



Tasman District Council

Submission to the Ministry for the Environment
Essential Freshwater
Action for Healthy Waterways Discussion Document
23 October 2019



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Contents

1	Contact Details.....	3
2	Executive Summary.....	3
3	Summary of submission	6
3.1	General position of TDC on freshwater proposals	6
3.2	Key concerns and outcomes sought	7
3.3	Central Government assistance to Councils	20
4	Detail on key concerns	20
4.1	Timeframe and resourcing impacts on Council capacity.....	20
4.2	Motupipi Catchment – removal from Schedule 1 of NES-FW	21
5	Draft NPS-FM - specific comment	23
5.1	General position of TDC.....	23
5.2	Specific comments.....	24
5.3	Amendments sought to Attributes and NPS-FM Appendix 2a and 2b	30
6	Proposed NES-FW – specific comment	35
6.1	General position of TDC.....	35
6.2	Specific comments.....	35
7	Draft Stock Exclusion Regulations -specific comment.....	43
7.1	General Position of TDC.....	43
7.2	Specific comments.....	43
8	Wastewater, Stormwater and Drinking Water NES	46

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Tasman District Council - Submission on NPS-FM amendments and NPS-FW

Closing Date: 31 Oct 2019 – Submission sent by email 23 Oct 2019 to

consultation.freshwater@mfe.govt.nz

Please note: page numbers referred to in this submission in square brackets [] relate to the page numbers in the online PDF version of the consultation document named “Action for Healthy Waterways” (AHW) available at: <https://www.mfe.govt.nz/consultation/action-for-healthy-waterways>

2 Executive Summary

The most effective path forward will require councils to build on existing programs of work. TDC’s key concern is that we, as well as other councils, have scoped and been working toward notification of plan changes based on the requirements of the previous NPS-FM and taking account of the issues, risk, and community capacity. The addition of 14 new attributes together with the need to develop a long-term vision and environment outcomes through engagement, and consenting under the proposed NES, are now new requirements that have not been previously scoped or resourced. Being able to deliver the new requirements by 2025 is uncertain.

In summary, the key points for Tasman are:

- **Practical Implementation and timeframes (refer sections 3 and 4)**
 - Regional flexibility needs to be retained for local solutions for local problems, and to incorporate existing and programmed plan review processes
 - Proposed timelines are unachievable from a capability, capacity and cost perspective and the existing timelines in the NPS-FM 2014 should be retained
 - There is a lack of skill base nationally to carry out the planning, science, monitoring and compliance, and certification/auditing of FEP’s, which will be a barrier to achieving both the existing and proposed timeframes and desired outcomes. Councils are already struggling to adequately resource all aspects of our freshwater functions. The Government needs to ensure that the outcomes it seeks will not fail to be achieved because of capacity constraints.
- **Consultation process and information provision (refer sections 3, 4 and 8)**
 - The timeframes for consultation feedback on the Essential Freshwater Package has been inadequate and poorly timed, particularly with regard to local elections and councillor input. While we have tried to reflect the views of elected representatives, they have not had the opportunity to provide collective input, but based on feedback there is concern about the cost and capacity implications of the changes.
 - The level of impact analysis including cost benefit and economic analysis provided to inform the Essential Freshwater Package proposals is superficial and inadequate to determine the impacts and effectiveness of the proposed policy interventions
 - Allocation water issues are not fully addressed in the EFW package and unintended consequences of this on the current round of planning are likely

- Redrafting of the NPS-FM and NES-FW (following submissions) requires review by appropriately experienced RMA drafting and legal experts to ensure it meets planning best practice, provides clear direction, and will be enforceable in the courts
- A further round of consultation is required following redrafting of the NPS and NES in conjunction with policy positions for the NES content for wastewater, stormwater and drinking water in 2020, and other uncertain aspects (e.g. water metering, tangata whenua values, etc.)
- **Freshwater planning process(refer section 3)**
 - We support in principle the freshwater panel process as a means to fast track freshwater plan processes and the associated appeal rights limitations, but implementation and costs of the panel process need further consideration to avoid significant and unbudgeted cost increases to ratepayers
 - Cost of investigation, monitoring and auditing to Councils and rate payers is significant. We anticipate a significant bottleneck in achieve the necessary level of evidentiary support for our freshwater plan changes
- **NPS-FM content (refer section 5):**
 - We support the principle of Te Mana O Te Wai, but further consideration is required on practical implementation of the hierarchy of obligations and incorporation of all four well-beings, definition of essential human health needs, and its implementation in the context of RMA Part 2.
 - We need to avoid potentially perverse outcomes for both economic and food security (e.g. local fruit and vegetable production) for the country
 - Clarification is required for attributes in Appendix 1A and 2A (as detailed in our submission), and in particular :
 - the metrics, statistics and sampling methods need to be clearly identified in each attribute table
 - the approach identified by LGNZ submission for addressing DIN and DRP at a regional level needs to be implemented
 - exclusions for predominantly groundwater-fed rivers need to be added to the tables, including for DIN, nitrate toxicity (including hardness) and dissolved oxygen
 - We support in principle the addition of stream, wetland and fish passage requirements in the NPS and NES, and outline suggested amendments in our submission
 - We do not support the requirement for attributes for the human contact value to be set above the current state in situations where the regional targets for primary contact are being met, particularly were this may also capture catchments at background 'natural' levels for these attributes
- **NES-FW content (refer section 6):**
 - Farm Environment Plan detail and requirements should reflect the level of environmental risk, should incorporate stock exclusion considerations (rather than use of separate regulations), and further specifics included in the required FEP content as detailed in our submission
 - Central government should take a lead role in management of FEP templates and develop a national online accounting system for managing FEPs. It should also amend the RMA and create the implementation framework for utilising existing industry assurance programs to avoid duplication of effort by councils and industry in supporting, assessing and monitoring the FEP cycle.
 - The implementation of FEPs as management plans should mirror how other management plans have previously been embedded in the RMA process, rather than create a new process.
 - Subpart 2 of the NES-FW requires further work, including provision of clear objectives and policies for assessing consents under NES-FW (clauses 33–36) and rewording to avoid potentially grandfathering of inappropriate land uses

- Subpart 4 of the NES-FW should be removed and nitrate issues addressed through Options 2 or 3 (refer section 8.4 of the Action for Health Waterways document) as part of the FEP requirements under the NES-FW, and within existing timeframes in the NPS-FM 2014 - enabling regional councils to set their local priorities within resourcing limitations
- If NES-FW Subpart 4 is retained, remove Motupipi River from Schedule 1 because it is mainly groundwater fed and the nitrate issues in this catchment are more complex than subpart 4 allows for (refer reasons set out in section 4.2)
- **Stock Exclusion Regulations (refer section 7):**
 - We would prefer that stock exclusion, including site specific setbacks, are controlled through the FEP part of the NES-FW rather than via separate regulations. We detail suggested amendments to the regulations in our submission should they be retained.

We have identified 189 specific outcomes sought throughout this submission document under their respective explanatory sections, and request our submission be read in its entirety.

3 Summary of submission

3.1 General position of TDC on freshwater proposals

Tasman District Council appreciates the opportunity to comment on the proposed amendments to the National Policy Statement for Freshwater (NPS-FM), the draft National Environmental Standard for Freshwater (NES-FW) and draft stock exclusion regulations (Stock REGs). However, we highlight the timeframe for consultation for the essential freshwater package has been too short, and very poorly timed with regard to the elections and enabling elected member involvement in the submissions process. We would like to be further engaged as the policy, regulations and the associated guidance materials are further developed.

We have addressed the key questions posed in Action for Healthy Waterways discussion document in the body of our submission and in the interests of keeping the submission short we have not repeated them separately.

Tasman District Council (TDC) supports in principle the intent behind the proposed changes to the NPS-FM and in particular the application of the concept of Te Mana O Te Wai within planning frameworks, and highlights the significant amount of alignment of the NES-FW with the outputs from our recent freshwater collaborative group process in the Takaka catchments¹. However further consideration needs to be given in the Te Mana O Te Wai hierarchy of obligations to all of the four well-beings (environmental, social, cultural and economic), and in considering the appropriate methods and timeframes for achieving the necessary changes to provide for the health of water and waterbodies.

We have significant concerns over the timeframe and resourcing required to meet the proposed deadlines, given the lack of capacity both within our region and nationally, as well as the lack of certainty of information still to come in the package and the potential for perverse outcomes to arise, both in the implementation of this by regional councils and the community well-being outcomes. We are also concerned about future allocation policy changes that have been signalled but currently lack detail. There is significant risk of perverse outcomes or unintended consequences addressing only one side of the water management coin.

The level of impact analysis including cost benefit and economic analysis provided to inform the Essential Freshwater Package proposals is superficial and inadequate to determine the impacts and effectiveness of the proposed policy interventions.

An initial assessment of the staffing need to implement the proposals in the timeframes indicates council would need to increase rates by approximately 2% just to cover additional staffing requirements and not including new systems and technology required to implement and monitor.

We are concerned at the impact of the suite of requirements on the ratepayers of Tasman and need further information and certainty to understand the potential impact for rates increases.

The primary issue is the speed of the required implementation timeframes for councils it is not a lack of desire, or need for further oversight, but one of adequately resourcing the required changes, and the complexity of the issues needing to be addressed. Improving the health of freshwater is a big job and it will take time to do the job right.

As a unitary authority TDC largely support the Local Government NZ submission (prepared by the Regional Sector Water Subgroup) on the essential freshwater package, however Tasman are seeking retention of the timeframes in the existing NPS-FM (2014, amended 2017) to provide flexibility for Councils to undertake sufficient engagement with communities and tangata whenua and to collect and analyse the

¹ The output report from our Freshwater and Land Advisory Group (FLAG) and mātauranga report from local manawhenua can be found on TDC's website at www.tasman.govt.nz/link/Takaka-FLAG

necessary science information to inform our plan changes(s). Tasman specific examples are provided in our submission that illustrate the concerns outlined in the Local Government NZ submission.

3.2 Key concerns and outcomes sought

The key concerns and preferences TDC have with the essential freshwater proposals are summarised in the following subsections. Further detail on our key concerns and specific comment regarding the NPS-FM, NES-FW and Stock Exclusion Regulations is provided in Sections 4 to 8.

3.2.1 Te Mana O Te Wai

TDC support in principle the concept of Te Mana o Te Wai as defined in the draft NPS-FM and recognise the importance of the health of water for both human health and wellbeing and to provide for the prosperity of current and future generations.

Further consideration needs to be given to the hierarchy of obligations to ensure Te Mana O Te Wai is consistent with all of the four well-beings (environmental, social, cultural and economic). Clarification is also required that Te Mana O Te Wai does not incur ownership rights over water to any party.

A key part of the planning process is a community and iwi discussion on what constitutes healthy waterbodies, the acceptable levels of risk from water and land use, obligations that come with water and land use, and a shared understanding of the implications of changes – without sufficient time and resourcing for these discussions there will be perverse outcomes. There is currently a lack of capability and capacity amongst iwi to be able to engage fully in freshwater processes. TDC is currently providing financial and in kind support to try to address some of this shortfall. Bringing forward the time frames will only exacerbate this problem. Given the council's own resourcing challenges, its ability to support iwi will be diminished and iwi will in turn not be able to meaningfully participate in the freshwater plan processes.

The capability and capacity shortfall is not limited to Council and iwi. Significantly more resourcing is required for assistance for farmers to transition to the new level of expected good practice, while maintaining viable businesses. This expertise does not lie with councils, but with industry groups and relevant industry research organisations. Government via MPI needs to increase its capacity and staffing levels to support farmers, industry and associated research organisations to help local farmers make the transition needed in a timely manner.

Without additional resourcing and a thorough assessment of whether there is the capability and capacity nationally to implement the proposed changes in the timeframes presented then the package risks setting the whole country up to fail.

Further clarification of the intent of the hierarchy of obligations within Te Mana O Te Wai and its relationship to RMA Part 2 is required. On the face of it the hierarchy in Te Mana O Te Wai would appear to conflict with the hierarchy in RMA Part 2. Further, within Te Mana O Te Wai further refinement is required to avoid unnecessary argument and litigation. For example the definition of 'essential health needs of people' is unclear. The scope of essential needs requires defining. For example, does this include food production? –does the hierarchy of obligations set up a hierarchy in uses of water? – E.g. prioritising the use of water for primary production commodities over other products such as viticulture, wood production manufacturing. - and if so, how should this be reflected in water allocation and quality management by councils, particularly given the RMA context of first in first served? - And what are the economic implications of this for communities?

Discussions with local communities will provide the best outcomes for the communities, central direction will deliver poor outcomes for New Zealand.

Outcomes sought:

- Retention of timeframes in existing NPS-FM to provide flexibility for Councils to undertake sufficient engagement with communities and tangata whenua and to collect and analyse the necessary science information to inform our plan changes(s)
- Greater resourcing and staffing of MPI to fast track industry support and research to assist farmers to transition to good management practice (water and land)
- Further clarification of Te Mana O Te Wai hierarchy of obligations to including the four well-beings and definition of the 'essential health needs of people', including guidance on implementation of the hierarchy in plans
- MfE consideration and guidance on the linkage between the hierarchy of obligations and the approaches available to Councils under the RMA

3.2.2 Greater consideration of whole-of-community wellbeing

There is potential for perverse outcomes of the package that affect whole of community wellbeing, in particular local food production. For example, vegetable growing and dairy are typically focussed on as being high risk activities for pollution of water. However, if these industries are discouraged through the essential freshwater package two possible perverse outcomes arise – an increased transition away from smaller locally-owned farming operations to larger corporate (and possibly foreign owned) companies, or a transition to other land uses - particularly non-food production uses that have lower compliance costs. This may result in the need to import fresh produce and dairy products, in turn increasing the cost of basic foods, add food miles to the products and shifts the contamination problem off shore to countries with looser controls, similar to climate change. Existing food production industries need to be supported and encouraged to innovate and find better ways to grow our food, while protecting water quality. While regulation may be an appropriate tool to encourage this innovation, it needs to be in a context that these industries are important to the health and well-being of local communities.

Outcome sought:

- Greater resourcing and staffing of MPI to fast track industry support and research to assist farmers (in particular food producing industries) to transition to good management practice (water and land)

3.2.3 Retention of FMU focus and regional flexibility

It is important that selection of solutions match catchment context and risks and the community's ability to pay – a key focus of the current 2014 (2017) NPS-FM is an FMU focused consideration of community and tangata whenua outcomes and consideration of methods to address situations where freshwater objectives are not being met. It is important to retain the FMU specific consideration by regional councils in addressing freshwater issues in our regions. One size does not fit all and the issues affecting water quality can be complex, varying considerably within and between regions (as recognised in the RIS on the RM Bill water provisions June 2019), and may be driven by a range of land and water uses or activities, rather than one specific land type. Further, more rules does not necessarily equate to more action on the ground – which is where our money and effort needs to be focused to see real change.

