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 1** topics

AND

IN THE MATTER of the hearing of submissions and the further submission by **WAIKATO REGION TERRITORIAL AUTHORITIES** in relation to **BLOCK 1** topics

LEGAL SUBMISSIONS OF COUNSEL FOR THE WAIKATO REGION TERRITORIAL AUTHORITIES ("WARTA")

1. INTRODUCTION

1.1 This is the hearing of Block 1 submissions and further submissions on the following matters contained in Proposed Waikato Regional Plan Change 1 (Waikato and Waipa River Catchments ("PC1")):

(a) Part A – Introduction and context of the plan change;

(b) Part B – Outcomes:

(i) B1 – Overall direction and whole plan submissions;

(ii) B2 – Values and uses;

(iii) B3 – Science and economics;

(iv) B4 – Objectives; and

(c) B5 – Freshwater management units, targets and limits, and priorities.

Waikato Region Territorial Authorities - WARTA

1.2 The territorial authorities ("TAs") in the Waikato Region have agreed to collaborate and to form a consortium to prepare and present a joint case on matters of common interest for the hearing of PC1 by the Waikato Regional Council ("WRC"). The collaborative group is called the Waikato Region Territorial Authority Group or "WARTA". The WARTA member councils comprise:

(a) Taupo District Council;

(b) South Waikato District Council;

(c) Otorohanga District Council;

(d) Waitomo District Council;

(e) Waipa District Council;

(f) Hamilton City Council;

(g) Waikato District Council;

(h) Matamata-Piako District Council;

(i) Hauraki District Council; and

(j) Thames-Coromandel District Council.

1.3 WARTA as an entity is not a formal submitter on PC1 and does not purport to be. Each WARTA member council lodged its own submission on PC1. A joint further submission that addressed the matters of common interest to WARTA members was lodged as WARTA but in the names of the individual councils.

1.4 A similar approach was successfully employed when a number of councils collaborated to form the Waikato River Municipal Users Group for the purpose of responding to RPV6 (WRC's Water Allocation variation).

Key issues of concern to WARTA

1.5 The WARTA member councils gave very close consideration to the issues raised by PC1, including various papers prepared by their staff and advisors, teleconferences and a half-day workshop. When it was all "boiled down", it emerged that the two key issues of common concern to WARTA arising out of PC1 are:

(a) The potential impacts on rural communities arising out of the land use aspects of PC1 to control diffuse discharges and the resulting significant economic impacts on primary production (sheep and beef farming, dairying, horticulture, forestry, etc.); and

(b) The potential impacts on urban communities in relation to the potentially significant costs of upgrading wastewater treatment plants ("WWTPs").

1.6 Some WARTA member councils are also presenting cases in support of their own submission on PC1 in relation to matters that are beyond the purview of the WARTA case.

WARTA Block 1 evidence - overview

1.7 WARTA has filed evidence from four witnesses in this block of hearings as follows.

Garry Dyet –WARTA spokesperson

1.8 Mr Dyet is Chief Executive of Waipa District Council and was instrumental in bringing the WARTA Group together. His evidence is presented as a duly appointed spokesperson for WARTA and addresses the following matters:

(a) WARTA's acknowledgement of the relationship of River Iwi with the Waikato and Waipa Rivers and support for achieving the Vision and Strategy;

(b) The heavy dependence of the economies of most of the TAs who comprise WARTA on rural economic activity and comments on the negative economic impacts and costs of PC1 in that regard; and

(c) Comments on the need to ensure that PC1 includes adequate provision for point source discharges from municipal wastewater treatment plants.

Dr Brent Wheeler – economist

1.9 Dr Wheeler is a well-known economist (and former planner) and Principal of Brent Wheeler Group. His evidence addresses economic issues arising with respect to PC1, including its reliance on command and control / input based regulation, costs of inflexibility related to a "one size fits all" approach, and the significant negative economic impacts of PC1.

Tim Harty – environmental engineer

1.10 Mr Harty is a Professional Environmental Engineer and Waikato Region Business Development Lead for GHD. He has formerly held roles managing water and wastewater infrastructure at Waipa District Council, Hamilton City Council and Waikato District Council. His evidence sets out his (and WARTA members') concerns as regards:

(a) PC1 not adequately recognising the assimilative capacity of the rivers with respect to point source discharges from WWTPs;

(b) The risk of targets and limits in Table 3.11-1 of PC1 being applied at the point of discharge rather than after reasonable mixing and the consequences of that;

(c) The potentially significant costs associated with upgrades to WWTPs to meet PC1 targets / limits and the benefits of offsetting in that regard; and

(d) Whether stormwater discharges are captured by the provisions of PC1.

Anthony Kirk – freshwater scientist

1.11 Mr Kirk is a freshwater scientist and Technical Director (Environment and Practice – Data and Analytics), GHD. His evidence addresses the following matters:

(a) Issues related to derivation of the ammonia toxicity targets;

(b) Lack of clarity regarding monitoring of targets;

(c) Consistency of Objectives 1 and 3 with the requirements for targets in the National Policy Statement for Freshwater Management 2014 (Updated 2017) ("NPS Freshwater"); and

(d) Implementation of monitoring of water quality.

Mary O'Callahan – planning consultant

1.12 Ms O'Callahan is a planning consultant and Technical Director (Planning), GHD. Her evidence draws on the evidence of Mr Harty and Mr Kirk and assesses issues raised in their evidence by reference to the relevant statutory planning documents and recommends amendments to PC1 to address those issues.

1.13 Ms O'Callahan and Mr Kirk have also prepared brief supplementary statements altering their recommendations as to the amendments to Objective 3 following discussions with Mr Ryan at Hamilton City.

1.14 WARTA is also relying on portions of the evidence of a number of other parties and that is addressed in the following sections of these submissions.

Scope of legal submissions

1.15 In light of that brief background, these submissions are structured as follows:

(a) Significant economic costs / effects – control of diffuse discharges (Section 2).

(b) Assimilative capacity and reasonable mixing – WWTP discharges (Section 3).

(c) Vision and Strategy for the Waikato River (Section 4).

(d) Comments on control of nitrogen discharges and sub-catchment planning (Section 5).

(e) Other matters of concern to WARTA (Section 6).

2. SIGNIFICANT ECONOMIC COSTS / EFFECTS – CONTROL OF DIFFUSE DISCHARGES

2.1 As noted above, one of the TAs' two key concerns in relation to PC1 as presently formulated relates to the significant economic costs that it will impose on rural communities, particularly as regards to primary production, as a result of the operation of the provisions seeking to control diffuse discharges.

WARTA approach

2.2 A range of submitters have raised concerns about the impact of the diffuse discharge provisions of PC1 on their respective interests and, between them, have proffered a range of approaches to addressing those issues. After considering the issue at some length, WARTA member councils have elected not to "pick a winner" in terms of the planning / regulatory approaches that other parties are promoting to ameliorate these economic effects. WARTA members have a shared view that, as local authorities, they are not qualified to undertake such an analysis; in any event other sector groups such as Horticulture NZ, Federated Farmers and Beef + Lamb are comprehensively addressing these issues.

