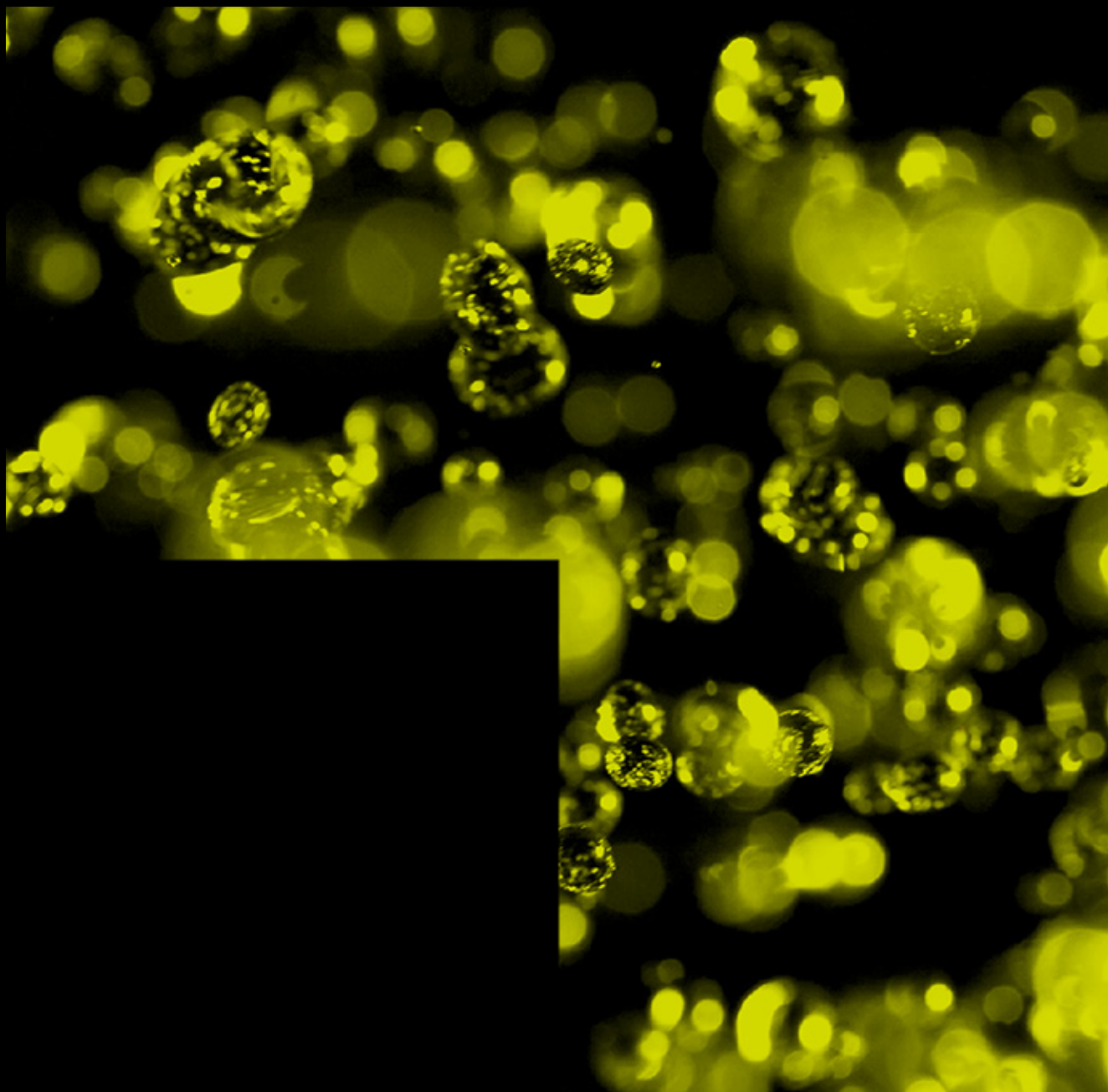


ACTION FOR HEALTHY WATERWAYS

Section 32 Evaluation

Ministry for the Environment






DOCUMENT CONTROL RECORD

CLIENT	Ministry for the Environment
PROJECT	Action for healthy waterways
HG PROJECT NO.	1020-147658-01
HG DOCUMENT NO.	R001v3-AK147658-01-final-22July2020
DOCUMENT	Section 32 Evaluation

ISSUE RECORD

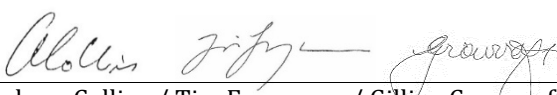
DATE OF ISSUE	22 July 2020
STATUS	Final

ORIGINATOR




Gillian Crowcroft / Glen Cooper / Mary McConnell / Adriene Grafia

REVIEWED



Andrew Collins / Tim Fergusson / Gillian Crowcroft

APPROVED FOR ISSUE



Andrew Collins

OFFICE OF ORIGIN

Auckland

TELEPHONE

09 917 5000

EMAIL

g.crowcroft@harrisingrierson.com

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APPENDICES

Appendix 1	Section 32
Appendix 2	Relatedness between Part 3 NPS-FM 2020 and NPS-FM 2014 (amended 2017)

KEY TERMINOLOGY AND ABBREVIATIONS USED

ABBREVIATION	
CMA	Coastal Marine Area
FMU	Freshwater Management Unit
IAP	Freshwater Independent Advisory Panel
MBIE	Ministry of Business, Innovation and Employment
Ministry or MfE	Ministry for the Environment
NES	National Environmental Standards
NES-F	National Environmental Standards for Freshwater 2020
NES-PF	National Environmental Standards for Plantation Forestry 2018
NOF	National Objectives Framework
NPS	National Policy Statement
NPS-IB	Proposed National Policy Statement for Indigenous Biodiversity
NPS-FM 2011	National Policy Statement for Freshwater Management 2011
NPS-FM 2014	National Policy Statement for Freshwater Management 2014
NPS-FM 2014 (amended 2017)	National Policy Statement for Freshwater Management 2014: Updated August 2017 to incorporate amendments from the National Policy Statement for Freshwater Amendment Order 2017
NPS-FM 2020	National Policy Statement for Freshwater Management 2020
NPS-UD	National Policy Statement on Urban Development Capacity
NZCPS	New Zealand Coastal Policy Statement
RIA	Regulatory Impact Assessment (may also referred to as Regulatory Impact Assessment)
RIS	Regulatory Impact Statement
RMA	Resource Management Act 1991
SEV	Stream Ecological Valuation
TERM	
Reference should first be made to the RMA and NPS-FM (2020) for interpretation of terms.	
Taonga	A treasured item. It can be tangible or intangible.
Te Mana o Te Wai	Fundamental concept of the NPS-FM as defined in clause 1.3 of the NPS-FM 2020.

REFERENCES TO THE NPS-FM & NES-F

The NPS-FM was first approved and gazetted in 2011 and has subsequently been changed (2014) and amended (2017). To avoid confusion this report identifies each NPS-FM version by its year of approval; i.e. NPS-FM 2011, NPS-FM 2014, NPS-FM 2014 (amended 2017) and NPS-FM 2020.

The NPS-FM 2020 refers to the latest change to the policy statement made through the Government's *Action for healthy waterways* package and, together with the NES-F, is the focus of this section 32 report.

At the time of drafting this report the Minister for the Environment had not yet approved the proposed NPS-FM 2020 and NES-F. This evaluation is therefore based on the July 2020 drafts of the two proposals although the language used assumes that this report is published after the proposals have been approved; i.e. the NPS-FM 2020 and NES-F are not referred to as proposals rather in the context of issued instruments.

EXECUTIVE SUMMARY

The Minister for the Environment has proposed a new National Policy Statement for Freshwater Management (NPS-FM 2020) and a National Environmental Standard for Freshwater (NES-F). This report, prepared by Harrison Grierson Consultants, provides a section 32 evaluation of the two legislative instruments in accordance with the provisions in the Resource Management Act (RMA).

The evaluation draws on the analysis undertaken and published by the Ministry for the Environment (Ministry, MfE), reports from advisory groups and panels and submissions received during the consultation period in 2019. This section 32 report is intended to be read alongside these reports, particularly the Regulatory Impact Assessments.

The NPS-FM 2020 and NES-F are part of the wider Government *'Action for healthy waterways'* package of freshwater proposals to stop further degradation of New Zealand's freshwater resources and to make measurable progress to reversing past damage within a generation. The broader Government package includes RMA amendments and section 360 regulations. However, this report focusses on just the NPS-FM 2020 and NES-F.

The NPS-FM 2020 is an amending proposal and represents further progression of national direction to local government for water management. The new NPS-FM is a substantive change from the NPS-FM 2014 (amended 2017) which is driven from the top down. The concept of Te Mana o Te Wai has been clarified, strengthened, and woven throughout the NPS-FM.

The changes to the NPS-FM are significant but at its core are familiar provisions from previous NPS-FM iterations. Some policies are largely carried across from the previous NPS-FM, some policies have a degree of change and some are new. The focus of this report is on what has changed between the version of the NPS-FM 2014 that was amended in 2017 and the NPS-FM 2020. Previous section 32 analysis for the NPS-FM provisions that remain largely unchanged are still valid.

The NES-F is a new instrument that has followed the same development process as the NPS-FM 2020. Consequently, all the regulations are new, and all have been evaluated in accordance with the relevant provisions of section 32 of the RMA.

The conclusion of this evaluation is that NPS-FM 2020 objective is the most appropriate way to achieve the purpose of the RMA with respect to freshwater. Further, the NPS-FM provisions and the NES-F rules are the most appropriate way of implementing the objective.

1.0 INTRODUCTION

1.1 REPORT PURPOSE

The Minister for the Environment has introduced the National Policy Statement for Freshwater Management 2020 (NPS-FM 2020) and National Environmental Standards for Freshwater (NES-F) under the Resource Management Act 1991 (RMA). The NPS-FM 2020 and NES-F form part of the Government's *'Action for healthy waterways'* policy package.

The purpose of this report is to provide an evaluation of the NPS-FM 2020 and NES-F in accordance with section 32 of the RMA.

Specifically, this report provides:

- An evaluation of the extent to which the objective of the NPS-FM is the most appropriate way to achieve the purpose of the RMA;
- An evaluation of whether the provisions in the NPS-FM 2020 and NES-F are the most appropriate to achieve the objective, including:
 - Identifying other reasonably practicable options for achieving the objective;
 - Assessing the efficiency and effectiveness of the provisions;
- Summarising the reasons for deciding on the provisions; and
- An assessment of benefits and costs of the effects that are anticipated from the implementation of the NPS-FM 2020 and NES-F.

This section 32 evaluation provides a level of detail that corresponds to the scale and significance of the proposals. It seeks to transparently communicate to stakeholders, the community and decision makers the rationale for the NPS-FM 2020 and NES-F and evaluates the likely impacts, benefits, and costs of the proposals. This report draws on the available relevant policy papers, reports, submission feedback and supporting evidence (refer to Section 4.0).

A Regulatory Impact Assessment (RIA) was prepared by the Ministry for the *Action for healthy waterways* package in May 2020. The RIA considers the *Action for healthy waterways* as a holistic package of proposals. It contains a detailed analysis of options and the costs and benefits of the NPS-FM 2020 and NES-F. An interim RIA was prepared prior to 2019 consultation on the proposals. Both the 2019 and 2020 RIAs are available on the Ministry website and should be read together with this report.

This evaluation report was prepared alongside the process to finalise drafting of national direction instruments. To the extent possible, this report reflects the most recent drafting of instruments, which have undergone changes in response to an exposure draft process. There may be small differences between drafting described in this report and the final drafting of the national direction instruments. Notwithstanding, the conclusions in this report are consistent with the final drafting of the national direction instruments.

This report has been prepared by Harrison Grierson Consultants Limited (Harrison Grierson). The addendum has been prepared by the Ministry for the Environment and Ministry for Primary Industry. Harrison Grierson has not been involved in any policy development or drafting of provisions, but rather just in the evaluation of the proposals presented.

1.2 OVERVIEW OF THE ACTION FOR HEALTHY WATERWAYS PACKAGE, NPS-FM 2020 AND NES-F

New Zealand has significant issues with freshwater quality and ecosystem health. Our regulatory and policy approach has not taken a fully integrated approach to address these issues. The Government has set out to address this through a series of initiatives including the '*Essential Freshwater: Healthy Water, Fairly Allocated*' work programme introduced in October 2018.¹ The overarching objectives of the *Essential Freshwater* work programme are to:

1. Stop further degradation of New Zealand's freshwater resources and start making immediate improvements so that water quality is materially improving within five years;
2. Reverse past damage and bring New Zealand's freshwater resources, waterways and ecosystems to a healthy state within a generation; and
3. Address water allocation issues having regard to all interests including Māori and existing and potential new users.

A major part of the *Essential Freshwater* work programme is being delivered through the *Action for healthy waterways* package; a set of new policies, rules and regulations first proposed by the Government in September 2019² and now finalised. The package includes new regulations under section 360 of the RMA, the NPS-FM 2020 and NES-F. Policy development for the third objective is being progressed separately and is not part of the package.

1.2.1 DEVELOPMENT PROCESS AND ADVISORY GROUPS

The *Action for healthy waterways* package was developed through a multi-agency Water Taskforce, including the Ministry and MPI. The package was developed with four specialist advisory groups set up to provide independent advice to the package and the overall *Essential Freshwater* programme³:

- ***Kahui Wai Māori – the Māori Freshwater Forum***: the forum was established to bring perspectives, insights and skills from a wide range of Māori society.
- ***Freshwater Leaders Group***: the group brings together expertise and input from leaders across the primary sector and agribusiness, environmental non-government organisation and other voices from the community.
- ***Science and Technical Advisory Group***: the group oversees the scientific evidence for freshwater policy development. It provides technical advice and plays a role in ensuring the interpretation of the science for policy development.
- ***Essential Freshwater Regional Sector Group***: The Regional Sector Water sub-group brings the voice and views of regional councils to the programme. Regional councils are important because of their links to local communities and their statutory role.

The intention to develop new national direction and policy was signalled to the public through the launch of the overall *Essential Freshwater* work programme in October 2018. Public consultation was undertaken on the *Action for healthy waterways* package between

¹ *Essential Freshwater: Healthy Water, Fairly Allocated*, (2018). Available at <https://www.Ministry.govt.nz/sites/default/files/media/Fresh%20water/essential-freshwater.pdf>

² *Action for healthy waterways - A discussion document on national direction to our essential freshwater*, (2019). Available at <https://www.Ministry.govt.nz/sites/default/files/media/Fresh%20water/action-for-healthy-waterways.pdf>

³ *Action for Healthy Waterways – Decisions on National Direction and Regulations for Freshwater Management Cabinet Paper*, (2020).

5 September and 31 October 2019. Over 17,500 submissions on the proposals were received, far more than any other freshwater consultation. This demonstrates the growing interest New Zealanders have in freshwater management.

An Independent Advisory Panel (IAP) assessed the submissions and recommended detailed refinements to the package to address submitter feedback⁴. The four advisory groups also provided further advice on refinements. The IAP, advisory groups and officials were in broad agreement about policy direction and modifications to the package following consultation. The consensus reflects the solid support for the Government's freshwater objectives that consultation highlighted.⁵

The *Action for healthy waterways* package, including the objective and provisions of the NPS-FM 2020 and NES-F, were amended, and refined in response to feedback received during consultation, from the IAP, advisory groups and in response to the anticipated economic impact of Covid-19. The NPS-FM 2020 and NES-F has been the result of a comprehensive development and iteration process.

1.2.2 THE NPS-FM

The NPS-FM 2020 is a National Policy Statement (NPS) prepared pursuant to sections 45 to 55 of the RMA. The purpose of an NPS is to state the objectives and policies for matters of national significance that are relevant to achieving the purpose of the RMA. It provides direction to local authorities about how to carry out their responsibilities under the RMA when it comes to matters of national significance. Consent authorities must also "have regard to" the relevant provisions of an NPS when considering an application for resource consent.⁶

The NPS-FM 2020 applies to the management of freshwater through a framework that considers and recognises Te Mana o Te Wai as an integral part of freshwater management.⁷ The NPS-FM 2020 requires regional councils to set long-term visions, expressed as objectives, in their regional policy statements, and to adopt objectives, policies, rules (including limits) in their regional plans by 31 December 2024. The sole NPS-FM objective is to ensure that resources are managed in a way that prioritises –

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

To achieve the objective, the NPS-FM 2020 includes a comprehensive package of provisions (policies in Part 2 and implementation approaches in Part 3).

1.2.3 THE NES-F

The NES-F is a National Environmental Standard (NES) prepared pursuant to sections 43 to 44A of the RMA. The purpose of the NES is to set regulations that apply across New Zealand and provide nationally consistent planning requirements for specified activities. The provisions must be consistent with the purpose of the RMA. Local authorities must observe an NES and enforce the observation of the NES. Consent authorities must also "have regard to" the relevant provisions of the NES when considering an application for resource consent⁸.

⁴ Essential Freshwater Report of the Freshwater Independent Advisory Panel, (2020).

⁵ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). pp.4-5.

⁶ Refer to section 104(1)(b)(iii) of the RMA

⁷ Refer to <https://www.Ministry.govt.nz/fresh-water/national-policy-statement/about-nps>

⁸ Refer to section 104(1)(b)(i) of the RMA

The NES-F sets the requirements for carrying out certain activities that potentially cause significant effects on freshwater and freshwater ecosystems. It introduces standards for activities that could lead to loss of wetlands, degradation of rivers, barriers to fish passage, and high-risk farming activities. In many cases, resource consent will be required from local authorities before carrying out regulated activities. The NES-F will have immediate effect and aims to prevent further loss and degradation of freshwater habitats. It will function alongside the provisions of the NPS-FM 2020 to achieve its objective.

1.2.4 HISTORY OF THE NPS-FM

The NPS-FM 2020 replaces previous versions of the NPS-FM⁹ briefly discussed below.

The NPS-FM 2011 was prepared by the Minister for the Environment in 2006 and referred to a Board of Inquiry in 2008. It set out objectives and policies specific to freshwater management. It aimed to drive national consistency in local RMA planning and decision making while enabling appropriate regional flexibility.

The NPS-FM 2011 was amended and replaced in 2014 (NPS-FM 2014). The NPS-FM 2014 introduced the national objective framework (NOF), which specified the process regional councils must use to set freshwater objectives and to apply the freshwater NPS requirements more consistently. Two compulsory values: ecosystem health and human health for recreation and some national bottom lines were introduced.

The NPS-FM 2014 was amended, but not replaced, in 2017 (and therefore is referred to as NPS-FM 2014 (amended 2017)). The 2017 amendments introduced national targets for swimmable lakes and rivers, increased direction for Te Mana o Te Wai in freshwater management and provided direction for monitoring attributes and for consideration of economic well-being.

Councils have made progress in implementing the NPS-FM 2014 (amended 2017), but this has been slower than anticipated and has not succeeded in halting the decline of freshwater ecosystems. Moreover, there have been gaps in key areas such as sediment management and a lack of integrated management. The continuing deterioration of the health of New Zealand's freshwater has led to the ambitious shift in policy direction reflected in the NPS-FM 2020 and retention of the NOF and some other provisions from the NPS-FM 2014 (amended 2017).

1.3 KEY ISSUES

Following consultation with stakeholders, public commentary and input from working groups, the problem statement of the *Action for healthy waterways* package was identified as:

The existing freshwater management framework is not achieving the sustainable management of freshwater resources.

Figure 1 summarises the resulting issues and consequences that have driven the changes to the NPS-FM 2020 and drafting of the NES-F.

Public perceptions of freshwater

In the 2018 New Zealand General Social Survey¹⁰, 80.2% of respondents expressed the view that there was a problem with the state of New Zealand's rivers, lakes, streams, wetlands, and aquatic life. Half of the respondents thought farming activities were the main cause of the issue while the second most commonly stated cause was sewage and storm water discharges (at 16.6%).

⁹ For a general overview of the NPS-FM history refer to <https://www.Ministry.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management/history>

¹⁰ Available at <https://www.stats.govt.nz/information-releases/wellbeing-statistics-2018>

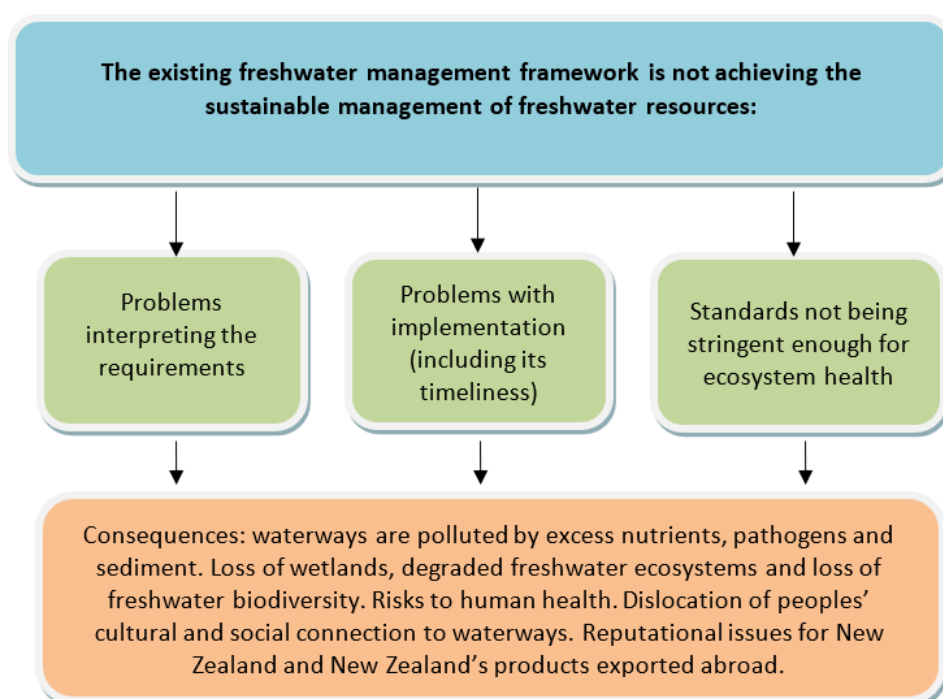


FIGURE 1: OVERARCHING ISSUES AND THEIR CONSEQUENCES (SECTION 2.6 REGULATORY IMPACT ANALYSIS ACTION FOR HEALTHY WATERWAYS, 2020).

Water Quality

Water quality continues to decline across a number of indicators in many parts of New Zealand. In their most recent assessment, Environment Aotearoa 2019 found that:

*"there is clear evidence that waterways in our farming areas have markedly higher pollution by nutrients (nitrogen and phosphorus), microbial pathogens, and sediment than waterways in native catchments."*¹¹

Waterways are polluted by excess nutrients, pathogens, and sediment. Many have been physically changed, for example urban streams have been piped and other waterways have been dammed. Pathogens enter waterways in animal excreta, polluted stormwater and from aging, failing, sewage pipes.

Land-use effects are now the dominant cause of freshwater degradation, yet there are few controls on land use to improve water quality.

Recreational water contact was cited in 2017 as a risk factor for campylobacteriosis (6482 cases), salmonellosis (1,119 cases), giardiasis (1,648 cases), and cryptosporidiosis (1,192 cases). Health professionals estimate the number of cases to be at least ten times higher than the notified cases¹².

Ecosystem health

Ecosystem health is a broad concept that includes habitat, aquatic life, and ecological processes – as well as water quality and quantity.

Continued land use intensification and population growth has placed freshwater, and the ecosystems it sustains, under severe threat. For example, synthetic nitrogen fertiliser use increased 772% from 1990 to 2018, 94% of urban streams and 82% of streams in

¹¹ Ministry for the Environment and StatsNZ. Environment Aotearoa, (2019). p.47.

¹² ESR. Notifiable diseases in New Zealand Annual Report 2017, (2019). Available at https://surv.esr.cri.nz/PDF_surveillance/AnnualRpt/AnnualSurv/2017/2017AnnualNDRReport_FINAL.pdf

pastoral areas are not suitable for swimming at least some of the time, 76% of native fish are threatened or at risk of extinction, and New Zealand has lost more than 90% of our wetlands¹³. These negative impacts on freshwater have contributed to major degradation of our estuaries.

Waterways in pastoral areas make up a large proportion of New Zealand's rivers and lakes¹⁴. While urban waterways make up less than one per cent of New Zealand's rivers and lakes, they also face significant issues with ecosystem health.

Systemic problems with existing freshwater legislation

Regional councils have functions to control land use for the purposes of maintaining and enhancing water quality, maintaining the quantity of water in water bodies and the maintenance and enhancement of ecosystems in water bodies (section 30(1)(c) of the RMA). However, there is slow adoption of quantitative enforceable water quality limits in most regional plans, and slow application of these limits to resource users. RMA mechanisms for Treaty partnership with Māori in freshwater governance have not been widely utilised. Direction to engage with iwi and hapū has been poorly implemented in some regions¹⁵.

The process for giving effect to the NPS-FM has been long and complex. It requires input from multiple disciplines, and reconciliation of the community's sometimes conflicting values. Since 2011 councils have made slow progress in implementing the NPS-FM and have not succeeded in halting the decline of our freshwater ecosystems; and, moreover, has gaps in key areas¹⁶.

1.4 STRUCTURE OF THE REPORT

Sections 2 and 3 of this report provide the statutory context for the preparation of the NPS-FM and NES-F and the requirements for preparing and publishing evaluation reports for the proposals.

Section 4 provides references to the discussion documents, cabinet paper and regulatory impact statements that collectively provide the evidence base that underpins the NPS-FM 2020 and NES-F.

The NPS-FM 2020 objective is evaluated in Section 5.

Sections 6 to 8 contain the evaluation of the provisions of the NPS-FM 2020 and NES-F in terms of achieving the objective. Section 6 discusses the approach taken to the evaluation of provisions, including a discussion of high level alternative approaches and reasonably practicable options for achieving the objective.

Section 7 sets out the substantive evaluation of the efficiency and effectiveness of the NPS-FM 2020 provisions while Section 8 sets out the same for NES-F provisions.

As explained in section 1.2, it is important to note that the *Action for healthy waterways* package was approached, researched, and consulted on as a package of proposals to address three objectives. The NPS-FM 2020 and NES-F are just two of the instruments that will deliver the outcomes sought. The evaluation of proposals, irrespective of the delivery mechanism, is bound as packages within key documents (Section 4.1).

¹³ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.3.

¹⁴ Ministry for the Environment and StatsNZ. Environment Aotearoa, (2019). p.65.

¹⁵ Ministry for the Environment. National Policy Statement for Freshwater Management Implementation Review: National Themes Report. Wellington, Ministry. (2020)

¹⁶ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.9.

For this section 32 evaluation the supporting evidence, research and information has been repackaged to enable a provision by provision evaluation and accordance with Ministry's section 32 guidance.

The general approach to provision assessment is:

- Policy by policy as they appear in the NPS-FM;
- Holistically evaluating the NPS-FM 2020 where there is a good nexus with requirements in Part 3 or elsewhere (either at the sub part, section, clause or Appendix level); and
- Part by Part as they appear in the NES-F.

References to the source of more detailed information, that should be read in conjunction with this report, are made in footnotes.

2.0 STATUTORY CONTEXT

2.1 PURPOSE AND PRINCIPLES OF THE RMA

The NPS-FM 2020 provides national direction on the management of freshwater to achieve the purpose of the RMA.

Section 5 of the RMA states the purpose of the RMA as follows:

5 Purpose

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while-

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Section 6 of the RMA states the matters of national importance that must be recognised and provided for in achieving the purpose of the RMA. The matters of National Importance that are most relevant to freshwater management are:

6 Matters of National Importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (e) the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*
- (g) the protection of protected customary rights:*

Section 7 sets out other matters that must be given particular regard to in managing the use, development and protection of natural and physical resources in achieving the purpose of RMA. The matters of most relevance to freshwater management are:

7 Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

- (a) kaitiakitanga:*
 - (aa) the ethic of stewardship:*
- (b) the efficient use and development of natural and physical resources:*
 - (ba) the efficiency of the end use of energy:*

- (c) the maintenance and enhancement of amenity values:*
- (d) intrinsic values of ecosystems:*
- (f) maintenance and enhancement of the quality of the environment:*
- (g) any finite characteristics of natural and physical resources:*
- (h) the protection of the habitat of trout and salmon:*
- (i) the effects of climate change:*
- (j) the benefits to be derived from the use and development of renewable energy.*

The principles of the Treaty of Waitangi (Te Tiriti o Waitangi) must be taken into account in achieving the purpose of this Act.

8 Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

2.2 DEVELOPING NATIONAL POLICY STATEMENTS AND STANDARDS

2.2.1 NATIONAL POLICY STATEMENTS

The RMA sets out clear requirements for national directions relating to their purpose, scope and development process.

The requirements for preparing an NPS are detailed in sections 45-55 of the RMA. Under section 45A(1) an NPS must state objectives and policies for matters of national significance that are relevant to achieve the purpose of the RMA. It may also state:

Section 45A(2)

- (a) the matters that local authorities must consider in preparing policy statements and plans:*
- (b) methods or requirements in policy statements or plans, and any specifications for how local authorities must apply those methods or requirements, including the use of models and formulae:*
- (c) the matters that local authorities are required to achieve or provide for in policy statements and plans:*
- (d) constraints or limits on the content of policy statements or plans:*
- (e) objectives and policies that must be included in policy statements and plans:*
- (f) directions to local authorities on the collection and publication of specific information in order to achieve the objectives of the statement:*
- (g) directions to local authorities on monitoring and reporting on matters relevant to the statement...*
- (h) any other matter relating to the purpose or implementation of the statement.*

Regional policy statements, regional plans and district plans are all required to give effect to an NPS.

2.2.2 NATIONAL ENVIRONMENTAL STANDARDS

The requirements for preparing a NES are outlined in sections 43-44A of the RMA. An NES may prescribe technical standards, methods and/or requirements (section 43(1)) for land use and subdivision, use of water bodies and coastal marine area, water take and use, discharges or noise.

Under section 43A an NES may prohibit an activity or allow an activity. Where an NES permits an activity, under section 43A(4) it -

- (a) may state that a resource consent is not required for that activity; or*
- (b) may do one or both of the following:*
 - (i) State an activity is permitted, but only on the terms or conditions specified in the standard; and*
 - (ii) Require compliance with the rules in a plan or proposed plan as a term or condition.*

An NES must not state that an activity is a permitted activity if that activity has significant adverse effects on the environment (section 43A(3)). An NES can also restrict the granting of a resource consent to matters specified in an NES (section 43A(1)(c)). Under section 43A(6), an NES that allows a resource consent to be granted for an activity may state that the activity is a controlled, restricted discretionary, discretionary or non-complying activity. It may also state the matters of control or discretion.

2.3 COMBINED PROCESS FOR NATIONAL DIRECTION

The RMA sets out a single process for preparing an NPS and NES under section 46A. If a Minister proposes to issue an NPS and NES, under section 46A(3), the Minister must either -

- (a) Follow the requirements set out in sections 47 to 51; or*
- (b) Establish and follow a process that includes the steps described in subsection (4).*

For the NPS-FM 2020 and NES-F, the Minister of Environment established a process under section 46A(3)(b) that meets the statutory requirements of 46A (4).¹⁷

Under 46A(3)(b) the process must include the following:

- (a) the public and iwi authorities must be given notice of—*
 - (i) the proposed national direction; and*
 - (ii) why the Minister considers that the proposed national direction is consistent with the purpose of the Act; and*
- (b) those notified must be given adequate time and opportunity to make a submission on the subject matter of the proposed national direction; and*
- (c) a report and recommendations must be made to the Minister on the submissions and the subject matter of the national direction; and*
- (d) the matters listed in section 51(1) must be considered as if the references in that provision to a board of inquiry were references to the person who prepares the report and recommendations.*

The general process undertaken to develop the *Action for healthy waterways* package as outlined in section 1.2.1 of this report aligns with the requirements set out in section 46A(3)(b).

¹⁷ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.34.

2.3.1 INTERACTIONS WITH OTHER NATIONAL DIRECTION

National directions under the RMA include NPS, NES, national planning standards (planning standards) and section 360 regulations. Collectively, they support decision making on resource management issues and on achieving the purpose of the RMA.

The NPS-FM 2020 and NES-F sit within a framework of national direction instruments¹⁸ (Table 1).

2.4 TE TIRITI O WAITANGI / TREATY OF WAITANGI

Freshwater is a precious and limited resource, a taonga of huge significance, and is of particular importance to Māori. The Crown has a duty to protect Treaty settlements. It also has broad responsibilities to protect taonga, the exercise of tino rangatiratanga and Kāwanatanga, and the principles of the Treaty.

The *Action for healthy waterways* package is about strengthening the concept of Te Mana o Te Wai, as outlined in clause 1.3 of the NPS-FM 2020, and improving ecosystem health and water quality of our water bodies in order to provide further protection for freshwater taonga. Achieving this requires a balance between setting directive policies and rules nationally and providing flexibility for matters to be addressed locally.

The package recognises the kaitiaki role of tangata whenua, and the important relationships that iwi, hapū and whānau have with freshwater. The package incorporates Te Ao Māori into future freshwater management and planning processes.

Consistency with Treaty of Waitangi settlements

It is not intended that the NPS-FM 2020 and NES-F will affect Treaty settlements and arrangements. When implementing policies, the Crown and councils will need to engage with iwi and hapū who have interests and settlements covering certain areas to ensure that implementation of the policies is not inconsistent with the settlements.

As required under settlement legislation, policies in the NPS-FM 2020 that may impact Te Awa Tupua – The Whanganui River and Ngāti Rangi settlement have been considered and found not to have direct impacts on these settlements¹⁹.

Not all Māori rights and interests are addressed in the *Action for healthy waterways* package

The NPS-FM 2020 and NES-F do not address all Māori rights and interests in freshwater discussed in the Wai 2358 report or raised by iwi/hapū and Māori in discussions with government about freshwater management. During public consultation, iwi/hapū and Māori raised issues that were sometimes described as rights and interests (such as governance, proprietary interests and allocation).

These issues were not all able to be addressed by the NPS-FM 2020 and NES-F. There is a recognised need to better acknowledge Māori rights and interests in water through regulatory reform and Treaty settlements. The Government will continue to work with will Māori in this space to address these issues

¹⁸ Refer to <https://www.Ministry.govt.nz/rma/national-direction/national-direction-instruments>

¹⁹ RIA Action for healthy waterways Part I: Summary and Overall impacts, (2020). p.10.

TABLE 1: NATIONAL DIRECTION INSTRUMENTS

NATIONAL DIRECTION INSTRUMENT	STATUS
NATIONAL POLICY STATEMENTS	
New Zealand Coastal Policy Statement 2010	In effect
National Policy Statement on Electricity Transmission 2008	
National Policy Statement for Renewable Electricity Generation 2011	
National Policy Statement for Freshwater Management 2014 (with amendments in 2017) – will be replaced by the NPS-FM 2020	
National Policy Statement on Urban Development Capacity 2016	
National Policy Statement for Freshwater Management 2020	Subject of this report
Proposed National Policy Statement for Urban Development ²⁰	In development
Proposed National Policy Statement for Highly Productive Land	
Proposed National Policy Statement for Indigenous Biodiversity	
Proposed amendments to the National Policy Statement for Renewable Electricity Generation	
NATIONAL ENVIRONMENTAL STANDARDS	
National Environmental Standards for Air Quality 2004	In effect
National Environmental Standards for Sources of Human Drinking Water 2007	
National Environmental Standards for Telecommunications Facilities 2016 (NES-TF)	
National Environmental Standards for Electricity Transmission Activities 2009	
National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011	
National Environmental Standards for Plantation Forestry 2018	
National Environmental Standard for Freshwater	Subject of this report
Proposed amendments to the National Environmental Standard for Sources of Human Drinking Water	In development
Proposed National Environmental Standards for Wastewater Discharges and Overflows	
Proposed amendments to the National Environmental Standards for Air Quality 2004	
Proposed National Environmental Standards for the Outdoor Storage of Tyres (NES-OST)	

²⁰ This will replace the NPS on Urban Development Capacity 2016, which is currently in effect

NATIONAL DIRECTION INSTRUMENT	STATUS
Proposed National Environmental Standards for Marine Aquaculture	
NATIONAL PLANNING STANDARDS	
National Planning Standards 2019	In effect
REGULATIONS UNDER SECTION 360	
Resource Management (Transitional, Fees, Rents and Royalties) Regulations 1991	In effect
Resource Management (Exemption) Regulations 1996	
Resource Management (Marine Pollution) Regulations 1998	
Resource Management (Infringement Offences) Regulations 1999	
Resource Management (Forms, Fees and Procedure) Regulations 2003	
Resource Management (Discount of Administrative Charges) Regulations 2010	
Resource Management Measurement and Reporting of Water Takes) Regulations 2010	
Resource Management (Forms, Fees, and Procedure for Auckland Combined Plan) Regulations 2013	
Resource Management (Network Utility Operations) Regulations 2016	
Resource Management (Exemption) Regulations 2017	
Proposed Stock Exclusion section 360 Regulations	Part of <i>Action for healthy waterways</i> package, but not this report

2.4.1 TREATY OF WAITANGI SETTLEMENT OBLIGATIONS

Analysis has not identified inconsistencies between policies introduced by the NPS-FM 2020 and Treaty settlements²¹. Councils will still need to comply with their Treaty settlement obligations when implementing freshwater policies.

The Ministry must engage with iwi and hapū during NPS-FM 2020 implementation to ensure any potential impacts are identified and managed appropriately. In particular, the Ministry and councils will need to engage with iwi and hapū that have interests and settlements covering certain areas, so that implementation is not inconsistent with the settlements. Several settlements require specific consideration for how any policy changes may affect the settlement. These are the Waikato and Waipā River iwi settlements, Te Awa Tupua, and Ngāti Rangi.

Ngāti Rangi and Te Awa Tupua rohe together encompass the entire Whanganui River. However, the hydropower exception policy area of the NPS-FM 2020 (Part 3, sub-part 3) will require ongoing engagement with iwi by the Ministry to ensure its implementation meets settlement obligations.

Te Ture Whaimana o te Awa o Waikato – The Vision and Strategy for the Waikato River has an overarching purpose which is to restore and protect the health and well-being of the Waikato and Waipā Rivers²². Te Ture Whaimana o te Awa o Waikato prevails over any inconsistent provision in an NPS and prevails over an NES if it is more stringent than the standard²³. Therefore, potentially inconsistent provisions, or less stringent standards in the instruments, would not apply to the Waikato River catchment.

The NPS-FM 2020 hydropower exceptions allows councils to set target attribute states below the national bottom lines (while ensuring water quality is maintained or improved). If a council chooses to maintain the status quo, with no improvement, this could result in a potential breach of settlement arrangements, which aim to restore the well-being and health of the river.

