# Marlborough District Council Essential Freshwater Audit

## **Report to Marlborough District Council**

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## 1 Purpose

In September 2020, the Government released a reform package to:

- stop further degradation of New Zealand's freshwater resources and start making immediate improvements so that water quality is materially improving within five years;
- reverse past damage to bring New Zealand's freshwater resources, waterways and ecosystems to a healthy state within a generation

The package consists of a revised National Policy Statement for Freshwater Management 2020 (NPS-FM), a new National Environmental Standard for Freshwater (NES-Fw), Regulations for Stock Exclusion and revised Regulations for the Measurement and Reporting of Water Takes. Two new Parts - 9A and 9B - were added to the Resource Management Act to introduce requirements for freshwater farm plans (Part 9A) and reporting on nitrogenous fertiliser use (Part 9B).

This report is a review of the Marlborough District Council's planning documents; reports on monitoring and reporting; and consenting and compliance against the requirements of the new NPS-FM, NES-Fw, Regulations and Parts 9A and 9B.

In particular, the Council seeks advice on:

- 1) The implications for the Council's relationship with Marlborough's tangata whenua iwi
- 2) The nature of the planning process for the National Objectives Framework under the NPS-FM
- 3) The implications on the current provisions of the Proposed Marlborough Environment Plan (PMEP) and the two existing Progressive Implementation Programmes prepared under previous versions of the NPS-FM
- 4) Implementation of the NES-Fw, other regulations and Parts 9A and 9B of the RMA
- 5) Environmental Monitoring requirements
- 6) The preparation of Action Plans
- 7) Reporting requirements
- 8) Data management and analysis
- 9) Resourcing (staffing and funding).

#### Approach

An initial step in this audit was a workshop with Council staff from policy, science, monitoring, and land management. The following documents provided further detail on the MDC approach

- Proposed Marlborough Environment Plan appeals version. Policy Chapters 3, 5, 8 and 15,
   Rules Chapters 2 and 3, and Appendix 5 and 6
- Catchment Care Programme November 2019 MDC Technical Report No: 19-006
- Current State of river water quality based on NOF attributes in the 2020 NPS-FM September
   2020

- Review of Surface Freshwater Quality Monitoring Programme September 2020
- Progressive Implementation Programmes notified 8 November 2012 and 2 April 2015.
- Proposal for freshwater monitoring (as part of LTP 2022 preparation)
- Update on Te Tau Ihu Partnership

A first draft of this report was discussed with Pere Hawes, Alan Johnson, Gina Ferguson and Rachel Anderson. A further draft was presented to a staff workshop in April and revised following feedback.

Each section starts with outlining

- what is required,
- what is in place including link to any national initiatives.,
- an assessment of what is needed

Section 11 brings together the "what is needed" from all previous sections into a high-level work programme prioritised into years. The intent is to provide a tool to assist resourcing and prioritisation discussions.

#### 2 Context

#### Te Mana o te Wai

Te Mana o te Wai is a fundamental concept in the National Policy Statement on Freshwater Management (2020). Compared to previous version of the NPS-FM, there is greater clarity that 'giving effect' to Te Mana o te Wai requires:

- involving tangata whenua in decision-making.
- prioritising the health and wellbeing of water bodies, then the essential needs of people, followed by other uses; and
- improving degraded water bodies and at least maintaining water quality in all others.

This most recent version of the NPS-FM provides greater certainty on the role of tangata whenua and requires that freshwater management must be informed by:

- (a) Mana whakahaere: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, freshwater
- (b) *Kaitiakitanga*: the obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations
- (c) *Manaakitanga*: the process by which tangata whenua show respect, generosity, and care for freshwater and for others.

Further, the NPS-FM 2020 introduces a hierarchy of obligations in Te Mana o te Wai that prioritises:

- (a) first, the health and well-being of water bodies and freshwater ecosystems
- (b) second, the health needs of people (such as drinking water)
- (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

There are links between the NPS-FM and the 3 waters reform. The new entity - Taumata Arowai - must give effect to Te Mana o te Wai as set out in the National Policy Statement for Freshwater Management. Taumata Arowai administers New Zealand's drinking water regulatory system to achieve drinking water safety and public health outcomes. It also has an oversight role for wastewater and stormwater.

#### Ecosystem health

When developing its proposals, government has stated an intent to "raise the bar on ecosystem health", that is moving beyond a focus on water quantity and water quality to include aspects such as habitat, aquatic life and ecological processes. The broader focus is evident in the NPS-FM provisions that add threatened species as a compulsory national value, new policies on wetlands, fish passage, and addition of new more ecologically focussed attributes for rivers. The broader focus has implications for council monitoring programmes and technical capability.

#### Regulations

A suite of activities is now managed through national regulation. There are a national set of rules for:

- wetlands,
- structures that affect fish passage culverts, weirs, fords and dams and flapgates
- farming feedlots, stockholding areas, winter grazing, synthetic fertilizer use, stock access.
- Rules for land use intensification that apply until the NPS-FM provisions are included in RMA plans; and
- Additional requirements to telemeter data on water takes.

A new set of regulations on freshwater farm plans is due in 2022, aligned with the new requirements in section 9A of the RMA.

District and regional rules and consent conditions can be more stringent that these regulations, but not more lenient. There are some limited exemptions to the new requirements set out in the regulations, such as for flood control purposes.

#### A strong data role

The NPS-FM 2020 has far greater direction for Council monitoring and mapping. There are more attributes and new directions to councils to map wetlands and structures in waterways. The NES-Fw requires data on land use change and practice to assess compliance, requires data collection on instream structures, and the s.360 increases the requirement for Council to collect flow measurement data in real time.

The emphasis on data underpinning in the Essential Freshwater aligns with a review of national data by the Parliamentary Commissioner for the Environment<sup>1</sup> (2019). The Commissioner recognised the importance of consistent, well-curated data sets for national state of environment reporting and recommended a comprehensive, nationally consistent, co-ordinated environmental monitoring system with dedicated resourcing. A national system will connect with regional data systems that are important for regional plan development, implementation and evaluation.

These initiatives will place greater requirements on Council for integrated and consistent data systems.

#### A changing situation

In the next 12 months government has stated it will:

- Add estuaries to the NPS-FM
- Prepare regulations for Freshwater Farm Plans under Part 9A of the RMA
- Reform the RMA
- Notify an NPS for Indigenous Biodiversity, and one for Highly Productive land
- Provide further options for allocation of water quality and water quantity
- Address Māori rights and interests in freshwater

<sup>&</sup>lt;sup>1</sup> Parliamentary Commissioner for the Environment (2019) Focussing Aotearoa New Zealand's Environmental Reporting System. PCE. Wellington

- Under its climate change agenda, continue to work with primary sector on emission reduction targets which use of farm environment plans as a key delivery mechanism.
- Restructure the provisions of water infrastructure "Three waters" including changes to
  the regulatory regime a new regulator Taumata Arowai, amendments to the NES for
  Sources of Human Drinking Water and potentially a National Environmental Standard on
  Wastewater Discharges and Overflows.

#### Marlborough situation

<u>Te Tau Ihu and Ngāi Tahu</u>. Eight iwi have manawhenua in Marlborough: Ngāti Apa, Ngāti Kōata, Ngāti Kuia, Ngāti Rārua, Ngāti Toa, Ngāi Tahu, Rangitāne and Te Ātiawa. Seven of these, alongside Ngāti Tama, form Ngā Iwi o Te Tauihu. Ngāti Kurī (Te Rūnanga o Kaikoura), one of the 18 Ngāi Tahu papatipu rūnanga, extends into the Marlborough region.

<u>Proposed Marlborough Environment Plan.</u> As a unitary authority, MDC is both a regional and district Council. To ensure clear direction on critical resource management issue, Council has combined its Regional Policy Statement, Regional Coastal Plan, Regional Plan and District Plan into the Proposed Marlborough Environment Plan. The PMEP was notified in June 2016 and decisions were publicly notified in February 2020.

<u>Land use trends.</u> Over the last few decades, land use in Marlborough has been away from pastoral and arable farming towards grapes and forestry. While pastoral farming has decreased (LAWA data comparing 1994 to 2012 land cover shows a 10% decline in exotic grasslands), it still covers about 25% of the region, and half the region is in native vegetation or native forest.

Horticultural land has increased by 200% (1994 to 2012) but is still less than 5% by area of the region. Council data on vineyard development areas shows 28,864 hectares in vineyards in 2020 – just under 5% of this area was in vineyards in 2000 and about 14% has been developed since 2014. The trend to grapes is most evident on the Wairau Plains and up the Wairau and Awatere Valleys. Exotic forest was 8% of the region in 2012.

Marlborough has not experienced the growth in the dairy industry evident in other South Island regions. From 1994 to 2017, there was a four-fold increase in dairy cattle numbers in the South Island – an addition of 2 million of which only 2500 were in Marlborough (Reference Agriculture Production Statistics). On the rolling and hill country, the dominant pastoral land use remains extensive sheep and beef farming. The region does not therefore have the widespread nitrogen issues that have driven NPS-FM plans in many other regions. With two exceptions, all of its State of Environment sites are in the A band for nitrogen, the other two are in the B band.

<u>Well-developed approach to water quantity management.</u> Although there are some areas in northern and inland Marlborough with high (+2000mm) rainfall, much of the region has a dry east coast climate and supports large primary and secondary sectors dependant on water. Its focus on managing these challenges has led to a mature set of policies and operational approaches to water quantity including minimum flows, flow sharing, water take limits, water transfer, recording water takes, and water storage.

<u>Te Hoiere/Pelorus exemplar catchment</u> The Te Hoiere/Pelorus is one of three exemplar catchments identified by the Ministry for the Environment. These are intended to model ways of collaborating with the Department of Conservation, Ministry of Primary Industries, regional councils, iwi/hapū and communities to improve freshwater health. These exemplars will also provide information about gaps that could be filled by either regulatory or non-regulatory interventions. Central government funding is available to support this initiative.

#### National and local co-ordination

The collective of regional councils has through its Chief Executives, committed to co-ordinating and sharing resources as its responds to the latest freshwater reforms. The initiative arises from concerns that there is not the capability and capacity to deliver the reforms particularly if each council develops its own approach, tools and data systems. The current focus in on interpretation issues and preparing for consents required under the NES-Fw through preparation of common consent application forms, consent conditions and information for applicants.

