**BEFORE THE INDEPENDENT COMMISSIONERS**

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| **IN THE MATTER** | of the Resource Management Act 1991 |
| **AND** | |
| **IN THE MATTER** | Application from Oceanea (New Zealand) Limited Gold (APP139551) for resource consents, being all necessary land use consents, discharge and water permits to authorise all activities associated with the construction, operation maintenance and rehabilitation of Project Martha. |

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# EVIDENCE OF ANNA SINTENIE ON BEHALF OF AUCKLAND WAIKATO FISH AND GAME COUNCIL

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## Qualifications and experience

1. My full name is Anna Bernarda Sintenie. I am an Environmental Officer with Auckland/Waikato Fish and Game and have been employed in this position since October 2016.

2. I have a Bachelor of Science degree (Geography and Environmental Sciences) and a 1st Class Honours Degree in Law from the University of Canterbury with dissertation research in resource management law.

3. Previous to this position, I practiced as a Barrister and Solicitor at Crown Law where I was employed from 2011 until 2014. My areas of focus in that position included natural resources and appeals under the Resource Management Act 1991 (RMA), land law and public /administrative law.

4. I am a member of the Resource Management Law Association and the New Zealand Freshwater Sciences Society.

5. In my role as Environmental Officer, I represent the Auckland/Waikato Fish and Game Council in responding to policy, planning and environmental management matters affecting sports fish or gamebird habitat or their use by licence holders in

the Auckland/Waikato Region. This includes assessing and monitoring resource consents and applications which may impact on fish and game resources, their habitats, and use, and representing the Auckland/Waikato Fish and Game Council by submitting and appearing on such matters.

6. While I have a legal and resource management background, I do not purport to be an independent planning expert, but as the majority of this evidence deals with planning matters, it is the subject of pre-exchange.

**Scope of Evidence**

7. I have prepared evidence in relation to the consent application to take water from the Ohinemuri River to flood the Martha Pit and mines (AUTH139551.05.01). The scope of my evidence is limited to the following planning and legal matters relevant to that application:

    7.1. Outline Fish and Game's statutory role and responsibilities;

    7.2. Outline of the fisheries and habitat values of the Ohinemuri River;

    7.3. Planning and policy background of this application and decision;

    7.4. Resource Management Act 1991 (RMA), S 104 and Part 2.

    7.5. Relief sought.

8. My colleague, Dr. Adam Daniel, has prepared evidence which relates to the effects of the proposed take on habitat and instream ecosystems of the Ohinemuri River, and I rely on the effects addressed therein, in addition to the effects on flow characteristics outlined in the evidence of Dr. Ian Boothroyd.

**Summary**

9. In my view, the application does not adequately a) assess or b) avoid, remedy or mitigate adverse effects.

10. The evidence of Dr. Daniel indicates that the proposed abstraction is highly likely to impact trout habitat and will significantly impact torrentfish habitat [AD at 8]. The requirement in Objective 3.1.2 that significant adverse effects of aquatic ecosystems are avoided has not been met by increasing the abstraction from the existing consented rate.

11. Degradation to habitat is expected to occur under the proposed consent, through degradation of water quality (temperature) and reduced flow. As such the application as formulated does not give effect to the clear directive throughout

Chapter 3.2 of the WRP that fisheries habitats are enhanced and maintained, and riparian aquatic habitats are to be protected.

12. Particular regard must be had to certain matters under Chapter 3.3 (Water Takes), Policy 11. Many of these cover effects in the in-stream environment which have not been investigated or assessed in the AEE. If the matters contained in Chapter 3.2 were appropriately addressed and read in conjunction with specific water take provisions, many of the matters for particular regard under Policy 11 could also be appropriately addressed.

13. In order to meet the requirements of Chapter 3.2 of the WRP for maintaining, preserving and enhancing the habitat, the effects of flow change can be mitigated by raising the minimum flow for abstraction. This may result in more time taken to fill the Martha Pit, however, the applicant has not demonstrated the need for the rate of abstraction applied for as required under Policy 11. Without a demonstrable need for the rate elected, I cannot find any impediment to increasing the fill time as a means of addressing impacts on aquatic habitats.