It is important that solutions sought in each FMU match the significance of the issues and risk being addressed. Solutions should represent the most efficient and effective methods for achieving the outcomes sought by each community of interest, and in a manner that is affordable to the community. Our preference is for flexibility to be retained for Councils to assess issues and solutions at a regional and FMU level. Sufficient time and resourcing needs to be provided to ensure FMU specific solutions can be identified with sufficient community and tangata whenua input into these processes. The timeframes proposed will mean we will need to significantly cut community and iwi engagement in policy and plan

development. The 2023 plan notification deadline will mean cutting out the step of consulting on a draft plan change. Consultation on drafts provides a flexible and low cost method for the community to work with the council on a plan before it is locked into a narrow and costly schedule 1 process. The loss of this step will in the long term lead to increased cost and time delays through the need to use plan variations to change aspects of the plan that could have been dealt with if a plan is released as a draft.

Aspects of the essential freshwater package are seeking to apply limits and requirements at a national level. Blanket attribute states and bands will require limitations that are unnecessary in some places to achieve the desired healthy water outcomes. Flexibility is needed in setting both attribute state bands and limits at a regional or FMU (or waterbody) level as appropriate (refer section 3.2.9 and 3.2.11).

The freshwater management framework should encourage and support adaptive management as does the climate adaptation approach. Many water quality issues are wicked problems and the exact solutions may not be known when action is started. Councils and communities are often having to make decisions when there is uncertain or limited information and regions have differing capacity for addressing information gaps. Locking in rigid limits removes the scope for flexibility that may be required to address an issue in the most cost effective manner.

Outcomes sought:

- Retention of timeframes in existing NPS-FM to provide flexibility for Councils to undertake sufficient engagement with communities and tangata whenua and to collect and analyse the necessary science information to inform plan changes
- Retain flexibility for regional councils to select the most appropriate nitrogen loss option for their FMUs – including high nitrate catchments. TDCs preference is for Option 3 (among other responses), however we recognise other councils may prefer Option 1 or 2 for their FMUs. Adaptation and flexibility is important to ensure that solutions fit the problem
- Removal of the Motupipi catchment from Schedule 1 of the NES-FW to enable TDC to manage this through the existing plan change process we have in progress (refer section 3.2.11)
- Amendments and exceptions added to the attribute tables in NPS-FM Part 4 to acknowledge regional and waterbody variation, particularly for groundwater-fed rivers (refer section 3.2.9 and 5.3)
- Ensure the ability for regional rules to be more restrictive (prevail over regulations) in the NPS-FM, NES-FW and Stock Exclusion Regulations

3.2.4 Resourcing and capacity to achieve the deadlines proposed

If adopted as is, the freshwater package will require an estimated 19 additional staff to implement and maintain the regime. This includes:

- A least 6-8 additional FTEs across environmental information and policy to develop and process the necessary plan changes and implementation plans.
- At least 8-12 additional staff across policy, environmental information, consents and compliance departments, to meet the ongoing requirements (BAU).

19 additional staff equate to approximately 2% rates rise until at least 2026, reducing to 12 people (1.2% rates increase). This is a conservative estimate given the lack of detail on the three waters components of the package and further information and clarity is needed to quantify this. It does not appear this aspect has been identified or assessed in the regulatory impact analysis for the proposals.

In particular, we anticipate a significant bottle neck in collecting and analysing sufficient science information to provide robust evidential support for the required plan change(s). This is a capacity and capability issue.

To meet the revised deadlines of 2025 TDC will have to forego the valuable step of releasing a draft version of the plan change for community feedback. Releasing a draft plan change allows for essential community and iwi input and the flexibility for the plan change to be amended to address any issues identified outside the narrow confines imposed by RMA schedule 1.

Outcome sought:

- Retain the timeframes in the current NPS-FM, as we consider our existing progressive implementation plan is achievable for our region within existing capacity constraints. This timeframe allows for collection and analysis of sufficient environmental information, and community and tangata whenua engagement in developing freshwater plan changes.

3.2.5 Availability of adequately qualified professionals within national industries

TDC has found it difficult to attract suitably qualified professionals in the freshwater space across all departments, and are heavily reliant on the current complement of expert staff. Recruitment processes can take four or more rounds to identify suitable candidates (if at all). TDC currently has two unfilled vacancies in the policy team and three unfilled consents positions. This is a national issue with many other councils in the same position. This is only expected to worsen as every regional council seeks additional resourcing to meet the requirements and deadlines of the Essential Freshwater package. The same issues are apparent for iwi and sector groups. The ability of the farm environment plan advisory economy to respond to the immediate needs for advisors and auditors is questionable in the time available. Further consideration and action on these shortages is needed by government and in lieu of available resources the only option is for greater flexibility in the timeframes and deadlines. Given the need to be familiar with the local legislative context, cultures and the New Zealand environment these are not skills shortages that can be immediately filled with recruiting from abroad.

Retaining the proposed timeframes is setting NZ Inc. up to fail.

Outcomes sought:

- Retain the timeframes in the current NPS-FM.
- Undertake an assessment of national capability and capacity in the freshwater planning, science and land advisory fields to determine shortages. Adjust timeframes to allow for available capacity.
- Develop an action plan to address the shortages over the long term through appropriate investment in training and education institution to ensure skills shortages are addressed and career paths are developed. .

3.2.6 Lack of information in package and associated NESs

We have struggled to provide feedback on the proposed package because the detail of many related aspects is missing - including details on possible regulatory interventions for wastewater and possibly stormwater, and amendments to the drinking water NES, water allocation considerations, metering regulations regarding telemetry requirements, term and methodology definitions, and options for māori values.

MfE has posed significant questions in the essential freshwater package and the direction selected following this submission round could have significant implications for different regions (e.g. the options for nitrogen loss management, options for māori values). We need an opportunity to consider and feedback on where the decisions land before they are finalised.

Outcomes sought:

- MfE to engage suitably qualified planning and legal experts to review the redrafting of the NPS-FM and NES-FW (following submissions) to ensure it meets planning best practice and provides clear, unambiguous direction, including definitions of key terms.
- MfE to undertake a second round of consultation following submissions on the NPS-FM and NES-FW, alongside policy positions and exposure drafts of regulatory proposals for wastewater limits, the management of stormwater and drinking water in 2020, so that the complete package can be presented and assessed, before the NPS-FM and NES-FW are finalised and gazetted.

3.2.7 Freshwater planning process

TDC supports in principle the use of a freshwater panel (and restricted appeal rights) for hearing plan changes that seek to substantially implement the NPS-FM framework within regional plans, and highlight the importance of retaining regional representation on the panel (as currently included in the proposed RMA amendment bill). It is important that this process retains understanding of local context and does not apply a one-size-fits-all approach for every region.

We disagree with the approach that councils fund the whole freshwater panel when there is no process for council to contribute to the appointment of the chair or other government appointees and there is no process for pre-approval of hearing related expenditure. We are concerned about the potential cost of the hearing panel process, and in particular the ability of the hearing panel to commission external work that may commit council to unbudgeted costs or additional information that may be of questionable value.

TDC is concerned at the short time frames (20 working days) that councils have to make their decisions on accepting or rejecting panel recommendations, particularly where rejection requires development of an alternative option. This is compounded by the need to ensure any freshwater plan changes integrate with the rest of the plan. The Panel has up to 23 months to develop its recommendations, but council has only less than one month to consider the panel's recommendations.

There is a further issue that panel recommendations can be out of scope of submissions (which TDC supports as sometimes a suitable outcome), however if councils wish to reject an 'out of scope' recommendation they are restricted to alternative options being within submissions scope. This may lead to an outcome where a recommendation of the panel cannot be changed by the council even if it was obviously flawed.

A further concern is the application of the hearing panel process beyond the initial NPS-FM implementation phase for freshwater related plan changes. Councils should have the option to elect to use the hearing panel process or standard planning process for subsequent freshwater plan changes or variations, particularly for minor plan changes and variations. This choice should also apply to private plan change requests. Alternatively the proposed process could only apply to the first round of plan changes to implement the NPS-FM. The proposed process represents an overly onerous process for minor freshwater plan changes with significant ongoing cost implications.

Integration

TDC is currently reviewing its entire suite of planning documents. One objective of the review is to create a single integrated plan. Pulling out freshwater and considering it in isolation risks a lack of integration that will inevitably need to be addressed through subsequent plan changes and variations. Requiring plan changes to address integration issues to be assessed by the freshwater panel may not be the most efficient and effective method to fix a problem. It would be best dealt with by the hearings panel that considered the entire plan to avoid the cost and delay of requiring the freshwater panel to understand the whole plan in order to understand the integration issues.

Further, central government should address the disconnect between the requirements of the NPS-FM and the optional nature of regional plans for freshwater and discharges in RMA sec 65 to clarify the obligation for regional councils and avoid putting the requirements sought under the NPS-FM at risk.

Outcomes sought:

- Support the inclusion of two regional elected representatives and a locally nominated mātauranga Māori expert on freshwater hearing panels
- Extend the timeframe for Council decisions on panel recommendations to at least 60 working days
- Retain the ability for panels to make recommendations that are out of submission scope, but clarify Council's ability to reject such recommendations and to identify alternatives that are also out of scope of submissions – recognising that such alternatives would be subject to appeal rights
- Amend the freshwater hearing panel process to apply to those plan changes seeking to substantially implement the NPS-FM at a regional level (taking into consideration our submission point on retaining existing NPS-FM timeframes), and provide an option for Councils to select between the freshwater panel and standard hearing panel processes for future freshwater plan changes. Alternatively, once the initial freshwater plan change decisions are delivered by the panel, all subsequent plan changes revert to the normal schedule one process.
- Allow for flexibility in NPS-FM hearing timeframes to allow freshwater plan changes to be heard as part of a wider plan hearing where a council is notifying a hearing on a whole plan to allow plan integration to be addressed. This will avoid duplication of effort, particularly where Regional Policy Statements are undergoing review, and with implementation of the National Planning Standards and moves to E-planning influencing upcoming review processes.
- Government to fund the government appointed members of the freshwater panel.
- Government to fund the cost of any external work commissioned by the chair of the panel or alternatively allow for a council approval processes of panel expenditure prior to the expenditure occurring.

3.2.8 Need for an independent freshwater commission

TDC do not support a separate independent national body (Te Mana O Te Wai commission). This would add complexity, duplication and cost that would not result in clear benefit. There are adequate requirements under the existing acts that Councils operate under with regards to obligations, processes and transparency. The primary issue in the speed of freshwater implementation for councils is not a lack of desire, or need for further oversight, but one of adequately resourcing the required changes, and the complexity of the issues needing to be addressed. Improving the health of freshwater is a big job and it will take time to do the job right.

3.2.9 Attribute data and the National Objective Framework

We have specific concerns about the attributes selected, the metrics and methods, and their application in Tasman, including the need for recognition of exemptions, particularly where groundwater and surface water interact. Our specific concerns and preferences for these aspects are outlined in section 5.3 of our submission.

Outcomes sought:

- Amend the attributes, metrics and methods as outlined in Section 5.3 of our submission, in particular:

- the metrics, statistics and sampling methods need to be clearly identified in each attribute table
- the footnote references used in the tables need clear numbered footnotes below the tables to clearly denote what is being applied where
- the approach identified by LGNZ submission for addressing DIN and DRP at a regional level needs to be implemented
- exclusions for predominantly groundwater-fed rivers need to be added to the tables, including for DIN, nitrate toxicity (including hardness) and dissolved oxygen
- Co-ordination in Science investment through MBIE to improve and expand research into water resources to enable defensible and well researched impact assessment and limit setting work at an FMU and regional scale – this accounts for the significant variation in hydrology in New Zealand.

3.2.10 Farm Environment Planning

We support the need for all high risk farms to have freshwater components in Farm Environment Plans, however we do not agree with the use of Overseer in any regulatory capacity in its current form, although we support its use in a non-regulatory capacity within FEPs.

We have particular concern with the resourcing required for management of FEP information and any FEPs received by council, and would like to see further work around a national platform for management of this information - also reflecting the work by MPI in creating a 'one-stop-shop' for farm information requirements as part of their Integrated Farm Planning (IFP) work stream, and considering potential data management overlaps with Biosecurity NZ (FarmsOnline database).

Councils are not best placed to assist farmers to improve their practices – this expertise lies within industry bodies and industry research organisations, and greater resourcing needs to be provided by government and industry to disseminating good practice information and engagement with farmers by industry sector groups, including promotion of farmers talking to farmers.

Government needs to work constructively with farm industry bodies. Current consultation has clearly demonstrated this has been insufficient to date.

Further clarification of some terms is needed, in particular 'farm' for clearer application of part 3 and outlining an agreed understanding of what is included in arable farming and horticulture (i.e. where do vegetables sit?).

Tasman district has over 1900 properties of over 20ha that would potentially require a FEP and fencing. Many of these have little or no stock and represent minimal risk to the environment. We consider a sliding scale, risk based approach to FEP requirements is appropriate. This can work in well with the requirement for stock exclusion.

The first step could be a declaration (form) from the land owner to state whether the property is stocked and what type of stock. Following this the level of scrutiny depends on stock type and stocking rate so lower risk farms have simpler requirements around who develops the farm plan and the time interval for auditing.

Specific additions to the content considerations of FEPs is provided in Section 6.2.4 of our submission.