The Minister for the Environment has established a national Freshwater Implementation Group to oversee implementation of the reforms. Its membership is chief executives from Ministry for the Environment, Ministry of Primary Industries, regional councils, primary sectors and environmental interests alongside Kahui Wai Māori. The group oversees a set of priority projects managed by Ministry for the Environment. Their current focus on Te Mana o te wai, mahinga kai, freshwater farm plans and technical aspects of the National Objectives Framework - nutrient criteria and sediment limit guidance.

## 3 Relationship with Marlborough's tangata whenua iwi

#### Requirements of the National Policy Statement

#### Every local authority must

- actively involve tangata whenua (to the extent they wish to be involved) in freshwater management (including decision-making processes) including
  - (a) identifying the local approach to giving effect to Te Mana o te Wai
  - (b) making or changing regional policy statements and regional and district plans so far as they relate to freshwater management
  - (c) implementing the NOF
  - (d) developing and implementing mātauranga Māori and other monitoring. (NPS-FM 3.4 (1))

#### Regional councils must

- engage with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region (NPS-FM 3.2 (1))
- work collaboratively with, and enable, tangata whenua to identify mahinga kai and any
  other the Māori freshwater values; and be actively involved (to the extent they wish to be
  involved) in decision-making processes relating to Māori freshwater values
- enable the application of a diversity of systems of values and knowledge, such as mātauranga Māori, to the management of freshwater (NPS-FM 3.2.2(b and d))
- work with tangata whenua to investigate the use of mechanisms available under the Act, to
  involve tangata whenua in freshwater management s.33 and s.36 and mana whakahono a
  rohe, (NPS-FM 3.4(3)) and when a decision to use or not use a mechanism is made or
  postponed a council must record matters considered and the reasons for decisions reached
  (NPS-FM 3.6)

Mahinga kai has been added as a compulsory national value which, alongside any other Māori freshwater values, must be identified for each freshwater management unit through collaboration between tangata whenua and the relevant regional council

#### Freshwater Hearing Commissioners

If Council uses the Freshwater Planning Process set out in Schedule 1 Part 4 s.59 of the RMA there is an additional requirement for tangata whenua. Local tangata whenua nominate 1 person with an understanding of tikanga Māori and mātauranga Māori to Freshwater Hearing Panels established to hear freshwater planning instruments —in this case the freshwater-related parts of the PMEP.

#### What is in place?

#### Structures in place for active involvement of tangata whenua

All of the Te Tau Ihu Claims Settlement Acts include provision for the establishment of a River and Freshwater Advisory Committee. The Act sets out the Committee as a means of providing for the participation of iwi with interests in Te Tau Ihu in the management of rivers and freshwater in Marlborough, Tasman and Nelson. The Advisory Committee is intended to work in a collaborative

manner with the common purpose of promoting the health and wellbeing of the rivers and freshwater within the jurisdiction of the relevant councils.

Marlborough District Councillors have voted to establish a Māori ward for Marlborough in time for the 2022 local government elections.

#### **Iwi Working Group**

An Iwi Working Group, with membership from each iwi authority, was formed to assist with the process of reviewing the Council's operative planning documents. The Iwi Working Group identified issues of significance to tangata whenua iwi, set objectives and policies with respect to each of the issues, developed policies for achieving the objectives and identified methods for implementing the policies. A chapter for the PMEP containing these provisions was then formally presented to the Council, accepted by Council and was in the notified version of the PMEP (Chapter 3, Volume 1). The Iwi Working Group also reviewed draft provisions elsewhere in the PMEP to ensure the plan was addressing the issues in a manner consistent with the provisions of Chapter 3 Volume 1.

#### Iwi management plans

There are six Iwi Management Plans in the region

Te Ātiawa o Te Waka-a-Māui Iwi Environmental Management Plan Te Tau Ihu Mahi Tuna (Nelson/North Marlborough) Eel Management Plan Te Rūnanga o Kaikōura Environmental Management Plan Ngati Koata Iwi Management Plan Te Rūnanga o Ngāti Kuia Pakohe Management Plan Te Rūnanga o Ngāi Tahu Freshwater Policy

#### Policy framework

Chapter 3 Volume 1 of PMEP - Marlborough's tangata whenua iwi - describes the resource management issues important to tangata whenua iwi. These include mauri, kaitiakitanga, taonga, a Māori world view of environmental domains including Ngā Wai and Ngā Awa, traditional foods and cultural beliefs. Issues important to tangata whenua iwi are then addressed through a suite of RPS-level objectives and policies. Methods include partnerships, statutory acknowledgments, iwi management plans, cultural impact assessments, decision-making processes and Māori place names.

Within Chapter 5 Volume 1 of PMEP – Allocation of resources, Objective 5.2 and Policy 5.2.2 make direct reference to Te Mana o te Wai; Policy 5.2.4 includes protecting the mauri of the waterbody as one of the reasons for setting environmental flows. Policy 5.3.1 sets Te Mana o te Wai as the first priority for the allocation of water.

Within Chapter 15 Volume 1 of PMEP – Resource Quality (Water, Air Soil), Objective 15.1 requires that water quality is maintained or enhanced so that the mauri of wai is protected. Policy 5.11.1 requires regard to the potential adverse effects of discharges on spiritual and cultural values of Marlborough's tangata whenua iwi. There is no direct reference in this chapter to Te Mana o te Wai.

The following two methods speak to Council's commitment to work with tangata whenua iwi on understanding tangata whenua values:

- Chapter 3 Method 5 Cultural indicators The Council will work with Marlborough's tangata whenua iwi to develop cultural indicators to assist in monitoring the state of Marlborough's natural and physical environment.
- Chapter 15 Method 1 To identify, on an ongoing basis, the uses and values supported by specific rivers, lakes, wetlands, aquifers and coastal waters. These values, including the spiritual and cultural values of Marlborough's tangata whenua iwi, will be identified in the MEP.

#### Capacity of Te Tau Ihu

Chapter 3 of the PMEP includes an assessment of tangata whenua iwi capacity for participation in resource management decision-making-

• Even if mechanisms were put in place to enable greater participation in resource management decision making by Marlborough's tangata whenua iwi, the iwi believe that a significant barrier to participation remains: that is, the capacity to participate. Many of Marlborough's tangata whenua iwi have limited financial resources and limited numbers 'on the ground' in terms of iwi members participating in resource management processes. It is therefore the view of most iwi that they do not currently have the capacity to effectively take part in the two processes that they have the greatest interest in - resource consent processing and policy development.

#### Te Tau Ihu Freshwater initiative

The 8 iwi trusts of Te Tau Ihu - Ngāti Tama ki Te Tau Ihu, Te Ātiawa o Te Waka-a-Māui, Ngāti Rārua, Ngāti Kōata, Ngāti Toa Rangatira, Ngāti Kuia, Ngāti Apa ki te Rā Tō and Rangitāne o Wairau — and the three Councils — Marlborough, Nelson and Tasman district councils - have initiated discussion on a Te Tau Ihu Freshwater Programme. The programme is intended to guide and help coordinate Council staff and Iwi trust authorities to establish an efficient and collaborative engagement process to implement the NPS-FM.

Te Tau Iwi are working with the Our Land and Water Science Challenge to develop a case study for implementing Te Mana o te Wai. The first recommendations are expected in June 2021.

#### Council liaison capacity and capability

Council does not have a dedicated tangata whenua liaison role. Staff liaise separately as part of their functional roles – for example planners with the lwi Liaison group, and Catchment Care staff on catchment action work. Council is proposing a kaihatu role to advise the Chief Executive on tangata whenua liaison.

#### National initiatives

A suite of training initiatives led by Kahui Wai Māori and supported by Ministry for the Environment

- Te Mana o te Wai training to regional councils due in first half of 2021
- Wananga with iwi and hapū about Te Mana o te Wai and its meaning at a local level
- Assist regional councils with their statutory responsibilities under the NPS-FM 2020 in relation to tangata whenua engagement
- Lifting the capacity and capability of tangata whenua to succeed in meeting the requirements under the NPS-FM 2020
- Case studies of approaches to identification of mahinga kai values.

#### What is still needed?

The NPS-FM clearly requires involving tangata whenua in decision-making and requires more specificity and hence greater protection/enhancement of Māori freshwater values. It is clear that Council must do this in partnership with tangata whenua iwi. For all parties (Councils, communities, iwi, other stakeholders) there is likely to be a high degree of uncertainty (at least in the short-term) as parties tease out the full implications of Te Mana o te Wai.

- Continue Te Tau Ihu freshwater initiatives. The initiative aligns well with Treaty Settlement
  legislation which supported a joint approach among Te Tau Ihu iwi and the three Councils –
  Marlborough, Nelson and Tasman District Councils. It will enable pooling of resources across
  tangata whenua iwi and councils. Resourcing will need to be reassessed once the case study
  with our Land and Water Science Challenge is complete.
- Establish arrangements with Te Tau Ihu collectively and/or individually. Engagement with tangata whenua and co-design of the planning framework is a critical starting point for the revision of plans.
- Develop an arrangement with Te Rūnanga o Kaikoura. Work with Te Rūnanga o Kaikoura to understand their preferences for working with Council given the initiative with Te Tau Ihu and what Ngāi Tahu are progressing with Environment Canterbury. Environment Canterbury is initiating an Te Mana o te Wai Implementation strategy with the 10 papatipū rūnanga within its region.
- Provide capacity funding. Consider providing funding to tangata whenua iwi for capacity to participate in the technical advisory group and for working with Council on vision setting, identification of mahinga kai values, and other aspects of implementation.
- Identify senior leadership responsibility for tangata whenua liaison within Council. The demands on tangata whenua and on Council staff will increase and are likely to require prioritisation and increased co-ordination across functions (which will extend beyond freshwater). Consider the role of the proposed Kaihatu and whether the role extends into co-ordination of liaison across Council functions.
- Reassessment of PMEP provision. The PMEP describes tangata whenua values and expresses the need to work together. Māori freshwater values are included in environmental flow and in discharge consent considerations. However, an overall vision and explanation of how Te Mana o te Wai applies in Marlborough is not explicit. This overarching framework is needed and will guide an assessment with tangata whenua of what is needed to provide for Te Mana o te Wai. An assessment of adequacy of existing plan provisions can only be made after working with tangata whenua iwi to understand their expectations for Te Mana o te Wai. Any detailed information on mahinga kai or other Māori freshwater values will need to be included. (See further discussion under Section 4 of this document).

