

**Draft Freshwater Management Units for the Bay of Plenty Region for discussion**

Version 1, 26 March 2021

# Summary

FMUs are the primary scale for implementing the National Policy Statement for Freshwater Management 2020. Every FMU will have a long-term vision, stated as an objective in the Regional Policy Statement. This will express what communities and tangata whenua want the FMU to be like in the future. Every FMU will have a chapter in the Regional Natural Resources Plan (in 2024), and these will identify: freshwater values; outcomes sought for values (expressed as objectives); water quality, ecosystem health current state, baseline state, and measurable targets; and methods to the targets them, including limits (e.g., maximum contaminant loads, water take limits), methods to achieve these. All of these steps can be applied to smaller sub-FMUs where necessary to address specific values or issues as well.

Thirteen working draft FMUs are identified: Tauranga Moana, Motiti, Rotorua Te Arawa Lakes, Kaituna, Waihī Estuary catchment, Waitahanui +, Tarawera River, Rangitāiki, Whakatāne, Ōhiwa Harbour, Waiōtahe, Waioeka and Otara, Eastern Coast. FMUs will remain will continue to be tested, and the need for sub-FMUs will be considered and during research, plan development and engagement with tangata whenua and the community (2021 – 2023).

# Purpose

To present working draft Freshwater Management Units (FMUs) for the Bay of Plenty region for discussion with tangata whenua, key stakeholders and the wider community.

# Introduction

This paper was prepared as part of Bay of Plenty Regional Council’s (BOPRC) Essential Freshwater Policy Programme (EFPP) to implement the National Policy Statement for Freshwater Management 2020 (NPSFM). This will result in notifying proposed changes to the Regional Policy Statement (RPS) and Regional Natural Resources Plan (RNRP) by July 2024.

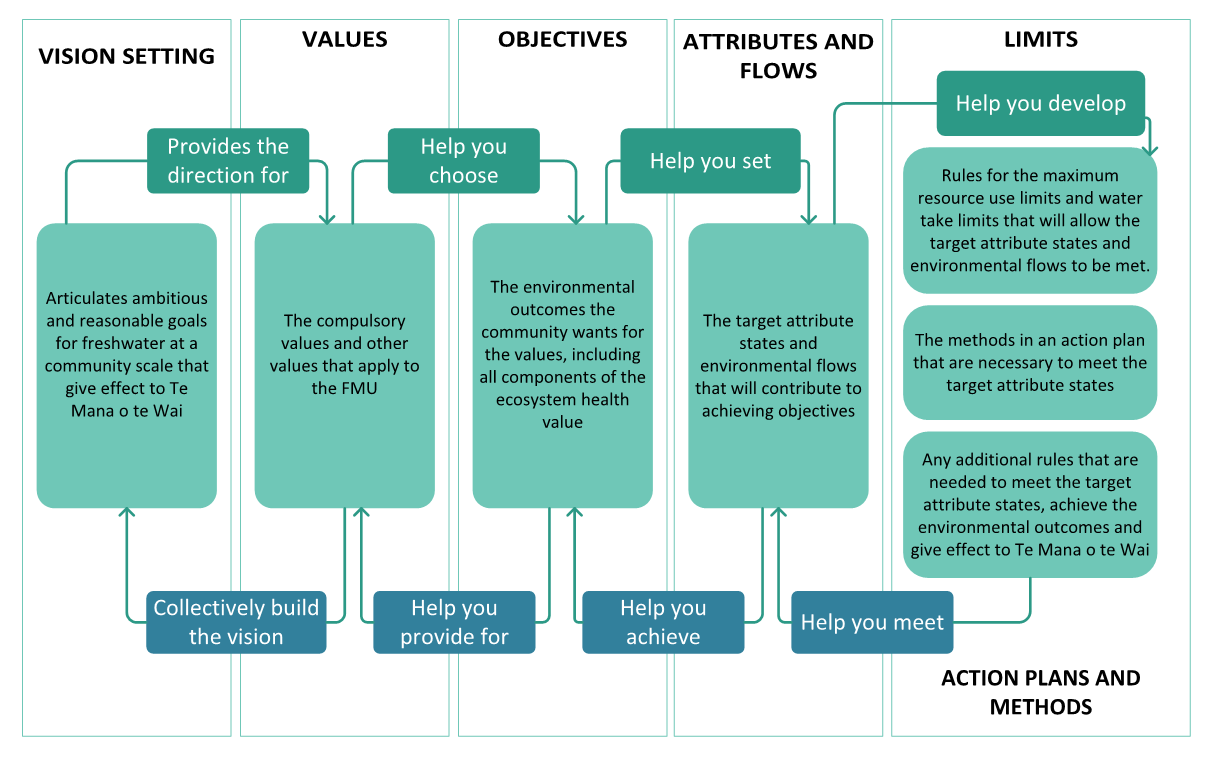
The NPSFM requires BOPRC to identify FMUs for the region, and every water body must be within at least one FMU[[1]](#footnote-1).

