

TO: THE BOARD OF INQUIRY
HAUAURU MA RAKI WIND FARM PROPOSAL

IN THE MATTER OF the Resource Management Act

AND

IN THE MATTER OF resource consent applications by Contact Wind Limited in respect of the Hauauru Ma Raki Wind Farm Proposal

AND

IN THE MATTER OF Notices of Requirement and a Resource Consent application by Contact Energy Ltd for transmission infrastructure related to the Wind Farm Proposal

EVIDENCE OF MALIBU MICHAEL HAMILTON

INTRODUCTION

1. My name is Malibu Michael Hamilton. I was born in Kawhia and have lived in Whaingaroa for 16 years and have surfed the Whaingaroa coastline since the early sixties. I whakapapa to Ngati Koata, Ngati Te Weehi, Ngati Mahuta and Ngati Maniapoto. I have a Bachelor's Degree in Iwi Environmental Management. I have been asked by Tainui Awhiro Hapu environmental spokesperson to undertake an analysis of certain documents that form part of the proposal before the Board of Inquiry.
2. I base my ability to complete this analysis on 12 years active involvement in environmental management matters in Whaingaroa and Hamilton and other places. I confirm that I have researched the background to many resource consents and completed research pertaining to land use planning issues to assist tangata whenua. In addition I process resource consents for Te Kotuku Whenua, Ngati Wairere Hapu and community organisations and participate in local authority hearings and hui have appeared in the Environment Court.

STRUCTURE AND SCOPE OF EVIDENCE

3. My evidence will cover the following matters:
 - a) Contact's Strategic plan – Mr. Geoghegan
 - b) Water abstraction and water take- Mr. Millais
 - c) The impacts of associated earthworks and sedimentation
 - d) Effects on landscape and visual amenity- Mr. Lister
 - e) Ecological effects -Mr. Kessels
 - f) Offset mitigation – Mr. Tonks
 - g) Statutory Provisions
 - h) Other matters
 - i) Summary
 - j) Conclusion

CONTACT'S STRATEGIC PLAN

4. Mr Geoghegan's evidence (para 26) states "*that in Contact's view the cheapest plants should be built first*" and also that "*the Company's objectives have to be focussed around available resources and potential sites for development.*" Plus, in para 48 he further adds that "*there is an effective cap on the percentage of electricity that can be generated from wind.*"
5. Since the cap on wind generation there has been a gold rush mentality by generators to claim the optimum sites. The Wind Energy website shows that to date there is eight operating or in construction¹ with approximately 20 to 22 more being proposed including Hauauru ma raki.²

¹ <http://windenergy.org.nz/nz-wind-farms/operating-wind-farms>

²<http://windenergy.org.nz/nz-wind-farms/proposed-wind-farm>

6. Many have had wide opposition. Maori have also been in opposition stating that some windfarm activities do impact on wahi tapu and wahi whakahirahira (sites of significance).
7. Jessica Graham (Graham J. et al 2008) states that “*Although the public generally hold positive attitudes towards wind energy, proposals for the construction of new wind farms are often met with strong resistance. In New Zealand, where the government has recently introduced ambitious policy targets for renewable energy generation, negative perceptions of wind farms are increasingly evident and have the potential to prevent the achievement of these targets.*”³
8. The Hauauru ma raki proposal may be the *cheapest* and it may *fit* Contacts objectives but; the economic benefit for Contact must be balanced against the adverse effects that the proposal will produce. The proposal also has to meet the gateway tests within section 104.D and sec 104 RMA 91.

WATER ABSTRACTION AND WATER TAKE

9. Mr Millais in his evidence at para 8 states that: “*the proposed water sources are four streams within the HMR wind farm project area, with a combined available flow of 373 cubic metres per day, supplemented by storage dams that will be fed by abstraction from streams and from harvested surface runoff. A spring has been identified that will be used as the potable water source.*”
10. Further in para 10 he states that it is “---**unlikely** that all four streams will be in use throughout the construction period.”
11. Furthermore in para 14 he states “*The peak demand for the project, discussed below, is now considered to be greater than that outlined in my Water Supply Assessment, and as a result my evidence varies in some respects from the recommendations in that Assessment. In particular, it is now proposed to use storage ponds (described*

³ Public perceptions of wind energy developments: Case studies from New Zealand- Jessica B. Graham^a, Janet R. Stephenson^b, and Inga J. Smith^a 2008 http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V2W-4VKMWBG-2&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&_view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=05ce97736c255a470038075b2e148677

further at paragraphs 51 to 63 below) rather than tankered water from the Waikato River to meet the project water demand during drought conditions”.

