Submission: Action for Healthy Waterways

Introduction

Thank you for the opportunity to make a submission on the development of New Zealand’s Freshwater Plan. The Public Health Association of New Zealand’s vision is ‘Good health for all - health equity in Aotearoa’, ‘Hauora mō te katoa – oranga mō te Ao’, and our purpose is to advocate for the health of all New Zealanders. We are a national association with members from the public, private and voluntary sectors. To achieve this, we provide a forum for information and debate about public health action in Aotearoa New Zealand.

Our organisation recognises te Tiriti o Waitangi as Aotearoa New Zealand’s founding document, defining respectful relationships between tangata whenua and tangata Tiriti. The PHA is actively committed to supporting Te Tiriti values in policy and legislation.

We also actively support and promote full implementation of the UN Convention on the Rights of the Child (UNCROC) and the Optional Protocol on the Involvement of Children in Armed Conflict (OPAC) in Aotearoa New Zealand. We also advocate action on the United Nations Sustainable Development Goals (SDGs), and particularly in the context of the proposed Bill, SDG 3 – Good Health and Wellbeing – and SDG 6 – Clean Water and Sanitation. All of these international agreements that New Zealand are signatory to should only indicate to all the intersectionality of Public Health with the equitable and effective protection of freshwater.

Public health relies on good freshwater management. Freshwater quality is a Public Health issue, indeed, was the issue out of which a Public Health voice and discipline was born in the late 1800s: as a response to the discovery that disease could be spread by contaminated drinking-water. The voice and aims of the Public Health sector are to protect the population both now and in the future, from the risks posed - in our environment and in our national policies – to our health. Risks to te Mana o te Wai are synonymous in our view to the risks to Hauora mō te katoa raua ko Oranga mō te ao. So in principle we support the work of the Ministry for the Environment to address risks still evident in our Freshwater system and national plan. However on the following pages we draw attention to some reservations and subsequent recommendations to ensure Public Health can be protected alongside freshwater in this policy document.
On section: The health of our nation depends on the health of our freshwater

1. As a profession, Public Health is often the victim of its own successes: when preventative policy is put in place, the public doesn’t see the disease those policies have prevented. We fear this may be the case with regard to the development of this discussion paper, when we note that the expertise of Public Health has been overlooked in its development. New Zealand’s leadership cannot regard water strictly as an environmental concern. The health of the water underpins the health of the population. Public Health knowledge and expertise lends rationale and robust evidence to freshwater risk analysis and the workforce are already invested in the implementation of freshwater management.

2. We support the three objectives described for freshwater management, but we question why the package of proposals address only the first two of the three. While we applaud government’s efforts to stop water degradation and reverse past damage done, we urge government to stress that fair water allocation is necessary and shouldn’t be deprioritised.

3. We understand there are two main pieces of policy and regulation addressed in these proposals, and one legislation:
   - Amendments to the national policy statement NPS-FM
   - Amendments to the national environment standard NES
   - Amendments to the Resource Management Act (RMA)

   We support in theory the intent that all regions will have freshwater plans that follow the NPS-FM, but see a risk of the NES being superseded as an outcome. The NES should be seen and used - and described clearly - as a critical ongoing regulatory tool for use in measuring and monitoring the success of a freshwater plan to achieve the three purposes this document prioritises. We support the NPS-FM as a tool that would provide guidelines and thorough consideration to those obliged to develop freshwater plans, but we maintain that the NES is the tool that can provide guidelines and thorough consideration for those obliged to enforce them. Both compliment each other in the way they might serve two separate interests of water-management; planning and implementation vs. regulation and enforcement. This dual and complimentary purpose of the policies should be given greater clarity.

4. On the RMA we note the findings and recommendations of the Waitangi Tribunal Freshwater Report, that states that as it currently exists the RMA is non-compliant with te Tiriti of Waitangi. It has weak Tiriti provisions and does not sufficiently provide for Māori tino rangatiratanga or kaitiakitanga over bodies of water which are taonga to particular iwi and hapū. Furthermore it is an Act that was developed exclusive to Māori, treating them as “new entrants” when seeking water rights, instead of recognising their unique rights as tangata whenua. Finally, as written, it has allowed for serious degradation of water quality to occur, despite Māori speaking up about their concerns. For these reasons the Tribunal is of the view that multiple breaches of te Tiriti have occurred, not simply limited to Māori with kaitiaki interests, but also equitable access to water for economic purposes as well. We support the Tribunal’s recommendations:
   - The Crown should recognise Māori proprietary rights over freshwater
   - Co-governance between Crown and Māori must be established for freshwater management going forward
   - Stronger accountability and monitoring of local government and state-owned operators with regard to their Tiriti compliance
• More funding for Māori participation in management and monitoring of freshwater systems
• Regulations to ensure Māori voice is strengthened at all stages in water management systems design and processes

