

**In the Matter of the Resource Management Act 1991
AND**

**In the Matter of Hearings into the Provisions of the
Proposed Wellington Natural Resources Plan.**

Hearing Stream 3 - Water Allocation & Natural Form and Function

**STATEMENT OF EVIDENCE OF LINDSAY DAYSH FOR WAIRARAPA WATER USERS
INCORPORATED, AJ BARTON AND ONGAHA FARMS LTD.**

Introduction

1. My name is Lindsay John Daysh. I hold a Bachelor of Regional Planning Degree from Massey University and a graduate qualification in Transport Systems Engineering from the University of South Australia. I am a member of the New Zealand Planning Institute and the Resource Management Law Association.
2. I have 30 years' experience in town planning and resource management in New Zealand and in Britain. This includes extensive experience in central government agencies, local authorities and since 2004 as a consultant carrying out a broad range of planning matters including strategic planning, policy development, and project development particularly for infrastructure providers. I am also an experienced independent commissioner with a chairmanship endorsement.
3. My current position is as a Director of Incite, a resource management and environmental consultancy. I am based in Wellington.
4. Prior to my move to Incite in 2010 I was New Zealand Planning Manager with GHD Ltd, where I held national responsibility for all planning matters. Preceding this I was Regional Planning Manager at Transit New Zealand for Wellington/Nelson/Tasman/Marlborough, had two periods of employment at Wellington City Council, worked for the London Borough of Hillingdon, and the former Ministry of Works and Development.
5. I am very familiar with the planning framework in the Wellington region having worked on a number of planning tasks in the city and the region at strategic and project consenting levels for the majority of my career. I also have strong familiarity with the practical application of a number of regional plans, in particular the operative set for the Wellington region and the Proposed Natural Resources Plan (PNRP).

6. I have read and am familiar with the Code of Conduct for Expert Witnesses in the current Environment Court Practice Note (2014), have complied with it, and will follow the Code when presenting evidence. I also confirm that the matters addressed in this Statement of Evidence are within my area of expertise, except where relying on the opinion or evidence of other witnesses. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Scope of Evidence

7. I have been requested by the Wairarapa Water Users Society Incorporated (WWUS), Ongaha Farms Ltd and Mr John Barton to provide evidence on water allocation matters that are under consideration at Hearing Stream 3. This is particularly as they relate to:-
 - a. The overall framework of the water allocation provisions including the conjunctive management framework particularly groundwater/surface water connectivity, minimum flows and allocation.
 - b. The categorisation of the groundwater resource in the Ruamahanga catchment. With respect to this I rely on the evidence of Mr Williamson who has considered the technical reports and evidence that have led to the groundwater classification mapping located in Chapter 7 being provisions relating to the Ruamahanga Whaitua.
 - c. The methods that are proposed for assessing new and renewed water takes and for transfers of permits.
8. I was not the author of the WWUS submission or Mr Barton's but I am familiar with the contents of Wairarapa Regional Irrigation Trust submission which I drafted. While the focus of that submission was in relation to water storage and distribution there is some degree of crossover. I have also been advising Water Wairarapa since 2013 on options and alternatives for water storage including providing a consenting framework.
9. I attended both the pre hearing meetings in Masterton on 11 April and 18 May 2017. The focus of these was the conjunctive management framework, minimum flow and allocation provisions in the Ruamāhanga whaitua.
10. I have read Ms Hammond's s42A report and agree that:

The most contentious issues relate to:

 - the overall framework of the water allocation provisions of the proposed Plan including the conjunctive management framework (groundwater/surface water connectivity), minimum flows, and allocation; and

- the priorities for water use including efficient allocation and transfer of permits.¹

Context

11. The ability to be able to take water for irrigating land has for many years been a feature of agriculture in the Wairarapa and in particular the Ruamahanga catchment. To be able to irrigate land means that agricultural production can be maintained in dry conditions.
12. Taking water from directly from rivers and streams is subject, quite rightly in my view, to minimum flow provisions that seek to ensure that there is sufficient water remaining in the waterbody to sustain its life supporting capacity. Taking water from groundwater that has a direct connection to surface water should also have restrictions that are evidence based.
13. Water allocation is not only a Wairarapa issue but is a national issue that effects many parts of the country where irrigation has been used in dry conditions for agricultural purposes. This national issue is reflected in the clear policy guidance within the soon to be amended National Policy Statement for Freshwater Management 2014 (NPSFM). There is a strong policy direction that Regional Councils must implement measures to control water allocation to ensure that waterbodies can continue to have sufficient water in dry conditions.
14. It is also uncontested that over allocation of the finite surface water and groundwater connected to surface water resources can have direct impacts upon the ability of the lakes, rivers and streams to sustain life.
15. While the environmental effects of over allocation are known, so is the potential economic importance to the community and to the wider region of being able to irrigate. This has been quantified to some extent the reports of S Harris on the draft Plan² and the Proposed Plan³. These have been referenced in the S42A report where Ms Hammond states

Policy LW.P115 of the Draft Natural Resources Plan (2014) (draft Plan) required groundwater takes with directly connected groundwater (Category A and some Category B takes) to cease when minimum flows were reached – after a transition period of four years. However, an economic assessment of the implications of this provision (Harris 2015) concluded that irrigators in the Waipoua, Mangatarere, Papawai and Waingawa

¹ s42A report p1.

² Harris S. 2015. Wairarapa Flow Regimes: Economic impact assessment of draft Plan changes

³ Harris S. 2016. Wairarapa Flow Regimes: Economic impact assessment of Proposed Plan changes

(in the Ruamāhanga whaitua) were likely to suffer considerable financial loss as a result of the restrictions.⁴

16. This referred to the draft Plan and it was recognised that cessation of all takes when minimum flows were reached would have considerable financial effects to some existing irrigators. In my view it is very important that with an allocation framework that can have potentially severe economic effects that the right balance is struck between management of the freshwater resource and allowing irrigation to continue.
17. In light of the concerns raised by a number of submitters in the Wairarapa, more quantification of economic effects was undertaken. The s42A report references an updated economic assessment where the economic impacts of restrictions on water takes with a 50% restriction at minimum flows.

A further economic impact assessment was undertaken to assess the impact of the 50% restriction at minimum flows (Harris 2017). This assessment concluded: In general there are only minor effect[sic] of the PNRP in all catchments apart from the Papawai and Waingawa which are moderately affected, and effects are much less severe than the DNRP effects across all catchments. It should be noted that there will be a number of consents who currently have no minimum flow specified who will be more severely affected than the aggregate suggests for the catchment. However the ability to continue irrigating under the PNRP even when the minimum flow is reached will provide significant benefits for those with arable and horticultural crops which have high potential for significant damage with complete restriction on irrigation takes.⁵

18. Mr Vollebregt the chair of the WWUS will outline the purpose of the Society at the hearing. He will also outline the way that irrigation users manage their water takes to ensure that the water is used for the correct purpose and at the right time.
19. The WWUS represents a number of existing irrigators in the Wairarapa whose main interest is to have a fair, workable and scientifically robust set of provisions. The important component of WWUS membership is that collectively their interests are not only financial. They also have a significant stake in ensuring that when there is water available that can be used, that it is used most efficiently. The WWUS also strongly support maintaining or enhancing the life supporting capacity of the waterbodies in the Wairarapa.

