Christchurch City Council

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Freshwater
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Christchurch City Council submission on 2019 Action for healthy waterways consultation

Introduction

1. Christchurch City Council (the Council) thanks the Ministry for the Environment for the opportunity to provide feedback on the "Action for healthy waterways" proposals.
2. Our submission addresses:
    - draft amendments to the National Policy Statement for Freshwater Management (NPS FM)
    - draft new National Environmental Standards for Freshwater (NES Freshwater)
    - draft new Stock Exclusion Section 360 Regulations (stock exclusion regulations)
    - potential future proposals in the discussion document Action for healthy waterways, including
        - amendment of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (water takes regulations)
        - new National Environmental Standard for Wastewater Discharges and Overflows (Wastewater NES)
        - amendments to the National Environmental Standard for Sources of Human Drinking Water (NES Human Drinking Water Sources)
        - amendment of the Resource Management Act 1991 (RMA) for a new planning process for freshwater
        - new Water Services Act.
3. The wider policy direction in the objectives, policies and other provisions of the NPS and the directions applying to regional planning documents have potential significance for the Christchurch City Council and the Christchurch District Plan.
4. We note that due to local body elections we needed to approve this submission by Friday 11 October. We also note that the incoming Council may wish to provide supplementary comments prior to the extended deadline of 31 October 2019.

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Submission

General comments

5. We wholly support measures to protect our freshwater taonga and consider that the proposals go some way to achieving this, but note that there are areas for which further consideration is needed. We address these in our submission.

6. The proposals in this freshwater consultation are both diverse and complex. They range from changes to the NPS FM with an accompanying draft of the NPS to brief indications of new or amended regulations, and cover freshwater issues from Te Mana o Te Wai to a potential change to the water take regulations. The breadth and scope of the proposals should be accompanied by a reasonable consultation period, to enable due consideration of the implications of the proposals. Because of the timing of the consultation to coincide with local body elections, elected members and Council staff have had to undertake a somewhat truncated review of the freshwater proposals, particularly in light of other Government consultations occurring over overlapping timeframes. We strongly urge the Ministry to provide more time for future consultations, such as for a new Wastewater NES, new planning processes for freshwater in a future amendment to the RMA, a new Water Services Act, amendments to the NES for Human Drinking Water Sources and changes to water takes regulations.

7. We request that the Ministry carefully consider how all of the freshwater proposals will work together and how these freshwater proposals will complement other proposals such as the proposed National Policy Statement on Urban Development, proposed National Policy Statement for Highly Productive Land and the upcoming proposed National Policy Statement for Indigenous Biodiversity.

8. We note that although groundwater is a significant freshwater resource there is little to address contamination of groundwater in this latest freshwater consultation, other than a brief bullet point in the discussion document that mentions managing specific contaminants in sources of human drinking water as part of a future set of amendments to the NES for Human Drinking Water Sources. We have noted this deficiency in our submissions on previous freshwater consultations and had requested that this is remedied. We strongly urge that groundwater quality is addressed, as this is a freshwater resource that is too important to ignore, and that the matter includes both human health and ecosystem health.

9. In general, we support the overall intention of the work programme to take meaningful steps to improve water quality and the wider health and values of waterbodies. This aligns well with the Council's strategic goals and community outcomes including healthy waterways and high-quality drinking water. However, many of the proposals are still very much in draft form – signalling future reviews but not providing very much detailed information. We consider that further consultation on a more complete version of a number of proposals should be undertaken before they are finalised.

10. We agree with the key argument that it is significantly more cost effective to prevent the degradation of waterways in the first place than to restore degraded waterways.

PROPOSED AMENDMENTS TO NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT

General comments

11. The Ministry proposes a number of amendments to the NPS FM. While we support the intent of the amendments to improve outcomes for freshwater bodies, we have some concerns with the changes, as noted below.

12. We note that the NPS FM focuses on surface water. We draw the Ministry's attention to the fact that groundwater quality can influence surface water and vice versa. For example, we have seen that rising nitrate levels in shallow groundwater in parts of Christchurch are reflected in rising levels of nitrates in the springs which are the source of our rivers and streams (e.g. Avon and Heathcote Rivers). The interaction between surface water and groundwater has the potential to create significant financial impact on drinking water suppliers and their communities and needs to be considered in any analysis of costs associated with changing contamination limit requirements.

13. Inappropriate land use can also result in contamination of groundwater, which can impact community drinking water supplies. We recommend that objectives and policies for the protection of groundwater are comprehensively included in the suite of healthy waterways documents to reflect the integrated nature of the water cycle, and the impacts that land use has on groundwater as well as surface water.

14. The range of freshwater matters addressed by the NPS FM is supported. However, as currently drafted, the NPS FM lacks clarity on the environmental outcomes to be achieved. There is uncertainty and inconsistencies in the policy direction, including between the description of Te Mana o te Wai and the stated objectives and policies. This creates the potential that the nationally important environmental outcomes, the national bottom lines and the other directive policies in the NPS FM will not be achieved, nor national consistency. At the very least it will create uncertainty for the community and councils, making the implementation of the NPS FM more difficult and open to legal dispute. Our submission seeks that these matters be rectified.

Te Mana o Te Wai, objectives and policies

15. The draft NPS FM builds on the existing NPS for Freshwater Management. Both contain objectives and policies and contain a description of the concept of Te Mana o te Wai that is relevant to the implementation of those objectives and policies. However, there are significant differences between the two documents.

16. Those differences include different objectives and policies, differences in the description of Te Mana o te Wai and the directions it contains, and the paramount importance now proposed to be placed on the description of Te Mana o te Wai. It is now required that the description of Te Mana o te Wai inform the interpretation of the stated objectives and policies.

