# BEFORE THE ENVIRONMENT COURT AT WELLINGTON

## I MUA I TE KOOTI TAIAO O AOTEAROA KI TE WHANGANUI-A-TARA

IN THE MATTER of an appeal under Clause 14 of

Schedule 1 of the Resource

Management Act 1991

AND IN THE MATTER Proposed Plan Change 9 (TANK) to

the Hawke's Bay Regional Resource

Management Plan (RRMP)

BETWEEN Royal Forest and Bird Protection

**Society of New Zealand Inc** 

Appellant

AND Hawke's Bay Regional Council

Respondent

### NOTICE OF APPEAL BY THE ROYAL FOREST AND

## **BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED**

Dated 25 October 2022

To: The Registrar
Environment Court
Wellington

- The Royal Forest and Bird Protection Society of New Zealand Incorporated ('Forest & Bird'; 'the Society') appeals against Hawke's Bay Regional Council's decision on Proposed Plan Change 9 (TANK) to the Hawke's Bay Regional Resource Management Plan (RRMP).
- 2. Forest & Bird made a submission and further submission on the proposed plan change.
- 3. Forest & Bird is not a trade competitor for the purposes of section 308D of the Resource Management Act 1991.
- 4. The decision was publicly notified on 9 September 2022. Forest & Bird received notice on the same date.
- The decision was made by the Independent Hearing Panel on behalf of the Hawke's Bay Regional Council.
- 6. Forest & Bird is willing to participate in alternative dispute resolution.
- 7. The parts of the decision that Forest & Bird is appealing are provisions relating to protection of indigenous biodiversity, water bodies, maintenance and enhancement of freshwater quality and quantity and effects on the coastal environment.

#### The reasons for appeal, and relief sought

- 8. In addition to the reasons set out in Table 1 below, the general reasons for Forest & Bird's appeal are that the provisions appealed against:
  - a. do not give effect to the National Policy Statement on Fresh water management (NPSFM);
  - b. do not give effect to the New Zealand Coastal Policy Statement (NZCPS);
  - c. are not consistent with Part 2 of the Resource Management Act ('the Act');
  - d. do not implement the Council's functions under s 30 of the Act;
  - e. do not represent best resource management practice.
- 9. The parts of the decision appealed, reasons for the appeal and relief sought are set out in Table 1 below. Where specific wording changes are proposed by way of relief, Forest & Bird seeks in the alternative any wording that would adequately address the reasons for its appeal. Forest & Bird also seeks any consequential changes made necessary by the relief sought below.

TABLE 1: ADDITIONAL REASONS FOR APPEAL AND RELIEF SOUGHT TO THE HB REGIONAL RESOURCE MANAGEMENT PLAN

Specific provisions to the matters appealed	Reasons for appeal (in addition to those set out in paragraph 7 and 8 above)	Relief (Forest & Bird changes are shown in <u>underline</u> and <u>strike through</u> to the decision version of PC9)
5.10.1 TANK Ob	pjectives	
TANK OBJ <u>21</u>	Amendment is required in order to give effect to the NPSFM 2020.  The NPSFM 2020 requires, through Policy 1, that "Freshwater is managed in a way that gives effect to Te Mana o te Wai."  TANK OBJ 1 should therefore be amended to state land and freshwater will be managed to "give effect to" Te Mana o te Wai (TMOTW) as opposed to "upheld and recognised."  It is important that the introductory words and clause (b) includes reference to wider environments beyond "freshwater" to give effect to clause 3.5 of the NPSFM 2020.  The term "appropriately" should be removed from clause (d) as this is unclear and provides scope to dilute the protection element in this objective.	Amend OBJ TANK 1 as:  OBJ TANK 1 Land and freshwater in the Tūtaekurī, Ahuriri, Ngaruroro and Karamū catchments are sustainably managed as integrated natural resources so that: a) Te Mana o te Wai and, ki uta ki tai (mountains to the sea) are upheld and recognised given effect to b) The interconnectedness between land, water, surface water, groundwater, associated ecosystems and the coastal environment and water and between surface water and groundwater are recognised c) Indigenous biodiversity is protected and life- supporting capacity and the aquatic ecosystem processes are safeguarded d) outstanding water bodies in Schedule 25 and the values in the plan objectives are appropriately protected and provided for and that: e) the kaitiaki responsibilities of tangata whenua to land and freshwater and cultural connection are recognised and provided for

		f) tangata whenua are supported in carrying out cultural practices with respect to water management in their rohe.
TANK OBJ 2	'Flow enhancement schemes' are not a mechanism for achieving 'mauri enhancement and ecosystem health', are not consistent with the NPSFM hierarchy of obligations, do not assist Council's undertake their functions under the RMA, and are at best a compensation mechanism (e.g., they are often compensating for stream-flow depletion, not operating as 'enhancement' schemes). Accordingly, they should not be identified in the first instance as a manner through which a high-level objective might be achieved. Their effectiveness is not supported by evidence and they should not be provided for in an objective. They merely prop-up status quo over-allocation arrangements, in contradiction to NPSFM (2020) direction, including Policy 11.	Delete objective and reinstate and amended version of OBJ TANK 5.  Recast clauses (a), (b), (c) as policies and reduce any interim allocation limit referred in (c) to 70 million m3.
	HBRC's own report¹ states:  "Stream augmentation of lowland streams is not sustainable in the long term"	
	The "interim allocation limit" of 90 million m3 is too high to achieve ecosystem health outcomes and represents ongoing over-allocation. A lower limit is required to achieve ecosystem health outcomes.	
TANK OBJ 4	OBJ TANK 4 is restricted to freshwater bodies, however Schedule 26 contains attribute states for estuaries. OBJ TANK 4 must be broadened to capture estuaries and for consistency with NPSFM clause 3.5 and the NZCPS.	Amend OBJ TANK 4:  The quality of the TANK freshwater bodies and coastal water is maintained where objectives are
	The reference to the "mixture of regulatory and non-regulatory provisions" is not appropriately placed in an objective. The reference to non-regulatory provisions is inappropriate as non-regulatory mechanisms generally do a poor job in achieving	currently being met, or is improved in degraded waterbodies <u>or coastal water</u> so that they meet target attribute states in Schedule 26 by 2040

<sup>&</sup>lt;sup>1</sup> https://www.hbrc.govt.nz/assets/Document-Library/Publications-Database/5018-Heretaunga-Aquifer-Groundwater-Model-Scenarios-Report-final.pdf

	water quality targets.	provided that:
		<ul> <li>a) for any specific water body where the attribute state is found to be higher than the target attribute state given in Schedule 26, the higher state is to be maintained;</li> <li>b) progress is made over the life of this Plan towards the long term target attribute states by the mixture of regulatory and non-regulatory provisions in this Plan.</li> </ul>
TANK OBJ 5	An objective is required to give effect to the NPSFM Objective.	Reinstate/amend OBJ TANK 5 to read:  Ensure that natural and physical resources are managed in a way that prioritises:  (a) first, the health and well-being of water bodies and freshwater ecosystems (b) second, the health needs of people (such as drinking water) (c) third, the ability of people and communities to provide for their social, economic, and cultural well-
TANK OBJ 7	An objective directing land use is carried out in a manner that reduces contaminant loss on freshwater and receiving environments is consistent with NSPFM Policy 3 and NZCPS Objective 1 and Policies 21 and 22. However, the original OBJ TANK 7 is inadequately worded as the goal of the objective, ensuring sedimentation of waterbodies is reduced or avoided and land use managed to achieve this, was not brought to the fore.	Include an Objective as follows:  Freshwater bodies, estuaries and the coastal environment are healthy and free from sedimentation and land use is sustainably managed in an integrated way consistent with ki uta ki tai
TANK OBJ <u>85</u>	OBJ TANK 5 needs to be broadened to capture coastal water and for consistency with NPSFM clause 3.5 and the NZCPS.	Amend the introductory words of OBJ TANK 5:

	The terms "where necessary" is ambiguous, does not provide adequate guidance and needs to connect to the objectives in Schedule 26.	Riparian margins are protected or improved where necessary to <u>achieve the outcomes and</u> <u>attributes states in Schedule 26,</u> provide for aquatic ecosystem health and mauri of water bodies <u>and coastal water</u> in the TANK catchment and to:
TANK OBJ <del>10</del> 7	OBJ TANK 5 is unduly narrowed to "Ahuriri freshwater catchments" and needs to refer to "Ahuriri catchments" to align with the estuaries referred in Schedule 26 and reflect the NPSFM 2020 and NZCPS.  Clause (a) is unclear and should be expanded to direct a reduction in sedimentation rates across all water bodies and coastal water in the Ahuriri catchments.  Enablement of domestic water needs (d) and primary production (e) at the same level as ecosystem health is not consistent with Te Mana o te Wai as it does not clearly prioritise the health of water and ecosystems above other uses. These clauses should be deleted as they are already addressed in OBJ TANK 11 (decision version).  An additional clause is needed to direct protection of natural character and the maintenance of fish passage. The NPSFM requires protection of habitat and river extent and values (e.g., Policy 6, 7, 9, Appendix 1A), and consideration of 'Natural form and character' under Appendix 1B. RMA s6(a) also requires preservation of natural character of rivers and their margins.	OBJ TANK 7 In combination with meeting the target attribute states specified in Schedule 26, and subject to the hierarchy of obligations in Te Mana o te Wai, as set out in Objective 2.1 of the NPSFM 2020, the mauri, water quality and water quantity of the Ahuriri freshwater-catchments are maintained and enhanced where necessary to enable:  a) sedimentation-Ahuriri estuary sediments to be reduced healthy and not accumulate excessively b) healthy ecosystems c) healthy and diverse indigenous aquatic plant, fish and bird populations d) people and communities to safely meet their domestic water needs e) primary production water for community social and economic well-being; and provide for f) contribution to the healthy functioning of the Te Whanganui a Orotū (Ahuriri) estuary ecosystem and enable people to safely carry out a wide range of social, cultural and recreational activities including swimming and the collection of mahinga kai in the estuary.

		x) protection of the natural character, habitat, instream values, hydrological functioning, and the natural movement of indigenous fish
OBJ TANK 118	As above, further amendments are required to ensure OBJ TANK 8 gives effect to Te Mana o te Wai.  Clause (d) should not be unduly limited to those listed water bodies. The NPSFM requires protection of habitat and river extent and values (e.g., Policy 6, 7, 9, Appendix 1A), and consideration of 'Natural form and character' under Appendix 1B. RMA s6(a) also requires preservation of natural character of rivers and their margins.	In combination with meeting the target attribute states specified in Schedule 26, and subject to the hierarchy of obligations in Te Mana o te Wai, as set out in Objective 2.1 of the NPSFM 2020, the mauri, water quality and water quantity in the Ngaruroro River catchment are maintained in the mainstem above the Whanawhana Cableway and in the Taruarau River, and are improved in the tributaries and lower reaches, including in the Taruarau River, where necessary to enable:  a) healthy ecosystems b) healthy and diverse indigenous aquatic plant, animal and bird populations especially whitebait, torrent fish, macroinvertebrate communities, bird habitat on braided river reaches and a healthy trout fishery c) people to safely carry out a wide range of social, cultural and recreational activities especially swimming and cultural practices of Uu and boating, including jet-boating in the braided reaches of the Ngaruroro; d) protection of the natural character, instream values and hydrological functioning of the Ngaruroro mainstem and Taruarau and Omahaki all tributaries within the Ngaruroro catchment, and the natural

