

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of **PROPOSED PLAN CHANGE 1** to the Waikato Regional Plan – hearing of **BLOCK 2** topics

AND

IN THE MATTER of the hearing of submissions and the further submission by **WATERCARE SERVICES LIMITED** in relation to **BLOCK 2** topics

OUTLINE OF LEGAL SUBMISSIONS OF COUNSEL FOR WATERCARE SERVICES LIMITED

1. INTRODUCTION

- 1.1 This is the hearing of the Block 2 submissions and further submissions on, amongst other matters, urban point source discharges.

Watercare Services Limited

- 1.2 As advised in Mark Bourne’s evidence for the Block 1 hearings, Watercare Services Limited (“Watercare”) is a council-controlled organisation (“CCO”) owned by the Auckland Council. Watercare is responsible for providing essential water and wastewater services to existing and future communities in Auckland and also townships in the northern part of Waikato District.
- 1.3 Watercare has significant interests in the Waikato Region as detailed in the evidence of Mr Bourne for the Block 1 hearings and in our legal submissions in the Block 1 hearings and need not be repeated here.
- 1.4 In the context of this hearings the Watercare interests / assets that give rise to a particular interest in urban point source discharges are:
- (a) As owner and operator of the Pukekohe Wastewater Treatment Plant (“Pukekohe WWTP”), which receives and treats wastewater from

Pukekohe, Patumahoe, Buckland, Pokeno and Tuakau. The Pukekohe WWTP is in the process of being upgraded at a cost of approximately \$143M.

- (b) As owner and operator of the Tuakau Water Treatment Plant, which treats the water taken from the Waikato River for municipal supply to Auckland (and places en route to Auckland).
- (c) As the result of a bulk supply agreement with WDC for the provision of water and wastewater services to Pokeno and Tuakau within the Waikato District, including provision of bulk treated drinking water; transmission and treatment of bulk wastewater; and maintenance services for local network reticulation. The scope of these services may be increased in the future.

Watercare position

- 1.5 Watercare remains supportive of PC1 insofar as it is intended to achieve the Vision and Strategy for the Waikato River ("V & S") and thus reduce the amount of contaminants entering the Waikato River from the Waikato and Waipā catchments.
- 1.6 Watercare's case in the Block 2 hearings primarily relates to amendments sought by Watercare to the policy provisions of Proposed Plan Change 1 ("PC1") to ensure they appropriately provide for point source discharges.
- 1.7 Counsel made extensive submissions on the meaning and application of the V & S in the Block 1 hearings, particularly as regards the need for PC1 to recognise the assimilative capacity of the rivers to provide for point source discharges from wastewater treatment plants. It is therefore not intended to repeat those submissions here, other than by way of recap to note the following key points from Watercare's principal submission from the Block 1 hearings:

"8.3 *To briefly recap Watercare's concerns and requests:*

- (a) *The values identified in PC1 lack clarity and may result in confusion or unnecessary information requirements. The values should be deleted or, as a minimum, amended to:*
 - (i) *include an explanation to make it clear that the Values are not "provisions" or "any other matter" to be considered in the resource consent process;*
 - (ii) *include words to make it clear that the Values include existing as well as future municipal water supply; and*

- (iii) *make it clear that rivers, lakes, and wetlands provide for existing and future municipal wastewater discharges.*
- (b) *Objective 1 of PC1 needs to be amended to require progressive reduction of diffuse and point source discharges with the aim of achieving the aspirational long term water quality targets in Table 3.11-1.*
- (c) *Amendments are also required to Objective 3 to make it clear that it does not apply to point source discharges from WWTPs.*
- (d) *PC1 does not make adequate provision in its objectives for existing municipal water and wastewater infrastructure and future water and wastewater infrastructure to support growth. To that extent, PC1 does not adequately give effect to the NPS:UDC Development and the equivalent provisions of the Waikato RPS. In that regard, it is worth noting that new wastewater discharges do not necessarily equate to degraded water quality. As per the Pukekohe WWTP – new infrastructure can provide for significant population growth and also achieve a downstream improvement in water quality (compared to the effects of the existing discharge) albeit at high cost.*
- (e) *Amendments are therefore required to the objectives to ensure that PC1 recognises the importance of existing and future regionally significant water supply and wastewater infrastructure and associated discharges, including inserting a definition of regionally significant infrastructure.*
- (f) *The objectives of PC1 do not adequately recognise the assimilative capacity of the Waikato and Waipa Rivers and the importance of that with respect to dilution of discharges from wastewater treatment plants. A new objective is required in that regard.*

...