17. Te Mana o te Wai (s. 1.5) now requires that priority is given to the health and wellbeing of water and water bodies first, then providing for essential human needs, and finally providing for other uses.

We support the intent of Te Mana o Te Wai to generally provide first for the ecosystem needs of freshwater bodies.

18. However, it is not clear whether the intention of the hierarchy of priorities is to require that the first priority values must be protected from all other uses, or what those values include. For example, whether they include all the values and features that a waterbody could have if unaffected by human activities. There is no definition of what the "health and wellbeing of waterbodies" means. As most human activity is likely to have some degree of adverse effects on the natural values of waterbodies, such an interpretation would leave little opportunity for water bodies to provide for the needs of people and communities.

19. The stated NPS FM objective (s. 2.1) contains similar, but not the same, direction in terms of priorities. However, it does not indicate the environmental outcomes that are to be achieved for particular values or uses, or clearly resolve conflicts between values or uses. The policies

that follow (s. 2.2) do identify some apparently absolute environmental outcomes that are to be achieved in all circumstances. However, there are indications in the more detailed provisions of the NPS FM itself, and in the draft NES, that at least some are not intended to be absolute outcomes.

20. In terms of the provisions that specifically apply to district plans that would mean, for example, no development that reduces riparian and freshwater habitats and other values, such as buildings or changing the vegetation cover close to rivers. If that were the intention, than it would be useful for the NPS FM to say so clearly.

21. The only direction in the draft NPS FM that would include this matter does not require such absolute protection. Rather it allows that the Council may avoid, remedy or only mitigate adverse effects of land use on waterbodies (s3.4(6)). That suggests that the values of waterbodies do not need to be protected from human activities to the absolute extent mentioned earlier. That conclusion is reinforced by the draft provisions in the proposed NES for Freshwater that require that the destruction of significant indigenous vegetation in or within 10 metres of a natural wetland be a non-complying activity, but includes exceptions for certain human activities, such as recreation and education purposes and nationally significant infrastructure, which are instead discretionary activities. Assuming this reflects the intent of the NPS FM, then that should be made clearer.

22. The NPS FM also needs to recognise circumstances under which high priority objectives to provide for human wellbeing might potentially supersede the health and wellbeing of the water body, for example where effects are short-term and/or can be mitigated with no net loss. In addition, the NPS FM objectives on priorities should recognise that there may be a need for transitional arrangements where the immediate protection of the health and wellbeing of waterbodies would have serious implications on critical human needs. For example, where the drinking water supply for towns comes from streams and there are no readily available alternatives, it may not be feasible to develop alternatives that achieve complete protection of the waterbodies before existing water take applications need to be renewed. The need for a phased approach is reflected in Policy 7 in respect of water takes specifically, but it should be provided for in the objectives and should be more widely applicable.

23. An example of more useful national direction is Objective 1 of the New Zealand Coastal Policy Statement, which sets out the attributes of the coastal environment that must be safeguarded. The five components of a healthy freshwater ecosystem set out on p.38 of the discussion document (aquatic life, habitat, water quality, water quantity, ecological processes) could form a useful starting point for the objective. Alternately, the objective could state what the anticipated outcome is for each of the compulsory values in Appendix 1A of the NPS-FM.

24. There is also uncertainty in the meaning of the second and third priorities, particularly where uses may fall under both priorities and where there is inconsistency between the description in Te Mana o te Wai and other NPS FM provisions.

25. The description in Te Mana o te Wai and the stated objective of the NPS FM contain somewhat different terms for the second priority. The former uses the term “essential human needs”, while the latter uses “essential health needs of people”. The former would seem to include the use of water to irrigate food crops, while that use is less clearly included in the latter.

26. Neither the description of Te Mana o te Wai nor the objectives, policies and other provisions define what “essential human needs/essential health needs of people” are. Nor do they identify where the line should be drawn between the use of water for essential needs and “other uses” covered by the third priority. It is unclear whether, for example, essential human

needs include the use of water only for crops and stock that provide food, or whether it would include such less essential crops such as viticulture. It is also unclear whether it would include stock that are primarily intended for non-food products, such as deer farmed their velvet, but which may also ultimately provide food.

27. The description in Te Mana o te Wai of the third priority is "other uses", but the third priority in the stated objective is limited to the social, economic and cultural wellbeing of people and communities. These differences mean that there is uncertainty as to whether water used for recreational purposes, for example, falls into the third priority or whether, because of the objective, it would be an even lower priority than the stated third priority.

28. Making the situation even more complex in respect of the use of water for recreation, there are indications it may in fact be more appropriately regarded to be a second priority, as an essential human need, in some circumstances. This is supported by the existing NPS FM which includes an objective that specifically seeks to safeguard the health of people in contact with freshwater. Also, the draft NPS FM itself includes a specific policy requiring compliance with a 'national target' that specifies an increasing percentage of rivers and lakes which must be suitable for primary contact.

29. There are also potential difficulties in distinguishing between essential human health needs and 'economic' uses. Essential health needs of people is not defined but presumably includes drinking water. However, it's not clear if irrigating food crops would be considered an essential human health need or an economic use. It is not clear whether all food production would fall within the second priority, including that destined for export. There would be practical difficulties in applying such a distinction, particularly if the crop was for both local use and export.

30. It is also noted that the cultural importance of waterbodies to tangata whenua would appear to be a top priority under the NPS FM, with specific direction that the management of freshwater 'reflect' those values (refer 1.5 Fundamental Concept - Te Mana o te Wai). On this basis, it seems inappropriate to suggest that providing for those cultural values falls into the third priority. There would appear to be other values that are also important, such as that reflected in the Government's draft Biodiversity Strategy that includes objectives to connect people with nature.

