BEFORE THE	**Bay of Plenty Regional Council** **HEARING COMMITTEE**
IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of hearing of submissions on Proposed Plan Change 5 (Kaituna River) (PC5) to the Regional Policy Statement

STATEMENT OF EVIDENCE BY SIMON JAMES GREENING FOR HORTICULTURE NEW ZEALAND

Summary Statement

1. The Bay of Plenty Regional Policy Statement (RPS) provisions for freshwater management set out an approach for the region that gives effect to '*Kaituna He Taonga Tuku Iho – A Treasure Handed Down*' (The Kaituna River Document). However, the RPS provisions could also potentially confine the community's productive capability as a result of premature commentary regarding groundwater allocation status.

2. This evidence addresses the Horticulture New Zealand's (Hort NZ) submission on Plan Change 5 (8-1) and BOPRC's response to that submission.

3. Hort NZ generally supports the provisions within PC5.

1.0 QUALIFICATIONS AND EXPERIENCE

1.1 My name is Simon Greening. I am a Service Leader (Environmental Planning) at Pattle Delamore Partners Ltd (PDP) where I have worked since November 2017. Prior to that, I was a Senior Resource Consent Planner for Watercare Services Limited (4 years), and Resource Consent Officer for Hawke's Bay Regional Council (2.5 years). I have also been employed as a Senior Pollution Response Advisor and District Plan Consent Monitoring Advisory for Auckland Council (2.5 years) and have undertaken environmental monitoring for Hawke's Bay Regional Council (<1 year).

1.2 I hold a bachelor's degree in Geography from Massey University, a Post Graduate Diploma in Environmental Science from the University of Auckland and have part completed a Post Graduate Certificate in Planning from Massey University.

1.3 I have 13 years professional experience working in resource management in New Zealand, primarily in consenting of infrastructure and industrial developments.

1.4 Of particular relevance to this hearing is my past experience at Hawkes Bay Regional Council (HBRC) and providing consultant services for Bay of Plenty Regional Council (BOPRC) where I had (HBRC)/have (BOPRC) responsibility for regional compliance with the Resource Management Act 1991 (RMA) for freshwater effects as a result of groundwater abstraction for a variety of uses.

1.5 I am a member of the Resource Management Law Association, and an Associate Member of the New Zealand Planning Institute.

1.6 I have previously appeared as a planning witness before consent hearings.

2.0 INVOLVEMENT WITH HORTICULTURE NEW ZEALAND

2.1 I have been engaged by Hort NZ specifically to prepare evidence for this hearing.

3.0 EXPERT WITNESS CODE OF CONDUCT

3.1 While this is a Council hearing, I acknowledge that I have read and agree to comply with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2014. My qualifications as an expert are set out above. Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

4.0 SCOPE OF EVIDENCE

4.1 This evidence specifically addresses groundwater allocation in respect to the following two parts of Plan Change 5 (which are presented in full in Appendix A):

- 2.12.4 Significant Issues affecting the Kaituna River
- Policy KR 4B: Managing groundwater abstraction in the Kaituna River

4.2 Accordingly, the structure of my evidence addresses the following:

i. The background and proposed changes sought by Hort NZ;

ii. The pressure upon the Kaituna River water source;

iii. The grounds upon which BOPRC's groundwater allocation limits were developed;

iv. The potential consequence of formalising a definitive statement on groundwater allocation within the RPS;

v. The method for setting appropriate and suitable groundwater allocation limits; and

vi. Possible alternative wording for the explanations in PC5 that should be considered.

4.3 Matters outside of this scope are not addressed in my evidence. These include:

i. The Planning provisions (Objectives and Policies) which are well described in Section 2 of the s.32 Report provided by BOPRC. Any changes made to Issue 2.12.4(1) would subsequently result in changes to the 'explanation' relating to Policy KR 4B but not change the wording of Policy KR 4B itself. Therefore Policy KR 4B is not in contest.

ii. Surface water allocation.

4.4 In preparing this evidence, I have read and considered the following documents:

i. Submissions on the proposal made by Hort NZ;

ii. BOPRC officers 'Overview report on submissions';

iii. The evidence of Blair Thornburrow (groundwater) on behalf of Hort NZ.

