Ministry for the Environment
Manatū Mō Te Taiao

Ministry for Primary Industries
Manatū Ahu Matua

FRESHWATER MANAGEMENT GUIDANCE

A Guide to the National Policy Statement for Freshwater Management 2014

(as amended 2017)

New Zealand Government

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Acknowledgements

The Ministry for the Environment would like to thank all those organisations and individuals that provided feedback to assist in the development of this guide.

This publication may be cited as:

Ministry for the Environment. 2017. *A Guide to the National Policy Statement for Freshwater Management 2014 (as amended 2017).* Wellington: Ministry for the Environment.

Published in December 2017 by the
Ministry for the Environment
Manatū Mō Te Taiao
PO Box 10362, Wellington 6143, New Zealand

ISBN: 978-1-98-852528-0
Publication number: ME 1336

This document is available on the Ministry for the Environment's website: www.mfe.govt.nz.

Ministry for the Environment
Manatū Mō Te Taiao

Making Aotearoa New Zealand
the most liveable place in the world
Aotearoa – he whenua mana kura mō te tangata

Contents

1 Introduction

1.1 Purpose and focus of this guide

This guide provides information about the National Policy Statement for Freshwater Management 2014, updated August 2017 to incorporate amendments from the National Policy Statement for Freshwater Amendment Order 2017 (Freshwater NPS or NPS).

This guide is not part of the Freshwater NPS, and does not have statutory weight. This guide is not a substitute for legal advice. Its primary purpose is to help local authorities (in particular regional councils and unitary authorities) understand the objectives and policies in the NPS, so they can implement it effectively. It draws on, and expands on, the policy intent behind the NPS as set out in Cabinet papers and reports to the Minister for the Environment.[1]

This guide may also be of use to iwi and hapū, stakeholders, or community members who are participating in a regional freshwater planning process and would like to understand more about the objectives and policies of the Freshwater NPS.

Further guidance has been, and continues to be, developed to assist the freshwater planning process and implementing the Freshwater NPS. We intend to update guidance as policy, case law, good practice methodologies, and the science develops. All guidance material will be available on the Ministry for the Environment's website.

1.2 Context – how we manage fresh water

The Freshwater NPS is a vital part of driving how we manage fresh water because:

- it requires regional councils to account for all freshwater takes and contaminants, which provides the information needed for setting and managing to freshwater objectives and limits
- it requires regional councils to set freshwater objectives, and provides a process for doing this
- the limits and methods (including rules) that councils (regional and district) set to achieve the freshwater objectives will affect how water is used, and may require water resource users to adjust their practices
- it requires regional councils to involve iwi and hapū in the management of fresh water, and to work with them to identify tangata whenua values and interests, and reflect these in the management of, and decision-making about, fresh water.

Implementing the Freshwater NPS will take time, will involve new approaches, and will not necessarily be achieved in one step. The NPS is only one part of how we manage fresh water; further work is under way which will contribute to improving the way fresh water is managed in New

[1] Cabinet papers and briefing notes about fresh water, including the development of the NPS can be found on the Ministry for the Environment's website.

Zealand. Community-led initiatives and collaboration between communities, local authorities, and iwi will also be important in improving freshwater management.

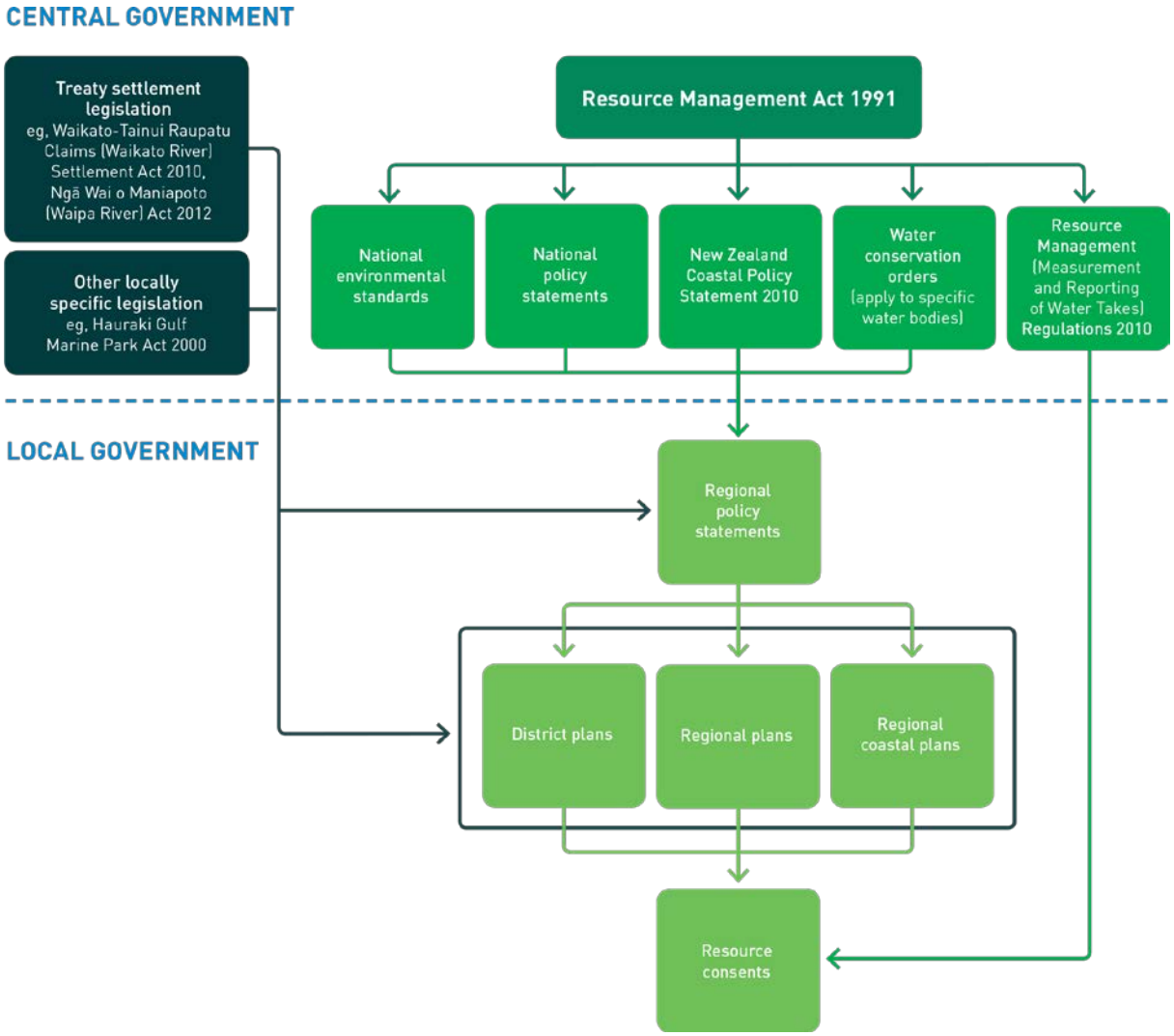
Information about the Government's water reform programme and its objectives is available on the Ministry for the Environment website.

2 Relationships to other regulatory instruments

The National Policy Statement for Freshwater Management 2014, as amended in August 2017 (Freshwater NPS or NPS) is an instrument under the Resource Management Act 1991 (RMA), and must be interpreted and given effect to within the context of the RMA. All parts of the NPS have legal effect, including Appendices and their 'notes'. The only exception to this is the preamble whose purpose is to help interpret the NPS.

This section explains the relationship between the Freshwater NPS and other associated documents and national instruments. Figure 1 shows the relationships between these various instruments. There will be other legislative and regulatory instruments, in addition to those discussed in this guide, which will also be relevant when determining how to give effect to the NPS.

Figure 1: Legislative and regulatory instruments that influence the management of fresh water



2.1 National policy statements

All national policy statements must be considered and given effect to individually. While NPSs are given effect to individually, to do so must not be at odds with any other NPS.

National policy statements with particular relevance to the Freshwater NPS are described below, and a full list of all national policy statements is available on the Ministry for the Environment website.

National Policy Statement for Renewable Electricity Generation

The National Policy Statement for Renewable Electricity Generation 2011 (NPSREG) identifies as matters of national significance:

a) the need to develop, operate, maintain and upgrade renewable electricity generation activities throughout New Zealand

b) the benefits of renewable electricity generation.

The NPSREG gives direction on the benefits of renewable electricity generation, and requires all councils to make provision for it in their plans.

As set out in the preamble, the NPSREG does not apply to the "allocation and prioritisation of fresh water as these are matters for regional councils to address in a catchment or regional context and may be subject to the development of national guidance in the future". These matters are addressed in the Freshwater NPS. This does not prevent regional councils from making decisions about freshwater management that reflect the importance of renewable energy generation. Appendix 1 of the Freshwater NPS identifies hydro-electric power generation as one of the national values of fresh water, and Policy CA2(a) requires that when developing freshwater objectives regional councils must consider *all* of the national values specified in Appendix 1 and how they apply to local and regional circumstances.

Policies in the NPSREG of particular relevance when making decisions about fresh water include:

- Policy B, which instructs decision-makers to have particular regard, among other things, to the fact that "maintenance of the generation output of existing renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource".
- Policy E2, which requires regional policy statements and regional and district plans to "include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance, and upgrading of new and existing hydro-electricity generation activities to the extent applicable to the region or district".

More information about the NPSREG is available on the Ministry for the Environment's website.

New Zealand Coastal Policy Statement 2010

The management of coastal water is directed by the New Zealand Coastal Policy Statement 2010 (NZCPS). The RMA defines 'coastal water' as seawater with a substantial freshwater component, and seawater found in fiords, inlets, embayments, harbours and estuaries.

Both the Freshwater NPS and the NZCPS provide direction on the management of fresh water in the coastal environment. Freshwater objectives and limits for freshwater bodies in the coastal environment must give effect to both policy statements. Policies and objectives of the NZCPS of particular relevance include:

- Objective 1: Ecosystems
- Objective 3: Treaty of Waitangi
- Policy 2: Treaty of Waitangi, tangata whenua and Māori
- Policy 4: Integration
- Policy 21: Enhancement of water quality
- Policy 22: Sedimentation
- Policy 23: Discharge of contaminants.

Regional councils will need to recognise the effects on receiving coastal waters when making decisions about fresh water in other freshwater management units (FMUs), not just those FMUs in the coastal environment. Coastal water quality will be affected by the quality of fresh water that flows into it, and the Freshwater NPS places obligations on councils to:

- improve the integrated management of land use and fresh water, particularly the interactions of fresh water and the coastal environment (Objective C1)
- recognise the interactions, ki uta ki tai (from the mountains to the sea) between fresh water, land, associated ecosystems, and the coastal environment (Policy C1)
- have regard to the connections between freshwater bodies and coastal water when setting freshwater objectives and limits (Policies A1 and B1)
- when addressing the periphyton attribute, develop instream nitrogen and phosphorous criteria to achieve the freshwater objective set for periphyton; while ensuring these are set to also achieve outcomes sought for any nutrient sensitive downstream receiving environments such as estuaries (see guidance on attributes).

Section 5 of this guide provides more detail about the relationships between the specific objectives and policies in the Freshwater NPS and the NZCPS. More information about the NZCPS is available on the Department of Conservation's website.

Water bodies in the coastal environment

Lakes and lagoons that are intermittently open to the sea and coastal wetlands may be managed as fresh or coastal water. Regional councils will generally make this decision when they set the boundary of the coastal marine area. For all water bodies that are managed as fresh water, including some lakes and lagoons that intermittently open to the sea, regional councils will need to set freshwater objectives under the Freshwater NPS and meet the relevant requirements of the NZCPS.

Where a council determines that a water body will be managed as coastal water, it will not be part of any freshwater management unit, and so freshwater objectives and limits do not need to be set under the NPS.

However, councils must still recognise interactions between the freshwater bodies and coastal water bodies in all their freshwater management decisions (Policies C1 and C2). Effects on coastal water bodies will also need to be considered when setting periphyton objectives if the water body is sensitive to nutrients.

2.2 National environmental standards

National environmental standards (NES) are regulations issued under the RMA. They can prescribe a range of technical standards, methods or requirements. National environmental standards are a specific requirement with the force of a rule, and local authorities must enforce them.

The scope of an NES is limited to:

- standards
- methods for classifying a natural resource
- methods to implement standards
- exemptions from standards
- transitional provisions.

A national environmental standard may regulate activities (as permitted, controlled, prohibited, etc) in the same way that a rule in a regional or district plan would. National environmental standards cannot include policies or objectives, so they don't direct how plans should be formed. However, each local authority and consent authority must observe a national environmental standard, and must enforce observance of that standard. A national environmental standard may specify that a regional or district rule may be more stringent than the regulation, but a rule or resource consent may not be more lenient (except in certain circumstances as set out in section 43B of the RMA). Decision-makers may need to amend plans to reflect a national environmental standard, and will need to take into account the provisions of a national environmental standard to the extent they affect decision-making (eg, permit and consent decisions).

There are two national environmental standards relevant to the Freshwater NPS. These are the National Environmental Standard for Sources of Human Drinking Water 2007, and the National Environmental Standard for Plantation Forestry (which comes into effect on 1 May 2018). A full list of all national environmental standards is available on the Ministry for the Environment website.

National Environmental Standard for Sources of Human Drinking Water 2007

The National Environmental Standard for Sources of Human Drinking Water (NES) is intended to reduce the risk of contaminating drinking water sources, such as rivers and groundwater. It requires councils to ensure effects on drinking water sources are considered in regional plans and decisions on resource consents.

It would be appropriate for regional councils to identify the national value of 'water supply' from Appendix 1 of the Freshwater NPS as a relevant value for water bodies to which this NES applies. In that case, a council would need to set appropriate freshwater objectives and limits in consideration of this NES for the applicable freshwater management unit.

More information about the National Environmental Standard for Sources of Human Drinking Water is available on the Ministry for the Environment's website.

National Environmental Standard for Plantation Forestry 2008

The objectives of the National Environment Standard for Plantation Forestry (gazetted 31 July 2017) are to:

- maintain or improve the environmental outcomes associated with plantation forestry activities nationally
- increase certainty and efficiency in the management of plantation forestry activities.

Some of the conditions of the National Environmental Standard for Plantation Forestry that are relevant to the management of fresh water include the following.

- For afforestation, permitted activity conditions include setbacks for tree planting from rivers, lakes, wetlands, coastal areas, and significant natural areas. Setbacks provide a buffer between forestry activity and these areas, providing shading and habitat for aquatic species and help to avoid erosion of stream banks.
- For harvesting to be a permitted activity, foresters must prepare a harvest plan, and submit the plan to their local council if requested. The plan should identify environmental risks, including erosion susceptibility using the Erosion Susceptibility Classification tool, and must list the mitigations to be used to respond to those risks and achieve compliance with permitted activity conditions.
- For earthworks, permitted activity conditions include the requirement to install and maintain stormwater and sediment control measures. Spoil, the by-product of excavation and earthworks, cannot be deposited where it may readily enter or deliver sediment into a water body, coastal area or significant natural area.

Regulation 6 of the National Environmental Standard for Plantation Forestry enables rules in a plan to be more stringent than those stipulated in the NES, if those plan rules are required to achieve freshwater objectives set under the Freshwater NPS.

More information about the National Environmental Standard for Plantation Forestry, including how the stringency provisions apply, is available on the Ministry for the Environment website.

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

The Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 apply to water takes of 5 L/second or more. The regulations require permit holders to measure and record their actual water usage and report results to their regional council for each water year.

Information received under the regulations will provide a substantial part of the accounting information required under Part CC of the NPS. Part CC requires regional councils to gather data to underpin the freshwater objective and limit setting process. In order to set an effective limits, it is first necessary to know how much is currently allocated (on paper according to water permits) versus how much of that water allocation is actually used. The latter is information which will be provided through the regulations.

More information about the regulations is available on the Ministry for the Environment's website.

2.4 Water conservation orders

The purpose of water conservation orders (WCOs) is to recognise the outstanding amenity or intrinsic values that water provides in either a natural or modified state, and to preserve and/or protect those values. A WCO can restrict or prohibit water takes, discharges, and other uses of the water in a particular water body. Anyone may apply for a WCO for any water body.

The process for considering an application involves a Special Tribunal and/or the Environment Court. WCOs are made by the Governor-General, on the recommendation of the Minister for the Environment.

Existing WCOs may help communities and councils identify values as part of implementing the Freshwater NPS. For example, where a WCO has identified jet boating as an outstanding value in a water body, this could form the basis of a value when implementing the NPS and setting objectives for that water body. However, a WCO can only protect values that are set out in Part 9 the RMA, and only if the water body is outstanding in terms of that value. This means that a WCO will not necessarily recognise all values that apply to a water body. For example, a water body may be valued for fisheries or recreation under the Freshwater NPS, even if it is not outstanding in these respects.

Regional councils must give effect to the Freshwater NPS by setting objectives and limits for all identified values, even where an existing WCO applies. Councils will need to ensure the freshwater objectives they set, and the limits and methods they establish to achieve them, do not contravene the requirements of an existing WCO.

In some cases the requirements of a WCO may constrain the range of options available to give effect to the Freshwater NPS. For example a WCO can constrain some regional council powers and functions under the RMA, such as their ability to grant consents for water takes and discharges. Complying with these constraints (eg, by not granting a consent) may impact the range of options available to councils to achieve freshwater objectives and limits.

More information about WCOs, and a full list of current WCOs, is available on the Ministry for the Environment's website.

2.5 Section 32 of the RMA

Section 32 of the RMA is integral to ensuring transparent, robust decision-making on RMA plans and policy statements. It requires that:

- new proposals (including new plans, plan changes, variations, full plan reviews, and new and amended regional policy statements) must be examined for their appropriateness in achieving the purpose of the RMA
- the benefits and costs, of new policies and rules on the community, the economy, and the environment need to be clearly identified and assessed
- the analysis must be documented, so stakeholders and decision-makers can understand the rationale for policy choices
- assess the risk of acting or not acting if there is uncertain or insufficient information.

Section 32 evaluation should be fully integrated into decision-making throughout the planning process, and should not be seen as merely a reporting requirement. Carrying out evaluation under section 32 will help councils to:

- understand the likely benefits and costs of different options to determine the most appropriate set of freshwater objectives, limits and methods
- understand the trade-offs that may be necessary to achieve freshwater objectives
- document the decision-making process, to help demonstrate compliance with the Freshwater NPS and to transparently communicate the rationale behind proposed plans
- fulfil the requirements of the freshwater NPS economic well-being objectives and policies, including Objective A4 and B5 with Policy A7 B8, CA22(f)(iab) and (v).

Guidance on section 32 of the RMA is available on the Ministry for the Environment's website.

2.6 Section 69 and Schedule 3 of the RMA

The Resource Legislation Amendment Act 2017 amended section 69 and Schedule 3 of the RMA so that Schedule 3 no longer applies to fresh water. This amendment was necessary to remove confusion between the Schedule 3 water classes and the national values in Appendix 1 and the water quality attributes in Appendix 2 of the Freshwater NPS.

The Freshwater NPS requires regional councils to make or change regional plans to ensure they establish freshwater objectives and limits – then establish methods (including rules) to achieve them. The Freshwater NPS requires regional councils to use the water quality attributes in Appendix 2 to establish their freshwater objectives then set limits which are enforced by rules in the regional plan. Section 69 of the RMA still provides a mechanism for setting rules for water quality – but it is only mandatory for geothermal and coastal water.

Where attributes are not provided in the Freshwater NPS, councils may still find it useful to use the Schedule 3 water quality classes, and include rules about water quality based on the Schedule 3 standards, because the NPS allows councils to use any other values and attributes they consider appropriate. For example, a value might be water managed for fish spawning purposes (see Schedule 3) and freshwater objectives could be set in numeric terms for temperature and concentration of dissolved oxygen.

2.7 Treaty settlement legislation

A key feature of many Treaty of Waitangi settlements is the establishment of natural resource arrangements, often centring on water bodies, which enable iwi and hapū to have a more effective role in resource management. These settlement arrangements are designed to promote integrated, catchment-based management, and will support the work of local authorities in giving effect to aspects of the Freshwater NPS.

Treaty settlements may place obligations on local authorities and how they exercise their functions under the RMA. When implementing regional policy statements, regional plans, and district plans, local authorities will need to give effect to the NPS and to any relevant Treaty settlement obligations. Local authorities should note that meeting obligations under the NPS won't necessarily fulfil the requirements of Treaty settlement legislation, or vice versa.

Of particular relevance are Treaty settlement provisions that prevail over any inconsistent provisions in national policy statements (including in the NPS), such as the following pieces of Treaty settlement legislation relating to the Waikato and Waipa Rivers:

- Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010
- Ngāti Tūwharetoa, Raukawa and Te Arawa River Iwi Waikato River Act 2010
- Ngā Wai o Maniapoto (Waipa River) Act 2012.

Under these Acts, the Waikato River Authority's Vision and Strategy prevails over any inconsistent provisions in national policy statements.

Note that this is not comprehensive list and councils need to be aware of Treaty legislation in their regions.

2.8 Hauraki Gulf Marine Park Act 2000

Under the Hauraki Gulf Marine Park Act 2000 (HGMPA), the provisions of section 55 (Local authority recognition of national policy statements) of the RMA apply as though sections 7 and 8 of the HGMPA were a national policy statement.

Section 7 of the HGMPA recognises that the interrelationship between the Hauraki Gulf, its islands and catchments, and the ability of that interrelationship to sustain the life-supporting capacity of the environment of the Hauraki Gulf and its islands. This section also notes that these are matters of national significance. In doing so, the HGMPA clarifies the link to national policy statements, the role of which is to address matters of national significance. Section 8 sets out the objectives of the management of the Hauraki Gulf, its islands and catchments.

These sections of the HGMPA overlap with the requirements of the Freshwater NPS in the Auckland and Waikato regions. In those regions, councils need to ensure implementation of the NPS does not conflict with the HGMPA. The more specific NPS will provide direction in implementing (but alone may not be sufficient to fully give effect to) sections 7 and 8 of the HGMPA.

3 Implementation by local authorities

The objectives and policies in the National Policy Statement for Freshwater Management 2014 (Freshwater NPS or NPS) direct how regional councils are to manage fresh water through their regional policy statements and regional plans, and in the consideration of resource consent applications. District and city councils must give effect to any objectives and policies in regional policy statements that give effect to the Freshwater NPS.

3.1 Regional plans and regional policy statements

Regional councils must give effect to the Freshwater NPS in their regional policy statements and all relevant regional plans. Where existing plans and policy statements do not already give effect to the Freshwater NPS, they must be amended by 31 December 2025 (or by 2030 if the 2025 timeframe will affect plan quality or it would be impracticable for the council to fully implement the NPS by 2025). Part E of the Freshwater NPS outlines the timing for implementation.