2.3 Rather, WARTA's approach is to contribute to the debate by enunciating and quantifying WARTA member concerns and then to join and contribute to the conversation about options.

Evidence relevant to the impact of the provisions relating to diffuse discharges

2.4 Evidence that is highly relevant to this concern has been prepared by Dr Wheeler. In addition to Dr Wheeler's evidence, we draw the Panel's attention to the evidence of the following witnesses as regards the costs of PC1 arising from the provisions to control diffuse discharges:

(a) Ms Shattock, Mayor of the South Waikato District Council;

(b) James Thomas (Deputy Mayor – Matamata-Piako District Council);

(c) Mr Dyet, Chief Executive of the Waipa District Council;

(d) Mr Beetham for Beef + Lamb; and

(e) Mr Le Miere for Federated Farmers.

2.5 We now turn to address their evidence.

Dr Wheeler's evidence

2.6 Dr Wheeler's evidence goes into some detail regarding the deficiencies of a "one size fits all" input control approach to regulation reflected in PC1. In that regard, his evidence is that:

> *"The heavy reliance in PC1 on input control through command and control regulation results in a blunt and unnecessarily costly approach to addressing a difficult problem which is characterised by a series of subtle complexities and nuances which demand a more devolved approach. In present form, PC1 therefore represents an inefficient means for seeking to achieve its objectives.*
>
> *This problem is exacerbated by the fact that PC1 does not recognise the spatial differences which characterise the region. Different districts have quite different characteristics as to the environment in which water quality problems arise, their physical capacity to adapt to new rules for behaviour and activity and in their social and economic character. Compliance is likely to result in breaches of equity principles, particularly where levels of differing deprivation are ignored."*[1]
>
> (Emphasis ours.)

2.7 Dr Wheeler's evidence is that PC1 as presently formulated results in material, negative effects that are unacceptable and unnecessary.[2] In that respect, he has included the following table in his evidence regarding loss of value added, loss of employment, and reduction in exports.[3]

Economic Effects	Value Added $m	Employment (MEC)	International Exports from NZ $m
Waikato Region	-106	-938	-78
NZ Wide Impact	-193	-1,880	-120

1 Wheeler EiC, paragraphs 3.3(a) and (b).
2 Wheeler EiC, paragraph 3.2.
3 Wheeler EiC, paragraph 3.1.

2.8 As regards, the breakdown of the significant economic effects on some WARTA members, Dr Wheeler has also included a table in his evidence that includes the following information provided by the WRC.[4]

Council	Decrease in sector profit ($m p.a.)	Decrease in value added ($m p.a.)	Decrease in employment count
Hamilton City	0.2	14.9 - 20.8	138 - 184
Otorohanga District	5.8	6.9 – 11.8	66 - 114
South Waikato District	4.8	7.2 – 12.6	56 - 97
Waikato District	13.7	17.2 - 27	158 - 248
Waipa District	7.6	15.1 – 24.8	135 - 221
Waitomo District	5.7	6 – 8.9	49 - 74
TOTAL	37.8	106	938

2.9 It is submitted that this table demonstrates significant adverse effects, particularly as regards loss of jobs within the districts of WARTA member councils who have primarily rural economies – Otorohanga, South Waikato, Waikato, Waipa, and Waitomo District Councils.

James Thomas (Deputy Mayor – Matamata-Piako District Council)

2.10 Deputy Mayor Thomas has significant knowledge of the farming community as he was a farmer and is a farm consultant. His evidence expresses his concerns regarding a "one size fits all" approach. In that regard, he has stated the following:

> *1.11 "... From my experience, adopting a "one-size-fits-all" approach will fail to recognise farm management that would include different stocking rates, management skills, and the difference this can make to farm systems. This would also include the differences in soil types and contour. Rules should not be regarded as the solution by default. Regulation must not be for administrative convenience, and regulation should only be adopted where this can clearly be justified. Therefore, the approach adopted must be seen to be fit for purpose.*
>
> ...
>
> *3.3 Methods that may include rules need to afford flexibility in the approaches of land managers to carry out their farming or horticulture activities simply because our communities are built on and sustained by the primary sector."*

Mr Beetham's evidence - Beef + Lamb

2.11 In addition to the above costs, PC1 imposes significant costs on primary production, including the following on sheep and beef farmers that are detailed in Mr Beetham's evidence:

(a) Upfront capital costs;

(b) Ongoing annual compliance costs; and

[4] Wheeler EiC, paragraph 9.2.

(c) Fencing costs.

2.12 Mr Beetham's evidence is that:

(a) Upfront capital costs will range from $26,139 to $541,437 per farm;[5] and

(b) Ongoing annual compliance costs will range from $5,905 to $70,859 per farm.[6]

2.13 Mr Beetham's evidence is that:

> *"86. ... These costs are significant and will have a major impact on the ongoing viability of some sheep and beef farms."*
>
> *87. The above compliance requirements such as fencing up to 25° on hill country are unsustainable and impractical, and effectively the PC1 is asking hill country farmers to bear unsustainable costs."*

Mr Le Miere's evidence - Federated Farmers

2.14 Mr Le Miere's evidence for Federated Farmers also sets out concerns regarding the significant economic costs by reference to Farm Environmental Plan case studies. He states the following in that regard:

> *"164. Unfortunately I consider the economic impact modelled underestimate the hardship that will be caused by PC1. I attach as PLM11 a report on FEP case studies. The FEP case study project that FFNZ commissioned in collaboration with other industry bodies (as well as WRC) identified that the costs to individual farmers for complying with the mitigations are likely to be significant, with the costs for one farmer ranging from $300,000 to $785,000 (depending on how the stock exclusion requirements are interpreted) and $0 to $500,000 for other farmers in the case study. These significant costs have not been factored in."*

Mayor Shattock's evidence - South Waikato District Council

2.15 The evidence of Her Worship Mayor Shattock notes that the South Waikato District Council supports Te Ture Whaimana (The Vision and Strategy for the Waikato River)[7] and the:

> *"...meritorious goal of wanting to improve the water quality of the Waikato River."*[8]

2.16 Mayor Shattock also notes that the:

> *"... goal is not questioned but the methods to achieve this most certainly are."*[9]

2.17 As regards the significant economic effects of PC1 as presently formulated, Mayor Shattock states the following in her evidence:

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5 Beetham EiC, paragraph 72.
6 Ibid.
7 Shattock evidence, paragraph 5.
8 Ibid, paragraph 3.
9 Ibid.

