from the wider community – and not from pressure groups who are responsible to no one but themselves.

I further note the continuance of the urban -rural divide around the council table .

That tells me that closed minds exist around the council table (see Plan change 7)

Money should be set aside to allow for a “ peoples council “ where we can all be directly involved at the beginning of discussion around plan changes -not at the end as always occurs

Gerrard Eckhoff

April 24th 2020

Dear Chair and Councillors,

Annual Plan 2020/21 - funding recommendation

I am writing as chair of a governance group formed for the purpose of establishing the Wakatipu Transport Management Association (TMA).

The TMA has, thus far, been supported by the Queenstown Chamber of Commerce after a draft W2G TDM scoping study, undertaken by NZTA transport consultant, reported that TMA's were a common feature of international resort towns with efficient transport networks.

A TMA can foster a strong appetite for businesses, resident associations, and other stakeholders in becoming a part of solving transport problems

The role of a TMA is to increase transportation options, provide financial savings to businesses and employees, reduce traffic congestion and parking problems, increase active transport, and reduce pollution emissions. They are an important strategy for creating more efficient land use patterns.

A TMA works in the space that other infrastructure agencies (or their suppliers) do not and helps to deliver common beneficial outcomes. It provides bottom up non-car transport advocacy, leads communities in effecting change and represents those who chose non-car transport by influencing the programs of providers rather than just delivering those programs.

The Wakatipu TMA recognises and endorses the pre-Covid19 recommendations made by Wakatipu Way 2 Go with respect to dramatically increasing the number of passenger movements made by bus or active travel. We note that travel demand management is a key component in the QTN business cases to help manage current and future travel demand and, is a ministerial requirement, for long term regional land transport plans. Transport planning research acknowledges that role of transport management associations in effective implementation of travel demand management in urban settings.

We are making a one-off funding request of \$120,000 employ a business manager to:

- Develop a communication and engagement plan suitable to support the W2G goals and activities planned for the 2020 and 2021 year
- Developing a sustainable business and funding plan establishing the TMA as an independent, not for profit, self financing organisation

In addition to furthering the goals of W2G, we believe the TMA will complement the Council's work plan to reduce carbon emissions, help deliver better urban development, and reinforce the role of public and active transport as our district rebuilds its economy.

Indeed, post Covid, a TMA would serve a key role:

- to address attitudinal resistance to getting back on the bus post lock down, including positioning bus transport as the most cost-effective way to travel for visitor and residents;
- to support transport infrastructure developments that may arise as a result of an economic stimulus infrastructure spend in the district
- advocating for in-street works to re-purpose parts of the carriageways eg for wider foot and cycle paths or creating bus lanes which needs to be done whilst the roads are quiet.
- helping retain the travel free days that level 4 and 3 produced, identifying how this can be incentivised and common issues overcome.

Attached is a brief outline of the proposed Wakatipu TMA. As a governance group we have been regular contact with the Way 2 Go partners, who are supportive of our aim in establishing the TMA.

We look forward to addressing you when you meet to hear submissions on the Annual Plan for the coming year.

Yours faithfully

Alistair Snow
Chairman Wakatipu TMA Governance Group

Wakatipu TMA in a nutshell

- Goal - 40% of visitor and resident travel journeys undertaken to public and active transport by 2028
- TMA to be a stand-alone, self financing not for profit organisation
- Governance Group formed for the purposes of securing \$120,000 to employ a business manager for 12 month period.
- TMA currently sits under the Queenstown Chamber of Commerce.
- Primary focus on education and encouragement, promoting active/ public transport to schools, workplaces, recreation sites and improving motorist education.
- Secondary focus of evaluation and governance, representing users in design and implementation of engineering based solutions provided by government funded infrastructure providers.
- TMA will complement work of the infrastructure providers (Wakatipu Way 2 Go)
- Achieving modal shift will reduce congestion, our reliance on fossil fuels and carbon emissions
- Current members of the Governance Group are:-

Alistair Snow - Queenstown Manger Harrison Grierson
Anna Mikell - CEO Queenstown Chamber of Commerce
Heather Beard - Colliers Queenstown
AJ Mason - Co founder Startup Queenstown
John Glover - Chair Glenorchy Community Association

Examples of proposed Wakatipu TMA projects :

- Establishing a volunteer transport ambassador programme for high demand periods.
- An ACC funded initiative providing workplace information and training around the safe use of bikes, ebikes etc; promoting safe active travel routes and how to deliver modal shift safely.
- Create a series of workshops/conferences/events promoting active and public travel.
- With government funding, undertake research to understand travel movements and identify optimal public and active travel improvements, education and incentives for modal shift targeting high single occupancy communities.
- Undertake a feasibility analysis to create a “last mile” centralised logistic service for downtown Queenstown - deliveries, collections, waste removal etc
- Write submissions to the ORC and others in respect of the Regional Land Transport Plan
- Learning from the lockdown- retaining ‘no journey’ behaviour

Respondent No: 85



24th April 2020

Otago Regional Council
Private Bag 1954
Dunedin 9054

Kia ora

Otago Regional Council Proposed Annual Plan 2020-21

Please find enclosed submission from the Department of Conservation in respect of the Otago Regional Council Proposed Annual Plan 2020-21.

Please contact John Roberts in the first instance if you wish to discuss any of the matters raised in this submission at jroberts@doc.govt.nz or 027-687-6809.

Ngā mihi



Aaron Fleming
Kaihautū Matarautaki *Director Operations – Southern South Island*
Te Papa Atawhai *Department of Conservation*
Whakatipu-wai-Māori Office
1 Arthurs Point Road | PO Box 811 | Queenstown 9348

SUBMISSION ON THE OTAGO REGIONAL COUNCIL PROPOSED ANNUAL PLAN 2020-21

TO: Otago Regional Council

SUBMISSION : Otago Regional Council Proposed Annual Plan 2020-21

FROM: Aaron Fleming, Director Operations Southern South Island

ADDRESS: Queenstown District Office, PO Box 811, Queenstown 9348, Attn. John Roberts

Date : 24 April 2020

I, Aaron Fleming, Director Operations Southern South Island acting upon delegation from the Director-General of the Department of Conservation make the following submission in respect of the Otago Regional Council Proposed Annual Plan 2020-21.

I do not wish to be heard in respect of this submission.

1. General

The Department supports the Otago Regional Councils vision for a healthy environment and acknowledges the recent efforts of the Council to improve freshwater, biodiversity, biosecurity and environmental outcomes generally across Otago. I also acknowledge a growing investment in preparation for the effects of climate change. These are all matters in which we share a great interest.

I am aware of the recent engagement between our organisations with respect to such matters as the development of the ORC's Regional Pest Management Plan 2019, the Biodiversity Strategy 2019 and our current early input to the development of a new Land and Water Regional Plan and several current Plan Changes. It will be important to align the objectives of the Biodiversity Strategy with ongoing land and water management, as well as the new Land and Water Regional Plan.

I also support your increased engagement with the Otago Conservation Board and Ngāi Tahu.

In particular I note our shared ongoing interest in turning the 2018 Otago Conservation Board led Biodiversity Forum into an ongoing multi-agency means to deliver positive environmental outcomes across all of Otago's land tenures.

For context, it is helpful to describe in broad terms some of the Departments key biodiversity interests in Otago.

Otago has an ecological character distinct from other regions of New Zealand and a vast diversity of landscapes, ecosystems, species and climates, which contribute to New Zealand's international identity and reputation. This is highly valued by the community. The diversity of ecosystems,

weather and geology result in a diversity of vegetation and species, many which are endemic to Otago.

This includes rare and endangered lizard fauna, including the threatened grand and Otago skinks of Central Otago and the moko kākārīki/jewelled gecko, several threatened and endemic freshwater fish species, and many threatened dryland plant species. The high-altitude range crests and bogs of the Central Otago dry basins and uplands support a distinctive range of low-stature alpine plants. Other distinctive features are the salt pans, which support endemic salt-tolerant plant species, and the presence of small spring annuals that feature at several small reserves. The drylands also contain a wide range of threatened invertebrates, such as moths and beetles. The forests of The Catlins provide nationally important habitats for mohua/yellowhead and other forest-dwelling species.

Otago's rivers, particularly the Taieri, are a stronghold for a number of threatened and endemic galaxiid. Thirteen non-migratory species have been confirmed, with sometimes a species being confined to one catchment. Protection of freshwater quantity and quality (including protection of upland and lowland wetlands) and increased public awareness of these often overlooked species are critical to their survival.

Marine and coastal areas support a wide range of seabirds, marine mammals, fish and invertebrates. Penguins, shearwaters, shags, albatrosses and gannets feed and breed in a number of locations along the coast. Bird species that usually nest only on offshore islands can be found nesting on parts of the mainland Otago coastline. Of particular note are the toroa/northern royal albatross and hoiho/yellow-eyed penguin. The toroa/northern royal albatross colony at Taiaroa Head (Pukekura) is the world's only mainland albatross breeding colony.

Dolphins and four species of seal (popoia/ngore/leopard seal, kekeno/New Zealand fur seal, ihupuku/southern elephant seal, and rāpoka/whakahao/New Zealand sea lion) are present in coastal waters. Public interest in marine mammals and birdlife is high. Oamaru, Otago Peninsula and The Catlins coast attract many people to observe wildlife, including kororā/little penguins and hoiho/yellow-eyed penguins.

The extensive public conservation lands and waters in the western mountains and lakes support threatened animals including whio/blue duck, mohua/yellowhead, pīwauwau/rock wren, kākā; kākārīki/parakeet, kārearea/New Zealand falcon and pekapeka/bat.

The most obvious threats to conservation in Otago are pest plants and animals, human activities, developments and fire. Natural hazards including debris flows, erosion and flooding can significantly modify the environment and pose a threat to conservation values.

Freshwater and dryland habitats and wetlands are vulnerable to pollution, irrigation, conversions to pasture or forestry, and lifestyle block development.

Central Otago dryland areas with low-stature plants are susceptible to replacement by higher stature exotic plants. The spread of pest plants such as wilding trees and gorse threatens the landscape, ecological and ecosystem-service values of tussock grasslands, as does fire.

High-altitude landforms are also at risk, with the potential for climate change to exacerbate weed invasion. Protection of these intact indigenous habitats from the impacts of pest plants and animals will require a high degree of inter-agency and community cooperation into the future.

Otago's ecosystems and species, along with some recreational opportunities and coastal heritage sites, are being affected by climate change. Future impacts are likely on both terrestrial and marine ecosystems, the distribution and survival of species, and the range of pests.

Co-operative community conservation efforts are contributing to the restoration of natural heritage in Otago. This is particularly important, given the high proportion of natural values on private or leasehold lands, especially in Central Otago.

2. Specific Comments regarding the proposed ORC Annual Plan 2020-21

(A) Freshwater

Prioritising this work and providing significant new funding for development of a new, fit for purpose Land and Water Regional Plan in part through significant additional funding above the previous 2019/20 Regional Planning budget is **supported**.

Providing significant new funding for improved State of the Environment (SOE) reporting, including more staff, is **supported**.

Funding the monitoring of water quality at Lakes Hayes, Wanaka and of Whakatipu wai-Māori is **supported**

Providing funding assistance for catchment groups and communities to work together is **supported**

(B) Climate Change

Additional funding for understanding adaptation to climate change and for understanding associated coastal changes, risk and flood protection is **supported**.

(C) Biodiversity and Biosecurity

Additional funding to support partnerships and the delivery of environmental initiatives through a Regional Biodiversity Trust or similar is **supported**. In particular I encourage the ORC to use this funding to engage a coordinator to support this and to develop a plan of work across the various agencies and land tenures.

The ORC retention of the targeted rate for wilding control is **supported** and should continue to be provided to community groups to deliver the work. I am assuming, as you have signalled and was planned for in the Long Term Plan, Year 3, that the overall decrease in biodiversity spending identified is a result of reduced external funding for wilding pine control work in 20/21.

Funding for building an Otago inventory of biodiversity is **supported**

The ECO Fund to support community-driven, environmental projects that protect and enhance Otago's environment is **supported**

Investing in working with landowner groups to support them in managing pests on their properties is **supported**, as is the roll out of the Regional Pest Plan.

Consequently the increase in funding for additional biosecurity work is **supported**

(D) Regulatory

The significant increase to regulatory funding, approximately 50% more than was forecast for 20/21 in the Long Term Plan Year 3 , and therefore prioritising consenting work, is **supported**

Thank you for the opportunity to submit

Nāku noa, nā

A handwritten signature in blue ink, appearing to read 'A Fleming', is positioned below the text 'Nāku noa, nā'.

Aaron Fleming
Director, Operations
Southern South Island
Department of Conservation

Pursuant to delegated authority on behalf of Lou Sanson, Director-General of Conservation

A copy of the instrument of delegation may be inspected at the Director-General's office at Conservation House Whare Kaupapa Atawhai, 18/32 Manners Street Wellington 6011.

East Otago Catchment Group
c/- Stephanie Scott
RD1
Waikouaiti
Otago 9471

23 April 2020

To Whom It May Concern,

SUBMISSION to the 2020/2021 ANNUAL PLAN

I am writing on behalf of the East Otago Catchment Group this submission to the Otago Regional Council (ORC) on their proposed 2020/2021 Annual Plan.

The East Otago Catchment Group (EOCG) committee was recently formed in August 2019 after ongoing workshops and consultation with the East Otago community. As a newly formed catchment group we are still working through goals for the future and what we want to achieve as a catchment. We are hoping to develop these goals and break down into sub-catchments within the next 6 months

At this stage all the work is being done by the committee as volunteers with support when needed from the ORC and Beef and Lamb. To achieve our water quality goals and to keep moving forward as a catchment our committee believes it is important to have a paid co-ordinator and administrator. Research shows that a co-ordinator can really make a difference to the success of a catchment group, however, at this stage we are limited by funds.

In the 2020/2021 Annual Plan you have identified that you *“want to formalize our assistance for catchment groups and communities working together to look after our waterways by having funds available to support their work.”*

We definitely support this statement as funding at this stage is inhibiting us from running events and progressing forward.

Listed below are ways in which an increase in funding and support from the Otago Regional Council will help the EOCG have a positive impact on our community and the environment:

- More opportunities for funding to help pay for a co-ordinator and an administrator for example increasing the funds available in the EcoFund. The co-ordinator would help to give guidance and direction for the catchment group and associated projects while the administrator would help with day to day running of the catchment group.
- Funding for specific projects – riparian planting, sediment traps, fencing off waterways, water quality studies etc.
- Technical support in the form of water quality scientists, ecologists and biodiversity experts, gps mapping, IT help, data collecting etc.
- Water quality testing.
- Less enforcement and more education for our farmers around the ORC rules and regulations.
- Education and discussion with our farmers around proposed policy changes.

In return we see the EOCG as being a positive link between our farming community and the ORC. We would work together to help improve water quality in the East Otago catchment and connect local government with our community.

Overall we support an increase in funding to catchment groups in the Otago region. Having more funding available would enable us to undertake more work to ensure that we are meeting our water quality goals and creating a healthy environment in East Otago.

Kind Regards

East Otago Catchment Group
eocatchmentgroup@gmail.com



Otago Regional Council Annual Plan 2020

**Submission from the
Otago Peninsula Community Board**

The Board thanks the Otago Regional Council for the opportunity to provide a submission to the 2020 Long Term Plan on behalf of the Otago Peninsula Community.

Pandemic Recovery

The Otago Peninsula finds itself in a significantly different world than it was in at the beginning of 2020. The Covid-19 pandemic has irrevocably changed the business, educational and social structures of our community. The collapse of the tourism industry has been devastating for the Peninsula and Dunedin economy. As a community we are very likely to feel the repercussions of this for a number of years. With this in mind the Otago Peninsula Community Board looks with a high degree of trepidation at the future of our city and our community. Many in our community face uncertainty over employment and business viability and the Otago Peninsula Community Board recognises that this will mean many will face difficult decisions about their futures.

- Therefore; the Board submits that there must be at least a 12-month period to allow people to recover mentally, financially and physically from the effects of the pandemic. The ORC should consider a 0% increase in rates for this year
- That the Council seek government funding for “shovel ready” project in weed, pest and biodiversity management on the Otago Peninsula.

Tomahawk Lagoon and Management Plan

The Otago Peninsula Community Board notes the positive clearing of the channel during heavy rain in 2017 and during a significant period of high seas in 2020. This was appreciated by the community and showed the Council being decisive and engaged with the Community Board.

However, at 4.5 kilometres as the crow flies from the Council offices this area has some of the worst water quality in Otago. In 2017/2018 the began a much waited for management plan process with the community to look at the communities aims important for this area of the region. However, while that process began with excellent community engagement it was never completed and never explained to the community why their aspirations were not implemented. This has been a major disappointment for the Tomahawk community and it seems that the Council have forgotten its original aim in working with these people.

- That the Otago Regional Council allocate sufficient funding to ensure that the work of Council staff undertaking community consultation can be achieved to ensure:
 - An appropriate management of the weir that controls water levels in the lagoon complex.
 - Surety over the management of the waterway in times of high rainfall and flooding.
 - A joint approach to the management of the channelled affecting flooding with the ORC and DoC.
 - The implementation of the Management Plan and objectives developed by the ORC in conjunction with the community that includes, water quality, biodiversity, recreation, accessibility, cultural matters and the general enjoyment and use of the lagoon area. A continued programme of monitoring, reporting and liaison that informs the community of the health of the lagoon.



Figures 1 & 2 show a significant algal bloom coming from the lagoon onto the beach in 2017. These events will continue unless the Council step up in the management of this area with the community.

Portobello/Harington Point Connection Project

In relation to this project the Board is concerned at the loss of bus stop platforms as the road is widened. It is important to the Peninsula community that we retain bus stops in locations that will increase patronage of the buses and that are relevant to the needs of residents and visitors who wish to use the bus service; especially to children, the elderly and the disabled.

- In collaboration with Dunedin City Council staff, the Board submits that any bus stop changes need to be well canvassed with the community, the City Council and the Community Board before those changes are made.

Boatsheds and Moorings

The occupation of the sea bed and harbour fringes by boat sheds and moorings for recreational use is an important aspect of the character of the Otago Peninsula. In recent years consenting fees for boatsheds have risen considerably as the requirement for resource consent in lieu of occupation has been undertaken by the ORC. Often boatsheds have been on the same site for generations and have largely been unchanged for the same period of time. This means that without exception the effects of occupation have not altered.

- It is the Board's submission that resource consent fees for such occupations, including ramps and moorings, should be standardised to recognise that effects have not changed rather than requiring complicated and costly assessment of environmental effects.

Dredging of the Eastern Channel

The Eastern Channel is important to the Peninsula community for recreational boating, potential access between communities during Civil Defence emergencies and for the Coastguard vessel. With the completion of the walkway/cycle way there will be increased demand for access to the harbour. A safe, navigable, maintained Eastern Channel is important to retain access to jetties and ramps on the Otago Peninsula. Currently it is difficult for recreational craft and the Coastguard to navigate this channel given the silting up of the harbour and the changing nature of the channel.

- The Board submits that ORC needs to work with local boating clubs and Coastguard to identify especially shallow areas that may be able to be addressed in the short term, and to consider a long term plan for the dredging the Eastern Channel.

Otago Harbour Management

The Otago Harbour is central to our community for recreation, play, business, biodiversity, transport and food. Our community and its whanau are reliant on its health and management by the Council for the benefit of our community and the wider region.

- The Board submits that greater financial investment is required by the Council for recreation, biodiversity and tourism

The Board notes the recent Ministry for the Environment on the impact of plastic on marine ecosystems. At Pilots Beach on Otago Peninsula, it is reported that:

- There are 15 items of rubbish for every 100sqm of beach, of which 23% is hard plastics and 23% are food wrappers.

- The Board seeks trials on stormwater filters in conjunction with the DCC to stop plastic entering the harbour and affecting wildlife that is pivotal to our region financially and culturally.



Figures 3&4 show the type of stormwater filters utilised in removing plastics that enter in significant waterways like the Otago Harbour.

Public Transport

Public transport is essential for many people within our community and the efficiency and regularity of that service must be continued to ensure our community thrives. The Council have made improvements to the route of the service and recently staff have altered the afternoon timetable in consultation with the Board and the community. This has been a significant improvement for our community, However, like any service improvements could make the service more attractive to Peninsula users.



- With the proposed acceleration of the Peninsula road widening project, cyclists will increase on the road but also we expect the possibility of using the bus to take a bike one way and then ride home, will become a popular trend. The Board submits that buses need to be able to accommodate cycles inside as they do in other countries.
- The Board submits that better live information on timetable delays of the current service would be very useful for our community of commuters.
- The Council consider making alterations on the fare structure to assist the recovery of the tourism market affected by the Covid-18 pandemic.
- Consultation and implementation of bilingual place names and signage on the Otago Peninsula including work with the ORC over bus signage.

Biosecurity – Pest Plants and Animals

The location of the Otago Peninsula and its importance to the region as a hub of biodiversity means that the area faces unique challenges for both public and private landowners who are working to improve their property for the benefit of biodiversity on the Otago Peninsula. Pest plant control is a major component of ecological restoration and one that many landowners and groups spend significant resources on to achieve.

The rabbit problem in our community is high and this creates serious problems with predator/prey relationships for our area due to increased numbers of mustelids surviving on rabbits. This creates high risk for iconic species of birdlife such as Yellow-eyed Penguin and Blue Penguin through predation that the Peninsula and the City relies on for economic wealth and development. While the Otago Peninsula Biodiversity Trust has made excellent inroads in the possum numbers of the Peninsula and has formed a model of community led control, the opportunity is now required to extend that model onto the rabbit/mustelid issues that we have on the Peninsula.

- The Board submits that this should be a priority for the Otago Regional Council so that conservation and biodiversity gains made on the Peninsula and other areas are able to be built on and enlarged.
- It is the submission of the Peninsula Community Board that resources in control, research and advocacy are required from the Otago Regional Council to support landowners and organisations who are undertaking this type of animal control on the Otago Peninsula. Again there is opportunity for information and resource sharing from the ORC and other agencies.

The Otago Peninsula Community Board appreciates the support Otago Regional Council has already given to our priorities and the considerable work staff have undertaken to progress many of them to their current stage. The stronger working relationship we have established with the Otago Regional Council in recent times is greatly valued by the Board. We look forward to working with the ORC to complete these projects for the benefit of the Otago Peninsula community and the wider city.



Paul Pope - Chairman

On behalf of the Otago Peninsula Community Board

Hoani Langsbury

Lox Kellas

Cheryl Neill

Graham McArthur

Edna Stevenson

Respondent No: 88

24 April 2020

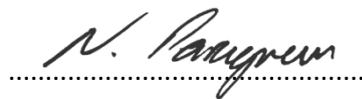
Otago Regional Council
Private Bag 1954
Dunedin, 9054
customerservices@orc.govt.nz

Submission on the 2020/2021 Annual Plan

This feedback is provided on behalf of the Otago Fish and Game Council (Fish and Game). For additional information please contact Nigel Paragreen using the details below.

Submitter Details

Submitter: The Otago Fish and Game Council
Contact person: Nigel Paragreen, Environmental Officer
Email: nparagreen@fishandgame.org.nz
Office phone: 03 477 9076
Postal address: PO Box 76, Dunedin 9016



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24 April 2020
.....