12. Tainui Awhiro is concerned that the use of the word “unlikely” is not specific nor does it engender confidence that all four streams will not be used during the construction period. Tainui Awhiro also has concerns that the applicant may find itself in a position where it does need to take a contingency approach in extreme dry periods and that it will undertake water abstraction from the Waikato and Waingaro river systems. At that stage it would be too late for Tainui Awhiro and submitters or the Board to contribute to a fair and robust process on the merits or adverse effects of such a case.
13. Much reliance is placed on several calculations that could impact on the streams and waterways. The applicant is dewatering the streams at a rate that has caused them to be seriously concerned of the allocable flow to the point that is having to measure the use on a daily basis while abstraction takes place; utilising the parameters set out in the evidence of Mr. Millais in para 48.
14. Also in para 49 he goes on to state *“In order to ensure that correlation errors do not result in accidental dewatering of the streams, I recommend that stream flows be gauged at 2- weekly intervals while the flow of the Naike Stream at Kaawa School Road is equal to or less than the 61 litres per second mean annual low flow. **If there is more than 20% difference from that expected on the basis of previous correlation, then the correlation will be adjusted accordingly, I expect that this would be taken into account at the 2-yearly review of consent conditions”.***
15. Tainui Awhiro argue that waiting till a two yearly review to make necessary adjustments are far too long considering the adverse effects of miscalculations. Also of concern is the applicant has acknowledged that the water take will culminate in an increase of temperature within the streams due to the low flow by having to measure for it as a parameter as set out in para 48 of the evidence of Mr. Millais. Elevated water temperature typically decreases the level of dissolved oxygen causing harm to aquatic animals. A temperature change of even one to two degrees Celsius can cause significant changes.
16. Moreover, Mr. Millais’s recommendations in para 76 (c) are *“Abstraction from the streams will cease between the hours of 12 noon and 5 pm during times that the flow*

of the Naike Stream at Kaawa School Road is equal to or less than 61 L/s and the afternoon stream temperature is above 20 degrees Celsius.”

17. If it was not for the potential adverse effects of the above proposals; the whole scheme sounds comical. One can only imagine the applicant running to and fro from one site to the other measuring for the different effects; and one of the workers shouting out “ no it IS NOT 20 degrees and its only 12.05; I need that water”
18. The applicant is seeking consent to place the streams and waterways in a vulnerable position despite the creation of the storage dams within different catchments , in fact are relying on statics and calculations that they already have had to adjust as above in the evidence of Mr. Millais in para 14. The water take and abstraction is poised on a knife edge. For example the watertake of the Whitford Quarry spring is 100% of the flow for the duration of construction which may or not be for the period of five years.
19. Tangata whenua have traditionally utilised puna or springs for a variety of cultural purposes including spiritual cleansing and for general use and there is a potential for the Whitford Quarry spring to never recover.
20. The take does not consider other users such as farmers in extreme dry periods as the calculations have been assessed on authorised uses only. Traditionally farmers have had to use streams in extreme circumstances to protect their economic wellbeing and in this case will not be able to as the take has been fully allocated and used.
21. Tainui Awhiro argues that the water take will cause adverse effects and that the rate of use is the tipping point and is not sustainable and does not meet the test in section 5 RMA 91.
22. The coastal zone makes up only 10% of the oceanic environment, but it contains 90% of all marine species. Coastal zones are the most nutrient-rich life zones of the oceans. The **cumulative** effect of multiple water take results in lower water flows in streams, thereby causing reduced assimilation of wastes, increased temperature and nutrient levels, reduced oxygen levels, and modification of aquatic habitats.

23. Ground water is an integral part of the water cycle. Any activity in one part has an effect on other parts (e.g. extensive use of ground water resources may reduce the flow of surface waters and cause degraded water quality and loss of stream habitat). If abstractions exceed the recharge ability, mining of the ground water resource occurs.
24. Even though only one of the streams (Waimai Stream) is classified as “Indigenous Fisheries and Fish Habitat”, Tainui Awhiro views all the streams and water ways as significant. Nationally tangata whenua view water as a taonga and have consistently sought redress or changes to practices that could impact on the mauri of the waterways. Tainui Awhiro contends that there will be significant reduction of the mauri in the waterways within the industrial windfarm operations and potentially beyond their boundaries.
25. Shaun Awatere (Awatere. S.2005) declares *“that failure to manage the environment in a sustainable manner can result in the degradation of the mauri of an ecosystem. This degradation in the mauri can cause a cascade effect resulting in the loss of a traditional food resource available to the iwi or hapu, negative health effects, and a loss of mana should an iwi or hapu be unable to provide the rich resources of their local ecosystem to visiting dignitaries and that this outcome is totally unacceptable for Māori.”*⁴
26. Of equal importance to the mauri of the streams and water ways; is the potential loss of traditional mahinga kai and mahinga mataitai customary practices. Of real concern is that this operation could place the whole area at risk of not recovering.
27. Mr. Millais in para 32 puts forward that the *“Allocable flows at each site are set by the Proposed Waikato Regional Plan (Variation N° 6 – Water Allocation) as 10% of the one in five year 7-day low flow, Q5.”* Tainui Awhiro notes that the plan is not operative.
28. While there is no issue with its use; it also prudent then that the Board turn its attention to the recognition for tangata whenua and ‘mauri’ in the policies in the Variation No -6 water allocation plan in Section 3.3.3 Policy 1 g), Policy 8 a)ix) and Policy 9 a)vii).⁵

