

UNDER

the Resource Management Act 1991
(the RMA)

IN THE MATTER OF

various applications to take and use
water for the purpose of irrigation in the
Upper Waitaki catchment

AND

IN THE MATTER OF

a submission by Te Rūnanga o Ngāi
Tahu

STATEMENT OF EVIDENCE OF MANDY WAAKA-HOME

Mihimihi - Introduction

Ko Aoraki te mauka teitei

Aoraki the lofty mountain

Ko Tarahaoa te Mauka

Tarahaoa is the Mountain

Ko Orari te Awa

Orari is the River

Ko Huirapa te Takata

Huirapa is the Ancestor

Ko Te Hawea, Rapuwai, Waitaha, Kāti Mamoe me Kāi Tahu te iwi

These are my tribal affiliations

Ko Te Waiateruati te Pā Tawhito

Te Waiateruati is the Ancient Fort

Ko Arowhenua me Waihao taku tupuna marae

Arowhenua and Waihao are my marae

Ko Te Hapa o Niu Tireni te Whare nō Arowhenua

Te Hapa o Niu Tireni is the name of my meeting house at Arowhenua

Ko Arowhenua te Whenua

Arowhenua is the Land

No Oamaru me Te Umu Kaha ahau

I am from Oamaru and Temuka

Ko Francese Irihapeti Mandy Waaka-Home taku ikoa

Francese Irihapeti Mandy Waaka-Home is my name

Tēnei te mihi mahana ki a koutou

Warm greetings to you all

Introduction - Kaitiakitanga

1. My name is Mandy Waaka-Home and I whakapapa to numerous Ngāi Tahu hapū and today I speak on behalf of Kāti Huirapa with the unconditional support of Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, Te Rūnanga o Moeraki and Te Rūnanga o Ngāi Tahu.
2. My taua (great-grandmother) Tautau was born at the Te Ao Mārama settlement during the heke led by Te Maiharoa into the high country. Taua Tautau married Teone Te Kahu, the son of Taare Wetere Te Kahu and Pirihera Kuku. My taua (grandmother) Lavinia married Tupae Reihana and they lived at Te Umu Kaha (Temuka). My mum was brought up by Taua Tautau at Glenavy when her mother passed away.
3. Like my mother, her mother and her mother's mother before her, I have inherited the role of kaitiaki of the Waitaki catchment. Being a kaitiaki is a significant responsibility; it is much more than being merely a passive guardian of natural resources. It requires a hands on and proactive approach to ensure our mahika kai is safeguarded and restored. I take my kaitiaki responsibilities extremely seriously. As an inherited responsibility it is not something that can be disregarded. I am passionate to ensure that our tāonga and other natural resources are passed on in as good a state, if not better, to the generations that follow, and that our care and endeavours today respect the beliefs, practices and the intentions of our Tīpuna.

4. Traditionally, kaitiakitanga incorporated guardian spirits who communicated with the living world to warn of the danger to the mauri and the mātauraka (training and knowledge) and also herald the times and limits of harvest seasons. Sometimes kaitiaki were manifested through guardian animals, birds, fish or taniwha. Kaitiaki were people with the mātauraka to interpret signs in the environment, such as environmental indicator species or natural events that were utilised to understand the changing ecology. They were monitors of resource health and wellbeing.
5. While the same principles still apply today, it has been necessary for the role of kaitiaki to evolve in order to cope with the intense demands that are being placed upon our natural resources. In modern times, and particularly under the Resource Management Act, the duties associated with kaitiakitanga include:
 - a. Restoring and rehabilitating our degraded mahika kai sites;
 - b. Assessing the cultural implications of proposed developments, including preparing cultural impact assessments;
 - c. Lodging submissions and presenting evidence on resource consent applications and plan development processes; and
 - d. Forming constructive relationships with environmental agencies such as councils, DoC and Fish and Game.
6. It is important to reemphasise that while the role of kaitiaki has evolved to accommodate contemporary resource management processes, we are still guided and remain true to our cultural foundations based on mauri and mātauraka. Fortunately for those of us mandated as kaitiaki we are more empowered now to express our cultural beliefs, values, activities and associations as it is **our relationship** that is important under the RMA and not simply more easily identifiable tangible aspects.
7. My involvement today is an example of my kaitiaki responsibilities. Other examples of kaitiaki initiatives I have been involved with include:
 - a. Since 1994 I have been involved with the numerous resource consent applications affecting the Waitaki catchment, including Project Aqua, the North Bank Tunnel Concept and the Hunter Downs Irrigation Scheme;

