

A CIVIL CONSERVATION on the Manuherekia

August 17th, 2017

Francie Diver - NGAI TAHU

Kia ora koutou katoa, ngā mihi aroha ki a koutou, nau mai haere mai.

Ko Francie Diver taku ingoa, ko Ngai Tahu, Waitaha, Kāti Mamoe oku iwi

Ko Aoraki te māuka tapu

Waitaki te awa, i roimata ki te tai, Arai te uru

Nō reira , tēnā koutou, tenā koutou, tenā koutou katoa

Our Karakia:

Ka haeata te ata

Ka hāpara te ata

Ka kokiri te manu

Ko wairori te kutu

Ko te ata nui kia arahina

Ka tangi te umere āna tamariki

He awatea!

It is about the new beginning

It is about the dawn coming up over the mountains

The sun shining out over the valley

It is going to be a huge dawn today

It hears the sounds of the birds

The scratching of the insects

It is massive

Aah..... but then you hear the sounds and the cries of the children

It is here, it is dawn

It has begun

It is about the beginning of a new day

Not just the sun coming over the mountains

It is about starting something new and starting a new beginning

Kia ora koutou katoa

Louise McKenzie - NGATI WHATUA

Ko wai ahau?

Ko Ruiha McKenzie toku ingoa

Ki te taha o toku Māmā

Ko Ngāti Whātua, ko Tainui, ko Kawerau, ko Ngāti Wai ngā iwi

Engari, ko te marae matua o toku Māmā, ko Whiti te Rā ki Kaipara

Engari, i te noho ahau ki konei mai i a rua tekau mā waru ngā tau

My iwi are from up North, Ngāti Whātua is one of the main ones and Tainui, Kawerau and Ngāti Wai, but I have been living in Alexandra for about twenty eight years now.

I'm just going to talk to you about the spiritual significance of water for Māori and link it back to the creation story and then I will talk to you very quickly about some of the many rituals that Māori adhere to, traditional ancient rituals for cleansing using water, and then Francie is going to give you a little of the background history of Ngai Tahu in Central Otago, pre European.

So, to link back to the Creation Story: every culture has a story to tell to try and understand how this world that we live in was created and for Māori it was the story of Ranginui and Papatūānuku who were the original parents. Papatūānuku the Earth Mother and Ranginui the Sky Father were originally bound together in a tight embrace. After a while they produced about seventy ātua children, and those children were all males and later became guardians of different aspects of the natural world that we live in. The children were tired of being cramped and in the dark and so they engineered it so that their mother and father were separated. So Ranginui was pushed to the sky above and looks down on Papatūānuku who remained below. The rain, the mist, the ice, the snow are the tears of Ranginui after the separation and those tears form the waterways upon our earth. For us water is personified because Ranginui is our original father and Papatūānuku our original mother. Water has its own Mauri, it represents the blood vessels that supply nourishment to Papatūānuku, our Earth Mother, and for that reason it is not to be desecrated or defiled. Because

the welfare of all things depends on water according to Māori, it is considered to be a Taonga. We must treat it with respect, we must revere it.

There were many, many rituals using water. They required the services of a Tohunga, a highly skilled, trained, experienced specialist who performed those rituals. I will give you some examples.

Tohi, which is baptism, is a ritual that was used to dedicate children to the various Gods, ngā ātua o Te Ao Māori. This ritual was always performed at a sacred stream. Every village had its own sacred stream or sacred water which was deemed to be tapu and not to be used for anything other than cleansing or lifting tapu.

Another example is Mate Māori. Mate Māori is an expression used to describe when you are ill. According to Māori there is always a reason and it is something to do with possible infringement of a tapu and so to help to restore you back to health this purified, virgin water is used in a ritual to cleanse and lift the tapu.

These are just a couple of examples.

Why would we want our water to be contaminated when we use it for cleansing, healing, baptising, etc.?

Francie

Kia ora ano.

Water was a lifeline for Māori who came into Central Otago. It was necessary for their gardens, and of other significance. All of the waterways were important. Māori came inland from the coast to gather and to take things back to the coast. There was never a marae in Central Otago so there was never a permanent base where they came and stayed. They would sometimes come and use the same buildings again and quite often you would come across a cave that they used over and over again but they never lived here, understandably. The water over the period of civilization, since the colonization of the area, has deteriorated in such a way that the loss, to me, is huge. It is a great loss. Our galaxis, our fish are starting to disappear, that the longfin eel has disappeared, that there are so many things that have just slowly, but surely gone and now we are trying to bring them back and it is a struggle to try and stop them from disappearing further.

The level of the rivers, especially in the Manuherekia fluctuate and it did in those times too when Māori were coming through. They would have to send scouts ahead to find a way to get across the rivers to get into Central Otago. All of the rivers were important. The Mataau was used as their way to get through to the coast. They would park their waka at Te Huka which is at Muttontown and come into the area and either get another waka and go down through to Dunedin to the coast, from Queenstown, after collecting the greenstone and so on as they came through.

So the importance of the rivers in our area is really high up there.

Sorry, I have run out of words.

Kia ora.

Tessa Handford - St Gerard's School

Hello, my name is Tessa.

I have had a few experiences with our local rivers and have been to the council a few times and have been part of a group that has been monitoring the river for around 3 years. There have been times that the river has been so gross and disgusting that you do not even want to go near it.

I worry that if we do not do anything soon it will be a toxic waste land.

I hope we do something soon or what is the point of having a river in our town if we do not care for it.

I feel so much about the river and I hate to see it like this.

I would hate all the kids growing up and not knowing the joy of swimming in a river, a clean river.

Hannah Tait - St Gerard's School

Good morning, I am Hannah.

For me it is important the river can be swum in.

I do swimming as a sport and I mainly do it in the pool, the reason being, in Alexandra the Manuherikia is not a very good river now to swim in. It can be shallow at times and it does not look the most amazing in places to swim in. For me what is the point of having a cool river that would be able to be swum in and things could live in, that just sits there and flows slowly past.

There is not much point having one that we cannot use very well.

We use the river to swim in, to do lots of other things in, but the things that need the river the most are the fish and the macroinvertebrates, it is their home and it is what the river should be for them to be able to live in easily and to be able to thrive in.

Thank you

Matt Hickey - Water RM

Good Morning to everyone here, my name is Matt Hickey.

At the present time I work as an independent consultant. In a previous life I worked for the Otago Regional Council for 10 years on Water. Prior to that, I did my Masters and my association with the Manuherikia started with my masters research at Otago University where I got to spend a lot of time on all of the tributaries of Chatto Creek, Thompsons Creek and Dunstan Creek and in the Ida Valley, looking at the different fish species that live there. Presently I work with a lot of the water users in the catchment and mainly having listened to the previous speakers to look at these complex issues around:

How much water do we need? How do we improve water quality? And how do we deal with it?