⁴ s42A report para 221

⁵ s42A report para 223

20. Similarly Mr Barton has concerns with the PNRP framework and in particular the categorisation of his groundwater take as being Category A (directly connected to surface water). I am aware that he has been through a significant and costly resource consent process to date. Mr Williamson has outlined this as a case study where a large amount of time and financial resources have been expended in attempting to demonstrate in a scientifically defensible manner that the aquifer his bores tap are not directly connected to surface water. His view and that of Mr Williamson is that these bores should not be considered as Category A groundwater takes.

NPS Freshwater Management

21. The s42A author has carried out a comprehensive breakdown of the higher order planning documents in her report. This in my view is a robust analysis although I note that on 7 August 2017 the Government agreed to amend the NPSFM 2014. The amendments will come into force on 6 September 2017.
22. I have reviewed the changes and note the primary emphasis is that the Government has set a target to make 90 per cent of New Zealand's rivers and lakes swimmable by 2040.

The new requirements in the Freshwater NPS that support this target include:

- i. requirements for regional councils to improve water quality
 - ii. requirements for regional councils to report on contributions to achieving regional targets every five years⁶.
23. While not in force at the time of writing this evidence, the purpose of the National Policy Statement for Freshwater Management⁷ (NPSFM) is explained in the Preamble.

This national policy statement recognises Te Mana o te Wai and sets out objectives and policies that direct local government to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits. The national policy statement is a first step to improve freshwater management at a national level.

...

This national policy statement provides a National Objectives Framework to assist regional councils and communities to more consistently and transparently plan for freshwater objectives. Te Mana o te Wai is an integral part of the framework that forms the platform for community discussions about the desired state of fresh water relative to

⁶ <https://www.mfe.govt.nz/fresh-water/national-policy-statement-freshwater-management/2017-changes>

⁷ National Policy Statement for Freshwater Management 2017 proposed amendments Preamble

the current state. New Zealanders generally aspire to high standards for our waterways and outcomes that are better than those achieved under the status quo. Freshwater planning will require an iterative approach that tests a range of possible objectives, limits and methods for their achievement, including different timeframes for achieving objectives. This ensures that the implications of proposed freshwater objectives are clear for councils and communities.

24. Regional policy statements, regional plans and district plans must give effect to the NPSFM. Importantly GW as a consent authority, when considering an application for a resource consent and any submissions received must, subject to Part 2 of the Act, have regard to, amongst other things, any relevant provisions of the NPSFM.
25. The objectives of the NPSFM 2014 relating to water quantity are:
 - a. *B1 To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.*
 - b. *B2 To avoid any further over-allocation of fresh water and phase out existing over-allocation.*
 - c. *B3 To improve and maximise the efficient allocation and efficient use of water.*
 - d. *B4 To protect significant values of wetlands and of outstanding freshwater bodies.*
26. The NPSFM also provides directive policies on the efficient allocation and use of water that regional plans must give effect to. These are quite long and I have paraphrased them here but they cover the following:
 - a. Policy B1 By every regional council establishing freshwater objectives and set environmental flows and/or levels for all freshwater management units in its region to give effect to the above NPS objectives, having regard to at least the following:
 - a) the reasonably foreseeable impacts of climate change;
 - b) the connection between water bodies; and
 - c) the connections between freshwater bodies and coastal water.
 - b. Policy B2 By every regional council making or changing regional to provide for the efficient allocation of fresh water to activities, within the limits set in Policy B1.

- c. Policy B3 By every regional council ensuring the plans state criteria by which applications for approval of transfers of water take permits are to be decided, including to improve and maximise the efficient allocation of water.
- d. Policy B4 By every regional council identifying methods in regional plans to encourage the efficient use of water.
- e. Policy B5 By every regional council ensuring that no decision will likely result in future over-allocation.
- f. Policy B6 By every regional council setting a defined timeframe and methods in regional plans by which over-allocation must be phased out.
- g. Policy B7 By every regional council amending regional plans (to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy B1 (allocation limits), Policy B2 (allocation), and Policy B6 (over-allocation) have become operative:

27. It is my view that in respect of water allocation that the 2017 changes do not materially alter the Objective and Policy framework in the NPSFM 2014 other than there is an additional objective and an additional policy. These are:-

***Objective B5** To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quantity, within limits*

***Policy B8** By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits*

28. I observe that this new objective and the new policy reference providing for economic wellbeing and for enabling economic opportunities. This is of course balanced by referencing the environmental limits in terms of allocating the water resource. It is the way the limits and restrictions are managed in the PNRP that are of concern to WWUS and to Mr Barton.

Regional Policy Statement for the Wellington Region 2013 (RPS)

29. As outlined by the officer⁸ the RPS identifies the regionally significant issues relating to water allocation. These are firstly poor ecosystem function in rivers, lakes and wetlands where the

⁸ s42A report paras 49-54

taking of water from rivers and groundwater connected to rivers, wetlands and springs can impair ecosystem function.

30. The second issue is that there is increasing demand on limited water resources where efficient management of water is a matter of vital importance for sustaining the wellbeing of people, communities and the regional economy.
31. In terms of RPS objectives these are:

Objective 12: *The quantity and quality of fresh water:*

(a) Meet the range of uses and values for which water is required

(b) Safeguard the life supporting capacity of water bodies; and

(c) Meet the reasonable foreseeable needs of future generations.

Objective 13: *The region's river, lakes and wetlands support healthy functioning ecosystems.*

Objective 14: *Fresh water available for use and development is allocated and used efficiently.*

32. These objectives are supported by a number of relevant policies, (paraphrased where necessary below), that in relation to taking water for economic purposes include:

Policy 12 Management purposes for surface water bodies where regional plans shall include policies, rules and/or methods that: require that water quality, flows and water levels, and the aquatic habitat of surface water bodies are to be managed for the purpose of safeguarding aquatic ecosystem health; and manage water bodies for other purposes identified in regional plans.

Policy 13: Allocating water where regional plans shall include policies and/or rules that:

(a) establish allocation limits for the total amount of water that can be taken from rivers and lakes, taking into account aquatic ecosystem health; and

(b) establish allocation limits for the total amount of water that can be taken from groundwater, taking into account the aquatic ecosystem health of rivers, lakes and wetlands, and preventing saltwater intrusion.

Policy 18: Protecting aquatic ecological function of water bodies

Policy 20: Using water efficiently to promote the efficient allocation and use of water; and promote water harvesting.