5.0 EVALUATION

Background

5.1 Hort NZ's submission (8-1) sought amendments to Significant Issues 2.12.4(1) and Policy KR 4B.

5.2 As outlined in submission 8-1, Hort NZ does not agree with the statement in Significant Issue 2.12.4(1) that "*allocation exceeds water quantity limits in several sub-catchments of the Kaituna River, and in parts of the underlying groundwater resource*"

5.3 Accordingly, Hort NZ suggested changes to Significant Issue 2.12.4(1) as follows:

> '~~*Current consented allocation exceeds water quantity limits,*~~ *In several subcatchments of the Kaituna River and in the Lower Kaituna aquifer current water allocation is approaching the peak of what would be suitable for freshwater outcomes. Groundwater across the region should be allocated through national policies (NPSFM & NES) and current and best knowledge of the aquifers at the Kaituna catchment scale*'

5.4 Hort NZ's reason for this change was that this statement is '*not based on current and best knowledge of the groundwater aquifers in the Bay of Plenty Region or the Kaituna catchments*'.[1]

5.5 In the BOPRC officers 'Overview report on submissions', the staff recommendations are that 'no change is made' to the wording of Significant Issues 2.12.4(1). Their reasoning for this recommendation is as follows:

> '*The notified explanation text is correct in that consented allocation exceeds limits based on the interim allocation regime currently in use. New limits, to be implemented by 2024, will be based on new modelling and the freshwater objectives for each Freshwater Management Unit. BOPRC's understanding of appropriate limits is evolving and the community will be engaged on a suitable approach to setting limits. As noted in Forest & Bird's further submission, the NPS-FM and NES-FW are not water allocation tools*.'

Pressure on the Resource

5.6 Significant Issues 2.12.4(1) as presented by BOPRC[2] notes that '*Increasing water demand particularly for agriculture, horticulture, industrial and municipal uses continues to increase pressure on key values including tangata whenua, ecological and recreational values*.'

1 I note for completeness here that Significant Issues 2.12.4(1) addresses both surface water allocation and groundwater allocation. I do not address surface water in this evidence, however groundwater abstraction can affect surface water values.

5.7 As a general premise I agree that this statement serves its purpose, as over-allocation in any surface water resource can put pressure on the stated values, and groundwater abstraction could exacerbate this.

5.8 In my opinion the statement BOPRC make immediately after the statement in paragraph 5.6 addresses this concern. That being: '*This signals a need to assign and manage uses within surface and groundwater limits to provide for the well-being and key values of these water bodies and springs associated with them*'. As such, I do not address 'values' hereafter on the basis that the limit setting processes described in paragraphs 5.24 to 5.29 addresses this issue.

Grounds Upon which Allocation Limits were Developed

5.9 The basis of BOPRCs statement that consented groundwater use exceeds allocation limits is described in Mr Thornburrow's evidence. However, it is apparent that the method used by BOPRC to define interim allocation limits has resulted in limits which are extremely conservative for the Lower Kaituna catchment and are inconsistent with other groundwater zones within the region.

5.10 BOPRC's interpretation of these groundwater allocation limits resides within BOPRC '*Indicative Groundwater Availability and Consented Allocation*' online calculator[3] (emphasis added). This online tool and the allocation limits presented within it, was not developed or tested through a formal public consultation process and the method used to develop the limits is not incorporated in any statutory document. It therefore holds little to no statutory weight.

5.11 However, this online tool does guide BOPRC decision making, and decisions regarding groundwater sustainability from a statutory decision-making perspective formally resides within Policy 70 of the operative Regional Natural Resources Plan (RNRP). This requires decision-makers:

> 'To allocate groundwater according to Policy 73, and at a sustainable yield that avoids permanently or unsustainably lowering water levels, or degrading water quality in aquifer systems.

5.12 Policy 73 requires decision-makers:

> '*To require the efficient use of water where the efficiency is assessed as defined in Method 168*.'