31. These are just some of the difficulties identified with the draft NPS FM provisions. They illustrate a need for much clearer direction on the management of waterbodies.

32. It may be that the intention is for communities and regions to determine for themselves what this hierarchy means. That may be the purpose of the statement in the description of Te Mana o te Wai that it "may be interpreted differently by different people in different contexts", and the direction that regional policy statements must manage freshwater in a manner that gives effect to Te Mana o te Wai as described in the NPS "and understood locally" (§3.2(1)).

33. Given the primacy of the description of Te Mana o te Wai over the objectives and policies, this potentially means that the national bottom lines and other directive policies in the NPS do not necessarily have to be complied with if a particular region decides otherwise. There is potential for such interpretations to lead to inconsistent priorities and standards being applied to the same use of, or effects on, waterbodies in different regions throughout the country. That would significantly limit the degree to which the NPS FM would achieve consistency for nationally important environmental outcomes. If that is the intention it should be made more explicit.

34. However, the Council is of the view that there should be national bottom lines and national targets for the matters covered in the draft NPS FM and that these should be required to be applied consistently.

Integrated management

35. One of the amendments to the NPS FM[1] is a requirement for regional councils to insert in their regional policy statements a requirement for district plans to include "*objectives, policies, and methods to avoid, remedy, or mitigate the cumulative adverse effects of land use on freshwater bodies, freshwater ecosystems, and sensitive receiving environments resulting from urban development*." A second NPS FM amendment[2] places a requirement for territorial authorities to include objectives, policies, and methods in their district plans, at their next reviews of their plans, "*to avoid, remedy, or mitigate the cumulative adverse effects of land use on freshwater bodies, freshwater ecosystems, and sensitive receiving environments".*

36. We support these requirements, but consider that further direction is required as follows:

    - Our District Plan already has policy direction to consider cumulative effects. We have found that there is frequently insufficient information available to be able to make a determination on an individual consent application that may have less than minor effects. This results in 'death by a thousand cuts'.
    - We suggest that the Ministry provide more directive guidance on the wording of objectives, policies and methods that would be effective in managing cumulative effects on freshwater bodies and ecosystems and consider the specific data requirements (and their costs) to enable a robust and legally defensible decision declining consent for individual developments. This could be included either as part of the NPS-FM or wider RMA reform programme.
    - We consider that if an objective in the NPS FM is to require communities to consider the wellbeing of freshwater bodies ahead of human needs, this needs to be aligned with objectives in the National Policy Statement for Urban Development (NPS UD) to meet urban growth requirements. The NPS UD needs to define a 'quality urban environment' in a way that ensures stormwater runoff from additional impervious surfacing is managed to safeguard Te Mana o te Wai.
    - It is essential for the understanding and application of the NPS FM that the following are clarified:
        - Directions included in a number of places in the NPS require territorial authorities to manage adverse effects on "sensitive receiving environments". This term needs to be defined in the NPS.
        - The NPS seems to use the terms "water" and "waterbodies" interchangeably throughout the document without any apparent reason, in most cases, as to why one or the other is used. In a many cases the latter would appear to be more appropriate because of the wider range of values it encompasses. The NPS should be amended accordingly.
        - The NPS contains directions that use the term "urban development" in a number of places. This term needs to be defined, as there are a range of

[1] §. 3.4(5) of the draft NPS FM

[2] §. 3.4(6) of the draft NPS FM

activities that may or may not be considered to be urban, e.g. rural produce processing facilities and recreational activities.

- Essential health needs of people needs to be defined.

Inland wetlands

37. Under this proposal (s3.15) regional councils would be required to protect inland wetlands from loss or degradation, as well as to restore natural inland wetlands, in their regional policy statements and regional plans. Regional councils would also be required to identify, map and maintain an inventory of wetlands within their regions.

38. We support this proposal.

Loss of habitats - streams

39. The Ministry proposes in s3.16 of the NPS FM to require regional councils to avoid the loss of stream habitats by including in their regional policy statements a policy to at least maintain the extent and ecosystem health of rivers and streams in their regions. The Ministry also proposes to require regional councils to ensure through their regional policy statements and regional plans that infilling of river and streams beds is avoided, unless it is related to restoring or enhancing natural values of the stream or ecosystem, required for the operation of nationally significant infrastructure or is required for flood prevention or erosion control.

40. We support this proposal.

Fish passage

41. The proposals include a requirement for regional councils to include objectives in their regional plans for fish passage in s3.17 of the NPS FM.

42. We support this proposal. We note that this is consistent both with the work we have undertaken to identify existing structures and with collaboration with Environment Canterbury to prioritise and remedy barriers to fish passage.

43. The proposed requirements should also apply to existing instream structures that are potentially barriers to fish passage and include a timeline for getting these structures modified and/or consented.

44. Requiring follow up monitoring of new and old/retrofitted structures to ensure they are effective in enabling fish species to pass upstream would also be beneficial. Currently there is no legislative requirement for this to occur and as a result, surveys are rarely undertaken.

Sampling at primary contact sites

45. Regional councils would be required to undertake weekly sampling of E.coli during the swimming season (1 November to 31 March) under this proposal (s3.18).

46. We support increased sampling frequency of swimming sites during the swimming season. However, there needs to be greater clarity around how councils assess 'where people want to swim' is determined. We would prefer that the target for swimmable rivers applied all year, however, we would accept a staged approach. A longer swimming season, until 30 April, that that takes into account high use periods, such as school term breaks, when there will still be camping and late season swims also needs to be considered as a first step.