8.4 *Watercare shares the WARTA councils concerns that PC1 as it is presently formulated does not give effect to the Vision, or the purpose of the RMA, due to the potentially significant economic costs arising from upgrades to WWTPs that would be required to achieve the targets / limits in Table 3.11-1 if a zone of reasonable mixing is not recognised for WWTP discharges, resulting in the targets / limits having to be met at the end of pipe.*

8.5 *Given its increasing role as an infrastructure operator in the Waikato Region, Watercare also endorses WARTA's position that, in undertaking the first step in the journey, significant and unnecessary economic burdens should not be imposed on infrastructure providers which must inevitably be passed on to the communities that are a vital part of achieving the Vision."*

(Emphasis ours.)

Key issues for determination - Watercare Block 2 evidence - overview

- 1.8 The key issues raised for determination by Watercare's three submissions on PC1 (primary submission, further submission and submission on Variation 1) in the context of the Block 2 hearings are addressed in the statements of evidence filed by Mr Hall and Mr Scafton.

Garett Hall – water quality scientist (Beca)

- 1.9 Mr Hall is a Technical Director - Environments at Beca. His evidence relates to water quality issues raised by PC1. His Block 2 evidence addresses the following matters:

- (a) Centralisation / amalgamation of point source discharges;
- (b) The need for seasonality effects to be recognised in PC1;
- (c) The implications for discharge consents arising from urban growth;
- (d) Beneficial environmental effects of treated wastewater discharges;
- (e) Offsetting of environmental effects; and
- (f) Protecting and restoring water quality.

Chris Scafton – planning consultant (Beca)

- 1.10 Mr Scafton is a Technical Director – Planning at Beca. His evidence relates to planning issues raised by PC1. His evidence addresses the following matters:

- (a) Development of policies to implement freshwater objectives;
- (b) Relationship of policies with Table 3.11-1;
- (c) Application of the best practicable option;
- (d) Offsetting environmental effects; and
- (e) Proposed amendments to Policy 12.

Scope of legal submissions

- 1.11 Very little in the way of strictly "legal" issues arise in the context of the Block 2 hearings. To that extent, the purpose of these submissions is to scope Watercare's case by reference to the evidence of Watercare's two expert witnesses. Specifically, these submissions address the following issues:

- (a) Best practice planning (Section 2);

- (b) Future growth and centralisation of municipal point source discharges (Section 3);
- (c) The existing environment and proportionality – assessing effects of point source discharges (Section 4);
- (d) Best practicable option and offsetting – the provisions of Policy 11 (Section 5);
- (e) The need to recognise and provide for reasonable mixing (Section 6);
- (f) Approach to consent duration (Section 7);
- (g) Technical water quality matters (Section 8) and
- (h) Watercare’s principal submission (Section 9).

2. **BEST PRACTICE PLANNING**

2.1 Mr Scrafton’s evidence is critical of PC1 in terms of achieving best practice planning. In summary, Mr Scrafton’s evidence is that:

- (a) Objective 1 is not a target / limit for the purposes of the National Policy Statement for Freshwater Management 2014 (Updated 2017) (“NPS FW”).¹
- (b) There are no objectives in PC1 that give effect to the NPS FW.²
- (c) The objectives and policies of PC1 do not clearly relate to the majority of the values in PC1.³
- (d) There are existing objectives and policies in the Waikato Regional Plan (“WRP”) that relate to the values in PC1, but PC1 notes in its introductory chapter that, where there are any inconsistencies between the provisions of PC1 and the other provisions of the WRP, PC1 provisions prevail.⁴
- (e) Providing for the PC1 provisions to prevail creates uncertainty and the text in that regard should be deleted in favour of an approach which identifies what provisions are and are not superseded by PC1.⁵

¹ Scrafton evidence, paragraph 3.4(a).

² Ibid, paragraph 3.4(b).

³ Ibid, paragraphs 3.4(c) and (d).

⁴ Ibid, paragraph 3.4(f).

⁵ Ibid.

- (f) The "Commercial, municipal and industrial use" value in PC1, which includes the assimilative capacity of the rivers, is not reflected in any of the objectives or policies in PC1.⁶
- (g) There is no clear cascade from the values to the freshwater objectives to the policies to the rules.⁷

2.2 Mr Scrafton's evidence can be tested against best practice planning by reference to the information on the Quality Planning website; we turn to that matter now.

Guidance from the Quality Planning website

2.3 The Quality Planning website ("QPW") was launched in 2001 and is a partnership between the following organisations:

- (a) Ministry for the Environment;
- (b) New Zealand Planning Institute;
- (c) Resource Management Law Association;
- (d) New Zealand Institute of Surveyors;
- (e) Local Government New Zealand; and
- (f) New Zealand Institute of Architects.