Introduction

- [1] Fish and Game is the statutory manager of sports fish and game bird resources within Otago. It holds functions and responsibilities set out in the Conservation Act (1987). Part of the organisation's function is to represent the interests and aspirations of anglers and hunters in the statutory planning process and to advocate the interests of the Council, including its interests in habitats. This submission is prepared in accordance with these functions.
- [2] Due to the popularity of angling in New Zealand, the demographic Fish and Game represents is significant yet not always obvious. The 2013/2014 Active NZ Survey conducted by Sport and Recreation New Zealand reported that 19.5% of respondents had been fishing (including both marine and freshwater angling) in the past 12 months¹. The survey found fishing had a higher rate of participation than rugby, tramping, football, cricket and basketball for men; and that fishing had a higher participation rate than netball, tennis, snow sports and tramping for women. Within Otago, license sales have exceeded 10,000 licenses in the past two decades and in the last decade has increased to over 20,000 licenses across all categories. Participation rates estimated from the National Angling Survey (NAS)² between

¹ Sport and Recreation New Zealand. 2015. *Sport and Active Recreation in the Lives of New Zealand Adults: 2013/14 Active New Zealand Survey Results*. Wellington: Sport New Zealand.

² Unwin, M. J. (2016). *Angler Usage of New Zealand Lake and River Fisheries*. Christchurch: National Institute of Water and Atmospheric Research.

1994 and 2015 show that total freshwater fishing effort in the Otago Fish and Game region ranged from 180,860 to 215,430 angler-days over the fishing season.

- [3] Fish and Game **does not** request to speak with the Otago regional Council (ORC) about its submission.

General comments

- [4] Although the focus of its submission is on freshwater and catchment groups, Fish and Game is supportive of each of the broad spending areas discussed in the annual plan. Each of these areas – freshwater, climate change, urban environments and biodiversity – poses significant, challenging problems for Otago in the immediate and long term. The ORC, is right to prioritise spending in these areas.
- [5] Serious development by the ORC in the fields of urban environments and climate change have been long awaited by Fish and Game. The region will soon face difficult choices in these fields and Fish and Game expects that expenditure to inform those choices will expand in coming years.
- [6] For climate change in particular, Fish and Game recommends ORC look to protecting the resilience of ecosystems that are beneficial to our adaptation of a changing climate. For example, a strategic retreat from development in or near wetlands and floodplains to control the impact of flooding as opposed to the construction of additional flood protection schemes. In the long run, this may provide a more cost-effective solution than building and maintaining bigger and better flood protection schemes to protect low lying areas.
- [7] Fish and Game supports the ORC increasing expenditure on compliance monitoring, which it regards as being subject to a historical underspend. It is understood that when ORC staff walked the Manuherekia in recent years, they found an exceptionally high degree of non-compliance that was previously unknown. Mass non-compliance simply should not occur, and the ORC must be funded to detect and resolve such issues.
- [8] Fish and Game understands that the ORC is, and has historically been, a regional council with a comparatively low income from rates. Fish and Game contends that there has been a historic underspend in areas such as compliance, research, monitoring and plan development. In the long term, Fish and Game considers that it is reasonable for the ORC to increase rates to resolve this issue. Low rates should not be a substitute for the effective function of the ORC.
- [9] With that said, Fish and Game will not comment on the impact of COVID-19 on this years' rates increase. Should the proposed rates increase be withdrawn after consultation, Fish and Game requests that the proposed expenditure be funded from other sources. Fish and Game would not like to see productive assets sold, with a preference for dipping further into reserves or expanding debt.

Managing freshwater

- [10] Through the deemed permit process, Otago was set to go through a massive re-allocation of freshwater resources. However, decades of poor management in this area has led to the region being thoroughly unprepared for the transition. Professor Skelton outlined many of the underlying issues for this in his report on the matter³.

³ Professor Skelton, Peter. 2019. *Investigation of Freshwater Management and Allocation Functions at Otago Regional Council: Report to the Minister for the Environment*. Wellington: Ministry for the Environment.

- [11] A lack of investment in this area has provided savings for successive Councils; however, it has placed an additional burden on external parties and the environment. The true cost of this failure is likely much larger than the savings made, with vast amounts of financial and social capital being spent on deemed permit processes by stakeholders and a fractured, conflicted community being the result.
- [12] In Fish and Game's experience, two critical elements absent from the deemed permit process have been the development of a fit-for-purpose policy framework and building quality information on the region's rivers for plan change processes. Similarly, Fish and Game's experience with deemed permit applications, where the responsibility of information collection is on the applicant, is that most are information deficient. The result of both outcomes is that deemed permit applications and plan change processes may progress with very little supporting information. Fish and Game does not think it is appropriate such large proportions of the public's freshwater resources to private, commercial activities. It is even less appropriate when the supporting information is systemically lacking.
- [13] Fish and Game is grateful that the ORC is changing its approach to the deemed permit process. Plan Change 7 provides the region with an opportunity to develop a fit-for-purpose policy framework and time to improve their understanding of affected rivers. It is a reasonable expectation that the proposed increase in spending will mean that Plan Change 7 will not simply 'kick the can down the road'. When the first generation resource are considered again in 2026, the public will expect that the region is prepared for the re-allocation of freshwater resources.
- [14] As a result, the additional allocation of funding in this annual plan for freshwater management is supported by Fish and Game. However, I note that funding will be highly targeted towards plan development and research or monitoring required to support that process and meet ongoing State of the Environment (SOE) obligations. Presumably, this explains unfortunate situation where the *Fresh Water Implementation* line of the Long Term Plan is proposed to be reduced in funding, while the *SOE* and *Regional Planning & Strategy* lines are both proposed to increase significantly.
- [15] Fish and Game expects that, on balance, the ORC will significantly increase its expenditure on plan development; immediate plan changes; and research and monitoring for SOE obligations and to inform planning exercises.

Community and catchment groups

- [16] Within the annual plan consultation document, reference is made to formalising assistance for catchment groups and communities to look after waterways⁴. Fish and Game is supportive of using public funding to support such groups, where they are working in the public interest.
- [17] In my experience working with community and catchment groups in Australia⁵, there is a wide spectrum of outcomes that can arise. I found that positive outcomes were typically associated with quality local leadership, strong policy guidance, input from an array of parties and sound technical advice. Without these – especially local leadership and quality policy guidance – I have found a group may be at risk of spending large sums of public money for very little gain.

⁴ Consultation document, page 5

⁵ In these career, I have provided technical and resource planning services to traditional owners on Cape York and rural communities in Southern Queensland

I have personally seen outcomes from catchment groups ranging from ineffectiveness to systemic corruption.

- [18]** At the other end of the scale, catchment groups can be an invaluable force for positive change. The Pomahaka Water Care Group is a prominent, local example of a group that has gotten much of this right, albeit with policy guidance changing at the last minute via Plan Change 6AA. This group has strong local leadership, professional support from NZ Landcare Trust and has sought input and advice from a wide spectrum of regional bodies – including Fish and Game.
- [19]** Councillors must be cognisant that not all catchment groups are created equal. The allocation of public funding should result in the public seeing a tangible benefit. Councillors should use this test when considering funding for catchment groups.
- [20]** Thorough vetting and a framework of professional support will greatly assist in ensuring positive outcomes for the public. Established organisations in this field, such as Landcare Trust, typically have the institutional knowledge to assist catchment groups with setting up. This would be preferable to requiring each group to start from scratch.
- [21]** Fish and Game recommends that the ORC require the all catchment groups receiving significant public funding to seek support from professional facilitation organisations. Given their non-for-profit status and established good work with the Pomahaka Water Care Group, there is an obvious preference for prioritising the Landcare Trust for this role.

Respondent No: 89

To Otago Regional Council

Annual Plan 2020-2021 Submission

Submitter

Dunedin Rural Development Incorp (DRD)

Murray Harris Chairperson DRD.

DRD wish to be present in person to support our Submission

Dunedin Rural Development Inc (DRD) Background

DRD has been in existence for over 23yrs now. Its prime objective is to identify, assess, develop and introduce to Dunedin, rural opportunities which have commercially competitive advantages taking into account marketability, technical development & production process.

DRD has managed and facilitated field days, seminars and other activities in the rural sector with the aim on positive employment outcomes. Over recent years DRD has provided seeding funds for various research projects and infrastructural support.

One such significant funding project in 2014yr was to provide \$30,000 funding in association with Otago Regional Council for Landcare Research to further identify soils in Otago and Dunedin City area for their new web based S-Map system. This project enabled further refinement and delineation of the soil maps and productive soils within Dunedin City along with additional technical information sheets that can be viewed via the Landcare website.

Summary of Submission comments DRD submission will focus on three specific areas.

DRD commends the Council for its wide ranging overview on its annual plan however we would like to see more details on the projects, priorities and financial expenditure.

1..Managing Freshwater in Otago

DRD considers that there is insufficient emphasis on the function and management of soils, soil quality and the inherent properties of soils in Otago. The focus appears to be on the end point on the quality and quantity of water.

- A strategic focus is suggested on better understanding the soil issues in Otago and what are the options for the Best Practices for Rural Landowners. By managing the

soil and subsoil environment more effectively will result in improved water quality outcomes down stream.

- Environmental Farm Plans

ORC-Historical Overview. The former Otago Catchment Board then later ORC (1989 commenced) were very involved in Soil and Water Conservation Plans (SWCP) or called Farm Plans. Around 1993 there had been completed and surveyed over many years a total of 374 SWCP including about 100 specific Water Plans. The area in total under SWCP survey was 1,094,054ha or approx. 32% of the ORC land area or if one deducts the National Park land approx. 45% of land had been in Farm Plans in Otago (some with stage 2 and 3 operative programmes).

These farm reports, data, monitoring and mapping information are stored at the ORC but to my knowledge the maps have not been converted into GIS map information. Many of the older reports and maps are line maps, or presented as half tone maps they were filed and stored in the ORC archives or as micro-Fiche and the like records.

Around the time of 1992-1994 a large project was undertaken by key staff at the ORC preparing a draft "Regional Land Plan". Excellent progress was made as it recorded great information as a stocktake of the land-soils issues that were identified. However, it was decided not to go ahead with this plan and focus was on the draft Water Plan.

The key point that DRD highlights is that the ORC has considerable data and monitoring information on the land resources in Otago including SWCP, Catchment Control Plans, Vegetation monitoring projects (especially Hill and High Country lands but not resurveyed for many years) and others. We suggest that more cognisance is noted of this information and use it accordingly. This data and information should also be made more readily available to primary production users.

Recommendation

DRD would like a more strategic approach to Environmental Farm Plans with a focus on encouraging a larger number of formal plans to be facilitated, actioned and completed by 2022yr.

Improvements in the availability and use of GIS information on land resources and inventory is strongly recommended.

In Environment Canterbury all farms now require an Environment Plan and similar regulations in Southland for mandatory plans. Dairy NZ, Beef and Lamb and Deer NZ have been active in encouraging Farm plans however still a large number of sheep, beef and deer farms in Otago do not have any formal plans. An important outcome to improving water quality in Otago rural lands is to ensure all farms have Environmental Farm Plans.

2..Climate Change in Otago

Considerable research, discussion and reporting has occurred on this topic. There are a number of research projects and studies carried out and new information is being communicated some of which are not scientifically based.

Its important that ORC is well informed.

For example one such up to date research finding is that AgResearch has identified:

“that NZ hill country sheep and beef livestock are producing about half the amount of nitrous oxide (N₂O) per unit of nitrogen from urine or dung than previously thought”. (dated 17th March 2020). *Source..*<https://www.agresearch.co.nz/hill-country-farm-emissions-drop/>

Importance of Soil in the Climate Change Outcome

There needs to be more focus and understanding on the importance of the regolith layer (ie loose material eg sand, alluvium, soil profile) which rest over the bedrock.

The council needs to focus on the soil erosion and losses that occur every year and the impact that these losses have on the quality and ecology of the water ways and to the sea.

Soil erosion losses can be from particles lost by the process of wind, creep, rilling and sheet erosion as well as mass erosion losses such as streambank, slips, slumping, gullyng and other forms. Losses of soil, carbon and organic matter can be significant on many of the Otago lowland soils in particular after storm events. The impact of soil particles into our waterways in many streams in Otago can be more detrimental than some of the nutrient inputs (eg ecology of the waterway).

In the USA The Nature Conservancy (TNC) has estimated that if implemented globally soil conservation and soil building activities could provide nearly 10% of the carbon reduction needed to avoid breaching the 2 degree climate barrier.

Source; <https://e360.yale.edu/features/can-carbon-smart-farming-play-a-key-role-in-the-climate-fight>.

NZ Poplar and Willow Research Trust

The ORC was an original member of this important research Trust but for various reasons decided to withdraw from this initiative around about 1993-94. There are presently 13 Regional Councils and other agencies involved in the Trust. The Trusts work includes research on plant materials for river and flood control, riparian planting, soil stabilisation and sustainable land use, carbon sequestration and climate change enhancements.

Furthermore, the ORC used to manage two poplar and willow nurseries located at Barnego near Balclutha but later sold off this business unit.

Nevertheless with Climate change priorities and the Billion Tree fund programme it is vital that the Council support any planting initiatives whether it be for riparian planting,

production forestry, shelterbelts or soil conservation purposes, carbon sequestration and the like.

Recommendation

DRD Strongly recommends that the Council reconsider joining up again with the NZ Poplar and Willow Research Trust.

3..Urban Development in Otago

With the COVID-19 pandemic the importance of having available and protection of High Class soils (and land) to provide the future production capacity for food for human consumption. It is now paramount that local and regional High Class soils are retained.

DRD has been very active in preparing submissions with regard the protection of High Class soils in Otago as part of the DCC -2GP plan and are presently in mediation with the Otago Federated Farmers Appeal. Furthermore, DRD has prepared a submission on the Government "Highly Productive land Consultation" document (15/8/019).

DRD agrees with the statement in the draft annual plan that Otago already has excellent soil mapping and climate data from GROWOTAGO.

But it should be recognised that the detailed soil mapping in GROWOTAGO only involves and includes mainly the lower hill slopes, valley floors and alluvial plains. The larger part of Otago relies on older soil map surveys generally at a larger scale.

Refer to Appendix 1 for background information on High Class soils.

Recommendation

That the ORC supports a project in conjunction with Landcare Research to identify and highlight factors on the specific "Soil Fact Sheets" (Part of S-Soil maps) where High Class soils occur. Furthermore, to review the relevant soil maps with more definitive identification at the appropriate scale of maps of the remaining High Class soils in Otago.

Submission by Dunedin Rural Development Inc

On behalf of Murray Harris Chairman

24th April 2020.

APPENDIX 1

Soil Quality and Loss of High Class land (HCL) and soils.

Once these soils have been lost to building platforms and more intensive subdivisions there is no reversal system in place, ie they are lost forever from the ability to produce intensive crops, market gardens and the like.

Within the Dunedin City Council area we now have about 5% land area left supporting HC Soils. We cannot afford to continue to lose these sites to subdivisions and various building developments.

High Class soils are a finite limited resource and need to be protected and managed for primary production now and well into the future.

Protection of High Class soils -for food production

Lifestyle blocks occupy 10% of NZ HCL, while urbanisation since 1990 occupies 0.5%.

Andrew, R and Dymond J R 2013 identified that in Otago in 2012, 87.8kha of HCL existed of which 10% was occupied by Lifestyle blocks.

This gradual loss of HCL means that the lower class lands which are less efficient in food production will be used more and will require more inputs and energy to produce the same quantity of food product. In simple terms this puts additional environmental and economic pressure on the same land area.

Loss of HCL-Impact on future Food Production

Julian Cribb a leading international Journalist addressed the Horticultural NZ Conference in August 2015 and noted that the change from dairying to horticulture will occur in 2030-2050 as Asian markets begin to demand more vegetables than dairy products.

Growing vegetables is more efficient on land eg 30 tonnes of cabbage can be grown using the same amount of water to produce 2kg of beef.

Horticulture NZ Chief Executive Mike Chapman stated (in Rural News Oct 18th 2016yr) that staples of the NZ food basket, such as carrots, potatoes, onions and leafy greens must be a consideration in urban planning.

“Parts of the NZ food chain are, in our view, being affected by constraints on production because of competition for suitable land for housing and access to water Chapman says”. Effects of shortages, or no supply, may result in increased prices for access to food staples such as carrots, potatoes, onions and leafy greens. Furthermore, a recent Auckland Council report, which investigated growers in the premium vegetable growing area of Pukekohe, concluded that research needs to look at the consequences of continuing urban growth and rural fragmentation on both the regions, and the country's, food growing capacity.

Comparing horticulture with dairy farming the following emerges; namely that 50,000 people are employed in the 7billion industry operating on 123,000ha while dairy returns \$18billion and employs about 30,000 people on 2.5m ha.

Respondent No: 90

Submission by Friends of Lake Hayes Society Inc. to the proposed ORC 2020-21 Annual Plan (April 23, 2020)

The Friends of Lake Hayes Society Inc. (FOLH) wishes to submit on the proposed Otago Regional Council Annual Plan 2020-21.

We would also like to be heard when Council holds public consultation on the draft plan.

Submission

As a community group with a strong interest in water quality in Lake Hayes we strongly support the following statement made by Council in the proposed Annual Plan: "We want to formalise our assistance for catchment groups and communities working together to look after our waterways by having funds available to support their work." On this basis we look forward to continuing and increasing support from the Council in the Annual Plan 2020-21 when it is finalized.

"Managing Fresh Water" - The current unacceptable state of Lake Hayes

We fully support the strengthening of the current Regional Plan: Water. Everyone we talk to (i.e., the community, scientists and politicians) agrees that the health of Lake Hayes has continued to decline since the management strategy was transferred from the 1995 Lake Hayes Management strategy to the ORC Regional Plan: Water in 2003 and that the current state of the water quality in the lake is unacceptable.

Back in 1995 Lake Hayes was identified as an iconic New Zealand Lake with a very high profile commanding the title of the 'most photographed Lake in NZ'. Its eutrophic state has not improved since 2003. If anything, it has got worse with the appearance of regular Ceratium and Cyanobacteria algae blooms and occasional fish kills and lake closures to recreation. Evidence of the lack of catchment management was highlighted yet again in February 2020. Then a moderate rain event washed large amounts of sediment and phosphorus into the lake and created perfect conditions for a cyanobacteria bloom. This appeared as predicted by scientists two weeks after the rain event and Lake Hayes was once again closed to the public.

The need for a nutrient budget for the catchment and lake

FOLH fully support ORC Councillors who have individually agreed that the development of an integrated catchment management plan for Lake Hayes and its catchment should be included in the ORC 2020-21 Annual Plan.

Management of the lake now needs to move from a mainly generic Otago Plan: Water approach, with inputs to the lake managed based only on Mill Creek nutrient concentrations measured only at or below mean river flows, to a nutrient budget approach based on total nutrient loads arriving at, and exiting, the lake. This will provide a much more accurate means to measure, model and manage the water quality and health of the lake over time.

The concept of whole catchment nutrient budgeting and limit setting is not new. An example is already successfully operating for Lake Taupo to manage a massive agriculture-related nitrate problem there. The gathering of Lake Hayes water quality and other environmental information to allow this to happen has been ongoing for 50 years culminating in the recent ORC catchment nutrient study which monitored a number of sites throughout the Lake Hayes catchment. With this new information on catchment nutrient hotspots and hot moments, we now have the opportunity to move forward on a nutrient budget as soon as resource is available to collect and process the final additional data needed for the budget. This will update previous similar nutrient budgets for the catchment and lake carried out in 1984, 1990-93 and 1997.

The current ORC Regional Plan: Water does not in our view provide the policy or regulatory support to develop and implement a nutrient budget approach.

The need to meet statutory requirements

Our concerns about the ORC Regional Plan: Water also relate to its ability to set appropriate water quality standards and to ensure these are met. This is highlighted for us because water quality issues at Lake Hayes will be tested in the QLDC District Plan appeal process in the Environment court later this year. The QLDC district plan currently states “A large part of this area also lies within the Lake Hayes catchment, as shown on Figure 2 below. Our conclusions in Report 18.1 (Section 2.8) were that the time to consider up-zoning of land to Precinct (or any other zone with higher development potential) is when it can be demonstrated that such a zoning would not result in further degradation of water quality feeding into Lake Hayes (and not before then), and that such an approach gives effect to both the Partially Operative RPS 2019 and the NPSFM.”

We believe that the Council should be actively supporting the current District Plan provisions as well as demonstrably meeting its statutory requirements under its own water plan as well as the NPSFM in relation to Lake Hayes.

The benefits of partnership

Lake Hayes provides ORC with the opportunity to demonstrate strong water leadership on this high-profile lake and catchment through a productive partnership with FOLH.

FOLH fully support the statement, below, from the 2020-21 ORC Annual Plan. “We want to formalize our assistance for catchment groups and communities working together to look after our waterways by having funds available to support their work”. For the past decade we have been working closely with ORC on Lake Hayes and its catchment and having a more formal working arrangement with clear accountabilities will make this process far more efficient.

FOLH would like to highlight the early success of data gathering by a solar powered buoy on Lake Hayes. This buoy came about through science-supported lobbying carried out by FOLH. Early success came from data gathered concerning

a recent cyanobacteria bloom, enabling scientists to understand changes in the lake conditions which ultimately lead to a fish kill in the lake. It also highlighted that as we carry out interventions in the lake and catchment we will see directly how this impacts on key lake health parameters allowing scientist to measure and if necessary adjust interventions.

FOLH proposed work plan

Further to this, FOLH would like to present to Council a prioritized strategy we developed with ORC staff. We appreciate ORC's support in developing the work plan and would appreciate your support in budgeting resources to begin implementing this work plan in the 2020-21 Annual Plan.

Updating and reinstating the 1995 Lake Hayes Management Strategy

The issues addressed in the comprehensive Lake Hayes Management Strategy (1995) remain largely unchanged today. However, to bring it up to date, data from the current ORC catchment nutrient study needs to replace the old nutrient load information. Similarly, the catchment land use information needs to be updated to reflect the move away from agriculture to tourism-based activities, resorts, golf courses and residential development. Most of the work needed to update this document has already been completed - it just needs to be professionally compiled. The 1995 Strategy was widely supported by stakeholders and, therefore, could easily be readopted once updated.

The Lake Hayes Management Strategy is not an operational plan but a contextual framework for all the initiatives which together will lead to the recovery of Lake Hayes. In hindsight, had we carried on with it in 2003 the lake would already be well down the track to recovery by now. The sad thing is that while so much discussion and debate has been going on about the state of the lake, no positive actions have been undertaken lake or catchment since then.

To get things moving, FOLH identified 2 initiatives in the 1995 Strategy, which, if implemented, could begin some positive actions to improve the lake health.

1. *Managing lake water inflows and outflows*

ORC, FOLH and their respective science advisors agreed that targeted augmentation of Mill Creek with cool, low nutrient water from the Arrow River irrigation scheme would benefit lake health at relatively low cost and with little risk. Further to this, the Lake Buoy would be able to measure the effect of this intervention and provide feedback on how and when to augment the water. ORC agreed that this would be a useful management action and built 80% of required infrastructure at Millbrook Resort to allow this to happen. ORC also identified the Lake Hayes outlet culvert as a limiting factor in this project. Thus, FOLH supports ORC scoping out the various activities that would be required if the culvert is to be upgraded (investigation, consenting, design, procurement etc.) and their estimated duration and costs. It is our hope that this would lead to a project to upgrade the culvert to avoid the recent lake flooding issues that have been identified by FOLH.