***Freshwater management unit****,* ***or FMU****, means all or any part of a water body or water bodies, and their related catchments, that a regional council determines … is an appropriate unit for freshwater management and accounting purposes; and* ***part of an FMU*** *means any part of an FMU including, but not limited to, a specific site, river reach, water body, or part of a water body[[2]](#footnote-2).*

FMUs are the primary scale for implementing the National Objectives Framework (NOF) outlined in Figure 1, although it can also be applied to any part of an FMU (henceforth called a sub-FMU).

The nature of freshwater bodies and their catchments varies across the region, as do the values and uses they support, the tangata whenua interests, the community interests, and the resource management issues within them. Many freshwater bodies are connected via surface and groundwater, as well as by cultural and community connections. Whatever FMUs are selected, there will be connections between FMUs, and these must be properly considered during NPSFM implementation. In particular, FMU boundaries will not constrain the ability of tangata whenua to express their values and interests across and within catchments, and these will be appropriately considered and reflected.

FMUs need to be identified early in the planning process, so the NOF process can be delivered, and because they affect RNRP 2024 structure and development. However, FMUs may need to be amended during the iterative plan development and engagement process. They will remain in draft until the draft RNRP 2024 develops, and engagement progresses, so that implications can be fully assessed.

**

*Figure 1: The National Objectives Framework set out in the National Policy Statement for Freshwater Management 2020, sub-part 2*

# How FMUs are used

Under the NPSFM, FMUs are the basic spatial unit of freshwater management, i.e., they are the units within which conversations about freshwater issues and solutions will occur.

The NPSFM requires that every FMU will have a long-term vision, stated as an objective in the RPS, which regional plans and district plans must give effect to. This will express what communities and tangata whenua want the FMU to be like in the future, and will include “ambitious but reasonable” goals and timeframes. People and communities should generally be able to relate to FMUs, and understand what is “in common” about water bodies within them for management purposes.

Every FMU will form a chapter in the RNRP 2024, and Council must apply the whole National Objectives Framework at an FMU, or part of an FMU scale. That is, FMU chapters will contain clear expression of: values; outcomes sought for values (expressed as objectives); water quality, ecosystem health and other attributes and measurable targets; and methods to achieve them including limits (e.g., maximum contaminant loads), rules and other methods. The many steps this includes are listed in Attachment 1.

# Previous Council decisions about FMUs

In 2011, nine Water Management Areas (WMAs) were adopted by Council as an appropriate scale for planning and engagement. Consideration was given to commonality between catchments and receiving environments, and to co-governance boundaries. WMAs generally reflect large river catchments, catchments with a common sensitive receiving environment, or several catchments with similar characteristics and receiving environments. Some anomalies do exist – these are noted in the assessment in Attachment 2.