14. The appropriate activity status for this application is contentious; I consider that there is a strong case that this is a water harvesting consent and as such should be reduced to 10% flow or alternatively be considered on a non-complying basis.

15. The rule relied on by the applicant requires as a standard and term that a Riparian Vegetation Management Plan be provided. This should be formulated to quantify temperature effects and enforce positive effects or outcomes designed to achieve no net loss of trout habitat in the Ohinemuri through temperature changes.

**Fish and Game's Statutory Responsibilities**

16. The Auckland/Waikato Fish and Game Council, along with all other regional Fish and Game councils across New Zealand, are the statutory managers of the sports fish and game bird resource under the Conservation Act 1987.

17. Functions of Fish and Game councils are set out in the Conservation Act, and include:

    a. To *"maintain and enhance the sports fish and game resource in the recreational interests of anglers and hunters"* (s 26Q(1)).

    b. To *"assess and monitor* [inter alia] *the condition and trend of ecosystems as habitats for sports fish and game"* (s 26Q(1)(a)).

    c. To *"maintain and improve the sports fish and game resource"* (s 26Q(1)(b) *"by* [inter alia] *ensuring that there are sufficient resources to enforce fishing and hunting season conditions"* (s 26Q(1)(b)(iv)).

d. To *"represent the interests and aspirations of anglers and hunters in the statutory planning process"* (s 26Q(1)(e)(i)).

e. To "*prepare draft sports fish and game management plans in accordance with this Act"* (s26Q(1)(e)(iii)).

f. To *"advocate in the interests of the Council, including its interests in habitats"* (s 26(1)(e)(vii)).

18. The Auckland/Waikato Sports Fish and Game Bird Management Plan (the Plan) [attached as Appendix 2] sets Goals and Objectives to manage, maintain and enhance the resource in the recreational interests of anglers and hunters[1]. A key objective of that Plan is to *protect and increase habitat for sports fish and game birds*[2].

19. The Plan sets methods for achieving this objective and specifies the Issues. Methods include:

- *Assessing and monitoring the condition and trend of sports fish and game bird habitat in the region;*
- *Advocating for the protection and increase of sports fish and game bird habitats through statutory planning processes and non-statutory processes.*

Issues include:

1. *Modification of rivers, particularly in lowlands, is adversely affecting trout habitat and angling values.*
2. *Decisions made by other statutory bodies, such as environmental flow setting, may sometimes have detrimental effects on sports fish and game bird habitat.*

20. The Ohinemuri River is identified as of high significance for rainbow and trout fishery values in the Plan.

21. The Plan should be had regard to when considering this application for a resource consent, pursuant to s 104(1)(b).

**Fisheries and habitat values of the Ohinemuri River**

22. The Ohinemuri River is listed in Appendix 1 to the Plan as a River of Regional Recreational Significance for Brown and Rainbow Trout fisheries. The River is valued as a site for fly fishing, angling events and for its locality and natural amenity values as set out in evidence of Dr. Daniel [5].

23. Dr. Daniel sets out the condition and trend of the Ohinemuri River habitat as generally degraded by extreme water temperatures, degraded water quality,

[1] Conservation act 1987, s 17L(1).
[2] Auckland/Waikato Sports Fish and Game Bird Management Plan 2010, Part 2, p 12.

migration barriers and degraded habitat [AD, 6-7]. Degradation is such that trout populations have little resilience to habitat stressors such as changes in flow and temperature which are inherent in the current application [AD, 16].

24. In the survey of Angler Usage of New Zealand Lake and River Fisheries (2014/15), the Ohinemuri River contributed the second most angler days within the Waihou catchment (second to the Waihou River)[3]; the catchment harbours significant cold spring-fed habitats in its southern reaches, but few alternatives to the north.

25. The WRP water classification map identifies the Ohinemuri River as including the classifications: Waikato Region Surface Water Class; Contact Recreation Class; Indigenous Fish Habitat Class; Trout Habitat Class.[4]

**Planning and policy background of this application and decision**

26. The AEE, the s42A Report, and the evidence of John Kyle and Richard Turner for the Applicant provide an assessment of the proposed application against the requirements of relevant statutes and planning documents. I do not replicate those assessments, but rather focus on areas where I have a different interpretation, or where provisions I consider are relevant have not been addressed.