In my career I have worked at a National Level on this kind of thing and I remember in 2006 being sent to Wellington to talk about water quality and quantity, how we deal with that and how we protect our rivers. Some of the examples they put in front of us were from the North Island

I put the Manuherikia river in front of them to highlight just how hard it is to deal with these kinds of issues. We have numerous Storage empowerments on the river, we have hundreds of water users who rely on the river. We have high values for fishing, swimming, and recreation, we also have the native fish values have been mentioned with the galaxiid's and the eels. A lot of these things have been impacted and I think the issue for us is how to deal with and how we are going to make it better.

More recently I have been working with the Manuherikia catchment just trying to understand how it works from a hydrological perspective. We have been doing a lot of work especially around Falls Dam and how it does work in the catchment and how the water users manage it.

I guess for me the key point of it that, although they are water users and they take water, they are a part of this community and all of the decisions they make are to try and manage these things like how much flows at the bottom of the river and how we deal with things. So, during low flows, the water users in Falls Dam manage the river to try to deliver a voluntary flow at Alexandra of 900 litre/sec. At the moment there is no legal requirement to do that but they do recognise that it is so important to be delivering water down there and during dry seasons when we do have low flows the

water users all voluntarily ration back to about 25-50% of usage so we need to keep that kind of thing in perspective that as a community there are going to be times when things are going to compound and we are going to have to work together to get an outcome.

When I worked at the Otago Regional Council, we did a lot of work around water quality in the catchment and we brought out a plan change which most people call 6A, that was around water quality and at the time we were getting a lot of pressure around having water quality limits that were weight able ? and those kinds of things but at the time we set the water quality limits in the Manuherikia to be swimmable. That was supported by the water users and the community. From now on going forward those limits were supposed to come into play in 2020. Which is at about the same time as a lot of the water permits come up in the catchment to be rejigged and re managed.

So, as you have heard today sometimes the river not at a swimmable state but most of the time it is. We know there are issues in catchment and we know we have to deal with it but we also know from my perspective the only way to deal with it is from a community based approach there is no point getting people from outside of the catchment area to come up with answers as a group we need to do it ourselves. Thank you

Kate Scott - Land Pro

Good morning, many of you may know me through my role at Land Pro I am a resource management planner but today I am also going to be speaking in my capacity as having been project manager for the Manuherikia catchment study group for the past 4 years who have been looking at options for addressing water and future water management within the catchment.

*Our strategy group is compromise of Farmers, Irrigators, Community and Environmental interest Groups. We have been looking at a variety of options throughout the valley. One of the bodies of work that we undertook that underpinned the work that we have been doing is our community proposition which talks about having a vision of a thriving valley community that uses its water resource's in a sustainable and cooperative way. And that statement has been guiding the work that we have been doing and we have been looking at arrange of feasibility studies, looking at options for the catchment which might include both new and upgraded dam options, but at the moment we have not made a decision on what a future option for the catchment might be. Our feasibility study has looked at engineering and environmental issues constraints and benefits and any project will have both positive and negative effects and will require a balance assessment. **The catchment is not considered to be short of water it is just that the water does not always fall at the right time, so storage becomes essential for water users in Central Otago.** Natural flow of the Manuherikia especially upstream of Ophir can be very dry during summers and would likely be much less if the current flows were not being augmented by the dam and by good irrigation management.*

I am aware that many sectors of the community have some concerns that irrigation development and expansion will result in more dairy cows in our community and firstly I just wanted to put out there that our irrigation schemes are quite different to other irrigation schemes within New Zealand.

Primarily a lot of the areas that we already have water coming to is already irrigated but not always efficiently because we have been using flood and contour irrigation rather than spray irrigation and also we have the advantage that our schemes are able to provide water by gravity which is quite a significant difference compared to many other schemes so overall the cost of irrigation development can be a lot less in our valley's compared to other parts of New Zealand. What that means is that many of our existing land use including Sheep, Beef, Viticulture and Horticulture will continue to remain economically viable land uses and people will not be forced into a position of having to convert to dairy to make their irrigation pay.

Our economic analysis work made some assumptions that not more than 25% of the catchment would be converted to dairy and when we look at our existing land uses in our catchment we have about 10% of the current catchment as existing dairy farms so if we look at that in round numbers we are probably talking about maybe less than 20 dairy farms in our community. I think it is important to understand that dairy cows are not necessarily the bad guys in our community and that there are a whole range of other viable land uses that make up a really important community variety of land uses.

The other thing when we look at existing water quality e.g. some of the state of the environment stuff, we see that Central Otago has really good water quality and as Matt alluded to ORC planned Change 6A is designed to ensure that we continue to achieve good water quality.

I will finish on the fact that some of our feasibility studies looked at, the potential effects on water quality from increased irrigation and land use intensification compared to what is currently happening and what that work found, that was completed by AG research, was that moving from flood irrigation to spray irrigation would be one of the most significant drivers for the reduction of end losses with our catchment and that generally speaking our catchment is has a very low susceptibility to P losses and that again our management of our irrigation through efficient irrigation practices should reduce those losses. Overall that work found that any development within our catchment would have a net decrease in modelled N & P losses.

Brian Turner Poet – Oturehua

Hi, I am Brian Turner, I am a writer these days.

I started writing when I was young in my teens, I was brought up in Dunedin, initially in a state housing development in Corstorphine, my Father was still at the war, we moved to north Dunedin and that changed my life. We lived beside the Leith it was stuffed with fish in those days, today it is barren. I got a job in the customs department, I worked in Christchurch and Wellington, I got married. Periodically, I would go down to Island Bay and look across the straight at the snow clad Kaikouras. I said to my wife at the time 'we are going home', so I grabbed our small boy, Andree, Judy my wife said 'I am not going', I went anyway and that was over 40 years ago.

I started fishing in the Leith and I pestered my parents, they bought, an old caravan and from that day on whenever we had a Sunday off or on Dad's holidays we would go to the lakes and rivers and streams of Southland, Fiordland, Otago, Canterbury and so on. I got to know the countryside very well. There are few river and streams today that are in anyway near the condition they were in in those days.

I started mountaineering as well and one of the reasons I came home was because I said I am a southern New Zealander and I made up my mind many years ago that I was going to put most of my time and energy into trying to look after as best we could, this place. I fell in love with this place and I still am.

I was on the Otago Fish and Game council for about 15 years and most environmental groups I have belonged to in some sort of way or another one way or another.

I thought that rather than say anymore at this a stage; I have written scores of poems and essays and books a lot of them include references to the South.

Here is a Poem called 'Elegy in the Clutha Valley' (in memory of Denis Glover)

*Something we will never know
the reason for
or the reason to
woke me one January morning
and streamed through the half-opened window
and made me feel it was timeless,*

*and I remembered a day
that will always be long ago
when I was older
and better able
to stride off over the rolling downs
in search of all the best reasons*

*in the beleaguered world
to do or not to do,
and to be in touch with oneself
wherever heart and mind
had come to agree
on where we should be going,*

*and let us think this
could be so. Then, the world's ill
flew from the shoulder
of the highest hill
around, and thereafter the will
took a bolder part in things*

*and my heart leapt
to the blind mountain
from which scree flaked
and water bled all day long
to the downy valley floor
where, in the evening*

*I took my rod and my heart
to the river's side
and cast and cast
while the water
ran purple and gold
in the quickening dusk,*

*and the sedges
fleeing the river
were like ash
at my face and throat
and all the world
seemed to be timeless.*

Thank you.