⁴ Presentation to stormwater conference. 2005. Some indigenous issues S. Awatere (1) and W. Kapea (2)

⁵ <http://ew.govt.nz/PageFiles/10844/Var6SummaryofCommitteesdecision.pdf>

29. Those policies are just slightly strengthened versions and are very similar to the Regional and Coastal plan. Policy 1 g), *Maintenance of identified tangata whenua uses and values, including the mauri of water*. Policy 2 g) *Maintains tangata whenua uses and values*.
30. It is only a casual glance over the shoulder in time to see that the area used to support a large population of tangata whenua that valued the biodiversity of the area and actively maintained and enhanced the resources available. Decade by decade the area has been modified and changed beyond recognition, decade by decade tangata whenua have mounted active opposition and faced continuous loss of taonga species. The Board has the legislative clout and obligation to actively adjudicate in the interests of tangata whenua and the environment.
31. Also of note is that Waikaretu Stream catchment will be impacted upon by the use of the Whitford Quarry spring which will be used for potable purposes and concrete batching. In addition the Whitford spring water will be disinfected for potable water use along with a concrete batching plant as noted in the evidence of Mr. Millais in para 41.
32. The use of chlorine for disinfection of potable water is wide spread but; both activities are associated with harmful toxins that could create severe adverse effects to the aquatic life-forms within the water ways leading into the ocean.
33. There is number of batching plants spread throughout several catchments and any water that comes into contact with cement or concrete becomes strongly alkaline (pH11-13). This is deadly to aquatic life. Plants, insects and animals can be burnt or killed by high pH water. High pH substances such as slurry or concrete washwater will attack the sensitive membranes of fish and eels, including the gills and the skin, effectively burning them much the same way acid burns us.

34. Often fish and eels try to jump out of the stream to escape the burning water resulting in death by suffocation. All life in a stream can be wiped out by a concrete or cement slurry or washwater discharge, and will take years to fully recover.⁶
35. Chlorine (used in treatment of drinking water and in pool chemicals) and cleaning agents such as detergents, degreasers and disinfectants, can cause significant changes to aquatic habitats including:
- a. Destroying the sensitive membranes of fish, making them susceptible to bacteria and parasites.
 - b. Lowering the surface tension of the water, making it easier for harmful chemicals to be absorbed by fish.
 - c. Depositing extra phosphate and nitrates in the water, which encourages plant growth.
 - d. When the plants die, bacteria breaking down the plants remove oxygen from the water, making it difficult for other plants and animals to survive.
36. Tainui Awhiro have grave concerns that the concrete batching is undertaken in close proximity to waterways and only one illegal discharge to the waterways will result in significant adverse effects.

ASSOCIATED EARTHWORKS AND SEDIMENTATION

37. Tainui Awhiro reaffirms their concerns regarding many aspects of the colossal project of disturbance which covers many miles including several distinct catchments. Below are points that will need careful deliberation.
- a) Discharges from construction sites and depositing sediment in to waterways
 - b) The diverting of stormwater away from earthworks and overburden to disposal sites creates adverse effects into waterways
 - c) The diversion and fill of unnamed and named streams around the gullies and fill destroys the natural stream landscape and has the potential to destroy habit for species within that habitat.
 - d) Impacts into the waterways in construction of culverts

⁶ http://www.northshorecity.govt.nz/our_environment/Pollution_prevention/Common_pollutants.htm

- e) Volumes of earthworks including structural fill for the formation of internal roading and road works generally
- f) The depositing of overburden onto land has the potential to cause adverse effects during construction and during the period of settlement and changes the natural landscape diminishing the landscapes values
- g) Disposal of surplus earthworks cut to fill locations on site
- a) Construction of wind farm towers and buildings.
- b) Adverse effects in the surrounding landscape impacting on a pristine rural landscape destroying the surrounding natural character
- c) Earthworks within and outside of high risk erosion areas has a high potential of creating adverse effects in the locality.
- d) Roading issues relating to transporting and cost to ratepayers.
- e) The onsite disturbance due to construction and maintenance.
- f) Maintenance and replacement of all works, equipment and facilities during the life of the wind farm.
- g) Quarrying activities
- h) Aggregate for roads and concrete batching.