		movement of indigenous fish  e) collection of kai to provide for social and cultural well-being  f) people and communities to safely meet their domestic water needs  g) primary production, industrial and commercial water needs and water required for associated processing and other urban activities to provide for community social and economic well-being
OBJ TANK <del>12</del> 9	As above, further amendments are required to ensure OBJ TANK 9 gives effect to Te Mana o te Wai, and directs protection of natural character, instream values, and hydrological functioning of all waterbodies and coastal water within the Tütaekurī River catchment.	In combination with meeting the target attribute states specified in Schedule 26, and subject to the hierarchy of obligations in Te Mana o te Wai, as set out in Objective 2.1 of the NPSFM 2020, the mauri, water quality and water quantity in the Tūtaekurī River catchment are maintained in the upper reaches of the mainstem and are improved in the tributaries and lower reaches where necessary to enable:  a) healthy ecosystems b) healthy and diverse indigenous aquatic and bird populations, especially whitebait, torrent fish, macroinvertebrate communities and a healthy trout fishery c) people to safely carry out a wide range of social, cultural and recreational activities, especially swimming and cultural practices of Uu and boating d) protection of the natural character, instream values and hydrological functioning of the Tūtaekurī mainstem and Mangatutu tributary all tributaries within the Tūtaekurī catchment, and the natural movement of indigenous fish

		e) collection of kai to provide for social and cultural well-being  f) people and communities to safely meet their domestic water needs g) primary production, industrial and commercial water needs and water required for associated processing and other urban activities to provide for community social and economic well-being
OBJ TANK 1310	As above. Enablement of domestic water needs in clause (d) and primary production at clause (e) at the same level as ecosystem health is not consistent with Te Mana o te Wai as it does not clearly prioritise the health of water and ecosystems above other uses.  The NPSFM requires protection of habitat and river extent and values (e.g., Policy 6, 7, Appendix 1A), and consideration of 'Natural form and character' under Appendix 1B. RMA s6(a) also requires preservation of natural character of rivers and their margins.	In combination with meeting the target attribute states specified in Schedule 26, and subject to the hierarchy of obligations in Te Mana o te Wai, as set out in Objective 2.1 of the NPSFM 2020, the mauri, water quality and water quantity in the Karamū and Clive Rivers catchment are improved to enable:  a) healthy ecosystems b) healthy and diverse indigenous aquatic and bird populations, especially black patiki, tuna and whitebait, and healthy macroinvertebrate communities c) people to safely carry out a wide range of social, recreational, and cultural activities, including swimming and cultural practices of Uu and rowing and waka ama in the Clive/Karamū d) collection of kai to provide for social and cultural well-being e) people and communities to safely meet their domestic water needs f) primary production, industrial and commercial water needs and water required for associated processing and other urban activities to provide for community social and economic well-being

		Include the additional clause:  x) protection of the natural character, instream values, hydrological functioning, and the natural movement of indigenous fish
OBJ TANK 1411	This provision is not consistent with Te Mana o te Wai and needs to be expanded to include groundwater in all TANK catchments.  Enablement of domestic water needs (d) and primary production (e) at the same level as ecosystem health is not consistent with Te Mana o te Wai as it does not clearly prioritise the health of water and ecosystems above other uses. Further amendments are needed to ensure the health and well-being of water bodies and freshwater ecosystems is prioritised.  Further amendments to clause (c) are required to ensure groundwater ecosystem health in protected and overallocation avoided and phased out per the NPSFM 2020.	In combination with meeting the target attribute states specified in Schedule 26, the mauri, water quality, water quantity and groundwater levels are maintained in the Groundwater connected to the Ngaruroro, Tūtaekurī and Karamū rivers and their tributaries in the TANK catchments is are managed to enable in a way that prioritises:  a) first, the health and well-being of water bodies and freshwater ecosystems  a) b) second, people and communities to safely meet their domestic water needs and to enable the provision of safe and secure supplies of water for municipal use  b) c) third, primary production, industrial and commercial water needs and water required for associated processing and other urban activities to provide for community social and economic well-being and provide for: c) the maintenance of groundwater levels at an

		equilibrium that accounts for annual variation in climate and prevents long term decline or seawater intrusion d) the maintenance or restoration of groundwater levels to protect the health of groundwater dependent ecosystems, overallocation to be phased out, and the avoidance of overallocation and saline intrusion
OBJ TANK <del>15</del> 12	Wetland protection is limited to those listed in Schedule 25, inconsistent with NPSFM Policy 6 (there is no further loss of natural inland wetlands, their values are protected, and their restoration is promoted).	Amend (f)  f) the protection of the outstanding values of natural inland wetlands and those wetlands and lakes listed
	Minor amendment required to clause (g) to clarify these are minimum thresholds.	in Schedule 25  Amend (g) to read  g) increase the total wetland area by protecting and restoring at least 200ha hectares of existing wetland and reinstating or creating at least 100ha of additional wetland by 2040.
OBJ TANK <del>16</del> 13	The approach to objectives does not give effect to the NPSFM 2020. Underpinning the NPSFM 2020 is the fundamental concept of Te Mana o Te Wai. There is a hierarchy of obligations in Te Mana o Te Wai that prioritises first, the health and well-being of water bodies and freshwater ecosystems. However, none of the water quantity objectives address this first order priority or account for any instream values of water.	Delete Objective 13 and recast as a policy prefaced with the following amended introductory words:  "POL TANK X: Ground and surface water in the TANK catchments is allocated, subject to the hierarchy of obligations in Te Mana o te Wai, as set out in Objective 2.1 of the NPSFM 2020, and limits, targets
	Objective 13 is inadequately worded and is more appropriate as policy rather than objective. It needs to be clear that limits will be set as per Te Mana o Te Wai.	and flow regimes which provide for the values of each water body, in the following priority order:"  Replace OBJ 13 with the following objectives:

		X) The management of water in the Tutaekuri, Ahuriri, Ngaruroro and Karamu catchments gives effect to Te Mana o te Wai, as set out in Objective 2.1 of the NPSFM 2020.  X) The life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water are safeguarded and the health of freshwater ecosystems is maintained.
OBJ TANK <del>17</del> 14	This objective does not implement the NPSFM 2020. If retained, the listed matters would be more appropriately recast and amended as policies.	Delete.
OBJ TANK 1815	'Aquifer recharge and flow enhancement' and 'water harvesting and storage' are mitigation measures that are not consistent with putting the health of water bodies first, as required by Te Mana o Te Wai. It is unclear how these will achieve NPSFM Policy 11.  'Water reticulation' does not add any meaning to the objective. While some of these methods might assist with water management in a region, they should not be elevated to the primary mechanism through which mauri and ecosystem health will be 'secured'.	Amend to:  OBJ TANK 15 The current and foreseeable water needs for mauri and ecosystem health and of future generations are secured through: a) avoiding future over-allocation and phasing out existing over-allocation b) water conservation, water use efficiency, and innovations in technology and management c) flexible water allocation and management regimes d) water reticulation e) aquifer recharge and flow enhancement f) water harvesting and storage.

Policy <u>42</u>	Water quality must be improved wherever it does not meet objectives, not just in priority catchments.	Amend as follows:
		POL TANK 2
	Reword the policy to make it clear that water quality improvements are needed wherever objectives are not currently met, and targets should be achieved by 2040. The responsibilities under s 30 of the RMA rest with the Council and rewording is required to reflect this.	The Council will regulate land use activities and will work with tangata whenua, landowners, local authorities, industry and community groups, and other stakeholders to manage land use activities so that existing water quality is maintained in its current state or improved to meet target attribute states shown in Schedule 26 by 2040 by focusing on:  a) water quality improvement in priority catchments (as described in Schedule 27) where water quality is not meeting specified freshwater quality targets
		Include a new clause:
		x) involving tangata whenua, landowners, local authorities, industry and community groups, and other stakeholders
POL TANK <del>2</del> 3	The reference to "flow management regimes" is not clear and could be used to justify stream augmentation/compensation, inconsistent with the NPSFM 2020. This should	Amend:
	not be the primary management strategy.	In the Clive/Karamū Rivers and their tributaries, in addition to Policy POL TANK 2 the Council will work
	There are parts of the policy that would be better in a 'methods' section (e.g. "establishment of riparian vegetation to shade the water and reduce macrophyte growth while accounting for flooding and drainage objectives").	with tangata whenua, landowners and the Hastings District Council to:
	The responsibilities under s 30 of the RMA rest with the Council and rewording is	a) reduce water temperature and increase the level of dissolved oxygen by:

	required to reflect this.	i. the establishment of riparian vegetation to shade the water and reduce macrophyte growth while accounting for flooding and drainage objectives ii. reducing excessive macrophyte growth by physical removal of aquatic plants in the short term
		b) adopt flow management regimes minimum flows and allocation limits to remedy or mitigate the effects of surface and ground water abstraction c) reduce the amount of sediment and nutrients entering the freshwater from adjacent land d) improve stormwater and drainage water quality and the ecosystem health of urban waterways and reduce contamination of stormwater associated with poor site management practices, spills and accidents in urban areas
		Recast clauses (a)(i) and (ii) as a methods.
		Include a new clause:
		x) work with tangata whenua, landowners, local authorities, industry and community groups, and other stakeholders
POL TANK 34	Rewording required to provide more direction on what the water quality objectives	Replace POL TANK 4 with the following:

POL TANK 4 <u>5</u>	As with POL TANK 2, the responsibilities under s 30 of the RMA rest with the Council and rewording is required to reflect this.	Amend the chapeau as follows:  In the lower Ngaruroro and Tūtaekurī Rivers and their tributaries, in addition to Policy POL TANK 2 the Council will work with landowners to:
	are, and how and when they will be achieved. As with POL TANK 2, the responsibilities under s 30 of the RMA rest with the Council and rewording is required to reflect this.  Amendments required to (d) to also refer to water bodies upstream of the lake or wetland, as these contribute to water quality issues.	In addition to POL TANK 2, the values and ecosystem health of lakes and wetlands in the TANK catchments will be protected and enhanced where necessary by:  a) working with landowners in wetland and lake catchments b) managing and regulating land use activities in wetland and lake catchments to reduce sediment and nutrient inputs, c) improve water quality and support indigenous macrophyte growth in shallow lakes d) improve ecosystem health and water quality by excluding stock and improving riparian management e) meet water quality target attribute states objectives in Schedule 26 for water bodies upstream and downstream of the lake or wetland f) enable landowners to protect, increase or restore existing wetlands or create new wetlands including for the management of urban stormwater

		Include a new clause:
		x) work with tangata whenua, landowners, local authorities, industry and community groups, and other stakeholders
POL TANK <u>56</u>	As with POL TANK 2, the responsibilities under s 30 of the RMA rest with the Council and rewording is required to reflect this. The policy includes provisions which are more suitable as methods as opposed to policy.  The streams in Napier city have poor indigenous fish passage and diversity. There are issues regarding stormwater infrastructure such as pumps and tidal gates which prevent fish movement and inhibit spawning which needs to be addressed in the policy framework.	Amend the chapeau as follows:  In the tributaries of Te Whanganui ā Orotū (Ahuriri Estuary), in addition to POL TANK 2 the Council will support the development of an Integrated Catchment Management Plan and will work with mana tangata whenua, landowners and the Napier City Council to  Delete clause (d) and recast it as a method.  Insert the additional clauses:  x) improve indigenous fish passage and restore spawning habitat  x) support the development of an Integrated Catchment Management Plan  x) work with tangata whenua, landowners, local authorities, industry and community groups, and other stakeholders
POL TANK 1011	The policy contains unclear direction, does not give effect the NPSFM and TANK OBJ 4. Conditions (a)-(d) should be deleted as these do not assist in achieving the Schedule 26 targets by 2040.	Amend POL TANK 11 to read:  The Council will manage point source discharges