Regional councils are required to consult with affected local authorities when they prepare regional policy statements and regional plans.

One of the intentions of the Freshwater NPS (eg, Part CA) is to make the consequences of the objectives and limits more explicit and transparent. The requirements in Policy CA2 for councils to set freshwater objectives and limits through discussion with communities, including tangata whenua, mean that all affected parties can be informed about the effects of the provisions in the regional plan during the plan's preparation, and will be able to participate in setting those objectives and limits.

3.2 District plans

The Freshwater NPS does not direct specific provisions to be included within district plans, but the RMA requires district plans to give effect to national policy statements and regional policy statements.

If a regional policy statement directs the management of contaminants such as sediment or nutrients, and those contaminants could be associated with land uses such as earthworks, the district council would need to give effect to those policies by introducing rules to control land use. Therefore, district rules would be the implementation method for managing these contaminants.

District councils may also be affected by regional plan provisions that give effect to the Freshwater NPS, for example:

- limits set on contaminants in any discharges to fresh water from infrastructure owned or managed by them, such as stormwater or sewerage system
- limits set on maximum rates of abstraction or minimum levels of flow in a water body used by a city or district council for water supply.

3.3 Resource consents

All consent authorities must have regard to national policy statements when considering and/or making decisions on resource consents (section 104 (1) (b) (iii) of the RMA), and 'have particular regard' to NPSs when considering notices of requirement for heritage orders and designations.

National policy statements are not a specified mandatory consideration in determining notification of an application under sections 95 to 95G of the RMA, but it may help identify relevant effects to consider in making the determination.

3.4 Community involvement in freshwater management

This guide refers throughout to decisions that are required to be made by regional councils. While regional councils are the final decision-makers in making changes to their policy statements and plans, these decisions must involve input from iwi and hapū, and from the local community, as required by Policy CA2, and Schedule 1 of the RMA and the Local Government Act 2002.

At a minimum, the planning process must involve iwi and hapū (Part D of the NPS and Schedule 1 of the RMA), and community participation (Policy CA2, Schedule 1 of the RMA). In addition, implementing the NPS will provide further opportunities for councils to involve water users and the wider community more substantively and collaboratively in freshwater management; in particular in:

- identifying the values that are locally relevant
- determining the desired state of fresh water to achieve those values through the setting of freshwater objectives
- providing input into decisions about the appropriate set of management interventions to achieve freshwater objectives and limits.

In New Zealand, collaboration is increasingly being used to tackle complex resource management issues. Regional councils are engaging stakeholders, communities and iwi early in the planning process as a way to resolve tensions over conflicting values, multiple interests, and increasing demands for fresh water. A collaborative approach emphasises the sharing of knowledge and working together at the front end of the planning process, through dialogue and discussion. More information on collaborative processes, including the Schedule 1 collaborative planning process can be found on the Ministry's website.

4 Explanation of terms used in the National Policy Statement for Freshwater Management 2014

The following list includes terms used in the National Policy Statement for Freshwater Management, as well as other terms used in this guide. Definitions that have been taken verbatim from the Resource Management Act 1991 (RMA) or Freshwater NPS are *italicised*. The RMA contains additional terms that are not included in this glossary.

Term	Description
Allocation	A process where a water resource (eg, the total amount of water that may be extracted and/or used, or an amount of contaminants that may be discharged) is divided and assigned to individuals, groups of individuals, or broad use. The term covers both the formal assigning of allocation through the planning/consent process, as well as cases where water resources are used but not specifically assigned as a consequence of a specific land use (eg, through permitted activities such as stock water takes and some diffuse discharges). The individual amounts are often referred to as 'allocations', and collectively referred to as the 'total allocation'.
Attribute	*Is a measurable characteristic of fresh water, including physical, chemical and biological properties, which supports particular values. (Freshwater NPS definition)* Attributes are the characteristics or properties of fresh water that need to be managed for a particular value. For example, *E.coli* and cyanobacteria concentrations are important factors affecting whether a person gets sick after contact with water, so these are attributes of the 'human health for recreation' value. Appendix 2 of the NPS contains a list of attributes that must be used to set freshwater objectives for the compulsory values in Appendix 1. This is not an exhaustive list; some additional attributes relating to the compulsory values, and attributes relating to the other, non-compulsory national values, are under development and will be added to Appendix 1 in the future. Setting freshwater objectives using other attributes, in addition to the ones listed in Appendix 2, is likely to be necessary. If relevant attributes for a selected value are not provided in Appendix 2 (either for values selected from Appendix 1, or any additional values that have been identified), regional councils will need to establish these attributes for themselves.
Attribute state	*The level to which an attribute is to be managed for those attributes specified in Appendix 2. (Freshwater NPS definition)* Each attribute state (left column) in Appendix 2 of the Freshwater NPS represents a different level of water quality for a particular attribute. Each attribute state is defined by a numeric range and a description that corresponds to a scientifically determined range of effects.

Term	Description
	The 'A' state represents a state that provides very well for the associated value (for attributes relating to ecosystem health, this would generally mean a healthy and resilient state with minimal effects on aquatic species). The 'D' state means the corresponding value is not adequately provided for. Regional councils can choose a desired attribute state from A to C depending on the existing water quality and the level at which they and their communities want the water management unit to provide for a particular value. Choosing an attribute state is also subject to the 'maintain or improve' requirements of Objective A2. This means a freshwater objective cannot be set in an attribute state lower than the current state. A council cannot set an objective in the D state (even if water quality currently is in the D state) except where Policies CA3 and CA4 apply, because that would not adequately provide for the value. Minimum acceptable states and national bottom lines are defined as the bottom of the C state. Freshwater objectives will be a numeric figure (or in some cases a narrative description) based on the desired attribute state. Freshwater objectives generally would be set at a finer level of detail than the attribute states; for example, if a council was to choose the 'B' state they may set a freshwater objective a point within the range provided for the 'B' state.
Coastal marine area	*Means the foreshore, seabed, and coastal water, and the air space above the water—* *a) of which the seaward boundary is the outer limits of the territorial sea:* *b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of—* *(i) 1 kilometre upstream from the mouth of the river; or* *(ii) the point upstream that is calculated by multiplying the width of the river mouth by 5. (RMA definition)*
Coastal water	*Means seawater within the outer limits of the territorial sea and includes—* *a) seawater with a substantial fresh water component; and* *b) seawater in estuaries, fiords, inlets, harbours, or embayments. (RMA definition)*
Compulsory values	*The national values relating to ecosystem health and to human health for recreation included in Appendix 1 and for which a non-exhaustive list of attributes is provided in Appendix 2. (Freshwater NPS definition)* There are two compulsory values ('ecosystem health' and 'human health for recreation') listed in Appendix 1 of the Freshwater NPS. These two values must be applied to all freshwater management units, and freshwater objectives using the attributes in Appendix 2 that are applicable to the freshwater body type must be set for them. The two compulsory values are not prioritised above any other values that are considered relevant at a regional or local level. A full set of values will include the compulsory values, any other national values chosen from Appendix 1, and any local values that are identified. Values are provided for by setting freshwater objectives and limits. Regional councils, with their

Term	Description
	communities, will determine the level to which each value will be provided for through setting freshwater objectives.
Efficient allocation	*Includes economic, technical and dynamic efficiency. (Freshwater NPS definition)* Efficient allocation may include (but is not limited to): • **Economic efficiency** (also known as allocative efficiency): allocating water to enable optimum economic outcomes (eg, allocating water to the uses which have the highest value to society and create headroom). • **Technical efficiency**: maximising the proportion of water beneficially used in relation to that taken. It relates to the performance of a water-use system, including avoiding water wastage. • **Dynamic efficiency**: adjusting the use of water over time to maintain or achieve allocative efficiency (eg, enabling movement of allocated water and minimising the transaction costs for doing so). These different aspects of efficiency are outlined further in relation to Policies B2, B3 and B4.
Environmental flows and/or levels	*A type of limit that describes the amount of water in a freshwater management unit (except ponds and naturally ephemeral water bodies) which is required to meet freshwater objectives. Environmental flows for rivers and streams must include an allocation limit and a minimum flow (or other flow/s). Environmental levels for other freshwater management units must include an allocation limit and a minimum water level (or other level/s). (Freshwater NPS definition)* Environmental flows/levels are the flows/levels that need to be maintained in a water body to provide for the values that have been identified for it. An environmental flow/level regime aims to ensure that sufficient volume and flow/level variability remains in the water body, by limiting the total amount of water that can be taken, and by limiting the taking of water when particular flows/levels are reached. Environmental flows and/or levels apply to the whole freshwater management unit which may comprise lakes, rivers, groundwater or wetlands, or a combination of these. An environmental flow regime must include: • an **allocation limit**: a limit on the total amount that can be allocated to users to be taken from the water body • a **minimum flow/level (or other flows/levels)**: the flow/level at which taking is limited (either partially or fully). A minimum flow/level is the point at which consumptive takes would need to cease (regardless of whether the full allocation limit is being used at the time). Other flows/levels could be points above the minimum at which takes may be partially restricted, to reduce the frequency and duration of reaching the minimum flow/level. Along with establishing minimum flow/level or other flows/levels, the allocation limit(s) can be set by determining how much of the water above the minimum flow/level should be available to be taken by users. Allocations for individual water users can then be set as a proportion of the total allocation limit(s).

Term	Description
Existing freshwater quality	*The quality of the fresh water at the time the regional council commences the process of setting or reviewing freshwater objectives and limits in accordance with Policy A1, Policy B1, and Policies CA1-CA4. (Freshwater NPS definition)* Regional councils will need to understand the existing freshwater quality to set freshwater objectives, and to identify whether freshwater quality is maintained or improved in the future. Freshwater quality naturally fluctuates over time, and an assessment of freshwater quality should not be based on a single point in time. The existing state is likely to be determined using a baseline of the most up-to-date data available at the time councils begin to determine freshwater objectives and limits, using scientifically robust methods (eg, through use of annual median data and long-term trends). An assessment of existing freshwater quality is not intended to be based on an anticipated future state of freshwater quality.
Fresh water	*All water except coastal water and geothermal water. (RMA definition)*
Freshwater management unit (FMU)	*The water body, multiple water bodies or any part of a water body determined by the regional council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes. (Freshwater NPS definition)* The NPS gives regional councils discretion over the spatial scale of FMUs. Regional councils must define FMUs at an appropriate management scale for which to undertake freshwater accounting and set freshwater objectives and limits. An FMU may be made up of a group of water bodies that are similar, both physically and/or socially (eg, who uses them and for what). Similar freshwater bodies can be grouped (eg, all first order streams originating from a mountain range) and be effectively managed as one FMU. Alternatively, an individual freshwater body or a part of a freshwater body (eg, a reach or sections of a river) could be set as an FMU.
Freshwater objective	*Describes an intended environmental outcome in a freshwater management unit. (Freshwater NPS definition)* A freshwater objective is an environmental outcome sought for an FMU. A freshwater objective describes the environmental state required for the identified values for fresh water to be achieved. For the compulsory national values, freshwater objectives must be set using all attributes from Appendix 2 relevant to the freshwater body types in the FMU. Freshwater objectives can also be set based on other attributes that regional councils consider appropriate, in addition to the ones in Appendix 2. Freshwater objectives can be set at a variety of scales and levels of detail. Where practicable they must be numeric (either expressed as a range or a single figure), but can also be narrative or supported by a narrative descriptor. Further explanation of freshwater objectives is provided later in this guide (see Policies A1, B1 and CA2).

Term	Description
Freshwater quality accounting system	*A system that, for each freshwater management unit, records, aggregates and keeps regularly updated, information on the measured, modelled or estimated:* *a) loads and/or concentrations of relevant contaminants;* *b) sources of relevant contaminants;* *c) amount of each contaminant attributable to each source; and* *d) where limits have been set, proportion of the limit that is being used. (Freshwater NPS definition)* A freshwater quality accounting system should keep account of the type and amount of relevant contaminants affecting an FMU. It should also keep account of where those contaminants are coming from by broad category (eg, stormwater, treated sewage, industrial, agriculture, natural sources), including point sources and diffuse discharges (runoff), plus the amount attributable to each source. The system will also keep account of how much of the limit is allocated and being used in the FMU.
Freshwater quantity accounting system	*A system that, for each freshwater management unit, records, aggregates and keeps regularly updated, information on the measured, modelled or estimated:* *a) total freshwater take;* *b) proportion of freshwater taken by each major category of use; and* *c) where limits have been set, the proportion of the limit that has been taken. (Freshwater NPS definition)* A freshwater quantity accounting system will keep account of how much water is allocated, as well as how much is being taken from freshwater bodies and broadly what that water is being used for (eg, municipal, irrigation, hydroelectric power).
Freshwater take	*A take of ground or surface fresh water whether authorised or not. (Freshwater NPS definition)* A freshwater take is the consumptive or non-consumptive use of water from a freshwater body, whether permitted by a resource consent or not. Non-consumptive use of water is where water is taken from a water body and the same amount of water is returned at or near the location from which it is taken, with no significant delay between taking and returning of the water. Consumptive use of water is where water is not returned, or is returned in a lesser amount or at a different location. For the purposes of freshwater accounting required under the NPS, the term freshwater take is intended to include unmetered takes, takes that do not require a resource consent (eg, stock water) and unauthorised takes.
Limit	*The maximum amount of resource use available, which allows a freshwater objective to be met. (Freshwater NPS definition)* A limit is the maximum amount of resource that is available for use while still enabling a freshwater objective to be met. It is a specific quantifiable amount that links the freshwater objective (the desired state) to use of the freshwater resource. A limit puts constraints on how much of that resource is available for use. Limits for both water quality and water quantity will be required for an FMU.

Term	Description
	The combination of quality and quantity limits will depend on the objectives set for the FMU. The NPS does not require a corresponding limit to be set for every freshwater objective, but it does require that limits are set that are sufficient to collectively give effect to all freshwater objectives set, and to give effect to all the wider objectives of the NPS. Limits should clearly specify a maximum amount of resource use that relates to the objective. For freshwater **quantity** a limit would define how much water can be taken and when, and therefore how much water must remain to continue to meet a freshwater objective (see the definition of environmental flows). For freshwater **quality**, the assimilative capacity of the water (its ability to absorb contaminants) is the resource being limited. A quality limit would describe how much of a contaminant (eg, a nutrient) could be discharged into the water by users without exceeding a freshwater objective. Limits must be set so the relevant freshwater objectives for each FMU can be met, taking into account any methods, uncertainties and management risks. Allocation of the resource to specific users, sectors, or land uses, is carried out within the broader limit set for the FMU. Further explanation of limits is provided is provided later in this guide (see Policies A1 and B1).[2]
Minimum acceptable state	*Means, where specified in Appendix 2, the minimum level at which a freshwater objective may be set in a regional plan in order to provide for the associated national value. (Freshwater NPS definition)* The minimum acceptable state is defined by the boundary between the C and D states for attributes in Appendix 2 of the NPS. The minimum acceptable states for the attributes of compulsory values are called national bottom lines (see definition below).
National bottom line	*Means, where specified, the minimum acceptable state for the compulsory values as specified in Appendix 2. (Freshwater NPS definition)* A national bottom line is the boundary between the C and D states for the attributes associated with the compulsory national values ('ecosystem health' and 'human health for recreation'). All FMUs must have freshwater objectives that are set above these nationally-defined bottom lines, except for in those circumstances described in Policy CA3 and CA4. The national bottom lines are described both numerically and narratively in Appendix 2 of the NPS.
National Target	*Means the national target for water quality improvement in Appendix 6. (Freshwater NPS definition)*
National Objectives Framework (NOF)	The National Objective Framework (NOF) directs regional decision-making in the setting of freshwater objectives. It consists of a process (set out in Part CA), a set of national values (Appendix 1), and a set of attributes for setting freshwater objectives to achieve those values (Appendix 2).

[2] See also Norton N, Snelder TH, Rouse H. 2010. *Technical and scientific considerations when setting measurable objectives and limits for water management.*

Term	Description
National value	*Any value described in Appendix 1. (Freshwater NPS definition)* National values in Appendix 1 are those intrinsic qualities, uses or potential uses that were determined by Government both to be appropriate based on a set of criteria outlined in the section of this guide relating to Appendix 1, and to be of national significance. Of the national values listed, two ('ecosystem health' and 'human health for recreation') are compulsory and must have freshwater objectives set for them. However, regional councils must consider all of the national values listed in Appendix 1 and must decide whether any of the non-compulsory national values also apply to the freshwater management units in their region (Policy CA2(a)). The list of other national values in Appendix 1 is not an exclusive list of all the values that may be relevant in an FMU. Regional councils, together with iwi and hapū and communities, can also choose additional values for fresh water that are locally important. Further explanation of national values is provided later in this guide (see Policy CA1 and Appendix 1).
Naturally occurring processes	*Processes that could have occurred in New Zealand prior to the arrival of humans. (Freshwater NPS definition)* Where existing freshwater quality in an FMU is below a national bottom line due to naturally occurring processes, a regional council may set a freshwater objective below a national bottom line under Policy CA3. By definition, any deterioration in water quality that is caused by human interventions, and would not have occurred without that intervention, does not qualify a water body to have a freshwater objective set for it below a bottom line (unless policy CA3 applies and the deterioration is related to infrastructure listed in Appendix 3).
Outstanding freshwater bodies	*Those water bodies identified in a regional policy statement or regional plan as having outstanding values, including ecological, landscape, recreational and spiritual values. (Freshwater NPS definition)* An outstanding freshwater body is one that is exceptional in some way. It may be exceptional in relation to one particular feature, or it may have a number of outstanding features. It would generally be through the process of identifying a set of relevant values for each FMU, set out in Policy CA2(a-b), that regional councils will identify (or confirm) those outstanding values that contribute to making a water body outstanding. A freshwater body may be outstanding at the local, regional or national level.
Over-allocation	*The situation where the resource:* *a) has been allocated to users beyond a limit; or* *b) is being used to a point where a freshwater objective is no longer being met.* *This applies to both water quantity and quality. (Freshwater NPS definition)* Setting a freshwater objective and limit establishes the level beyond which over-allocation occurs. Over-allocation occurs when either, or both, of the relevant objective and limit are not being met or will not be met in the future. Further explanation of over-allocation is provided later in this guide (see Policies A1, B5 and B6).

Term	Description
Pest	*Means a pest as defined in the Biosecurity Act 1993. (Freshwater NPS definition)* This has been defined so that where water quality is impacted by pests or unwanted organisms such as didymo (as opposed to resource use), this is managed as a biosecurity issue.
Primary contact	*Means people's contact with fresh water that involves immersion in water, including swimming. (Freshwater NPS definition)* Primary contact is broader than swimming, and captures the different ways people come into contact with water and can be affected by its quality. It is not limited to recreational use (contact it could be for work reasons), but reflects the compulsory value of human health for recreation, which is not limited to swimming.
Primary contact site	*Means: a) any part of a specified river or lake that a regional council considers is used, or would be used but for existing water quality, for primary contact, and b) any other site in any other river or lake that a regional council has determined should be managed for primary contact. (Freshwater NPS definition)* Primary contact sites must be identified in regional plans, and must be monitored for *E. coli* in accordance with Appendix 5.
Regional target	*This means a regional target established under Policy A6. (Freshwater NPS definition)*
Specified rivers and lakes	*Means: a) rivers that are fourth order or above using the methods outlined in the River Environment Classification system, National Institute of Water and Atmospheric Research, Version 1; and b) lakes with a perimeter of 1.5 kilometres or more. (Freshwater NPS definition)* Specified rivers and lakes can be part of freshwater management units, and managed within the unit, as long as the regional plan also gives effect to Policy A5.
Suitable for primary contact more often	*Means reducing the percentage and magnitude of E. coli exceedences for rivers and lakes, and cyanobacteria – planktonic biovolume for lakes, according to the attribute tables in Appendix 2. (Freshwater NPS definition)* This term: (a) Describes relative improvement on the *status quo*, and does not describe a standard to be met. Whether water quality is good or poor right now, it will have to improve in terms of *E. coli* and cyanobacteria to be suitable for swimming **more often**. (b) Refers to primary contact generally, and not just swimming. It applies to a broader range of activities than just swimming, and is in line with the compulsory value of human health for recreation.
Relevant contaminants	This term is used in Policy A2 and in the definition of a freshwater quality accounting system. It refers to contaminants that need to be accounted for and managed to achieve the freshwater objectives for the FMU. Although a range of contaminants may be present and influence water quality to some degree, contaminants considered relevant are generally those with the

Term	Description
	potential to affect the achievement of freshwater objectives, or those that have the potential to affect the life-supporting capacity of the water. Not all contaminants will need to be accounted for and managed in every FMU (eg, heavy metals may only be relevant in some water bodies).
Significant values	While the term 'values' is used in Part CA of the NPS in relation to all FMUs, the term 'significant values' is used in Objectives A2 and B4 specifically in relation to wetlands and outstanding freshwater bodies. These NPS objectives require the significant values of wetlands and outstanding freshwater bodies to be protected. Significant values and how to protect them will need to be determined according to regional tangata whenua and community preferences (eg, a wetland or water body may have a significant value related to native biodiversity, fisheries, geomorphology, culture, science, recreation or landscape). Councils may set criteria for identifying significant values in their regional policy statement or plans.
Target	*A limit that must be met at a defined time in the future. This meaning only applies in the context of over-allocation. (Freshwater NPS definition)* A council may set several intermediate targets in a regional plan, each specifying a limit and the time by which that limit must be met. This series of targets would make up part of a staged work programme, designed so water quality is gradually improved over time to meet the relevant freshwater objective.
Unwanted organism	*Means an unwanted organism as defined in the Biosecurity Act 1993 (Freshwater NPS definition)* The definition of unwanted organism is included to ensure the macroinvertebrate monitoring requirements in Part CB are clear.
Value	*Means:* *a) any national value; and* *b) includes any value in relation to fresh water, that is not a national value, which a regional council identifies as appropriate for regional or local circumstances (including any use value). (Freshwater NPS definition)* Values are those intrinsic qualities, uses or potential uses associated with fresh water. They are qualities or uses that people and communities appreciate about freshwater bodies and wish to see recognised in the on-going management of those freshwater bodies. Intrinsic qualities include ecosystem health, and natural form and character. Uses or potential uses of fresh water by people include water supply, irrigation, cultivation, hydro-generation and recreation. National values are those values identified in Appendix 1 of the NPS. They include compulsory values (which must have objectives set in relation to them), other national values (which must be considered but do not necessarily require objectives to be set in relation to them), and any other values a council identifies as appropriate through Policy CA2(b)(ii).

Term	Description
Water body	*Means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area. (RMA definition)*

5 Guidance on the 'parts' of the National Policy Statement for Freshwater Management 2014

This chapter explains the policy intent behind each of the 'parts' (eg, AA-E) of the National Policy Statement for Freshwater Management 2014 (Freshwater NPS or NPS), and provides guidance on how they can be given effect to.