Morgan Trotter - Fish & Game

My names Morgan Trotter and to explain why I feel a close connection with some rivers in Otago including the upper Manuherikia. I should probably touch on my upbringing, I was very fortunate to grow up on a small sheep farm near Moeraki, it had been in the family since the 1840's so we felt a strong connection to the land. In many ways I had quite a privileged upbringing and that there was a small stream not far from our homestead and even in quite bad droughts it would keep flowing and had surprising deep pools and surprisingly large brown trout and an abundance of eels and I spent much of my childhood swimming and fishing in the stream and playing with friends. Over the last 15 years I have visited the Upper Manuherikia Valley and down by the river there it reminds me of some of my childhood feelings that I had growing up on the creek at home. I enjoy seeing clean clear water flowing over cobbles and picking up a stone and seeing mayflies and of course seeing trout and it's not just the river it is also the landscape, its watching the sun going down over the Hawkduns, these are quite special things for me. I think the heart or the essence of the matter that's before us is that we have simply taken too much from our rivers and wetlands and too many catchments in Otago and its time we gave back something back to our rivers in particular.

Sometimes I feel conflicted when I am advocating to have increased minimum flows in catchments that are heavily over allocated. I realise that farmers are in very difficult situation often due to the historic over allocation of water rights going back to the mining rights days when the government issues rights and the fact is that now we have situations where there is so much paper water in theory allocated that if the water is taken the river runs dry. I think we are facing a real conundrum if we were trying to find a match between providing ecological health in a lot of our streams that are well and truly over allocated and providing for the economic need and demands of some of the farmers who have developed their farming models often largely based on irrigation that are trying to drought proof their farms. I recall the droughts of the 1980, in the area that I grew up in and it had a devastating impact on some of the farmers there. So, I do feel sympathetic to the situation that some of the farmers are faced with.

I guess something that differs in the words that I have tried to get across today from how I normally talk about water management issues is that I have brought up some of the more personal issues and feelings that I have about rivers than I normally would, I am normally much more introverted. Thanks for your time.

Matthew Sole – Chatto Creek

Hi, I am Matthew Sole and I am just going to share some values that I see of a more holistically looking at the social and cultural values I endorse and relate to the local iwi values a sense of place a life force a spiritual relationship with a healthy and vital living river. I recognise the place of our lifegiving river and its tributaries in art, via painting, photograph, poetry, music, song, and stories. I cherish and would like to regain for our children, a birth right, to experience rivers and creeks and learn of its living giving properties, exploring the river of life, learning to catch cockabillies, tadpoles, frogs, bugs, collecting watercress for salads and fresh mint for boiled spuds. Swinging into pools off trees, tree huts, fishing, and just wondering or exploring.

There are also heritage values in terms of our early pastoral river history. Our early punts, ferries and bridges we still have remnants of those all along. Our goldmining, sluicing, tailings, water races, we have old aqueduct's and syphon sites and in the depression area we got have the irrigation schemes that built many of the systems. My father-in-law lived below the falls dam, where his father worked with explosives on the dam. An interesting point from my archaeological background is the Manuherikia Junction cemetery from 1863 to 1868 actually required a punt to transfer coffins and funeral parties across the Manuherikia and that was one of the main reasons for changing the

cemetery over to the Alexandra side. I look at it from a landscape point of view particularly from a dry land river landscape it is something unique to this area and its distinctive matrix of schist gorges with its respective braided shift gravel sequence, interconnecting them. It is also contributed to by a diverse variety of tributary catchments many distinctive and unique in their own rights. Dunstan Creek in my opinion is one of the most biodiversity rich and intact flora and fauna systems in Otago and yet Poolburn is a quirk of nature in a sense that it drains out of the middle of a valley and the various other rivers all have their unique contributions.

A key concern for me is our valley floor has some of the most threatened biodiversity but equally some of the highest extinction rates. Increasing intensive land use for irrigation is exacerbating the extinction of many species unique to Central Otago and existing nowhere else on the planet. The issues for me relate to the current over extracted practices which require realignment of water use that is sustainable to the natural life supporting capacity and ecosystem processes of the catchment. For me, the key issues are ensuring the environment comes first as our economy is subservient to our environmental wellbeing, we have a spiritual and emotional relationships to our river and its surroundings. The current stewardship of our river and to its adjacent land use is exceeding the environmental limits it can sustain. I think for me personally each decade of balance for growth is eroding our life force. I as a living being of mother earth feel deeply the discord and share deeply in her pain.

Lynne Stewart – Riparian Care

Kia ora, hello everyone my name is Lynne Stewart.

Manuherikia. The Manuherikia flows through our region and is precious to many of us, we all need to be involved with taking care of it. It is in a degraded state from run off from agriculture and from us having destroyed its riparian vegetation over the last 150 years. We all need to improve and protect the mauri, the life force, the ecological health of our river as well as the whole catchment it is for our children and our grandchildren's sake its very, very important it is our natural heritage it is your natural heritage, kids. For over 80 million years, unique species of plants, birds, lizards, fish, and invertebrates developed in New Zealand as our country remained geographically isolated. Yet in less than 200 years Central Otago's flora, fauna and fish has become dominated by exotics; willows, poplars, blackberry, briar, broom they have all spread along the Manuherikia replacing the herakeke (the flax), the ti kouka (the cabbage tree) they are the dominant vegetation and trout have now become the dominant fish species because they are more valuable than our native fish species our Galaxias, our tuna (eels), our long finned eels.

Central Otago now has the highest number of threatened native freshwater fish species in all of New Zealand and we have only got 1% of our original vegetation remaining. Now our ecological environment is a disaster really, we need a visionary and sustainable programme of river management and ecological restoration and protection of our Manuherikia. I look at the vision of the Clutha-Mata-Au River Parkway Group and its mission to protect and improve the natural, recreational, and cultural values of the Clutha-Mata-Au, the corridor, by creating a regional river park and trail. Fred Pierce in his book 'When the rivers run dry' stated 'nothing will matter more to humanities future on this planet over the next century than the state of our rivers' and we are all coming to understand that he was right in one way or another, the way we manage our waterways will impact on all of us.