"8. *The South Waikato has a unique economic and community profile and the adverse economic and social costs if the current plan is implemented will hit the district hard. Given the current demographic, for example an ageing population, the proposed plan change as written is simply unrealistic, unachievable and unaffordable for South Waikato to implement.*

9. *Each of our mainstay industries are profoundly affected and in a multitude of different ways by PC1. The Kinleith Mill Oji, foresters, dairy and pastoral farmers including dry stock, are all faced with different, but equally challenging impacts on their ability to operate. This underlines the critical need for flexibility in the management system that will ultimately be applied.*

10. *The potential impacts such as job losses and infrastructure affordability on the District are significant. Employment in the primary sector and support services will be hugely impacted and this will cause a knock-on effect in the wider district which relies heavily on dairy farmers to survive."*

(Emphasis ours).

2.18 Dr Wheeler's evidence sets out difficulties with a "one size fits all" approach and states the following with respect to the South Waikato District:

"9.20 *The South Waikato District provides the sharpest illustration of these difficulties. In that regard, the South Waikato District is characterised by high levels of deprivation. The New Zealand Index of Multiple Deprivation ("IMD"), developed by Auckland University, shows the South Waikato District as having the fourth highest population living in quintile 5 in New Zealand, the highest 20% of deprivation, at 51% of its population based on 2013 data.*

9.21 *This is the highest in the Waikato Region, with Hauraki next at 12th having 40% of its population in Quintile 5. In terms of the employment metric of the IMD, over 70% of the population of the South Waikato District are in quintile 5, the next in the Waikato region being Hauraki District at approximately 35%.*

9.22 *Capacity to absorb declines in profits, value added and employment are therefore:*

(a) In absolute terms extremely limited; and

(b) Relative to other areas quite different (lower).

9.23 *PC1 as developed and in its present form does not reflect consideration of these effects.*

9.24 *The overall social and economic effect is likely to be an exacerbation of an already difficult situation."*

Submission

2.19 Drawing the thrust of this evidence together, it is submitted that:

(a) The evidence referred to above has demonstrated that there will be significant adverse economic effects on the rural communities of the WARTA TAs with primarily rural economies.

(b) As a result of the significant economic costs that PC1 would impose on rural communities, the plan change would:

(i) Fail to promote the purpose of the Resource Management Act 1991 ("RMA") because the plan provisions would not be managing the use and development of resources in a manner that enables the people and communities of the PC1 area to provide for their social and economic wellbeing; and

(ii) Not give effect to the Vision for the Waikato River, a fundamental aspect of which envisions not only a clean river but also "prosperous communities". (We return to this issue in Section 4.)

3. ASSIMILATIVE CAPACITY AND REASONABLE MIXING – WWTP DISCHARGES

3.1 A significant number of municipal wastewater treatment plants ("WWTPs") discharge directly or indirectly into the Waikato River.

3.2 The Te Awamutu WWTP discharges to the Waipa River and the Te Kuiti WWTP discharges into the Mangaokewa Stream, which is a minor tributary of the Waipa River.

3.3 The assimilative capacity of the Waikato and Waipa Rivers is recognised in the "commercial, municipal and industrial use" value in PC1 where it states:

> *"Freshwater is used for industrial and municipal processes, which rely on the assimilative capacity for discharges to surface water bodies. In addition:*
>
> ...
>
> - *Lakes, rivers and wetlands provide assimilative capacity for wastewater disposal, flood and stormwater, and ecosystem services through community schemes or on site disposal."*
>
> (Emphasis ours.)

3.4 Despite this recognition, there is no equivalent recognition of assimilative capacity in the objectives or policies or any other provision of PC1. It is submitted that this is a serious omission.

WWTP discharges – the need for a zone of reasonable mixing

3.5 It is of fundamental importance that discharges from WWTPs are able to utilise the assimilative capacity of river embodied by the concept of zones of reasonable mixing. WARTA member councils were therefore concerned that PC1 does not adequately recognise and provide for such zones, even though the WRP does. This concern turned to alarm we they heard word that Counsel for the WRC had advised the Panel that, in his view, the

Vision and Strategy does not recognise reasonable mixing and neither should PC1. The WARTA councils strongly disagree with that view.

3.6 The NIWA's website contains a useful overview of what "reasonable mixing entails:

> *"The size of a mixing zone depends on the results of environmental testing. During testing, ecologists try to establish what level of pollutant can be discharged at safe levels. They might measure the effects of contaminants on fish migration, slime growth, water quality and clarity, and how quickly effluent disperses in the receiving water.*
>
> *The tests contribute to statistical modelling and assist mapping of contaminant concentrations in the plume downstream from the outfall of a mixing zone. Regional councils can then develop definitions of reasonable mixing for various pollutants. For example, the Auckland Regional Council has set the reasonable mixing level for discharges of ammonia content in dairy washwater at 30 times the width of the receiving water downstream and 1/3 the width across."*

3.7 The concept is well known and recognised and provided for in regional plans across New Zealand, including the WRP:

> *"8. The extent to which the discharge, after initial or reasonable mixing, results in:*
>
> *1.the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or*
>
> *2.any conspicuous change in the colour or visual clarity; or*
>
> *3.any emission of objectionable odour; or*
>
> *4.any significant adverse effects on aquatic life."*

3.8 Mr Harty's evidence regarding zones of reasonable mixing is:

> *"3.4 For context, the ability to utilise the assimilative capacity of the rivers is important with respect to point source discharges from WWTPs because conventional practice has always been to recognise a "zone of reasonable mixing" to recognise that the end-of-pipe discharge will be rapidly diluted (i.e., assimilated) within a relatively short distance of the discharge point with minimal physical environmental effects."*

3.9 Mr Harty then goes on in his evidence to set out his primary concerns:

(a) That the limits / targets in Table 3.11-1 could be applied at the point of discharge rather than after reasonable mixing; and

(b) Such an approach would be likely to carry extraordinarily high financial costs but would only result in modest environmental benefits.[10]

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[10] Harty EiC, paragraphs 3.8 to 3.10.

3.10 Ms O'Callahan notes in her evidence that there is a policy on reasonable mixing in the Waikato Regional Plan, but she also notes that:

(a) The policy is uncertain and does not provide any direction to decision makers; and

(b) In any event, PC1 will prevail in the event of any inconsistencies with other provisions of the WRP.[11]

3.11 Ms O'Callahan therefore concludes that:

> *"... there could be an interpretation that Policy 8 does not apply and that no mixing zone is the WRP approach for application of water quality states referenced by Objectives 1 and 3."*[12]

Significant upgrade costs

3.12 The costs of upgrading WWTPs to achieve Attribute State B of the National Policy Statement for Freshwater Management 2014 (Updated 2017) ("NPS Freshwater") were assessed by GHD for the Department of Internal Affairs.[13] The estimated costs of the upgrades and the technology (biological nutrient removal ("BNR") or membrane bioreactors ("MBR")) required to achieve them in relation to WARTA members are addressed in paragraph 4.3 of Mr Harty's evidence, but are worth highlighting here as follows:

(a) Cambridge (Waipa District Council) – BNR technology at a cost of $31M to $46M;

(b) Huntly (Waikato District Council) – MBR technology at a cost of $24M to $36M;

(c) Meremere (Waikato District Council) – MBR technology at a cost of $4M to $6M;

(d) Ngaruawahia (Waikato District Council) – MBR technology at a cost of $17M to $25M;

(e) Otorohanga (Otorohanga District Council) – MBR technology at a cost of $11M to $16M;

(f) Te Kauwhata (Waikato District Council) – MBR technology at a cost of $12M to $18M; and

(g) Tokoroa (South Waikato District Council) – MBR technology at a cost of $20M to $30M.