When giving effect to the NPS local authorities will still have to comply with all relevant treaty settlement obligations that apply in their regions, regardless of whether they are considering setting a target attribute state below a national bottom line (NPS-FM 2020 clause 3.31(3) & 3.33(3)).

Ngāi Tahu has statutory acknowledgements relating to three of the five proposed hydro scheme exceptions. These interests will need to be considered through implementation and engagement.

Waitangi Tribunal's report on its inquiry into freshwater and geothermal resources

On 28 August 2019, the Waitangi Tribunal issued a report on its inquiry into freshwater and geothermal resources (Wai 2358).

The policies of the NPS-FM 2020 are consistent with Tribunal recommendations on a number of issues including: requirement to regional councils to 'give effect to' Te Mana o Te Wai; introducing a compulsory mahinga kai value; introducing measures to protect wetlands; taking urgent action on stock exclusion and native fish habitat protection, including more stringent bottom lines; and introducing interim measures to halt degradation of water bodies²⁴.

²¹ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.7.

²² <https://waikatoriver.org.nz/wp-content/uploads/2019/03/Vision-and-Strategy-Reprint-2019web.pdf>

²³ RIA Action for healthy waterways Part I: Summary and Overall impacts, (2020). p.10

²⁴ ibid

3.0 SECTION 32

3.1 REQUIREMENTS OF SECTION 32

Section 32 requires any person developing a policy or regulatory instrument under the RMA to carry out an evaluation of the appropriateness of the proposal in achieving the purpose of the RMA (Appendix 1). The evaluation examines appropriateness of the proposal in two ways:

1. The extent to which the objectives of the proposal are the most appropriate way to achieve the purpose of the RMA²⁵; and
2. Whether the provisions in the proposal are the most appropriate way to achieve the objectives²⁶. The provisions are the specific policies and methods that implement, or give effect to, the objectives of the proposal.

The evaluation must clearly identify the best practicable options for giving effect to the proposed objectives and provide an assessment of the efficiency and effectiveness of each of the proposed provisions. This includes consideration of:

1. The risk of acting or not acting; and if there is uncertain or insufficient information; and
2. The benefits and costs of the environmental, economic social and cultural effects that are anticipated from the implementation of the provisions, including opportunities for, or effects on, economic growth and employment.

The reasons why the selected option was deemed to be more appropriate must also be included.

The purpose of this section 32 evaluation report is to detail the policy analysis undertaken by the Ministry in preparing the NPS-FM 2020 and NES-F. The evaluation report provides the detail needed to inform both submitters and decision makers of the analysis and outcomes following consultation on draft versions of the documents completed in 2019.

The NPS-FM 2020 is as an amending proposal and replaces the NPS-FM 2014 (amended 2017). Provisions that have been retained, or changed to a minor degree, from the NPS-FM 2014 (amended 2017) are evaluated in less detail and reference is made to the section 32 evaluations for those provisions.

The NES-F is a new proposal. The provisions of the NES-F are fully evaluated in accordance with section 32.

3.2 APPROACH TO COST BENEFIT ANALYSIS

The NPS-FM 2020 and NES-F are part of the wider *Action for healthy waterways* policy package. The RIA and other relevant evidence and reports are structured according to the package rather than specific provisions of the instruments evaluated in this report. A degree of judgment has been required to re-package the substantive impact assessment and evaluate the efficiency of the proposed provisions in the NPS-FM 2020 and NES-F.

The RIA and supporting documents present the costs and benefits assessments for *Action for healthy waterways* and should be read together with this report. This section 32

²⁵ Section 32(1)(a) of the RMA

²⁶ Section 32(1)(b) of the RMA

report draws on, but does not replicate, the depth of assessments in the RIA and supporting document.

The following provides an overview of the substantive cost benefit approach^{27 28}.

The Ministry assessed the costs and benefits for the wider *Action for healthy waterways* proposals in two stages. The first stage was before consultation in late 2019 and the second stage followed consultation.

The key objectives of the stage two assessment were to:

- provide monetised estimates of costs and benefits where possible, but not to be constrained to report only monetised impacts;
- provide estimates of the likely impacts of nutrient limits (nitrogen and phosphorous) and, in particular, monetised estimates of the costs of these policies to the agricultural sector; and
- review impact assessments done prior to October 2019, referring to feedback provided by advisors and submitters.

A key limitation to the assessment was data availability. In many areas, there were significant data limitations, particularly a lack of publicly available data about farm-level nutrient losses, farm management practices and farm finances for different types of farms. This highlighted the importance and value of considering non-quantified, qualified impacts as well as monetised impacts when appraising policies. If reliance were placed entirely on monetised impacts, important benefits and costs would be overlooked when decisions were made.

The NPS-FM 2020 requires significant reduction in pollution, from both urban and rural land uses, bringing sizeable benefits and costs. However, because the requirements are not yet implemented the impacts are yet to be seen. The impacts of the proposals and the final package were assessed assuming full compliance has been achieved.

The Ministry assessed the impacts of individual policies, as well as the cumulative impacts of policies, that will have significant environmental and economic effects. This work was supported by the contribution of New Zealand's leading research institutes, universities, and private sector organisations. Numerous studies of national, catchment and farm-level policy impacts on key groups (Māori, farmers and regional councils) and analysis of industry, regional and national costs and benefits were completed. Reports were peer reviewed to ensure the quality of the data used to inform advice. Many of these reports can be found on Ministry's website (refer Section 4.0).

The *Action for healthy waterways* policy package includes immediately effective regulation and long-term direction for regional planning. As a result, the costs and benefits of different components will be realised over different timescales and, in some cases, are concentrated in specific regions.

Action for healthy waterways is estimated to provide a net cumulative benefit – that is the benefits minus the costs – of \$193 million per annum over 30 years (\$3.8 billion PV). Estimated benefits are approximately \$359 million per annum (about \$7.0 billion PV), and estimated costs are approximately \$166 million per annum (about \$3.2 billion PV). The PV values assume constant annual impact (in constant values) and a 3% discount

²⁷ Ministry for the Environment. *Action for healthy waterways: Overview of the impact analysis undertaken to inform decisions on freshwater policy, with a focus on monetised costs*. Wellington: Ministry for the Environment. (2020).

²⁸ *Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper*, (2020).

rate, and it is measured in today's values over 30 years.²⁹ The cost and benefits on the community in achieving the Objective will be a fraction of the total *Action for healthy waterways* costs.

3.3 SCALE AND SIGNIFICANCE OF THE PROPOSAL

Section 32(1)(c) of the RMA states that the evaluation must contain a level of detail that corresponds to the scale and significance of the effects that are anticipated from the implementation of the proposal. The scale and significance are key factors influencing the level of detailed required for this evaluation.

Overall, Table 2 assesses the scale and significance³⁰ of the proposal as being of **high significance**.

²⁹ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020).

³⁰ Based on information in the RIA Action for healthy waterways Part I: Summary and Overall impacts, (2020) and Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020).

TABLE 2: ASSESMENT OF THE SCALE AND SIGNIFICANCE OF THE NPS-FM 2020 AND NES-F

CRITERIA	WEIGHTING	ASSESSMENT
Reason for change	High	<ul style="list-style-type: none"> To achieve national consistency in freshwater resource and ecosystem management and provide for a clear more integrated approach. To improve regulatory certainty and enable decisions that affect freshwater to be made quickly and with confidence. To address gaps in existing policy and to stop further decline of our freshwater resources and ecosystems. To align with the Government's direction and programme of reform towards a sustainable, low-emissions economy. To address the slow progress made in implementing the NPS-FM 2014 (amended 2017). To provide more certain environmental outcomes across New Zealand from the management of activities that pose risks to freshwater and freshwater ecosystems
Degree of shift from status quo	High	<p>The proposal introduces several key shifts from the status quo:</p> <ol style="list-style-type: none"> Greater focus on Te Mana o Te Wai and shifts from taking a more balanced approach to one that prioritises the health and wellbeing of freshwater resources and ecosystems (as set out in the NPS-FM objective). There are new national bottom lines and more requirements on certain activities that pose risks to freshwater and freshwater ecosystems. In many cases, resource consent will be required from local authorities before carrying out regulated activities. Increased Māori participation in freshwater management. <p>For councils and communities, the degree and shift will be highly dependent on the extent to which they have implemented the NPS-FM 2014 (amended 2017), how they have decided to achieve desired outcomes and when they achieve desired outcomes³¹:</p> <ul style="list-style-type: none"> Where council and communities are aspirational for water quality, the shift will be relatively low. Councils in these areas will already be acting actively to meet NPS-FM 2014 (amended 2017) requirements and achieving bottom lines set out in the proposal. In some areas in New Zealand, engagement with the community has led to current requirements for water quality and management practices that are even more stringent than those in the proposal. Where council and communities have yet to respond to the NPS-FM 2014 (amended 2017) requirements, then the shift will be more significant.
Who and how many will be affected	High	<p>The proposal addresses matters of national significance, with freshwater of importance to councils, iwi/Māori, landowners and the wider community:</p> <ul style="list-style-type: none"> All councils will be affected as regional policy statements, regional plans and district plans are all required to give effect to the NPS-FM 2020. All councils will also need to observe and enforce compliance with the NES-F. However, regional councils will be more affected as the matters addressed by the NPS-FM 2020 and NES-F are more within their functions.

³¹ Refer specifically to Section 4.1 in the RIA Action for healthy waterways Part I: Summary and Overall impacts, (2020). pp.17-18.

CRITERIA	WEIGHTING	ASSESSMENT
		<ul style="list-style-type: none"> Landowners and those carrying out activities considered to pose risks to freshwater and freshwater ecosystems will be affected. They will need to observe compliance with the NES-F and may need to change current management practices or seek resource consent for activities. Iwi/Māori will be affected as the proposal relates to an important taonga and provides support for partnership arrangements. The wider community will be affected as it relates to an important resource providing for social, economic, and cultural well-being. The proposed package had a strong public interest with over 17,500 submissions received on the proposals, far more than any other freshwater consultation.
Degree of impact on, or interest from iwi/Māori	High	<ul style="list-style-type: none"> Iwi/ Māori have strong interest in the proposal, as freshwater is recognised as a taonga of huge significance and of particular importance to Māori. The proposal is about strengthening Te Mana o Te Wai, improving ecosystem health and water quality of our water bodies, in order to provide further protection for sites and resources of significance to Māori. The proposal includes policies that will require and encourage further engagement between tangata whenua and councils and greater provision for the exercise of Kaitiakitanga in decision making processes. The proposal intends to uphold the intrinsic values, objectives and/or strategies associated with existing Treaty settlement commitments. Analysis of the proposal has identified no inconsistencies between policies and Treaty settlements. Councils are required to comply with their Treaty settlement obligations during implementation and engage with those iwi and hapū with interests and settlements covering certain areas when implementing policies (for example, the exceptions for hydropower).
When will the effects occur	Medium	<ul style="list-style-type: none"> The effects will occur from commencement and be ongoing. The proposal is expected to make material improvements in five years and restore past damage over a generation.
Geographic scale of impacts	High	<ul style="list-style-type: none"> The proposal will apply nationwide and will cover a significant geographic extent.
Type of effect	High	<ul style="list-style-type: none"> The proposal will have significant, lasting benefits over the long-term and will exceed the costs of transition and implementation. It will have a range of positive effects on freshwater quality and ecosystem health and benefits to New Zealanders' well-being, Māori values and economics (particularly tourism and the "green" premium").
Degree of policy risk or uncertainty	Medium	<ul style="list-style-type: none"> The proposal has been informed by a comprehensive development and public consultation process to provide a robust policy package and to address and reduce potential risks (i.e. implementation timeframes, practicality, Covid-19's effects). Different approaches to target the problem have been assessed, with the proposal considered most appropriate and risk averse. The proposal works within the existing legislative framework but makes enhanced regulatory responses and targeted systemic changes. As such, the overall approach is not untested.

4.0 EVIDENCE BASE – RESEARCH, CONSULTATION, INFORMATION AND ANALYSIS UNDERTAKEN

4.1 RESEARCH, INFORMATION AND ANALYSIS

The Government considered reports and advice from advisory groups and other experts in preparing the NPS-FM 2020 and NES-F. The *Action for healthy waterways* discussion document (September 2019) provides an overview of the government's freshwater objectives, a summary of proposals and an overview of the input from advisory groups. The discussion document can be found on the Ministry website together with supporting evidence used to prepare the NPS-FM 2020 and NES-F.

<https://www.Ministry.govt.nz/supporting-evidence-action-for-healthy-waterways>.

This section 32 evaluation has made use of all available information. Several key documents have been drawn on heavily in this report including:

- Interim regulatory impact analysis for consultation: Essential Freshwater part I: summary and overview (August 2019)
- Interim regulatory impact analysis for consultation: Essential Freshwater part II: detailed analysis (August 2019)
- Cabinet paper: Action for healthy waterways (May 2020)
- Regulatory Impact analysis: Action for healthy waterways. Part 1: summary and overall impacts. (May 2020).
- Regulatory impact analysis: Action for healthy waterways. Part 2: detailed analysis (May 2020).

Throughout this report reference is made to the relevant sections of the supporting documents where more detail, analysis and/or narrative can be found.

5.0 EVALUATION OF THE OBJECTIVE

5.1 APPROACH

Section 32 of the RMA requires an evaluation to examine the extent to which the objectives of a proposal are the most appropriate way to achieve the purpose of the RMA – to promote sustainable management of natural and physical resources. The focus of this section is the objective set out in clause 2.1 of the NS-FM 2020 referred to hereafter as “the Objective”.

The purpose of the NES-F must also be evaluated to see if it is the most appropriate way to achieve the purpose of the RMA³². The NES-F is a standards-based instrument and does not contain any objectives to evaluate. As such the assessment required is against the purpose of the NES-F i.e. to support the NPS-FM 2020 and to meet the government’s *Action for healthy waterways* goals³³. These goals aim for a holistic approach in achieving sustainable management, including across RMA jurisdictions³⁴. Both instruments are intended to work closely together to achieve the single Objective of the NPS-FM 2020.

The NES-F contains rules relating to wetlands in the coastal marine area. Here the NPS-FM 2020 gives way to the New Zealand Coastal Policy Statement (NZCPS). NZCPS does not contain any red flags or policy barriers that would conflict with this intent. Overall, it is complementary³⁵.

The following evaluation of the appropriateness of the NPS-FM the Objective is based on The Ministry’s guidance³⁶ and considers three key aspects: relevance, feasibility and acceptability; with assessment of key criteria. The assessment has been informed by the evaluation of the provisions (i.e. policies, implementation requirements, rules and other methods) in sections 7.0 and 8.0 of this report because it is not possible to fully assess some criteria, for example feasibility, until after the effectiveness and efficiency of the provisions has been assessed.

5.2 INTRODUCTION

Objective

- (1) The objective of this National Policy Statement is to ensure that resources are managed in a way that prioritises–
 - (a) first, the health and wellbeing of water bodies and freshwater ecosystems; and
 - (b) second, the health needs of people (such as drinking water); and
 - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

³² Section 32(6) of the RMA

³³ As set out in *Action for healthy waterways* - A discussion document on national direction to our essential freshwater (2019).

³⁴ Refer to Ministry for the Environment. A guide to section 32 of the Resource Management Act: Incorporating changes as a result of the Resource Legislation Amendment Act 2017, (2017).

³⁵ For example, Objective 1 of the NZCPS.

³⁶ Ibid.

The Objective represents a substantial change to the previous NPS-FM objectives in the NPS-FM 2014 (amended 2017) through clearer direction for future freshwater management to halt further degradation and reverse past damage. It mirrors the hierarchy of obligations that is implicit within the concept of Te Mana o Te Wai and builds on the previous concept of Te Mana o Te Wai in the NPS-FM 2014 (amended 2017) ³⁷.

While the foundation of the Objective is Te Mana o Te Wai, the relationship between the Objective and Te Mana o Te Wai is not explicitly clear in the NPS-FM 2020 and will require further guidance³⁸. It is acknowledged that Te Mana o Te Wai embodies Te Ao Māori and will shift the way we view freshwater and to actively involve tangata whenua.

5.3 BACKGROUND

The RIA does not state the reasons for moving from 15 objectives in the NPS-FM 2014 (amended 2017) to a single objective. Generally, having a single clear objective has greater potential to be successful in achieving desired environmental outcomes in RMA planning, rather than multiple similar but different or competing objectives. The key is to ensure the objective is clear and sufficiently broad and targeted.

Some concern was noted by the IAP about the role of the NPS-FM 2020 objective and policies; *“Currently [Objective] 2.1, although being nominally an objective, reads as a purpose statement rather than an objective. The policies under [Clause] 2.2 likewise read as a set of objectives and should be renamed as such.”* Although a matter of drafting that has not been taken forward, it is relevant as an alternative option and considered as such.

5.4 INTER-RELATEDNESS

The evaluation of the appropriateness of the Objective requires a wider understanding of other parts of the NPS-FM 2020. This is partly because the hierarchy of obligations is “woven” throughout the NPS-FM 2020 which makes it difficult to disentangle the Objective. As an example, the Freshwater Leaders Group noted the Objective mirrors the hierarchy of obligations (in clause 1.3 of the NPS-FM). This is also because of an explicit degree of overlap and circularity, for example where Te Mana o Te Wai must inform the interpretation of:

- a) the objective and policies of the NPS-FM 2020; and
- b) the objectives and policies required by the NPS-FM 2020 to be included in local authority policy statements and plans (including through the NOF process, which is discussed later in this report).³⁹

There is no issue with the high level of inter-relatedness or overlap provided there is consistency and it does not distract from the effectiveness or efficiency of the provisions.

5.5 INTENT

The ingredients of section 5 of the RMA are in the Objective but are re-arranged to give greater specificity by prioritising the health of freshwater above other resource use and development.

The intent of the objective is *not* that the first priority (clause 2.1(1)(a)) be read as a bottom line with the goal of achieving a pristine or “pre-human” water quality state. Rather, the intent is to shift the way that we think about managing freshwater and guide

³⁷ Objective AA1

³⁸ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.171. Also see Essential Freshwater Report of the Freshwater Independent Advisory Panel, (2020). pp.23-24.

³⁹ clause 3.2(4) of the NPS-FM

the implementation of the National Objectives Framework (NOF) process prescribed in the NPS-FM 2020.⁴⁰

The Objective is clear in its priorities but flexible in its approach, which is consistent with the effects-based approach under the RMA. There is nothing in its wording to suggest it creates a strict priority on competing interests, and councils will need to exercise their discretion guided by clear and strong direction. The NOF in Part 3, subpart 2, anticipates that different values and objectives may be identified for different catchments. A key theme of the NPS-FM 2020 is to address current imbalances and gaps in the planning regime contributing to the degradation of freshwater and loss of river and wetland extent. There is little to no room for an overall (including an ‘unders and overs’) approach found in the NPS-FM 2014 (amended 2017).

The Ministry is considering preparation of guidance on the policy intent, and further implementation guidance (which has been done for other national direction like the NZCPS).

5.6 EVALUATION

The evaluation of the objective for relevance, feasibility and acceptable is in Table 3, Table 4 and Table 5 respectively.

5.7 OVERALL ASSESSMENT OF THE OBJECTIVE

For the reasons above the single Objective of the NPS-FM 2020 is considered to be the most appropriate way of achieving the RMA purpose to promote the sustainable management of natural and physical resources. Because the Objective satisfies section 32 of the RMA, the purpose of the NES-F (to implement the NPS-FM 2020) is also satisfied.

⁴⁰ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.177

TABLE 3. NPS-FM 2020 THE OBJECTIVE EVALUATION FOR RELEVANCE

CRITERIA	EVALUATION
Directed to addressing a resource management issue	<ul style="list-style-type: none"> The Objective provides strong direction relating to the core problem – the freshwater management framework is not achieving sustainable management because of interpretation issues, implementation issues, and ecosystem health standards are not stringent enough. It allows for a staged approach to drive change and flexibility to “<i>ensure that resources are managed in a way that prioritises</i>” – that is consistent with the government’s <i>Action for healthy waterways</i> goals – immediately (stopping further degradation) – in the short term (to see a material improvement within five years) – and within a generation (to reverse past damage and return to a healthy state). Although regional councils have RMA functions to control the use of land to maintain and enhance freshwater and control and allocate water⁴¹, the health and extent of freshwater resources has continued to decline⁴². This is despite explicit functions in the RMA and the introduction of freshwater national direction since 2011. While timeliness has affected implementation, councils lack direction to balance competing interests. A lack of clarity and specific direction from central government is a key contributor to this situation.
Focused on achieving the purpose of RMA	<ul style="list-style-type: none"> An examination of the Objective reveals the core elements of sustainable management as defined in section 5 of the RMA are present. Like the principles in Part 2 of the RMA, the Objective give greater prescription and guidance in achieving the purpose of the RMA. This is consistent with the intent of national direction. The Objective does this by prioritising freshwater health and well-being, rather than seeking a desired state (e.g. maintained, enhanced, protected⁴³). To some this would appear a departure from the common policy approach. To others it will be a welcome foundation to support complex discussions with communities. As the single NPS-FM 2020 objective it carries a lot of responsibility (and weighting). However, the RMA is not a ‘no effects’ statute, it manages effects and activities. Clear health and well-being outcomes – across the biophysical; human health; and social, economic, and cultural dimensions – are sharply focused on prioritising competing interests (which may constrain growth), which allows flexibility in keeping with the effects based regime of the RMA. This does not anticipate blunt or strict prioritisation, which could be misdirected in achieving sustainable management. In achieving the sustainable purpose of the RMA, a number of Part 2 matters are relevant, and the Objective is broadly consistent with these, in particular giving clearer focus and emphasis to a number of the environmental principles in sections 6 and 7.⁴⁴

⁴¹ Section 30 of the RMA

⁴² The Cabinet paper contains a useful summary. Further detail is provided in the RIA.

⁴³ That would not be too narrow and consistent with the concept of Te Mana o te Wai.

⁴⁴ With a particular focus on: safeguarding the life-supporting capacity of water (section 5(2)(b)); protecting wetlands, and lakes and rivers and their margins from inappropriate subdivision, use, and development (section 6(a)); recognising and providing for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (section 6(e)); the intrinsic values of ecosystems (section 7(d)); maintenance and enhancement of the quality of the environment (7(f)); as well as taking into account the Treaty of Waitangi (section 8).

CRITERIA	EVALUATION
Assists councils to carry out its statutory functions	<ul style="list-style-type: none"> The Objective is directly related to the functions of regional councils under sections 30(1)(c), (d), (e), (f), (fa), (g) relating to the control of land use for the purpose of maintaining and enhancing freshwater, control of water quality and quantity, and the control of discharges of contaminants. It also emphasises other functions, including ensuring sufficient development capacity, which is consistent with the third priority. It will assist councils to carry out their functions by providing clear national direction to prioritise competing interests where resource use and development has a negative impact on the health of freshwater and freshwater ecosystems. This in turn is expected to address the lack of clarity and implementation issues councils are facing when implementing the NPS-FM 2014 (amended 2017), including when implementing the Te Mana o Te Wai provisions that only require regional councils to “recognise and consider”.
Within scope of higher level documents	<ul style="list-style-type: none"> This is not relevant for the NPS-FM because it is the highest order planning instrument under the RMA. The NPS-FM is complementary to the NZCPS, although may result in different outcomes in implementing the NES-F, particularly for wetlands in the coastal marine area.

TABLE 4. NPS-FM 2020 THE OBJECTIVE EVALUATION FOR FEASIBILITY

CRITERIA	EVALUATION
Acceptable level of uncertainty or risk	<ul style="list-style-type: none"> It is clear and widely accepted that the status quo will lead to the ongoing loss of extent of New Zealand’s freshwater resources and further degradation in water quality. The Objective provides an acceptable level of certainty about what is needed to maintain and improve New Zealand’s freshwater resources and ecosystem health. The priorities in the objective are not intended to be strict but will provide greater clarity and certainty for councils and resource users. To achieve the objective communities and tangata whenua will need to work with councils to make substantial improvements in freshwater management practice. Most of this will work occur through the NOF process, with more immediate improvements through NES-F standards, particularly the farming standards. The level of impact that will be felt in land development for housing, infrastructure, and rural and farming sectors has a degree of uncertainty. However, the assessment of options considers that in all cases the risk of not acting exceeds the risk of acting. As a whole the benefits are likely to outweigh the costs. Specific exceptions for hydroelectricity, vegetable production, and for sustainable, cultural, and low impact activities, mitigates the level of economic, social, and cultural risk. There is an implementation risk that the objective and the inter-relatedness with giving effect to Te Mana o Te Wai may result in differing or inconsistent interpretations for RMA decision making processes, in particular resource consenting decisions. However, the strength of the NPS-FM 2020 when viewed as a whole should mitigate this to a degree. As regional plans progress in giving effect to the NPS-FM 2020 there will be a corresponding decrease in this risk. Further implementation risks are discussed below regarding councils’ capability and capacity.

CRITERIA	EVALUATION
Realistically able to be achieved within council's powers, skills and resources	<ul style="list-style-type: none"> The Objective requires strong leadership from regional councils and a local authority coordinated approach to implement the NPS-FM 2020 provisions to achieve the objective. The NOF process is fundamental to this and the refinements in the NPS-FM 2020 add clarity and greater certainty on providing for compulsory values. Councils have the necessary powers to develop the regulatory and non-regulatory methods required by the NPS-FM 2020. There will need to be upskilling of staff and additional resources as discussed throughout the provisions section of this report. Prioritising the health and wellbeing of freshwater and freshwater ecosystems will require a greater understanding of the natural environment and improved decision making processes and monitoring. Some councils will be disproportionately impacted with greater workloads, especially in establishing arrangements with iwi, consenting processes, mapping natural inland wetlands, and other monitoring, mapping, and action plan requirements. It will be challenging for some councils to resource the required programme of work, particularly those with a low rating base. Councils will need to review their freshwater programmes, and in many cases bring them forward and expand them, to meet the shorter deadline for notifying freshwater plans (before 2025). This includes addressing science gaps and engaging with communities and actively involving tangata whenua. Whether this is achievable is uncertain. Transitional arrangements e.g. staged implementation in the NES-F for farming standards, 10 years for mapping wetlands, and flexibility for achieving target states for freshwater and freshwater ecosystems, provide some relief. Central government support and guidance on implementing the NPS-FM 2020 will be required and critical in helping councils to achieve the Objective. The Ministry's adaptive management approach to support the implementation of <i>Action for healthy waterways</i> and implementation programme will go some way towards mitigating capability and capacity risks and the potential for poor planning outcomes.

TABLE 5. NPS-FM 2020 THE OBJECTIVE EVALUATION FOR ACCEPTABILITY

CRITERIA	EVALUATION
Consistent with identified iwi/Māori and community outcomes	<ul style="list-style-type: none"> Te Mana o Te Wai is a fundamental concept weaved throughout the NPS-FM. Central to this is the hierarchy of obligations, which is specifically mirrored in the Objective. This is a clear reflection of the values Māori place on ensuring the essential health and well-being of water comes before all other uses. Fresh water resources are a highly valued taonga to Māori and the requirement to provide for Māori freshwater values in many of the provisions and other actions required to achieve the objective will assist in maintaining and improving the mauri of waterways as well as the protection of sites of cultural significance, and the ability to source mahinga kai. The objective is also complementary to providing for tangata whenua to express kaitiakitanga. Feedback and submissions suggested a high level of support for Te Mana o Te Wai (and by association the Objective) and the freshwater outcomes sought. Communities and tangata whenua have high expectations for freshwater health and wellbeing in New Zealand. There is a high level of acceptance of the importance of maintaining and improving freshwater ecosystem health in a holistic way and the social, cultural and economic benefits enjoyed by the wider community. These benefits include amenity, the use of rivers for recreation and river transport, resilience to natural hazard risk, wetland ecosystem services, reduced pressure on stormwater infrastructure and opportunities for people to be better connected to the natural environment. These benefits can be difficult to quantify in financial terms and can be highly site-specific. Feedback and

CRITERIA	EVALUATION
	<p>submissions suggested that the Objective is broadly consistent with community outcomes and expectations, although some communities (or sectors) are less accepting of the actions needed and potential costs.</p>
<p>Will not result in unjustifiably high costs on the community or parts of the community</p>	<ul style="list-style-type: none"> • Achieving full compliance with the NPS-FM 2014 will require significant reductions in pollution, from both urban and rural land uses, bringing sizeable benefits and costs⁴⁵. The analysis for the government's <i>Action for healthy waterways</i> policy package (which includes the NPS-FM and NES-F, and other interventions) has considered the <i>marginal</i> impact – the additional impact that are beyond existing policies when those are fully complied with. The costs and benefits of different components will eventuate over different timescale and in some cases are concentrated in certain regions, especially rural regions. Total estimated costs are approximately \$166 million per annum (about \$3.2 billion PV), although a large proportion of these costs relate to policy decisions outside the scope of this report. For example, fencing of waterways, farm plans and monitoring of water takes, which will be addressed in section 360 Regulations. The benefits considerably outweigh the costs. • The costs on the community in achieving the Objective will be a fraction of the total costs. Some of the costs are broken down in more detail in the provisions assessment section of this report. Substantial costs will fall on regional councils with upfront and ongoing costs in giving effect to the NPS-FM 2020 in regional plans and implementing the NES-F, as well as related RMA decision making processes and monitoring and enforcement. There will also be costs to some farmers in changing their practices to meet permitted activities in the NES-F or applying for resource consent (including any necessary changes to farming practices). The actions required to achieve the objective will also result in opportunity costs for landowners and developers (and has the potential to disproportionately affect Māori landowners who have not developed their land), as well as infrastructure providers, the mining sector and others. This is particularly so for provisions aiming to avoid the further loss of rivers (including streams) and wetlands. These opportunity costs are expected to vary widely and are difficult to quantify. • Implementation support and funding from central government is necessary to ensure these costs are not unjustifiably high, particularly in the rural regions most affected.

⁴⁵ Section 3.2 Approach to Cost Benefit Analysis of in the report

6.0 APPROACH TO THE EVALUATION OF THE PROVISIONS

6.1 ASSESSMENT

The changes to the NPS-FM are significant but at its core are provisions from the NPS-FM 2014 (amended 2017). Some policies have largely been carried across, some policies are more specific and contain new directions and some are new. Table 6 shows the relatedness of NPS-FM 2020 policies to those in the NPS-FM 2014 (amended 2017).

TABLE 6: OVERVIEW OF POLICY CHANGES TO THE NPS-FM

NPS-FM 2020	RELATED POLICIES IN NPS-FM 2014 (AS AMENDED 2017)
Clause 1.3 Fundamental concept – Te Mana o Te Wai	The description in national significance of Te Mana o Te Wai, Objective AA1 and Policy AA1
Policy 1: Fresh water is managed in a way that gives effect to Te Mana o Te Wai.	Objective AA1 and Policy AA1
Policy 2: Tangata whenua are actively involved in freshwater management (including decision making processes), and Māori freshwater values are identified and provided for.	Part D, Objective D1, Policy D1
Policy 3: Fresh water is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.	Part C, Objective C1, Policy C1, Policy C2
Policy 4: Fresh water is managed as part of New Zealand's integrated response to climate change.	Policy A1 (a)(i), Policy B1(a)
Policy 5: Fresh water is managed through a National Objectives Framework in order to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.	Part CA
Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.	Objective A2(b), Objective B4
Policy 7: The loss of river extent and values is avoided to the extent practicable.	New
Policy 8: The significant values of outstanding water bodies are protected.	Objective A2(a), Objective B4 [essentially carried over]
Policy 9: The habitats of indigenous freshwater species are protected.	New
Policy 11: Fresh water is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.	Objective A2(c), Objective B2, Objective B3, Policy B5
Policy 12: The national target (as set out in Appendix 3) for water quality improvement is achieved.	Objective A3, Policy A5, Policy A6
Policy 13: The condition of water bodies and freshwater ecosystems is systematically monitored over time, and action is taken where freshwater is degraded, and to reverse deteriorating trends.	Part CB, Part CC, Objective A1, Objective A2, Objective B1, Policy CB2
Policy 13: Information (including monitoring data) about the state of water bodies and freshwater ecosystems, and the challenges to their health and well-being, is regularly reported on and published.	Part CB

NPS-FM 2020	RELATED POLICIES IN NPS-FM 2014 (AS AMENDED 2017)
Policy 14: Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with the National Policy Statement.	Policy A7, Policy B8 [essentially carried over]

A similar table for the NPS-FM2020 clauses and previous NPS 2014 (amended 2017) is in Appendix 2.

This evaluation focusses on what has changed between the NPS-FM 2014 (amended 2017) amendments and the 2020 change; previous section 32 analyses for the NPS-FM provisions that remain unchanged are still valid.

The NPS-FM 2020 is an amending proposal. The 15 objectives in the NPS-FM 2014 (amended 2017) are proposed to be replaced by the single the Objective. There is no need to consider the NPS-FM 2014 (amended 2017) Objectives further. The focus of this evaluation is the preferred option and rationale for deciding on the provisions. The assessment relies primarily on the RIA.

It is noted that the grouping of policy direction in the RIA does not necessarily reflect the individual provisions in the NPS-FM 2020 and NES-F, some are distinct and others are interrelated (either within or between the national direction documents). Thus, the assessment approach involves a degree of interpretation in identifying reasonably practicable options to be helpful. However, the authoritative source is the RIA.

6.2 OPTIONS FOR ACHIEVING THE OBJECTIVE

In examining whether the NPS-FM 2020 and NES-F provisions are the most appropriate to achieve the objective there may be “other reasonably practicable options” to consider.⁴⁶ An “appropriate” option means a suitable but not necessarily superior one. This means the most appropriate option does not need to be the optimal or best option but must demonstrate that it will meet the objective in an efficient and effective way.

While “*reasonably practicable*” is not defined in the RMA, it may include options that:

- are both regulatory and non-regulatory
- are targeted towards achieving the goal/objective
- are within the Standards’ resources, duties and powers
- represent a reasonable range of possible alternatives.

The RIA identified four broad options to achieve the government’s *Action for healthy waterways goals* and address the problem⁴⁷ (refer to Table 7). These options are equally relevant as alternative options to achieving the Objective and are briefly discussed below.

⁴⁶ Section 32(1)(b)(i) of the RMA

⁴⁷ RIA Action for healthy waterways Part I: Summary and Overall impacts, (2020). pp.14-15

TABLE 7: OPTIONS TO ACHIEVE ACTION FOR HEALTHY WATERWAYS OBJECTIVES

APPROACH	EVALUATION
Approach one: fundamentally overhaul the RMA systems to address systemic issues.	This was rejected as it would take many years to achieve the change. Also, much of what is in place and has already been developed can be built on rather than setting progress back further.
Approach two: develop a charging regime so that polluters face the true costs of polluting.	<p>This is not feasible for most types of water pollution in most locations, as they are diffuse and highly location specific. It is challenging to link an activity to a catchment-wide outcome and external cost.</p> <p>Establishing such a regime would likely take many years and, given the difficulty in setting accurate charges to reflect externalities, is unlikely to be widely successful at achieving the desired outcomes.</p> <p>It was not considered a practical option to address the problems.</p>
Approach three: provide Government funding to achieve the objectives.	<p>This was rejected on the grounds of the cost to taxpayers, and the key principle that it should be polluters who pay to reduce their (unacceptable) levels of pollution in the environment.</p> <p>Experience has also shown that the approach of 'paying polluters not to pollute' can create perverse incentives and lead to unintended consequences that make such approaches unsustainable.</p>
Approach four: work within the existing legislative framework to enhance regulatory responses and make targeted systemic changes where appropriate.	Preferred approach

Approach four is the preferred broad approach. The Water Taskforce identified three regulatory tools to address the problem:

1. changes to the NPS-FM
2. the creation of a new NES-F
3. the creation of new section 360 regulations (not the subject of this section 32 report)

Together these regulatory tools can be used to:

- improve policy direction;
- set thresholds or bottom lines; require adoption of good practice;
- improve monitoring and reporting on freshwater; and
- support people in implementing these changes.

The RIA concludes that these provide appropriate policy tools for the kind of intervention required by the problem. These interventions balance the need for strong national direction while ensuring that councils have sufficient flexibility to adapt to local circumstances.

This section 32 report has examined the alternative policy options and has not found any reason to depart from that conclusion in achieving the single Objective (refer to Table 8).

Key changes made since the draft NES-F was released for consultation in 2019 have sharpened the appropriateness of these tools. For example, the removal of farm plan regulations from the NES-F to new section 360 regulations and necessary changes to the RMA to ensure they are enforceable.

Additional commentary on sub-options is provided in the following provision evaluation sections of this report.

TABLE 8. ADDITIONAL SECTION 32 ASSESSMENT OF OPTIONS FOR ACHIEVING NPS-FM 2020 THE OBJECTIVE

ELEMENTS OF THE OBJECTIVE (AND ADDITIONAL CRITERION)	STATUS QUO	APPROACH ONE: FUNDAMENTALLY OVERHAUL THE RMA	APPROACH TWO: DEVELOP A POLLUTOR CHARGING REGIME	APPROACH THREE: PROVIDE GOVERNMENT FUNDING	APPROACH FOUR: PREFERRED OPTION (NPS-FM & NES-F)
Resources are managed in a way that prioritises (Timely intervention and certainty of outcome)	~	~	x	x	✓
First, the health and wellbeing of water bodies and freshwater ecosystems (Certainty of outcome)	~	✓	~	x	✓
Second, the essential health needs of people (Certainty of outcome)	~	✓	~	x	✓
Third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future (Certainty of outcome)	✓	✓	~	~	✓

Key:

✓ Meets

x Does not meet

~ Partly meets

6.3 EFFICIENCY AND EFFECTIVENESS

Each proposed provision is assessed regarding its effectiveness and efficiency in achieving the objectives⁴⁸. These two terms are described below:⁴⁹

- **Effectiveness** assesses the contribution new provisions make towards achieving the objective, and how successful they are likely to be in solving the problem they were designed to address (i.e. how well a given method might work).

⁴⁸ Section 32(1)(b)(ii) of the RMA

⁴⁹ Ministry for the Environment. A guide to section 32 of the Resource Management Act: Incorporating changes as a result of the Resource Legislation Amendment Act 2017, (2017).

- **Efficiency** measures whether the provisions will be likely to achieve the objectives at the lowest total cost to all members of society or achieves the highest net benefit to all of society. This includes the assessment of a broad range of costs and benefits, many of which are intangible and non-monetary.

The benefits and costs of the environmental, economic, social and cultural effects anticipated are identified and assessed as part of the assessment of the effectiveness and efficiency of the provisions. Where practicable, these costs and benefits are quantified. Consideration is also given to economic growth and employment opportunities.