Going back to the 1960s, lake levels were controlled by the natural lake outlet profile. Then Hayes Creek was bridged which allowed the lake to drain freely. This was replaced by a double culvert which operated satisfactorily. However, in 2002 these were replaced by a single culvert and this appears to be the cause of the current flooding issues. Lake level does affect lake health, as shoreline flooding releases large amounts of soil phosphorus and erodes lake shores. All this was researched and reported in the 1995 Lake Hayes Management Strategy, which described optimal lake height, lake level variation and culvert design. Considering the substantial time elapsed since the ORC built the infrastructure for flow augmentation from the Arrow River, it is heartening to know that ORC's proposal to scope out works to improve outlet culvert. This should be relatively simple because most of the relevant data will have been collated as part of the 1995 Strategy update. We appreciate that this work has also been included in the 2020-21 Annual Plan.

2. Spatial catchment mitigation plan

The second important initiative from the 1995 Strategy which needs reviewing is the section on remediation of non-point source pollution in the catchment. With support from ORC, QLDC and DOC, FOLH commissioned NIWA to identify opportunities within the catchment to reduce fluxes of nutrient and sediment from the catchment to the lake. It also examined the benefits of riparian plantings to cool the waters of Mill Creek during summer months to maintain higher dissolved oxygen levels in the creek which would provide more oxygen to the bottom waters of the lake. At this stage, a riparian planting initiative is being driven by FOLH and sits outside the proposed ORC Annual Plan. FOLH is working with a local Environmental Consultancy firm to, in the first instance, develop a spatial pollution mitigation plan for the catchment. This plan will identify where wetlands could be reinstated or constructed, where sediment traps could effectively be located, and where riparian plantings could be beneficial. All of this will aim to reduce nutrient, sediment and *E. coli* loads to the lake, and reducing the temperature while increasing the oxygen content of Mill Creek. Although not completed yet, this plan will need to link to the updated Lake Hayes Management Strategy, and to relevant district and regional plans.

Mike Hanff

Chairman
Friends of Lake Hayes Society Inc.

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Queenstown

Phone 021755462
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Respondent No: 91

April 2020

To Otago Regional Council

Please find attached DPA's submission on Otago Regional Council Draft Annual Plan 2020-2021

Disabled Persons Assembly NZ

Contact:

Chris Ford

Kaituitui

DPA Dunedin

Introducing Disabled Persons Assembly NZ

The Disabled Persons Assembly NZ (DPA) is a pan-disability disabled person's organisation that works to realise an equitable society, where all disabled people (of all impairment types and including women, Māori, Pasifika, young people) are able to direct their own lives. DPA works to improve social indicators for disabled people and for disabled people to be recognised as valued members of society. DPA and its members work with the wider disability community, other DPOs, government agencies, service providers, international disability organisations, and the public by:



telling our stories and identifying systemic barriers



developing and advocating for solutions



celebrating innovation and good practice

The submission

DPA Dunedin acknowledges that the world has changed since the outbreak of Covid-19 and that this will impact on the operations and spending decisions of the Otago Regional Council for the year ahead. We also acknowledge the hard work of both staff and councillors during this emergency, especially given the Council's responsibility for overseeing the regional civil defence response to this health emergency.

DPA is pleased to see the provision of \$1 million additional funding for public transport provision in the 2020-21 year. We strongly hope that some of this increase is directed towards Total Mobility, which has become free at point of use for Covid-19 alert levels 3 and 4. We also believe that some of this funding should be used to ensure that all buses have audible public announcements, not just some (and we do welcome the start that has been made) as is currently the case.

DPA is supportive of the funding increase also being significantly directed towards raising bus driver pay to living wage rates. Bus drivers are an important and essential component of the public transport workforce and this increase should recognise that. Moreover, increasing bus driver pay rates will act as one means of

stimulating the local economy as it recovers from the Covid-19 pandemic and will improve the standard of living of both bus drivers and their whanau.

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)

The UNCRPD Articles most relevant to our submission are:

- Article 4.3 Involving disabled people and our organisations in decisions that affect us
- Article 9 Accessibility
- Article 19 Living independently and being Included in the community
- Article 20 Personal mobility
- Article 29 Participation in political and public life.

The UNCRPD provides for access to council services and facilities for disabled people on an equal basis with others and requires councils to consult with disabled people and our organisations on changes which would significantly impact on us. As many council services and facilities have a direct impact on our lives it is essential that our views are considered in all aspects of council planning.

DPA's recommendations

The Disabled Person's Assembly strongly recommends that the ORC and DCC work collaboratively to give effect to the proposed Central City Bus Loop service and, especially, flat rate, low fares (as is the case with the Queenstown \$2 fares).

Expenditure increases, such as that for public transport, should be deemed important in the post-Covid recovery especially, given that it will stimulate demand for bus services (which will be crucial as more people progressively return to work, study/training, school, and ordinary life over the next six months to a year) and also encourage greater use of bus services by all Dunedin residents going forwards. This includes for disabled people whom are on mainly low and/or fixed incomes and many

of us would benefit from having such a scheme in place. We also look forward to the proposed review of the Regional Public Transport Plan (RPTP) and will participate in this process.

DPA strongly recommends that all future Otago Regional Council Annual Plan and 10 Year Plan documents (as well as essential Council information) be published in accessible formats such as New Zealand Sign Language, Easy Read and in formats which can be readily accessed by blind and low vision residents. These requests have been made in every submission we have made for years. However, all of these requests, disappointingly, have not been acted upon to date. DPA would, therefore, request that the ORC Communications Team be directed to develop an accessible communications action plan in partnership with Deaf and disabled people to make all crucial council information available in accessible formats within the 2020-21 year.

DPA also recommends that the ORC continue working on projects to mitigate and to use a more familiar recent term 'flatten the curve' on climate change. Climate change will have many adverse impacts for everybody if average temperature rises are not contained to within the 1.5 degree Celsius -maximum limit agreed at the Paris Climate Summit in 2016 within the next ten years. Further and rapid climate change will have an adverse impact on many already socially marginalised groups and that includes disabled people.

Disabled people will be impacted in terms of some of us potentially having to move from lower lying, flatter areas (and living in such areas as, i.e., South Dunedin and Mosgiel is particularly important for people with mobility impairments) to hillier, less accessible areas. Besides, disabled people and people with health conditions - and indeed all population groups - will face the prospect of having to breathe more unbreathable air (creating a rising incidence of asthma and other respiratory issues) as well as greater levels of anxiety (which will be doubly impactful for people already experiencing psychosocial disability (mental health) disabilities and mental distress). That is why the ORC should continue to fully fund, even in these economically straitened times, climate-change oriented programmes such as the South Dunedin Futures project (in collaboration with the DCC), air monitoring work and other activities which seek to directly monitor and lower our emissions profile, thereby

increasing the chances for everyone to enjoy a better planet. As another currently popular slogan goes 'we're all in this together' and that includes on climate change.

DPA recommends that rates be struck at the level of inflation or that there be a nil increase just for the 2020-21 year. In saying this, we recognise the real conundrum as we believe that ordinary ratepayers should not be overburdened and this includes, in particular, low-income ratepayers while seeking to retain the current level of council services and projects at this time. What should be done to resolve this conundrum is that the Regional Council should look at ways of mitigating the rates burden for lower income households (of which there will be more post-Covid 19). Many disabled people (or at least those few who are fortunate enough to own their own homes) are in this category. Therefore, the ORC should look to fund its operations for the next year by seeking to make up any shortfalls through utilising dividends from Port Otago, short-term borrowing, greater reliance on central government funding and encouraging low-income earners to access government rates relief grants and allowing ratepayers more time to pay rates. Cutting expenditure on services and projects at this time (particularly in the area of managing climate change and transport, etc) would be short-sighted and compound problems further down the track. Therefore, we believe that running a short-term deficit while things are tight for everyone would be the best way of managing the situation until the economy returns to normal activity.

Respondent No: 92

SUBMISSION ON THE OTAGO REGIONAL COUNCIL DRAFT ANNUAL PLAN 2020-21

TO: The Otago Regional Council
customerservices@orc.govt.nz

DATE: 24 April 2020

ADDRESS FOR SERVICE

Name	Position	Phone Number	Email Address	Postal Address
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OTHER CONTACTS

Simon Davies	Federated Farmers Otago Provincial President	03 976 5599	tokofarms@gmail.com	PO Box 5242 Dunedin 9058
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ABOUT FEDERATED FARMERS

Federated Farmers of New Zealand is a membership organisation, which is mandated by its members to advocate on their behalf and ensure representation of their views. Federated Farmers does not collect a compulsory levy under the commodities levy act and is funded from voluntary membership.

Federated Farmers represents rural and farming businesses throughout New Zealand. We have a long and proud history of representing the needs and interests of New Zealand's farmers

Federated Farmers aims to empower farmers to excel in farming. Our key strategic outcomes include provision for an economic and social environment within which:

- Our members may operate their business in a fair and flexible commercial environment.
- Our members' families and their staff have access to services essential to the needs of a vibrant rural community; and
- Our members adopt responsible management and sustainable food production practices.

Summary of submissions

We welcome the opportunity to submit to the 2020/21 Draft Annual Plan. In this submission we provide comment on both proposed divergences from the 2018-28 Long Term Plan and on Council's recent decisions around key planning processes.

We have provided views on key activities where Council is proposing a divergence from spending forecast for year 3 of the 2018 Long Term Plan, in Table 1 of this submission.

Based on the information provided around new rates relating to stock truck effluent disposal, we support use of the general rate, including a region wide general rate contribution.

We've received strong feedback from our members and Executive that given the bumpy year ahead for the region, Council's focus should be joining with central government on recovery, trying to put New Zealand back together again once the dust settles.

We have significant concerns with the development process, timeframes, and potential implications of critical plan changes for Otago, including the Regional Policy Statement and Proposed Water Permits Plan Change 7. Feedback we've received on this is that Otago's resource users are tired of the Council making decisions on behalf of the region, without meaningful engagement.

We consider Council has fundamentally failed in its responsibility to deliver robust and Otago specific plans, that it has committed to unachievable deadlines and severely reduced the opportunity for community input.

Federated Farmers seeks that Council develop criteria for ensuring new dwellings are required to have on-site water tanks.

1. Introduction

- 1.1 Federated Farmers welcomes the opportunity to provide feedback to the Otago Regional Council Draft Annual Plan (“DAP”). We support the Council engaging in consultation, particularly given the significant changes proposed in Council operations, planning and expenditure in the year ahead, all which are significant divergences from the 2018-28 Long Term Plan (“LTP”).
- 1.2 Usually, the focus of our submission would be on considering and submitting on these spending programme divergences from the LTP. This year we also provide comment on Council’s inexplicable decision to request the Minister for the Environment ‘call in’ critical regional plan changes and to agree to unreasonable planning timeframes. This both undermines the ability for communities and individuals to provide input to these critical planning processes and raises significant questions as to whether these approaches will lead to reasonable and effective plans.
- 1.3 In terms of spending, Council is proposing significant increases in many areas, resulting in a general rate increase of 9.1% and an increase in targeted rates of 2.8%. These rate increases mask Council’s overall increase in spending, with an additional \$2 million (an increase of \$8.1 million to \$10.1 million for the year) from the Port Otago dividend and \$4 million to be drawn from general reserves.
- 1.4 Some of this additional expenditure is warranted, enabling timely and beneficial spending on ‘need to haves’. Some of it is not. Of particular note is the proposal to increase expenditure on Governance and Community Engagement, given Council has chosen to divest itself of a significant proportion of its community engagement responsibilities.
- 1.5 We provide comment on specific areas of expenditure below, in Table 1. At this time, we consider it important that rates increases are minimised, to recognise the challenges residents are facing. We ask Council revisit proposed spending increases with a view to deferring non-essential spending until the Long Term Plan next year.
- 1.6 Since the time Council considered expenditure for the year ahead and included this in the DAP, the context has changed significantly. The impacts of COVID-19 will be far reaching, and Council can play a part in reducing these impacts, by reducing rating costs. This is important not just for the farming sector but for all ratepayers, to reduce operating costs.

Submission

We welcome the opportunity to submit to the 2020/21 Draft Annual Plan.

Our submission focusses on both proposed divergences from the 2018-28 Long Term Plan and provides comment on Council’s decisions around key planning processes.

We ask that Council revisit proposed spending with a view to reducing specific activities prior to the draft Long Term Plan 2021-31.

2. Proposed activities

2.1 We provide comment on some of the specific activities where the DAP proposes significant divergences to the LTP in Table 1, below.

Activity	Proposed adjustment	Federated Farmers submission
Fresh Water Implementation	<p>Council is proposing a new planning approach, to be completed over the next 3 to 5 years. For the year ahead this includes:</p> <p>Rationalising what council work is included under this activity:</p> <ul style="list-style-type: none"> - to focus on specific and targeted 'Good Water Programme' initiatives (i.e. research, information & communication) - shift core functions (e.g regulatory; SOE related science) to other appropriate activities <p>Reducing the level of funding collected from the Rural Water Quality Rate. While the Council refocuses and re-tasks, expenditure will be general rate funded.</p> <p>Resourcing to maintain momentum for the Lake Hayes programme</p> <p>Introducing modest level of new funding to develop the Council - catchment groups partnership.</p> <p>Considering 'on the ground' opportunities associated with immediate plan changes.</p> <p>Where feasible, supporting high value implementation projects with science support. The priorities for Council's science resource will be on developing the SOE monitoring programme, supporting regional planning and the freshwater management unit (FMU) approach, and servicing the consents process.</p> <p>Introducing new work and potential funding as future options become clear and are developed with the community.</p>	<p>Federated Farmers supports these proposals. While expenditure on the activity itself is decreasing, spending on SOE monitoring is increasing substantially, and we agree this is a priority at this time.</p> <p>While it would have been useful to have prior consultation on how the proposals may have been specifically tailored to ensure the programme aligns with farmer initiatives, the proposals provide appropriate and 'need to have' investment at a time when farmers are working to find solutions at a farm and catchment level.</p> <p>We agree with the proposal to reduce the level of funding from the Rural Water Quality Rate. Although the consultation document does not provide information on how much the rate is being reduced.</p> <p>As we have previously expressed, we do not consider the level of costs allocated through the Rural Water Quality Rate are fair, nor do we consider it reflects the good work and investment already underway on farm.</p> <p>We support the proposal to fund the Council-catchment groups partnership. Catchment groups are the best mechanism for allowing farmers to socialise problems and develop effective solutions,</p>

	<p>Council is proposing to reduce expenditure for this activity by \$241,000 below LTP forecasts.</p>	<p>and funding and engaging with these groups should be, and must remain, a Council priority.</p> <p>We support the intention to develop 'on the ground' opportunities associated with immediate plan changes. However, we would prefer Council use the funding and staff resource on appropriately consulting on and informing these processes, rather than plugging holes after the plan changes are in place.</p> <p>Summary: we agree with the proposed focus for Fresh Water Implementation, however we disagree with Council's decision to seek the Minister 'call in' related planning processes.</p>
<p>Biosecurity & Biodiversity</p>	<p>Biosecurity – Council is proposing an additional \$576,000 expenditure on Biosecurity beyond that forecast for year 3 of the LTP. Council will then review spending to establish a sustainable level of service for pest management.</p> <p>Council is proposing an additional \$83,000 on Biodiversity beyond that forecast for year 3 of the LTP. In 2020/21 this will be spent on prioritising the mapped ecosystems and developing a monitoring programme, and on partnering initiatives, and delivery mechanisms (e.g Regional Trust) will also be advanced.</p>	<p>Biosecurity - Federated Farmers supports the proposed increase in biosecurity spending. Increased expenditure in pest management now, reduces the future costs of pest management by reducing spread. We would welcome the opportunity to engage with Council on the required level of funding for this activity in the lead up to the 2021-31 LTP process.</p> <p>Biodiversity – we consider additional spending on monitoring too early, given the proposed NPS Biodiversity may change the requirements and focus of biodiversity monitoring and mapping requirements.</p> <p>We support the proposal to partner with other initiatives.</p> <p>Summary: We agree with proposals to increase biosecurity spending, particularly for pest control.</p> <p>We consider additional expenditure on biodiversity monitoring should be deferred until</p>

		the NPS-Biodiversity is operative and Council has a better sense of the responsibilities they'll be facing.
Air Implementation	Spending is proposed to reduce by \$8,000 below that forecast for year 3 of the LTP, due to concerns with the effectiveness and potential alternatives to the programme, and the need to prioritise in other areas, for example freshwater.	Summary: Federated Farmers supports the proposal.
State of the Environment Reporting (SOE)	<p>Council is increasing spending for SOE monitoring by \$925,000 beyond that provided for in year 3 of the LTP, in order to accelerate its efforts to develop its SOE network to:</p> <ul style="list-style-type: none"> - Appropriately report and model on Fresh Water Management Units (supports regional planning process) - Meet National Policy Statement requirements & National Environmental Monitoring Standards - Monitor regional plans and support implementation 	<p>Federated Farmers supports this proposal. Accurate SOE reporting is critical to making good decisions, at the regional, FMU, catchment and farm level.</p> <p>It is not clear whether water quality monitoring is included in this additional expenditure. Monitoring of water quality, rather than modelling, is critical for establishing clear linkages between human use and natural events.</p> <p>This information will be particularly important in the development of water quality plan change processes and underlines why these processes should be delayed to ensure the plans and processes are fully informed and robust.</p> <p>Summary: Federated Farmers supports the proposal, although we underline the need for better water quality monitoring, not just reporting and modelling.</p>
Regional Planning & Strategy (incl. Urban Development Strategy)	<p>Council is proposing to increase expenditure in this activity with an increase of \$2,049,000 more than was budgeted for in year 3 of the LTP.</p> <p>This expenditure will enable a 'reset' of the regional planning programme, including:</p> <ul style="list-style-type: none"> - The review of the Regional Plan: Water & Land, with notification planned in 2023 - Completion of a range of immediate water plan changes to improve rules and provisions (i.e. Omnibus Plan Change) 	<p>The 'reset' was indeed signalled in 2019, although Council's decision to agree to all of the Minister for the Environment's recommendations and timelines without question or amendment was not. At that time, Otago farmers expected Council would do the job it is there to do; develop robust plans and properly consult with the community, and to seek realistic and workable timelines.</p>

	<ul style="list-style-type: none"> - Complete the review of the Regional Policy Statement, with notification planned during 20/21. - The development of Urban Development Strategy – includes completing an assessment of highly productive land to inform the strategy. It also integrates with the deliverables from other activity (e.g Transport Planning; Regional Policy Statement) <p>New work will include:</p> <ul style="list-style-type: none"> - Scoping the development of new regional plans including the Regional Plan: Coast. 	<p>We do not oppose additional funding in this area, although it should have been spent consulting with the affected communities and promoting timelines that are workable and realistic.</p> <p>We question why the Regional Plan: Coast process is proceeding, given this sits underneath the RPS (which is to be fully reviewed in completely unrealistic and unreasonable timeframes, despite being reviewed only very recently – and after years of input, resourcing and involvement from the community, businesses and stakeholders).</p> <p>Summary: The proposal for additional expenditure for a review of the RPS is required, although not welcome given it has been reviewed only recently, and resulting timeframes are unrealistic and will likely result in rushed and poor quality planning outcomes.</p> <p>We oppose the decision to seek the Minister ‘call in’ water plan changes. This should have been undertaken by Council with full engagement with the community/ies.</p> <p>We question why the Regional Plan: Coast process is proceeding at this time, and ask it is deferred.</p>
<p>Governance & Community Engagement</p>	<p>Council is proposing an additional \$932,000 in expenditure beyond that forecast in year 3 of the LTP. This is to fund:</p> <ul style="list-style-type: none"> - additional funding for supporting an Otago Mayoral Forum, including secretariat support and a base level of advisory support that enables this group to discuss and explore matters that provide benefit for the region. - provision for input into the district plan reviews occurring across the City and District Councils of Otago. A regional perspective to these planning processes is expected and necessary. 	<p>We oppose the additional expenditure.</p> <p>It is unclear how an additional amount of close to \$1 million is required to attend meetings, pay staff to take notes and provide advice is of any benefit to the ratepayers of Otago, given Council cannot currently effectively engage with its own ratepayers and communities.</p>

		<p>A key component for input into district planning processes is the RPS, which district plans must 'give effect to'. It is again difficult to understand how Council can provide a 'regional perspective' when it cannot consult with the regional community, and has only recently failed to develop an operative RPS despite significant costs to ratepayers, resource users and the community.</p> <p>Summary: We oppose Council increasing spending in 'Governance and Community Engagement', particularly as the additional costs do not relate in any way to community engagement.</p>
<p>Consenting, monitoring, investigations & enforcement</p>	<p>Council has responded to recent external reviews and its own understanding of the region's needs. This has resulted in:</p> <ul style="list-style-type: none"> - Additional consent processing staff - Increase level of service for incident response (pollution hotline). - Improvements to the coverage across the region. - Increases in compliance monitoring resources. 	<p>We oppose the additional expenditure, with the exception of additional resourcing for resource consent processing.</p> <p>It is again notable the cost drivers reflect Council's "own understanding" of community needs rather than any effective consultation.</p> <p>The additional costs for incident response and compliance monitoring should be deferred to allow for consultation on required levels of service in the development of the Draft 2021-31 LTP.</p> <p>It is also unclear why Council is focussed on additional resourcing for compliance given it is undertaking reviews of the plans against which compliance will be assessed.</p> <p>Summary: We support additional resourcing for consent processing, but seek that Council defers other increases in this activity until it has a better understanding of community and planning requirements.</p>

Flood Protection	<p>Council is proposing to increase opex by \$518,000 and capex by \$925,000 beyond that forecast in year 3 of the LTP.</p> <ul style="list-style-type: none"> - Develop asset management systems & data - Lower & West Taieri Schemes - increase programme and support with a new Project Manager role - Coastal Hazards – follow up on completed Hazard risk report - Improve work on designations, bylaws & compliance with additional resource 	<p>Summary: We support additional capex for flood protection schemes in rural areas.</p> <p>We question whether the proposed opex is required, and we ask that Council defer non maintenance related opex until the development of the Draft 2021-31 LTP, to allow for sufficient engagement with those funding the schemes.</p>

3. Proposed changes to Revenue and Financing Policy

- 3.1 Aside from an expansion of the 'Safety' and 'Enforcement' areas of rating for the Harbour Management activity, the only proposed change to the Revenue and Financing Policy is to implement two new sets of charges on the general rate under the 'Stock Effluent Disposal' activity:
- 3.1.1 a rate for the costs of 'planning and investigating' at a regional level.
 - 3.1.2 a range of smaller general rate based targeted rates, set at a district level.
- 3.2 The DAP does not provide sufficient information around the level of these rates, either at a regional or district level, or the funding splits between central government's contribution, the targeted general rate and the regionwide general rate contributions. It is hard to assess the equity of these charges based on the information provided.
- 3.3 Our preferred alternative would be for the costs of effluent disposal sites to be funded either entirely or in large part through central government funding, derived from road user charges and fuel taxes. This is because the effluent disposal sites will be used by those traveling from or to areas outside of the region, for example between Southland and Canterbury.
- 3.4 As a second option, we support use of the general rate to fund these activities, that the rate and funds are collected and administered by regional council, and that there is a regional contribution to these costs.