[2] Version 5.0 dated August 2022.
[3] https://boprc.maps.arcgis.com/apps/MapSeries/index.html?appid=7a2ff1e0b0454bdb89498f0e019a23dd

5.13 As indicated by Mr Thornburrow, results presented to the Kaituna and Pongakawa-Waitahanui Freshwater Futures Community Groups (Workshop 11, 20 November 2019), indicated that the current allocation has little regional groundwater level impact[4].

5.14 Consequently, in my opinion the use of groundwater allocation limits in the online tool, and reliance on them, predetermines the state of the groundwater resource without the benefit of scientific rigour or community input. Until groundwater limits have been formalised through a public forum, a conclusive statement on the status of the resource is premature.

Consequence of Proposed RPS Wording

5.15 The consequence of formalising such conclusive statements in the RPS is the flow-on implications it may have for future decision-making. Section 59 of the Resource Management Act 1991 describes the purpose of an RPS as follows:

> '*The purpose of a regional policy statement is to achieve the purpose of the Act by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region*.'

5.16 The RPS will accordingly have bearing on the manner in which BOPRC will prepare its Regional Plans, and specifically, undertake the Freshwater Planning Process (FPP) prescribed by s.80A of the RMA. Section 80A specifically states:

> '*(3) A regional council must prepare a freshwater planning instrument[5] in accordance with this subpart and Part 4 of Schedule 1*.'

5.17 Accordingly, BOPRC notes[6] the following:

> '*The updated National Environmental Standards for Freshwater and National Policy Statement for Freshwater Management are based on the fundamental concept of Te Mana o te Wai…. Our regional freshwater management rules need to be updated by 2024 to meet these new targets.*
>
> *This means that the land and freshwater objectives, policies and rules in the Regional Policy Statement and Regional Natural Resources Plan will change, new water quality*

[4] https://atlas.boprc.govt.nz/api/v1/edms/document/A3470702/content

[5] (2) A freshwater planning instrument means—
(a) a proposed regional plan or regional policy statement for the purpose of giving effect to any national policy statement for freshwater management
(b) a proposed regional plan or regional policy statement that relates to freshwater (other than for the purpose described in paragraph (a)):
(c) a change or variation to a proposed regional plan or regional policy statement if the change or variation—
(i) is for the purpose described in paragraph (a); or
(ii) otherwise relates to freshwater.

[6] https://www.boprc.govt.nz/environment/fresh-water/updating-regional-freshwater-rules

targets and limits will be added, and water take limits (allocation and minimum flows) will change. Rules and methods will be established to meet these limits.'

5.18 As a result of the FPP, s.65(6) of the RMA sets out how Regional Plans (i.e. the FPI) must be prepared. Specifically, s.65(6) states that:

'(2) A regional council must amend a proposed regional plan or regional plan to give effect to a regional policy statement, if—

(a) the statement contains a provision to which the plan does not give effect; and

(b) one of the following occurs:

i. the statement is reviewed under section 79 and not changed or replaced; or

ii. the statement is reviewed under section 79 and is changed or replaced and the change or replacement becomes operative; or

iii. the statement is changed or varied and becomes operative.'

5.19 As a result of the FPP, s.67 of the RMA sets out the matters to be considered by BOPRC when developing their FPI. Specifically, s.67(2) states that:

'(3) A regional plan must give effect to—

(c) any regional policy statement.'

5.20 Furthermore, if the RPS is not operative by the time the FPI is prepared, s.66(2) of the RMA states:

'*(2) In addition to the requirements of section 67(3) and (4), when preparing or changing any regional plan, the regional council shall have regard to—*

(d) any proposed regional policy statement in respect of the region.'

5.21 Together these provisions mean that BOPRC will be required to 'give effect' to the RPS when developing the FPI. In my opinion, there are two outcomes that may transpire when BOPRC develop their FPI. First, they may take lead from Significant Issue 2.12.4(1) (as currently drafted by BOPRC), and give effect to the statement that the groundwater within the Kaituna River catchment is over-allocated. This would 'lock in' groundwater limits that reflect this 'over-allocated' statement. Or secondly, BOPRC may develop groundwater limits that provide for further groundwater to be allocated (beyond their informal interim limits), which will create a contradiction with Significant Issue 2.12.4(1) of the RPS.