Outcomes sought:

- Central government to set up national certification scheme for industry programs to enable continued industry management of FEPs, but ensure content of FEPs is consistent and meets

freshwater requirements, and that compliance monitoring and auditing is undertaken and results reported to regional councils. Including any changes needed to the RMA to facilitate this approach and ensure it is enforceable by councils and/or the EPA

- FEP requirements are linked to risk. All farm owners provide a simple declaration on stock/stocking rates (we note this information may already be held by Biosecurity NZ, but is currently unavailable to councils). Low risk farms have lesser requirement around how the FEP is written and by whom. Auditing requirements are also less for low risk farms with a sliding scale to the full suite as proposed for high risk activities.
- Replace stock exclusion regulations with a requirement for stock exclusion and fencing requirements to be assessed and implemented through the Farm Environment Planning process. This would enable farmers to apply appropriate setbacks and exclusions for their specific farm context, including consideration of stock types, slopes, soil permeability, proximity to waterways, Critical Source Areas and pathways of contamination, mitigation options employed on the land and other benefits sought from fencing waterbodies including biodiversity considerations and carbon farming options. This approach enables a risk based and more holistic consideration of exclusion and fencing requirements, rather than just purely keeping animals out of waterbodies
- That Central Government fund work to address the current deficiencies in the base data that Overseer uses in order to improve its accuracy (e.g. soil mapping in S-Map - in a lot of areas this relies on old LUC soil mapping and charges for inclusion of new soil data into S-map is a barrier to this improving), and to improve its functionality for other land uses that it doesn't currently address well. Greater transparency in Overseer processes is also needed to build trust in the outputs for regulatory use.
- More investment to training and accreditation for personnel to be competent in producing FEP specific to sector groups.
- Resourcing of MPI to develop and maintain a national registry / database of Farm Environment Plan information, with Council access to property and FMU level data for analysis. There needs to be much greater linkage between the MPI IFP work stream and the implementation of the FEP components of the NES-FW and NPS-FM
- Greater resourcing of MPI to fast track industry support and research to assist farmers to transition to better land use practice

3.2.11 Management of high nitrate catchments

TDC is unclear as to the added benefit provided by subpart 4 over the requirements in subpart 3. Further work is required to clarify the cost-benefit of this approach.

TDC support Options 2 and 3 for management of high-nitrate catchments.

Option 2 (national nitrogen caps) would need to consider soil types, as well as crop type and land use as some soils are more prone to nitrate leaching than others. Central Government funding of work to develop these caps is supported.

Option 3 allows for farm-specific risks for nitrogen loss to be identified and addressed and does not pose the problem of setting legally defensible catchment thresholds where the source and pathways of nitrogen loss are complex and multifaceted (as with Option 1). While we support these options, we recognise other Councils may support Option1 and it is important to retain flexibility to apply the most appropriate method to each FMU.

If Option 1 is retained, clarification of the method for setting the catchment threshold is needed, as the words used in the NES-FW draft are ambiguous and can be interpreted in such a way as to require either the top 10% or the top 90% to be required to reduce nitrate.

It is unclear from the draft regulations what policies and objectives an application should be assessed against. There are no clear objectives and policies in the NPS-FM to assess the consent applications under subpart 4 against. Existing objectives and policies in regional plans will be variable and potentially inconsistent with the objectives of the regulation or regional plans may have no relevant objectives and policies to assess the consent applications against. This could lead to widely variable outcomes in terms of consenting. In addition there is no clear link in the NPS-FM to the regulations so there are no supporting objectives and policies in the NPS-FM to assess the consent applications against.

In addition, use of the online slope tool does not appear to be appropriate for Option 1 as there are many properties not classified and the use of average slope has the potential to classify properties incorrectly (refer section 7.1 of our submission for further discussion on this). The online tool appears filtered for application of the stock exclusion regulations rather than for nitrogen loss as well.

TDC is also seeking removal of the Motupipi catchment from Schedule 1 of the proposed NES to allow this catchment to be addressed through the regional plan review process already in progress. This will cover the full range of management options that reflect the complex context of water quality issues in this catchment. The nitrate issues in this catchment are groundwater related and have multiple sources that require investigation and management, rather than wholly derived from intensive pastoral farming². As this work is tied to the wider Takaka freshwater project, TDC is also waiting on the recommendations of the Special Tribunal for the Te Waikoropupū Water Conservation Order process, which has been ongoing for over a year. It is expected that the WCO will provide water quality limits for the catchment.

Implementing subpart 4 in the Motupipi ahead of the rest of the district will divert resources away from the wider NPS-FM implementation work and will have the effect of slowing implementation down with the likely result TDC will miss the 2023 deadline.

Our reasons for removal of this catchment are outlined in section 4.2 of this submission.

For similar reasons, we support the exclusion of any catchments with predominantly groundwater-fed rivers that reflect the ambient groundwater quality (including Waimea catchments) from schedule 1 of the NES-FW. While there is a recognised nitrate problem in the Waimea plains, the issue is a groundwater one, and there is very little dairy use in the catchments. This issue requires a different approach than proposed in subpart 4 (i.e. Option 1). In the case of the Motupipi and the Waimea, removal of all dairy farms from the catchments is likely to have limited, if any, effect on nitrate concentrations in the groundwater.

Outcomes sought:

- If subpart 4 of the NES-FW is retained, clear objectives and policies are needed to support consent application processing.
- Retain flexibility for regional councils to select the most appropriate nitrogen loss option for their FMUs – including high nitrate catchments. TDCs preference is for Option 2 or 3 (among other responses), however we recognise other councils may prefer Option 1 or 2 for their FMUs. Adaptation and flexibility is important to ensure that solutions fit the problem
- If flexibility is not provided for regional councils to set the options in their FMU, then TDC support Options 2 and 3 [AHW pages 70 to 72] for management of high nitrate nitrogen catchments (retaining the ability to set nitrate caps as appropriate in regional plans)

² The Motupipi River is up to 90% spring fed. Groundwater is currently between 0.5 and 2 g/m3 which is very good for groundwater.

- Further clarification of options 2 and 3 implementation is required in the NES-FW.
- If option 1 is retained, clarify the method for setting the catchment threshold so that it is unambiguous (the example in the Action for Health Waterway document on this is contrary to how staff interpreted the wording in the proposed NES-FW Subpart 4) and review use of the online slope tool in assigning property requirements.
- Removal of Motupipi catchment from Schedule 1 of the NES-FW to enable TDC to progress management of this catchment through the existing plan change and non-regulatory implementation plan process already underway to address the water quality issues in this river and its contributing groundwater catchments.
- If Motupipi is not removed from Schedule 1, TDCs preference is for Option 2 or 3 of the nitrogen loss options [AHW pages 70 to 72] as we do not believe we can set a legally defensible nitrogen cap values at this time (option 1). Enabling farmers to identify and address their nitrogen leaching risks allows the process to address farm-specific risks.
- Support the exclusion of predominantly groundwater fed river catchments (including Waimea) from Schedule 1 of the NES-FW
- If subpart 4 of the NES-FW is retained, Central Government to provide further information on the cost-benefit of Subpart 4 particularly compared to outcomes anticipated from subpart 3.

3.2.12 Stock exclusion regulations

TDC support the exclusion of stock from waterways (including stock and waterbodies types proposed), and recognise that the dairy industry has already achieved the requirements for stock exclusion from waterbodies greater than 1m wide within the Tasman region.

However we consider stock exclusion and fencing requirements should be assessed and implemented through the Farm Environment Planning process. This would enable farmers to apply appropriate setbacks and exclusions for their specific farm context. There are multiple factors that require consideration including stock types, slope, soil permeability, proximity to waterways, Critical Source Areas and pathways of contamination, and mitigation options employed on the land. The setback average of 5m does not allow consideration and design to capture other benefits from fencing waterbodies including biodiversity considerations and carbon farming options. The FEP approach enables a risk based and more holistic consideration of exclusion and fencing requirements, rather than just purely keeping animals out of waterbodies.

With regards to the Stock Exclusion Regulations, as currently worded, TDC supports an average setback for fencing of 5m, but would like further information on the basis for this distance and clarification of the aims of the setbacks. In the majority of cases there will be a need to plant trees in this area to achieve the desired ecological health benefits, as well as have buffers wider than 5m at points where flow paths from critical source areas enter waterways to intercept run-off. However we are concerned over the additional costs and requirements being placed on landowners who have already invested in excluding stock from waterbodies.

We also have concerns around the implementation of stock exclusions requirements and the methodology for determining fencing requirements on differing slopes. The online tool is not currently fit for purpose. In Tasman there are many sections of waterways that flow through flat to rolling land that are not mapped because they are part of a larger parcel that include both steep slopes and valley floor areas so the average excludes them, but the water ways are clearly on flat land. If accuracy was improved, the online tool could be used as a flag for farmers to consider stock exclusion requirements further in FEPs.

Further clarification of some terms is needed, in particular 'farm' and 'paddock' for clearer application of the regulations and definition of dairy cattle which appears to be contradictory.

Outcomes sought:

- Require implementation of stock exclusion, including fencing requirements and appropriate setbacks as part of the Farm Environment Planning process, rather than through use of separate regulations.
If separate stock exclusion regulations are progressed:
- Removal of the requirement for existing fences that adequately exclude stock to be moved to meet the average setback requirements (including new pastoral systems where the existing fences appropriately exclude the new stock type). Compliance only to be required at the time of replacement of existing fencing (i.e. at the end of its lifespan) or as programmed in their Farm Environment Plan - as this recognises the significant investment already made by landowners to exclude stock.
- If the moving of existing fences that currently adequately exclude stock is retained in the regulations, this cost should be funded by Central Government.
- Provide the following exemptions from the regulations:
 - Sites where fences are likely to be regularly damaged by flood flows
 - Sites where topography provides a natural barrier to stock access
 - Sites where exiting fencing provides adequate stock exclusion (including new pastoral systems where the existing fencing provides suitable exclusion to the new stock type)
- Enable farmers to provide an alternative stock exclusion plan, particularly in areas where flooding may make permanent fencing impractical or where stock densities do not provide sufficient benefit to the cost.
- TDC support a slope distinction of 5 degrees, however we consider the intent of the slope distinction needs to be clarified, and further work undertaken by MfE/MPI to define an appropriate slope that achieves the intent
- Clarification of the slope methodology for determining fencing needs and improvement of the accuracy of the online slope tool. The online slope tool appears to have data gaps and in using an average slope, may place parcels in inappropriate categories where there are significant changes in slope (i.e. predominately flat land with a steep section). **A clear and simple methodology for farmers and councils to apply to properties would provide a more effective and efficient process and outcome**
- Consider using a stock density approach instead of slope. Ensure that whichever method is used is clear and easily implemented by farmers
- Use a narrative definition for low and non-low slope land that does not depend wholly on the online tool
- TDC support an average setback for fencing of 5m, but would like further information on the basis for this distance and clarification of the aims of the setback
- If the regulations are progressed, we recommend MfE seek specific feedback from industry on the use of average setbacks and the clarity and ease of implementation of the regulations.
- Define where the width of river is to be measure from in a way that is clear and practicable to implement for both councils and farmers.
- Rather than using a slope and base carrying capacity approach, develop an agreed table of stocking units for the stock types affected and define appropriate stocking rates above which the regulations will apply. Use existing stocking rates rather than a hypothetical base carrying capacity to determine application of the regulations

- Ensure that the terms 'farm' and 'paddock' have been adequately defined (neither is adequately defined at present), and that there is an agreed table of what is a stock unit for the stock types.
- Clarify the definition of dairy cattle. There seems to be a conflict between 1-2 and 3 – with 2 matching the definition of dairy support and 3 specifically excluding dairy support. Our preference is to include dairy support cows in the definition of dairy cattle, or for MfE clarify the reason why this is appropriate from a water quality risk perspective, particularly when other non-milking cows are included in definition
- Further clarify the definition of pastoral systems and how this applies to changes in stock types
- Remove reference to wetlands in regional or district plans from the low and non-low slope tables and provide a single timeframe date for wetlands.

Further detail is given in section 7 of our submission.

3.2.13 Wetland protections

TDC is supportive of the clarity around protection of wetlands, however we would like to see restored wetlands provided the same protections as natural wetlands, and purposes for constructed wetlands specified to include water quality treatment, flood attenuation, water storage and amenity.

We are concerned that discretionary status for wetland restoration activities will create a barrier to restoration projects in terms of processing costs unless processed on a non-notified basis. We seek addition of a clause that applications for a resource consent for the purposes of wetland restoration will not be publicly or limited notified.

Alternatively consideration should be given to making activities associated with restoration of wetlands a permitted activity, providing the applicant holds a council approved restoration plan for the wetland (with criteria for such plans developed).

Further comment on details in the NPS and NES on wetlands is included in sections 5.2 and 6.2 of our submission.

Outcomes sought:

- Definition of restored wetlands and provision of the same protections as afforded to natural wetlands to protect the investment made by landowners in developing wetland areas for biodiversity and ecosystem health benefits
- Clarification of the definition of constructed wetland to be those constructed for the primary purpose of water quality treatment, flood attenuation or amenity, recognising the need for these to be periodically maintained to retain function for the primary purpose
- Inclusion of a clause that applications for discretionary consent for activities associated with restoration of a wetland will be processed on a non-notified basis to avoid additional cost barriers to restoration projects, or alternatively realign the rule to a permitted activity provided the application holds a council approved wetland restoration plan
- Review the reporting requirements in NES-FW clause 5 (1b) to ensure they are not overly onerous (ie consider annual monitoring for the first 5 years and less frequently after in accordance with a monitoring plan), and incorporate an end date into the monitoring obligations under clause 5 where consents are land use consents and no expiry date is specified to avoid a disproportionate enduring obligation for monitoring
- Further detail is provided in sections 5.2 and 6.2.

3.2.14 Stream protections

TDC are supportive of clarity around stream protection and avoidance of infilling of urban streams, however infilling is the end point in a cascade of adverse effects that occurs with urbanisation of streams and the initial issue is typically lack of sufficient setbacks from waterbodies to allow for their natural form and function (i.e. room for rivers). With insufficient setbacks, particularly for buildings, issues of flooding and erosion due to higher volume and velocity of flows becomes an issue, resulting in the need for armouring of bed and banks and/or installation of stop banks or flood walls. This then locks in channel capacity meaning waterbodies cannot be revegetated or enhanced due to the adverse effects on flood capacity. Our preference is for stream controls to focus on sufficient setbacks to avoid the resulting effects cascade. One specific design element is the use of a sufficiently rough Manning's Roughness Coefficient (n value) when determining the necessary channel sizing that takes account of channels being restored with mature and diverse riparian vegetation and instream woody material for habitat provision. Use of appropriate roughness coefficient highlights that channels often need to be twice as wide as traditionally designed when just looking solely at water passage capacity. In addition, greater consideration needs to be given to attenuating flows from impervious surfaces etc. which create the increased volumes and velocities.

Outcomes sought

- Retain the requirement to avoid infilling of streams
- Include requirement to avoid buildings and structures within specified minimum setbacks of waterbodies
- Include requirement to use an appropriate Manning's Roughness Coefficient value in sizing channel capacity that reflects restoration of healthy, mature and diverse riparian vegetation and healthy instream habitat diversity (i.e. refer values (i.e. > 0.055) on page 120 of NZS 4404:2010)
- For simplicity, use only the term river as defined under the RMA – a further definition of stream just adds unnecessary complexity
- Further detail is provided in sections 5.2 and 6.2.