Submission

The information provided around new rates relating to stock truck effluent disposal is not sufficient to provide informed feedback.

However, on the basis of the information provided we support use of the general rate, including a region wide general rate contribution.

4. Planning processes

- 4.1 Council has requested Minister Parker 'call in' many of Council's planning processes or has committed to unreasonable timeframes, with the result being that these important planning processes will be 'fast-tracked', bypassing council hearings and either going straight to a Board of Inquiry or Environment Court hearing, and thereby undermining the ability for Otago residents and those most affected by these plan changes to understand or have a say on the proposals, without the stress associated with court processes.
- 4.2 We consider Council's adoption of the Minister's recommendations without question, including unworkable and unachievable timeframes, signals a lack of understanding of the importance of these planning processes and how long it will take to develop robust, understood and quality Otago-specific plans. The timeframes will be made even further unachievable as a result of the COVID-19 restrictions. In our view, Council should be seeking further extensions to timeframes required in light of these COVID19 restrictions.

- 4.3 Regional Policy Statement (RPS) review – we cannot understand how Council can expect to undertake a full review of the RPS by November 2020, nor why Council has committed to this timeframe.
- 4.4 The existing, partially operative RPS took close to 4 years to get through council and court processes, and involved significant commitment, resources, and time for all involved. In our view, it is largely unachievable to completely redo this plan to the quality needed, in timeframes provided, particularly in light of the COVID-19 lockdown.
- 4.5 Given the position of the RPS in the planning hierarchy, with other plans required to ‘give effect to’ the RPS, this sits as the most important plan in Otago. The timeframes for the review mean it is now pre-empting, and will have to subsequently be amended in response to national regulations that haven’t yet been finalised, including Essential Freshwater regulations, the NPS Indigenous Biodiversity, NPS Highly Productive Land, NPS Urban Development, and NPS High Class Soils.
- 4.6 Federated Farmers is concerned with the lack of engagement to date, which has largely comprised of a leading online-survey, and some 1-2hr public meetings of questionable value, and limited engagement with stakeholders. Feedback from our members is that Council now seems to be assuming it knows what is best for the Otago region, and is making decisions that will greatly impact the region, without meaningful engagement.
- 4.7 Otago Water Plan Review – Plan Change 6AA – We were disappointed that Council has failed to make good its earlier promises and commitments in respect of implementation of the existing Otago Water Plan, and we are concerned at the time and expense of the costs that have been imposed on stakeholders and ratepayers as a result. Overall, however, we supported the proposal to extend timeframes to allow for a review of the plan, given the lack of feasible alternatives.
- 4.8 Proposed Water Permits Plan Change 7 (PC7) – we have been deeply concerned with the process for agreeing on options for PC7, including the lack of time for farmers and stakeholders to provide a view on these options, and the decision to exclude two of the Councillors who best understand the issues facing irrigators, under a perceived conflict of interest.
- 4.9 We are further concerned with the decision to only allow short-term consents until the Land and Water Regional Plan is developed prior to December 2025. This provides water users with no time or certainty to invest in expensive infrastructure to make efficient use of water, undermines the investment in planning to inform resource consent applications, and creates unnecessary stress for water users.
- 4.10 Our concerns with the process include:
- 4.10.1 A lack of appropriate cost-benefit analysis through the S32 report.
 - 4.10.2 Lack of technical assessment, and a lack of underlying science.
 - 4.10.3 The blanket short-term consents, for a maximum period of six years for replacement water permits.
 - 4.10.4 Basing allocation only on the average maximum amount of water used and recorded during the period 1 July 2012 to 30 June 2017.
 - 4.10.5 Allowing no further irrigation of land beyond that which was irrigated in the 2017-18 irrigation season for the entire Otago Region.

Submission

We have significant concerns with the development process, timeframes, and potential implications of critical plan changes for Otago, including the Regional Policy Statement and Proposed Water Permits Plan Change 7.

We consider Council has fundamentally failed in its responsibility to deliver robust and Otago specific plans, committing to unachievable deadlines, has jeopardised environmental outcomes in the short-term, and has severely reduced the opportunity for appropriate levels of community input.

5. Water tanks required for new development

- 5.1 As a component of its responsibilities in respect of water quality and water allocation, we strongly argue Council should consider promoting the requirement for new dwellings in Otago to include water tanks, to capture rainwater.
- 5.2 This is particularly relevant given likely water shortages in some areas of the region, to provide for effective use of the water resource, and to reduce stress on Otago's infrastructure.
- 5.3 We seek Council engage with Otago's city and district councils to develop criteria to require water tanks for new dwellings.

Summary

Federated Farmers seeks Council develop criteria for ensuring future new dwellings are required to have on-site water tanks in respect to treating additional stormwater and providing drinking water.

SUBMISSION ENDS

Annual Plan Submission 2020

Mihi

Tena koutou katoa

Ko Maungatua te maunga

Ko Taieri te awa

Ko Uruao te waka

Ko Titi toku tipuna

Ko Ngai Tahu toku iwi

Ko Otakou toku marae

Ko Taieri/Moturata toku hapu

No Otokia ahau

Ko Ian Henare Bryant toku ingoa

No Reira, tena koutou, tena koutou, tena koutou katoa

History: Pre-European of flooding at West Taieri (Outram-Henley/Berwick)

Mataipapa: Henley

Catchment wide flood. In any widespread rainfall event affecting coastal and inland Otago, the affect would be on the Waipori river first with the relatively short length (and without hydro development of the present). The peak flow would rise quickly and be accommodated by the Waipori/ Waihola lake complex with minimal impact on the Henley Kaika. The Kaika up to the 1920's was a significant runaka with a population in the 100's, a Taieri chief, Te Raki and the same status as neighbouring runaka Otakou. As late as 1902 a large meeting hall, Te Waipoumanu as constructed and opened with hui attended by many dignitaries.

The Taieri River with its long reach and large catchment, would peak much later with the flood waters exiting the gorge above Outram and flowing over the town site then spreading out to inundate the whole of the West Taieri area and given the slope of the plain from north to south, the flow would in the same direction, with the Waipori/ Waihola complex filling and then the flood water flowing through the lower gorge. By the time the flood waters reached the Henley kaika, the depth was again minimal. The reason I am sure this is factual, is that my tupuna would never have established the kaika and urupa at Henley if the area was subject to frequent flooding of a significant depth.

Localised surface flooding.

With a small localised rainfall event affecting only the lower Taieri Plain, the surface flooding would have been general from Outram to Henley as each hectare generates the same water

volume and although the plain slopes from north to south, the hump and hollow nature of the land and only the two natural creeks, Lee Creek and Duck Creek to convey the surface flood water and two mahinga kai lakes, Tatawai and Marama Te Taha to fill, the Henley/Otokia area was no more affected than the Outram/ Momona area.

The early 20th century brought the Lower Taieri Flood protection scheme and the West Taieri Drainage scheme with devastating effect on the Maitapapa kaika with the kaika now in the unprotected flood channel and the mahinga kai gathering lakes of Tatawai and Marama Te Taha(Ascog) being drained and an extensive system of drains and channels with pumps created to serve the whole West Taieri. Tatawai in particular was a rich and easily accessed source of mahinga kai with an abundance of tuna, koura, inanga, pukeko, grey duck and patiki.

My Story

Titi from Kati Mamoe tribe, married whaler William Palmer and their daughter Mere Kui lived at the Henley kaika marrying William Bryant. With the loss of the mahinga kai lakes and more frequent flooding of the kaika, the Bryants moved up river to farm at Otokia on the banks of the Taieri River. With raising of the flood protection banks, the family was forced to move to the protected and drained land where they have resided to this day.

All the drainage and flood protection schemes on the Taieri took place with no consultation with the tangata whenua and the hapu Taieri/Moturata that represent them and with active opposition to Parliament from kaumatua Tieke Kona. That lack of consultation has continued to this present day. Decisions such as having differential rating for flood protection and drainage within the West Taieri area reinforced by the flawed 2011 rating review, the decision to lower the pumping capacity in 2015 with the installation of two smaller pumps to replace three pumps at Waipori pump station with the devastating effect on hapu farmers in the 2017 July and 2018 November surface floods. The efficient drain network channelled the Outram/ Momona surface water quickly to the Henley/Otokia area and lower capacity pumps never coped for some weeks.

It is wrong that hapu had their kaika, urupa and mahinga kai sites taken from them by flood protection and drainage schemes with no compensation for the greater good of the wider plain and then when hapu moved to the protected and drained areas they are told they have to pay the highest differential rate to support these schemes. When the benefits from the schemes are honestly looked at, there is no justification for the differential rating either flood protection or drainage within West Taieri. Historically both flood protection and drainage were uniformly rated over the whole West Taieri with the progression over time through percentage increased rates, to the current high differential rating. Flooding on the Lower Taieri and therefore Maitaipapa, has been further exacerbated by the clearance of snow tussock and bush in the whole Taieri catchment.

The drainage scheme rating has impacted hapu by moving some areas to virtual nil rating, removing land above the Contour channel from rating and not rating over flow flood water from the Contour Channel caused by the recent development on Maunga Atua.

Even decisions on increased storm water pumps for Mosgiel, changes to spillway heights at Riverside and reducing pumping capacity at Waipori have downstream effects for tangata whenua and hapu that they should be consulted on.

In these days of honouring the treaty and settling historic grievances, it is disappointing that the ORC and the preceding catchment authorities have allowed such a negative impact on tangata whenua from Maitapapa to continue and increase over time. We had to sacrifice our kaika, urupa and mahinga lakes to allow the flood protection and drainage schemes to exist and when hapu tried to benefit from these schemes by moving into protected areas, the rating system to pay for and maintain the schemes has been stacked against us to the extent that hapu members pay up to 200% higher rates than Outram area land owners for the same benefits and protection. The Tatawai lake bed taken from the hapu and drained after an Act of Parliament, generates land rental for the benefit of all Taieri ratepayers. The only benefit to hapu is from the landing and camp site of 4 acres on the old shore line which generates a small land rental for the Maungatua Trust who administer it.

My Submission

While recognising the Lower Taieri Flood Protection and West Taieri Drainage Schemes are a historical fact that cannot be reversed for the hapu's benefit, consultation with hapu on any changes to these schemes and consultation on the unfair rating system that pays for them has to take place.

Ian Bryant

Chair Tatawai Whenua Tapu Trust

Henley Urupa Trust

Te Nohoaka o Tukiauau Trust

Maungatua Whenua Tle the apu Trust

Henley/ Moturata Hapu



Submission to Otago Regional Council Proposed Annual Plan 2020-21

The Chief Executive
Otago Regional Council
Private Bag 1954
Dunedin 9054

24th April 2020

We thank you for the opportunity to present this submission to your Proposed Annual Plan for 2020 -21 and, in opening, we would ask you to pass on our thanks to all ORC staff who have continued working in essential services during the COVID19 lockdown period.

Public Transport - Bus Services

We represent the residential communities of Waikouaiti, Karitane, Seacliff, Warrington, Evansdale and Waitati/Doctors Point. The current bus service which connects Dunedin to our communities is poor and completely inadequate. There are no weekend services at all, and no weekday services in the evenings. As a comparison, the distance from Dunedin CBD to Waitati is similar to the distance from Dunedin CBD to Portobello which does have an adequate bus service. The services which currently operate do not travel along Coast Road between Karitane and Warrington, but travel along State Highway 1 between the Karitane turn-off and Evansdale, a route with minimal resident population. We would like to add this anomaly to our discussions, together with the possible use of smaller buses at various times.

After speaking with folk who actually use the bus service from Dunedin City to the north coast area, we have prepared a draft preferred bus timetable which we would ask you to consider favourably. (This is attached as APPENDIX 1). We have asked for a service that recognises that people have to get to the city in time for work and return afterwards; that people would like to go to the city at weekends, and also in the evenings to go to a movie, a concert or a sporting event.

It is pleasing to read on Page 7 of your *Proposed Annual Plan* document that you wish to 'give people more sustainable travel choices', 'reduce carbon emissions' and 'expand our public transport network'. We believe that our request is consistent with these goals and we look forward to being able to sit down with your transport team and work towards a mutually successful outcome.

Environment - Wilding Pines

We are disappointed to read on Page 11 of your document that you appear to be reducing the amount you spend on wilding pine control. We find this statement to be rather vague and confusing : *'\$452,000 decrease* from 2019-20 budget *decrease is due to large reduction in grant funding for the wilding pine programme.*

Is the reduction in grant funding money which ORC receives from somewhere, or is it money which ORC gives to various entities?

We believe that there is a case for ORC to keep up the fight against wilding pines, and there might even be a case for ORC to enter discussions with NZTA (New Zealand Transport Agency) about control of wilding pines along many highways, perhaps by utilising the services of the same contractors as an aid to reducing costs. We note that Central Government is keen to supply funding to what are seen as 'Shovel Ready' projects, as an aid to boosting employment as the country edges its way out of COVID19. Control of wilding pines would certainly fit within this category – although 'chainsaw' might be a more appropriate word than 'shovel'.

Rates The Board understands the need for a substantial percentage increase in rates. Given the historically low current level of rates, the actual sums involved for most households will be relatively low. We ask, however, that the Council takes every step it can to reduce the proposed increase, given the difficult times we are all facing. There are, for example, a number of proposals in your document for the preparation of "business cases", "inventories", and the like, which might possibly be reassessed.

Proposed Budget The Board accepts that a considerable amount of the new spending has been imposed on the Council by government regulation. We are broadly supportive of measures to improve environmental health and realise that this will involve increased compliance pressures, particularly on primary producers.

Without more detail, it is impossible to comment further, except to say that we would expect the Council, as far as possible, to work cooperatively with farmers to develop systems that are robust, efficient and equitable.

We particularly commend the Council's stated intention to engage with farmer catchment groups.

Thank you for the opportunity to present this submission. I wish to speak in support of it, either in person or by video link, whichever is more appropriate at the time.

For now, we wish you well in your discussions and consideration of the 2020-21 Annual Plan. The current COVID19 Pandemic has not just caused severe financial hardship for many, but also emotional stress. We trust that you will take this, and the general wellbeing of the wider community, into consideration as you finalise the plan.



Alasdair Morrison,
Chairman, Waikouaiti Coast Community Board

APPENDIX 1

Waikouaiti Coast Community Board

Request to ORC for improvements to North Coast Bus Services

Note 1 There are currently no bus services to the North Coast on Weekends

Note 2 There are no evening services during the week, or at weekends

Note 3 The requests below do not relate to school bus services

Existing Service : Monday – Friday : Southbound				
Palmerston	Waikouaiti	Karitane	Waitati	Dunedin Bus Hub
07.00	07.20	07.30	07.50	08.10
11.00	11.17	11.26	11.41	12.00
16.45	17.02	17.11	17.26	17.45

Existing Service : Monday – Friday : Northbound				
Dunedin Bus Hub	Waitati	Karitane	Waikouaiti	Palmerston
08.40	09.05	09.20	09.30	09.45
15.35	16.00	16.15	16.25	16.40
18.00	18.25	18.40	18.50	19.05
Currently – April 2020 – there are no weekend services				

Requested Bus Service : Monday – Friday : Southbound				
Palmerston	Waikouaiti	Karitane	Waitati	Dunedin Bus Hub
06.35	06.55	07.05	07.25	07.45
07.00	07.20	07.30	07.50	08.10
08.00	08.20	08.30	08.50	09.10
11.00	11.17	11.26	11.41	12.00
16.45	17.02	17.11	17.26	17.45

Requested Bus Service : Monday – Friday : Northbound				
Dunedin Bus Hub	Waitati	Karitane	Waikouaiti	Palmerston
08.40	09.05	09.20	09.30	09.45
15.35	16.00	16.15	16.25	16.40
18.00	18.25	18.40	18.50	19.05
21.00	21.25	21.40	21.50	22.05
F 23.00	F 23.25	F 23.40	F 23.50	F 00.05
Note – F = Fridays only				

Requested Bus Service : Saturday : Southbound				
Palmerston	Waikouaiti	Karitane	Waitati	Dunedin Bus Hub
08.00	08.20	08.30	08.50	09.10
11.00	11.17	11.26	11.41	12.00
16.45	17.02	17.11	17.26	17.45
17.45	18.02	18.11	18.26	18.45

Requested Bus Service : Saturday : Northbound				
Dunedin Bus Hub	Waitati	Karitane	Waikouaiti	Palmerston
12.00	12.25	12.40	12.50	13.05
18.00	18.25	18.40	18.50	19.05
21.00	21.25	21.40	21.50	22.05
23.00	23.25	23.40	23.50	00.05

Requested Bus Service : Sunday / Public Holidays : Southbound				
Palmerston	Waikouaiti	Karitane	Waitati	Dunedin Bus Hub
08.00	08.20	08.30	08.50	09.10
16.45	17.02	17.11	17.26	17.45

Requested Bus Service : Sunday / Public Holidays: Northbound				
Dunedin Bus Hub	Waitati	Karitane	Waikouaiti	Palmerston
13.00	13.25	13.40	13.50	14.05
18.00	18.25	18.40	18.50	19.05



Respondent No: 95

Dunedin area Tracks & Trails Trust (DaT&T Trust) *In-formation*
(Name to be determined)
C/- 159 Hagart-Alexander Drive, Mosgiel
Dunedin 9024

24 April 2020

Otago Regional Council
Private Bag 1954
Dunedin 9054

RE: Annual Plan
Attn: The Chair and Councillors of the Otago Regional Council

Thank you for the opportunity to provide comment on your Annual Plan 2020. Our submission specifically relates to provision and support for the development of tracks and trails across our fabulous city. Given our Trusts *In-formation* status, we would also like to take this opportunity to introduce the Dunedin area Tracks and Trails Trust (DaT&T Trust).

The Trust

The concept of the DaT&T Trust (name yet to be determined) has come about as a result of several discussions between stakeholders in the tracks and trails realm across the city of Dunedin. There are many diverse stakeholders in this space! You may be aware, there are a handful of groups working toward the development of new big budget cycling trails including those from Oamaru to Dunedin, from Dunedin to Waihola, around and over the Peninsula, the Three Peaks, and down the southern coast. There are also other groups and clubs using and maintaining a multitude of existing walking tracks and mountain bike trails, some requiring additional maintenance, others that would benefit from enhancement.

We believe the opportunity exists to bring these stakeholders together, with the Dunedin City Council, to create a network of world class tracks and trails across Dunedin City. This concept has been supported by a growing number of stakeholders and as such we have progressed to the status of *in formation* with name yet to be determined.

Likely Trustees of the DaT&T Trust are reputable experts in their fields and as a group these Trustees will ensure the Trust performs to the highest of standards. It is proposed key functions of the Trust will include, but are not limited to; strategic development, fundraising, resource and knowledge sharing, advocacy, promotion, and project management.

A shared vision

From discussions with stakeholders it is clear Dunedin City is not short on opportunity in the tracks and trails domain, nor enthusiasm. It is also clear, these different groups are seeking support, and would benefit from a shared vision for tracks and trails across Dunedin City. A shared vision that is supported by a robust strategic plan that emphasises collaboration, integration and partnerships. A vision that is aligned with the City Council's vision for a great small city that is connected, active and healthy. A vision that links local trails to the national trail network promoting regional and national tourism, but also enhances local 'stay-cation' opportunities. A vision that stakeholders are involved in from development through implementation and on to maintenance.

Submission request one: The DaT&T Trust *in-formation* requests that councillors endorse the development of a shared vision and strategy for tracks and trails across Dunedin City.

Collaboration

The contribution existing groups could make to the development of a shared vision and strategy should not be underestimated and would likely be valuable and cost effective. This is particularly important currently, when times are tough, rate payers are hurting and council expenditure is constrained.

A successful local community-council partnership in the development of a strategy is evidenced with Ara Toi, Dunedin City Council's Art and Culture Strategy. This strategy was developed by the DCC in partnership with the arts and culture collective Transforming Dunedin.

Similarly, Queenstown's first trails strategy, 2004, was developed following a council-community meeting to assess interest in a network of recreational trails. This strategy has undoubtedly been a success and the latest Queenstown Trails Trust (QTT) Strategy 2015-2025 was again prepared in collaboration with the Department of Conservation, Queenstown Lakes District Council, tourism industry, walking and cycling groups, New Zealand Transport Agency and other stakeholders.

The DaT&T Trust *in-forma*tion would like to propose a collaborative approach to the development of a shared vision and strategy for ALL tracks and trails across Dunedin City. The Trusts functions, as detailed earlier, could enhance the strategic development process immensely with ready access to: local expertise and experience in the development of diverse trails, access to additional funding streams, access to communities for engagement, and enthusiasm for progress.

Submission request two: The DaT&T Trust *in-forma*tion requests that councillors endorse collaboration with the Trust to develop a shared vision and strategy for tracks and trails across Dunedin City.

Opportunistic projects

There is no underestimating the impact of COVID 19 on the economic and social wellbeing of our city, yet amidst the gut wrenching stories of loss lies a glimmer of opportunity. As you will be aware, Central Government is looking at all ways to kick start local economies. Funding opportunities are available through the Government Infrastructure Fund, the Provincial Growth Fund, the Cycleway Extension Fund, the Tourism Infrastructure Fund, NZTA's off-road shared paths programme, Department of Conservation Funding, and the Otago Conservation Review - with calls for proposals for new cycle trails across Otago.

The proposed Southern Gateway Trail from the Octagon through the Caversham and Wingatui Rail Tunnels and across the Taieri to Waihola is currently in concept stage. This trail could be a key trail in the city's vision as it provides a critical link from Dunedin to the Central Otago trails. From Waihola the trail will continue to Lawrence (Clutha Gold Extension), from Lawrence to Roxburgh (Clutha Gold Trail), from Roxburgh to Alexandra (the Roxburgh Gorge Trail), then from Clyde to the Otago Central Rail Trail or on to Bannockburn (under construction) and further to the Queenstown Cycle Trails Network.

The proposed 'northern gateway' linking Dunedin to Oamaru is another trail in concept stage that could be considered a key trail in the City's tracks and trails vision.

With seed funding to progress feasibility studies, either of these trails could be 'shovel ready' soon and capitalise on the funding opportunities presently available.

Is now the time to be investing in tracks and trails? Yes, activity is directly linked to personal wellbeing and has there ever been more people out and about in their sneakers, or on their bikes, around our city than there has been over the past four weeks?

Submission request three: The DaT&T Trust *in-forma*tion requests that councillors consider a) endorsing the concept of the Southern Gateway Trail linking Dunedin to Waihola as an integral trail in Dunedin's trail network b) acknowledging a trail leading north from the city as also integral to a world class network of trails c) adding both these trails to the Regional Transport Plan.

Submission request four: The DaT&T Trust *in-formation* requests that councillors endorse the use of flood stop banks on the SilverStream and Taieri River as part of the Southern Gateway Trail route.

In conclusion

The time is right to invest in a vision for tracks and trails around our great small city.