2.4 The QPW sets out best practice guidance on planning and resource management matters and it states the following in relation to cascade approaches to planning documents:

"Cascade approaches are a way of organising plan provisions so that:

- *it is easy to check relations between issues, objectives, policies and rules, and to see if they are consistent with each other*
- *plan drafters and those implementing the plan can check rules to manage the effects of activities through assigning activity status without leaving gaps or overlaps that create uncertainty or unintended outcomes.*

A cascade approach can be used to check the internal consistency of provisions within plans. Characteristics of a cascade approach:

- *objectives link back to issues*

⁶ Ibid, paragraph 3.4(g).

⁷ Scrafton evidence, paragraph 3.6.

- *policies link back to objectives*
- *methods link back to policies*
- *environmental resultants expected link to objectives*
- *indicators link to environmental results expected*
- *rules link to policies and methods.*

This cascade approach simultaneously demonstrates both the 'top-down ' approach to plan drafting and 'bottom-up ' approach to plan interpretation, thereby indicating the close links the levels of plan components have with each other.

Relationships between plan provisions:

- *objectives should be related to an issue (the issue may or may not be stated in the plan)*
- *policies should link to objectives (policies are the course of action to achieve one or more objectives)*
- *methods should link to policies (they are the techniques for implementing the policies) noting that methods (other than rules) may or may not be stated in the plan*
- *rules should link to policies (rules should also take into account other methods and may link to those methods)*
- *environmental results expected should link back to policies and methods (as they will provide a means of testing whether the policies and methods have achieved the desired outcome or objective) noting that environmental results expected may or may not be contained in a plan (if not, they may form part of the plan effectiveness monitoring required under s35 of the RMA)*
- *indicators should link to environmental results expected (note the RMA does not mention indicators explicitly but indicators provide the means to measure the environmental results expected)."*

2.5 For the reasons set out in Mr Scafton's evidence for both the Block 1 hearings and these hearings, it is submitted that PC1 as presently formulated fails to achieve best practice planning as described above. The Panel has the unenviable task of attempting to achieve that.

2.6 Notwithstanding that, a primary objective of Watercare's case to date and today is to make recommendations (particularly via Mr Scafton's evidence) in relation to the objectives and policies of PC1 which, if accepted, will go some way towards rectifying the deficiencies of PC1 insofar as it relates to municipal point source discharges of wastewater. Mr Scafton recommended amendments to the objectives of PC1 in the Block 1 hearings. His evidence for the Block 2 hearings focuses on amendments to the policies of PC1 and we address those in the remainder of these submissions.

3. **FUTURE GROWTH AND CENTRALISATION OF MUNICIPAL POINT SOURCE DISCHARGES**

3.1 In the Block 1 hearings, Mr Scrafton presented evidence on the significant growth envisaged in the Waikato Region. Mr Scrafton and Mr Hall both address that matter in their evidence for these hearings as well, stating their expert opinions that the provisions of PC1 do not adequately recognise or provide for urban growth. In that regard, the Waikato District is identified in the National Policy Statement for Urban Development ("NPS UDC") as a high growth district and 16,000 additional dwellings are required in Pukekohe and Paerata before 2046 based on the Auckland Council's Future Urban Land Supply Strategy.⁸

3.2 As part of his evidence in the Block 1 hearings, Mr Scrafton has recommended the inclusion of a new objective (Objective 7) to recognise the importance of existing and future regionally significant infrastructure, while still achieving the restoration and protection of the Waikato River, given that there was no objective in that regard. Existing regionally significant infrastructure is likely to require upgrading or replacing to provide for growth, but Policy 10 of PC1 only provides for the "continued operation of regionally significant infrastructure." Mr Scrafton has therefore recommended amendments to Policy 11 so that it also provides for:

- (a) Upgrading of regionally significant infrastructure; and
- (b) New regionally significant infrastructure.⁹

3.3 It is submitted that the amendments proposed by Mr Scrafton are necessary to ensure that PC1 provides for future growth and gives effect to the NPS UDC.

Centralisation

3.4 Mr Hall's evidence addresses the trend toward centralisation of wastewater treatment plants ("WWTPs") by replacing two or more smaller wastewater treatment plants with a new, larger, and technologically superior WWTP. His evidence notes the following examples in the Auckland Region:

- (a) Warkworth and Snells Beach wastewater to be treated at a new WWTP at Snells Beach;
- (b) Orewa's wastewater is now treated at Army Bay and Waiwera's wastewater will be treated there in the future; and

⁸ Scrafton evidence, paragraphs 5.1(a) and (c).

⁹ Scrafton evidence, paragraph 5.4.