- b. From 2000 to today I have been a member of the Aoraki Canterbury Conservation Board;
 - c. I am the present chair of the Manuhaea Land Trust, which involves the management of our ancestral lands at Lake Hawea that were returned to the descendants of the original Manuhaea Native Reserve landowners;
 - d. From 2002 to today I have been a member of the Waitaki Native Fish Trap and Transfer Committee;
 - e. Since the early 1990s, I have been a member of the Roopū Kaitiaki DoC Rūnanga working party;
 - f. From its inception in 2004 I have been a past chair and current member of the Ngāi Tahu Māori Rock Art Trust;
 - g. From 2007 to today I have been a member of the Orari–Rangitata Mātaitai Committee;
 - h. In 2007 I was appointed by the Minister of Fisheries to be a tangata tiaki (customary fisheries officer) from the Rakaia to the Waitaki;
 - i. Since 2000, I have been the report writer for the Ngāi Tahu Land Tenure team for the pastoral leases between the Rakaia and the Waitaki; and
 - j. Since 2007, I have been employed as the Marae manager for Arowhenua Marae.
8. I was disturbed to learn that, in the cultural evidence presented on behalf of Southdown, Five Rivers and Killermont Station, Mr Buddy Mikaere commented that there are no Māori communities in the Waitaki and that Ngāi Tahu does not have a physical presence there. Such a statement offends me and shows a complete lack of understanding of our relationship with the Waitaki catchment. Because of the temperate climate and the seasonal availability of mahika kai, our Tīpuna maintained a relationship with the Upper Waitaki based on a cycle of continual visitation and usage. Our relationship with the Upper Waitaki is the same today as it was then.
9. Ever since I was a little girl, I have spent many years in the hinterland of the Upper Waitaki and Te Manahuna (the Mackenzie Basin). Every year my whānau and I go on numerous trips up to the high country to enjoy the landscape and spend time with one another. My daughter and mokopuna who are present here today have

accompanied me on many of these hīkoi. During our hīkoi, I always keep an eye on the cultural health of the catchment and it is my responsibility to pass on my knowledge to them so that they will one day take over my kaitiaki responsibilities.

10. I am extremely proud of our history with the Upper Waitaki and Te Manahuna. In the same vein as my Tīpuna, I enjoy a relationship with the catchment based on regular visits to the hinterland. Historically, the Waitaki Catchment sustained over 160 kaika. While the permanent settlements were mainly found at the river mouth, the majority of sites were used on a seasonal and temporary basis by whānau and hapū. We gathered food and resources at different locations in the valley and at different times of year so as to relieve harvesting pressure at particular locations. We continue to maintain this pattern of cultural use. The Upper Waitaki continues to be a place where my family feel especially empowered and connected. It is our place in the world, our home, Te Ao Mārama.

11. I am also particularly proud of our efforts to restore mahika kai in the Upper Waitaki. As I will explain shortly, many Ngāi Tahu people, especially my late cousin Kelly Davis, have spent many tireless years working towards restoring our mahika kai. Despite the enormous impacts that have resulted from the hydro development, we feel we are making some genuine progress towards restoring our mahika kai. I do not want to see our efforts undone by a short sighted and unsustainable quest to intensify the area's productive capacity.