In sections 5.5 to 5.13 below, each of the individual objectives and policies is quoted in full, followed by an explanation.

5.1 Preamble to the National Policy Statement for Freshwater Management 2014

The preamble outlines the rationale for, and introduces the concepts which underpin, the Freshwater NPS. It is intended to clarify the policy intent and to help interpret the NPS objectives and policies. The preamble is a guide in itself and is not explained further here. The preamble is the only part of an NPS which does not have legal effect – all other parts, including appendices and footnotes have legal effect.

5.2 Review

The Freshwater NPS states that an independent review of its implementation and effectiveness will be undertaken no later than 1 July 2020. The need for any further amendments will be considered following that review.

5.3 National significance of fresh water and Te Mana o te Wai

As part of the 2017 amendments the National Significance statement was moved so it is more clearly part of the main body of the NPS. The concept of Te Mana o te Wai was also redrafted to make it clearer and easier to weave into freshwater management processes. This new statement is relevant to the new objective and policy in Part AA (explained below).

5.4 Interpretation

The interpretation section of the NPS lists definitions relevant to the national policy statement. These terms, as well as others of relevance from the Resource Management Act 1991 (RMA), are defined and explained above in section 4 of this guide.

5.5 Part AA – Te Mana o te Wai

Objective AA1

> To consider and recognise Te Mana o te Wai in the management of fresh water.

Councils must consider and recognise Te Mana o te Wai when making decisions about fresh water. How this is reflected in a planning process will vary within each region and freshwater management unit, or rohe etc. Rather than produce a one-size-fits-all guide on Te Mana o te Wai and what it means, the Ministry for the Environment will work with individual councils to help them define what Te Mana o te Wai means for them, in conjunction with their communities , including iwi, and how to consider and recognise it in decision-making for fresh water.

For assistance email freshwater@mfe.govt.nz.

Policy AA1

> By every regional council making or changing regional policy statements and plans to consider and recognise Te Mana o te Wai, noting that:
>
> a) te Mana o te Wai recognises the connection between water and the broader environment – Te Hauora o te Taiao (the health of the environment), Te Hauora o te Wai (the health of the waterbody) and Te Hauora o te Tangata (the health of the people); and
>
> b) values identified through engagement and discussion with the community, including tangata whenua, must inform the setting of freshwater objectives and limits.

The policy provides direction for councils on how to give effect to the objective. It specifically recognises the 'three healths' and that these must form the basis of discussions about the values held by the community, including tangata whenua, for fresh water. When making decisions about what Te Mana o te Wai means for a water body, councils and communities should be directed by the statement of national significance at the start of the Freshwater NPS. See also the factsheet on Te Mana o te Wai on the Ministry for the Environment website for more information on how to incorporate the concept of Te Mana o te Wai into planning processes and plans.

5.6 Part A. Water quality

Objective A1

To safeguard:

a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water; and

b) the health of people and communities, as affected by contact with fresh water;

in sustainably managing the use and development of land, and of discharges of contaminants.

Origins of the policy

The Land and Water Forum recommended that the Government define the process for setting national objectives for water quality.[3] The Forum also recommended a requirement to safeguard the life-supporting capacity, ecosystem processes, and indigenous species, including their associated ecosystems, of fresh water. This was included in the 2011 Freshwater NPS.

The Land and Water Forum later recommended adding an objective about managing risks to human health, to apply to all water bodies.[4] The National Objectives Framework Reference Group[5] supported this and further recommended that human health should be a national objective, requiring that all surface waters are safe for at least secondary contact recreation values (eg, boating and wading). This is included in the 2014 Freshwater NPS.

Amendments in 2017 removed the qualifier 'secondary' from the phrase 'contact with fresh water'. This is an important change – it expands the scope of Objective A1 so it applies to any form of 'contact' with fresh water. This amendment was made to signal a new direction for the NPS, which is to focus on getting more water to the swimmable standard overall.

Policy intent and implementation

Objective A1 recognises the crucial role fresh water plays in sustaining life, both for people and for ecosystems more generally. Recognising this role, and safeguarding the ability of fresh water to support life and human health through the sustainable management of water quality, is an important part of recognising the national importance of freshwater and Te Mana o te Wai.

The objectives and policies within the Freshwater NPS provide national direction on what is required to support Objective A1, but achieving this objective requires regional councils to adopt a whole of catchment response using a variety of tools and methods (both regulatory and non-regulatory) that

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3 Recommendation 1, First Report.

4 Recommendation 1, Second Report.

5 The National Objectives Framework Reference Group is a group of water users including representatives from iwi, regional councils, and key stakeholder groups, which provided advice to officials about the workability of proposed attributes for the NPS. A list of members is available on the Ministry for the Environment's website.

go beyond the specific requirements in the NPS itself. Achieving Objective A1 will require regional councils to:

- gain an understanding of the sources and amount of relevant contaminants, and the current state of freshwater resources (accounting provisions under Part CC)
- set freshwater objectives using the compulsory attributes in Appendix 2 for the compulsory values, **and any other attributes** that are relevant to safeguarding the life-supporting capacity, ecosystem processes, and indigenous species of a water body, including their associated ecosystems – not just the attributes that are currently included in Appendix 2 of the NPS
- set limits for both water quality and quantity to achieve the freshwater objectives, and develop a range of methods to achieve the limits.

Objective A1 is also a relevant consideration for all applications for resource consents, including discharge applications and land-use applications that potentially impact on freshwater quality, and in notice of requirement decision-making.

This objective requires local authorities to ensure the economic, social and cultural well-being of people is provided for in a sustainable way that ensures the life-supporting capacity of water is maintained. The word 'safeguard' implies an active duty (ie, proactive responses) for local authorities to determine ways to ensure, for example, that fresh water maintains its life-supporting capacity.

Objective A1(a)

Policy CA2 of the Freshwater NPS requires regional councils to set freshwater objectives for the compulsory values and any other values the community considers relevant. Setting freshwater objectives for the compulsory value 'ecosystem health' using the attributes in Appendix 2 will contribute to, but not completely be sufficient to fully give effect to, Objective A1(a). Regional councils will need to develop freshwater objectives in each freshwater management unit (FMU) for all attributes that are applicable to the value and the freshwater body type. This is likely to include attributes not found in Appendix 2 (eg, sediment, temperature, clarity, and additional nutrients). Councils should exercise caution where little is known about the life-supporting capacity of a particular freshwater ecosystem.

Objective A1(b)

Setting freshwater objectives for the compulsory national value 'human health for recreation', in accordance with Policy CA2, will contribute to achieving Objective A1(b). At a minimum, freshwater objectives must be set to safeguard the health of people who have contact with fresh water. A regional council can also include freshwater objectives for other attributes, that it or its community, desires to achieve this value and objective (eg, clarity, sediment and periphyton). Further guidance on the objective-setting process is provided in the section of this guide dealing with Part CA.

Monitoring, as required by Policy CB1, will indicate whether Objective A1 is being met.

Objective A2

The overall quality of fresh water within a freshwater management unit is maintained or improved while:

a) protecting the significant values of outstanding freshwater bodies;

b) protecting the significant values of wetlands; and

c) improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.

Maintaining or improving overall quality of fresh water

Objective A2 recognises that maintaining or improving all aspects of water quality everywhere may not be possible or desirable, economically or socially. The freshwater objective-setting process outlined in part CA of the NPS provides a process to assist with this decision-making.

What it means to maintain

Objective A2 allows for some variability in water quality as long as the overall water quality within an FMU is maintained or improved. Amendments in 2017 narrowed the scale at which the requirement to maintain or improve is applied from "within a **region**" (2014 NPS amendments) to "within an **FMU**" (2017 amendments) and introduced clarification on what it actually means to '**maintain**' water quality through new Policy CA2(e)(iia).

Policy CA2 (e)(iia) states that to 'maintain' means setting a freshwater objective, using an attribute listed in Appendix 2, within the same attribute band (ie, state) as the current water quality; or, if the attribute is not in Appendix 2 (and therefore has no predetermined bands) so that the value(s) it is being set for will be no worse off. For example, water clarity is an attribute which could apply both to the values of fishing and human health for recreation. A freshwater objective, using the attribute water clarity, would be set at current state levels (so that the value is no worse off) or better if improvements are sought.

National bottom lines and maintain or improve

While Objective A2 allows for limited balancing of water quality within an FMU, the overall obligation is to "maintain or improve". Further detail of what it means to 'maintain' is set out in Policy CA2(e)(iia). This policy clarifies that a freshwater objective for an attribute listed in Appendix 2 must be set at a point within the current attribute state, or better (ie at a point somewhere within the C state range – even though water quality may currently be at the top of that range).

For water bodies that are already degraded so that the current state of water quality is in the bottom band (D-state) of an attribute in Appendix 2, aspirational freshwater objectives must be set in the C-state or better and improvement made over time to meet that objective.

All the attributes in Appendix 2 of the Freshwater NPS each have a national bottom line, below which freshwater objectives cannot be set except for in specific circumstances set out under Policy CA3. The exception to this is *E. coli* and will be discussed in guidance currently being prepared on provisions around swimming that were introduced into the Freshwater NPS in 2017. Once published, the guidance will be available on the Ministry for the Environment website.

Objective A2 sets three additional, specific requirements that must be met while maintaining or improving overall water quality. These are described below.

Outstanding freshwater bodies

Objective A2(a) requires that where a water body is considered to be outstanding, its significant values must be protected. The objective is intended to ensure that those characteristics that make a waterbody outstanding are protected.

Protecting the significant values of outstanding water bodies sets a high standard for managing outstanding water bodies. In practice, once a water body has been identified as outstanding, adverse effects on the significant values of the water body may need to be avoided in some instances to provide for those values. The objective implies that while some degradation of some aspects of water quality (offset by a proportionate improvement to ensure overall quality is maintained or improved) is allowable, that degradation cannot be at the expense of the significant values associated with an outstanding freshwater body.

This objective does not require that every aspect of the water body is fully protected, unless that is necessary to protect the outstanding characteristics. For example a water body may be outstanding because it is the habitat for an endemic freshwater fish, but protecting that fish may be possible even if some water takes and discharges are authorised.

Outstanding freshwater bodies will be identified in a regional policy statement or regional plan. A regional council could also include in a regional policy statement or regional plan the criteria for significant values that the outstanding freshwater bodies meet, to guide the setting of freshwater objectives for the water body.

Significant values of wetlands

The second requirement is that any significant values of wetlands must be protected.

A wetland is defined in the RMA as including permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

Again, it is the significant values rather than the wetland itself that Objective A2 seeks to protect, and it implies that any degradation of water quality cannot be at the expense of the significant values of wetlands. It may require adverse effects on the significant values to be avoided to provide for those values.

A regional policy statement or regional plan could include the criteria for significant values that would be applied to the wetland. Significant value(s) of a wetland and how to protect them can then be determined through the public planning process (eg, a wetland may have a significant value related to native biodiversity, fisheries, geomorphology, culture, science, recreation, landscape, water yield regulation, denitrification, or water purification). Any conflicts between protection measures for different values will need to be resolved (eg, a biodiversity value may be protected by preventing contaminated water entering the wetland, while a water purification value could be protected by allowing such flows to enter and maintaining the wetland to allow flows to be effectively processed).

The Ramsar Convention on Wetlands (ratified by New Zealand) requires that contracting parties work towards the wise use of all their wetlands, not just designated Ramsar sites. Wise use has been defined by the Convention as “the maintenance of their ecological character, achieved through the

implementation of ecosystem approaches, within the context of sustainable development". Implementing the Freshwater NPS will be an important part of meeting the requirements of the Ramsar Convention (eg, through maintaining life-supporting capacity and setting freshwater objectives for the compulsory 'ecosystem health' value). The Ramsar website provides guidance, toolkits and handbooks on various aspects of wetlands management, which may be useful to councils when considering how to manage water quality in wetlands.

There is significant case law available on methodologies for identifying ecological significance of wetlands that should be considered.[6] Further work is being undertaken to provide attributes for wetlands and these may be included in the Freshwater NPS in the future.

Degraded water bodies

The third requirement is to improve the quality of fresh water in those water bodies that have been degraded by human activities to the point of being over-allocated (defined as allocated beyond a limit, or is being used to a point where the freshwater objective is not being met). This recognises that fresh water may be degraded by natural factors, (eg, geothermal discharges).

The policy does not require that all degraded water bodies be improved; just those that have been degraded by human activities to the point of over-allocation. In the NPS, over-allocation occurs where the resource has been allocated (either in terms of water extracted and/or used, or an amount of contaminant discharged) beyond a limit or to the extent that a freshwater objective for a water body is no longer being met.

Targets and methods (including rules that define new activities as prohibited activity, or that set maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality as described in section 68 of the RMA) for addressing over-allocation within a specified timeframe should be used by councils where a freshwater limit or objective is not being met. This target-setting should be done at an FMU scale in accordance with Policies A1 and A2.

This objective is closely linked to Policy 21 of the NZCPS, which requires councils to give priority to improving water quality in the coastal environment where it has deteriorated to the extent that it is having significant adverse effects on ecosystems, natural habitats, or water-based recreational activities, or is restricting existing uses. The point at which significant adverse effects occur, and the point at which a resource is over-allocated (as defined in the Freshwater NPS), will not necessarily be the same. However, councils must consider the effects of freshwater quality on the coastal environment, and the bearing this should have on any decisions about maintaining or improving freshwater quality.

The concept of over-allocation applies to both water quality and quantity. Over-allocation with regard to water quantity is addressed in Part B of the NPS.

Objective A2 will be given effect to through Policies A1–A3.

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[6] Examples include:

- *Minister for Conservation v Western Bay of Plenty* DC A071/01
- *Mighty River Power Ltd v Waikato* RC A146/01
- *Friends of Shearer Swamp v West Coast Regional Council* [2010] NZEnvC 345 (confirmed by the High Court on appeal).

Objective A3

The quality of freshwater within a freshwater management unit is improved so it is suitable for primary contact more often, unless:

a) regional targets are established under Policy A6(b) have been achieved; or

b) naturally occurring processes mean further improvement is not possible.

This objective was inserted as part of the 2017 amendments. It requires that for those attributes which relate to the compulsory value human health, freshwater objectives must be set which will **improve** rather than just **maintain** the current state.

This objective, its intent and caveats, are addressed in detail in guidance currently being drafted by the Ministry on the swimming policies and objectives.

Objective A4 – economic well-being

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quality, within limits.

This objective and the equivalent objective for quantity (Objectvie B5) were inserted in the 2017 amendments. They are supported by respective policies, Policy A7 and Policy B8 – *By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits.*

The additions to the NPS on economic well-being are intended to provide a **prompt** for councils and communities to consider how to enable economic well-being at all stages of freshwater management decision-making. These provisions signal the importance of having **broad** community discussions about costs and benefits of different options and opportunities that come with sustainably managing freshwater ecosystems.

Note that there was a existing requirment to consider the economic implications arising from setting freshwater objectives and limits through Policy CA (2)(f)(v). The 2017 amendment makes the requirement more explicit but does not lend economic well-being any more weight than the other well-beings, that is, social, cultural and environmental. The provisions reflect the purpose[7] of the RMA, including section 32 requirements, and therefore do not create any new requirements for councils. It is likely that councils are already ensuring that economic well-being is considered during the limit setting and decision-making process. If this is the case, then nothing further is needed to give effect to the 2017 amendments on economic well-being.

[7] To sustainably manage natural resources in a way that enables people and communities to provide for their social, economic, and cultural well-being.

Policy A1

By every regional council making or changing regional plans to the extent needed to ensure the plans:

a) establish freshwater objectives in accordance with Policies CA1-CA4 and set freshwater quality limits for all freshwater management units in their regions to give effect to the objectives in this national policy statement, having regard to at least the following:

   i. the reasonably foreseeable impacts of climate change;

   ii. the connection between water bodies; and

   iii. the connections between freshwater bodies and coastal water; and

b) establish methods (including rules) to avoid over-allocation.

Policy A1(a) requires regional councils to set freshwater objectives and quality limits, and (b) to establish methods to avoid over-allocation.

This policy is closely linked to Policy CA2, which sets out a process for setting freshwater objectives. The process involves identifying values that are relevant to an FMU, identifying attributes that provide for those values, and setting freshwater objectives for those attributes. Setting limits for water quality involves determining the maximum resource use that will enable a chosen freshwater objective to be met.

By setting freshwater objectives and limits, councils will have effectively determined what constitutes over-allocation in an FMU. Policy A1 then requires councils to establish methods to avoid over-allocation.

Figure 2: The relationship between freshwater objectives, limits and methods

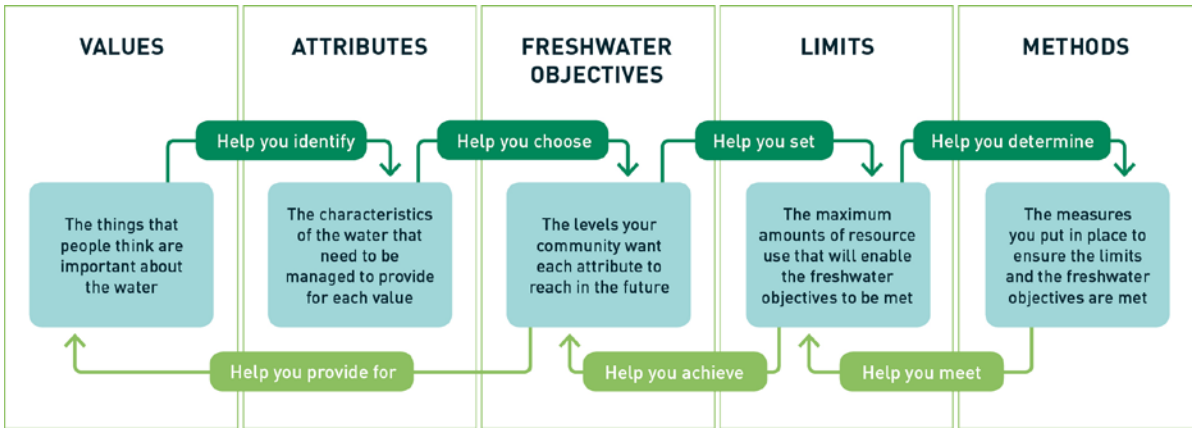


Figure 2 shows the relationship between freshwater objectives, limits and methods, and how the identification of values and attributes (using the process set out in Policy CA2) contributes to their development. Each component of this chain helps to inform decisions about the next part. It is important to note, however, that in reality this is unlikely to be a linear, step-by-step process. At each point councils will need to be consider how their decision would affect the following parts of the

chain (eg, what limit may be required based on what freshwater objective is chosen) and the most appropriate process is likely to be an iterative one where earlier decisions are revisited throughout.

The following sections provide more detail about each part of Policy A1.

Establishing freshwater objectives

Establishing freshwater objectives and setting limits go hand in hand. Freshwater objectives need to describe an intended environmental outcome that will result in the chosen values for the FMU to be met to the desired level. Thus, the locally held values associated with each FMU, identified through engagement with local iwi and hapū, water users, and the community, will be the important first step in objective-setting.

Part CA of the NPS directs the process for formulating freshwater objectives. A freshwater objective must be set for each attribute associated with the chosen values for each FMU. In accordance with the direction in Objective A2, freshwater objectives should be set at the current (water quality) state or be better than the current water quality, if that is achievable with planned interventions.

Freshwater objectives could be set at different scales and levels of detail. In giving effect to the NPS, a regional policy statement may include broad narrative objectives based on the desired values, but for regional plans, freshwater objectives must be set using the process in Policy CA2. Freshwater objectives in regional plans should be numeric where practicable, and use the attributes and attribute states supplied in Appendix 2. Any other attributes considered appropriate to achieve a value should also be used to set freshwater objectives to achieve the value. Numeric attributes can be supported with a narrative. Where it is not possible to set a numeric freshwater objective, the regional plan should contain a tightly defined narrative freshwater objective. A narrative objective may outline an acceptable amount of change, an outcome or parameters sought.

Regional councils must consider the social, cultural and economic implications for resource users when setting freshwater objectives (Policy CA2(f)), as well as ensuring the environmental outcomes in Objectives A1 and A2 are met. Objective setting may be an iterative process. Final decisions about freshwater objectives should only be made after analysis of options, and should be fully informed by an understanding of their costs, the limits required to achieve them – and the impact of those limits to communities.

Setting freshwater quality limits

Limits are defined in the Freshwater NPS as the maximum amount of resource use that will allow a freshwater objective to be met. Limits relate to people's use of freshwater resources; therefore while a freshwater objective describes the desired state of the water in relation to a particular characteristic, a limit describes the maximum use of the resource that is possible while still achieving the desired state of a particular characteristic (ie, freshwater objective).

For water quality, the resource that is limited is generally the assimilative capacity of the fresh water (its capacity to absorb contaminants) in the FMU. Setting a limit for water quality involves determining the maximum use of that capacity (or the total load on that FMU) that will enable a chosen freshwater objective to be met.

In most cases, setting a water quality limit first involves quantifying the total amount of a contaminant entering the FMU from all sources (by measuring, modelling or estimating, as per the freshwater accounting requirements in Part CC). The background component (the amount of contaminant that comes from natural processes or sources, or from historic activity rather than from

current resource use) will also need to be established. The other component that will need to be established is the environmental flow/water level.

A limit should, where practicable, specify an actual amount that can be measured or modelled with statistical confidence.

The intent of the policy is that a limit will be allocable, that is, an allocation to a particular user, activity or sector is determined within the total for the FMU (where practicable). If a limit is not quantified and allocated then it will not be possible to determine when full allocation has been reached (ie, maximum resource use) and further use (through the continued issuing of consents) halted so over-allocation can be avoided (as per the requirements of Policy A2; Objective B2).

However, not all contaminants can be measured in a way that allows them to be easily expressed as a quantifiable total load which can then be allocated. Other types of limits to resource use (eg, limits on stock access) may be appropriate for meeting some freshwater objectives and these can be thought of as a limit of the right to use the resource For example, if we think of stock access to water for drinking as a 'use' of the water resource, achieving water quality outcomes could be done through 'limiting' stock access to water through a rule which requires x% of waterways to be fenced.

Limits on resource use should ensure specific freshwater objectives can be met, rather than reflect more generic aspirations. If time shows that the freshwater objective can be met within more relaxed limits, the limit and objective combination will need to be reviewed during the next plan change, to decide whether to aim for a more aspirational objective or to increase the limit to allow more use of the resource.