“Our view is that the Crown must now recognise Māori propriety rights and provide what the New Zealand Māori Council called ‘proprietary redress’. We recommend that the Crown arrange for an allocation on a percentage basis to iwi and hapū, according to a regional catchment scheme. We also recommend an allocation for Māori land development, and that the feasibility of royalties and other forms of proprietary redress be investigated.” (p xxiv)

5. We commend the process of engaging with Kāhui Wai Māori advisory group (KWM) to ensure the voice of tangata whenua is part of this policy development, as the Tribunal and te Tiriti o Waitangi insist. We note however there is barely no mention of te Tiriti o Waitangi throughout the discussion paper. We insist te Tiriti o Waitangi provides key principles for all policy development and should be stated explicitly among the principles for te Mana o te Wai, as well as within amendments to the RMA, the NPS-FM and NES. We insist te Tiriti o Waitangi also provides key principles for designing and implementing the ongoing enforcement of our freshwater limits and regulations.

6. We support a Te Mana o Te Wai Commission, as proposed by the KWM and also backed by the Māori Council and the Waitangi Tribunal. We support the partnership model described between the new Commission Agency and the Maori Advisory group, for providing the regions a strong Tiriti-base from which guidance comes from. We also support the rationale that this partnership model is the Commission Agency’s responsibility to maintain. Ideally, all regions should follow the same partnership model when developing their plans. We note it is critical to establish a best practice to this co-governance model at the high level, so that this practice model is adopted through regional planning and implementation.

7. Overall we agree this proposal represents a positive strengthening of the regulatory clarity of the NPS-FM, which will assist with current issues with implementation by the regional councils. Overall we see the proposals representing a positive change, but we remain concerned with some aspects that need further strengthening. In the first instance we note some recommendations given by the KWM have not been taken up in these proposals. We also support KWM’s recommendation to recognise and resolve iwi/hapū customary title and rights in water within the next three years.

8. We share with the RSWS substantial concerns about the capacity and capability throughout New Zealand to achieve change in the timeframes outlined. We agree that there is not enough thought yet on the institutional and monitoring arrangements needed to strengthen compliance. It is here in which we suggest Public Health workforce capability and capacity can be the greatest asset and ally. We know from experience in other areas of public health regulatory enforcement, the mechanisms will need funding and significant resource locally, while the science and information systems necessary to inform local enforcement and decision-making are continually updating and improving. We call for continued significant investment in support for regional councils to establish and maintain the arrangements and systems necessary to strengthen compliance everywhere, by everyone. Appropriate upfront investment by government now will reduce costs over the long term caused by under-regulated non-compliance.

9. We support KWM’s recommendation that Te Mana o te Wai Commission implements:
• a Capacity and Capability Strategy to guide the investment in and development and empowerment of the leaders of Te Mana o te Wai to enable this structural and system reform
• a National Freshwater Science Strategy, that extends beyond biophysical factors and includes Māori measures of well-being, public health outcome measures, and measures of equity for all New Zealanders.

10. We agree that the transition to healthier ecosystems across all of New Zealand will take decades, but our position is that the more done now to set clear expectations and direction, the more all New Zealanders can adopt more responsibility for improving ecosystem health. In this regard we are not satisfied with the discussion paper’s lack of a thorough consideration on how climate change will have impact in our future. This should be foregrounded. Climate change is both imminent and unpredictable in its impacts, therefore requiring considerable risk analysis, testing and planning toward risk mitigation.

11. We are disappointed with the lack of any co-optation of Public Health expertise by the Freshwater Leaders Group (FLG) or the Science and Technical Advisory Group (STAG). Going forward, we strongly recommend that the Panel of Experts delegated to review and deliver a plan for resource management reform includes Public Health expertise.

12. We do not see value in holding a “public conversation on nitrogen discharge allowances” and urge instead that quantifying the level of nitrate exposure in New Zealand drinking water become an urgent research priority, alongside a public education programme to raise awareness of the associated risks to Public Health associated with the levels New Zealand currently permits. For there to be informed debate at a national level, the population must first be made capable of this, through broader understanding of the relation between nitrates and various morbidities such as colorectal cancer, Crohn’s diseases, thyroid disease, paediatric inflammatory bowel disease, adverse birth outcomes such as neural tube defects in utero, and other less extreme health outcomes.

On section: Implementing improvements through the Resource Management Act

13. Little is said in the document regarding the best practice partnership model there needs to be between mana whenua, iwi and hapū, and regional governments, when it comes to resource management. We support Tiriti-based partnership being supported and given best practice guidelines at the regional level that reflect the KWM’s recommendations for national level.