3.2.15 Fish passage

TDC supports the clarity around requirements for fish passage, however it is important fish passage requirements apply to all instream structures, not just new ones. Tasman's experience has been that the challenge with fish passage is the ongoing monitoring and maintenance necessary to ensure ongoing passage over time, particularly after storm events, and the subsequent cost of compliance monitoring that goes with this. As one of the Councils who is most advanced in addressing this issue across all instream structures, we are happy to provide detail about our experience of managing this issue. Further detail is provided in Sections 5.2.6 and 6.2.3.

Further detail is also available in the NZ Fish Passage Advisory Group submission.

Outcomes sought:

- Include requirement in NES-FW for owners of any instream structures to ensure ongoing fish passage, including monitoring and restoration of fish passage following storm events
- Include a definition/amended definition of the following words: culvert, weir, dam:
 - Culvert means: A tube, either a round pipe or box section, conveying water of a waterbody, typically located below roads, railways, cycleways, or walkways.
 - Weir means: A non-enclosed structure across the full width of the river that alters the flow characteristics of the river and usually results in a change in level of the river.
 - Dam – include a definition including reference to size

- List the parameters that should be measured with respect to instream structure assessments for fish passage (a full list can be provided on request).

3.3 Central Government assistance to Councils

Question 5 in the Action for Health Waterways asks “What support or information could the Government provide to help you, your business, or your organisation to implement the proposals?”

Key ways that Central Government can assist Councils and communities to protect and improve freshwater health include:

- Allowing councils to set realistic planning and implementation timeframes that reflect the freshwater context in their region and FMUs, that allows for sufficient community and tangata whenua engagement, and matches the ability of the community to pay for both planning processes and implementation
- Clear unambiguous direction that is shown to be evidentially based, is legally robust and reflects good planning practice (including draft proposals for consultation)
- Sufficient time for councils and their communities to consider and respond to draft proposals, including secondary rounds of consultation where revisions and clarifications occur
- Providing clear implementation guidance to councils in advance of new instruments taking effect
- Providing funding to councils (particularly those with small rates bases relative to land area) to assist in implementing the freshwater proposals, including assistance with research, data gathering and analysis – for example expanding the scope of Envirolink funding to baseline investigations not currently funded as BAU, but potentially not affordable for smaller councils in the timeframes needed
- Funding and facilitating national datasets and national information accounting systems, including:
 - A national online database for certified Farm Environment Plans under the MPI Integrated Farm Planning (IFP) work stream that councils can access to obtain property, FMU and regional level information on land use, stocking rates, crop types, farm practices, nitrogen losses, etc.
 - Generate, maintain and implement ongoing improvement of national datasets for use a regional and local scales, such as LIDAR, soil types, River Environment Classification, threatened species habitats, and associated spatial data accuracy
 - Develop and maintain a national database on funding options available to landowners, community groups, councils and iwi for waterbody restoration projects
- Central Government funding and facilitation of capacity building for iwi to engage further in freshwater planning process. TDCs experience is that local iwi representatives are stretched over a wide range of areas, and do not have sufficient capacity or capability to effectively engage in resource management planning processes. Requests for external mātauranga experts to fill this capacity gap are common, however there are only so many operating in the national freshwater space. The cost of providing for capability and capacity building for tangata whenua is borne by local government for all new central government legislative and regulation requirements to engage or work with tangata whenua. This is a cost that is not accounted for within the RIS. Further assistance from Central Government is needed.

4 Detail on key concerns

4.1 Timeframe and resourcing impacts on Council capacity

TDC staff have sought to roughly estimate the additional staff resourcing needed with regard to the further work identified to implement the NPS-FM and NES-FW, both for ongoing resourcing needs, and temporary resourcing considered necessary to meet the 2025 deadline. This has proven difficult due to the range of options and potential directions that could be take in the final versions.

The estimate includes more rapid development of science information to underpin a regional plan change, as well as development of the data management and accounting systems to support the process. The additional temporary resourcing is considered necessary to get over the transitional hump of changes needed before council could move back into a business as usual context.

We have significant concerns over our ability to both pay for the additional resourcing (both temporary and ongoing), as well as attracting suitably qualified personnel to the region to fill these positions in time to meet the deadlines. Particularly given national shortages in science, planning, and consenting staff with freshwater experience. TDC is already experiencing considerable difficulties in the recruitment processes for these positions and understand other councils are in the same position.

Table 1 Summary of rough estimates of additional Council staff resourcing requirements

Aspect	FTE Estimate of additional ongoing resourcing	FTE Estimate of additional temporary resourcing	FTE type
Collection, analysis and reporting of supporting FMU environmental data	1-1.5	3.5-4.5	Environmental Information
Data management and accounting systems (FEP, attribute data, telemetry)	1.5 – 2.5	0.5 – 1.5	Environmental Information
Regional plan change to apply framework	na	1.5 – 2.5	Environmental Policy
Improving degraded catchments, GMP advice	1.5 – 2.5		Land advocacy
Consent processing	1.5 – 2.5		Consents
Monitoring and Compliance action (including wetlands)	1.5 – 2.5		Compliance
Additional monitoring (new attributes , low flow, mātauranga, recreation, aquatic flora & fauna)	2-3		Environmental Information
TOTAL	8 - 12	6 - 8	

4.2 Motupipi Catchment – removal from Schedule 1 of NES-FW

The proposed NES-FW includes the Motupipi River as a high-nitrogen catchment. Tasman District Council submits that this be removed from Schedule 1 proposed in the NES-FW.

There is a range of reasons for this:

Nature of Motupipi River and catchment context for nitrate issue

- (i) The Motupipi River catchment is not a normal geographically based catchment. Most of the water in the river (>90 %) at normal base flows is groundwater, mainly from the karst limestone geology (Takaka Limestone Aquifer), with a smaller component of Takaka Gravel Aquifer water in its upper reaches near Takaka township.
- (ii) The catchment can't be defined by the surface catchment boundary, as the karst geology extends well beyond the surface catchment boundary, and includes significant land - mostly unfarmed - in the karst reaches. In addition, much of the Takaka Gravel Aquifer that provides water in the upper reaches is also outside of the surface catchment.
- (iii) Groundwater in the Takaka Limestone Aquifer ranges between 1 – 3 mg/L nitrate-nitrogen, with the Takaka Gravel Aquifer water being generally in the 0.5 to 1.5 mg/L nitrate-nitrogen

range. These levels are considered to be in the low end from a groundwater quality perspective. Groundwater is naturally higher in nitrate than surface water and the levels of nitrate in the Motupipi River is a reflection of the groundwater discharge.

- (iv) There are numerous potential sources of nitrate in the contributing catchments of the aquifers, and the response to manage nitrate needs to consider all of these sources and the various methods suitable to each given the groundwater context. There are numerous unsewered houses in the karst, dryland sheep farming, and issues of feral animals (goats/pigs etc.) in the upland karst (on private land and Department of Conservation Land). Due to the nature of the groundwater, its residence time, and geology, removing all livestock from the catchment may not have any impact on nitrate levels in the Motupipi River.
- (v) The proposal and methods for the Motupipi River in the NES-FW will not address the water quality issues as it focuses on only one contaminant and one source of that contaminant. The water health concerns in the Motupipi River are wider than just nitrate, and include deposited fine sediment, sediment nutrient load, phosphorus, dissolved oxygen and habitat quality and an integrated response is necessary.

Council plan review process already underway

- (vi) The community led Freshwater and Land Advisory Group (FLAG) has recommended holistic farm management plans (both for quantity and quality) alongside a number of other methods to address water quality issues in the Takaka catchments. TDC consider that a multi-faceted approach will be required to address long term water quality in the Motupipi River, and consider the existing process which is intended to be implemented through a regional plan change and non-regulatory implementation programme would be more likely to achieve tangible long term benefits for the Motupipi River. The FLAG recommendations cover all land uses in the contributing catchment to this river, including consideration of impacts on groundwater recharge. Significant work on this NPS-FM consistent water management plan is underway and Council hopes to notify this plan change next year (2020).
- (vii) Council is already working progressively with the farming community to reduce runoff related effects in relation to water quality. The dairy farms in the lower catchment already have Farm Environment Plans with water quality modules, and have undertaken stock exclusion. Some farms also have other projects programed to improve ecosystem health values, including wetland development and riparian planting. There is however a lot more to do and limited staff time to facilitate it to happen. Some key farms will voluntarily work with Council in this process.
- (viii) The effects of mitigation of nitrate effects in this catchment would be long term as the residence time of some of the groundwater is years and not just the quick runoff after rain flows. The quick runoff flow effects is already being addressed with the farming community with fencing/plaining and farm planning underway.
- (ix) The key farming stakeholders in the community are keen to work with the Council and the Council also needs to include the wider contributing catchment community in the aquifer recharge areas.
- (x) In the NES-FW clause 31 (2b) determines the applicability of subpart 4 and as currently worded clause 31 (2b) incorporates new requirements on council in the form of Action plans and changes to the RPS and regional plan. Given the councils proposal to notify a plan change in 2020, the farms in the Motupipi catchment will then potentially be in a position where a regional plan has legal affect they must comply with, in addition to the NES-FW subpart 4 until such time as Council can tick off the remaining elements outlined in clause 31 (2b). This is considered to add unnecessary complexity for little to no additional benefit.
- (xi) Inclusion of the Motupipi River in Schedule 1 and the associated work and deadlines will divert already limited council staff resourcing to this specific catchment, and away from the wider regional focus to implement the NPS-FM framework.

Subpart 4 benefits to cost and Council ability to set a robust nitrate threshold value

- (xii) We are concerned with the ability to set a robust and legally defensible nitrate threshold value for the Motupipi River and its groundwater contributing catchment. The approach in Schedule 1 relies on the assumption that nitrate issues are wholly farm sourced, wholly from dairy farming and are a result of runoff, with clause 47 (1) relying on aggregating the nitrogen loss figures only from the dairy farms in the catchment. Accessing dairy farm Overseer information will assist council to understand part of the nitrate issue in this catchment, but given the potential non-dairy farm sources and non-farm sources, including natural background levels, onsite wastewater and feral animals in the upper catchments, we do not believe that calculating a catchment threshold based on dairy farming will provide a robust approach for deriving farm activity consent status or justify requirements for farms to reduce their nitrate losses.
- (xiii) We are concerned that the requirements in subpart 4 do not present suitable value for cost in the Motupipi catchments. There are 7 dairy farms in the surface catchments that drain to the Motupipi River. Application of the threshold approach under clause 47 and 44/45 (and as per the example in the Action for Health Waterways document) may result in only one farm being targeted under subpart 4 as not meeting the catchment threshold (set as per clause 47 (2)). This seems a significant amount of complexity for very little benefit.

Outcome sought:

- TDCs preference is for removal of Motupipi catchment from Schedule 1 of the NES-FW to enable TDC to progress management of this catchment through the existing plan change and non-regulatory implementation plan process already underway to address the water quality issues in this river and its contributing groundwater catchments.

5 Draft NPS-FM - specific comment

5.1 General position of TDC

We are generally supportive of the additions to the NPS-FM including further strengthening of Te Mana O Te Wai, and inclusion of further attributes related to Ecosystem Health. However we have some concerns with specific parts of the NPS-FM which are outlined in sections 5.2 and 5.3.

The general drafting in both the NPS-FM and NES-FW is of concern. Many parts do not appear to meet good planning practice and key terms are undefined or poorly defined. We expect considerable effort has been unnecessarily spent nationally by submitters in addressing the drafting issues. For example:

- definitions for proposed terms are not consistent with the National Planning Standards definition standard or the RMA, and being spread throughout the documents makes for difficult reading
- The NPS-FM objective and policies do not conform to accepted format for their respective purposes
- Double negatives and subjective language are used
- Inconsistent language is used creating uncertainty of application: e.g.
 - 3.16(3) "Every regional council must make or change its policy statement and plan to..."
 - 3.16(5) "Every regional council must make or change its regional policies and plans to..."
 - 3.17(3) "Regional councils must make or change their plans to..."
- The requirements in the NPS-FM and NES-FW may create potential conflicts with regional plans being contrary to themselves and the NES-FW – for example the NPS-FM requires regional councils to have a policy that states the loss or degradation of all or any part of a wetland is avoided (3.15(2)), but then creates an overall conflict to this in 3.15(4) by requiring plans ensure when considering consent applications adverse effects are managed by applying the effects management hierarchy which employs an avoid-remedy-mitigate-offset-compensation cascade approach. Further the NES-FW creates an exception to the requirement to 'avoid' for nationally significant infrastructure in clause subpart 1 (6a). It is unclear how these aspects might play out in practice, particularly given the King Salmon

decision (avoid means avoid). In addition, the wording of NPS-FM 3.15 (3a), directing the regional policy to be read subject to rules in the NES, seems to be turning the planning framework on its head where rules are directing interpretation of policy rather than the other way around.

Outcome sought:

- Redrafting of the NPS-FM and NES-FW (following submissions) requires review by appropriately experienced RMA drafting and legal experts to ensure it meets planning best practice, provides clear direction, and will be enforceable in the courts
- Provide clarity and advice on how the interplay between 3.15 (2) and (4) and (3a) is expected to be implemented by regional councils

5.2 Specific comments

5.2.1 Mahinga kai and tangata whenua values [AHW page 31]

TDC supports the amalgamation of the two existing mahinga kai values into one value, and suggest the further amalgamation of the fishing value to create one all-encompassing value that reflects the outcomes sought by both māori and non-māori for access to and safe harvest of freshwater species (including for food and other material uses). The freshwater management needs for all three current values are related. Presumably those undertaking fishing activities also wish the fish to be safe to harvest and eat and that mauri of the habitats they are taken from is healthy, and conversely the mahinga kai by its definition already incorporates fishing. Our experience through our freshwater collaboration process in the Takaka catchments supports this approach.

We do not have a strong position on whether an amalgamated mahinga kai / fishing value should be elevated to a compulsory value, but highlight that communities and tangata whenua are already able to identify these values as applying to an FMU under the current NPS-FM -where it is applicable. Presumably there may be FMUs where the mahinga kai-fishing value may not apply, where in contrast the current compulsory Ecosystem Health and Human Health requirements are ubiquitous.