Scope of Evidence

12. My evidence will outline:

- a. Our aspirations for the Waitaki catchment;
- b. The significance of Longfin Eel (tuna) to Ngāi Tahu, their unique lifecycle, the decline in the tuna population and the urgent need for restoration;
- c. The reasons why we have been restoring the Ahuriri Delta as a habitat for tuna;
- d. The strategic importance of the Lower Takapo River and the Haldon Arm of Lake Benmore for restoring tuna in the Upper Waitaki; and
- e. The impacts that the irrigation proposals will have on our aspirations to restore mahika kai in the Upper Waitaki.

Aspirations for the Waitaki Catchment

13. Our aspiration for the Waitaki is to continue to preserve our relationship with our ancestral river – Ko Waitaki te awa - and to enhance our use of the catchment, including its many rivers, lakes and wetlands. Engagement and interaction is central to realising this aspiration and more importantly to continue the generation and use of our mātauraka.

14. Engagement will be encouraged by:

- Protecting the cultural health of rivers, lakes, streams and taonga valued by Ngāi Tahu Whānui. An essential ingredient of this aspiration is the protection of the high water quality of the Upper Waitaki, which is most visibly represented by different water bodies in the catchment having distinctive vibrant blue colours;
- Facilitating the restoration of a network of mahika kai sites from the mountains to the sea. While in the past, we have been forced to watch as rivers such as the Pukaki, Upper Takapo, Lower Ohau and a myriad of wetlands have been drained, we have never before faced a serious threat to the water quality of the upper catchment. Without clean water, our aspirations will be unachievable;
- Continuing the protection of rock art which requires us to avoid the risk of creating microclimates that could undermine our restoration initiatives;
- Continuing to record and make available to whānau information about the Waitaki;
- Continuing to promote the protection of the Ahuriri as a relatively unmodified braided river habitat and “remnant” of the old Waitaki headwater streams (Takapo, Pukaki, Ohau) that were dewatered or modified by development; and
- Continuing to develop positive relationships with communities in the catchment and with river users to more effectively balance the use, development and protection of Waitaki catchment resources. We believe that inequalities in the past meant that our cultural associations were marginalised or at worst ignored. Opportunities to address this imbalance and develop constructive collaborative relationships will be explored.

15. We want Kāi Tahu Whānui to know their awa (river) and to be proud to say “Ko Aoraki te mauka, Ko Waitaki te awa, Ko Kāi Tahu te iwi”.

Tuna - Longfin Eel

16. Tuna are of immense spiritual significance to us and are recorded in many Ngāi Tahu traditions and tribal whakapapa. The following whakataukī (proverb) is well known amongst Ngāi Tahu:

Kia hiwa rā, Kia hiwa rā
Moe araara ki te matahi tuna
Moe araara ki te matahi taua
Kia hiwa rā, Kia hiwa rā

Be watchful, be watchful
Lest you sleep and miss the eels
Lest you sleep and miss the war party
Be watchful, be watchful

17. Tuna more so than any other mahika kai played a vital role in our traditional, social and economic relationships. Tuna provided my Tīpuna with the rich dietary sustenance required to move around the island. My Tīpuna harvested different types of tuna at specific points along the Waitaki and Ahuriri Rivers on their inland hīkoi.

18. Tuna are harvested from rivers, lakes and streams mainly by use of hinaki (eel trap/net). Once tuna are caught they are processed using the pawhara method of splitting, hanging and drying. Tuna are bled from their tails, then hung and dried, before removing the head, back-bone and internal organs for final preparation of the flesh ready for consumption or storage.

19. The different maraes of Ngāi Tahu are known for their unique mahika kai, such as the titi (muttonbirds) of Murihiku (Southland), the tuaki (cockles) of Ōtākou and the kaimoana (seafood) of Kaikōura. We are renowned for our tuna, and in particular those from the Waitaki catchment. Tuna from the Waitaki catchment provide a valuable, reliable and sort after food source for us, as well as those who come to visit. Over the generations manuhiri (visitors) have come to expect a feed of tuna, and this is important for our mana as tangata whenua.