14. Similarly we note that with no precedent set at national level to include Public Health expertise and evidence in the policy development surrounding freshwater management, it is also missing at the regional level.

15. We agree that voluntary efforts by catchment restoration groups, ratepayers in cities, farmers that are using new systems and technology, etc, are not enough to ensure our freshwater. We support clear rules and regulations to ensure all land owners and users know what’s expected and why, as well as ensuring compliance.

On section: Context

16. We support and consider most of Section 3 is good helpful context, in terms of describing the ways human behaviour has impact on the environment. Conversely, however, this chapter is remiss in describing the ways poor freshwater quality in turn has impact on population health. Contextually this chapter could be definitive in terms of establishing a ‘holistic’ rationale and approach to
freshwater management, if only it balanced the causal relationship it outlines between social and physical conditions.

17. For example, this chapter could be where the various contaminants that exist in freshwater can be discussed, the risk they pose to population health and what the evidence suggests are the levels considered “safe”. This would provide useful context as we begin to consider benchmarks for our regulations, as well as the kind of resources we need to conduct monitoring and further research.

18. Without providing this counterbalance of causality, it is the economic productivity of “freshwater’s ability to support life” through “our agricultural, electricity and tourism sectors” that is given precedence as a rationale for better freshwater management. We take objection to the economic productivity or growth principle underpinning decision making for freshwater management. That rationale is antithesis to the prioritisation of Te Mana o te Wai.

19. We assert that the omission of the counterbalancing causality (between effective freshwater management and population health) is the result of having no Public Health expertise invited to contribute in any of the groups that developed this document. Better understanding of the holistic relationship between population health and freshwater quality is an essential part of the context for this document.

20. We are also disappointed to see little discussion on climate change as a growing contextual concern for freshwater quality and management. More extreme weather events, rise in land and water temperatures, drier soils, altered precipitation patterns etc - ie climate change impacts – will similarly have converse impacts upon human behaviours, as well as increased risks for population health.

21. A real risk within the changes to human behaviour created by conditions of climate change, is that existing human behaviours causing climate change are accelerated. For example, drier soils and altered precipitation may inspire further intensification within agricultural and industrial practices. Over the past 30 years dairy farming has become increasingly intensive and over the same period New Zealand’s waterways have shown a range of indicators of degraded water quality. Without describing this spiral effect implicit in the causal relationship between human behaviour and climate change, a further opportunity is missed to provide better rationale for strong regulations and appropriate levels of resourcing their enforcement.

On section: Setting and clarifying policy direction

22. We support the intention to speed up every council’s development of their regional water plans with greater clarity for the process provided within amendments to the NPS-FM. We support the prioritisation and recognition of Te Mana o te Wai as the first obligation within these regional water plans. We support the work done in partnership between the KWM and MfE to clarify the concept and intended outcomes for Councils, but we urge for efforts to be made to also clarify the concept for the public at large in New Zealand. We recommend that through discussion with tangata whenua and communities about their long-term wishes for waterbodies in the region, Councils are required to raise public awareness of the holistic and causal relationships between freshwater quality, social (including economic) practices/human behaviour and public health.

23. We generally support the KWM recommendations for the principles and obligations underpinning te Mana o te Wai, but we would like to see Hauora among the core principles steering leadership and decision-making, as well as Rangatiratanga, Kawanatanga, Oritetanga and Kaitiakitanga (principles
of te Tiriti o Waitangi). How we move towards this reframing of obligation, under these principles, needs careful change management to mitigate the economic impacts/costs regionally, from falling worst upon the most vulnerable. We fear this document privileges the short-term costs in its consideration of the burden of transition, but is silent on:

- equity; ie who is bearing the cost currently, of freshwater degradation, particularly in terms of health outcomes and particularly in circumstances where the impacted population are not the water-users creating its pollution
- the intergenerational costs of inaction

24. We object to the subheading 4.3 which suggests Māori values need strengthening. New Zealand’s prioritisation, implementation or incorporation of them into legislation and policy is clearly what needs strengthening. Language is important and this subheading should be renamed “Supporting Councils to meaningfully adopt Māori values”. Again, the link to hauora Māori, health equity and population health could be made more clearly in this section, to strengthen the rationale behind being steered by Māori values, as well as to strengthen the rationale behind mahinga kai.ix

25. We strongly support the 2025 deadline for councils to develop their freshwater plans and support the amendments to the Resource Management Act to enable better, faster more nationally consistent water management in the regions. We also strongly agree with the Advisory groups’ comments however, that there is likely to be a significant need for capacity building, in some regions more than others, but in all generally, to ensure government-appointed freshwater commissioners could form the panels needed locally, as outlined. Again, we strongly urge for local panels and the government-appointed freshwater commissioners forming them, to include Public Health experts and learn from the Public Health regulatory frameworks already in existence.