To define the limit, regional councils will need to identify:

- the current state of water quality
- the quantity of water available and how it fluctuates seasonally and over time (as concentrations of contaminants will be influenced by the quantity of water present)
- the attribute(s) and objective(s) that the setting of a limit is intended to manage
- inputs and outputs (freshwater accounting). In the case of water quality, that includes identifying the sources of relevant contaminants (eg, sediment, nitrogen, phosphorus)
- the limit for each relevant contaminant, taking into account any possible interactions between contaminants and possible lag effects
- the timeframes over which the limit can be achieved, and targets that may be required to reach the limit (discussed further in the section on Policy A2)
- the scale at which the limit is to be applied (eg, to the input into a lake itself, the streams feeding into the lake, or by managing nutrient inputs to the land in the catchment). Some limits may not be allocable at anything smaller than a catchment scale.

In many cases limits for both water quantity (eg, environmental flows/water levels) and water quality will be necessary to meet freshwater objectives. Other methods (eg, riparian management in the case of rivers) may also interact with limits and influence achievement of freshwater objectives, and would need to be considered at the same time as setting limits.

Limits can be set at a range of scales to fit regional circumstances, but the collective set of limits must be sufficient to address every freshwater objective for every FMU in the region. One limit may contribute to achieving more than one freshwater objective, while in other cases a whole set of limits

might be needed to address a single freshwater objective. Limits can be water body specific, or land-use specific.

Limits set under Policy A1 must give effect to all the objectives of the NPS. This means that when setting water quality limits, regional councils should also consider water quantity (Objectives B1-B7), integrated management (Objective C1), and tangata whenua values and interests (Objective D1).

Accurate limit-setting can be technically difficult, time-consuming, and expensive. Regional councils could prioritise FMUs that would benefit most from early setting of limits (that is, those FMUs that are under the greatest pressure). For lower priority FMUs it may be appropriate for a council to set general region-wide discharge allocations (eg, per hectare) until specific limits for individual FMUs are set, as a precaution against over-allocation occurring in the interim.

Limit setting, particularly for water quality, is an iterative process that may take a succession of plan changes to get right. When freshwater objectives are first set, regional councils are required under Policy CA2(f)(v) to consider (among other things) the effects that the associated limits will have on resource users and communities. If further refinement of limits is required in later plan changes (either to better reflect what's needed to achieve the objective, or because the objective itself is changed), it will be important for regional councils to carry out thorough analysis of how the changes will affect resource users.

A limit must be given effect to through policies and rules in plans that consider all activities contributing to the limit, and through establishing appropriate methods (both regulatory and non-regulatory) to manage compliance with the limit and to ensure it can be met.

The Ministry is drafting guidance on limits which will be available on our website once finalised.

Reasonably foreseeable impacts of climate change

Policy A1 requires that in setting freshwater objectives and limits regional councils have regard to the reasonably foreseeable impacts of climate change. Communities and businesses prefer as much long-term stability as possible. Climate change, and the ways this may affect individual FMUs, need to be considered when rules to enforce limits are set to reduce the frequency with which those rules will need to be adjusted in the future.

In setting limits (and therefore rules), it is important to consider matters such as:

- changes in frequency and severity of droughts
- changes in frequency and severity of heavy rainfall and flushing or flooding events
- changes in temperatures which may influence algal blooms, increased pressure from invasive aquatic species, or changes to water quality
- sea level rise, which may affect salination, saltwater intrusion, and groundwater quality in some areas
- exacerbation of existing anthropogenic effects (eg, land-use impacts, flooding, or nutrient runoff) – degraded ecosystems are less resilient to additional pressures, including those resulting from climate change

- the presence or absence of natural features to mitigate the effects of climate change, including:
  - shading (and cooling) effects provided by riparian vegetation
  - wetlands providing a water source for irrigation
- deterioration of water quality in some areas as a result of lower flows in freshwater bodies.

Two reasonably foreseeable impacts of climate change are that projected lower rainfall in the east and north of the country will prolong periods of low flows in rivers and at the same time increase demand for water abstractions. Longer periods of stable low flows in rivers, even with a nutrient limit in place, may allow periphyton to continue growing to a point where chlorophyll-a levels exceed the objective set in the regional plan. The likelihood of having to reassess limits to accommodate the effects of climate change should be identified when the limits are first established and set in regional plans or on resource consents.

Consideration of the impacts of climate change should be based on the best information available. The Ministry for the Environment has produced guidance manuals for local government on adapting to climate change, which include projected climatic changes, and recommendations on how to include these in planning and decision-making. Where a regional council has already developed region-specific information for climate effects on hydrology (eg, rainfall models), it should have regard for this information in establishing objectives and limits.

Connection between water bodies

Regional councils must have regard to the connections between water bodies in establishing freshwater objectives and limits. Those connections may be:

- physical (eg, a lake and its adjacent wetlands)
- through water movements (eg, a river and an aquifer that is partially recharged by the river)
- through biodiversity movements (eg, eels may access a lagoon through movement over the barrier between it and the adjacent sea or river).

Connections include:

- connections between water bodies and receiving environments (lakes or wetlands)
- artificial connections between water bodies (that is, the mixing of water) between different water bodies created by abstraction and/or discharges, and its effect on water quality
- between surface water and groundwater.

Where connections exist between aquifers and surface water, freshwater objectives and limits should be developed through a 'whole of catchment' approach, with consideration given to the effects of surface water on aquifers and vice versa.

Connections between freshwater bodies and coastal water

The NPS does not apply to coastal or geothermal water, but it does apply to freshwater bodies in the coastal environment (that is, coastal wetlands and lower reaches of rivers and streams).[8] Freshwater

[8] Refer to Policy 1 of the NZCPS for the definition of coastal environment.

objectives and limits for freshwater bodies in the coastal environment must give effect to both the Freshwater NPS and the relevant objectives and policies of the New Zealand Coastal Policy Statement (NZCPS). For water quality, relevant policies include Policy 21 (enhancement of water quality), Policy 22 (sedimentation), and Policy 23 (discharge of contaminants).

Policy A1 also requires regional councils to have regard to the connections between freshwater bodies and coastal water when setting freshwater objectives and limits for all FMUs, not just those in the coastal environment. A freshwater objective and/or limit for an FMU may be driven by the impact that water will have on a receiving environment within the coastal marine area.

See also Part C which requires councils to take an integrated catchment management approach and as part of that consider the effects on receiving environments such as the coastal environment.

Methods to avoid over-allocation

Existing regional plans containing freshwater provisions need to be assessed to determine whether they establish freshwater objectives, set limits, and establish methods (including rules – with an appropriate activity status) to avoid over-allocation for all FMUs.

Over-allocation is relevant both to water quality and quantity. Once a water quality objective or a limit for a particular contaminant has been set, over-allocation would occur if the contaminants discharged in the FMU exceeded the FMU's assimilative capacity, and meant that the objective couldn't be met. This might occur solely through consented discharges, or be exacerbated through unconsented diffuse discharges. The intent of the accounting provisions in Part CC are that unconsented discharges are put on the contaminant balance sheet for the catchment, even if it is only possible to estimate or model these (see section 5.11 of this Guide).

Policy A1 requires regional councils to have methods to avoid over-allocation.

Methods to avoid over-allocation can apply to both point source and diffuse discharges, and include both:

- regulatory methods, such as regional rules and conditions about allocation on resource consents
- non-regulatory methods, such as funding, landowner advisory and extension programmes, voluntary or partnership programmes, or supporting industry-led programmes.

A combination of regulatory (rules) and non-regulatory methods can be adopted to suit the individual catchment, and mitigate impacts on resource users. Not **all** methods need to be set out in a regional plan; some, such as council funding for riparian fencing, may be set out in an annual plan or long-term plan.

Although the NPS allows for either or both types of methods to be used, once over-allocation has occurred it is likely that rules containing a change in activity status in the plan will be needed to guide consenting officers and, in some circumstances, to justify declining new applications for resource use. Rules that set maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality (as described in section 68 of the RMA) are needed before a limit can affect the exercise of existing consents. The methods must avoid, not just mitigate or remedy, over-allocation.

Policy A2

Where freshwater management units do not meet the freshwater objectives made pursuant to Policy A1, every regional council is to specify targets and implement methods (either or both regulatory and non-regulatory), in a way that considers the sources of relevant contaminants recorded under Policy CC1, to assist the improvement of water quality in the freshwater management units, to meet those targets, and within a defined timeframe.

Policy A2 is only relevant if freshwater objectives are not met; (ie, water quality has declined from the state it was when the freshwater objective was set) or if an aspirational objective is set or, where the water quality is below a bottom line.

Where this policy applies, the regional council must establish targets, and methods to achieve those targets over defined timeframes, so water quality is gradually improved to meet the freshwater objective.

Methods (regulatory or non-regulatory) must be established 'in a way that considers the sources of relevant contaminants' identified through the freshwater quality accounting process set out in Policy CC1. It is likely that the methods will need to be directed primarily at the sources of contaminants to be effective in meeting freshwater objectives and addressing the causes of poor water quality.

Regional councils are required under Policy CA2(f)(v) to consider the implications of their objective and limit choices on resource users. The presumption is that any burden associated with water quality improvement would primarily be borne by those that are responsible for the source of the contaminant. However, Policy A2 does not require the targets and methods to be applicable solely to the identified sources, and there may be cases where it is more appropriate to spread the burden of a particular intervention across a wider group of resource users, or across the wider community, for example, through rates. The decision about whether to do this should be made as part of the evaluation of plan objectives, policies and methods under section 32 of the RMA, and with involvement from iwi and hapū, water users, and the wider community.

Setting targets

In relation to over-allocation, a target is an interim limit that must be met at a defined time in the future which will progressively address the over-allocated state. A regional council may set several intermediate targets, with timeframes set in a regional plan. The final target will be the limit needed to meet the freshwater objectives set under Policy A1. The sequence of targets would form a stepped approach to work towards the freshwater objective and limit for the FMU.

Management of both point source and diffuse discharges may be required through targets to reduce over-allocation over time. A programme to reduce allocation will prescribe how to move from the existing resource use level to the desired limit.

Good practice would be to ensure that targets are set within the lifetime of a regional plan, or that the plan includes methods to allow for sufficient progress to be made towards a target over the lifetime of the plan to ensure that it is met within the defined timeframe. It may not be feasible, however, to expect measurable progress towards meeting freshwater objectives themselves within the lifetime of a regional plan.

Methods for achieving targets

The NPS- provides flexibility in terms of which methods can be adopted (eg, rules, funding, landowner liaison, voluntary programmes, or management plans), provided they are sufficient to meet freshwater objectives (and the wider requirements of the NPS) in a defined timeframe. A mix of approaches (both regulatory and non-regulatory) can be tailored to the individual catchment and can be targeted to local issues, interests and parties. The social, economic, cultural and environmental impacts of a particular approach (or combination of approaches) should be evaluated and considered (ie, through the section32 evaluation).

Non-regulatory methods that give effect to Policy A2 may need to be supported by methods in the annual plan or long-term plan. If measures need to be implemented through a district plan (such as low impact urban design or restrictions on land uses), regional councils should direct this approach in their regional policy statement; the requirement under Policy C2 to provide for the integrated management of land use and fresh water in regional policy statements signals and supports this approach.

For existing resource consents, regional councils are limited in the regulatory methods that can be imposed until those consents expire, or are able to be reviewed in accordance with section 128 of the RMA. Section 128(1)(a) provides for review where this is specified in the consent, and section 128(1)(b) provides for review where an operative regional plan sets rules for maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality (see section 68 of the RMA), and it is appropriate to review the conditions of consent to meet those rules. Where possible, the planning process should be used for a comprehensive approach to implement Policy A2 rather than solely relying on conditions of consents.

Policy 21 of the NZCPS 2010 is relevant in determining an approach to improving deteriorated water quality in the coastal environment. Policy 21 of the NZCPS includes some specific actions that should be taken (eg, excluding stock from water bodies).

Policy A3

By regional councils:

a) imposing conditions on discharge permits to ensure the limits and targets specified pursuant to Policy A1 and Policy A2 can be met; and

b) where permissible, making rules requiring the adoption of the best practicable option to prevent or minimise any actual or likely adverse effect on the environment of any discharge of a contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

Policy A3(a) requires conditions to be imposed on discharge permits to ensure the limits and targets can be met. Once objectives, limits and targets made under Policies A1 and A2 are adopted in a regional plan, they will be relevant when determining the conditions to impose on discharge permits.

In addition, plans will need to be assessed to determine whether additional 'best practicable option' (BPO) provisions are needed to prevent or minimise adverse effects on the environment, to give effect to Policy A3(b).

Policy A3(b) is intended to be consistent with section 70(2) of the RMA, which sets out when a BPO may be imposed. The words "where permissible" in Policy A3(b) reflect section 70(2) which requires councils to be satisfied that including a rule which provides for the use of a BPO is the most efficient and effective means of preventing or minimising adverse effects on the environment.

Limits established under Policy A1 help define the benchmark for what are acceptable effects. "Preventing" (avoiding) or "minimising" (remedying or mitigating) are the words used in section 70 for rules about discharges.

Councils and other decision-makers must also have regard to Policy 23 of the NZCPS 2010 when managing discharges through conditions or rules in the coastal environment.

Policy A4 and direction (under section 55) to regional councils

By every regional council amending regional plans (without using the process in Schedule 1) to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy A1 and Policy A2 (freshwater quality limits and targets) have become operative:

"1. When considering any application for a discharge the consent authority must have regard to the following matters:

   a. the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water, and

   b. the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.

2. When considering any application for a discharge the consent authority must have regard to the following matters:

   a. the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their secondary contact with fresh water; and

   b. the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their secondary contact with fresh water resulting from the discharge would be avoided.

3. This policy applies to the following discharges (including a diffuse discharge by any person or animal):

   a. a new discharge, or

   b. a change or increase in any discharge –

   of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

4. Paragraph 1 of this policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.

5. Paragraph 2 of this policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 takes effect."

The process and timeframes for setting freshwater objectives and limits under the NPS may be significant for some regions. Policy A4 allows regional councils to consider water quality matters in consent decisions in the interim, to ensure the objectives of the NPS for water quality can still be achieved.

Inserting Policy A4 into regional plans

Policy A4 is a transitional policy, which councils are required to insert into their regional plan, in accordance with the process set out in section 55(2)–(2D) of the RMA until such time as the objectives, policies, methods or other measures giving effect to policies A1 and A2 are made operative through a Schedule 1 process. The Policy required regional councils to insert paragraphs 1, 3 and 4 directly into regional plans as soon as practicable after 1 July 2011 (which all councils have now done), and requires paragraphs 2 and 5 to be inserted as soon as practicable after 1 August 2014.

The most efficient response will usually be to insert the policy into plans using the exact wording in Policy A4. Under sections 55(2) and 55(2A) of the RMA, public notice is to be given once amendments are made. Note that the Freshwater NPS 2014 has a further paragraph which councils must insert into a regional plan, in addition to the paragraphs inserted under the 2011 NPS.

Where regional plans already give effect to these policies, no amendment to the plan is needed.

Effect of Policy A4 on consents

Policy A4 requires that a regional council has regard to certain matters when assessing and determining an application for a discharge permit. It applies, once a plan is amended to include the transitional policy.

However, regional councils must also have regard to it when considering an application for resource consent before the amendment under section 55(2) is made to the regional plan (due to the requirements under section 104(1)(b)(iii) of the RMA). This means that regional councils considering resource consent applications lodged after 1 July 2011 (for paragraph 1) and 1 August 2014 (for paragraph 2) must have regard to Policy A4 under section 104(1)(b), pending the inclusion of the policy in a plan.

Policy A4 applies to decisions on discharge permits required under the current regional plan involving new discharges or changes/increases in any discharge.

It does not apply to:

- land-use (or other) consents that involve a discharge that is authorised by a permitted activity rule in a regional plan unless, or until, additional or new consents are required
- consents for an existing consented discharge where there is no change or increase in the discharge.

The requirement for consent authorities to have regard to the listed matters is no stronger than the requirement of section 104 of the RMA to have regard to a number of matters, including any actual or potential effects on the environment, and the NPS. This interim policy therefore draws further attention to specific matters related to water quality, and the connection between land use and water quality over and above the more general considerations required by the RMA.

Policy A4 does not expressly identify the matters listed in 1(a), 1(b), 2(a) and 2(b) as matters of control or discretion. The policy does not affect activity status, and regard to the matters in Policy A4

should be within the parameters of the activity status. The policy will therefore operate differently depending on the activity status. For example, for controlled activities, the consent authority must have regard to those matters, and may impose conditions relating to those matters, but the consent must still be granted if the application complies with any requirements, conditions and permissions stated in the rule. When Policy A4 is inserted into a plan, councils may wish to avoid confusion by outlining how the policy will operate for particular rules and activity statuses within the plan. The reference to effects that are more than minor is intended to ensure the policy does not impose significant compliance and opportunity costs where adverse effects may only be minor.

NZCPS 2010 Policy 23 also lists matters to which regard must be given, and requirements for certain types of discharges in the coastal environment.

Policy A5

By every regional council making or changing regional plans to the extent needed to ensure the plans:

a) identify specified rivers and lakes, and primary contact sites; and

b) state what improvements will be made, and over what timeframes, to specified rivers and lakes, and primary contact sites, so they are suitable for primary contact more often; or

c) state how specified rivers and lakes, and primary contact sites, will be maintained if regional targets established under Policy A6(b) have been achieved.

Improvements to specified rivers and lakes in (b) must make a contribution to achieving regional targets established under Policy A6(b).

Specific guidance on the swimming provisions that were introduced as part of the 2017 changes to the NPS is currently being prepared by the Ministry.

Policy A6

By every regional council developing regional targets to improve the quality of fresh water in specified rivers and lakes and contribute to achieving the national target in Appendix 6, and ensuring:

a) draft regional targets are available to the public by 31 March 2018; and

b) final regional targets are available to the public by 31 December 2018.

Specific guidance on the swimming provisions that were introduced as part of the 2017 changes to the NPS is currently being prepared by the Ministry.

Policy A7

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing fresh water quantity, within limits

Policy A7 was introduced as part of the 2017 amendments and is addressed as part of a general discussion on economic well-being in the section on Objective A4.

5.7 Part B. Water quantity

Objective B1

To safeguard the life-supporting capacity, ecosystem processes and indigenous species, including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming or diverting of fresh water.

Objective B1 recognises the crucial role fresh water plays in sustaining life. Safeguarding the life-supporting capacity of fresh water by sustainably managing how water is taken and used, as required by Objective B1, will be an important part of recognising Te Mana o te Wai in the management of fresh water.

Regional councils will need to give effect to Objective B1 in regional policy statements and regional plans. This objective is also a relevant consideration for decision-makers determining resource consent applications to take, use, dam or divert fresh water.

Freshwater bodies and the aquatic communities they support vary across regions and between different types of freshwater ecosystems. What is required to achieve safeguarding of the specified matters will be catchment-specific. Life-supporting capacity may be assessed using a range of attributes and/or methodologies (eg, macroinvertebrate community index (MCI), stream ecological evaluation (SEV) and instream flow incremental methodology (IFIM)).

Regional policy statements and regional plans may already contain freshwater quantity provisions. These provisions will need to be assessed to determine whether they adequately reflect Objective B1, and amended if necessary. As with Objective A1, the word ‘safeguard’ implies an active duty and a proactive response by local authorities to ensure, for example, that fresh water maintains its life-supporting capacity. As with Objective A1, this does not imply there would never be any change or adverse effect in a water body; rather, it requires local authorities to ensure the economic, social and cultural well-being of people is provided for in a sustainable way so the life-supporting capacity of water is maintained.

The guidance provided on Objective A1 relates to water quality but applies equally to this objective. Water quantity will have an effect on water quality, as the quantity of water available (and variability in flow rates in rivers and streams) will affect the capacity of the fresh water to assimilate nutrients and other contaminants while still maintaining its life-supporting capacity.

Objective B2

To avoid any further over-allocation of fresh water and phase out existing over-allocation.

Regional councils need to give effect to Objective B2 in regional policy statements and regional plans.

Over-allocated FMUs will be identified by regional councils undertaking the freshwater accounting requirements of Part CC, and by using this information in the process of setting freshwater objectives and water quantity limits. Avoiding and phasing out any over-allocations will be achieved by implementing the policies in Part B of the NPS, particularly Policies B5 and B6.

In some regions there is already recognised over-allocation where the use of water has created changes in freshwater bodies that either prevent them delivering desired community outcomes, or that fail to safeguard the life-supporting capacity of the freshwater body.

But there are also instances of consented over-allocations where the full use of allocations would result in unacceptable changes to the freshwater body but for the fact that actual current use is below what has been consented.

Where over-allocation has occurred (or would occur if the consent was exercised to its full extent), this objective seeks the incremental reduction of water use over time until a sustainable level is reached (see Policy B6). A sustainable level would be where freshwater objectives and limits are met within the environmental flows established under Policy B1. Councils should consider whether existing consents need to be reviewed to phase out existing over-allocation. Under section 68 of the RMA, plans can specify that existing consents will be reviewed if new rules are adopted in their regional plan that set new maximum or minimum levels or flows or rates of use of water.

Where over-allocation has not occurred, the objective requires that measures are put in place to avoid it occurring in future. Avoiding over-allocation is more a more stringent requirement than 'avoiding, remedying, or mitigating', and would be achieved through setting and implementing limits and/or targets.

Avoiding over-allocation where it is not already occurring is a specific aim of the NPS, and it is expected that adverse effects on water quantity resulting from a water body cumulatively moving to a position of over-allocation will be avoided.

Objective B3

To improve and maximise the efficient allocation and efficient use of water.

The phrase 'to improve' indicates measures currently in place to advance efficient allocation and use of water may be insufficient. Undertaking freshwater accounting, as required by Part CC, is a first step in providing the information needed to identify where improvements in efficient allocation and use of water can be made.

Efficient allocation and efficient use of water will ensure maximum benefit is gained from using that part of the resource that is sustainably available for use. Measures of both efficient use and efficient allocation are needed to ensure these are being delivered.

Efficient allocation may involve:

- using the most appropriate combination of mechanisms available for the circumstances under the RMA to ensure processes for allocating water are efficient
- ensuring scarce water can be allocated and transferred to the highest value uses (either economically, or in terms of other values placed on the water), taking account of issues of fairness and equity
- enabling the movement of allocated water between users to improve outcomes and allow new water users to have an opportunity to gain an allocation, while also providing certainty of allocation over time
- identifying any potential 'headroom' in a catchment once freshwater objectives are met, and providing this information to resource users in a way which enables efficient and equitable access to the available water
- taking into account environmental, economic, social and cultural interests, and how these may change over time
- ensuring the rights and responsibilities of the recipient are clearly defined when allocating water.

Efficient use may involve:

- reducing water wastage (that is, ensuring all water used is delivering the intended benefit)
- using more efficient technology and/or practices
- re-using water for multiple activities where possible
- reducing the need for water by changing the way benefits are achieved (eg, changing crop varieties to one that requires less irrigation but delivers the same economic benefits).

Improvements in the efficiency with which water is allocated will give New Zealanders greater value from the country's water resources over time.

