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28 April 2017

Clean Water Consultation 2017
Ministry for the Environment
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Dear Sir/Madam

Waikato Regional Council submission on the Clean Water Consultation 2017

Thank you for the opportunity to make a submission on the Clean Water Consultation 2017. Please find attached Waikato Regional Council's (the council's) submission regarding this document. The submission was formally endorsed by the council on 27 April 2017. Should you have any queries regarding the content of this document please contact Macaela Flanagan on (07) 859 0776 or by email at macaela.flanagan@waikatoregion.govt.nz.

We note an extension of three weeks has been given for the swimmability aspects of the Clean Water package. The council may have additional submission matters on this point.

Regards,

A handwritten signature in black ink, appearing to read "Tracey May". The signature is stylized and cursive.

Tracey May

Director Science and Strategy

SUBMISSION

Clean Water Consultation 2017

To: Clean Water Consultation 2017
Ministry for the Environment
P O Box 10362
WELLINGTON 6143

From: The Chief Executive Officer
Waikato Regional Council
P O Box 4010
HAMILTON EAST 3216

1 Introduction

- 1.1 The Waikato Regional Council (the council) thanks the Ministry for the opportunity to comment on the 'Clean Water Consultation 2017 – consultation document' released February 2017 for submission by 28 April 2017. The council notes that an extension of submission period, that Council staff were notified of by email from the Deputy Secretary, Natural Resource Policy (dated 27 April 2017), has been provided in specific regard to the swimmability aspects of the proposal, and that a further submission from Council may be lodged on this point.
- 1.2 The council supports the aims of this document to improve freshwater quality. Furthermore the council is keen to see improvements around freshwater water management issues and therefore supports the overall intent of the Clean Water Consultation 2017. The council recognises that the proposed changes are based on a partial analysis of costs and benefits. Local government has previously supported improved water quality and the council's experience in doing so involves many stakeholders, including the primary sector and communities as providers of infrastructure. The council also understands that central government is now seeking to engage with regional councils and others to get a more complete picture of these costs and benefits. We look forward to providing assistance in these matters where possible.
- 1.3 However the matters covered in Clean Water Consultation 2017 and the timeframes attached to the work programme set out in the letter¹ from the Minister for the Environment (MfE) received on the 28 Feb 2017 involve tasks that will be challenging to achieve. These will involve modelling various scenarios including stock exclusion from waterways, changing stock numbers, riparian planting, and understanding the urban infrastructure requirements.
- 1.4 Water quality is one of the council's priorities and fresh water is our most important resource for the future. Proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments (previously referred to as Healthy Rivers Wai Ora) (PPC1) gives effect to both the National Policy Statement on Freshwater Management 2014 (NPSFM) and the primary direction setting document for the Waikato and Waipā rivers, the *Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato* the Vision and Strategy for the Waikato River, enacted by Treaty settlement legislation and which council is required to give effect to through our regional plan.
- 1.5 PPC1 was developed using a collaborative stakeholder group process, focused on reducing four contaminants, nitrogen, phosphorus, sediment and bacteria in the Waikato and Waipā catchments.

¹ Attached as Appendix One,

It sets our region on the first decade of an 80-year journey towards making the Waikato and Waipā rivers swimmable and safe for food gathering along their entire length as required by *the Vision and Strategy*. Council has also delivered the Protecting Lake Taupō Strategy a variation to our regional plan to reduce nitrogen Lake Taupō.

- 1.6 While PPC1 and the then Variation 5, Lake Taupo, set in place the regulatory framework, we recognise that, to create buy-in and make meaningful change towards achieving water quality targets, it is vital that those most affected can take ownership of both the problems and the solutions. Council continues to work closely with our key stakeholders and river iwi. Other projects directed toward achieving water quality targets include:
- The Waikato and Waipa River Restoration Strategy a partnership between DairyNZ, Waikato Regional Council and the Waikato River Authority (WRA).
 - The Lake Taupo Protection Trust that administers \$80 million in funding.
 - The work of council's Integrated Catchment Management directorate in developing both zone and catchment management plans that support our regional plan work, and seek to address water quality through non-regulatory methods, working alongside iwi, stakeholders and communities. The work makes use of a spatially prioritised approach to investment.
- 1.7 In Council's own submission to PPC1 ,the plan that was prepared by the Collaborative Stakeholder Group, a matter was highlighted that Council also believes should be highlighted for this document, it relates to Council as a provider of regionally significant infrastructure. This matter is further detail in 4.11 to 4.13 below.
- 1.8 In discussing the submission that was prepared by staff the elected members of Council asked that a number of other matters be highlighted in the submission. Firstly, that the Waikato is a significant primary production area for the nation. Many of our catchments have been highly modified by primary industries, and in some cases the social and economic costs to attain the swimmability targets will be significant. Having recently experienced a number of extreme weather events, it is asked that in formulating national policy direction consideration is given to practical outcomes. There may be times of high flood, and in times of post-flood ponding, where swimmability targets can not be met, national direction needs to recognise and provide for this.
- 1.9 Elected members also requested that consideration be given to the concept of 'exemption areas' for the swimmability targets. This concept would acknowledge that there are areas within the Waikato, and no doubt other parts of the country, where systems are so highly modified and where the selection of interventions are so extremely limited, as to make achievability of targets almost impossible. Council is supportive of the need to improve water quality, but has questioned whether a blanket approach is best, in that the present approach does not recognise highly modified drainage systems where improvements in swimmability targets would require substantial investment and be a substantial task, given all of the responsibilities that council is asked to fulfil.