Our parliamentary commissioner for the environment Dr Jan Wright has said we need strong rules to protect our rivers and improve water quality and we need to push for these in our region, we need to be politically active, we need to make submissions to the Otago Regional Council, because I don't think they are doing their job. I have lived here in Central for over 31 years and I first of all enjoyed paddling or wading with our 2 small boys in the Manuherikia after having picnics on the bank. The

river has been a big part of what it means to live in Central Otago for many, many Central Otago people. You can no longer kayak safely anymore, particularly after rain because of all the faecal bacteria. The E.coli levels there so high they make it unsafe for swimming, they will kill dogs and they almost kill people. The only action taken by our Otago Regional Council in this situation is, to erect a few signs, in a few places, saying the river is unsafe for swimming and put it on their web page on about the third one you go to, if you can be bothered looking that long. My son who was a New Zealand representative junior kayak slalom paddler along with many other keen paddlers loved to paddle the Manuherikia gorge after rain when it was at its highest below Ophir. But this is the time when it also has high E. Coli count when faecal runoff mainly due to the lack of riparian vegetation and all the animals close to the riverbank. They impact hugely on our community because when you have got sick kids trying to go to school and sit exams who cannot get recovered for days and days. They have water poisoning and its way worse than food poisoning.

The Manuherikia deserves a far higher level of protection than it presently has and it needs to see a far greater investment in restoration of riparian vegetation in its catchment if we are to protect its very special value to our community. We all need to be involved with taking care of our Manuherikia, it is a part of our national heritage, we need a visionary and sustainable programme for river management and ecological restoration and protection. Wouldn't it be good if on hot summer days we could swim safely in our Manuherikia and not get poisoned by all E.coli in its water?

Peter Bodeker – CEO ORC (Statement read by Mayor Cadogan)

The Manuherikia river is protected for future generations by two associated but separate ways; Firstly, the Otago Regional Council water plan which focuses on water quality. The rural water quality plan requires water that flows from farming horticulture, viticulture, rural lifestyle and or forestry operations to be of a quality which will not adversely affect the overall quality of the river. This rural water quality plan implemented about 5 years ago was done as a result of community consultation which included landholders, environmentalists, advocates, iwi, and general members of the public. The process under which the plan was developed was in line with Resource Management Act and as such required significant consultation and in the case of this plan mediation through the Environment court. Ongoing monitoring of the rural water plan will be taken by the Otago Regional Council and if water quality is found not to be up to the required standards, a review of the conditions of the plan will be undertaken.

The second way the Manuherikia river will be protected for future generation focuses on the use of water for irrigation and mining purposes currently considered under the Deemed Permit Water Scheme. Deemed Permits were used during mining privileges and 30 years ago were signed to be phased out by 2021. By 2021 user of water under a deemed permit will have had to replace that Deemed Permit by an RMA based water consent, during that process over allocation of the river will be considered and water will be allocated on a more efficient use of water basis, than the current Deemed Permit regimen allows. The Otago Regional Council is very much interested in ensuring that the Manuherikia and any other water bodies are maintained for future generations not only for recreational and ecological uses but also for economic uses as per our mandate specifically under the Resource Management Act.

Gary Kelliher – Farmer & Irrigator

Thank you, I am Gary Kelliher and I appreciate the opportunity to speak today, with my family we have a farm at Springvale just out of Alexandra. Our family has been in this area for 3 or 4 generations and much of what were previous family farms is now housing 2-300 families now following subdivision and development. We have a 500-hectare farm and we lease some small areas around us and we run between 3 to 4 thousand stock units in sheep, beef, and deer. About half our property is irrigated and half dry land hill tussock country and we are in an area that is very dry, 300mm on average per annum and we are very reliant on the Manuherikia Irrigation scheme and

storage that the scheme has at Falls Dam. But the schemes do have to ration every 10 years, probably 3 to 4 years, so the reliability is not high. The changes coming in 2020/2021, we cannot continue on with that level of reliability and make those changes to our business. When its dry were we are its generally dry everywhere else and a historic comment that has been made in past generations that the Manuherikia down in our area where we are would go, visually dry in a super dry year, prior to Falls Dam and the irrigation schemes. I became involved with the Manuherikia Strategy Group right from its inception, purely because of my concern really for the river, my concern for the community that relies on the river also for a personal view for our own businesses for our family and other families that live in this area about how do we meet those changes and the reliability that we need.

The Strategy Group work that has been done for us, has predicted a cost of \$3000 per hectare to create the reliability we need and the work that we need to do on the schemes and consents. Alongside that we have upwards of \$5000 a hectare to spend on farm, which we are starting to do now, that will include efficient spray irrigation, it will include fencing of water ways, riparian planting and big changes to the way our farming business is. We can just make that work on deer, beef, and sheep we believe, based on those numbers that \$3000 per hectare as a business we have advanced the models through we have looked at every option and it at the absolute upper limit for us, it is a major push we have to resolve issues with generations all at once, for my parents, we are thinking of our future generation for our children, but we are very focused on the deer, sheep and beef industries, we do not want to be dairy farmers.

We are very protective of our river and we consider it our river alongside everyone else's, my sister and I grew up in it, my children are growing up in it as well, they value being able to swim in it and its absolutely critical that we get the next stage of what we do right so that the river remains for the community to be able to used, as we have done. We see the hundreds of people that come into this community in the summer and enjoy the river and camp by it, we know of 2 or 3 generations of families who have come to the same spot camping, they come and talk to us regularly and it's great to see that and we have to protect for them. We do always have in the river, a running flow, but when it gets dry and rationing comes in place, rationing is in big steps, its 75%, its 50%, its 25% and then is stock water and that does happen. So, the problem for us is that any increase in flow beyond what we currently do at that \$900 is going to be a big increase in storage cost for us because it is going to come from the dam, we can't add more cost on to those numbers, without considering dairy so, we know what we want to do, going into the future but we also know realistically from a business perspective what we may have to do and we think that there are probably many others based with that predicament in this catchment.

Jillian Sullivan -Poet – Oturehua

Hello, I am Jillian Sullivan and I live in Oturehua and the Ida burn stream flowing through my property, I am going to read a poem. I come here as a grandmother who grew up with the Wainamu River and my children grew up with the Motueka River and I asked my son what it meant to him that he said that, every day after school or during lunchtime they would go to the Motueka River and it was one of his best parts of his childhood, that the river was always cool and clean and crisp is how he described it to me and now I am taking my grandchildren to the river and so this is a poem, called 'In the Middle of Nowhere'

*'We take a picnic of peanut butter sandwiches,
a bottle of water and a stick
begin the trek along the streams fractured edge
the water, rushy in places
it didn't used to be*

how everything changes after rain
beneath the twig willows the snow melt water sings
Grandma do you live in the middle of nowhere?
No, wherever you are is the centre of someone's life
Around each secret curve
a ripple of sky and cloud
There is slime on the stones
Long strands of green flowing under glass
As if this is how streams are, showy with nitrates in waste
We can only imagine how water would live
If irrigator hadn't flung the rivers hearts on grass
Or beast hadn't strayed beyond trees
And would only ever approach beguiled like a three-year-old
Entranced with light and air'.