38. . Potential impacts of sediment include;

- a. decrease in the number of invertebrate species that are a food source to mahinga kai
- b. sediments affect the supply of food, sites for mating and egg development and damages gills and mouthparts due to its smothering effect
- c. damage to gills of fish and filter feeders
- d. decrease in water clarity; increased sediment loading into a stream will decrease water clarity and reduce visibility and the ability of fish to find food.
- e. changes to the benthic (bottom) structure of the stream/river bed; coarse substrates such as gravels and boulders are replaced/smothered by sand and silt.
- f. decrease in algae food supply; when algae, (tiny plants - a major food source for stream life) are scoured off the rocks or when light is reduced to a level where algae cannot grow.

39. While indicative draft Erosion and Sediment Control Plans have been put forward for the project; Tainui Awhiro note in the evidence of Mr. James (para 194) that the ESCPs will

be developed further with consultation with Environment Waikato only and implemented for each wind farm turbine Block. Plus each block will have a specific ESCP. Of issue is that there is no mention of or involvement of tangata whenua or hapu; and yet the effects of the earthworks are monumental.

EFFECTS ON LANDSCAPE AND VISUAL AMENITY, INCLUDING EFFECTS ON RURAL CHARACTER

40. Contact acknowledges that the proposed activity will have significant visual effects which are reflected in the evidence of Mr Lister in para 78 where he states: *“clearly the Wind Farm will result in significant change to, and will become **a defining element of, the sub-regional landscape character**”*.
41. At para 316 he further states *“the wind turbines **will be seen in counterpoint** to the underlying landscape. They will not domesticate the landscape as some other activities do but **will engage with the wind** that characterises the west”*.
42. Mr Lister’s evidence in para’s 78 and 316 are at odds and contradictory.
43. Tainui Awhiro disagrees with his comments in para 79 b that the *“area is off-the-beaten-track so that the ‘audience’ is limited”*. Moreover, in his attempt to lower the visual effect from the Whaanga coast he states *“Any ocean haze is likely to make the turbines appear grey and faint. The turbines will appear grouped in relation to the broad range of low hills with a relatively flat skyline. They will be part of the background.*
44. The visual impact from the Whaingaroa coast will be immense. The southern three groups of turbines labelled H, I and J will have a substantial impact due to the height, size and scale of each of the turbines. Those turbines will be the foreground view with many of the others in the middle ground view and create adverse effects on the natural character. The whole sweeping embayment and landforms contributes to the Whaingaroa and Whaanga coast resident’s intrinsic values and portray isolation, remoteness and an air of peacefulness. Those are the key characteristics that allow the tourist accommodation and surfboard industry outlets to exist.

45. The case *Harrison vs. Tasman District Council W42/93*, the Tribunal ruled:

*“We found the estuary presents a largely natural character with few signs of structures or human habitation at present visible from the grassed reserve to the north of the tip site when looking both inland and towards the mouth of the estuary. **The word ‘natural’ does not necessarily equate with the word “pristine” except in so far as landscape in its pristine state is probably rarer and of more value than a landscape in a natural state.** The word “natural” is a word indicating a product of nature and can include such things as pasture, exotic tree species (pine), wildlife both wild and domestic and many other things of that ilk as **opposed to man-made structures, roads, machinery, etc.**”*

46. The above case was also reaffirmed by the case *Brook Weatherwell-Johnson vs. Tasman District Council (1996) W181/96*, where Judge Kenderdine held:

*“We accept that Motupipi Hill itself is an area where the natural character has been compromised over the years by farming, mining, exotic planting and logging and it has bulldozed tracks. Mr Garland’s evidence was that it had departed further from a pristine state than any other rural land in Golden Bay. Certainly this is borne out by many of the photographs put in evidence by the appellants or witnesses to some of the past activities and their effects upon the hill. But the word “natural” does not necessarily equate with the word “pristine” as was held by the Tribunal in *Harrison vs. Tasman District*.*

47. The views from the Whaanga coast are ones that portray natural character; which those that have been produced by nature, albeit inclusive of pasture, exotic trees and domestic animals. The intrusion of any “man made” structures of this magnitude will detract from the natural character present and do not satisfy the requirements of section 6(a) of the RMA 1991.

48. The Whaingaroa coast is internationally recognised through the surfing world and host large numbers of international surfers and tourists to the extent that Whaingaroa has large numbers of tourist accommodation facilities and is dependent on tourism. There has been no evidence put forward by the applicant on the adverse economic impacts of the tourist accommodation businesses operating in the Whaanga coast or Whaingaroa. To date there has been no consultation, discussion or potential compensation for the essential tourist operators in the Whaanga coast or Whaingaroa. Contact has erred in its approach and Whaingaroa has been treated as an afterthought and yet are severely impacted upon.

49. Many international surfers comment on the fact that the area offers uninterrupted rural coastlines views; views that on clear day go to the Manukau Heads and beyond. Moreover, the industrial towers will be lit at night for navigation purposes thereby

further reducing the amenity values of Whaingaroa and Whale Bay residents. It is unreasonable to suggest that no lighting effects will take place even if the navigation lights are upward facing. Furthermore; if consent is granted, Contact could further exacerbate the adverse visual effects by applying for more turbines in the future as the precedent has been set.