We do not support proposal 2 to create a new tangata whenua freshwater values category, as this represents a potential duplication of effort when tangata whenua values are able to be expressed within the existing values framework (we acknowledge further work is required to fully achieve this in Tasman, particularly with respect to development of cultural tohu). This approach also risks developing values in an unintegrated manner, which loses the benefits of shared conversations between tangata whenua and the community to reach common understanding on values and management objectives. Our experience through our freshwater collaborative process in the Takaka catchments highlighted that there were many commonly shared views between tangata whenua and the community across the values set, and the primary differences arose from: philosophical differences to management approaches (partly addressed through the strengthening of Te Mana O Te Wai as proposed); in personal views and application of concepts such as utu (reciprocity) and kaitiakitanga obligations; and in the personal perception of acceptable risk.

Outcomes sought:

- TDC supports the amalgamation of the two existing mahinga kai values into one value, and suggest the further amalgamation of the fishing value to create one all-encompassing value that reflects the outcomes sought by both māori and non-māori for access to and safe harvest of freshwater species (including for food and other material uses).
- TDC neither oppose or support the elevation of an amended mahinga kai value to a compulsory value, but highlight communities and tangata whenua can already identify this as a value where appropriate and that this value may not be present in all FMU
- TDC do not support the creation of a separate tangata whenua values category as this represents a duplication of effort and loses the benefit of shared conversations between

tangata whenua and communities to reach common understanding of values and management objectives.

5.2.2 Definitions

All definitions should be located in the definitions sections – even if this means duplicating definition text. Having some definitions in the definitions section and some embedded in the text with references to clause numbers is not helpful to users.

There is a need for further clarification of some defined terms, and new definitions for other currently undefined terms, particularly where they influence implementation of the NPS-FM.

Outcomes sought:

- The definitions sections in the NPS and NES should be complete lists of all definitions used in the documents to provide a single location to view these. Words that have specific definitions should be highlighted in some way in the text (i.e. bold italic) and preferably hyperlinked to definitions in electronic versions for ease of use.
- Clause 3.14(1) requires definition or clarification on what constitutes a trend, i.e. how much, over what timeframe, etc.
- The definition of take limit should be amended to read: ***take limit means a limit on the amount of water that can be taken from an FMU or all or any part of a waterbody or waterbodies [...]*** as this better reflects the potential complexity of water take management within some FMUs
- The Net Loss definition is located under the wetland section 3.15, but is used in 3.16 streams section which provides uncertainty as to its application for all of subpart 3. It also appears to define “no net loss” or a neutral position where positives equal losses – rather than net loss where the losses outweigh the positives. The term being defined should be either renamed “No net loss” or separate definitions for net loss and no net loss provided for clarity
- Any definitions regarding wetland should be consistent with the RMA definition (ie using intermittent wetland, not ephemeral wetland – refer 3.15 (5a))

5.2.3 Threatened species

Reference to threatened species attribute in the NPS-FM should be modified to refer to habitats of threatened species.

With regard to freshwater management it is not an RMA function of councils to manage threatened species per se, but it is a council function to manage ecosystems and biodiversity. There may be other non-water related factors having significant adverse effects on species, such as predation and pest competition, genetic and disease issues and terrestrial habitat and connectivity loss, some of which are addressed through other Acts and legislative instruments directing other functions of council as well as other organisations. The ‘attribute’ councils have control over via freshwater management is riparian and aquatic habitats and this would be the better measure of whether we are meeting our objectives for threatened species from a freshwater perspective. This approach already reflects clauses 3.6 (3c) (location of habitats of threatened species), but provides clarity around council function.

The wording of Appendix 1A (3) needs clarification and the wording sought is provided below. It is important to recognize the ability of councils to influence the protection of threatened species in relation to freshwater is limited to those aspects listed.

Outcome sought:

- Amend all references to the ‘threatened species’ attribute in the NPS-FM to the ‘habitats of threatened species’, including Appendix 1A(3)
- Appendix 1A (3) should be reworded to: “In FMUs that support a population of threaten species, the extent and quality of aquatic and riparian habitat for that threatened species is not reduced. This includes water quality, flows or water levels and aquatic and riparian habitat for specific life stages.”

5.2.4 Wetlands (Subpart 3 - 3.15)

Avoiding the loss or degradation of wetlands is important, but this needs to be backed up by a comprehensive mapping and compliance monitoring programmes. Despite TDC having reasonably strict policies on wetland removal, wetland loss has still occurred until recently.

There is a lot of work to do in order to reduce the degradation in our region with weed invasion (e.g. willows, blackwoods) in wetlands causing a lot of “degradation”. More funding is needed to control priority pest plants, particularly those in areas in the “pre-explosion” phase.

TDC is mapping and collecting wetland information discussed in 3.15 (5). We are mapping down to a finer scale - 0.01 hectares (not to 0.05 ha prescribed). We use the Landcare Research wetland delineation protocols and apply them very consistently (we have been audited by the author of these in the application of these methods).

TDC is currently not monitoring wetland condition (repeated sampling events over time). However, through the field-based mapping process condition is described in basic terms a one-off. We do not monitor condition thoroughly as per recommended guidelines (Landcare Research publication).

Outcomes sought:

- The planting of exotic trees or invasive species in wetlands should be prohibited.
- In clause 3.15 (7) of the NPS-FM replace the word “or” with “and” as methods are required in an RPS under RMA Sec 62 (1e) and non-regulatory methods will likely be important to obtaining the desired outcomes for wetlands.
- Clause 3.15 (8) should have added to the end “provided requirements for sediment discharge are met”

5.2.5 Streams (Subpart 3 - 3.16)

The addition of stream “extent” to RPS’s is welcomed and very important, given reports of extensive piping streams in much of Aotearoa. As far as staff are aware, this activity has been very limited in Tasman.

In addition to adding a policy to avoid “infilling” of rivers, avoidance of buildings and structures too close to rivers and excessive armouring (e.g. rock-lining, revetments, etc.) of waterways is also needed.

The basic problem is that waterways need appropriate space (through plan mechanisms) and appropriate design for capacity needs in order to allow natural functions and processes and provide space for natural or “soft engineering” approaches to bank and bed stabilization. For example, using an appropriate Manning’s Roughness Coefficient number in capacity and channel sizing to allow for future riparian restoration - taking into account effect of mature, stratified riparian vegetation on capacity (*refer NZS 4404*). Waterways will always move and need some room to do that, within bounds.

This is the key issue in that inappropriate setbacks initiates a cascade of adverse effects on streams, particularly in urban areas that often ends with piping or infilling. Not allowing sufficient ‘room for rivers’ often drives the need for armouring of bed and banks to cope with increased runoff volumes and velocities. Insufficient channel capacity and no room for management results in barriers to habitat restoration (planting in the channel exacerbates the capacity problems) and often results in increased flooding risk to structures located too close to rivers, which in turn drives further flood management activities that impact on waterbody health and often drives the desire for piping or realignment and

infilling. As worded currently, the focus on infilling and the provision for this to still occur where flood risk is an issue leaves a loop-hole for the above cascade to continue to occur.

In rural areas setbacks are also important for any land disturbance, including cropping/ cultivation and intensive grazing.

Given the potential long term and cumulative adverse effects of armouring, consideration should be given to situations and thresholds above which this should be a consented activity.

Rock lining is implicated in significant adverse ecological effects, such as high water temperatures (from lack of shading), poor habitat (e.g. very uniform thalweg and limited pools, limited cover along the banks for fish and overhead cover of trees to supply leaf detritus and insect “rain” to “feed” the waterway), potentially higher growth of macrophytes due to lack of shading. It also has potential to impact on adjacent and downstream properties through modification of flows and erosion. Rock lining is generally only appropriate around bridges or significant infrastructure and soft engineering approaches should be promoted for other erosion and river control purposes.

The term “infilling” needs to be defined in the definitions as it is not self-evident.

Further discussion on stream management is provided in section 6.2.2.

Outcomes sought:

- Include the following in 3.16 (4) of the NPS-FM:
 - inadequate waterbody setbacks for buildings and structures not required to be located in the river bed (or appropriate words to this effect);
 - rock lining or armouring of river bed, banks and riparian margins
- Include a definition of ‘infilling’ in the NPS-FM
- Include a clear definition of ‘net loss’ and what this relates to with respect to stream habitat (e.g spatial extent of river bed, habitat values, wetted habitat, etc)
- For simplicity, use only the term river as defined under the RMA – a further definition of stream just adds unnecessary complexity
- Check 3.15 (5) should regional policies refer to ‘regional policy statements and plans’?

5.2.6 Fish Passage (Subpart 3 - 3.17)

This obligation for Council (as listed in s3.17 4 & 5) to develop a work programme to assess and remediate in-stream structures is critical to achieving meaningful improvements in fish populations. However, it will take a lot of resources and, given that it is a legacy issue, a contribution from central government is likely to be necessary. While it will take time, the important thing is that we make progress. It will be achievable in two decades if the resources are there and Councils are diligent.

TDC has assessed and remediated about 3000 instream structures over 10 years, using about 60 weeks of staff and contractor time. This is expected to be about 30-40% of all such structures in the district.

Clause 3.17 5(a) should list or refer to a list of the key parameters needed to be measured e.g. perch height and over-hang length, maximum water velocity (if more than one culvert, measure in each), water depth. A full list can be found in the NZ Fish Passage Advisory Group submission. Measuring and recording these parameters are fundamental for assessing fish passage.

The roading industry is often an asset owner of structures that can create fish passage barriers. Often those doing the assessment are maintenance contractors that have had little or no training in this aspect of the job. TDC has repeatedly tried to give this training to such contractors, but when there is staff turned over such knowledge is not passed on. Training and certification schemes should be set up to achieve this.

Further detail is also available in the NZ Fish Passage Advisory Group submission.

Outcomes sought:

- Clause 3.17 5(a) should list or refer to a list of the key parameters needed to be measured as part of identifying instream structures. A full list can be found in the NZ Fish Passage Advisory Group submission. Measuring and recording these parameters is fundamental for assessing fish passage.
- Central Government to provide guidance to the roading industry and development appropriate training and certification schemes to ensure contractors have the necessary understanding to assess fish passage requirements during maintenance inspections.
- Include a requirement in the NES-FW for structure owners to notify councils with structure location information (at a minimum) to assist regional councils in fulfilling requirements under 3.17(6)
- Clarify if 3.17 (1) also applies to trout diversity and abundance, and if so, provide guidance on how this is to be implemented in the context of enhancing native fish diversity and abundance, particularly where these are threatened species and are predated on by trout.
- 3.17 (3b) is confusing and reads like a double negative and should be reworded for clarity

5.2.7 Human contact requirements and Primary Contact Sites (Subpart 3 - 3.18)

Clause 3.9 (2)(a) requires swimming attribute (human contact) states need to be set above the current state. In Tasman we are well in excess of the national targets set in the 2017 amendments. Our LTP/Annual plan targets are 97% and our current state is around 96-97%. The remaining 3-4% tend to be from transient issues that arise in different locations in different years, or are sites where, despite significant investigations, no obvious source has been identified and there may be naturalised populations of *E.coli*, or they are known sites where efforts are already being planned, but may take time to achieve results. To seek 98 or 99% in this context is cost prohibitive and not practicable, particularly given the transient nature of some issues.

In addition, it needs to be recognised that even naturally forested catchments can produce *E.coli* and consideration of the background load is required. It is unfeasible to expect councils to manage *E.coli* to below background levels.

Regarding the requirements under 3.18 (2), Council only samples two FMU's on an annual basis. These sites have been chosen because they are very popular and there is up to moderate risk of faecal contamination (there are no moderate-high risk situations). This proposed requirement will force TDC to sample in more FMU's (e.g. Buller, Motueka (currently sampled every second year). This is a big effort and cost to do every year for sites that are low risk. This will use up funds that would be better put towards investigating the cause of poor water quality. We also suggest that it would be more efficient to sample a whole suite of sites across the FMU on a triennial basis (three yearly), rather than drive reasonably large distances for only one sample at least 20 times annually.

Regarding the time periods in 3.18 (3) Swimming in rivers in Tasman, typically starts in mid-December when water temperatures get over 18 degrees (hardy youth may swim a month or so earlier when temperatures are as low as 16 degrees). We currently start our sampling in mid-November, but finish in early March. Primary contact relating to whitewater kayaking occurs all year round, but most commonly

occurs in October through to April-May. This requirement requiring us to sample over a longer season would require us to employ more staff as this requires a lot of sampling outside of the time we normally have summer students.

Regarding clause 3.18 (3) It should be specified in the requirement as to when daily sampling can cease. For many regions it is not possible to sample daily through the weekend. Daily sampling is not possible on Saturday as samples would then get to the lab on Sunday when it is not open. Couriers don't run on Sunday for a delivery to the lab on Monday.

Outcomes sought:

- Retain the existing provision in the 2014 (2017) NPS-FM for improvement requirements in current states only where regional targets are not being met.
- Include allowance in clause 3.18 (2 and 3) for councils to set appropriate monitoring timeframes and appropriate bathing periods that match the FMU risks and primary contact uses of water, including allowing flexibility in monitoring programs to allow monitoring of more sites less frequently (eg FMU wide synoptic sampling on a three yearly basis) rather than less sites more often.
- Include in clause 3.18 (3) specification for when daily sampling can cease that takes into practical considerations such as laboratory and courier availability.
- Reword 3.18 (1) to relate to the management of risks to water quality at primary contact sites, and clarify it is not intended to direct regional councils to physically manage sites to remove slippery or unpleasant weed growth

5.2.8 Assessing and reporting requirements (Subpart 3 - 3.12)

TDC is concerned that the additional attributes (14 in total) create a risk that additional capacity and resource will be required to quantify the existing attribute state. Allowing councils to identify freshwater management unit specific attributes using a risk informed prioritisation framework would enable more effective management interventions and allow councils to focus on key contaminants.

Reporting annually across all attributes is too frequent for the following reasons:

- 1) Annual reporting purely of data with no associated interpretation will likely lead to a lot more questions from the public, so we anticipate some professional interpretation will be needed in this reporting.
- 2) This is an additional resourcing burden that will not yield the appropriate level of benefit. It is important that staff resources are put into achieving outcomes rather than proliferate monitoring and reporting for the sake of it.
- 3) Usually water quality trends take more than three years of monthly monitoring to detect, and that is just significant trends which may only occur at a few sites.

If we are to do annual reporting, it should be:

- a. Related to degraded streams only to determine if intervention is working.
- b. Automated analysis and reporting systems
- c. Bathing water quality.