Exceptions for naturally occurring processes

47. In s3.23 of the NPS FM the Ministry proposes to allow exceptions for waterbodies affected by naturally occurring processes so that the current state is worse than the national bottom line. Regional councils would be required to demonstrate that the poor state of the affected

waterbodies prevented the affected waterbodies from meeting the national bottom line, and would have to set a target for improvement as far as feasible given the natural processes.

48. We support this proposal.

Timing

49. Regional councils would need to have publicly notified their "final decisions on changes to policy statements and plan" no later than 31 December 2025.

50. We support this proposal.

Threatened species

51. One of the proposed amendments (in Appendix 1A) is the addition of threatened species to the list of compulsory values that regional councils must consider in their regional plans. For this new compulsory value regional councils would need to consider how to manage aquatic ecosystems to protect threatened species. The discussion document mentions fish and fish habitat.

52. We support this proposal in principle. We suggest that 'threatened species' in the NPS FM include not only threatened but "At Risk" species.

53. We note that any requirement with respect to threatened species will need to be consistent with the proposed National Policy Statement for Indigenous Biodiversity.

New mahinga kai or tangata whenua compulsory value

54. The proposal offers two alternatives with respect to a new compulsory value:

    1) Combine the two mahinga kai values, which aren't currently compulsory, to create a new compulsory mahinga kai value, or

    2) Create a new tangata whenua compulsory value.

    We support the addition of a new value. We consider that option 2 would be preferable as provision for 'tangata whenua freshwater values' can account for a larger range of values than mahinga kai and is potentially less anthropocentric (i.e. valuing the waterbody for its intrinsic value rather than to the extent that it is useful to humans).

New dissolved inorganic nitrogen and dissolved reactive phosphorus attributes

55. Under the proposal two new attributes for rivers (dissolved inorganic nitrogen [DIN] and dissolved reactive phosphorus [DRP]), would be added to the National Objectives Framework to join the current nutrient attributes for lakes (total nitrogen and total phosphorous).

56. We support a national bottom line of 1 mg per litre for DIN and a national bottom line of 0.018 mg per litre for DRP, as these are consistent with ecological literature. However, we recommend that the Ministry acknowledge that natural baseline levels may differ between catchments and may require different targets for these attribute. We suggest that, similar to the sediment attribute, different classes of rivers are identified for which different target DIN and DRP attributes are set rather than having a single attribute value nationwide. This is important in some areas where soil types mean nitrogen levels are lower and 1.0 mg/L are too high.

New sediment attributes for rivers and streams

57. The proposal adds a new suspended sediment attribute (turbidity) for rivers and streams and a new deposited fine sediment (percent sediment cover) attribute for 'wadeable' rivers and streams. The latter is addressed later is our submission.

58. We support these proposals in principle. We note that we collaborated with Environment Canterbury, developers in the building industry, the Christchurch-West Melton zone committee and other stakeholders to develop erosion and sediment control guidelines, which are used in Canterbury for developing erosion and sediment control plans required for resource consents.

59. We consider that the suspended sediment classes for rivers and streams (Appendix 2A Table 10 plus Appendix 2C Tables 1 and 3) are too complicated. We suggest have a smaller number of classes, or at a minimum providing more clearly defined descriptions of the 12 sediment classes.

60. The Council has limited experience with the FNU scale for turbidity but our understanding suggests that the National Bottom Lines set a very strict standard. We question whether the national bottom line levels for suspended sediment are too stringent, and whether any river or stream within our district could meet the national bottom line. More clarification is needed for the suspended sediment attribute, particularly around peak versus long term mean values.

Additional ecosystem health attributes added

61. A suite of new attributes aimed at improving ecosystem health, termed 'attributes requiring action plans', are proposed to be added to the NPS FM:

    - Macroinvertebrates (two attributes) for wadeable rivers and streams
    - Fish for wadeable rivers
    - Submerged native plants for lakes
    - Submerged invasive plants for lakes
    - Deposited fine sediment for wadeable rivers and stream
    - Dissolved oxygen (four attributes: two for rivers, one for lakes and one for seasonally stratifying lakes)

62. In addition, a new attribute for E. coli has been added for swimming sites ('primary contact sites') in lakes and rivers that would apply during the bathing season (1 November – 31 March).

63. We support the two new attributes for macroinvertebrates. We note that a level of 4 to 5 indicates 'fair', and as such support a national bottom line for the Macroinvertebrate Community Index score of 4.5.

64. We support the inclusion of a new attribute for fish as measured by the Fish Index of Biotic Integrity.

Additional comments - urban waterway contaminants

65. We note that the draft NPS FM does not yet make any provision for managing levels of metals in waterbodies. Contaminants such as copper, zinc, lead, aluminium, cadmium and chromium can be found in elevated levels in stormwater discharges and subsequently in urban waterways. These contaminants can have an adverse effect on ecosystem health.

66. We understand that further work on urban contaminants is planned to occur in 2020 and we recommend that the Ministry develop attributes for inclusion in the NPS FM to address metals in waterways.

67. We also recommend that the Ministry act to address at least one source of heavy metals in stormwater: copper from brake pads. We are aware that alternatives to copper brake pads exist and can be purchased in New Zealand but currently there is little or no awareness or

incentive to do so. We recommend that copper-containing brake pads are regulated at a national level.

PROPOSED NEW NATIONAL ENVIRONMENTAL STANDARD FOR FRESHWATER

General

68. We support in principle a new NES Freshwater, which can provide greater consistency in management of New Zealand's freshwater bodies.