26. We support both proposals, to elevate the status of mahinga kai to a compulsory value and to strengthen priority given to tangata whenua freshwater values. We note and support the comments of the KWM regarding these proposals and similarly do not see them as either/or options. We note that Ministry of Primary Industry policies in many cases undermine mahinga kai as a value,x and urgently recommend that efforts be made to proactively engage this government agency if mahinga kai is to be protected through the management of freshwater.

27. We object to the six major hydroelectricity schemes being exempt from the planning requirement but will still be subject to RMA requirements. The rationale is not made clear enough why such major exceptions be made. We note that improving water quality is actually important to the productivity of hydroelectricity, especially regarding silting.xi Rather than an exemption from the requirement for a plan, we recommend a modified plan should be provided that accounts for sustainable energy flows but ultimately ensures ecosystem health. We note the Advisory groups are also opposed to blanket exemption of the six schemes and we find merit in the RSWS suggestion that exemptions and offset mitigation requirements should be at regional council discretion if and when the full assessment of effects, causes and management options has been documented.

28. We find the wording of these clauses in the actual draft NPS-FM confusing, and we oppose exemption for hydroelectric schemes:

NPSFM page 22:

(2) When setting limits or developing action plans, and when making plan changes required by this National Policy Statement, regional councils must have regard to the importance of not adversely impacting the generation capacity, storage and operational flexibility of a Scheme.
We suggest:

When setting limits..., regional councils are proactive in engaging with Schemes whose generation capacity, storage and operational flexibility is likely to be impacted, to fully assess effects, causes and management options necessary to bring Schemes into full compliance by 2025

(3) Regional councils may accordingly set target attribute states that are below national bottom lines in respect of waterbodies or freshwater ecosystems that are adversely impacted by structures that form part of any Schemes, to the extent of such an impact.

We suggest:

Regional councils must identify all risks to their region’s full compliance of national bottom lines and discuss how Schemes in the region creating this risk are being supported to offset and manage their risk of non-compliance

(4) Despite subclause (3), regional councils must still set target attributes states that, to the extent possible, improve any waterbody or freshwater ecosystem affected by any Scheme.

If (2) and (3) are amended as we suggest, there is no requirement for (4).

On section: Raising the bar on ecosystem health

29. We support all five pillars that make up holistic ecosystem health. They broaden the focus for decisionmakers, but we believe Māori tools and cultural indices for measuring te hauora o te wai need to be embedded within these otherwise Western science measures.\textsuperscript{xii} We also note that the development and incorporation of these tools and cultural indices should be adequately resourced and not just rely on the resources of iwi.

30. We support the five pillars being compulsory and having bottom lines. But we note again capacity building will be necessary to ensure the capability of decision makers for this broadened focus. We note also the necessary evidence-build and monitoring resource that would support and inform good decision making. At present there really isn’t this level of expertise among decision makers, while there is dissonance between the frameworks provided in ecosystem and population health science and the expertise required of regulators tasked with enforcing bottom lines. While scientists are very good at monitoring, they aren’t necessarily great at enforcing. A methodology that overcomes the dissonance of these interdependent disciplines is necessary. Choosing the right people for these critical roles needs careful consideration in the allocation, and once again, we urge for Public Health expertise to be involved in this development.

31. We support all bottom-line attributes for ecosystem health are set out in the NPS-FM, and strongly urge that these bottom lines can ensure population health in accordance with the second obligation of te Mana o te Wai. We also support the proactive management approach for existing attributes and new suspended sediment and nutrient attributes, and strongly urge that these are in line with improving population health outcomes equitably. We also support the adaptive management approach and the development and implementation of action plans to achieve improvement where bottom lines are not being met be made compulsory and adequately enforced.

32. We strongly support adding the compulsory value for threatened indigenous species, in the interests of cultural well-being and food security. We also strongly support the requirement of
regional councils to provide for proper fish passage in both planning and consenting and in imposing
design requirements on some types of structures. We note however that regional councils will need
considerable support to enforce these requirements.

33. We were disappointed with the focus for wetlands being “no further loss”. The quantity of wetlands
needs to be increased rather than just held steady. Additionally we note there are no bottom line
quality indicators for wetlands. The section failed to adequately identify the risk to remaining
wetlands, both coastal and inland, from sea level rise, flooding and storm surges. The section also
failed to explain the significant role wetlands play as one of the “natural solutions” to climate
change mitigation. Freshwater inland wetlands in particular appear to be very significant carbon
sinks.\textsuperscript{xii} We recommend that wetlands be considered more thoroughly within the context of climate
change, and targets be set for restoring wetlands to levels that would maximise their role in climate
change mitigation. We support the Advisory groups’ recommendation for incentives to be
developed for wetland restoration.