Outcomes sought:

- Amend annual reporting in clause 3.21 to be limited to: degraded streams only to determine if intervention is working; Automated analysis and reporting systems; Bathing water quality

- Allow councils to identify freshwater management unit specific attributes using a risk informed prioritisation framework would enable more effective management interventions and allow councils to focus on key contaminants.

5.2.9 Other specific outcomes sought

Outcomes sought:

- Reword clause 3.2 (4) to refer to “engage in discussion with communities and tangata whenua to determine how Te Mana O Te Wai and the hierarchy of obligations is applied to freshwater bodies in the region” to make it clear this requirement is not intended to rehash the definition of Te Mana O te Wai as outlined in NPS-FM section 1.5, but to consider the application of the concept and hierarchy of obligations within local waterbody management
- In clause 3.4(5) the polices directing territorial authorities should be amended to include reference to unitary authorities.
- Part 3.8 – security of supply is a key attribute of water quantity when considered in the context of water use for economic purposes and appears to meet the definition of an attribute as a ‘measurable characteristic that can be used to assess a particular component of a value applied to water’. This attribute could be sought to be maximised for this value of water within the context of the TMOTW hierarchy of obligations.
- Part 3.10, 3.11 and 3.12. Setting environmental flows and levels. There should be a policy expressly requiring sampling for key ecological attributes at low flows (particularly extreme low flows) in order to help set appropriate environmental limits. Such attributes would include DO, water temperature, periphyton, wetted usable area, quantitative macro-invertebrates, and fish. If there is a requirement to set limits based on the best information available, there needs to be a requirement to collect it. There also needs to be consideration in the timeframes/deadlines for the time needed to collect and analyse sufficient data to inform decisions.

5.3 Amendments sought to Attributes and NPS-FM Appendix 2a and 2b

5.3.1 General comment:

TDC welcome adding the attributes of DO (for all rivers, not just discharges), suspended and deposited sediment, aquatic invertebrates, fish and bathing water to the NPS-FM. Having multiple attributes is important in managing a complex system when no one indicator is perfect. Intersecting evidence (ie multiple lines of evidence that corroborate about a particular issue) is important.

More guidance is needed around monitoring network design. For example, “annual sampling” for freshwater fish (using at least one method) – one site for each FMU would be very limited and triennial sampling (e.g. sampling 20 times in a season every 3rd year) over several sites in an FMU is probably more appropriate (Table 15).

While it is useful to see attributes split into Appendix 2a and 2b, for those meant to be applied as limits versus a trigger for action plans, it needs to be made clearer at the top of each table which is the case - as it is not immediately obvious if you skim over the appendix heading as there is no difference in the format of each set of tables.

It is important that the relevant statistical metric is made clear in each attribute table. Currently some are clearly stipulated and others are not (e.g. turbidity).

Outcomes sought:

- Provide further guidance on monitoring network design, including appropriate sampling timeframes, and considering the need for FMU-wide understanding of issues.
- Ensure the relevant statistical metrics are clearly identified for each attribute in each attribute table, including the error margins for chemical determinants
- Identify in each table the requirement for limits and action plans.

5.3.2 Table 2. Periphyton.

While this attribute limit remains the same as the 2017 NPS-FM, we have advice from top aquatic ecologists that, for Tasman, sampling for chlorophyll- α is of limited value. This is because there are very seldom thick mats (apart from a few places where *Microcoleus autumnale* commonly blooms in stable base flows). Instead we intend to continue monitoring % cover of various types of periphyton (using the RAM2 method in Biggs and Kilroy 2000) as in our SOE river water quality monitoring programme. This approach matches the previous MfE guidance provided for the 2014/17 versions of the NPS-FM, but has not been formally recognized in the NPS-FM itself.

Outcome sought:

- Provide allowance in Table 2 for monitoring of % cover (in the first instance) in regions or FMU where chlorophyll- α is of limited value.

5.3.3 Table 5. Dissolved Inorganic Nitrogen and Table 8 Nitrate Toxicity

While the note at the bottom of Table 5 acknowledges the linkage with groundwater stating “Groundwater concentrations also need to be managed to ensure resurgence via springs and seepage does not degrade rivers through DIN enrichment.” This does not adequately address the issue that groundwater is naturally higher in DIN than surface water and in many cases groundwater will result in spring-fed rivers exceeding the numeric attribute states in this table (in some cases due to naturally occurring, background nitrate concentrations). DIN levels of 0.5 to 4 mg/L are considered low for groundwater. Further the hardness of groundwater influences the toxicity of nitrate.

An exclusion is required for predominantly spring-fed rivers in combination with enabling councils to identify appropriate attribute state bands for groundwaters and their associated spring-fed rivers that take into account the context of groundwater DIN, likely back-ground levels, water hardness and anticipated timeframes for change in DIN levels over time.

Outcome sought:

- TDC support the approach identified in the LGNZ submission for the DIN and DRP tables.
- In Table 5 (if retained) and Table 8, add an exclusion for predominantly groundwater-fed rivers allowing for councils to specify appropriate attribute state bands for these that reflect catchment context.
- Include a definition for groundwater fed river as one where during baseflow the predominant source of water is groundwater.
- Clarify the hierarchy of Table 5 and 8.
- In the case of groundwater-fed systems hardness should be accounted for in Table 8 which has an influence on nitrate toxicity.

5.3.4 Table 9 and Table 19 Dissolved Oxygen

Table 9 (rivers below point sources)

We are unsure why Table 9 only applies to the summer period. While summer is the period that it is most likely to breach these limits and when monitoring should be targeted, there is still a chance that breaches will occur in winter.

Table 19 (rivers)

It is very important to have this attribute applying to rivers. There may be some natural exceptions, particularly due to spring-fed streams where the aquifer dissolved oxygen is below bottom lines. While these situations are not common, an exclusion should be allowed for to enable councils to set locally appropriate attribute state bands.

In practical terms, it is often hard to get a full 7-day deployment in between storms or flood events and much easier to obtain a 3-4 day deployment during stable weather. It would be very useful to have a 3 or 4 day limit with the numeric attribute state appropriately between the one and seven day limits.

There seems little point in having a “mean minimum” over one day. So changing that to a daily minimum would be appropriate.

We understand from the consultation meetings that Table 19 is only applied to action plans. It needs to be clear which attributes are applied as real bottom lines, and what are meant as triggers for action plans.

Table 9 and Table 19 are virtually the same with the exception of the application period for point source and the need for limits vs action plans. Both tables could be amalgamated with highlighting of the differing requirements for limits and action plans.

Outcome sought:

- Extend the application of Table 9 to all year round
- TDC support the inclusion of dissolved oxygen attribute in rivers
- Add exclusion for groundwater fed rivers allowing for councils to specify appropriate attribute state bands for these.
- Change mean minimum to daily minimum in Table 19
- Consider amalgamating Table 9 & 19 with correct referencing and footnote and highlight the differing requirements for limits and action plans

5.3.5 Table 10. Suspended sediment.

The statistic that the turbidity numeric attribute state applies to needs to be stated in Table 10 (the relevant statistics should be clear in all Tables). We now understand (from the MfE roadshow) that it applies to a two or three yearly rolling median. That is understandable. If it were a single sample, these attribute states for turbidity seem very low (several classes 1.5-1.6 FTU) making it very strict for most classes of river. These limits are even more strict than the Buller and Motueka Water Conservation Orders and we don't tend to manage to this limit in resource consent conditions because it is impossible (for example, building river bank protection works often leads to turbidity in the river downstream of reasonable mixing in the 100's of FTU for a period of hours). From experience for most hill and lowland fed streams a limit around 10 FTU is appropriate as an average with a single sample representing a short term spike around 20 FTU.

It is the fine sediment loading that is most important and there needs to be more guidance about setting load limits.

Spring-fed waterways are naturally very clear and should be highlighted in a specific river class.

There is a lot of error sampling turbidity down to these very low levels (confidence intervals up to 1.5 FTU), so we would have to take that into account.

We suggest:

1. Applying this attribute state to base flow, and
2. As a trigger for further investigation and
3. Provide an additional attribute state using a median or 95th percentile.

These latter statistics based on a suite of sample data would be more appropriate given that high turbidity for a very short duration may not cause a significant adverse effect. For sediment, more than most contaminants, it is the total load that is most important. To that effect, it is helpful to provide for both single sample and a statistic applying to a data series to protect streams from both very high level short-term discharges and moderate-level medium-term discharges.

Sediment discharges from winter grazing activity can result in turbidity in waterways in the high 100's to 1000's of FTU for a period of 1-2 days. Even with best practice this will often be 50-200 FTU over that same period. Our urban streams are usually well over this limit even at base flow and will be much higher for periods after rain.

It would be useful to get some guidance about attribute states for continuous data. The Lee River is in class 9 which has a bottom line of 1.6 FTU.

Outcome sought:

- Clarify the statistic that applies in Table 10 as being a 2 or 3 year rolling median.
- Provide further guidance on setting load limits for fine sediment loading
- Highlight spring-fed waterways as a separate river class, including consideration of increased sampling error in very clear waters
- Consider providing for both single sample and a statistic applying to a data series to protect streams from both very high level short-term discharges and moderate-level medium-term discharges
- Provide guidance on attribute states for continuous data
- Apply the attribute state to base flow and as a trigger for further investigation
- Provide an additional attribute state using a median or 95th percentile.

5.3.6 Table 13. Macroinvertebrates

This attribute requires us to analyse macroinvertebrate samples using the fixed count method instead of coded abundance that we have undertaken for almost 20 years. We, and our science advisors, believe the increased cost (2-3x) does not yield sufficient benefits for this change. We can still calculate MCI (as well as sqMCI, % EPT, # EPT taxa, # taxa), but we cannot calculate QMCI or the ASPM on Table 14.

Outcome sought:

- Enable council's to continue to use coded abundance as a method for monitoring macroinvertebrates.

5.3.7 Table 15. Fish (rivers)

While we support the fish IBI, we suggest using observed over expected is the most appropriate metric. The downside with the fish IBI is that the addition or loss of 1-2 species makes a massive difference to the score because we often have so few species in a waterway reach. In addition, we have to be realistic that it will probably take many years to see a meaningful improvement in fish populations as most of the degradation took place a very long time ago and there is a massive legacy (particularly of fine sediment,

waterway straightening) to get over. Fish modelling backed up by expert panels is also important information to put alongside any fish IBI data. Note that habitat monitoring is as important as measuring the fish themselves.

Note: most waterways in Golden Bay are well above the A band. There are very few reference sites many parts of our region (e.g. Moutere) to compare what band we would be expected to be in.

Outcome sought:

- Enable councils to use observed over expected metric in assessing fish.

5.3.8 Table 18. Fine sediment cover.

These attribute states for % fine sediment cover seem too high (permissive) and is best applied to assessing discharges prior to any mixing zone. In Tasman, the vast majority of waterways in the “working landscape” are in Class 10 which has a bottom line of 29% cover. We rarely get any fine sediment covering more than 5% of the bed for any streams in this class. A lot of this probably has to do with stream gradient and depositional environment. A recent flood in the Wai-iti River and tributaries is a case in point where very high suspended solids/turbidity were observed (we suspect winter grazing was the cause), but very little deposited sediment was evident. We suggest that consideration of the depositional environment should be made when applying this attribute.

We support this attribute being used as a single sample exceedance metric as this measure is integrated over a relatively long period of time (i.e. between floods).

We still prefer re-suspendable solids (sediment assessment method 4) over % surface cover of fine sediment as that is much more of an early-warning system. SAM4 takes longer to sample in the field and for sample analysis, but the results are much better quality. SAM4 appears to be far more related to invertebrate condition than surface cover. An attribute state for SAM4 may need to be developed based on a lot more data. This means that the requirement should be for monitoring using this metric, rather than having an attribute state limit.

Outcome sought:

- Allow for consideration of deposition environments in applying % fine sediment cover
- TDC support this attribute being used as a single sample exceedance metric as this measure is integrated over a relatively long period of time (i.e. between floods).
- Amend the requirement for suspendable solids to monitoring of this attribute, rather than using this as an attribute state limit at this time.

5.3.9 Other specific outcomes sought – urban and emerging contaminants

It would be good to see attribute states developed for key heavy metals so there is more ability to regulate urban streams. We understand that recent research has led to the revision of the ANZECC guidelines, at least for zinc. There was discussion at the consultation meetings that any standards for metals and other urban toxicants would be in the yet-to-be-developed NES for stormwater. We consider it would be better to have all the limits in one place i.e. NPS-FM NOF tables.

Emerging contaminants have the potential to have significant effects on both human and ecosystem health and may ‘fall through the cracks’ of the current freshwater framework. While regional monitoring needs to occur for these, we feel central government via MfE or the EPA, needs to take a lead role in

looking at emerging contaminants, and identify key contaminants nationally, and provide research-based guidance on appropriate and cost effective monitoring methods and regimes for councils.

Outcome sought:

- MfE to develop and publicly release a program of development of further attributes, including heavy metals and other key contaminants in urban areas.
- Central government to take a lead role (via MfE or EPA) on emerging contaminants identifying key contaminants nationally and providing research-based guidance on appropriate and cost effective monitoring methods and regimes for councils.

6 Proposed NES-FW – specific comment

6.1 General position of TDC

While TDC support the use of an NES as an interim measure until regional plans are updated, in its current form, consents staff do not consider it workable. The additional consent processing requirements will affect Council capacity, which is already struggling to achieve full staff capacity in the current national recruitment market.

6.2 Specific comments

6.2.1 Wetlands (Part 2, Subpart 1)

TDC support the protection of wetlands, however we have additional recommendations.

We are seeking that wetlands that have been restored (including those returning previously drained areas back to wetland, or new wetland sites) are afforded the same protections as natural wetlands, while constructed wetlands definition should be further clarified and constructed wetlands recognized as potentially needing periodic excavation and replanting to maintain their primary purpose.

We consider that constructed wetlands could be defined more specifically as those wetlands constructed with primarily for the purpose of water quality treatment, flood attenuation, water storage, or amenity.

In clause 8 the planting of exotic trees (e.g. willows or blackwoods) in wetlands should be prohibited. While this activity is not widespread, it is common enough to be an issue to manage. This activity is usually carried out to dry out and convert the wetland to a future productive use.

The definition of “Vegetation Destruction” as applying only to significant and indigenous vegetation severely limits the impact of NES-FW in terms of potential adverse effects on wetlands. The vegetation adjacent to a wetland may still provide benefits without being significant itself. The soil disturbance effects will still be present with vegetation removal of non-significant vegetation.