2 Structure of the submission

- 2.1 The document includes general comments, structured as per the proposals in the Clean Water Consultation 2017, noted below:
- 90% of rivers and lakes swimmable by 2040
 - Amending the National Policy Statement for Freshwater Management 2014
 - Keeping stock out of our waterways.
- 2.2 Appendix one includes specific amendments sought.
-

3 90% of rivers and lakes swimmable by 2040

Timeframe

- 3.1 The Clean Water Consultation 2017 requires these targets to apply across the region and to involve the community in the development of these targets. Treaty Settlement legislation requires the five River Iwi to be involved in water related policy as it relates to the Waikato and Waipā River Catchments. Council and River Iwi set up a co-management and co-governance arrangements in the development of the PPC1, notified on 22 October 2016. Any regional target development within the Waikato or Waipa catchment will need to be undertaken with River Iwi. Furthermore other iwi within the region are likely to have a strong interest in being involved in developing regional water quality targets. The council also has a legal obligation to consult with tangata whenua through iwi when going through a process to incorporate amendments to the NPSFM into the WRP. It is the council's preference to undertake the consultation upfront. Furthermore most regional councils are going through an LTP process and the Government should consider the timeframe to allow councils to build this package of work into the LTP process so it can be funded transparently and done within reasonable timeframes.
- 3.2 Given the matters outlined above in the previous paragraph, we consider that the October 2017 deadline does not provide sufficient time for iwi and the regional community to have meaningful conversations in respect in the development of any proposed regional water quality targets.

Fairness

- 3.3 Whilst those with interests in the Waikato and Waipa river catchments have had time to debate water quality and the interventions to achieve improved water quality (noting this will continue through the Resource Management Act 1991 Schedule 1 process (RMA)), other communities and iwi that have interest in other major river catchments within the Waikato Region. For example, the Hauraki catchments and the Coromandel Peninsula, and West Coast catchments have not been afforded this opportunity, and the timeframe does not allow for that involvement to occur to any meaningful level.

Decision-making tools (Modelling)

- 3.4 It is unclear how MfE intends to measure the progress towards the national swimmability target as presented in the document. We suggest that a joint effort between MfE and local government would be helpful to ensure consistency, while taking account of regional differences. The council would prefer to have the information regarding measuring the progression towards national swimmability targets in order to ensure it is integrated with the modelling and decision making tools
- 3.5 It is further noted, that very little regard is currently given to the effects of model uncertainty on predictions of swimmability at regional and national scale.

New regulatory tools

- 3.6 The council considers there is a need to explore the potential for new regulatory tools to assist in developing interventions to give effect to the clean water document through resource management or local government legislation.

Resourcing

- 3.7 The proposed monitoring requirements for *E. coli* will have major implications for regional councils, particularly those that currently have appreciable numbers of rivers that are not suitable for swimming. A provisional calculation for the Waikato and Waipa River catchments ("Plan Change 1") indicates that the sampling effort will likely need to increase by approximately 15-fold. For the 64 monitoring sites that have already been identified in the plan change for these rivers, this will amount to a very large increase in operational costs, in excess of \$3 million per year. Council would be looking central government for funding to cover increased costs of resourcing.
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- 3.8 In Appendix 5 of Clean Water Consultation 2017, it appears to make public health the mandate of regional councils by the requirement for daily monitoring under certain circumstances. If the Ministry does intend regional councils to widen their mandate into monitoring for *E.coli* in relation to public health, then there becomes a need for prediction modelling for informing public health. The main reason to suggest to move into prediction modelling is the laboratory turn-around time to receive *E. coli* results is substantial (up to 3 days) and therefore a significant delay to put up warning signs for swimming by the time the results are available.

4 Amending the National Policy Statement for Freshwater Management 2014

- 4.1 The following two sections of this report provide general comments on sections one through to five of the Clean Water Consultation 2017 document. Please refer to Appendix one of this submission provides further detail on each provision.
- 4.2 As stated in section one of this submission, the council supports the aims of the Ministry and of communities to improve water quality. The Ministry's amendments to the NPSFM 2014 are raising the bar for water quality and this council is already doing so through its PPC1 process². However for the reasons stated previously the council has concerns in regard to the timeframes around meeting the targets and limits as set out in the Clean Water Consultation 2017 document. In regard to section 3 of the Clean Water Consultation 2017 document the council makes the following points.

Swimming and recreational values

- 4.3 The council is supportive of the proposal to improve the proportion of waterbodies that are swimmable. However, the proposed mechanism for determining that this happens appears to involve determining whether the proportion of locations that are within the "swimmable" bands (e.g. states A, B and C for *E. coli*) increase over time. This doesn't allow for the possibility that a location may actually improve its real condition by having fewer exceedances of the *E. coli* threshold, while actually remaining within the same attribute band. Please refer to Appendix Two #9 of this document for more detail.

Maintain or improve overall water quality

- 4.4 The proposed change made to Objective A2 of the Clean Water Consultation 2017 still invites people to envisage that a plan could allow some waterbodies within a freshwater management unit (FMU) to deteriorate while others improve. The underlying problem seems to be the use of the term "overall water quality". The council considers that the word "overall" needs to be omitted, so the policy simply states that "water quality is maintained or improved within, [either a region or an FMU]".
- 4.5 The proposal that "water quality is at least maintained if freshwater objectives are set within the same attribute band as current water quality" is likely to result in a real deterioration of water quality over time. This is because the existing attribute bands consider a range of conditions. For example, state A for median total phosphorus (TP) in lakes is anywhere between 0 and 10 mg/m³. In practice, this represents a reasonably-wide range of lake types. In a lake where median TP was currently nearly 5 mg/m³, the proposed amendment would enable anything up to a doubling of TP concentrations and the water quality would be deemed to have been maintained. In fact, lake experts would regard such a change as a major deterioration, associated with increased levels of phytoplankton and poorer water quality. The existing WRP for the protection of Lake Taupo (WRP section 3.10), by contrast, states that the existing TP concentration in the lake, namely an average of

² ibid

5.6 mg/m³ (equivalent to NPSFM 2014 state A), is to be maintained at this value into the future. This is what “maintain” actually means in the context of the lake ecosystem.