34. We agree with STAG that the current attributes and bottom lines for nutrient pollution are
insufficient. But we do not consider their new bottom line for nitrogen in rivers is sufficient either.
1mg/litre is being presented to the public as a “pristine” standard, but for Public Health this level
would still mean a degraded river with a risk to populations swimming in them.\textsuperscript{vii} We note and
congratulate councils such as Horizons, already adopting lower bottom lines for nitrate levels.
Setting strong limits around nitrogen are critical not just for ecosystem health but also for Public
Health. Although the relationship between nitrate levels in freshwater and levels in drinking water is
not clear, what is known is that freshwater nitrate levels drive drinking water nitrate levels, and
these cannot be addressed through chlorination. We recommend setting a bottom line for nitrogen
at 0.5mg/litre.

35. A major study in Denmark with a country-wide sample size and data from a 35 year period found a
significant correlation between nitrates in drinking water and an increased risk of colorectal
cancer.\textsuperscript{xv} Another population-based study in Spain and Italy also found significant increases in
colorectal cancer risk, associated with nitrates in drinking water at levels 10 times lower than are
currently allowed in New Zealand.\textsuperscript{xvi} A large literary review of all epidemiological research was
published last year also found strong evidence for a relationship between drinking water nitrate
ingestion and thyroid disease, blue-baby syndrome and neural tube defects.\textsuperscript{xvii}

36. The World Cancer Research Fund lists New Zealand as the fourteenth nation for colorectal cancer in
the worlds, and ninth for women.\textsuperscript{xviii} The current nitrate limit certainly does not protect the
population, and we have the opportunity to set the limit where the public health can be protected.
We strongly urge the limit to be safe, rather than sorry.

37. Time lags and nitrate dynamics are also crucial to point out in a discussion of bottom line setting.
The time lag as nitrate makes its way from soil into aquifers, means that nitrate levels are going to
go up in fresh and drinking water regardless of what we do, for a long time to come due to the
intensification of land use over the last decades. Given the long term impact for years to come, we
strongly support the precautionary approach and suggest an immediate and rapid reduction to
mitigate this likely lag. We support the comprehensive work of the STAG on developing
the comprehensive limits. We support the table they recommended and strongly recommend that STAG
is asked to consider the drinking water standard.
38. The RMA requires land users to consider the impact on future generations. We see a risk in this regard, in the suggestion that the timeframe be pushed out, rather than to push up the reduction upfront, to account for the timelag of nitrate levels’ relation to recent land use intensification. This suggestion only creates potential for the timelag to be extended and we argue there would be significant positive impact on future Public Health outcomes for reductions to be made more rapidly now, rather than long into the future.

39. We support the proposals to reduce sediment, however we note that sediment is an important consideration within urban development also. For example, within road wash off on urban roads there is likely high contaminants associated with road use, posing a risk to our water. The discussion paper leaves out this consideration and puts the onus of sediment reduction to those in rural regions of New Zealand.

40. We object to the benchmark of “swimmability” for our standard of water quality determining an approach to monitoring and maintaining water quality at only certain “swimmable” times of the year. For example, it was seen that 8% of New Zealand adults reported participating in sports and recreation activities on, in, and beside lakes, rivers and streams in a week of October. Swimming is not confined to the identified swimming spots, nor the swim season, and so there should be education programmes for the public surrounding their choice of areas to swim, all year round.

41. We also object to using just E. coli as a proxy determining measure. Tools used for monitoring should be close to real time, not using E. coli as a proxy. The document suggests that monitoring and management of E. coli levels are all that is relevant, and in only a swimming season. We should be using knowledge of the environment and pending risks, rather than relying on a single content measure of a level of just one contaminant.

42. We question the definition and determination of swimming spots. The ones already monitored should be a bottom line, but iwi and hapu must be adequately and continually involved in the identification of all swimming spots that need monitoring.

43. We agree with the FLG’s recommendation that greater Public Health expertise and microbial expertise look at determining the measures for swimmability more closely. We can’t agree with the levels put forward when they still give such a high chance (5%) of infection. These were the standards put in place back in 2003 for recreational water spots and should be considered a dangerous level. We support the FLG’s call for an updated study or a literary review of more up to date studies of microbial risk. Land use has changed and the risk profile of rivers will have changed significantly as a result.

44. We understand that some regions have already made action plans based on the McBride 2017 standards for monitoring swimmability, while the discussion paper adds new standards just for the identified swim spots deemed most popular. We hold the view that the McBride 2017 swimming standards are low and regions must be encouraged to follow any updated evidence-base.