Part 1

69. Clarification is needed concerning when/whether provisions of the NES Freshwater need to be implemented in regional plans, district plans or both. While many of the provisions clearly only apply to regional plans (e.g. infilling the bed of a river), others will apply to district plans (e.g. vegetation clearance and earthworks in wetlands outside of the part of the wetland that can be considered in the 'bed' of the water body (i.e. the wet part of the wetland, not the land margins covered in wetland vegetation). Part 1 of the NES Freshwater needs to specify which rules are intended to be implemented in which plan.

70. The NES Freshwater notes that regional councils may include rules in their plans that are more stringent than those required by the Standard. If some rules are intended to be implemented in district plans, section 2 should also apply to rules in district plans.

71. It would also be useful to specify that district plans can have less stringent standards where regional plans already require a resource consent for the same activity or to specify that regional and district plans should not include rules that require a resource consent for the same activity where the same effects are being managed. This will enable better integrated plans at the regional and district levels.

Part 2 –Subpart 1 Wetlands

72. In general, we support the inclusion of provisions to provide protection for wetlands, with the following observations and recommendations.

73. We suggest that the term 'indigenous vegetation destruction' is used rather than 'vegetation destruction' to avoid misreading of the rules and confusion with other potential plan rules or definitions that may relate to other kinds of vegetation destruction.

74. We note that there is no further definition of 'significance' in this context. How is this meant to be understood/determined by plan administrators? Will guidance on determining significance be forthcoming in the National Policy Statement on Indigenous Biodiversity? Regardless, the term should be defined in this context as it cannot be assumed that a definition in another NPS would clearly apply to these provisions.

75. We support in principle policies and rules that will halt the loss of natural wetlands and streams.

76. We note that if the full extent of the wetland has been correctly mapped, additional 10 metre setbacks should not be necessary at least in urban environments because the Resource Management Act definition of 'wetland' includes "land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions".

77. Some of the proposed rules could impose significant restrictions on neighbouring landowners for benefits that are not immediately obvious. For example, earthworks within 10 metres of a natural wetland becomes a non-complying activity unless they are for the purpose of restoring the wetland or are educational or recreation activities. This captures ordinary gardening activities and roadworks on Council-owned roads.

78. We suggest that either the wetland setback rules should be removed or an exception should be made for sites with urban zoning adjoining a wetland. If the intention is to provide a 'buffer' area that wetlands can grow in to there should be specific policy direction in the NPS FM supporting this. A buffer zone would seem to be more appropriate/likely to occur in rural areas.

79. The recently gazetted National Planning Standards include a definition for "earthworks". Rather than introducing an additional definition for "earth disturbance" when the definitions are largely similar with only a few exceptions, it would be simpler to use the Planning Standards definition of "earthworks" and then include the exemptions in the NES Freshwater rules. This would avoid plans needing to have multiple similar definitions for "earthworks" when the NES is implemented (also noting that mandatory direction 14.1 of the Planning Standards does not allow local authorities to have definitions that are synonyms of definitions in the Planning Standards).

80. We consider that requiring a Discretionary resource consent for earthworks or vegetation clearance or earthworks for education or recreation purposes is unnecessarily restrictive. For example, this would require thousands of dollars in consenting costs to put up an interpretive sign in Travis Wetland. What are the actual environmental effects that justify that cost? Potentially taking soil samples would also require a resource consent under the proposed rules. We recommend a minimum permitted earthworks standard that would enable conservation activities including access tracks for pest control maintenance; educational and interpretation activities; and environmental research and monitoring facilities.

81. The rules in the NES set out a hierarchy of priorities for activities in wetlands (i.e. conservation activities, education or recreation activities, public flood control and nationally significant infrastructure are more acceptable than other activities) but this is not reflected in the objectives and policies in the NPS FM which include blanket policies such as: "There is no further loss or degradation of natural inland wetland." How will an application for a Discretionary activity under the NES Freshwater be able to show that it is consistent with that policy? Policies 8 and 9 should be revised to reflect that in some circumstances vegetation destruction or earthworks may be acceptable.

82. We note that the vegetation destruction rules do not allow for any level of customary harvesting in natural wetlands. The draft Biodiversity Strategy on which the Department of Conservation is currently consulting includes objectives such as "current and future generations connect with nature". Some of the provisions in the NES Freshwater, however, seem to discourage recreational and customary access to wetlands. This access is necessary to encourage a sense of kaitiakitanga in local communities.

Part 2 Subpart 2 River infilling

83. We support in principle rules that would place some restriction and controls on infilling of rivers and streams.

84. We recommend adding provisions to provide similar restrictions and controls concerning infilling of lakes and ponds.

85. We also recommend that in addition to exemption for nationally significant infrastructure that exemptions also apply to operation and maintenance of public infrastructure, such as bridges and monitoring equipment.

86. "Infilling" needs to be defined as potentially this could apply to backfilling around supports for more or less any structure or planting in the bed of a waterbody. This would potentially

lead to a default Discretionary activity status for any activity requiring earthworks in the bed of a water body.

87. We support Discretionary activity status for flood prevention and erosion control works in the bed of a water body subject to clarification requested above that district plan rules can be more stringent that the NES. Potentially in natural coastal wetlands, more stringent provisions may be necessary in order to give effect to the New Zealand Coastal Policy Statement.

Additional comments – environmental management plans

88. The draft NES Freshwater proposes to require farms to have farm management plans that include freshwater 'modules'. We support mandatory farm management plans.

89. We also note that industrial premises can also discharge contaminants to land, air, stormwater and surface water from site activities, but these contaminants are not required to be managed consistently. This gap is not adequately covered by discharge consents or the Hazardous Substances and New Organisms (HSNO) Act. For instance, scrap metal is not a hazardous material, but metal processing activities can produce residues that are toxic to aquatic ecology when entrained in stormwater. Requiring environmental management plans for industrial sites that include drainage plans, preventative maintenance, and spill procedures is one method that could be used to promote better management practices and environmental stewardship.