(that are not stormwater discharges) so that after reasonable mixing, contaminants discharged either by themselves or in combination with other discharges enable existing water quality to be maintained or do not cause the 2040 target attribute states in Schedule 26 to be exceeded and when considering applications to discharge contaminants will also take into account: a) where the attribute state is found to be higher than the target attribute state given in Schedule 26 the higher state is maintained; b) where water quality meets the target attribute state, water quality continues to meet the target attribute states in Schedule 26; c) the target attribute states in Schedule 26 are met; a) measurement uncertainties associated with variables such as location, flows, seasonal variation and climatic events b) the degree to which a point source discharge is of a temporary nature, or is associated with necessary maintenance work c) when it is an existing activity, identification of mitigation measures, where necessary, and timeframes for their adoption that contribute to the meeting of water quality objectives target attribute states d) the necessity for requiring best practicable option

	to prevent or minimise any actual or likely adverse effect on the environment of any point source discharge of a contaminant.
POL TANK 12 requires stronger direction to align with the NPSFM 2020 and reflect the requirements in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 and Resource Management (Stock Exclusion) Regulations 2020. Livestock exclusion and clearly expressed setback requirements for cultivation and breakfeeding are two of the simplest and most direct ways of protecting waterbodies from pollution and should be mandated by clear policy direction.	Amend to read  POL TANK 12  The Council will promote and support the establishment of Reiparian vegetation will be established, including in conjunction with and stock exclusion and setback regulations requirements implemented, that: a) contributes to the health of aquatic ecosystems especially for indigenous species b) provides shading to reduce macrophyte growth and water temperature especially in lowland tributaries of the Karamū River c) reduces contamination of water from land use activities d) reduces river bank erosion e) improves local amenity f) enhances recreational activities g) improves fish spawning habitat h) assist in weed control.
POL TANK 14 does not provide clear policy direction and includes matters more appropriately recast as methods (for example, "working with industry groups and landowner collectives to identify where riparian management is to be improved").  Clause (e)(i) should be deleted as it duplicates and potentially weakens the referenced POL TANKs. Clause the reference to "significant public benefit" in (e)(ii) should be	Recast POL TANK 14 as a method.  Remove 'significant' from (c) – i.e. "regulating cultivation, stock access and indigenous vegetation clearance activities that have an significant adverse effect on functioning of riparian margins in relation to water quality and aquatic ecosystem"
	requirements in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 and Resource Management (Stock Exclusion) Regulations 2020. Livestock exclusion and clearly expressed setback requirements for cultivation and breakfeeding are two of the simplest and most direct ways of protecting waterbodies from pollution and should be mandated by clear policy direction.  POL TANK 14 does not provide clear policy direction and includes matters more appropriately recast as methods (for example, "working with industry groups and landowner collectives to identify where riparian management is to be improved").  Clause (e)(i) should be deleted as it duplicates and potentially weakens the referenced

		Delete clause (e).
POL TANK 15	As with POL TANK 14, POL TANK 15 contains matters more appropriately reframed as methods.	Recast POL TANK 15 as a method and delete clause (f).
POL TANK 16	POL TANK 16 contains matters more appropriately reframed as methods.  This policy should refer to the objectives/targets for cyanobacteria (benthic cover %) attribute in Schedule 26 and to meet these where they are currently exceeded by 2040.  Phormidium autumnale is now described as Microcleus autumnalis and it is not the only potentially toxic benthic cyanobacteria. It is more correct to refer to the group of cyanobacteria as a whole to avoid confusion associated with changes in nomenclature.	Replace reference to "toxic microcoleus" with "toxic benthic cyanobacteria".  Amend to read:  To meet toxic benthic cyanobacteria objectives and targets by 2040, the Council will:  x) reduce nutrient and sediment inputs in accordance with POL TANK 19 x) maintain flushing flows x) regulate land use activities and diffuse discharges to assist in preventing the occurrence of blooms  Recast the balance of the matters (clauses (a), (b), (c), and (f)) as methods.
POL TANK 17	POL TANK 17 does not provide a certain regulatory pathway to achieving the water quality objectives or targets in Schedule 26 and the water quality issues for priority catchments in Schedule 27. Where targets for water quality are not being achieved, clear management of land use activities which contribute to degraded water quality must be included in the plan with a timebound pathway to achieving targets by 2040.  Water quality issues in priority catchments must be listed in Schedule 27 to make clear where controls on land use are needed as a priority.	Delete POL TANK 17.

	Catchment collectives, industry, and farm plans do not adequately implement the NPSFM 2020 and may not pick up individual offenders or worst polluters.  Voluntary measures such as farm plans and catchment collectives are insufficient on their own to address the degradation of ecosystem health and biodiversity and achieve environmental outcomes required under RMA including via the NPSFM 2020. They cannot replace having regulatory bottom lines and measurable standards to enforce compliance.	
POL TANK 18	POL TANK 18 is inconsistent with the NPSFM 2020 and leaves the issue of nutrient pollution to a future plan change, despite the current water quality issues in the TANK catchments. Delaying action has, and will continue to, result in serious adverse effects on receiving environments, particularly estuaries.  Regulatory measures are necessary to maintain water quality and achieve water quality improvements.  While Overseer may not be an adequate tool to inform a management/leaching framework, MfE has released a risk index tool that could be used, and there are plenty of input controls that could be used to manage pollution (for example, stocking rate limits, fertiliser use limits).  A regulatory 'backstop' to address possible adverse effects from diffuse discharges is required.	Delete POL TANK 18.
POL TANK 2019	POL TANK 19 requires amendments reflect the directive components of the NPSFM 2020 and NZCPS are given effect to. In particular, to ensure water quality, life-supporting capacity and ecosystem health in freshwater and estuaries is safeguarded.	Sediment loss, erosion and effects on freshwater and coastal ecosystems will be mitigated and reduced to meet the objectives and targets in Schedule 26 by 2040:  a) regulating cultivation, stock access and vegetation clearance in all catchments

		b) regulating land use in priority catchments in Schedule 27 to manage critical source areas at the property and the catchment scales c) requiring and supporting tree planting, afforestation, and retirement of land d) requiring and supporting an improved and sustainable riparian management in all catchments
POL TANK 2120	POL TANK 20 contains inadequate direction to address the effects caused by land use intensification on ecosystem health and other instream freshwater values. It places inappropriate reliance on voluntary measures which do not provide certainty that life-supporting capacity of ecosystems and water will be safeguarded for future generations. Further amendments are required to ensure it gives effect to the NPSFM 2020 and NZCPS.	The impacts of diffuse discharges from intensification of land will be controlled in all catchments to ensure that:  a) where the attribute state is found to be higher than the target attribute state given in Schedule 26 the higher state is maintained; b) where water quality meets the target attribute state, water quality continues to meet the target attribute states in Schedule 26; c) the target attribute states in Schedule 26 are not exceeded; d) where target attribute states in Schedule 26 are not met, ensuring water quality of discharges are improved to meet the target attribute states by 2040
POL TANK 22	Stock access to water bodies, their margins and estuaries has known and multiple adverse effects on water quality, life-supporting capacity, and ecosystem health (along with other freshwater values). POL TANK 22 needs to be reinstated to be directive and clear that stock will be excluded from all TANK waterbodies and	Reinstate POL TANK 22 and replace the chapeau with the following:  Avoid the degradation of water quality and aquatic

	estuarine environments.  While the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 have come into effect, PC9 still contains gaps in the regulation of stock access. Such gaps need to be addressed, particularly in light of Policy 21 of the NZCPS, which requires stock to be excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment within a prescribed timeframe to improve degraded water quality.	ecosystems (including plants and habitats in, on or under the bed) in a water body or the coastal marine area from sedimentation, the direct discharge of contaminants, damage to the beds, banks or margins resulting from stock access. When considering an application for resource consent, take into account the following matters:
POL TANK 2321	POL TANK 21 devolves Council's responsibility for managing land use impacts to third parties, and is not sufficient for managing effects or ensuring that life-supporting capacity will be safeguarded in accordance with the RMA. In any event, measures related to farm plans may be superseded by new farm plan regulations which are expected to be Gazetted in late 2022.	Delete POL TANK 21.
POL TANK 2422	As above.	Delete POL TANK 22.
POL TANK 2523	As above	Delete POL TANK 23.
POL TANK 2624	As above, and further, enforcement action must be the first response to non-compliance.	Delete POL TANK 24.
POL TANK 2725	POL TANK 25 needs to be captured in a methods section of PC9. Timeframes are required.	Delete POL TANK 25 and move intention to create implementation plan to a non-regulatory 'methods' section. Capture key actions for implementation (in Table 1) elsewhere in the plan and include a timeframe of 2023 or earlier to achieve milestones (where a date is not already stated).
POL TANK <del>28</del> 26	This policy deems the adverse effects in high value habitats as only a matter to consider and does not include direction to ensure these habitats are protected from	Amend as follows:

adverse effects. As such, it is inconsistent with the NPSFM Objective and Policies 1, 3, 6, 8, and 9.

Further, the policy lacks direction to protect threatened taxa engaged by NZCPS Policy 11 and spawning habitat and migratory fish routes engaged by NZCPS 11(b)(ii) and (v). For example, īnanga, known to be adversely disrupted by stormwater discharges.

The Council will reduce or mitigate the <u>aA</u>dverse effects of stormwater quality and quantity on aquatic ecosystems and community well-being arising from existing and new urban development (including infill development) industrial or trade premises and associated infrastructure, <u>will be reduced or mitigated</u>, by addressing the following matters when considering applications to divert and discharge stormwater, by requiring:

- a) measures to achieve the target attribute states in Schedule 26
- b) adoption of an integrated catchment management approach to the collection, treatment and discharge of stormwater
- c) stormwater to be discharged into a reticulated stormwater network where such a network is available or will be made available as part of the development
- d) retention or detention of stormwater where necessary, while not exacerbating flood hazards;
- e) adoption of a good practice approach to stormwater management including adoption of Low Impact Design for stormwater systems and adherence to relevant industry guidelines
- f) any potential adverse effects on significant and/or outstanding values of the receiving environment including estuaries, wetlands and any water body listed in Schedule 25 are avoided g) avoidance of adverse effects on:
  - i. indigenous freshwater species, and
  - ii. <u>the indigenous fish spawning habitat,</u> particularly during spawning periods

		f) any potential adverse effects on significant and/or outstanding values of the receiving environment including estuaries, wetlands and any waterbody listed in Schedule 25 g) h) site specific constraints including areas with high groundwater and, source protection zones and extents,
POL TANK 31 <u>29</u>	It is inappropriate to further delay managing stormwater in a way that meets the objectives and targets in Schedule 26.	Reinstate the reference to 2025 and delete the reference to 2030 in clause (a).
POL TANK <del>33</del> 30	This is a method and not a policy.	Recast POL TANK 30 as a non-regulatory method.
POL TANK 3431	As above.	Recast POL TANK 31 as a non-regulatory method.
POL TANK 3532	As above.	Recast POL TANK 32 as a non-regulatory method.
POL TANK 3 <del>6</del> 3	This policy does not give effect to NPSFM Policy 11 (Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided).	Amend POL TANK 33 to read:  POL TANK 33 The Council avoids recognises the actual and
	In particular, the policy provides for the use of "flow maintenance and habitat enhancement schemes" as a way to address over-allocation. They are a compensation method and reference to them must be removed.	potential adverse effects of groundwater abstraction in the Heretaunga Plains Groundwater Quantity Area on:  a) groundwater levels and groundwater
	The plan must focus on creating absolute allocation limits and then bringing water use down to within these limits. Mitigation/compensation measures cannot be a core part of PC9's approach to managing the effects of over-allocation. Instead, over-allocation must be addressed through a real reduction in allocation.	dependent ecosystems b) flows in connected surface waterbodies and water levels in wetlands c) flows of the Ngaruroro River d) groundwater quality through risks of sea water intrusion
	Te Mana o te Wai establishes a three-tiered hierarchy of obligations, requiring that	e) tikanga and mātauranga Māori