3.13 The PC1 targets / limits in Table 3.11-1 are significantly more stringent than the Attribute State B targets / limits in the NPS Freshwater[14]. Mr Harty's evidence makes clear that any move to make it a requirement to meet those limits at the point of discharge would require technology not generally in use in New Zealand, as Mr Harty's evidence states:

> *"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 not currently*

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11 O'Callahan evidence, paragraph 7.16.
12 O'Callahan EiC, paragraph 7.16.
13 Ibid, paragraph 4.1.
14 Harty EiC, paragraphs 4.4 to 4.6.

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.)

3.14 Mr Harty then goes on to address, by reference to Mr Hall's evidence for Watercare, the possibility that, even taking into account reasonable mixing, it is possible that the most technologically advanced pending WWTP upgrade in New Zealand (Pukekohe WWTP) would not be able to achieve the water quality target for ammonia.[15]

Clear need to recognise and provide for a zone of reasonable mixing

3.15 Given the extraordinarily high costs of technology required to meet the Table 3.11-1 targets / limits and the unavailability / absence of use of that technology in New Zealand at the present time, it is submitted that it is of fundamental importance that PC1 be amended to specifically recognise and provide for zones of reasonable mixing. Ms O'Callahan is not recommending any amendments to the objectives of PC1 as she considers that the zone of reasonable mixing should be addressed in the policies of PC1.

Proposed amendments

3.16 Ms O'Callahan has proposed amendments to Objectives 1 and 3 that are partly related to what her evidence regarding reasonable mixing will be for the next stage of hearings. The amendment to Objective 1 is to add the following words to the end of Objectives 1 and 3 (additions underlined):

"Objective 1

By 2096 at the latest, a reduction in the discharges of nitrogen, phosphorus, sediment and microbial pathogens to land and water results in achievement of the restoration and protection of the Waikato and Waipā Rivers, such that of the 80-year water quality attribute states in Table 3.11-1 are met, as measured at the identified state of the environment monitoring sites."

3.17 The amendments to Objective 3 are as follows:

"Objective 3

Actions are put in place ~~and implemented~~ by 2026 to reduce ~~diffuse and point source~~ discharges of nitrogen, phosphorus, sediment and microbial pathogens that are sufficient to achieve the short term water quality ~~attribute states~~ goals in Table 3.11-1, as measured at the identified state of the environment monitoring sites. This objective applies to diffuse and point source discharges (in the case of existing point source discharges, only when consents are renewed). It is recognised there may be a lag between taking action and the receiving water quality improving so the short term water quality goals may not necessarily be achieved by 2026."

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15 Harty EiC, paragraph 4.8.

3.18 These amendments are in Ms O'Callahan's supplementary evidence and part of the reason for them is to be consistent with the amendments proposed by Mr Ryan for Hamilton City Council in his supplementary evidence. The reason for changing "attribute states" to "goals" is as a result of a recommendation from Mr Kirk. We address that further at paragraphs 6.5 to 6.8 below.

3.19 Ms O'Callahan has also recommended inclusion of the following footnote to the "Site" column heading in Table 3.11-1:

> *"4. In respect of point source discharges, any relevant attribute targets apply only at these identified state of the environment monitoring sites and not at the point of discharge."*[16]

3.20 Ms O'Callahan is of the opinion that the above amendments will ensure that compliance with the targets / limits in Table 3.11-1 will not be required in a mixing zone.[17]

Offsetting policy

3.21 Although the offsetting policy (Policy 11) is not included in the Block 1 hearings, Mr Harty provides some brief comments on it in his evidence to foreshadow its importance alongside recognising the zone of reasonable mixing. In that regard, Mr Harty states the following in his evidence:

> *"4.12 It is probable that greater environmental benefits can be obtained from a given level of financial investment by offsetting diffuse discharges rather than requiring unjustifiably expensive upgrades to WWTPs. In order to ensure best practicable outcomes for the money spent, such options must be considered and may well be selected."*

3.22 WARTA intends to present further evidence on offsetting when the hearings on the policies take place.

4. VISION AND STRATEGY FOR THE WAIKATO RIVER

4.1 PC1 has been promulgated to give effect to the Vision and Strategy for the Waikato River (Te Ture Whaimana) in accordance with section 13(4) of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 ("Settlement Act").

4.2 In assessing whether PC1 as presently formulated gives effect to the Vision and Strategy it is necessary to consider some key parts of the Vision and Strategy, which we turn to now.

The Vision

4.3 The Vision for the Waikato River per Schedule 2 of the Settlement Act is as follows:

> *"1 **Vision***
>
> *(1) Tooku awa koiora me oona pikonga he kura tangihia o te maataamuri. The river of life, each curve more beautiful than the last.*

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16 O'Callahan EiC, paragraph 7.25.
17 Ibid, paragraphs 7.17 to 7.23 and 7.25.

(2) *Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come."*

(Emphasis ours).

4.4 In assessing the merits of the PC1 before us, it is of fundamental importance to bear in mind that the Vision envisions a healthy Waikato River that "sustains abundant life **and** prosperous communities," with those prosperous communities having the ongoing responsibility for restoring and protecting the river.

4.5 In that regard, one of the thirteen objectives to be pursued in realising the Vision (Clause 3 of Schedule 2) states:

> *"(d) the restoration and protection of the relationships of the Waikato Region's communities with the Waikato River, including their economic, social, cultural, and spiritual relationships."*

4.6 In our submission, these aspects of the Vision underpin the importance of ensuring that the outcome of the PC1 process strikes an appropriate balance between environmental and social outcomes – it would represent a classic Catch 22 if the restoration of the river was achieved at the cost of compromising the economic welfare of the Waikato communities through which the river flows. That would be "robbing Peter to pay Paul".

4.7 This is no exaggeration; the threat is real – that is why the WARTA member councils are here as a group today. Consider the sheer cost of upgrading WWTPs to meet the standards imposed by PC1. Or the economic consequences of implementing PC1's "one size fits all" approach as outlined in Dr Wheeler's evidence. The impacts on these rural communities would be very significantly adverse if PC1 is implemented as is.

4.8 All of the WARTA members support in the Vision and Strategy but are very clear that due consideration of these real world consequences is needed to temper the zeal with which the WRC seems to want to implement the Vision and Strategy.