The DaTT Trust *in formation* is working to develop a comprehensive network of stakeholders in the tracks and trails realm of Dunedin. We believe these stakeholders would benefit from a shared vision and strategic plan to create a network of world class tracks and trails across our great small city.

With ready access to local expertise and experience, the mechanism to enable resource and knowledge sharing, access to additional funding streams, strengths in advocacy, promotion, and project management the DaTT Trust *in formation* would welcome the opportunity to collaborate with the ORC in the establishment of a vision and strategy for Dunedin tracks and trails.

The DaT&T Trust *In-formation* supports the development of the Southern Gateway Trail and a north bound trail as key trails in Dunedin's tracks and trails network and requests councillors endorse the use of flood stop banks on the SilverStream and Taieri River as part of the Southern Gateway Trail route – extending the Tunnels Trail to lead from the Octagon to Waihola.

Again, thank you for this opportunity

Sincerely

Sarah Davie-Nitis
Communications Manager
On behalf of the Dunedin area Tracks & Trails Trust *in formation*

**Submission to Otago Regional Council 2020/21 Annual Plan
Wakatipu Wilding Conifer Control Group Incorporated (WCG)
April 2020**

Summary

- WCG, established in 2009, is a community-led volunteer group, led by highly skilled community leaders who are experts in their field, co-ordinating the wilding conifer control efforts and obligations of agencies, land owners/managers and who also engage with the Wakatipu community.
 - Wilding Conifers pose a threat to the Wakatipu tussock landscape, to native ecosystems, to historical areas including Council and DOC reserves, to tourism and recreational areas, they also pose a dangerous fire risk to the community.
 - ORC is the lead agency in recognising and addressing the large wilding problem in Otago and have previously funded \$100,000 per annum to WCG, where as a volunteer run charity organisation, WCG is able to further leverage these funds into a much greater sum with funding sourced from other bodies.
 - Other Wakatipu environmental community groups also support and endorse the work of WCG and recognise that their own conservation efforts are interlinked with the detrimental effects of exponential growth of wilding conifers/pines. If WCG fail in their control efforts, then local environmental groups are also likely to fail in their own objectives.
 - Continued ORC financial support to WCG will help preserve our unique biodiversity and landscape, create and maintain jobs, while benefiting the community as a whole.
- 1. ORC are the lead agency and the new Regional Pest Management Plan (RPMP) recognises and addresses the large wilding conifer problem in Otago.**
- 1.1. Pinus Contorta is classified in the RPMP as an unwanted organism, this is the most invasive introduced conifer species. WCG supports ORC's continued enforcement of Pinus Contorta control and appreciates the good work of Richard Lord and his team in this regard.

- 1.2. Other wilding conifers are also included in the new RPMP under the progressive Containment programme - “to contain or reduce the geographic distribution of the subject, or an organism being spread by the subject, to an area over time.”
- 1.3. “The Biodiversity Strategy outcomes seek to reduce the impact of pests on indigenous species, provide more pest management information and to **support community-led initiatives.**”
- 1.4. The Regional Policy Statement contains policies and methods to encourage, facilitate and to **support activities** which control pests.
- 1.5. The WCG recognise that the ORC represent the WCG at a National level and attend the National Wilding Conifer Control Programme - Operational Advisory Group. ORC hold funding from MPI to pay into the Wilding program in the Wakatipu. The WCG would like ORC to step up their involvement and understanding of the program and advocate for a higher percentage of National funding to come to this area. This can be done via increased ORC involvement with DOC in the planning and understanding of operational work.

2. Continue financial and other support from ORC for wilding conifer control programmes in Otago/Wakatipu.

- 2.1. In the 2019/20 financial year, ORC contributed funds to Otago for wilding conifer control, \$100,000 was funded to the Wakatipu area
- 2.2. WCG thank ORC for this financial support towards the WCG Programme in 2019/20
- 2.3. In the previous 10 years WCG have invested over \$14 million in wilding control. It would not have been possible to raise that amount without vital base line funding. WCG have managed to leverage that council funding and to build on the sum contributed so that, in this financial year, WCG have a budget of \$2.9 million. Other funding sources include; landowners, Department of Conservation (DOC), Land Information NZ (LINZ), Ministry of Primary Industries (MPI), Queenstown Lakes District Council (QLDC), funding

bodies (ie. Central Lakes Trust, Lotteries Environment & Heritage, Skycity, ORC Eco Fund), community and business donations.

2.4. WCG applaud the ORC's current successful, collaborative working partnership with "wilding pine" community-led groups.

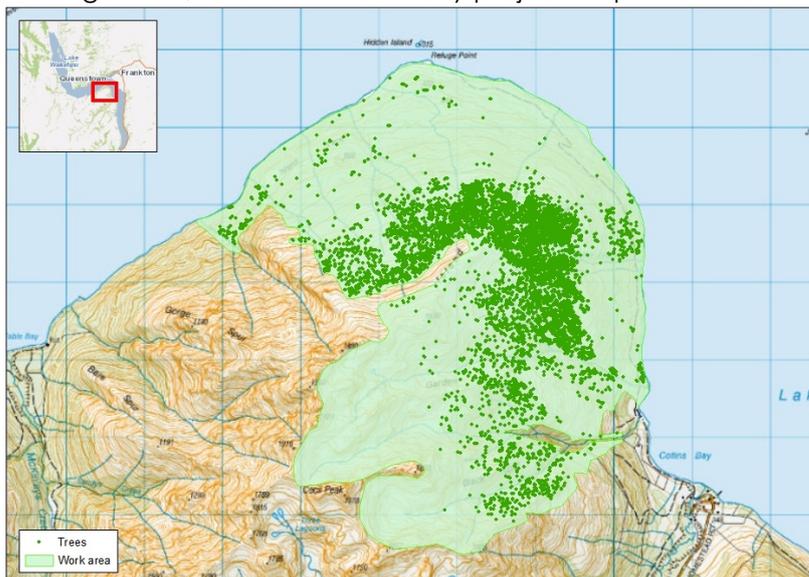
2.5. WCG submit that ORC continue with a minimum \$100,000 annual funding to Wakatipu Wilding Conifer Control Group Inc (WCG) for the management of these pest trees with a view to increasing this amount in the future, as the economy stabilises, to be more in line with funding from other agencies.

Recommendation:

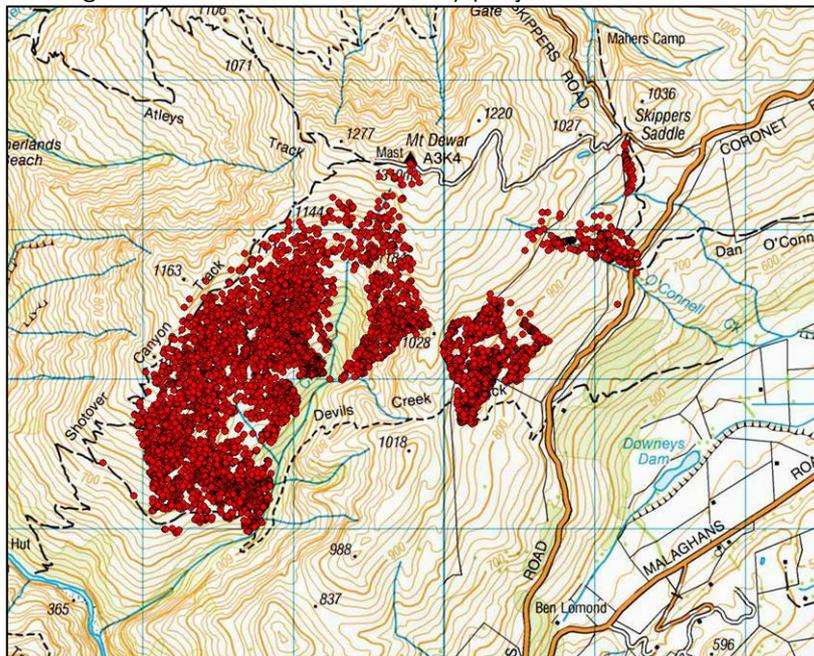
That Otago Regional Council continue to support the community-led Wakatipu Wilding Conifer Control Group Inc (WCG) with annual funding, at a minimum of \$100,000, in the 2020/21 ORC Annual Plan, so as to control wilding conifers as described in the RPMP and in line with funding commitments for this purpose as outlined in the ORC Long Term Plan.

Additionally, WCG encourage ORC advocating, through the National Wilding Conifer Control Programme - Operational Advisory Group for a higher percentage of National funding to come to this area.

Map: Shows the distribution of 8,000 trees removed from Cecil Peak under WCG management, as one of their many projects in previous seasons.



Map: Shows the distribution of 7,858 trees removed from Mt Dewar under WCG management, as one of their many projects, for the 2019/20 season.



24 April 2020

OFFICE OF THE MAYOR

Otago Regional Council
By email: customerservices@orc.govt.nz

SUBMISSION ON OTAGO REGIONAL COUNCIL'S PROPOSED ANNUAL PLAN

The Queenstown Lakes District Council (QLDC) requests that the Otago Regional Council include budget to enable two fulltime equivalent Emergency Management Officers (EMO) to be dedicated to the Queenstown Lakes District. At present, the budget reflects 1.5 FTE EMO.

A year ago, QLDC made a compelling case for two fulltime equivalent Emergency Management Officers. This was declined but subsequently a shared resource was agreed to share one FTE across QLDC and Central Otago District Council and this second role is about to commence. It is patently obvious as of today that this is not an adequate response.

There has never been a stronger and more urgent need for additional resource in the Queenstown Lakes District. Not only is the QLDC dealing with an unprecedented welfare crisis, we must be ready to respond to other emergencies. The shared resource model has been applied previously and has proven untenable for a staff member with two masters, a significant geographical difference and two differing operational styles.

On behalf of our community please make this request an absolute priority.

Yours sincerely



Jim Boulton ONZM
MAYOR



Mike Theelen
Chief Executive

CC: Sarah Gardner, ORC
Marian Hobbs, ORC

Respondent No: 98

Submission from Richard Bowman to the ORC Proposed Annual Plan 2020-21

I wish to make a submission on the Otago Regional Council's Proposed Annual Plan 2020-21.

I also wish to be heard by Council as part of the Annual Plan public consultation process as and when hearings are held.

Opening Comments

The Proposed Annual Plan 2020-21 and accompanying documentation is general in nature and lacks specific information about policy objectives and how these will be achieved. Nor does it provide any financial information down to a meaningful level of detail. If one refers to the LTCCP 2018-2028 this is of little assistance. There have been so many changes since 2018 that the information it contains must be regarded as outdated and only relevant now in general terms. Hence, the comments and suggestions I make here are necessarily general.

I take heart from the statements made in the proposed plan to the effect that 'We are not the ORC of old' and 'Together with our communities, we're grappling with the best ways to protect and sustainably manage our water and land resources. We're already experiencing more floods and fires - the impacts of climate change. And no matter where we live, pollution in our water and how much water we use is a challenge for everyone.' Now the Council needs to deliver on this statement of intent in a unified and effective way.

Issues of concern

Biosecurity

Over the last few years, under the previous Regional Pest Management Strategy, it appears that the biosecurity function of ORC has lacked the resources to meet the community's pest management needs and expectations in many areas. This relates to rabbits, wallaby, lake snow, Lagarosiphon, wilding conifers, etc. With the implementation of the new Regional Pest Management Plan (RPMP), adopted by Council in December 2019, now is the time to address any deficits in management and technical expertise. The Council needs to ensure that it has the staff capability and capacity to achieve the management objectives which have been set in the RPMP for each designated pest including enforcement of the regulatory provisions. It is not apparent in the figures provided in the proposed Annual Plan or the LTCCP that there will be enough funding to address this need. I would ask that Council looks very closely at the funding of biosecurity in order to rebuild this function and to enable it to properly perform its role.

Wallaby

It is said today that the wallaby will become the next rabbit in Otago.

There will be no cheaper time than now to contain and control wallabies. This conclusion can be drawn from the 2016 Landcare Research study (funded by MPI) which examined current and future

predicted distributions and impacts wallabies in New Zealand. It has calculated that current losses to agriculture and the environment caused by wallabies in the South Island were \$27M/ann. If nothing were done for 10 years this would increase to \$67M/ann. Containing and controlling wallaby within current distribution would cost \$6.2M. So, there is a very considerable benefit from control carried out now.

Wallaby are established in northern parts Otago and are progressively spreading south and west. Without effective intervention they have the potential to occupy hill country and high country habitats over the entire region. This spread will continue across into Southland.

As wallaby infestations are established across the region they will impose costs of tens of thousands of dollars a year on individual farmers. This will come from production loss and expensive and frustratingly difficult control on their properties. These problems are all too evident today in many areas of Mid and South Canterbury.

The eradication objective for Bennett's wallaby in Otago the RPMP may now be almost impossible to achieve given the current evidence of distribution across a vast area of back country land. A more realistic objective would be the progressive containment of wallaby in Otago, but this would still require a significant amount of funding in the short and medium term. The most immediate need is for surveillance of vast areas of habitat to identify populations and spreading trends. Then systematic effective control will be required to eliminate those populations to halt spread and then to roll it back. A programme to achieve this should be funded and coordinated through a single agency such as the ORC. However, it would be desirable to contract out the management and control work to highly skilled specialists. The development and application of new science and technology-based tools for wallaby detection, surveillance, control and monitoring will be a critical factor.

Ten years from now it will be obvious whether the golden opportunity to head off the wallaby problem in Otago was taken when it could.

Rabbits

There is a widely expressed view today that rabbit numbers are higher than before RHD in 1997 and that they are 'out of control' in many parts of Central Otago. If this is correct then this situation is due to the extremely favourable habitat for rabbits there, the kind seasons over the last few years and the lack of effective control by many landowners.

It will not be financially or logistically possible for individual landowners to control rabbits across the region down to the levels set in the RPMP with the currently available tools. Nor is it within the resources of the Council itself to undertake such control on a landscape scale. Rather the Council needs to take a more pragmatic approach. This could focus on proactively helping those landowners and communities who want to help themselves. It would target those landowners and more particularly groups of landowners who are prepared to invest their own funds and effort to control rabbits over the long term. There are good examples in Otago and elsewhere where such landowner-led, cooperative rabbit control works very effectively. These successful programmes can provide excellent models to follow.

Rabbit control on farmland can be generally achieved on large farming properties through the effective use of fencing, shooting and poisoning carried out on a long-term basis. Farmers also have a strong motivation to reduce the economic costs rabbits impose on them. They also develop a

strong commitment to cooperative action once they have achieved good results. The farmer-owned company Maniototo Pest Management Incorporated is a good example of how this can work.

It is more difficult, however, to achieve this on small holdings in semi-rural or peri-urban areas where a lot of the rabbit complaints are generated. This is because the most effective tools cannot be used there and it can be difficult to coordinate landowners, many of whom are not permanent residents, to participate in a coordinated plan of action. Nonetheless it should still be possible to engender a cooperative approach in these difficult areas if enough affected land holders can be encouraged to appreciate the benefits of working together with their neighbours. Here where appropriate the Council should provide liaison, advice and incentives to assist and support this. Once formed then groups should be encouraged act strategically. This could involve them reducing the habitat favourability on their land (e.g., through rabbit fencing and other land management practices) and by coordinating control effort to optimise results. Control should be carried out to high and consistent standards ideally by specialist rabbit control contractors. Where necessary new contractors should be encouraged to enter the market. For cooperative programmes to work it is essential that the rules in the RPMP are enforced wherever necessary to protect those landowners who are committed to rabbit control from those who are not.

ORC needs to ensure it has enough staff with the right social and technical skills to support existing community-led rabbit control programmes and to encourage new groups to start and operate on a long-term basis. It also needs to have the staff capacity to deliver effective regulatory solutions for non-compliance as and when required.

The use of land holder/community-led rabbit management model will not solve the rabbit problem in Otago. However, it has the potential to provide relief to those landowners who are prepared to actively participate in cooperative programmes which are supported by the Council. Successfully adopting such an approach would address a lot of the criticism the Council has received over perceived unsatisfactory management of rabbits in the past.

Wilding Conifers

Wilding conifers are almost certainly the greatest weed threat facing Otago. This also applies to several other regions in New Zealand with large areas of land vulnerable to wilding trees and their exponential rates of spread. In fact, much of the debate about water allocation today may be irrelevant if in 20- or 30-years' time if wilding tree spread in critical dryland catchments has significantly reduced the yield of water available for use. This is quite apart from the impacts on farming production as well as on biodiversity.

The Council should be congratulated on the \$200,000 it provides per year for the Wakatipu Wilding Conifer Group and the Central Otago Wilding Conifer Groups as a contribution to their work programmes to reduce the wilding threat in those areas. However, it should be noted that these only cover a portion of the 2 million hectares of hill and high country land in the region vulnerable to wilding spread.

Otago Regional Council needs to take a strong lead on wilding conifers because this is one of the most potentially damaging economic and environmental threats it faces. It is very well understood all over New Zealand that early intervention in removing seed sources that threaten large areas of vulnerable land is by far the most cost-effective solution to the problem. There is an excellent suite of tools with proven ability to control wilding conifers and there is a growing capacity in the market

to provide effective and efficient contracting services. What is missing now is clear regional leadership committed to long term wilding tree management and to acquiring the funding necessary to operate large scale programmes. Failure to respond effectively at the early stages of wilding spread will result in intractable infestations over large areas of inland Otago and the long term economic, environmental and social costs that will bring.

Biodiversity

It is gratifying to see that ORC has adopted its Regional Biodiversity Strategy. However, it is disappointing to see in the proposed Annual Plan that resourcing to progress its implementation is currently 'limited' to a programme of biodiversity mapping. Hopefully, this shortfall can be addressed in the future. On the other hand, it is good to see the ECO fund is in place to aid landowners and community groups who have projects which meet its criteria.

In my view the best investment the Council could make toward improving biodiversity values in the region would be to provide more support for communities and landowners. This should involve the provision of liaison, technical advice and seed funding to assist them undertake projects to protect and enhance the natural values that are important to them. You will be aware that there are a multitude of community-led groups across the region already. These are already making remarkable gains on the ground as well as nurturing a rapidly growing conservation and environmental awareness ethic in our society. I am personally involved with a number of these groups in the Wakatipu, Upper Clutha and Central Otago areas. They are making substantial contributions in terms of pest control, native plantings and reforestation, protection of water and soil values, etc. To enable them to reach their goals, which in turn contribute to those in the Regional Biodiversity Strategy, they need all the encouragement and support they can get.

ORC needs more staff with the right communication and technical skills who can interact directly and regularly with local landowners and groups. These staff need to be located in or close to the communities they work with. Ideally, they should be seen as a part of those communities rather than as an occasional visitor from the outside. There is considerable cost associated with employing specialist staff and locating them in the more distant parts of region. However, investment in this will be warmly welcomed by those it aims to help, will bring a substantial return in terms of biodiversity action on the ground as well as increasing community 'buy in' to the Regional Biodiversity Strategy.

Fresh Water

Councillors will be aware of the recently released "Our freshwater 2020" report prepared by the Ministries for the Environment and Statistics. This paints a dismal picture of the current state of our rivers and lakes in New Zealand. It also indicates continuing decline if human impacts on water are not reduced and that this will be exacerbated by the effects of climate change/global warming. Although this is a national report Otago is facing exactly those problems it outlines. In fact, the one catchment case study presented is of the Manuherikia River because it exemplifies many of the serious issues identified in the report.

It is unfortunate that in recent years so much Council effort seems to have been focussed on water for irrigation in Central Otago when there is a wide range of other pressing water issues across the rest of the region which also need attention. As the freshwater report states the decline in water

quality is now recognised as being more acute in New Zealand's lakes than in its rivers. I am particularly concerned about impacts of the intensification of agriculture and urban growth on the naturally pristine water sources of the Upper Clutha and Kawarau Catchments. It is inevitable in my view that adverse effects on water quality related to these factors will soon be identified in Lake Dunstan and later in Lakes Wakatipu, Wanaka and Hawea. Every effort needs to be taken now to prevent these priceless natural assets from being degraded by poorly managed human activity. The Council must be seen to be addressing water issues across the whole region and demonstrating that it is committed to ensuring that water quality problems will be identified and dealt with wherever they are.

Friends of Lake Hayes Society Inc (FOLH), of which I am a member, gratefully acknowledge the investments that the Council has made at Lake Hayes in recent times. This includes the installation of a continuous monitoring buoy and the collection of additional water quality monitoring in Mill Creek to evaluate changes in water quality levels against the Caruso study undertaken 20 years ago. The data produced from these activities will provide a base of scientific knowledge which can be used to guide efforts to address declining water quality in this iconic waterbody. FOLH representing hundreds of people who regularly interact with lake, offers an excellent base for an effective community-agency partnership focussed on improving water quality in the lake. We would urge the Council to seize this opportunity and to make available the staff resources necessary to develop a strong working relationship between the Council and local stakeholders. A successful model developed here could be readily adapted to be used elsewhere in the region.

It is critical that ORC invests in the freshwater science capability and capacity to bring it up to a level where it can effectively monitor all of our waterways for current state and change in water quality over time. Without a comprehensive and detailed information framework it will not be possible to make sound, evidence-based decisions about sustainable water use on catchment and sub-catchment basis in the region.

Funding

The issues I have raised and the solutions I have suggested will all require additional investments, particularly in staff. If these are not made, then ORC will struggle to meet its statutory obligations as well as the needs and expectations of the ratepayers of the region. A top priority for Council should be to rebuild organisational capability and capacity in deficient areas such as freshwater science and biosecurity/biodiversity management. It also needs to build the human resources needed to enable Council to interact directly and positively with all communities and especially those remote from Dunedin.

Short term funding pressures should not be used as a reason to avoid striving for ambitious, long term environmental goals. While it may not be possible at this time to provide all the funding needed to address the issues I have raised the Council does have a range of financial options available to it. These include significant reserves and capital assets as well as the possibility of post Covid-19 support from central Government by way special loan provisions for local government. All these resourcing options need to be harnessed to bring the organisation up to an acceptable level of performance in the shortest possible time frame.

The current Covid-19 pandemic response has put the national and regional economy under severe stress. However, it also provides an opportunity to think and act differently in the face the major challenges posed by climate change and other identified regional hazards. Achieving the sustainable

use and management of our natural resources including water, soil, air and coast for future generations would be a major first step toward creating the resilience needed to cope with predicted environmental shocks. In addition, Council can also promote decarbonising of our economy through the influential role it has in public transport.

On a personal note, as a residential property owner, I would not object to a reasonable increase in my rates. That is providing I could be assured the funds would be used by ORC to effectively meet its statutory obligations to sustainably manage the natural resources of the region.



20 April 2020

Richard Bowman

75 Arrowtown-Lake Hayes Rd

RD 1, Queenstown 9371

Email : bowmanz@actrix.co.nz

Phone: 021 784 975

Respondent No: 99

24 April 2020

Draft Annual Plan
Otago Regional Council
70 Stafford Street
Dunedin 9054

annual.plan@orc.govt.nz

Tēnā koutou

SUBMISSION ON THE OTAGO REGIONAL COUNCIL DRAFT ANNUAL PLAN 2020/21

1. The Dunedin City Council (DCC) welcomes the opportunity to submit on the Otago Regional Council (ORC) Draft Annual Plan 2020/21.
2. The DCC appreciates the support of the ORC on matters of shared responsibility and interest. The DCC looks forward to continuing to work closely with the ORC for the benefit of Dunedin, its residents and ratepayers.
3. The DCC acknowledges the unexpected challenges presented by the unfolding COVID-19 crisis and requests the ORC reconsider rate increases for Dunedin residents. The DCC acknowledges the importance of ORC activities and obligations as an environmental regulator and requests consideration of using financial reserves if necessary, to offset the need for large rates increases.