20. The unique lifecycle of tuna makes it particularly susceptible to human induced threats such as commercial fishing, hydro electricity dams and habitat loss and degradation. For numerous decades, tuna live in rivers, lakes and wetlands before beginning their whaka heke (migration) to the tropical Pacific to spawn and die. It is vital to appreciate that tuna breed only once in their life, thereby making the whaka heke critical to the sustainability of the species.
21. Before tuna begin their 5000 kilometre whaka heke, they change their shape and become more streamlined. Their eyes enlarge, probably in order to see better in the dim light of the ocean depths. Sex organs grow and fat reserves diminish. It is believed tuna do not feed during their whaka heke to the Pacific trenches.
22. Once tuna reach their destination, the wahine tuna lay millions of eggs and die. The larvae look nothing like an eel – they are transparent, flat and leaf-shaped. The larvae reach New Zealand by drifting on ocean currents. Before entering freshwater, the larvae change into a more familiar eel shape. These tiny glass eels enter freshwater between July and November each year. It is believed that glass eels select their river based on scent. Therefore the mauri of the Waitaki is critical to the ongoing recruitment of tuna. The reduction of flow and the degradation of water quality will have a significant impact upon tuna recruitment.
23. I will now play for you the Longfin Eel DVD, produced by the University of Otago, which describes the unique lifecycle of tuna. I believe this will be useful background information for you when considering the impacts of the irrigation proposals upon our aspirations to restore tuna in the Upper Waitaki catchment.
24. The Upper Waitaki catchment was a particularly significant area for the seasonal harvesting of mahika kai. There are numerous traditional mahika kai sites dotted throughout the Upper Waitaki. The beauty of the Upper Waitaki was that it provided a network of backwaters, streams and wetlands where the slow moving nature of the water made it an ideal habitat for tuna. It was also much safer to gather kai in the backwaters than the deeper and swifter waters of the mainstem.

24. Prior to hydro development and commercial eeling, the Upper Waitaki catchment sustained an abundant and productive freshwater fishery. I am aware, for example, that in the 1940s a large number of whānau from Waihao and Arowhenua travelled by horse and cart, walking and biking up to Lake Takapo, Pukaki and Ohau to harvest tuna to send over to the 28th Māori Battalion in Europe, returning with 140 tonne for their efforts. Unfortunately, now days with our trap and transfer project, over a period of 6 months we only trap a small number of migrating tuna to bring down below the dams for their whaka heke to breed.

25. The importance of the Upper Waitaki tuna fishery is recorded in the Statutory Acknowledgements for both Te Ao Mārama (Lake Benmore) and Lake Ohau. The Statutory Acknowledgement for Te Ao Mārama (Lake Benmore) states:

An important and productive fishery exists in the lake, with the Haldon and Ahuriri arms once rich in long finned eels, although in more recent times the fishery has been depleted.

26. The South Canterbury/Waitaki Eel Management Plan states that the Upper Waitaki catchment was:

Traditionally a good fishery but in severe decline through lack of recruitment. [page 87]

27. The Eel Management Plan also states that the:

Lakes in the upper catchment have huge enhancement potential. [page 87]

28. Not only are there far fewer tuna in the Upper Waitaki catchment, but the size of those still there is considerably smaller than they used to be. Commercial catch records show that tuna being caught are getting smaller, and most are in the lowest size category (220 – 500 grams). Very few large tuna are now seen anywhere.