***Waikato Regional Plan – Water and Water Management***

27. The applicant has stated that the water take applied for is a discretionary activity pursuant to Rule 3.3.4.23. If 'discretionary' is considered to be the appropriate category (or if the application is considered by the Panel to fall under the non-complying activity rule for water harvesting), it must comply with any requirements, conditions and permissions specified in the RMA, regulations or relevant plan[5]. Chapters 3.1 and 3.2 are relevant in this regard.

28. Chapter 3.2 'Management of Water Resources' has not been covered in the AEE. Chapter 3.2 contains a set of general policies and methods that apply to the management of water quality and flow regimes in the Region. It sets out the following relevant provisions:

3.2.3 Policies:

Policy 1: Management of Water Bodies

*Manage all water bodies to enable a range of water use activities, whilst ensuring that a net improvement in water quality across the Region is achieved over time through:*

[3] Angler Usage of New Zealand lake and river fisheries: Results from the 2014/15 National Angling Survey (July 2016) *Prepared for Fish and Game New Zealand* p 61.
[4] https://waikatomaps.waikatoregion.govt.nz/Viewer/?map=11b87e5bebb14ca2a8b4a39ef8be87cb
[5] Resource Management Act, s 87A(4)(b).

a) *Classifying and mapping water bodies based on the characteristics for which they are valued and implementing the classification through a mixture of regulatory and non-regulatory methods.*
b) *Maintaining overall water quality in areas where it is high, and in other water bodies, avoiding, remedying or mitigating cumulative degradation of water quality from the effects of resource use activities.*
c) *Enhancing the quality of degraded waterbodies.*

Policy 3: Natural Character

*Recognise, and where relevant provide for, the following characteristics when considering the preservation of the natural character of lakes and river and their margins and the protection of them from inappropriate use and development:*

a) *Diversity and composition of the aquatic and riparian habitat.*
c) *The natural flow characteristics and hydraulic processes (such as sediment transport) of rivers and streams or the pattern and range of water level fluctuations that occur naturally in lakes and rivers.*

Policy 4: Waikato Region Surface Water Class

*Enable the use of all surface water bodies in the Region, provided that:*

a) *Any significant adverse effects on existing aquatic ecosystems are avoided, remedied or mitigated.*

Policy 7: Fishery Class

This policy has been set out in the evidence of Mr. Turner at [74], however I refer specifically to the purpose which is to "*maintain or enhance*" the "*water quality and aquatic habitat*" so that "*these fisheries, trout or indigenous fish can complete their life cycles and/or maintain self sustaining populations and managed trout and indigenous fisheries can be sustained*". The Policy lists matters to be included in consideration (this list is not exhaustive).

29. I consider the Explanation and Principal Reasons for Adopting the Policies to be relevant and informative in applying the above provisions, which provide that the policies carry significant weight in assessing resource consent applications:
    - *Policy 3 sets out the aspects of natural character that will be considered … in the consideration of any relevant consent application that affects …water bodies and their margins.*
    - *Policies 4-7 … The policies also provide assessment criteria to guide the case-by-case assessment of resource consent applications.*
    - *Policy 7 … It lists matters that need to be considered when assessing resource consent applications and have the potential to affect the fishery values of water of these water bodies.*

30. The matters that would need to be considered or had regard[6] to therefore include maintaining water temperatures that are suitable for aquatic habitat (d); minimising temperature barriers and changes in flow regimes that would otherwise prevent fish from completing their life cycle and/or maintaining self-sustaining populations (f) and minimising the adverse effects of physical disturbance to aquatic habitat (g).