Policy 40 that requires when undertaking a review of a regional plan particular regard shall be given to requiring that water quality, flows and water levels and aquatic habitats of surface water bodies are managed for the purpose of safeguarding aquatic ecosystem health.

Policy 43 that requires when undertaking a review of a regional plan particular regard shall be given to:

- Maintaining or enhancing the functioning of ecosystems in the water body,
- Minimising the effect of the proposal on groundwater recharge areas that are connected to surface water bodies, and
- Maintaining natural flow regimes required to support aquatic ecosystem health

33. I consider that the PNRP provisions do give effect to the RPS policies in that it does provide objectives, policies and rules that establish allocation limits on both surface water and groundwater takes. The difficulty I see it based on the evidence of Mr Williamson is the way in which the allocation limits have been applied particularly around the conjunctive management approach between surface water and ground water.

Proposed Natural Resources Plan

34. I was first requested to assist WWUS in September 2016 and since that time I have had a number of discussions with members of the executive in respect of the concerns raised in its submission. In carrying out this evidence and in giving prior advice, I have firstly reviewed the Objectives and Policies that apply to water allocation in light of the WWUS submission.
35. In terms of objectives there are number that are indirectly of relevance but I agree with Ms Hammond that the only one of specific relevance is Objective 52 This states

Objective 52 - The efficiency of allocation and use of water is improved and maximised through time, including by means of:

- a) efficient infrastructure and application methods, and*
- b) good management practice, including irrigation, domestic municipal and industry practices, and*
- c) maximising reuse, recovery and recycling of water and contaminants, and*
- d) enabling water to be transferred between users, and*
- e) enabling water storage outside river beds.*

36. WWUS submitted that increasing water allocation allows for growth and requests that Objective O52 is amended to read ‘the efficiency of allocation and use of water is improved and maximised the amount is increased through time.
37. In my view this objective is fundamentally sound although I observe that in relation to water storage that it may not always be able to be achieved outside of river beds, a matter raised by the Wairarapa Irrigation Trust and WWUS. I note though that Ms Hammond is recommending deletion of the sub clauses anyway. I have no particular problems with that as it is “*efficiency of allocation and use of water is improved and maximised through time*” that is important as an objective rather than specifying the means to achieve it. Policies should specify the means.
38. There are also numerous policies that I only comment on by exception as I consider that on the whole they are either required by the NPSFM or are fundamentally sound.
39. The first Policies that WWUS provided a further submission on was Policy P111 and Policy P115. These state:

Policy P111: Water takes at minimum flows and water levels

The take and use of water shall not occur when flows or water levels fall below minimum flows or water levels in the whitua chapters (chapters 7-11), with the exception that water is available below minimum flows:

- (a) for firefighting, an individual’s reasonable domestic needs and the reasonable needs of an individual’s animals for drinking water as provided for by section 14(3)(b) and 14(3)(e) of the Resource Management Act 1991, or*
- (b) for the take and use of water permitted by rules in the Plan, or*
- (c) as authorised by resource consents in accordance with Policy P108.*

Policy P115: Authorising takes below minimum flows and lake levels

The take and use of water may be authorised below minimum flows or lake levels established in whitua chapters of the Plan (chapters 7-11) for:

- (a) the health needs of people as part of group drinking water supply or community drinking water supply, and*
- (b) the water used by industry from a community drinking water supply for a period of seven years from the date of public notification of the Proposed Natural Resources Plan (31.07.2015), and*
- (c) permanent horticultural or viticultural root crops (excluding pasture species, animal fodder crops and maize) for the sole purpose of avoiding their death provided:*

(i) *the water shall only be available five days (120 hours) after **minimum flow** cessation take restrictions are imposed and where no practical alternative sources of water are available or accessible, and*

(ii) *the amount of water needed shall be determined following consideration of the extent and type of crop(s) and the risk of crop death in drought situations, and*

(d) *category A groundwater which shall be required to reduce the take by 50% of the amount consented above minimum flows, and*

(e) *category B groundwater (directly connected), category B groundwater (not directly connected) and category C groundwater.*

40. Rangitāne o Wairarapa Inc. submitted that Policies P111 and P115 do not give effect to NPS-FM and the policy and rules should be amended so that they do not provide for takes to occur below the minimum flow levels set in the plan. A further submission by WWUS opposes the submission point made by Rangitāne o Wairarapa Inc.⁹ I also note that the officer is also recommending some changes to the definitions of the categories outlined in clauses (d) and (e) of Policy 115 that I will comment on later in this evidence.

41. In recommending that the submission of Rangitāne o Wairarapa Inc be rejected Ms Hammond considered.

Minimum flows are discussed in detail in section 2.3 of this report, and recognise that on occasion rivers and streams will naturally fall below the minimum flow. When this occurs, is it reasonable to expect that water can no longer be used for any purpose, other than maintaining the in-stream values? In my opinion, there are certain uses of water, such as for the health needs of people and stock drinking water, which need to occur in order to meet the most basic needs of life¹⁰.

42. I agree with Ms Hammond on this. There have to be circumstances where some takes below minimum flows are necessary. A total prohibition would mean that stock couldn't be watered and water supply for humans may not be available.

43. The provision for rootstock protection in Policy P115 is an issue where WWUS requested that words *available five days (120 hours) after **minimum flow** cessation take restrictions are imposed* be deleted and make the timing *unlimited* meaning that water can be made available at any time for rootstock protection.

⁹ s42A report para104

¹⁰ s42A report para 111

44. I consider that some provision for keeping root stock alive is appropriate when the minimum flow provisions apply and agree with the officer that it should not be unlimited. I also presume that the 5 day availability is consistent with other plans elsewhere and if that is the case I would support the provision as worded.

45. However the officer states:-

In addition, Policy P115 will be implemented through the resource consent process where an assessment of the amount of water for rootstock protection required will take place.¹¹

46. I would question though whether or not the time to prepare lodge and then have a resource consent approved for rootstock protection is sufficient, particularly since reasonably urgent and fundamental decisions about watering for rootstock protection need to be made. In this regard the Regional Council perhaps through the Whaitua Process should look to provide a clear set of guidelines to water users to streamline the process including methods of fast-tracking any consents.

Schedule P and Related Provisions

47. A key focus of submissions by WWUS and Mr Barton/Ongaha Farms is on seeking clarification, verification and calibration of the groundwater categories in the interpretation sections, Policy P107, Schedule P, and Figures 7.2-7.8.