29. In addition to the reduction in size, there are also considerably fewer wahine tuna than tāne tuna. Regularly fished rivers show that there are up to 100 male Longfin eels for every 1 – 2 females.¹

30. The main causes for the decline of tuna in the Upper Waitaki are:

- a. The construction of the hydro dams and lakes, which prevent migration and recruitment. Although tuna are capable climbers, the hydro dams are generally too large for elver to climb. The power turbines are also responsible for the death of many mature tuna during their whaka heke;
- b. Commercial eeling began in the 1960s and peaked in the mid 1970s (approximately 2,500 tonnes). The subsequent decline in tuna prompted the Ministry of Fisheries to introduce measures to attempt to ensure that commercial eeling was sustainable. A quota management system for both Longfin and Shortfin was introduced in the South Island in 2000, and in 2005 some rivers were declared off limits to commercial eelers. Unfortunately, these measures have been too little too late.²

31. A further threat for tuna in the Upper Waitaki is the loss and degradation of their preferred habitat. Wetland drainage, water abstractions and declining water quality are all contributing to an overall reduction in suitable tuna habitat.

32. On a broader scale, it is important to be aware that the New Zealand Threat Classification System (2005)³ lists Longfin Eels as being in “gradual decline (human induced)”. I am also aware that there is a mounting call for a complete ban/moratorium on commercial fishing of Longfin until stock numbers begin to replenish.

33. We are committed to restoring tuna throughout the Upper Waitaki catchment. Over the years we have worked closely with key agencies such as the Ministry of Fisheries, Meridian, the Department of Conservation, NIWA, the regional council and commercial eel fishers to promote restoration. Examples include the Meridian

¹ Refer to the recent article in the Forest & Bird magazine, Issue 334, November 2009, page 50 – 52.

² *Ibid*

³ Hitchmough, R., Bull, L. and Cromarty, P. (Compilers) (2007). New Zealand Threat Classification System lists 2005. Department of Conservation, Wellington, New Zealand.

Trap and Transfer programme and the closure to commercial fishing of areas identified as significant Longfin habitat.

The Ahuriri Delta

34. In this section of my evidence I will explain our efforts to restore tuna at the Ahuriri Delta.

35. During the development of the South Canterbury/Waitaki Eel Management Plan, we identified the Ahuriri Delta as an area that we wanted to restore as a mahika kai. The Plan identifies the Ahuriri Arm of Lake Benmore as a “potential exclusive customary fishing area” [page 24].



36. The reasons we identified the Ahuriri Delta as an area to restore tuna and as an exclusive customary fishing area were:

- The Ahuriri River is a traditional mahika kai famous for its tuna. It was used by our Tīpuna on their inland journeys and on their seasonal mahika kai expeditions. In particular, the Ahuriri River was an important mahika kai for the settlement established by Te Maiharoa and occupied in protest of the Crown

asserting ownership of the Canterbury and Otago high country, Te Ao Mārama. We want to restore this traditional mahika kai site;

- Ecologically speaking, the Delta is an ideal site to restore tuna because of its diverse network of habitat ideal for both juvenile and adult tuna, including slow moving meandering riffles, wetlands and pools;
- It is in close proximity to the Omarama Stream, which is considered an ideal nursery for elver and into which elver are released as a part of the trap and transfer programme;
- There is potential to enhance the area by undertaking removal of crack willows and the replanting of appropriate native riparian species such as raupō (bulrush), harakeke (flax) and podocarp;
- The Ahuriri River has a Water Conservation Order, which provides safeguards in respect of both water quality and quantity;
- The Ahuriri Delta is an ideal location to harvest tuna before they enter Te Ao Mārama (Lake Benmore); and
- There is the ability to obtain exclusive Ngāi Tahu access via Ben Omar Station.

37. We have undertaken many measures to restore the Ahuriri Delta for mahika kai. Amongst these, we knew we had to close the area to commercial eeling. Initially, we worked with the commercial eelers to implement a voluntary closure of commercial eeling in the Ahuriri Arm of Lake Benmore. Unfortunately, this approach proved to be unsuccessful. In 2004, we successfully applied to the Minister of Fisheries to stop commercial eeling in the Ahuriri Arm of Lake Benmore.

38. The Minister accepted that the proposal to prohibit commercial eeling in the Ahuriri Arm of Lake Benmore will:

...give effect to recognising and providing for the use and management practices of tangata whenua in the exercise of their non-commercial fishing rights as required by s10 of the Settlement Act.⁴

39. The Minister amended section 11Q of the Fisheries (South-East Area Commercial Fishing) Regulations 1986 to read:

⁴ Ministry of Fisheries, Review of Sustainability Measures and Other Management Controls for the 2004-05 (01 October) Fishing Year, Final Advice Paper, 3 September 2004.