7.0 EVALUATION OF THE NPS-FM PROVISIONS

7.1 PRELIMINARY PROVISIONS

Part 1 of the NPS-FM 2020

Also see:

the Objective

Policy 1



7.1.1 INTENT

The concept of Te Mana o Te Wai is not new to the NPS-FM but it has been reframed, strengthened and woven throughout the provisions. Clause 1.3 is key to understanding what Te Mana o Te Wai means and therefore how to give effect to it. The Te Mana o Te Wai framework encompasses 6 principles relating to the roles of tangata whenua and other New Zealanders in the management of freshwater. These principles are to inform the implementation of the NPS-FM. There is a hierarchy of obligations (clause 1.3(5)) in Te Mana o Te Wai which priorities:

- (a) first, the health and well-being of the water
- (b) second, the health needs of people (such as drinking water)
- (c) third, everything else.

The hierarchy of obligations is mirrored in the single NPS-FM 2020 objective (section 6.2) while Policy 1 (section 7.1). requires that freshwater is managed in a way that gives effect to Te Mana o Te Wai (section 7.1).

The NPS-FM 2020 definitions (clause 1.4) are noticeably different from the NPS-FM 2014 (amended 2017). Several of the terms used in previous NPS-FM have been reinterpreted and new terms have been included. The new terms mostly reflect the broadened in scope of the NPS-FM. Any definitions of significance and relevance to this evaluation are discussed in detail in the relevant sections of this report.

The NPS-FM 2020 requires that regional council notify any changes to their regional policy statements, regional plans and district plans by December 2025 (clause 4.1). Clause 1.6(3) requires decision making using the best available information and without delay. Where FMUs have limited data and uncertain information decisions must still be made in a way that best gives effect to the NPS-FM 2020. The timing and scope of work required to implement the NPS-FM 2020 are discussed in detail in the relevant sections of this report.

7.1.2 EFFECTIVENESS

The NPS-FM 2020 strengthens the role of tangata whenua in freshwater management and prioritises the health and wellbeing of the water through Te Mana o Te Wai. This is effective in contributing to the Objective, which mirrors the hierarchy of obligations.

The requirement for councils to use the best available information and not delay decision-making is effective in speeding up the plan development processes and fully implementing the NPS-FM 2020.

7.1.3 EFFICIENCY

No costs are anticipated for the matters above. The clarification provided in relation to The Treaty of Waitangi, Te Mana o Te Wai, definitions and best information is an efficient approach and provides the certainty and clarity needed for regional councils to implement the NPS-FM 2020.

7.1.4 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THESE PRELIMINARY STANDARDS

Part 1 Preliminary Provisions support the interpretation of the requirements of the NPS-FM 2020.

The structure and format of this section is consistent with other RMA regulations and is considered the most effective and efficient option to achieve the Objective for the reasons discussed above and in sections 6.0 and 7.0 of this report.

7.2 POLICY 1 AND POLICY 2

Policy 1

Freshwater is managed in a way that gives effect to Te Mana o Te Wai.

Policy 2

Tangata whenua are actively involved in freshwater management (including decision making processes), and Māori freshwater values are identified and provided for

Supported by:

Part 1, 1.3 Fundamental concept – Te Mana o Te Wai

3.2 Te Mana o Te Wai

3.3 Long-term vision for water bodies

3.4 Tangata whenua involvement

Part 3, Subpart 2 National Objectives Framework

Policy 1 and the supporting implementation approaches in clause 3.2 provide a clear and direct connection between the fundamental concept of Te Mana o Te Wai and the policies and methods in the NPS-FM 2020.

Policy 2 is evaluated here together with Policy 1 as the two policies are inextricably linked to the concept of Te Mana o Te Wai and how it is given effect to in managing freshwater.

7.2.1 INTENT

The concept of Te Mana o Te Wai was incorporated in the NPS-FM in 2014. In response to feedback from iwi that the NPS-FM did not give Te Mana o Te Wai sufficient weight and concerns that the concept would not follow through in regional plans, the 2017 amendments to the NPS-FM 2014 further clarified Te Mana o Te Wai and incorporated the concept into an objective. The objective required regional councils to ‘consider and recognise Te Mana o Te Wai in the management of freshwater’. Feedback from practitioners indicated that the directions in the NPS-FM and Te Mana o Te Wai were still

not clear⁵⁰. Local actions have tended to focus on the economic benefits of water use, which has contributed to declining water quality trends.

New Zealand's freshwater management system has not fully enabled Māori to participate in freshwater management and freshwater planning processes. This is evident in the fact that Māori values and measures of health are not being adequately identified, reflected or incorporated into regional freshwater planning processes, or considered a priority against other biophysical compulsory values or attributes⁵¹. Contributing factors to this include the variable capacity and capability of regional councils to implement the NPS-FM and for iwi/hapū to participate in resource management processes. Regional councils also often have limited understanding about how to reflect and incorporate Māori values into freshwater planning.

The primary driver for the 2020 change to Te Mana o Te Wai, the new objective and revision of provisions is the recognition that progress to stop further degradation is too slow, water quality is declining and freshwater ecosystems continue to be degraded or lost.

Policy 2 requires that tangata whenua are actively involved in freshwater management, including decision making processes, and Māori freshwater values are identified and provided for. This is an intrinsic part of giving effect to Te Mana o Te Wai.

Policy 2 is supported by Subpart 1 clause 3.4 – Tangata whenua involvement. This directs local authorities to actively involve tangata whenua in freshwater management, including decision-making processes. This includes active involvement in decision making at all steps of the NOF process including when providing for Māori freshwater values and a requirement for regional councils to work with tangata whenua on investigating the use of mechanisms under RMA to actively involve tangata whenua. In addition to clause 3.4, the previously optional mahinga kai value has been elevated to a compulsory value in the NOF.

There is greater recognition of mātauranga Māori and tangata whenua involvement in its development and implementation in monitoring. This supports the requirement to include mātauranga Māori in monitoring, which was included in the 2017 amendments to the NPSFM 2014.

Collectively, the measures included in the NPS-FM 2020 have been designed to strengthen the inclusion of Māori freshwater values to give effect to Te Mana o Te Wai and support the achievement of the hierarchy of obligations set out in the objective

7.2.2 EFFECTIVENESS

The NPS-FM 2020 reframes and strengthens Te Mana o Te Wai. It is no longer a concept tied to one of many NPS-FM objectives but instead is explicitly required to be given effect to by Policy 1 while the Te Mana o Te Wai hierarchy of obligations is reflected in the NPS-FM 2020 objective. Clause 3.2 (Te Mana o Te Wai) requires regional councils to give effect to Te Mana o Te Wai as described in clause 3.2.

Policy 2 requires that tangata whenua are actively involved in freshwater management, including decision making, and Māori freshwater values are identified and provided for. This is an intrinsic part of giving effect to Te Mana o Te Wai so in meeting Policy 1, Policy 2 would also be met. Similarly, in giving effect to Te Mana o Te Wai as intended would also be expected to achieve the Objective (being one strand of the concept).

⁵⁰ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.171

⁵¹ Tipoki, V, Campbell, L, Tovell-Soundy, C, Milner, D. Scoping report – issues and options for incorporating Māori values and outcomes in freshwater management planning, decision-making and implementation. Wellington: Ministry for the Environment, (2019). pp.26-27; Ministry for the Environment. National Policy Statement for Freshwater Management Implementation Review: National Themes Report. Wellington: Ministry for the Environment. (2017). pp.37-41.

The potential efficacy of Policy 1 is demonstrated in recent freshwater planning processes that have involved tangata whenua and observed a similar hierarchy of obligations. For example, Healthy Rivers Plan change to the Waikato Regional Plan, prioritises the health and wellbeing of the Waikato and Waipa Rivers in setting resource limits.

The proposed policy and implementation approaches provide strong direction to regional councils and requires the inclusion of at least one Māori freshwater value (mahinga kai) into regional freshwater planning. Mahinga kai is a broad and multi-faceted indicator, which will ensure that a wide variety of quantitative and qualitative Māori measures of health are incorporated into regional freshwater planning.

Overall Policy 1 and Policy 2 are effective in meeting the Objective, particularly when applied to freshwater plan making processes. Some challenges may arise in other regional council freshwater decision making before freshwater plans are notified. The NPS-FM the Objective and Policy 1 will be relevant to resource consent applications for activities that affect freshwater. They will, therefore, need to be considered in the statutory assessment of consent applications. It may be less certain how to give effect to Te Mana o Te Wai and the hierarchy of obligations in the context of resource consent application processes prior to the preparation of new/updated regional plans. This may require the decision maker to refer back to Part 2 of the RMA for resolution.

7.2.3 EFFICIENCY

Regional councils are directed to give effect to Te Mana o Te Wai in their freshwater plan making processes and other decision making. In so doing freshwater plan provisions will achieve the Objective which reflects the hierarchy of obligations in Te Mana o Te Wai. Giving effect to Te Mana o Te Wai involves engagement with tangata whenua and communities in a collaborative and informed process to identify the long-term vision, values and desired future states for water bodies. This is made clear in clauses 1.3 and 3.2 to 3.4 of the NPS-FM. While any collaborative process may have its efficiency challenges, the transparency requirements of section 3.6 and the specified timeframes in Part 4 will keep the processes as focused and efficient as practicable.

The assessment of efficiency in Table 9 below draws on the base assumption that the concept of Te Mana o Te Wai focuses on ensuring (and in some instances restoring) the balance between the health and wellbeing of waterbodies and freshwater ecosystems, the health needs of people and other community needs, informed by a hierarchy of obligations. It is a multi-faceted concept that includes consideration of both use and protection values and outcomes.

TABLE 9: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 1 AND POLICY 2

	BENEFITS	COSTS
Environmental	<p>Protection of freshwater bodies through more environmentally conservative objectives and limits in plans. A halt to further degradation of freshwater bodies.</p> <p>Increase in restoration efforts where communities and regional councils identify that the water will not be able to sustain current pressures on the water.</p>	
Economic	<p>The improved environmental health of freshwater expected to result from greater Māori involvement helps support New Zealand's environmental reputation, which underpins our biggest export earners tourism and agriculture. It will secure the future of our meat, dairy and other primary exports and ensure they continue to earn higher prices overseas.</p>	<p>Moderate implementation costs to regional councils, through greater expectations for engagement, which may also further impact regional council capability and capacity. Additional requirements may impact on the ability of regional councils to meet the 2024 timeframes.</p> <p>Potential cost to stakeholders when implemented, where more environmentally conservative measures are required as a result of more environmentally conservative objective and limit setting.</p> <p>Potential constraints on further development and resource use, or requirements for users to adopt innovative management methods that minimise impacts on the health of the waterbody (land use changes). Costs for tangata whenua, other stakeholders and communities to engage in freshwater planning processes, particularly for organisations contributing across multiple regional freshwater plan development processes.</p>
Social	<p>Greater civic engagement and governance as a result of greater engagement with communities.</p> <p>Improvement in water quality enabling enhanced recreational opportunities for New Zealanders and visitors.</p> <p>Māori approaches to freshwater management promote improved environmental health which provides wider benefits to the community.</p> <p>Greater understanding of different worldviews, knowledge systems and perspectives will be fostered amongst the community. This could lead to improved relationships, and greater results for collaborative management and action.</p>	<p>Costs for communities to engage in freshwater planning processes.</p>

	BENEFITS	COSTS
Cultural	<p>Enhanced cultural identity, particularly where there has been a low level of tangata whenua involvement in freshwater management. Greater involvement allows for Māori to provide input and inform councils about their values, measures of wellbeing and mātauranga, which is critical to actively protect Māori interests.</p> <p>The development of mahinga kai values and attributes at the catchment level rather than nationally ensures they align to the relevant species and methods for individual catchments.</p>	<p>Resourcing costs to tangata whenua in participation of plan development and resource consent processes and the development and use of mātauranga Māori monitoring measures.</p> <p>Limited capacity to meet shortened freshwater plan development timeframes.</p>
Additional sector commentary	<p>There may be long-term costs as a result of this option, particularly if more environmentally conservative limits or restoration efforts are required. These could have associated impacts on the economy, including job availability and people's income and consumption levels in the regions.</p>	
Opportunities for economic growth and employment to be provided or reduced	<p>Increased opportunities for iwi/hapū working with regional councils on plan development processes. Increased opportunities for upskilling of all freshwater practitioners through engagement with tangata whenua. The first priority will drive a lot of research and investigation of ecosystem health and increased opportunity for training and employment.</p>	
Risks of not acting and uncertainty	<p>Further degradation to freshwater bodies, reputational damage to "Clean Green image" with associated economic and intangible consequences, further loss of threatened species, human health risks.</p> <p>Policy 1 adds further clarity and certainty to regional councils in terms of how they should give effect to the NPS-FM and Te Mana o Te Wai requirements.</p> <p>Greater recognition of the role of tangata whenua in freshwater management. As well as enabling a more integrated and holistic approach to managing freshwater.</p> <p>The capacity and capability of regional councils and tangata whenua to participate in freshwater management processes creates some uncertainty. This is relevant to all measures associated with implementing Te Mana o Te Wai. There is also uncertainty regarding the costs to implement the policy and implantation measures. The overall level of uncertainty is acceptable and is able to be managed through ensuring adequate resourcing is available to implement the policy package.</p> <p>The risk of not acting exceeds the risk of acting.</p>	

7.2.4 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 1 AND POLICY 2 AND SUPPORTING PROVISIONS

Te Mana o Te Wai

Four options to clarify and strengthen Te Mana o Te Wai in the NPS-FM were assessed⁵²:

- A. Status Quo
- B. Amend the NPS-FM to clarify the role of Te Mana o Te Wai in freshwater management, maintaining current requirement to “*consider and recognise*” Te Mana o Te Wai
- C. Amend the NPS-FM to direct regional councils to “*recognise and provide for or give effect to*” Te Mana o Te Wai in freshwater management
- D. Reframing Te Mana o Te Wai in the NPS

The status quo was not considered a preferred option for the reasons described above in Section 6 i.e. the directions in the NPS-FM 2014 (amended 2017) and Te Mana o Te Wai were not clear⁵³ and local freshwater management decisions have tended to focus on the economic benefits of water use, which has contributed to declining water quality trends.

Option B would retain the flexibility for Te Mana o Te Wai to be interpreted and applied locally as appropriate. However, this option would not provide the clarity needed for regional councils to understand when they have given effect to the requirements or how they are expected to meet the requirements. This option would also not add the necessary compulsion to ensure Te Mana o Te Wai is applied in freshwater management.

Option C would reduce some ambiguity in the NPS-FM 2014 (amended 2017), while adding further compulsion for regional councils to apply the framework of Te Mana o Te Wai. However, this option may increase risks and costs to regional councils, and it does also not add sufficient clarity for when regional councils have achieved the requirement or ‘provided for’ Te Mana o Te Wai.

Overall, Option D has been selected as the preferred option.

Providing for greater Māori involvement

Four options were considered to provide for greater Māori involvement in freshwater management in the NPS-FM⁵⁴:

- A. Status Quo
- B. Provide non-regulatory implementation support
- C. Elevate the status of mahinga kai from an ‘other national value’ to a ‘compulsory national value’ in the National Objectives Framework
- D. Create a new ‘tangata whenua’ value category in the NOF

The status quo is not considered a viable option as it will not address the problem. There is currently limited guidance or clear direction regarding central government’s expectations for regional councils to incorporate Māori values and attributes of freshwater health into planning processes. In addition, the existing RMA mechanisms for promoting Māori involvement in these processes is not mandatory and rely on individual councils approaches and the capacity and capability of both regional councils and iwi/hapū.

⁵² Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.194

⁵³ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.171

⁵⁴ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.194

Option B would involve central government providing non-regulatory support to regional councils and iwi/hapū. This could include preparing guidance material to support the implementation of the NPS-FM or through strategic investment to increase regional council and iwi/hapū capacity and capability. Whilst this option would help address the capacity/capability barrier to effective participation, this option would not address the fact that incorporating Māori values into regional freshwater planning is not mandatory and the lack of clarity or direction for regional councils in implementing the NPS-FM. It also does not strengthen the existing requirements in the NPS-FM in a manner that gives effect to Te Mana o Te Wai.

Option C would involve introducing one compulsory mahinga kai value into the NOF which is equivalent to ecosystem health and human health for recreation. This would require regional councils to incorporate a Māori value into freshwater planning. The use of mahinga kai as a compulsory value, as opposed to another Māori value (i.e., mauri), is likely to be the most efficient option because regional councils are already familiar with mahinga kai in the current NOF. Mahinga kai is also widely applicable across the country, and a number of iwi/hapū have already identified mahinga kai values and attributes in iwi management plans, regional planning documents and kaupapa Māori assessment frameworks, which could reduce expected implementation costs.

This option does not resolve the issue of regional councils and iwi/hapū capacity and capability. Making mahinga kai a compulsory value may result in regional councils having to direct their resources through their long-term planning towards funding Māori participation to identify attributes for mahinga kai, and then to meet the target attribute states to provide for the value.

Option D proposes to create a new category of value within the NOF for 'tangata whenua freshwater values', alongside ecosystem health and human health for recreation. The intent with this approach would be to maintain flexibility to allow a local approach to freshwater management. This would also involve providing clearer and stronger direction to regional councils about how to work with hapū and iwi to identify and incorporate tangata whenua values into freshwater planning.

This option will not solve the capacity and capability issues. There will be implementation costs in developing guidance and other financial non-regulatory implementation support in order to address the problem. Having a broad scope for 'tangata whenua values for freshwater health' is likely to cause uncertainty for regional councils, and cause difficulties for implementation.

Overall, Option C has been selected as the preferred option.

Policy 1 and Policy 2 is the most effective and efficient way to achieve the Objective for the reasons discussed above.

7.3 POLICY 3

Policy 3

Fresh water is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.5 Integrated management

7.3.1 INTENT

The policy intent is to address the effects of land use and development on freshwater and freshwater ecosystems. Integrated management is not a new concept and was first introduced in the NPS-FM 2011.

The integrated management policies in the NPS-FM 2014 (amended 2017) are focused on the functions of regional councils, with no specific direction to territorial authorities (local councils). While regional councils will continue to have a key role in achieving integrated management of land use (particularly rural land use) with freshwater management, so too are territorial local authorities needed to fulfil an integrated management role. Territorial authorities are uniquely placed to promote integrated catchment management through their role in managing the effects of infrastructure and land use activities through district or city plans and through managing and operating infrastructure⁵⁵. There is concern that some territorial authorities are taking a narrow view to freshwater management and the variability in the strength of regional policy statements, or other non-statutory methods, is not achieving freshwater management as envisioned by the RMA.

Policy 3 addresses the lack of integration between decision making by regional councils and territorial authorities. It requires councils to consider the effects of the use and development of land on a whole-of-catchments and is intended to better manage the effects of urban development and growth. It is intended to contribute to the first priority of the NPS-FM 2020 objective (clause 2.1 (a)).

Policy 3 is supported by an instructional set of requirements in clause 3.5. This includes directing regional councils to provide for the integrated management of the effects of land use and development on freshwater in their regional policy statements (which must be implemented without following a Schedule 1 process), and to adopt a method requiring district plans to address cumulative adverse effects. Territorial authorities must then change their district plans to include objectives, policies, and methods to promote positive effects and to avoid, remedy or mitigate the cumulative adverse effects of land use from urban activities.

These requirements recognise *ki uta ki tai*⁵⁶ and encourages greater co-ordination in the sequencing of regional or urban growth and the provision of infrastructure. Councils that share jurisdiction over a catchment must also co-operate. Proactive integrated freshwater management is likely to be more successful in achieving freshwater objectives and can be achieved by councils working together towards common goals. It is also likely to reduce potential planning gaps between planning documents or perceived jurisdiction barriers.

⁵⁵ Under section 31 territorial authorities have functions for the purpose of giving effect to the RMA in their districts, including the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district.

⁵⁶ the recognition and management of the interconnectedness of the whole environment, from the mountains to the sea.

Councils retain flexibility about how they will manage urban water bodies in an integrated way. This policy sets up the framework but does not prescribe what district plan controls must be imposed. This is because the best approaches to manage effects of urban development on freshwater are likely to be context specific. It is likely that many local councils will need to develop a better understanding of the impacts of land use activity on freshwater alongside understanding the community's aspirations with a greater focus on understanding the cumulative effects of activities in RMA decision making processes. Regional councils can assist through their involvement in the freshwater planning process and in facilitating greater co-ordination and co-operation.

Although the requirements are not directive towards particular freshwater management approaches for the urban environment, the types of approaches this policy is expected to drive may include some or all of the following:

- Regulating impervious surface cover and/or requiring on-site infiltration
- Requiring treatment of contaminants at source
- Using zoning/designations to avoid all, or certain types of development in areas where the effects on freshwater could not be adequately managed or avoided
- Provision of blue/green infrastructure (especially for stormwater management)
- Use of best practice Water Sensitive Urban Design and Low Impact Design techniques

Part 4 Timing of the NPS-FM 2020 requires local authorities to implement the objectives and policies of the NPS "as soon as reasonably practicable". It does not set a specific timeframe for territorial and unitary authorities to review and update district plans. However, Part 4 does set a deadline of 31 December 2024 for regional councils to notify changes to their regional policy statements and plans to give effect to the NPS-FM 2020. It follows that district plans must subsequently be amended as necessary to give effect to regional policy statements, including the new requirements in clause 3.5(4).

The Ministry is considering preparing guidance on model plan provisions that councils can consider, with stormwater guidance modules already being developed on how to implement good stormwater management practices, particularly around water sensitive design approaches and planning provisions.

7.3.2 EFFICIENCY & EFFECTIVENESS

The Policy 3 efficiency and effectiveness evaluation is in Table 10 and Table 11.

7.3.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 3 AND SUPPORTING PROVISIONS

The status quo and three options were considered including:⁵⁷

- Option 1: Clarify the existing roles and responsibilities of territorial authorities and signal the importance of aligning district plans with wider planning documents
- Option 2: Require territorial authorities to manage the effects of land use for urban development on freshwater in their district plans
- Option 3: Require regional councils to direct district plans in their regional policy statements to manage the effects of land use for urban development on freshwater

⁵⁷ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). Appendix 12

TABLE 10: ASSESSMENT OF EFFECTIVENESS FOR POLICY 3

THE OBJECTIVE ELEMENTS	RESOURCES ARE MANAGED IN A WAY THAT PRIORITISES	FIRST, THE HEALTH AND WELLBEING OF WATER BODIES AND FRESHWATER ECOSYSTEMS	SECOND, THE ESSENTIAL HEALTH NEEDS OF PEOPLE	THIRD, THE ABILITY OF PEOPLE AND COMMUNITIES TO PROVIDE FOR THEIR SOCIAL, ECONOMIC, AND CULTURAL WELL-BEING, NOW AND IN THE FUTURE
Contribution of Policy 3 towards achieving the Objective	Provides a clearer role for local councils in managing effects under the NPS-FM, especially cumulative adverse effects, of urban development on freshwater in an integrated way, which is consistent with sections 3 and 31 of the RMA. Flexibility in approach could lead to local councils doing the minimum or not being timely with introducing planning controls (or if the controls lack strength). However, any serious risk is likely to be mitigated by the requirements for regional policy statements, which district plans must give effect to.	The NPS-FM 2014 (amended 2017) already requires freshwater to be managed in urban areas to meet freshwater objectives and limits. This policy is intended to make it more likely that these requirements would be met.	Provides flexibility for councils to decide their approach to managing urban development and freshwater in an integrated way.	Provides flexibility for councils to decide their approach to managing urban development and freshwater in an integrated way.
ELEMENTS OF THE SPECIFIC PROBLEM DEFINITION	THE INTEGRATED MANAGEMENT POLICIES IN THE NPS-FM 2014 (AMENDED 2017) WERE OVERLY FOCUSED ON THE FUNCTIONS OF REGIONAL COUNCILS, WITH NO SPECIFIC DIRECTION TO TERRITORIAL AUTHORITIES (LOCAL COUNCILS).			
Likely success of the Policy 3 in solving the problem it was designed to address	The policy specifically addresses the notable absence of local councils in the NPS-FM 2014 (amended 2017) and affirms that they play an important role in the integrated management of freshwater. This will share some of the burden current falling on regional councils.			
Overall assessment	The policy provides a clearer role and framework for local councils. It will be partially successful in contributing clause (a) of the objective. However, the degree of success will depend on its implementation, in particular the approach of district plans in managing urban development and freshwater in an integrated way and on a whole-of-catchment-basis. The policy is consistent with sections 3 and 31 of the RMA.			

TABLE 11: ASSESSMENT OF EFFICIENCY FOR POLICY 3

	BENEFITS	COSTS
Environmental	<p>Environmental benefits are difficult to quantify and depend on the response of councils rather than the policy itself.</p> <p>For example, water sensitive design can have a range of environmental benefits including improved water quality, benefits for biodiversity and ecosystem health, and amenity. These benefits can be difficult to quantify in financial terms and are highly site-specific.</p> <p>The policy potentially avoids future costs to remediate degraded water bodies. May also avoid land use activity in sensitive catchments/areas and provide for the activities elsewhere. However, these decisions with an emphasis on good urban design and spatial planning will need to be worked through when reviewing district plans. This includes the benefits and costs.</p>	<p>Environmental benefits may be distributed inequitably across regions or districts if councils take an inconsistent or 'do minimum' approach to managing the effects of urban development on freshwater or are not timely in introducing planning controls (or if controls lack strength).</p>
Economic	<p>The RIA notes that one Australian based study found that for water sensitive design assets:</p> <ul style="list-style-type: none"> the value of pollution reduction is estimated to be worth more than the lifecycle cost of assets the potential avoided waterway rehabilitation life cycle costs are estimated to be worth around 70 percent of the lifecycle cost of assets the potential property premiums are estimated to be around 90% of the capital cost of assets the capital costs of implementing it in residential developments are typically less than one percent of the cost of a new dwelling 	<p>The policy is unlikely to impose additional costs on regional councils or communities when compared to implementation of the NPS-FM 2014 (amended 2017). The policy incurs little to no direct cost. Determining the amount of resource use that can occur, and the resulting economic cost, will primarily occur through district plan changes and other planning decisions.</p> <p>By way of an example the available evidence indicates that the cost of water sensitive design approaches can be highly variable based on the specific methods adopted, and the particular circumstances of the development. Examples show there may be no additional cost (and potentially cost savings), alternatively increased costs may range from 0-33% total life cycle costs of infrastructure compared to non-water sensitive design options (like piping).</p>
Social	<p>Could potentially improve the quality of urban development, resilience, amenity, and liveability of urban environments. This range of benefits linked to ecosystem services leads to improvements in general well-being.</p>	
Cultural	<p>Could potentially lead to better connections to the natural environment and to express kaitiakitanga and specifically recognises ki uta ki tai.</p>	
Additional sector commentary	<p>Could potentially create some overlap in functions, which could cause some confusion or conflict if not carefully managed. This would reduce its efficiency – however this is considered a low risk.</p>	
Opportunities for economic growth and employment to be provided or reduced	<p>Likely to be low.</p>	
Risks of not acting and uncertainty	<p>The risk of not acting is that the first priority health and wellbeing of water bodies (especially urban water bodies) component of the objective is less successful through the lack of a specific supporting policy. Providing additional direction on how to achieve integrated management will be more effective than the status quo with minimal direct cost.</p> <p>The risk of not acting exceeds the risk of acting.</p> <p>There is a low level of uncertainty associated with Policy 3 because it closely reflects the statutory functions of local councils in section 31 of the RMA but gives greater specificity in regarding a whole-of-catchment approach. Any risk of overlap or confusion on roles or responsibilities is low.</p>	

The RIA preferred Option 2 considering it to be equally as effective as Option 3, the most timely option because it would not require a two-stage process of amending regional policy statements and then subsequently amending district plans.

Option 1 would not add any specific requirements beyond what is already in the NPS-FM – it would seek to clarify and therefore have less impact in driving change and establishing a transparent framework.

Policy 3 (supported by clause 3.5) is the most effective and efficient way to achieve the Objective for the reasons discussed above

7.4 POLICY 4

Policy 4

Fresh water is managed as part of New Zealand's integrated response to climate change.

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.14 Setting limits on resource use

3.16 Setting environmental flows and levels

3.31 Large hydro-electric generation schemes

7.4.1 INTENT

Policy 4 is a new policy and is the only policy relating to climate change in the NPS-FM 2020. It has been included as part of a programme of reform towards a sustainable, low-emissions economy and as a commitment to the Climate Change Response (Zero Carbon) Amendment Act 2019, to allow New Zealand to prepare for, and adapt to, the effects of climate change.

The policy intent is to address the country's climate change obligations (to which the largest hydro schemes make a major contribution) while maintaining and improving freshwater quality and ecosystem health throughout the country⁵⁸.

Policy 4 provides the policy basis for the exception mechanism in Part 3, Subpart 4 for New Zealand's five largest hydroelectricity schemes. This permits regional councils to maintain attributes below national bottom lines if it is necessary to secure the benefits of the Waikato, Tongariro, Waikato, Manapouri and Clutha schemes, while ensuring water quality is maintained or improved.

Changes to the NPS-FM include an exception for FMU's affected by existing structures within the Waikato, Tongariro, Waitaki, Manapouri, and Clutha hydro-electricity schemes, whereby a regional council may set a target attribute state that is worse than national bottom lines if the current baseline state is below the national bottom line and achieving the national bottom line would jeopardise the benefits provided by the Scheme. In such situations, clause 3.31 requires target attribute states to strive for an improvement to the extent possible, having regard to New Zealand's greenhouse gas emission targets, the security and responsiveness of the country's electricity supply and generation capacity.

7.4.2 EFFECTIVENESS & EFFICIENCY

Policy 4 is effective because it:

⁵⁸ Essential Freshwater Report of the Freshwater Independent Advisory Panel, (2020). p.25

- Contributes to achieving the Objective (2.1 (1)(b) and (c)), by preserving hydro-electricity flexibility, which will secure renewable electricity generation, which is important for meeting the health needs of people (clause (b)) as well as enabling communities to provide for their social, cultural and economic well-being, now and into the future (clause (c)); and
- Establishes a commitment to transition to a climate-resilient New Zealand.

Policy 4 is efficient as it is an enabling policy and recognises the tension in setting target attribute states in catchments with the listed power schemes.

The change from the status quo is significant, providing clear direction for regional councils to have regard to the importance of not adversely impacting the generation capacity, storage and operational flexibility of a scheme.

In giving effect to the Policy 4 and the exceptions in clause 3.31, local authorities will still have to comply with all relevant treaty settlement obligations that apply in their regions, including when considering setting a target attribute state below a national bottom line (for the purpose of an exemption).

The Policy 4 efficiency and effectiveness evaluation is in Table 12.

7.4.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 4 AND SUPPORTING PROVISIONS

The draft NPS-FM proposed to implement hydro power exceptions for six named hydro-electricity schemes. Waikaremoana was the sixth scheme included in the draft NPS-FM. In light of submissions and IAP recommendations it was decided that, as Waikaremoana has much less generating capacity compared to the other five schemes and should not qualify for the exception. The five largest hydro schemes have been settled on as a reasonable and appropriate policy choice⁵⁹.

There are national policy statements for both freshwater management and renewable electricity generation, as well as greenhouse gas emissions reduction targets to reconcile. Whereas the NPS- FM 2014 provided a mechanism for identifying exceptions, this NPS-FM 2020 goes further in that clause 3.31 now provides direction for the five largest hydro schemes in order to implement the policy direction in Policy 4.

Policy 4 is the most effective and efficient way to achieve the Objective because it:

- Recognises the importance of hydro-electric power as a renewable energy source in New Zealand's response to managing the effects of climate change; and
- Provides regional councils clear direction on how to treat hydro-electricity generation in their freshwater planning.

⁵⁹ Essential Freshwater Report of the Freshwater Independent Advisory Panel, (2020).

TABLE 12: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 4

	BENEFITS	COSTS
Environmental	Policy 4 will help meet New Zealand's climate change obligations.	
Economic	Policy 4 is necessary to provide New Zealand with security of energy supply. The five schemes included in the exception mechanism produce 86% of New Zealand's hydro-electricity capacity ⁶⁰	Regional councils in areas with significant hydro-generation infrastructure would have the ability to set freshwater objectives below national bottom lines, which would add additional planning and consultation costs on regional councils; however, we expect these are likely to be immaterial ⁶¹
Social		
Cultural		<p>During consultation iwi and hapū practitioners were significantly concerned with the effects the exemption of certain hydro-power stations from freshwater policies will have to specific freshwater bodies and associated iwi and hapū.</p> <p>When giving effect to the NPS local authorities will still have to comply with all relevant treaty settlement obligations that apply in their regions, including when considering setting a target attribute state below a national bottom line (NPS-FM 2020 clause 3.31(3)). However, where there are no Treaty settlements, or if early Treaty settlements did not address these matters, iwi may be disadvantaged.</p> <p>Prioritising renewable energy over freshwater health is a continuation of principles from the NPS-FM 2014 (amended 2017). This is a decision that was not made in conjunction with Māori as Treaty partners. Furthermore, the decision to identify 6 hydro-electricity schemes was not made in conjunction with iwi and hapū whose freshwater bodies are directly affected by these decisions.</p> <p>There has been little discussion with impacted iwi on this matter. In comparison with the NPS-FM 2014 (amended 2017), where no decisions were made regarding which hydro schemes to exempt, the Freshwater Proposals diminish mana motuhake to a medium extent. Despite Treaty settlement legislation applying in the relevant regions, the impacts of this freshwater proposal will be keenly felt by those directly affected and there is strong opposition from impacted iwi for this proposal⁶².</p>
Additional sector commentary	Government's priority is to protect the flexibility of most existing hydroelectricity generation, which is needed to achieve New Zealand's greenhouse gas emissions reductions targets and maintain security of electricity supply.	
Opportunities for economic growth and employment to be provided or reduced	Likely to be low.	
Risks of not acting	<p>That the ability to preserve hydro-electricity flexibility and output to maintain security of supply is not secured.</p> <p>Moving into the implementation phase, the Ministry must engage with iwi and hapū to ensure any potential impacts are identified early and managed appropriately. In particular, the Ministry and councils will need to engage with those iwi and hapū that have interests and settlements covering certain areas when implementing policies (for example, the exceptions for hydropower), so that implementation is not inconsistent with the settlements.</p>	

⁶⁰ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.15.

⁶¹ Castalia. Administrative Costs of Proposed Essential Freshwater Package on Regional Councils, (2020). p.5

⁶² Infometrics. Options for estimating effects of proposed freshwater policies on Māori land-use potential, (2020).

7.5 POLICY 5

Policy 5

Fresh water is managed through a National Objectives Framework in order to ensure that the health and wellbeing of degraded water bodies and freshwater ecosystems is improved, and the health and wellbeing of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.

Supported by:

Part 3 Subpart 2 National Objectives Framework

Also see:

3.2 Te Mana o Te Wai

3.3 Long-term vision for freshwater

3.4 Involving tangata whenua

Part 3 Subpart 4 Exceptions

Appendix 1A Compulsory values

Appendix 1B Other values that must be considered

Appendix 2A Attributes requiring limits on resource use

Appendix 2B Attributes requiring action plans

Appendix 2C Sediment classification tables

Appendix 3 National target for primary contact

7.5.1 INTENT

The NOF is fundamental to implementing NPS-FM 2020. It was first introduced in the NPS-FM 2014 to define a process for developing nationally consistent freshwater objectives and limits in plans. The core aspects of the NOF process are not being changed, rather, the changes are to enhance the framework. The following sections discuss changes that aim to provide greater statutory guidance and process direction.

Policy 5 is to be implemented through Part 3, subpart 2 (NOF). It consolidates various elements of the NPS-FM 2014 (amended 2017)⁶³ and includes additional attributes. The draft policy was revised following submissions and now provides clearer direction about where improvements are required. For example, the NOF now provides greater specificity to ensure the health and wellbeing of degraded water bodies and freshwater ecosystems is improved, and the health and wellbeing of all other water bodies and freshwater ecosystems is maintained and (if communities should choose) improved.

There is no major issue with the previous NOF (NPS-FM 2014 (amended 2017)), rather the framework has been revised as a result of consequential changes from more directive policies. This includes providing an appropriate and effective framework for regional councils to better consider the five inter-related components of ecosystem health in achieving the single Objective. The NOF will be more effective in maintaining or improving freshwater with greater involvement of communities and tangata whenua.

⁶³ E.g. Policy AA1, Objective A2, Objective A3, Policy A1, Objective B1, Policy C2, Objective CA1, Policy CA1, Policy CA2

The NOF remains fundamental to the regional planning process under Schedule 1 of the RMA⁶⁴. The addition of a freshwater ecosystem focus in Policy 5 complements the intent of the NOF.

7.5.2 THE NOF PROCESS

This evaluation provides a high-level assessment of the NOF process. Other reports provide greater detail and rationale for the NOF approach⁶⁵. The IAP also considered the refinements and provided a useful comparison of proposed changes to the current framework based on the draft NPS-FM 2020⁶⁶.

Policy 5 will drive changes to halt further decline in New Zealand's freshwater. At every step of the NOF process this is to be achieved through discussions with communities and tangata whenua, who are empowered to choose between maintaining or improving freshwater water bodies and freshwater ecosystems. The NOF does not prescribe how these choices will be made and regional councils will need to develop predictable and transparent processes for making decisions, having regard to various values and views.

The hierarchy of obligations in Te Mana o Te Wai is complementary in guiding and informing these discussions. How effective this process will be in achieving the Objective depends on the values of water bodies and the willingness of communities to accept change. The NOF continues to allow for this.

Many of the NPS-FM 2014 (amended 2017) process steps remain but are strengthened and re-organised. The NOF process is summarised in clause 3.7 of the NPS-FM 2020 and a high-level comparison is provided in Table 13.

TABLE 13. SUMMARY OF THE NOF PROCESS

CLAUSE 3.7(2) OF THE NPS-FM 2020
Regional councils must carry out each step of the NOF through discussion with communities (including tangata whenua) and apply the hierarchy of obligations (clauses 1.3(5), 3.2(5)(c))
The steps are:
(a) identify FMUs in the region (clause 3.8)
(b) identify values for each FMU (clause 3.9)
(c) adopt objectives in the regional plan that will achieve the environmental outcomes sought for each value (clause 3.9)
(d) identify attributes for each value and set their baseline states (clause 3.10)
(e) set target attribute states, environmental flows and levels, and other criteria to support the achievement of environmental outcomes (clauses 3.11, 3.13, 3.16, 3.17)
(f) make rules and prepare action plans, as appropriate, to support the achievement of environmental outcomes (clauses 3.12, 3.14, 3.15)
Regional councils must also monitor water bodies and freshwater ecosystems (clauses 3.18 and 3.19); and take steps if deterioration is detected (clause 3.20)

⁶⁴ This will be under the freshwater planning process prescribed by the RMA amendment act 2020.