48. The officer accurately summarises these concerns as follows:

My understanding of the submitters' issues is that the model used to describe and derive the conjunctive management framework (including Category A, B and C definitions, allocation limits, catchment management units and sub units and Schedule P) is too uncertain for the Ruamāhanga catchment. The submitters' assert that the model is a regionally based approach formulated on limited data and based on many assumptions. Therefore, the model does not provide enough detail to accurately determine the classification of a particular bore (from which to abstract water) at a particular depth and specific location.¹²

49. Further Mr Barton had much more specific concerns.

- a. That the arbitrary depth when assessing the degree of hydraulic connection be removed;

¹¹ s42A report para

¹² s42A report para

- b. Considerable evidence exists that the Lake Category C groundwater zone extends up into the lower Ruamāhanga valley towards the Huangarua confluence (Figure 7.9 of the proposed Plan). Mr Barton requests the Lower Ruamāhanga Category A boundary be moved upstream to the vicinity of the Huangarua confluence, which will recognise the thick aquitard that exists above the Q2 aquifer downstream of the confluence;
 - c. That fundamental to the application of Policies P107 and P108 is the accurate, realistic and practical understanding of groundwater connectivity to surface water. The default position should not be the assumption of connectivity. Limitations of regional scale modelling need to be recognised when considering resource consents; and
 - d. That the definitions of Categories A, B and C be amended to better explain the degree of hydraulic connectivity. Definitions need to recognise local variations, and the potential for such variations to cause significant differences in the expected behaviour of the groundwater system.
50. At the outset of my involvement I was of the view that in order for the PNRP provisions to be robust that there had to be a full analysis of the mapping and categorisation of the Ruamahanga ground water resource. To this end I recommended to WWUS that they engage an independent hydrogeologist (Mr Williamson) to review that assumptions made and the framework developed. This was because the financial implications of irrigation not being able to occur may be significant and that being Category A, as is the case with Mr Barton, an exhaustive and confrontational resource consent process needed to be entered into to prove that the groundwater resource was not directly connected to surface water.
51. At the prehearing meeting suggested changes to the categories were promoted by GW officers. The officer, particularly when it came to applying Schedule P, found that the categorisation definitions and explanations were confusing. Ms Hammond has recommended replacing Schedule P with a revised Table to be inserted under Policy 107 and adjusting the categorisation definitions.
52. Policy 107 is of course included in the plan to implementing the direction provided in the NPSFM. The tracked change version of the policy recommended by the officer is:

Policy P107: Framework for taking and using water

The framework for the take and use of water recognises:

- a. *groundwater connectivity to surface water shall be managed as described in ~~Schedule P~~ Table 4.1 (groundwater connectivity), and*

- b. *the take and use of water does not exceed core allocation amounts provided for in the Plan, and*
- c. *minimum flows or water levels are managed in accordance with the Plan provisions, and*
- d. *permitted and controlled activities provided for in the Plan and section 14(3)(b) and (e) takes are not included in the allocation amounts, or subject to minimum flows or water levels.*¹³

53. In respect of the changes proposed to Policy 107 and the inclusion of a revised Table 1 as a replacement to Schedule P I agree that these assist in interpretation. I also share Ms Hammond’s views that the framework as notified for the allocation of groundwater is confusing and difficult to comprehend.
54. For convenience I reproduce a table from Mr Williamsons’ evidence that shows the differences between the notified plan provisions relating to groundwater categorisation and those that are now proposed in the s42A report.

Table 1. Definition of groundwater categories.

Category (PNRP 31 July 2015)	Category re-worked (18 May 2017)	Definition (PNRP 31 July 2015)
Category A groundwater	Direct Connection (Category A) groundwater	Groundwater directly connected to surface water at the locations generally shown in Figures 7.2, 7.5, 7.6, 7.7, 7.8 and 7.9 in chapter 7; Figures 8.1 and 8.2 in chapter 8; and Figure 10.1 and 10.2 in chapter 10. Taking water from Category A groundwater is considered to be surface water allocation.
Category B groundwater (directly connected)	High Connection (Category B) groundwater	Groundwater not classified as either category A groundwater or category C groundwater and which is defined as being directly connected to surface water through applying the tests in Schedule Q (efficient use). Category B groundwater (directly connected) is at the locations generally described in Tables 7.3 and 7.4 in chapter 7, Table 8.2 chapter 8 and Table 10.2 in

¹³ Redline version PNRP page 82

		chapter 10. Taking water from category B groundwater (directly connected) is considered to be surface water allocation.
Category B groundwater (not directly connected)	Moderate Connection (Category B) groundwater	Groundwater not classified as either category A groundwater or category C groundwater and which is defined as being not directly connected to surface water through applying the tests in Schedule Q (efficient use). Category B groundwater (not directly connected) is at the locations generally described in Table 7.5 in chapter 7, Table 8.3 in chapter 8 and Table 10.3 in chapter 10. Taking water from category B groundwater (not directly connected) is considered to be groundwater allocation.
Category C groundwater	Limited Connection (Category C) groundwater	Groundwater not directly connected to surface water at the locations generally shown in Figures 7.2-7.9 in chapter 7, Figures 8.1-8.2 in chapter 8, and Figure 10.1 in chapter 10. Taking water from category C groundwater is considered to be groundwater allocation.

55. I consider that the revised definitions are an improvement but there are difficulties for applicants in terms of proving that the groundwater take is actually different than the categorisation derived from the higher scale groundwater modelling carried out. I also note that Mr Williamson is of the view that Category B groundwater (not directly connected) is not overly useful. I come on to this later in my evidence.