## 4 RMA Planning instruments

The Council's freshwater planning approach is contained in the Proposed Marlborough Environment Plan (PMEP). The PMEP is a combined Regional Policy Statement, Regional Coastal Plan, Regional Plan and District Plan. The PMEP was notified in June 2016 and decisions were publicly notified in February 2020. The provisions of the PMEP were prepared under the NPS-FM 2014, although the Hearings Panel made changes to the notified provisions in order to give effect to the 2017 amendments to the NPS-FM. Such changes were limited to the scope of submissions.

Marlborough District Council has given notice of two Progressive Implementation Programmes (PIP) under the NPS-FM 2014:

- PIP notified 8 November 2012. Water quality contaminants limits notification of plan changes by June 2024 to introduce cumulative limits. If necessary, the plan changes will include methods and timeframes for managing water quality improvements if freshwater objectives not being met.
- PIP notified 2 April 2015. Wairau Aquifer Freshwater Management Unit (Recharge Area)
   Minimum Water Level. notification of plans changes by December 2024, to introduce a
   Wairau Aquifer minimum water level. If necessary, the plan changes will include methods
   and timeframes for applying minimum level restrictions to water users.

A PIP is no longer required under the NPS-FM 2020. The two PIPs therefore have no legal status but are important is so far as they illustrate that Council had resourcing set aside to carry out water quality limits and work on the Wairau Aquifer. The work programme to notify plan changes by 2024 will supersede the intent of the PIPs and become the reference for how Council is responding to the NPS-FM 2020.

The "what is needed?" parts of this section assume that Council will notify a single change/variation to the PMEP to make the changes needed to the RPS, Regional and District Plan to implement the NPS-FM 2020 with the new legislative timeframe set in the RMA s80A.

The new NPS-FM provisions will require new upfront provisions in the plan that explains how Te Mana o te Wai applies in Marlborough and sets visions and outcomes as objectives in the PMEP. The new upfront provisions will, in turn, guide an assessment, by Council and tangata whenua iwi, of what further is needed in the detailed PMEP provisions to provide for Te Mana o te Wai, the vision and outcomes. There are therefore two distinct phases in revising the PMEP as shown in the diagram below.

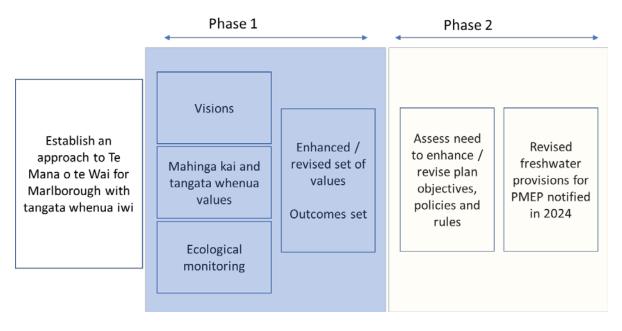


Figure 1 - Approach to developing revised provisions to the PMEP for notification in 2024.

#### This chapter is broken into three parts

- Applying the NOF. Part 2 Subpart 3 of the NPS-FM National Objective Framework sets out the process of applying the National Objective framework including all the attributes in Appendix 2A and 2B. This section includes a discussion on FMUs.
- <u>Environmental flows and levels</u>. Technically, flows and levels are part of the NOF but have been separated out here to reflect that the PMEP has extensive water quantity provisions already in place.
- Other changes to give effect to the NPS in the PMEP

The NOF parts of the NPS-FM also reference monitoring and action plans. These are discussed in Monitoring (section 6) and Action Plans (section 7).

#### 4.1 PMEP – Application of the National Objectives Framework

#### Requirements of the National Policy Statement

#### The NPS-FM requires Councils to

- Engage with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region (NPS-FM 3.2.1)
- Give effect to Te Mana o te Wai, and in doing so must engage with communities and tangata whenua to identify long-term visions, environmental outcomes, and other elements of the NOF (NPS-FM 3.2.3(b)).
- Include an objective in its regional policy statement that describes how the management of freshwater in the region will give effect to Te Mana o te Wai (NPS-FM 3.2(3))
- Develop long-term visions for freshwater in its region through engagement with communities and tangata whenua, and include those long-term visions as objectives in its regional policy statement (NPS-FM 3.3)
- Identify outstanding waterbodies

#### • Apply the NOF process:

- At each step of the NOF process, every regional council must engage with communities and tangata whenua; and apply the hierarchy of obligations – first priority health and well-being of waterbodies, second health needs of people; and provision for social, economic, and cultural well-being.
- Identify FMUs and monitoring sites (NPS-FM 3.8)
- For each FMU, identify values (Appendix 1B plus others) and environmental outcomes for each value and include the environmental outcomes as objectives in regional plans – compulsory, other national and other (NPS-FM 3.9)
- Identify attributes for each value and baseline states for attributes in NPS-FM Appendix 2A, 2B; attributes for Māori freshwater values which must include mahinga kai values, and any other attributes a Council wishes to use (NPS-FM 3.10)
- Set target attribute states, the sites they apply at, timelines (including interim targets) and other criteria to support achieving the environmental outcomes (NPS-FM 3.11)
- As per NPS-FM 3.12, identify how to achieve targets and environmental outcomes through limits (NPS-FM 3.14), nutrient criteria (NPS-FM 3.13), action plans (NPS-FM 3.15) or consent conditions
  - For Appendix 2A attributes identify limits on resource use that are specified in rules with optional use of action plans and consent conditions (Action plans must be published but not necessarily as part of plan)
  - Set nitrogen and phosphorus exceedance criteria and instream concentrations
  - For Appendix 2B attributes prepare action plans with optional use of limits, nutrient criteria and consent conditions (Action plans must be published but not necessarily as part of plan)
  - For other attributes do at least one of limits, action plan or consent conditions.

While the NPS-FM requires the use of best information, new provisions make it clear that decisions must not be delayed solely because of uncertainty about the quality or quantity of the information available (NPS-FM 1.6).

There is a change of terminology about "limits" between the 2017 and 2020 NPS-FM. The 2017 version refers frequently to objectives, limits and methods, whereas the 2020 NPS-FM refers to environmental outcomes. Environmental outcomes are linked to the vision(s) and must be set for each value in an FMU and described in a way that enables an assessment of effectiveness of regional policy statements and plans (including methods and limits).

A **limit** is defined in the NPS-FM 2020 as a limit on resource use or a take limit where a **limit on resource use** means the maximum amount of a resource use that is permissible while still achieving a relevant target attribute state. Whereas the NPS-FM 2017 defined a **Limit** as the maximum amount of resource use available, which allows a freshwater objective to be met. The 2020 NPS-FM clarifies that a limit can be a land use control, an input control or an output control (NPS-FM 3.14).

#### What is in place?

As mentioned in the previous section, there are references to Te Mana o te Wai within Chapter 5 Volume 1 of PMEP. However, there is not an overarching RPS-level objective, nor are there explicit long-term visions for freshwater.

PMEP Appendix 5 sets out values for each of 61 surface water and 8 groundwater zones referred to as Water Resource Units. The PMEP identifies a suite of values for each of the detailed Water Resource Units. These cover habitat (fish, bird, invertebrate and riparian), recreation, aquatic macrophytes, public access, natural character, significant wetlands, and aesthetics, and identify water supply and hydro-electricity catchments/aquifers. Tangata whenua values are not explicitly identified.

Targets for water quality in each FMU (for nitrate, ammonia and E. coli) are set out in Objectives 15.1b, c, d and e. These are the compulsory values as per the 2017 NPS-FM and are set to achieve A band water quality. The periphyton (and associated DIN) attributes in the 2017 NPS-FM are not included.

Schedule 2 of Appendix 5 contains a set of water quality classification standards, some of which include NOF attributes. Standards apply based on the classification of a water body related to its use e.g. shellfish gathering, water supply, contact recreation. Standards apply to both fresh and coastal water. These standards relate to Schedule 3 of the RMA, which following 2017 amendments to the Act, no longer apply to freshwater (s.69(4)).

The PMEP is clear that more is needed to apply the NOF even as it was in 2014 NPS-FM. Policy 15.1.3 states that council will investigate the capacity of fresh waterbodies to receive contaminants from all sources in order to establish cumulative contaminant limits by 2024. This commitment is reflected in the PIP and aligns with the 2024 timeframe now set in the RMA.

While the PMEP does not set "cumulative contaminant limits" it does restrict activities such as dairy farming, stock access, fertilizer us, stormwater, wastewater and discharges. These restrictions fit within the definition of "limits" in the NPS-FM 2020 because they are land use or input controls.

#### National initiatives

Allocation workstream – Ministry for the Environment

 Address water allocation issues having regard to all interests including Māori and existing and potential new users. No timelines given

Freshwater implementation projects

- Case studies of approaches to mahinga kai identification
- Science gaps to support NOF nutrient criteria, sediment limits.
- One aspects of guidance that the regional councils have requested is advice on applying the NOF in a short time frame often with little or no monitoring data for some attributes, and in a way that recognises mahinga kai values, and sits within a Te Mana o te Wai approach.

#### What is needed?

The PMEP provides a suitable framework for implementation of the NPS-FM 2020. It contains values, a comprehensive set of water quantity provisions, a set of water quality standards<sup>2</sup> and contains NOF attributes as objectives. It reflects the dry climate, demands for water, and has not

<sup>&</sup>lt;sup>2</sup> Noting that the term "standard" and the use of classifications no longer apply to freshwater. There is still information useful to the NOF in the standards currently applied in the PMEP.

had to respond to the intensification concerns of many other regions. It reflects that the majority<sup>3</sup> of nitrogen levels are in the A Band.