Managing nitrogen and phosphorous

4.6 The council appreciates the desire to explicitly link the existing periphyton biomass attribute to the concentrations of dissolved phosphorus and nitrogen that actually support plant growth in rivers – and that these are the factors that will need to be managed in the catchment to change periphyton biomass. However, the council also accepts that it is probably not possible to specify nationwide limits to these concentrations, as site-specific conditions are likely to be very important. In this situation the proposed amendment is about as far as a national limit can go.

4.7 However, the council observes that there are other unresolved difficulties with the periphyton attribute. The most important of these for the Waikato is, in this region with many soft-bottomed streams is that much of the periphyton growth observed here is epiphytic: the periphyton slimes grow on other plants, namely instream macrophytes, rather than on rocks. Therefore the management problem in these streams may well be the presence of macrophytes that provide a substrate for periphyton growth rather than necessarily being elevated concentrations of phosphorus and nitrogen. (Furthermore, it is likely to be the presence of the macrophytes or phytoplankton that contributes to marked fluctuations in dissolved oxygen concentrations in these streams, rather than any point source discharges [cf. the NPSFM 2014 dissolved oxygen attribute]).

Economic well being

4.8 The council notes the specific inclusion of the need to consider economic well being in the implementation of the NPS-FM. We understand that the purpose of this amendment is to ensure that economic well being is considered alongside other matters (but is not elevated above them). We consider that this requirement was clear without this amendment, but if it helps to provide additional clarity on this point, then we support this amendment.

4.9 The RMA section 32 analysis that supports the consultation document includes the cost of stock exclusion (fencing) based on different land landscape, topography, etc. but notes that there were aspects of the economic implications not covered. The council recognises that the proposed changes are based on a partial analysis of costs and benefits. We also understand that central government is now seeking to engage with regional councils and others to get a more complete picture of these costs and benefits. We look forward to providing assistance in these matters where possible. We note that, given the importance of the primary sector in the Waikato region, the potential costs and benefits of these policies need to be well-understood.

Te Mana o Te Wai - Addressing iwi/hapū and community aspirations to work towards improving the suitability of lakes and rivers for swimming

4.10 The council supports the inclusion of Objective AAA1 in the NPSFM. The iwi/hapū and community aspirations and expectations that the Waikato and Waipā rivers and their tributaries be safe for people to swim in and to take food over their entire length derives from the Vision and Strategy³ for the Waikato River. The Vision and Strategy is the primary direction setting document for the Waikato and Waipā rivers and their catchments. Its water quality standards prevail over any inconsistent provisions within National or Regional Policy Statements.

Council as a provider of regionally significant infrastructure

4.11 The primary function of flood protection and land drainage infrastructure is to provide a conduit for runoff, particularly during times of heavy and/or extended rainfall. This function is defined by “levels of service”, which are agreed with the community as being an appropriate balance between the cost of the infrastructure and the benefits that are provided. For example, a “level of service” may require the infrastructure to be capable of removing runoff from a certain rainfall event within a certain period of time. This “level of service” then drives the design and performance requirements for the

³ Ibid

different elements of infrastructure that make up an overall scheme which must be provided for by Council.

- 4.12 The Council notes that it is important that the need to achieve this level of service is recognised when considering the achievement of water quality objectives in relation to point source discharges, as well as there being the potential for the two to conflict (noting that the performance of flood protection and land drainage infrastructure is generally measured during times of flooding, where the quality of water being conveyed will often be relatively poor, as is expected during times of flooding).
- 4.13 It is proposed that amendments to the NPSFM should account for, during flood events, the potential conflict between achieving the level of service for regionally significant infrastructure, and the water quality objectives that may be set through a regional plan. The NPSFM should allow for regional councils commitment to maintain flood protection levels of service to be met by allowing the unimpeded passage of high flows, regardless of water quality, during flood events.

Clarity in definition between swim ability and immersion, relationship with Te Ture Whaimana o Te Awa o Waikato, Vision and Strategy for the Waikato River

- 4.14 Council notes that there is potential confusion between the 90% swim ability target and the swim ability maps. The changed criteria in the NPSFM relates to human immersion. Council queries whether this means that the swimability targets are aspirational and the modelled maps indicative, whereas the human immersion policies and attribute changes are regulatory? If there is no difference meant between the terms, then Council would encourage the document to use only a single term to avoid confusion. Matters become confused when the colloquial reference is to swimability is not that used in the document.
- 4.15 Council suggests a more rigorous legal interpretation of the two terms, if necessary, as it could be relevant with respect to the relationship between the NPSFM and Te Ture Whaimana o Te Awa o Waikato/Vision and Strategy for the Waikato and Waipa River catchments.
- 4.16 The Vision and Strategy clearly considers swimability as one desired state for the Waikato River and catchments, and this overrides the NPSFM and any amendments when there is conflict between the two. If the two are not the same, they cannot be in conflict and therefore the accelerated timing of the proposed NPSFM amendments means that it would also apply in the Waikato River catchment, and could therefore create some conflict with the outcomes sought by the Vision and Strategy.
- 4.17 To complicate matters further, new NPSFM Appendix 5 uses 'bathing season' in relation to the frequency of monitoring activity. There is no definition of this, but general interpretation would suggest that it is more aligned with swimming than incidental immersion which could happen at any time of the year.
- 4.18 Council would welcome clarity between the terms so that the relationship between the NPSFM and the Vision and Strategy is clear and without confusion.