45. We note that the suggested response to non-compliant levels is to set an action plan to respond. Action plans are not legal documents and so we fear there is no recourse for the public to hold councils to account if they don’t implement but only develop action plans. We recommend that the response to non-compliant levels is enforceable, and for these response action plans for non-compliance to be attached to the regional plans, which are more closely enforced.

46. We support the updating of water usage monitoring to become mandate telemetry (direct electronic transmission) and we support the roll out over time to come into force from the largest
group of users first to the smaller groups later. We agree with the RSWS that this update in reporting will help councils maintain healthy flows in waterways, however we do not agree to there being any exceptions where technology/transmission does not enable telemetry. In these circumstances, we recommend consents are not given for water use.

On section: Supporting the delivery of safe drinking water

47. We support the amendments to the Drinking Water NES and whatever consequential amendments necessary to other national directional documents, to give effect to all six. We have the following reservations and/or additions, however:

- The standard does not apply to quantity of drinking water sources and should include protection of water quantity for sources of human drinking water. We note the over allocation of water sources has impacted on the reliability of drinking water sources in several communities in recent years. We recommend that the NES should require councils to consider whether an application for a water take (eg for irrigation) is likely to negatively impact on the reliability of a drinking water source.

- We support the provision of direction in setting “source water risk management areas” and application of NES regulations to those areas, but we note that the identification of source protection zones can be technically demanding and methods such as the use of quantitative models for ground water sources require high resolution data sets. We recommend that the proposed drinking water regulator is enabled to support this work and to review and approve such zones. The NES will need to provide for default management or protection areas upgradient or upstream of water sources in the absence of zones developed through more advanced methods where these are not available.

- While we support providing that all activities potentially affected drinking water are covered, we recommend defining clearly the types of activities to be assessed.

- While we support expanding to cover all registered supplies serving more than 25 people, we note that specified self-suppliers (such as marae) should be covered when affected water sources supply more than 25 people for at least 60 days per calendar year.

- While we support the new approach for contaminants that are challenging for drinking water supplies to remove, we note this should include emerging contaminants such as endocrine disrupting chemicals.

- While we support regional councils and territorial authorities place appropriate controls on the development and use of land in source water risk management areas, we note the need to bring controlled and restricted discretionary rules into the NES regime. There are likely to be significant legacy issues with existing land uses potentially needing to be phased out over time.

- Regarding the allowance for “bespoke” source water risk management zones to be established where there is “sufficient data to prove that the default source water risk management areas prescribed in the Drinking Water NES are not appropriate for a particular water supply”: It is vital that proper engagement with tangata whenua is written into this allowance to ensure that any “bespoke” zone is developed in partnership with local mana whenua. We question why in this first instance the KWM and other advisory groups were not consulted on.

- Initially cabinet proposed that the standard could apply to any activity regulated by a regional council including land uses. The current NES regulations rules 7 and 8, concerning granting of consents, apply only to water permits or discharge permits and explicitly do not apply to land
use. This means that land uses that may significantly increase risks to water sources such as winter grazing are not regulated by the NES.

- NES regulation 10 applies only to permitted activity rules. This means that activities consented through a controlled activity rule are not subject to any source water protection consideration. We note also that councils must grant consents for applications under controlled activity rules. NES regulation 10 also does not apply to restricted discretionary rules. Potentially restricted discretionary rules could enable a council to decline a consent or impose conditions on the consent if the matter over which the discretion is restricted is included in the NES (section 87A (3) a Resource Management Act 1991).

- For regulations relating to both consenting decisions and resource plan rules the NES restricts the application of the regulations (7,8 and 10) to the protection of water sources supplying 501 or more people. The originally proposed NES applied to all registered water supplies of 25 people and above. A regulatory impact assessment issued at the time noted that application of the standard to such communities was estimated to result in a cost of $200 million over 20 years which was a 10 fold increase above the cost when applying only to communities of 501 or more. In hindsight it is clear that the limitation to populations of 501 or more created a significant inequity with smaller rural communities, likely to be least able to afford advanced treatment, not being protected by the NES.

- As noted in the discussion paper the terms currently used in the NES (upstream or upgradient for ground water sources) are imprecise and subject to council interpretation.

**On section: Better managing stormwater and wastewater**

48. We support the proposal for a NES for Wastewater Discharges and Overflows and we also support a new obligation set for wastewater network operators and stormwater operators to prepare risk management plans. We recommend that wastewater operators have the same guidance to develop their wastewater risk management plans as this document suggests for freshwater management plans, through a NPS-WW (Waste Water). This way the complimentary nature of how NPS and NES can be in effect, to support partnership brokerage between the operators, territorial authorities and regional councils when considering how all three risk areas – environmental, public health and social/cultural – will be effectively accounted for and by whom.