The new NPS-FM provisions will require a new front end on the plan that sets an overall vision and explanation of how Te Mana o te Wai applies in Marlborough. The purpose is to clearly establish the point (i.e., environmental flows, contaminant concentrations) at which each of the priorities (health of water, human health needs, all other well-beings) are provided for. There are two phases as outlined in the introductions

#### Phase 1

- <u>Te Mana o te Wai</u> Establish with tangata whenua a local approach to giving effect to Te Mana o te Wai (Our Land and Water Science challenge work should assist)
- Mahinga kai and Māori freshwater values. Work with tangata whenua iwi on the identification of mahinga kai and other Māori freshwater values.
- Establish and communicate a process for community involvement in the vision, values, outcomes and NOF process. Options include: an advisory/stakeholder group akin to Southland's Regional Forum, issues/options papers, or FMU-scale groups. Given the tight timeframes, almost all councils are now moving to a single plan change across the region rather than FMU by FMU and likewise their consultation processes. The connection with and support of tangata whenua iwi for the approach will be important.
- <u>Clarify FMUs.</u> FMUs set the upper boundary of scale for management approaches, and the
  basis for national reporting. However, on-the-ground management of water quantity and
  quality can be at smaller scales, with multiple management approaches within each FMU
  because of very local values and issues.

The PMEP anticipates different FMUs for water quality and water quantity. Having two sets of FMUs does not align well with the increased emphasis on ecosystem health as a concept which combines water quality, water quantity, habitat, aquatic life and ecological processes. Similarly, the reporting in NPS-FM 3.30 (3) requires a single overall score for ecosystem health for each FMU in the region which further supports a single set of FMU for Marlborough.

In the PMEP, values are identified for each Water Resource Unit; these are a small scale and nest well within the 6 larger potential FMUs that were proposed for water quality. Two Councils have FMU decisions in front of the Environment Court. For Southland, the court is deciding between 5 or 6 FMUs, and in Waikato the court is deciding between 1 or 8 FMUs for the Waikato River catchment excluding Lake Taupo. Southland is 31,200 km², the Waikato catchment (excluding Taupo) is 11,000 km², and Marlborough is 12,480 km². While a comparison of size could be misleading, the use of 6 FMUs in Marlborough is consistent with the scale being used across the country. Similarly, Tasman is anticipating 7 FMUs.

• Consider how environmental outcomes will be included in plan. The NPS-FM introduces a new term "environmental outcome". These are likely already specified in objectives and policies but not necessarily identified as such or linked to each FMU or nested in Te Mana o te Wai and the long-term vision.

<sup>&</sup>lt;sup>3</sup> All but 2 State of Environment sites are in A Band for Nitrogen – the remaining 2 sites are in the B band

Apply the NOF – vision, values and outcomes. Confirm vision, identify values and outcomes
for each FMU. Values are already included in the PMEP for each water resource unit, and
inherent in the water quality classification standards. As noted in the tangata whenua
section, Council must work with tangata whenua to identify mahinga kai and any other the
Māori freshwater values.

#### Phase 2

- Apply the NOF attributes. Set attribute baseline and target states consistent with the
  environmental outcomes. Given some of the new attributes have not been monitored,
  baseline and target states will need to be set without the benefit of trend analysis. This is an
  issue across all Councils, and a need for consistent approaches on how to do this has been
  identified. Nutrient criteria as per NPS-FM 3.13 will also be needed.
- Apply the NOF develop how the environmental outcomes and target states will be achieved. Develop limits, actions or consent conditions to achieve the outcomes and targets. Review the most appropriate way to set water quality limits given the broader definition of limits. The changed definition of limits allows for alternatives to the term "cumulative discharge limits" as proposed in the PIP and it is now clear that limits can be land use, input and/or output controls. As noted above, the PIPs will be superseded by the work programme to notify a plan change in 2024 to give effect to the latest NPS-FM.
- Add the NOF to the PMEP in the 2024 notification
- Remove the application of RMA Schedule 3 standards to freshwater from the PMEP.

Timeframes will be dependent on tangata whenua iwi capacity to identify mahinga kai values and co-develop an approach to Te Mana o te Wai.

Linking both Council and tangata whenua iwi into national initiatives on application of the NOF will be important, firstly in Te Tau Ihu, then nationally.

#### 4.2 PMEP – Environmental flows and levels

#### Requirements of the National Policy Statement

The NPS-FM requires Councils to

- Include rules that set environmental flows and levels (NPS-FM 3.16) and take limits (NPS-FM 3.17), and state whether and when existing consents will be reviewed to comply
- Include in plans criteria for water transfer, improving and maximising the efficient allocation of water (must include methods to encourage efficient use)
- Environmental flows and levels must be set at a level that achieves the environmental outcomes for the values relating to the FMU or relevant part of the FMU and all relevant long-term visions; and have regard to climate change.

#### What is in place?

Chapter 5 of the PMEP— Allocation of Freshwater Resources — addresses environmental flows and levels. The objectives and policies of this chapter, alongside Appendix 6 and Rule 2.1.1 set environmental flows and limits and take limits. The water quantity framework has existed for the main river systems for over 25 years with a longstanding requirement for minimum flows and water

take limits. It is understood throughout the region that, with the exception of one major river, there is no further water available unless it is taken to storage at high flows, which has led to increasingly common use of water storage.

#### Environmental flows and levels

The PMEP has a much more complete approach to environmental flows and limits, than to the water quality attributes part of the NOF. Appendix 6 contains a complete set of environmental flows and levels. Schedules 1 and 2 set quantity allocations which are "take limits" including an approach to set a limit for rivers with little information. Rule 2.6.1 makes it a prohibited activity to exceed these limits. Schedules 3 of Appendix 6 sets minimum flows and levels for surface and groundwater, including an approach to set a minimum flow for rivers with little information and Schedule 4 sets conductivity limits for aquifers. These requirements become conditions of resource consents.

PMEP Policies 5.2.4 and 5.2.10 set the parameters to consider in setting environmental flows for surface and groundwater respectively. These two policies work in tandem with Policy 5.3.1 which sets a priority for water allocation of:

- (a) Te Mana o te Wai; then
- (b) natural and human use values; then
- (c) aquifer recharge; then
- (d) domestic and stock water supply; then
- (e) municipal water supply; and then
- (f) all other takes of water.

The PMEP is clear that minimum flows and/or levels are still needed for the Wairau Aquifer. Policy 5.2.11 states that Council will implement a programme of investigation in order to establish minimum flows and/or levels for the Wairau Aquifer by 2024, including a review of the minimum levels already established for Wairau Aquifer Urban Springs, Wairau Aquifer Central Springs and Wairau Aquifer North Springs. This commitment is reflected in the PIP and aligns with the 2024 timeframe now set in the RMA.

There is an extensive set of policies outlining specific operational requirements for water efficiency that is obviously well-evolved and attuned to a water-short region. Methods to encourage storage and efficient use particularly of irrigation are strong in the plan. Policy 5.4.5 set ground rules for a streamlined transfer system – these appear similar to the NPS-FM requirement to set criteria for water transfer. The PMEP flags further development of a streamlined transfer system is needed.

Policy 5.5.4 and 5.5.5 establish how over-allocation will be addressed in a set of named aquifers by 2025. The approach for two less vulnerable over-allocated aquifers proposes reducing individual resource consent allocations as they are replaced, by applying a reasonable use test to their existing activity. This will align the paper allocation within permits to the sustainable yield of those aquifers. The approach for the three more vulnerable over-allocated aquifers proposes reducing individual resource consent allocations on a proportional basis, based on the existing consented irrigated area and the total allocation available. The reductions will be achieved by reviewing the conditions of all the relevant water permits to reallocate the available allocation fairly across all relevant users.

#### National initiatives

Allocation workstream – Ministry for the Environment

 Address water allocation issues having regard to all interests including Māori and existing and potential new users. No timelines given

#### Envirolink project

NIWA and Cawthron. Monitoring and evaluation of riverine flow management. Purpose: to
develop a scientifically defensible evaluation of whether water allocation rules have enabled
freshwater management objectives to be met; and adaptive management of water
allocation rules, which involves using data collected to reduce uncertainty around how river
ecosystems respond to allocation rules.

#### What is needed?

<u>Establish environmental flows/levels for the Wairau aquifer as per Policy 5.2.1.</u> While the existing PIP describes the use of minimum levels, there is opportunity, given that the PIPs are superseded, to review the most appropriate control mechanism for takes from these aquifers.

Revisit Environmental flow and level policies once a vision and outcomes are established. Policies 5.2.4 and 5.2.10 will need to be assessed once the freshwater vision, and outcomes are established through the NOF process. However, unlike the NOF attributes for water quality there are no numeric bottom lines or bands for environmental flows and limits contained in the NPS-FM. There is, however, clarity given in NPS-FM Appendix 1A about the component parts of ecosystem health and an explicit need to consider water quantity, habitat, aquatic life and ecological processes. PMEP Policies 5.2.4, 5.2 9 and 5.2.10 do cover aspects under each of these categories.

The more significant change to the environmental flow and levels in PMEP driven by the NPS-FM is the hierarchy of obligations set in Te Mana o te Wai – prioritising the health and wellbeing of water bodies, then the essential needs of people, followed by other uses. Policy 5.3.1 will need to demonstrate how this hierarchy applies in practice.

Reassess environmental flows and levels. Once the vision(s) and outcomes are developed, assess whether the vision/outcomes or any changes in Policy 5.2.4, 5.2.10 and/or Policy 5.3.1 would result in changed environmental flows/levels. It is not a given that a change in policy would result in changed flows. However, there is potential for environmental flows to increase when the new hierarchy of obligations under Te Mana o te Wai is applied, particularly if the basis for existing flows did not include all aspects of ecosystem health.

<u>Ecological and mahinga kai monitoring.</u> Appeals on the PMEP indicate some concern about some of the minimum flows. Monitoring at the reaches subject to these minimum flows might help quantify the environmental outcomes supported by the current environmental flows and, if necessary, provide information for reassessment of existing flows.

<u>Include criteria for water transfers</u> Build on existing plan provisions (Policy 5.4.5) to review requirements for transfer and explicating refer to transfer criteria. This approach is aligned with the direction already flagged in the PMEP.