5.22 The first scenario is particularly problematic and concerning for Hort NZ. If groundwater limits were set that take a lead from the RPS, then no further allocation could be granted to prospective groundwater users, and furthermore, existing allocation may need to be phased

out (as required by Policy 11 of the NSPFM). This scenario conflicts with the evidence presented by Mr Thornburrow that demonstrates that various allocation scenarios demonstrate that there is further groundwater allocation possible for this area.

5.23 The second scenario is less problematic, but results in an outcome where the FPI and RPS will conflict with each other because the FPI could say the groundwater allocation limits are 'under-allocated' but the RPS says they are over-allocated. It is questionable in this scenario whether the FPI 'gives effect' to the RPS as required by s.67 of the RMA.

Recommended Method for Determining Allocation Status

5.24 As a result of these difficulties, it is appropriate in my opinion, to avoid the narrative that the groundwater resource exceeds current allocation limits. Avoidance of such a narrative would have no material bearing on the environmental outcomes pursued by the RPS, as the wording of Policy KR 4B is retained that requires decision-makers to:

> '*Manage groundwater abstraction to protect the mauri of puna (spring) flows within the Kaituna River while:*
>
> *(a) Having regard to the social, economic and cultural well-being of present and future iwi, hapū and communities; and*
>
> (b) *Ensuring there is sufficient water available to provide for tāngata whenua, ecological and recreational values*.'

5.25 It is appropriate that groundwater allocation limits are decided upon within the FPP that BOPRC is embarking upon. BOPRC acknowledges this approach and note in paragraph 6.54[7] that: '*New limits, to be implemented by 2024, will be based on new modelling and the freshwater objectives for each Freshwater Management Unit*'.

5.26 In this respect I agree with BOPRC and the submission by the Royal Forest and Bird Protection Society of New Zealand Incorporated that the NPSFM is to be 'given effect' to by BOPRC plans including the RPS, and that the NPSFM is not in itself an allocation tool.

5.27 As indicated in paragraph 6.54[8], '*BOPRC's understanding of appropriate limits is evolving and the community will be engaged on a suitable approach to setting limits*'. Inherent within this statement is that current interim allocation limits are possibly not appropriate as they have not been developed through suitable approaches.

5.28 Groundwater allocation limits (and all freshwater limits) are value and judgement based. They can range across a spectrum and represent various environmental outcomes. It is

[7] Overview report on submissions
[8] Overview report on submissions

evident that the NPSFM intends for groundwater limits to be co-designed in collaboration with the community. The National Objectives Framework (NOF) sets out the process BOPRC must undertake in order to give effect to the NPSFM. Section 3.16 and 3.17 of the NPSFM states:

'Every regional council must include rules in its regional plan(s) that set environmental flows and levels for each FMU, and may set different flows and levels for different parts of an FMU.

(1) In order to meet environmental flows and levels, every regional council:

(a) must identify take limits for each FMU; and must include the take limits as rules in its regional plan(s);'

In order to be able to set these flows, levels and limits, the NOF states (in section 3.7):

(1) At each step of the NOF process, every regional council must:

(a) engage with communities and tangata whenua

5.29 Evidently, the NPSFM's foundation for developing groundwater limits is based on a process of community input, identification of values (sometimes competing), and varying intended environmental outcomes. The groundwater limits currently used by BOPRC do not satisfy these requirements and I consider it premature to rely on these to make definitive statements about allocation status in the RPS. That the allocation status of the groundwater resource in the Kaituna River catchment is yet to be determined.

Proposed Wording

5.30 As a result of this evaluation, I recommend a change to the wording of Significant Issues 2.12.4(1) and Policy KR 4B as presented in full in Appendix B and summarised in paragraph 5.34 below.

5.31 However, there are two points worth making prior to doing so which refers to Hort NZ's proposed wording in Submission 8-1.