4.9 A good example of that is Mr Milne's assertion that providing for a zone of reasonable mixing (where a treatment plant discharges directly to a water body) is not in the Vision and Strategy and should not be in PC1. Such a position is contrary to WRC's normal approach and standard engineering and regulatory practice. We need to ensure that we are so enamoured with the lofty ideals of the Settlement Act and the Vision and Strategy that we take our eye off the ball of real world effects and common sense. Failure to allow for reasonable mixing would simply "break the bank" of the WARTA member councils who would either bear the extraordinary WWTP upgrade costs or remain non-compliant and face the processes related to this as a more cost effective management solution for the community.

4.10 And the upshot would be directly contrary to the second leg of the Vision – by eliminating the prosperity of prosperous communities. There are a number of ways in which a more appropriate balance can be struck – imposing less stringent targets that can be met over longer time frames, making the offsetting policy more flexible and sensible, and providing for a zone of reasonable mixing, to name but three.

4.11 In relation to the objectives it is also worth noting that:

(a) They are objectives to be "pursued" to "realise the vision" and, as a result, they do not override the vision. The words are words of aspiration and must be interpreted as such.

(b) They recognise the importance of economic relationships, which is relevant to the Waikato River sustaining prosperous communities.

(c) There is no priority amongst the objectives.

The strategy

4.12 We submit that key points to note about the strategies are that they:

(a) Are strategies that will be "followed" to "achieve the vision" and, therefore, do not override the vision;

(b) Require the development of targets to improve the health and wellbeing of the Waikato River, but do not set any targets or a time frame for them to be achieved; and

(c) Require development and implementation of a programme of action to achieve the targets, but do not set a time frame for that to be achieved or identify what the steps along the way are.

Submission

4.13 To state the obvious, PC1 as formulated is the <u>first step</u> in what will eventually become a programme of steps to achieve the Vision by 2096 - and short term and long term water quality targets have been set in Table 3.11-1.

4.14 The short term targets (which WARTA submits should be referred to as "goals" for reasons to be outlined in evidence) and long term targets have been the subject of a great deal of evidence from freshwater scientists and will be the subject of conferencing to determine some serious issues with the targets. The outcome of that conferencing will have a significant bearing on the ultimate position that WARTA takes regarding whether the targets are appropriate for WWTPs, particularly with respect to ammonia. The issues in that regard are addressed further in Section 6 below.

4.15 In terms of protecting and restoring the Waikato River, the key touchstone from the Vision is that it will sustain "abundant life." That being the case, a key issue that the freshwater scientists need to address in their conferencing is what constitutes abundant life as that should determine what the 2096 targets are in Table 3.11-1.

4.16 While the Vision is undoubtedly directed towards protecting and restoring the Waikato River, the Vision specifically envisages that those objectives will be achieved while sustaining prosperous communities. A delicate balance is required to be struck – if we move too fast in imposing controls to achieve an ideal, significant economic and social harm could be caused for little environmental benefit. Peter and Paul again.

4.17 Prosperous communities require prosperous economies but prosperous economies will not be prosperous for long if they have significant economic costs imposed on them in a short space of time, for example:

(a) The significant economic costs associated with controlling diffuse discharges; and

(b) The potentially extraordinarily high costs related to WWTP upgrades if upgrades to WWTP discharges are required to meet Table 3.11-1 limits at the end of the pipe.

4.18 Given the significant economic costs on communities, it is submitted that, in the absence of amendments, PC1 does not adequately "give effect to" that fundamentally important aspect of the Vision or achieve the sustainable management purpose of the RMA.

4.19 No provision of the Settlement Act overrides the requirement for PC1 to achieve the purpose of the RMA. This was recognised in the Environment Court's decision on Variation 6:[18]

> *"[440] The Settlement Act and the Vision and Strategy do not extend the functions and powers of the Regional Council under the Resource Management Act. Ms Forret mounted an argument based on the words restoration and protection in Objective C in the Vision and Strategy. Objective C does not extend the Council's functions and powers as set out in Section 30 of the Resource Management Act. The Settlement Act legislation would require clear and unambiguous words to override the principal Act which creates the functions and powers of decision-makers."*
>
> (Emphasis ours.)

4.20 Section 63 of the RMA states the following with respect to the purpose of a regional plan:

> ***"63 Purpose of regional plans***
>
> *(1) The purpose of the preparation, implementation, and administration of regional plans is to assist a regional council to carry out any of its functions in order to achieve the purpose of this Act."*

4.21 It is submitted that PC1 as presently drafted does not achieve or promote the sustainable management purpose of the RMA on the basis that, as currently drafted, it does not enable people and communities to provide for their social and economic wellbeing; indeed, quite the opposite.

4.22 Over the course of the hearing, the Panel will hear a great deal of evidence and it is likely that the provisions of PC1 will change significantly in response to that evidence. Indeed, PC1 may transpire to be quite different than it looks now. As noted, WARTA has not "picked a winner" in terms of the relief sought and has no specific proposal as to how the Panel might amend PC1 to reduce the economic burden. However, Section 5 addresses a number of matters that WARTA respectfully requests the Panel to very carefully test the evidence on in addition to what the Table 3.11-1 targets / limits should be.

The Panel's Minute

4.23 In its Minute dated 19 February 2019, the Panel stated the following:

> *"PC1 is required to "give effect" to the Vision and Strategy. The Vision and Strategy contains, amongst other things, the vision, together with a number of objectives and strategies. The Panel foresees that submitters may argue that different elements of the Vision and Strategy suggest different responses. For example, the provisions focussing on*

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18 *Carter Holt Harvey Ltd & Ors v Waikato Regional Council* [2011] NZEnvC 380.

restoration and protection of the health and wellbeing of the Waikato River might be seen by some submitters to conflict with sustaining prosperous communities and protecting of the economic relationships some communities have with the River.

Given the legal obligation to give effect to it, does the Council consider that some elements of the Vision and Strategy take precedence? If so, what is the basis for that view, and which elements are prioritised. If the Council considers there is no internal priority, how does the Council suggest the Panel resolve areas of perceived conflict?

Second, Objective k of the Vision and Strategy focuses on water quality being such that it is safe for people to swim in the Waikato River over its entire length. A number of submitters suggest that the achievement of that objective needs to take into account river conditions, e.g. excluding consideration of times when the river is in flood and unsuitable for swimming on that account. How does Council interpret that objective in this regard?"

4.24 In response to the above, Counsel for the WRC in opening legal submissions cited statements from cases which have referred to the Deed of Settlement, the Settlement Act, and the Vision and Strategy, including the *Puke Coal*[19] decision. Mr Milne then went on to submit that there is a "clear and paramount theme in the Vision and Strategy" – the "protection and restoration of the Waikato River." In support of that submission he also cited clause (a) from the Strategy and ultimately submitted that:

> *"... it cannot credibly be suggested that economic considerations have priority under the Vision and Strategy."*

4.25 WARTA is not in any way arguing that economic considerations have priority over protecting and restoring the Waikato River. However, economic considerations are clearly highly relevant, both in terms of the Vision itself and in achieving the purpose of the RMA, for the reasons already outlined. Those economic considerations are required to be factored into your decision making.