5 Keeping stock out of our waterways

- 5.1 The council supports the new requirements to prevent livestock from entering streams, rivers, lakes and wetlands. The council also supports in principle the proposed dates and slope based approach for stock exclusion.
- 5.2 Note that clause 62 of the Draft Regulatory Impact Statement: Stock Exclusion (RIS) states that around half the regional councils *"offer funding to cover part of the cost of streamside fencing...although this is often only available for priority areas."* This council only offers such funding
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where the proposed fencing goes beyond statutory requirements. Potentially such funding will be unavailable in future if it is a statutory requirement to fence. We expect that other councils would take the same view.

- 5.3 Through the Healthy Rivers Wai Ora⁴ plan development process, council identified that removing stock from waterways and riparian planting will not be sufficient in reducing E.coli/cyanobacteria levels to swimmable levels.

Proposals for stock exclusion

- 5.4 Council supports the use of a national, spatial data set developed by Landcare Research that classifies land into slope class. However, the question of accuracy of scale of this dataset is not answered. It is also not clear if this will be 'static' in the regulation, or will it be updated over time.

Stock crossings

- 5.6 The proposal for stock crossings currently implies that stock are not permitted to enter a water body unless actively driven. In the situation where the required date for stock exclusion has yet to be reached, it is unclear if prior to the date of exclusion stock entering a water body passively 'without being driven' would be considered a breach of the regulation. In this example, is there an expectation that the land owner may need to exclude stock earlier than the required date?

Water bodies

- 5.7 Further clarification is sought in regard to "over 1 metre wide an any point" – does this mean waterways need to be fenced where the active channel is more than 1 metre wide, or does it mean if the waterway is over 1 metre wide anywhere on the land owner's property then the entirety needs to be fenced? In addition, the document also refers to the "active channel". This needs to be clearly defined to ensure consistent implementation and enforcement.
- 5.8 Clause 92 of the RIS identifies the waterways to which the stock exclusion requirements will apply. It includes wetlands and the RMA definition of "wetland" will apply. That definition does not appear to include artificial wetlands, and this is reflected by the reference in the clean water document to "natural wetlands." Council does agree that the regulations should not apply to artificial water bodies that do not flow into natural water (e.g. stock dams, storage ponds etc.). However, the council considers that artificial wetlands which do flow into natural water bodies, should be included. Enabling open stock access to artificial wetlands would cause the unnecessary discharge of contaminants to water, and would appear to defeat the purpose of constructing the wetland in the first place. It is also worth noting that rehabilitated wetlands could be included in this definition.

Alternative option

- 5.9 The use of a standalone or wider farm environment plan or land environment plan where the land owner is unable to meet the requirements is supported by council. However there is the potential for inconsistent approaches to this across regions. Specifically in regard to this wording: "Must be approved in writing by the regional council". It is also suggested that consideration is put into standardised information requirement for this application, factors to consider for approval/refusal, and the means to recover costs.

Enforcement

- 5.10 It is unclear as to what exactly is required by the Regulations. This lack of clarity is also reflected in the RIS. In Clause 115 of the RIS, it states that "Failing to provide effective exclusion, regardless of whether stock actually gain access to the water body would be an offence under the regulation." However, clause 116 states that the "Regulation will prescribe a maximum fee of \$2000 for each observed event of stock in a water body." These statements are contradictory. The first states that the regulation will regulate potential access to the water body, the second implies that actual access is what is regulated. This is an important distinction that the Regulations needs to

⁴ Ibid

clarify. In any event clear guidance is needed to avoid inconsistent approaches between regional councils which will undermine the integrity of the regulations.

Regional council discretion

- 5.11 The stock exclusion approach provides for “more stringent” requirements than specified by the regulations. This may require further clarification. In particular should “stringency” also account for the timing of the provisions? For example, if a Regional Council has fencing requirements that are more strict, but which have effect at a later date than the Regulations, then do the less strict provisions of the Regulations apply in the meantime?
- 5.12 In relation to riparian buffers, the clean water consultation 2017 document refers to the application of “best management practice” but then goes on to refer to regional councils having “discretion” to require riparian buffers. The document is therefore unclear as to the approach to be taken. Council query whether council discretion is legally possible in the context of a regulation, and are unclear how it would work in practice, unless there is clear practical guidance.
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6 Conclusion

- 6.1 The council thanks the Ministry for the opportunity to provide feedback and looks forward to ongoing discussions around the Government's freshwater reforms. The council agrees with the intent of the freshwater reforms but would like to further explore with the Minister our concerns as expressed in this submission.

 - 6.2 The council also would like to let the Ministry know that the relevant staff are available to discuss any matters contained in this submission. Please direct any enquiries to Macaela Flanagan Acting Team Leader Policy Implementation, Macaela.flanagan@waikatoregion.govt.nz
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Appendix Three: Comments to the Clean Water Consultation Document 2017

Submission point	Provision	Support/oppose	Submission	Decision sought
Section 1 of the Clean Water Consultation 2017 –90% of rivers and lakes swimmable by 2040				
1	Proposal for targets pg.9	Support with amendments	The document states regional councils are to tell central government by March 2018 how the target can be achieved, including the likely costs and the impacts on their communities. Some water bodies will need monitoring/science/economic to understand how improvements can be made and the cost/affordability of doing so. The timeframe does not provide for this to occur.	Amend the timeframes to provide for council to undertake the modelling and community engagement
2	Proposal for targets pg.9	Support with amendments	It is understood regional councils will need to work with communities to decide which lakes/rivers are most important to them for swimming, what improvements are needed and how quickly they will be made. The timeframes do not provide for meaningful community involvement.	Amend timeframes to provide for quality consultation. Suggested timeframes are 2 years for the technical work and 2 years for the consultation with communities so 4.5 years in total.
3	Proposal for targets pg.9	Support with amendments	It is unlikely there will be sufficient technical capacity available to support all regional councils in collating information to inform the targets and their affordability for the community.	Amend timeframes to provide for more clarity around the technical capacity that will be available.
4	Proposal for targets pg.9	Support with amendments	Based on experience communities want to understand the costs/impacts before they agree on targets. There is no time for this with the current deadlines.	Amend the timeframes to allow time for costs to be worked out and provide for time to this to be communicated to communities.
5	Proposal for targets p.10	Support with amendments	Most regional councils are going through a Long Term Plan (LTP) process. The Government should consider the timeframe to allow councils to build this package of work into the LTP process so it can be funded transparently and done within those timeframes.	Amend the timeframes to provide for clean water work to align with the LTP process, so it can be transparently funded whilst within reasonable timeframes.