5.32 In order to present a pragmatic position, Hort NZ was happy to retain some acknowledgement of allocation status, in order to give the statement more weight, and in doing so proposed wording that '*Lower Kaituna aquifer current water allocation is approaching the peak of what would be suitable for freshwater outcomes*'. In accordance with Mr Thornburrow's evidence, modelling results presented to the Kaituna and Pongakawa-Waitahanui Freshwater Futures Community Groups (Workshop 11, 20 November 2019), comprised three allocation scenarios ranging from existing allocation, through to an approximate tripling of allocation, with a doubling of allocation appearing most favoured.

Accordingly, I consider that even wording indicating a nearing of allocation limits is too prescriptive and it is for the community to decide through the FPP what the allocation status should be. As a result, I suggest broadening the wording to acknowledge that over-allocation is a serious concern and can result in unacceptable outcomes, however such limits will be decided upon through the FPP.

5.33 My second comment on the Hort NZ submission is a clarification matter only, in that the proposed wording stated: '*Groundwater across the region should be allocated through national policies (NPSFM & NES) and current and best knowledge of the aquifers at the Kaituna catchment scale*' It is recommended that this wording be changed to reflect the fact that groundwater will be allocated based on limits that have been set through the FPP, and not through the NPSFM/NES policies themselves.

5.34 In summary, the following changes are proposed to Significant Issues 2.12.4(1) and Policy KR 4B:

i. That over-allocation of groundwater can present a serious environmental risk; and

ii. That appropriate and suitable groundwater allocation limits should be set through the FPP that give effect to the provisions in the NPSFM and RPS. This would involve engagement with community and iwi to understand values which require protection and/or support to enable development.

6.0 CONCLUSIONS

6.1 The key conclusions are drawn, namely:

i. It would be detrimental to the FPP and premature to conclude that groundwater within the Kaituna River catchment is over-allocated;

ii. The FPP and adherence to the NOF are the appropriate settings to determine appropriate and suitable groundwater allocation limits.

iii. Conclusive statements in the RPS regarding the over-allocated status of the Kaituna groundwater resource would require BOPRC to implement a limit within their FPI that:

   a. is either consistent with such a statement and therefore curtails any future development that relies on groundwater, or

   b. is inconsistent with the RPS statement if limits are set that provide more groundwater available for allocation.

iv. I suggest that the Significant Issues 2.12.4(1) is amended to acknowledge the fact that over-allocation of the groundwater resource is undesirable and has potentially

significant effects, but avoids making definitive statements regarding the current allocation status.

Simon Greening
13 September 2022

Appendix A: BOPRC officers 'Overview report on submissions' Recommended Wording

2.12.4 Significant Issues affecting the Kaituna

Water demand is high and could pose a risk for springs, surface water bodies and associated tangata whenua, ecological and recreational values

Current consented allocation exceeds water quantity limits in several sub-catchments of the Kaituna River, and in parts of the underlying groundwater resource.

Increasing water demand particularly for agriculture, horticulture, industrial and municipal uses continues to increase pressure on key values including tangata whenua, ecological and recreational values. This signals a need to assign and manage uses within surface and groundwater limits to provide for the well-being and key values of these water bodies and springs associated with them. Water demand is particularly high in the lower Kaituna River

Catchment. Projected urban growth will also place increased demand on water in the lower Kaituna.

Policy KR 4B: Managing groundwater abstraction in the Kaituna River

Manage groundwater abstraction to protect the mauri of puna (spring) flows within the Kaituna River while:

(e) Having regard to the social, economic and cultural well-being of present and future iwi, hapū and communities; and

(f) Ensuring there is sufficient water available to provide for tāngata whenua, ecological and recreational values.

Explanation

Demand for fresh water particularly for agriculture, horticulture and for drinking supply is predicted to double in the Western Bay sub-region between 2005 and 2055 but the amount of water in our rivers, streams and groundwater aquifers is limited. Under the National Policy Statement on Urban Development, Rotorua is identified as a tier 2 urban environment and local authority reversing a previous trend of declining growth. The Western Bay of Plenty sub-region (which includes Tauranga City) is identified as a tier 1 urban environment and local authority. ~~Appendix E of this Policy Statement identifies~~ Considerable areas of currently rural land are earmarked for future urban development in the Te Puke, Rangiuru Business Park and Te Tumu urban growth areas. As population growth and urban development occurs within these areas there will be greater demand for freshwater use.