31. Chapter 3.2.5 lists the Environmental Results Anticipated, which include:
*(2) Areas of significant indigenous fisheries habitat maintained and enhanced;*
*(3) Areas of trout fisheries and spawning habitat maintained and enhanced.*

32. These policies set a clear general direction as to matters for consideration by decision makers assessing resource consent applications with regard to effects on water quality or aquatic ecosystems in the Ohinemuri River. Water quality should be maintained where high and where water quality is degraded, cumulative degradation should be avoided, remedied or mitigated[7]; water quality and aquatic habitats should be maintained or enhanced[8], while recognising and providing for aquatic and riparian habitats and natural flow characteristics and hydraulic processes[9] (and enhancing flow regimes where practicable[10]). Significant adverse effects on aquatic ecosystems should be avoided (Objective 3.1.2).

***Waikato Regional Plan – Water Takes***

33. Specific provisions for Water Takes are set out at Chapter 3.3 WRP. The AEE (pp186-187) contains an assessment of these provisions and I address the relevant provisions where I consider this assessment is deficient or requires expansion.

34. Policy 11 requires that *when assessing resource consent applications for surface water takes and/or any associated water use, the effects of these activities shall be assessed individually and cumulatively with all other existing or authorised water take and use activities. In doing so, the Council shall have particular regard to* specified matters.

35. The applicant summarises Policy 11 in the AEE, however some of the specified matters to be had particular regard to are not addressed appropriately (Section 5 of the AEE; 5.8.2 relates to the effects of the abstraction on the Ohinemuri River). As identified in the evidence of Dr. Daniel:

[6] WRP, Method 3.2.4.2(b) Water management classes. The standards listed in the implementation methods are "*one possible means of achieving the purpose of the class as described in the policies in section 3.2.3*".
[7] WRP, 3.2.3, Policy 1.
[8] WRP, 3.2.3, Policy 7.
[9] WRP, 3.2.3, Policy 2.
[10] WRP, Objective 3.1.2(d).

1. The applicant does not quantify the potential for increased river temperatures; increase temperatures as a result of loss of flow are not addressed in the AEE [AD 17-18].

2. The applicant does not quantify the loss of habitat caused by reduced flow, however, Dr. Daniel assesses the effects of various scenarios of water take including the existing and the proposed take. This analysis indicates the percent of additional days suboptimal conditions would occur for torrentfish, Rainbow and Brown Trout [AD 14-15; Table 1].

36. The following matters under Policy 11 either lack the requisite information, or have not been addressed in the AEE. These matters should be had particular regard to:

1. *d) The net effect of the take on water quality in the water body from which the water will be taken i.e. whether the further degradation of water quality is avoided (having regard to the flow rates and contaminant concentrations in that water body).* The AEE focusses on nutrient concentrations and mobility of contaminants. Based on the evidence of Dr. Daniel, I consider this assessment should include temperature.

2. *p) Impacts on, and integration with, other existing authorised uses of the relevant water body (including customary uses).* I consider this assessment should be undertaken and should include fishery values.

3. *r) The effects on ecological values and biodiversity and the benefits of the natural flow regime variability, including sediment transport and natural flushing and flood flows.* Natural flushing and flood disturbance events have been considered in the AEE through a $FRE_3$ analysis, however the ecological and biodiversity impacts associated with changes in temperature and habitat identified in the evidence of Dr. Daniel have not been assessed.

4. *(x) Whether appropriate mitigation measures are to be implemented, including the maintenance of adequate environmental flows or flow regimes, the location of the abstraction, the maintenance of fish passage, the application of riparian planting, or other measures.* Appropriate mitigation measures for loss of habitat and increased temperature are not included in the AEE other than to indicate there is substantial existing planting. The extent of planting that occurs on riparian margins is not clear. I consider that in addressing temperature effects, appropriate riparian planning should be had particular regard to including quantification of the riparian margin to be planted and an estimation of the temperature effects of such.

37. In addition, there are certain matters which the applicant must demonstrate as part of the application, these are set out at d) and t) of Policy 11 and require the applicant to demonstrate a *need for the volume and rate of water sought.* While the need for the volume sought has been demonstrated (ie, the volume is required to fill the Martha Pit), the AEE and evidence provided does not demonstrate why the rate of abstraction has increased from the previous consented limit.