⁶⁵ The previous NPS-FM section 32 reports (2011, 2014, 2017), the submissions and recommendations of the IAP, and the RIA provide more detail and rationale. Between the Draft NPS-FM and final version there has been no substantive shift in policy direction for the NOF but there have been several clarifications and technical drafting changes.

⁶⁶ The IAP considered the NOF process of Part 3, subpart 2 a refinement of Part CA of the NPS-FM 2014 (amended 2017). Refer to Essential Freshwater Report of the Freshwater Independent Advisory Panel, (2020). p.31.

7.5.3 GREATER INVOLVEMENT

The NOF process encourages a collaborative approach by requiring regional councils to carry out each step through discussion with communities (including tangata whenua) and applying the Te Mana o Te Wai hierarchy of obligations. Te Mana o Te Wai forms the platform for community discussions about the desired state of freshwater relative to the current state.

The IAP was concerned about the tight deadline for regional plans to set water quality limits, and the efficiencies needed with consultation, collaboration, and engagement with communities and tangata whenua. The IAP recommended that rather than requiring this ‘at every stage of the process’, regional councils should have discretion to tailor consultation so that they can meet the 2025 deadline.⁶⁷

NPS-FM changes have incorporated more specific requirements in relation to engagement with tangata whenua and communities. Councils will be required to engage with communities and tangata whenua in the NOF process, and in particular to ‘actively involve’ tangata whenua (to the extent they wish to be involved)⁶⁸. This also requires councils to develop processes to identify Māori freshwater values and for iwi to participate in all decision making around those values at each step. This is consistent with the high level of public participation the RMA affords and the policy intent for Māori to have the lead role in identifying, developing, implementing, and monitoring Māori freshwater values (compulsory or otherwise).

However, this does not require all parties to agree. Regionals councils will still need to make decisions, which may potentially be co-governance decisions with tangata whenua⁶⁹). The community and tangata whenua will be able to make formal submissions if they are not adequately heard or disagree. Those rights continue.

7.5.4 MAINTAINING OR IMPROVING FRESHWATER AND ECOSYSTEM HEALTH

A key change to the NOF process requires specific, measurable and time-bound objectives to maintain (at a minimum) freshwater at its *baseline state* rather than within attribute bands under the NPS-FM 2014 (amended 2017).

This is intended to be more effective in maintaining water quality by severely restricting any ‘headroom’ that may allow further decline. It will also make it more straightforward to assess whether objectives are achieved in managing ecosystem health.

The *baseline state* is carefully defined in the NPS-FM 2020 to prevent “locking in” further declines while the NOF process is undertaken. This means the best attribute state out of the following:

- i. the state of the attribute on the date the attribute is first identified:
- ii. the state of the attribute on the date on which a regional council set a freshwater objective for the attribute under the NPS-FM 2014 (amended 2017):
- iii. the state of the attribute on 7 September 2017.

The NOF does not preclude the use of modelling, but prefers physical monitoring.

Clearer reporting requirements are set out in clause 3.30 are intended to give councils more direction on how to assess whether freshwater has been maintained over time. They recognise that this assessment is more complex than simply measuring

⁶⁷ Essential Freshwater Report of the Freshwater Independent Advisory Panel, (2020). p.34

⁶⁸ Clause 3.4(1)

⁶⁹ Promoted in clause 3.4(4) where Local authorities must work with tangata whenua to investigate the use of mechanisms available under the RMA to increase the involvement of tangata whenua in the governance and management of fresh water, such as: transfers or delegations of power under section 33: joint management arrangements under section 36B: mana whakahono a rohe (iwi participation agreements) under Subpart 2 of Part 5.

achievement of freshwater objectives. For example, proposed reporting requirements include direction to consider changes across multiple attributes and locations (and what this means for catchments as a whole) and predicted changes (e.g. as a result of climate influences or historic land use).⁷⁰

Regional councils are already very familiar with the requirement to identify and monitor Freshwater Management Units (FMUs). The NOF process will substantially reduce the scope for variability of the NPS-FM 2014 (amended 2017) that allowed an overall approach to managing freshwater (i.e. 'unders and overs'). There is still scope for flexibility when regional councils identify their FMUs at an appropriate spatial area, noting some regional councils have done this as the whole region or sub-regions⁷¹. The NOF clarifies this can be at the FMU, or part of an FMU, which would include at the (sub)catchment level.

The NOF places more rigour around FMUs by requiring regional councils to identify the following (if present) within each FMU: sites to be used for monitoring attributes; primary contact sites; the location of habitats of threatened species; outstanding water bodies; and natural inland wetlands. Monitoring of representative sites or other relevant sites – this provides a level of flexibility where it may be beneficial to monitor, for example, sensitive receiving sites (this will likely also support more effective and robust decision making for discharge permit applications under section 105 of the RMA).

The specific requirement to identify outstanding water bodies could be undermined by the complexity of the task involved. The Hawkes Bay Regional Council has been advancing work in this space for several years⁷², and earlier this year notified Proposed Plan Change 7 – Outstanding Water Bodies. The development of national guidance or tools would be useful to avoid potential duplication with other protection tools⁷³.

7.5.5 ACTION PLANS

Action plans are intended to be an adaptive management tool to respond to deteriorating trends in freshwater, but will be more effective as a short term response tool as trend analysis can be very challenging and may require up to 10 years of data, especially where there is a higher degree of natural variability or for complexity. Action plans are also intended to assist in achieving target attribute states.

Action plans will be required to halt or reverse the deterioration or avoid over-allocation if a council detects issues with achieving environmental outcomes or flows, or degrading FMUs (or parts of FMUs). They are already mentioned in the NPS-FM (amended 2017) but will have a much greater role going forward to manage those components of ecosystem health that warrant a more flexible approach. The RIA notes the current limit setting approach in the NPS-FM 2014 (amended 2017) works well conceptually with water takes and discharges of contaminants (like nitrogen) but less easily or accurately for the new ecosystem health attributes proposed⁷⁴. Action plans will complement limits.

For example, in achieving target states for attributes in Appendix 2A action plans are optional (while limits are required), while achieving attributes in Appendix 2B action plans are mandatory (while limits are optional). Alternatively for achieving any other target attribute states or to support achieving environmental outcomes, action plans are available as one of three options (the others are to identify limits on resource use and include them as rules in its regional plan or impose conditions on resource consents).

The NOF prescribes an approach for preparing action plans, including undertaking a reasonable level of consultation. It is expected this would be like the way councils already

⁷⁰ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.192

⁷¹ Ministry for the Environment. A Guide to Identifying Freshwater Management Units Under the national Policy Statement for Freshwater Management 2014. Wellington: Ministry for the Environment. (2016).

⁷² Outstanding Water Bodies Plan Change: Selecting a list of outstanding water bodies in Hawke's Bay, (2018).

⁷³ E.g. Water Conservation Orders, Part 9 of the RMA.

⁷⁴ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.35

prepare non-statutory RMA documents and could also allow for a multi-agency response (including public health agencies and other environmental agencies). Depending on the consultation process, greater weighting could be given to action plans when deciding resource consents⁷⁵, increasing their effectiveness at all level of decision making.

Action plans may be published in regional plans (through a Schedule 1 Part 4 plan change process) or they may be published separately.

There is a trade-off between flexibility (and timeliness) and enforceability where action plans sit outside regional plans. This is because there is no explicit requirement for councils to implement action plans, which may unintentionally limit their effectiveness. This is unlikely as communities and iwi will not tolerate inaction.

Action plans are also required for fish passage and are addressed separately in section 7.9 of this report.

7.5.6 SETTING ENVIRONMENTAL FLOWS

The setting of limits on resource use is a requirement of the NPS-FM 2014 (amended 2017). Changes in the NPS-FM 2020 provide a clearer policy intent. Regional councils must specifically state the environmental outcomes (including compulsory ecosystem health outcomes) they seek through water flow regimes outlined in regional plans as well as set water take limits that are clearly related to achieving those outcomes. This adds a level of detail and transparency to the current requirements. It is likely to place a greater emphasis on having good monitoring data and water reliability assessment. There will be a level of uncertainty for water users until take limits are included in regional plans. In regions such as Otago this is a topical issue⁷⁶. Regional councils have sought more guidance on setting flows and levels for ecosystems health and this should be prioritised.

7.5.7 NEW ECOSYSTEM HEALTH, THREATENED SPECIES AND MĀORI VALUES

Under the NPS-FM 2014 (amended 2017) the freshwater management approach for managing ecosystem health is fragmented and narrow and fails to promote restoration or manage risks to indigenous and threatened species. The amended and new compulsory values in Appendix 1A aim to take a more holistic and less reductionist approach to ecosystem health management and to support Te Mana o Te Wai.

Direction in the NPS-FM 2014 (amended 2017) for managing specific water quality attributes and establishing minimum water flows or levels, has meant that to date councils have tended to focus their freshwater management efforts at the components of water quality and quantity to the detriment of the other three ecosystem components.⁷⁷

The compulsory values in Appendix 1A are fundamental to achieving the Objective and critical to achieving the sustainable management of freshwater in the context of the pressures the resource is under in many catchments. However, values are not effective until they are incorporated into regional plans. To this end they are essentially an aid to be adequately considered in detail through the NOF process, especially when setting limits on resource use through rules in regional plans. Communities, tangata whenua and councils will determine the relative importance of applicable values and attributes.

The following is a brief commentary on the new values rather than a detailed evaluation.

⁷⁵ As an "other matter" e.g. under section 104 of the RMA

⁷⁶ For example, the Proposed Water Permits Plan Change (Plan Change 7) and recent ministerial 'call in' has received much media attention regarding the uncertainty impacts of potential short term replacement deemed water permit to facilitate the transition from the Regional Plan: Water for Otago to a new Regional Land and Water Plan.

⁷⁷ RIA Action for healthy waterways Part II: Detailed Analysis, (2020).

Amended Ecosystem Health Value

The NPS-FM 2020 has amended the ecosystem health value of the previous NPS-FM to recognise the five biophysical components of ecosystem health (aquatic life, water quality, water quantity, habitat, and ecological processes).

The policy intent is not aimed at natural variability or changes, rather at a scenario-based approach of what this may be like in the absence of human disturbance or alteration. However, for some catchments this will be a challenging yet important task to reimagine. For example, the Manuherikia River catchment in Otago where a complex network of historic water races, a dam, and substantial irrigation water takes.

A clear and complete ecosystem health value is fundamental to achieving the Objective because it is the starting point for the NOF process. Councils and communities can have more open and meaningful discussions about managing freshwater and focus their efforts in a more inclusive and holistic way.

New Threatened Species Value

This new compulsory national value requires regional councils to identify the location of threatened species in their regional plans, set an environmental outcome which specifically accommodates for the value, and adopt appropriate policies and methods to achieve it. Threatened species is defined in the NPS-FM 2020 for clarity.

The threatened species value is intended to add support to the ecosystem health value rather than duplicating it. The focus is on the most vulnerable species rather than all species. The RIA considered that expanding the scope of the value as requested by some submitters could undermine the policy intent. At-risk freshwater species are expected to benefit as a result of improved conditions through the Ecosystem Health value and related policies.

The success of this value will rely heavily on the Department of Conservation to work with the Ministry to help councils with implementing this new compulsory value, which links to the work programme for the proposed National Policy Statement for Indigenous Biodiversity (NPS-IB).

Elevating Mahinga Kai Values

Mahinga kai values – ‘kai are safe to harvest and eat’ and ‘kei te ora te mauri (the mauri of the place is intact)’ - were included in the NPS-FM 2014 (amended 2017) as one of the “other” national values of freshwater’. Mahinga kai has been elevated to a compulsory value in the NPS-FM 2020. Previously, opportunities for Māori participation in freshwater management and freshwater planning processes were not being fully realised. For example, Māori values and measures of health have, to date, generally not been identified, reflected or incorporated into regional planning, or considered a priority against other biophysical compulsory values or attributes.⁷⁸ There was overwhelming support for strengthening Māori values in the NPS-FM 2020.

The elevation of mahinga kai values to a compulsory national value in Appendix 1A will go a long way towards achieving the Objective. This option (in combination with other changes in the NPS-FM 2020 to strengthen tangata whenua involvement in freshwater management) was preferred to the identification of any new Māori values.

Regional councils will need to work closely with tangata whenua, especially through the NOF process, and by considering how to give effect to Te Mana o Te Wai.

⁷⁸ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.157; Scoping report – issues and options for incorporating Māori values and outcomes in freshwater management planning, decision-making and implementation (2019). pp.26-27; Ministry National Policy Statement for Freshwater Management Implementation Review: National Themes Report (2017). pp.37-41.

7.5.8 NEW AND UPDATED ATTRIBUTE TABLES

Attribute tables are essentially an aid to be adequately considered in detail through the NOF process, especially when setting resource use limits and rules in regional plans. Communities, tangata whenua and councils will determine the target attribute states for achieving environmental outcomes. The following is a brief commentary rather than a detailed evaluation⁷⁹.

Ecosystem Health

New attribute tables in Appendix 2B require councils to better monitor and respond to specific ecosystem health metrics (submerged plants, fish (rivers), macroinvertebrate score, dissolved oxygen, ecosystem metabolism). These are to be implemented through action plans.

The new macroinvertebrate score of 90, specified in Attribute Table 14, requires an action plan and replaces the NPS-FM bottom line score of 80⁸⁰. This is expected to be more successful in detecting degradation.

Nutrients

There has been much debate about setting nutrient bottom lines, with divided views, including among the scientific community and concerns about costs on rural communities. It is clear that many catchments will require reductions in nitrogen loads to meet the NPS 2014 (amended 2017) bottom lines, and the new and reset NPS-FM 2020 bottom-lines. Nitrogen policies in the previous NPS-FM, and councils' implementation of them, were insufficient to provide for ecosystem health, especially in soft-bottomed rivers that do not support the growth of periphyton⁸¹.

Consideration has been given to the following options in relation to nutrients:

- requiring councils to set dissolved inorganic nitrogen (DIN) and dissolved reactive phosphorus (DRP) attribute states to provide for other ecosystem health attributes⁸²;
- adopting a more stringent toxicity (Ammonia and Nitrate) bottom line to provide 95% species protection;
- exempting selected commercial vegetable growing areas that are critical for national food security and stability of supply of fresh vegetables through all seasons; and
- adopting an action plan approach to DRP without a national bottom line.

A summary of the options and the reasons for the choices made can be found in the RIA and Cabinet paper.

The government needs more time to consider whether there should be a DIN bottom line in the NPS-FM 2020. The timeframe for this is within the next 12 months, following a review of the environmental and economic implications. On balance, the government also does not believe it can progress a national bottom line for DRP at this time, but it is critical that the Government take steps now to improve how phosphorus is managed.

⁷⁹ Refer to the RIA for more information

⁸⁰ Policy CB2/CB3

⁸¹ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.17

⁸² To an extent this is noted in the NPS-FM 2014 (amended 2017) for achieving the periphyton attribute. Clause 3.13 extends this to any other attribute and provides greater clarity by locating it in the body of the NPS-FM with consequential changes.

The decision to not proceed with proposed nitrogen bottom lines (from the Science and Technical Advisory Group's proposed DIN bottom line of 1mg/l to nitrate toxicity of 2.4mg/l), has been estimated to reduce costs by over \$2 billion PV.

The decision to not proceed with a phosphorus attribute bottom line is estimated to reduce costs by about \$500 million PV.⁸³

This is not ideal to some but is expected to have some gains in achieving the Objective. The harm being caused by excessive nutrients must continue to be addressed at the regional level by councils setting catchment limits on resource use. The introduction (or not) of national attributes does not preclude this.

Contact recreation

The new action plan attribute for *E. coli* is discussed separately in section 7.11 of this report.

Sediment

New sediment tables fill a core policy gap in the management of sediment as councils do not currently require in-stream sediment to be maintained below thresholds to provide for ecosystem health. This means that high-risk sediment-generating activities and erosion-prone areas are inadequately considered in resource management decisions, and inadequately controlled. Few councils have developed or signalled that they are considering developing sediment thresholds. There is wide support for a nationally consistent approach. Addressing this sediment gap at the national level is preferred.

The new tables are Appendix 2A Attribute - Table 8 – Suspended fine sediment, Appendix 2B Action plan attribute - Table 16 – Deposited fine sediment, and Appendix 2C Sediment Classification Tables.

7.5.9 REMOVAL OF STAGED IMPLEMENTATION AND ADDITIONAL RESOURCING

Regional councils must undertake the NOF process and notify changes to their existing regional plans by 31 December 2024. The leniency and staged approach in the previous NPS-FM 2014 (amended 2017) has been removed.

The NOF still requires councils to consider freshwater values and set environmental outcomes (to be expressed as objectives in regional plans) in accordance with the process prescribed. However, plans must be notified by the end of 2024 (not 2030) to achieve *baseline states* for the compulsory values where they are not already met. It does not impose timeframes for achieving target states for freshwater and freshwater ecosystems, but where a longer timeframe is proposed, interim targets at intervals of not more than 10-years must be set.

Previously councils and communities could choose a timeframe that deferred the cost of meeting bottom lines into the indefinite future when the present value of costs is relatively low. It should be noted that where implementation costs are deferred, so too will be the costs of improved water quality, for amenity, cultural appreciation and other current uses such as recreation.⁸⁴ The NOF retains a degree of flexibility for councils and communities to respond in ways that suit their circumstances, but there is little relief (or scope) to defer research and monitoring, including cultural monitoring, and the debate on what local objectives should be cannot be delayed.

⁸³ p.5

⁸⁴ p. 27

The resourcing concerns from councils, iwi and communities are well covered in submissions and other reports⁸⁵.

A high level of wrap around support and funding from the government will be critical to ensuring the Policy 5 package is effective in achieving the priority outcomes in the Objective. The Cabinet paper provides some comfort⁸⁶, but it cannot fill any substantial gaps in the science. There is a risk that decisions will be rushed or not well informed. However, the risk of not acting is of greater concern to the government.

There will need to be a degree of re-work to undertake the new NOF process by making or changing regional plans. This may lead to some inefficiency, but much of this work should be able to be reused and regional planning is an iterative process. Unintentionally, those regional councils who delayed implementing the NPS-FM may benefit in starting fresh. For a number of councils who have established frameworks and special committees, like Greater Wellington Regional Council, these work programmes will likely need to be bought forward and amended to ensure all steps in the NOF are met.

The impact on councils and communities will vary region by region. For example, Otago Regional Council are in the early stages of implementing the NPS-FM 2014 (amended 2017) and previous versions. Hawkes Bay Regional Council⁸⁷ and Waikato Regional Council⁸⁸ are well advanced in certain areas, especially with nutrient management. This year Greater Wellington Regional Council notified decisions on its new regional plan and has a whitua (catchment) work programme to manage land and water through Whitua committees. NOF Guidance will be developed by the Ministry to assist in understanding and implementing the NOF⁸⁹. This will likely evolve over time and reflects the “adaptive management” approach the Ministry is taking (more about this can be found in the RIA).

7.5.10 EFFECTIVENESS & EFFICIENCY

The Policy 5 efficiency and effectiveness evaluation is discussed in Table 14 and Table 15.

⁸⁵ E.g. IAP report

⁸⁶ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020).

⁸⁷ Plan Change 6 Tukituki River Catchment

⁸⁸ Healthy Rivers/Wai Ora: Plan Change 1: Waikato and Waipa River Catchments

⁸⁹ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.14

TABLE 14: ASSESSMENT OF EFFECTIVENESS FOR POLICY 5

ELEMENTS OF THE OBJECTIVE	RESOURCES ARE MANAGED IN A WAY THAT PRIORITISES	FIRST, THE HEALTH AND WELLBEING OF WATER BODIES AND FRESHWATER ECOSYSTEMS	SECOND, THE ESSENTIAL HEALTH NEEDS OF PEOPLE	THIRD, THE ABILITY OF PEOPLE AND COMMUNITIES TO PROVIDE FOR THEIR SOCIAL, ECONOMIC, AND CULTURAL WELL-BEING, NOW AND IN THE FUTURE
Contribution of Policy 5 NOF package towards achieving the Objective	<p>Strengthens the current NOF process for all regional councils to follow in developing freshwater objectives. Councils must give effect to this policy in their regional plans thereby achieving national consistency.</p> <p>Improved objectives will focus community effort on what is needed for the ecosystem, as well as what is needed to achieve particular attribute states</p> <p>Councils monitor a wider range of ecosystem health metrics, and develop actions to respond</p> <p>More complete evidence base, and clearer pathway for it to inform action.</p> <p>Fills a core regulatory gap relating to managing sediment.</p>	<p>Recognises that the first obligation is to the water before providing for the needs of people.</p> <p>Indigenous freshwater flora and fauna that are nationally critical, nationally endangered, and nationally vulnerable are at reduced risk of extinction because the environmental conditions necessary for their existence will be better safeguarded.</p> <p>Councils must manage habitat, aquatic life and ecosystem processes as key components of freshwater ecosystems.</p> <p>Some aspects may reduce or limit effectiveness, including no requirement to implement action plans and the complexity of identifying outstanding water bodies and science gaps. Overall, on balance the NOF provides a comprehensive and appropriate framework for regional councils.</p>	The NOF continues to provide for this through value setting (no change from the NPS-FM 2014 (amended 2017))	<p>The NOF continues to provide for this through value setting (no change from the NPS-FM 2014 (amended 2017))</p> <p>Improves the objective setting framework by stepping the councils and communities through a staged process to manage ecosystem health (and other values) as a whole before considering the component parts, which on their own are not sufficient to safeguard ecosystem health.</p>
ELEMENTS OF THE SPECIFIC PROBLEM DEFINITION	THERE IS NO MAJOR ISSUE WITH THE CURRENT NOF RATHER IT IS BEING OVERHAULED BECAUSE OF CONSEQUENTIAL CHANGES RESULTING FROM MORE DIRECTIVE POLICIES			
Likely success of Policy 5 NOF package in solving the problem it was designed to address	<p>Through Policy 5, the NOF provides greater specificity to ensure the health and wellbeing of degraded water bodies and freshwater ecosystems is improved, and the health and wellbeing of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.</p> <p>The NOF is likely to be a successful framework for regional councils to more broadly consider the five inter-related components of ecosystem health, which in turn will support conversations around competing interests for water and correct some imbalances, allow threatened species and Māori values to receive proper attention, and provide a more complete set of attribute tables.</p> <p>There may be some criticism that the nutrient tables do not go far enough but councils are still required to maintain freshwater (within 12 months the government will revisit this).</p>			
Overall assessment	<p>Policy 5 and the NOF is expected to be effective in achieving the Objective because it prescribes a nationally consistent process for and strong direction for maintaining or improving freshwater with greater involvement of communities and tangata whenua. Undesirable aspects have been removed, including the ability to allow a degree of decline in maintaining target attribute states. Major policy gaps are addressed by including additional ecosystem health attributes tables and new sediment attribute tables.</p> <p>The marginal (and material) change from the status quo is moderate but the NOF process is already well established. Councils will be better equipped to adequately plan for the health of freshwater, monitor and respond to deteriorating trends in freshwater. However, timely guidance and funding from central government will be critical to successful implementation. The RIA provides details on this.</p>			

TABLE 15: ASSESSMENT OF EFFICIENCY FOR POLICY 5

	BENEFITS	COSTS
Environmental	<p>Reduced flooding risk and vulnerability; increased societal resilience to natural hazards.</p> <p>Targets actions where threatened species live. Allows councils to introduce comprehensive protective measures through their planning processes.</p> <p>Retention and, in some cases, increases of natural capital stocks such as biodiversity; increases in ecosystem services flows (provisioning, regulating, and supporting services).</p> <p>Improving understanding of what must be managed for ecosystem health is an efficient method of improving decision making and makes it easier for communities to hold councils to account.</p> <p>In some cases, land-use change from intensive land use to afforestation, and resulting climate change benefits</p> <p>Monitoring targets actions that are appropriate to the issue and catchment. Stronger evidence base supports decision making</p>	<p>Risk of continued degradation of water quality in some areas prior to new regional provisions being implemented if the plan change process is lengthy.</p> <p>There may be implementation issues, with councils lacking capability and capacity.</p> <p>Most of the impacts of this new compulsory threatened species value will fall on regional councils in their identification of the places where the threatened species are present. This work will be assisted by central government.</p> <p>One-off capital costs for councils for monitoring equipment, and ongoing monitoring costs which they may recoup via consents from resource users. Approximately \$2 million.</p>
Economic	<p>Sediment net benefits from water clarity, savings from reduced dredging, avoided erosion cost and net profit impacts assuming land use change and carbon revenues is estimated at \$297 million per annum by 2050 (about \$5 billion PV) - This is the upper limit of net benefits.⁹⁰</p> <p>Improving water clarity and protecting freshwater species increases recreational opportunities. The value that people place on this, signalled through their willingness to pay for improved freshwater and freshwater recreation activities, is estimated as \$79 million per year.⁹¹</p> <p>Taking action now will avoid higher costs in future, by stopping ecosystems passing tipping points.</p>	<p>\$12 million of Budget 2019 has been allocated for council and iwi/hapū and Māori implementation support, completely meet these groups' longer-term support needs to implement the package effectively. If central government does not provide further support, councils, iwi/hapū and Māori will either increase expenditure on planning engagement and development or will likely implement the measures in a sub-par manner.⁹²</p> <p>Recognising all components of ecosystem health value is estimated at \$2 million for the average regional council for additional planning, science and management costs on regional councils requiring an additional 0.45 full time employees (some councils may incur higher costs than others).⁹³</p> <p>Impact analyses show that increasing the stringency of the toxicity thresholds requires improvement at 5% of monitored river sites, over and above the existing improvements needed to meet the limits for periphyton growth. The new nitrogen toxicity bottom lines are estimated to cost an additional \$30 million per annum by 2050 over the status quo. Officials estimate the cost of achieving the necessary nitrogen reductions to meet the NPS-FM 2020 requirements to be \$394 million per annum by 2050 (about \$3.6 billion PV) and lead to 7% of dairying area shifting to other land uses (concentrated in some regions, 16.0% in Canterbury, 14.5% in Taranaki, 10.7% in Manawatu and 9.6% in Southland).⁹⁴</p>

⁹⁰ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020).

⁹¹ Action for healthy waterways – Information on benefits and costs, (2020). p.2

⁹² Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020).

⁹³ Castalia Limited. Administrative Costs of Proposed Essential Freshwater Package on Regional Councils: Report for the Ministry for the Environment (draft). Castalia Limited. (2020).

⁹⁴ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020).

	BENEFITS	COSTS
		<p>Across New Zealand, meeting the strengthened nitrogen toxicity bottom line will mean costs to farmers to invest in mitigation or reduce output. In some cases, land-use change could be used to reduce nitrogen output.</p> <p>The primary sector may respond to the changes from this package by diversifying with new types of products and new land uses. Innovations and advances like this would lessen the impacts of the package that have been estimated.</p> <p>These reforms impact both urban and rural areas. The package potentially impacts on new 'greenfield' urban development (rather than infill development). Urban and infrastructure developers and operators may face costs to comply with the regulations and long-term policies that emerge from regional council planning processes. For example, the stream loss and sediment policies will likely increase development costs for greenfield sites in regions that do not already have adequate protection measures.⁹⁵</p> <p>A study on the performance of wastewater treatment plants that discharge to freshwater found that there would be no significant additional cost from these proposals. An investment of \$1.4 to \$2.1 billion would be expected to be needed to meet existing requirements of the NPS-FM 2014 (amended 2017).⁹⁶</p> <p>Costs for councils have been estimated at \$76 million per annum, with the highest costs expected to come from river flows policies, enforcing Freshwater farm plans, and water-take measuring and reporting. Some portion of these costs is probably coming through existing planning processes, and the highest proportion of these costs is expected to fall on Canterbury, Waikato and Otago, where these problems are most acute.</p>
Social	<p>Increased recreation/leisure opportunities as a result of reduced sediment impacts.</p> <p>Resource users maintain their social licence to operate. Brand protected or enhanced for exporters and tourism.</p>	<p>Negative effect on wellbeing (anxiety/mental health) if financial costs of interventions affect, or are perceived to affect, farm viability, and if farmers are concerned they do not have the necessary skills to implement interventions or do not believe them to be effective and necessary.</p>
Cultural	<p>Improve Māori values and Māori involvement in freshwater management to provide input and inform councils about their values, measures of wellbeing and mātauranga. Elevating Mahinga Kai will support the ecosystem health value and concerns regarding a focuses on a western view of freshwater health.</p> <p>Increased opportunities for food gathering / mahinga kai as a result of improved ecosystem health.</p> <p>Improved mauri of water bodies and facilitate kaitiakitanga / stewardship roles.</p> <p>Greater value placed on indigenous species unique to Aotearoa.</p> <p>Benefits accrue to cultural heritage, sense of identity, mahinga kai, recreation (e.g. fishing, kayaking, tramping), and tourism.</p>	<p>Iwi and hapū are uncertain of councils' capacity to account for local Māori values and interests in their plans. Councils share this view, and wider concerns about being able to act on the proposals.⁹⁷</p>

⁹⁵ Action for healthy waterways – Information on benefits and costs, (2020). p.3

⁹⁶ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.23

⁹⁷ Action for healthy waterways: Summary of submissions on national direction for our essential freshwater, (2020). p.22

	BENEFITS	COSTS
	Better incorporates Te Ao Māori into future freshwater management and planning processes	
Additional sector commentary	None	
Opportunities for economic growth and employment to be provided or reduced	Refer above. Potential increased job opportunities for land managers and professionals with soil conservation skills. These reforms impact both urban and rural areas.	
Risks of not acting and uncertainty	<p>The Government considers the long time it is taking councils to implement the NPS-FM 2014 (amended 2017) is unacceptable. The NOF framework is a critical part of the implementation of the NPS-FM 2020 and without this policy there is a significant risk that the objective may not be achieved. There is an overall moderate level of uncertainty mostly arising from the potential costs and concerns about resourcing arising from submissions relating to plan change processes to implement NPS-FM 2020.</p> <p>The risk of not acting exceeds the risk of acting.</p>	

7.5.11 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON POLICY 5 AND SUPPORTING PROVISIONS

The Policy 5 NOF package has been assessed against the status quo only. The changes are more of a refinement to the NOF and consequential to the overall stronger direction in the NPS-FM 2020. Further details around the sub-options for implementing some parts of the NOF (e.g. ecosystem and Māori values; and ecosystem, nutrient, and sediment attributes) are covered in detail in analysis in the RIA⁹⁸ and Interim RIA⁹⁹. The RIA also comments on the technical drafting changes made to the NOF process to respond to submissions and the IAP report.

The government's *Action for healthy waterways* aims to restore our waterways in a generation. The NPS-FM 2020 – including Te Mana o Te Wai, new values, and new attributes, and faster and nationally consistent regional plans is fundamental to achieving this.

The Policy 5 NOF package is the most appropriate way to achieve the Objective because it provides greater clarity and direction to ensure regional planning processes adequately consider freshwater ecosystem health and involve communities and tangata whenua. Changes to the NOF will provide better assurance that further degradation is effectively halted, and water bodies are improved where degraded or otherwise maintained or (if communities choose) improved. This includes providing clearer direction to address competing interests and removing undesirable aspects of the current NOF.

Many councils are already well underway with their freshwater planning under the NPS-FM 2014 (amended 2017), and much of this work should be able to be carried across into the new NOF process. However, it is likely that there may a degree of re-work and existing implementation programmes will need to be revisited to ensure they satisfy the requirements of the NOF. In some regions new processes will need to be put in place to actively involve tangata whenua.

There will be substantial benefits and costs. However, much of this arises in implementing the values and attribute tables, which are lightly evaluated because the detail will need to be assessed when implementing the NOF. Substantial improvement costs to meet macro-invertebrate and toxicity requirements are already locked in under the NPS-FM (amended 2017) and the additional cost is expected to be relatively small.

None-the-less regional councils will likely face substantial additional resourcing costs, and iwi will too. Much of this will be in more rural regions, especially the lower South Island and Waikato. The government is committed to providing funding and preparing guidance to support the successful implementation of new freshwater plans (which must be notified before 31 December 2024).

⁹⁸ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). e.g. Chapters 1, 3, 6, 8, 9 and 11

⁹⁹ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). e.g. Appendix 3

7.6 POLICY 6

Policy 6

There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.

Supported by:

3.21 Definitions relating to wetlands and rivers

3.22 Natural inland wetlands

3.23 Mapping and monitoring natural inland wetlands

Also see:

Policy 5 NOF package

Policy 8 Habitat package

NES-F

7.6.1 INTENT

Historically the value of New Zealand's wetlands was not recognised, and extensive drainage to create 'productive land' was incentivised. This contributed to the loss of over 90% of the original historical inland wetlands. The extent of remaining inland wetlands continues to decline with at least 1,247 hectares being lost between 2001 and 2016.¹⁰⁰

The extensive and ongoing loss and degradation of wetlands has resulted in the loss of unique biodiversity and ecosystem services. Current national policies are inadequate to protect our remaining inland wetlands, and consequently the strength of regional plans varies considerably between local councils. Lack of data and resources can also make it difficult to implement rules.¹⁰¹

Several changes have been made to the policy direction since consultation on the draft NPS-FM in 2019. These changes include, clarifying the policy intent of protecting New Zealand's remaining inland wetlands regardless of their perceived "significance", improving workability of the provisions, and encouraging and enabling restoration¹⁰².

Policy 6 will strongly direct consenting decisions and require regional planning to avoid further loss of these habitats and ecosystems, maintain their condition into the future and promote restoration to improve condition. The impact of Policy 6 is immediate. It uses strongly directive language and is reinforced by the requirement for councils to replicate Policy 6 in regional plans without using the Schedule 1 process in the RMA. The policy also affords a high degree of protection, one of the strongest in the NPS-FM 2020.

The requirements allow for a specific exception for "specified infrastructure" (which is defined). Broadly, this exception only applies to necessary infrastructure operated by a lifeline utility and public flood or drainage related works, or regionally significant infrastructure identified as such in a regional policy statement or regional plan. Applicants seeking a resource consent under the exception must be able to demonstrate significant national or regional benefits, a functional need, and manage effects by applying the effects management hierarchy. The overall theme is a presumption that further loss of

¹⁰⁰ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.8

¹⁰¹ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.205

¹⁰² Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). Appendix 1.

inland natural wetland extent is unlikely to be approved, other than in limited circumstances.

A nationally consistent approach to aquatic offsetting and aquatic compensation is defined. The effects management hierarchy aims to provide a consistent way of ensuring a good outcome that aligns with best practice for offsets and compensation.

Also supporting Policy 6 is a set of directive requirements on regional councils to map and maintain an inventory of natural inland wetlands with area greater than 500m² and undertake a monitoring programme to satisfy that wetland policies are being achieved. Regional councils have 10 years to complete the wetland mapping for their regions and must prioritise this, first by mapping any wetland at risk of loss of extent or value.

A wetland identification and delineation protocol is incorporated by reference to reduce the potential for litigation. This will assist in cases of uncertainty or dispute about the existence or extent of a natural inland wetland. On its own (as a non-regulatory method) it is unlikely it would have sufficient strength, so its inclusion is appropriate.

The NPS-FM 2020 contains a definition for “natural wetland”, which applies when interpreting both the NPS-FM and NES-F. In addition, the NPS-FM 2020 also defines the term “natural inland wetland”, which is a natural wetland that is not in the CMA and it is these natural inland wetlands that are the primary focus of clause 3.22.

7.6.2 EFFECTIVENESS AND EFFICIENCY

Table 16 provides an assessment of the effectiveness of Policy 6 and its supporting implementation requirements. Table 17 assesses the efficiency of these provisions.

It is acknowledged that councils will require support and guidance to effectively implement the wetlands regulations. The Ministry is developing an implementation work programme to provide technical guidance, education and support.

This includes:¹⁰³

- Procurement for projects to complete the hydrological tool component of the wetland delineation protocol (which is underway);
- Identifying the best method for high-resolution wetland mapping (which is underway);
- Assistance to ensure consistent mapping and producing a mapping methodology for wetlands and threatened species. This may include support to carry out the mapping at either a national or regional level and guidance and support on collecting and recording mapping data; and
- On the ground support identified for further consideration includes potential funding to support natural wetland restoration and to increase number of constructed wetlands.