56. Mr Williamson simply explains that:

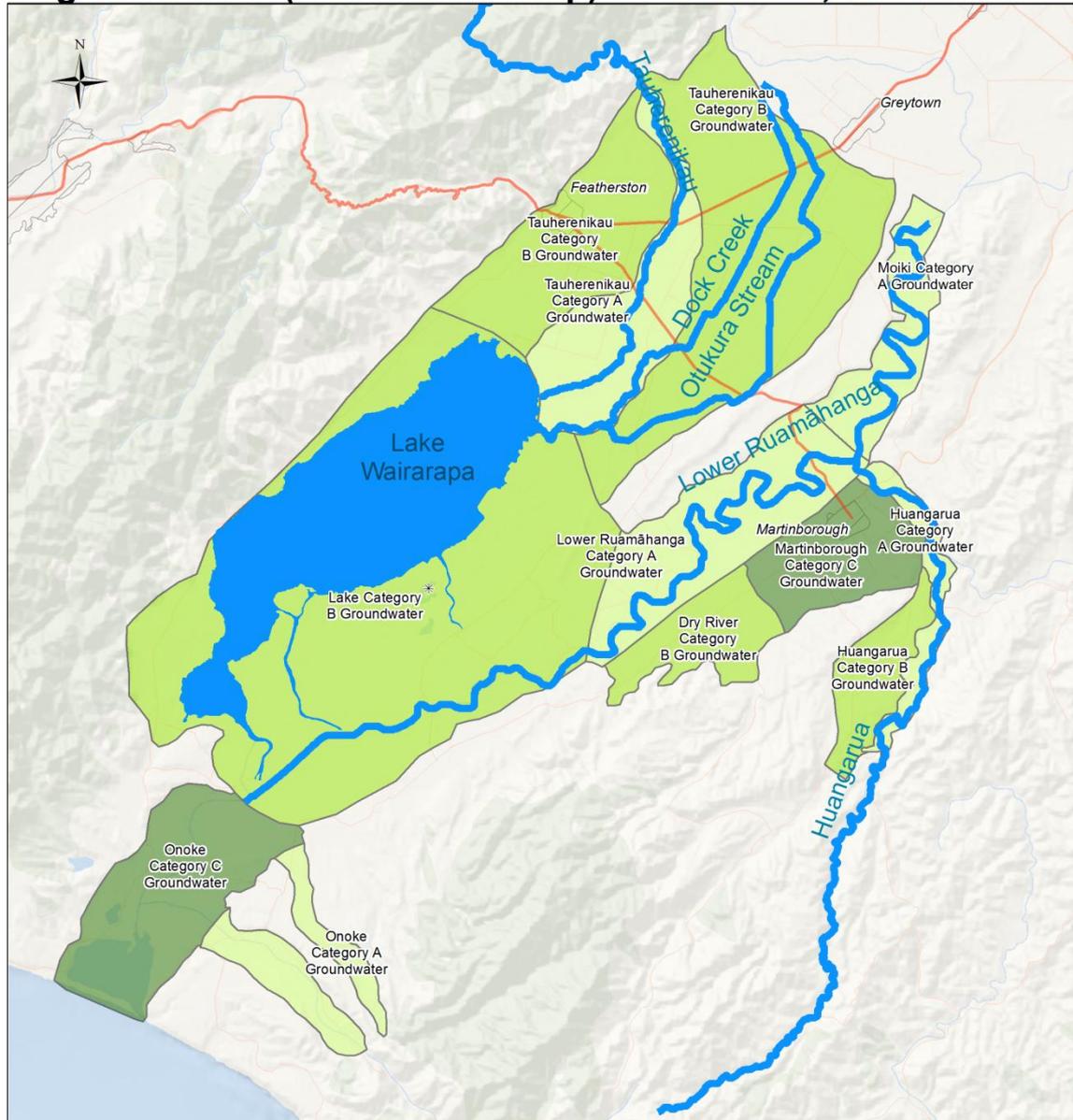
*Category A water takes are allocated from the surface water allocation and are subject to low-flow restrictions. Category B - High water takes are allocated from both surface and groundwater allocation amounts and may be subject to low-flow restrictions. Category B - Moderate water takes are allocated from the groundwater allocation and are not subject to low-flow restrictions. Category C water takes are also allocated from the groundwater allocation and are not subject to low-flow restrictions.*¹⁴

57. Mr Williamson is also somewhat critical of the approach taken by Dr Gyopari in particular in establishing the defined categorisation of Groundwater in the Ruamahanga Catchment. These have been mapped in Figures 7.2 to 7.8 of the PNRP. The figure below is helpful as it shows the

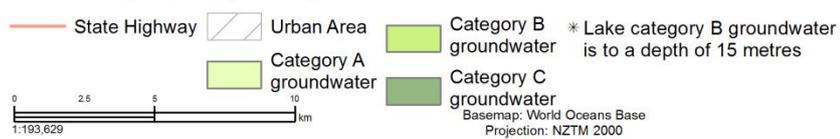
¹⁴ Evidence of Jon Williamson para 45

detailed mapping for the Lower Ruamahanga that shows the large amount of land (and therefore sources of groundwater) subject to category A and B restrictions.

Figure 7.8: Lower Ruamahanga - rivers and groundwater (0-20 metres deep) in Tables 7.3, 7.4 and 7.5



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <http://mapping.gw.govt.nz/gwrc/> (select theme Proposed Natural Resources Plan 2015) and can be accessed from the Council offices or public library.



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58. Mr Williamson readily acknowledges that his detailed analysis is only for a small part of the catchment being the Waihenga Bridge to Pukio reach of the Ruamahanga.

59. The views of Mr Williamson on the adequacy of the process are contrary to the views of advisers to GW. Ms Hammond concludes:

Dr Gyopari's expert evidence addresses these issues and based on his conclusions I consider that the information and models that Council has used to develop the provisions in the proposed Plan are founded on the best information available given the complexities of groundwater systems. There is enough certainty at a catchment and sub catchment level to have confidence in the mapped groundwater categories. In addition, Schedule P enables a resource consent applicant, to provide Council with evidence that a particular take does not have the expected stream depletion effects for that category. Council can then use its discretion to apply the management approach of another category. In most cases, an applicant for a groundwater take would rather not be classified as a Category A take, as the proposed Plan directs, through Policy P115, that these takes reduce the volume of water taken by 50% when the relevant river or stream reaches minimum flows¹⁵.

60. Utilising the analysis that he has undertaken for Mr Barton and Ongaha Farms Ltd, Mr Williamson has a view that the proposed groundwater categorisation and therefore the mapping included in Chapter 7 is inappropriate. The following is from his Executive Summary¹⁶.

The key reasons for my conclusion that the proposed groundwater categorisation is inappropriate in the Waihenga Bridge to Pukio reach of the Ruamahanga River, are:

- (a) *The groundwater categorisation was largely mapped on the basis of the spatial extent of Q1 alluvium deposits in the QMap geological coverage. However, Q1 alluvium can comprise mud, silt, clay, sand and gravel, which are materials displaying a wide range of contrasting hydraulic conductivity. I developed a geological model for this reach of the river using publicly available borelog data that shows that 92% of the 102 bores in this reach have silt and clay at the surface, and of these 61% have greater than 5 m thickness of silt and clay. Therefore, the assignment of gravel and hydraulic conductivity associated with gravel (330 m/day or 4×10^{-3} m/s) on the basis of the QMap Q1 alluvium coverage in this reach of the river is clearly inaccurate.*
- (b) *I proposed an alternative conceptual geological model based on the borelog data and knowledge of the depositional environment, which suggests the recent river channels (and*

¹⁵ s42A report

¹⁶ Evidence of Jon Williamson para 30.

paleochannel) are underlain by a thin narrow veneer of river gravels overlying a thicker widespread silt and clay deposit that is typically 9 m thick, but up to 15 m in places.