We are concerned at the reliance on the identification of wetlands in regional or district plans in the timeframes listed in the tables for low slope and non-low slope land in the stock exclusion regulations. This may create the situation where a wetland is as yet unmapped or not yet in a plan by the dates in regulations is not subject to the stock exclusion requirements for another two years (refer outcome sought on this in section 7.2.6).

The use of a discretionary activity status for wetland restoration work under the NES-FW will present an additional barrier to encouraging restoration and consideration should be given to making applications for restoration work non-notified. Alternatively consideration should be given to making activities associated with restoration of wetlands a permitted activity, providing the applicant holds a council approved restoration plan for the wetland.

Outcome sought:

- The definitions related to wetlands should be amended to:

Constructed wetland means a wetland constructed by artificial means that:

- a) supports an ecosystem of plants that are suited to wet conditions; and
- b) ~~is constructed for a specific purpose~~ primarily for the purpose of water quality treatment, flood attenuation, water storage, or amenity in a place where a natural wetland does not already exist; and
- c) may require periodic management to maintain the primary purpose, including excavation and plant replacement.

Natural wetland means a wetland as defined in the Act (regardless of whether it is dominated by indigenous or exotic vegetation, and including coastal wetlands and restored wetlands), except that it does not include:

- a) wet pasture or paddocks where water temporarily ponds after rain in places dominated by pasture, or that contain patches of exotic sedge or rush species; or
- b) constructed wetlands; or
- c) geothermal wetlands

Restored wetland means a wetland constructed by artificial means that:

- a) supports an ecosystem of plants that are suited to wet conditions; and
- b) is constructed primarily for the purpose of biodiversity or ecosystem health enhancement, or enhancement of catchment hydrology in a place where a wetland does not currently exist.

- In Part 8 add that the planting of exotic trees (e.g. willows or blackwoods) in wetlands is prohibited.
- Add a clause to subpart 1 that an application for a resource consent for the purposes of restoration of wetlands will not be publicly or limited notified.
- Clarify how earthworks disturbance is intended to work with the earthworks and land disturbance definitions under the National Planning Standards
- Amend the definition of vegetation destruction to remove the words significant and indigenous
- Clarify in clause 5 that suitably qualified persons are to undertake the technical monitoring work (rather than the holder of the consent)
- Clarify in part 2, subpart 1 15 (b) what is meant by 'water level' in this context, and provide guidance on how the extent of effect on water levels referenced in 16 and 17 (i.e. 0.1m change) are intended to be assessed in advance of the activities occurring.
- Modify clauses 12 and 13 to refer to "within a distance that is the lesser of:
 - 100m of the wetland; or
 - The distance from the wetland to outer boundary of its catchment upstream; or
 - Within the area downstream or laterally where draw-down of groundwater levels may affect the wetland."

6.2.2 Stream requirements (Part 2, Subpart 2)

Our comments for this aspect are the similar as those made for the streams part of the NPS-FM (refer Section 5.2.5) – we duplicate our comments below for convenience, and provide NES-FW specific outcomes sought:

"The addition of stream "extent" to RPS's is welcomed and very important, given reports of extensive piping streams in much of Aotearoa. As far as staff are aware, this activity has been very limited in Tasman.

In addition to adding a policy to avoid “infilling” of rivers, avoidance of buildings and structures too close to rivers and excessive armouring (e.g. rock-lining, revetments, etc.) of waterways is also needed.

The basic problem is that waterways need appropriate space (through plan mechanisms) and appropriate design for capacity needs in order to allow natural functions and processes and provide space for natural or “soft engineering” approaches to bank and bed stabilization. For example, using an appropriate Manning’s Roughness Coefficient number in capacity and channel sizing to allow for future riparian restoration - taking into account effect of mature, stratified riparian vegetation on capacity – refer NZS 4404). Waterways will always move and need some room to do that, within bounds.

This is the key issue in that inappropriate setbacks initiates a cascade of adverse effects on streams, particularly in urban areas that often ends with piping or infilling. Not allowing sufficient ‘room for rivers’ often drives the need for armouring of bed and banks to cope with increased runoff volumes and velocities. Insufficient channel capacity and no room for management results in barriers to habitat restoration (planting in the channel exacerbates the capacity problems) and often results in increased flooding risk to structures located too close to rivers, which in turn drives further flood management activities that impact on waterbody health and often drives the desire for piping or realignment and infilling. As worded currently the focus on infilling and the provision for this to still occur where flood risk is an issue leaves a loop-hole for the above cascade to continue to occur.

In rural areas setbacks are also important for any land disturbance, including cropping/ cultivation and intensive grazing.

It is suggested that any more than 30m linear length on any bank should require special consent. Such rock lining is implicated in significant adverse ecological effects such as high water temperatures (from lack of shading), poor habitat (e.g. very uniform thalweg and limited pools, limited cover along the banks for fish and overhead cover of trees to supply leaf detritus and insect “rain” to “feed” the waterway), potentially higher growth of macrophytes due to lack of shading. Rock lining is generally only appropriate around bridges or significant infrastructure.

The term “infilling” needs to be defined in the definitions as it is not self-evident.”

Outcomes sought:

- Include adequate waterbody setbacks requirements under the NES-FW subpart 2, including a requirement to consider riparian and aquatic habitat enhancement in channel design
- Include requirement to use an appropriate Manning’s Roughness Coefficient value in sizing channel capacity that reflects restoration of healthy, mature and diverse riparian vegetation and healthy instream habitat diversity (i.e. refer values (i.e. > 0.055) on page 120 of NZS 4404:2010)
- Given the potential long term and cumulative adverse effects of armouring of river beds, banks and margins, this should be included in the requirements under the NES-FW subpart 2, and consideration given to situations and thresholds above which this should be a consented activity.
- Include a definition of ‘infilling’ in the NES-FW
- Include a clear definition of ‘net loss’ and what this relates to with respect to stream habitat (e.g spatial extent of river bed, habitat values, wetted habitat, etc)
- For simplicity, use only the term river as defined under the RMA – a further definition of stream just adds unnecessary complexity

- Clarify what is meant by ‘condition of the river’ in subpart 2 (2) – ecologically, hydrologically, culturally – all conditions?

6.2.3 Fish passage (Part 2, Subpart 3)

Requirements under clauses 21(1) (culverts), 22(1) (weirs) and 23(1) (passive flood gates) need to apply to all existing structures not just new installs and require ongoing fish passage into the future.

TDC’s experience has been that the challenge with fish passage is the ongoing monitoring and maintenance necessary to ensure ongoing passage over time, particularly after storm events, and the subsequent cost of compliance monitoring that goes with this.

This is a major problem with this rule because it only applies to the construction of the structure (i.e. new installs) and does not touch the country’s legacy of fish passage barriers. This does not take us any further than Council plans at the moment (all have rules relating to new installs). If TDC, NCC, GDC and Horizons, as well as the NES-Plantation Forestry find it workable to have rules requiring fish passage at all culverts, then all regions can do it.

Reference to “occupation of the bed” in addition to “construction” is needed in the first clause on subsection 1 of both clause 21, 22 and 23.

NES-FW s21(1)(h) says that the “person constructing” the structure should be responsible. This should be the landowner and/or the “person constructing” the structure (not just the person constructing it), as it is often very hard to track down the contractor doing the work, especially if it is a one-man-band like so many doing such farm work. It might seem like a minor point, but these things can often fall down in the implementation.

Water velocity should be a piece of information that is supplied with the rest listed (and s21(1)(c) should be maximum velocity, not mean).

Further detail is also available in the NZ Fish Passage Advisory Group submission.

Outcomes sought:

- Change subpart 3 of the NES-FM, including 19(1), so the requirement for fish passage is reframed for owners of any instream structures (existing and new) to ensure ongoing fish passage to be maintained into the future, including after storm events
- Reference to “occupation of the bed” in addition to “construction” is needed in the first clause on subsection 1 of both clause 21, 22 and 23.
- Reword clause 21(1)(h) and (g) to read “the landowner and/or the person constructing the structure...”
- Clause 21(1)(c) should refer to maximum velocity, not mean.
- Include a definition/amended definition of the following words: culvert, weir, dam:
 - Culvert means: A tube, either a round pipe or box section, conveying water of a waterbody, typically located below roads, railways, cycleways, or walkways.
 - Weir means: A non-enclosed structure across the full width of the river that alters the flow characteristics of the river and usually results in a change in level of the river.
 - Dam – include a definition including reference to size
- The standard fish passage structure information definition (clause 20) should be expanded. A full list can be found in the NZ Fish Passage Advisory Group submission. Measuring and recording these parameters is fundamental for assessing fish passage.

- Include a requirement in the NES-FW for structure owners to notify councils with structure location information (at a minimum) to assist regional councils in fulfilling requirements under NPS-FM 3.17(6)
- Define what is meant by 'active floodplain' in subpart 3 (20)
- Clarify what is meant by 'stable for at least four fifths of the time' in clause 21 (f) – what context of 'time' is intended here and why is this fraction used?

6.2.4 Farming (Part 3)

Definitions

We are concerned that the definitions used in Part 3 will not be sufficiently robust for their intended use.

For example, we are not confident that the definitions of 'farm' and 'enterprise' will be sufficiently robust for the application of clause 26 (application of part 3) and subpart 2 (intensification). It is uncertain how the definition of farm and enterprise might be applied, particularly in outdoor vegetable growing where use of land parcels can be transient with lease arrangements rather than ownership and how a single operating unit is defined, particularly if legally separate business units are less than hectare levels in clause 26.

We would like clarification as to why the definition of intensive winter grazing does not include pastoral grazing at a high stocking density.

The definition of feedlot could be amended to refer to stock being fed from food produced off-site rather than it tied to the method of feeding (by hand or mechanical). We would also like clarification as to why there is no stocking density aspect to this definition.

Having addition definitions scattered through the part is unhelpful. These should all be included in the definitions list at the front of this part.

Activities potentially generating erosion and sediment runoff

Consideration should be given to including a permitted condition in clause 27, 28 and 30 that reflects the wording of Subpart 1 (12 2c) requiring the use of best practice erosion and sediment controls when undertaking these activities (feedlots, sacrifice paddocks and intensive winter grazing).

Outcomes sought:

- Review robustness of the definitions for 'farm', 'enterprise', 'intensive winter grazing', 'sacrifice paddock' and confirm they will be fit for their intended purpose
- Ensure all defined terms are included in the list at the front of this part (or in a single definitions list at the front of the NES)
- Add wording similar to Subpart 1 (12 2c) requiring the use of best practice erosion and sediment controls in Part 3 clauses 27, 28 and 30

6.2.5 Intensification (Part 3, Subpart 2)

The intensification clauses set thresholds for intensification above which a resource consent is required for a discretionary activity. These measures are intended as interim until NPS-FM compliant plans are in place. It is unclear from the draft NES-FW what policies and objectives an application should be assessed against.

A regional plan may have no relevant objectives and policies, or could have conflicting or supporting objectives and policies. This could lead to widely variable outcomes in terms of consenting. In addition there is no clear link in the NPS-FM to the regulations so there are no supporting objectives and policies in the NPS-FM. This compounds the problem.

Part 33 (2) As written, is difficult to understand and enforce. What if the total area was unacceptably high in any particular year from 2013-2019? This could potentially grandfather inappropriate land use.

Outcome sought:

- Provide clear objectives and policies for assessing consents under NES-FW clauses 33 – 36
- Rewrite part 33 (2) to clarify and avoid potentially grandfathering inappropriate land use.

6.2.6 Farm Environmental Plans (Part 3, Subpart 3)

Farm Environment Planning is a very important tool as they are finely-tuned plans appropriate to the site that reflect consideration of specific farm context and risks. It is important that farmers are supported by industry through guidance and advice in developing their own farm plans. It is also important that any certification and auditing process is cost effective and efficient.

It is imperative that the system does not result in the perverse outcome where specialists are brought in to develop plans and farmers lose the opportunity for learning and buy-in to their own farm management.

Industry program certification

Both of Tasman's collaborative freshwater groups identified the desire to avoid duplication of effort in supporting, certifying and auditing FEPs, and sought to utilizing existing industry programs (such as Fonterra's Tiaki program, NZ Gap and Global Gap, etc), with Council taking on an auditor of the auditors role. Two key aspects of this approach were firstly certifying that the industry programs met the requirements for content in the freshwater modules of the FEPs they required members to develop, and secondly closing the compliance gap by requiring industry programs to provide compliance information to Council on a regular basis and to communicate serious non-compliance immediately. The mechanism proposed for this was for farming activities to be a permitted activity only if the farmer were a current member of a council approved industry program (listed in the plan) and to set up a separate approval process that required industry programs to comply with FEP freshwater content, and compliance monitoring, auditing and reporting requirements in order to remain listed in the plan. TDC consider this process should be considered to be undertaken by central government as a national certification program to avoid duplication of effort across each regional council and for the RMA to be amended to enable enforceability of such an approach.

FEP content

TDC have recommendations for further content of FEPs and in particular would prefer for stock exclusion and fencing requirements to be assessed and implemented through the Farm Environment Planning process. This would enable farmers to apply appropriate setbacks and exclusions for their specific farm context, including consideration of stock types, slopes, soil permeability, proximity to waterways, Critical Source Areas and pathways of contamination, mitigation options employed on the land and other benefits sought from fencing waterbodies including biodiversity considerations and carbon farming options. This approach enables a risk based and more holistic consideration of exclusion and fencing requirements, rather than just purely keeping animals out of waterbodies.

Further Farm Environment plan content required under Clause 38 (2) should also include:

- 1) Identification of 'critical pathways' in addition to location of critical source areas – both overland and via groundwater – to ensure farmers consider the ways in which contaminants from critical source areas may reach waterbodies. These are locations where mitigation options (e.g. funnel point wetlands, etc.) might be located to control diffuse discharges.

- 2) Inclusion of need for erosion and sediment controls, including clean water diversion drains – e.g. around sacrificial paddocks etc. and sediment control ponds or decant bunds to help filter out suspended sediment – particularly for temporary practices such as break feeding on slopes and winter grazing.
- 3) Setbacks for cropping and land disturbance from waterbodies
- 4) Location and assessing in-stream structures
- 5) Location of offal, silage and refuse pits as high risk sources of contamination

Hail activities

TDC support the identification of HAIL activities as part of FEPs. Guideline values used to assess the risk to the aquatic environment should be mentioned as part of the risk assessment process.

In addition, to be consistent with the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESC), the identification of HAIL should also include land which is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it (e.g. clause 38(3)(b)(ii) should read “land on which an activity or industry described in the Hazardous Activities and Industries List is being, or has been, or is more likely than not to have been undertaken”.