#### 4.3 Other Requirements of the National Policy Statement

#### Councils must

- Encourage the co-ordination and sequencing of regional or urban growth. (NPS-FM 3.5)
- Provide in its regional policy statement for integrated management of the effects of the use and development of land on freshwater; and land and freshwater on receiving environments including recognises the interconnectedness of the whole environment, from the mountains and lakes, down the rivers to hāpua (lagoons), wahapū (estuaries) and to the sea. NPS-FM 3.5 (1 and 2)

- Include in its district plan objectives, policies and methods to promote positive effects, and avoid, remedy, or mitigate adverse effects (including cumulative effects), of urban development on the health and well-being of water bodies, freshwater ecosystems, and receiving environments. NPS-FM 3.5 (4)
- Insert into regional plans a set of specific polices or words to that effect using s.55 of the RMA
  - NPS-FM s.3.22 (1)- avoid loss or degradation of wetlands, protect values and promote restoration,
  - NPS-FM s.3.24 (1)- avoid loss of river extent and values
  - o NPS-FM s.3.26 (1)- maintain or improve fish passage

These are inserted without the need for a submission and hearing process under s.55 of the RMA.

- Change regional plans to include:
  - Identification of any regionally significant infrastructure (any identified infrastructure is then able to be "specified infrastructure" referred to in the wetland provisions)
  - A set of plan provisions for consent applications that are exceptions under the policies outlined in NPS-FM 3.22 and 3.24 - applying effects hierarchy and monitoring.
  - Plan objectives, policies, and methods that provide for and promote the restoration of natural inland wetlands NPS-FM 3.22 (4)
  - Plan policies to identify desired fish species, location and life stages that must have passage provided, and the same for undesirable species for which passage should be impeded including liaison with Department of Conservation as per NPS-FM 3.26 (2 and 3)
  - Consent considerations for consents for instream structures (NPS-FM 3.26(4))
  - Provisions that promote the remediation of fish passage existing structures NPS-FM
     3.26 (5)

#### What is in place?

#### <u>Integrated management</u>

Chapter 2 of the PMEP gives the background to the development of the plan and identifies integrated management as a foundation of the plan. Integration is inherent in the PMEP at it is the combined Regional Policy statement, regional coastal plan, regional plan and district plan for Marlborough.

#### Regionally significant infrastructure

Chapter 4 of the PMEP outlines the importance of regionally significant infrastructure, network utilities and emergency services. Policy 4.2.1 identifies regionally significant infrastructure.

#### Wetlands

The PMEP has a set of objectives and policies and rules for wetland protection in Chapters 5, 8 and 15. These predominantly apply to significant wetlands, whereas the NPS-FM applies to all wetlands. Chapter 8 has objectives to protect remaining indigenous biodiversity, and to increase area/extent or condition of biodiversity. A set of policies seeks to protect, maintain and enhance areas and

habitats with a focus for re-establishment and enhancement in the most threatened environments. These policies refer to biodiversity of freshwater environments and of wetlands.

Significant wetlands are identified and mapped in Volume 4. Rules aimed at protecting the significant wetlands are included in the General Rules and zone-based rules throughout the plan and control specific activities occurring within, and in close proximity to the identified wetlands. The activities regulated include the taking, damming and diversion of water, the discharge of contaminants, activities in riverbeds, excavation, filling, vegetation clearance, and the construction of buildings and structures.

The policy set out NPS-FM s.3.22 (1) to avoid loss or degradation of wetlands, protect values and promote restoration has now been inserted into the PMEP as Policy 8.2.8A. The assessment of wetland policies and rules is also linked to the wetland rules in the NES-Fw (see following section of this report).

#### **River Extent**

The policy set out NPS-FM s.3.24 (1) to avoid loss of river extent and values has now been inserted into the PMEP as Policy 8.2.8B.

#### Fish passage

The policy set out NPS-FM s.3.26 (1) to maintain or improve fish passage has now been inserted into the PMEP as Policy 8.2.8C. Effect on migration of fish species is included as an adverse effect to be avoided (or biodiversity values maintained) under Policies 8.3.2 and 8.3.4.

Rules 2.7 to 2.11 set out requirements for structures. Structures are also addressed in rules in the NES-Fw (see following section of this report)

#### What is needed?

<u>Insert policies as per 3.22(1) 3.24(1) and 3.26(1) of NPS-FM.</u> Use s.55 process to get NPS policy into MEP. (Complete as of November 2020)

<u>Make other changes to the PMEP as part of 2024 notification.</u> Consider if new policies are needed to guide consent decisions for exceptions under the newly inserted policies, identify fish species and promote wetland restoration and fish passage remediation. Similarly assess if new policies are needed to manage the effect of urban development on the health and well-being of waterways.

For wetland and fish passage and stock access refer also the discussion on the NES-Fw.

#### 5 NES-Fw and s.360

#### Requirements of the NES-Fw

The Resource Management (National Environmental Standards for Freshwater) Regulation 2020 came into force on 3 September 2020 with the exception

- of intensive winter grazing provisions which come into force on 1 May 2021 (as of March 2021 delayed until May 2022),
- and stockholding areas and synthetic nitrogen on 1 July 2021.

#### The regulations cover:

- Farming activities feedlots and stock holding areas; intensive winter grazing; application of synthetic nitrogen
- Farming activities temporary agricultural intensification conversion of plantation forestry to pastoral; land on farm to dairy farmland; irrigation of dairy farmland; use of land as dairy support. These provisions are in place until Council has given notice under s.55 (2A) of amendments to its plans to give effect to the NPS-FM 2020.
- Natural wetlands
- Reclamation of rivers
- Passage of fish affected by structures for any culverts, weirs, flap-gates, dams and fords built after 2September 2020

District and regional rules, and consent conditions can be more stringent but not more lenient unless for the purposes of preventing unwanted fish passage.

Note - on 25 May 2021, the Minister for the Environment indicated that there will be changes to the wetland provisions in the NPS-FM and NES-Fw. It is also understood that there will be changes to the permitted activity rules for Intensive Winter Grazing and for the slope maps referred to in the Stock Access regulations. These will be consulted on by the Ministry for the Environment in 2021.

#### Requirements of s.360 regulations - stock access

Regulations require the exclusion of stock from specified wetlands, lakes, and rivers more than one metre wide. Stock, except deer, may only cross a river or lake by using a dedicated bridge or culvert, unless they cross no more than twice in any month. The regulation applies beef cattle, dairy cattle, dairy support cattle, deer or pigs (stock). For all dairy, dairy-support and beef cattle, pigs, and deer there must be a minimum setback of 3 metres from the bed of a lake or river. However, the regulations provide for an exception to the 3-metre setback where an existing 'permanent fence or existing riparian planting was established as of 3 September 2020.

#### The regulations apply to:

- From 1 September 2020 to any new pastoral farming system
- From 1 July 2023 lakes and rivers
  - dairy cattle and pigs
  - o beef cattle and deer that are break feeding or grazing on annual forage crops or on irrigated pasture
  - o dairy cattle crossing more than twice a month must use dedicated bridge or culvert
- From 1 July 2023 wetlands

- o Cattle, deer and pigs from wetlands identified in the PMEP
- From 1 July 2025 rivers and lakes
  - o dairy support cattle
  - o beef cattle and deer on low slope land
  - dairy support cattle and pigs crossing more than twice a month must use dedicated bridge or culvert
- From 1 July 2025
  - o Cattle deer and pigs from wetlands with threatened species
  - o Cattle deer and pigs from wetland over 500 m<sup>2</sup> on low slope land

### Requirements of s.360 regulations – measurement of water takes

The Regulations have been amended to state that holders of resource consents that allow taking fresh water at a rate of 5 litres per second or more, must: •

- o measure their water use every 15 minutes
- o store their records
- o electronically submit their records to their regional council every day, or as instructed by their regional council.

#### Relationship of NES standards with RMA plan rules

Section 43 of the RMA states that rule or resource consent that is more stringent than a national environmental standard prevails over the standard, if the standard expressly says that a rule or consent may be more stringent than it. The NES-Fw explicitly states that district rules, regional rules and resource consent conditions can be more stringent and can be more lenient in only one case – in the case where a structure is there to prevent fish passage to protect a particular fish species. The exception aside, the applicable instrument is now whichever is more stringent – that is it prohibits or restricts more activities or imposes more stringent conditions on an activity. Conditions on existing resource consents - water permits, discharge permits and land use (regional rules only) - apply until the consents are reviewed or replaced.

Section 44A of the RMA sets outs a process for managing duplication between an NES and rules in a proposed or operative regional plan. It allows a Council to amend plans to address duplication and conflicts without using a Schedule 1 process. In this case, conflict will arise if the requirements in the NES-Fw are more stringent that the provisions in the PMEP.

These requirements do not apply to the stock access and measurement of water takes because these are made under s.360 of the RMA not as National Environmental Standards.

#### Data requirements to implement the NES-Fw and s.360 regulations

Implementing the suite of requirements requires councils to establish baseline information that will require further data and mapping (refer section 6 of this report). Importantly, information on farm boundaries, the number of farms, land use and location of stock crossings, wetlands etc. will be needed. It was envisaged in the design of the reform package that this information would come through Freshwater Farm Plans. Clear requirements for the information to be available to Councils and systems to standardise data transfer will be needed.

The regional councils are currently scoping a National Farm Plan Data platform which will set out how information, mapping and data can be received and held by Councils.

#### What is in place compared to NES-Fw and s.360 regulations?

#### Farming activities

The PMEP does not have rules specifically for stock holding areas, and intensive winter grazing, although the activities, particularly on dairy farms, would be managed under the rules in the plan.

The PMEP has provisions in place to manage farming activities, in particular the policies relating to dairy land. Policy 15.1.33 and 15.1.34 set a requirement no more than minor adverse effect on water quality and requires management of risks as a minimum for land use consents for dairy. The NES-Fw sets out permitted and discretionary rules for discharges associated with conversion to dairy farming that essentially require an applicant to demonstrate no increase in contaminants.

Rule 3.3.24 limits the application of nitrogen (excluding N from direct animal inputs) to 200kg N/ha per year. The NES-Fw caps synthetic nitrogen use at 190kg N/ha.