¹⁰³ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.212

TABLE 16: ASSESSMENT OF EFFECTIVENESS FOR POLICY 6

ELEMENTS OF THE OBJECTIVE	RESOURCES ARE MANAGED IN A WAY THAT PRIORITISES	FIRST, THE HEALTH AND WELLBEING OF WATER BODIES AND FRESHWATER ECOSYSTEMS	SECOND, THE HEALTH NEEDS OF PEOPLE	THIRD, THE ABILITY OF PEOPLE AND COMMUNITIES TO PROVIDE FOR THEIR SOCIAL, ECONOMIC, AND CULTURAL WELL-BEING, NOW AND IN THE FUTURE
<p>Contribution of Policy 6 towards achieving the Objective</p>	<p>Contains clear and strong direction to avoid further loss of extent of natural inland wetlands and protect their values and will have an immediate impact because it is targeted at resource consent decisions, and is consistent with sections 5, 6(a), 7(d) and (f) of the RMA.</p> <p>Specifying the policy and requirements in regional plans reduces any perceived need to refer back to higher order planning documents or Part 2 of the RMA.</p> <p>All natural inland wetlands will be treated in a consistent manner. Because it is essentially a blanket policy it provides little room for discretion and will be successful as a blunt tool. Other more targeted options suggested (such as developing and applying wetland significance criteria) would likely be less successful in achieving the objective because they would take time and further wetland loss is likely to continue in the interim.</p> <p>Mapping and monitoring of natural inland wetlands by regional councils over the next 10 years is to be prioritised, starting with mapping any wetland at risk of loss of extent or value, which aligns with the objective. These requirements do not apply to the government, so it is important they lead by example in the conservation estate and provide support.</p>	<p>Provides a high level of protection to halt the further loss of remaining natural inland wetland extent (regardless of their significance) and is a key policy to achieve the first priority in managing the health and wellbeing of wetlands and freshwater ecosystems.</p> <p>Protecting wetland values and promoting restoration are also key to achieving the first priority and is complementary to restoration and rehabilitation policy in the NZCPS¹⁰⁴.</p> <p>Excludes geothermal wetlands, so will have limited success compared to the status quo.</p>		<p>The high level of protection to achieve the first priority will limit the ability to use or develop land. Likely to disadvantage or reduce options for some landowners, particularly Māori landowners, who have not previously developed their land.</p> <p>The policy does not apply to some activities to help achieve the third priority, including cultural harvest and the sustainable harvest of sphagnum moss, scientific research, construction or maintenance of wetland utility structures such as boardwalks, and maintenance of existing infrastructure. These are generally low impact or temporary activities, which is consistent with the effects regime of the RMA. It also includes an exception for “specified infrastructure”, which is narrowly defined including demonstrating regional or national benefits.</p>

¹⁰⁴ Policy 14, which includes saline wetlands and intertidal saltmarsh

ELEMENTS OF THE SPECIFIC PROBLEM DEFINITION	CURRENT NATIONAL POLICIES ARE INADEQUATE TO PROTECT OUR REMAINING INLAND WETLANDS	THE STRENGTH OF REGIONAL PLANS VARIES CONSIDERABLY BETWEEN LOCAL COUNCILS	LACK OF DATA AND RESOURCES CAN ALSO MAKE IT DIFFICULT TO IMPLEMENT RULES
Likely success of Policy 6 in solving the problem it was designed to address	<p>The avoid policies are strongly directive, and the direction to councils is multi-layered to reinforce the policy intent. This is likely to be more successful than the current focus on safeguarding (which envisages some level of effect), or protecting the significant values of wetlands¹⁰⁵, which has had limited success in adequately preventing the loss of wetlands.</p> <p>Clear requirements for resource consent applications that will impact wetlands. The overall theme is a presumption that loss will not be approved without rigorous assessment, which should improve decision making.</p>	<p>Provides a nationally consistent planning approach reducing the potential for variability and inconsistency among regional plans.</p> <p>This problem would not be resolved allowing for regional differences as requested by some councils. It would likely lead to further wetland loss, which will not achieve the government's goals and be less successful in achieving the first priority.</p> <p>Provides a nationally consistent approach to compensation and off-setting.</p>	<p>Mapping and monitoring of natural inland wetlands will increase our knowledge to better manage them, and by providing a method (the wetland delineation protocol) to help define and identify inland wetlands promotes consistency and potentially reduce litigation.</p> <p>Over the next 10 years councils are required to create a complete inventory and monitor both the extent and condition of inland natural wetlands. Councils may face constraints entering private land to survey and monitor wetlands (which may affect the success of improving data), but drone technology and other digital innovation may assist.</p>
Overall assessment	<p>The policy package is strongly geared towards achieving clause (a) of the objective. It is likely to be highly effective in avoiding further wetland loss and protecting their values in a nationally consistent way. The degree of success of improving the condition and restoration of wetlands will depend on funding and resourcing. Clear requirements for mapping and monitoring will improve our knowledge base for decision making (over the next 10 years), although its success will rely on the Ministry providing an adequate implementation support package.</p> <p>This policy is at the preservation and protection end of the spectrum, which is consistent with sections 5, 6(a), 7(d) and (f) of the RMA.</p>		

¹⁰⁵ In the context of Objective A2 of the NPS-FM 2014 (amended 2017)

TABLE 17: ASSESSMENT OF EFFICIENCY FOR POLICY 6

	BENEFITS	COSTS
Environmental	<p>The benefits include protecting the 30,000 hectares of unprotected inland wetlands on fertile land. International research suggests that despite covering only 1.5% of the earth's surface, wetlands provide disproportionately high ecosystem service benefits – roughly 40% of the total.</p> <p>Those regions with the most non-protected inland wetlands on fertile land classes are within the Canterbury, West Coast, Otago, Southland, and Waikato regions. Councils and landowners in these regions will likely be more impacted, although these regions also reap the benefits of the ecosystem services provided by these wetlands.</p>	<p>As Policy 6 mainly deals with avoiding further loss of wetland extent or values, the environmental costs are low when considered in isolation.</p>
Economic	<p>Wetlands provide ongoing ecosystem services such as flood mitigation, nutrient cycling, and water storage. Based on New Zealand assessments, to replace the services these wetlands provide, for example, with engineering infrastructure like flood barriers and dams, it would cost about \$50,000 per hectare of wetlands lost per year (or ~\$1.4 b/year nationally). When capital stocks decrease (wetland area), the flow of benefits received from them are lost forever.¹⁰⁶</p> <p>There is the potential for increased tourism opportunities associated with wetland areas with high naturalness.</p>	<p>The cost of reinstating constructed wetlands to achieve the ecosystem service benefit of nutrient attenuation or the cost of restoring wetlands for indigenous biodiversity habitat is likely to be far greater than the opportunity cost of protecting remaining wetlands in the first place.</p> <p>Those regions with the most non-protected inland wetlands on fertile land classes are within the Canterbury, West Coast, Otago, Southland, and Waikato regions. Councils and landowners in these regions will likely be more impacted, although these regions also reap the benefits of the ecosystem services provided by these wetlands.</p> <p>Opportunity cost to landowners and commercial businesses, including not developing wetland area, or taking water, is overall expected to be generally low nationally due to small percentage of privately owned non-protected wetlands to be affected by policies and rules. This was not monetised.¹⁰⁷</p> <p>Costs associated with unmined minerals are unknown as these permits are across multiple companies and are for a variety of different minerals. One submitter Oceana Gold considers the policy has the potential to leave 4 million ounces of gold (~1 billion NZD equivalent) un-minable. Further analysis has not been undertaken.</p> <p>However, based on the wetland extents identified, MBIE estimate in 2018 approximately \$1 million was spent on exploration of mineral deposits classified as wetlands and likely impacted by the proposed policies. For large mining permits that contain wetlands, it is estimated the value of the minerals impacted by the proposal is at least \$600 million. This is a lower-bound estimate as it includes only coal reserves due to data availability. The estimated annual value</p>

¹⁰⁶ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.22

¹⁰⁷ Overview of the impact analysis undertaken to inform decisions on freshwater policy, with a focus on monetised costs. 25 May 2020. Report prepared by Susan Guthrie, Ministry

		of the ecosystem services provided by the wetlands potentially impacted by active mining permits alone (excluding prospecting and exploration) is in the order of \$66.2 million per year (2019 NZD) for active permits and \$41.9 million per year for those under mining permit application.
Social	Social (and some economic) benefits enjoyed by the wider community are likely to include enhanced opportunities for activities such as bird watching and hunting. Also see the benefits of ecosystem services above.	
Cultural	The policy package can be expected to result in significant benefits to cultural values. Wetlands are regarded as a highly valued taonga to Māori and the requirement to ensure no loss of Māori freshwater values will assist in maintaining the mauri of waterways as well as the protection of sites of cultural significance, and the ability to source mahinga kai and for cultural harvest. The policy package is also complementary to providing opportunity for tangata whenua to express kaitiakitanga.	
Additional sector commentary	Estimated implementation costs for regional councils are approx. \$100k/y per council, although this will differ between councils. High resolution mapping costs of \$0.5 – \$2.5m (although cheaper methods could also be used). Some costs expected for upskilling staff on technical matters. Complementary measures provided by central government such as wetland mapping methodology, potentially a high-resolution national map, guidance on water level variations, drainage setbacks are estimated between \$550k initially and \$4m if central government provided a national high-resolution wetland map.	
Opportunities for economic growth and employment to be provided or reduced	Likely to be low.	
Risks of not acting and uncertainty	The risk of not acting is that the gradual loss of wetland habitat is expected to continue, especially those in areas with non-protected wetlands on fertile land, and the objective is not achieved through the lack of a specific supporting policy direction. The risk of not acting exceeds the risk of acting. There is a moderate degree of uncertainty because overall the benefits of maintaining natural environments are difficult to quantify and costs will vary with land use. There is a degree of uncertainty regarding impacts on the mining sector, although some costs have been monetised.	

7.6.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 6 AND SUPPORTING PROVISIONS

Four options were considered:¹⁰⁸

- Option 1: Status quo
- Option 2: Include inland wetland attributes within the NPS-FM
- Option 3: Amend the NPS-FM to strengthen inland wetland policies
- Option 4: Develop NES rules to apply to inland and coastal wetlands.

Options 3 and 4 have been progressed as a package. The NES-F is addressed separately in section 8.0 of this report.

Geothermal wetlands are not included in either policy tool because geothermal systems are complex and dynamic, and more work is required to identify better-suited options for these ecosystems.

Continuation of the status quo would be expected to result in continued loss and degradation of inland wetlands, especially those in areas with non-protected wetlands on fertile land, weak regional rules, and insufficient monitoring and rule enforcement.

There was widespread support from submitters for the wetland attributes proposed by the STAG (Option 2). But implementing this was considered difficult to achieve under the RMA and it was considered that more immediate protection would be achieved by the preferred policy package.

Another option requested by some councils who considered the proposals to be inequitable and too costly involved allowing for regional differences in implementing the policy. This was considered to likely lead to further wetland loss, which will not achieve the government goals of halting the loss of our natural inland wetlands.

Given analysis for the mining sector and ultimate objective of preventing further loss of wetlands, the Ministry decided against proposing to include exceptions for the mining sector. They considered that it would be difficult to justify leniency to one commercial sector over others such as agriculture.

For further details around the options and options analysis please refer to the RIA¹⁰⁹ and Interim RIA¹¹⁰.

Policy 6 (supported by clauses 3.21, 3.22 and 3.23) is the most effective and efficient way to achieve the Objective for the reasons discussed above.

The NES-F is addressed separately in section 8.0 of this report but should be read together with this section.

¹⁰⁸ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.53

¹⁰⁹ *ibid*, Chapter 13

¹¹⁰ *ibid*, p.207

7.7 POLICY 7

Policy 7

The loss of river extent and values is avoided to the extent practicable.

Supported by:

3.21 Definitions relating to wetlands and rivers

3.24 Rivers

Also see:

Policy 5 NOF package

Policy 8 Habitat package

NES-F



7.7.1 INTENT

Adverse effects on streams are not being adequately avoided, remedied, or mitigated, which is leading to a cumulative and ongoing loss of stream extent and values and associated ecosystems¹¹¹. This loss primarily results from land use change and development. Resource consenting processes are allowing unacceptable adverse effects. The strength and inconsistency of regional and district plans is also contributing.

This in turn reduces the overall health of freshwater ecosystems and contributes to loss of biodiversity as well as human use values. Replacing and restoring lost stream habitat is much more difficult and expensive than protecting it from damage in the first place.

Urban expansion and population growth will continue to put pressure on rivers and streams. Gradual and continued loss of freshwater habitat is expected to continue.

Policy 7 specifically targets the unacceptable loss and degradation of New Zealand's rivers (a term which is defined in the RMA to include streams). Targeted activities include piping, diversion, and reclamation of streams and rivers. The purpose is to retain river and stream extents and associated values to the extent practicable.

The 2019 draft NPS-FM worded the policy as no further "net loss". This has been reframed as no further loss, with no net loss provided for in applying the effects management hierarchy. The policy intent remains the same, which is no net loss¹¹².

Policy 7 will have an immediate impact. It uses strongly directive language, reinforced by the requirement in clause 3.24 for councils to adopt a specific avoidance policy in their regional plans without using the RMA's Schedule 1 process. This requires regional councils to avoid the loss of river extent and values unless they are satisfied that there is a functional need and effects management hierarchy is applied. Providing this high threshold complements and clarifies the "extent practicable" test mentioned in Policy 7.

¹¹¹ *ibid*, pp.41-42

¹¹² The Cabinet paper states that for streams [rivers] "we have not made substantive changes to the policy intent because submissions and the IAP were broadly supportive of the proposals as consulted. However, we have made some technical changes to the proposals to support implementation, reduce risk of litigation, and reduce the risk of unintended consequences."

A level of discretion has been retained because absolute protection of rivers has been ruled out as this would have a significant impact on people and communities¹¹³. To secure this regional councils introducing a consenting regime which does not allow a resource consent to be granted for an activity that would result (directly or indirectly) in the loss of extent or values of a river unless applicants provide rigorous assessment.

Regional councils are also required to develop and undertake monitoring plans for rivers in their regions and have methods to respond if loss of extent or values is detected. Councils already do this as part of their state of the environment monitoring but will need review whether this is sufficient as well as consent holder charges¹¹⁴.

7.7.2 EFFECTIVENESS & EFFICIENCY

Table 18 provides an assessment of the effectiveness of Policy 6 and its supporting implementation requirements. Table 19 assesses the efficiency of these provisions.

The key to implementing Policy 7 is restricting the ability for applicants to obtain resource consents for piping, diversion, and reclamation activities, and placing additional conditions on consents. Strong policy direction will ensure offsetting or compensation is applied (but only as a last resort). A specific reclamation rule in the NES-F also complements this policy (this rule is evaluated separately in section 8.0 of this report but should be read together with this section).

The policy is expected to be mostly felt by those involved in greenfield development, particularly in major urban centres. Councils will also need to carefully consider the policy direction in meeting their obligations under the National Policy Statement on Urban Development (NPS-UD) 2020 to provide sufficient land supply for housing growth.

To support national direction on preventing further stream loss, the Ministry intends to review the Stream Ecological Valuation (SEV) technique and prepare new technical guidance about calculating the amount of mitigation or offsetting. On its own (as a non-regulatory method) the SEV will not have sufficient strength as a mandatory method, however, it is a familiar tool for many freshwater ecologists and is likely to be used.

These provisions will not apply to artificial waterways (which fall outside the definition of a “river” in the RMA¹¹⁵). However, they will apply to continually or intermittently flowing freshwater, including streams and modified watercourses. Ephemeral streams (i.e. that usually flow following rainfall) are not captured. Determining whether a stream is natural or artificial is not always straightforward and there is a lack of consistent guidance. Further, many artificially constructed waterways are the last vestiges of aquatic habitat where there was previously a stream or wetland, which can provide habitat for threatened species such as longfin eel and black mudfish.¹¹⁶ The NOF process provides a way to take this into account and protect the ecological values of such habitats, including riparian habitats, that are not directly captured by the RMA’s specific river definition.

¹¹³ Refer to the RIA

¹¹⁴ Under section 35 of the RMA

¹¹⁵ Section 2

¹¹⁶ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.45

TABLE 18: ASSESSMENT OF EFFECTIVENESS FOR POLICY 7

ELEMENTS OF THE OBJECTIVE	RESOURCES ARE MANAGED IN A WAY THAT PRIORITISES	FIRST, THE HEALTH AND WELLBEING OF WATER BODIES AND FRESHWATER ECOSYSTEMS	SECOND, THE HEALTH NEEDS OF PEOPLE	THIRD, THE ABILITY OF PEOPLE AND COMMUNITIES TO PROVIDE FOR THEIR SOCIAL, ECONOMIC, AND CULTURAL WELL-BEING, NOW AND IN THE FUTURE
Contribution of the Policy 7 River package towards achieving the Objective	<p>Contains clear and strong direction to avoid further loss of extent or values rivers where practicable and will have an immediate impact, targeted at resource consent decisions, and is consistent with section 5 and, among others, section 6(a) of the RMA.</p> <p>Particularising the policy and requirements in regional plans reduces any perceived need to refer back to Part 2 of the RMA.</p> <p>Provides flexibility and allows a proportionate response to deal with residual minor effects after all options to avoid, remedy, or mitigate have been exhausted.</p> <p>Time lags in applying the effects management hierarchy will need to be accounted for at the planning stage. The success of this will rely on councils setting appropriate consent conditions.</p>	<p>Likely to be more successful than the status quo in maintaining current river extent and values (by no net loss, and preferably a net gain) and contribute towards national consistency in managing the health and wellbeing of water bodies and freshwater ecosystems.</p> <p>Places great responsibility on the practicable test that may be open to interpretation. This may reduce its effectiveness, but to a degree is mitigated by strongly directive requirements including applying the effects management hierarchy.</p> <p>Will be more successful when paired with other land use controls and incentives (noting the Government's recent commitment of \$700 million towards fencing, planting and cleaning up waterways), and other directive tools in development like the proposed NPS-IB and proposed NPS-UD.</p>		<p>Is likely to restrict some urban and rural land development, especially greenfield development where it would have direct or indirect impacts on water bodies. However, allows for discretion and exceptions to achieve the third priority including (among other things) for housing and infrastructure.</p> <p>Positive outcomes are anticipated through a greater emphasis on water sensitive design, and innovation through building typology and smaller plots when considering development yield feasibility.</p>
ELEMENTS OF THE SPECIFIC PROBLEM DEFINITION	ADVERSE EFFECTS ON STREAMS ARE NOT BEING ADEQUATELY AVOIDED, REMEDIED OR MITIGATED IN CONSENTING PROCESSES AND THAT IS LEADING TO A CUMULATIVE AND ONGOING LOSS OF STREAM HABITAT.	OFFSETTING AND COMPENSATION ARE BEING USED IN RESOURCE CONSENTS NOW, BUT IN AN INCONSISTENT WAY THAT OFTEN RESULTS IN A DECLINE IN ECOLOGICAL HEALTH OF STREAMS AND RIVERS.		
Likely success of Policy 7 River package in solving the problem it was designed to address	<p>The avoid policies are strongly directive, and the direction to councils is multi-layered to reinforce the policy intent. This is likely to be more successful than the current focus on safeguarding (which envisages some level of effect) and hasn't worked to adequately protect our rivers from loss and degradation.</p> <p>Clear requirements for resource consent applications, including piping, diversion, and reclamation, sets a high bar. The overall theme is a</p>	<p>Provides a nationally consistent approach to compensation and off-setting. SEV guidance can support implementation and is already used. Also provides flexibility for other tools and innovation.</p>		

	<p>presumption that further river (and stream) loss will not be approved without rigorous assessment, which should improve decision making.</p> <p>The policy targets active channels of rivers and streams and will have limited success in protecting riverbanks or riparian margins which fall outside the definition of a river but are extensions of freshwater ecosystems and provide amenity value. However, district plans will need to specifically consider integrated management under the NPS-FM 2020. Offsetting would also be expected to contribute to improvements.</p>	
Overall assessment	<p>Policy 7 is strongly geared towards achieving clause (a) of the objective. It is likely to be effective in avoiding stream loss in the first instance, and partially effective in securing no net loss after a rigorous consent process. The degree that nationally consistent off-setting and compensation will lead to successful outcomes will depend on regional councils setting and enforcing appropriate conditions (including addressing any time lags).</p> <p>This policy is considerably closer to the preservation and protection end of the spectrum, which is consistent with section 5 and, among others, section 6(a) of the RMA. As it is addressing the highest priority matter it creates a high threshold for exceptions, including for land development and infrastructure.</p> <p>Proportionality for consent decisions and conditions is also provided where there are no more than minor residual effects.</p>	

TABLE 19: ASSESSMENT OF EFFICIENCY FOR THE POLICY 7

	BENEFITS	COSTS
Environmental	<p>Expected environmental benefits include improved water quality in downstream receiving environments, benefits for biodiversity and ecosystem health, and. These benefits can be difficult to quantify in financial terms and can be highly site-specific.</p> <p>Preventing loss of streams will also result in benefits for councils in terms of their responsibilities for integrated management of catchments.</p>	<p>As Policy 7 mainly deals with avoiding further loss of river extent or values, the environmental costs are low when considered in isolation.</p> <p>The inclusion of the term ‘where practicable’ in the policy provides an opportunity for some river and stream loss and therefore does not afford the highest level of environmental protection possible, which is a minor environmental cost of the policy package.</p>
Economic	<p>Will increase certainty for consent applicants and encourage innovation, which is an economic benefit.</p> <p>Preventing stream loss will preserve natural capital and retain streams that can provide “green infrastructure” that can contribute to flood attenuation, stormwater management and other ecosystem services.</p> <p>Helps to avoid future potential costs of restoring and rehabilitating ecosystems.</p> <p>Potential benefits to Government’s urban development and rural land use initiatives; encourages efficient use of land and infrastructure, and strategic consideration of locations for housing intensification.</p>	<p>Replacing and restoring lost stream habitat is much more difficult and expensive than protecting it from damage in the first place. Currently, the cost of stream loss is largely being borne by the environment and general public – the main impact will be to shift the cost of stream damage to resource users and developers that are causing the damage or harm.</p> <p>The potential for increased costs or reduced returns for developers and other resource users is highly variable; depending on development design, topography of land, amount of streams present, and ecological values that need to be offset. Compared to a situation where stream loss is permitted, preventing the loss of an urban stream within a new development can reduce the amount of land available and result in less land being available for purchase (by land area). This could result in higher costs per property being passed on to prospective purchasers, or a reduced return for the development as a whole, impacting project feasibility decisions.</p> <p>The stream loss and sediment policies together will likely increase development costs for greenfield sites in regions that do not already have adequate protection measures. The cost of interventions to meet more stringent sediment reduction requirements has been estimated at approximately \$2,000 per greenfield section in regions without adequate measures.</p> <p>A case study by Wellington Regional Council estimated stream loss requirements could affect developer revenue by up to \$26,700 per section, though this figure is likely an outlier nationally because Wellington has particularly steep and challenging development terrain and the case study site had much greater stream length than most development areas. Also, the study noted some of the interventions to reduce sediment loss would be the same as to prevent stream loss, the interventions would likely increase the value of sections, and non-greenfield sites will not be affected significantly.</p> <p>It is possible to avoid the need to reclaim or pipe streams through the way urban developments are designed. A report commissioned by Greater Wellington Regional Council concluded that “requiring the retention of streams within urban developments will not unduly hinder the provision of additional housing capacity within the Wellington Region. Refer to the RIA for further information.</p>

		<p>Using the cost of restoring a piped stream as a proxy for the ecosystem services provided, the Greater Wellington Regional Council study found around a 31% probability that social benefits to the community would outweigh the lost income of the developer. Refer to the RIA for further information. This is an example of an economic cost or a low probability of social benefit associated with the status quo.</p> <p>Limited impact on rural land uses, although some costs likely on rural landowners who commonly have culverts for stream crossings as well as stream/river modifications for drainage and flood protection.</p> <p>Other providers of infrastructure such as landfills, mines, quarries and roads will be impacted by these recommendations. There are often physical constraints on the location of these activities that mean that stream loss cannot be avoided. There is a consenting pathway available for these activities under the exceptions to the policy, noting these applications are often complex and require specialist advice.</p>
Social	Social (and some economic) benefits enjoyed by the wider community are likely to include amenity, the use of rivers for recreation and river transport, resilience to natural hazard risk, reduced pressure on stormwater infrastructure and opportunities for people to be better connected to the natural environment. These benefits can be difficult to quantify in financial terms, and can be highly site-specific.	
Cultural	The policy package can be expected to result in significant benefits cultural values. Rivers and streams are regarded as a highly valued taonga to Māori and the requirement to ensure no loss of Māori freshwater values will assist in maintaining the mauri of waterways as well as the protection of sites of cultural significance, and the ability to source mahinga kai. The policy package is also complementary to providing opportunity for tangata whenua to express kaitiakitanga.	
Additional sector commentary	Preventing stream loss will lead to additional consenting, monitoring and compliance costs on regional councils. The annual cost to regional councils of implementing the policy package are \$8,260,000. It was estimated that Waikato Regional Council would need a total of four additional full-time employees, and the average councils would require 1.85 additional full-time employees. Costs will be higher for those councils with a higher rate of land use intensification.	
Opportunities for economic growth and employment to be provided or reduced	Refer above.	
Risks of not acting and uncertainty	<p>The risk of not acting is that the gradual loss of stream and river habitat is expected to continue, and the objective is not achieved through the lack of a specific supporting policy direction.</p> <p>The risk of not acting exceeds the risk of acting.</p> <p>There is a moderate degree of uncertainty because overall the benefits of maintaining natural environments are difficult to quantify and costs will vary with design decisions. This is particularly so for potential greenfield development. The RIA contains further detail that is not presented in this report.</p>	

7.7.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 7 AND SUPPORTING PROVISIONS

Six options were considered:¹¹⁷

- Option 1: Status quo
- Option 2: Objective and policy in NPS-FM
- Option 3: Regulation of damaging activities in NES-F
- Option 4: Offsetting and compensation
- Option 5: Review the SEV technique
- Option 6: Monitoring and reporting

Options 2 to 6 have been progressed as a holistic package, with the bulk of the policy to be implemented through the NPS-FM 2020.

The option of directing councils to modify their plans to avoid stream loss entirely without any possibility of offsetting was considered but ruled out. This would be the most protective of stream habitat, but it would have significant impacts on available land for housing and national infrastructure.

The RIA also identified concerns over inadequate monitoring and compliance of resource consent conditions leading to the loss of stream habitat, but considers the problem is not unique to streams and is a symptom of the wider resource management system better dealt with by reforms at the RMA level.

For further details around the options, helpful case studies, and options analysis please refer to the RIA¹¹⁸.

Policy 7 (supported by clauses 3.21 and 3.24) is the most effective and efficient way to achieve the Objective for the reasons discussed above.

The NES-F is addressed separately in section 8.0 of this report but should be read together with this section.

7.8 POLICY 8

Policy 8

The significant values of outstanding water bodies are protected.

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.3 Long-term vision for freshwater

7.8.1 INTENT

Policy 8 has been transferred from the NPS-FM 2014 (amended 2017) where it forms part of the framework for Objective A2:

Objective A2: The overall quality of fresh water within a freshwater management unit is maintained or improved while:

¹¹⁷ *ibid*, p.53

¹¹⁸ *ibid*, Chapter 2

- 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*

Policy 8 is implemented by clause 3.3, to assist in giving effect to Te Mana o Te Wai, and through the NOF. Clause 3.3 (1) requires that every regional council develop long-term visions for the FMUs or catchments in its region and include the visions as objectives in the region's regional policy statement. The benefits of a long-term vision will in turn support Te Mana o Te Wai and protecting outstanding values of freshwater bodies in the long-term. The Waikato River Authority has demonstrated the benefits of having a clear long-term vision, which each subsequent regional plan would work towards achieving¹¹⁹.

7.8.2 EFFECTIVENESS

Policy 8 is effective because it contributes to achieving the hierarchy of obligations in the Objective, by giving effect to Te Mana o Te Wai and prioritising the health and wellbeing of water before providing for essential human health needs and other uses (Table 20).

The policy establishes an environmental bottom line of protecting the significant values of those water bodies with the highest environmental value. The requirement to protect sets a high bar and aligns with the first priority of Te Mana o Te Wai.

The mechanism for implementing the policy is provided through the NOF, which requires outstanding water bodies to be identified. Policy 8 will contribute to achieving the Objective and will be effective in helping to stop degradation of outstanding freshwater bodies.

Clause 3.3 requires that the vision is included in the regional policy statement as an objective. The regional policy statement objective will provide a basis for setting the target attribute states, environmental outcomes and the objectives for outstanding water bodies in regional plans¹²⁰.

Policy 8 will contribute towards the protection of the significant values of outstanding water bodies, again sought in the Objective.

7.8.3 EFFICIENCY

Policy 8 is expected to efficiently achieve the outcome sought in the Objective (Table 20).. It will provide significant environmental benefits by protecting sites of outstanding value, including those with recreational, landscape and spiritual value.

By developing a process to set long term visions of water bodies, the national benefits of Policy 8 will assist in improving New Zealand's economic, environmental, cultural, and social well-being. It also allows councils discretion as to how they go about complying with the NPS-FM 2020.

For tangata whenua Policy 8 is likely to be a mixture of moderate and small benefits and small cost. The medium and small benefits come from improved collaboration with regional councils, the protection of waahi tapu sites and participation in monitoring outcomes. The small cost comes from participating in council processes on water quality and contributing to the development of the long-term vision.

Local communities, recreational users, and environmental non-governmental organisations will also experience a medium benefit because of their ability to enjoy

¹¹⁹ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.178

¹²⁰ Ibid.

amenity values associated with the existence value of fresh water. They will also experience a minor cost in providing input into the development of the long-term vision.

The main costs will fall on the regional councils, since this policy is specifically directed at changing regional policies and plans. Significant resources will be required to set up monitoring systems, understand the current water quality levels, and set up a process to meet new standards. Not only will they have to use their own staff but also large numbers of outside specialists.

7.8.4 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 8 AND SUPPORTING PROVISIONS

The report of the IAP recommended to remove the long-term vision requirement in clause 3.3 of the NPS-FM 2020 to speed the process and reduce administrative burden.

It was considered that this was overly bureaucratic, and burdensome. Producing a long-term vision risks spending valuable time and resources on an instrument with potentially little real impact, rather than carrying out regional plans which effectively incorporate clear directions giving effect to Te Mana o Te Wai.

However, it was decided that removing the vision could also reduce the benefits of Te Mana o Te Wai and managing for freshwater values for the longer-term and instead it was specified that the long-term vision is to be set at the catchment or FMU scale, must be time-bound (must be ambitions and set reasonable timeframes) and articulated as an objective in the regional policy statement.

No other alternative options were considered for Policy 8.

Policy 8 is the most effective and efficient way to achieve the Objective, as it prioritises the health and well-being of water bodies and freshwater ecosystems, through protecting those water bodies that have been assessed as outstanding within each FMU.¹²¹

Policy 8 has been selected as the most effective and efficient way of realising the objective of the NPS-FM 2020 because it:

- Prioritises the health and well-being of water bodies and freshwater ecosystems, through protecting those water bodies that have been assessed as outstanding within each FMU.
- Gives effect to Te Mana o Te Wai.
- Prioritises health and wellbeing of freshwater.

Policy 8 will contribute to achieving the Objective and will be effective in helping to stop degradation of outstanding freshwater bodies.

¹²¹ Appendix 1 to Action for healthy waterways – decisions on national direction and regulations for freshwater management Cabinet Paper, (2020) p.12.

TABLE 20: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 8

	BENEFITS	COSTS
Environmental	Provides significant environmental benefits by ensuring the protection of the highest value sites within each FMU. The supporting requirement in the NOF to identify outstanding water bodies within each FMU will assist in ensuring these areas are protected.	The implementation measures supporting Policy 8 seek to ensure outstanding water bodies are identified within each FMU. The absence of a nationally consistent standard for determining outstanding status has the potential to result in variability in the implementation of the policy. The exceptions regime afforded to regional councils to secure the benefits of 89% of all hydro-electricity generation permits the setting of targets below bottom lines.
Economic	Water quality is an important issue for New Zealand. Any improvement in water quality is likely to improve New Zealand's national brand, tourism prospects, and products and services. Waterbodies identified as having outstanding values, particularly those which qualify due to landscape and recreation values are likely to be regarded as tourist attractions, therefore their protection supports the significant economic benefits associated with the tourism sector.	Māori involvement in freshwater management imposes additional engagement, co-governance support, planning, and monitoring costs. There may be an economic cost for landowners or industry in constraining existing activities or future development potential where they operate in or adjacent to outstanding water bodies. This is considered a minor cost as sites of outstanding value will be subject to existing protection provisions in district and regional planning documents.
Social	The protection of outstanding water bodies will have social benefits in enhancing the amenity values and enjoyment of these areas for recreational activities.	There is the potential for a minor social cost in contributing to the identification of outstanding water bodies and from any constraints on activities involving the use of these water bodies resulting from their protection.
Cultural	Policy 8 promotes greater participation of Māori in freshwater management. More involvement allows for Māori to provide input and inform councils about their values, measures of well-being and mātauranga, which is critical to actively protect Māori interests and support intergenerational transfer of knowledge.	The provision for sites of outstanding spiritual value to be identified and protected through Policy 8 would be expected to include sites regarded as waahi tapu, however the lack of clarity regarding this aspect is a minor cultural cost of the Policy 8 package (including the supporting definition of outstanding).
Additional sector commentary	This option proposes to reframe Te Mana o to Wai in the NPS-FM 2014 (amended 2017) by clarifying current provisions, further embedding the concept and requiring an approach that prioritises the essential value, health, and wellbeing of the waterbody ¹²² .	
Opportunities for economic growth and employment to be provided or reduced	Outstanding water bodies can be expected to have a high visual and amenity value, which is often associated with tourism and recreation e.g. Lake Taupo. These activities promote generation of supporting services and opportunities for employment.	

¹²² Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.199

Risks of not acting and uncertainty	<p>This risk of not acting is that the other policies within the NPS-FM 2020 do not adequately protect those water bodies that qualify as outstanding due to values which are not adequately addressed through the NOF process. The range of values that are considered in determining if a waterbody is outstanding include landscape and recreational values in addition to ecological and spiritual values. The risk of not acting exceeds the risk of acting.</p> <p>The Ministry recommends developing long-term visions to understand what communities and tangata whenua want their water bodies to look like in the future. This option as the most effective option to meet the objectives and address the problems. The Ministry also assesses that this is the fairest and most efficient option that could result in the most benefits¹²³.</p> <p>The requirement to identify outstanding water bodies within each FMU provides certainty in the identification of water bodies that are subject to Policy 8. The lack of a nationally consistent set of criteria for determining what is outstanding has the potential to lead to regional variations and introduces a degree of uncertainty. Overall, the level of uncertainty is acceptable.</p>
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¹²³ Ibid, p.199

7.9 POLICY 9

Policy 9

The habitats of indigenous freshwater species are protected

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.26 Fish Passage

3.27 Primary contact sites

Appendix 1A Compulsory National Values

Appendix 4 Details about instream structures

Also see:

Policy 6

Policy 13



7.9.1 INTENT

Protecting the life-supporting capacity of water is critical for the habitat of indigenous freshwater species. The loss of habitat connectivity has contributed to the decline of indigenous fish species, with approximately 76% of all assessed species now classified as threatened or at risk of extinction. About one-third of New Zealand's indigenous freshwater fish species need access to the sea, and both indigenous and sports fish require access between and within habitats to complete their life cycles and maintain population viability¹²⁴.

Policy 9 seeks to protect threatened species and stop the cumulative loss of habitat over time.¹²⁵ It is complementary to the NOF to ensure the health and wellbeing of waterbodies and freshwater ecosystems are provided for in water management. The intent of Policy 9 is to broaden the ecosystem focus for RMA decision making processes so that all five components of freshwater ecosystem health are considered, with a focus on the habitats of indigenous freshwater species and their protection.

PROTECTION OF INDIGENOUS SPECIES

Measures in the NPS-FM 2020 to support Policy 9 include the compulsory value for threatened species, the NOF, and direction to protect stream habitat and wetlands. The new compulsory national value for threatened species is intended to ensure regional planning identifies and manages threatened species¹²⁶ and recognises and provides for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Threatened species include all species dependent on freshwater i.e. flora and fauna.

¹²⁴ Appendix 1 to Action for healthy waterways – decisions on national direction and regulations for freshwater management Cabinet Paper, (2020) p.2

¹²⁵ Action for healthy waterways - A discussion document on national direction for our essential freshwater, (2019), p.37

¹²⁶ Action for healthy waterways - A discussion document on national direction for our essential freshwater, (2019) p.42

Adding a compulsory value for threatened species to the NPS-FM is consistent with the 'rarity' criteria for significance. In their report to Ministers in 2018, the Biodiversity Collaborative Group used "rarity" as one of four criteria for identifying significant natural areas. Rarity was defined as including 'threatened' and 'at risk' (including 'naturally uncommon').

Three-quarters of New Zealand's native freshwater fish species are threatened or declining. Some widespread migratory species, such as kōaro and īnanga (whitebait species), appear to be declining in both abundance and distribution. Fish habitat, including areas where populations are surviving in poor habitat such as farm drains and urban streams, is not always identified and managed. In some circumstances, threatened species' habitats may need more active management, because of their specific habitat needs and current distribution.

FISH PASSAGE

Improving ecosystem health by protecting the habitat of indigenous species and preventing destruction of habitat is supported by direction to improve connectivity of habitat to promote healthy fish populations. Without adequate fish passage, structures such as culverts, dams and tide gates can delay or prevent fish from accessing critical habitats upstream and downstream. Barriers to fish passage lead to declining fish populations and depleted fish communities¹²⁷

Clause 3.26(2) requires regional councils to include certain fish passage policies in their regional plans and to identify valued species and their relevant life stages, for which in-stream structures must provide passage.

Subclause (6) requires regional councils to establish and implement an action plan to improve the extent to which existing structures achieve the fish passage objective.

Subclause (7) prescribes matters that are to be included in such work programmes, including identifying existing in-stream structures and evaluating their risk to fish migrations; prioritising remediation of structures applying ecological criteria in the Fish Passage Guidelines.

7.9.2 EFFECTIVENESS & EFFICIENCY

Policy 9 directs consideration of a number of the components that contribute to the health of a freshwater ecosystem. These components are necessary for healthy functioning ecosystems and the benefits people derive from them, which supports the Objective. Policy 9 aids in clarifying how to manage water quality and ecosystem health and is consistent with Part 2 of the RMA.

Regional councils will need to review and amend their regional plans to give effect to the direction on how they manage ecosystem health and protect the habitats of indigenous species. They may need to fill technical gaps in their competency or management programmes and undertake additional monitoring. The Ministry is supporting councils by undertaking a desktop study of information relevant to identifying the location of threatened species habitats (flora and fauna), including geospatial information.

Preparing actions plans to achieve the environmental outcomes will allow councils set out all actions, including actions they will take under the Biosecurity Act 2002 to protect indigenous species, in one place. This approach supports the Objective by prioritising the needs of the water and the aquatic species that depend on it.

It is more cost effective to provide for fish passage in the design and construction of new structures, than to remediate existing ones. Nevertheless, a small increase in consenting or design costs is expected. Councils are free to decide how they prioritise remediation of

¹²⁷ RIA Action for healthy waterways Part I: Summary and Overall impacts, (2020). p.10

existing fish barriers, and to whom the cost falls. Costs associated with the other options will be around any additional monitoring or required actions. To some extent the policies are aimed at making good management practices clearer, rather than imposing additional and new obligations¹²⁸.

Further evaluation of the policy effectiveness and efficiency is provided in Table 21

7.9.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 9 AND SUPPORTING PROVISIONS

The main alternative is the status quo (no Policy 9 and supporting provisions).

Council management effort would continue to focus on water quality and quantity, sometimes overlooking other factors that are essential for protecting the life-supporting capacity of the water bodies.

Providing for fish passage would likely be informed by the NZ Fish Passage Guidelines, but their use may not be universal around the country.

Specific habitat needs of threatened species may be provided for in some areas, but without consistent monitoring around the country the locations of remnant populations may not be identified or managed sufficiently.

The cumulative effect of fish population fragmentation and loss of suitable habitat will contribute to the decline of freshwater fish and other freshwater species¹²⁹.

Compared with the status quo, Policy 9 and supporting provisions are the most effective and efficient way to achieve the Objective. The NPS-FM 2020 will require councils to monitor and protect the habitats of indigenous freshwater species and to identify all habitats of threatened species in each of their freshwater management units, monitor fish abundance, diversity and passage, and to establish work programmes to address barriers to fish passage over time where it is needed.

Policy 9 is considered the most effective and efficient way to achieve the Objective because it:

- Requires councils to establish work programmes to address barriers to fish passage over time where it is needed.
- Prioritises the health and wellbeing of freshwater ecosystems, through both the NPS-FM 2020 and the NES-F.

These components all contribute to the health of a freshwater ecosystem and are necessary for healthy functioning ecosystems and the benefits people derive from them. This supports the Objective and is consistent with Part 2 of the RMA.