4.26 WARTA also accepts that there will inevitably be significant costs associated with achieving the Vision. The real issue then becomes a matter of determining what needs to be done and when to ensure that communities remain sufficiently prosperous to achieve the protection and restoration of the Waikato River, keeping in mind that we are facing approximately an 80 year time frame to achieve the vision.

Reasonable mixing

4.27 As noted above, we understand that Mr Milne advised the Panel on day 1 of the Block 1 hearings that his view is that the Vision and Strategy does not recognise reasonable mixing and neither should PC1. We disagree with that position. It is not surprising that there is no mention of reasonable mixing in the Vision and Strategy given that it contains a high level vision, high level objectives, and a high level strategy – it is deliberately and obviously aspirational in nature; it simply does not descend into that level of detail, nor does it need to.

4.28 The best argument for not providing for reasonable mixing zones in PC1 would appear to be based on Objective (k) of the Vision, which provides for:

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

> *"(k) the restoration of water quality within the Waikato River so that it is safe for people to swim in and take food from over its entire length:"*

4.29 Ultraviolet treatment of WWTP discharges prior to discharge into the rivers means that E. coli limits are not likely to be exceeded at the discharge point. However, nitrogen and phosphorous limits may be even with expensive NBR and MBR technology. Adding phosphorous to the Waikato River can result in nuisance periphyton growths and toxic algal blooms as the Waikato River is phosphorous limited – see Section 5 below.

4.30 However, the discharge is often to a diffuser that is located close to the bed of the river and some distance into the river where there is a strong current. As a result, the phosphorous concentration will be rapidly diluted and that minimises the risk of nuisance periphyton growths and toxic algal blooms where people could be swimming on or near the surface of the river. That requires an assessment in each individual case.

4.31 Even if phosphorous limits are exceeded at or near the surface of the water where people could swim, Objective (k) does not override the Vision which, as noted, requires economic considerations to be taken into account. Given the potentially extraordinary costs associated with upgrading WWTPs and the current unavailability of technology in New Zealand to meet the stringent PC1 limits at the end of the pipe, it is submitted that it is of fundamental importance that PC1 recognises and provides for reasonable mixing.

4.32 That does not mean that provision will always have to be made in successive versions of PC1 for reasonable mixing. In that respect, as time passes, technology will improve and the cost of that technology reduces so there may well be a time in the foreseeable future that an nitrogen and phosphorous limits can be met at WWTP discharge points at a reasonable cost to ratepayers. In that regard, it needs to be borne in mind that we are looking at a long time frame (out to 2096) to achieve the Vision, and Objective (k) does not have to be given effect to in the life of PC1.

4.33 In relation to the time frame and the technology gap, the text of PC1 recognises the issue, as it states the following in the first paragraph under the heading *"Full achievement of the Vision and Strategy will be intergenerational:"*

> *"The 80-year timeframe recognises the 'innovation gap' that means full achievement of water quality requires technologies or practices that are not yet available or economically feasible."*

4.34 In light of all of the above, it is submitted that PC1 can be amended to provide for zones of reasonable mixing and that there are compelling reasons to do so.

5. COMMENTS ON NITROGEN CONTROLS AND SUB-CATCHMENT PLANNING

5.1 The detail of the various approaches that parties have promoted in terms of amendments to PC1 will be considered in future hearing blocks. As noted earlier, WARTA has deliberately refrained from "picking a winner" but is particularly interested in any approaches that are justifiable on scientific, economic, planning, and legal grounds that would result in the protection and restoration of the Waikato River at less economic cost than the current PC1 provisions.

5.2 In this context, we comment on only two matters at this stage:

(a) Control of nitrogen discharges; and

(b) Sub catchment planning.

Control of nitrogen discharges

5.3 The Panel's Minute dated 19 February 2019 stated the following:

> *"The entire premise of the Plan Change is that the surface water network associated with the Waikato and Waipa river catchments is degraded and needs urgent action.*
>
> *It appears from Table 3.11.1 that the 80 year targets are already met in some sub-catchments, implying that in those sub catchments at least water quality is not degraded. It appears also from reviewing the recently released report, that all the water quality trends (Water Quality) are either neutral or positive, except nitrogen, and in relation to the latter, periphyton is improving and not likely to be an issue.*
>
> *What does the Council see as the implications of the findings of this report in relation to the PC1 provisions?"*

5.4 Mr Vant provided a response to this in his evidence from a scientific perspective but that did not address any implications for the PC1 provisions. Mr McCallum-Clarke referred to some of the changes that the WRC is signalling for future hearings, including with respect to nitrogen control, but that response did not directly relate to the above query.

5.5 Our understanding of the Panel's query with respect to nitrogen is that, while nitrogen inputs have been increasing, those inputs have not been resulting in increased nuisance growths of periphyton.

5.6 Assuming that to be the case, then we also understand the Panel to be asking whether that has implications for the approach to control of nitrogen discharges in PC1?

5.7 We wish to draw the Panel's attention to a number of matters likely to be highly relevant to any decisions to be made with respect to the appropriate control of nitrogen in PC1.

NIWA report May 2016

5.8 The latest report that we are aware of in relation to the limitation status of the Waikato River prior to the trends report referred to by the Panel is a NIWA report[20] on the nutrient limitation status of the Waikato River. The key points to note from that report are its conclusions that:

> *"There is abundant evidence that algal biomass in the Waikato River is primarily limited by phosphorus (P), and not by nitrogen (N)...*
>
> *Reduced P concentrations in the Waikato River in the past two decades appear to have been responsible for the trend of reducing average algal biomass in the river. The decrease in algal biomass was achieved without reducing N... P reduction is of primary importance to further reduce annual average algal biomass, including during summer.*

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20 *Nutrient Limitation of algal biomass in the Waikato River*, May 2016, NIWA. This report was prepared for the Technical Leaders Group for Healthy Rivers.

... annual average chlorophyll a in the Waikato River is controlled by the amount of P.

... annual average chlorophyll a in the Waikato River was controlled by the amount of P throughout the examined period (1990 to 2014)."[21]

5.9 The short point that emerges from that passage is that although the major focus of PC1 is on nitrogen control, the science supports the view that control of phosphorous in the Waikato River is far more important than the control of nitrogen as the Waikato River is phosphorous limited.