50. There is the potential that the huge industrial wind towers will create adverse effects to the weather pattern which could radically affect the quality of the surf on the Whaanga coast culminating in reduced amenity values, recreational aspects and impacting on the economic income of surfboard outlets and tourist accommodation providers.

ECOLOGICAL IMPACTS

51. In the evidence of Mr. Kessles he states in para 18 that:

*“The streams where water abstraction is proposed are considered to be of a degraded nature, having moderate to poor habitat and water quality. **However, the fishery value is considered to be moderate to good as a result of the close proximity (in terms of distance, access and altitude) of the site to the ocean.**”*

52. He goes on to state in para 86.

*“Although the streams provided limited habitat, **the lower reaches of the streams are considered to have a moderate to good fishery values** as shown by the abundant inanga catches within the Kaawa Stream and Ohuka Creek during our surveys. The number of whitebaiters I have often observed at the Waikaretu and Waimai Streams also indicates a reasonable whitebait fishery within these catchments. The streams are located close to the ocean, and several species, including threatened species, have been historically recorded or are considered likely to be found within the sampled streams based on habitat preferences. At least 17 fish species are known to occur in the freshwater bodies within the study area.”*

53. Within his Exhibit GK15 are the piharau (lamprey) and short fin eel along with other species. The Piharau (Lamprey) is a taonga species for tangata whenua; they migrate up streams to spawn and can sometimes stay without feeding for 15 months before

heading back out to sea for a further 4- 5years. The young stay in the area for four years before migrating out to sea. The species is a threatened species and are rare. The state of their habitat is crucial and excessive water abstraction and sediment could potentially threaten the survival of the species within the larger area.

54. Equally important is the other taonga species in Exhibit GK15 which also includes the short and long fin tuna (eel). Tainui Awhiro argues that the activities of the windfarm have a high potential to destroy the traditional cultural practices of maori by destroying the very habitat of the identified species; or the very least by disrupting the ecological processes which could reduce their ecological resilience to the point of potential collapse.

55. Certainly Tainui Awhiro disagree with Mr. Kessels statement in para 18

Silt runoff effects during construction on aquatic biota habitats are likely to be no more than minor provided suitable avoidance and remediation measures are adopted during the construction phase.

56. The whole basis of the statement is based on the word “provided”. While there is some confidence that Environment Waikato’s Erosion and Sediment Control Guidelines will be used and potential consent conditions could be set; it is also the management and independent monitoring of the earth works programs that are crucial. Of real concern is once any approval is given; any adverse effect occurring only results in abatement notices, providing the authority is willing to act on the complaints.

57. There is does not appear to be any mechanism for hapu or the community to monitor or contribute to the Earthworks Design and Management and Construction Ecology Effects Management Plans. *See appendix 1- view of large scale earthworks.*

58. Mr. Kessels in para 57 also notes that:

“The flight paths of key internal migratory shorebirds in New Zealand are not at all well understood. Although the majority of these species pass to and from their breeding grounds in the South Island to the coastal harbours north of Port Waikato, few relevant observations have been recorded”.

59. In addition in para 59 of his evidence:

“The migratory routes of wrybill are even less clear. These birds are small and cryptically coloured, so difficult to see in flight. However, there is some evidence that the northward migration pathway for at least some birds is along the west coast of the North Island. My own observations during the present shorebird surveys confirm this”.

60. Plus, in para 60:

“I also noted the possibility that birds flying toward the Firth of Thames might leave the west coast beaches between Kawhia and Port Waikato, and fly overland i.e. potentially through the wind farm footprint giving rise to a risk of turbine strike”.

61. Next, in para 61 of his evidence he states that:

“Quantifying this risk requires a large amount of robust data on a wide range of behavioural and flight patterns of key shorebird species, as well as continual weather information”.

62. The evidence of Mr. Kessels above demonstrate that very little knowledge is available on the flight paths of key migratory shorebirds including the nationally threatened wrybill and that potentially they will fly through the windfarm footprint and are at risk of turbine strike. Also that quantifying the risk requires a lot of data. Even to date; more research is being undertaken to assess the risk.

63. Tainui Awhiro argues that in the absence of robust science to assess the level of risk; that the application be put on hold until the present scientific studies are complete.

64. More alarming than not having robust scientific data to demonstrate that bird strike will not happen; is the monitoring program set out in para 194 and para 195 of Mr.Kessls evidence. The parameters as set by Mr. Kessles in both those paragraphs are based on a death counts AFTER the bird strikes.

65. In the evidence of Mr. Kessels in para 114 he states:

“According to my review of existing and available literature there are sixteen nationally threatened animal species found in a variety of habitats within the study area”

66. And para 115:

“In addition, my assessment of indigenous forest and scrubland habitats suggests that the following threatened lizard species may also be present”.