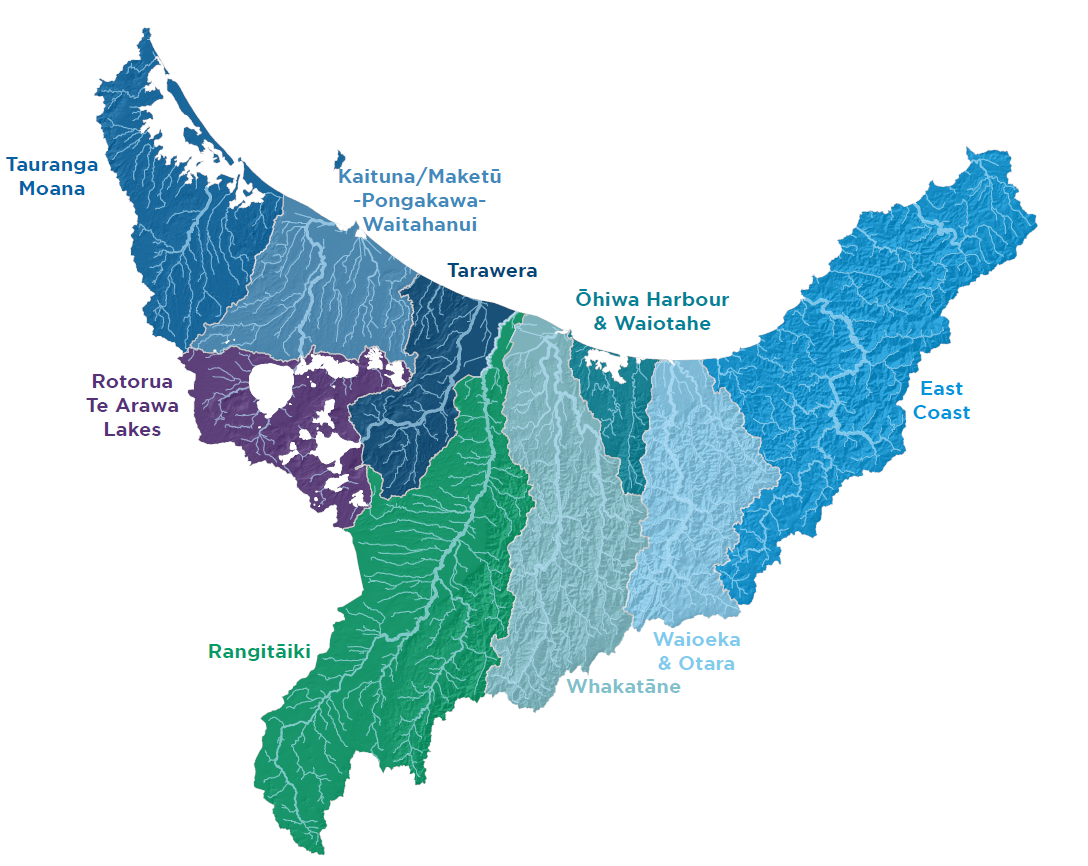


Figure 2: The nine Water Management Areas adopted by BOPRC in 2011

In 2016, Council approved principles for FMU setting, and then working draft FMUs for Kaituna-Pongakawa-Waitahanui (KPW) and Rangitāiki WMAs[[3]](#footnote-3).

In KPW WMA, the draft FMUs firstly reflected catchments of three different receiving environments, that is Waitahanui River, Waihī Estuary, Kaituna River/Maketū Estuary catchments. Waihi Estuary and Kaituna catchments were then further divided into lowland and mid-upper FMUs, reflecting quite different land and freshwater issues, in anticipation of different objectives and management approaches. The Waiari catchment, within the Kaituna catchment was also identified as a separate draft FMU, recognising its importance for municipal water supply. Community groups and some iwi questioned the division of whole catchments.

In Rangitāiki, upper-most catchments in protected native forest were identified as separate FMUs, the lowlands below the Matahina Dam were identified as another, and the remaining catchment above Matahina as another.

At that time, several other options were considered, such as aligning FMUs to community or iwi/hapū rohe boundaries, co-governance boundaries, or biophysical classifications and these have been reconsidered now. In addition, staff have considered FMUs set in other regions, although none have been notified since the 2020 changes to the NPSFM. Almost all regions use a catchment based approach, but there is no one consistent scale at which FMUs are applied.

Changes to the NPSFM 2020 means revision of these earlier decisions is appropriate, particularly the requirement to set a vision at FMU or part of an FMU scale, and the ability to apply the NOF to a whole FMU or part of an FMU. New considerations are reflected in the principles below.