- (c) *The Council's cross section shows that out of the 25 bores in the reach only 3 bores were fully screened within the Q1 alluvium and the remaining 22 were screened within the Q2-Q4 gravels. This indicates that drillers had limited success finding water in the Q1 alluvium and continued downwards until the Q2-Q4 gravels were struck, implying the permeability and yields of the Q2-Q4 gravels is likely to be significantly greater than the Q1 alluvium.*
- (d) *GWRC experts indicate that a significant flux in or out of the river is required to classify an aquifer as highly connected, yet the calculated gains and losses in this reach of the river were less than the instrument error associated with the flow measurements themselves (i.e. <10% of the measured flow). Therefore, the calculated gains and losses were both inconclusive and small, or insignificant in proportion to flow and not supportive of strong connectivity.*
- (e) *The Institute of Geological and Nuclear Sciences (GNS) has investigated groundwater chemistry and age in Ruamahanga valley and found groundwater in the Q2-Q4 aquifer in the Lower Ruamahanga area has a completely different signature to that of the river water, exhibiting more dissolved solids, iron and manganese, and low in dissolved oxygen. Furthermore, GNS found that the age of groundwater in the Q2-Q4 aquifer in this area is from 55 to > 80 years old. This implies the groundwater is very old and almost stagnant, which is a stark contrast from the river and could only occur with a high degree of confinement from the river and associated shallow Q1 sediments.*
- (f) *Groundwater modelling undertaken by my firm replicated the model Council Officers presented in the Ongaha Objection Hearing. The modelling results showed conclusively that with a high hydraulic conductivity value of 1.16×10^{-3} in the surficial sediments, simulated groundwater chemistry in both the shallow aquifer and deeper Q2-Q4 aquifer would be very similar. GWRC's model assumption of high hydraulic conductivity in the Q1 sediments in this location is, therefore, incorrect.*
- (g) *I recommended that the groundwater categorisation maps in the area of the evidence discussed (Lower Ruamahanga Management Zone - Waihenga Bridge and Pukio) be adjusted to properly reflect the hydrogeological evidence and to strengthen the guidance for reclassification by significantly reducing ambiguity and uncertainty.*

61. Clearly this is a matter of major importance for not only irrigation users but also for the Regional Council in terms of administering the Natural Resources Plan once operative. I am though concerned that there is a divergence of views on the adequacy of the work done to date particularly as the difference between being a Category A/ Category B high connectivity user and a Category B moderate connectivity/ Category C user is so significant for water users, where reliability of the supply is a crucial factor.

Reclassification

62. As the officer rightly points out there is a process where an existing or proposed user can justify a reclassification of the groundwater take through a resource consent process in accordance with the guidance in Schedule P, noting that this is now proposed to be included below Policy 107.
63. Regardless, this can be a long, expensive and in the case of Ongaha Farms a confrontational process. I note that Mr Williamson has provided a detailed account in his section entitled “*Challenges for Water Users Seeking Re-Classification*”¹⁷. In this he has outlined a real example at Ongaha Farms with the process. In a table¹⁸ Mr Williamson outlines:
- a. From (a) to (j) the GWRC information requirements (i.e. the first or (a) is as analysis of local/sub catchment subsurface geology/stratigraphy);
 - b. Provides an interpretation of this information requirement; then
 - c. The information provided for the Ongaha Farm example; and
 - d. The actual outcome on each of the matters included.
64. In raising such concerns Mr Williamson discusses the difficulty with the reclassification criteria.

While the list of information requirements to assess the groundwater take category does not mention the assessment of stream depletion, the stream depletion effect is the only criteria given in the pNRP to distinguish between Category B - High and Category B - Moderate groundwater. No criteria are provided to distinguish between Categories A and B or B and C.

Due to the lack of clear criteria, it will be very difficult for water users to achieve a re-classification of their water take as any assessment of the information provided will be arbitrary. The Ongaha case is a good example of such arbitrary argumentation and dismissal of evidence based on opinions rather than scientific criteria.¹⁹

¹⁷ Evidence of Jon Williamson paras 73 to 78

¹⁸ Evidence of Jon Williamson Table 4

¹⁹ Evidence of Jon Williamson paras 81 and 82

65. I note that Mr Williamson recommends a complete revision of Schedule P and a check list and weighted scoring approach to make an objective assessment of groundwater connectivity to surface water and therefore the take category. He considers:

While GWRC has recognised and included a list of requirements²⁰ to provide guidance on reclassification, it is too general and not specific enough in terms of the amount and quality of information required, how the information will be assessed, and what criteria will be applied in the assessment.

I recommended the Council adopt a scheme (albeit after expert conferencing) akin to what I developed for this hearing, which provides a definitive checklist and weighted scoring system, and a grading scale for groundwater category classification.²¹

66. I also note the view of Mr Williamson that he would welcome the opportunity to discuss this further with the technical experts from GW.

67. To me, based on the evidence of Mr Williamson there is significant uncertainty with the framework for regulating water allocation and significant hurdles to justify that a category should be reclassified.

68. Therefore it is my view that:

- a. Schedule P should be revised in accordance with the recommendation in Table 5 of Mr Williamsons evidence.
- b. That based on the evidence of Mr Williamson that mapping in the Lower Ruamahanga should be revised. Clearly if there are such issues with the adequacy at Ongaha Farm as Mr Williamson purports this could also be the case elsewhere in the region.

69. I also consider that Mr Williamson's changes should be the subject of expert conferencing. At the least it will provide a basis for at least defining the areas of disagreement.

Thresholds for Distinction between Groundwater Categories

70. Mr Williamson also outlines that the revised Schedule P provides criteria for the distinction between Category B High and Category B – Moderate with the distinction based on the magnitude of stream depletion effects. He states

The distinction is based on the magnitude of the stream depletion effect, which represents the proportion of the water take that is derived from stream depletion. The

²⁰ Proposed as a new Schedule yet unnumbered.

²¹ Evidence of Jon Williamson pars 32 and 33

current thresholds for distinction between Category B - High and Category B - Moderate in Schedule P are as follows:

- a. *Category B - High groundwater is considered to be groundwater that over the course of a pumping season represents;*
 - i. *a stream depletion effect from local surface waters of greater than 60% of the rate of take; or*
 - ii. *the stream depletion effect is greater than 10 L/s.*
- b. *No criteria are provided for distinction between Category A and Category B - High, or between Category B - Moderate and Category C. Category B - Moderate groundwater is treated exactly the same as Category C groundwater and therefore a threshold is not strictly necessary. In fact, the need for the Category B - Moderate is unclear. In contrast, Category A groundwater is treated substantially different from Category B - High groundwater in that low-flow restrictions are always imposed on Category A takes, while Category B - High takes may be subject to low-flow restrictions and they are likely to be less restrictive compared to Category A. Therefore, I would propose that thresholds are introduced between all categories.*

71. Mr Williamson has also carried out a review of *Classification of stream depletion effects in other regions of NZ*.²² These regions are Canterbury (ECan), Hawkes Bay, Southland and Manawatu/Whanganui (Horizons) where he considered the magnitude of effect across these regions for Direct, High, Moderate and Low classifications of stream depletion. He concludes:

Schedule P provides some criteria for the distinction between Category B – High and Category B – Moderate. This is an important distinction because water takes in Category B - High may be subject to low-flow restrictions, while water takes in Category B - Moderate are not subject to low-flow restrictions.

The distinction is based on the magnitude of the stream depletion effect, which represents the proportion (%) and the rate (L/s) of the water take that is ultimately derived from the river or stream.

My concern with the way the criteria in Schedule P are currently defined is that the stream depletion rate threshold of 10 L/s is inappropriately high (too restrictive) for large rivers and inappropriately low (not restrictive enough) for small rivers and streams.