	certain uses/values of water are prioritised over others. This is not appropriately reflected in Policies 33-39.	and will:  f) adopt a staged approach to groundwater management that includes:  i. avoiding further adverse effects by not granting new consents to take and use groundwater except as provided for by POL TANK 49  ii. reducing existing levels of water use iii. mitigating the adverse effects of groundwater abstraction on flows in connected water bodies, until water use is reduced to be within allocation limits  iv. gathering information about actual water use and its effects on stream depletion v. monitoring the effectiveness of stream flow maintenance and habitat enhancement schemes vi. including plan review directions to assess effectiveness of these measures.
POL TANK 374	POL TANK 34 does not give effect to NPSFM Policy 11.  Creating a limit without any firm scientific assessment and based on a concern for what is economically sustainable not an appropriate way to set a limit under the.  In addition, the policy provides for the use of "flow maintenance and habitat enhancement schemes" as a way to address over-allocation. They are a compensation method and reference to them should be removed.  The plan must focus on creating absolute allocation limits and then bringing water use down to within these limits. Mitigation/compensation measures are inadequate in managing the effects of over-allocation. Instead, over-allocation must be addressed through a real reduction in allocation.	POL TANK 34  In managing the allocation and use of groundwater in the Heretaunga Plains Groundwater Quantity Area, the Council will:  a) adopt an interim allocation limit of 5090 million cubic metres per year based on Actual and Reasonable water use  b) Except for providing water for stream flow maintenance avoid re-allocation of any water that might become available within the interim groundwater allocation limit or within the limit of any connected water body until there has been a review of the relevant allocation limits within this plan  c) manage the Heretaunga Plains Groundwater Quantity Area as an over- allocated management

		unit and prevent any new allocations of groundwater except as provided for by POL TANK 48  d) when considering applications in respect of existing consents due for expiry, or when reviewing consents, to: i. allocate groundwater the basis of the maximum quantity that is able to be abstracted during each year or irrigation season expressed in cubic meters per year ii. apply an assessment of Actual and Reasonable use (except as provided by POL TANK 48) iii. take into account any water use required as part of a programmed or staged development specified within the existing water permit or associated resource consent, if:  1. the consent holder can demonstrate that the existing investment is dependent on water use over and above Actual and Reasonable use 2. the whole or part of the specified activity or development has not lapsed during the resource consent duration 3. the activity or development is integral to the on going operation of the activity or development for which the permit was issued 4. where applicable, water demand is calculated for rootstock only where there is evidence of a contract for the supply of that rootstock existing as at 2 May 2020 e) mitigate stream depletion effects on lowland streams by providing for stream flow maintenance and habitat enhancement schemes.
POL TANK 385	POL TANK 35 is unclear and could be interpreted to mean:	Delete POL TANK 35.
	that council will only reallocate water to previous holders of permits and	

takes, effectively "grandparenting"; or

 that council will restrict how much water it allocates to those applicants for consents whose consents have expires (still including a degree of grandparenting).

There are risks that this will preserve the environmental status quo, as an existing permit holder may not necessarily be the most appropriate or efficient user of the water.

The approach under POL TANK 35 does not give effect to the NSPFM 2020 and the hierarchy of obligations.

#### POL TANK 396

This policy provides for the use of "flow maintenance and habitat enhancement schemes" as a way to address over-allocation. As noted, this is inconsistent with the NPSFM including the hierarchy of obligations and Policy 11. They are a compensation method, are experimental, and reference to them should be removed.

For example, if water is put into a stream (as 'augmentation') further downstream than where the effects of the depletion are seen, there will still be a habitat loss upstream of the point of compensation. This would be inconsistent with NPSFM Policy 7 (The loss of river extent and values is avoided to the extent practicable).

Over abstraction and overallocation of groundwater on groundwater-dependent ecosystems, for example stygofauna communities, is also contrary to NPSFM Policy 9 (that habitats of indigenous freshwater species are protected). Abstractions which deplete streams must cease when minimum flows are reached in all cases. Stream flow (and other groundwater dependent ecosystems such as wetlands, lakes, springs and stygofauna communities) should be maintained by managing and allocating the groundwater resource sustainably in the first instance.

As worded this policy just allows for, and enables, over-allocation to continue with an ecologically insufficient compensation scheme.

Delete POL TANK 36 and all references to "stream flow maintenance" in PC9. Replace with a new policy that gives effect to NPSFM 11, 7 and 9, which directs protection of groundwater ecosystems including stygofauna.

	PC9 must focus on creating absolute allocation limits and then bringing water use down to within these limits. Mitigation/compensation measures cannot be a core part of the plan's approach to managing the effects of over-allocation. Instead, over-allocation must be addressed through a real reduction in allocation.	
POL TANK 40 <u>37</u>	As above, this policy provides for the use of "flow maintenance and habitat enhancement schemes" as a way to address over-allocation. This is inconsistent with the NPSFM 2020. They are a compensation method and reference to them should be removed.	Delete POL TANK 37 and all references to "stream flow maintenance" in the plan.
POL TANK 4138	As above, this policy provides for the use of "flow maintenance and habitat enhancement schemes" as a way to address over-allocation. This is inconsistent with the NPSFM including the hierarchy of obligations in Te Mana o te Wai. They are a compensation method and reference to them should be removed.	Delete POL TANK 38 and all references to "stream flow maintenance" in the plan.
POL TANK 4 <del>2</del> 39	As above – compensation schemes should not be written into the policies.  NPSFM Policy 11 requires over-allocation to be phased out and the policies must reflect this.	Delete POL TANK 39 and all references to "stream flow maintenance" in the plan.
POL TANK 40	The NPSFM 202 requires Te Mana o te Wai to be given effect to, and over-allocation be avoided and phased out. Allowing water to be available beyond limits fails to give effect to these directions. Exceptions to minimum flows are inconsistent with the NPSFM and risk creating cumulative adverse effects.	Amend POL TANK 40 to read:  The Council will manage river flows and lake or wetland water levels affected by surface water abstraction activities, including groundwater abstraction in Zone 1 Groundwater, during low flow periods so that they meet objectives for aquatic ecosystem health, mauri, tikanga Māori values, and other instream values by applying the minimum flows, flow

		maintenance triggers, and allocation limits specified in Schedule 30, except as provided for by POLs TANK 43, 52 and 49, when considering applications to take and use water.
POL TANK 441	The effects of ground and surface water takes on the Paritua/Karewarewa streams must be managed using cease take at minimum flow and sustainably limiting the allocation of water from this area. Diverting water from the Ngaruroro River to the Paritua Stream or augmenting flows from groundwater simply shifts the effects from one waterbody to another, it does not manage effects, which is required under the RMA and the NPSFM 2020.	Amend clause (a) as  "investigate opportunities for create wetlands creation-to"  Delete clauses (d)-(f).
POL TANK 4 <del>5</del> 2	High flows in rivers have valuable ecosystem functions. They flush out algae and sediment, mobilise the bed (and prevent bed armouring and compaction), trigger fish and macroinvertebrate life-cycle stages, remove weeds and nuisance vegetation growth, and are vital to maintain the natural character and floodplain condition of a river. Water taken at a time of high flow must be subject to allocation limits and there must be limits on the maximum rate that water can be taken at high flows. Such limits are vital to ensure ecosystem health.	Include direction that ensures all water taken at high flows must be subject to high flow allocation limits in accordance with the NPSFM 2020 and in a way that meets Schedule 26 targets.  Delete clause (d).
	Telemetric monitoring is vital to ensure cease takes are being complied with and to inform future allocation of water and resource consent reviews.  Clause (d) must be deleted for reasons outlined earlier. Compensation should not be written into policies as they are inconsistent with RMA and NPSFM direction.	
POL TANK 4 <del>6</del> 3	These are not water use efficiency measures, do not assist with implementing the NSPFM 2020, and should be deleted.	Delete POL TANK 43.
POL TANK 4 <del>7</del> 4	Reliability standards are inappropriate as they are not measures of efficiency and should be deleted.	Delete clause (c). Replace reference to "good management practice" with "best practice".
POL TANK 4 <del>8</del> 5	Amendments are required to ensure that ecosystem health, Te Mana o te Wai, and	Amend policy to reflect the NPSFM Objective and

	water for human health are prioritised over irrigation. Amendments are required to increase consistency with NPSFM 2020.  "Water use change or transfer" is inappropriate for any overallocated waterbody or zone. Any application to transfer water use into an overallocated zone should be declined (and assigned a rule with prohibited activity status).  Applications should also be declined wherever significant adverse effects on ecosystem health are likely.	Policies 1 and 9, and to direct that applications be declined in overallocated zones and where there may be significant adverse effects on ecosystem health.  Delete clauses (b)(i) and (ii), (c)(i) and (e).
POL TANK 4 <u>96</u>	As above, the reference the "flow enhancement and aquifer recharge schemes and any riparian margin upgrades" and needs to be removed.  The Council requires discretion to impose shorter expiry dates on water permits. Long term consents are contrary to sustainable management, particularly under the NPSFM 2020 and as new information on water use is becoming available.	When considering applications to take and use water, the Council will set common expiry dates that enables consistent and efficient management of the resource, and will set durations that provide a periodic opportunity to review effects of the cumulative water use and to take into account potential effects of changes in:  a) knowledge about the water bodies b) over-allocation of water c) patterns of water use d) development of new technology e) climate change effects f) flow enhancement and aquifer recharge schemes and any riparian margin upgrades and the Council: g) will impose consent durations of no longer than specified water quantity area Management Unit expiry dates as specified in Schedule 32 and, in any event no longer than 15 years according to. Future dates for expiry or review of consents within that catchment are every 15 years thereafter

		h) will impose a consent duration of up to 30 years for municipal supply and will impose consent review requirements that align with the expiry of all other consents in the applicable quantity area i) may grant consents granted within three years prior to the relevant common catchment expiry date with a duration to align with the second common expiry date in Schedule 32, except where the application is subject to section 8.2.4 of the RRMP.
POL TANK <u>48</u>	POL TANK 48 is inconsistent with the NPSFM 2020, provides an avenue for cumulative adverse effects to occur and will not assist the Council undertake its functions under the RMA. There is the potential for cumulative effects from multiple takes to cause effects that may not be easily detected through individual applications. The reference to "unforeseen non-commercial needs" is broad, uncertain and undermines NPSFM Policy 11. Water takes below minimum flow and in exceedance of allocation limits must be assigned prohibited activity status.	Delete POL TANK 48.
POL TANK 5149	Section 14(3)(b) of the Act provides for the taking of water for stock drinking and domestic takes that will not cause adverse effects on the environment. However, the taking of water below a minimum flow or minimum level for tree crops, primary production, business operations, and non-consumptive uses is not a matter provided for under section 14(3) of the Act.  POL TANK 49 is also contrary to the NPSFM 2020 as it does not prioritise the health and well-being of water bodies and freshwater ecosystems. Allowing takes below	Delete clauses (d), (e), (f) and (j) from POL TANK 49.
	minimum flow, which has been identified in order to safeguard the life supporting capacity of ecosystems, could have unacceptable adverse effects, including cumulative adverse effects.  The blanket reference to non-consumptive takes in this policy is also inappropriate, particularly as the effects on values of taking water below minimum flows will occur for the length of the river or stream affected before the water is returned to the river.	