PROPOSED NEW STOCK EXCLUSION SECTION 360 REGULATIONS

90. We support regulations to exclude livestock at and near waterways.

91. In addition, we support provisions or incentives that encourage setbacks to be planted in order to inhibit runoff.

ACTION FOR HEALTHY WATERWAYS PROPOSALS

General comments

92. There are a number of other proposals in the discussion document *Action for Healthy Waterways*. These are less developed than the proposals for the NPS FM, NES Freshwater and stock exclusion regulations.

93. We are hopeful that robust and comprehensive consultation will be undertaken with the proposals outlined in the discussion document and addressed in our submission below.

Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 amendment

94. The Ministry is proposing to amend the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 to make telemetering of water takes mandatory.

95. We consider that where there are water measuring devices that are capable to telemeter data this may be appropriate. However not all water takes meet this requirement, for a variety of reasons, including:

- Older analogue water take measuring devices that must be read manually are not capable of providing automatic data, although some may be able to be retrofitted with this capability at some cost to the water take user.
- The manner in which some wells are constructed precludes having a water measuring device for the well itself. There may be meters on a pumping station for example, rather than on the individual wells from which it pumps. Knowing which well a pumping station

is drawing from at any particular time allows for virtual metering in which the take from each well can be determined.

- It will be difficult to provide telemetered data from some remote sites due to a lack of coverage. What is proposed in these instances? Could a data logger be installed and the data be submitted on a regular basis (say monthly) to the regional council?

96. Many community water suppliers could be affected by the proposal for any or all of the reasons noted above. The costs for telemetering provided in the discussion document are arguably optimistic, and given this, along with the proposal to begin to take effect only two years after the regulations come into force may prove extremely challenging for community water suppliers, particularly when added to other new requirements. We consider that additional time should be provided to allow for community water suppliers to conduct adequate long-term planning to implement any new water take measurement regulations.

97. We recommend that the Ministry work closely with community water suppliers to ensure that any amendments to the water takes regulations will not disproportionally adversely affect them.

New National Environmental Standard for Wastewater Discharges and Overflows

98. A new national environment standard is proposed for wastewater to include:

- minimum treatment standards
- targets or limits on volume and frequency of wet weather overflows
- methods for monitoring compliance
- approaches for incorporating culturally-acceptable wastewater treatment processes

99. We support the intent of the proposal but recommend that the Ministry consider whether the proposal is somewhat inconsistent with the RMA with its requirements to base contaminant concentrations/loads on effects in the environment after reasonable mixing. A set of national targets or limits for wastewater overflows implies a 'one size fits all' approach that would take little or no account of the receiving environment.

100. We also note that the cost of reducing overflows is significant and that resourcing could pose a difficult challenge for network operators. We suggest that limits should be tailored to communities' ability to afford the target achievement. It may well be that this may need to be spread over two generations. Emphasis should be on developing a realistically achievable 'improvement plan' with intermediate targets and timeframes. Wet weather overflow improvements require expensive flow monitoring and network modelling to understand and identify improvement opportunities.

101. We consider that national measures for treated wastewater quality need to be relevant to the treatment system and receiving environment (e.g., treated wastewater ponds have high total suspended solids, mostly algae, so effects are visual rather than environmental).

102. We note that, in reference to methods for monitoring compliance for overflows, this can only be done fairly through modelling with actual results compared against the model over time.

103. With respect to incorporating culturally acceptable wastewater treatment processes, this will require active and on-going engagement with iwi, as well as understanding of each treatment system and reuse and/or disposal options. Alternatives to direct discharges to water are possible but in some instances may be impractical or unrealistically cost prohibitive.

104. We wish to draw the Ministry's attention to the following observations concerning wastewater networks, discharges and overflows.

1) It must be acknowledged that constructed overflow points in a wastewater network are a necessary part of the network design to safeguard public health. Without these designed overflow points, discharges that occur will otherwise be onto public roads or onto private properties.

2) We agree that targets and limits should be set to reduce overflow frequency and volume over time but given the very high cost of measures to reduce overflows the targets and timeframes must be tailored to a community's ability to afford the target achievement. This may mean that timeframes for target achievement will be longer.

3) If the overall aim is to improve water quality, in scientific terms, in our rivers and streams then capital expenditure on overflow reduction measures may be less effective in achieving that outcome than other less expensive stormwater treatment measures. Doing so however will not address the cultural concerns associated with overflows.

4) The setting of improvement targets for wastewater overflows can only be done with a clear understanding of the current wastewater network system performance. This requires the development of a hydrodynamic model of the network and flow measurement in the network in both wet and dry weather conditions to calibrate the model so that the model closely reflects actual flows and overflows in the network. Smaller network operators may require financial assistance to develop and run these network models. The models can then be used to determine what measures best reduce overflows so that expenditure can be accurately targeted to those measures and that there is confidence that "best bang for buck" is being achieved.