¹²⁸ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis (2019). p.25

¹²⁹ Interim Regulatory Impact Analysis for Consultation: Essential Freshwater Part II: Detailed Analysis (2019) p.6

TABLE 21: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 9

	BENEFITS	COSTS
Environmental	The Policy 9 package, including compulsory values in the NOF and measures to provide for fish passage and protect streams and wetlands are anticipated to have significant environmental benefits.	
Economic		<p>Costs to regional councils in collecting environmental data to assess the current state of habitats and structures impeding fish passage.</p> <p>Remediation may require additional resources for regional councils. Councils are at different stages of remediation work and addressing fish passage. Some are in the process of collecting data to understand where the structures are and assess their risk of restricting fish passage. Others are in the process of remediating structures in the region.</p> <p>For example, Tasman District Council has remediated about 3000 instream structures over 10 years, using about 60 weeks of staff and contractor time. The council expect that they have remediated about 30 to 40% of all similar structures in the district. Some councils have encouraged remediation of barriers (such as providing subsidies for some barriers or advice about how to remediate and prioritising fixes that will have the most ecological benefit)¹³⁰.</p> <p>One-off capital costs for councils for monitoring equipment, and ongoing monitoring costs which they may recoup via consents from resource users. Approximately \$2 million.</p>
Social	<p>Resource users maintain their social licence to operate. Brand protected or enhanced for exporters and tourism.</p> <p>Healthy ecosystems support wellbeing (see 'other parties' below). Healthy freshwater habitats support a variety of recreational activities, including fishing and whitebaiting which contribute to community wellbeing.</p> <p>Contribute to the Ministry target that no threatened freshwater fish increase in threat status.</p>	<p>Consent holders may need to undertake mitigation of existing structures, depending on council priorities. Unknown cost from possible constraints on resource use that may occur as a result of council and community actions</p> <p>Approximately \$20 million over time, and depending on council and community decision making</p>
Cultural	<p>Impacts of fish passage provisions on Māori cultural values</p> <p>A report commissioned by the Ministry has identified that 'removing restriction to fish passage is key to supporting the mauri of aquatic life and in turn, the mauri of freshwater health. Many mahinga kai species</p>	

¹³⁰ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.30

	require access to the sea and freshwater to complete their lifecycles and therefore, removing restrictions also supports the mauri of mahinga kai ¹³¹ .	
Additional sector commentary		
Opportunities for economic growth and employment to be provided or reduced	Employment opportunities may arise due to lack of sufficient information for councils to meet the NPS-FM 2020 monitoring requirements. In the short term it is expected that councils will need to contract ecological expertise to meet the requirements.	
Risks of not acting and uncertainty	<p>The risk not acting exceeds the risk of acting.</p> <p>Rough estimates from Department of Conservation suggest that there are at least 120,000 in-stream structures in our waterways, and that were an assessment to be undertaken, up to half of these would likely present a barrier to fish passage. The loss of habitat connectivity has contributed to decline of indigenous fish species, with approximately 76 per cent of all assessed species now classified as threatened or at risk of extinction¹³².</p> <p>Healthy ecosystems support wellbeing.</p> <p>Contribute to the Ministry target that no threatened freshwater fish increase in threat status.</p> <p>Support DOCs stretch goals and outcomes.</p> <p>Contribute to implementing Convention on Biological Diversity.</p> <p>The inclusion of the compulsory value for threatened species and specifying habitat as one of the five components of ecosystem health reduces the level of uncertainty associated with achieving the objective.</p> <p>The fish passage policies do not specifically exempt hydroelectricity from providing for fish passage. Regional councils would be required to make or change their plans to require that regard is had to at least the requirements set under 3.17 (3) on all consents (including hydroelectricity structures) and consider hydroelectricity structures in their remediation work programme. The fish passage policies, however, do not set specific design standards for structures above 4 meters in the NES. Councils would then need to consider setting appropriate consent conditions and activity status for in-stream structures (including hydroelectricity) based on the requirements under 3.17 (3).</p> <p>In practice, the policies for hydroelectricity and fish passage would need to be considered simultaneously and regional councils (along with communities and tangata whenua) would need to use their judgement and discretion on changes to plans by considering the need to secure New Zealand's security of electricity within the context of climate change and their obligation to improving the health of our ecosystems.</p> <p>Councils are expected to work with hydroelectricity providers to address, where possible, potential barriers for fish migration from hydro structures if these are identified as a priority for remediation in the council remediation work programme¹³³</p>	

¹³¹ Ibid, p.21

¹³² Ibid, p.21

¹³³ Ibid, p.29

7.10 POLICY 11

Policy 11

Fresh water is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.28 Water Allocation

7.10.1 INTENT

Policy 11 is the primary water quantity policy within the NPS-FM 2020. It aims to ensure the efficient allocation and use of water and to avoid over allocation.

The NPS-FM 2011 required regional councils to avoid over-allocation, and phase out existing over-allocation of freshwater. This policy is retained in Policy 11. Over-allocation is defined as when a water body is not meeting its freshwater objectives. These objectives must, at a minimum, provide for ecosystem health.

Policy 11 is implemented by clause 3.28, which directs regional councils to include criteria in regional plans for deciding applications to transfer water permits and how to improve and maximise the efficient allocation of water. Regional councils are also required to define a timeframe to phase out over-allocation and methods to achieve it in order to give effect to the NPS-FM 2020.

7.10.2 EFFECTIVENESS & EFFICIENCY

Policy 11 is fundamental to achieving the Objective. The policy is specifically directed to regional plans and decision making which is appropriate given that it seeks a regulatory framework to provide for the efficient allocation of fresh water. The evaluation of the policy effectiveness and efficiency is in Table 22.

Clause 3.28 is specifically directed to the inclusion of methods in regional plans. It is likely that resource consents and decision making relating to the use of water will be affected. Given the reference to 'methods' it can also be expected that clause 3.28 will influence non-regulatory methods.

There is a significant amount of discretion regarding what a council should include in its plans through the phrase "methods...to encourage" which may weaken the effectiveness of the implementation of clause 3.28 in relation to the efficient use of water. This phrase provides councils with flexibility to select the most appropriate method, but it also provides the opportunity for councils to implement a 'do minimum' approach, which may undermine the effectiveness of Policy 11.

Decisions to apply any reductions in allocations to individual consent holders can only be made by regional councils. The NPS-FM 2020 cannot, and does not, direct councils to review water permits.

Regional councils have sought more guidance on setting flows and levels for ecosystems health. Until this is provided, some may need extra capacity and capability to implement the package. Once the guidance is available, councils can use their existing data to set appropriate thresholds to provide for ecosystem health¹³⁴

¹³⁴ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.60

TABLE 22: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 11¹³⁵

	BENEFITS	COSTS
Environmental	Councils are already required to evaluate the effectiveness of their current approaches. The recommended approach may require increased monitoring of the ecosystem as affected by human-induced changes in water levels in rivers, lakes, and groundwater.	
Economic	<p>The setting of timeframes for phasing out over-allocation provides certainty to water users which is a minor economic benefit of the policy package.</p> <p>The development of methods to achieve the efficient use of water creates opportunities for innovation and new technology with associated economic benefits.</p>	<p>The largest cost to central government is in preparing guidance -\$200,000 (approx.)</p> <p>There are likely to be economic costs on large water users within over-allocated catchments as this over allocation is phased out. The reduced availability of water in these areas may affect production, reduce future development potential or lead to land use changes.</p>
Social	<p>More certainty about water allocation,</p> <p>More defensible decisions on minimum flows and allocation limits.</p>	Changes to water availability can impact land use activities
Cultural	The sustainable allocation and efficient use of water is important to ensuring the mauri of water bodies is protected. The policy package gives effect to Te Mana o Te Wai.	
Additional sector commentary	<p>Central government will be better able to analyse the robustness of current water allocation, to prepare for future parts of the government work programme relating to water allocation.</p> <p>All parties involved in public processes for regional plan development will have a higher level of certainty for the process</p>	
Opportunities for economic growth and employment to be provided or reduced	Efficient allocation of water contributes to more opportunities for other uses of water and generate economic growth and resultant employment.	
Risks of not acting and uncertainty	<p>The risk of not acting is that the increasing pressure on water resources will not be adequately managed leading to further overallocation and existing over allocation will continue resulting in the continued decline in freshwater ecosystem health.</p> <p>An important allocation issue remaining is addressing Māori rights, interests and responsibilities in water. This affects the extent to which proposals for Te Mana o Te Wai can be fully defined, for example governance decisions. Government decisions on water allocation will likely necessitate further amendments to the NPS-FM and the RMA¹³⁶.</p>	

¹³⁵ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.66

¹³⁶ Freshwater Report of the Freshwater Independent Advisory Panel, (2020). p.21

Policy 11 is implemented by directing regional councils to specify how efficient allocation of water will be achieved. The incremental nature of Policy 11 means that there is a mixture of minor to moderate costs and benefits across all stakeholders.

The minor benefits accrue to the environment, tangata whenua, local communities, recreational users, and other non-governmental organisations, while small costs accrue to all forms of government. There is the potential for costs to commercial users of water in over allocated catchments as the over allocation is phased out with reduced water availability and constraints on activities and further development potential. This is assessed as a minor cost as the Policy 11 package does not represent a major policy shift from the existing water allocation regimes required by previous NPS documents.

For all parties the impacts on consents and the opportunity cost of water will only become clear once sustainable allocation limits are set.

7.10.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 11 AND SUPPORTING PROVISIONS

Options that have been considered include:

1. Amending the NPS-FM to provide more specific direction about setting and complying with ecological flows and levels (selected option)
2. Prepare guidance on appropriate methodologies for setting ecological flows, and other technical matters

Seven further options were evaluated in the interim RIA but not considered feasible or sufficient to address the problems.

Within Option 1 three possible amendments were evaluated:

- a) improving the process for setting freshwater objectives for water quantity for the compulsory values (in line with the process for setting freshwater objectives for water quality)
- b) adding policy direction for setting water quantity limits (flow(s), water levels and allocation limits) that deal with the effects of abstractions and diversions throughout the freshwater management unit, including on small streams
- c) adding policy direction about restricting groundwater takes if the groundwater is connected to surface water and continuing abstractions are compromising freshwater objectives in surface water bodies (as well as groundwater)

Option 2 considered incorporating the proposed National Environmental Standard on Ecological Flows and Water Levels (2008) methodology into guidance for setting flows and limits.

Both options 1 and 2 meet the NPS-FM 2020 objective and will help to address the problems of poor freshwater objectives for water quantity, and safeguarding ecosystem health and other values throughout the freshwater management unit¹³⁷. Providing direction for regional councils to address water quantity issues has been included in the NPS-FM since its inception. Policy 11 of the NPS-FM 2020 as drafted will seek to address inefficient allocation of fresh water as a problem with current freshwater management. This is particularly where water is scarce and/or under greatest demand.

Policy 11 is the most effective and efficient way to achieve the Objective as particular regard is given to the efficient use and development of natural and physical resources.

¹³⁷ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.61

7.11 POLICY 12

Policy 12

The national target (as set out in Appendix 3) for water quality improvement is achieved.

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.3 Long-term vision for freshwater

3.9 Identifying values and setting environmental outcomes as objectives

3.11 Setting target attribute states

3.25 Deposited sediment in rivers

3.27 Primary contact sites

Appendix 3 National target for primary contact

7.11.1 INTENT

Policy 12 seeks to increase the proportion of specified rivers and lakes that are suitable for primary contact to at least 80% by 2030 and 90% no later than 2040, and also to improve water quality across all categories. This is intended to address the degradation of New Zealand's freshwater, as 94% of urban streams and 82% of streams in pastoral areas pose very high risks to human health for swimming at least some of the time¹³⁸. The target is assessed based on two human health attributes, *E. coli* and cyanobacteria (planktonic). In addition, waterways are polluted by excess nutrients, pathogens, and sediment and there is clear evidence that waterways in our farming areas have markedly higher pollution by nutrients (nitrogen and phosphorus), microbial pathogens, and sediment than waterways in native catchments¹³⁹.

The national target is set out in Appendix 3 of the NPS-FM 2020 and sets clear standards for swimming in all rivers and lakes that are likely to be used for recreation. Regional councils have already set targets for swimmable rivers and lakes, but there was confusion about what 'swimmable' means and whether the current threshold is stringent enough.

New direction in the NPS-FM will help councils achieve the national target. Specifically, this is to direct regional councils to identify primary contact sites in their regional plans and improve water quality at those sites so that it is at least better than the new national bottom line for *E. coli* (NPS-FM 2020, Appendix 2B). Through clause 3.27, regional councils are required to monitor primary contact sites for their risk to human health, and their suitability for activities that take place on them (clause 3.27(1)).

Key changes to the NPS-FM include:

- The requirement to identify primary contact sites where the regional council considers they are regularly used, or would be regularly used, but for existing freshwater quality, for recreational activities such as swimming, paddling, boating, or water sports, and particularly for activities where there is a high likelihood of water or water vapour being ingested or inhaled.

¹³⁸ Action for healthy waterways – decisions on national direction and regulations for freshwater management Cabinet Paper, (2020). p.3.

¹³⁹ RIA Action for healthy waterways Part I: Summary, (2020). p.11

- New sediment attributes are being introduced as a major step for New Zealand water management. At present, about 31% of monitored sites do not meet the proposed bottom lines and will require improvements. These attributes are being introduced in order to ensure our rivers and estuaries do not continue to degrade due to sedimentation.

7.11.2 EFFECTIVENESS & EFFICIENCY

Policy 12 is effective because it contributes to achieving clauses (b) and (c) of the Objective. Related direction in the NPS-FM requires councils to set target attribute states for the value human contact above the baseline state (clause 3.11(3)) and sets a national bottom line for *E. coli*, which indicates when the water in the water body may affect human health, for primary contact sites.

Policy 12 will have significant human health and recreation benefits for communities by requiring councils to reduce *E. coli* levels to levels that present a lower health risk, thereby providing more opportunities for safe swimming and other recreation in waterways. The increased safe use of the rivers will also improve the primary sector's social licence to operate and improve community cohesion.

Improving the natural environment enhances opportunities to spend time in nature to increase social connections, people's wellbeing and mental health, thereby prioritising the essential health needs of the community.

Whether Policy 12 is efficient depends on catchment land use. Reducing *E. coli* levels from rural areas will involve excluding stock from rivers and lakes and targeting runoff from pastoral farm areas like laneways and yards. Reducing *E. coli* levels will have associated reductions in nutrients and sediment, because these are also present in stock excreta and sewage effluent. Reducing *E. coli* in urban areas will generally be through better infrastructure management, particularly wastewater and stormwater management.

The evaluation of the policy effectiveness and efficiency is in Table 23.

7.11.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 12 AND SUPPORTING PROVISIONS

Retaining the status quo would mean that councils set objectives for *E. coli* at a level that will contribute to a national target where 90 percent of large rivers and lakes are swimmable. Apart from Marlborough and West Coast councils, which have draft regional targets, all regional councils have published final targets for swimmable lakes and rivers. In combination, the regional targets will not achieve the national target by 2040¹⁴⁰.

The NPS-FM 2014 (amended 2017) had an attribute table for *E. coli* but it did not include a national bottom line. The NPS-FM 2020 has retained the earlier attribute table for *E. coli*, which applies to all freshwater management units, and added a new table that must be used for setting target attribute states at primary contact sites. The new attribute table provides specific direction for councils related to *E. coli* attributes in relation to the swimming season and places where people want to swim. The new attribute and national bottom line for *E. coli* applies to primary contact sites during the bathing season and regional councils can work toward desired outcomes through non-statutory action plans.

Policy 12 is the most effective and efficient way to achieve the Objective because it:

- Recognises the importance of providing freshwater swimming sites that are able to be utilised without fear of getting sick.

Providing regional councils clear direction on a national target of specified rivers and lakes suitable for primary contact.

¹⁴⁰ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.175

TABLE 23: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 12

	BENEFITS	COSTS
Environmental	Methods to achieve Policy 12 include stock exclusion and improvements to wastewater treatment, both which support freshwater ecosystem health.	
Economic	<p>Reduced risk to human health through reduced exposure to pathogens when swimming, boating, rafting or kayaking. The value New Zealanders place on the improved swimmability resulting from <i>E. coli</i> reductions from fencing out stock has been estimated at \$883 million.¹⁴¹</p> <p>The estimated benefits of reduced illness that would result from reducing <i>E. coli</i> levels in rivers currently managed for recreation is in the range of \$10 million to \$80 million annually.¹⁴²</p> <p>Sediment control regulations will improve clarity in New Zealand's rivers making them more suitable for swimming. Officials estimate that over 30,000km of streams will require stock exclusion and setbacks. The monetised, long-term benefits of this policy – New Zealanders' willingness-to-pay for more swimmable rivers due to reduced health risks and clearer water – are about \$2.4 billion¹⁴³</p>	<p>One-off costs for specific mitigations (regional councils will target <i>E. coli</i> hot spots)</p> <p>One-off upgrade costs of wastewater treatment plants, plus ongoing treatment. Nearly 60 percent of all wastewater treatment plants (WWTPs) nationally are currently going through, or will go through, a resource consenting process in the next 10 years. In general, improvements to wastewater treatment are being driven by community expectations rather than rules in regional plans. Thus, while plants upstream of WWTPs are likely to require improvements to reduce their <i>E. coli</i> contributions, the cost to do this (usually ultraviolet disinfection) is likely to be a small part of the overall cost. Costs to improve treatment to reduce nutrient contributions, or to completely remove treated sewage discharges to water, will be greater¹⁴⁴.</p> <p>Ongoing monitoring costs the same (councils already monitor recreational sites during the bathing season).¹⁴⁵</p> <p>Estimates for fencing costs range from \$2.91 to \$24.88 per metre depending on stock type and land type. Assuming half the remaining streams are fenced with electric 4-wire, and half with nonelectric 8-wire, the total costs would be \$654 million. Most of these costs would be in the Manawatu-Whanganui region, which has identified the highest number of bathing sites. Actual costs will depend on the actions councils choose to take improve to water quality. Fencing stock out of water bodies is only one approach to reducing the impact of stock on <i>E. coli</i> levels in water bodies – intercepting and reducing runoff from laneways and yards may be more effective. Choosing the most effective mitigation approach for each farm is something that can be directed through farm-specific farm environment plans. This has been demonstrated in improvements in water quality trends, including reductions in <i>E. coli</i> levels, in some Manawatu rivers¹⁴⁶.</p>
Social	Increased opportunities for social and recreation through more rivers being safe for recreation (boating, kayaking, rafting, fishing, swimming). A survey estimated that if algal blooms were eliminated there would be a 650% increase	The total economic costs associated with the Havelock North campylobacteriosis outbreak in 2016 were estimated to be \$21,029,288, for an estimated 5,088 households.

¹⁴¹ Grinter J and White J. National Stock Exclusion Study: Analysis of the costs and benefits of excluding stock from New Zealand waterways. MPI. (2016)

¹⁴² Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.169

¹⁴³ Action for healthy waterways – decisions on national direction and regulations for freshwater management Cabinet Paper, (2020). p.16

¹⁴⁴ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.167

¹⁴⁵ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.154

¹⁴⁶ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis (2019) p.168

	in recreational activity (in terms of days spent) at Lake Rotorua and a 237% increase in the rest of the Bay of Plenty ¹⁴⁷	The costs of the Havelock North campylobacteriosis outbreak suggest that illnesses caused by contact with recreational water could be costing New Zealand \$25 million - \$175 million annually. With nearly half of New Zealand's population living within 20 km of a monitored recreational site (2.2 million people), and assuming that this equates reasonably well with the proportion of people who have become sick after contact with recreational freshwater (as reported to district health boards), the estimated benefits of reduced illness that would result from improving water quality in rivers and lakes as indicated by <i>E. coli</i> would be in the range of \$10 million to \$80 million annually ¹⁴⁸ .
Cultural	Improved cultural opportunities arising from water quality and ecosystems being maintained or restored to levels more consistent with Te Mana o Te Wai, cultural uses of water and water-based resources. Improved safety in harvesting mahinga kai will also provide cultural benefits.	
Additional sector commentary	The River Environment Classification (REC) version 2.4 was used for the purposes of calculating catchment and river length statistics. There is a total of 217,139 kilometres of stream above swimming sites nationwide. There are 2.07 million people living within 20 km of a site that is below the recommended national bottom line ¹⁴⁹ .	
Opportunities for economic growth and employment to be provided or reduced	Employment opportunities may arise due to lack of sufficient capacity in councils to meet the NPS-FM 2020 monitoring requirements. Additional sampling and analysis requirements may create opportunity for growth in the industry servicing this need.	
Risks of not acting and uncertainty	<p>The risk of not acting exceeds the risk of acting. The risk of not acting is that national targets for swimmable lakes and rivers would not likely be met by 2040.</p> <p>There is a degree of uncertainty associated with the ability for regional councils to effectively identify appropriate targeted actions to ensure the <i>E. coli</i> bottom line is achieved and mitigate the effects of these sources, which could be varied and include difficult to manage sources such as wild fowl. The cost to implement measures to achieve compliance also introduces uncertainty. These factors have been considered in the evaluation of options and the overall level of uncertainty is considered to be acceptable.</p> <p>The relationship between <i>E. coli</i> and the risk to human health is based on studies done in 1999-2000. This relationship may have changed over the last 20 years.¹⁵⁰</p>	

¹⁴⁷ Bell B and Yap M. The Rotorua Lakes: Evaluation of less tangible values. A report prepared for Environment Bay of Plenty. Nimmo-Bell. (2004)

¹⁴⁸ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.170

¹⁴⁹ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.167

¹⁵⁰ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.165

7.12 POLICY 13

Policy 13

The condition of water bodies and freshwater ecosystems is systematically monitored over time, and action is taken where freshwater is degraded, and to reverse deteriorating trends.

Supported by:

Part 3 Subpart 2 National Objectives Framework

3.3 Long-term vision for freshwater

3.8 Identifying FMUs and special sites and features

3.18 Monitoring

3.19 Assessing Trends

3.25 Deposited sediment in rivers

3.26 Fish passage

3.28 Water allocation

3.30 Assessing and reporting

7.12.1 INTENT

The health of our people, our environment, and our economy depends on the health of our freshwater. But our water is suffering as a result of human activity – urban development, agriculture, horticulture, forestry, and other activities – and because of a lack of robust regulation, monitoring, and enforcement.

In order to understand where the health of ecosystems is being affected by activities, and whether it is getting worse or better as a result of the way those activities are managed, Policy 13 directs better monitoring and reporting, so that the links can be made between the state of all aspects of the freshwater environment and the way it is managed.

Policy 13 supports regional councils carry out the state of ecosystem health as per the attributes provided in Appendices 2A and 2B, as a minimum. The NPS-FM 2020 adds 12 new attributes¹⁵¹ that councils must monitor for ecosystem health, and changes one existing attribute¹⁵². The six existing ecosystem health attributes are retained unchanged.

The development of monitoring plans required by Policy 13 will ensure that the impact of management approaches selected for freshwater bodies will be apparent to the community when changes to the water body take place over time.

There is broad recognition that measuring water quality alone is not enough to assess ecosystem health. If the fundamental state of all components of ecosystem health are not adequately assessed or understood, councils and communities cannot assess the effectiveness of the policies and rules in place.

Systematic under-reporting of ecosystem health, and inability to communicate effectively where improvements or declines on overall ecosystem health have occurred or are occurring limit the public to fully understand what management interventions are

¹⁵¹ Appendix 2A & 2B Tables 8, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21

¹⁵² Appendix 2A Table 7

required to improve degraded ecosystems and change deteriorating trends. This will impede the ability of communities to fully participate in decision making.

Councils need to be able to communicate an accurate and reliable story of the state of our environment. This will better inform why, where, and how they need to change any of the approaches in their regional plans, and will help inform an evaluation of the effectiveness of the NPS-FM. Monitoring five components of ecosystem health will mean that:

- Decisions about resourcing interventions are more easily supported by meaningful evidence-based knowledge
- Effectiveness of policies to improve ecosystem health can be assessed; and
- The public better understands the extent that the information represents the freshwater ecosystem, and where information gaps exist.

7.12.2 EFFECTIVENESS

Through Policy 13, regional councils will be required to measure and monitor a broader range of ecosystem health attributes. In the event the attribute declines, or is below a national bottom line, regional councils are better placed to assess how the state of the attribute or the direction of the trend is related to their management approaches. They must then prepare and implement an action plan to achieve improvement.

This approach reflects that there may be a wide range of reasons for a deterioration, a variety of actions that might be taken, and the specific actions might depend on the catchment and situation. The best approach may be to undertake monitoring to learn about the catchment, detect possible issues, and then develop an action plan with management actions to respond. The results are evaluated, and actions adjusted on the basis of what has been learned. This allows for decision making in the face of uncertainty.

Requiring councils to develop plans for monitoring progress towards and achievement of freshwater objectives provides national guidance about the expectations for monitoring that will help to achieve a nationally consistent approach. By requiring sites to be regionally representative sites, the policy also recognises regional and local circumstances and allows councils to operate in a way that is the most efficient and effective for their needs.

The shift to transparent reporting allows councils, their communities and government to rapidly understand what the available information is telling them and where the gaps are. This facilitates informed debate and decision making. Being transparent about gaps will encourage decisions on how to best prioritise monitoring to fill gaps, within budgets.

The evaluation of effectiveness of Policy 13 is in Table 24 and draws on the Interim RIA.

7.12.3 EFFICIENCY

The NPS-FM 2014 (amended 2017) requires monitoring of macroinvertebrate communities, the health of indigenous flora and fauna, and any objectives councils have set for attributes through the National Objectives Framework (at a minimum). Policy 13 will extend this, and be implemented by monitoring the following attributes¹⁵³:

- Fish

Monitoring fish communities is relatively expensive for councils, compared to water quality sampling, because it involves specialised skills and is more complex and time-consuming.

- Macroinvertebrates (two measures)

¹⁵³ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.23

Macroinvertebrate monitoring is currently undertaken by all councils. The NPS-FM 2014 (amended 2017) requires the monitoring of the Macroinvertebrate Community Index (MCI), a measure originally developed to indicate organic and nutrient pollution and based on presence and absence data. The STAG considers this insufficient for managing broader ecosystem health. Their recommended additional measures are the Quantitative MCI (QMCI) which accounts for the relative abundance of species, and the Average Score Per Metric (ASPM) which is a multi-metric index that better reflects community health, developed by Collier (2008).

These three measures are not mutually exclusive and complement one another. All three can be calculated with the same data, however there will be some additional laboratory processing costs for any councils that currently do not pay for abundance counts. Requiring a minimum of 200-fixed count sub sampling (as opposed to full counts) will help minimise additional cost, while still providing informative data.

- Dissolved Oxygen (four measures)

There will be implementation costs for councils to increase monitoring of DO, prepare management plans and carry out management actions. The increased costs arise from having continuous loggers in the rivers, rather than relying on single sample results as they have done in the past. The capital cost for establishing a new DO monitoring site varies from less than \$5000 to more than \$80,000.¹⁵⁴

- Ecosystem metabolism

Assuming DO monitoring is being undertaken, then any additional costs will be minor.

- Macrophytes

Lake Submerged Plant Indicators (LakeSPI) is a method of characterising the ecological health of lakes based on the amount of native and invasive plants growing in them. Most regional councils and the Department of Conservation have undertaken LakeSPI assessments and, to date, LakeSPI assessments have been carried out on more than 300 New Zealand lakes. LakeSPI data are collated and reported on the LAWA website as a key indicator of lake health.

LakeSPI is described as a cost-effective tool, however with the exception of very shallow lakes the method requires scuba-diving skills and qualifications, a certified boat operator and a minimum of three people. There are constraints on the availability of trained personnel to undertake the surveys. To reduce costs, it is likely that the method could be adapted to use remote-controlled underwater cameras for example.

The more significant cost implication will be that councils will have a greater requirement to improve the state of submerged plants in lakes. In some lakes that is likely to involve ongoing surveillance and management of invasive species.

- Sediment

The introduced requirement will be to monitor in-stream deposited sediment in wadeable streams using at least the following indicator: in-stream areal coverage of percent fine sediment (<2mm grain size) as determined through in-stream visual assessment, known as the SAM2 method. This will also include triggers for development of methods to address deposited sediment if monitoring trends are declining or indicators are below a specific threshold.

This monitoring will result in local governments collecting information on deposited sediment levels in a standard manner over time. This will facilitate councils' evaluation of overarching ecosystem health parameters and potential needed interventions through an

¹⁵⁴ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.19

adaptive planning approach. It will also generate the information needed to assess drivers of deposited sediment levels and possible management actions to reduce them¹⁵⁵.

The evaluation of efficiency of Policy 13 is in Table 24 and draws on the Interim RIA.

7.12.4 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 13 AND SUPPORTING PROVISIONS

An alternative option involving an immediate requirement to fill monitoring gaps, and report on compulsory metrics under all five components of ecosystem health was considered. Councils would be required to immediately establish methods to monitor and report on overall ecosystem health as a single combined score. This would require councils to:

- Implement methods and protocols for monitoring and reporting on all metrics, including those that are not routinely monitored
- Immediately establish data management protocols and reporting templates to integrate data into a single ecosystem health reporting metric
- Report on overall ecosystem health across the region on an annual basis

This would require councils to undertake full scale monitoring of prescribed components of Ecosystem Health. This poses several risks that go against the intent of the policy and other related policies:

1. Councils have uneven rating bases and environmental demands to manage, which presents a significant barrier for many to implement this policy. This is a systemic issue that may be best considered with wider reform of the resource management system
2. Councils will not have all the technical guidance in place necessary to ensure transparent and consistent reporting for all measures
3. Councils will not have the technical guidance for ensuring adequate data management protocols are tried and tested and are in place.

Overall, this option was ruled out as there are greater risks to setting out inefficiencies in national protocol development, and councils will not have sufficient time to prioritise monitoring resources against other policy needs. Implementing this policy without addressing the underlying systemic issues first would likely prove unmanageable for some councils and have significant impacts on their ability to carry out their other required functions¹⁵⁶.

Policy 13 is the most effective and efficient way to achieve the Objective because it prioritises the health and wellbeing of freshwater ecosystems, through the requirement to monitor components of ecosystem health.

This will have the immediate effect improving transparency for the public of the data that is, and is not being collected and reported, and helps councils identify where gaps exist, and assist in stopping further degradation of New Zealand's freshwater resources, to enable regional councils to start making immediate improvements so that water quality is materially improving within five years.

¹⁵⁵ Interim Regulatory Impact Analysis for Consultation: Essential Freshwater Part II: Detailed Analysis (2019) p.119

¹⁵⁶ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.105

TABLE 24: ASSESSMENT OF EFFICIENCY AND EFFECTIVENESS FOR POLICY 13

	BENEFITS	COSTS
Environmental	<p>Healthy freshwater ecosystems underpin a range of ecosystem services that our society and economy benefit from, such as:</p> <ul style="list-style-type: none"> Regulatory services: Maintenance of water quality (filtering, attenuation), and attenuation of flood flows Provisioning Services: Drinking water, agriculture, industry, hydro-generation, and food. 	
Economic	<p>Improved monitoring systems is expected to provide more accurate data on which to base decision making and therefore provides greater certainty which has an economic benefit.</p> <p>More efficient management at the regional level, and efficiency gains at the national levels for national reporting on environmental trends.</p>	One-off capital costs for councils for monitoring equipment, and ongoing monitoring costs which they may recoup via consents from resource users.
Social	<p>Improved data transparency for communities to understand the effects of their activities and the effects of changes they make to their practices. An ability to identify gaps, improved ability to monitor components of ecosystem health.</p> <p>Intrinsic values provide satisfaction and underpin wellbeing. Benefits accrue to sense of identity, recreation (e.g. fishing, kayaking, tramping).</p>	
Cultural	Policy 13 promotes a broader way of monitoring ecosystem than water quality alone and recognises Te Mana o Te Wai as a shift to a holistic way of reporting on ecosystem health, including the requirement to include measures of mātauranga Māori in monitoring	
Additional sector commentary	Councils monitor a wider range of ecosystem health metrics, and develop actions to respond	
Opportunities for economic growth and employment to be provided or reduced	Employment opportunities may arise due to lack of sufficient capability and capacity in councils to meet the NPS-FM 2020 monitoring requirements. In the short term it is expected that councils will need to contract ecological monitoring expertise to meet the requirements.	
Risks of not acting and uncertainty	<p>If the current approach to monitoring remains unchanged, these issues with bias and inconsistency will continue in the immediate future, and efforts to resolve will be slow. This poses problems for policy making, and effective community participation in decision making.</p> <p>Targets actions that are appropriate to the issue and catchment. Stronger evidence base supports decision making.</p> <p>Relies on councils amending their regional plans, which must happen over the next ten years.</p>	

7.13 POLICY 14

Policy 14

Information about the state of water bodies and freshwater ecosystems, and the challenges to their health and wellbeing, is regularly reported on and published.

Supported by:

Part 3 Subpart 2 National Objectives Framework

Appendix 1B Other values that must be considered

7.13.1 INTENT

The intent of Policy 14 is to address the barriers to making effective decisions and undertaking the actions required to halt declines in ecosystem health through a lack of timely information on which to base decisions.

The current approach to reporting is considered ‘ad hoc’ in terms of style and content, resulting in inconsistency and bias in the information available to inform decision making and intervention. The types of information being reported tend to focus on aspects of water quality and quantity, whereas ecosystem health has three other components – physical habitat, the presence (or absence) of aquatic life, and the interaction between all these components (ecosystem processes). All five components are needed for healthy functioning ecosystems and form part of the natural environment that councils must manage.¹⁵⁷

Holistic, clear and consistent reporting that covers all five components of ecosystem health will better inform why, where and how decision makers and the public need to take action to halt declines in ecosystem health. Decisions can be easily supported by meaningful evidence-based knowledge, the effectiveness of policies can be assessed, and information gaps can also be identified¹⁵⁸.

Policy 14 is implemented by clauses 3.27, 3.29 and 3.30 of the NPS-FM 2020 and complemented by Policy 13 of the NPS-FM 2020, which requires monitoring to inform environmental reporting. Within five years, the government expects environmental reporting to show evidence of improvement in water quality. Key requirements include:

- Introducing mandatory transparent reporting of the five components of ecosystem health.
- Data routinely collected will need to be explicitly categorise into one of the five components. Councils are also required to produce a synthesis report at least five years integrating the five components of ecosystem health into a single ecosystem health score.¹⁵⁹
- Where no information is available will also be explicitly reported.

¹⁵⁷ Refer to Appendix 5 in the Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). pp.102-103 and Chapter 5 in the RIA Action for healthy waterways Part II: Detailed Analysis, (2020). pp.122-123.

¹⁵⁸ Refer to Appendix 5 in the Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.103.

¹⁵⁹ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.122

7.13.2 EFFECTIVENESS

To facilitate improvement and direct consistency, Policy 14 requires a shift to a reporting framework that is transparent about data gaps, starting with the requirement to report all monitoring data against the five defined components of ecosystem health. Where no information is available will also be reported.

The chosen framework for doing this is set out in the Freshwater Biophysical Ecosystem Health Framework¹⁶⁰. This report describes the current state of knowledge of best practice reporting systems internationally, and the approach recommended for New Zealand's freshwater environments.

Policy 14 is effective because:

- It allows councils, their communities and government to rapidly understand the state of ecosystem health and the other values in the freshwater management unit, and make informed, effective and tailored decisions that contribute to achieving the Objective.
- It establishes a consistent and transparent knowledge base that can be drawn on by a range of decision-makers, enabling greater participation in decision making and collective action towards achieving the Objective.
- It provides a clear mechanism by which other policies and interventions can be assessed.

The evaluation of effectiveness of Policy 14 is in Table 25.

7.13.3 EFFICIENCY

Policy 14 is efficient because the shift to transparent reporting is accommodated within the current resources used for annual data reporting and does not require councils to add additional metrics/data analytical steps to annual monitoring and reporting¹⁶¹.

This is consistent with the framework and recommendations set out in Ministry's commissioned report by Clapcott et al. 2018¹⁶², that sets out the current state of knowledge of best practice reporting systems internationally, and the approach recommended for New Zealand's freshwater environments. This is also consistent with the reporting practices currently adopted by several councils in New Zealand that currently produce detailed annual reports and summary report card style assessments of the regional state of freshwater and/or whole of catchment quality.

In effect, regional councils are required to either amend their existing reporting or undertake new reporting to include the five components of ecosystem health. This may require updates to database templates, re-configuration of summary statistical outputs, re-configuration of graphical displays to convey the information into websites (e.g. LAWA) and annual report cards. Additional narrative will also be required to provide the context of information presentation and website linkages.

A National Report Card prototype is currently being developed. Following completion, this process will be further assessed to determine at what scale it is feasible and appropriate to define a single integrated measure of Ecosystem Health. Demonstrating

¹⁶⁰ Clapcott J, Young R, Sinner J, Wilcox M, Storey R, Quinn J, Daughney C, Canning A. Freshwater biophysical ecosystem health framework. Prepared for Ministry for the Environment. Cawthron Report No. 3194. (2018). Available at <https://www.Ministry.govt.nz/sites/default/files/media/Fresh%20water/freshwater-ecosystem-health-framework.pdf>

¹⁶¹ Refer to Appendix 5 in the Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.106.

¹⁶² Freshwater biophysical ecosystem health framework. (2018)

the framework using New Zealand data is a critical step in shifting the current status quo of reporting to one that is flexible and transparent.

The risk of not shifting to this transparent process is that current issues of data management and reporting inconsistencies will remain; there will be an inability to effectively determine whether Ecosystem Health has been maintained or improved, and it will impede resource investment decisions and impede further policy development processes.

Central and local government potentially have several avenues for funding opportunities by which to co-develop practical and meaningful guidance and implementation. For example, the MBIE Envirolink grant is a route by which protocols and guidance tools could be funded. This mechanism is subject to conditions, and a successful application being submitted¹⁶³.

The evaluation of efficiency of Policy 14 is in Table 25.

7.13.4 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 14 AND SUPPORTING PROVISIONS

Retaining the status quo would mean that there are no changes to the current reporting regimes of councils. Councils will continue with current regionally based practices of data reporting and analysis.¹⁶⁴

Policy 14 is the most effective and efficient way to achieve the Objective because it prioritises the health and wellbeing of freshwater ecosystems, through the requirement to monitor components of ecosystem health.

Policy 14 provides clear direction about reporting on ecosystem health, which will also ensure reporting is done in a consistent manner – both between and within regional councils – and, importantly, that monitoring gaps are clearly identified. Acknowledgment of data gaps will help address any information asymmetry that informs decision making.

As with Policy 13, this will have the immediate effect improving transparency for the public of the data that is, and is not being collected and reported, and helps councils identify where gaps exist, and assist in stopping further degradation of New Zealand's freshwater resources, to enable regional councils to start making immediate improvements so that water quality is materially improving within five years.

¹⁶³ Refer to Appendix 5 in the Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.109.

¹⁶⁴ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.104.