POL TANK 5 <u>20</u>	POL TANK 50 does not contain requisite certainty that overallocation will be phased out. POL TANK 50 needs to set allocation limits that will be adhered to. Further water use in overallocated areas must be prohibited. The proposed approach grandparents the current overallocation, it does not phase it out.	Amend to include clear methods with timeframes to phase out overallocation by 2040.
	Timeframes for phasing out overallocation must be included.	
POL TANK 5 <del>3</del> 1	Frost protection uses a large amount of water. Temporary takes may be for any purpose and the duration is not clear.	Delete POL TANK 51.
	These should be subject to allocation limits and minimum flows like all other uses. Water at all flows is vital for ecosystem health protection. Exempting such takes is not consistent with the NPSFM 2020.	
	Non-consumptive takes may still cause adverse effects and must be subject to parameters. For example, requiring water be returned at the same location or within 50 metres distance from that location at most, and within a short timeframe.	
POL TANK 54 <u>2</u>	The adverse effects of run of river damming are permanent. Run of river damming should not be enabled by PC9.	Delete POL TANK 52 and replace with a policy that clearly states dams in river channels will be prohibited.
	Run of river dams, whether on a 'mainstem' or tributary, should be prohibited as they are completely inconsistent with RMA and NPSFM requirements. The effects cannot be avoided, remedied, or mitigated.	
	Any water taken for off-line water storage should also be subject to minimum flows cease takes and high flow allocation limits. The effects of discharge of water from dams on water quality and ecosystem health must be considered.	
POL TANK 5 <del>5</del> 3	Any water taken for off-line water storage should also be subject to minimum flows, cease takes, and high flow allocation limits. The effects of discharge of water from dams on water quality and ecosystem health must be considered.	Add the following to clause (b);  viii. the physical conditions of the active channel, riparian areas, and flood plain, and the life-

	There is no reference to minimum flows and cease takes in this policy, which is inconsistent with the NPSFM and RMA. It would also be appropriate to limit the amount of water taken to a proportion of the current flow. For example, if a river has a median flow of 10 cumecs and the river is flowing at 30 cumecs, water users should not be able to take all water above the median flow, because this would create 'flat' hydrographs by drawing the flow down to 10 cumecs for long periods and limiting natural variation in flow.  There should be a higher threshold to start taking 'high flow allocations' than the median flow. The median flow in many Hawke's Bay waterbodies is quite low. 'High flow' allocations should only be available when the river is at a high flow.  Clause (x) appears to contain grandparenting which will not assist the Council in meeting its responsibilities under section 30 of the RMA or in implementing the NPSFM 200.	Amend the introductory words to clauses (viii) to (x) as follows:  and will limit the amount of flow alteration so that the taking of surface water does not cumulatively adversely affect the frequency of flows above three times the median flow by more than a minor amount and provided that:  viii. the high flow take ceases when the river is at or below the median flow ix. such high flow takes-do not cumulatively exceed the specified allocation limits comply with the flows, levels and allocation limits in Schedule 30, and do not breach any limits in Schedule 31 x. any takes to storage existing as at 2 May 2020 will continue to be provided for within new allocation limits and subject to existing flow triggers xi. high flow takes are only available above three times median flow.
POL TANK 5 <del>6</del> <u>4</u>	POL TANK 54 is contrary to the RMA's purpose to safeguard "the life-supporting capacity of air, water, soil, and ecosystems." Water storage is a third order priority under the NPSFM 2020 at best and streamflow augmentation offends against NPSFM Policies 8 and 11.  POL TANK 54 does not reflect the scientific consensus on water storage and	Delete POL TANK 54.
POL TANK <u>5</u> 7 <u>5</u>	"augmentation."  This is a method not a policy.	Recast as a method and remove reference to
- <b>-</b>		"environmental enhancement" should this be

		referring to compensation for adverse effects rather than managing allocation.
POL TANK <u>5</u> <u>8</u> <u>6</u>	The NPSFM requires protection of habitat and river extent and values (e.g., Policy 6, 7, Appendix 1A), and consideration of 'Natural form and character' under Appendix 1B. RMA s6(a) also requires preservation of natural character of rivers and their margins.  The effects of run of river dams are significant, effectively irreversible, and are inconsistent with the NPSFM 2020 and RMA. Accordingly, policy needs to direct prohibition of damming everywhere (except for "off line" storage).	Amend to read:  The Council will protect the instream water values and uses identified in OBJs TANK 8 and 9 for the rivers and tributaries in the Ngaruroro and Tūtaekurī Rivers and their tributaries catchments, the Taruarau, Omahaki, Mangatutu and Mangaone Rivers by prohibiting the construction of dams on the mainstem of those rivers.
POL TANK <u>5<del>9</del>7</u>	Iwi input into this POL TANK 57 as required by NPSFM Policy 2.  "Environmental enhancement" is undefined. If this is to capture "flow maintenance and habitat enhancement schemes" or mitigation or compensation by another name then this is must be removed POL TANK 57 as it is contrary to NSPFM Policy 11.	Delete clause (a).
RULES		
TANK 1	In order for PC9 to give effect to the NPSFM 2020 and for council to meet its responsibilities under s 30 of the RMA, farming needs to be regulated and require consent:  a) in priority catchments with identified water quality issues specified in Schedule 27; and b) all catchments where water quality targets are not being met in Schedule 26.  Permitting land use activities which discharge contaminants to water that have current significant adverse effects on aquatic life fails to meet section 70(1)(g) of the RMA.	Amend and assign TANK 1 as either restricted discretionary or discretionary status for use of production land (farm land) in priority catchments (with water quality issues as specified in Schedule 27 "Priority Catchments") or where water quality targets are not being met. Apropos restricted discretionary status, include the listed "Matters of Control/Discretion" referred in TANK 2 as matters of discretion, alongside the additional matters of discretion:
	Devolving management of land use effects on water quality and aquatic life is	x) audit and review of all farm plans (including

	uncertain and inappropriate.	catchment collectives and industry programmes if retained)
	Where farming is undertaken in a manner that will not address the water quality issues in priority catchments or will not contribute to achieving water quality targets in Schedule 26 by 2040 Council needs the discretion to decline consent or grant	Include a map of the priority catchments.
	consent with rigorous conditions. Restricted discretionary or full discretionary is appropriate in these catchments in order to meet the NPSFM 2020 and section 70(1)(g) of the RMA and address the risks of cumulative adverse effects.	Include a new rule providing for use of production land (farm land) as a permitted activity for farming below the size thresholds in referred in the "Activity" column of TANK 1 as a permitted activity.
TANK 2	There is insufficient scope within the matters for control to ensure the Council meets its responsibilities under the NPSFM 2020 or address cumulative adverse effects.	Amend Rule 2 so that the use of productive land for farming that is not in priority catchments or where water quality objectives in Schedule 26 are being
	Conditions require amendment to make it clear that discretion is held over matters to achieve the target attribute states, not the target attribute states themselves.	met is controlled.  Amend the matters for control:
		Amend the matters for control.
		1. Any measures required to reduce the actual or
		potential contaminant loss occurring from the
		<pre>property to achieve t∓he target attribute states in</pre>
		Schedule 26 for the catchment where the activity is
		being undertaken <del>and any measures required to</del>
		reduce the actual or potential contaminant loss
		occurring from the property, taking into account
		their <del>costs and</del> likely effectiveness and including
		performance in relation to industry good
		management practice and requirements for:
		a) Efficient use of nutrients and minimisation of
		nutrient losses
		b) Wetland management
		c) Riparian management
		d) Management of farm wastes
		e) Management of stock including in relation to

water ways and contaminant losses to ground and surface water f) Measures required to maintain or improve the physical and biological condition of soils so as to reduce risks of erosion, movement of soil into waterways, and damage to soil structure g) Measures to prevent or minimise any adverse effects on the quality of the source water used for a Registered Drinking Water Supply irrespective of any treatment process for the Registered Drinking Water Supply. Include additional matters of control: x) measures to avoid adverse effects on lifesupporting capacity, ecosystem processes, and indigenous species. x) audit and review of all farm plans (including catchment collectives and industry programmes if retained) **TANK 3 Stock** Stock access can cause significant adverse effects on indigenous freshwater species Reinstate and replace with a rule requiring: and their habitat by causing slumping, pugging or erosion to the beds and banks of Access waterbodies. Effects include destruction of indigenous fish spawning habitat, and a. stock to be excluded from all waterbodies when increased sediment and nutrient input into the waterways. breakfeeding on pasture or cops on land of any slope; b. cattle, deer, pigs, and sheep be excluded from The inclusion of small waterways (including headwater, intermittent and ephemeral streams) is critical to ensuring impacts on freshwater ecosystem health and water rivers (including headwater, intermittent and quality are reduced or avoided. Small headwater streams are important for ephemeral streams) less than 3 metres wide; ecosystem health and for water quality contaminant reductions. The majority of c. cattle, deer, pigs, and sheep be excluded from nutrient loads to freshwater enter small rivers and streams. outstanding waterbodies, coastal marine area,

	Preventing stock access to estuarine areas ensures the plan change gives effect to NZCPS Policy 21(d), which requires stock to be excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment within a prescribed timeframe to improve degraded water quality.  The exclusion of stock from indigenous fish habitat, particularly threatened taxa such as īnanga, is consistent with the NPSFM. It is also consistent with NZCPS Policy 11 given the diadromous lifecycle of certain indigenous fish. NZCPS Policy 11(a) is applicable to threatened taxa including īnanga, and NZCPS 11(b)(ii) and (v) applicable to spawning habitat and migratory fish routes.	adjoining intertidal areas and other water bodies and riparian margins in the coastal environment; d. cattle, deer, pigs, and sheep be excluded from indigenous fish spawning habitat; and e. a 10 metre minimum setback from the above areas.  Ensure activity status defaults to discretionary where the above requirements cannot be met, and to noncomplying in the case of outstanding waterbodies, the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment.  Include an advice note that refers users to a GIS layer of comprehensive and current fish spawning sites identified by the Council, or such alternative relief as to allow users to access a comprehensive and current inventory of fish spawning sites identified by the Council.
TANK <del>5</del> 4	Council requires discretion to decline consent for intensification, particularly in catchments which are priority catchments in Schedule 27 or where water quality targets in Schedule 26 are not being met.	Reclassify TANK 4 as a discretionary activity.  Include additional "Conditions/Standards/Terms":  x) the activity does not occur in the Schedule 27
		Priority Catchments x) the activity complies with the targets in Schedule 26
TANK <del>6</del> 5	As above.	Reclassify TANK 5 as a non-complying activity.
TANK <del>7</del> 6	Further amendments are required to TANK 6 address cumulative adverse effects and	Reinstate clause (b) as notified with amendment to

ensure consistency with the NPSFM 2020, particularly Policies 9 and 11. clarify that TANK 6(b)(i) and (ii) apply together. The amendments and additions to clause (b) in the decision version provide for Amend clause (g) to read: existing takes beyond what is provided for in section 14(3)(b) of the RMA and are The rate of take from a river does not exceed inconsistent with the NPSFM. whichever is the lesser of: Permitted takes of surface water less than 5m<sup>3</sup>/day require an instantaneous rate of take (<10% of instantaneous flow or 2 l/s, whichever is the lesser) to protect low flows a) 10% of the instantaneous flow at the point and in small waterbodies from being over-abstracted by permitted takes. time of take, or b) An absolute limit of 2 l/s When a river is at or below minimum flow, aquatic ecosystems are likely to be under considerable stress. This will be a particular concern for smaller water bodies where aquatic life may already be under stress by virtue of poor water quality. Include a condition requiring notification of the take, location, volume and rate to be provided to council within 1 month or the take commencing or this plan becoming operative. As above, the amendments and additions to clause (b) in the decision version provide Reinstate clause (b) as notified. TANK 87 for existing takes beyond what is provided for in section 14(3)(b) of the RMA and are Delete "Other than aquifer testing for which the rate inconsistent with the NPSFM. of take is not restricted" from clause (c) and assign Having no restriction on the taking of water for aquifer testing is not appropriate. this activity as controlled. Include matters of control Testing can pump thousands of cubic metres of water from an aquifer in a very short to address adverse environmental effects, including period, and could have an adverse effect. As such, the taking of water for aquifer but not limited to: testing should be assigned controlled activity status. x) measures to avoid adverse effects on lifesupporting capacity, ecosystem processes, and indigenous species x) measures to prevent saline intrusion Amend (e) to read: The take shall not cause changes to the flows or