(c) Kingseat, Clarks Beach, Glenbrook, and Waiuku wastewater to be treated at a new WWTP at Waiuku.¹⁰

3.5 Mr Hall notes that the centralisation trend is likely to be followed in the Waikato and recommends that provision be made in PC1 to recognise that likelihood so that the positive effects of discontinuing some discharges can be assessed against the effects of the new, centralised discharge.¹¹ Mr Scafton has therefore recommended an amendment to Policy 12 so that the following has to be taken into account in considering the new, centralised discharge:

"(g) Where existing point source discharge locations are being amalgamated, the overall effects on water quality when comparing the effects of the proposed discharge/s to the existing discharges."

3.6 It is submitted that recognising the potential benefits of centralisation / amalgamation of wastewater discharges should be provided for in PC1 as it can result in protecting and restoring water quality in the Waikato and Waipa Rivers.

4. **THE EXISTING ENVIRONMENT AND PROPORTIONALITY – ASSESSING THE EFFECTS OF POINT SOURCE DISCHARGES**

4.1 Mr Scafton has recommended the following amendment to Policy 12 in the context of consenting an existing wastewater treatment plant discharge:

"(c) Where relevant, the extent of improvement of discharge quality when compared to the current point source discharge from the same regionally significant infrastructure."¹²

4.2 The proposed amendment is designed to ensure that the effects of the existing discharge are considered against the up-stream background water quality and that any proposed improvement as part of the new consent application is taken into account. That will in turn enable the decision makers to assess to what degree the proposed new discharge would result in protection or restoration of the Waikato River.

4.3 Mr Scafton notes in his evidence that the "environmental baseline" normally applied in consenting an existing wastewater discharge is "without the discharge occurring."¹³ That is so an applicant cannot, in assessing the effects of the activity to be authorised by their application, rely on the adverse effects generated by the existing activity as part of the existing environment. Mr Scafton's understanding is consistent with a line of authority to that effect in

¹⁰ Hall evidence, paragraphs 3.1 and 3.2.

¹¹ Ibid, paragraph 3.4.

¹² Scafton evidence, paragraph 8.10.

¹³ Scafton evidence, paragraph 8.6.

the context of reconsenting existing dams and other structures (e.g. marine farms).¹⁴ This principle is summarised in the "Environmental and Resource Management Law" text as follows¹⁵:

"Accordingly, the existing environment cannot include, in the context of a renewal application, the effects caused by the activities for which the renewal consents are sought, unless it would be fanciful or unrealistic to assess the existing environment as though those structures authorised by the consent being renewed did not exist ..."

(Emphasis ours.)

- 4.4 The principle established by this line of authority stands but in the Waikato and Waipa River catchments a gloss needs to be put on it in light of the effect of the *Puke Coal* decision,¹⁶ which makes it necessary to establish some element of betterment in relation to, for example, a proposed discharge. In these circumstances, the effects of the existing activity need to be considered for the purpose of determining whether the *Puke Coal* requirement has been satisfied. Watercare's application for the Pukekohe WWTP discharge consents was approached in that manner, in our submission appropriately.
- 4.5 Thus, making the amendment to PC1 sought is appropriate and necessary in assessing an application to re consent an existing discharge in which improvements are required to protect or restore the Waikato River.

Proportionality

- 4.6 Mr Scrafton's evidence is that there is a policy void in PC1 as regards identifying what degree of improvement / betterment is required in any resource consent application.¹⁷ Mr Scrafton has therefore recommended amendments to Policy 12 so that the following would need to be taken into account in assessing a resource consent application:

- "(a) *The relative proportional contribution of nitrogen, phosphorous, sediment or microbial pathogens that the particular point source discharge contributes to the catchment load and the likely impact of that contribution to:*
- i. The achievement of the short-term numeric attribute states in Table 3.11-1; and*
 - ii. Progression towards the achievement of the 80-year targets in Table 3.11-1."*

¹⁴ For example, see *Ngati Rangi Trust v Manawatu-Whanganui Regional Council* [2016] NZHC 2948 and *Port Gore Marine Farms v Marlborough District Council* [2012] NZEnvC 72.

¹⁵ As cited with approval in *Ngati Rangi* at paragraph [67].

¹⁶ *Puke Coal Ltd v Waikato Regional Council* [2014] NZEnvC 223.

¹⁷ Scrafton evidence, paragraphs 8.3(a) to (c).

- 4.7 The need to appropriately recognise proportionality was recognised in the *Puke Coal* decision where the following was stated:

"[92] *Implicit in the Supreme Court decision was the matter of workable practicality thus any protection or restoration must be proportionate to the impact of the application on the catchment. However, it is clear that it intends to go further than avoiding effect. We have concluded protection and restoration includes preservation from future and restoration from past damage. Restoration can only involve recreation of a past state. Thus, some element of betterment is intended."*

(Emphasis ours.)