67. And then in para 116:

“Of these species listed above, eleven nationally threatened fauna species are confirmed as being present as a result of the surveys specifically conducted for HMR by Kessels & Associates since surveys commenced in mid-2007”.

68. The interpretation of “Environment” includes-

- (a) Ecosystems and their constituent parts, including people and communities; and*
- (b) All natural and physical resources; and*

69. The interpretation of “Intrinsic values”, *in relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including –*

- (a) Their biological and genetic diversity; and*
- (b) The essential characteristics that determine an ecosystem’s integrity, form, functioning, and resilience:*

70. The migratory shorebirds, nationally threatened and threatened species are part of the natural and physical resources of the coasts; plus make up the coastal characteristics that determine an ecosystem’s integrity, form, functioning, and resilience. Furthermore; for any species to be noted as threatened or nationally threatened carries a higher regard.

71. Decade by decade; species have been subjected to develop pressures that has seen the destruction of their habit. Coastal margins and wetlands have been subjected to change. The whole thrust of notifying species as threatened or nationally threatened is to highlight the seriousness of the activities that creates an impact and for regulatory statutory bodies to make sound decisions on their behalf.

72. The species themselves cannot speak; but the Board has an explicit duty to adjudicate according to the RMA 1991 and in particular section 5 (2) (a) (b) sec.6 (a) (e) (g) sec 7 (a) (c) (d) sec 8.

73. Tainui Awhiro are highly concerned that in the instance of bird strikes and the lack a robust assessment that an off handed approach has been taken and does not satisfy the requirements of Part 2 of the RMA1991.

OFFSET MITIGATION

74. In the evidence of Mr.Tonks in para 9 he puts forward that:

“There are four actual or potential ecological impacts associated with the proposed windfarm that in my opinion may be addressed by the use of offset mitigation. The specific impacts, and the offset mitigation that I propose in response to these impacts, are as follow”

- *Clearance of Native Vegetation*
- *Turbine Strike Affecting Native Birds & Bats*
- *Transmission Line Strike*
- *Water Abstraction & Laying of Culverts*

75. Below are the recommendations that Mr. Tonks has put forward.

Clearance of Native Vegetation

76. Para 11

My recommendation for offset mitigation in respect of this effect is for Contact to facilitate the retirement and restoration of an area of approximately 56.4 hectares of regenerating native bush that will, in the long term (once regeneration is complete) provide a significantly larger area of replacement bush, of similar type, in place of that required to be cleared for the HMR project.

77. The offset mitigation for the clearance of native vegetation is inadequate. The proposed 56.4 hectares site is not like for like as in the manner of the *JF Investments Ltd v Queenstown Lakes District Council (April 2004)*. The 56.4 hectares is calculated

on the actual loss inclusive of the edge effect. The area targeted for regeneration is of semi-grazed pastureland and gorse areas without the abundant species within the Te Umukaraka and Te Kotuku Bush areas. The regeneration will take a substantial numbers of years. It is only proposed that pest control and scattered replanting take place. The overall cost is quoted as only \$280.000.

Turbine Strike Affecting Native Birds & Bats

78. Para13.

I recommend that Contact commit to an annual contribution of \$17,000 toward one or more native species conservation programmes focused on the protection and population enhancement of resident and/or migratory native birds.

Transmission Line Strike

79. Para 15.

My recommendation for offset mitigation of these potential effects is for Contact to commit to facilitating a protective covenant and implementing a weed control programme over a minimum of 5 hectares of Pungapunga wetland (or other wetland of similar value as habitat for Australasian bittern).

80. The package of \$17.000 for the period and potential life span of the windfarm and only 5 hectares of Pungapunga wetland is woefully understated considering the potential adverse effects. Apart from the potential loss of biodiversity through tower and line deaths; there is the potential for the migrating birds to alter their flight patterns through learned behaviour after a period of years and not congregate at Kawhia, Aotea and Raglan harbours in the immediate coast, nor congregate at Port Waikato and the Manukau harbour. That would represent a significant loss not only to the communities but to many migrating bird enthusiasts up and down the coast. Even today tangata whenua and others utilise the migratory birds' flights as a tohu or sign of the seasons. In addition if the migratory patterns are altered it could also upset the life-form balance within the harbours themselves.

Water Abstraction & Laying of Culverts

81. Para17.

The offset mitigation that I recommend for these effects is for Contact to commit to riparian fencing and planting of 500 metres of channel (both sides) in the lower Kaawa and/or Waikorea Streams. This riparian protection work will provide shading and help prevent damage to whitebait spawning areas caused by grazing by livestock.

82. The offset mitigation is near meaningless due to the size and scale of the earthworks during the period of construction alone. Even developers of rural subdivisions do more. There is potential to create major adverse effects through badly monitored and placed silt control methods; despite following the guidelines set out by regional councils Erosion & Sediment plan. The water take over the life of the construction could pose significant damage to the aquatic life-forms. The scale of this project is enormous. Geographically it covers a large part of the coastal margin and could result in substantial change to the landscape and the water way systems.