Objective B4

> To protect significant values of wetlands and of outstanding freshwater bodies.

Objective B4 is intended to be given effect to within the context of water quantity; that is, by giving effect to:

- Objective B1 – sustainably managing the taking, use and damming, or diverting of fresh water
- Policy B1 – establishing freshwater objectives and setting environmental flows/levels.

An example of a water quantity issue that may be relevant to Objective B4 is maintaining variations in water levels in a wetland so that ecosystem processes and the habitats of indigenous species in the wetland are safeguarded. Significant ecological values of wetlands may be affected by lowered water tables (which can result from drainage in the surrounding land), and this may need to be managed to protect those significant values.

Depending on the values of the wetland or outstanding freshwater body, limit-setting alone may not be enough to protect the significant values of the wetland or outstanding freshwater body. Other measures to address water quality (including non-regulatory measures) may be required. Guidance provided for Objective A2 on protecting the significant values of wetlands and outstanding freshwater bodies is relevant for Objective B4.

Objective B4 will be a relevant consideration in consent and notice of requirement decision-making.

Objective B5

> To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing fresh water quantity, within limits

This policy was introduced as part of the 2017 amendments and is addressed as part of a general discussion on economic well-being in Objective A4 above.

Policy B1

> By every regional council making or changing regional plans to the extent needed to ensure the plans establish freshwater objectives in accordance with Policies CA1-CA4 and set environmental flows and/or levels for all freshwater management units in its region (except ponds and naturally ephemeral water bodies) to give effect to the objectives in this national policy statement, having regard to at least the following:
>
> a) the reasonably foreseeable impacts of climate change;
>
> b) the connection between water bodies; and
>
> c) the connections between freshwater bodies and coastal water.

A core element of the Freshwater NPS is the limits-based water management regime. Policy B1 is a critical policy for implementing that regime, alongside Policy A1. Policy B1 requires councils to set freshwater objectives and environmental flows and/or levels.

Environmental flows and/or levels are types of limits relating to water quantity; setting them determines how much fresh water is available for use, and how much needs to remain in the water bodies in an FMU to allow freshwater objectives to continue to be met.

Over time a strengthened limits-based water management regime should:

- maintain healthy ecosystems and ecosystem services that all water users rely on (for example, the provision of good drinking water quality for public health and sufficient species habitat)
- include provisions in a plan (including rules with a relevant activity status, or that set maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality) which clarify that when a limit has been reached, further allocation will cease. This should be clear for both water users and consenting officers
- identify over-allocation and headroom within a catchment

- improve investor certainty and consenting efficiency
- provide certainty and reliability in supply
- avoid the need to reduce or claw back over-allocation in future.

The following sections provide more detail about each part of Policy B1.

Making or changing regional plans

Councils will need to assess existing regional plans containing freshwater provisions, to determine whether existing objectives, flows/levels and allocation limits are relevant to FMUs established under the 2014 NPS. Regional plans will need to be changed if necessary to give effect to the policy.

Setting environmental flows and/or levels in all FMUs in a region requires a significant amount of work. A number of regional councils have already made good progress in setting flows and levels in their regions. In regions or FMUs where this work is not so well progressed, Policy E of the NPS allows this to be undertaken in a progressive manner. In these regions, as a first step, it may also be appropriate to set interim allocation limits for small FMUs or those that are not under allocation pressure.

Establishing freshwater objectives

The process for setting freshwater objectives is outlined in the section of this guide dealing with Policy CA2. This process involves establishing the values that are relevant in an FMU, identifying the attributes that correspond to those values, and setting objectives based on desired attribute states.

Freshwater objectives can be set for either freshwater quality or quantity; both may have implications for managing water quantity. For example:

- if a council identified the value 'hydro-electric power generation' as being a relevant value, it could set a freshwater quantity objective that sufficient flow will be maintained to provide for energy generation; limits on other water uses would then need to be established to meet the objective
- if a council set a freshwater quality objective for periphyton to meet the 'ecological health' value, it would be likely to require a combination of limits on both contaminants (quality) and flow (quantity) to achieve it.

The guidance under Policy A1 for establishing freshwater objectives also applies to this policy.

Establishing environmental flows/levels

When setting freshwater objectives, regional councils need to consider what limits will be required to achieve the freshwater objective. A limits-based water management regime is underpinned by establishing environmental flows/levels to determine the amount that is available to be allocated efficiently to users (see the definition of environmental flows and/or levels).

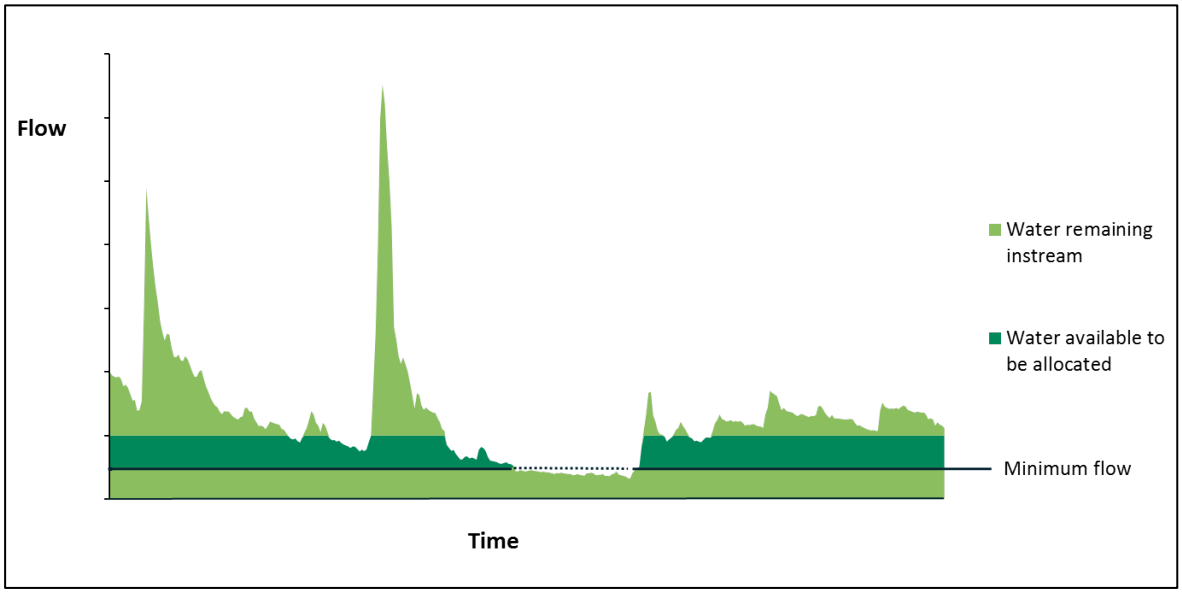
The intent of the policy is that environmental flows and levels will be set for the entire FMU, with environmental levels applying to groundwater, lakes and wetlands as appropriate. Environmental levels for groundwater may protect the integrity of the aquifer, or safeguard the ecosystems dependent on shallow groundwater (eg, in wetlands). Environmental levels for lakes may protect ecosystems dependent on lake margins. These may comprise minimum and maximum levels, and variations within a range.

Information on the flow regime (for rivers and streams) or water levels (for lakes and groundwater) should be gathered for each FMU, and environmental flows/levels established. A hydrological monitoring network should be established to provide the necessary information if not already available. This should be undertaken at a scale appropriate for the impact on the resource. In some cases modelling or estimates may be sufficient.

At a basic level, determining an environmental flow/level involves determining:

- the minimum flow/level and/or other flows/levels – the flows/levels at which the taking of water will be limited (either fully or partially)
- an allocation limit – a limit on how much water can be taken.

Figure 3: Example of a simple environmental flow



In practice, an environmental flow/level regime is likely to involve a range of flows/levels and allocation limits. It could involve a series of flows/levels where different levels of restriction start to apply; for example, a minimum flow at which all taking must cease, and a series of additional flows at which taking is restricted by a certain percentage (becoming more stringent as they get closer to the minimum flow) or where taking is restricted to specified permit holders.

By establishing the minimum flow/level or other flows/levels, the allocation limit(s) can be set by determining the amount of water above the minimum flow/level that could be available to be allocated for consumptive use while maintaining sufficient flow/level variability over time. For many water bodies, the patterns of flow may be important for achieving a freshwater objective. For example flushing flows are necessary to remove sediment accumulations in streams, and to maintain open gravel islands within braided rivers. Flushing flow timing may have critical effects on biodiversity (eg, on bird breeding success).

Environmental flow/level regimes may vary seasonally and/or spatially across an FMU (eg, along the reach of a river). They may also need to take into account hydrological modifications (eg, where a diversion results in a reduction of water in one water body and an increase in another).

The draft guidelines on methods for determining ecological flows and water levels may help in determining environmental flows to give effect to Policy B1. Other methods may be useful, depending on the circumstances, including instream flow incremental methodology (IFIM).

It is important to note that environmental flows/levels are intended to provide for all of an FMU's freshwater objectives (and all of the relevant values), not just those relating to ecological health. For example, where freshwater objectives have been set to provide for hydro-electricity or transport/navigation, an environmental flow regime would need to ensure that sufficient water remains in the water body to enable these objectives to be met.

If insufficient information is available to establish the flow regime and environmental flows/levels when freshwater objectives and limits are being set, a precautionary approach could be taken in the short term (eg, through smaller allocation limits) while further information is gathered on the flow or water level regime across each FMU to reduce the risk of councils having to reduce individual allocations later.

Reasonably foreseeable impacts of climate change

Guidance under Policy A1 also applies to Policy B1. In setting limits, it is important to consider matters that could affect the quantity of water available in an FMU, such as:

- changes in frequency and severity of droughts
- changes in frequency and severity of heavy rainfall and flushing or flooding events
- rainfall, snow and evaporation rates, which are likely to change water flows and aquifer levels, or worsen or otherwise change existing problems with availability
- sea level rise, which may affect salination and groundwater quality in some areas.

Connection between water bodies

Regional councils need to have regard to the connection between water bodies when setting freshwater objectives and limits. Guidance under Policy A1 about connections between water bodies also applies to this Policy.

In the context of water quantity, having regard to the connection between water bodies will involve considering how changes in one water body may affect the amount of water available to meet a freshwater objective in another water body; for example, how groundwater abstractions could affect the amount of surface water available (or vice versa), or how abstractions from a river would affect water quantity in a receiving environment and therefore the quality. These considerations should influence the freshwater objectives and water quantity limits that are set for a particular FMU.

Connection between freshwater bodies and coastal water

Freshwater objectives and limits do not need to be set for coastal water (or geothermal water). However, the connections between freshwater bodies and coastal water, and the impacts on them, need to be considered when implementing this policy (see also the section of this guide dealing with Policy A1, Te Mana o te Wai, and Part C – Integrated management).

Policy B2

By every regional council making or changing regional plans to the extent needed to provide for the efficient allocation of fresh water to activities, within the limits set to give effect to Policy B1.

The current 'first in, first served' approach to water allocation presents challenges as the amount of water in a catchment available for allocation reduces. In some regions, a lack of clear resource limits in plans has resulted in over-allocation through the cumulative effects of individual water takes. Policy B2 aims to ensure that once limits have been set, the available resource is allocated efficiently. The intention of this policy is for allocation decisions to be made in a cohesive way through plans.

The freshwater accounting requirements of part CC will make sure the necessary information is generated (eg, all water takes, consented or otherwise, need to be accounted for if efficient allocation is going to be achieved (Policy CC1(a)).

The reference to Policy B1 in Policy B2 emphasises that allocation of fresh water must not exceed the allocation limits or breach minimum flows/levels (or other flows/levels) that have been set under Policy B1. The intent of this policy is that an allocable quantum (a total amount that can be allocated to users) is to be established within a plan. This will provide certainty to resource users on the resource that is available. Regional councils then need to allocate that water efficiently. Finer detail on consent conditions can be established through the consenting process, such as including any off-site mitigation options.

Under section 30 of the RMA, regional councils have the function of establishing rules in regional plans to allocate the taking and use of water, including the allocation of that water to types of activities. Policy B2 does not require regional councils to allocate fresh water to particular activities, but councils have the ability to do so in accordance with section 30(4)(e) of the RMA if they choose to. Efficient allocation of water will vary according to:

- regional differences in water availability
- differences in the types of activities that use or affect fresh water in a region
- the values that communities place on these activities/uses.

Regional councils with over-allocated catchments can consider options to review and reduce allocations. These include (but are not limited to):

- reallocation
- progressive reduction in the volumes of water consented to be taken over time (sinking lid)
- common review dates within the catchment.

Addressing current over-allocation is discussed further in Policy B6. Efficiency of allocation is discussed further under Objective B3.

Policy B3

By every regional council making or changing regional plans to the extent needed to ensure the plans state criteria by which applications for approval of transfers of water take permits are to be decided, including to improve and maximise the efficient allocation of water.

Policy B3 seeks to ensure the way regional councils manage transfers of water take permits supports efficient water allocation, and, by implication, the achievement of freshwater objectives and compliance with limits. Transfers may be appropriate where the person or company undertaking an activity changes, or to allow the movement of water from one user or use to another. Shifting allocations over time recognises that fresh water may be valued differently at different times by different parties.

Regional councils are required to state in regional plans their assessment criteria for approving the transfer of water take permits. This is intended to increase certainty and remove unnecessary administrative barriers or inefficiencies.

Policy B3 is subject to the provisions of the RMA, including sections 30 and 136. For example, section 136(4)(b)(ii) requires councils to consider the matters specified in section 104, and the effects of the transfer.

Policy B3's focus on transfer is part of supporting greater uptake of consent transfers, to maximise efficient allocation. The broader area of 'dynamic efficiency' provides opportunities for new approaches in trading and transfer systems that enable appropriate consideration of both environmental and economic outcomes. For example, short consent terms may help achieve dynamic efficiency and enable regular review, but would not always be economically efficient for investment.

Policy B4

By every regional council identifying methods in regional plans to encourage the efficient use of water.

Policy B4 is related to technical efficiency (that is, maximising the output produced from a set of resources). In the case of water this would be the proportion of water beneficially used in relation to that taken.

The reference to methods includes both regulatory and non-regulatory methods.

Examples of non-regulatory methods already used in some regions include:

- council/industry partnerships
- voluntary agreement to targets (such as percentage efficiency targets for certain land uses or municipal water supplies).

Examples of regulatory methods include:

- a differing activity status, which is commensurate with the differing level of efficiency demonstrated for the particular resource use
- a requirement for water users to develop a conservation/efficiency plan.

Because Policy B4 requires methods to be included in regional plans, resource consents and decision-making about the use of water may be indirectly or directly affected depending on the methods included and those selected.

The freshwater accounting requirements in part CC will provide the core information required to establish whether water is currently being used (and allocated) efficiently.

Policy B5

> By every regional council ensuring that no decision will likely result in future over-allocation – including managing fresh water so that the aggregate of all amounts of fresh water in a freshwater management unit that are authorised to be taken, used, dammed or diverted does not over-allocate the water in the freshwater management unit.

Policy B5 is fundamentally important to avoiding further over-allocation as sought by Objective B2. This policy recognises a significant cause of over-allocation is the cumulative effects of multiple consent decisions, and specifically directs attention to that issue.

Policy B5 is relevant once freshwater objectives and limits have been set, as these determine the over-allocation threshold and provide clarity to resource users about how much of the resource is available. This policy aims to ensure once water quantity limits have been set, the cumulative effects of individual decisions do not exceed them. Therefore a limit must be able to be allocated to users – and the extent of current use established. This will need to be further supported with plan provisions (including rules with relevant activity status) which signal when further consents for resource use mean the limit is reached, additional allocation will cease. Good information on current allocations will be needed to determine whether over-allocation has occurred, or would occur if further activities are authorised. This information will be generated by the freshwater accounting requirements in part CC of the NPS.

To determine if over allocation has occurred or will occur, regional councils need to account for all takes (as required by Policy CC1), whether by consented or permitted activities. Permitted activities (eg, takes for stock water, domestic use, or fire-fighting) can make up a significant quantity of cumulative takes from an FMU. Regional councils will also need to consider the effects of how water is used, dammed or diverted within the FMU, and whether this is likely to contribute to over-allocation. They need to take into account the effects of permitted land uses that may change water yield from a catchment (eg, forestry plantings) or aquifer recharging, and effects of climate change on water availability.

The use of the phrase ‘will likely result’ implies a precautionary approach to future-proof allocation decisions, so they are unlikely to result in over-allocation (for example, these decisions should take account of projected demand of increasing urban populations for drinking water).

During the consenting process, decisions about resource use should have due regard to reliable new information about the freshwater resource proposed to be used, to demonstrate the allocation limit is not exceeded. Information presented as part of the consenting process may support a change of the default limit in the particular FMU if it demonstrates the current limit does not match well to the relevant objective. However, changing the limit (or the underlying objective) will require a plan change.

This policy will result in a need for regional plan rules, and for the activity status of activities in FMUs that exceed allocation limits to be set. Existing plans containing provisions regarding over-allocation and/or cumulative effects relating to freshwater should be assessed by councils to determine if they adequately give effect to Policy B5, and must be changed if necessary.

Policy B6

> By every regional council setting a defined time frame and methods in regional plans by which over-allocation must be phased out, including by reviewing water permits and consents to help ensure the total amount of water allocated in the freshwater management unit is reduced to the level set to give effect to Policy B1.

Policy B6 seeks to reduce over-allocation where it has already occurred. This policy is relevant once freshwater objectives and limits have been set, because these determine the threshold at which over-allocation has occurred.

Regional councils are restricted in the regulatory methods that can be imposed on existing resource consents until those consents expire, or are able to be reviewed under section 128 of the RMA. Section 128 provides for review where specified in the consent (section 128(1)(a)), and where an operative regional plan sets rules for levels, flows, rates or standards and it is appropriate to review the conditions of consent to meet those rules (section 128(1)(b)). Where a review is undertaken under the terms of a review condition for a specific consent, the permissible scope of the review may be limited by that condition.

Non-regulatory methods and voluntary programmes could be implemented for existing resource consents, particularly where these do not have review conditions or it will take longer for rules to be implemented for the purpose of section 128 (1)(b).

Just as for Policy B5, over-allocation relates to all takes, uses, dams and diversions (consented or otherwise). These may include permitted activities that contribute to existing over-allocation, including land uses that affect water yield.

In giving effect to Policy B6, regional councils must determine a timeframe and methods for reducing over-allocation. This ability to set a timeframe recognises that reduction in water available for use over time (as may be necessary to reduce over-allocation) is likely to have social, environmental, cultural and economic impacts that need to be balanced.

Policy B7 and direction (under section 55) to regional councils

By every regional council amending regional plans (without using the process in Schedule 1) to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy B1 (allocation limits), Policy B2 (allocation), and Policy B6 (over-allocation) have become operative:

"1. When considering any application the consent authority must have regard to the following matters:

   a. the extent to which the change would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem, and

   b. the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.

2. This policy applies to:

   a. any new activity, and

   b. any change in the character, intensity or scale of any established activity–

   that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).

3. This policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011."

Effect of Policy B7

This transitional policy needs to be inserted into all regional plans using Section 55(2A)-(2D) of the RMA until such time as the relevant Schedule 1 processes make operative the objectives, policies, methods or other measures that give effect to Policies B1, B2 and B6 of the NPS. The provisions of the plan then influence the consideration of resource consent applications. Before the transitional policy is added to the regional plan, regional councils must have regard to Policy B7 when considering an application for resource consent (section 104(1)(b)(iii)).

Policy B7 requires the regional council to consider certain matters in assessing and determining an application for consent. These are the equivalent to assessment matters or matters of control, and should be inserted into plans alongside them.

The direction that the consent authority must "have regard to" the listed matters is no stronger than the requirement of section 104 of the RMA to have regard to a number of matters, including any actual or potential effects on the environment, and the relevant provisions of the NPS. This interim policy therefore draws attention to specific matters related to water quantity, and the connection between land use and water quantity over and above the more general considerations required by the RMA.

What Policy B7 applies to

Policy B7 applies to consideration of applications where a resource consent for an activity is required under the current regional plan. It applies to a new activity and any change to the character, intensity or scale of any established activity that is likely to result in more than minor adverse change in the natural variability of flows or levels of fresh water.

The policy does not apply to:

- permitted activities or existing activities unless, or until, they require additional or new consents
- new consents or replacement consents for the same consented activity where there is no change in character, intensity or scale.

Policy B7 applies where regional plans need to be amended to give effect to Policies B1, B2 and B6. Where regional plans already give effect to these policies, no amendment to the plan is required – duplication is not necessary.

Policy B7 does not expressly identify the matters listed in 1(a) and (b) as matters of control or discretion; however, this is the effect of the policy. This policy does not affect activity status, and regard to the matters in Policy B7 will be within the parameters of the activity status.

The policy will operate differently depending on the activity status. For example, for controlled activities the policy will not provide a basis for refusing consent, but for a non-complying activity or discretionary activity it may. In all cases it will provide a platform for imposing conditions of consent. When Policy B7 is inserted into a plan, a council may decide to outline how it will operate in the context of the plan's particular rules and activity status, to help avoid confusion.

Interim effect

Policy B7 is an interim measure, to manage activities that adversely affect freshwater resources while regional plan changes required by the NPS are implemented. The process and timeframes for setting water quantity objectives and limits may be significant for some regions, and this policy allows regional councils to consider matters so the objectives of the NPS for water quantity can be achieved in the interim.

The policy requires regional councils to insert the policies directly into regional plans (without using the Schedule 1 process) as soon as practicable after 1 July 2011 (the date those policies became operative). Regional council officers, and panels or commissioners considering and determining resource consent applications lodged after 1 July 2011, need to have regard to Policy B7 under section 104(1)(b), pending the inclusion of the policy in a plan.

Policy B8

> By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits.

This policy was introduced as part of the 2017 amendments and has been addressed as part of the discussion on Objective A4.

5.8 Part C. Integrated management

Objective C1

> To improve integrated management of fresh water and the use and development of land in whole catchments, including the interactions between fresh water, land, associated ecosystems and the coastal environment.

Integrated management is integral to the Freshwater NPS. Objective C1 recognises the connections between the use and development of land and conditions in a catchment (eg, vegetation cover, nutrient inputs, changes in soils, erosion) and the condition of freshwater systems, as well as the interactions between those systems and the receiving coastal environment.

Recognising these interactions, and managing all three elements to ensure they support each other, is an important part of recognising Te Mana o te Wai. This objective also supports provisions of the RMA and specific functions for regional councils, including sections 30(1)(a), 30(1)(c), 30(1)(g) and 59, and functions for territorial authorities in terms of integrated management of the effects of land use in section 31(1)(a).