TABLE 25: ASSESSMENT OF EFFECTIVENESS AND EFFICIENCY FOR POLICY 14

	BENEFITS	COSTS
Environmental	A transparent reporting process supports good decision making regarding actions required to progress towards achieving the desired environmental outcomes for freshwater.	
Economic	It is not anticipated these reporting requirements will significantly add to regional council costs ¹⁶⁵ .	There will be some additional costs for regional councils, to undertake additional analysis and production of reports ¹⁶⁶ .
Social	Encourages greater participation in decision making and active involvement by the public, stakeholders and other groups. Communities will be better able to understand the effects of their activities and the effects of changes they make to their practices.	
Cultural	The ecosystem health reporting requirements have been assessed to support Te Mana o Te Wai ¹⁶⁷ .	
Additional sector commentary		
Opportunities for economic growth and employment to be provided or reduced	Employment opportunities may arise due to lack of sufficient capability and capacity in councils to meet the NPS-FM 2020 requirements.	
Risks of not acting and uncertainty	<p>The risk of not acting is that bias and inconsistency in information will continue in the immediate future. Relying on the RMA requirement to monitor and report on the state of the environment and the effectiveness of their policies every five years, has not been effective and without specific direction related to freshwater, councils will continue to do this in an inconsistent and irregular way. There will be an inability to effectively determine whether ecosystem health has been maintained or improved and impede resource investment decisions and further policy development¹⁶⁸.</p> <p>The risk of not acting exceeds the risk of acting.</p> <p>It is acknowledged that reporting as part of implementing Policy 14 will not be sufficient on its own to determine whether water quality has been maintained in a meaningful way, and directs regional councils to consider specific types of additional information and exercise judgment about what that means¹⁶⁹.</p>	

¹⁶⁵ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.122

¹⁶⁶ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.229

¹⁶⁷ RIA Action for healthy waterways Part II: Detailed Analysis, (2020).

¹⁶⁸ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2019). p.109.

¹⁶⁹ Ibid. p.227

7.14 POLICY 15

Policy 15

Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with the National Policy Statement.

Supported by:

Part 3 Subpart 2 National Objectives Framework

Also see:

Policy 5 NOF



7.14.1 INTENT

The RIA does not specifically address the enabling of economic wellbeing in the problem definition because this matter was already addressed in the decision making process set out in the NPS-FM 2020.

New Zealand's economy is reliant on fresh water. It is critical to the success and future of the primary sector (including products exported abroad), as well as low carbon hydro-power generation, clean drinking water, sanitation, and business. The 2020 drought in Auckland highlights the importance of freshwater availability.

Policy 15 specifically enables communities to provide for their economic wellbeing. It is an enabling policy intended to achieve the third priority of the NPS-FM objective (clause 2.1(1)(c)). The policy also emphasises the third priority in Te Mana o Te Wai.

An enabling policy for economic values was added to the NPS-FM 2014 (amended 2017) out of concern the direction in policy CA2(f)(v) in the NPS-FM 2014 provided insufficient direction to regional councils to consider implications for economic growth before establishing limits to meet freshwater objectives¹⁷⁰. After consultation, the policy in draft NPS-FM was changed from "*Communities are enabled to provide for their economic wellbeing while managing freshwater in a manner consistent with Te Mana o Te Wai and as required by the national objectives framework and other requirements of this National Policy Statement*" to "*Communities are enabled to provide for their social, economic and cultural wellbeing in a way that is consistent with the National Policy Statement*" in the NPS-FM 2020.

This changed wording mirrors the enabling economic wellbeing wording in section 5 of the RMA. The approach is consistent with other policies in the NPS-FM 2020, which are generally succinct statements limited to a single concept. It is also complementary to the approach in the NZCPS¹⁷¹. The NPS-FM 2020 is intended to be read as a whole package and is directive, in some cases strongly directive. Policies, including those for wetlands, rivers, and providing for the ecosystem health value, should be read together. Having an enabling economic policy that requires a separate consistency test would create an unnecessary tension and would likely be no more effective in achieving the Objective.

¹⁷⁰ Ministry 2017; Proposed amendments to the National Policy Statement for Freshwater Management, section 32 evaluation. Wellington: Ministry for the Environment. p.32.

¹⁷¹ E.g. Objective 6

7.14.2 EFFECTIVENESS AND EFFICIENCY

The effectiveness (Table 26) and efficiency (Table 27) of Policy 14 is drawn directly from the RIA and Cabinet paper and summarised here in a way that is consistent with and meets the requirements of section 32, with additional commentary added and changes where necessary.

7.14.3 ALTERNATIVE OPTIONS AND REASONS FOR POLICY 14 AND SUPPORTING PROVISIONS

Policy 15 has been against the status quo only and there is little difference from the NPS-FM 2014 (amended 2017) objectives and policies enabling economic wellbeing. As mentioned above, this policy has evolved since the 2019 draft NPS-FM. Changes to remove the explicit need to try and balance and achieve consistency with Te Mana o Te Wai, the NOF, and other requirements of the NPS-FM 2020 have been made. Having an enabling economic policy that requires a separate consistency test would create an unnecessary tension and is no more effective in achieving the Objective.

Policy 15 is the most effective and efficient way to achieve the Objective for the reasons discussed above.

7.15 OTHER PROVISIONS

The NPS-FM contains several provisions that are not specifically assessed in the previous sections. These are discussed briefly below and cross reference made to the relevant provisions assessment in Section 7.0.

Part 3: 3.6 Transparent Decisions

The transparent decision making clause 3.6 is primarily administrative. It requires local authorities make transparent decisions and record the options considered, advice and evidence received and considered, substantive reasons for the decision reached and any other narrative necessary to show how the decision gives effect to the NPF-FM 2020. Regional councils must document and justify the use, or not, of mechanisms to actively involve tangata whenua in freshwater management and decision making.

Part 3: Subpart 4 Exceptions

Subpart 4 - Exceptions provides for the 5 large hydro schemes and naturally occurring processes. Regional councils must have regard to the schemes when implementing the NPS-FM, more specifically as it applies to an FMU. The exceptions for the large hydro schemes is particularly relevant when applying the NOF (see sections 7.4 and 7.5 and elsewhere throughout this report).

Refer to the Addendum for a detailed evaluation the vegetable production exception.

Part 4 Timing

The NPS-FM brings the timeframe for notification of policy statements and plans to give effect to the NPS-FM 2020 forward to 31 December 2024. Assessment of the change to the timeframe for preparing freshwater plan changes is provided in Table 4 and section 7.5.9 of this report.

TABLE 26: ASSESSMENT OF EFFECTIVENESS FOR POLICY 15

ELEMENTS OF THE OBJECTIVE	RESOURCES ARE MANAGED IN A WAY THAT PRIORITISES	FIRST, THE HEALTH AND WELLBEING OF WATER BODIES AND FRESHWATER ECOSYSTEMS	SECOND, THE ESSENTIAL HEALTH NEEDS OF PEOPLE	THIRD, THE ABILITY OF PEOPLE AND COMMUNITIES TO PROVIDE FOR THEIR SOCIAL, ECONOMIC, AND CULTURAL WELL-BEING, NOW AND IN THE FUTURE
Contribution of Policy 15 towards achieving the Objective	<p>Contains clear direction to ensure economic opportunities and costs are considered at the outset, which is consistent with section 5 of the RMA and may reduce any perceived need to refer back to Part 2 of the RMA.</p> <p>Signals an expectation that resources are managed in a way that enables communities to provide for their economic well-being, now and into the future.</p>	Better decision making is expected through a water centric view when enabling economic wellbeing.		<p>Aims to enable economic wellbeing and is a key policy to achieve the third priority and to use land and water resources for farming, business, tourism, and other economic activities.</p> <p>Does not aim to sway in any direction to provide for economic wellbeing. This is because it is enabling (not directive), which may limit its effectiveness.</p> <p>There will likely be tensions to resolve, including through the NOF process, however that is ultimately a matter of weighting for RMA decision making at the regional and local level.</p>
ELEMENTS OF THE SPECIFIC PROBLEM DEFINITION	THE RIA DOES NOT SPECIFICALLY ADDRESS THE ENABLING OF ECONOMIC WELLBEING IN THE PROBLEM DEFINITION			
Likely success of Policy 15 in solving the problem it was designed to address	<p>This policy is largely carried over from a number of objectives and policies in the NPS-FM 2014 (amended 2017) and is expressed as a single policy avoiding duplication. The consolidation into a single policy is immaterial because the substance matters, not the number of expressions.</p> <p>The policy does not seek to balance competing environmental and economic interests – this can be achieved when reading the NPS-FM 2020 as a whole and giving priority to the health and wellbeing of freshwater as set out in the hierarchy of obligations and within the objective.</p>			
Overall assessment	Policy 14 sits within the framework of the NPS-FM 2020. The policy is clear towards achieving subclause c of objective. It is likely to be moderately effective. As it is addressing the lowest priority matter it simply reflects section 5 of the RMA and the objective with neutral language.			

TABLE 27: ASSESSMENT OF EFFICIENCY FOR POLICY 15

	BENEFITS	COSTS
Environmental	As Policy 15 only deals with enabling economic wellbeing, the environmental benefits are low when considered in isolation.	There is a risk that councils may look to enable economic development over the priority given to the health of water bodies and freshwater ecosystems – however this is assessed as a minor cost as there are sufficient checks and balances (including through the NOF process) to avoid legacy or future imbalances continuing to cause unacceptable loss or harm.
Economic	<p>There is an economic benefit in speeding up and having more certainty on how planning decisions will be made, which promotes greater efficiency.</p> <p>The <i>Action for healthy waterways</i> policy package (which includes the NPS-FM) is estimated to have net benefits – that is the benefits minus the costs – of \$193 million per annum over 30 years (\$3.8 billion Present Value, PV). To put this in context, annual GDP is approximately \$300 billion.¹⁷²</p>	<p>The policy is unlikely to impose any additional costs on regional councils or communities when compared to the implementation of the NPS-FM 2014 (amended 2017), which requires regional councils to consider the economic implications at all relevant points of the limit-setting process.</p> <p>The use of land and freshwater resources is critical to the New Zealand economy. Activities that greatly contribute to or have a significant impact on national or regional GDP may find the enabling intent insufficient to carry on their business activities when reading the NPS-FM 2020 as a whole.</p> <p>Determining the amount of resource use that can occur, and the amount of economic wellbeing that can be derived from it will occur through the NOF process and other planning decisions, and these processes are uncertain and lengthy – however tight timeframes and a clearer outcome and priority for freshwater mitigates this to a degree.</p> <p>Economic benefits may be distributed inequitably across regions and opportunities for economic growth and employment may be constrained if regional councils take an inconsistent or overly risk adverse approach to enabling economic wellbeing.</p>
Social	Social wellbeing is closely linked to economic wellbeing, therefore a policy approach aimed at enabling economic wellbeing, is also likely to provide social benefits. These benefits include higher living standards.	
Cultural	Enabling economic wellbeing associated with freshwater use has benefits to Māori landowners.	The absence of a clear reference to how enabling economic wellbeing fits within the principles of Te Mana o Te Wai has the potential to create some uncertainty. This is a minor cost of the policy.
Additional sector commentary		
Opportunities for economic growth and employment to be provided or reduced	Policy 15 is an important policy to ensure that economic considerations and employment impacts are able to be considered during freshwater planning processes.	
Risks of not acting and uncertainty	<p>The risk of not acting is that the economic wellbeing component of the objective is not achieved through the lack of a specific supporting policy.</p> <p>The risk of not acting exceeds the risk of acting.</p> <p>There is a low level of uncertainty associated with Policy 15 because it closely reflects the third priority in the objective and reflects section 5 of the RMA. The structure of the NPS-FM 2020 policy framework is designed to require a collective view of the provisions, which limits any uncertainty that may result if the policy were to be considered outside of the context of the other policies.</p>	

¹⁷² Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.6

8.0 EVALUATION OF THE NES-F PROVISIONS

8.1 PART 1 PRELIMINARY PROVISIONS

Part 1

Preliminary provisions

Also see:

NPS-FM Policy 5, Policy 9, Policy 13



8.1.1 INTENT

The Part 1 Preliminary provisions permit plan rules and resource consents to be more stringent than the NES-F regulations. The preliminary provisions state that the NES-F regulations are subject to the National Environmental Standards for Plantation Forestry 2017 (NES-PF).

Definitions of terms used in the NES-F are provided within this section. Any definitions of significance and relevance to this evaluation are discussed in detail in the relevant sub-sections of this report.

The intent of Part 1 is to provide clarity and certainty for people using the NES-F.

8.1.2 EFFECTIVENESS

The NES-F states that the regulations are subject to the NES-PF as both sets of regulations will apply to plantation forestry and there are several matters covered by both standards. These include:

- River crossings – which are a regulated activity under Regulation 5(1)(d) of the NES-PF¹⁷³. The NES-PF sets out detailed requirements to manage the effects of river crossings but does not provide direction on how to address stream habitat loss caused by culvert installation¹⁷⁴.
- Sediment and erosion management – the NES-PF includes activity-specific regulations to improve erosion management within the forestry sector.
- Wetlands – the NES-PF contains rules which apply to wetlands, which is also addressed by the NES-F.

These matters will continue to be addressed by the NES-PF, which sets out good practice and also includes a requirement for risk-based management plans for a range of activities related to the harvest of plantation forestry.

8.1.3 EFFICIENCY

No costs are anticipated for the matters above. The clarification provided in relation to overlapping provisions of the NES-F and NES-PF is an efficient approach and avoids confusion and potential duplication of regulations.

¹⁷³ The NES-PF notes that river crossings can have adverse effects on sedimentation, fish passage, erosion, and the accumulation of debris

¹⁷⁴ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2020). p.30.

8.1.4 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THESE PRELIMINARY STANDARDS

Not giving effect to the NES-PF could lead to uncertainty when applying the provisions, where one method may be more permissive than the other on related matters such as wetlands. Part 1 Preliminary Provisions support the interpretation of the requirements of the NES-F.

The structure and format of this section is consistent with other RMA regulations and is considered the most effective and efficient option to achieve the Objective for the reasons discussed above and in section 5.0 of this report.

The NPS-FM is addressed separately in section 7.0 of this report but should be read together with this section.

8.2 PART 2 STANDARDS FOR FARMING ACTIVITIES

Part 2

Rules relating to feedlots, intensive winter grazing, agricultural intensification, and synthetic nitrogen fertiliser

Also see:

NPS-FM 2020 Objective



8.2.1 INTENT

The NES-F is the primary implementation tool to stop further degradation of New Zealand's freshwater resources and to start making improvements so that water quality is materially improving within five years. The farming standards introduce immediate controls on high risk farming activities to achieve the NPS-FM 2020 objective. This will allow time for freshwater regional plans and other planning documents to be developed in the coming years to give full effect to the NPS-FM 2020.

The NES-F regulations come into force in 2020, except for the regulations for intensive winter grazing (1 May 2021), and stockholding areas other than feedlots and synthetic nitrogen fertiliser (1 July 2021). This provides for a staged implementation to provide time to prepare.

Regulation 8 also focuses the NES-F on moderate to large scale farming, which includes arable, horticultural, or pastoral land uses above specified areas. The farm size threshold is variable depending on land use. Pastoral or arable land use over 20 hectares and horticultural land use over five hectares are within the specific scope of the standards.

8.2.2 FRESHWATER FARM PLANS

Freshwater farm plan standards that were initially included in the draft NES-F have been removed following submissions. There is no need to consider them in detail in this section 32 report. They are considered as a complementary alternative option, which will be delivered through amendments to the RMA and the development of new Regulations¹⁷⁵. This change of approach is intended to address some of the concerns raised by submitters and ensure they are enforceable.

Water quality is degrading in many rural catchments. One significant contributing factor is that not all farmers are adopting practices to reduce water quality impacts from their

¹⁷⁵ A new Part 6AAA in the RMA. This RMA Amendment Bill has passed its third and final reading at the time of writing this report.

farms or are not doing so fast enough. The success of farm plans has been demonstrated in Canterbury where nitrogen fertiliser rates on dairy farms (which had been increasing previously) are declining¹⁷⁶. The farm plan regime is intended to complement, and support limits set through the NOF process and any future allocation regime/s¹⁷⁷. Mandatory farm plans remain the government's preferred approach to improve farming practice, but in response to submissions and to ensure farm plans are enforceable, they will now be delivered through amendments to the RMA and empowering provisions to develop regulations over the following 18 months in collaboration with the primary sector, regional sector and iwi/hapū and others.

8.2.3 FEEDLOTS AND STOCKHOLDING AREAS

Feedlots and intensive stock holding areas pose high environmental risks if not managed under good farming practice. These practices have increased in extent on farms in recent years and regional councils have not adequately regulated them leading to gaps in the regulatory regime.

Regulations 9 to 14 set minimum requirements and a consenting rules regime for feedlots and other stock holding areas to manage land use and discharges in a nationally consistent way. Resource consent will only be required if the feedlot holds cattle over a specified age or weight. Feedlots unable to comply with the condition will require a resource consent. The purpose of this approach is to target larger or older cattle which have potential to cause greater damage to soil and generate higher volumes of effluent. For other stock-holding areas (feed pads, wintering pads, standoff pads, loafing pads and wintering barns), farmers will only need a resource consent when they do not meet additional minimum requirements relating to the stockholding area infrastructure and its operation. If resource consent is required, it will either be assessed as discretionary or non-complying activities to ensure a relatively high level of assessment and scrutiny by the council.

"Feedlot" and "stockholding area" are defined for clarity including types of farm infrastructure.

8.2.4 INTENSIVE WINTER GRAZING

Winter forage crops are an important part of the pastoral farm production system and profitability. However, meeting feed demand has resulted in increased stock numbers, which in turn has meant that some stock grazing systems are becoming increasingly intensive.

There is evidence that environmentally risky practices are expanding in scope, frequency, and into riskier areas (e.g. steeper slopes) causing soil erosion and degradation of waterways. Many regional plans do not regulate winter forage grazing during winter in a targeted way. This practice is most prominent in Southland, Canterbury, and Otago. The RIA discusses this in more detail.

Regulations 15 to 17 introduce a nationally consistent consenting regime that targets the environmental risk of intensive winter grazing, especially in relation to erosion runoff, by managing land and associated discharges. It is intended to incentivise farmers to adjust their practices to lower-risk activities. This is primarily through a permitted activity status for lower-impact intensive winter grazing activities where conditions are met. These conditions relate to land slope and area, re-sowing of land, minimum setbacks from waterways, and the extent of pugging of soil by the hooves of grazing livestock, which are the main contributors leading to adverse effects.

¹⁷⁶ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p17

¹⁷⁷ Water quantity and nutrient assimilative allocation is being progressed separately as part of the broader *Essential freshwater* programme.

Those activities that cannot meet the permitted activity conditions will require resource consent as a restricted discretionary activity. Applicants and decision makers will need to specifically consider the effects of their activities on ecosystems, water bodies and freshwater, as well as Māori cultural values. This includes considering how and when farm practices may be undertaken to reduce the risk of discharging contaminants into freshwater. This risk-based approach is consistent with managing adverse effects under the RMA¹⁷⁸.

Where the area of land used for intensive winter grazing at any one time is more than the amount used by the farm between 1 July 2014 and 30 June 2019 (the “reference period”), agricultural intensification regulations will trigger a higher discretionary activity status, which is intended to disincentivise farmers from increasing their existing activities to the permitted area limits.

8.2.5 AGRICULTURAL INTENSIFICATION

In recent decades New Zealand has experienced significant agricultural intensification in rural areas. Increasing intensification of agricultural inputs such as fertiliser, higher stocking rates, and irrigation is contributing to the degradation of waterways. This is not sustainable.

Interim intensification controls are preferred until regional councils can give full effect to the NPS-FM 2020 in their regional plans, including setting more certain limits and rules through the NOF process.

The Cabinet paper noted a number of changes have been following submissions on the draft NES-F. This includes a sunset clause to give certainty that the regulations are an interim measure, greater flexibility in catchments that create headroom, an exception for vegetable production, and only restricting the expansion of irrigation for dairy farming (not all irrigation).¹⁷⁹ This was in response to submissions, the IAP report, and the economic impacts of Covid-19.

In light of this, regulations 15-25 are temporary measures (until 1 January 2025 when the regulations are revoked, unless a regional plan is amended before this date then they cease to apply). The regulations introduce a nationally consistent consenting rules regime to control new dairy conversions and increases in irrigation area on existing dairy farms, increases in intensive winter grazing, and conversions from forestry to pastoral farming. A resource consent will be required for the following:

- To convert more than 10 hectares of farmland to dairy farming
- To convert more than 10 hectares of land from plantation forestry to pastoral farming
- To expand irrigation by more than 10 hectares on dairy farms
- To expand the area of intensive winter grazing on forage crops above a historical baseline, and
- To expand the area of dairy support above a historical baseline.

Conversion of land and associated discharges below these thresholds are permitted activities under the NES-F.

¹⁷⁸ Section 3 of the RMA

¹⁷⁹ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p5

This is intended to allow minor scale land use conversion and target higher risk farming intensification for greater control. Regional councils may only grant a resource consent for intensification if satisfied that the activity will not result in an increase in contaminant loads in the catchment, freshwater or sensitive receiving environments relative to the 7th of September 2017, which aligns with the 'baseline state' set in the NPS-FM 2020. This is specifically intended to 'hold the line' and ensure consistency with the NPS-FM 2020 objective and water quality policies. It will require applicants to identify the containment load and concentration baseline and demonstrate it can be met as a limit in order to obtain resource consent, which may be particularly difficult in some catchments and require specialist input.

Any consent granted under these regulations must expire earlier than 31 December 2030. This is intended to ensure any replacement consent is considered under the limits set in regional plans that give full effect to the NPS-FM 2020, which will provide greater certainty for environmental sustainability and ensure a consistent approach is applied.

Horticulture is specifically excluded from the interim intensification rules to allow a degree of flexibility¹⁸⁰. Horticulture New Zealand estimated that roughly 12,000 additional hectares of outdoor vegetable growing is required to meet population growth by 2030. This specific exclusion is intended to ensure the security of supply of commercial vegetables to New Zealanders and provides for some development opportunities (for example, for tangata whenua and undeveloped Maori owned land).

8.2.6 SYNTHETIC NITROGEN FERTILISER CAP

Many catchments will require reductions in nitrogen loads to meet the NPSFM 2014 (amended 2017) and NPS-FM 2020 bottom-lines.

All land use generates nitrogen losses to water, including native bush and urban land use. While some level of loss is inevitable, there is an opportunity to mitigate some losses immediately, to contribute to early improvements in water quality. Synthetic nitrogen fertiliser use has increased rapidly, allowing land uses to intensify and creating unacceptable environmental harm in some areas. Poor farm practice and excessive application of fertiliser is a major contributor and the target of these regulations.

The problem is complex and requires a systematic approach using multiple policy levers for managing *both* nitrogen and excessive use of nitrogen fertiliser. A synthetic nitrogen fertiliser cap, together with early and targeted rollout of farm plans to highly nitrogen-impacted catchments (through new Regulations), is expected to help longer-term change get off to a fast start¹⁸¹. The NOF process will also address more substantive farming issues in regional plans, including where intensification can be sustainably undertaken.

The Cabinet paper acknowledged the calls from stakeholders and submitters to go further, with direct controls on farming inputs, such as a much stricter cap on fertiliser use and limiting stock numbers. These controls are already part of the planning regime in some regions, for example, in the Waikato where a rules framework based on stocking rates or nitrogen leaching rate bottom lines has been introduced.¹⁸² It is also intended that the high risk of nitrogen leaching through inappropriate land use will be addressed through the NOF process.¹⁸³

¹⁸⁰ RIA Action for healthy waterways Part II: Detailed Analysis, (2020).

¹⁸¹ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p17. Appendix 1 also notes that as well as a fertiliser cap, it is intended to address excessive nitrogen discharges by prioritising the roll-out of FWFPs to highly nitrogen-impacted catchments – those within the top 10% of in-stream nitrate levels – when the Freshwater farm plan regime is in place (which sits outside of this NES-F). They will not replace the cap, but will ensure usage is at best practice for that farm, and any council set limits are being met.

¹⁸² Waikato Regional Plan – Plan Change 1: Healthy Rivers/Wai Ora (decisions version)

¹⁸³ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.237.

The fertiliser cap does not preclude and will be complementary to more comprehensive approaches.

However, the government also has made it clear that this is the “last chance saloon” for output controls¹⁸⁴, which have been favoured under the RMA’s effects-based regime. Focusing on outputs has allowed nutrient losses to increase, with corresponding deterioration in freshwater quality. Regional councils have made progress with some requiring farm plans in their regional plans to better manage nutrient losses.¹⁸⁵ However, progress has been slow and inconsistent.

Regulations 32 to 34 address the harm to freshwater caused by excess nitrogen through the introduction of a nationally consistent rules framework applying to land used for grazing livestock. This framework is focused on a permitted activity condition limiting the maximum annual application (discharge) of synthetic nitrogen fertiliser at or below 190 kg N/ha (the “fertiliser cap”). It is complementary to regional nutrient management frameworks already being implemented at the farm level and at the catchment level (e.g. in the Waikato and Lake Taupo).

The cap is intended to send an early signal to those farmers using excessive nitrogen fertiliser. Farm plans and the NOF process are intended to drive more fundamental change in the way fertiliser is applied in farming operations. However, some farms, particularly in Canterbury will be impacted. While the dairy sector’s annual national nitrogen fertiliser application is about 150 kg N/ha, Canterbury’s average was 222 kg N/ha in 2017-18.¹⁸⁶

To transition and/or provide for similar outcomes to the new fertiliser cap regime two different consenting pathways will be available to apply over 190 kg N/ha/year from synthetic nitrogen fertiliser:

- Pathway 1 is an interim pathway which expires on 1 July 2023. Under this pathway applicants must develop, and adhere to, a synthetic nitrogen reduction plan that demonstrates how they will reduce their synthetic nitrogen fertiliser use, year by year, so that the rate of nitrogen applied to the land, as a component of the synthetic nitrogen fertiliser, is ≤ 190 kg/ha/year from 1 July 2023. The consent holder would have to report their synthetic nitrogen fertiliser use to the relevant regional council annually.
- Pathway 2 is an ongoing pathway which allows applicants to apply for consents for periods of up to five years. Under this pathway, an applicant must provide the regional council with a report from a suitably qualified and experienced practitioner. This report would need to confirm, to the consent authority’s satisfaction, that granting the consent would not result in a discharge that exceeds the rate of nitrogen that would be discharged to water if the rate of synthetic nitrogen fertiliser applied, were ≤ 190 kg N/ha/year using good fertiliser application practices. The consent authority must then impose conditions that ensure that discharges do not exceed this rate. The consent holder would have to report their synthetic nitrogen fertiliser use to the relevant consent authority annually.

These regulations specifically target dairy, dairy-support, sheep, beef, and deer farms. Annual reporting of fertiliser use to regional councils will be required for dairy farms

¹⁸⁴ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.18

¹⁸⁵ The RIA p237, notes that many regional councils are already addressing high nitrogen discharges through their regional rules. Horizons, Hawkes Bay (Tukituki catchment), Waikato (Taupo catchment), Bay of Plenty (proposed for the Rotorua catchment in Plan Change 10), Otago and Canterbury have set per hectare nitrogen-discharge caps under an allocation regime, in order to meet water quality limits. In many cases, the nitrogen-discharge cap set by these councils is lower than current discharge rates, e.g., in the Selwyn-Waihora zone, dairy farm discharges must fall by 30 percent by 2022.

¹⁸⁶ Action for healthy waterways – Decisions on national direction and regulations for freshwater management cabinet paper, (2020). p.12

only, although beef may be added later. Recording this information will assist farmers and councils in meeting their obligations.

The government expects rapid progress in reducing nutrient losses, and potentially the 190 kg N/ha cap may be ratcheted down in future, as well as introducing other blunt input measures such as stocking rates per hectare and limits on supplementary feed. This is not proposed at this stage. The government will monitor the effectiveness of the policy regime for nitrogen. If a material reduction in nitrogen fertiliser is not achieved the policy settings will be reviewed. The RMA anticipates continual review.

The fertiliser cap is not intended to apply to arable and horticultural crops because they make up a small portion of agricultural land (about 5%) and are considered to present a small risk to ecosystems on the national scale.¹⁸⁷ It is considered that a single national level cap covering all land uses would not be particularly effective nor efficient. The NOF process in the NPS-FM 2020 provides for a more targeted approach.

8.2.7 EFFECTIVENESS AND EFFICIENCY

Table 28 addresses the effectiveness of the farming standards and Table 29 the efficiency of the standards.

8.2.8 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THE FARMING STANDARDS

For more details of the options and options analysis refer to the RIA. A brief summary follows.

Improving water quality through better farm practice

As mentioned earlier, freshwater farm plan regulations in the draft NES-F have been removed following submissions. They are now intended to be delivered through amendments to the RMA and the development of new and enforceable Regulations¹⁸⁸. This change of approach addressed submitters concerns.

Feedlots & stockholding areas

The RIA discusses three options for managing feedlots and stock holding areas:

- Option 1: Status quo
- Option 2: NES regulations supported by freshwater farm plans
- Option 3: Freshwater farm plans for stock holding areas and NES regulations for feedlots

Option 2 is the preferred option.

Option 1 was not favoured as it would result in a continuation of risky practices with associated adverse effects until regional councils develop rules that give full effect to the NPS-FM 2020. This option would also not give effect to Te Mana o Te Wai as private economic gain would continue to take precedence over the health and wellbeing of the water.

Option 3 is limited by the lack of baseline data for contaminant discharges and the need for all relevant farms to adopt monitoring systems that provide the information at an attribution level. This makes the option extremely costly and difficult to set appropriately at a national scale. It would also take more time to implement.

¹⁸⁷ Ibid, p13

¹⁸⁸ A new Part 6AAA in the RMA. This RMA Amendment Bill has passed its third and final reading at the time of writing this report.

TABLE 28. ASSESSMENT OF EFFECTIVENESS FOR FARMING STANDARDS

ELEMENTS OF THE OBJECTIVE	RESOURCES ARE MANAGED IN A WAY THAT PRIORITISES	FIRST, THE HEALTH AND WELLBEING OF WATER BODIES AND FRESHWATER ECOSYSTEMS	SECOND, THE HEALTH NEEDS OF PEOPLE	THIRD, THE ABILITY OF PEOPLE AND COMMUNITIES TO PROVIDE FOR THEIR SOCIAL, ECONOMIC, AND CULTURAL WELL-BEING, NOW AND IN THE FUTURE
<p>Contribution of farming standards towards achieving the Objective</p>	<p>Promotes a nationally consistent consenting regime and rules framework that will be effective in having an immediate impact by stopping further degradation of freshwater and making a material improvement within five years.</p> <p>Most regulations are intended as an interim measure while limits are set in regional plans. The RIA acknowledges that farm plans are the best instrument for identifying and addressing poor practice, but it will be several years before they are in place in highly nitrogen-impacted catchments. The effectiveness of the regulations is therefore limited by design but will make a substantial contribution to better managing most risky, excessive and poorly managed farm practices, including addressing rule gaps.</p> <p>The consenting regime provides an effective and timely way to manage farming land use and discharges causing the most harm. Councils will be able to implement the regulations without having to endure lengthy and costly plan changes.</p> <p>There is a risk the interim intensification controls 2024 sunset clause may need to be extended if regional plans fall short in content and timing.</p>	<p>The rules target farming activities that are causing the most harm to freshwater and ecosystem health. These will be partially successful in targeting the highest risk activities. A level of harm will continue but is expected to lessen over time.</p> <p>The fertiliser cap is an effective tool to manage inputs to reduce losses to freshwater. However, it only partially addresses aspects of farm management that impacts nitrogen discharges and water quality (it does not deal with suitability of land and soils for farming, which is expected to be addressed through the NOF process).</p> <p>Its effectiveness is mixed but provides more certainty and greater certainty of outcome than the status quo.</p>	<p>Addressing high risk farming activities will positively contribute towards the second priority. High levels of nitrogen and contaminants encourages nuisance weed and algae growth, which makes water unpleasant for swimming and drinking. Reducing the public health risks by requiring a higher level of treatment to meet drinking water standards is anticipated.</p>	<p>The effects and risk-based rules regime aims to achieve the first priority, which will limit the ability to farm some land intensively. This is likely to reduce options for some farmers and there may be economic and social impacts. The regulations aim to improve farm poor practices</p> <p>The regulations do not apply to some activities to help achieve the third priority. The fertiliser cap does not apply to arable and horticultural properties. The cap would be ineffective for any other land uses if it was set at the level needed for vegetable growing properties and setting separate caps for arable and vegetable crops would not be feasible to develop and administer given the range of crops grown across New Zealand and on individual farms.</p> <p>Further, horticulture is excluded from the interim intensification rules to provide additional flexibility. This is intended to ensure the security of supply of commercial vegetables to New Zealander's and provides for some development opportunities (for example tangata whenua and undeveloped Maori owned land).</p> <p>Small scale farming (by land area) is not captured by the regulations, which promotes the third priority at low cost.</p>

ELEMENTS OF THE SPECIFIC PROBLEM DEFINITION	SYNTHETIC NITROGEN FERTILISER USE HAS INCREASED RAPIDLY, ALLOWING LAND USES TO INTENSIFY AND CREATING UNACCEPTABLE ENVIRONMENTAL HARM IN SOME AREAS	FEEDLOTS AND INTENSIVE STOCK HOLDING AREAS POSE HIGH ENVIRONMENTAL RISKS. THESE HAVE INCREASED IN EXTENT ON FARMS IN RECENT YEARS AND REGIONAL COUNCILS HAVE NOT ADEQUATELY REGULATED THEM	MANY REGIONAL PLANS DO NOT REGULATE WINTER FORAGE GRAZING DURING WINTER IN A TARGETED WAY. ENVIRONMENTALLY RISKY INTENSIVE WINTER GRAZING PRACTICES ARE EXPANDING.	INTERIM CONTROLS ARE NEEDED UNTIL FRESHWATER PLANS ARE IN PLACE TO STOP FURTHER FRESHWATER DEGRADATION CAUSED BY AGRICULTURAL INTENSIFICATION
Likely success of the farming standards in solving the problem it was designed to address	<p>Clear requirements for when a resource consent is required, which will have some success in targeting excessive fertiliser use and is therefore a partial (“modest”) and interim solution.</p> <p>Some farmers may substitute other inputs for fertiliser, and some may continue to apply rates over the cap (which would require additional enforcement). Some of this risk is mitigated.</p> <p>Annual reporting of synthetic fertiliser use on dairy farms is required, monitoring the effectiveness of the cap for other pastoral farming may be less successful. It is noted that beef farming may be included later.</p>	Introduces minimum standards for feedlots and stock holding area and provides a nationally consistent and targeted rules regime, reducing the potential for variability and inconsistency between regional plans.	<p>Controls poor practice in intensive winter grazing and provides a nationally consistent and targeted rules regime, reducing the potential for variability and inconsistency among regional plans.</p> <p>Clear requirements for resource consent applications. The permitted activity rule incentivises farmers to adjust their practices to lower-risk activities potentially avoiding the need for consent. For example, control of the adverse effects of grazing hill country forage crops may be achieved by addressing risks related to slope rather than by controlling hill country cropping</p>	<p>Focuses on the riskiest activities such as land use conversions, expanded irrigation for dairy and larger areas used for intensive winter grazing.</p> <p>The rationale for excluding horticulture from the interim intensification rules and providing additional flexibility is discussed above.</p>
Overall assessment	<p>The farming standards are focused on achieving substantial and early gains in achieving the Objective clause (a) in a nationally consistent way. The rules framework and consenting regimes for high risk farming activities are likely to be effective in stopping further degradation and making a material improvement. In the medium to long-term temporary measures in the NES-F are expected to be superseded by freshwater farm plans and limits in regional plans.</p> <p>There is a high degree of permissiveness in the rules, which in part is intended to incentivise change towards less environmentally risky farming activities. The permitted activity thresholds, “modest” fertiliser cap, as well as the number of exceptions (e.g. for horticulture), anticipate that a level of environmental effect and some degradation to freshwater will continue to occur at least in the short to medium term, although this will be localised and limited.</p> <p>Overall, the rules and consenting regime will be partially successful, but towards the upper end of successful, in achieving the objectives and policies of the NPS-FM 2020, and the farming standards are consistent with section 5 of the RMA.</p> <p>As the rules are addressing the highest priority matter by targeting the most risky and poorly managed farm practices it is appropriate that attention is focused here.</p>			

TABLE 29. ASSESSMENT OF EFFICIENCY FOR THE FARMING STANDARDS

	BENEFITS	COSTS
Environmental	<p>The main benefit relates to improved water quality by reducing nitrogen leaching, managing risky environmental farming practices and erosion runoff, and the negative effects of excessive intensification. Rapid progress in expected in reducing nutrient losses.</p>	<p>As the regulations mainly deal with managing the most risky, excessive and poorly managed farm practices, the environmental costs are likely to be low to moderate when considered in isolation.</p> <p>Excluding arable and horticulture land uses from the fertiliser cap may have a moderate but localised environmental cost (compared to if they were included in the regulations).</p> <p>In the longer term any environmental costs are likely to decrease compared to the status quo. This will gradually be achieved over time through other instruments such as freshwater farm plans (over the next few years, starting with high risk catchments) and setting and notifying limits in regional plans through the NOF process (before 2025).</p>
Economic	<p>Will increase certainty for consent applicants and encourage innovation and better farming practice, which is an economic benefit.</p> <p>Helps to avoid future potential costs of restoring and rehabilitating ecosystems degraded by environmentally risky farming practices.</p> <p>Savings in fertiliser costs.</p>	<p>The RIA considered setting a cap for the pastoral sectors is feasible, with good evidence to support setting a cap at 200 kg N/ha (slightly higher than the NES-F fertiliser cap), since DairyNZ data indicates that rates above this are not able to be justified economically, as the pasture response curve flattens out beyond 200 kg. A fertiliser cap set at this level would not affect most drystock farms.</p> <p>It is estimated that the cost of a fertiliser cap of 190 kg N/ha/year would be about 4% of operating profit for farms currently applying 300 kg N/ha/year at a milk-solids price of \$7.50/kg. Roughly 2,000 of the 11,000 current dairy farms may need to reduce synthetic fertiliser application, with the vast majority of these being in the South Island, especially in Canterbury and Southland.</p> <p>A Lincoln University Dairy Farm study found that reducing nitrogen fertiliser from 313 kg N/ha to 178 kg N/ha (and associated stocking rate changes) reduced nitrogen leaching by over 30%, as well as greenhouse gas emissions by 20%. In some cases, farmers may increase supplementary feed rather than reduce stock numbers, but this is likely to be rare due to financial considerations. Where it occurs, this would reduce the intended benefit of reducing nitrogen leaching. Over time this risk will be managed through the rollout of farm plans, which will require good practice across all sources of nitrogen.</p> <p>All dairy farmers (11,590 herds in 2018) will need to report fertiliser use annually to councils. Cost of reporting will be relatively low per farm, if electronic – estimated \$1-2 million total at 2 hours per return and \$50-100/hour opportunity cost of farmers' time.</p> <p>It is estimated that a maximum of 30 feedlots will require consents. Also, some proportion of existing dairy and beef cattle infrastructure, such as the 3,700 existing dairy stand-off pads and other feedpads but not wintering barns, would need consents depending on whether they meet specifications for permitted activity status. This practice is most prominent in Southland, Canterbury, and Otago, and so the consenting impacts and resultant environmental benefits, in terms of improved controls on risky activities, will be most relevant in these regions.</p> <p>Nationally, in winter 2018 there were about 1,250 properties with winter cropping in steeper land (seven degrees slope and above). In Southland, Canterbury, and Hawkes Bay in 2018, about 850 properties had winter grazing on more than 50 hectares. It is expected farmers will adjust their practices to lower-risk activities so fewer consents than this will be required. The permitted activity rule incentivises this.</p>

	BENEFITS	COSTS
		<p>Interim intensification proposals are likely to impact on all landowners wanting to develop their land, Māori landowners of currently underdeveloped land could be more affected in the short-term.</p> <p>There will be opportunities for development in high-value crops and tree plantations, together with central government support and funding, this is expected to go some way to mitigate the costs.</p> <p>There will be costs to farmers to meet the permitted activity standards (where those standards are not already being met) and costs obtaining a resource consent if required. These costs could be low to moderate.</p> <p>For agricultural intensification rules it is estimated there will likely be a low consenting burden. The Ministry identified 244 instances of intensification that would have triggered the requirement in the 2012-2016 period.</p>
Social	There is potential to improve social licence for farmers, particularly where current practice results in visually unpleasant impacts (e.g. stock in mud, visible sedimentation in rivers). This in turn may increase support from communities, enhance community cohesion and increase feelings of environmental stewardship and responsibility.	The potential for stress and financial hardship for farmers and their communities is likely to be moderate. However, this has not been qualified. This impact can be mitigated to a degree by addressing poor farming practices to ensure compliance with permitted activities. Farmers who cannot or choose not to will face disproportionate social impacts. The cabinet paper acknowledges that the overall economic and social impacts are going to be significant in some regions.
Cultural	<p>The regulations can be expected to result in benefits to cultural values. These benefits include maintaining the mauri of waterways as well as the protection of sites of cultural significance, and the ability to source mahinga kai, and improved kaitiakitanga.</p> <p>Resource consents required for intensive winter grazing will specifically need to consider impacts on Māori cultural values.</p>	
Additional sector commentary	Council compliance checks of dairy farms to monitor and enforce the fertiliser cap estimated at \$600,000 per year – 1200 farms @ \$500 per farm.	
Opportunities for economic growth and employment to be provided or reduced	<p>Potential for increased demand for experts in farm management could lead to increased job growth in support industries, with flow on positive effects for communities.</p> <p>Māori, who disproportionately have lower-skilled jobs or undertake seasonal work, may experience a negative impact in areas where significant land use change occurs over coming decades. This may be mitigated by new lower-skilled jobs related to increases in horticulture land use, on-farm mitigation measures and freshwater farm plan implementation, and programmes to support training and worker relocation if needed.</p>	
Risks of not acting and uncertainty	<p>The risk of not acting is that the significant impacts from excessive nitrogen losses, intensive and environmentally risky farming practices, and further unchecked land use conversions and extended irrigation for dairy farming in particular, will continue leading to corresponding declines of water quality.</p> <p>The risk of not acting exceeds the risk of acting.</p> <p>There is a moderate degree of uncertainty because overall the benefits of maintaining natural environments are difficult to quantify and costs will vary with land use. There is a reasonable level of certainty regarding the number of farms likely to be impacted by the new rules (mostly in Southland, Canterbury, Otago, Waikato and Hawkes Bay). The costs have not been quantified but are likely to be low to moderate. However, this will depend on the on-farm actions required to meet permitted activity conditions or obtaining resource consent (including necessary changes to farm practices).</p>	

Intensive winter grazing

The status quo and three options were considered:

- Option 1: Status quo
- Option 2: Certified freshwater farm plans
- Option 3: Minimum regulation supported by good practice
- Option 4: NES with stringent 'core' standards

The preferred option (Option 4) reflects a mix of thresholds reflecting the inherent environmental risk of the activity, especially in relation to erosion runoff. A range of consenting thresholds and practice standards in the options provided in the discussion document were consulted on. The IAP recommendations and submissions led the Ministry to reconsider and remove some of the practice standards, especially those related to grazing management, because they would be difficult to enforce. Option 2 is also preferred but will be primarily implemented in new Regulations rather than the NES-F.