83. Further to the evidence above in section 8 pg21 Mr.Tonks also puts forward a cost summary & delivery mechanisms.

Depending on the options chosen, the inflation-adjusted nett present value (NPV) of all of the off-set mitigation measures combined is between \$693,700 and \$919,200.

The delivery of this mitigation funding could be either by direct funding of the actions themselves (by Contact Wind) or through a new or existing community trust or via direct funding to agencies such as the Department of Conservation or Environment Waikato. If administered through a trust or other agency this would enable greater flexibility in the way that the funding is specifically used (e.g. through a contestable fund).

84. As stated above the amount set aside for such a large project is inadequate. Besides; if the fund is managed by the Department of Conservation or Environment Waikato administration costs would apply. A contestable fund has the potential to produce ad hoc mitigation. A contestable fund may also not meet the threshold set by *the JF Investments Ltd* environment court case in point (3) which is:

(3) It must be effective; usually there should be conditions (a condition precedent or a bond) to ensure that it is completed or supplied.

85. Tainui Awhiro wish to raise the case below:

Bethwaite v. Christchurch City Council (CO85/93)19:

"The word minor is a comparative word meaning lesser or comparatively small in size or importance. Minor is less than major but could be more than simply minute or slight. Adverse effects could also be made minor by means of conditions - although the necessity to impose stringent conditions to mitigate off-site effects may indicate that the suitability of the site is marginal and the effect on the environment may be more than minor."

86. Tainui Awhiro argues that the suitability of the site within the coastal margins is marginal and that it has the potential to create substantial adverse effects plus the mitigation put forward does not satisfy the requirements of the RMA 1991 and that the proposed windfarm project is inappropriate in the coastal environment.

STATUTORY PROVISIONS

87. The proposed windfarm has several non complying activities which relate to Environment Waikato, Franklin and Waikato District Councils.

Environment Waikato	Take water from one ground water source.
Franklin District Council	<ul style="list-style-type: none">• Re-opening and operation of the Whitford Quarry including rock crushing and processing facilities.• Operation of concrete batching plants.• Up to three viewing areas (including signage) and associated parking areas.
Waikato District Council	<ul style="list-style-type: none">• Vegetation clearance.• Operation of concrete batching plants.

88. The water take from the Whitford spring is 100% of the flow; that is why the activity is non complying. It is unreasonable, and in fact the spring stream and it's biotic life-forms for 100mtrs will be sacrificed for potable water AND for concrete batching. Puna are a taonga of maori. Maori for centuries valued puna over and above the potentially polluting water from streams and rivers due their purity for spiritual and human use.

89. The rationale that the Whitford spring only contributes 0.5% of the Waikaretu stream flow and therefore is expendable; demeans the purpose of the Act and its relevant provisions. The puna **adds** to biodiversity, it **contributes** and mixes its more pure content which assists to alleviate the more polluted water from farm runoff within the Waikaretu stream. There is no way to remedy or mitigate the effects of 100% take or 100mtrs of loss of biodiversity. The only tool then is to avoid.

90. The operation of the concrete batching plants will all be next to waterways and while it could be argued by Mr Chrisp in para 40 of his evidence that they are temporary activities; it is the effects of the discharge as outlined above in the evidence in para 33 and 34 that has the potential to create adverse impacts on the water ways and aquatic life-forms.

91. Cement lime is alkaline, so as a result concrete slurry and any water that comes into contact with cement or concrete becomes strongly alkaline (pH11-13) which is deadly to aquatic life. It could be the effects of the activity that has labelled concrete batching being non complying in the Franklin and Waikato District plans rather than the *catch – all* techniques as described in para 12 of Mr. Chrisp's evidence.

92. Tainui Awhiro wish to restate there is the potential to cause catastrophic adverse effects despite the concrete slurry being recycled into ponds due to the concrete batching taking place in close proximity to water ways. The activity is inappropriate near or close to waterways.

93. Furthermore in para 21 of Mr. Crisp's evidence he notes:

“The most notable exception is the non-complying activity status of the proposed wind farm within the Waikato District due to turbines being located within 1,000m of Mean High Water Springs in the Coastal Zone of the Waikato Proposed District Plan”

94. Moving the turbines as a setback in Zone A and B do not constitute adequate mitigation. The Coastal Zone in the Proposed Waikato District Council has been designed to afford protection from inappropriate development of the coastal margins and the non complying status means a higher test or threshold needs to be applied.

While it is convenient for Mr. Crisp to use the principles of bundling in para 23 of his evidence to assist the Board to narrow the focus of the proposed windfarm, Tainui Awhiro maintain that all the suite of restricted and discretionary activities has to be considered as part of the decision process.