49. In theory we support the proposal of a new Water Services Act that determines nationally consistent measures for wastewater and stormwater operators, to have the same water quality parameters as regional councils and make them more transparent and accountable to the public. We certainly support a new obligation for operators to report annually on their compliance to a set of nationally prescribed environmental performance measures. We certainly support reporting standards that specify public disclosure as well as directly to a regulatory agency. There is substantial evidence and experience within New Zealand of problems arising from self-regulation by operators, and so we strongly recommend that an external regulator monitors the wastewater and stormwater measures. We also strongly recommend the regulator establishes terms of reference that obstruct industry interference from its regulatory operations.

50. We are concerned that there is no discussion in this document outlining the need for the regulatory agency to test operators’ reports for accuracy, and the capacity and capability building necessary to ensure such tests can be routinely performed, let alone policed appropriately where an operator is found to be reporting inaccurately.
51. We strongly support setting clear national standards and funding appropriate levels of capability building to implement water sensitive design and green infrastructure for stormwater network management.

52. We question why in this first instance the KWM and other advisory groups were not consulted on for this section. We note the Māori Council have called for a Mana o te Wai Commission into which policing of these standards (and drinking water and swimmability of rivers) would be subsumed. This was a call echoed by the KWM. We support this recommendation and see merit in such an agency having over-arching regulatory powers.

On section: Improving farm practices

53. We agree the risks to freshwater created by intensification of farm practices are far too great to leave until freshwater plans have nationwide coverage at 2025, and immediate changes are necessary now. We strongly oppose the allowance of any further intensification of farm practices. We support the KWM’s call for a 10-year moratorium on further intensification of land use and further consumptive water takes. Like the KWM, we hold that the proposed restrictions on intensification are insufficient to improve the health of our waterways. We therefore recommend that whatever level of intensified farm practices has been reached within any and all catchments across New Zealand, further intensification beyond that limit is prohibited. We support tight restrictions on land-use changes and urge that any increase to existing farm inputs be immediately banned from resource consent.

This policy should send a significant message to all in the farming industry that an old ‘growth’ model giving precedence to economic profit over te Mana o te Wai is now outdated. This ensures that by 2025, when restrictions force farmers with higher intensification to make reductions through the cross-country coverage of regional freshwater management plans, no new damage will have undermined the positive impact of these equitable measures.

54. We object to the proposal of only restricting – not prohibiting - destructive land-use changes, with the logic that resource consents would only be granted if the activity does not increase nitrogen, phosphorus, sediment or microbial pathogen discharges above a baseline (five year average 2013-2018). The fault with this logic is that consents would be granted based on the promise of applications to keep within these baselines, a promise which – given the profit motive - we fear could be cynically given. We therefore propose the following interim measures until regional and farm plans are in place:

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No new increases in the area of land in irrigated pastoral, arable or horticultural production

No changes in land use from:

- arable, deer, sheep or beef to dairy-support
- arable, deer, dairy-support, sheep or beef to dairy

No increases in forage cropping beyond the area in intensive winter grazing in the past five years, or if the applicant hasn’t previously carried out intensive winter grazing, then no forage cropping permitted for its purpose
55. We support the proposal that commercial vegetable growing would require a consent and we support both options as resource consent requirements for this change to land use.

56. We strongly support the requirement for all farmers to have a farm plan with a freshwater module. We strongly support engaging with MPI to align their wider integrated farm planning approach for farmers to include a freshwater component, so that farmers are supported with appropriate information resources and online tools to meet their freshwater and climate obligations by 2025.

57. We strongly support the development of a certification scheme for farm environment planners, complete with freshwater modules in farm plans, to help build the ecosystem competency within the knowledge base of rural professionals and the farm workforce at large. We hold that farm plans should be mandatory. We strongly support the scheme’s extension to include farm plan auditors and can see the merit in the scheme for supporting compliance to the freshwater NES. It is our view that farm plans should not only be mandatory, but that auditing is an established discipline within the certification scheme, and routine audits of farm plans also be made mandatory. We recommend that audits are transparent processes so that farmers found non-compliant in the audit process be exposed publicly.

58. The certification and audit scheme suggests a significant growth in the regulatory sector for farming. It will require significant investment by government to foster and institutionalise, but we see significant gains for the rural sector at large from this insertion of environmental knowledge into farm praxis.

59. We strongly agree immediate action is needed to reduce nitrogen leaching arising from poor management practices on farms and support the first two options as measures taken together. We see no point in choosing between them and urge government to impose both:

- The risk associated with Option 1 alone is that only a worst percentage of farmers within just the worst 10% of catchments – excluding regions with their own measures - would be forced to change their practices. It does not factor well the likelihood that among these high nitrate catchments, all farms within one sub-catchment may still have overall higher nitrogen loss figures than another sub-catchment of farms, but farms from both catchments under the threshold percentile would be treated the same. This option does not account well for these relative disparities and may contribute to inequity between farming regions. As the KWM points out, farms under the threshold should also be required to do their part. We support their recommendation that a whole of catchment based nitrogen reduction target of 10 per cent should also be set to foster the learning conversations and collaborative efforts necessary for rapid change within farming communities of each catchment.