Submission point	Provision	Support/oppose	Submission	Decision sought
Section 3 Clean Water Consultation 2017 – Amending the National Policy Statement for Freshwater Management 2014				
6	3.3 NPSFM 2014 amendments – Maintain and improve overall water quality	Support with amendments	<p>The Environment Court Decision ENV-2013-WLG-000050 NGATI KAHUNGUNU IWI INC VS THE HAWKES BAY REGIONAL COUNCIL concluded that objective A2 in NPSFM 2014 of maintain or improve overall water quality within a region was untenable⁵ if it involved planning for “overs and unders”, with some fresh water management units (FMUs) in a region deteriorating while others improved. The proposed amendment to maintain or improve overall water quality “within an FMU” does not change the fundamental concern here; it simply changes the <u>scale</u> at which the comparison operates to within an FMU as opposed to within a region.</p> <p>The proposed change still invites people to envisage that a plan could allow some waterbodies within a FMU to deteriorate while others improved. The underlying problem seems to be the use of the term “overall water quality”. The council considers that the word “overall” needs to be omitted, so the policy simply states that “water quality is maintained or improved within, [either a region or an FMU].</p>	Amend to remove the word ‘overall’.
7	3.3. NPSFM 2014 amendments – Maintain and improve overall water quality	Oppose	<p>The proposal that “water quality is at least maintained if freshwater objectives are set within the same attribute band as current water quality” could result in a real deterioration of water quality over time. This is because the existing attribute bands consider a <u>range of conditions</u>. For example, state A for median total phosphorus (TP) in lakes is anywhere between 0 and 10 mg/m³. In practice, this represents a reasonably-wide range of lake types. So in a lake where median TP was currently nearly 5 mg/m³, the proposed amendment would enable anything up to a doubling of TP concentrations and the water quality would be deemed to have been maintained. In fact, lake experts would regard such a change as a major deterioration,</p>	Oppose.

⁵ ENV-2013-WLG-000050 NGATI KAHUNGUNU IWI INV VS HAWKES BAY REGIONAL COUNCIL

Submission point	Provision	Support/oppose	Submission	Decision sought
			<p>associated with increased levels of phytoplankton and poorer water quality. The existing Waikato Regional Council Regional Plan for the protection of Lake Taupo (WRP section 3.10), by contrast states that the existing TP concentration in the lake, namely an average of 5.6 mg/m³ (equivalent to NPSFM 2014 state A), is to be maintained <u>at this value</u> into the future. This is what “maintain” actually means in the context of the lake ecosystem.</p> <p>Even more notably, both the Upper Waikato River (at Lake Ohakuri) and the Upper Ohinemuri River (at SH25), for example, would fall into attribute state A in the proposed new definitions for <i>E. coli</i>. But the measured water quality at these two sites is quite different: median <i>E. coli</i> is 3 per 100 mL at the Waikato site and 100 per 100 mL at the Ohinemuri site, while 0 percent of samples exceed 260 <i>E. coli</i> at the Waikato site and 4 percent exceed it at the Ohinemuri site. If the Upper Waikato site were to change to become the same condition as the Upper Ohinemuri site – with its <i>E. coli</i> concentration thereby increasing by more than 30-fold – this would represent a very large deterioration in water quality of the Upper Waikato, even though the attribute state for <i>E. coli</i> would not have changed.</p> <p>The proposed amendment appears to permit a progressive and insidious deterioration in the water quality of a waterbody. Council does not support this proposed relaxation of the definition of “maintain current water quality”.</p>	
8	3.4 Managing nitrogen and phosphorus	Support	<p>The council appreciates the desire to explicitly link the existing periphyton biomass attribute to the concentrations of dissolved phosphorus and nitrogen that actually support plant growth in rivers – and that these are the factors that will need to be managed in the catchment to change periphyton biomass. However, the council also accepts that it is probably not possible to specify nationwide limits to these concentrations, as site-specific conditions are likely to be</p>	<p>Amend to give consideration to other unresolved issues regarding periphyton such as the presence of macrophytes as opposed to assuming the elevated presence of phosphorus and nitrogen.</p>

Submission point	Provision	Support/oppose	Submission	Decision sought
			<p>very important. In this situation the proposed amendment is probably about as far as a national limit can go.</p> <p>However, the council observes that there are other unresolved difficulties with the periphyton attribute. The most important of these for the Waikato in this region with many soft-bottomed streams is that much of the periphyton growth observed here is epiphytic: the periphyton slimes grow on other plants, namely instream macrophytes, rather than on rocks. Therefore the management problem in these streams may well be the presence of macrophytes that provide a substrate for periphyton growth rather than necessarily being elevated concentrations of phosphorus and nitrogen. (Furthermore, it is likely to be the presence of the macrophytes or phytoplankton that contributes to marked fluctuations in dissolved oxygen concentrations in these streams, rather than any point source discharges [cf. the NPSFM 2014 dissolved oxygen attribute]).</p>	