Thank you

Vicky Bonham - CODC Counsellor

My name is Victoria Bonham, a Central Otago District counsellor, but today I talk on my own behalf. On the way here I stopped at the Manuherikia and picked up a stone, I really felt the Manuherikia should be here and bought of a little bit of her with me. 'We have not inherited the earth from our ancestors but have borrowed it from our children', it is an old American native proverb and one that I base my talk on. Make no mistake water is the essence of life, is essential for the survival and wellbeing of our children and our children's children and that of the animals and the wild life who also share our environment and the heart of what makes New Zealand amazing and the essence of the New Zealand way of life. We have been blessed, nearly half of the world's population does not have access to safe water, through miss management, pollution, and greed. Lands have become unsustainable, and unproductive, rife with disease and famine and depopulation and don't think it can't happen here, it can and it will, if we don't respect, and appreciate and manage well this most precious of resources, if we continue to poison, pollute and pillage our rivers, our future generation will share the same fate as other third world countries.

I grew up in this area and growing up in the '70 and '80 here, the Manuherikia was a big part of our life. We were also irrigators, we lived in the Muttontown area and the irrigation that we had in Muttontown also came from the Manuherikia and I can remember big eels and fish coming down that irrigation race. I remember irrigation well because our irrigation fell at the ends of Sunday night after the Sunday horrors and us as children took the first shift out there with our torches and shifting the irrigation it was frightening. One of the eels that came down the irrigation we kept for a few days and fed him with pet roll we called him Earl before releasing him, he was about 4 foot long he was huge. So coming back to this area to raise our children we thought that things were going to be pretty much the same and on reflecting back on how we lived in the '70 and '80 here, we spent a lot of leisure time at the river horse-riding and swimming, floating down the river on giant tubes, camping and partying It was a wonderful place to grow up, my dad was a keen fisherman and the river was abundant with fish and eels. I can even remember going up Manuherikia in a jet boat, there was a lot of water. It was a place I also went to not just for pleasure and to relax but a place I went to for emotional and spiritual healing for seeking clarity, and realisation, and inspiration. Our river is not just a place of physical nurture and wellbeing but also essential to our emotional and spiritual wellbeing. This is what has drawn me back to the area to raise my family, but shifting back here I am saddened and I am angry our beautiful Manuherikia river already over allocated and sick with toxic algae and chemical sprays, poisons, effluent, and other phosphate contamination is unsafe for our children to swim in our ride our horses in and nearly void of fish and eels. Last year my mother's dog nearly died after drinking the water and our stock when it comes to drinking from our irrigation race,

refuse to drink it and we make sure they have other water supplies so they don't have to. We have an obligation to our river and for future generations to remain guardians of our waterways and resist corporate control. The native Americans also say:

*'the earth does not belong to man, man belongs to the earth,
all things are connected like the blood that unites one family,
man did not weave the web of life,
he is merely a strand in it, whatever he does to the web,
he does to himself'.*

Thank you.

Nia du Plessis - St Gerard's School

Hello, my name is Nia du Plessis and I am 12 years old .The river has always been a part of my life and I hope it always will be. I have had some concerns recently about the river and its health conditions. When I was younger, I always used to go down and have a swim in it, when it was a hot summers day and now, I don't really want to because it's not as healthy as it was. I think it would be sad if my children wouldn't be able to swim in the river and enjoy the pleasures that I have had and their children's children couldn't enjoy that feeling as well. The river is a place where I feel safe and where I can have adventures with my brother and where I can have fun, but now it's not really that, I feel like the memories are starting to fade and I hope we do something about it. Thank you.

Charis Morrell - St Gerard's School

Hello, my name is Charis Morrell and I am here to tell you what my concerns and worries are. My Mum is from Switzerland but I have lived here in New Zealand all my life. We go back to Switzerland for family holidays to visit my Grandparents, Uncles and Cousins. Throughout my visits{to Switzerland) I have never seen a river that doesn't literally have a forest of trees on either side of the banks. I think this is one of the reasons their rivers are clean. Switzerland is in the middle of Europe, so they don't get to see the ocean very often, but they also have lakes. My mum when she was a kid always went to the same place on holiday, it was a camping ground with a huge lake and lots of cool obstacles in it. Me and my family went to Switzerland last year and we went there, it was called the Seine. The water's edge was filled with big rocks and water was sparkling clean but back in New Zealand I don't know what clean is anymore after seeing the Manuherikia again. Thank you for listening.

Michael Harlow – Poet & Counsellor

Kia Ora, Michael Harlow, I am a Jungian? psychotherapist and a poet and also a member of Class? the Central Otago Environmental Society. I just want to talk very briefly about one way to think about water. It's hardly a secret that we are smack in the middle of a global crisis it's come about largely because we failed in our attitudes and the way we think about water outside of the economic sphere and growth. The only proper way, I think my experience to make any changes that we need to make is how we think about what we want to happen. So, we are really in a fix and we are searching for ways in which we can do something about renewing and recovering our relationship to the water. It's a fact of human development that our personalities are formed, therefore our ideas which inform the decisions we make, come about because we establish relationships, that is simply the way that it is. So, what I am arguing for or advocating, is that we think a little bit about the idea of making a relationship at an individual and a collective level with water. The key here for me in advocating some kind of a change in which we go from only consumers to guardians at a collective and an individual nature. So, I have written a poem that tries to talk about that idea of establishing a relationship with a key natural resource in this case water, appropriately enough it was commissioned for an art installation.

And the poem goes like this:

*Water that never talks nonsense
The music of light
The music of water
the water that never talks nonsense
Are you a visitor? asked the water
Yes, I answered
Only a visitor? asked the water
Yes, I answered
Take me with you, said the water*

Kia Ora

Clarification questions and discussion

Victoria

Kate is it,

You said in your talk and I presume I heard it correctly. That you understand the river to be of high quality of water, could you clarify that please because obviously in our experience we seem different.

Kate

Thanks, Victoria was asking around clarifying around water quality and I may also hand directly to Matt to answer some of these questions as well, but certainly when I look at the available data from state of Environment report, reporting law MFE, there's a whole index, a whole variety of monitoring programmes and systems that record a range of water quality parameters and when you look at Central Otago's water quality and you compare that to other water bodies within New Zealand in the ranking system CO water quality is actually deemed to be high quality, Particularly compared to other and many other waterways within NZ so I'm not sure if you've got anything you can add to that that's perhaps slightly more scientific Matt? Since its more your realm than mine?

Matt H

I can try, on a National scale Manuherikia water quality is considered good by statistic in nitrogen phosphates and E.coli. Part of the reason the Regional Council brought in its plan change 6A water quality was to try to protect that and work and make it better. We know that we have issues that was pointed out after rain, particularly with E.coli levels, with water coming off farms but that's a tough one to beat, when you have agriculture in a catchment and its common across New Zealand.