- 4.8 In our submission, the amendments proposed by Mr Scafton are consistent with the guidance provided by the Environment Court in the above passage and, as a result, should in our submission be included in Policy 12.

5. **BEST PRACTICABLE OPTION AND OFFSETTING – PROVISIONS OF POLICY 11**

- 5.1 Mr Scafton has recommended that Policy 11, which relates to the best practicable option ("BPO") and offsetting, is broken down into two new policies – Policy 11 (BPO) and Policy 11A (offsetting). One reason for that is that Policy 11 as currently drafted is written like a rule. Aside from that, the key reasons for Mr Scafton's recommendation are set out in his evidence as follows:

"6.6. *In my view, the position put forward by the Reporting Officer with regard to the BPO being a minimum requirement:*

- (a) *Is inconsistent with the RMA;*
- (b) *Does not reflect my experience of undertaking a BPO assessment wherein the policy framework is a key component of understanding the sensitivity of the receiving environment;*
- (c) *Appears to assume that utilising offsets to achieve positive outcomes cannot form part of the BPO; and*
- (d) *Appears to assume that municipal providers (and ultimately the communities they service) are able to "pay those costs" in all circumstances or that a viable alternative option to a municipal discharge to water is always readily available.*

6.7...

6.8 *Policy 11 as proposed by PC1 requires the adoption of the BPO to avoid or mitigate all adverse effects and where it is not practicable to avoid or mitigate all adverse effects an applicant may propose offset measures to achieve a positive outcome. In my view, this approach both:*

- (a) *Misinterprets the meaning of the BPO, which provides for the consideration of a range of factors to identify the BPO to prevent or minimise adverse effects; and*
- (b) *Inappropriately merges two very different concepts, being the BPO and offsetting."*

5.2 In relation to the above, it is submitted that Mr Scafton is correct that:

- (a) the BPO and offsetting are two distinct concepts; and
- (b) offsetting can and may well form part of the BPO.

5.3 For example, rather than undertaking a costly upgrade to a WWTP to reduce nutrients, with potentially no actual beneficial effect for the rivers given existing diffuse discharges of nutrients, the BPO may be undertaking a minimal upgrade alongside riparian planting / retiring erosion prone land to reduce discharges of suspended sediment into the rivers.

5.4 The wording Mr Scafton is recommending for the BPO is as follows:

"When deciding resource consent applications for point source discharges of nitrogen, phosphorus, sediment or microbial pathogens to water or onto or into land in the Waikato and Waipa River catchments, have regard to whether the proposed discharge represents the best practicable option at the time resource consent is being considered."

Offsetting

5.5 The offsetting provisions of Policy 11 are limited in scope insofar as they are restricted to offsetting the same contaminant (e.g. nitrogen for nitrogen) and contain restrictions as to where the offsetting can occur:

- (a) preferably within the same sub-catchment as the discharge; or
- (b) if that is not practicable, in the same freshwater management unit or an upstream freshwater management unit.

5.6 Offsetting can have significant advantages, such as avoiding a costly upgrade to a WWTP in circumstances where:

- (a) that upgrade is going to have minimal (if any) effect on water quality due to the high background nutrient concentration in the rivers from other sources such as diffuse discharges; and

- (b) greater environmental benefits can be achieved by offsetting (e.g. retiring erosion prone land).¹⁸

5.7 Given the potentially significant benefits of offsetting, it is submitted that the offsetting provisions in PC1 should be amended to provide the greatest flexibility feasible. Doing so is likely to provide for more “bangs for the buck” in achieving the V & S than the narrow and inflexible provisions currently contained in PC1. In that regard, Mr Scrafton has recommended that the following offsetting provisions be included in a new Policy 11A:

"Recognise that to achieve sufficient contribution towards the protection and restoration of the health and wellbeing of the Waikato and Waipa Rivers, offset measures may be proposed:

- (a) In alternative locations to the point source discharge; and*
- (b) Preferably within the same sub-catchment in which the primary discharge occurs but:*
- (c) If this is not practicable, then within the same Freshwater Management Unit or a Freshwater Management Unit located upstream; or*
- (d) If better water quality outcomes can be achieved, then outside of the sub-catchment but within the same freshwater management unit or a Freshwater Management Unit located upstream.*

5.8 The key difference between the above provisions and the existing provisions of PC1 is that the provisions recommended by Mr Scrafton do not limit offsetting to the same contaminant. In addition, those provisions would enable offsetting outside of the sub-catchment, even if offsetting is practicable within the sub-catchment, if better environmental outcomes can be achieved.

5.9 In his evidence, Mr Hall specifically refers to retiring erosion prone land as being an offsetting measure that can be of value.¹⁹ **Attached as Appendix 1** to these submissions is an aerial photograph that shows the confluence of the Waipa and Waikato Rivers at Ngaruawahia to highlight the significant effect of suspended sediment deposited in the Waipa River during flood as a result of erosion of land in the Waipa River catchment.