Section 5 of the Clean Water Consultation 2017 – Keeping stock out of our waterways

9	Keeping stock out of our water ways Table (nameless) p.26-27	Support with amendments	The table does not include horses. It is unclear why they are not included. It is not less likely that horses enter water bodies and contaminate them than for listed stock.	Amend the table on page 26-27 to include horses.
11	Proposal for stock exclusion p.28	Support with amendments	Council supports the use of a national, spatial data set developed by Landcare Research that classifies land into slope class. However, the question of accuracy of scale of this dataset is not answered. It is also not clear if this will be 'static' in the regulation, or will it be updated over time.	Amend to provide clarification on accuracy of the data set and whether it will be static in the regulation or updated.
12	Proposal for stock exclusion p.28	Support with amendments	The proposal for stock crossings currently implies that stock are not permitted to enter a water body unless actively driven. In the situation where the required date for stock exclusion has yet to be reached, it is unclear if prior to the date of exclusion stock entering a water body passively 'without being driven' would be considered a breach of the regulation. In this example is there an expectation	Amend to provide clarification on whether stock are prohibited from entering a water body (i.e. breaching the regulation) prior to the required exclusion date.

Submission point	Provision	Support/oppose	Submission	Decision sought
			that the land owner may need to exclude stock earlier than the required date?	
13	Proposal for stock exclusion p.28	Support with Amendments	The proposal states that “stock crossings used once or more per week, must be bridged or culverted” Council would like to raise that this is considered to be extremely problematic to monitor or enforce. Council recommends amending to state that livestock must not be permitted to enter onto or pass across the bed of the water body, except when using a livestock crossing structure."	Amendment to state that livestock must not be permitted to enter onto or pass across the bed of the water body, except when using a livestock crossing structure.
14	Proposal for stock exclusion p.28	Support with amendments	There are concerns about this point being unclear and unenforceable. It is unclear how councils are supposed to check if a water body is crossed by livestock more than once a week and if they are “actively driven”. It is not stated if the same crossing has to be used every week or if stock can cross the water body at different points every week (that would do considerably more damage to the river banks and riparian area).	Amend to clarify intent and enforceability.
15	Proposal for stock exclusion p.28	Support with Amendments	Clarification is needed in regards to “over 1 meter wide an any point” – does this mean waterways need to be fenced where the active channel is more than 1 meter wide, or does it mean if the waterway is over 1 meter wide anywhere on the land owners property then the entirety needs to be fenced?	Amend to provide clarification on what width of waterway needs to be fenced.
16	Proposal for stock exclusion p.28	Support with Amendments	The document also refers to the “active channel”, this needs to be clearly defined to ensure consistent implementation and enforcement. The wetted width of a stream will often increase or decrease with flow (dependent on channel shape). For example the median wetted width of wadeable ⁶ streams in the Waikato region’s spatially unbiased network (176 sites) is about c.2.5m (with a 25 th percentile of c.1m), but the channel width is c.3.5m (and 1 st percentile of c.1m). So in effect if channel width was used then 99% of streams would need fencing, but if wetted width in low flows was used then less than 75% of streams would require fencing. The	Amend to include definition of active channel in NPSFM-2014.

⁶ Practicalities mean that macroinvertebrate monitoring can only be done in rivers or streams that are wadeable. Wadeable in this sense does not mean refer to water quality but the physical characteristics of the river or stream,i.e. it must be possible for someone to wade into the river and gather the necessary data.

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			definition is further important for the implementation (and then the effectiveness of the outcome), as it will essentially dictate where the fence will go in some situations, e.g. X metres back from the top of the bank or X metres from the waters edge which can change (which in many cases would be an underestimate of what I would consider to be the “active channel”)	
17	Proposal for stock exclusion p.28	Support with Amendments	Clause 92 of the RIS identifies the waterways to which the stock exclusion requirements will apply. It includes wetlands and it is noted that the RMA definition of “wetland” will apply. That definition does not appear to include artificial wetlands, and this is reflected by the reference in the clean water document to “ <u>natural</u> wetlands.” While council agrees that the regulations should not apply to artificial water bodies that do not flow into natural water (e.g. stock dams, storage ponds etc.) council considers that artificial wetlands which do flow into natural water bodies, should be included. Enabling open stock access to artificial wetlands would cause the unnecessary discharge of contaminants to water, and would appear to defeat the purpose of constructing the wetland in the first place.	Amend to include artificial wetlands which do flow into natural water bodies.
18	Proposal for stock exclusion p.28	Support with Amendments	The use of a standalone or wider farm environment plan or land environment plan where the land owner is unable to meet the requirements is supported by council. However council would like to point out that there is the potential for inconsistent approaches to this across regions. Specifically in regards to the fact that this “Must be approved in writing by the regional council”.	Amend to address inconsistencies in farm plan approaches across regions.
19	Proposal for stock exclusion p.28	Support with Amendments	As there is no template or prescribed approach for a stock exclusion plan there is potential for litigation when inconsistencies arise.	Amend to provide a template for a stock exclusion plan or a prescribed approach.
20	Proposal for stock exclusion p.28	Support with amendments	The document currently states that the information for the Land Resources Inventory (LRI) slope dataset will be communicated to land owners and regional council using an online interactive mapping tool.	Amend to include offline methods to communicate information from the LRI slope dataset to landowners.