The other thing that we know where we have issues and hotspots is some of the tributaries, where we have border dike and flood irrigation, washing across paddocks going into that creek and that water coming down the river. So generally over a year timescale or over a summer, the water quality would be considered good but there are peaks, there are points where you get these spikes due to those sort of water use things and when we talk about 2021, changing the water permits a lot of that irrigation method isn't considered efficient use of water and would have to change to spray. Spray doesn't have run off over land running back into rivers. So partly why 2020/2021 line up was because the council when we were designing those things, was trying to kill two birds with one stone get good efficient use of water but also improve water quality. If you look at Manuherikia catchment you have spikes as you come down the river, but it cleans itself up and you might get another spike and it cleans itself up, over all I would say it was good to very good water quality, but we need to deal with those issues and that's sort of partly where I get employed to help these guy is to fix some of those things but the goal is to make it better keep it good and make it even better if we can.

Kate

And just to add to that from my point of view I think the reason that we are all here is that we actually want to find a solution to how we might do that and I think that's actually from my point of view the sort of things we need to focus on is that there needs to be a range of uses of our water there needs to be swimming there need to be recreation there need to be the ability for people to earn a living from the use of our water and it's how do we actually collectively find a solution that enables all those things to occur and coming back to water quality and some of the points that I think you Lynne touched on around loss of riparian strips to our rivers well look that to me is a really simple solution that with coordinated management throughout our catchment it's not that difficult to plant a few trees look I paid my way through university on a poor students wage working for my father planting thousands of trees, riparian planning and I grew up in Taranaki and that was a really interesting example of how a community had actually embraced riparian planting and when you look at the water quality data in Taranaki now after 10 years of fully fences and mostly fully planted catchment there water quality is now quite significantly improved I think is about how do we come together to find solutions to address those things that don't actually force us into arguing with each other around what is best or otherwise use of the water, So that's certainly what I would be interested in exploring today is well how do we actually put all our minds together to actually come up with a positive solution.

Lynne

I just wondered why the ORC doesn't test water quality after rain, you do not test water quality after rain. Who is ORC here? because after rain should be the time they are testing and they are not, they won't test after rain, because E.coli level is so high and so anybody if its summer and it rains and the kids are in swimming there going to get sick and your dogs might die. It's just disgusting this is our river this is our Manuherikia so I'm really keen for everybody to work on the same page for a solution and I think it's fantastic that everybody wants a living, clean, fish filled with insects, birds singing, Tui and the Flax flowers.

Kate

I have a couple of questions and perhaps Morgan might be able to answer one of them, and I guess you know there are some comments about the fact that you know in the past our rivers had tuna in the river and I guess one thing that comes to mind for me and I don't know the answer to this but I also understand that there is a big dam in Roxburgh which actually means that the tuna cannot actually swim up from the ocean up into our rivers so yes it's an issue and a constraint that we have in our Manuherikia but it's not actually as a result of the fact that we've done anything to the Manuherikia specifically we also have a large dam in the way that prevents the eels from actually swimming up here to spawn. I think that is correct. But further to that we also talk about the fact that we have people have noticed a reduction in galaxiids in our waterways and like I quite like the native fish if anyone seen some pictures there kind of like that as far as fish go it's about the extent of my knowledge but certainly when we look at that we have got some conflicting challenges in terms of the things that live in our streams because we also have trout who love to eat galaxiids so we have kind of got this competing issue and I guess the question I have is how do we manage this situation when on the one hand we've got all these galaxiids that are native that we would like to maintain but as soon as we get enough flow in the rivers all of our trout can swim up and eat them so how do we actually achieve that balance. I just would just be interested perhaps in your view Morgan obviously in your day job you have a lot to do with trout, I don't know might be throwing you a hand grenade here but, perhaps I would be interested in your answer.

Morgan

So, in regard to my comment about long fin eel populations. I was being more specific to referring to the creek that I grew up next to Totters creek and that has open access to the ocean and when I was

a boy the biomass of eels in the stream was almost unbelievable. If you broke an egg in the pool, an area the size of a bathtub would appear from the bank and there would be a black mass of long finned eels. That was before commercial eeling really got stuck into the creek and cleaned most of the eels out. Now there is more control of commercial take of eels but there is still a big concern about the sustainability of long finned and I think that's rightly so.

Referring to the dams, I'm not a long finned eel passage expert but I know here is discussions about how we can get elvers over the dams and in time we may see better returns to the Manuherikia and see more eels come back to the river, so we certainly shouldn't write that off.

In regard to brown trout and native galaxiid interactions my personal opinion is that any rare threatened native galaxiid should be given the highest priority and protecting . I think the best way to achieve this is to enhance and extend trout barriers on small mountain streams this might come in the form of a waterfall to prevent possible trout incursion and potentially we could look at electric fishing and even more serious methods to remove trout from small headwater streams because often in these head water systems the trout are a very small size and have limited value to anglers. In my personal opinion some people have suggested we can run rivers down to very low to next to nothing flow levels in an attempt to protect galaxiid population, the water being so skinny that the trout cant access the galaxiids over a few short months over summer. I personally don't agree with that because as soon as the flow increases the trout will increase. I think that's a very risky way to be managing such an important fishery, with such an important rare fish. I think we need to look more at trout exclusion, total exclusion from head water streams.

Gary

I'd just like to clarify a point on riparian planting and water quality and there is actually within the Manuherikia itself a huge opportunity to improve water quality from where it currently is with riparian planting. The problem with that is that unless you plant your riparian planting smack in the middle of a creek it won't grow because it's so dry so what you actually have to do is irrigate your riparian planting for it to survive. So, in Southland in other areas throughout New Zealand riparian planting is a very good solution to improving water quality. In Central Otago it will also be a very good solution to improving water quality but it comes at a substantial cost and a far greater risk to the farmers who are faced with doing that and we are going to do that on our property too and we have started doing it and we have been doing that for a number of years but we have situations where we water trees for 2 or 3 years and if you go away for 2 weeks and someone doesn't water them you can find them dead so they are the challenges that the farmers are faced with.

Tim

Gary can I just ask you, what happens when we have a flood like we had two weeks ago in the Manuherikia where you flow went from what might be well the Regional Councils minimum flow was put at 1.25 cumecs and it was barreling through at 350. So, 350% greater than say a summer flow. What happens to that riparian planting when the flow gets that big?

Gary

Well the flood really is re setting the river and anything either side of it because the river is so broad and meandering that on the river main stem a lot of damage, and you know riparian planting here takes a longer time to grow and establish than other areas and it'll go through those natural flushes because the river flooding like that is quite natural and that's why it looks the way you can see behind you there. When you look at for our property, we only got 1.5 mls of rain at that time when there was 300 odd cumecs rocketing down the river. So, that is how dynamic and dry we are but a big flood in our area would do some big damage to our riparian planting.

Lynne

Central Otago White Water has a kayak course on the Clutha/Mata-au river directly in line with Wastebusters bottles down the bank and over the other side. So, its straight opposite the end of Boundary road. They planted 10 years ago and they made huge big meter round circles and planted their flaxes in the bottom and then put stones around so they didn't get washed away when the water came up and those flaxes have now have flax flowers on and so the kayakers can watch the Tui's feeding when they are down there paddling. It's a very cool thing to do. But they bucket watered sometimes in the summer, those first summers, it's hard, but it's possible.