While the RMA clearly sets out these functions for regional councils, the objective of the Freshwater NPS is not just to reiterate the importance of integrated management, but to improve the integrated management of fresh water, land use and associated interactions. The baseline and measure for improvement will be set through regional councils assessing their own regional situation, approaches and provisions to give effect to Policies C1 and C2. Regional policy statements and plans already contain freshwater, land-use and integrated management provisions. Councils will need to assess these provisions to determine whether they adequately reflect Objective C1 (see Policy C2) and particularly if regional policy statements provide a clear signal to district councils.

Policy 4 in the NZCPS 2010 is also relevant to the implementation of Objective C1. A 2009 study by NIWA[9] highlights the significance of fresh water inputs to estuaries.

Regional councils and territorial authorities will need to work together to determine how their respective plans will achieve Objective C1. Objective C1 is relevant for territorial authorities in

[9] NIWA, 2009. A review of land-based effects on coastal fisheries and supporting biodiversity in New Zealand. *New Zealand Aquatic Environment and Biodiversity Report No. 37.*

consent decision-making for land use and subdivision, particularly considering the effects of these on freshwater quality and water yields (eg, the effects of residential development in terms of stormwater generation).

Policies C1 and C2 do not require territorial authorities to amend plans, but this may be necessary to ensure district plans give effect to amended regional policy statements and are not inconsistent with regional plans. Objective C1 will be relevant to city and district councils when they undertake district plan reviews to give effect to relevant direction in the regional policy statement and to exercise their function for integrated management under section 31(1).

Policy C1

By every regional council:

a) recognising the interactions, ki uta ki tai (from the mountains to the sea) between fresh water, land, associated ecosystems and the coastal environment; and

b) managing fresh water and land use and development in catchments in an integrated and sustainable way to avoid, remedy or mitigate adverse effects, including cumulative effects.

Achieving Policy C1 will require focusing on better plan provisions, and planning processes, rather than managing effects through consenting. A whole of catchment management approach is envisaged by the policy to address the interactions between land and water. This will also include considering the effects on down-stream receiving environments when setting freshwater objectives and limits (see particularly the periphyton attribute note).

Coordination and collaboration between regional councils and territorial authorities during regional and district planning processes will help councils to give effect to Policy C1. Improving integrated management will require working with territorial authorities and their management of land use (eg, rural activity conversions and residential development or earthworks that may affect freshwater quality). Integration and consistency of approach across different regional and territorial planning instruments and programmes is required.

Regional councils are the lead agencies and should use all mechanisms available under the RMA to achieve this, that is, regional policy statements which give clear direction of the outcomes sought. This will require a council to look at the way it can manage land-use impacts on water quality and quantity. This may include:

- nutrient limits
- management of impervious surfaces
- management of stormwater
- management of erosion and sediment input
- management of land uses that alter water yield (eg, vegetation cover that may influence absolute quantity of or seasonal variation).

In addition, Policies 4, 22 and 23 of the New Zealand Coastal Policy Statement 2010 (NZCPS) are relevant in determining an approach to improving integrated management within the coastal environment. Policy 4 of the NZCPS 2010 requires councils to provide for integrated management in the coastal environment and for activities that affect the coastal environment. Policies 22 and 23 require consideration of the impact of land use on coastal water and consideration of the integrated management of catchments and stormwater networks.

Policy C2

By every regional council making or changing regional policy statements to the extent needed to provide for the integrated management of the effects of the use and development of:

a) land on fresh water, including encouraging the coordination and sequencing of regional and/or urban growth, land use and development and the provision of infrastructure; and

b) land and fresh water on coastal water.

Policy C2 reinforces the existing function of regional councils in section 30 of the RMA and sets out how to give effect to Objective C1, by requiring regional policy statements to specifically provide for the integrated management of land use and fresh water, and the effect of these on coastal water.

This policy requires councils to recognise the:

- relationship between land use and fresh water, and their effects on coastal water
- need to plan at a regional and district level to manage land use and its effects
- relationship between management of land use, water and provision of infrastructure (all types).

Regional councils will need to assess their regional policy statement to ensure it provides sufficient direction to district councils for integrated management to the extent outlined in Policy C2.

Policies 4, 6, 22 and 23(4)(C) of the NZCPS 2010 are relevant in implementing Policy C2 in the coastal environment. Policy 4 requires councils to coordinate management and control of activities that cross administrative boundaries, and to work collaboratively with other agencies. Similarly to Policy C1, it relates to some of the same locations and subject matter as the NZCPS 2010 policies. This reinforces the coordinated and collaborative approach between regional councils and territorial authorities anticipated under Policy C1 of the Freshwater NPS, rather than creating a different approach to integrated management in the coastal environment.

5.9 Part CA. National Objectives Framework

Objective CA1

To provide an approach to establish freshwater objectives for national values, and any other values that:

a) is nationally consistent; and

b) recognises regional and local circumstances.

Origins of the policy

The National Objectives Framework (NOF) originated from the Land and Water Forum recommendations for a national framework for setting freshwater objectives.[10] This recommendation was further developed by the National Objectives Framework Reference Group (NOFRG), expert science panels, and officials (in discussion with the Iwi Leaders Group) into the NOF.[11] The NOF is made up of the objectives and policies in part CA, and is supported by the tables in Appendices 1 and 2.

The requirements in Policy CA2(f) come from the Land and Water Forum recommendation that the process for setting freshwater objectives should be undertaken together with the consideration of strategies, methods and timelines for achieving them. The Land and Water Forum recommended the process of assessment and deliberation should be repeated to evaluate different scenarios (objectives, limits, methods and timelines), to achieve a clear understanding of the options including their achievability, costs, benefits and consequences.[12]

Policy intent and implementation

The intent of Objective CA1 is that there is a nationally consistent approach to setting freshwater objectives, with flexibility for recognising regional circumstances. The way this should be done is directed in Policies CA1-4.

Policy CA1 requires every regional council to establish FMUs which capture all freshwater bodies within the region.

Policy CA2 outlines the process for setting freshwater objectives and the matters to consider when doing so.

The tables in Appendices 1 and 2 of the NPS provide a selection of values (including the two compulsory values) and the attributes which must be used when setting freshwater objectives. Councils have the flexibility to determine their own, additional attributes from which to set freshwater objectives that are appropriate for their regional and local circumstances in addition to the attributes in Appendix 2.

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10 Recommendations 4, 5, 12, Second Report.

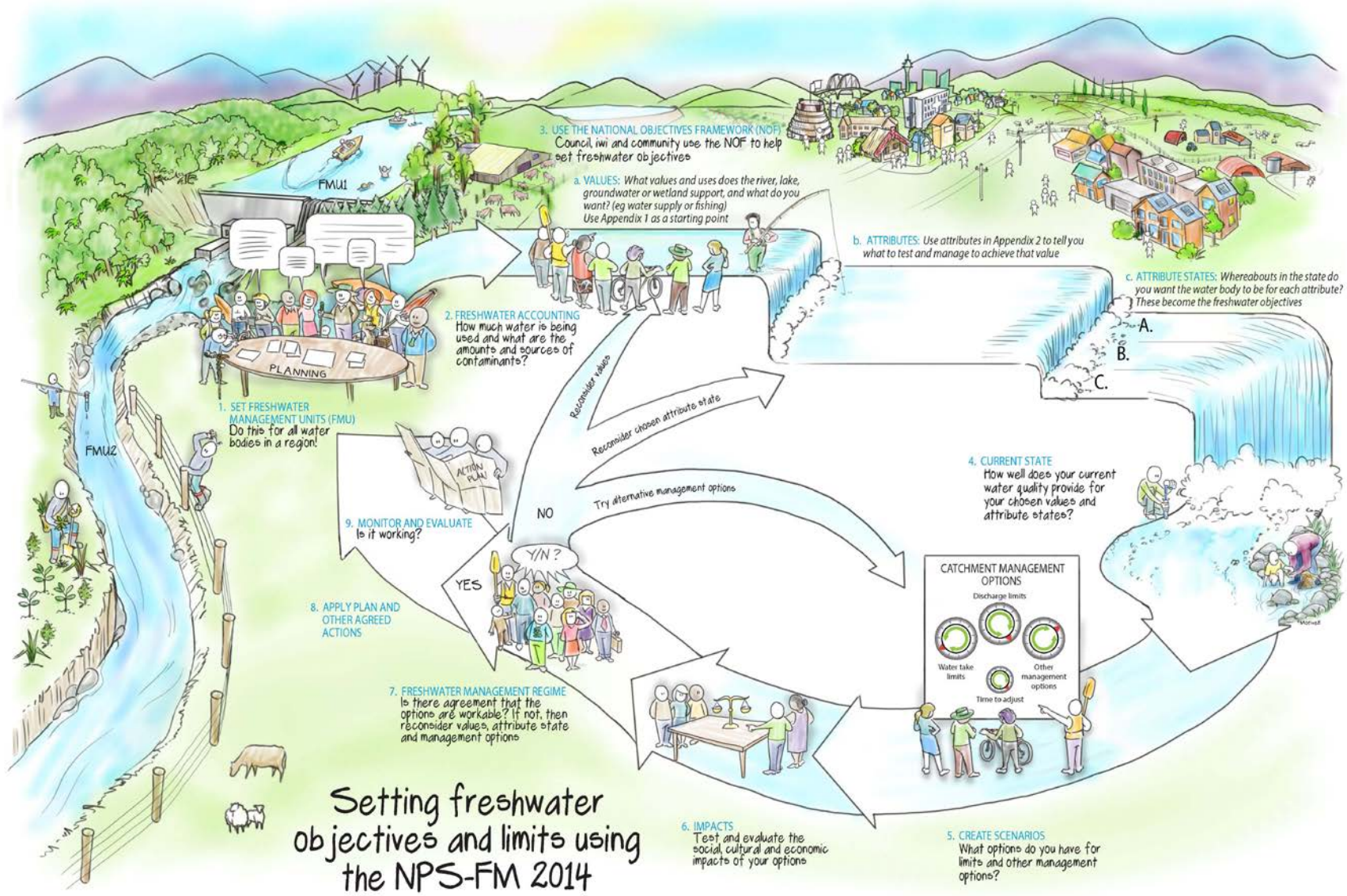
11 An explanation of the process for developing the NPS, and descriptions of the groups involved, are available on the Ministry for the Environment's website.

12 Recommendation 4, Third Report.

Figure 4 provides an overview of how the objective-setting process (set out in Policies CA1-CA4) could work in practice, and how this process feeds into the development of limits and methods (under Parts A and B of the NPS).

As the diagram illustrates, the planning process is likely to be iterative. It is likely to involve considering a number of different scenarios, each made up of a combination of measures.

Figure 4: Overview of the freshwater objective and limit setting process under the Freshwater NPS



Policy CA1

By every regional council identifying freshwater management units that include all freshwater bodies within its region.

Regional councils must ensure that all freshwater bodies in a region are included within FMUs.

Policy CA2(f)(ii) requires regional councils to consider the spatial scale at which freshwater management units are defined. The scale of the FMU needs to be appropriate for objective and limit-setting, freshwater accounting, and monitoring. An FMU should not be set at too large a scale, which may prevent the setting of freshwater objectives that are specific enough to be effective. Equally, an FMU should not be set at too small a scale, which may result in undue complexity and cost in the planning process or in the management of the FMU.

Although by definition FMUs are made up of water bodies (or parts of water bodies), the management of fresh water is inherently linked to the management of the land that feeds into it (ie, the catchment that supplies the freshwater body). For example, the management of freshwater quality will involve the management of discharges from the surrounding land area. Therefore, councils should consider the surrounding land use and any recharge areas affecting the freshwater body/bodies when establishing FMUs. In this way, setting FMUs also links with the requirement in part C of the NPS to manage freshwater in conjunction with the use and development of land in whole catchments.

Setting FMUs may be influenced by the values and freshwater objectives that are likely to be set. This means that it may be necessary to revisit decisions about FMUs throughout the process of determining values and freshwater objectives.

Policy CA2

By every regional council, through discussion with communities, including tangata whenua, applying the following processes in developing freshwater objectives for all freshwater management units:

a) considering all national values and how they apply to local and regional circumstances;

b) identifying the values for each freshwater management unit, which

   i. must include the compulsory values; and

   ii. may include any other national values or other values that the regional council considers appropriate (in either case having regard to local and regional circumstances);

c) identifying:

   i. for the compulsory values or any other national value for which relevant attributes are provided in Appendix 2:

      A. the attributes listed in Appendix 2 that are applicable to each value identified under Policy CA2(b) for the freshwater body type; and

      B. any other attributes that the regional council considers appropriate for each value identified under Policy CA2(b) for the freshwater body type; and

   ii. for any national value for which relevant attributes are not provided in Appendix 2 or any other value, the attributes that the regional council considers appropriate for each value identified under Policy CA2(b) for the freshwater body type;

d) for those attributes specified in Appendix 2, assigning an attribute state at or above the minimum acceptable state for that attribute;

e) formulating freshwater objectives:

   i. in those cases where an applicable numeric attribute state is specified in Appendix 2, in numeric terms by reference to that specified numeric attribute state; or

   ii. in those cases where the attribute is not listed in Appendix 2, in numeric terms where practicable, otherwise in narrative terms; and

   iia. in those cases where a freshwater objective seeks to maintain overall water quality in accordance with Objective A2, by every regional council ensuring:

      A. where an attribute is listed in Appendix 2, that freshwater objectives are set at least within the same attribute state as existing freshwater quality; and

B. where an attribute is not listed in Appendix 2, that freshwater objectives are set so that values identified under Policy CA2(b) will not be worse off when compared to existing freshwater quality; and

iii. on the basis that, where an attribute applies to more than one value, the most stringent freshwater objective for that attribute is adopted; and

f) considering the following matters at all relevant points in the process described under Policy CA2(a)-(e):

iaa. how to improve the quality of fresh water so it is suitable for primary contact more often, unless regional targets established under Policy A6(b) have been achieved or naturally occurring processes mean further improvement is not possible;

iab. how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits;

i. the current state of the freshwater management unit, and its anticipated future state on the basis of past and current resource use;

ii. the spatial scale at which freshwater management units are defined;

iii. the limits that would be required to achieve the freshwater objectives;

iv. any choices between the values that the formulation of freshwater objectives and associated limits would require;

v. any implications for resource users, people and communities arising from the freshwater objectives and associated limits including implications for actions, investments, ongoing management changes and any social, cultural or economic implications;

vi. the timeframes required for achieving the freshwater objectives, including the ability of regional councils to set long timeframes for achieving targets; and

vii. such other matters relevant and reasonably necessary to give effect to the objectives and policies in this national policy statement, in particular Objective AA1 and Objective A2.

Policy CA2 provides the process for developing freshwater objectives, which must involve discussion with the community, including tangata whenua to:

- identify the values that apply to an FMU
- identify the attributes that need to be managed to provide for those values
- formulate freshwater objectives using the attributes in Appendix 2 and any others the council considers necessary to achieve the values identified by the community for their water bodies.

Amendments in 2017 made it explicit that establishing values and formulating freshwater objectives and limits must be done in consultation with the community, including tangata whenua. This supports the existing requirements in Part D to involve iwi and hapū in the processes of the Freshwater NPS (see section on Part D for further discussion).

The freshwater objectives formulated using this process form the basis for determining limits and targets (as required by Policies A1, A2 and B1). Parts (a) to (e) of Policy CA2 direct the steps that must be taken to formulate freshwater objectives. Part (f) lists the matters that must be considered throughout the objective-setting process. The parts of Policy CA2 are explained further in the following sections.

Consider all national values – Policy CA2(a) and CA2(b)

Under Policy CA2(a) regional councils must *consider* all the values in Appendix 1 and how they apply across a region and to an FMU. Policy CA2(b) requires regional councils to *identify* the values for each FMU. These values will include:

- both of the compulsory national values in Appendix 1 (ecosystem health and human health for recreation)
- any other national values chosen from Appendix 1 that the council considers appropriate
- any other locally specific values or uses of fresh water that are not listed in Appendix 1 but are considered appropriate by the council.

This process will need to involve input from iwi and hapū as required by Part D, as a way of ensuring that tangata whenua values are identified. It should also involve input from water users and the wider community, to ensure councils are aware of the extent to which national values are relevant locally.

Through identifying the values, a council may identify specific values that are sufficiently outstanding to warrant the FMU being designated an outstanding freshwater body. Recognising a freshwater body as being outstanding places an obligation on the council to select freshwater objectives that would protect those significant values (as described in relation to Objective A2).

Identify attributes

To provide for the values that have been identified, various aspects of the freshwater environment need to be managed. Policy CA2(c) requires regional councils to identify relevant attributes that need to be managed for the values identified under Policy CA2(b).

Appendix 2 attributes

Appendix 2 of the NPS identifies some of the attributes that need to be managed for the compulsory values in Appendix 1. All these attributes are linked to the compulsory values and so must be used for the compulsory values, and they may also be relevant to other values identified for an FMU. Additional attributes, which are not in Appendix 2 may also need to be identified to provide for the compulsory values.

Each attribute table in Appendix 2 specifies the type of water body the attribute applies to. The attributes apply to either rivers, lakes, or both, while some water body types (eg, groundwater and wetlands) have no attributes included in Appendix 2 for any national value. The attributes in Appendix 2 must be used where applicable (that is, where the identified value has attribute(s) for that type of water body in Appendix 2).

Appendix 2 is not an exhaustive list. It does not yet include:

- all the attributes that will be necessary to provide for the compulsory values
- attributes specific to the other national values although it is likely that the attributes associated with the compulsory values will also be relevant for the other national values.

Other attributes

Additional attributes beyond those in Appendix 2 will also need to be identified, to provide both for the compulsory values and for any other values that are identified. When setting additional attributes, councils should ensure they:

- are relevant to the value (ie, they contribute to, or indicate that the value is being provided for)
- are relevant to the water body type
- support and justify the setting of limits and management actions.

Once additional attributes have been added to Appendix 2, through further amendments to the NPS, it is possible that regional councils may need to revisit these freshwater objectives and where they have been set, to ensure they are above minimum acceptable states.

Assign an attribute state – Policy CA2(d)

This policy requires regional councils to select a desired water quality state for all the attributes listed in Appendix 2. The attribute state indicates and describes the degree to which values are provided for. Each attribute in Appendix 2 has four attribute states (with the exception of *E. coli* – which has five states as discussed in the guidance on swimming being developed by the Ministry). The 'A-state' indicates high or excellent water quality, and 'D' indicates unacceptably low or poor water quality which is insufficient to provide for the value.

When choosing the attribute state, Objective A2 requires water quality to be **maintained or improved**, so freshwater objectives must be set somewhere within an **equivalent attribute state range** (**or better**) to **current water quality**[13] (see Policy CA2(e)(iia) for direction on this and a discussion on attributes in Appendix 2).

The absolute minimum state a freshwater objective can be set at is the bottom of 'C' state[14] and this is only possible where the current state is somewhere within the D or C state ranges. Water quality which currently falls within the 'D' state range indicates the value is not being achieved. Freshwater objectives cannot be set in the D state (even though existing water quality may be in 'D' state when objective-setting begins). They must be set in the 'C' state or above and water quality improved to that level (unless an exception applies – see footnote 14).

The different attribute states reflect changes in water quality and (in some cases) represent approximate step changes between pristine, slightly impacted, and impacted but acceptable. Each attribute state corresponds to a scientifically-determined range of effects.

The narrative state descriptors (far right column on each attribute table in Appendix 2) are intended to help communities understand what different choices for freshwater quality objectives would

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13 Amendments in 2017 to Policy CA2(e)(iia), clarified that "to maintain" water quality means staying at any point within the current water quality attribute state range.

14 Unless an exception is possible under policy CA3 or CA4.

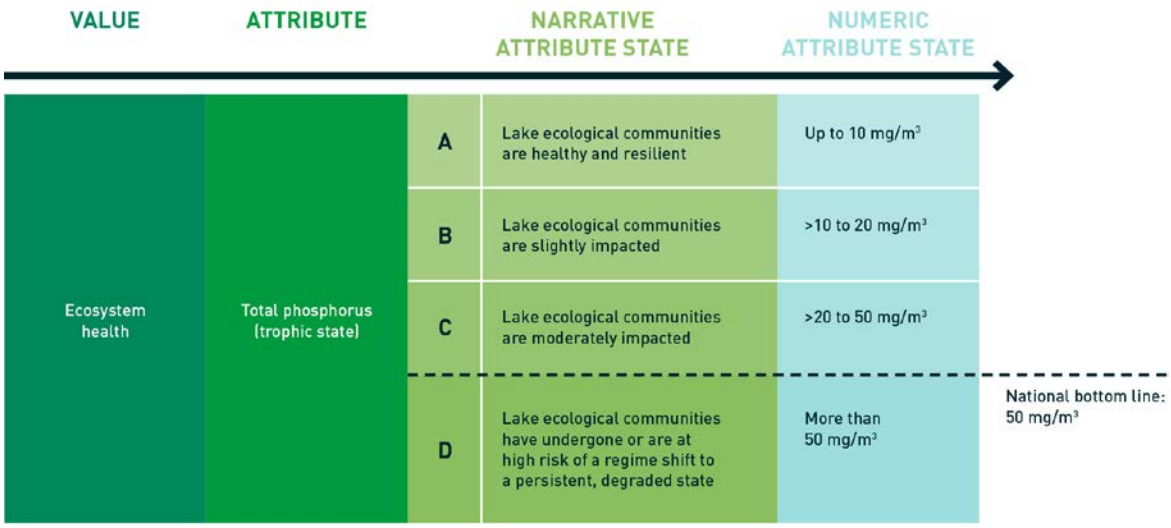
mean on the ground. For example, when discussing what is desired for a local river in terms of periphyton, people can express the state they want as “no more than occasional blooms” rather than discussing it in terms of a number such as “80 mg of chlorophyll-a per square metre”.

This should enable informed discussion of the choices around setting freshwater objectives at different levels of water quality, relative to the current state. Whatever attribute state is chosen (current state or better), the decision must be transparent in terms of the impacts of those choices on the values agreed by the community. The matters to consider under part (f), explained later in this section, are particularly relevant at this point in the process.

Where a council identifies an attribute that is appropriate to the value and that attribute is not in Appendix 2, there is no requirement to determine a set of attribute states before setting freshwater objectives; however doing so may be a useful way to guide community discussions about the possible levels at which to set freshwater objectives.

Figure 5 (below) shows an example of the available narrative and numeric attribute states for the Total Phosphorus (trophic state) attribute for lakes.

Figure 5: Attribute states for the Total Phosphorus (trophic state) attribute for lakes



Formulate freshwater objectives – Policy CA2(e)

Part (e) directs regional councils to formulate freshwater objectives for all FMUs. Changes in 2017 provide more direction on what it means to ‘maintain’ (Policy CA2(e)(iia))

At the very least, formulating freshwater objectives will include using all the attributes in Appendix 2 (applicable to the water body type) as they are all relevant to the compulsory national values ‘ecosystem health’ and ‘human health for recreation’ in Appendix 1. Attributes in addition to those provided in Appendix 2 will likely also be required to fully provide for the compulsory values. Additional attributes may also be needed for other values identified by the community, including any values listed in Appendix 1, and councils will need to establish attributes for water body types for which no attributes are listed (eg, wetlands and groundwater).