5.10 It is submitted that the ability to offset discharges of nutrients (nitrogen and phosphorous) by retiring/planting erosion prone land would likely have significant benefits and, as a result, it should be enabled to the greatest extent possible. At the very least, that opportunity (and similar opportunities to

¹⁸ Hall evidence, paragraph 7.2.

¹⁹ Ibid.

optimise environmental outcomes) should be “on the table” rather than being precluded by the unduly narrow provisions currently in PC1.

6. THE NEED TO RECOGNISE AND PROVIDE FOR REASONABLE MIXING

6.1 In his evidence in chief for the Block 1 hearings, Mr Hall addressed the assimilative capacity of the Waikato and Waipa Rivers and the zone of reasonable mixing. In that regard, Mr Hall’s evidence stated:

"2.3 *Assimilative capacity is the ability of a water body to dilute and subsequently incorporate/alter contaminants discharged to the water body. In my experience of consenting wastewater treatment plant ("WWTP") point source discharges to water bodies, a zone of reasonable mixing is always provided for and end-of-pipe limits are imposed in the knowledge that the concentration of the relevant contaminant will be measured in the water body after the zone of reasonable mixing.*

2.4 *While the provisions of PC1 refer to assimilative capacity, there is no reference to assimilative capacity in the objectives of PC1. Unless PC1 specifically addresses the matter, I am concerned that there is in potential for Objectives 1 and 3 to be interpreted in such a manner that the short and long term water quality targets / limits for nitrogen, phosphorus, sediment and microbial pathogens are required to be met at the end-of-pipe rather than after the zone of reasonable mixing which factors in the assimilative capacity of a water body."*

6.2 In light of the above, in his evidence in chief for the Block 1 hearings Mr Scafton recommended inclusion of a new objective to recognise the assimilative capacity of the river. That objective is as follows:

"Objective 7:

The achievement of the restoration and protection of the Waikato and Waipa Rivers recognises the importance of the assimilative capacity of the rivers."

6.3 Mr Scafton has recommended amendments to Policy 12 to provide for reasonable mixing so there is a cascade from his recommended objective and a clear link to an existing policy in the WRP regarding reasonable mixing. Mr Scafton’s recommended amendment is as follows:

"Consider the contribution made by a point source discharge after the application of reasonable mixing in accordance with Policy 3.2.3.8, to the nitrogen, phosphorus, sediment and microbial pathogen catchment loads and the impact of that contribution on ~~the likely achievement of the short term targets~~ ^{in Objective 3} or the progression towards the 80 year targets ^{in Objective 1}, taking into account:

..."

(Emphasis ours.)

6.4 In our submission, it is appropriate to expressly provide for reasonable mixing in PC1, particularly given the extraordinarily high costs of upgrading WWTPs if the targets / limits in Table 3.11-1 had to be met at the end-of-pipe. Those potential costs were addressed in Mr Harty's evidence for the Waikato Region Territorial Authorities in the Block 1 hearings. In that respect, Mr Harty's evidence stated the following:

- "2.2 *The failure of PC1 to recognise and provide for utilisation of the assimilative capacity of the Waikato and Waipa Rivers is a matter of primary concern. While it is recognised that there is a need to reduce the contaminant load in the rivers, the lack of clear recognition and provision for areas of mixing (i.e., an area of the river that enables the discharge to be assimilated with the flow), following discharges from WWTPs needs to be addressed.*
- 2.3 *If the targets and limits set through PC1 were to be applied directly at the point of discharge rather than following reasonable mixing, the impact on treatment costs for the relevant municipal authority would be huge.*
- 2.4 *This significant cost would not, in my view, represent a prudent investment nor meet the tests required through the application of the "best practicable option" in terms of the Resource Management Act 1991 ("RMA").*
- 2.5 *In 2018, the DIA delivered a report to Government that outlined the investment required for municipal WWTPs to meet the National Policy Statement for Freshwater Management 2014 (Updated 2017) ("NPS Freshwater") Attribute State B standard. GHD, alongside Boffa Miskell, undertook this work for DIA and I was part of the GHD team.*
- 2.6 *The output of the work demonstrated that a large number of plants within the areas covered by PC1 would require to be upgraded to meet Attribute State B standard and that the costs - estimated at between \$125 and \$210 million - would be significant.*
- 2.7 *It is important to note that the water quality requirements of PC1 are much more stringent than that of NPS FM Attribute B and, therefore, any WWTP upgrades would need to be focused on achieving an even higher standard, at a significantly higher cost, and potentially for no environmental gain.*
- 2.8 *To meet the much more stringent PC1 requirements at point of discharge at these sites (if that were required) would require the introduction of treatment processes currently not in general use for WWTPs in New Zealand. Significant research and analysis would be required to determine whether there is any practicable operating treatment process globally that would meet these standards and if so the costs would be expected to be several times greater than the cost to treat to NPS Freshwater Attribute B standards considered in the DIA report.*

(Emphasis ours.)