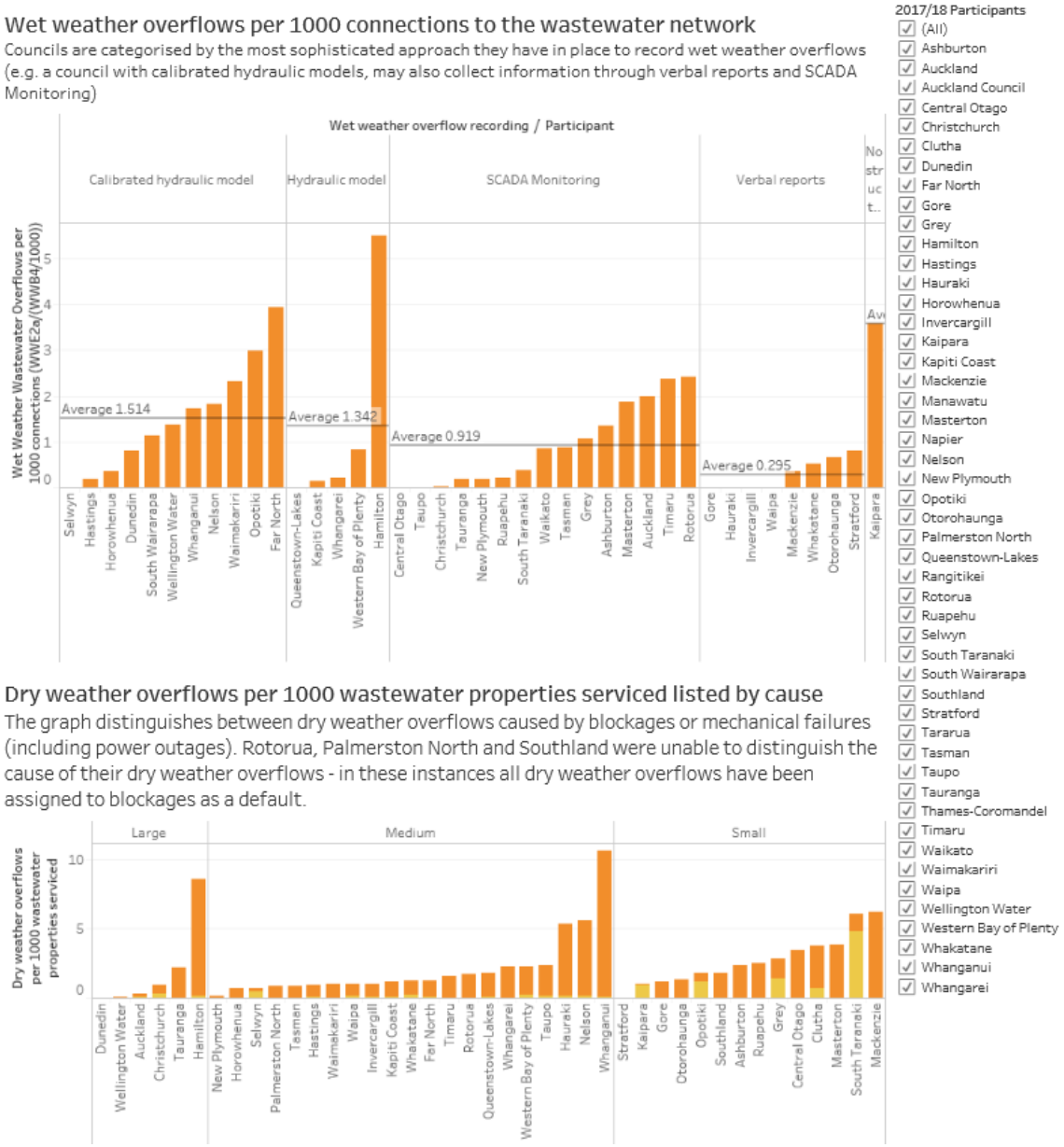
5) A wastewater network model is the only fair way to assess compliance with any standard, providing the basis of the model output (frequency and volume of overflow) is derived from a long time series rainfall record of at least 10 years. Use of the model in this way removes the inherent short term variability of rainfall and antecedent soil moisture conditions that impact inflow and infiltration into a network. The rainfall record used needs to be updated for currency approximately every five years so that variability due to climate change effects on rainfall events are incorporated.

6) Advances in technology are making the monitoring of levels in a network cheaper and simpler. Monitoring of a portion of overflows is recommended. The overflows chosen for monitoring need to be those that activate most frequently in rain events. This monitoring will assist in verifying the model predictions against reality, and can be used as the trigger for notification of an overflow event and public reporting. They can also be used to warn of an impending overflow that may trigger other mitigation measures.

7) A community's ability to meet a given overflow reduction target will be dependent on a range of parameters including the age, pipe material and integrity of the piped network, the integrity of the private property laterals, the number of illegal private stormwater connections to the network, the catchments flooding frequency and resulting inflow into the sewer network (how low lying the catchment is). These factors and the options available to reduce overflows will mean that different communities will have very different abilities to meet any set targets.

8) It is recommended that each network operator for communities that currently have overflows be required to develop an overflow reduction plan by a certain date. The overflow abatement plan should as a minimum require:
    - A timeframe to develop a network model
    - Model calibration to determine current system performance
    - Optimised measures to reduce overflow frequency and volume
    - Community consultation on which measures and which overflows to work to improve
    - Long Term Plan financial commitments to achieve community agreed targets
9) Government-set targets (bottom lines) will underpin what each community decides in terms over its own overflow reduction measures and how they fit with other initiatives to improve river and stream water quality.

105. We support national reporting of wastewater overflows for both wet weather events and dry weather events. This is currently done through the Water New Zealand National Performance Review – Three Waters Benchmarking, which most but not all local authorities take part in on an annual basis (see below). Link to Water NZ website: https://www.waternz.org.nz/Category?Action=View&Category_id=966



106. We request that the Ministry work closely with wastewater network operators, iwi and local communities in order to determine the best approach to managing wastewater overflows.

National Environmental Standard for Sources of Human Drinking Water amendments

107. The Ministry is proposing some changes to the current NES for Human Drinking Water Sources. Some changes are aimed at providing better guidance, such as providing direction on setting source water risk management areas and defining activities that must be assessed as potential risk to sources of human drinking water. We support these changes in principle.