The policy states that in cases where it is possible to use a number from the attribute table this must be used. Where there are no attributes listed in Appendix 2, the council must formulate freshwater objectives using whatever other attributes it considers to be appropriate (ie sediment, temperature

etc) and set these at a point so that the value(s) they provide for are maintained. If an attribute is not in Appendix 2, and it is not possible to develop a numeric attribute - a narrative descriptor may be used.

Under Policy CA2(e)(iia) maintaining (as opposed to improving) means setting a freshwater objective at some point within the current attribute state range; equally, it could be expressed as the full range of the attribute state. This means that even where the water quality state is currently at the top of the range, a freshwater objective could be set lower (as long as it was still within the state range) or expressed as the full range of the (current) state. The aim is to provide flexibility while still protecting the values the freshwater objectives relate to.

Where councils formulate their own attributes (therefore there are no national bottom lines/states defined for these), freshwater objectives should be set for these attributes so the value they relate to is maintained to current levels (ie, is no worse off).

What it means to 'maintain' water quality is also discussed in the section on Objective A2 and Appendix 2.

In addition to biophysical characteristics (eg, attributes relating to trophic state, toxicants and chemical composition like the ones provided in Appendix 2), freshwater objectives may need to be set for other characteristics of the freshwater resource (eg, cultural or social) to provide for the full range of values identified as being locally relevant.

Freshwater objectives should be specific and measurable enough that they allow effective limits to be set. Wherever practicable, freshwater objectives should be expressed in numeric terms (eg, by numerically specifying the maximum concentration of a contaminant), or if this is not practicable, they may be expressed in narrative terms that describe the desired outcome that the state will provide for (eg, specifying that a contaminant will be at a concentration that allows for a specific outcome, without specifying what that concentration is). Narrative freshwater objectives should be as specific and measurable as possible. Numeric freshwater objectives, or specific and measurable narrative objectives, will make it easier to set limits and monitor progress towards freshwater objectives.

Water quality is likely to vary to some extent both across an FMU (spatially) and through seasonal variation (temporally). Progress towards freshwater objectives will be monitored at representative sites, and will need to recognise the importance of long-term trends, as required by Policy CB1.

Matters to consider when formulating freshwater objectives – Policy CA2(f)

The Policy CA2(f) requires that as regional councils go through the process of establishing freshwater objectives, they consider all the matters listed in Policy CA2(f) i-vii.

Policy CA2(f)(iaa)

This policy is part of the swimming provisions and signals that water quality must be improved so it suitable for primary contact more often, **until** regional targets are met **or** natural process (defined in the NPS) mean improvement is not possible. This policy will be discussed further in the swimming guidance currently being prepared by the Ministry.

Policy CA2(f)(iab)

This policy on enabling communities to provide for their economic well-being is addressed in the section on Objective A4***.***

Policy CA2(f)(i)

This policy requires regional councils to consider both the:

- current state of the FMU
- anticipated future state (based on past and current resource use, both consented and actual).

This is to establish and take into account any lag effects from historic land use and/or additional loads anticipated as a result of current use. Best practice would also include considering the impact of any currently planned or consented future use, even if this is not being fully exercised.

Knowing the current state is essential when considering the level at which to set freshwater objectives. The current state of the FMU is relevant to Objective A2, which requires that overall water quality in a region is maintained or improved. The current state is also relevant in choosing the attribute state that will become the freshwater objective.

Policy CA2(f)(ii)

This policy requires councils to consider the spatial scale at which each FMU is defined. In particular, councils should consider how the spatial scale will affect the values chosen and the freshwater objectives that are set. Further guidance on FMUs is provided in the section of this guide dealing with Policy CA1.

Policy CA2(f)(iii)

This policy requires councils to consider the limits that may be required. Establishing limits will draw on the information generated from freshwater accounting and the requirements of part B – particularly Policy B1 regarding setting environmental flows. Establishing the current state and use and anticipating future state and use will help regional councils identify appropriate limits needed to achieve the freshwater objective. The limit-setting process will need to be iterative to allow fully informed choices before decisions are made, taking into account the consequences of setting freshwater objectives and limits at certain levels (see Policy CA2 (f)(v)).

Policy CA2(f)(iv)

This policy requires balancing value choices where those choices would result in incompatible freshwater objectives, and limits to achieve those values. In practice a single attribute cannot be managed to two different levels in the same place simultaneously; therefore where two different values use the same attribute for the same location, the more stringent of the two freshwater objectives will be the one that needs to be achieved through limits and methods.

In considering all the potential values communities may hold for water bodies in a region, councils will need to balance the competing uses for fresh water and how each use may impact on any intrinsic values.

Councils will need to ensure the objectives they set to provide for one value do not conflict with the objectives they set for another value. For example, reflecting the national value of ‘natural form and

character' may require establishing freshwater objectives that conflict with the objectives required to reflect the value 'hydro-electric power generation'. In this case, a council would need to arrive at an agreed balance between the levels to which each value will be provided for (bearing in mind that any freshwater objectives must be set within the current band or better and give effect to Objectives A1 and A2).

Policy CA2(f)(v)

This policy requires the implications arising from potential freshwater objectives and limits to be considered. This can be done during the objective setting process through scenarios run in the context of social, cultural and economic effects on resource users, people and communities. Note that councils will have considered the environmental implications in determining the environmental flows under Policy B1, and by developing freshwater objectives and limits which give effect to the objectives of the NPS, as required by Policy A1.

The freshwater objectives written in a regional plan should be the result of an iterative process that considers the value(s), attribute states, the limits needed, and the effect those limits will have. The intention is that this occurs throughout the planning process in conjunction with the community. It should be done in a way that provides relevant information to help communities make informed decisions on freshwater objectives and limits.

For example, a community may initially decide they want improved water quality and an aspirational freshwater objective set at the 'A' state. However, when the limits to achieve this are determined it may become evident this will have a significant effect on current land use and businesses in the area. The community might agree that the effects are too great, and decide that the current water quality which falls within the 'B' state is acceptable. Any freshwater objective chosen must give effect to Objective A2 requiring water quality to be maintained or improved overall.

Policy CA2(f)(vi)

Where an objective is set to achieve a quality better than the current state an important consideration is an appropriate timeframe for meeting the freshwater objectives and/or a timeframe to meet limits, particularly any targets set under Policy A2. Policy CA2(f)(vi) is a prompt that councils have the ability to use long timeframes to achieve target limits. This is relevant where aspirational freshwater objectives have been set, or where there will be significant lag times for nutrients in an FMU, or where existing water quality is below a national bottom line.

Policy CA2(f)(vii)

Policy CA2(f)(vii) instructs regional councils to consider any other matters reasonably necessary to give effect to the objectives and policies in the NPS, in particular the requirement to maintain or improve overall water quality within a region (Objective A2) and to consider and recognise Te Mana o te Wai in the management of freshwater (Objective AA1).

This includes matters necessary to give effect to:

- the connections between water bodies and the broader environment (Policy AA1)
- the requirement to safeguard life-supporting capacity and human health (Objective A1)
- provisions around integrated management of land and water bodies (Part C) and the involvement of iwi and hapū (Part D).

As required by Policies A1 and B1, regional councils need to set freshwater objectives having regard to:

- the reasonably foreseeable impacts of climate change
- the connection between water bodies, including effects of groundwater where it affects or directly feeds into surface freshwater bodies (and vice versa)
- connections between fresh water and coastal water.

Policy CA3

By every regional council ensuring that freshwater objectives for the compulsory values are set at or above the national bottom lines for all freshwater management units, unless the existing freshwater quality of the freshwater management unit is already below the national bottom line for an attribute or attributes and the regional council considers it appropriate to set the freshwater objective below the national bottom line for an attribute or attributes because:

a) the existing freshwater quality is caused by naturally occurring processes; or

b) any of the existing significant infrastructure (that was operational on 1 August 2014) listed in Appendix 3 contributes to the existing freshwater quality; and

i. it is necessary to realise the benefits provided by the listed infrastructure; and

ii. it applies only to the waterbody, waterbodies or any other part of a waterbody, where the listed infrastructure contributes to the existing water quality.

National bottom lines only become relevant when the current state of water quality is below them (ie, is within the D state). This is because freshwater objectives must be set at current state or better **unless current water quality is below** the bottom lines. National bottom lines are the bottom of the C state and represent the minimum acceptable standard of water quality for the attributes in Appendix 2. National bottom lines are minimum acceptable states for the compulsory values; they are not targets.

Objective A2 requires that overall water quality within each region is maintained or improved. Therefore, regional councils are expected to set freshwater objectives that reflect existing water quality or better. Limited balancing of particular aspects of water quality is provided through the ability to set a freshwater objective at any point within the current water quality attribute state (Policy CA2(e)(iia)).

Note however, that if water quality is currently below a bottom line (or trending that way), it must be improved over time to achieve a freshwater objective above the bottom line.

Policy CA3 allows for two situations in which a regional council may set a freshwater objective below a national bottom line where:

- water quality is below a national bottom line and this is caused by naturally occurring processes (Policy CA3(a))
- infrastructure listed in Appendix 3 of the NPS contributes to existing water quality being below the national bottom line (Policy CA3(b)).

These two situations are discussed in more detail in the sections below.

Policy CA3 allows regional councils to set freshwater objectives below a bottom line, it does not require them to do so. A council is still required to consider the matters specified in Policy CA2(f) before it sets an objective in a regional plan, and must follow the processes set out in the NPS and the process set out in Schedule 1 of the RMA. Councils need to consider the most appropriate freshwater objectives for the FMUs in their region, and need to consider the implications for integrated and collaborative catchment management, including for upstream and downstream catchment communities.

Where a council chooses to set a freshwater objective below a bottom line under Policy CA3(a) or (b), the requirement to maintain or improve overall water quality (Objective A2) still applies. Policies CA3(a) and (b) allow for a council to set a freshwater objective below a national bottom line, but they do not allow for water quality currently below the national bottom to decline relative to its current point in the D state.

The ability to set a freshwater objective below a national bottom line does not exempt a council from giving effect to any of the other, broader objectives in the NPS. For example, where a freshwater objective is set below a national bottom line for a specific attribute, the other freshwater objectives for the FMU must still be set at levels that are sufficient to safeguard the life-supporting capacity, ecosystem processes, and indigenous species (including their associated ecosystems) of freshwater.

Naturally occurring processes

The first situation is where water quality is below a national bottom line due to naturally occurring processes (Policy CA3(a)). These are defined in the NPS as processes that could have occurred in New Zealand before the arrival of humans (eg, where nesting birds adjacent to a water body might cause high *E. coli* concentrations or volcanic/geothermal activity resulting in low pH, high temperature or heavy metals in the water).

Decisions on whether to set a freshwater objective below a national bottom line due to naturally occurring processes will be made through the regional plan development process.

Existing infrastructure listed in Appendix 3

Policy CA3(b) allows for a freshwater objective to be set below a national bottom line in a FMU that contains infrastructure listed in Appendix 3.

This policy is intended to be used in limited situations, and applies to FMUs that do not meet bottom lines, due (completely or in part) to effects of existing infrastructure.

Appendix 3 is currently empty. Adding eligible infrastructure to Appendix 3 will require an amendment to the NPS, which will follow the process outlined in the RMA for amending a national policy statement.

Once infrastructure is listed in Appendix 3, councils have the ability to set a freshwater objective below a national bottom line for an FMU if the criteria in Policy CA3 are met. The Minister for the Environment decides whether to amend the NPS to list any infrastructure. In making this decision, which must be informed by public consultation, the Minister may take into account the matters listed in Policy CA3, as well as any other matters necessary to make the amendment. If an objective is set below a national bottom line for an FMU comprising a water body, water bodies, or any part of a water body affected by infrastructure listed in Appendix 3, the council must also be satisfied that the requirements in Policy CA3 are met.

A council would need to:

- determine whether the existing freshwater quality of the FMU is already below any national bottom line
- demonstrate that any of the existing infrastructure listed in Appendix 3 is contributing to the existing water quality being below a national bottom line
- establish that maintaining water quality below national bottom lines is necessary (and acceptable to the community) to continue to realise the benefits from the infrastructure
- ensure the freshwater objective which is set below the national bottom line applies only to that part of the water body on which the infrastructure has an impact.

The steps of determining the current state of water quality, and identifying the reasons for that state are important steps in the objective and limit-setting process in any FMU, regardless of whether infrastructure exists which is listed in Appendix 3. These parts of the planning process should continue in the absence of a populated Appendix 3.

If an FMU contains infrastructure listed in Appendix 3, this does not guarantee that the council will set relevant freshwater objectives below national bottom lines – the choice of whether or not to apply Policy CA3(b) for a particular FMU rests with the council. Input from iwi and hapū, water users (including infrastructure owners) and the wider community will be important.

When considering whether to set a freshwater objective below a bottom line under Policy CA3(b), a council could also consider whether to instead set a freshwater objective:

- above a bottom line using targets over a specified timeframe to achieve the objective
- below a bottom line on a transitional basis under Policy CA4 by having the FMU added to Appendix 4 of the NPS.

If a regional council considers that infrastructure exists in an FMU that may justify setting a freshwater objective below a bottom line, or wants to ensure the full range of options is presented to the community, it may choose to defer setting objectives for that FMU until national decisions have been made about populating Appendix 3.

The requirement to complete an evaluation under section 32 of the RMA will form an important part of documenting the decision points and trade-offs the council has considered regarding whether to set a freshwater objective below a bottom line under Policy CA3.

Policy CA4

A regional council may set a freshwater objective below a national bottom line on a transitional basis for the freshwater management units and for the periods of time specified in Appendix 4.

If a regional council wants to set a freshwater objective below a national bottom line on a transitional basis for a particular FMU, that FMU must be listed in the Freshwater NPS. Currently, there are no FMUs specified in Appendix 4.

A regional council may request that the Minister for the Environment amend the NPS to list an FMU in Appendix 4 so it can set a freshwater objective below a bottom line in a regional plan. Once the objective is achieved, or the transitional period is expired, a new objective must be set above the national bottom line unless the NPS is amended to provide a new transitional period for a new objective.

Best practice would be for councils to make the decision to seek this transitional period with community input and/or consultation, as part of a council's plan preparation before notification of any plan changes.

The water body and time period would be specified in Appendix 4 by an amendment to the NPS. The Government would consult publicly on the addition of the FMU for the water body and the proposed transitional period, using the process specified under the RMA for amending an NPS, before a final decision is made by the Minister for the Environment. The length of any transitional period and the area to which it applies would be decided on a case-by-case basis.

A transitional period could be useful if a council considers the interventions needed to manage a water body to a level above the bottom line would place an unmanageable burden on their community; or if the scientific information, methods or technology are not currently available to determine realistic timeframes for meeting a national bottom line. A council may decide it wants to maintain water quality at current levels for a period (but halt further degradation), or make progress towards the national bottom line according to what is achievable with existing management options.

The transitional period would allow the community time to test and refine approaches to improve water quality in the FMU, and to work out what needs to be done to meet bottom lines. The transitional timeframe would provide reassurance to the community that water quality improvements will not be delayed indefinitely, but are not expected to occur at the expense of livelihoods, particularly if the effectiveness or total cost of the changes is uncertain.

During any transitional period the requirement to maintain or improve overall water quality within a region would still apply. At (or before) the end of the specified transitional period, a new freshwater objective would need to be set in a regional plan. This would need to follow the Schedule 1 public consultation process described in the RMA, and the freshwater objective would need to be set at or above the national bottom line unless a further transitional period is allowed through an additional amendment to the NPS.

5.10 Part CB. Monitoring Plans

Objective CB1

To provide for an approach to the monitoring of progress towards, and the achievement of, freshwater objectives and the values identified under Policy CA2 (b).

Policy intent and implementation

Having appropriate monitoring systems in place to measure progress towards and achievement of the values and freshwater objectives established under the Freshwater NPS is essential to measure the effectiveness of policies and rules in regional plans (as required under the RMA).

The information obtained from monitoring will also contribute to meeting (but is unlikely to completely fulfil) the requirements to account for relevant contaminants under part CC of the NPS.

Information from monitoring will contribute to future decision-making and plan evaluation. Monitoring results can be used to inform revisions of freshwater objectives or limits when the regional plan is reviewed. For example, if monitoring shows that progress towards freshwater objectives is slower than planned, then more stringent limits may need to be set.

Part CB of the NPS is not intended to result in duplication of current monitoring regimes. Regional councils can use existing monitoring sites, as long as there are sufficient representative site(s) for each FMU – more may well be needed. Long-term data and trend analysis will be essential in setting freshwater objectives and limits.

Objective CB1 is supported by four policies (Policy CB1-4). These provide direction on what the monitoring should involve and are discussed extensively in *A Draft Guide to Monitoring* currently being drafted by the Ministry. The monitoring guide also contains case studies and references for further reading, and includes links to monitoring protocols.

5.11 Part CC. Accounting for freshwater takes and contaminants

Objective CC1

To improve information on freshwater takes and sources of freshwater contaminants, in order to:

a) ensure the necessary information is available for freshwater objective and limit setting and freshwater management under this national policy statement; and

b) ensure information on resource availability is available for current and potential resource users.

Policy intent

Accurate information on the quantity of water being taken from freshwater bodies and the type and amount of contaminants going into freshwater bodies is essential. Accounting for existing uses of water and existing sources of contaminants is needed to:

- inform decisions on setting freshwater objectives and limits by providing an understanding of the existing use of water, and sources and amount of contaminants, and when testing the economic and social impacts of various scenarios for freshwater objectives and limits
- inform decisions on how to manage within limits (eg, to determine the most equitable and cost-effective way to reduce current discharges)
- provide feedback to communities on their progress in meeting freshwater objectives, and act as a trigger for changes in management (eg, when existing methods are not having the required effect and targets are not being met)
- provide consistent regional accounting information for investors on catchments where there is headroom for expansion.

A freshwater accounting requirement is already implied through the duties imposed on local authorities by sections 35(1) and 35(2) of the RMA. Section 35(1) requires local authorities to gather such information as is necessary to effectively carry out their functions under the Act. For regional councils those functions include the control of the:

- taking, use, damming and diversion of water, and of the quantity, level and flow of water in any water body (section 30(1)(e))
- discharges of contaminants into or onto land or water (section 30(1)(f)).

Section 35(2)(d) requires local authorities to monitor the exercise of resource consents.

The aim of Objective CC1 is to provide additional specificity for councils on how to undertake the functions required of them – in this case, effective accounting to manage freshwater resources.

The intention is that the accounting system includes all freshwater takes and all sources of relevant contaminants.

Accounting for freshwater takes

To meet the policy intent will require accounting for all freshwater takes. It will involve:

- identifying who is taking water (consented or otherwise)
- collecting information on, or estimating, how much is used (ie, the total actual take), the proportion taken by category, and eventually, when limits have been set, the proportion of the limit that is being used.

The data can be measured, modelled or estimated, depending on the significance of the resource issue. If modelling or estimates are used, some data verification may be necessary, and the information should be consolidated and available for the community at the time of setting or reviewing freshwater objectives and limits. The level of detail and precision that is appropriate in a freshwater accounting system will depend on the extent to which the water in the FMU (and the ability for the FMU to meet freshwater objectives) is affected by water use.

The information collected under the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 will contribute a significant amount of the information required for the water quantity accounting requirements. However, regional councils will also need to account for:

- consented water takes that are not covered by the regulations (non-consumptive takes and takes of less than 5 *L*/s)
- water takes that do not need a resource consent (ie, permitted takes and takes authorised under section 14(3)(b) of the RMA) and any unauthorised takes.

Simple models can be used to estimate permitted, stock water and domestic takes; for example, multiplying stock numbers by average daily intake, with intake coefficients validated using sample surveys and other data (eg, from metered takes).

Accounting for freshwater contaminants

The phrase ‘relevant contaminants’ means the contaminants that impact, or have the potential to impact, water quality. The policy does not require regional councils to monitor every possible contaminant, only those that they and the community identify as being relevant to achieving freshwater objectives. Accounting for all sources of relevant contaminants requires broadly identifying the sources of the contaminant(s) that need to be managed to achieve particular objectives.

Sources of relevant contaminants include both point source and non-point source or diffuse discharges, and include background or naturally occurring contaminant sources. Sources are most usefully grouped into background, point and diffuse sources, with diffuse sources potentially broken down further by land-use type. This grouping can also assist with assessment of the economic impact of potential objectives to specific sectors or land-use types.

A preliminary assessment of likely values and objectives will need to be carried out, along with an initial low cost accounting process for the contaminant(s) most likely to be relevant. Once the possible range of objectives is narrowed, more accurate accounting may be needed (eg, if significant reductions in discharges of relevant contaminants are needed to achieve some of the objectives being considered).

Contaminant sources may in some cases be able to be individually identified and measured (eg, large point sources), and in other cases only broad identification will be possible (eg, estimated loads generated by each land-use type). Councils will need to use modelling to identify and estimate diffuse discharges from farmland, urban run-off, native bush, plantation forests, wildlife and septic tanks.

Policy CC1

By every regional council:

a) establishing and operating a freshwater quality accounting system and a freshwater quantity accounting system for those freshwater management units where they are setting or reviewing freshwater objectives and limits in accordance with Policy A1, Policy B1, and Policies CA1-CA4; and

b) maintaining a freshwater quality accounting system and a freshwater quantity accounting system at levels of detail that are commensurate with the significance of the freshwater quality and freshwater quantity issues, respectively, in each freshwater management unit.

This policy requires that regional councils establish and operate freshwater quality and quantity accounting systems, and that they collect and record freshwater accounting information for all FMUs. This is to be done at a level of detail that reflects the scale of the water quality/quantity issues in the FMU. Therefore, the information gathered may include direct measurements, modelling results or estimates.

Freshwater quality accounting systems

Is defined in the NPS as, *"A system that, for each freshwater management unit, records, aggregates and keeps regularly updated, information on the measured, modelled or estimated:*

a. loads and/or concentrations of relevant contaminants;

b. sources of relevant contaminants;

c. amount of each contaminant attributable to each source; and

d. where limits have been set, proportion of the limit that is being used" (NPS definition).

A freshwater quality accounting system will keep account of the type and amount of relevant contaminants affecting an FMU. The system will also identify where those contaminants are coming from by source, and the amount generated by each source. This will include both point and diffuse discharges. When limits are set, the accounting system will also be able to identify the proportion of any limit that is being used in an FMU.

Freshwater quantity accounting systems

Is defined in the NPS as, *"A system that, for each freshwater management unit, records, aggregates and keeps regularly updated, information on the measured, modelled or estimated:*

a. total freshwater take;

b. proportion of freshwater taken by each major category of use; and

c. where limits have been set, proportion of the limit that has been taken" (NPS definition).