7. APPROACH TO CONSENT DURATION

7.1 The reporting officer recommends the deletion of the reference to a consent duration of 25 years in Policy 13 and deletion of reference in the same policy to demonstrating that the approaches set out in Policies 11 and 12 will be met.

7.2 Mr Scrafton agrees with the reporting officer on the basis that:

- (a) having a consent duration stated in Policy 13 could be seen as a starting point or a cap;²⁰ and
- (b) the approaches set out in Policies 11 and 12 are not approaches that can be met.²¹

7.3 In his evidence, Mr Scrafton notes that Policy 1.2.4.6 of the WRP already provides for consent duration.²² That policy states the following:

"When determining consent duration, there will be a presumption for the duration applied for unless an analysis of the case indicates that a different duration is more appropriate having had regard to case law, good practice guidelines, the potential environmental risks and any uncertainty in granting the consent."

7.4 Given the that there is already an existing policy in the WRP on consent duration, Mr Scrafton is also recommending that Policy 13 be amended to refer to the existing policy so that the matters set out in Policy 13 are additional matters to have regard to.

7.5 Considerations relevant to determining the appropriate duration for a consent were addressed by the Environment Court in the *PVL Proteins*²³ decision where the following was stated:

"[27] A decision on what is the appropriate term of the resource consent is to be made for the purpose of the Act, having regard to the actual and potential effects on the environment and relevant provisions of applicable instruments under the Act, the nature of the discharge, the sensitivity of the receiving environment to adverse effects, the applicant's reasons, and any possible alternative methods of discharge, including to another receiving environment.

[28] Relevant factors in making a decision on the term of the resource consent include that conditions may be imposed requiring adoption of the best practicable option, requiring supply of information relating to the exercise of the consent, requiring observance of minimum standards of quality in the receiving

²⁰ Scrafton evidence, paragraph 9.5.

²¹ Ibid, paragraph 9.6.

²² Ibid, paragraph 9.2.

²³ *PVL Proteins v Auckland Regional Council* A 61/01.

environment, and reserving power to review the conditions.

...

[30] Uncertainty for an applicant of a short term, and an applicant's need (to protect investment) for as much security as is consistent with sustainable management, indicate a longer term. Likewise, review of conditions may be more effective than a shorter term to ensure conditions do not become outdated, irrelevant or inadequate.

[31] *By comparison, expected future change in the vicinity has been regarded as indicating a shorter term. Another indication of a shorter term is uncertainty about the effectiveness of conditions to protect the environment (including where the applicant's past record of being unresponsive to effects on the environment and making relatively low capital expenditure on alleviation of environmental effects compared with expenditure on repairs and maintenance or for profit. In addition, where the operation has given rise to considerable public disquiet, review of conditions may not be adequate, as it cannot be initiated by affected residents."*

(Emphasis ours.)

7.6 It is apparent from this dicta that a wide range of factors should be brought to bear in determining consent duration. The underlined passage is particularly relevant to consent holders who are required to spend large sums of money on infrastructure such as municipal supply authorities, electricity companies, etc.

7.7 It is submitted that there is no need or justification for specifying a certain consent duration period if specified criteria are met. As *PVL Proteins* makes clear, duration will always depend on the circumstances relating to the application. Indeed, given that, a plan change is not even an appropriate forum or context to conduct that debate. Mention of a consent duration should therefore be deleted.

8. TECHNICAL WATER QUALITY MATTERS

8.1 Mr Hall's evidence addresses the following technical matters that he considers should be provided for, or better provided for, in PC1:

- (a) Seasonality;
- (b) Protection versus restoration of water quality;
- (c) Beneficial effects of treated wastewater discharges; and
- (d) Benefits of land use change.

- 8.2 Mr Scrafton has recommended amendments to address the above matters and we comment on each of them briefly below.

Seasonality

- 8.3 The effects of treated wastewater discharges can vary significantly between seasons, with the rivers having greater capacity to assimilate discharges during winter months compared to summer months.²⁴ PC1 currently recognises seasonal variation between years, but it does not recognise variations between winter months and summer months within the same calendar year.²⁵ This lack of recognition carries with it potentially significant consequences, for example, potentially requiring very low nutrient limits during winter months when that is not justified on an effects basis.²⁶
- 8.4 To address this issue, Mr Scrafton has recommended an amendment to Policy 12 so that the following has to be taken into account in considering consent applications for treated wastewater discharges:

"(h) The influence of seasonal climatic conditions and other natural processes that affect the assimilative capacity of water bodies and resultant water quality effects."