#### **Wetlands**

The PMEP has a set of objectives, policies and rules for wetland protection in Chapters 5 and 15. These are less specific than the provision of NES-Fw and as such it is not straightforward to assess if they are less stringent. A major difference is that the NPS-FM rules apply to all wetlands, whereas the PMEP Policies in Chapter 15 apply to significant wetlands. The NPS-Fm requires councils to map all natural wetlands greater than 0.05 hectares within 10 years.

Wetlands feature in rules/standards which unless otherwise noted apply within 8 metres of a significant wetland, for

- Plantation and woodlot planting and harvesting (10 metres setback for new planting)
- Filling of land with clear fill
- Construction of bores or off-river dams
- Vegetation clearance
- Cultivation
- Excavation
- Agricultural discharges including agrichemicals, compost, effluent, offal within 20 metres
- Stock access
- Water takes all wetlands

#### The NES-Fw rules apply to

- vegetation clearance within a 10-metre setback
- earthworks or land disturbance with a 10-metre setback
- taking, use, damming or diversion of water with a 100m setback

The setbacks are wider in the NPS-FM.

The NES-Fw has a very strict regime with activities being prohibited in a wetland and non-complying in the setback zone. There are some permitted activities and discretionary activities for:

- restoration
- scientific research
- structures for recreation, conservation, education or monitoring,
- specified infrastructure (lifeline utility, regionally significant infrastructure, public flood control/protection, drainage) identified in the RPS
- horticultural or arable land use occurring between 2010 and 2020

#### natural hazard work

#### Fish passage

Policy 5.24 requires fish passage is factored into setting environmental flows and Policy 5.2.22 refers to fish passage for instream damming. Rules 2.7 to 2.11 set requirements for activities in, on, over or under the bed of a lake or river and relate in most cases to structures. There are a set of standards (rule 2.9) that apply to existing and new structures including culverts and dams.

The NES-Fw applies to any culvert, weir, for any culverts, weirs, flap-gates, dams and fords built after 2September 2020. It has a detailed set of information requirements; and permitted, discretionary and non-complying rules.

A more detailed stringency comparison is needed – for example the PMEP has a permitted activity standard that culverts do not exceed 12 metres (except if under a state highway) whereas there is no length requirement in the NES-Fw. The NES-FW requires that the invert of the culvert is a distance of 20% of the diameter below the riverbed whereas the NES-Fw requires the culvert invert is at least 25% of the diameter below the bed.

#### Stock access

PMEP Policy 15.1.35 - Avoid stock disturbance of riverbeds, lakes and Significant Wetlands and the associated discharge of animal effluent to those water bodies to the extent necessary to meet the management purposes by avoiding the access of intensively farmed stock to rivers, lakes and Significant Wetlands.

PMEP Rule 2.9.9 provides the permitted activity standards for stock entering waterways. Rules 2.11.4 and 5 (and comparable rules in rural and coastal zones) prohibit, from 9 June 2022, intensively farmed livestock entering onto or passing across the bed of a lake or the bed of a river when there is water flowing in the river. Intensively farmed livestock is defined as

- (a) Cattle, deer or sheep which are contained for breakfeeding of winter feed crops; or
- (b) Dairy cattle; or
- (c) Pigs.

PMPE Policy 15.1.27 promotes the retirement and planting of riparian margins in rural areas to intercept contaminated run-off, especially where water quality is degraded or at risk of degradation. The PMEP does not require a specific setback.

As stock access is a regulation under s.360 of the RMA rather than an NES, it does not come under s.44A and any plan changes to address duplication or conflicts would be subject to a Schedule 1 process.

#### Measurement of water takes

PMEP Policy 5.7.4 – Requires water permit holders to measure, record and transfer the information from their water take using a meter and data management system that is capable of recording real time information and transmitting this to the Marlborough District Council via telemetry. Over 85% of existing takes are already telemetered

As flow measurements is a regulation under s.360 of the RMA rather than an NES, it does not come under s.44A and any plan changes to address duplication or conflicts would be subject to a Schedule 1 process.

#### National initiatives

#### National implementation projects

- Ministry for the Environment continues to provide interpretation and guidance on the NES-Fw.
- o Guidance around the synthetic nitrogenous fertilizer is due in June.
- o Councils sharing of consent templates, application forms and information sheets
- A Southland initiative has recommended changes to the intensive winter grazing parts of the NES-Fw – Government has delayed the start date for the intensive winter grazing requirements.
- o National Farm Plan Data Platform initiatives led by Regional Chief Executives.

#### What is needed?

#### Commission a formal stringency review and recommendation for changes to plan wording

A complete stringency test is not part of this audit. However, the following table sets out the potential for conflicts and duplication.

Topics	Comment	Priority for stringency review	
Farming activities and intensification rules	Some potential duplication in the provisions around dairy land. PMEP provisions are less specific about practices and relate to management of risks and no increase in contaminants. Land use in Marlborough is trending out of pastoral farming into grapes and forestry. Stock holding areas and intensive winter grazing are not widespread in Marlborough	Low	
Synthetic nitrogen use	Potential for confusion with 200kg/N cap in the PMEP – applies to all fertilizer not just synthetic	Moderate – add clarification to PMEP	
Wetlands	There are references to wetlands throughout the PMEP. Wetlands provisions in the PMEP apply to multiple activities and the list of activities in the NES-Fw is not structured the same way as the PMEP. The setback requirements are wider in the NPS-FM.  The NES-Fw requirements apply to all wetlands, the PMEP ones apply one to the significant wetlands.	High	
Fish passage	Some obvious duplication around culverts that could benefit from resolution  Note that the NES-Fw provisions only apply to structures first built after September 2020.  Existing structures will remain under the PMEP	High	

	provisions even for maintenance and replacement after 2020.	
River extent	Not explicitly addressed in PMEP and little specificity in the NES-Fw	Low
Stock access	There are different timeframes outlined in the PMEP compared to the NES-Fw and different stock types addressed. The PMEP brings in requirements from 2022 so in some cases is ahead of the s.360 timelines. However, after 2023 the s.360 applies to more stock types – e.g., all beef cattle on low slope land or on irrigated land, and deer.  Given the range of stock types addressed in the s.360 regulation, there is merit in assessing whether the stock exclusion rules in the PMEP are required after 2023. If it was removed, initiatives to publicise and check compliance of stock exclusion could be aligned with national initiatives.	Moderate – refer to timelines set in the NES-Fw
Water takes	Telemetry is already required under the PMEP. The regulation is not new.	Low

A detailed stringency review should recommend if and how the PMEP can be changed to avoid duplication and conflicts.

Section 44A allows reference to an NES to be added to a plan. Even when there is legal clarity on which requirements – the NES-Fw or the PMEP provisions – is will not necessarily be clear to consent applicants and those operating under permitted activity rules. For clarity, there is value in identifying in the PMEP the relationship with the NES-FW and the activities and situations where the NES-Fw applies, ensuring that applicants are directed to the right place. This approach mirrors the approach current used in the PMEP for the NES-Planation Forestry. The stringency review could identify where such references would provide clarity.

A similar process would be useful for the s.360 regulations noting that s44A does not apply to plan changes in relation to those regulations.

<u>Publicity for new NES-Fw and s.360 requirements</u> Communication material about the new requirements are available from Ministry for the Environment and other Councils. These and existing MDC consent information need to be reviewed for appropriateness in Marlborough.

Broad communication and fact sheets could be supplemented by making direct contact with roading agencies, viticulture industry, MDC river engineers and others about new requirements.

## 6 Environmental monitoring, mapping and reporting

#### Requirements of the Essential Freshwater package

The NPS-FM requires councils to:

- Monitor the achievement of environmental outcomes and target attributes
- Monitoring methods must include measurement of
  - Mātauranga Maori
  - o the health of indigenous flora and fauna
- Map or identify sites to be used for monitoring attributes
- Determine in collaboration with tangata whenua sites for monitoring Māori freshwater values
- Map primary contact sites
- Monitor Primary contact recreation sites (NPS-FM 3.27) one or more monitoring site identified relevant to each site, a bathing time season, weekly sampling E. Coli during season with increased frequency and notify public once detected above thresholds NPS-FM 3.27 (5) and (6)
- Map the location of habitats of threatened species
- Map natural inland wetlands-(NPS-FM 3.23) within 10 years prioritised programme and keep wetland inventory with classification and any monitoring information
- Develop a wetland monitoring plan to monitor condition and assess effectiveness at ensuring not loss of value or extent
- Develop a plan to monitor condition of rivers to assess no loss of river extent or values
- Identify softbottom streams and whether naturally soft or hard bottomed (NPS-FM 3.25) and for these monitoring of deposited sediment using SAM2(3.25)
- Identify instream structures in the region by recording, for each structure (NPS-FM 3.26 and Appendix 4 part 1 and 2), the risks that instream structures present as an undesirable barrier to fish passage; and document the structures or locations that have been prioritised, the remediation that is required to achieve the desired outcome, and how and when this will be achieved.
- Identify desired fish species, and their relevant life stages, for which instream structures must provide passage; identify rivers and receiving environments where desired fish species have been identified and
- Identify undesirable fish species whose passage can or should be prevented; and identify rivers
  and receiving environments where fish passage for undesirable fish species is to be impeded in
  order to manage their adverse effects on fish populations upstream or downstream of any
  barrier

The NPS-FM requires analysis of monitoring to:

- Assess trends in attributes determine appropriate period for assessment, sampling frequency and distribution, and specify likelihood of any trend
- Investigate the cause of any deteriorating trend and assess risks of adverse effects on the environment.

#### What is in place?

There are now 22 attribute Tables in the NPS-FM, all of which must be monitored. The 2020 NPS-FM introduced 12 new attributes - 8 for rivers and 4 for lakes.

	NPS-FM 2017	NPS-FM 2020 additions
River monitoring	3	8
Lake monitoring	4	4
River and lake	2	0

Through its SOE programme, Marlborough District Council has monitoring in place for the river and river/lake attributes from the 2017 NPS-FM, and also has monitoring in place for half of the new river attributes, although the method will need to change for macroinvertebrates and suspended fine sediment.