For a safe, resilient future

4. The DCC welcomes the ORC's focus on climate change resiliency in the ORC's 2020-21 Annual Plan and looks forward to future partnership work.
5. The DCC acknowledges progress made through partnerships between the ORC, DCC and others on work to prepare for climate change in Dunedin. The DCC is particularly grateful for the continued collaborative work on the South Dunedin Future work programme and for the ORC's work on monitoring and modelling of stormwater and groundwater in the South Dunedin area.
6. The DCC also acknowledges crucial collaboration to date on the Ministry for the Environment South Dunedin case study, which will be invaluable to ensure the best outcomes can be achieved for residents.

7. The DCC supports all work that will assist in planning for the effects of sea level rise and coastal hazards more generally. In particular, the DCC supports the ORC's regional climate change risk assessment project as a crucial step forward for the region to better understand how Otago can adapt to the impacts of climate change.
8. The DCC commends the ORC's commitment to assess CO₂ emissions for the Otago region, and to measuring its own emissions. Since 2013/14, the DCC has been measuring and reporting its corporate emissions, through the Toitū carbon reduce programme. Since 2015, Dunedin City has been a signatory to the Global Covenant of Mayors and has, as part of this commitment, completed a citywide inventory of greenhouse gas emissions; conducted a climate change vulnerability assessment; and is reviewing forward work programmes to align with Dunedin's commitment to become a net carbon zero city by 2030.
9. The DCC also encourages the ORC, as owner of Port Otago, to assess emissions from ships visiting the region with a view to regulation. During cruise ship season emissions from berthed ships, and the resulting air quality, likely has a detrimental effect on those living in the immediate vicinity of Port Otago. The DCC requests that the ORC monitors these emissions and air quality more stringently with regular reporting to DCC and the West Harbour Community Board. The DCC does not support the Port itself being solely responsible for monitoring and reporting emissions.
10. As transport is the source of over half of the city's non-agricultural emissions, the DCC seeks to work closely with the ORC to deliver on this target. The DCC shares the ORC's commitment to exploring options to incentivise car-free, low emissions travel. Specific comments relating to investment in public transport planning and operations are set out below.

Better urban environments

11. The DCC supports further collaborative work and believes the joint approach taken for incorporating natural hazard risks into the 2GP serves as a good model for future collaboration to support the management of urban development capacity. The DCC particularly appreciates the input of ORC science teams in providing a strong foundation for land-use planning done by the DCC.
12. The DCC has identified a shortage of capacity for residential growth over the medium and long-term and is currently working on addressing this shortage. As part of this work, the DCC would welcome input from the ORC on the impacts of growth options on environmental matters managed by the ORC.
13. The DCC supports the national policy direction and ORC's objective of enabling development while protecting highly productive land and water quality. Science input from the ORC will be essential in achieving this approach consistently across the region and to provide clarity to councils and the community about expectations and management.

14. The DCC acknowledges balancing development against the protection of highly productive soils and water quality will be a challenge. It is acknowledged that ORC recognises these issues and will provide further scientific input.
15. The DCC acknowledges a key challenge in urban development is the management of wastewater and stormwater networks. Provision of a robust planning framework for network discharges to ensure clarity and consistency would be beneficial to Councils and communities.

Transport for the city

16. The DCC acknowledges the collaborative work being undertaken by the ORC and DCC in the Dunedin transport space, including the joint investigation of a bus loop for the city, ways in which fares could be subsidised across the network, and scoping discussions for the Regional Public Transport Plan review. The DCC wishes to continue working with the ORC on transport matters in a collaborative way as there is considerable opportunity to achieve the best outcomes for Dunedin by working together. As highlighted above, improving public transport in Dunedin is central to delivering on the DCC's target of achieving net carbon neutrality for the city by 2030.
17. The DCC maintains the position of seeking a simplified public transport fare structure in Dunedin.
18. The DCC would like noted the passing of the following resolution of the Council in August 2019:

That the Council:
 - a) *Supports in principle, the transfer of public transport governance in the Dunedin district from the ORC to the DCC;*
 - b) *Requests that the ORC include this question in their forthcoming review of the Regional Public Transport Plan, and;*
 - c) *Continue to work with LGNZ and central government on reform of the Public Transport Operating Model (PTOM).*
19. The DCC also notes the letter sent from Mayor Hawkins and Mayor Boulton to Chair Hobbs in December 2019, reinforcing a commitment to a positive working relationship between organisations as it relates to the public transport investment space.
20. The DCC would like to see clarity on how the DCC can be actively involved in the Regional Public Transport Plan review, including how matters of governance can be raised. The DCC regrets that the Regional Public Transport Plan is not further advanced and would like to see it progressed as a matter of priority.

21. Given the ORC has a responsibility for planning the transport system, by connecting communities and in line with the Government priorities for mode shift, the DCC will work with the ORC to advance safe, shared paths to our communities, supporting them into the Regional Public Transport Plan 2021-31 for NLTP funding.
22. The DCC welcomes the further clarity on funding for transport matters by the ORC, including on the following:
 - Funding is allocated for changes to operational contracts to ensure the Regional Public Transport Plan review is properly resourced. However, clarity is sought regarding resource for the next step of public transport investment required in Dunedin.
 - Current transport planning for the new hospital development envisages a step change in public transport provision. Clarity is sought around how this is being factored into future financial planning.
 - There is no mention of provision for the development of Regional Speed Management Plans, which may be required.
23. The DCC requests that the ORC seeks pricing information from the market for electric vehicle options when finalising contracts for the Public Transport Operating Model (PTOM) units. This would assist the DCC in planning towards Dunedin's target of net carbon zero by 2030.
24. The DCC requests that the ORC considers the approach of Greater Wellington Regional Council who have taken lead on provision and support for EVs in their region, including coordinating a Regional EV Working Group.

Managing freshwater

25. The DCC looks forward to continuing to work with the ORC on plan changes to improve the management of freshwater. The DCC welcomes any opportunity for partnering with the ORC where compatible workstreams align, such as for urban water quality, and community consultation in relation to environmental outcomes.
26. In addition to what is currently planned, the DCC would like to see a Taieri Flood Protection Scheme performance review undertaken, to determine not only how well it will cope with the extra pressures of climate change, but with urban development as well. While the ORC considers the Taieri scheme to be a rural drainage scheme, a large part of the scheme services an urban area. The DCC would welcome a partnership approach to ensure the scheme is performing and functioning appropriately to protect the entire community it services.

Increased monitoring

27. The DCC supports the additional funding being made available for more freshwater monitoring to better understand the state of environment (SOE), and to inform the public about the suitability of water quality for contact recreation.
28. The DCC would be particularly supportive of ORC collecting more data about water quality in urban environments, which would also be consistent with the vision, goals and methods of ORC's Urban Water Quality Strategy 2017.
29. The DCC would like to see the increased monitoring extended into the coastal marine area, an area used extensively for contact recreation. Monitoring water quality against contact recreational standards allows communities to be confident about the suitability of waterbodies for swimming, surfing and boating. The DCC notes not all popular sites are monitored, and it would be beneficial to consider a consistent set of criteria for establishing monitoring sites. It would also be beneficial for the ORC to increase public awareness about its SOE monitoring, the suitability of the local environment for recreational activities, and individual actions people can take to improve water quality.
30. As a holder of resource consents to discharge contaminants to water, the DCC is required by the ORC to undertake extensive environmental monitoring. The DCC faces challenges when gathering environmental data through consenting and recommends consideration of a more strategic approach. Current challenges include a lack of Dunedin-wide vision for what data is collected and how it is used to drive improvements, a lack of flexibility in adjusting the monitoring regime, and a lack of inhouse expertise to respond to the results obtained.
31. The DCC would like the ORC to consider taking greater ownership of all environmental monitoring, aligning it with SOE and contact recreational monitoring, and charging costs of monitoring to consent holders. The consent holder should continue to undertake any monitoring of the discharge itself. This supports the position as noted in the ORC's Urban Water Quality Strategy 2017 "Integrating our approach to regulation, monitoring, and information-sharing is important if we want to achieve a successful long-term strategy and most importantly, good or excellent water quality throughout Otago".

Freshwater Management Units and catchment management plans

32. The DCC supports the allocation of additional funding for reporting and modelling Freshwater Management Units (FMUs). However, it is important to ensure adequate funding is available for FMUs and Catchment Management Plans so they can be prepared and implemented appropriately.
33. Dunedin is currently covered by two FMUs – the 'Dunedin Coast' and 'Taieri'. The DCC suggests that ORC's aim of improving urban water quality would be better supported if these FMU enabled a more urban-focus. For example, Dunedin may benefit from separate FMUs for the Kaikorai, the Leith and Tomahawk Lagoon catchments. The 'characterisation' monitoring

of these FMUs could be done in conjunction with the increased SOE monitoring that has been proposed.

34. The DCC would like to see the implementation of catchment management plans, utilising the information gathered from SOE and FMU monitoring to achieve good water quality outcomes. The DCC believes catchment management plans would provide territorial authorities, businesses and communities with clear guidelines and goals. The DCC would be interested in partnering with the ORC to develop FMUs for the Kaikorai, Leith and Tomahawk Lagoon (and potentially others). This would enable a good understanding of those catchments and the issues they face, facilitate a consistent approach to their management and provide guidance for all parties interested in being a part of improving urban water quality.
35. The Tomahawk Lagoon is a Regionally Significant Wetland with poor water quality. The DCC is particularly supportive of the ORC taking a lead role in driving improvements of the wetland, including funding for educational and improvement initiatives. In 2018, two community workshops were held, but unfortunately the intended progress on a third workshop and additional funding has not occurred. The DCC would like to see this Lagoon project prioritised.

Drinking water source protection

36. The DCC supports the ORC providing for the protection of drinking water sources through implementation of the National Environmental Standards for Sources of Human Drinking Water. The DCC notes the Government has proposed, through the Essential Freshwater Programme, revising the standards to strengthen the ability of regional councils and territorial authorities to manage risks to drinking water posed by activities in drinking water catchments.
37. The ORC is one of nine Councils that forms part of the Southern Drinking Water Reference Group, set up in 2018 as a response to the Havelock North inquiry recommendations. The DCC supports the continued collaborative operation of this group, and the ORC's presence within it. The DCC requests the allocation of ongoing resource to enable this role to continue.

Urban watercourses

38. The Dunedin urban drainage network includes public stormwater pipes, and private watercourses (both open and piped). The DCC is investigating numerous capacity and flooding issues within this network, and has identified the ORC, under its Resource Management Act 1991 functions, has a key role to play in addressing those challenges. The DCC requests the ORC make resources available to partner with the DCC in developing solutions. Challenges include:
 - Addressing privately owned structures (such as pipes) already present in or on the beds of rivers, that are undersized and/or poorly maintained, and are contributing to flooding and causing property damage.

- Addressing adverse cumulative and significant downstream effects of discharges of stormwater from individual properties into watercourses, that are currently permitted by the Regional Plan: Water.
- Assessing various management options for urban watercourses that are an integral part of the city's drainage network e.g. from fully piping to daylighting.

Coastal matters

39. The DCC notes there is no mention of funding associated with coastal works or coastal erosion monitoring in the Annual Plan (although there is funding allocated in the LTP). If adequate funding is not currently allocated for this work, it is requested that the ORC give consideration to further resourcing for:
- The DCC and ORC Memorandum of Understanding that outlines the projects that both Councils will be working together on to gather coastal hazard information. This is an important document, as are the projects proposed by it, particularly the initial district-wide coastal hazard screening that will inform more detailed assessment on higher risk areas and assets and other coastal assessments.
 - Coastal monitoring, particularly nearshore monitoring along the coastal frontage at Ocean Beach is essential to facilitate both Councils developing an understanding of the potential futures for beach management and feeding into the broader South Dunedin resilience picture. The coastal hazard screening will inform the framing up of monitoring plans for specific sites. Resourcing for monitoring of Ocean Beach should be specifically identified and allocated by the ORC.

Looking after our natural environment and resources

40. In 2016 the DCC adopted Te Ao Tūroa – The Natural World, Dunedin's Environment Strategy 2016-2026. Te Ao Tūroa takes a partnership approach to delivering on the city's environment ambitions to facilitate and secure a healthy environment now and into the future.
41. The Strategy's implementation is overseen, monitored and reviewed by the Te Ao Tūroa Partnership, of which the ORC is a member. The DCC encourages continued active ORC involvement in the Partnership and the delivery of the Strategy's goals.
42. The Strategy implementation is tracked against several environmental indicators including those that the ORC is legislatively responsible for monitoring, including air, soil and water quality. The DCC encourages continued monitoring of these indicators and welcomes ORC input into more robust reporting of these indicators as part of the Strategy.
43. The DCC would also be willing to work with the ORC to take a collaborative approach to public education and awareness-raising to promote active learning about the biodiversity in the city

and would welcome an active leadership role from ORC in driving collaboration across the region.

Other activities

44. The DCC supports increased funding of the ORC's regulatory functions across both policy and consenting functions. The DCC supports increases in funding to facilitate collaborative engagement in developing the Regional Policy Statement (RPS) and regional plans, consenting matters, and in freshwater management, including the development of FMU and other management plans.
45. However, the DCC also encourages the ORC to provide increased resourcing for science teams to support the policy and consent work of the ORC and to work on collaborative projects with the DCC, as highlighted in other parts of this submission.
46. The DCC also wishes to acknowledge the ongoing importance and value of working in partnership with ORC on matters concerning the Otago harbour edge.

Concluding remarks

47. While the Triennial Agreement is not a matter for discussion as part of the Annual Plan, the DCC would like to engage with the ORC as early as possible regarding priorities for inclusion in the next iteration of the Triennial Agreement. While these recommendations would not bind future councils, they may provide a useful resource to inform the next agreement.
48. Thank you again for the opportunity to submit on the ORC Draft Annual Plan 2020/21. Should the ORC wish to clarify any of the issues raised in this submission, please do not hesitate to get in touch.

Yours faithfully,



Aaron Hawkins
Mayor of Dunedin

Submission by the Wise Response Society to Otago Regional Council Annual Plan 2020 – 2021 and Year-3 Long Term Plan Amendments

Background

1. In March 2019, the Wise Response Society ran a seminar called “Tackling our Climate Emergency Head-On! find out what you can do with Emission Reduction Planning for Home or Business”. Professor Bob Lloyd set the scene with the climate change predicament, Maria Ioannou and Jessie Wu who outlined what climate work the DCC had been doing, Janet Stephenson spoke to Dunedin’s energy plan and Dr Ann Smith and Austin Hansell from Enviro-Mark Solutions (now Toitu) showed their carbon accounting software for business and households.
2. What emerged was that the Emissions Trading Scheme would, sooner or later, encourage business to start carbon accounting and that commercial tools were available for this purpose. It was also clear that this would not, by itself, motivate individuals or ordinary households. While it may be that business generates the bulk of our emissions, it seemed to us that households could be an important sector to help create momentum for effective mitigation and reduction.
3. The outcome of this meeting was a resolution from the floor that a group be established to “advance community-wide emissions accounting and reduction planning in the district”. The group postulated that:
 - there are many ordinary individuals who would be prepared to take action if they knew what to do. This assumption is evidenced by (among other things) voluntary action such as waste recycling.
 - The most effective outcomes will be achieved if people can quantify their footprint, see what is causing most impact and plan an effective response.
4. In 2019, Intern with Wise Response, Ollie Leuthart, looked into the possibility of developing a tool for smart phones that would resemble a board game, where groups of students (and potentially households) could compete or cooperate to achieve emissions reductions. An application made to the ORC Eco Grants scheme to develop this concept was unsuccessful.
5. As a project for our 2020 Intern, we asked Lily McDougall, a 4th-year Politics, Philosophy and Economics MA student, to review what carbon accounting software calculators were available in New Zealand and a selection of overseas calculators. Based on the earlier work of Leuthart, we identified a set of desirable attributes. This list was expanded with other key attributes and features from the literature review undertaken by Lily. She then summarised and compared the attributes of each of the calculators in a spreadsheet. Her findings and recommendations are in the appended report.

Key Recommendations from the Carbon Accounting Study

6. The following are the main recommendations from Lily McDougall’s review of the Carbon Accounting Tools
 - i. *After comparing the existing New Zealand carbon accounting tools, Eco Footprint and Future Fit are the most appealing. It is apparent these two tools have different strengths. Eco Footprint appears simpler to use, with more explicit categories. However, Future Fit is more robust for analysing and monitoring progress.*

- ii. *In our view, the best option will be to expand the detail of Future Fit, using the Eco Footprint calculator as a guide. This would increase the value of each calculator while avoiding re-creating something. In advancing the detail, reference should also be made to the 'ideal' features identified on the spreadsheet, to ensure all criteria described in literature and that outlined by Wise Response is met.*
 - iii. *This would create an effective tool to help people better understand which components of their lives contribute most to GHG emissions, and therefore understand how they can most effectively reduce their personal or household footprints.*
 - iv. *This is a rational option to pursue as these two tools have been developed by public authorities, suggesting further improvement could be made without colliding with intellectual property issues. Further, Future Fit already has the ability for other councils to use the programme, and encourages feedback, see <https://www.futurefit.nz/get-involved>. Kapiti City District Council could be contacted to further explore the detail of Eco Footprint.*
7. We have submitted Ms McDougall's report to the DCC Annual Plan and requested that they:
- i. with the approval of their developers, direct the necessary resources to refine and integrate the two preferred software tools to meet the City's and educational requirements.
 - ii. incorporate the resulting tool into a wider climate change Action Plan and timeframe, based on sound understanding of the personal, household, business and city carbon budgets.
 - iii. when developing the Action Plan, Council works with other institutions to maximise involvement and the effectiveness of the tool and programme.

Educational opportunity and Enviroschools

8. The idea for this study into carbon calculators was first raised by Robyn Zink, the Regional Coordinator for Enviroschools in Otago with a view to it being a teaching aid. On the question of where a suitably configured tool might best fit in to the curriculum, she has offered the following preliminary suggestions.
- *A carbon footprint calculator could be integrated into the curriculum from year 7. Many 10-year olds already know that climate change is an issue and want to know how they can make a difference.*
 - *A carbon footprint calculator provides cross-curriculum learning, as students have to do some investigation/observation, maths, science to understand carbon, writing and then identifying action they can take to reduce their carbon footprint.*
 - *At High School, it could be used in science, geography and social studies and linked to the Education for sustainability standards in the senior years.*
9. This suggests that the tool will need to be flexible enough to cater for a range of school levels.
10. She said that with a good tool, Enviroschools would be happy to promote it, especially if the focus was on emissions **reduction** rather than emissions **offset**, which most schools could not afford and which is not as effective in achieving behaviour change.
11. She also thought that having the tool available for Term 4, 2020 would allow the tool to be demonstrated and give for teachers to incorporate it into their planning for 2021.

Proposal for improving and employing a Carbon Accounting Tool

12. Our Society considers that a carbon accounting tool that incorporates the identified attributes
 - i. would be an excellent tool for establishing individual and household emissions profiles so that the most **effective abatement action** could be identified and prioritised.
 - ii. would be an excellent learning tool for **climate change education** in schools
 - iii. could play a key role in educating and motivating the Dunedin community at large as **part of a wider initiative** for coordinated and effective action against climate change.

Recommendation 1:

The ORC work with the DCC to help develop a climate change Action Plan that facilitates mitigation for households, schools and businesses throughout Otago.

The Context and Climate Challenge

13. Much progress has been made by scientists in understanding the science and technologies involved in climate change and reducing emissions. However, the close relationship between use of fossil energy, emissions and economic activity means it is difficult to make significant cuts to emissions without adversely affecting economic activity and wealth creation.
14. This is undoubtedly a key reason why progress on achieving meaningful emissions reduction rates is so elusive. Another reason is that no international law can compel global citizens to curb their emissions. All international agreements are voluntary except where treaties are ratified and incorporated into domestic statutes.
15. An alternative “bottom up” approach is for local bodies and communities to start taking it upon themselves to reduce their own emissions. However, many local businesses anticipate (often wrongly) similar conflict between their emissions and their revenue stream. Moreover, some still consider climate change a peripheral issue that, if any remedy is required at all, it will fall to someone else, at some other time. Think globally. Act locally.
16. To get an entire community motivated to respond to climate change will not be easy and will require a carefully designed programme to cut emissions at sufficient scale to make a difference.

NZs Remaining Carbon Budget

At a national level, the government’s target of carbon neutrality by 2050 is in line with the Paris accord that we are signatory to. This target is supported by global modelling data. (see Figure 1 from the IPCC)

Thus globally, there is a cut-off point about mid-century when net carbon impacts must be neutral and then in the second half of the century, we will need to have developed ways of actually extracting carbon from the atmosphere to remain below 2 degrees. The Figure shows that by 2100, the rate of this extraction will need to be at 50% the rate we are emitting it now and we have no idea how we will do that!

We are therefore already in huge overshoot, and gambling on yet to be developed technology to get us out of this mess. Thus, we all need to start getting runs on the board as soon as possible to give us half a chance of passing on a habitable climate to our children.

17. It is expected that the Climate Change Commission will recommend the use of carbon budgets by all sectors of the community as a pretext to allocating emission rights. This proposal would give Otago a head start and potentially position them as leaders in climate action.

Figure 1 shows changes in emissions, relative to those in 2015, for both CO₂ and CH₄, in the region covering New Zealand, Australia and Indonesia and consistent with keeping below 2°C (SSP1-26, hollow symbols) and 1.5°C (SSP1-19, solid symbols)

(Emissions data used in Figure 1 are publicly available at: <https://tntcat.iiasa.ac.at/SspDb/dsd>)

Council's Climate Change Policy and Obligation

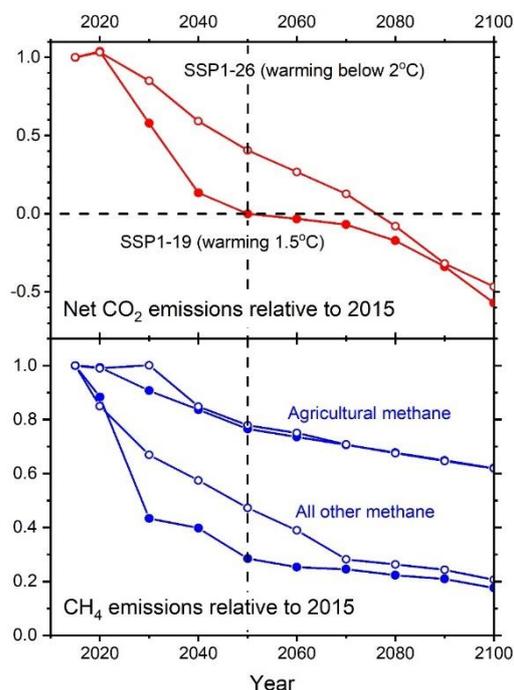
18. The Council has strategies for urban water quality, rural water quality, Milton flood risk, Biodiversity, air quality and biosecurity but nothing on climate change. There are Plans on Water, Waste, Air Quality, Coast and Flood Protection but none on climate change.
19. Under “current work on climate change” on the Council’s website, it only lists adaptation programmes. There is no mention of mitigation when, if we are to achieve the Government policy of zero net carbon by 2050, then we **all** need to do what we can.
20. Climate change mitigation consists of actions to limit the magnitude or rate of global warming and its related effects. This generally involves reductions in human emissions of greenhouse gases¹.
21. The policy on climate change in the partially operative Regional Policy Statement states:

Policy 4.2.2 Climate change

Ensure Otago’s people and communities are able to mitigate and adapt to the effects of climate change, over no less than 100 years, by all of the following:

- a) Taking into account the effects of climate change, including by using the best relevant climate change data;
- b) Applying a **precautionary approach** when assessing and managing the effects of climate change where there is scientific uncertainty and potentially significant or irreversible effects;
- c) **Encouraging activities that assist to reduce or mitigate the effects of climate change.** (our bolding)

22. To give effect to this policy, the Council is obligation to adopt strategies and plans that not only adapt to climate change but also promote actions that reduce our combined GHG footprint.