Protection versus restoration of water quality

- 8.5 Mr Hall and Mr Scrafton both refer to Appendix D of the PC1 section 32 report in relation to existing water quality and whether:
- (a) it is of high quality and needs to be maintained (protected); or
 - (b) degraded and needs to be enhanced (restored).²⁷
- 8.6 Both witnesses consider that the provisions of PC1 should recognise this distinction and, in that respect, Mr Scrafton is recommending amendments to Policy 12 so that the following has to be taken into account when considering a resource consent application for a point source discharge:

"(b) The water quality of the receiving environment and whether the proposed discharge will contribute to:

(i) The protection of water quality where the receiving environment is of high water quality; or

²⁴ Hall evidence, paragraph 4.1.

²⁵ Ibid, paragraphs 4.2 and 4.3.

²⁶ Ibid, paragraph 4.3(b).

²⁷ Hall evidence, paragraphs 8.1 and 8.2; Scrafton evidence, bottom of page 21 and top of page 22.

- (ii) *The restoration of water quality in a manner proportional to the impact of the discharge where the receiving environment is less than high quality.*"

Beneficial effects of treated wastewater discharges

- 8.7 Beneficial effects are generated in terms of hydrological effects (e.g., supplementing low flows during summer time and assisting with assimilation of contaminants) by discharging treated wastewater back into the rivers.²⁸ PC1 does not presently recognise such beneficial effects.
- 8.8 Both Mr Scafton and Mr Hall consider that the provisions of PC1 should be amended to recognise the beneficial effects of treated wastewater discharges and Mr Scafton has recommended amendments to Policy 12 so that the following has to be taken into account when considering a resource consent application for a point source discharge:

"(j) The beneficial social, economic, and environmental effects of the discharge."

Benefits of land use change

- 8.9 Land use change from rural land uses to urban land uses can also have significant benefits in terms of reducing diffuse discharges of nutrients.²⁹ In that regard, the evidence of Mr Scafton and Mr Hall is that provision should be made in PC1 to recognise that that may be the case.³⁰ Mr Scafton is therefore recommending that the following should be taken into account when considering resource consent applications for point source discharges:

"(i) That in some cases changing land use can result in positive effects on water quality when compared to previous land use."

9. CONCLUDING SUBMISSION

- 9.1 Having regard to the above, and by way of summary and conclusions, Watercare respectfully submits that:

- (a) The objectives and policies of PC1 should be amended to adequately recognise and provide for utilising the assimilative capacity of the river and for reasonable mixing. Watercare has proposed amendments, via Mr Scafton's evidence, to provide a best practice "planning cascade" in PC1 as regards assimilative capacity and reasonable mixing, including

²⁸ Hall evidence, paragraphs 6.1 to 6.4.

²⁹ Ibid.

³⁰ Scafton evidence, paragraphs 8.15 and 8.16.

by reference to a clear link to an existing policy in the WRP on reasonable mixing.

- (b) The provisions of PC1 should provide for upgrading of regionally significant infrastructure and new regionally significant infrastructure to provide for growth and take into account the potentially beneficial effects of centralisation / amalgamation of wastewater discharges as doing so can result in protecting and restoring the Waikato and Waipa Rivers.
- (c) Amendments are required to PC1 to ensure that the effects of existing treated wastewater discharges can be assessed so that proportionality is properly taken into account when considering applications for consent for new or continued discharges of treated wastewater.
- (d) Policy 11 (BPO and offsetting as presently drafted) should be split in to two policies – Policy 11 (BPO) and Policy 11A (offsetting). This would ensure that these two different concepts are not conflated and applied inappropriately. In addition, the offsetting provisions need to be broadened to enable potentially superior environmental outcomes than would currently be possible under PC1.
- (e) Amendments are required to Policy 13 (consent duration), in particular to delete reference to a specific number of years as this could be seen as a cap or starting point for consent duration on the basis that consent duration should be assessed having regard to all relevant factors in each case. law.
- (f) There are a number of technical water quality matters (seasonality, protection versus restoration of water quality, beneficial effects of treated wastewater discharges, and benefits of land use change) that should be recognised by amendments to PC1.

9.2 Watercare is grateful for the Panel's consideration of this matter.

DATED this 25th day of June 2019



S J Berry



C D H Malone

Counsel for Watercare Services Limited

APPENDIX 1

**SUSPENDED SEDIMENT FROM THE WAIPA RIVER DISCHARGING INTO THE
WAIKATO RIVER AT NGARUAWAHIA DURING FLOOD CONDITIONS**