²² Evidence of Jon Williamson Table 7

I have reviewed rules from other regions and recommend a compromise that sought to balance the categorisation criteria with size of river, while also being cognisant of the new guidance I have proposed for reclassification. ²³

72. I also note that Mr Williamson proposes a revised classification system that I reproduce below.

Table 2. Proposed stream depletion classification.

Classification of stream depletion	Magnitude of stream depletion effect		
	Large Rivers (MALF > 10,000 L/s)	Medium Rivers (MALF > 5,000 L/s)	Small Rivers/Streams (MALF < 5,000 L/s)
Direct	Mapped areas (Category A)	Mapped areas (Category A)	Mapped areas (Category A)
High	Greater than 60%	Greater than 60% or greater than 5 L/s	Greater than 60% or greater than 2 L/s
Moderate	Less than 60%	Less than 60%	Less than 60%
Low	Mapped areas (Category C)	Mapped areas (Category C)	Mapped areas (Category C)

73. I endorse this as it appears that the PNRP provisions may result in perverse outcomes i.e. too restrictive for large rivers and too permissive for smaller waterbodies.

Stepdown Allocation

74. WWUS supported the submission of Dairy NZ and Fonterra that considered the definition of stepdown allocation to be confusing and request the definition be amended. I note that the officer supports the requested amended text which reads as follows.

A reduction in the core amount of water allocated from a river below the median flow when resource consents for the total take and use of water exceeds the amount of water available above the interim minimum flow when river flows are low to protect the minimum flow.

Implications of Minimum Flows

75. WWUS requested a lag time be introduced to Policies P111 and P115 before 50% restriction applies to Category A takes e.g. following a period of 10 days of continuous river levels at minimum flow.

76. Ms Hammond responds to this as follows.

²³ Evidence of Jon Williamson Executive Summary paras 34-37

When a river or stream reaches minimum flow it is after a sustained dry period. It is also safe to assume that during that dry period, water abstraction (particularly for irrigation) will have been occurring for a period of time. As described in Mr Hughes' evidence, the depletion effects of a Category A take on a surface water body are similar to a direct surface water take. Therefore, based on Mr Hughes' evidence, if a Category A take was permitted to continue for a further 10 days, before being restricted, the effects of that groundwater abstraction would further exacerbate the low flows in the surface water body, potentially compromising the life-supporting capacity of the water body. Additionally, the stream depletion effects of Category A takes dissipate quickly when pumping stops (or reduces) which will result in a corresponding increase in the flow of the river.²⁴

77. I accept Ms Hammonds view on this as does Mr Williamson but it does place even more onus on getting the groundwater categories correct.

Policy P120

78. This states:

Policy P120: Taking water for storage

The taking of water for storage outside a river bed at flows above the median flow is appropriate provided Policy P117 is satisfied.

79. Federated Farmers and Rangitāne o Wairarapa Inc. both suggest Policy P120 is redundant and should be deleted. A further submission by WWUS opposed the submission by Rangitāne o Wairarapa Inc. as the storage of water enhances the efficiency of water allocation and further is a beneficial use to the region.
80. I agree with the officer who considers that ²⁵Policy P120 is appropriate as it gives effect to Objective O52(e) – enabling water storage outside river beds and Policy 20 of the RPS. I note though that the officer recommends deleting the subclauses to that objective but the intent remains.
81. Further I also agree with Ms Hammonds view that the directive nature Policy 20 to promote water harvesting support the necessity of having a policy that more than provides for, but considers it appropriate to take water above median flow for storage outside a river bed provided certain conditions are met.

²⁴ s42A report para 269

²⁵ s42A report para 391

Rule R137: Farm dairy washdown and milk-cooling water

82. Rule 137 concerns the take and use of water from a surface water body (other than a water race that is permitted by Rule R138) or groundwater for the purpose of farm dairy washdown and milk cooling on a dairy milking platform as a permitted activity. It is subject to several conditions notably the following condition.

(b) *the total take shall be no more than 70L per day per stock unit based on the maximum herd size on the property at any time during the three years prior to the date of public notification of the Proposed Natural Resources Plan (31.07.2015), and*

83. In its submission the WWUS considered that Rule R137 is anti-growth and development and requests amending condition (b) by deleting the reference to the maximum herd size three years prior to the proposed Plan being publicly notified. The officers view is:-

In general, the proposed Plan recognises in some instances (especially in the Ruamāhanga Whaitua) water resources are fully allocated or close to full allocation and it is therefore appropriate to limit the permitted activity to existing levels of activity. The approach taken, to allowing existing users to continue their activities, is a consistent one applied in the plan for an interim period while whaitua committees consider a final set of objectives and limits that will apply in the region. The proposed Plan does not prohibit more water being taken for dairy shed use, however, as indicated above, many catchments are fully allocated, so the additional water will likely be transferred from other uses (e.g. irrigation).²⁶

84. I consider that the officer's response is valid. The Whaitua process is underway but I am not aware where it has got to and when there may be changes brought forward to review water allocation objectives and limits. However considering the much smaller fraction of water used for washdown and cooling as opposed to water used for irrigation it should not be too onerous on dairy farmers if their herd grows to accommodate the additional water within allocation limits.

Policy P114

85. This relates to priorities when demand exceeds supply. WWUS opposed Rangitāne o Wairarapa Inc. submission that requested the policy be deleted as it provides for over-allocation. WWUS opposed the removal of Policy P114 as it is a community, collaboratively based policy prioritising essential water use. The officer considers that the policy should be rewritten as follows which I support as it prioritises health needs of people over other uses.

²⁶ s42A report para 445

The take and use of water for the health needs of people by community drinking water supply or a group drinking water supply shall be a priority over other uses.

Policy RP3

86. WWUS submission on Policy R.P3 requests adverse effects to be measured (not just modelled). The redlined version of Policy RP3 recommended to be altered in the officers report is.

Policy R.P3: Cumulative effects on river reaches of allocating water

When allocating river water or ~~groundwater directly connected to surface water~~ direct connection (Category A) groundwater and high connection (Category B) groundwater, regard shall be given to cumulative adverse effects on aquatic ecosystems in downstream river reaches as a result of flow depletion from loss of river water to groundwater.

87. These are consequential changes proposed as a result of the officer recommending changes to the definitions. In my view, the intent of Policy R.P3 is to provide guidance in the situation where there may be water available for allocation near the top of a catchment management unit, but further downstream flow is depleted due to losses of river water to groundwater. I support the retention of the Policy in its revised form subject to the eventual classification system adopted.

Schedule R Guidelines for Stepdown Allocation

88. WWUS submitted that Schedule R is a good schedule but needs to add 'stock drinking water and rootstock protection' after the health needs of people.
89. I note that the officer has recommended amendments to Schedule R to add reference to rootstock protection to the text and table and add stock drinking water (water races) to the text.