		levels of water in any connected wetland or surface water body.
TANK <del>9</del> 8	This rule does not give effect to the NPSFM. Stream flow augmentation is inappropriate.	Delete reference to stream flow augmentation schemes.
		Insert "ecological effects" as a matter of discretion.
TANK <del>10</del> 9	As above.	Delete rule.
TANK 1 <u>40</u>	This rule allows takes for frost protection, water schemes, temporary non- consumptive takes, and staged development to take below minimum flow and outside allocation limits. There is the potential for cumulative effects from multiple	Ensure all takes outside allocation limits in Schedule 30 are prohibited.
	takes to cause effects that may not be easily detected through individual applications. Such exceptions are inconsistent with the NSPFM 2020.	Delete exceptions to clause (b) which refer to frost protection, temporary takes, non-consumptive takes, takes of water associated with and from or
	Temporary takes may be for any purpose and the duration is not clear. Non-consumptive takes may still cause adverse effects. The effects on in-stream values of taking water below minimum flows will occur for the length of the river or stream	dependant on release of water from a water storage impoundment, or managed aquifer recharge scheme, and water required as part of a
	affected before the water is returned to the river.  Takes for frost protection should be provided for in the overall allocation.	programmed or staged development existing as at 2 May 2020 that is not otherwise Actual and Reasonable water use.
TANK 11	Non-complying activity status will allow case-by-case assessments of consumptive takes exceeding allocation limits. It is an inappropriate way of managing cumulative	Delete TANK 11 and make consequential amendments to TANK 12 to ensure all takes outside
Groundwater take	adverse effects and does not give certainty that over-allocation will be avoided in accordance with NPSFM Policy 11.	of the allocation limits in TANK 10 are prohibited.
TANK 14	Dams are extremely damaging ecologically and are not consistent the NPSFM, in particular Policies 7, 8 and 9.	Amend rule to prohibit all in-stream dams.
Damming water	Allowing dams on rivers does not prevent the loss of their extent and values, does not ensure habitat is protected, and does not preserve natural character.	

TANK 15	Taking and using water from an impoundment can have a range of adverse effects.  Discretion should not be limited.	Reclassify TANK 15 a discretionary activity.
Take and use		
from storage		
TANK 1 <del>6</del> 7	The rule framework for damming is already permissive and has the potential to have	Reclassify TANK 18 as a prohibited activity.
	significant adverse effects on the values of aquatic ecosystems.	
TANK 17 <u>8</u>	TANK 18 needs to be widened to protect all rivers from 'run of river' / in-stream schemes.	Extend prohibition to all rivers.
Damming		
water	Allowing dams on rivers does not prevent the loss of their extent and values, does not ensure habitat is protected, and does not preserve natural character. Accordingly, it is contrary to the NPSFM Objective and Policies 7, 8, and 9 and section 6(a) of the	
	RMA.	
TANK 1 <del>8</del> 9	A rule framework for stream flow compensation does not address root causes of over- allocation and need to be prohibited. It should not be available to water users as a	Reclassify TANK 19 as a prohibited activity. Make any consequential amendments to ensure stream
Stream Flow Maintenance	mechanism to address stream depleting effects and are contrary to NPSFM Policy 11.	flow compensation and discharge of groundwater into surface water into the Tūtaekurī, Ahuriri,
and Habitat	Stream flow maintenance schemes are inappropriate for long-term use in a consent,	Ngaruroro and Karamū Catchments defaults to
Enhancement	do not protect ecological values, and are not an appropriate mechanism to	prohibited activity status.
Scheme	implementing the NPSFM 2020.	
	"Maintenance," "augmentation," and "habitat enhancement" are not ecologically	
	appropriate terms to use and are not consistent with national mitigation and offsetting guidelines.	
TANK 20	As above.	Delete TANK 20
Stream Flow		
Maintenance		
and Habitat		

Enhancement		
Scheme		
TANK <del>19</del> 21 Small scale	TANK 21 does not adequately meet the requirements of s 70 of the RMA.	Reclassify TANK 21 as a discretionary activity.
stormwater diversion and discharge	The existing standards are ambiguous, imprecise and require value judgements which create significant uncertainty and do not ensure the NPSFM Objective and Policies will be given effect to. The standards leave it to plan users to determine whether compliance with the standards will be achieved which does not prevent the risk of adverse environmental effects. They do not exclude the discharge of sediments and do not provide assurance that the Schedule 26 targets will be met.	
	Given the lack of clear standards and the potential for significant adverse effects on aquatic life, including cumulative effects, higher activity status is warranted.  Otherwise, the conditions must be revised to be clear, measurable and enforceable.  Revised conditions must link to Schedule 26 and reflect s 70(1)(g) of the RMA.	
TANK 2 <del>0</del> 2	The matters of discretion are too narrow to ensure the NSPFM is given effect to and that the objectives and limits in Schedule 26 are met.	Reclassify TANK 22 as a discretionary activity.
Small scale stormwater diversion and discharge		
TANK 2±3  Diversion and discharge from local authority networks	The diversion and discharge of stormwater can cause locational and cumulative impacts and is not appropriate as a controlled activity. The inability to refuse consent for these activities is inconsistent with NPSFM Policy 9. Discharges of stormwater into īnanga spawning habitats can disrupt spawning and egg development through changes to the natural salinity of spawning habitats, causing eggs to hatch too quickly and larvae being destroyed.	Reclassify TANK 23 as a restricted discretionary activity and include the listed "Matters of Control/Discretion" referred in TANK 23 as matters of discretion, alongside the additional matters of discretion:  x) impacts on native fish migration and spawning
Hetworks	The controlled activity standards do not enable plan users to determine whether compliance with the controlled activity standards can be achieved and refer to imprecise terms that require judgements to made by the council.	habitats.

TANK 2 <u>24</u> Stormwater discharge from industrial or trade premises	Further matters of discretion are required to ensure the NPSFM 2020 Objective and Policies are given effect to. Matters for discretion should include references to ensuring water quality objectives and targets can be achieved by 2040 and native fish spawning habitats.	Include as additional matters of discretion reference to the water quality objectives and targets in Schedule 26 and native fish spawning habitat.
TANK 2 <del>3</del> 5	Diversion and discharge of stormwater that do not meet the preceding rules have adverse effects on both freshwaters and marine habitats, aquatic life and ecosystem health that must be avoided.	Reclassify TANK 25 as a non-complying activity.
6.9 AMENDMEI	NTS TO RRMP RULES	
RRMP Rule 7	<ul> <li>A minimum 10 metre setback is required to:</li> <li>a. ensure consistency with the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (regulation 50);</li> <li>b. reduce sediment loads to water bodies; and</li> <li>c. prevent significant adverse effects on indigenous freshwater species and ecosystems.</li> </ul>	Amend clause (h)(i) to provide for a 10 metre minimum setback in all circumstances.  Amend to specify that cultivation does not occur in critical source areas (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020).
	<ul> <li>This is particularly important for wetlands and lakes given their static nature, longer residence time of water, and limited flushing flows, compared to that in rivers.</li> <li>The exceptions in clauses (f)(i) and (i)(i) must be removed:</li> <li>a. It is unclear how vegetation clearance or cultivation can lead to an improvement in riparian condition.</li> <li>b. It is inconsistent with the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 – for example, regulations 38, 39 and 50.</li> <li>c. An exception from the requirement to maintain setbacks for "improvements to riparian management for water quality/biodiversity purposes" lacks the requisite clarity and certainty for a permitted activity rule.</li> </ul>	Delete the exception in clauses (f)(i) and (i)(i) "where cultivation is part of improvements to riparian management for water quality/biodiversity purposes as specified in the relevant Freshwater Farm Plan or Catchment Collective Plan."

	d. Freshwater Farm or Catchment Collective Plans are not specific to riparian restoration and their compliance may be difficult if not impossible.	
RRMP Rules 32 and 33	RRMP Rules 32 and 33 lacks clear and precise limits for a permitted activity standard. These rules need to link to the requirements in Schedule 26.	Amend to include reference to the need to comply with water quality objectives and targets in Schedule 26.
RRMP Rule 62	The listed matters of control are insufficient to ensure adverse effects caused by saline intrusion do not occur.	Add additional matters of control:  x) saline intrusion  x) adverse effects on groundwater dependant species and ecosystems  x) adverse effects on structures as a result of subsidence groundwater abstraction and uplift / liquefaction from groundwater injection / recharge
RRMP Rule 62A Transfer of permits to take and use water	"Flow enhancement schemes" undermine the NPSFM Objective and are contrary to NPSFM Policy 11.	Delete clause (h)(ii) "for transfers that enable the operation of a flow enhancement scheme (ref POL TANK 36)". Make consequential amendments to other rules and policies to ensure transfer of water permits into over-allocated ground and surface water bodies defaults to a prohibited activity status.
RRMP Rule 67	The rule has the potential to cause significant adverse effects on native freshwater fauna and their habitats. An activity of this nature should only be allowed through resource consent, as oversight is required to ensure the passage of fish is maintained, or is improved, by instream structures, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats in accordance with the NPSFM 2020.	Reclassify rule 67 as a discretionary activity rule.
	The conditions/standards/terms are inadequate to ensure NPSFM Policies 6, 7, 9 and OBJ 37A of the Hawke's Bay Regional Resource Management Plan are implemented. Further, the conditions lack the requisite certainty for a permitted activity rule, leaving it to the plan user to make judgements and determine whether imprecise standards will be achieved (for example, whether erosion or deposition will occur).	

RRMP Rule 68	Damming presents a barrier to indigenous fish passage, resulting in reduction of the distribution and abundance of migratory fish in a waterway and cause gradual decline in, or even loss of, fish species from some rivers and streams.	Amend "Conditions/Standards/Terms" to include the following:
	Further amendments are required to ensure the rule implements NPSFM Policies 6, 7,	(x) the activity does not impede the safe passage of indigenous fish both upstream and downstream
	9 and OBJ 37A of the Hawke's Bay Regional Resource Management Plan.	(x) the activity does not take place in threatened species habitat
		(x) the activity does not take place in an
		outstanding freshwater body
RRMP Rule 71A	River control and drainage works can have significant adverse effects on physical habitat in rivers. It is inappropriate that such works can occur without oversight.	Reclassify 71A as a controlled activity.
	Permitted activity status could lead to works that cause adverse effects on the natural	Include the following additional conditions under
	character and freshwater values that are contrary to NPSFM Policies 7 and 9.	"Conditions/Standards/Terms":
		x) the activity does not contribute to a decline in
		the median Natural Character Index (or Habitat
		Quality Index) of more than 15% or component score of more than 40%.
		x) the activity does not involve the introduction or
		planting of any non-native species
		x) the activity does not occur in an outstanding water body
		Include the following Matters for Control/Discretion:
		x) effects on:
		i. hydrological values
		ii. ecosystem health and indigenous
		biodiversity iii. river extent
		iv. natural character values