***Waikato Regional Plan – Rule requirements***

38. I agree with the view expressed in the evidence of Mr. Turner that it is somewhat contentious as to how the abstraction falls under rules of the WRP [RP, para 71].

39. I consider that the analysis Mr. Turner refers to at 8.4.8.2 does not present the whole picture of the WRP when relevant provisions are read together. As stated in the AEE, water harvesting is defined as "*Taking water to be stored for future use in accordance with Section 3.3.3 Policy 20"*. I agree that while the water is not taken for a future use such as irrigation, it does have a use in that it provides for a lake as remediation of the mine site.

40. The AEE analysis then turns to Policy 20, stating that the policy "defines the activity of water harvesting as being an abstraction when the flow in a river is greater than the median flow and the total amount of water does not exceed 10% of the river flow at the time of abstraction". I contend that this is not a characteristic which "defines" 'water harvesting', but rather a limitation on water harvesting, as indicated by the wording of Policy 20, which states that an allocation may be provided as a restricted discretionary activity in those circumstances:

> *Policy 20: Surface Water Harvesting*
>
> **(Implements Objective 3.1.2 c), g) and p))**
> Except as restricted by Policies 13 and 14, in addition to the primary allocation and secondary allocation set out in Table 3-5, an allocation at higher flows from rivers may be provided as a restricted discretionary activity:
>
> a. if the take is not within the Waikato River Catchment upstream of the Karapiro Dam; and
> b. in circumstances where water is only taken when the river flow is greater than the median flow, and the total amount of water taken by way of water harvesting does not exceed 10% of the flow in the river at the time of abstraction.

41. This interpretation is supported by the non-complying activity Rule 3.3.4.26 for "surface water harvesting" which exceeds the Policy 20(b) "limits". I consider that under a natural interpretation of the provisions of the WRP, when read together, the application should be considered under the non-complying activity rule for water takes: 3.3.4.26.

42. The Applicant and s42A Report have stated that the application has been made on the basis that the proposed abstraction is *a discretionary activity in accordance with Policy 7(e) and Rule 3.3.4.23(4). In this regard, it is a replacement consent for an existing take in a catchment where all existing takes cumulatively exceed the primary and secondary allocable flows specified in Table 3-5.*[11] In the event that the Panel considers this to be the appropriate consenting pathway for the application, the activity is subject to the specified standards and terms.

[11] AEE, pp188-189.

43. Term b) of Rule 3.3.4.23 is relevant in requiring a Riparian Vegetation Management Plan which meets the requirements of Standard 3.3.34.28. The method is attached at Appendix 1, and while it lists a number of specific requirements and performance standards, there is an overall discretion for the WRC to enable planting on a property other than the property on which the water take occurs with consideration as to site-specific circumstances.

44. In the evidence of Mr. Turner, it is noted that no riparian or restoration plan condition is considered to be required [117]. I do not agree. If this application is granted pursuant to the discretionary activity rule, a Riparian Vegetation Management Plan must be included as mitigation.

**Resource Management Act**

***Part 2***

45. The Panel's consideration of this application is 'subject to part 2' of the RMA. Insofar as the provisions apply to this particular decision, pursuant to the ruling in *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316, I outline matters which I consider to be relevant. I consider that these matters may be appropriately considered and do not raise issues that 'render the regional plan ineffective' as set out in that ruling.

46. In *King Salmon,* the Supreme Court made the following declaratory points in relation to s 5[12]:

    1. the word "while" in the definition of "sustainable management" means "at the same time as".[13]

    2. the word "avoiding" in "avoiding, remedying, or mitigating" in s 5(2)(c) means "not allowing" or "preventing the occurrence of".[14]

    3. the words "remedying" and "mitigating" in s 5(2)(c) indicate that development and uses of natural and physical resources which might have adverse effects if they are not avoided, could be permitted if they are mitigated and/or remedied.[15]

    4. the inclusion of "protection" in the phrase "use, development and protection of natural and physical resources" and the use of the word "avoiding" in s 5(2)(c) of the RMA indicate particular environments may need to be protected from the adverse effects of activities in order to implement the policy of sustainable management. The Supreme Court explained the definition of