95. In para 116 of Mr. Crisps' evidence he goes so far as to say that:

an analysis undertaken under section 104D(1)(b) of the RMA requires an assessment of the objectives and policies of the relevant plan(s) as a whole in an overall consideration of the purposes and scheme of the relevant parts of the plan(s).

96. If the analysis is followed through; it means that the *enabling* policies in para 92 cancel out the *protectionist* policies in para 97 of the Proposed Waikato District Council. That is outside the gambit of the legislation.

97. The Hauauru ma raki proposal is contrary to the general principles within the New Zealand Coastal Policy Statement in 7, 8,9 and policies 1.1.2 (a) (b) (c) 2.1.1, 2.1.2 and the objectives and policies of the Regional Policy Statement 3.4.10,3.5.4,3.5.5, 3.5.6, Waikato Regional Coastal Plan 3.1,3.3, 3.4, 4.1,and the Waikato Regional Plan, 2.3.2,4.3.2 (f),(h)3.1.2 (c)(d)(e)(J)(l)(o)policy 3(a)(c)3.2.4.6(a)(b)(c)policy 5 (a) (b) policy 6(a)(b)(c).

OTHER MATTERS

98. Tainui Awhiro opposes the land use designations and term of consents and state that it is unreasonable to expect approval in perpetuity. Furthermore, while there is condition on the removal of turbines; there is no bond been volunteered by Contact for decommissioning or the removal of broken or disused turbines.

99. In addition, the destruction of wahi tapu and wahi whakahirahira amounts to environmental racism and contributes and assists to obliterate and make invisible the historic heritage of tangata whenua from the landscape severing the whakapapa relationship of the peoples of the Tainui waka.

100. The word *maori* has only appeared in the consent conditions six times and all six times it is to mention the maori landowners. The words *tangata whenua* do not appear in any conditions at all despite the opportunity to recognise and provide for and to take into account provisions with the Act.

SUMMARY

101. The watertake within the various catchments has the potential to create adverse effects by lowering the flow to a point that elevated temperature rises decreases the level of dissolved oxygen; even a change of one to two degrees can cause harm to aquatic life-forms. In addition the 100% take of the Whitford spring will reduce the beneficial mixing of a more pure water source and eliminate the biodiversity from the puna into the Waikaretu Stream, plus the mauri of the water ways will be impacted upon.

102. The earthworks and associated sediment over such a large scale covering several catchments has the potential to create adverse effects as stated in para 38 of the evidence above and that there is no mention of tangata whenua in the ESCP's or monitoring which diminishes the kaitiakitanga duties of maori and hapu.

103. The evidence above states that the natural character of the landforms of the coastline will be severely diminished by the creation of manmade intrusions and the visual impacts to tourists, tourist operators and residents of the Whaanga and Whaingaroa coast along with their amenity values will have adverse effects.

104. The ecological impacts and potential loss of taonga species, along with turbine plus transmission strike without robust scientific analysis of the migrating birds that are nationally threatened is contrary to the part 11 RMA 91. Nor does the loss of a regionally significant native bush with its associated abundance of biodiversity meet the tests as set out the Act.

105. Tainui Awhiro wish to reaffirm that the proposal does not meet the gateways tests of section 104 D (1) (a) (b) due to the effects being more than minor and is contrary to the objectives and policies of several plans.

CONCLUSION

106. The water take is unreasonable and could potentially create adverse effects to the streams and water ways culminating in loss of aquatic biodiversity and loss or cultural practices. The impacts of the earthworks could devastate the surrounding landscape

and result in silted water ways adding cumulatively to the water take pressures on the aquatic biodiversity. The offset mitigation package is minuscule compared to the scale of the activities.

107. Case Law has ascertained that the Board of Inquiry would have to clearly show where recognition of the relationship and provision for the relationship will satisfy Sec 6 (e)

108. Section 7 must be carefully weighed in the decision and it is seen as important that the Board of Inquiry will need to show how they have had particular regard to the issues raised.

109. Section 8 of the Act states that the principles of the Te Tiriti o Waitangi shall be taken into account when managing the use, development, and protection of natural and physical resources.

110. One of the main principles of the Te Tiriti o Waitangi is active protection as defined by the Waitangi Tribunal and case law. Protection of historic, traditional, cultural, and the spiritual relationship of the tangata whenua to nga taonga tuku iho is seen as part of that protection.

111. The Board of Inquiry is subject to Part II of the RMA when it exercises its powers under section 104, including section 8, which requires persons exercising functions and powers under the RMA to take into account the principles of the Te Tiriti o Waitangi.

112. The Board of Inquiry decision will have to adequately demonstrate that due weight has been given to Sec.5, 6, 7,8 while the balance of the decision should demonstrate the mitigation of the concerns of Tangata Whenua.

RECOMMENDATION

113. Decline the application in its entirety.