Brian

A question Gary about the riparian margins and so on. Has there been a considerable removal of riparian grow in the last decade or so relative what was the case previously and is there any merit in attempting to get some sort of rates relief from the Region Council/ District Council if you as a farmer decide it's not good enough and that their needs to be return of riparian growth and so on. Do you think there would be a chance that the wider community would accept that as a necessity and that in some case you guys would have great trouble funding what you would like to be doing, you clearly do have. Is that worth pursuing?

Kate

I can perhaps give the example that the Taranaki Regional Council use because its somewhat unique in New Zealand and so what the Taranaki Regional Council do they have a bunch of their land sustainability officers that are available to go talk to landowners and farmers who wish to undertake riparian planting and they will prepare a riparian planting plan for free for those farmers so they pull up their farm on a map and they identify the A, B, & C zones for a riparian planting and then they specify the types of plants that would be the most appropriate for each zone the TRC then has their own nursery and any landowner who wishes to commit to undertaking riparian planting in accordance with the plan that has been prepared for nothing for them can then access those plants at cost so that's how they have actually had such a large uptake in the Taranaki Region is because people have got relatively cheap access to plants so the cost to farmers and landowners has been the cost of the fencing and obviously the planting of the plants and the subsequent maintenance of those but when I lived and worked in Taranaki there was some really great examples of the ability of a couple of my corporate clients who had large tracts of land adjoining rivers where what they actually did they got their riparian planting plans and they actually engaged local community groups so for example one of the local high school had their annual rugby trip to Australia and every year the 1st 15 would come in and they would plant a hectare of plants and this group would actually pay a donation to that group in kind so it was actually bringing the community together and I think that's a really good example of how it worked well and that could be the sort of thing that we might wish to explore further if we are looking for some solutions.

Gary

Thanks just to continue on with that question it's a really valid one. The first part of the question was around has there been riparian planting removed and when you sit down and you are looking at your map of your property and your figuring what you're going to do. One of the biggest arguments around the kitchen table is around what you're going to cut down or what you're going to shift and generally the family are more concerned about trees than anything else. So, you end up having to make those decisions now. The advice is that you should design the irrigation system to suit that base starting point that you have and because of the cost, then unfortunately you are faced with having to look at replanting something and you have to view it as well maybe what you have had for the last 100 years, you are now starting on the next 100 (years) and what you'll put in place and plant around that, you know our farms don't operate without having shelter and so the shelter becomes critical to our stock especially in winter. So, it's always a big decision behind riparian

planning, I don't think there has been much riparian planning removed to date, in the changes that have been happening in the Manuherikia. Around community involvement I think I'd support it in that, what you might get then is sensible solutions and sensible advice around what you should plant in specific areas and I've never been a fan too much of going out into the wider community looking for what I might do on my property. But in these situations where you are substantially enhancing the environment your protecting and setting it up for the future. I think there could be some merit in that.

Morgan

Thank you and Matt might be able to add to this but I think there has been some research done at Otago University which would suggest in terms of capturing overland sediment and E.coli runoff, often long grass buffers are quite effective and its often the width of the buffer that's most important factor (and also) I just had another thought about trout v. galaxiid interactions, looking at the main stem river behind us, I think one pragmatic management goal might be manage the main stem river for large brown trout and long finned eel habitat, both have similar habitat requirement deep pools and deep water and then look at managing a selection of tributary streams where we would exclude trout with barriers.

Francie

Just to add what you were saying Morgan is restoring the wetland areas of the Manuherikia to encourage that kind of putting in the growth of the plants that are happening and just returning that back to the valley that would be awesome, that would be great.

Victoria

Well I'm not sure who can answer this, maybe there's a few of you, but I was wondering what impact a dam has on a river. Now I know that with our Falls Dam that it is sometimes full of algal bloom which releases a toxin to our waters and its becomes very dangerous to animals and to people so with the algae you know is that a typical thing that happens when you dam a river or it just happening with the Falls Dam.

Matt H

I don't know about the toxicity part of it, but, I know that probably 2 years ago there was algal bloom at Falls Dam and they did sample that, the Regional Council went in there, I don't think it was toxic but, the problem is when you dam a water or river it turns into a pond, so at times when you have low levels in a dam and you get wind and sediment stirred up into the water column you end up with nutrients in the water column that algae's can then grow from. It's a bit different to up there, with the water quality coming in, the risk of that is what I would consider low more than might be able to back that up, but, it's a bit different to some of the issues we see in empowerment in other countries or even in the North Island with lots of intensive land use up stream getting higher nutrients into dams you can end up with like you say toxic problems but up there I think it was the only one I know of was that one a couple of years ago and I know that they did test that because there was serious concern about releasing water out of that dam down the river if it was toxic, to all the stock drinking and all that kind of stuff, so they would have had to basically shut it off if that was the case. There are always consequences when you dam a river, some of them you can't anticipate and some of them you can like with the eels coming up, those kind of issues we know about and we know we've got to do something about it, as far as I know Contact Energy are supposed to have been doing something about it this year, why this year? something about getting elvers up here. Dams rivers always things impacting.

Francie

There's been a programme over a number of years where they have been collecting them at the base of Roxburgh, and NIWA has had a lot to do with that, and Contact Energy and so they would take them from below the dam and then take them into areas that we are not allowed to know, no name given and released and so that's how there is some movement of young coming back into the area but its still not an answer, why the stairs or the steps were not put in in the original date, I don't know or how that can be fixed, I don't know.

Gary

Just to add about the Falls Dam and looking at a dam on a river its quite a unique situation, but it's quite probably a positive situation in that, the scale of the Fall Dam and the scale of the Manuherikia river and main stem, that the Falls Dam fills very quickly because of its size, its only half the height it was ever intended to be, if it went to the full height its about 10 or 12 times more the storage that would be behind it but, it would change the way the river operates quite dramatically, because you would have far more water building behind the dam. At the moment Falls Dam in a dry year will almost empty completely, but then conservation manages that to make sure that it not emptying too quickly although, it does plummet very quickly when it gets very dry. So, where we are lucky with the Manuherikia is that you have Dunstan creek and then other tributaries, that provide quite substantial catchments for when you do get a rain event for the flushing ability down the main stem. So, when we look at what will change with Falls Dam then, at this stage it shouldn't be so high that it would majorly change the overall dynamics of having that impediment across that stem of the river. So, the likes of the flood that we've just had was able to flush straight through the dam and continue on, and but under a far greater empowerment far more of that would be retained.

Victoria

Just one last question, with the different options of the Falls Dam. What is, I mean obviously there's a huge risk of having a large earthquake in that area with the Alpine Fault line, what is the risk of death and damage to our town if one of these dams goes?