[12] *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd & Ors* [2014] NZSC 32 (17 April 2014) at [24] and [25].
[13] Ibid, at [24].
[14] Ibid, at [24], and [92] – [97].
[15] Ibid, at [24].

sustainable management "indicates that environmental protection is a core element of sustainable management, so that a policy of preventing the adverse effect of development on particular areas is consistent with sustainable management". [16]

47. The conditions of the consent must therefore ensure that the life- supporting capacity of the freshwater receiving environment is safeguarded, and that the effects of the discharge are avoided, remedied and mitigated. If this cannot be accomplished then the application should be declined.

48. The proposed take will have effects in regards to temperature changes and changes in flow for the duration of the consent, which impact on the preservation of the natural character of rivers and their margins from inappropriate use and development (s 6(a)); the protection of areas of significant habitats of indigenous fauna (s 6(c)).

49. In considering these effects and the appropriate measures to avoid remedy and mitigate, particular regard should be had to:

> d) intrinsic values of ecosystems;
>
> f) maintenance and enhancement of the quality of the environment;
>
> h) the protection of the habitat of trout and salmon;

50. Intrinsic values are defined in s 2 *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.*

51. Relevant to this point is the evidence of Dr. Daniel, which explains that within the Ohinemuri River, the very stressed trout populations have very little resilience to the effects of reduced flow. Effects on the trout habitat caused by flow changes and the quality of the environment are outlined in the evidence of Dr. Daniel.

[16] Ibid, at [24] and [148].

**Section 104**

52. There are some matters relevant to the s 104 analysis which I wish to comment on.

***Actual or potential effects (s104(1)(a))***

53. The effects of the abstraction on flow characteristics have been outlined in the evidence of Dr. Boothroyd.

54. Dr. Boothroyd at [58] states that the application for the new consent is principally concerned with the effects of the proposed increase in the rate/volume of take about 175l/s. I wish to emphasise that in considering effects under s 104, the existing environment without the current consent (ie, the natural river flow and associated habitat) should be the baseline against which effects are measured.

55. The approach applied in *Ngati Rangi Trust v Manawatu-Whanganui Regional Council* [2016] NCHC 2948 should apply here. That case concerned an application for an increased take of water. In coming to a conclusion that the environment should be considered as if the existing consented take was not extant, the High Court considered other cases concerning existing use rights including one in the land use and subdivision context.[17] The High Court agreed that that case should be distinguished stating[18]: "*Water take permits are not permanent and do not carry existing use rights and protections".* In its decision the Court noted that[19]: "*a principle has emerged in which it should not be assumed that existing consents with finite terms will be renewed or renewed on the same conditions*."

56. Further, it is relevant that the existing consent was notified in 1997, and as such the Ohinemuri River has since experienced changes in water and habitat quality, and the policy requirements of the WRP, WRPS and National Policy Statement for Freshwater Management did not exist. This consent must reflect the impacts on the ecosystem in its current state and the new policy requirements.

57. The effects of reductions in flow to particular fish habitats have been summarised in the evidence of Dr. Daniel.

58. The effects of reductions in flow on downstream temperature and habitat have not been modelled and therefore it is not possible to assess these effects.

59. Section 104(6) gives the Panel the option to decline the application to enable the applicant to provide adequate information to determine the application. This would require modelling of the downstream impact of the increased water temperatures and the habitat loss caused by reduced flow. Given that the commencement of a

[17] *Rodney District Council v Eyres Eco-Park Ltd* [2007] NZRMA 1 (HC)
[18] At [62].
[19] At [65].

consent for abstraction may occur some years in the future, there is time to do this work.

***Positive effects (s 104(1)(ab))***

60. Section 104(ab) provides for consideration of any measure proposed or agreed to by the applicant for the purpose of insuring positive effects on the environment to offset or compensate for any adverse effects that will or may result from allowing the activity. There is a recognised set of principles in establishing a well-applied offset or compensation which should be considered.[20] These include measurable outcomes which achieve non-net-loss of the values effected, consideration of the landscape context (the location of the impacts and the location of the offset), and permanence (the benefits should be secured for at least as long as the impacts).