# Principles for FMU setting

There is no single way to define FMUs. The following principles have been drawn from the NPSFM 2020, treaty settlement acts, and National Planning Standards. These are explained using a presentation posted on BOPRC’s Essential Freshwater web page.

1. **FMUs should relate primarily to catchment boundaries** of *freshwater bodies*, rather than to social or cultural boundaries, to achieve integrated freshwater management on a whole of catchment basis, ki uta ki tai (mountains to the sea)[[4]](#footnote-4). Thus, the whole surface water catchment of one (or more) sensitive receiving environment/s (lakes, estuaries, harbours) would be included within one FMU, as would a whole sea draining river (or rivers).
2. **FMUs should reflect the catchment boundaries of co-governance bodies**. Co-governance bodies and river documents established under treaty settlement acts, have a legislated role in setting direction for freshwater management, which must be responded to during plan making under the RMA and NPSFM.
3. **Within an FMU, there may be more than one whole catchment**, where they have characteristics in common (e.g., biophysical, social and cultural values, land and water use), and the scale and nature of resource management issues is sufficiently similar, such that a common objective and / or management approach may be appropriate.
4. **The number of FMUs should achieve a balance** between RNRP/administrative simplicity and bespoke solutions. It is desirable to have an efficient, clear and uncomplicated regulatory, monitoring and reporting freshwater management framework. On the other hand, a more tailored approach might respond to locally specific characteristics of freshwater bodies, their catchments, and specific values held by tangata whenua and communities.
5. **FMUs should generally be set at the largest scale** that may have a common objective and /or management approach to achieve consistency and reduce repetition in the RNRP.
6. **Other spatial units,** such as part of an FMU (i.e., a sub-FMU), overlays, and specific controls can also be applied to deliver specific objectives, policies, rules and/or methods, *where necessary* to address specific values, issues or activities[[5]](#footnote-5).

Note that **Groundwater extents differ** from surface water catchments, and this will be addressed in the RNRP. However, groundwater can be largely managed in alignment with surface water FMU boundaries. Thus, groundwater bodies lying beneath each FMU are considered to be “in” the FMU.

# Draft FMUs

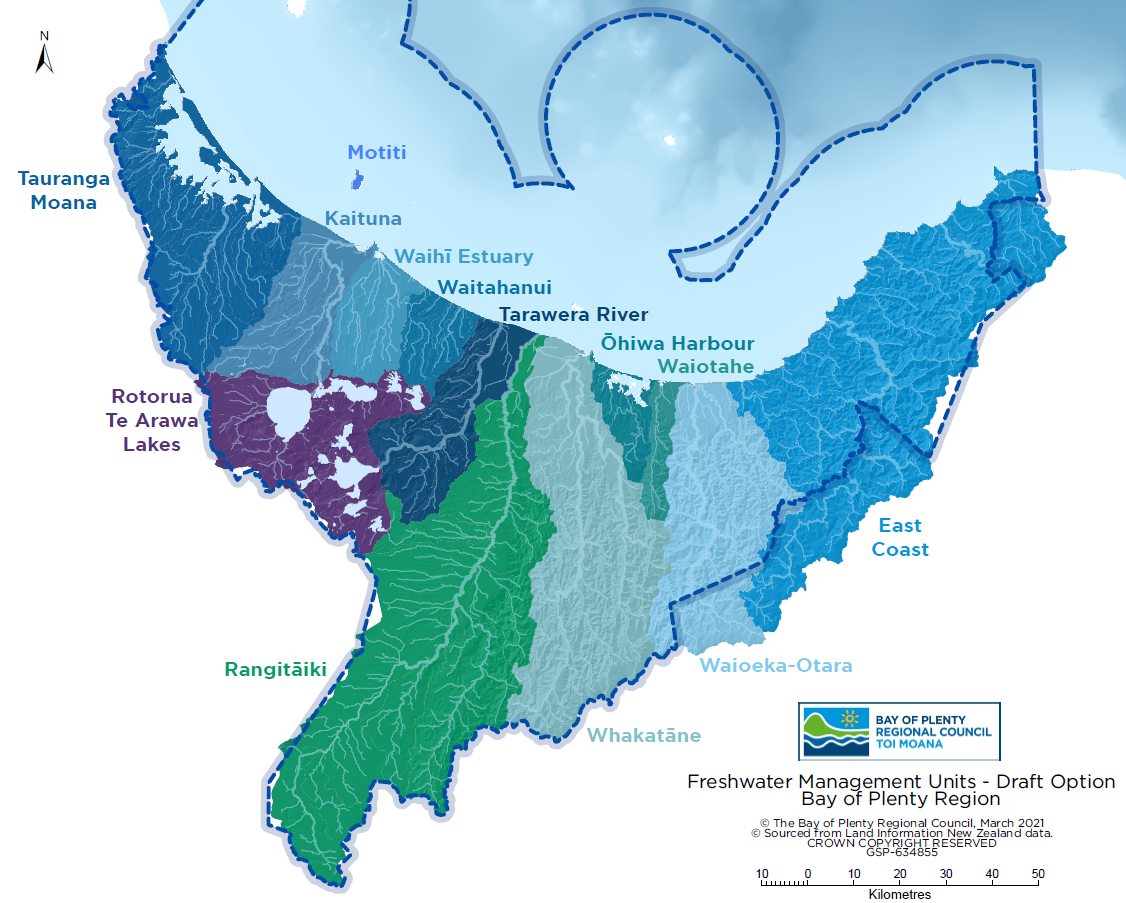
Various catchment based options have been considered by BOPRC before recommending the draft FMUS listed in Table 1 and explained in more detail in Attachment 2. Importantly:

1. engagement with iwi and hapū can and will focus on all of the water bodies they have an interest in, whether they are in one FMU or multiple. Their input, in accordance to their whakapapa and heritage, will be considered and reflected appropriately in each relevant FMU. Ideally, collaboration between iwi and hapū with interests in an FMU will result in commonly agreed advice regarding vision, values and objectives for FMUs and sub-FMUs.
2. there is flexibility to apply the NOF or parts of the NOF (vision, values, objectives, limits and methods) to any part of an FMU, where this is found to be necessary after research and engagement with tangata whenua, stakeholders and the community.
3. connections between each FMU, coastal receiving environments, and groundwater hydrogeological groups will be identified and considered[[6]](#footnote-6) (see Appendix 1 example).

Options that are not catchment based were not progressed, as they do not appear to be appropriate in light of NPSFM policy direction to achieve integrated freshwater management, on a whole of catchment basis, ki uta ki tai[[7]](#footnote-7). However, tangata whenua and public engagement may identify other options, and these will need to be considered by Council.

*Table 1: Freshwater Management Unit options*

|  |  |
| --- | --- |
| **Water Management Areas** | **Recommended Draft FMUs** |
| Tauranga Moana | Tauranga Moana |
| Motiti |
| Kaituna-Pongakawa-Waitahanui | Kaituna |
| Waihī Estuary |
| Waitahanui |
| Tarawera |
| Tarawera River |
| Tarawera River |
| Rotorua Te Arawa Lakes | Rotorua Te Arawa Lakes |
| Rangitāiki | Rangitāiki |
| Whakatāne | Whakatāne |
| Ōhiwa Harbour and Waiotahe | Ōhiwa Harbour |
| Waiōtahe |
| Waioeka and Otara | Waioeka and Otara |
| East Coast | East Coast |



*Figure 3: Draft FMUs - reflecting catchments of sensitive receiving environments and large rivers*

Setting FMUs at a more localised, sub-catchment and small river scale was considered but will result in a complex planning, monitoring and reporting framework, and a lot of repetition in the RNRP. It would be highly complex and costly to have FMUs at this scale across the whole region. Instead, this level of detail may be applied *only where necessary* to address specific values, activities or effects, or steps in the NOF, by setting sub-FMUs (e.g., for each of the lakes catchments), overlays or specific controls that sit within (or across) FMU chapters. The necessity for these more specific provisions will be explored during FMU based research, plan development and engagement with tangata whenua, key stakeholders and the community as a whole.