No commercial fisher may—

(a) take eels from—

(i) the waters of the Ahuriri Arm of Lake Benmore, extending westward of a line drawn northeast from Turnagain Point to the south-westernmost part of the Peninsula lying to the north and east of Turnagain Island, including any river or stream or their tributaries that flow into that Arm;

40. This was a significant achievement for us as restoration of the Ahuriri Delta would not have been possible whilst commercial eeling was taking place.

41. The next significant measure to restore tuna in the Ahuriri Delta was to reseed the tributaries of the Ahuriri River with elver, many of which will eventually make their way to the Delta. For example, between November 2008 and March 2009, 75 kg of elver, both Longfin and Shortfin, were released into the Omarama, Quailburn, Henburn and Willowburn Steams, which are kōhanga (nurseries). This amounts to the release of approximately 16,000 elver into the Ahuriri River catchment. This exercise takes place annually.

42. We have also established a good working relationship with Ginger Anderson, the owner of Ben Omar Station. We now have physical access to the Delta through his farm. Ginger's family has farmed in the area for many generations and, as a child, he can recall huge eels being taken out of the Ahuriri River. He is very supportive of our aspirations to restore tuna in the Ahuriri Delta and as a result Ginger has declined commercial eelers access through his property.

43. We feel that, although restoration of the tuna population in the Upper Waitaki catchment, in particular the Ahuriri Delta, is a long term goal, we have already achieved a great deal in a relatively short time. Having said this, it is important to emphasise that the cultural health of the Ahuriri Delta is already under significant strain. In her ecological assessment, Di Robertson stated that the recent establishment of lagarosiphon and didymo have affected the aquatic habitat of the Ahuriri Delta and that these species are likely to increase in biomass as a result of increasing nutrient levels. Di Robertson also states that nutrient levels at the Delta

already appear to be increasing as a result of existing irrigation in the catchment. Siltation is also identified as a factor that is reducing the habitat values of the Delta.

44. From our point of view, the Ahuriri Delta is at a tipping point. If there were to be an increase in nutrients entering the Delta above existing levels, then the cultural health of this significant site will decline dramatically. This will result in the area becoming useless for mahika kai restoration. For us, this means that all of our hard work will amount to nothing.

The Haldon Arm and the Lower Takapo River

45. In this section of my evidence, I will explain why it is important for us that the Haldon Arm of Lake Benmore and the Lower Takapo River are not degraded.

46. The Haldon Arm and the Lower Takapo River are strategic locations from which to trap tuna on their whaka heke. The Haldon Arm and the Lower Takapo River are the reciprocals for all migratory eels from Lakes Pukaki and Takapo. They provide an ideal habitat to trap tuna before they enter the depths of Te Ao Mārama (Lake Benmore) and before they encounter the hazards of the power turbines and dams of Mahi Tikumu (Lake Aviemore) and Lake Waitaki.

47. Between October and April, a small group of us spend a week in the upper catchment, including the Haldon Arm, trapping tuna as a part of the Meridian Trap and Transfer programme. We have done this for the past 8 years. During the course of a week, up to 30 tuna are trapped, not all of which are sexually mature. To do this, we use fyke nets, which are large hoop nets with funnels to catch swimming fish. Eels are measured and weighed and identified as to whether or not they are sexually mature. They are then put into holding tanks until they are released below the Waitaki Dam. This is the only way that we are able to ensure that mature tuna can leave the Waitaki River hydro scheme area to breed.

48. Unfortunately, in recent times the number of tuna trapped in the catchment has reduced. Sometimes, over the course of the week, we only trap 10 or less tuna. This is likely due to the significant decline in recruitment that resulted from the construction of the Waitaki hydro scheme and the impact of commercial eeling.