***Relevant provisions of specified documents (s 104(1)(b))***

61. The relevant provisions of the WRP are outlined above.

62. I note that the Auckland/Waikato Sports Fish and Game Bird Management Plan (outlined above) should be given due regard. The Plan recognises and promotes the protection of the habitat of sports fish as an essential component to the sustainable management of these populations. Identification of habitats in the Plan ensures that local authorities give due recognition to sports fish and game bird resources and habitats in their planning.[21]

**Relief sought**

63. Fish and Game seeks increases to minimum flow requirements as set out at [29] of the evidence of Dr. Daniel. Alternatively, the renewal of the consent on the existing terms would ensure effects are not amplified further. These amendments would mitigate actual and potential effects on trout habitat aside from temperature effects.

64. In any case a Riparian Vegetation Management Plan should be put in place with requirements based on quantification of the the temperature increases to the Ohinemuri River and habitat impacts caused by the abstraction. There should be no net loss of habitat as a result of temperature changes. The plan should include standards for the maintenance and preservation of the planting. Existing plantings should not be relied upon if they are required to mitigate instream effects of other activities.

[20] Maseyk, F., Ussher, G., Kessels, G., Christiansen, M., Brown, M. (2018) *Biodiversity Offsetting under the Resource Managmenent Act: A guidance document.* p4.
[21] Auckland/Waikato Sports Fish and Game Bird Management Plan 2010, p 32, para 3.

65. If effects cannot be quantified or modelled, and conditions cannot be imposed that would result in maintenance of aquatic habitat, the consent should be declined until such time that this work can be done.

## APPENDIX 1 – Waikato Regional Standard to Discretionary Rule 3.3.4.23

*3.3.4.28 Standard – How riparian planting and stock exclusion fencing shall apply*

**(Implements Section 3.3.3 Policies 7, 11 n) and 11 x))**
The contents of a Riparian Vegetation Management Plan prepared as part of a consent application to take water shall meet the following requirements:

a. Extent of riparian fencing and planting:
    i. Notwithstanding Rules 4.3.5.4 and 4.3.5.5, where stock are or are likely to be present, riparian fencing and planting should generally be undertaken within the property along the full extent of the water body from which the take occurs, or the equivalent length of tributary water bodies on the property or another property in the catchment;
    ii. All fencing undertaken should generally be permanent and effectively exclude all livestock present;
    iii. Where stock exclusion fencing is not required (i.e. there are no livestock on the affected property) or is already in place, riparian planting should generally be undertaken within the property along the full extent of the water body, or the equivalent length of tributary water bodies.
b. Timeframes for implementation of fencing and/or planting:
    i. Fencing must be completed within 3 years of a water take consent being granted;
    ii. Riparian planting must be progressively completed over the term of the water take consent;
    iii. Where stock exclusion fencing is not required (i.e. there are no livestock on the affected property) or is already in place, riparian planting must be progressively completed over the term of the water take consent.
c. Minimum riparian width:
    i. Fences must be set back a minimum of 3 metres from the top of the bank[6],
    ii. Riparian planting must be undertaken within the full extent of the riparian setback. Where fencing is not required the riparian margin which is planted must be at least 3 metres wide from the top of the bank.
d. Planting requirements:
    i. Where no suitable planting already exists, a minimum of 80% of riparian plantings shall be made up of native plant species appropriate to the characteristics of the site and catchment (e.g. climate, size of stream, flood risk, erosion, local native flora, potential, and slope);
    ii. Plantings must be undertaken at a density of no less than 2500 stems per hectare and shall be maintained (including replacement of losses and control of pest species) accordingly during the term of the consent.

**Advisory Note:**

- Fencing and riparian planting may be undertaken on a property other than the property containing the water body from which the water is taken provided that property is in the same catchment. As a guide Waikato Regional Council will generally require riparian fencing and planting over a length equivalent to the full extent of the water body within the property from which the take occurs. However, depending on the site-specific circumstances, the Waikato Regional Council may modify this requirement by altering the extent of fencing and/or planting.