Kate

I'm not a dam builder and I'm not an engineer. But look, there's a whole bunch or regulations that control the constructions of dams. So, the existing, all the existing dams you've got Falls Dam, Mannorburn Dam, the whole lot, they are required to meet the dam safety regulations, so part of what originally drove some of the work in the Manuherikia catchment, looking at options for Falls Dam was the fact that **there is going to need to be some upgrades to bring the dam up to the new dam safety regulations.** And the work involved to do that meant that logically adding on top of the dam would be a good way to deal with the extra material that would need to be excavated to do that. So, a whole bunch of dam safety regulations there's things called potential impact classification and a whole bunch of risk assessments that need to be undertaken that assess the number of people that would be below a dam and the number of properties and people and issues and risks and look, some of the increase in costs in the project that we have encountered to date, have really fallen out of the engineering concerns around the seismic stability and so I'm not trying to offend any engineers in the room, but the engineers like to over engineer everything and so basically that's a key part of the work that we've have done and when the community and the current irrigators make a decision around what project they want to proceed, then they will have to do a whole bunch more engineering and dam safety related work to be certain that, should there be an earthquake or some other hazard that the risks to the communities downstream are minimised and so there's a whole bunch of thing that they would have to do to satisfy those dam safety regulations.

What have you learned today?

Michael

Its Michael Harlow again, on brief reflection, I think that I detected that there is an increasing sense of urgency, about how to handle a whole host of very complex problems and I think that's good. I think unless enough pressure is put upon the kind of intellectual formulations of policy, I think we are going to go around too many circles. So, the sense of urgency is a good one and thanks to the kids in hearing your point of view good one.

Charis

I particularly liked hearing about the Falls Dam because I've noticed not just also in the Clyde Dam building up around there's lots of algae and stuff, but I still like swimming there it's fun and I think that if we all gave our personal opinions about the lakes and rivers that we want to be cleaned and made to be swimmable again, I think we would go along way. Thank you.

Nia

I have learned quite a bit about the fish and the rivers and the dams and everything about technical stuff, but the thing that I most like is how everyone is very concerned about the river and everyone's on the same page. And I think its really cool because if we sat making words into actions, it could lead into something big. Thank you

Vicky

Wow, you kids are amazing. I come away from this knowing that we all care and that we all want to see and make sure that our rivers are sustainable, that want to keep them healthy and I think its going to take knowledge from all sorts of directions to able to make this happen and I really think that common sense will prevail if we keep talking and also wisdom, I believe in science, but I believe in science as a knowledge, I don't believe in science as a wisdom. So, I think if we keep talking and we keep pooling our knowledge together, I think we will find a solution and we could even lead the way for other areas. Thank you.

Jillian

I'd like to read another poem and it's about listening and what I learned today is just what a sense of community here and how there's a strong feeling of everyone to work out what's best for the river. The poems called Substratum.

We are so vulnerable here.
Our time on earth a time of
how to keep warm and how to be
fed and how to quell our most
anxious thoughts which come back
and back to connection.

How do we stay here on this earth
which is right below our feet?
Ice, clay, substrates of rock,
magma, lava, water, oil, gas;
the things we want to bring up and use,
the things we want to use up.

If all we ever wanted was to know
we would be warm and fed and listened to,
would we be kinder?
Would we in turn listen? Would we understand
the importance of those close to us
and the importance of what is under us?

We have the far sight. And we are what
the shamans warned against.

Gary

For me I have learned that the new level of passion that is out there for the river and the community and over and above what we have known and have engaged with and I think it's been valuable. Thank you.

Lynne

I'm very heartened that were all on the same page, in our young people and those even not born, hopefully will be able to enjoy the Manuherikia mauri, the life force, and we will get our galaxiids back and our eels: our tuna.

Matthew S

Matthew here I think from me it's the, our relationships with the river and I think there's a very common thread in terms of that relationships, but I think also if we are going to get there, we are going to have to do this together.

Morgan

I've been really impressed to hear that everyone is passionate about looking after our river and doing the right thing by the river and its been good to hear some other opinions.

Brian

Yes, I wrote down, I've been reminded of the dangers of assuming we know what others think before we have listened to what they have to say, so thank you Evelyn for putting this on, you've done a community service as I understand it.

Kate

I'm not sure I can follow such wise words from Brian. Look, I think probably one of my key observations is the fact that there appears to be a willingness to want to work together and I think the only way that we can actually achieve an outcome is to continue to collaborate on this and actually facilitating ongoing conversations around what we need to do and how we are actually going to do it will actually be the key to our success. Because we need to actually ensure all the views are around our table for the prosperity of our community and I think probably what's the most exciting for me is what are the opportunities to come for us to continue to work together.

Matt H

I think what you have done is confirm to me how hard this is going to be. But I think it's doable, its quite good to sit here and listen to a community who want to take responsibility for their river and I think that pooling that resource and getting an understanding across what everyone wants we can do something, it might not necessarily be at 100% what each of us wants but I think we can get something that can work, so thanks for reminding me how tough this stuffs going to be over the next couple of years, but it's definitely good to listen everyone.

Hannah

I really enjoyed hearing everybody's different opinions to what the river is like at the moment and what the river could turn out to be in the future and I do hope and think we can fix it and make it better for everything and everyone.

Tessa

I'm really glad that everyone agrees that there's got to be something changed about the river and the way that it is and I'm glad that our words are going to become actions.

Louise

Kia ora koutou, I think, well I learned so much I wouldn't know where to start, so instead I'll just talk to Evelyn. I thought that was extremely courageous of you to try this concept, which is quite different from what public forums are in the Pakeha world. And I have learned that if you are passionate enough and manic enough and keep pushing forward with it, it will happen and it has succeeded and thanks for being so brave and I just, I know I'm going to put a plug in here for Te Ara Māori but this is how we do things. When we speak, no one is to interrupt, if you do you are tramping on the mana of the person who is speaking and so it's all about respect and understanding that everybody comes from a different perspective and allowing them to express themselves without being trampled all over. So, Thank you.

Francie

Kia Ora, it's actually quite true that the handing around of the stick (the microphone) so everybody gets a chance to speak and while they are speaking, that is it. No one else speaks. So, it's been an awesome opportunity. For me today has been an eye opener on looking at how many Kaitiaki people out there who are looking after our Mahinga Kai, looking after our environment, looking after the future of these beautiful children here and their children. So, in hearing the wisdom coming out of their voices, out of their mouths so that's just great. So, the future isn't lost, between us all and being the last person to speak, between us all, we can do this, we can actually manage to do this.

Karakia Whakamutunga***Louise:***

We began according to Tikanga Māori so we need to end the Māori way as well.

We started with a Karakia so we will end with a Karakia.

Me inoi tātou :

E te Atua

Manaakitia a mātou i tēnei wā

Arahina mātou i tēnei wā ki te wā tūturu mō te Ao Māori

Hei oranga mō mātou Iwi, mō mātou katoa.

Amine