A freshwater quantity accounting system will keep account of how much water is allocated, as well as how much is being taken from freshwater bodies, and broadly what that water is being used for (eg, municipal, irrigation, hydroelectric power). A freshwater quality accounting system will also keep account of how much of the limit is being used in each FMU.

Extent and timing

Regional councils are required to establish freshwater quality and quantity accounting systems in FMUs where they are setting or reviewing freshwater objectives and limits. This means freshwater accounting systems do not have to be established for the whole region, and data does not have to be gathered for all FMUs at once. Regional councils can take a staged approach to setting up accounting systems and data gathering. Eventually, just as a whole region is required to be covered by FMUs, the region will also be covered by an accounting system at a scale or scales commensurate with the issues affecting each FMU.

A two-year period has been allowed before the accounting requirements take effect (from 1 August 2014 – the date that the NPS came into effect). The two-year delay provides time to establish an accounting system and collect the data for the first FMU in which the regional council is setting or reviewing freshwater objectives and/or limits after the NPS takes effect.

Scale and significance

The level of detail of the accounting systems will depend on the scale and significance of issues in each FMU. The policy provides the flexibility for regional councils to determine this at a local level.

It is appropriate to have a targeted focus on the relevant contaminants (that is, those that are most critical to manage to achieve the objective specified for the FMU). It is also appropriate to tailor the level of detail at which the sources of relevant contaminants are identified (eg, by broad category or more specifically) or water takes are measured, and the frequency of the accounting cycle, commensurate with the scale of resource use and the drivers and pressures affecting that FMU.

For example, in FMUs with little pressure on freshwater resources it may be sufficient to account for sources of contaminants by broad category or sector; however in FMUs where significant reductions in a contaminant are needed to achieve an objective, a more detailed breakdown of sources by individual source (users) may be needed to assess, and possibly refine, the management approaches being taken. Pressures on water quality are likely to affect the approach towards accounting for water takes. Where pressure on water use is minimal, estimating water takes may be appropriate, while measurement may be required in under-pressure FMUs to ensure a greater degree of accuracy.

Policy CC2

By every regional council taking reasonable steps to ensure that information gathered in accordance with Policy CC1 is available to the public, regularly and in a suitable form, for the freshwater management units where they are setting or reviewing, and where they have set or reviewed, freshwater objectives and limits in accordance with Policy A1, Policy B1, and Policies CA1-CA4.

Objective CC1 and Policies CC1 and CC2 will take effect 24 months from the date of entry into effect of the National Policy Statement for Freshwater Management 2014.

This policy requires that the information collected under Policy CC1 is available to inform the process of setting (or reviewing) freshwater objectives and limits. The information collected must be available in a suitable form for the council and the community when making decisions as part of the iterative process of setting and managing within freshwater objectives and limits. This means the data can be aggregated or collated and should clearly reflect any change over time.

For water quantity, the system used to gather and report data as part of the Resource Management (Water Measurement and Reporting of Water Takes) Regulations 2010 could be used to incorporate those takes not covered by the regulations (ie, non-consumptive takes and takes of less than 5*L*/sec). This would allow a full account to be made of water taken and used in FMUs within a region, and provided on an annual basis.

For water quality, the system used to manage data will depend in part on the level of detail required from the accounting system; this in turn will reflect the complexity and seriousness of issues affecting a particular FMU.

The regional accounting system needs to be flexible enough to allow for various scales of complexity and still enable comparisons between FMUs to be made. The reporting period for water quality accounts may vary for each FMU depending on:

- the pressure on the resource
- the complexity of the accounting undertaken
- information needs (for setting and reviewing freshwater objectives and limits, providing information to the community on available resource use, and tracking progress toward targets).

5.12 Part D. Tangata whenua roles and interests

Objective D1

> To provide for the involvement of iwi and hapū, and to ensure that tangata whenua values and interests are identified and reflected in the management of fresh water including associated ecosystems, and decision-making regarding freshwater planning, including on how all other objectives of this national policy statement are given effect to.

Objective D1 supports and clarifies the requirements of the RMA. It provides for the involvement of iwi and hapū and ensures tangata whenua values and interests are identified and reflected in the management of, and decision-making for, freshwater planning. It may require councils to change the processes they follow to engage with iwi and hapū when giving effect to the objectives and policies under the NPS.

The terms 'provide for' and 'to ensure' imply an imperative for action on the part of councils in relation to this objective.

The NPS objective relates to involvement generally in freshwater management, and in decision-making regarding freshwater planning. Existing RMA requirements still apply to other types of decision-making (eg, in respect of consenting notification requirements).

The term 'involvement' allows for different approaches to iwi and hapū roles in the management of fresh water. Regional councils should engage with iwi and hapū (ideally early in the planning process), so both parties can equally determine what involvement in freshwater management might look like.

The NZCPS 2010 contains Objective 3 and Policies 2, 21(e) and 23(3), which also relate to tangata whenua roles and interests in the coastal environment. While NZCPS 2010 Objective 3 and Policy 2 and NPS Objective D1 and Policy D1 use different terminology in places, they are compatible provisions, and councils should implement both for fresh water in the coastal environment.

Policy D1

Local authorities shall take reasonable steps to:

a) involve iwi and hapū in the management of fresh water and freshwater ecosystems in the region;

b) work with iwi and hapū to identify tangata whenua values and interests in fresh water and freshwater ecosystems in the region; and

c) reflect tangata whenua values and interests in the management of, and decision-making regarding, fresh water and freshwater ecosystems in the region.

Policy D1 refers to local authorities, and so applies to both regional and territorial authorities in relation to their water management functions within the scope of Objective D1. It has immediate effect and is relevant to local authority work programmes to give effect to the NPS.

Policy D1 requires an ongoing response, as opposed to a one-off review. Local authorities will need to review the processes and policies for involving iwi and hapū in matters within the scope of Objective D1, and work with iwi and hapū to reflect tangata whenua values and interests in decision-making about fresh water and freshwater ecosystems. Local authorities will also need to make changes to processes that do not adequately give effect to Objective D1.

Recognising Te Mana o te Wai in the management of fresh water will involve identifying and providing for the values of both tangata whenua and the wider community; therefore engagement between councils and iwi and hapū to identify tangata whenua values will be an important part of recognising Te Mana o te Wai.

To 'take reasonable steps' anticipates local authorities will provide appropriate opportunities for the iwi and hapū to be involved in managing fresh water (including in implementing the NPS) based on current good practice. What constitutes reasonable steps will depend on the local context and available resourcing for both the council and iwi and hapū. Options beyond the RMA can be considered (eg, Local Government Act committee arrangements or memoranda of understanding). Plan provisions may be necessary in some cases, particularly to ensure appropriate weight can be given to identified values.

This policy does not override or alter any existing or future obligations local authorities have under Treaty settlements.

Key words to consider in implementing this policy are:

***Involve*:** This policy does not dictate the form of iwi and hapū involvement in the management of and decision-making regarding fresh water. There is a range of ways iwi and hapū can be involved in the management of fresh water under existing legislation. Involvement may include consultation, but may also include other methods for iwi and hapū to participate in freshwater management. Methods can include, but are not limited to, joint management agreements, joint committees, decision-making roles, relationship agreements, and statutory acknowledgements.

***Work with*:** Policy D1 (b) clarifies that councils should work with iwi and hapū and should not identify values and interests on their behalf. Councils can work with iwi and hapū in a number of ways including, but not limited to:

- engagement with iwi and hapū early in the freshwater planning process to identify locally relevant values for fresh water
- seeking technical advice and input to inform plan or plan change preparation
- commissioning reports from iwi or hapū
- using mātauranga Māori to inform policy decisions
- including members of relevant iwi or hapū on plan hearing committees.

***Reflect*:** Policy D1 requires that local authorities do more than just have regard to tangata whenua values and interests in the management of and decision-making regarding fresh water and freshwater ecosystems. Policy-making needs to reflect tangata whenua values and interests and take them into account in freshwater management decisions. Councils need to be transparent in their decisions and demonstrate how they have reflected the values and interests. This can be documented through the section 42A or 32 report.

5.13 Part E. Progressive implementation programme

Policy E1

a) This policy applies to the implementation by a regional council of a policy of this national policy statement.

b) Every regional council is to implement the policy as promptly as is reasonable in the circumstances, and so it is fully completed by no later than 31 December 2025.

ba) A regional council may extend the date in Policy E1(b) to 31 December 2030 if it considers that:

  i. meeting that date would result in lower quality planning; or

  ii. it would be impracticable for it to complete implementation of a policy by that date.

c) Where a regional council is satisfied that it is impracticable for it to complete implementation of a policy fully by 31 December 2015, the council may implement it by a programme of defined time-limited stages by which it is to be fully implemented by 31 December 2025 or 31 December 2030 if Policy E1(ba) applies.

d) Any programme of time-limited stages is to be formally adopted by the council by 31 December 2015, and publicly notified.

e) Where a regional council has adopted a programme of staged implementation, it is to publicly report, in every year, on the extent to which the programme has been implemented.

f) Any programme adopted under Policy E1(c) of the National Policy Statement for Freshwater Management 2011 or under E1(c) of the National Policy Statement for freshwater Management 2014 by a regional council is to be reviewed, revised if necessary, and formally adopted by the regional council by 31 December 2015 and publicly notified.

g) Every regional council must, at intervals of not more than five years, compile and make available to the public a review of the improvements to specified rivers and lakes, and primary contact sites, made in giving effect to Policy A5.

Policy E1 outlines the expectations and timeframes for regional councils to implement the policies in the NPS. The policy recognises that each region will have different circumstances in determining when and how to give effect to this national policy statement.

All implementation is expected as promptly as is reasonable in the circumstances. Full implementation under the Freshwater NPS 2014 is required by 31 December 2025. However, the policy allows for the implementation timeframe to be extended to 2030 if the 2025 timeframe will

affect plan quality or it would be impracticable for the council to complete implementation of a policy by 2025.

Where it is impracticable for a regional council to fully implement the NPS- by end of 2015 it may develop or update a formal progressive implementation programme (PIP). The PIP will outline the planned progress toward meeting the 31 December 2025 (or 2030) timeframe.

Where policies of the NPS require regional councils to make or change regional policy statements or regional plans, these changes must be fully operative for this policy to be considered implemented. The timelines in Policy E1 relate to putting in place the necessary policies, plans and/or methods; improvements in water quality will have their own timeframes identified for achieving specific freshwater objectives.

Where a change to the regional policy statement or regional plans is required, section 55(2C) requires a Schedule 1 process to be used (except for Policies A4 and B7). This may involve a series of plan changes. The NPS does not need to be fully given effect to with one plan change, nor in the first available plan change, but the provisions in any plan change that is made (including project-specific plan changes, or plan changes for which the NPS- is not the principal reason) must be consistent with the NPS.

The PIP will need to set out how a council plans to give effect to the NPS in its entirety by the 2025 (or 2030) deadline. The PIP must set out the stages and timeframes for their region. The council must formally adopt the programme, and publicly notify that the programme has been adopted. Preparing and adopting a PIP will need to meet Local Government Act 2002 obligations, as it involves resources and priorities and may be a significant part of the council work programme. Public notification of the PIP, along with the annual progress reports, is intended to engage the public in the approach and provide a mechanism for councils to be accountable to the public in demonstrating their progress towards fully implementing the NPS. Annual reporting could be through the annual plan and annual report under the Local Government Act 2002. Similarly, if possible, it would be appropriate for the implementation programme to be part of a council's long-term plan.

Implementation programmes can be flexible. For example, dates or catchment priorities may change. It is likely to be appropriate for a council to review and revise its PIP regularly; this could also be part of the annual plan or long-term plan process. Similarly, good practice would be to review and revise the PIP following any amendment to the NPS.

The options available for implementation recognise the differences in resourcing and in the extent of work that may be required in various regions. Where considerable cost and effort has to be applied in a region to implement the NPS, a progressive implementation programme provides scope to identify priorities, resourcing and how the council will respond to the NPSs requirements.

An implementation programme may outline the:

- consultation strategy/programme
- prioritising of plan changes by catchment and/or management issues
- expected time for key milestones, such as notification of plan changes setting limits, timing for hearings, and timing for any review of consents.

As well as plan changes, the programme may outline other activities, initiatives and methods to be implemented, indicating timing, priorities and resourcing. Examples include consent reviews, capital works initiatives, changes to the council's own work programmes, and/or landowner liaison programmes.

Engagement with communities and robust durable solutions can take time. This policy recognises the importance of quality rather than quick processes and frameworks.

Policy E1 does not create a requirement for all freshwater objectives and limits under Policies A1, A2, and B1 to be achieved by 2025, although objectives, limits, targets (including timeframes for achieving the targets) and methods must be set. In some cases, where there are significant legacy issues and long lag times to be dealt with (ie, nutrients from past land use still in transit to water bodies), freshwater objectives and limits may take longer to achieve. Note the requirements in g) were introduced through the 2017 amendments and relate to the swimming provisions of the freshwater NPS. They will be addressed as part of the swimming guidance currently being prepared by the Ministry.

6 National Policy Statement for Freshwater Management 2014 Appendices

Appendix 1

Purpose of Appendix 1

The preamble of the 2011 National Policy Statement for Freshwater Management included a list of national values of fresh water. The values were derived from the Resource Management Act 1991 (RMA), the proposed 2011 National Policy Statement (NPS), and submissions /evidence provided to the Board of Inquiry.

Two groupings of national values were identified, those providing for the well-being and amenity of people and communities, and those recognising the intrinsic values of fresh water. The national values that were in the preamble of the 2011 NPS are now included (for the most part) in Appendix 1 in the 2014 Freshwater NPS.

The compulsory values included in Appendix 1 of the NPS were those considered important to all New Zealanders and likely to apply to all water bodies. The other national values are nationally significant, but are not necessarily valued in every water body nationally. Each value is described in Appendix 1 of the NPS.

How Appendix 1 is to be used

Appendix 1 is to be used when making decisions as directed by Policy CA2, which directs councils to consider the entire list of values in Appendix 1 and how they apply to local and regional circumstances. Appendix 1 contains two compulsory national values (‘ecosystem health’ and ‘human health for recreation’), plus other national values and uses for freshwater that councils must consider (Policy CA2 (a)).

The compulsory values (ecosystem health and human health for recreation) need to be provided for in each freshwater management unit (FMU) through freshwater objectives included in the regional plan. The freshwater objectives for the compulsory values must use the attributes provided in Appendix 2 plus any others the councils considers appropriate. If a council decides that one or more of the other national values are also relevant, then the council must provide for these in the regional plan through establishing freshwater objectives. Councils can use the attributes provided in Appendix 2 where these are relevant to the other national values, or develop their own attributes. In developing freshwater objectives, councils must use the process outlined in Policy CA2 and must ensure that whatever freshwater objectives they set are also sufficient to give effect to the wider

objectives and policies of the NPS (such as the requirements to support life-supporting capacity, and to maintain or improve overall water quality).

Councils can also derive their own values, besides the ones provided in Appendix 1, to reflect what is important to the local community.

The value descriptions in Appendix 1 are intended to guide community and council discussions on what is considered important (valued) for water bodies in each region. The national value descriptions do not imply legal rights or prioritise certain values above others. Appendix 1 contains both intrinsic and amenity/economic values. Intrinsic values of fresh water are substantial in themselves and not subordinate to economic values of fresh water for potential use for people and community well-being. At a national level it is not possible to prioritise individual activities and values, given the range of local circumstances and considerations that might apply. It is for regional communities, facilitated by regional councils, to consider values and priorities locally and determine how to respond to those values at a local level.

Appendix 2

Purpose of Appendix 2

The tables of attributes with attribute states in Appendix 2 are intended to support a consistent approach to the setting of freshwater objectives in relation to the national values in Appendix 1. For those values that have been identified as being likely to be relevant nationwide, Appendix 2 sets out some of the water quality attributes that need to be managed to provide for each value. This is intended to:

- prevent unnecessary cost and duplication that would be caused by councils independently developing and testing their own technical information
- allow local discussions to focus on community values and the impacts of decisions, rather than on debating the validity of the science and the technical detail of how a value is measured.

Note that all the attributes currently in Appendix 2 are compulsory as they all relate to the compulsory values, but this is not an exhaustive list; work is ongoing to develop additional attributes relating to the compulsory values, and to develop attributes relating to the other, non-compulsory national values in Appendix 1.

The matters that were considered before including an attribute in Appendix 2 of the Freshwater NPS 2014 included:

a. link to the National Value
    i. is the attribute required to support the value?
    ii. does the attribute represent the value?
b. measurement and band thresholds
    i. are there established protocols for measurement of the attribute?
    ii. do experts agree on the summary statistic and associated time period?
    iii. do experts agree on thresholds for the numerical bands and associated band descriptors?

c. relationship to limits and management

   i. do we know what to do to manage this attribute?

   ii. do we understand the drivers associated with the attribute?

   iii. do quantitative relationships link the attribute state to resource use limits and/or management interventions?

d. evaluation of current state of the attribute on a national scale

   i. what do we know about the current state of the attribute at a national scale?

   ii. is there data of sufficient quality, quantity and representativeness to assess the current state of the attribute on a national scale?

e. Implications of including the attribute in the National Objectives Framework

   i. Do we understand or can we estimate the extent (spatial), magnitude, and location of failures to meet the proposed bottom line for the attribute on a national scale?[15]

How Appendix 2 is to be used

The attributes in Appendix 2 form the basis for setting freshwater objectives. All of the attributes currently in Appendix 2 apply to the compulsory national values and must be used to set freshwater objectives in plans if they are applicable to the freshwater body type.

In setting a freshwater objective, the current state should first be established. Following discussions with the community, a decision should be made as to whether to maintain or improve on the current state. The freshwater objective is set accordingly, either within the current band or in the band above if improvement to that degree is sought.

Note that under Policy CA2(e)(iia), maintaining means setting freshwater objectives in the same attribute band as current state. This means if current water quality is at the top of a band, a freshwater objective could be set at the bottom of that band and still be considered to be maintained. However, councils should be transparent about the options with their communities. The purpose is not to allow for degradation but to provide some flexibility where communities and councils consider it appropriate.

Where a national value (other than a compulsory value) is chosen for a freshwater management unit and Appendix 2 contains suitable attributes for that value these should be used. Regional councils should also identify any other attributes that are not in Appendix 2 that are relevant to achieving the identified values and include these as freshwater objectives.

Refer to *A Draft Guide to Attributes in Appendix 2 of the National Policy Statement for Freshwater Management 2014* for more detail on Appendix 2.

[15] Regulatory Impact Statement: Amendments to the National Policy Statement for Freshwater Management 2011.

Appendix 3

Appendix 3 is discussed under Policy CA3(b) of this guide and Policy CB3(c) of *A Draft Guide to Monitoring*. Refer to these sections for detail.

Appendix 4

Appendix 4 is discussed under Policy CA4 of this guide. Refer to this section for detail.

Appendix 5 and 6

Appendix 5 and 6 will be discussed in the guidance on swimming currently being prepared by the Ministry. Refer to this guidance for detail once available.

7 References

A number of technical, guidance and background reports for freshwater management are available at *http://www.mfe.govt.nz/fresh-water/national-policy-statement/supporting-impact-papers-nps*. Of particular relevance are the following reports:

Biggs BJF. 2000a. Eutrophication of streams and rivers: dissolved nutrient chlorophyll relationships for benthic algae. *Journal of the North American Benthological Society* 19, 17–31.

Biggs BJF. 2000b. *New Zealand Periphyton Guideline: detecting, monitoring and managing enrichment of streams*. Wellington; Ministry for the Environment.

Biggs BJF, Kilroy C. 2000. *Stream periphyton monitoring manual*. Published by NIWA for the Ministry for the Environment.

Department of Conservation. 2010. *New Zealand Coastal Policy Statement 2010*. Wellington: Department of Conservation.

Land and Water Forum. 2010. *Report of the Land and Water Forum: A Fresh Start for Fresh Water*. Wellington: Land and Water Forum.

Land and Water Forum. 2012. *Second Report of the Land and Water Forum: Setting Limits for Water Quantity and Quality, and Freshwater Policy- and Plan-Making Through Collaboration*. Wellington: Land and Water Forum.

Land and Water Forum. 2012. *Third Report of the Land and Water Forum: Managing Water Quality and Allocating Water*. Wellington: Land and Water Forum.

Lessard J, Hicks DM, Snelder TH, Arscott DB, Larned ST, Booker D, & Suren AM. 2012. Dam Design can Impede Adaptive Management of Environmental Flows: A Case Study from the Opuha Dam, New Zealand. *Environmental Management*, 1–15.

Matheson F, Quinn J, Hickey C. 2012. *Review of the New Zealand instream plant and nutrient guidelines and development of an extended decision-making framework: Phases 1 and 2 final report*. Prepared for the Ministry of Science & Innovation Envirolink Fund. NIWA Client Report No: HAM2012-081.

Ministry for the Environment. 1998. *Flow Guidelines for Instream Values – Volume A*. Wellington: Ministry for the Environment.

Ministry for the Environment. 1998. *Flow Guidelines for Instream Values – Volume B*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2008. *Draft Guidelines for the Selection of Methods to Determine Ecological Flows and Water Levels*. Prepared for the Ministry for the Environment by Beca Infrastructure Ltd. Wellington: Ministry for the Environment.

Ministry for the Environment. 2010. *Report and Recommendations of the Board of Inquiry into the Proposed National Policy Statement for Freshwater Management*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2013. *Report of the National Objectives Framework Reference Group*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2013. *Freshwater reform: 2013 and beyond*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2013. *Proposed amendments to the National Policy Statement for Freshwater Management 2011: A discussion document*. Wellington: Ministry for the Environment.

Norton N, Snelder T, Rouse H. 2010. *Technical and scientific considerations when setting measurable objectives and limits for water management*. Prepared for the Ministry for the Environment. Christchurch: National Institute of Water and Atmospheric Research Ltd.

Rouse HL, Horrell G, Depree C, Rajanayaka C, Cooke J, Giorgetti A, Collins D, Norton N, Snelder TH, Fraser C. 2013. *Regional Council Freshwater Management Methodologies: Accounting Systems and Limit Setting*. NIWA Client Report CHC2013-077. Prepared for the Ministry for the Environment. Christchurch: National Institute of Water and Atmospheric Research Ltd.

Snelder TH, Biggs B, Kilroy C, Booker J. 2013. *National Objective Framework for periphyton*. NIWA Client Report CHC2013-122, Prepared for Ministry for the Environment.

Snelder TH, Booker DJ, Quinn JM, Kilroy C. 2014. Predicting periphyton cover frequency distributions across New Zealand's rivers. *Journal of the American Water Resources Association*, 50(1) 111–127.