MDC freshwater ecological monitoring will need to increase. Like most regional councils, existing monitoring focuses on water quality and quantity. The new attributes arise from the government's policy intent to "raise the bar on ecosystem health". Although monitoring of the effects of environmental flows is not explicit in the NPS-FM attributes, the focus on ecosystem health will drive an assessment of existing flow regimes against the ecosystem health components set in Appendix 1A of the NPS-FM. This monitoring is not in place.

Marlborough has very few lakes, so very little if any lake monitoring.

There is time to build up the monitoring approach recognising that even if it started in July 2021 there is insufficient time for trend analysis to feed into 2024 plan notification. The quality of data and systems used to store data are very important (refer Section 10)

#### **National initiatives**

- National Environmental Monitoring Standards. Clarity is still needed from MfE on the monitoring frequency for some attributes.
- Guidance on the design of Monitoring frameworks

#### What is needed?

#### FMU monitoring of outcomes and attributes

- Determine approach to representative monitoring in each FMU, once FMUs confirmed.
- The short report Review of Surface Freshwater Quality Monitoring Programme September 2020 set out options for the freshwater quality monitoring programme. Option 2 seems the most logical approach that meets both national requirements for FMU reporting but allows more nuanced local management. This would mean that FMUs can be set at a relatively large scale, while on the ground management of water quality remains at a smaller scale. Subsequently the current six large FMUs are kept in place for national reporting, but smaller catchment units are set up for management. Although this approach will be more cost effective, it is important to note that each FMU still needs to be monitored at representative sites.
- Add additional monitoring as part of action plans to assess the effectiveness of policy and/or management interventions – linked to the Catchment Care programme

#### Extend scope of monitoring programmes

- There are four completely new attributes for rivers—fish, deposited fine sediment, dissolved oxygen and ecosystem metabolism. These will need to be added to the SOE programme, and the method adjusted for macroinvertebrates and suspended fine sediment
- The report Review of Surface Freshwater Quality Monitoring Programme September 2020 identified 5 lakes for monitoring. There is no clear guidance on how lakes are included within the NOF framework particularly when they are not at the downstream end of a catchment. A risk-based approach to monitoring the lakes, with a baseline assessment, is a pragmatic and sensible approach.
- MDC has flexibility on how fast it ramps up to full monitoring. Timeframes are not specified
  in the NPS-FM other than the requirement under NPS-FM 4.1 to act as soon as reasonable.
  Timeframe can be informed by development of National Monitoring Standards which should
  provide certainty on monitoring frequency and methods, and of design of monitoring
  frameworks for each attribute.

#### **Ecological monitoring capability**

• Plan to increase ecological monitoring capacity/capability

## 7 Action plans

#### Requirements of the National Policy Statement

An action plan may describe both regulatory measures (such as proposals to amend regional policy statements and plans, and actions taken under the Biosecurity Act 1993 or other legislation) and non-regulatory measures such as work plans and partnership arrangements with tangata whenua and community groups

Action plans must be published but not necessarily as part of an RMA plan. The NPS-FM requires action plans are reviewed every five years. Before preparing an action plan, or amending an action plan other than in a minor way, the regional council must consult with communities and tangata whenua.

Timeframes are not specified in the NPS-FM other than the requirement under NPS-FM 4.1 to act as soon as reasonable.

#### Councils are required to:

- Prepare and publish an action plan for achieving the target attribute state for Appendix 2B attributes (and has the option of doing actions plans for Appendix 2A attributes).
- Include in an action plan, actions taken if an FMU or part of an FMU is degraded (below bottom line or below target state) or if degradation is detected include in action plan the causes of the deterioration, methods to address those causes, and an evaluation of the effectiveness of the methods and a response proportionate to the likelihood and magnitude of the trend, the risk of adverse effects on the environment, and the risk of not achieving target attribute states identify.
- Prepare an action plan in places where if it is appropriate to return a soft-bottomed site (that is naturally hard bottomed) to a hard-bottomed state (3.25)
- Set out a work programme in an action plan to improve the extent to which existing instream structures achieve the fish passage objective; and
  - set targets for remediation of existing instream structures needed to achieve any environmental outcomes and target attribute states relating to the abundance and diversity of fish
  - evaluate the risks that instream structures present as an undesirable barrier to fish passage
  - prioritise structures for remediation, applying the ecological criteria and described in table 5.1 of the New Zealand Fish Passage Guidelines, and set method and timeline for remediation
  - o identify those that have been remediated and their monitoring (3.26)
- Have methods to respond to any loss of wetland extent or wetland values (3.23 6b) or loss of river extent and values (3.24 (4)b)
- Reviewed 5 yearly

#### What is in place?

MDC has an established and growing Catchment Care programme. The Catchment Care programme adopts a community-centred, non-regulatory approach involving iwi and a wide range of other stakeholders to

- •protect or improve water quality in the Marlborough region
- •reduce erosion and sediment production
- protect sensitive receiving environments.

While Catchment Care is described as a non-regulatory approach, its purpose is to meet the water quality obligations set in the PMEP. The programme prioritises catchments identified as degraded or at risk of degradation In PMEP Policies 15.1.4 to 15.1.7. Policy 15.17 states that the methods to be used to enhance water quality will be determined following an assessment of the cause and effect of degraded water quality and will be clearly identified within the catchment enhancement plan.

Catchment Care is also linked to Objective 15.2. and its policies – Maintain and enhance the quality of Marlborough's soil resource. It includes measures related to the new sediment-related attributes in the NOF.

A number of catchment characterisation studies have been completed in recent years. The first Catchment Care programme is currently in progress for the Taylor River/Doctors Creek and Catchment Care programmes are also planned to begin in other catchments within a year. A significant number of degraded waterways listed in the PMEP are included in the Te Hoiere/Pelorus Exemplar catchment project.

#### **National initiatives**

Some councils have instigated a fish passage work programme to identify and then guide restoration of existing structures.

#### What is needed?

<u>Continuation of the Catchment Care programme</u> is critical to meeting Government's objective to have water quality materially improving within five years. Of all the freshwater implementation activities, it is the one likely to make the most improvements in the short term.

The Catchment Care programme is well aligned to action plans as it involves working with tangata whenua and community. Prioritisation is based on monitoring with a concentration on places that are considered degrading or at risk.

#### Extend Catchment Care programme

The list of catchments is likely to be revised as monitoring is extended and there are Māori freshwater values added to the PMEP. MDC has made good use of central government funding sources. There are also opportunities for funding which go directly to tangata whenua for catchment improvement initiatives.

#### Use Te Hoiere/Pelorus to refine approach

Water quality monitoring indicates that a focus on Te Hoiere/Pelorus is appropriate and will be assisted by being an MFE exemplar catchment.

Learnings from this catchment including the condition assessment will provide valuable information to the application of the NOF, particularly given that NPS-FM Appendix 1B attributes can be addressed through action plans rather than limits or consent conditions. The Te Hoiere/Pelorus is also likely to be a priority for the role out of freshwater farm plans. Previously the Government indicated a priority for exemplar catchments.

#### Revise catchment care documents to fulfil action plan intent of NPS-FM

Overtime as the PMEP plan provisions become clear, the existing catchment care plans can be adjusted to become action plans under the NPS-FM. That will require greater connection to catchment vision and outcomes and can describe the regulatory approach alongside the non-regulatory approach.

#### Fish passage work programme

Develop a fish passage work programme as resources permit.

#### 8 Freshwater Farm Plans

Freshwater farm plans are now in the RMA and will be progressively required. The roll out of compulsory farm plans will be set by regulations due in 2022. The regulations will set the timeframe for roll out and can set priorities spatially, by land-use/crop, or by property size.

#### Requirements of RMA s.9A

Once identified in the regulations, a farm operator must prepare a freshwater farm plan and have it certified and arrange, at a prescribed frequency, for an auditor to audit the farm for compliance with the certified freshwater farm plan.

A freshwater farm plan must:

- identify any adverse effects of activities carried out on the farm on freshwater and freshwater ecosystems; and
- specify requirements that (i) are appropriate for the purpose of avoiding, remedying, or mitigating the adverse effects of those activities on freshwater and freshwater ecosystems; and (ii) are clear and measurable.

The auditor must provide a report on compliance with the farm plan requirements and provide that report to the relevant regional council.

Regulations coming (due in early 2022) may set out

- content of a freshwater farm plan
- form, manner, timeframe and fees for certification and audit
- prescribed circumstances where amend or recertify
- criteria for auditors/certifiers
- information that must be provided to a regional council
- information that a regional council must keep; and
- prescribe infringement offences.

#### Requirements of Regional Councils in RMA s.9A

A regional council has the following functions:

- enforce the requirements of 9A and regulations
- monitor compliance by farm operators with their duties
- receive notifications of freshwater farm plans that have been certified; and
- receive audit reports and related notifications from auditors.

A regional council may require a farm operator to produce a certified freshwater farm plan for inspection.

A regional council must keep and maintain, in relation to each farm in its jurisdiction, a record of

- whether the farm has a certified freshwater farm plan; and
- the date the plan was last certified; and
- the date the farm was last audited for compliance with the plan; and
- any other information required by regulations

A regional council must appoint certifiers and auditors (at least one of each)

#### What is in place?

There are very few Farm Environment Plans by pastoral and arable farmers in Marlborough. They have not been advanced through the regulatory approach by MDC, as they have been by other councils with large pastoral farming sectors.

PMEP Method 15.M.25 refers to water quality management and/or nutrient management plans for dairy farms.

The overview of the Catchment Management programme refers to property-level planning = "individual properties are the primary locus for the implementation of good management practices and mitigation actions".

Te Hoiere/Pelorus is also likely to be a priority for the role out of freshwater farm plans. Previously the Government indicated a priority for exemplar catchments. Work under way through the condition assessments under the Catchment Care programme will also provide valuable information for farm plan preparation.

#### **Nationally**

Extensive national discussions are occurring on the development of the freshwater farm plan regulation which includes:

- the role of and connection to industry schemes such as Horticulture New Zealand's NZGAP, Fonterra's Tiaki farm plans,
- the link to wider farm planning such as the requirements to report Greenhouse gas emissions.
- o development of a national farm data platform
- o accreditation of farm planners and auditors

Nationally the primary sectors – Federated Farmers, Dairy NZ, Beef and Lamb, Horticulture NZ, Irrigation NZ - supported by the regional councils and Ministry for the Environment have agreed to the development of farm plans across all farms by 2030.