Further we note the requirements for certification of a FW-FP differ from the requirements for sign-off for a contaminated site investigation report – this is set out in the NESC User’s guide (Section 2.1.1 and requires a minimum of 10 years related experience for certifying reports).

Auditing

Clause 41(6)(7) farm plan auditor has to advise the Council of the “results of the audit”. This is not considered sufficient for council management purposes and our preference would be for the full audit report to also be made available on request.

Accounting needs

We have particular concern with the resourcing required for management of FEP information and any FEPs received by council, and would like to see further work around a national platform for management of this information - also reflecting the work by MPI in creating a ‘one-stop-shop’ for farm information requirements as part of their Integrated Farm Planning (IFP) work stream, and considering potential data management overlaps with Biosecurity NZ (FarmsOnline database).

Outcome sought:

- Ensure FEP requirements are linked to risk. All farm owners provide a simple declaration on stock/stocking rates (we note this information may already be held by Biosecurity NZ, but is currently unavailable to councils). Low risk farms have lesser requirement around how the FEP is written and by whom. Auditing requirements are also less for low risk farms with a sliding scale to the full suite as proposed for high risk activities.
- Replace stock exclusion regulations with a requirement for stock exclusion and fencing requirements to be assessed and implemented through the Farm Environment Planning process. This would enable farmers to apply appropriate setbacks and exclusions for their specific farm context, including consideration of stock types, slopes, soil permeability, proximity to waterways, Critical Source Areas and pathways of contamination, mitigation options employed on the land and other benefits sought from fencing waterbodies including biodiversity considerations and carbon farming options. This approach enables a risk based and more holistic consideration of exclusion and fencing requirements, rather than just purely keeping animals out of waterbodies
- Add the following content requirements to clause 38 (2):

- Identification of ‘critical pathways’ in addition to location of critical source areas – both overland and via groundwater – to ensure farmers consider the ways in which contaminants from critical source areas may reach waterbodies. These are locations where mitigation options (e.g. funnel point wetlands, etc.) might be located to control diffuse discharges.
 - Inclusion of need for erosion and sediment controls, including clean water diversion drains – e.g. around sacrificial paddocks etc. and sediment control ponds or decant bunds to help filter out suspended sediment – particularly for temporary practices such as break feeding on slopes and winter grazing.
 - Setbacks for cropping and land disturbance from waterbodies
 - Location and assessing in-stream structures
 - Location of offal, silage and refuse pits as high risk sources of contamination
- To be consistent with the NES for Assessing and Managing Contaminants in Soil to Protect Human Health), the identification of HAIL should also include land which is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it, for example clause 38(3)(b)(ii) should read “land on which an activity or industry described in the Hazardous Activities and Industries List is being, or has been, or is more likely than not to have been undertaken”.
 - **FEP scheme management:**
 - The implementation of FEPs as management plans should mirror how other management plans have previously been embedded in the RMA process, rather than create a new process.
 - Central government to set up national certification scheme for industry programs to enable continued industry management of FEPs, but ensure content of FEPs is consistent and meets freshwater requirements, and that compliance monitoring and auditing is undertaken and results reported to regional councils. Including any changes needed to the RMA to facilitate this approach and ensure it is enforceable by councils and/or the EPA
 - More investment to training and accreditation for personnel to be competent in producing FEP specific to sector groups.
 - Resourcing of MPI to develop and maintain a national registry / database of Farm Environment Plan information, with Council access to property and FMU level data for analysis. There needs to be much greater linkage between the MPI IFP work stream and the implementation of the FEP components of the NES-FW and NPS-FM
 - Greater resourcing of MPI to fast track industry support and research to assist farmers to transition to better land use practice

6.2.7 Other specific outcomes sought

Outcomes sought:

- Part 1 (3) (placeholder) appears to have an error referring to the NPS-PF rather than NES-PF
- Subpart 1 clause 10 (3) should include a further condition reflecting the wording used in clause 6 (c) regarding the implementation of best practice erosion and sediment control. This condition should be repeated wherever necessary in the framework to ensure sediment is adequately controlled.
- Clarify where weir height is to be measured from in subpart 3, 22(1c)
- Clarify why there is not a rule cascade requiring provision of fish passage for dams and fords, only an information requirement under subpart 3, 24

7 Draft Stock Exclusion Regulations -specific comment

7.1 General Position of TDC

TDC support the need for stock exclusion, however we would prefer for stock exclusion and fencing requirements to be assessed and implemented through the Farm Environment Planning process. This would enable farmers to apply appropriate setbacks and exclusions for their specific farm context, including consideration of stock types, slopes, soil permeability, proximity to waterways, Critical Source Areas and pathways of contamination, mitigation options employed on the land and other benefits sought from fencing waterbodies including biodiversity considerations and carbon farming options. This approach enables a risk based and more holistic consideration of exclusion and fencing requirements, rather than just purely keeping animals out of waterbodies.

Outcome sought:

- Require implementation of stock exclusion, including fencing requirements and appropriate setbacks as part of the Farm Environment Planning process, rather than through use of separate regulations.

If the Stock Exclusion Regulations are retained, then TDC have the following concerns about specific aspects of the regulations.

7.2 Specific comments

7.2.1 Information notes

The regulations will need to clarify where the width of rivers is measured from – is this talking about river bed width (as per RMA) or wetted width (if so measured when/how?) or using a practical measurement approach as used in the Clean Streams Accord (e.g. deeper than a red band gumboot and wider than a stride’ – as referenced in the Action for Healthy Waterways document). There are many situations in which it is difficult to determine the edge of the bed of a river and the method uses needs to be clear and practicable to implement by both council and farmers.

Outcome sought:

- Define where the width of river is to be measure from in a way that is clear and practicable to implement for both councils and farmers.

7.2.2 Exemptions from the regulations

The Action for Health Waterways document seeks specific feedback on situations where exemptions from the regulations should be allowed. TDCs preferences are outlined below.

Outcome sought:

- Exemptions from the regulations should including the following situations
 - Sites where fences are likely to be regularly damaged by flood flows
 - Sites where topography provides a natural barrier to stock access
 - Sites where exiting fencing provides adequate stock exclusion (including new pastoral systems where the existing fencing provides suitable exclusion to the new stock type)
- Farmers should have the option to provide an alternative stock exclusion plan, particularly in areas where flooding may make permanent fencing impractical or where stock densities do not provide sufficient benefit to the cost.

7.2.3 Carrying capacity and stock types

It is inappropriate to use a definition for carrying capacity that refers to a method for assessing this (rents for pastoral lease document), which then refers to definitions in an Act (the Crown Pastoral Land Act) that then outlines an in-depth process for determining carrying capacity (Part 1A of the Crown Pastoral Land Act)- all of which is for setting of rents and not related to water quality risk. This is overly complex for users.

We question the need for the use of base carrying capacity, as the non-low slope table could just refer to the stocking rates listed and the regulations apply to those above the stock rates. This links the requirement to exclude stock to the actual land use, rather than the potential for land use as with the proposed base carrying capacity approach. If at any time the stocking rate was increased above the threshold the regulations would apply.

Outcomes sought:

- Develop an agreed table of stocking units for the stock types affected and define appropriate stocking rates above which the regulations will apply. Use existing stocking rates rather than a hypothetical base carrying capacity to determine application of the regulations
- Ensure that the terms 'farm' and 'paddock' have been adequately defined (neither is adequately defined at present), and that there is an agreed table of what is a stock unit for the stock types.
- Clarify the definition of dairy cattle. There seems to be a conflict between 1-2 and 3 – with 2 matching the definition of dairy support and 3 specifically excluding dairy support. Our preference is to include dairy support cows in the definition of dairy cattle, or for MfE clarify the reason why this is appropriate from a water quality risk perspective, particularly when other non-milking cows are included in definition

7.2.4 Definition of low slope land

TDCs preference is for the definition of low and non-low slope land to be a specific reference to the slope – e.g. land where the slope is less than or equal to X degrees – rather than using reference to the online tool. The online tool can instead be referenced in an advice note for use as guidance support.

TDC consider further work is needed to clarify both the intent of the slope distinction and review the research that supports any specific slope used. The Action for Healthy Waterways document suggests the goals of exclusion are keeping stock out of waterways and management of sedimentation [refer AHW page 75 discussion on setbacks]. Some erosion research suggests 10 degrees is the minimum point of sediment yield increase in runoff (<https://www.tandfonline.com/doi/abs/10.1080/09064710.2018.1488988>) others suggest less is needed e.g. (<https://naldc.nal.usda.gov/download/IND43968206/PDF>). However if the slope classification is more about fencing requirement impacts on lower stocked farm types (i.e. sheep and beef) then a stocking density approach may be a better distinction to use.

Outcomes sought:

- Use a narrative definition for low and non-low slope land that does not depend wholly on the online tool
- TDC support a slope distinction of 5 degrees, however we consider the intent of the slope distinction needs to be clarified, and further work undertaken by MfE/MPI to define an appropriate slope that achieves the intent
- Consider using a stock density approach instead of slope. Ensure that whichever method is used is clear and easily implemented by farmers

7.2.5 Setback distances

TDC support an average setback of 5m, but would like further information on the basis for this distance and clarification of the aims of the setbacks and would prefer appropriate setbacks are set through Farm Environment Plans (refer section 7.1). To support this further consideration and guidance is needed for industry on integration of stock exclusion requirements with biodiversity

outcomes, and economic considerations such as carbon farming and other farm benefits of shade and shelter provision.

Further consideration of these aspects might influence and change the discussion around setbacks and the farm-specific economics of setbacks, offsetting opportunity cost of marginal land currently counted as productive, with other benefits to farm productivity and biodiversity etc.

Outcomes sought:

- Require implementation of stock exclusion, including fencing requirements and appropriate setbacks as part of the Farm Environment Planning process, rather than through use of separate regulations.
- If the regulations are progressed, we recommend MfE seek specific feedback from industry on the use of average setbacks and the clarity and ease of implementation of the regulations.
- Define where the width of river is to be measure from in a way that is clear and practicable to implement for both councils and farmers.

7.2.6 Wetland definition

TDC consider that the same protections given to natural wetlands should be given to wetlands restored/constructed for biodiversity and ecosystem health purposes and have requested this definition change in the NPS and NES (refer sections 5.2.4 and 6.2.1). Ideally the same definitions should be used across all the respective instruments.

We are concerned at the reliance on the identification of wetlands in regional or district plans in the timeframes listed in the tables for low slope and non-low slope land in the stock exclusion regulations. This may create the situation where a wetland is as yet unmapped or not yet in a plan by the dates in regulations is not subject to the stock exclusion requirements for another two years. The reference to being in a plan should be removed

Outcomes sought:

- Remove reference to wetlands in regional or district plans from the low and non-low slope tables and provide a single timeframe date for wetlands.

7.2.7 New pastoral systems using existing fencing

As discussed in the key concerns section 3.2.12, TDC has requested removal of the requirement for existing fences that adequately exclude stock to meet the new setback distances. Associated with this, we think this same approach should be used for new pastoral systems where there is existing fencing that adequately excludes the new stock type. In addition, clarification of new pastoral systems' is needed – does this mean where the land use has changed to pastoral or does it also capture changes in stock type – i.e. deer to cattle, or sheep to deer etc. and does it also capture temporary changes in land use – such as rotating paddocks in an existing pastoral system for use as fodder crop and break feeding

Outcome sought:

- Exclude new pastoral systems from complying with average setbacks in the regulations, where existing fencing provides suitable exclusion to the new stock type
- Further clarify the definition of pastoral systems and how this applies to changes in stock types

8 Wastewater, Stormwater and Drinking Water NES

It has been difficult to answer the questions posed in the Action for Healthy Waterways document because of the lack of detail provided for the proposed NESs for the three waters.

TDC supports the use of an integrated catchment management framework within the proposed reforms, in particular the water sensitive design. Stormwater management requires carefully planned and integrated regulatory, public education and capital works interventions to achieve tangible outcomes. This approach is key to Tasman's future development strategy, catchment management plans and discharge consents for each urban drainage area. It is envisioned that these levers will allow TDC to work collaboratively with the community in the context of each UDA's unique hydrology, topography, economic and social outcomes to define and meet a desired outcome.

We would like the approach adopted in the discharge to be reinforced by the policy package – allowing us to readily maintain integration and manage cumulative effects.

The rapidly increasing population of Tasman and its rate of economic growth means that TDC is facing significant growth pressures for a unitary authority of its size. The new Nelson–Tasman Land Development Manual introduces water sensitive controls in relation to greenfield development and subdivision. It therefore supports the proposals set out in Section 3.4.5 and 3.4.6 of the NPS-FM.

TDC supports in principle the proposal for risk management plans and standardised reporting metrics (refer section 7.3 of the Action for Healthy Waterways document). Reporting needs to be clear and concise in order to increase engagement and understanding. TDC needs to understand how these relate to:

- better understand how the performance of the stormwater network is contributing to the outcomes set by the region's strategic and regulatory documents and national policy.
- monitor the performance of capital and operational investments, and other initiatives, and report on service provision in terms of their impact on stakeholders, communities and customers.
- make better informed decisions on what priorities, investments and resource allocations to focus on in the short, medium and longer term.

With respect to the NES-DW, the following information is needed to better understand what is being proposed:

- How the proposed standards for source protection areas (and how these are defined) in the NES-DW will link with the requirements under both the NPS-FM and NES-FW
- Whether the NES-DW will apply to permitted activities (including shallow bores within source protection areas), which can be just as harmful to water supplies as consented activities, and cumulatively may be more harmful as they are so numerous
- Whether the NES-DW will address the legacy of old unused bores and wells which have not been properly decommissioned. There are likely to be thousands across our district.
- Whether the NES-DW will address the legacy of existing bores with unsecure well heads and no back flow protection and the cost implications of this
- How the NES-DW and source water protections might apply to townships such as Motueka and Takaka, which have numerous individual bores that do not meet the definition of registered drinking water supplies, but relate to significant populations.

○ Outcomes sought:

- MfE to undertake a second round of consultation once the NPS-FM and NES-FW have been revised following submissions, and made available alongside policy positions for the NES content for wastewater, stormwater and drinking water in 2020, so a full assessment of the impacts and implications of the complete package can be completed, before the NPS-FM and NES-FW are finalised and gazetted.

- Reinforce use of an integrated catchment management framework within the proposed reforms
- Support in principle the proposal of risk management plans and standardised reporting metrics