5.10 The following extracts from the evidence of Dr Neale for Wairakei Pastoral Ltd are to similar effect:

> *"16 ... Notwithstanding, there is some uncertainty around the P data used in the trend report. Vant (2018) suggests that the results imply that phytoplankton growth (as indicated by chlorophyll a concentrations) in the river is less dependent on the availability of N (as compared with P).*
>
> *17 Furthermore, multiple lines of evidence produced by the TLG indicate that overall, P is the key limiting factor of algal biomass in the Waikato River. Nutrients (indicated by total phosphorus (**TP**) and total nitrogen (**TN**) concentrations) and algal biomass (indicated by chlorophyll a concentration) all increase with distance downstream from Taupo Gates and there is therefore a correlation amongst these three variables. However, at an individual site level, there is a strong positive relationship between TP and chlorophyll a, whereas the relationship between TN and chlorophyll a is weak.*
>
> *18 These findings are consistent with previous long-term trend analysis of WRC's monitoring data that shows TP and chlorophyll a have decreased, whilst TN has increased, indicating that TP is limiting algal biomass (Verburg, 2016).*
>
> *19 In addition, bioassays, in which algal response to nutrient manipulations were investigated, have documented much greater changes in algal biomass with P additions or reductions, than N (Gibbs et al., 2014; Gibbs & Croker, 2015).*
>
> *20 As a result of this body of evidence, I consider it appropriate that efforts to manage algal biomass in the Waikato River should focus more on managing P to achieve the Vision and Strategy. Reducing algal growth through the management of P is important for a number of the objectives in the Vision and Strategy, but is critical to objective k and the ability to swim and take food from the river."*
>
> (Emphasis ours.)

5.11 As regards the approach taken to control nitrogen discharges, we also note that the section 42A report states the following:

> *"132 Officers broadly agree with a number of the submitters who consider that the PC1 regime with*

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[21] Ibid, executive summary.

respect to N is costly, inflexible and potentially has a range of unintended consequences..."

5.12 As noted, Mr McCallum Clarke has signalled some future changes to the provisions of PC1, including in relation to control of discharges of nitrogen. It is not clear from Mr McCallum-Clarke's response what effect the signalled future changes would have in reducing the costly and inflexible approach to nitrogen control, so we will have to wait to see the details of the changes and respond accordingly.

5.13 WARTA would welcome any changes to the provisions of PC1 that reduce the costly and inflexible approach to nitrogen control referred to in the section 42A report. In that regard, the detail of any such approaches proposed by the parties will be the subject of future hearings, including with respect to sub-catchment approaches.

Sub-catchment approaches

5.14 In his evidence in response to the Panel's questions, Mr McCallum-Clark has detailed the varying sub-catchment approaches that will be the subject of future hearings. WARTA does not take a position on the appropriateness or otherwise of any sub-catchment planning approaches at the present time as there has been no section 42A report in relation to them or any substantive evidence from the proponents of the various approaches.

5.15 Having said that, we note that there could be merit in some sub-catchment approaches. In that regard, we note the following statement from Ms Corina Jordan's evidence for Beef + Lamb:

> *"123. I believe that adoption of a sub-catchment approach would not pose the risks identified by the officers such as "not having an 'eye on the prize': which is the health and restoration of the whole river system." Rather this approach would empower communities to understand local and broader spatial scale issues in relation to environmental health, with a focus on aquatic ecosystem health. Solutions would be found that are spatially explicit and more efficient and effective at achieving freshwater objectives, at a broad range of scales rather than the current one size fits all approach proposed in PC1.*
>
> ...
>
> *125. As set out in the expert evidence on behalf of B+LNZ, and in the Officers' s42A report, water quality varies across sub catchments and is reflective of land use and history of land use. In upper catchments where land cover is under native cover, or/and land uses are extensive, water quality outcomes are already achieved, and for others the level of over allocation and the numerical parameters vary e.g. from sediment or nitrogen."*
>
> (Emphasis ours.)

5.16 Ms Jordan's comments above are consistent with the following statements from Dr Wheeler's evidence:

> *"2.6 Command and control input regulation:*

(a) *Suffers from centrally based administration, which "averages" complexity and creates rigidity;*

(b) *Results in "one size fits all" regulation administered by "non participant" regulators who have less "skin in the game" than owners and operator/workers; and*

(c) *Results in inconsistencies, which arise, for example, in dealing with wastewater treatment to "one standard" which is not appropriate in all cases*[22].

2.7 The impacts of "one size fits all" regulation across the entire region are likely to be severely deleterious. Negative impacts are likely to arise through:

(a) *Administrative differences between districts with overlapping regimes already in existence;*

(b) *Lack of recognition of existing regimes and the community investment already committed to these under existing legislative mandates (such as the requirements of the RMA);*

(c) *Differing levels of physical capacity in different districts meaning that reaching uniform standards is likely to involve different types of issue and differing resolution costs to be addressed; and*

(d) *Differing levels of social capacity in different districts, meaning that reaching uniform standards is likely to involve different types of issue and differing resolution costs to be addressed."*

5.17 We also note that Deputy Mayor Thomas states the following with respect to a sub-catchment approach:

"3.7 ... I do see merit in moving to a sub-catchment based approach for the reasons I outlined in paragraph 1.11. This approach would recognise and better understand the local environment as the first step to providing locally relevant and practical solutions to promoting sustainable management, being the over-riding purpose of the Act."

5.18 We have highlighted the above matters to signal that WARTA retains a real interest in what the nitrogen control regime ends up being and what advantages, including with respect to controlling nitrogen, may be achievable via a sub-catchment approach, rather than the one size fits all approach that the provisions of PC1 presently represent.

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22 See evidence of Mr Tim Harty.

6. OTHER MATTERS OF CONCERN TO WARTA

6.1 The other matters of concern to WARTA that arise during the Block 1 hearing matters are as follows:

(a) Inclusion of the values in PC1;

(b) The wording of Objective 3;

(c) Table 3.11-1;

(d) Monitoring water quality; and

(e) Whether the provisions of PC1 are intended to apply to stormwater.

6.2 We address each of these matters briefly below.

Inclusion of the "values" in PC1

6.3 Ms O'Callahan addresses this issue in her evidence and concludes that the values included in PC1 should be deleted. In brief summary, Ms O'Callahan's reasons for that view are as follows:

(a) The purpose of identifying the relevant values was to inform what the objectives should be by reference to the NPS Freshwater;

(b) It is not a requirement of the NPS Freshwater that the values be included in PC1;

(c) The values are inconsistent with each other;

(d) The values could be considered to be relevant to assessment of a resource consent application in terms of section 104(1)(c) of the RMA; and

(e) Inclusion of the values unnecessarily adds to the complexity of PC1.[23]

6.4 Mr Scrafton's evidence for Watercare Services Limited also addresses the values included in PC1. His main concern is how these values might be applied in the context of a resource consent process, under either section 104(1)(b) or (c). His summary notes:

> "2.4 *... whilst the NPS:FM requires a regional council to consider the freshwater values in the development of freshwater objectives, neither the NPS:FM or the RMA require that the values be included within a regional plan. However, if values are to be included in a regional plan, without sufficient clarity being provided within the regional plan, it is highly likely that the values would be "had regard to" through a resource consent process as a result of the application of either or both of section 104(1)(b) or (104(1)(c) of the RMA. In my view, the current drafting of PC1 perpetuates such uncertainty.* "
>
> 2.5 *On this basis, I agree with the Reporting Officer's suggestion (noting it was not a recommendation) to delete the values and uses from PC1. In my view, this approach would better align with the prescribed process set out in Policy CA2 of the NPS:FM and will*

[23] O'Callahan EiC, paragraphs 2.4 to 2.7.

remove the risk of confusion and unnecessary information requirements in resource consent processes."