¹ https://en.wikipedia.org/wiki/Climate_change_mitigation#cite_note-4

National level Climate Change Policy Direction

Zero Carbon Bill and the Climate Change Commission

23. The Zero Carbon Bill legislation requires the country to cut biogenic methane emissions by 10 per cent by 2030 and between 24 per cent and 47 per cent by 2050. It also enshrines the Paris Agreement target of limiting warming to 1.5°C into law.
24. New Zealand's newly established Climate Change Commission has been asked to determine whether the country should change domestic policy to make it consistent with limiting global warming to 1.5°C.
25. Figure 1 above neatly illustrates the challenge ahead for both CO₂ and methane reduction. Key points to note include:
 - i. It reconfirms the need to achieve zero net CO₂ emissions by 2050 for 1.5° C - now considered highly desirable by IPCC.
 - ii. For 1.5° C, it is necessary to reduce agricultural CH₄ immediately and that it needs to be about 23% less by 2050. However, this assumes cuts of **about 70%** in "all other methane" will be achieved in the same period.
 - iii. Crucial to note is that this rate of agricultural emissions decline is **pre-set** in the model for food production and then the required rate of all other emission determined based on that presupposition. Other methane is a mix of fossil (fracking, melting tundra, ocean warming, etc.), so whether 70% is technically achievable is uncertain.
 - iv. By 2100, (as already noted in the side bar) negative emissions technologies will need to be abstracting at a rate equal to about **half the rate** at which we are currently discharging. This is when there is no current proven method to achieve this at such scale.
26. Overall, the graph shows that managing the combined forcing from CO₂ and CH₄ to sustain a safe climate is already highly challenging and the more urgently and stringently we can act on all gases now the better our chances of meeting the Paris obligations.
27. We should expect the Climate Change Commission to recommend strong mitigation measures.

RMA amendment

28. The 2020 draft amendment to the Resource Management Act (1991) repeals the 2004 Amendment (ss 70A and 104E) that does not allow consideration of the effect of the emissions of greenhouse gases to be regulated or controlled at the local authority level.
29. If that clause is sustained, Council will need to consider whether the granting of resource consents will aggravate climate change.
30. Thought will need to be given as to how this provision will be effectively implemented.
31. This must be undertaken under the broad objectives and policies in Chapter 1 of the RPS. Key policies include the following (with our boldings)

Policy 1.1.1 Economic wellbeing

*Provide for the economic wellbeing of Otago's people and communities by enabling **the resilient and sustainable use and development of natural and physical resources.***

Policy 1.1.2 Social and cultural wellbeing and health and safety

Provide for the social and cultural wellbeing and health and safety of Otago's people and

communities when undertaking the subdivision, use, development and protection of natural and physical resources by all of the following:

- a) Recognising and providing for Kāi Tahu values;
- b) Taking into account the values of other cultures;
- c) Taking into account the diverse needs of Otago's people and communities;
- d) Avoiding significant adverse effects of activities on human health;**
- e) Promoting community resilience and the need to secure resources for the reasonable needs for human wellbeing;**

Policy 1.2.112 Integrated resource management

Achieve integrated management of Otago's natural and physical resources, by all of the following:

- a) Coordinating the management of interconnected natural and physical resources;**
- b) Taking into account the impacts of management of one natural or physical resource on the values of another, or on the environment;**
- c) Recognising that the value and function of a natural or physical resource may extend beyond the immediate, or directly adjacent, area of interest;**
- d) Ensuring that resource management approaches across administrative boundaries are consistent and complementary;
- e) Ensuring that effects of activities on the whole of a natural or physical resource are considered when that resource is managed as subunits.
- f) Managing adverse effects of activities to give effect to the objectives and policies of the Regional Policy Statement.
- g) Promoting healthy ecosystems and ecosystem services;**
- h) Promoting methods that reduce or negate the risk of exceeding sustainable resource limits.**

32. There are other policies concerning hazards and precaution as well. The key point is that if we fail to effectively mitigate climate change, we will not be able to achieve these policies. Mitigating climate change effects to meet the Paris agreement now requires all sectors in NZ to play their fair part. Simply limiting climate policy to adaptation is not addressing the cause.

Recommendation 2:
The ORC expands its climate change strategy from one currently focused almost exclusively on adaptation to included mitigation, thus implementing the Policies in its partially operative Regional Policy Statement and emerging National Policy provisions.

Thank you for the opportunity to submit. We would like to be heard.

Sir Alan Mark, FRSNZ
Chairperson,
Wise Response Society Inc.

Attachment: McDougall, L., *A Review of Carbon Accounting Tools for New Zealand Application*, 23 April 2020

Postscript: This project was initiated prior to the emergence of Covid19, the full impacts of which on emissions are still uncertain. The recommendations anticipate that, in due course, our economy will recover and controlling our emissions will again become essential for restabilising the climate.

Review of Carbon Accounting Tools for New Zealand Application For the Wise Response Society Inc.

23 April 2020

**By Lily McDougall
Politics Philosophy and Economics MA Student
University of Otago**

1. Summary

This report aims to explore and evaluate the existing carbon accounting calculators for households, primarily those developed in New Zealand (NZ), in order to recommend a best practice model for Wise Response to use in the future. The purpose is to establish the best model of a calculator that allows individuals and households in NZ to measure the carbon footprint of their everyday actions and behaviours, and provides options for how they can change reduce their emissions by changing behaviours and actions. A multicriteria analysis was conducted, and the results displayed in a spreadsheet. The key findings outline that the best NZ carbon accounting tools are Future Fit, an Auckland and Wellington Council collaboration, and Eco Footprint, designed for the Kapiti City District City Council. As these two tools have different strengths, it is recommended that the detail of Future Fit is expanded using Eco Footprint as a guide.

2. Purpose of Study

According to the 2015 Paris Agreement on climate change, global mean temperature rise above pre-industrial levels needs to be kept well below two degrees, and it would be better to limit the temperature increase to at most 1.5 degrees.¹ If NZ is to achieve its target emissions reductions under the Paris Agreement, Kiwis need to start understanding their own carbon footprint. Therefore, developing a carbon accounting tool appropriate for New Zealand households is very crucial. The purpose of these calculators is to provide households with a relatively accurate estimation of their carbon footprint and present ideas of how they could reduce their greenhouse gas emissions (GHG) by shifting towards less emission-intensive products and actions. While the calculators are generally based on households, individuals are also be able to use them. It is anticipated that a carbon accounting tool will be effective in informing an action and adaptation plan at the community level and fill the void of social technology appropriate for change.² The available accounting software has been recorded, and the key features summarised in a spreadsheet.

3. Calculator Primary Components

In order to evaluate and compare the existing calculators, a multicriteria analysis was conducted. A range of key features were identified in NZ literature. These were determined the key drivers of GHG emissions inherent in what NZ households consume:

- Food/diet, transport, and housing utilities, accounting for a total of 89% of emissions.³
- Household waste was also identified as a primary element of a households carbon footprint.⁴

¹ https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

² Wise Response Society. *Productivity Commission Inquiry: "Transition to a lower net emissions economy"* Submission of: Wise Response Society Inc. (2017) <https://www.productivity.govt.nz/sites/default/files/sub-low-emissions-102-wise-response-society-inc-1490Kb.pdf>

³ Carl Romanos, Suzi Kerr and Campbell Will, "Greenhouse Gas Emissions in New Zealand: A Preliminary Consumption-Based Analysis," *Motu Economic and Public Policy Research*, (2014), 13, http://motu-www.motu.org.nz/wpapers/14_05.pdf

⁴ Ministry for the Environment. "Measuring Emissions: A Guide for Organisations, 2019 Quick Guide." *Ministry for the Environment* (2019) 25, <https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/2019-quick-guide.pdf>

Food/diet: The literature from Motu established that food contributes 32% of total consumption emissions for the average household.⁵ Of this, the report outlined that Red meat, poultry and fish made up 34%, dairy products and eggs 17% and fruit and vegetables 19%. To emphasise the importance of including food/diet in a calculator, Collins et al., (2020) conducted a study which showed that of the 78% of respondents who stated they were inspired to make changes to their CO₂ consumption, ‘food’ (56%) was one of the key areas where respondents were inspired to make a change.⁶

Housing utilities: Housing utilities contribute 24% of total emissions for the average household. Electricity usage makes up the largest component of this, consisting of 64% of total housing utilities emissions.⁷ Collins et al., (2020) found 27% were inspired to make changes to ‘housing’, and 38% motivated to change ‘energy’ consumption.⁸

Transport: Transport contributes 27% of total emissions for the average household, where petrol is the largest contributor, making up 69% of this category. Passenger transport services makes up 19% of this category.⁹ Collins et al., (2020) identified 47% of respondents were inspired to make changes to ‘travel’.¹⁰ It is important to include walking or cycling in this category as it illustrates how taking one action affects other actions.

Household waste: How a household deals with their waste whether they recycle or compost and how much rubbish is sent to a landfill has a large impact on a households carbon footprint. In NZ, each person sends on average 401 kg of residential waste to landfills each year.¹¹ Landfills release methane as waste is broken down by anaerobic bacteria; thus it is necessary to encourage households to limit their landfill waste. In the study by Collins et al., they found that of individuals motivated to reduce their carbon footprint, 56% were inspired to make changes to their waste and recycling habits.

These four primary categories are the main drivers of GHG emissions in NZ households. They also have the highest marginal emissions. These results are also in line with the 2019 guide for GHG reporting from the Ministry for the Environment.¹²

4. Wise Response Selection Criteria

Wise Response also outlined a series of criteria they believe are important for a good accounting tool. These features reflect the Wise Response Society’s hopes that an ideal carbon calculator could play a key role in motivating the Dunedin community as part of a wider initiative to awaken action against climate change.

- Focus on planning reduction, rather than offsetting

⁵ Romanos, Kerr and Will, 18

⁶ Andrea Collins, Alessandro Galli, Tara Hipwood and Adeline Murthy. “Living within a One Planet reality: the contribution of personal Footprint calculators,” *Environmental Research Letters* 15, no. 2 (2020), 10, <https://iopscience.iop.org/article/10.1088/1748-9326/ab5f96>

⁷ Romanos, Kerr and Will, 18

⁸ Collins, Galli, Hipwood and Murthy, 10

⁹ Romanos, Kerr and Will, 18

¹⁰ Collins, Galli, Hipwood and Murthy, 10

¹¹ Ministry for the Environment, “Waste generation and disposal in New Zealand,” *State of Environment 1997*, <https://www.mfe.govt.nz/publications/environmental-reporting/waste-generation-and-disposal-new-zealand>

¹² Ministry for the Environment. (2019) 25,

<https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/2019-quick-guide.pdf>

- In terms of target audiences, an ideal tool should be aimed at general New Zealanders, yet a specific targeted sub group is schools. A collaboration could occur with Enviroschools to determine the best way to present the calculator as a project for primary, secondary and tertiary curriculums.
- Facility to plan reduction by changing parameters (a sliding scale as opposed to absolute figures)
- Visual representation of current profile
- Ability to monitor and compare progress
- Fun factor, e.g. with cooperative and competitive elements, so it is suitable for school use.
- Includes embedded carbon: greenhouse gases that are released throughout the supply chain, (e.g. material consumption and use of services).¹³
- Appears robust and accurate to be able to accommodate for different or changing family behaviours.
- Incorporates some explanation as to the assumptions or factors included in the tool.

These criteria were used as a guide to create the additional categories for the spreadsheet. The categories are explained in paragraph 6.

5. Background

Prior Research Into The Strategic Approach

A significant gap has been identified in literature between a calculator being an effective tool for enhancing individuals' knowledge, and inspiring them to make changes.¹⁴ By themselves, facts are not enough to engage people on an issue with entrenched values and customs.¹⁵ A model tool needs to be demonstrated in a way that fosters long term change. Prior research for Wise Response, conducted by Ollie Leuthart, offers insight into understanding how the use of a mobile tool can encourage meaningful change. He identified the importance of “realise” and “resolve” as steps to improving household and individual sustainability.

The “realise” step aims to make individuals better informed about the environmental risks. “Resolve” aims to find a solution to the identified environmental risks, and to decide to respond in a particular way.¹⁶ The research analysed whether a mobile tool should focus on competition or cooperation. The conclusion was that cooperation is effective as it creates a sense of community, where groups can cooperate and share tips on how to reach their goals. This can emphasise the sustainability of behaviour change. By contrast, competition is more effective at capturing immediate change. It was recommended to conduct further research exploring how to incentivise cooperation as something attractive in the short term, particularly as cooperation has the ability to foster the relevant values.

¹³ Circular Ecology, “Embodied Carbon Assessment” Accessed 20th April 2020, <https://www.circularecology.com/embodied-carbon.html>

¹⁴ Collins, Galli, Hipwood and Murthy, 9

¹⁵ Holmes, T., Blackmore, E., Hawkins., R. & Dr. Wakeford, T. (2011) *The Common Cause Handbook: A Guide to Values and Frames for Campaigners, Community Organisers, Civil Servants, Fundraisers, Educators, Social Entrepreneurs, Activists, Funders, Politicians, and everyone in between.* [Online] United Kingdom, Public Interest Research Centre. http://www.commoncause.org.au/uploads/1/2/9/4/12943361/common_cause_handbook.pdf

¹⁶ Oxford Dictionaries (2018b) *Definition of resolve* [Online] Available: <https://en.oxforddictionaries.com/definition/resolve> [Accessed 17th April 2020]

The incorporation of cooperation and/or competition in a carbon accounting calculator involves having components where users can monitor progress and set goals, as well as platforms to share results with friends. The ability to set goals sets an expectation for behaviour and sustainable behaviours increase. This may be because expectations hold people accountable. Monitoring household progress is also important as it helps individuals build on a sense of achievement, as well as turning the new knowledge into action.¹⁷ Therefore it is preferable that an ideal carbon accounting calculator includes these features.

6. Assessment Methodology

The spreadsheet was created based on this criterion and key features identified. (Please refer to the attached spreadsheet). The ideal tool should recognise and include all these features.

Beyond the specific household GHG emissions, other features were also acknowledged as necessary to include. These tended to focus on the experience of using the calculator, and are in line with Wise Response's purpose and criteria, as well as those outlined in 'Living within a One Planet reality: the contribution of personal Footprint calculators'.¹⁸

Additional Categories

Below I have listed the categories, explaining them in more detail and why they were included.

- **Usability:** The ease of use as well as clearly explained key terms and phrases, and explanation for the features included in the tool.¹⁹
- **Average income:** Included in the best practice models and helps to establish socio-demographic correlation with socio status and behaviour.
- **Simple/advanced option:** Enables user to run through a simple version of the calculator and then answer more advanced questions if they wish. This allows the tool to be used by school children as well as adults, and the ability to obtain a more accurate footprint.
- **Adjust period:** Choose whether the tool is calculating data for your household for one year, or a number of months. This was included in some of the best models and is valuable as it can accommodate for changing family behaviours.
- **Sliding scale:** As opposed to absolute figures, this is important as often people's behaviours are not always the same: so being able to rate your behaviour on a scale is more accurate.
- **Local/organic produce:** Whether people buy locally, organically or grow food themselves has varying impacts on the environment and GHG emissions.
- **Square Footage:** The size of the individuals house provides more detail and accuracy for the calculator.
- **Goods and Services:** How much a household spends on varying goods and services. This includes, yet is not limited to: embedded carbon such as computers and IT equipment, clothing, pharmaceuticals, furniture, telephone bills, insurance and education. Goods and services contribute an additional 10-15% to the average US households GHG emissions.²⁰ Therefore this is an important element to consider.

¹⁷ Department of Conservation, "Monitor and Evaluate Progress", Accessed 8th April 2020, <https://www.doc.govt.nz/get-involved/run-a-project/community-project-guidelines/monitor-and-evaluate-progress/>

¹⁸ Collins, Galli, Hipwood and Murthy, 9

¹⁹ Barber, William (2018) Website and application programmer. (Personal Communication, 30th July)

²⁰ Christopher M. Jones, "A Lifecycle Assessment of US Household Consumption" *UC Berkeley: University of California International and Area Studies*. (2005) <https://escholarship.org/uc/item/1fb4q9bb>

Although it must be noted there is not a lot of detail about goods and service impacts on NZ households emissions. This is an avenue that should be further explored in NZ.

- **Extra detail:** Any additional details the calculator may include. Important to understand the depth of detail of each calculator. This includes elements such as water usage, which is important as a result of the energy used. Solar panels are another feature that some tools incorporate. In NZ in 2016, the share of electricity generated from renewable sources was 85%, although this is not specific to households.²¹ Thus understanding where households use renewable energy sources is useful to understand the relationships between actions; how taking one action impacts subsequent actions.
- **Average household emission rating:** Important to ensure users can understand their own footprint in relation to the average, and see their CO₂ emissions in a context.
- **Offset emissions option:** It is recommended that a tool focuses on reducing GHG emissions, as opposed to encouraging an individual to offset their emissions. There are considerable dangers in relying on offsetting emissions to reduce your carbon footprint. For example, unexpected events, such as disease or bush fires, can quickly destroy offsets in forestry.²² Further, they encourage people to think they are “offsetting their responsibilities.”²³ Finally, while carbon offsetting schemes vary in quality, with some providing much more robust additional emissions reduction than others, still, none of them is as immediately and unequivocally effective as direct emission reduction.
- **Summary of CO₂ emissions for each element:** Enables users to see which category the majority of their emissions are related to. This is also helpful to determine what areas households can focus on to reduce their footprint.
- **Summary graphs:** Enables individuals to see their footprint as a visual, as opposed to just a number. This is also useful to encouraging and aid understanding for children.
- **Reduce your impact tool:** An extra tool on the source that enables an individual to explore different ways they can reduce their carbon footprint. For example buying a more fuel efficient car next time or flying less.

For ease of use, the features of each calculator that meet the ideal requirement have been colour coded green on the attached spreadsheet. International sources have also been incorporated in the spreadsheet, as it is useful to compare and contrast what features have been included by other countries, and how NZ tools correlate. It must be acknowledged that only a sample of calculators from other countries have been identified in this research. Yet those calculators included are among the most well recognised at a global scale.

7. How emissions are calculated

The carbon methodology and model to calculate emissions tended to be similar across all NZ tools. To measure household expenditure in a specific category, the expenditure in said category (e.g. meat) is multiplied with the associated emissions factors; emissions from meat

²¹ Statistics New Zealand, ‘New Zealand’s greenhouse gas emissions’ (April 2019), <https://www.stats.govt.nz/indicators/new-zealands-greenhouse-gas-emissions>

²² Niklas Hagelberg, “Carbon offsets are not our get-out-of-jail free card” *UN Environment Programme*, (2019) <https://www.unenvironment.org/news-and-stories/story/carbon-offsets-are-not-our-get-out-jail-free-card>

²³ Sharon Beder. “Carbon offsets can do more environmental harm than good” *The Conversation*. (2014) <https://theconversation.com/carbon-offsets-can-do-more-environmental-harm-than-good-26593>

= emissions per dollar of meat consumed x expenditure on meat. Total household emissions is calculated by adding the emissions from each expenditure category.²⁴

8. The Preferred NZ calculators

After comparing the existing tools in NZ against each other according to the criteria discussed above, the best carbon accounting tools appear to be Future Fit and Eco Footprint. Future Fit is a collaboration between Wellington and Auckland City Councils, developed as a useful and motivating tool for New Zealanders to calculate their everyday impact on the environment.²⁵ Eco Footprint was developed by Ben Jack for the Kapiti District Council, primarily to support the participants in the Greener Neighbourhoods Competition, yet other communities are welcome to use it.²⁶

Future Fit and Eco Footprint are the most in line with the criteria outlined by both Wise Response and the literature. While including the standard information that all tools seem to have, these two tools also include additional details in the extra detail categories, thereby allowing a more accurate footprint calculation. As all calculators have to make certain assumptions, the extra level of detailed acquired builds on the confidence of each factor assumed in the model.

Another aspect of these two tools that makes them noteworthy is that they have the ability to monitor individual/family progress. No other NZ tool appears to include this feature.

Both these tools also propose each question in the calculator in the most simple yet clear way; increasing the usability of the tool for all ages, as well as the accuracy of the footprint.

Comparing Future Fit and Eco Footprint

i) *Eco Footprint*

Eco Footprint has a strong focus on food, breaking down the categories to specifics.

It also concentrates on organic/locally grown food, and it is the only NZ indicator that includes this. This is an important aspect to address as being more mindful of where food comes from and prioritising locally/organically grown food can drive significant reduction in a household's carbon footprint.²⁷

Eco Footprint also has a category called 'consumer goods', where it asks you how much you purchase and dispose of embedded carbon goods like electronics, clothing and furnishings. This is the only NZ tool that includes this, yet most well renowned global tools incorporate it. As previously stated, goods and services contribute a 10-15% to average household GHG emissions in the US, and is thus an important category for calculators to include.

²⁴ Corey Allen and Suzi Kerr. "Documentation for the Household Climate Action Tool" *Motu Economic and Public Policy Research*, (2015), <https://motu.nz/assets/Documents/our-work/environment-and-resources/emission-mitigation/shaping-new-zealands-low-emissions-future/Documentation-for-the-Household-Climate-Action-Tool.pdf>

²⁵ Future Fit, "About", Accessed 14th April 2020, <https://www.futurefit.nz/about>

²⁶ NZ Eco Footprint Calculator, "About", Accessed 14th April 2020, <http://www.ecofootprint.nz/about>

²⁷ IPCC, *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley. (United Kingdom and New York, Cambridge University Press, 2014).

Eco Footprint also asks for the square footage of the relevant house, further enhancing the detail and accuracy of the tool. In addition to these details it also includes pet ownership, and breaks this down into categories such as low (fish, rabbit), medium (cat), high resource (large dog).

The tool to monitor progress is displayed as a bar chart, illustrating a household's various attempts at entering information into the questionnaire.

ii) Future Fit

Future Fit is not as detailed as Eco Footprint, and it categorises transport as the largest focus for household emissions. However, as previously mentioned, Future Fit includes more key features than other standard NZ tools. It also includes additional 'extra details', enquiring for example about solar panels and insulation, which are important features that reduce the need for relatively high emission energy such as electrical or gas usage.