49. It is extremely important for us and the future of the Trap and Transfer programme that the catchment remains in a healthy condition. Our ability to successfully trap tuna and the reproductive capacity of those tuna that are caught and released down below the Waitaki dam will be significantly affected by any decline in water quality that may result from these proposals.

Impacts of irrigation

50. This section of my evidence describes some of the effects upon our values that will be likely to occur if the large scale irrigation proposals go ahead.

51. As Di Robertson has already explained, both the Ahuriri Delta and the Haldon Arm/Lower Takapo River will come under intense pressure if these large scale irrigation proposals go ahead. Both of these locations will receive the sum total of all of the nutrients and phosphorous discharged from the proposed dairy farms before they enter Te Ao Mārama (Lake Benmore).

52. The Ahuriri Delta will be the receiving environment for the nutrients and phosphorous being discharged from the following three applicants:

- Southdown Holdings Limited (Glen Eyrie Downs Station, Ohau Downs Station and Shelton Downs Station) proposal to irrigate 2,500 hectares;
- Southdown Holdings Limited (Killermont Station) proposal to irrigate 1,100 hectares; and
- Five Rivers Limited (Ohau Downs Station) proposal to irrigate 1,500 hectares.

53. Collectively, these three applications are seeking to establish 16 separate stand alone dairy farms with a total of 17,850 cows, producing a combined volume of 1.7 million litres of diluted dairy effluent per day. The applicants are proposing to house the cows in cubicle stables for 8 months of the year and 50% of the remaining 4 months. The effluent will be collected, stored in ponds and applied to land via centre pivot irrigation. This is to be contrasted with continental dairy farming in Europe, where, as I understand it, the effluent is collected and burnt in furnaces⁵.

⁵ Comment made by a farmer irrigating a dairy farm with water extracted from the Lower Waitaki.

54. I am aware that these applicants have prepared farm environmental management plans, which set nutrient and phosphorous caps for each station. The applicants have set water quality targets for Te Ao Mārama (Lake Benmore), but in order to meet these, there must in fact be a reduction in nutrient and phosphorous discharges below present levels. I am at a loss to see how this can happen when it is proposed to convert a further 5,000 plus hectares to intensive dairy farming.
55. I am extremely concerned that, if the Southdown/Five Rivers consents are granted, then the water quality of the surrounding waterways, especially the Ahuriri Delta, will decline substantially. My observation over many years is that tuna chase good water quality and habitats rich in suitable food resources such as insect larvae, worms and water snails. A decline in water quality at the Ahuriri Delta, with the potential for toxic algal blooms, will make it an undesirable tuna habitat. It is my opinion that there are already so many human induced obstacles facing the survival of tuna in the Upper Waitaki catchment that we cannot afford to impose any more.
56. Degraded water quality in the Ahuriri Delta will destroy our aspirations to restore tuna there. While tuna may still be able to survive and grow there, harvesting them will be out of the question. From our point of view, water should be clean enough to eat from and it is offensive to gather food from areas in a polluted or degraded state, particularly one degraded by effluent. We know from past experiences that tuna living in nutrient rich habitats become unfit for harvesting because they smell and taste like tutae (effluent). I would be embarrassed to serve manuhiri (guests) at my marae tuna that smell and taste like cow shit. This is nothing but offensive.
57. The Simons Hill and Simons Pass applications are of a similar scale as the Southdown and Five Rivers proposals. They are proposing to irrigate a total of 4,800 hectares and, depending upon the form of farming they ultimately decide to undertake, are likely to produce a similar volume of contaminants as Southdown/Fiver Rivers.
58. During our consultation with Simons Hill and Simons Pass, we were advised that the Haldon Arm of Lake Benmore has a greater ability to absorb nutrients than the

Ahuriri Delta. While this may be the case, we are concerned that the nutrients from the Simons Hill and Simons Pass operations will re-emerge from groundwater into surface water before entering the lake. If this occurs, then there will be a significant decline in the water quality of the Lower Takapo River, with the possibility of toxic algal blooms during summer months. As already mentioned, this will have a serious effect upon our ongoing ability to trap migratory tuna before they enter the lake. If this happens then the future of the Trap and Transfer programme will be put in jeopardy. This would be a major blow to our efforts to restore the Waitaki Longfin Eel population to a sustainable level.