(http://www.fedfarm.org.nz/FFPublic/Policy2/National/Good Farming Practice-Action Plan for Water Quality 2018.aspx).

The wine industry is not part of these discussions but has an industry-wide certification programme Sustainable Winegrowing New Zealand.

#### What is needed?

It is a change – the proposed Freshwater Farm Plans will create tensions between the regulatory and non-regulatory approaches of Councils. Freshwater Farm plans are now a regulatory requirement whereas they have been seen as part of a non-regulatory approach.

The timing of requirements for freshwater farm plans is not set – it will be set by the regulation. Previously, the Government's set the following priorities (Essential Freshwater discussion document September 2019):

• farms used for commercial vegetable production

- farms in the catchments and sub catchments identified as high nitrogen catchments (none in Marlborough)
- farms in the Kaipara catchment that are on highly erodible land (at that stage Kaipara was the only exemplar catchment announced).

<u>Work closely with primary industry sectors</u>. Continue ongoing relationship with local primary sectors organisations. It would be worth understanding how the wine industry is included in government initiatives – they are unlikely to be a priority and already have a well-developed system.

<u>Stay connected to national and cross-regional work on Freshwater Farm plans</u>. Keep a close eye on national and industry stuff -stay connected with national initiatives including connection with industry bodies and their approaches. Noting that regulations are due in 2022.

<u>Use Te Hoiere/Pelorus to refine approach</u> Learnings from this catchment including the condition assessment will provide valuable information for the assessment of catchment and on-farm risks. Te Hoiere/Pelorus is also likely to be a priority for the role out of freshwater farm plans. Previously the Government indicated a priority for exemplar catchments.

## 9 Freshwater accounting and reporting

#### Requirements of the National Policy Statement?

#### Councils are required to

- publish annually actual data, or a link to those data, about each component of the values Ecosystem Health and Human Contact obtained from the monitoring site for each relevant attribute 3.30 (1)
- include in 5 yearly State of Environment report performance against the NPS-FM including current and target state of attributes, environmental outcomes, causes of degradation, environmental pressures, predictions of change and assessment of actions taken. 3.30 (2)
- Include in 5 yearly State of Environment report an ecosystem health card including a single overall score for each FMU 3.30 (3) and (4).
- operate and maintain, for every FMU, a freshwater quality and freshwater quality accounting system, and publish information from those systems be regularly updated and in a suitable form.

The freshwater quality accounting system must (where practicable) record, aggregate, and regularly update, for each FMU,

- information on the measured, modelled, or estimated loads and concentrations of relevant contaminants; and
- where a desired contaminant load, the proportion of the contaminant load that has been allocated; and
- sources of relevant contaminants; and the amount of each contaminant attributable to each source.

The freshwater quantity accounting system must record, aggregate, and regularly update, for each FMU.

#### What is in place?

Across the country freshwater accounting systems are still nascent, with the exception of water takes. Marlborough District Council is one of the leading councils for metering and provision of metered data.

Marlborough District Council contributes data to LAWA alongside all other Councils.

The State of Environment report published in 2015 includes surface water quality MCI, groundwater quality and quantity, and biosecurity freshwater pest species. Annual scorecards are reported to the Environment Committee.

#### National initiatives

- Projects on freshwater accounting, monitoring and report are not yet in train. However, a
  suite of data and reporting projects has been identified and is currently going through a
  prioritisation process. Freshwater accounting particularly the inclusion of groundwater has
  been identified by the regional sector as a priority
- Development of ecosystem score card

## What is needed?

- Keep developing freshwater accounting systems as time and funding permits. Timeframes are not specified in the NPS-FM other than the requirement under NPS-FM 4.1 to act as soon as reasonable.
- Nationally co-ordination may come through work by the CRIs/ Our Land and Water Science Challenge and/or the regional councils.

## 10 Data management systems

#### Implications of Essential Freshwater Package

The new NPS-FM has a strong focus on data and mapping as does the NES-Fw and the s.360 regulations. All parts of Council – planning, regulatory, catchment care, science and operational parts (river engineers, roading) – will have information that will contribute to Council's implementation of Essential Freshwater and the ongoing need to report progress.

Section 6 of this report sets out a suite of monitoring and mapping requirements, Section 8 outlines requirements for tracking freshwater farm plans, and section 9 the requirements for accounting and reporting. All of these have implications for the data management and reporting systems within MDC. Systems that ensure data quality are also critical and resourcing needs to reflect the work needed for data quality assurance.

In addition, the new section 9B of the RMA allows for regulations related to nitrogenous fertilizer to require information relating to or arising from the sale and purchase of nitrogenous fertiliser, and the provision of that information to the EPA, a regional council, a specified agency, or a specified person or class of persons. If triggered and if regulations require the information to be provided to regional councils, the councils will need systems to accept.

#### What is in place?

I have not looked at data storage systems within MDC.

MDC is actively involved in national discussion on data and chairs the Environmental Data Special Interest Group. It is well place to understand progress at the national scale – either across Councils or Councils working with government.

#### **National initiatives**

Data and data systems is a very active topic for cross-regional council collaboration. Through Regional Software Holdings, the regional sector has the ability to develop cross-Council software. There is also a combined initiative Environmental Monitoring and Reporting (EMaR) with a steering group comprising senior staff from regional councils, Ministry for the Environment, Statistics New Zealand, Cawthron, and the LAWA project manager

There are ongoing discussions across government departments, arising from a report by the Parliamentary Commissioner for the Environment, on the roles and responsibilities for environmental monitoring.

Late last year the Regional Sector submitted a proposal to Ministers recommending that work commence on creating an Integrated National Farm Data Platform. The recommendation recognises the growing data requirements on both farmers and regional councils and the need to have an appropriate and efficient way to collect, manage and report on this data. The proposal was well received by Minister and the Regional Sector have offered to be the lead agency for an initial phase and it is underway.

#### What is needed?

#### Consider the need for a dedicated position to co-ordinate data across Council

The new NPS-FM has a strong focus on data, mapping and reporting which will require co-ordination across council functions. It is not clear where the responsibility for co-ordination and making recommendations for data requirements, standards and systems sit within Council. Its importance warrants a dedicated position focusing on information management, usefulness/appropriateness of data, and informing/enabling analysis across teams and with external stakeholders.

Demands for information particularly to central government are likely to increase and to require consistency. There will be implications for Council systems which further supports the need for a dedicated position.

#### Factor database requirements into budgets including

- Systems for recording monitoring data on new attributes; systems that record mātauranga knowledge recorded (or enable tangata whenua iwi to do))
- The mapping needs of NPS-FM- wetlands, structures, mahinga kai and other Māori freshwater values
- The information needs for NES-Fw- information for farms/land use and structures that Councils are required to collect, as well as the base information need to assess compliance with the NES-Fw
- Freshwater farm plans These will have an additional set of data and system needs for Councils. Requirements will need to be assessed once the regulations are out.

## 11 Work programme priorities 2021-2024 and beyond

The following table brings together all the component parts of implementing Essential Freshwater and a proposed timeline. Workstreams will be led by different teams which will need to be co-ordinated as the programme rolls out. A more detailed work programme could be developed from this table.

The programme will be influenced by early discussions with tangata whenua iwi and the work in Phase 1 of the PMEP considerations (see Figure 1 in Section 4) and also by the timing of Freshwater Farm plans because of their role in data to implement the NES-Fm and the link to Catchment Care programmes.

All parts are connected. A programme overview structure is needed to ensure co-ordination across Council. The overview could be a "board" type overview consisting of managers of each section or another arrangement suitable to MDC structures and processes. This group would set clear roles and responsibilities, promote consistency in approach particularly to external communications and liaison, and ensure connections across sections are delivered when needed.

Workstream	To June 2021	To June 2022	To June 2023	To June 2024	To June 2025	Beyond
Tangata whenua iwi	Discussion with tangata whenua iwi on the approach to Te Mana o te Wai in Marlborough Informed by OLW science challenge and work across Te Tau Ihu Discussions with Ngāti Kurī (Kaikoura)	Assess with tangata whenua iwi capacity for engagement (internal and within tangata whenua iwi)  Identification of mahinga kai and Māori freshwater values  Confirm Kaihatu role and senior leadership responsibility		across all aspects of Esse		
RMA plan processes		Detailed work programme to get to 2024 notification publicised	Establish vision for each FMU	Appy the NOF – attributes and solutions	Draft plan and Schedule 1 consultation	Hearings

		Design process for community input  Confirm FMUs	Apply the NOF values and outcomes	Assess extent to which existing plan provisions need adjustment Confirm Wairau aquifer limits Criteria for water transfer	Notification of plan change Develop action plans jointly with catchment care programme	
Monitoring and mapping		Begin increasing monitoring capacity particularly ecological monitoring Begin Mātauranga monitoring position (iwi led)	Increase ecological monitoring and lake monitoring Monitor sites where environmental flow is challenged Confirm approach to FMU monitoring	Monitoring capacity for all new NOF requirements in place including mātauranga and mahinga kai monitoring  Assess mapping requirements (link to catchment care programme)	Monitoring ongoing  Development of freshwater accounting systems  Development of ecosystem score card  Begin implementing any new mapping requirements	Ongoing
Action plans	Focus	on continuing existing operation	Design fish passage work programme and incorporate into catchment care programmes	Maintain existing catchment care capacity even once HCEF funding finishes	Consider additional funding for works  Develop action plans based on existing catchment care programmes	Ongoing
NESFW and s.360 regulations	Consenting strategies Stringency review	Communication with key parties likely to have new requirements	Compliance strategies	Ongoing and feeding da	ta into national reporting	

Freshwater farm plans	Discussion document due from Government	Regulations come into force Liaison with primary sectors within Marlborough	Implementation to be designed and costed once regulations and timelines are available.  Experience gained in Te Hoiere/Pelorus will assist	
Data systems		Consider a dedicated role	Building capacity to analyse and report information across council functions including databases and information systems – strong link to national systems	
Funding opportunities	Keep across existing government funding for Te Mana o te Wai, iwi/hapū capacity, extension, mitigation, restoration initiatives			