Policy P118 reasonable and efficient use of water

90. Policy P118 dictates the matters that will be considered in respect of new or renewed resource consents where the amount of water taken or diverted needs to be used reasonably and efficiently. It refers to Schedule Q that applies some criteria including requiring an 80% efficiency criteria. Policy P118 states:

Policy P118: Reasonable and efficient use

The amount of water taken or diverted through resource consents shall be reasonable and used efficiently, including consideration of:

- a) applying the reasonable and efficient use criteria identified in Schedule Q (efficient use) to new users immediately, while existing users replacing existing resource*

consents have a period of four years from the date of the plan being made operative to meet the criteria, and

b) maximising the efficient use of water when designing systems to convey or apply water, and

c) industry guidelines, and

d) water use records.

91. Schedule Q in relation to the reasonable and efficient use criteria for irrigation states

A resource consent application to take water for irrigation purposes shall include an assessment using a field validated model that considers land use, crop water use requirements, on-site physical factors such as soil water holding capacity, and climatic factors such as rainfall variability and potential evapo-transpiration. The model must reliably predict annual irrigation volume within an accuracy of 15%. The annual volume calculated using the model shall meet with the following criteria:

(a) an irrigation application efficiency of 80%, and

(b) demand conditions that occur in nine out of 10 years.

92. In their submissions both Mr Barton/Ongaha Farms and WWUS disagree with the timeframe in Policy P118 for requiring existing consent holders to meet the efficiency criteria in Schedule Q. Schedule Q is prescriptive in relation to what measures an irrigator at the time of consent needs to provide to prove efficiency. Further WWUS considered Schedule Q to be unreasonable and that Wairarapa conditions vary to the rest of the country. Irrigators with lower efficiency may be more suitable for specific crops and farming situations. They request the model accuracy be removed and add 'where practical' after the 80% irrigation application efficiency.

93. The officer considers that:

In my opinion Schedule Q is an essential tool to ensure that the provisions of the proposed Plan are implemented and the NPS-FM is given effect to. In particular for irrigation, it is a tool to establish the reasonable amount of water required.²⁷

94. Further Ms Hammond states in relation to the figure of 80% efficiency states:

I also consider it is appropriate to use an application efficiency of 80%, even if the actual system being used has a lower application efficiency, because this will drive inefficient systems towards a higher efficiency. I acknowledge that there is likely to be a cost (in

²⁷ s42A report para 584

some cases significant) involved in improving a systems efficiency, however, I consider there are growing pressures on the uses of water and therefore, all water taken should be used in an efficient manner. Additionally, Policy B2 of the NPS-FM requires regional councils to provide for the efficient allocation of fresh water and Policy B4 requires regional councils to identify methods to encourage the efficient use of water.²⁸

95. I consider that the rider “if practical” on the 80% efficiency criteria in Schedule Q to be a reasonable suggestion. If 80% cannot be met at the time of resource consent then the reasons why could be stipulated. This could also refer to the type of crops and the overall investment required particularly if there is relatively new plant bought that doesn’t meet the criteria.

Rules R143, R144 and R145: Transferring water permits

96. WWUS consider that Rule R143 should be a permitted activity rather than controlled. This applies to transferring a water permit for a period of no more than a year.

97. Ms Hammond notes that

The Section 32 report: Water quantity, considered using a permitted activity rule for transfers but concluded:

- *Accounting for transfers in order to meet NPS-FM requirements (Objective CC1, and Policies CC1 and CC2) through a permitted activity rule is not realistic or feasible, and*
- *Measuring and reporting according to the Resource Management (Measuring and Reporting of Water Takes) Regulations 2010 is unrealistic through a permitted activity rule, and*
- *Conditions cannot realistically be placed on a permitted activity rule that could control efficient use for all of the different uses of water that could arise for water transferred to different locations.*

98. I can understand the position of the officer in relation to the need to have proper accounting practices and the necessity in some cases to impose conditions. However resource consents come at a cost (the transfer of water permit deposit fee alone is \$948.75) and the controlled activity consent is only for one year. This may provide a disincentive to transferring water takes due to the potential complexity involved in preparing an application and then paying fees and other monitoring charges.

²⁸ S42A report para 587

99. I consider that a permitted activity rule that had the same conditions on monitoring and reporting as the controlled activity conditions would be workable and should be encouraged.

Method M18: Water use groups

100. WWU (S124/025) considers Method M18 will work well but the transferring of water needs to be a permitted activity. The transfer of water is discussed above.

Method M19: Water management

101. WWUS requested the following amendment to Method M19 that concerns working with councils, water users and other groups to encourage efficient use of water. This was to (d) ~~promoting alternatives to the use of water races~~ quantify costs and benefits of water races and explore alternatives. I note that the officer generally agrees with this approach which is supported.

Conclusions

102. The ability for water users to have clear limits or boundaries around the circumstances when irrigation can occur is of significant importance to the users but also is of economic importance to the region. The use of water has also to be considered in light of the clear and unequivocal evidence that over allocation leads to degradation of watercourses.
103. It is the right balance between reasonable use and the environmental health of the regions' watercourses that is fundamental to the application of the water allocation provisions in the PNRP.
104. In terms of the national instruments the NPSFM is the core driver of the provisions in the PNRP. Interestingly I note that the 2017 changes due to be in force on 6 September 2017, now include a new objective and a new policy that reference providing for economic wellbeing and for enabling economic opportunities. This is of course balanced by referencing the environmental limits in terms of allocating the water resource.
105. I consider that the objectives and policies within the PNRP as proposed to be altered by the officer in her report, with some relatively minor exceptions, are fundamentally sound and give effect to the NPSFM. However it is the way the limits and restrictions are managed in the PNRP that are of concern to WWUS and to Mr Barton.
106. Mr Williamson the hydrogeologist assisting both WWUS and Mr Barton is concerned with the adequacy of the foundation work carried out for the PNRP that has resulted in the categorisation of certain areas of the Ruamahanga catchment that map areas on the basis of whether or not there is a connection between surface water and ground water. Category A and Category B high

connection areas are subject to restrictions while Category B moderate and category Low takes have less or no restrictions. Mr Williamson has utilised a case study of Ongaha Farm to illustrate the technical problems with the categorisation of an area of the Lower Ruamahanga catchment and to conclude that the bores at Ongaha farm are not utilising a Category A groundwater resource.

107. He is also suggesting improved provisions (formerly Schedule P) where a case can be made to change the current categorisation i.e. from A to B or from B to C. Based on this evidence I support this approach as it provides a more scientific and evidence based approach.
108. Similarly Mr Williamson is also recommending a classification approach to stream depletion effects. As they currently stand restrictions are too severe for larger water bodies and perhaps not restrictive enough for waterbodies.
109. From a planning perspective the remainder of the provisions are broadly acceptable. However I would question the necessity for resource consents for all transfers of water in the same sub catchment particularly as they only apply for a year.



Lindsay Daysh
Incite
28 August 2017