- Option 2 compliments option 1 in that it proposes a reduction for all farmers at the source of nitrogen’s application, in fertiliser. We anticipate this may be the most difficult option to enforce and monitor, however, and we note the lack of regulation of the fertiliser industry itself. We urge government to impose levels of nitrogen application at the source of its supply, through its manufacture as well as at the source of its application through farmers on site.

- Option 3 compliments the two previous options by ensuring strong regulatory practice is wrapped around the farmers causing the greatest damage. However this option is to some extent moot considering all farmers have to develop farm plans anyway, and there is risk in adopting this as a stand-alone option because there will be strong industry lobbying direct to
farmers, from influencers with stronger resources to wrap-around farmers and compete with the good advice of any new sector in freshwater management regulation.

60. We understand and appreciate there are regions and catchments that have already proposed rules to reduce nitrogen leaching. We support their exclusion from the caps set nationally, where they are more protective than the caps set regionally. We suggest the third option, requiring farmers to show how they will rapidly reduce leaching and audit this reduction, should be imposed nationally without any regional exemption. We expect regions and catchments already holding caps will no doubt need national agency support and resources to monitor and track all farmers’ freshwater modules, their implementation and audit.

61. We support the two-tier approach for excluding stock from waterways. We applaud the voluntary efforts dairy farmers have made to fence streams across New Zealand, and we understand the capability and capacity varies from place to place among farmers, creating inequity among the rivers in terms of their faecal contamination and subsequent population health risk. We recommend incentives and other means of support for farmers that indicate low capability to exclude stock from waterways on their properties.

62. We share the concerns of the KWM, FLG and RSWS at both the environmental and animal welfare impacts of poor winter grazing practices. We do not support the allowance of resource consents for winter grazing above defined standards. We object on principle to the adoption of industry-set standards for controlling for intensive winter grazing (option 2) and we support the advisory groups’ recommendations that standards also:
   • Provide a dry place for animals to lie
   • Exclude highly permeable soils
   • Limit pugging to 5cm

63. We strongly oppose the practice of feedlots and the holding of stock in concentrated areas for longer than 10 days in a row and call for their prohibition in New Zealand. We hold the view that te Mana o te Kau is intrinsic to te Mana o te Wai. Extreme intensification of livestock such as the practice of feedlots flouts animal welfare principles and owners of existing feedlots are to be regarded as rogue dairy operators that damage New Zealand’s international reputation in animal welfare standards. We see how upholding te Mana o te Wai is an opportunity for New Zealand’s government to say no once and for all to their inhumane practice. We urgently recommend that in the interests of te Mana o te Kia raua ko te Wai, the NES be amended to prohibit these forms of farming practice in New Zealand.

Further comments

64. In section 10 of the discussion paper, we have reservations with the way the Interim Regulatory Impact Analysis (IRIS) estimates costs and benefits in its impact (positive and negative) column. It appears that costs are factored for operators and land-users who would require new resource consents to continue operating under status quo outputs and inputs, that new standards and regulations are intended to reduce or limit. This is a cynical approach to regulation that make it appear as if regulations are only ever set here so long as they are seen to have enough ways and means to avoid their compliance. The approach makes it hard for government not to appear as if a primary intent of the standards is to create new revenue through resource consent applications and administration.
Conclusion

The protection of waterways in Aotearoa New Zealand is vital not just for environmental reasons, but for Public Health outcomes, equity and cultural well-being. We acknowledge the additional costs to the agricultural sector which may be significant in terms of adjusting from a growth model, that privileges and accepts intensification as viable, to one that aligns with te Mana o te Wai and accepts strong regulation of improved farm practices. However this sector must accept that this shift is necessary for the greater good of our people and our environment. The costs incurred to change will be balanced, if not significantly outweighed, by the benefits gained by reducing disease treatments, water treatments, preservation of wild food sources, gains in tourism, and to hydropower schemes (with the reduction of silt in waterways).
Endnotes

i Waitangi Tribunal: August 2019 Stage 2 Report on the National Freshwater and Geothermal Resources Claims (WAI 2358)

ii Panui 30 August 2019, p7


See also: https://www.rnz.co.nz/national/programmes/morningreport/audio/2018699585/environment-canterbury-stands-by-nitrate-limits-in-water


xii See Rainforth et al (endnote ix)


Nitrate in drinking water and colorectal cancer risk: A nationwide population-based cohort study.

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xvii See Ward etl (endnote xiv)