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			Since people in rural areas often have a poor or no internet connection using an online tool to inform is not adequate to be the sole means to communicate important information.	
21	Keeping stock out of our water ways - Enforcement	Accept with amendments	It is unclear as to what exactly is required by the Regulations. The RIS states that “Failing to provide effective exclusion, <u>regardless of whether stock actually gain access to the water body</u> would be an offence under the regulation.” However, Clause 116 of the RIS states that the “Regulation will prescribe a maximum fee of \$2000 for <u>each observed event</u> of stock in a water body.” These statements are contradictory. The first states that the regulation will regulate <u>potential</u> access to the water body, the second implies that <u>actual</u> access is what is regulated. This is an important distinction that the Regulations needs to clarify. In any event clear guidance is needed to avoid inconsistent approaches between regional councils which will undermine the integrity of the regulations.	Amend to clarify the distinction between potential and actual.
22	Keeping stock out of our water ways - Regional council discretion p.29	Support with amendments	The Draft Regulatory Impact Statement stock exclusion (referred to on page 26) reads in paragraph 5: “Sediment can enter water bodies from pugging and trampling of the stream banks which causes erosion, vegetation loss and soil loss. This reduces water clarity and decreases the water’s ability to support a healthy ecosystem...” Fencing right next to the riverbank would not prevent this from happening. The documents states that including a buffer would be seen as best management practice. A mandatory riparian buffer seems a logical requirement to ensure reaching the water quality targets especially on rolling and steeper land.	Amend to Regional council discretion to include a mandatory riparian buffer for stock exclusion.
23	Keeping stock out of our water ways - Regional council discretion p.29	Support with amendments	In relation to riparian buffers, the clean water consultation 2017 document on page 29 refers to the application of “best management practice” but then goes on to refer to regional councils having “discretion” to <u>require</u> riparian buffers. The document is therefore unclear as to the approach to be taken. Council query whether council discretion is legally possible in the context of a regulation, and are unclear how it would work in practice, unless there is clear practical guidance.	Amend to provide clarification for council’s on which approach to take in regards to phrase Regional councils have discretion to require riparian buffers’.

Submission point	Provision	Support/oppose	Submission	Decision sought
Annex1: Proposed amendments to the National Policy Statement for Freshwater 2014				
24	Preamble	Accept with amendments	"This NPSFM 2014 allows some variability in terms of freshwater quality as long as overall freshwater quality is maintained" – council has concerns on this approach, as an unders and overs or averaging approach.	Amend to provide further interpretation or clarity on the approach.
25	Interpretation	support with amendments	The definition of 'contact with freshwater' rules out industry, commercial or business purposes of contact with freshwater.	Amend to include commercial purposes or ADD in a commercial purpose definition.
26	Interpretation	Support with amendments	Council has concerns around the absence of environmental limits/constraints in this definition.	Amend to include environmental limits in this definition.
27	Interpretation	Support with amendments	Council has concerns around the definition of large lakes and rivers.	Amend to provide more clarity on this definition.
28	Interpretation	Support with amendments	Council has concerns around the definition of 'immersion' and 'bathing season'.	Amend to provide more clarity around immersion.
29	Policy AAA1b)	Support with amendments	To include the word target in Policy AAA1b) as the clean water document and the letter from the MfE, both refer to 'setting targets'.	Local and regional values identified through engagement and discussion with the community, including tangata whenua must inform the setting of freshwater objectives, targets and limits.
30	Objective A2	Support with amendments	Council is concerned that this is promoting an unders/overs or averaging approach.	Amend to make the addition regarding economic well-being another bullet point rather.
31	Objective A2	Support with amendments	Objective A2 provides for economic wellbeing, including productive economic opportunities, within environmental limits, however objective B1 provides for economic wellbeing but not within environmental limits.	Amend to ensure including 'environmental limits' is consistent in any proposed change to the NPSFM 2014. Provide clarity around the meaning of productive economic opportunity and economic well-being.

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32	Objective A3	Oppose with amendments	The most minor improvement in risk to human health would achieve this objective – however this objective doesn't support water bodies being swimmable in accordance with the communities' wishes.	Amend to support water bodies being swimmable in accordance with communities' wishes.
33	Objective B1	Support with amendments	Environmental limits is missing from the new insertion, there are no definitions of productive economic opportunities or of economic well-being	Amend to insert environmental limits into the insertion, provide clarity around the meaning of a productive economic opportunity and economic well-being.
32	Policy CA2	Support with amendments	Unclear around the meaning of community understandings of health and well-being of the FMU.	Amend to provide more clarity on the meaning of this.
34	Policy CA2	Support with amendments	<p>Council supports the clarification that CA2 applies within a FMU because each region must be covered completely by FMUs.</p> <p>This would now seem to be able to be met for coliforms (the determining attribute for swimmability maps) by conforming to Policy CA2 e)ii.a by staying within the same state or band. The way this is written water quality could deteriorate, but as long as the band is not breached they will be deemed to have been maintained.</p> <p>How does this correlate to the government directive with respect to swimmability?</p>	Amend to delete Policy CA2e)11a.a
34A	Policy CA3	Support with amendment	The primary function of flood protection and land drainage infrastructure is to provide a conduit for runoff, particularly during times of heavy and/or extended rainfall. This function is defined by "levels of service", which are agreed with the community as being an appropriate balance between the cost of the infrastructure and the benefits that are provided. For example, a "level of service" may require the infrastructure to be capable of removing runoff from a certain rainfall event within a certain period of time. This "level of service" then drives the design and performance requirements for	Amend CA3 to recognise that during flood events, the potential conflict between achieving the level of service for regionally significant infrastructure, and the water quality objectives that may be set through a regional plan.