Amendment to Objective 3

6.5 Mr Kirk's evidence is that Objective 3 should be amended so that it refers to "short term water quality goals" rather than "short term water quality attribute states." Mr Kirk's reason for that opinion is that Objective 3 does not set a target for the purposes of the NPS Freshwater because it does not have to be achieved within any specified time frame.[24] In that regard, the definition of a target in the NPS Freshwater is as follows:

> ***"Target"*** *is a limit which must be met at a defined time in the future. This meaning only applies in the context of over-allocation.*

6.6 The short term attribute states referred to in Objective 3 are contained in Table 3.11-1 and, while they are targets to be achieved in the "short term," the "short term" is not defined. It is therefore submitted that Mr Kirk is correct that Objective 3 is not an objective that includes a target for the purposes of the NPS Freshwater.

6.7 In comparison, Mr Kirk's evidence is that Objective 1 does set a target for the purposes of the NPS Freshwater as the attribute states referred to in Objective 1 are required to be achieved by 2096 at the latest. He has therefore recommended that references in the explanatory text of PC1 to "desired water quality states" be amended to "long term targets."

6.8 Ms O'Callahan has included Mr Kirk's recommended amendments in Appendix 1 to her evidence.

Table 3.11-1

6.9 Mr Kirk's evidence also addresses issues regarding the limits and targets in Table 3.11-1, particularly with respect to ammonia. We note at this point that the Panel has directed conferencing of the experts on these issues and that Mr Hill, as independent facilitator, is in the process of arranging for that conferencing, which Mr Kirk will attend.

6.10 Given that conferencing is to take place, we have no submissions on Table 3.11-1 at this time.

Monitoring

6.11 Another matter addressed in Mr Kirk's evidence is the lack of clarity in PC1 regarding the manner in which water quality monitoring is to be implemented and, in that respect, he has recommended that:

(a) There should be monthly surface water monitoring for a period of five years;

(b) In the alternative to (a) above, monitoring plans outlining the approach to implementing monitoring should be prepared and incorporated in PC1 by reference; and

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[24] Kirk EiC, paragraphs 2.7 and 2.8.

(c) A five year rolling average of monitoring data should be used in relation to assessing achievement of the water quality targets and desired states.[25]

6.12 As regards these recommendations, Mr Kirk's evidence is that:

> *"4.5 This annual review of five years' monitoring will enable:*
>
> *(a) Earlier response to degrading conditions;*
>
> *(b) Earlier validation of the influence of water quality improvement activities; and*
>
> *(c) Earlier recognition of investments made into improving water quality."*

6.13 Given the significant benefits of Mr Kirk's recommendations per the passage cited above, it is submitted that PC1 should be amended to clearly provide for his recommendations. Proposed amendments are included in Appendix 1 to Mr Kirk's evidence.

Stormwater

6.14 Mr Harty addresses stormwater in his evidence and whether PC1 is intended to apply to it. We note that the only mention of stormwater in PC1 is in the commercial, municipal, and industrial use value in PC1 where the following is stated:

> *"Lakes, rivers and wetlands provide assimilative capacity for wastewater disposal, flood and stormwater, and ecosystem services through community schemes or on site disposal."*

6.15 Mr Harty states the following regarding whether the PC1 provisions relate to stormwater:

> *"5.1 The major contaminants in urban stormwater are sediments, heavy metals, total nitrogen and phosphorous ("TP" and "TN," respectively). The PC1 provisions do not appear to be directly relevant to urban stormwater discharges, although I understand there is no specific exclusion provided in PC1. Through the Collaborative Stakeholders Group, which I was involved in, stormwater was specifically excluded from discussions regarding point source discharges and therefore PC1; it was pushed into "the next iteration." Accordingly, I understand that PC1 should not look to manage stormwater, so it is important that that is made clear in the document."*

6.16 In response the above, Ms O'Callahan has recommended the inclusion of the following note in Table 3.11-1:

> *"5. None of the attribute targets apply to point source discharges for stormwater."*

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25 Kirk EiC, paragraphs 4.1 to 4.5.

7. PRINCIPAL SUBMISSION

7.1 WARTA member councils acknowledge the vital relationship that the Waikato and Waipa River Iwi have with the Waikato and Waipa Rivers. WARTA members also acknowledge:

(a) The fundamental importance of achieving the Vision for the Waikato River over the long term; and

(b) That the economic costs of achieving the Vision do not override its requirement to protect and restore the Waikato River so that in the long term it is healthy and sustains prosperous communities and abundant life.

7.2 Achieving the Vision is a long term journey and PC1 only represents the first step in that journey. It is nevertheless a very important first step that needs to be undertaken in a manner and at a rate that ensures that the prosperous communities envisaged by the Vision can ensure that the Waikato River is protected and restored so that it is healthy and contains abundant life, which WARTA members acknowledge to be the primary goal of the Vision and, indeed, the Settlement Act and the negotiations that led to its enactment.

7.3 In undertaking the first step in the journey it is WARTA's position that significant and unnecessary economic burdens should not be imposed on the communities that are a vital part of achieving the Vision. Doing so would simply be counterproductive as it would undermine the communities' ability to afford to implement over time the changes necessary to achieve the long term goal. In our submission, this would be inconsistent with the Vision itself and the purpose of the RMA for the reasons we have addressed above.

7.4 Having read the submissions of Counsel for the WRC and Counsel for the River Iwi, it seems clear that there is no fundamental difference of view that the Vision needs to be achieved in the long term and that economic considerations are relevant to your decision making.

7.5 WARTA's concerns with PC1 as it is presently formulated is that it does not give effect to the Vision or the purpose of the RMA due to the potentially significant economic costs arising from:

(a) 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; and

(b) The costs associated with the expensive and inflexible one size fits all approach to control of discharges of nitrogen.

7.6 As regard 7.5(a) above, it is submitted that the extraordinary costs associated with complying with the limits / targets at the end of pipe now are not a justified first step along the journey to achieving the Vision; even if those limits were achievable, which appears doubtful at least in light of the current technology gap.

7.7 In relation to 7.5(b) above, and as noted earlier in these submissions, WARTA retains a real interest in what the nitrogen control regime ends up being and what advantages may be achievable via a sub-catchment approach, rather than the one size fits all approach that the provisions of PC1 presently represent.

7.8 WARTA members look forward to continuing to participate in this process in a constructive and collaborative manner and wish the Panel well for its difficult task.

DATED at Hamilton this 18th day of March 2019

S J Berry **C D H Malone**

Counsel for the Waikato Region Territorial Authorities Group