108. We also support in principle the development of "*a new approach for managing specific contaminants in source waters, including nitrate-nitrogen*". We strongly recommend using a precautionary approach in managing contaminants in sources of human drinking water. Further, in light of emerging information about the effect of nitrate on human health, we consider that this is urgently needed and strongly recommend that the Ministry employ a risk-

averse approach in any limit or target setting for nitrates in drinking water sources while further research is undertaken about the health impacts of nitrates in drinking water.

109. We also support a more risk adverse approach for the monitoring of other emerging contaminants. To support this approach, we request the current four-yearly groundwater pesticide survey, currently carried out by ESR for regional councils, continues to monitor for emerging organic contaminants be undertaken more frequently and be led by central government.

110. Additional amendments are proposed that would require regional councils and territorial authorities to place 'appropriate' controls on development and use of land in source water risk management areas, including reviews of plans and rules for activities within the source water risk management areas. We support this in principle, noting that we may have further comment when the NES for Human Drinking Water consultation occurs in 2020.

111. We request that the Ministry work closely with territorial authorities in developing amendments to the NES for Human Drinking Water Sources. As a drinking water supplier we are committed to providing high quality drinking water for which treatment is not needed for groundwater-sourced supplies. This commitment requires a high quality groundwater water source to be maintained.

Resource Management Act 1991 amendment for a new freshwater planning process

112. The Council will be separately submitting on the Resource Management Amendment Bill.

Wastewater risk management plans

113. Risk management plans are proposed for wastewater network operators, which would need to identify risks to the environment, people and social/cultural issues as well as how those risks would be managed.

114. We support this proposal in principle, reserving the right for further comment when more details are provided in a future consultation. We note that the development of wastewater network risk management plans could be substantive work that wastewater network operators may find challenging to undertake. It could be that they follow a similar format that required for drinking water safety plans.

Stormwater risk management plans

115. The Ministry proposes that stormwater network operators are required to prepare stormwater risk management plans that would encompass their entire stormwater networks. The discussion document notes that many local authorities have stormwater management plans that consider risks to the environment, people and property.

116. We support this proposal and note that the Council is developing stormwater management plans for our stormwater network. While our stormwater management plans are water-quality focused they could also meet the purpose of risk management plans.

National guidance on stormwater

117. National guidance on 'green infrastructure' and water sensitive design is proposed. Green infrastructure has potential to control contaminants close to source and to be a means to encourage at-source control.

118. We strongly support this proposal, and recommend that in addition to national guidance statutory and non-statutory incentives should be put in place to incentivise change.

New Water Services Act

119. The Ministry has identified elements that would be included in a new Water Services Act, such as:

- a requirement for wastewater network operators to report annually on nationally-prescribed environmental performance measures
- a requirement for stormwater networks to report annually on a set of national environmental performance measures

120. We note that all local authorities already report on mandatory non-financial performance measures to the Department of Internal Affairs. These could be expanded to include other performance measures. We also note however that the DIA never provides a national summary of the results of these non-financial performance measures, so the purpose of the reporting should be considered, before imposing additional administrative requirements on local authorities.

121. It is unclear in the discussion document what other requirements would be included in this Act. Risk management plans for wastewater and stormwater networks are proposed but the mechanism to require these was not clear.

122. We support nationally consistent reporting and suggest that Water New Zealand assist with this, as they conduct annual water services benchmarking surveys.

123. We note that performance measures as proposed in the discussion document could augment or replace levels of service in the Activity Management Plans prepared for long term plans. It would be useful if performance measures are able to be adapted for this purpose.

124. In response to one of the elements for a proposed wastewater network annual report, 'sludge disposal practices' we suggest a change in thinking and language, e.g. 'biosolids reuse opportunities' in the first instance then biosolids disposal practices. Further, we are aware that there are already Guidelines for Beneficial Use of Organic Materials on Land[3].

125. We have identified an additional element we suggest to be included in the proposed wastewater network annual report: nuisance pests (e.g. midges).

Sediment

126. The discussion document suggests a time period concerning the amount of sediment deposited in an estuary (possibly five years) after which it is proposed to require regional councils to implement further measures to control deposited sediment. This relates to the addition of a new attribute requiring an action plan (deposited fine sediment, table 18) in the draft NPS FM. The NPS FM itself makes no reference to sediment in estuaries nor a time period after which some assessment would need to be made about reduction of deposited sediment in estuaries.

127. We consider that five years is a short period over which to measure sediment accumulation in an estuary. We suggest that to avoid a long delay in measuring change it may be necessary to allow deposition rates to be inferred from suspended sediment monitoring.

Conclusions

128. In summary:

- We wholly support measures to protect our freshwater taonga.

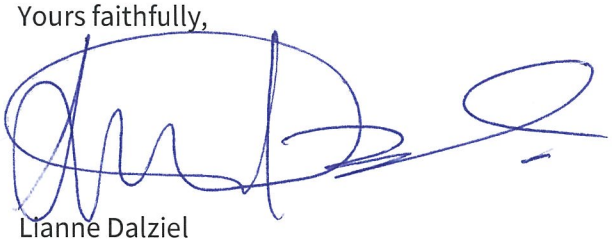
[3] Water New Zealand, 2017. Accessed online at https://www.waternz.org.nz/Article?Action=View&Article_id=1212

- We strongly urge the Ministry to provide adequate time for future consultations, to allow adequate consideration of the impact of any proposals.
- We strongly urge that groundwater quality measures are addressed for both human health and ecosystem health

Thank you for the opportunity to provide this submission.

For any clarification on points within this submission please contact Brendon Anstiss, at 03 941 8472 or Brendan.Anstiss@ccc.govt.nz.

Yours faithfully,



Lianne Dalziel

Mayor