Submission point	Provision	Support/oppose	Submission	Decision sought
			<p>the different elements of infrastructure that make up an overall scheme which must be provided for by Council.</p> <p>The Council notes that it is important that the need to achieve this level of service is recognised when considering the achievement of water quality objectives in relation to point source discharges, as well as there being the potential for the two to conflict (noting that the performance of flood protection and land drainage infrastructure is generally measured during times of flooding, where the quality of water being conveyed will often be relatively poor, as is expected during times of flooding).</p>	<p>The NPSFM should allow for regional councils commitment to maintain flood protection levels of service to be met by allowing the unimpeded passage of high flows, regardless of water quality, during flood events.</p>
35	Appendix 2	Support with amendments	<p>The ability to detect 4th order streams is improving, thus it needs to be defined whether this refers to river environment classification (REC) one (REC1), REC1 or REC2? When REC3 comes in, the costs of monitoring could change substantially and could potentially double the length of streams to target.</p>	<p>Amend to define which REC is being referred to.</p>
36	Appendix: 2: Attribute Tables	Support with Amendments	<p>The proposed attribute table would be more useful if the following changes/clarifications were made:</p> <ol style="list-style-type: none"> 1. Explicitly state here that “suitable for immersion” means states A, B or C (as in the description of Policy A5). Otherwise there is likely to be confusion as to the role of state D which is described as being “intermittently suitable to swim in”. If readers gloss over Policy A5, they may conclude that state D is also suitable for immersion. 2. Add a column including the median E. coli concentration that corresponds to each attribute state (as on the MfE website). Graham McBride (NIWA), NZ’s pre-eminent expert on these matters, has advised that the table is incomplete without this necessary addition, and COUNCIL supports this view. Council also gathers that some people consider that two other “tests” mentioned on the MfE website are also necessary components of this table. 	<p>Amend the attribute tables so that it is explicit that only states A, B or C are suitable for immersion.</p> <p>Amend the table to add a including the median E. coli concentration that corresponds to each attribute state.</p> <p>Provide clarification which E.coli test is applicable.</p>

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			<p>3. The fact the experts consider that at least one, and possibly three, extra “tests” are needed in the <i>E. coli</i> table means that it will be necessary to clarify just which of these are essential to achieve a particular attribute state: For example is the failure of a single “test” sufficient to mean that the site does not meet the requirements for a particular state? Similarly are some of the “tests” more important than others?</p>	
37	Appendix: 2: Attribute Tables	Support with amendments	<p>The proposed methodologies in the clean water document specify at least weekly monitoring of <i>E. coli</i> during the bathing season, with the frequency increasing to daily if individual results exceed stated values. Most of council’s existing monitoring of <i>E. coli</i> in freshwaters is undertaken at monthly intervals. So the proposed requirements will mean at least a 4-fold increase in effort (as staff time, vehicle running and laboratory costs) Furthermore, many of council’s routine river sites currently exceed the swimmable thresholds, such that daily monitoring is likely to be necessary at these.</p> <p>Council’s notified Plan Change #1 for the Waikato and Waipa catchments has identified 64 river and stream sites where water quality monitoring – including monitoring for <i>E. coli</i> – is to occur. The plan change also intends that rivers and streams be swimmable in all seasons (i.e. a 12-month bathing season).</p> <p>On average, samples collected from council monitoring sites in the Waikato and Waipa catchments have exceeded the <i>E. coli</i> threshold for daily sampling (namely 260 per 100 mL) on 41% of sampling visits: some locations show very few exceedances while others show many, with the average being 41%.</p> <p>Under the new proposal each of these sites that exceed guidelines would need to be visited weekly. Then over the next six days a further 160 samples would need to be collected (= 64 sites x 6 days x 41%). That is, each week 221 samples would be needed, or 11,515</p>	Amend the frequency of monitoring to be more affordable.

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			<p>per year. At present the sites are visited monthly, so that 768 samples are collected each year. So the new proposal would represent a 15-fold increase in labour, vehicles and laboratory costs.</p> <p>At present the cost of monitoring <i>E. coli</i> monthly at the Waikato and Waipa catchment sites is approximately \$0.23 million per year. This is likely to increase to about \$3.41 million per year if the monitoring requirements of Appendix 5 are to be met (i.e. an increase of more than \$3 million each year).</p> <p>Alternatively, council might amend the Waikato River Quality Monitoring Programme^[1] and the Regional Rivers Water Quality Monitoring Programme⁷.</p>	
38	Appendix 2	Support with amendments	Which of the 4 attribute states for <i>E. coli</i> is more important? Noting that the maps were produced using the 540 <i>E. coli</i> exceedances only. The council would like to see the technical backing report for Table 1 – The <i>E. coli</i> swimming categories. The reference to swimmability only relates to the maps and the targets which are non-regulatory, all other references are for human immersion as a value in the changes to the National Objectives Framework (NOF) Appendix 2 which have regulatory weight. This makes it difficult to argue the relationship of the two standards when they are called different things and have different power.	Clarification is sought on which of the four attributes in table Appendix 2 and
39	Appendix 5	Support with amendments	Definition of a bathing season is very unclear	Amend to provide more clarity around a bathing season.
40	Appendix 5	Support with Amendments	Appendix 5 of clean water 2017 requires daily monitoring to be increased to daily monitoring if the single sample collected is greater than 260 <i>E.coli</i> per 100mL. If the Ministry does intend regional councils to widen their mandate into monitoring for <i>E.coli</i> in relation to public health, then there becomes a need for prediction modelling	Amend Appendix 5 to allow for the use of predictive modelling

^[1] <https://www.waikatoregion.govt.nz/services/publications/technical-reports/tr/tr200634>

⁷ <https://www.waikatoregion.govt.nz/services/publications/technical-reports/tr/tr201515>

Submission point	Provision	Support/oppose	Submission	Decision sought
			for informing public health. It is the opinion of council that prediction modelling is appropriate due to the laboratory turn-around time to receive <i>E. coli</i> . Results can take up to 3 days and therefore a significant delay to put up warning signs for swimming by the time the results are available.	