While Eco Footprint appears to be slightly more detailed, the standout feature of Future Fit is its focus on behaviour change. The concluding section of the calculator allows the user to see their impact compared to average NZ households and global household. There is a 'latest actions' section, which lets an individual choose actions to reduce their carbon footprint and document the actions they have taken.

A key feature of Future Fit is the 'My goals' section, as well as the ability to earn badges and sign up to be a part of different teams and challenge friends to get "Future Fit". As previously discussed, it is important for people understand what to do and where to go with the information they learn about their carbon footprint. A frequently overlooked component in existing tools, this makes Future Fit an extremely appealing calculator.

An additional outstanding feature of Future Fit is the incorporation of a simple/advanced option. On first go of the calculator, a series of low-detail questions are asked. After completion, it asks whether the user would like to 'step it up', by answering a few more questions to get a more accurate footprint. The additional questions include the kilometres travelled in an individual's commute, and how much electricity a household uses per year. While these features appear to be embedded in the calculator as it is typically installed, only including them in a second detailed version of the calculator allows and encourages the usability of the tool for children. This is an extremely valuable extension to a carbon calculator and could be developed to a much greater extent than it has been in the existing Future Fit. For example, a better version might increase the level of detail in the advanced software or make the different stages of detail more explicit. The Berkeley Cool Climate Network includes this feature, although they too could develop this element further.

iii) Potential Improvements

Both Future Fit and Eco Footprint have some areas for improvement. As illustrated in the spreadsheet, neither calculator meets all the requirements for the 'ideal' tool.

Thus, it would be beneficial to explore ways in which the best of both tools could be included in one calculator, and also incorporating additional ideal features that neither tool included. Potential improvements include incorporating sliding scales in the calculator, as opposed to absolute figures, as well as allowing the user to adjust the period which they are calculating.

Further, careful thought needs to be given to the best ways in which to ask questions. All tools ask questions in varying ways. For example Future Fit proposes the travel questions like ‘how many days a week do you travel by... (foot/bicycle/car etc).’ ‘How many hours do you roughly spend traveling by... (foot/bicycle/car etc).’ Whereas Eco Footprint asks ‘how far do you travel by car each week?’ ‘And how much driving do you do in urban areas?’ It would be valuable to know what is the most direct way to ask a question that still ensures accuracy. This is particularly important when developing a tool that can be used by both school children and adults. Although, as previously stated, it may be that that the best way to go about this is to further develop the ‘simple’ and ‘advanced’ options in the calculator.

9. Recommendations

- i)* After comparing the existing New Zealand carbon accounting tools, Eco Footprint and Future Fit are the most appealing. It is apparent these two tools have different strengths. Eco Footprint appears simpler to use, with more explicit categories. Yet Future Fit is a better tool for analysing and monitoring progress.
- ii)* Thus, the best option going forward seems to be to expand the detail of Future Fit, using the Eco Footprint calculator as a guide. This would increase the value of each calculator while avoiding re-creating something that already exists. In advancing the detail, reference should also be made to the ‘ideal’ features identified on the spreadsheet, to ensure all criteria described in literature and that outlined by Wise Response is met.
- iii)* Such a hybrid calculator would provide an effective tool to help people better understand which components of their lives contribute most to GHG emissions, and therefore understand how they can most effectively reduce their personal or household footprint.
- iv)* This is a rational option to pursue as these two tools have been developed by local authorities, suggesting further improvement could be made without running into commercial or ownership issues. Further, Future Fit already has the ability for other councils to use their programme, and encourages feedback, see <https://www.futurefit.nz/get-involved>. Kapiti City District Council could be contacted to further explore the detail of Eco Footprint.

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Romanos C, Kerr S, Campbell W. “Greenhouse Gas Emissions in New Zealand: A Preliminary Consumption-Based Analysis,” *Motu Economic and Public Policy Research*, (2014), http://motu-www.motu.org.nz/wpapers/14_05.pdf

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Appendix A: Multicriteria analysis and comparison of Carbon Accounting Tools

Table 1: New Zealand Tools

Table 2: Selected Overseas Tools

(Shaded areas –the ideal criteria have been met)

Table 1: New Zealand Tools

Software	Ideal	Toitu	NZ Herald	EKOS	Carbon Neutral NZ Trust	Future Fit	Eco Footprint	Catalyst: ACE
URL		https://calculator.toitu.co.nz/?calculator=household	https://insights.nzherald.co.nz/article/climate-action-tool/	https://ekos.org.nz/lifestyle-calc	https://www.carbonneutraltrust.org.nz/calculator-login	https://www.futurefit.nz/questionnaire	http://www.ecofootprint.nz/surveys/1324/edit/7094/20938	http://catalystnz.co.nz/environment/ace---the-annual-carbon-emissions-calculator
Country		NZ	NZ	NZ	NZ	NZ	NZ	NZ
Focus	Reduction	Offsetting	Reduction	Offsetting	Reduction	Reduction	Reduction	Reduction
Usability	5 out of 5	4 out of 5	5 out of 5	5 out of 5	5 out of 5	5 out of 5	5 out of 5	3 out of 5
Average income	Yes	No	Yes	No	No	Yes	No	No
Simple/advanced option	Yes	No	No	No	No	Yes	No	No
Adjust period	Yes	Yes	No	Yes	No	No	No	No
Sliding scale	Yes	No	Yes	No	No	No	Yes	No
Diet	Beef/lamb, Pork, Poultry, Dairy, Eggs, Fruit and Vegetables, Grains	No	Red meat, Dairy	Meat lover, Average meat eater, No red meat, Vegetarian, Vegan	Meat lover, Average meat eater, Vegetarian, Pescatarian, Vegan	Beef/lamb, Pork, Poultry, Dairy, Eggs	Beef/lamb, Pork, Poultry, Dairy, Eggs, Fruit and Vegetables, Grains	No
Local/organic produce	Yes	No	No	No	No	No	Yes	No
Household waste	Recycling, Compost, Landfill waste	Recycling, Compost, Landfill waste	No	Landfill waste	Recycling, Compost, Landfill waste	Recycle, Compost, Landfill waste	Recycling, Compost, Landfill waste	Landfill waste
Housing utilities	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity	Electricity, Reticulated gas, Wood burner	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity, Natural gas, Coal
Travel	Private vehicle, Walking or cycling, Public transport, Air travel	Private vehicle, Air travel, Public transport, Accommodation	Private vehicle, Efficiency, Air travel, Public transport	Private vehicle, Air travel, Accommodation	Private vehicle, Air travel, Public transport	Private vehicle, Public transport, Walking or cycling, Air travel	Private vehicle, Walking or cycling, Public transport, Air travel	Private vehicle, Public transport, Air travel
Square Footage	Yes	No	No	No	No	No	Yes	No
Goods and Services	Yes	No	No	No	No	No	Yes	No
Extra detail	Water, Pets, Solar panels, Insulation, Type of house	No	No	No	No	Water, Solar panels, Insulation	Water, Pets	Refrigerant use
Average household emission rating	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Offset emissions option		Yes	No	Yes	No	No	No	Yes
Summary of CO2 emissions for each element	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Ability to monitor progress	Yes	No	No	No	No	Yes	Yes	No
Summary graphs	Yes	No	No	No	Yes	Yes	Yes	No
Reduce your impact tool	Yes	No	Yes	No	Yes	Yes	No	Yes
Summary		Well laid out simple tool. Yet is more focused on offsets than planning reduction and does not give direction for future actions.	Not a calculator. A platform that allows you to see ways you can reduce your emissions, based off an estimation from your behaviours.	Has the option for business, school or lifestyle calculator. Quite a simple tool to use. Yet once you have finished filling in the calculator, it tells you your average carbon footprint yet doesn't tell you what that means or what you should do with that information.	A well explained tool. Really good summaries at the end of the calculator that breaks down all the components and next steps, with graphs as well as words. And compares your CO2 emissions to other community averages. Yet not the most visually appealing or fun tool.	Quite a specific tool yet asks questions in a simple manor, increasing the user friendly nature of the tool. For example, how do you travel most often, when you travel in a car are you the driver or passenger, how many people do you normally travel in a car with? Has a very well-illustrated summary at the end, with colourful graphs and places to monitor your progress. However it could do with some direct links to understand what actions to take.	Quite a specific calculator, again asks, how much of the driving do you do in urban areas (where you have to break often?) Quite focused on diet, and whether it is organic, locally grown, unpackaged. Has the ability to monitor progress although not as appealing/efficient as Future fit. Should learn from this in the level of detail and simplicity of the tool, yet it would be suggested that this needs more links to understand what actions you can take to reduce your footprint.	A spreadsheet style calculator. Laid out quite plain and to the point, thus better for businesses.

Table 2: Selected Overseas Tools

Software	Ideal	Carbon Footprint	The Nature Conservancy	UN Carbon Offset Platform	Berkley Cool Climate Network	Resurgence
URL		https://www.carbonfootprint.com/calculator.aspx	https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-	https://offset.climateneutralnow.org/footprintcalc	https://coolclimate.berkeley.edu/calculator	https://www.resurgence.org/resources/carbon-calculator.html
Country		Global	Global	Global	US	UK
Focus	Reduction	Reduction	Reduction	Offsetting	Reduction	Reduction
Usability	5 out of 5	4 out of 5	5 out of 5	5 out of 5	5 out of 5	3 out of 5
Average income	Yes	No	Yes	No	Yes	No
Simple/advanced option	Yes	No	No	No	Yes	Yes
Adjust period	Yes	Yes	No	No	No	No
Sliding scale	Yes	No	Yes	No	Yes	No
Diet	Beef/lamb, Pork, Poultry, Dairy, Eggs, Fruit and Vegetables, Grains	Meat lover, Average meat eater, Vegetarian, Pescatarian, Vegan	Beef/lamb, Pork, Poultry, Dairy, Eggs, Grains, Fruit and Vegetables	Meat lover, Average meat eater, Vegetarian, Pescatarian, Vegan	Beef/lamb, Pork, Poultry, Dairy, Eggs, Grains, Fruit and Vegetables	Meat, Fish, Eggs, Dairy
Local/organic produce	Yes	No	No	Yes	No	Yes
Household waste	Recycling, Compost, Landfill waste	No	No	Recycling, Compost	No	No
Housing utilities	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG	Electricity, Natural gas, Heating oils	Electricity, Reticulated gas, Heating oil, Solid fuels	Electricity, Reticulated gas, Heating oil	Electricity, Reticulated gas, Liquid gas, Solid fuels, LPG
Travel	Private vehicle, Walking or cycling, Public transport, Air travel	Private vehicle, Air travel, Public transport, Accomodation	Private vehicle, Air travel, Public transport	Private vehicle, Walking or cycling, Public transport, Air travel	Private vehicle, Public transport, Air travel	Private vehicle, Public transport, Air travel
Square Footage	Yes	No	Yes	Yes	Yes	No
Goods and Services	Yes	Yes	Yes	No	Yes	Yes
Extra detail	Water, Pets, Solar panels, Insulation, Type of house	No	Water	Type of house	Water	No
Average household emission rating	Yes	Yes	Yes	Yes	Yes	Yes
Offset emissions option		Yes	No	Yes	No	No
Summary of CO2 emissions for each element	Yes	Yes	Yes	Yes	Yes	Yes
Ability to monitor progress	Yes	No	No	No	Yes	No
Summary graphs	Yes	No	Yes	Yes	Yes	No
Reduce your impact tool	Yes	Yes	Yes	No	Yes	Yes
Summary		A specific model that is easy to use as it makes lots of inferences for you. E.g when putting in information about your car, you select the brand, model and year and it calculates the average emission for you. Makes it more specific and simple for the user.	Very good tool but may be difficult to get software to develop this. At the end shows your total carbon footprint as well as how yours compares to the average as a percentage. A very good summary also illustrated in graphs. Then a very detailed tool to see how to reduce your emissions, this is broken down into transportation, housing and shopping. E.g. I will buy a more fuel efficient vehicle, the tons of CO2 saved is... dollars saved... upfront cost....	A simple tool, and has a focus on buying local/organic products. Yet is more focused on offsetting than reductions and does not give direction for future actions.	A very similar tool to The Nature Conservancy, just a different lay out. Gives a good summary at the end and many ideas for how to reduce your impact, an element of being able to monitor progress although it is not great. Also allows you to participate in a simple calculator vs an advanced questionnaire	This is a very accurate calculator which requires your domestic energy bills and MOT certificate. It is a very specific tool, but does have a simple option for a calculator.

Respondent No: 101

Queenstown, NZ - 24th of April 2020

Project Phoenix

Categorie: Best Community Impact

Proposal: Regenerative town

Applicant: Franco Nobell



Why do we do that?

We are facing a disruptive change in our status quo, with different new realities and **we need to establish an ongoing regenerative process.**

How will we do that?

Regenerative town is a rehabilitation approach to community systems, a holistic community development.

It focuses on social trust regeneration, increasing human connections, improving equity, supporting local producers, strengthening the health and vitality of communities and enhancing resilience to the world crisis.

Reasons to do it:

- to get to know your **neighbours**;
- to feel like you are **making a difference** in the world;
- because the **world's huge challenges** feel more manageable if we are addressed at the local scale.
- to **catalyse** all manner of new projects, enterprises and investment **opportunities**;
- to **learn** new skills;
- to feel like you are **creating a new story** for your place;
- to feel **connected to other people** and to experience something historic and exciting happening around you;
- because you feel it is "**the right thing to do**".

The **process of regeneration** is an **open-source role model**, based on social, ecological and economic principles. The process starts at home, then at workplaces and then at the community.

Around Aotearoa and the world are a lot of projects running at the moment. We must re-activate and prioritise these, bring new ones to our community and set them up as a part of **our ongoing process of regeneration**.

What will we do?

The road map suggested, will have measurable and clear initiatives, but the core of the philosophy is to face our local and global reality. Here are some of the projects to run, support, and bring to our community:

- The Men's Shed (<http://menzshed.org.nz/>)
- Sew Good (<https://www.commonunityproject.org.nz/sew-good-cooperative>)
- Seeds libraries - Seed and Plant Swap
- Pecha Kucha (<https://www.pechakucha.com/>)
- Green Drinks
(<https://www.facebook.com/events/fuji-xerox-queenstown-unit-14-the-landing-hawthorne-drive-queenstown-9300/green-drinks-queenstown-lakes/1357194061094210/>)
- Growers Market
- Support New Zealand Made Products
(<https://www.facebook.com/groups/519618962054849>)
- Zero waste initiatives - (Wanaka Wastebusters, <https://www.wastebusters.co.nz/>)
- Kiwi harvest (<https://kiwiharvest.org.nz/>)
- Tiny house communities
- Civil share app. Buy, sell, share, swap and hire materials and resources.
(<http://civilshare.co.nz/>)
- Clothing repairs. Fixing something we might otherwise throw away. (Worm wear, <https://wornwear.patagonia.com/>)
- Cafe repairs. Community service offered by enthusiasts and professionals in the area.
- Home and community composting (Dr. Compost, <https://www.wastebusters.co.nz/at-home/composting-at-home/>)
- More and more...

Road map suggested

The 7 essential points for doing Transition:

- Healthy **groups**. Learning how to work well together
- **Vision**. Imagining the future you want to co-create
- **Involvement**. Getting the wider community involved and developing relationships beyond friends and natural allies.
- **Networks & partnerships**. Collaborating with others.
- **Practical projects**. Inspiring others and building new infrastructures.
- **Part of a movement**. Scaling up your impacts by linking up with other projects. (Transition network).
- **Reflect & celebrate**. Reflecting on how you are doing and celebrating the difference you are making.

The moment is now. Why wait? Let's drive a change now, let's build a new model that makes the existing system obsolete.

Welcome to be part of this real-life, real-time global social experiment.

Glossary: Regenerative agriculture. Transition towns.

LOCAL GOVERNMENT BUSINESS FORUM

27 March 2020

To all Regional councils
City Councils
District Councils

ANNUAL PLANS AND COVID-19

Dear Council,

The Local Government Business Forum is writing to all councils to express its support for the actions being taken to combat the COVID-19 outbreak and to provide suggestions as they consider their draft annual plans for 2020/21.

Firstly, it is crucial that the primary focus for local government should be to continue to provide critical lifeline services that the public rely on in their day-to-day lives, and especially in a crisis.

We support the establishment of the Local and Central Government COVID-19 response team to address specific topics that councils are grappling with, whether governance, finance and recovery, social wellbeing or council project management and coordination, so helping inform council decision-making over the coming weeks and months.

We are also encouraged that your sector body Local Government New Zealand is working to develop funding and financing options to reduce the current rates burden on communities while maintaining essential infrastructure and services. The Forum strongly supports moves to reduce the reliance on property value-based rates and reduce the rating burden, which we consider to be unsustainable.

In the meantime, councils across the country are considering their draft annual plans. Those we have seen to date show some alarmingly large rates increases, some in excess of 10% and a number well over 5%. Increases of that magnitude are unacceptable, especially in the current climate.

While draft annual plans were in most cases developed well before New Zealand became aware of the impacts of Covid-19, councils should not assume business-as-usual can be maintained. All councils should immediately review their draft annual plans to ensure they will be focusing on core activities and to seek to reduce their proposed rates increases. We are encouraged that some councils are already doing this.

As well as focusing on core activities, councils should consider using more debt, especially to finance infrastructure investment. Not only does this make sense from an inter-generational perspective but it would also reduce short-term pressure on rates at a crucial time.

Councils should also consider rates remission or rates rebate options for businesses adversely affected by COVID-19, including waving late payment fees and allowing delayed rates instalments. These should be temporary and time-limited.

We also strongly submit that councils must adjust their 'business-as-usual' policy and regulatory activities. The development of policy and regulation (such as regional and district plans) should be slowed down with their timeframes extended. This is because meaningful community engagement will be severely constrained if not impossible over the coming weeks and because councils should, like everyone else inside and outside government, be focused on responding to the more immediate crisis.

Similarly, also needed is a pause on the monitoring and enforcement of regulation not related to public health and safety, especially where it involves making visits to properties. It is simply not appropriate during a 'lock-down' period for council inspectors to make visits to properties and expect to be welcomed by people who are in lock-down. Again, councils should, like everyone else inside and outside government, be focused on responding to the more immediate crisis.

With these simple actions Forum members are confident that local government will make a positive contribution to what is undoubtedly one of the greatest challenges faced by this country and its people.

Yours sincerely:



Michael Barnett
Chair Local Government Business Forum

About the Local Government Business Forum

The Forum comprises organisations that have a vital interest in the activities of local government. Its members include BusinessNZ, the Electricity Networks Association, Federated Farmers of NZ, NZ Initiative, NZ Chambers of Commerce, Property Council NZ, and Retirement Villages Association of NZ.

The Forum was established in 1994 to promote greater efficiency in local government and to contribute to the debate on policy issues affecting it.

23 March 2020

To Mayors, Chairs, Councillors and Chief Executives
All Regional, City and District Councils

CALL TO CONTAIN RATES RISES AND RECONSIDER CONSULTATION PROCESSES

On behalf of Federated Farmers of New Zealand I am asking all Councils to keep their ratepayers in mind when considering their draft annual plans for 2020/21 and to consider whether some consultation processes in the pipeline need to be extended and/or delayed while their ratepayers, citizens and staff guard themselves against the threat of Covid-19.

Draft annual plans currently being put out by regional, city, and district councils show some alarmingly large rates increases, some in excess of 10% and a number well over 5%. Ratepayers are facing a very difficult and uncertain time and the last thing they need to worry about right now are runaway rates increases.

Federated Farmers is deeply concerned about the serious impact of Covid-19 on our communities and on our economy. We have applauded the decisive action of central government both in terms of public health and its economic rescue package.

Despite the Government's rescue package, the economy will suffer a sharp shock and will likely enter a deep and long recession. At a time of economic downturn and uncertainty it is particularly important that councils focus on their core functions and operate as efficiently and effectively as possible to keep the rates burden down for the wellbeing of their communities. 'Nice to haves' need to be shelved.

As well as focusing on core business councils could also consider following the Government's lead and take on more debt, especially for capital investment. Most councils have little debt and have plenty of scope to borrow while remaining prudent while those that are close to their debt limits could be forgiven for breaching them at this extraordinary time.

We also note that many councils aren't planning to consult this year on their annual plans and will simply be adopting annual plans based on the numbers from their 2018-28 Long Term Plans. The environment has changed dramatically since they'd have made their decision not to consult and these councils should now urgently review their planned rates increases too.

Another serious concern we have is the ability of councils to meaningfully consult and engage with their communities on other policy and regulatory matters, including district and regional plans. We ask that Councils look to adjust their work programmes and timeframes. Assuming business as usual for these processes is unwise with the restrictions on gatherings and the simple fact that most people (both inside and outside councils) are trying to focus first and foremost on their wellbeing and will be avoiding gatherings as much as possible.

Finally, Federated Farmers will be approaching central government asking that they consider using taxpayer resources to help councils meet the costs with three waters infrastructure investment needed to comply with the Government's tougher regulation of drinking water. We will also be asking that drinking water quality be regulated at point of supply to humans rather than at source. The Three Waters Reforms look like being incredibly expensive for councils and will be a major driver behind large rates increases.

Federated Farmers' provinces will be making their own submissions on councils' specific draft annual plan consultations and I acknowledge their submissions.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Katie Milne', with a stylized flourish at the end.

Katie Milne
National President and Local Government Spokesperson



20 March 2019

Attn: The Mayor / Chair

Dear Your Worship,

Pandemic response: 12 month rates freeze

This letter is being sent to every New Zealand mayor and regional council chair seeking your commitment to respond to the economic challenges every community must face in relation to the current pandemic.

COVID-19 looks set to be the biggest health and economic event in our lifetime. In terms of employment alone, without dramatic intervention, tens or perhaps even hundreds of thousands of New Zealanders will lose their jobs or businesses in the coming months.

The Government is currently prioritising economic relief for businesses and households facing economic calamity.

But rate hikes at this time of economic turmoil will serve to exacerbate immediate financial stresses and undermine the Government's relief strategy. Any economist will tell you that a recession is the most damaging time to hike taxes.

Households and businesses are cutting costs and it is only fair that your council does the same — we must all cut our cloth to fit the new economic reality.

We ask you to commit to:

1. a rates freeze for the next 12 months; and
2. identifying and cutting low-priority spending to redeploy into local civil defence efforts, or rates relief.

We understand some councils are already considering such moves. A group of Christchurch City Councillors have written to their Mayor requesting a rates freeze, Wellington City Council has deferred a vote on rate hikes until April, and Marlborough District Council will vote on replacing a planned 4.86% hike with a near-freeze.

Councils are not well placed to provide economic stimulus compared to central government. It is economic lunacy to use council spending to stimulate the local economy when the primary tax local government relies on (rates on land) is unrelated to the ability of the property owner to pay.

An economic crisis is no time for a business-as-usual approach to rates. We trust that you understand the seriousness of the economic crisis facing your ratepayers and ask that you provide assurance on this matter as soon as possible.

LOWER TAXES, LESS WASTE, MORE TRANSPARENCY

WWW.TAXPAYERS.ORG.NZ

We look forward to your response.

Yours sincerely,



Jordan Williams
Executive Director
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Mobile: 021 762 542