SCHEDULES			
SCHEDULE 26  General comments	Schedule 26 is titled: 'Freshwater Quality Objectives', although other provisions of PC9 refers to Schedule 26 as containing water quality targets or target attribute states. PC9 is unclear as to whether the water quality numeric attribute states in Schedule 26 are objectives or targets.	1.	Amend title and other PC9 provisions that refer to schedule 26 to be clear and consistent regarding wording.
	Timeframes should be shortened to be within the life of the plan or if longer should include interim target attribute states (set for intervals of not more than 10 years) to assess progress towards achieving the target attribute state in the long term (as per NPSFM 3.11(6)(a)). Dates are required to achieve the long term target attribute states and interim targets (set at intervals of no more than 10 years) to implement the NOF.	2.	Change timeframes for achieving target attribute states to have interim targets (not more than 10 years from when the plan is operational) within the life of PC9 to assess progress towards long term target attribute states. Ensure interim targets are ambitious.
	It is unclear what a 'default' monitoring site is.	3.	Clarify what is meant by 'default' monitoring site
	The term 'critical value' used in column 9 of the schedule is not defined in the NPSFM 2020 or PC9. It's use (and usefulness) is unclear.	4.	Delete 'critical value' and 'also relevant for' columns, and instead refer to terminology
	The period of record used to determine whether a waterbody is meeting or exceeds the attribute state in Schedule 26 needs to be defined. For example, MCI specifies an average at flow < median but does not define over what period the average is to be calculated (e.g., 5-years). It is assumed that the NPSFM methods in Appendix 2B are		consistent with NPSFM, such as values used in NPSFM 2020 Appendix 1A and 1B.
	to be applied, but this is not specified. Further, there is no technical reason why MCI average from flows below median should be specified as the measurement system for this attribute. National standards, methods and protocols specify conditions for when macroinvertebrate data should be collected and this is not required to be stated as the measuring system, it is incorrect to do so.	5.	Clarify what is required regarding the length of recording periods for data / data collection standards (e.g., the period of record used to determine whether a waterbody is meeting or exceeds the attribute state in Schedule 26 needs to be defined).
SCHEDULE 26	Many of the target attribute states columns/rows/cells are 'unpopulated', with a note that they will be set through the Kotahi plan change. In other cases, attributes from	1.	Include target attribute states now for those water management areas specified to be
Attributes	that they will be set through the Rotali plan change. In other cases, attributes from the NPSFM have not been included, or placeholders have been left for entire sections (e.g., on threatened species, mahinga kai, mātauranga Māori, and wetlands). This is		addressed through a future plan process (Kotahi) / those attributes that are currently "not

inappropriate and many of these cells could be filled now, using targets from the NPSFM, the proposed plan, or expert knowledge.

In other places, targets have been inserted for some catchments or rows (e.g., deposited fine sediment at 20% in the Ngaruroro) but not in others (e.g. the Ahuriri). It is unclear why this is the case. These should be populated.

The decision report notes that "detailed groundwater attributes are left to the Kotahi Review. To be fit for human consumption water needs to meet NZ drinking water standards (NZDWS), and these are presently under review." We note that the Drinking Water Standards are no longer under review and Groundwater quality limits can be set. We also note that it appears from Schedule 26 that groundwater targets *have* been included by the decision (at least for 2040), for example the target is "Within guidelines specified in the Drinking Water Standards for New Zealand." and "< 1" for E. Coli and nitrate-nitrogen. It is unclear what is being left for 2040 and what is considered 'missing' now. Schedule 26 should be comprehensively populated.

The decision notes that "it was agreed [in expert conferencing] that each of temperature, turbidity and pH could be deleted as possible attributes in Schedule 26, as should the removal of the deposited sediment target... We support these changes to Schedule 26 as agreed in the JWS." We do not agree with this and consider these attributes should be reinstated. For example, deposited sediment is a critical factor affecting the ecosystem health of rivers, particularly benthic macroinvertebrate community health and the spawning habitat of indigenous fish. Confusingly, attribute states for deposited sediment seem to have been retained in the plan despite this note in the decision and are largely consistent with national guidelines from Clapcott et al. (2011). We support these and the plan should be amended to ensure they apply in all waterbodies.

- populated" i.e., (at least) deposited fine sediment, the fish index of biotic integrity (IBI), ecosystem metabolism, temperature, pH, groundwater, and other contaminants such as heavy metals and pesticides.
- 2. Regarding threatened species, mahinga kai, and mātauranga Māori, if specific targets cannot be set for each FMU/management area, insert a 'general' narrative target for each. E.g., the GWRC NRP target for mahinga kai is: "Mahinga kai species, including taonga species, are present in quantities, size and of a quality that is appropriate for the area and reflective of a healthy functioning ecosystem. Huanga of mahinga kai as identified by mana whenua are achieved." (With footnote: Appropriate for the area means consistent with what would be expected when the ecosystem is in a natural healthy condition.)
- Regarding wetlands, take the targets for area from the objectives and translate these to schedule 26. Include a target for wetland condition using the 'wetland condition index'.
- 4. Regarding lakes, insert relevant targets from the NPSFM 2020.
- Regarding deposited fine sediment, include targets as per NPS Table 16. Where a specific value cannot be determined easily (as per the NPS), use a default of 20% fine sediment cover as

## **Periphyton Biomass**

There are only two sites at which periphyton biomass is monitored in the TANK catchments (lower Ngaruroro and upper Tūtaekurī Rivers). The attribute state to provide for ecosystem health at the Ngaruroro site is set at the NPS FM B band of 120mg/m2 whereas a periphyton biomass 2040 target attribute states for the Tūtaekurī River are deferred to the Kotahi Plan (even though the baseline state is currently in the B band of the NPS FM). It is unclear whether periphyton biomass at the NPS FM B band will be adequate to protect ecosystem health in the upper Tūtaekurī River. 50 mg/m2 chlorophyll a is associated with a good state of benthic biodiversity (Biggs 2000), whereas 120 mg/m2 is more closely aligned with trout habitat outcomes in the literature.

#### Macrophytes

Not all macrophytes create adverse effects (e.g., indigenous macrophytes can be positive indicators of ecosystem health). Submerged nuisance macrophytes (e.g., invasive weeds) however can adversely affect ecosystem health and dissolved oxygen. This should be clarified in the wording of the attribute.

Nuisance macrophytes may also have adverse effects on other lowland streams in the TANK catchments. Macrophytes are not included as attributes for the lowland streams in the Tūtaekurī catchment. Schedule 26 should be amended to include all lowland rivers and streams to reduce the potential effects on ecosystems health from nuisance macrophyte growth.

#### DIN and DRP

per the recommendations of Clapcott et al. in the Sediment Assessment Methods.<sup>2</sup>

- 6. Reinstate turbidity (visual clarity) targets.
- 7. Populate cyanobacteria and rooted macrophytes targets
- 8. Raise/reinstate target attribute states to values/targets recommended by the s42A officer's report, where the decision adopted lower targets. E.g., Reinstate the higher MCI scores that were lowered by the decision; reinstate the use of ANZECC guidelines where they were removed.
- 9. Include measures of and targets for physical habitat and natural character condition, such as using the Natural Character / Habitat Quality Index or similar (this was addressed in F&B's original submission and in the evidence of Tom Kay). Include Rapid Habitat Assessment targets as an absolute minimum (these are already recorded and reported across some of the region).<sup>3</sup>
- 10. Amend the periphyton biomass target attribute state 2040 for the upper Tūtaekurī River to "A" (<50 mg/m2).

<sup>&</sup>lt;sup>2</sup> https://www.envirolink.govt.nz/assets/R4-1-Sediment-Assessment-Methods-Protocol-and-guidelines.pdf

<sup>&</sup>lt;sup>3</sup> https://www.stats.govt.nz/indicators/freshwater-physical-habitat/

We disagree with the decision reports statement that "there is no strong link between nutrient concentrations and periphyton or macrophyte biomass in rivers and streams." (p. 69) and "there is no determinative link between N concentrations in rivers and streams and periphyton growth," (p. 70). We do not consider the ANZECC guidelines and Dr Haidekker's recommendations to be "too conservative." (p. 70).

Dissolved inorganic nitrogen (DIN) and dissolved reactive phosphorous (DRP) are key nutrients in managing periphyton, macrophyte, cyanobacteria growth and macroalgae in waterbodies, including estuaries. The numeric attribute states for DIN appear to be appropriate to provide for ecosystem health in most cases. However, DRP in the lower Ngaruroro and Tūtaekurī Rivers and tributaries may not be stringent enough to manage periphyton biomass or cover to meet those attribute states. The critical values should be ecosystem health as algal growth is not a freshwater value, it is an attribute.

## Nitrate and ammonia

Nitrate nitrogen and ammoniacal nitrogen are managed to avoid toxic effects on aquatic life for ecosystem health. However, the concentrations at which nitrogen has adverse effects on ecosystem health are much more stringent than those for toxicity and in all cases for the TANK catchments nitrate and ammonia attribute states will be overridden by dissolved and total nitrogen needed to manage for periphyton, macrophyte, cyanobacteria and estuarine health. The A band toxicity attribute state from the NPS FM for nitrate and ammonia in all catchments is supported as an important 'backstop' to ensure nitrate and ammonia do not have toxic effects on sensitive aquatic life.

# **Temperature**

Temperature is a critical stressor of aquatic life and ecosystem health. It is unclear what the reference state in Schedule 26 is for temperature in each 'FMU' so it is difficult to see how the temperature change increments might affect ecosystem health and other freshwater values or how they will be measured over time.

- 11. Amend the attribute to be named: 'Submerged nuisance macrophytes'.
- 12. Include macrophytes as an attribute for all lowland rivers and streams in the TANK catchments.
- 13. Delete 'algal growth' and amend the critical values for DIN and DRP to ecosystem health.
- 14. Amend the DIN and DRP attribute states to ensure these will achieve periphyton and other aquatic life outcomes associated with ecosystem health.
- 15. If reference to critical values is retained in Schedule 26, amend the critical value for nitrate and ammonia from 'Toxicity' to 'Ecosystem health'.
- 16. Retain groundwater quality by including 'baseline state' data and ensuring objectives which do not allow degradation of the Heretaunga Aquifer are included. This should include moving the 1 mg/L nitrate-nitrogen target forward from the current 2040 position, unless clear data can be provided showing a slower transition (with interim goals) is required.

Management of maximum water temperatures is needed in Schedule 26. Both maximum temperature and temperature change (because of activities managed by PC9 such as point source or stormwater discharges) are needed in Schedule 26.

#### Groundwater

Nitrate in groundwater can have adverse effects on ecosystem health and aquatic life when it enters surface water systems (as well as the aquatic life of groundwater dependent ecosystems, including stygofauna). Managing groundwater quality to avoid toxic effects when it reaches surface water provides some protection for aquatic life in surface water and groundwater dependent ecosystems. This objective applies to all groundwater in the TANK catchments and is supported. However, the quality of groundwater in the Heretaunga Aquifer must not be allowed to degrade where quality is currently better than the attribute state.

## Physical habitat and natural character

Currently, there are no attributes to manage physical habitat quality (one of the 5 key components of ecosystem health – NPS Appendix 1A) or 'natural form and character' (Appendix 1B). Physical habitat is one of the key components of ecosystem health. It is also a key requirement of the NPSFM and RMA. Policy 9 of the NPSFM (2020) is "The habitats of indigenous freshwater species are protected". And "Habitat – the physical form, structure, and extent of the water body, its bed, banks and margins; its riparian vegetation; and its connections to the floodplain and to groundwater" is a compulsory value in Appendix 1A of the NPSFM 2020. In the RMA, "the preservation of the natural character of... rivers and their margins, and the protection of them from inappropriate subdivision, use, and development" and "the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna" are matters of national importance (s6). It is therefore imperative that a measure of physical habitat condition and a mechanism to prevent its degradation (or enable its improvement) are included in the plan.