# Implications for Māori

BOPRC is discussing and establishing engagement relationships with tangata whenua for the Essential Freshwater Policy Programme. Engagement will include discussing the NOF (i.e., values and interests, vision, objectives, targets, etc). In some cases, specific cultural values or interests may necessitate a sub-FMU or overlay with specific management approaches.

The draft FMUs apply mainly to whole catchments, which aligns with the Te Ao Māori concept of ki uta ki tai.

Multiple rohe exist and overlap within many freshwater catchments, and may cross multiple catchments and FMUs, or sit within one. When BOPRC engages with iwi and hapū, discussions can traverse all water bodies within their respective rohe, and can consider implications up and down-stream of a rohe. Some consideration was given to FMUs based on rohe boundaries, which would have resulted in multiple overlapping FMUs. This is not functional as the outcome would be multiple objectives for the same body of water. Likewise, several water bodies would be dissected.

The recommended option enables all iwi and hapū with interests in a whole catchment, ki uta ki tai, to either work together collaboratively to advise, or for each to advise separately, requiring BOPRC to collate, assess and recommend options for iwi/hapū comment.

Co-governance areas are set by treaty settlement legislation and, to date, are catchment-based and bring together multiple iwi whose rohe or area of interest lie partially or fully within that area. The draft FMUs align with co-governance boundaries established to date, noting more are likely to follow as a result of pending treaty settlements.

# Next Steps

FMUs will remain in working draft form until the planning framework to implement the NPSFM, and engagement is well progressed. FMUs, and the need for sub-FMUs or overlays, will continue to be tested and discussed during FMU based research, plan development and engagement. Future reports to Councillors (Strategy and Policy Committee) will address the need for sub-FMUs within each FMU, and also changes (if any) to FMUs. That is, formal decisions will not be sought for some time yet.

**Attachment 1: How FMUs are used**

In addition to setting a vision for every FMU (or part of an FMU) Council must implement the following within every FMU or part of an FMU:

* The Te Mana o te Wai hierarchy of obligations – providing firstly for the health and wellbeing of water bodies and freshwater ecosystems, secondly for health needs of people and thirdly for the ability of people and communities to provide for their social, economic and cultural wellbeing.
* Identify values:
  + compulsory values that apply. They are ecosystem health, human contact, threatened species and mahinga kai.
  + Māori freshwater values.
  + other values that apply, including: natural form and character; drinking water supply; wai tapu; transport and tauranga waka; fishing; hydro-electric power generation; animal drinking water; irrigation, cultivation and production of food and beverages; and commercial and industrial use.
* Identify an environmental outcome for every value, and include these as an objective, or multiple objectives, in the RNRP.
* Use all compulsory attributes that apply, and other attributes (or assessment criteria) for values – identify baseline, current state, target attribute state, and nutrient excedence criteria (where necessary to achieve target attributes states for attributes affected by nutrients).
* Set limits on resource use, environmental flows, levels and take limits.
* Monitor:
  + Identify methods for monitoring progress towards achieving target attributes states and environmental outcomes.
  + Identify sites to be used for monitoring, outstanding waterbodies, primary contact sites, natural inland wetlands, and the location of habitats of threatened species.
  + Monitor at sites that are either or both (a) representative of the FMU or relevant part of the FMU (b) representative of one or more primary contact sites in the FMU.
* Prepare action plans where necessary to address degradation and take action to halt or reverse degradation
* Operate and maintain a freshwater quality and a freshwater quantity accounting system.
* Assess and report current state of attributes compared with target attribute states (TAS), and whether TAS and environmental outcomes are being achieved; when they are likely to be achieved; and likely causes of any degradation. Describe pressures and cumulative effect of multiple changes across multiple sites and attributes.