The challenge is to ensure there is sufficient water within the Kaituna River to provide for tangata whenua, ecological and recreational values for present and future generations whilst also providing for growth and economic, cultural and social well-being. This challenge is serious given current consented allocation exceeds water quantity limits in several sub-catchments of the Kaituna River and also in parts of the underlying groundwater resource.

Managing groundwater abstraction is challenging given its complexities including the interconnections between groundwater and surface water. Water is a renewable resource if used responsibly and sustainably managed. As groundwater and surface water limits are met there will be increasing competition between users for this resource.

Decisions about the allocation of groundwater must ensure there is sufficient water available to provide for tangata whenua, ecological and recreational values. Policy KR 4B must be considered in tandem with Policy WQ 2A when setting allocation limits and Policy WQ 4B when establishing common review dates for groundwater takes within the Kaituna River Catchment.

Appendix B: Proposed Recommended Wording

Green indicates changes I suggest.

2.12.4 Significant Issues affecting the Kaituna

Water demand is high and could pose a risk for springs, surface water bodies and associated tangata whenua, ecological and recreational values

Current consented allocation exceeds water quantity limits in several sub-catchments of the Kaituna River, ~~and in parts of the underlying groundwater resource.~~ however, allocation limits have not yet been determined for the groundwater resource. Despite this, over-allocation of the groundwater can have serious environmental effects. Increasing water demand particularly for agriculture, horticulture, industrial and municipal uses continues to increase pressure on key values including tangata whenua, ecological and recreational values. This signals a need to assign and manage uses within surface and groundwater limits to provide for the well-being and key values of these water bodies and springs associated with them. Water demand is particularly high in the lower Kaituna River Catchment. Projected urban growth will also place increased demand on water in the lower Kaituna.

Appropriate and suitable groundwater allocation limits should be set in accordance with the Freshwater Planning Process (FPP) set out in Section 80A of the Resource Management Act 1991. This should be done by giving effect to the National Policy Statement for Freshwater Management 2020 (or any replacement National Policy Statement) and in accordance with the National Objectives Framework.

Policy KR 4B: Managing groundwater abstraction in the Kaituna River

Manage groundwater abstraction to protect the mauri of puna (spring) flows within the Kaituna River while:

(a) Having regard to the social, economic and cultural well-being of present and future iwi, hapū and communities; and

(b) Ensuring there is sufficient water available to provide for tāngata whenua, ecological and recreational values.

Explanation

Demand for fresh water particularly for agriculture, horticulture and for drinking supply is predicted to double in the Western Bay sub-region between 2005 and 2055 but the amount of water in our rivers, streams and groundwater aquifers is limited. Under the National Policy Statement on Urban Development, Rotorua is identified as a tier 2 urban environment and

local authority reversing a previous trend of declining growth. The Western Bay of Plenty sub-region (which includes Tauranga City) is identified as a tier 1 urban environment and local authority. ~~Appendix E of this Policy Statement identifies~~ Considerable areas of currently rural land are earmarked for future urban development in the Te Puke, Rangiuru Business Park and Te Tumu urban growth areas. As population growth and urban development occurs within these areas there will be greater demand for freshwater use.

The challenge is to ensure there is sufficient water within the Kaituna River to provide for tangata whenua, ecological and recreational values for present and future generations whilst also providing for growth and economic, cultural and social well-being. This challenge is serious given current consented allocation exceeds water quantity limits in several sub-catchments of the Kaituna River ~~and also in parts of the underlying groundwater resource~~ and since suitable and acceptable groundwater allocation limits have not yet been set.

Managing groundwater abstraction is challenging given its complexities including the interconnections between groundwater and surface water. Water is a renewable resource if used responsibly and sustainably managed. As groundwater and surface water limits are met there will be increasing competition between users for this resource.

Decisions about the allocation of groundwater must ensure there is sufficient water available to provide for tangata whenua, ecological and recreational values. Policy KR 4B must be considered in tandem with Policy WQ 2A when setting allocation limits and Policy WQ 4B when establishing common review dates for groundwater takes within the Kaituna River Catchment.