59. Finally, many of our whānau have been forced to “get up to speed” with the issue of non point source pollution. Given the lag time between commencing an activity and causing the effect, observing an effect, and then experiencing the full brunt of that effect we have no confidence in the ability of monitoring to be effective in enabling meaningful changes to be implemented. We have been told of examples where today we are experiencing the effects of land use and management actions from decades ago. If this is the case, how can we be asked to sacrifice or put at risk our relationship with our ancestral waters when we know that we are all working to different time scales? In other words we do not have confidence in mechanisms such as farms plans, monitoring programmes and consent reviews to address the issues that we raise and more importantly protect our cultural relationship with our ancestral waters and taonga.

Conclusion

60. In my evidence today, I have focused on our aspirations to restore tuna in the Upper Waitaki catchment. This is a tangible and realistic goal for us. Many of our other mahika kai species have already been lost or access restricted. We still have access to the tuna resource. Eels are a key part of our relationship with this catchment. We want to protect our relationship with this taonga, which enables us to continue to generate mātauraka which only comes from our “hands on relationship” working with our taonga. We need to maintain our ability to visit, to restore this resource, to retain and generate mātauraka, and when it is sustainable and healthy to gather and use it as our Tīpuna did.

61. Hopefully by focusing on tuna, we have given an example of how a species forms a fundamental component of our relationship, and in turn how this relationship reinforces identity and connections that are fundamental to the cultural wellbeing of our whānau, hapū and iwi.
62. The cultural implications of these large scale irrigation proposals cannot be overstated. We have an intergenerational relationship with the Waitaki that endures. We have aspirations to restore a network of our mahika kai sites in the Waitaki catchment, from the mountains to the sea - ki uta ki tai. To achieve our aspirations, we have spent an enormous amount of time, energy and resources, over many years, on restoration initiatives. A prime example of this is the efforts that we have made to protect and restore tuna at the Ahuriri Delta.
63. An underlying prerequisite to achieve our aspirations is to ensure the water quality of the Upper Waitaki catchment is maintained in a healthy cultural condition. Clean water is essential for the maintenance of the mauri and the life supporting capacity of the rivers, lakes, wetlands and lagoons. It is also essential in terms of providing for the health and safety of our people while gathering kai and carrying out restoration initiatives such as the Trap and Transfer programme.
64. We do not believe we should have to suffer the indignity of gathering and eating food from an environment that is knowingly polluted. And more so, to have to pass this on to our manuhiri (visitors) and mokopuna (grandchildren). There is no mana in that.
65. Although we have focused our evidence on the Upper Waitaki, the health and vitality of the Upper Catchment is essential to sustaining the health of the downstream reaches.
66. Ngāi Tahu is not satisfied that irrigation schemes of the scale as those being proposed by Southdown, Fiver Rivers, Killermont, Simons Hill and Simons Pass will be able to operate in a benign manner. To the contrary, we believe that, if granted, the consents will result in an accelerated process of degradation of the cultural health of the Upper Waitaki catchment.

67. I started my evidence by stating that I am a kaitiaki for the Waitaki system. While many of our Tīpuna experienced losses in the Waitaki, as a Kaitiaki, with guidance from our kaumātua, we have been gradually restoring and reaffirming fundamental components of our relationship with the catchment. We have lost many of the people that started this journey and were the teachers for my generation but we have three generations represented here today. To repeat, we have an enduring intergenerational relationship with the Waitaki that we want to see protected.

68. We urge you to bear the potentially severe cultural impacts of the irrigation proposals at the forefront of your mind when deliberating on these applications.