	The plan needs to include measures and targets for physical habitat and natural form and character across all waterbodies to meet the requirements of the NPSFM 2020.	
SCHEDULE 29 Catchment Collective, Industry Programme and Freshwater Farm Plan	The provisions regarding Industry Programme and Catchment Collectives are uncertain and ambiguous and do not provide for freshwater management in a way that is consistent with the NPSFM.	Delete Schedule 29 insofar as it provides for Industry Programme and Catchment Collectives  Amend Schedule 29 re. farm plans:  Amend to align as much as possible with requirements in draft farm plan regulations as per RMA.
SCHEDULE 30 Flows, Levels, and Allocation Limits (Overall)	Stream flow maintenance schemes are not consistent with direction in the NPSFM (2020).	Amend:  The minimum flow is the flow at which surface water and Zone 1 Groundwater, groundwater takes must cease where there is no appropriate stream flow maintenance scheme, or a water user does not participate in a stream flow maintenance scheme.  The flow maintenance trigger is the flow which stream flow maintenance schemes must maintain for participating water users to continue taking water.
SCHEDULE 30 Flows, Levels, and Allocation Limits	There are no minimum flows set for ground or surface water in the Ahuriri catchment. This is inconsistent with NPSFM 2020 direction, including 3.16 which states "Environmental flows and levels must be expressed in terms of the water level and flow rate".	Insert flows for Ahuriri Water Quantity Area.

Ahuriri		
SCHEDULE 30 Flows, Levels, and Allocation Limits Karamū	It needs to be made clear that minimum flows and allocation limits apply to surface water in the Awanui Kawerawera/Paritua, Irongate, Louisa, Mangateretere, Karamū and Raupare streams and rivers – as is the case for Poukawa (including Lake Poukawa). It is not clear whether connected groundwater in the catchments listed above is managed to ensure minimum flows and allocation limits will be exceeded.	Clarify that minimum flows and allocation limits apply to surface water in the Awanui Kawerawera/Paritua, Irongate, Louisa, Mangateretere, Karamū and Raupare streams and rivers.
SCHEDULE 30 Flows, Levels, and Allocation Limits Ngaruroro	Modelling by HBRC indicates that a minimum flow of 2400 l/s for the Ngaruroro River at Fernhill provides only a 44% level of habitat protection for torrentfish (and other fast-water fish), 47% for invertebrates, 86% for moderate-water fish, and 100% for slow-water fish. <sup>4</sup> Torrentfish require 4200 l/s and rainbow trout require 3900 l/s to be afforded a 90% level of habitat protection. <sup>5</sup> This low level of protection is inconsistent with the hierarchy of obligation in Te Mana o te Wai, which clearly states that the health and wellbeing of water bodies and freshwater ecosystems must be prioritised. The NPSFM also states that environmental flows "must be set at a level that achieves the environmental outcomes for the values relating to the FMU or relevant part of the FMU".  While values have not been identified through the NOF process, the PC9 notes a range of values in the introduction, including ecosystem health. It also notes "This Plan also recognises Te Mana o te Wai, which puts the mauri of the waterbody and its ability to provide for Te Hauora o te Tangata (the health of the people), Te Hauora o te Taiao (health of the environment) and Te Hauora o te Wai (the health of the waterbody) to the forefront of freshwater management."	Increase the minimum flows for Ngaruroro at Fernhill to provide greater habitat at minimum flow for torrentfish and other fast-flow indigenous fish, and macroinvertebrates.

<sup>&</sup>lt;sup>4</sup> Wilding, T. (2018). Addendum to fish habitat modelling for the Ngaruroro and Tutaekuri rivers (Report No. 4990 – RM 18-09). HBRC. <a href="https://www.hbrc.govt.nz/assets/Document-Library/TANK/TANK-Key-Reports/4990-Addendum-Fish-Habitat-Modelling-Ngaruroro-Tutaekuri-010418.pdf">https://www.hbrc.govt.nz/assets/Document-Library/TANK/TANK-Key-Reports/4990-Addendum-Fish-Habitat-Modelling-Ngaruroro-Tutaekuri-010418.pdf</a>

<sup>&</sup>lt;sup>5</sup> Johnson, K. (2011). Lower Ngaruroro River Instream Flow Assessment. HBRC. https://www.hbrc.govt.nz/assets/Document-Library/Projects/TANK/TANK-Key-Reports/Ngaruroro-Flow-Assessment-2011.pdf

	Torrentfish are an at risk and nationally declining indigenous fish species found only in Aotearoa New Zealand. There are also at least 675 species of macroinvertebrate in Aotearoa (others are probably undiscovered), at least 26% of which are threatened with or at-risk of extinction (many others are data deficient) <sup>6</sup> . Their habitat is not adequately protected by the minimum flow proposed in PC9.	
	There is an inconsistent approach in Schedule 31 to protecting indigenous fish and aquatic life between the Ngaruroro and Tūtaekurī Rivers.	
	We also note the significant depleting effect of groundwater extraction on the Ngaruroro noted in an HBRC report: "Modelling indicates that river losses have increased in all major rivers analysed (the Ngaruroro), and spring gains have declined in lowland streams (theTūtaekurī–Waimate). The increased groundwater pumping has caused reduced streamflow, particularly during summer. Modelling indicates that the most affected surface water body is the Ngaruroro River, with about 50% loss (depletion of about 1000 L/s) during the driest conditions"	
SCHEDULE 30 Flows, Levels, and Allocation Limits Tūtaekurī	Minimum flows for the Tūtaekurī are set to provide habitat protection for adult trout. The plan sets the minimum flow at 2,500 l/s, providing more than 90% of habitat protection at low flow for adult trout. This is an inconsistent approach with the Ngaruroro River, which should have a minimum flow of 3900 l/s to provide 90% habitat protection for trout (i.e., the minimum flow in the Ngaruroro should be increased).	Reduce the allocation limit to 20% of MALF.
	The high degree of allocation from the Tūtaekurī River (1,140 l/s or 29% of MALF and >45% of the minimum flow) means the frequency of minimum flows and the duration and severity of low flows may have adverse effects on aquatic life during times of	

 $<sup>^{6}\,\</sup>underline{https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs28entire.pdf}$ 

<sup>&</sup>lt;sup>7</sup> Rakowshi, P. (2018). *Heretaunga Aquifer Groundwater Model Scenarios Report*. HBRC. <a href="https://www.hbrc.govt.nz/assets/Document-Library/Publications-Database/5018-Heretaunga-Aquifer-Groundwater-Model-Scenarios-Report-final.pdf">https://www.hbrc.govt.nz/assets/Document-Library/Publications-Database/5018-Heretaunga-Aquifer-Groundwater-Model-Scenarios-Report-final.pdf</a>

	greatest stress (i.e., summer). This allocation should be reduced.	
SCHEDULE 30 Flows, Levels, and Allocation Limits Heretaunga Plains	The approach used to set the allocation limit was not consistent with the NPSFM 2020.  There is evidence that 'existing use' amounts to over-allocation because it is having an adverse effect on ecosystem health, and groundwater levels are reducing.	Reduce annual allocation limit from 90 million m3 to a limit that protects ecosystem health.
Groundwater SCHEDULE 32	High flow allocation	Include amendments to:
High Flow Allocation	It is not clear when and how this applies. For example, the schedule states "this Schedule specifies the amount of water that may be authorised for abstraction from the specified water management units and the flows at which water abstraction is subject to restrictions or requirements." However, it then states "They apply to water abstraction that is enabled by the damming and release of water taken or dammed at times of high flow and stored for later release."	<ol> <li>Clarify how the flow triggers and allocations work.</li> <li>Increase the flow at which high flow allocation can occur to at least three times the median flow.</li> </ol>
	It is unclear whether this schedule only applies to water takes from dams, or if it also allows for general takes at high flow to then put in an off-stream storage lake, or other storage.	3. Reduce the amount of high flow allocation.
	High flows in rivers have valuable ecosystem functions. They flush out algae and sediment, mobilise the bed, trigger fish and macroinvertebrate life-cycle stages,	4. Introduce a 'staged' approach so that the full volume is not available straight away.
	remove weeds and nuisance vegetation growth, and are vital to maintain the natural character and floodplain condition of a river. Water taken at a time of high flow must be subject to allocation limits and there must be limits on the maximum rate that	5. Take a consistent approach to setting the proportion of flow available between rivers.
	water can be taken at high flows. Such limits are vital to ensure ecosystem processes are protected.	6. Extend prohibition on damming to all rivers / instream / run of river schemes (if this schedule only applies to dammed rivers, delete the
	At the moment, it is unclear how the flow triggers and allocation amounts work. For	schedule).

example, if the Ngaruroro River at Fernhill is flowing at 22m3/s, it is unclear whether this means 8m3/s can be taken (leaving the river at 14m3/s), or if the flow available to be taken limited to 2m3/s. It is also unclear whether the full 8m3/s only becomes available when the river is flowing at 28m3/s.

Assuming the full allocations are available from the trigger flow, the total high flow allocations are too high. For example, allocation from the Ngaruroro River is 8,000 l/s when the flow in the river is 20 m3/s (median flow) or greater. This represents a high proportion of allocation from the Ngaruroro River at median flows (40% of flow at median). The high flow allocation for the Tūtaekurī at Puketapu (2,500 l/s) is a significant proportion (31%) of the flow trigger of 8,000 l/s. When combined with low minimum flows and a high degree of low flow allocation these 'high flow' limits are unlikely to safeguard life-supporting capacity or provide for ecosystem health and other instream freshwater values. It is unclear how the allocation limits proposed give effect to the NPSFM, protect Te Mana o te Wai and ecosystem health, and meets Schedule 26 targets.

# Damming prohibitions

Damming prohibitions must be widened to protect all rivers from 'run of river' / instream schemes. Consistent with the RMA and NPSFM, including Policies 7, 8 and 9.

Allowing dams on rivers does not prevent the loss of their extent and values, does not ensure habitat is protected, and does not preserve natural character.

New provision

The plan should include FMUs in order to give effect to the NPSFM 2020.

Include Freshwater Management Units.

#### **Attachments**

- 10. The following documents are attached to this notice of appeal:
  - a. A copy of the relevant parts of the panel's decision (Appendix A);
  - A list of names and addresses of persons to be served with a copy of this notice (Appendix B); and
  - c. A copy of Forest & Bird's submission and further submission to the Hawke's Bay Regional Council (Appendix C).
- 11. Parties served with a copy of this notice of appeal will not be served with the attachments and may obtain a copy from the Appellant on request.

Dated: 25 October 2022

May Downing

Counsel for the Royal Forest and Bird Protection Society of New Zealand Incorporated

# **Address for Service**

May Downing PO Box 631, Wellington

Telephone: +64 22 048 1970

E-mail: m.downing@forestandbird.org.nz

# Advice to recipients of copy of notice of appeal

How to become party to proceedings

You may be a party to the appeal if you made a submission or a further submission on the matter of this appeal and you lodge a notice of your wish to be a party to the proceedings (in <u>form 33</u>) with the Environment Court within 15 working days after the period for lodging a notice of appeal ends.

Your right to be a party to the proceedings in the court may be limited by the trade competition provisions in <u>section 274(1)</u> and <u>Part 11A</u> of the Resource Management Act 1991.

You may apply to the Environment Court under <u>section 281</u> of the Resource Management Act 1991 for a waiver of the above timing or service requirements (see form 38).

\*How to obtain copies of documents relating to appeal

The copy of this notice served on you does not attach a copy of the appellant's submission or the decision appealed. These documents may be obtained, on request, from the appellant.

### **Advice**

If you have any questions about this notice, contact the Environment Court in Auckland, Wellington, or Christchurch.

- Schedule 1 form 7 heading: amended, on 1 November 2010, by <u>regulation 19(1)</u> of the Resource Management (Forms, Fees, and Procedure) Amendment Regulations 2010 (SR 2010/279).
- Schedule 1 form 7: amended, on 1 November 2010, by <u>regulation 19(1)</u> of the Resource Management (Forms, Fees, and Procedure) Amendment Regulations 2010 (SR 2010/279).
- Schedule 1 form 7: amended, on 1 June 2006, by <u>regulation 10(4)</u> of the Resource Management (Forms, Fees, and Procedure) Amendment Regulations 2006 (SR 2006/99).