**Attachment 2: Description of the draft FMUs, advantages and disadvantages**

|  |  |  |
| --- | --- | --- |
| **Description** | **Advantages** | **Disadvantages** |
| They generally reflect large river catchments, catchments with similar characteristics and receiving environments.  Similar to WMAs, with a few distinctions:  Kaituna-Pongakawa-Waitahanui WMA is split in to three to recognise the two distinct estuarine receiving environments (Waihī and Te Awa o Ngātoroirangi/Maketu). Waitahanui (which is a sea draining catchment) is grouped with other coastal streams currently mapped in the Tarawera WMA.  Tarawara FMU is aligned with the Tarawera river catchment. pending Tarawera Awa Restoration Group co-governance boundary.  Waiotahe and Ōhiwa are separated as there are two separate sensitive receiving environments and they have distinctly different geology.  Motiti Island is defined as an FMU, as it has a unique off-shore freshwater context and small group of interested/affected parties.  This option would result in fourteen FMUs. | Those FMUs that include just one large river catchment would have a vision, set of objectives and policies for the whole catchment. There would be flexibility to set specific provisions for sub-FMUs to address specific values/activities where necessary.  Greater distinction between catchments with different receiving environments than WMAs.  Kaituna FMU aligns with Te Maru o Kaituna co-governance area.  Rotorua Te Arawa Lakes FMU aligns with the Rotorua Te Arawa Lakes Strategy Group co-governance boundary. There is flexibility to apply a sub-FMUsto the greater Tarawera lakes system (closely connected by groundwater), and/or to each of the lake catchments as needed.  Eastern catchments are grouped together, commensurate with the scale and nature of resource management issues, and key geology and land use similarities. This also leaves flexibility to respond to Te Whānau a Apanui treaty settlement which may direct sub-FMUs that need to be applied.  Rangitaiki FMU aligns with the Rangitaiki River Forum co-governance area. Tauranga Moana FMU remains likely to become one co-governance area.  Waiōtahe and Ōhiwa will have distinct objectives, reflecting their different receiving environments.  Grouping Waitahanui with coastal streams (in the Tarawera River WMA) is more appropriate than grouping with estuary catchments, but forms an FMU that crosses WMA boundaries, which may cause some public confusion. WMA boundaries and terminology may need to be dropped. | The RPS will have at least 13 visions and the RNRP will have 13 FMU chapters.  Each of the Rotorua Lakes is a sensitive receiving environment, with different current state. While there will be some common values and objectives, they are likely to each need individual objectives to reflect their unique values and state. For example, Lake Ōkaro and Lake Rotomā are in very different states, with very different land uses in their catchments. That is, each lake catchment may need to be a sub- FMU (within and FMU chapter) and the NOF would be applied. Lakes Tarawera, Rotoiti and, to some extent Rerewhakaitu, are all in Rotorua Te Arawa Lakes FMU, but discharge into downstream rivers in a different FMU. This can be addressed by ensuring lake objectives will enable downstream river objectives to be met.  The variable size of FMUs may be perceived as inappropriate and may drive requests for more, small catchment scale sub-FMUs within the FMUs.  Motiti is a very small FMU and resource management issues are small relative to other areas in the region. Defining it as an FMU may raise unrealistic expectations about the level of monitoring and resourcing the can be applied to this area, which will need to be addressed. |

1. NPSFM clause 3.8(1) and (2). [↑](#footnote-ref-1)
2. NPSFM, clause 1.4, page 6. [↑](#footnote-ref-2)
3. Freshwater Futures: Approach to value setting and freshwater management units. Report to the Regional Direction and Delivery Committee, 31 March 2016.   
   Freshwater Futures: Value setting and freshwater management units update. Report to the Regional Direction and Delivery Committee, 23 June 2016 [↑](#footnote-ref-3)
4. As directed by NPSFM Policy 3 and clause 3.5(1). [↑](#footnote-ref-4)
5. Generally, a sub-FMU may be a sub-catchment in which the NOF steps might be applied in addition to the whole FMU. Generally, an overlay may be used to protect specific types of area across the region (e.g., upper catchment natural state areas, or to manage land use activities consistently (e.g., urban or lowland land drainage area management). [↑](#footnote-ref-5)
6. NPSFM, clause 3.5(1) [↑](#footnote-ref-6)
7. Particularly NPSFM Policy 3 and clause 3.5. [↑](#footnote-ref-7)