Agricultural intensification

Four options were considered:

- Option 1: Status quo
- Option 2: Mortarium
- Option 3: Interim NES regulations
- Option 4: Amend NPS-FM

Options 1, 2 and 4 are either too uncertain (amending the NPS-FM 2020) or will take too long to fully implement (all other options), by which time water quality may degrade further. Option 3 is preferred and provides the most practical, enforceable and timely way to prevent further degradation to water bodies from increased contaminant loads and concentrations caused by further agricultural intensification.

Reducing excessively high nitrogen leaching

Six options were considered for managing excessive nitrogen. Following submissions and recommendation from the IAP these options were refined and repackaged to a shortlist:

- Status quo
- Revised Option 1: NES with targeted N discharge caps, plus freshwater farm plans
- Option 2: NES with national nitrogen fertiliser cap
- Option 3: NES requiring targeted early freshwater farm plans

The RIA considered these finely balanced. While freshwater farm plans are an effective instrument for identifying and addressing poor practice, it will be several years before they are in place in highly nitrogen-impacted catchments and the progressively rolled out to other catchments. Revised Option 1 provides a balanced, timely and enforceable response.

Summary

In summary the farming standards in Part 2 of the NES-F are the most effective and efficient way to achieve the Objective for the reasons discussed above.

The potential environmental effects (including potential for significant environmental effects) resulting from permitted activities has not been assessed in any detail¹⁸⁹. The Ministry is seeking further advice and it is assumed there is no issue that affects this s32 report.

8.3 PART 3 SUBPART 1 – NATURAL WETLANDS

Regulations 37 to 56

Rules relating to restoration, scientific research, wetland utility structures, specified infrastructure and other infrastructure, sphagnum moss harvesting, crop harvesting, natural hazard works, the construction and deepening of drains, and other activities.

Supported by:

Regulation 55 General conditions on natural wetland activities

Regulation 56 Restricted discretionary activities: matters to which discretion is restricted

Schedule 2 Restoration plans for natural wetlands

Schedule 3 Sphagnum moss harvesting plans

Schedule 4 Form for assessing natural wetlands after harvest of sphagnum moss

Also see:

NPS-FM 2020 Policy 6 Wetlands



8.3.1 INTENT

The policy intent is discussed in section 7.6.1 of this report and should be read together with this section.

Regulations 37 to 56 provide a nationally consistent set of rules and conditions for activities such as vegetation clearance, earthworks and changes to water levels that lead to the loss of wetlands (including coastal wetlands). These regulations do not apply to the harvest of food or resources undertaken in accordance with tikanga Māori.

There are seven permitted activity rules in Regulations 38, 40, 43, 46, 48, 50 and 51 that broadly relate to:

- Vegetation removal, earthworks and land disturbance, and the taking, use, damming or diverting, or discharge of water, for restoration; scientific research; maintaining “wetland utility structures” associated with recreation, education, conservation, or restoration, maintaining and operation “specified infrastructure” and other (existing) infrastructure, arable and horticultural land use, and natural hazard works.

¹⁸⁹ Section 43A(3) of the RMA

- Harvesting sphagnum moss¹⁹⁰ and harvesting crops within 10m of a wetland boundary.

These activities are subject to conditions to manage adverse effects, including the general conditions in Regulation 55. However, the general conditions do not apply to sphagnum moss harvesting, which will need to comply with sphagnum moss harvesting plans and the assessment forms in Schedules 3 & 4. Natural hazard works do not need to comply with the general conditions because this would unreasonably constrain what can be done under emergency work to protect people and property.

8.3.2 EFFECTIVENESS

The activity-based rules approach emphasises the third priority of the NPS-FM 2020 objective. However, this is within the acceptable and constraining limits of the strong avoidance direction in NPS-FM 2020 Policy 6 geared towards achieving the first priority of the objective – the health and well-being of freshwater and ecosystems. The rules framework ‘staircases’ from permitted to requiring a resource consent – where matters of discretion in regulation 56 will apply, which focus on limiting activities impacting on a wetland to the minimum extent necessary. The activity-based rules are less flexible than effects-based rules, but they provide greater certainty for communities and councils.

Promoting restoration is a specific outcome sought by NPS-FM 2020 Policy 6, which is intended to reduce the regulatory hurdles, as much as possible, to promote restoration. Well managed wetland restoration is expected to have greater positive benefits over any minor adverse effects. Where a resource consent is required for wetland restoration then Schedule 2 requires a natural wetland restoration plan to ensure effects can be managed. This level of permissiveness is consistent with the NPS-FM 2020 policy intent and section 5 of the RMA. It is likely to be an effective means of contributing towards the objective and policy intent by setting clear limits on resource use.

The wetlands rules trigger a considerably higher activity status for activities falling outside the permitted activities and potentially high policy barriers, which is consistent with the high level of policy protection. The construction of new specified infrastructure is a discretionary activity (and its maintenance and operation are either permitted or restricted discretionary), which is a high threshold although Policy 6 provides specific exception for this in certain circumstances. There is little policy relief for other infrastructure.

The general catch-all non-complying rules for “other activities” requires resource consent applicants to overcome substantial policy barriers. This includes the construction or deepening of drains, which is a non-complying activity within 100 metres of a natural wetland and prohibited within a wetland. This is consistent with the policy intent to secure no further loss of extent of natural wetlands. While the strength of Policy 6 will need to be applied and tested in individual circumstances of RMA decision making processes, the policy direction and rules provide little room for adverse effects. The RMA’s non-complying activity “gateway test”¹⁹¹ will also apply and is a substantial hurdle itself, even before full evaluation of the merits of a project are considered.

The rules complement the NPS-FM 2020 natural inland wetlands policies. Applicants will need to demonstrate that they have followed the rigorous assessment process, including applying the effects management hierarchy. Further discussion on effectiveness of the policy direction can be found in section 7.6.2 of this report.

¹⁹⁰ In accordance with the Schedule 3 harvesting plan and the post-harvesting assessment in Schedule 4 requirements

¹⁹¹ Section 104D of the RMA

8.3.3 EFFICIENCY

This assessment adds to the evaluation of environmental, economic cultural, social benefits and costs, and risks discussed in section 7.6.2 of this report. The focus of this additional assessment is on coastal wetlands, with the majority located in the Northland and Auckland regions. The ecosystem benefits of coastal wetlands are considerable. The benefits are estimated nationally at around \$17 billion per year, in addition to the almost \$1.5 billion of benefits for inland wetlands on fertile land¹⁹².

The NPS-FM 2020 gives way to complementary policies in the NZCPS for natural wetlands in the CMA¹⁹³. The NES-F rules framework may be less effective and efficient in achieving the third priority of the objective in the CMA if decision making on RMA process is inconsistent or inequitable across policy jurisdictions, with the NPS-FM 2020 containing potentially stronger policy direction. Conversely, “specified infrastructure”, or infrastructure in general, in the CMA may face slightly lower (but still high) policy barriers, which would allow the significance of the wetland to be thoroughly examined and provide regional or national benefits if projects are approved. This would be expected to result in a level of environmental cost to achieving the first priority compared to if the exception for inland natural wetland did not apply¹⁹⁴. In this scenario the NES-F may be less efficient in achieving the objective, although would be still be expected to substantially contribute to achieving the outcomes of the NZCPS.

This is because while the NPS-FM 2020 policy direction is complementary to the NZCPS, it is not the same. However, the issue is at the policy level, rather than the NES-F itself.

To reduce duplication the NES-F rules will not apply where they overlap with the NES-PF, which promotes efficiency and is consistent with other RMA planning instruments.

8.3.4 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THE NATURAL WETLAND STANDARDS

The natural wetland rules are the most effective and efficient way to achieve the NPS-FM 2020 objective and related provisions for the reasons discussed above and in section 7.6 of this report. The rules framework and consenting regime complements and implements the NPS-FM 2020. It targets and severely constrains resource use within and close to existing wetlands to prevent further loss and degradation. This will contribute to achieving the objective’s first priority – the health and wellbeing of freshwater and freshwater ecosystems (as well as in the coastal marine area). The discretionary (and restricted discretionary) activity status for specified infrastructure reflects the Policy 6 exception and recognises and finely balances the regional and national benefits of this.

8.4 PART 3 SUBPART 2 – RECLAMATION OF RIVERS

Regulation 57

Reclamation of the bed of any river is a discretionary activity.

Also see:

Policy 7 Rivers package

¹⁹² RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p214

¹⁹³ E.g. Policy 11 of the NZCPS, which (among other things) aims to avoid significant adverse effects and avoid, remedy or mitigate adverse effects on indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh. Policy 10 aims to avoid reclamation in the coastal marine area (unless exceptions apply).

¹⁹⁴ If it does apply the costs would likely be similar.

8.4.1 INTENT

Regulation 57 provides a nationally consistent rule to require resource consent for reclamation activities leading to the loss of rivers and streams. It complements Policy 7 of the NPS-FM 2020 and related provisions by filling gaps in regional plan rules that are inadequate for protecting freshwater habitat. The policy intent is discussed in section 7.7.1 of this report and should be read together with this section.

Reclamation and other activities (such as piping and diverting water¹⁹⁵) reduce the extent of streams. It is often undertaken to create a more useable building area, or to modify productive rural land, with smaller and intermittent streams being particularly vulnerable¹⁹⁶. Conversely, some reclamation activities are associated with returning streams to more ‘natural’ alignments to remedy historic modification (e.g. straightened and channelised streams). The intention is not to prevent such remedial reclamation¹⁹⁷.

8.4.2 EFFECTIVENESS AND EFFICIENCY

The discretionary activity status restricts reclamation activities in a nationally consistent way. It emphasises the third priority of the NPS-FM 2020 objective by providing some tolerance for river and stream reclamation. While the “practicable test” of the strong avoidance direction in Policy 7 provides complementary (and strong) checks and balances to contribute towards the Objective’s first priority – the health and well-being of freshwater and ecosystems. It is not explicit whether the rule captures ancillary reclamation such as that required for infilling over culverts or pipes, which are generally permitted or controlled activities in regional plans. Although the rule relates to the river bed, which in turn relates to the space of land which the waters of a river covers¹⁹⁸, rather than installed structures.

The reclamation rule complements and effectively secures the NPS-FM 2020 policies for rivers by ensuring that a resource consent is required for all river bed reclamations. This means that resource consent applicants must demonstrate they have followed the rigorous assessment process (including applying the effect management hierarchy). Further discussion on the complementary river provisions and the requirements for applicants and RMA decision making can be found in section 7.7 of this report.

Benefits and costs, opportunities, and risks are discussed in section 7.7.2 of this report. Although the reclamation rule applies a balanced discretionary approach, councils may apply more stringent requirements in their regional plans, including providing for local circumstances through the NOF process. The costs and benefits of this will need to be considered during future RMA plan making processes.

The NES-F rule will not apply where it overlaps with the NES-PF to reduce duplication, which promotes efficiency and is consistent with other planning instruments under the RMA.

8.4.3 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THE RIVER RECLAMATION STANDARD

Refer to section 7.7 of this report for a discussion of the rivers policy options.

¹⁹⁵ These are not regulated by the NES-F but are captured by the Policy 7 river package and regional plan rules.

¹⁹⁶ Ephemeral streams are also vulnerable but fall outside the RMA definition of a “river” and are not captured by these regulations. Limits (including rules) for ephemeral streams can be set under the NPS-FM 2020 NOF process.

¹⁹⁷ RIA Action for healthy waterways Part II: Detailed Analysis, (2020). p.47

¹⁹⁸ Section 2 of the RMA

Regulation 57 is the most effective and efficient way to achieve the Objective for the reasons discussed above and in section 7.7 of this report. In summary, it provides a nationally consistent rule requiring resource consent for all stream reclamation activities.

Although absolute protection is not sought by the policy intent, implementation of this rule is targeted towards the health and well-being of freshwater and ecosystems. Applications for resource consent under this rule will be subject to a high level of assessment.

8.5 PART 3 SUBPART 3 – PASSAGE OF FISH AFFECTED BY STRUCTURES

Subpart 3 of the NES-F

Also see:

NPS-FM Policy 9 *The habitats of indigenous freshwater species are safeguarded*



8.5.1 INTENT

The policy intent is discussed in section 7.9.1 of this report and should be read together with this section.

Many fish migrate up and down rivers through their life cycle and in-stream structures can disrupt the movement of species within a river system.

Rough estimates from DOC and NIWA suggest there are at least 20,000 in-stream structures in our waterways, and that possibly a quarter to a half will be found to present a possible or likely barrier to fish passage¹⁹⁹. The loss of habitat connectivity has contributed to the decline of indigenous fish species, with approximately 76% of all assessed species now classified as threatened or at risk of extinction.

The NES-F rules permit the placement, use, alteration, extension and reconstruction of new weirs and culverts, provided they meet design requirements, discourage use of flap gates, and require any person placing, altering, extending and reconstructing new in-stream structures to provide councils with information related to the structure's ability to provide for fish passage.

For permitted activities, information must be provided to regional councils within 20 working days of an activity finishing. For activities that need resource consent, this information must be provided, as a condition on the activity, to regional councils within 20 working days of an activity finishing.

8.5.2 EFFECTIVENESS

The information requirements and rules approach enable the third priority of the Objective, by supporting the first priority of the NPS-FM 2020 and Policy 9, by ensuring that when structures are placed in the bed of the river, standards apply and matters relating to fish passage are considered.

The information requirements provide certainty for councils and require all persons placing weirs, culverts, flap gates, dams and fords to supply regional councils with information on their physical characteristics and design in relation to fish passage. The *Essential Freshwater Action on healthy waterways - Impacts on Māori values* report identified that 'removing restriction to fish passage is key to supporting the mauri of aquatic life and in turn, the mauri of freshwater health. Many mahinga kai species require

¹⁹⁹ Interim RIA for Consultation: Essential Freshwater Part II: Detailed Analysis, (2020). p.6

access to the sea and freshwater to complete their lifecycles and therefore, removing restrictions also supports the mauri of mahinga kai.’

Councils only have partial information on the number and location of barriers, which makes management difficult. Many barriers are the legacy of a time when less weight was placed on the implications for fish passage, or often structures become a barrier over time because of poor design or maintenance against erosion.

Requiring that information be gathered as part of the NES-F will help with understanding where new barriers are being placed and those likely to be a barrier to fish passage in the future.

For activities requiring a consent, the regulations impose requirements for consent conditions to monitor whether structures continue to provide for fish passage to the same degree over the life of any consented structure. Monitoring and maintenance plans will be required to demonstrate that the structure will be maintained over time if the structure does deteriorate and at risk at no longer meeting its consent conditions. Developing monitoring and maintenance plans will be very low cost. The costs of monitoring and maintenance will depend on the size of the structure and if deterioration does occur.

The monitoring will not require assessing whether the structure provides for fish passage or doing an assessment of the fish species and habitat in the area. The monitoring will only be in relation to the structure design relating to fish passage.

Monitoring is required each time a significant natural hazard affects the structure and at intervals set out in the monitoring and maintenance plans. These events are rare, however, if a flood happens a year after the structure has been constructed, this condition will ensure structure owners know to check the structures for potential damage. Without such a condition, structures may be left unchecked until the next scheduled monitoring. Regional councils may require more frequent monitoring if they assess that the structure may be at risk of deteriorating or require maintenance more frequently.

Monitoring will at least require the input of new data into the fish passage assessment tool. The monitoring would be for the purpose of assessing the structure and whether it has changed or decayed over time, and whether it possibly poses additional risks to fish passage than when the structure was first constructed.

Ensuring that the structure provides the same quality of fish passage for the lifetime of the structure will avoid structures being left to degrade to the point they perform poorer than intended when consented or built.

Clause 3.26 of the NPS-FM 2020 requires councils to have regard to ‘any proposed monitoring and maintenance plan for ensuring that the structure meets the fish passage objective in 3.26(1) for fish now and in the future. The additional direction as part of the consent conditions in the NES-F would further connect these requirements.

These monitoring and maintenance requirements will not have a significant impact on the owners of structures or councils, but will ensure greater benefits to fish passage, and subsequently ecosystem health overtime.

The discretionary and non-complying rules of the NES-F seek to support the Policy 9 strengthened direction for the protection of vulnerable habitats and species. These rules leave discretion of fish passage to regional councils, although the same fish passage will need to be provided for the lifetime of the structure as when the structure was first placed in the river.

The rules framework of the NES-F has created standards and requirements for in-stream structures to provide for fish passage, which complements the requirements of the NPS-FM to establish work programmes to address barriers to fish passage over time where it is needed and the objective in 3.26(1).

Subpart 3 of the NES-F applies to structures placed in a river after the start date of the standard. It sets separate standards for culverts, weirs and passive flap gates.

The placement, use, extension, alteration and reconstruction of culverts that do not comply with the permitted activity conditions are classified as a discretionary activity, subject to information for finished structures and monitoring and maintenance.

The NES-F also enables regional councils to collect and maintain records of fish passage performance for new structures, conditions for permitted and consented activities and requires infrastructure owners to provide information directly to regional councils upon completion of the activity

This information will be used to develop a strategy to establish the location of structures, methods for assessing biological performance, and to explain how effort will be prioritised. Its effectiveness comes from councils and the community having an improved understanding of what activities must be better managed for fish passage and therefore improved decision making; it will be easier to hold councils to account for ensuring new structures will perform as expected.

8.5.3 EFFICIENCY

This assessment adds to the evaluation of environmental, economic cultural, social benefits and costs, and risks and should be read together with section 7.9 of this report.

The NES-F is compatible with the Freshwater Fisheries Regulations in entrusting regional councils with responsibility for achieving aquatic life objectives in regional plans by objectively identifying fish species in a local waterway that are valued or considered undesirable. The RMA provides well-established processes for resolving any difference of opinion about the value or desirability of particular species in regional planning.

These provisions will apply to all new structures after the commencement date.

8.5.4 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THE FISH PASSAGE STANDARDS

This section should be read together with section 7.9.3 of this report.

An alternative option considered was to remove the permitted activity status of existing in-stream structures. Many councils permit existing structures that may have been authorised at the time of construction, but which do not provide for fish passage. This option would involve removing the permitted activity status for these legacy barriers, thereby bringing their management into the consenting regime. The effect would trigger the owner to apply for a resource consent and have the council consider the effects. If the consent was declined, the owner would need to apply for another consent to remove the structure, or attempt to mitigate the effects if possible, and apply again.

However, this was ruled out because there are thousands of structures and councils lack the capacity to undertake such an assessment. This is unlikely to be an efficient way of encouraging prioritisation of remediation effort.

A second alternative option was to include rules for remediation within the NES, which would enable communities remediate in-stream structures in 2020, and would provide a head start to the fish passage remediation work programme and contribute faster to the improvement of ecosystem health. It was decided that this option could be ineffective and may have unintended consequences if councils do not have the necessary oversight over consent activities and the necessary information to make decisions on best approach remediation.

The alternative option for providing information is the status quo – where regional councils are not aware when a permitted structure is established, which has led to

problems with the implementation of the NPS-FM 2014. This would be less effective and efficient in addressing implementation issues and achieving the Objective of the NPS-FM 2020.

The fish passage rules in Part 3, Subpart 3 are the most effective and efficient way to achieve the Objective for the reasons discussed above and in section 7.9 of this report, as physical habitat and the presence (or absence) of aquatic life are necessary for healthy functioning ecosystems and the benefits people derive from them.

Part 4 Miscellaneous of the NES-F is minor and seeks to assist implementing the NES-F, through enabling councils to charge for monitoring and to be provided information for carrying out their functions (Policies 12 and 13 NPS-FM 2020)

The NPS-FM 2020 is addressed separately in section 7.0 of this report but should be read together with this section.

8.6 PART 4 MISCELLANEOUS

Part 4

Other provisions

Also see:

NPS-FM Policy 5

Policy 9

Policy 13



8.6.1 INTENT

Part 4 provides for local authorities to charge for monitoring activities that are permitted activities under the NES-F.

Enabling local authorities with a mechanism to charge for monitoring of permitted activities under the NES-F will support Councils with their new requirements to report on the five components of ecosystem health.

8.6.2 EFFECTIVENESS

Regulation 75 of the NES-F clearly establishes a user-pays system and being able to charge for monitoring of permitted activities will mean that councils do not have to on-charge these costs to ratepayers. Currently, the mechanism to charge parties for monitoring of permitted activities is not available to councils.

Should Councils be able to generate revenue through Regulation 73 of the NES-F, Councils would then be able to develop rehabilitation strategies to achieve mitigation of existing structures.

8.6.3 EFFICIENCY

No additional costs are anticipated for the matters above. The immediate changes can be implemented using existing Council resourcing and any increase in costs will be on-charged i.e. user-pays.

The fish passage assessment tool is fit for purpose for councils to use for collecting and maintaining records. This tool was published in January 2019 from a \$166,750 investment from MBIE (through an Envirolink Grant). Uptake to date has been limited to

a few regional councils. One key reason is that fish passage barriers have received low priority for monitoring effort to date, as is the case with many ecosystem health measures other than water quality.

Applying the fish passage assessment tool, depending on access at the structure, and the structure type, takes 4-10 minutes at a site on average. For most common structures (culverts, fords, weirs) the tool processes the information collected and assigns a risk category to the structure indicating potential for it being a barrier (i.e. performance). This automation reduces time and training costs for the person in the field to make this assessment themselves. The councils can use this information to inform how they decide to prioritise their mitigation efforts in order to achieve their objectives.

8.6.4 ALTERNATIVE OPTIONS AND REASONS FOR DECIDING ON THESE MISCELLANEOUS STANDARDS

Charging for monitoring

If the ability to on-charge for monitoring was not available, the only alternative option considered would be to recover these costs through rates. Councils may de-prioritise other projects/programmes to resource implementation or not be able to adequately resource the work. There would be a risk that the monitoring would not be undertaken.

Part 4 Miscellaneous of the NES-F is minor and seeks to assist implementing the NES-F, through enabling councils to charge for monitoring as part of carrying out their functions (Policy 12 NPS-FM 2020)

It is considered that the regulations are the most effective and efficient way to achieve the Objective for the reasons discussed above.

The NPS-FM 2020 is addressed separately in section 7.0 of this report but should be read together with this section.

9.0 CONCLUSION

The conclusion of this evaluation is that NPS-FM 2020 objective is the most appropriate way to achieve the purpose of the RMA with respect to freshwater. Further, the NPS-FM 2020 provisions and the NES-F rules are the most appropriate way of implementing the objective

10.0 LIMITATIONS

10.1 GENERAL

This report has been prepared for the particular project described to us and its extent is limited to the scope of work agreed between the client and Harrison Grierson Consultants Limited. No responsibility is accepted by Harrison Grierson Consultants Limited or its directors, servants, agents, staff or employees for the accuracy of information provided by third parties and/or the use of any part of this report in any other context or for any other purposes.



APPENDICES



APPENDIX 1

SECTION 32

- (1) *An evaluation report required under this Act must—*
- (a) *examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and*
 - (b) *examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—*
 - (i) *identifying other reasonably practicable options for achieving the objectives; and*
 - (ii) *assessing the efficiency and effectiveness of the provisions in achieving the objectives; and*
 - (iii) *summarising the reasons for deciding on the provisions; and*
 - (c) *contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.*
- (2) *An assessment under subsection (1)(b)(ii) must—*
- (a) *identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—*
 - (i) *economic growth that are anticipated to be provided or reduced; and*
 - (ii) *employment that are anticipated to be provided or reduced; and*
 - (b) *if practicable, quantify the benefits and costs referred to in paragraph (a); and*
 - (c) *assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.*
- (3) *If the proposal (an amending proposal) will amend a standard, statement, national planning standard, regulation, plan, or change that is already proposed or that already exists (an existing proposal), the examination under subsection (1)(b) must relate to—*
- (a) *the provisions and objectives of the amending proposal; and*
 - (b) *the objectives of the existing proposal to the extent that those objectives—*
 - (i) *are relevant to the objectives of the amending proposal; and*
 - (ii) *would remain if the amending proposal were to take effect*

APPENDIX 2

RELATEDNESS BETWEEN PART 3 NPS-FM 2020 AND NPS-FM 2014 (AMENDED 2017)

NPS-FM 2020	RELATED POLICIES IN NPS-FM 2017
3.2 Te Mana o Te Wai	Part AA and Part D
3.3 Long term visions for freshwater	New
3.4 Tangata whenua involvement	Part D
3.5 Integrated management	Part C
3.6 Transparent decision making	New
3.7 NOF process	Part CA
3.8 Identifying FMUs and special sites and features	Policy CA1
3.9 Identifying values and setting environmental outcomes as objectives	Policy CA2 (a) and (b)
3.10 Identifying attributes and their baseline states, or other criteria, for assessing achievement of environmental outcomes	Policy CA2 (c), and (e)
3.11 Setting target attribute states	Policy CA2 (d) and (e), Policy A1, Policy A6
3.12 How to achieve target attribute states and environmental outcomes	Policy A1 (a), CA2(e)(iii)
3.13 Special provisions for attributes affected by nutrients	Note under the periphyton attribute table in Appendix 2
3.14 Setting limits on resource use	Objective A4, Policy A1, Policy A3, Policy A4, Objective B5, Policy B2
3.15 Preparing action plans	Policy CB2
3.16 Setting environmental flows and levels	Definition of “environmental flows and/or levels”, Objective B1, Policy B1
3.17 Identifying take limits	Definition of “environmental flows and/or levels”, Policy B2
3.18 Monitoring	Policy CB2, Policy D1
3.19 Assessing trends	Policy CB(1)(c)
3.20 Responding to deterioration	Objective A2(c), Policy CA3
3.21 Definitions relating to wetlands and rivers	
3.22 Natural inland wetlands	Objective A2(b), Objective B4
3.23 Mapping and monitoring natural inland wetlands	New
3.24 Rivers	New
3.25 Deposited sediment in rivers	New
3.26 Fish passage	New
3.27 Primary contact sites	New
3.28 Water allocation	Policy B2, Policy B3, Policy B4

NPS-FM 2020	RELATED POLICIES IN NPS-FM 2017
3.29 Freshwater Accounting systems	Part CC, and definitions for freshwater quantity and freshwater quality accounting system.
3.30 Assessing and reporting	Policy CB4
3.31 Large hydro-electric generation scheme	Policy CA3 (b)
3.32 Naturally occurring processes	Policy CA3 (a)
3.33 Specified vegetable growing areas	New
4.1 Timing	Policy E1
4.2 Keeping policy statements and plans up to date	New
4.3 Existing policy statements and plans	New
Appendix 1A Ecosystem health	Appendix 1 Ecosystem health
Appendix 1A Human contact	Appendix 1 Human health for recreation
Appendix 1A threatened species	New
Appendix 1A Mahinga kai	"other national value" mahinga kai
Appendix 1B Natural form and character	Appendix 1 Natural form and character
Appendix 1B Drinking water supply	New; based on Appendix 1 Water supply
Appendix 1B Wai tapu	Appendix 1 Wai tapu
Appendix 1B Transport and tauranga waka	Appendix 1 Transport and Tauranga waka
Appendix 1B Fishing	Appendix 1 Fishing
Appendix 1B Hydro-electric power generation	Appendix 1: Hydro-electric power generation
Appendix 1B Animal drinking water	Appendix 1: Animal drinking water
Appendix 1B Irrigation, cultivation, and production of food and beverages	Appendix 1: Irrigation, cultivation and food production
Appendix 1B Commercial and industrial use	Appendix 1: Commercial and industrial use
Appendix 2A attribute table for <ul style="list-style-type: none"> Suspended fine sediment Appendix 2B attribute tables for <ul style="list-style-type: none"> Submerged plants (natives) Submerged plants (invasive species) Fish Macroinvertebrates (2 tables) Deposited fine sediment Dissolved oxygen Lake bottom dissolved oxygen Mid-hypolimnetic dissolved oxygen Dissolved reactive phosphorus Ecosystem metabolism <i>E. coli</i> (primary contact sites) 	New

ADDENDUM

This addendum has been prepared by the Ministry for the Environment as a supplementary report to the Section 32 Evaluation of the National Policy Statement for Freshwater Management 2020 (NPS-FM 2020) and National Environmental Standards for Freshwater (NES-F) prepared by Harrison Grierson.

It covers two policies: Specified Vegetable Growing Areas and new Policy 10 (The habitat of trout and salmon are protected, insofar as this is consistent with Policy 9).

SPECIFIED VEGETABLE GROWING AREAS

INTENT

The specified vegetable growing areas exemption is a new policy which recognises the importance of maintaining the domestic supply of vegetables. The policy enables, but does not require, regional councils to set target attribute states below national bottom lines for nitrogen attributes and other attributes impacted by nitrogen. Unlike the exemption for large hydro-electric generation schemes however, this policy is timebound and will expire after ten years. The policy applies to the two growing regions, which are key to New Zealand's domestic supply of fresh vegetables – Pukekohe and Horowhenua.

The policy intent is to recognise the importance of the domestic supply of vegetables to the health of New Zealanders while improving freshwater quality and ecosystem health. Pukekohe and Horowhenua produce approximately 30 percent of New Zealand's vegetables by value, the majority of which are grown to supply the domestic market.

The time-bound nature of the exemption recognises that water quality in these catchments still needs to improve substantially in the long-term. Further work will be undertaken alongside the implementation of the NPS-FM to develop a plan specific to these regions to ensure the domestic supply of vegetables can be maintained while improving water quality. It is unclear when these catchments could meet national bottom lines, while ensuring the supply of fresh vegetables to the domestic market. However, the Government is working towards reducing the contaminant loads so that these bottom lines can be met or exceeded over time.

EFFECTIVENESS & EFFICIENCY

The specified vegetable growing areas policy is effective because it contributes to achieving clauses (b) and (c) of the Objective of the NPS-FM 2020, as described below:

- Preserving domestic vegetable production in two key growing areas is important for supporting the health of New Zealanders, especially those who would otherwise struggle to access fresh vegetables (clause (b));
- Commercial vegetable growing in these areas is important to the community to provide for their social and economic well-being now and in the future (clause (c)).

The specified vegetable growing areas policy does not contribute to achieving clause (a) of the Objective (putting the health and wellbeing of water bodies and freshwater ecosystems first). The specified vegetable growing areas policy puts the health of New Zealanders above the health and wellbeing of the water bodies, at least in the near-term. It should be noted however that water quality improvements will be required, albeit not to the national bottom line.

This policy helps to preserve the social and economic well-being of affected communities by retaining local employment. The policy also provides a long-term direction of travel for reducing the impact of nitrogen on the water bodies in those areas, including the culturally significant Lake Horowhenua and Hokio Stream.

The preferred option for the vegetable growing areas policy is the most efficient of those considered, as it recognises the importance of the supply of affordable fresh vegetables to human health, without allowing targets set below national bottom lines to be open-ended. This provides certainty to the affected communities and provides an incentive to vegetable growers in the near-term, whilst also providing an incentive to vegetable growers and other land users in the area to use nitrogen more efficiently, and explore and pursue other mitigations to reduce nutrient dischargers.

The change from the status quo (no exemption for key vegetable growing areas and no recognition of the importance of vegetable growing in the NPS-FM) is significant, providing clear direction for regional councils to have regard to the importance of the specified areas to the domestic supply for vegetables.

In giving effect to the specified vegetable growing areas policy, local authorities will still have to comply with all relevant Treaty settlement obligations that apply in their regions, including when considering setting a target attribute state below a national bottom line.

The efficiency and effectiveness evaluation is outlined in Table 1 below.

ALTERNATIVE OPTIONS AND REASONS FOR THE POLICY

The in-principle Cabinet decision on the specified vegetable growing areas policy was to provide an exemption to specified areas of Pukekohe and Horowhenua that would enable, but not require, regional councils to set target attribute states for nitrogen related attributes below national bottom lines. This policy option did not include a time limitation for the exception.

The areas of Pukekohe and Horowhenua were chosen because analysis indicated that these were the only two areas in New Zealand that met the following criteria:

1. The catchment/area needed significant reductions in nitrogen loads to meet the national bottom lines in the NPS-FM.
2. The area was so dominated by vegetable growing that the reductions needed could not be achieved or vegetable growing could not be accommodated within the catchment without significant land use change out of vegetable growing.
3. The area of land use change out of vegetable growing would be sufficiently large to materially affect New Zealand's supply and price of vegetables (noting that the general requirement on councils in the NPS-FM 2020 to at least maintain water quality at current states means that any large reductions in vegetable growing in one area cannot easily be compensated for by large increases in vegetable growing elsewhere).

Four options were considered before making a final decision:

- The status quo – the NPS-FM, and in particular the national objectives framework, would apply to the specified areas in the same way as the rest of New Zealand.
- An exemption to enable councils to set target attribute states below national bottom lines for specified attributes.
- A statement in the NPS-FM which would require regional councils to have regard to the importance of the domestic supply of vegetables when setting target attribute states, but no exemption from national bottom lines.
- A timebound exemption (until 2030) to enable councils to set target attribute states below national bottom lines for specified attributes. Under this option, further work with iwi and hapū and relevant councils, would be undertaken to develop regulations containing targets and limits that are appropriate for the area.

Under both the exemption options (an exemption to national bottom lines and a time-bound exemption to national bottom lines), water quality will be required to be improved, not just maintained.

In terms of achieving the NPS-FM 2020 Objective, we consider that a timebound exemption is most appropriate because it would send a strong signal to iwi that the government is serious in its intention to improve water quality. It sends an equally strong message to vegetable growers and other land users that they must be prepared to use all practicable mitigations to contribute to that improvement and engage meaningfully to find solutions (the default being catchments must eventually mean the NPS-FM 2020 national bottom lines).

This policy is the most effective and efficient way to achieve the NPS-FM 2020 Objective because it:

- Recognises the importance of vegetables for the health needs of people;
- Provides regional councils with direction on how to consider vegetable growing in their freshwater planning; and

- Provides a clear signal to vegetable growers in these areas that improvements in practice will be required over the long-term.

Other options considered are not the most effective and efficient way to achieve Objective 2.1 because:

- The status quo was not considered the most appropriate option because this approach would risk perverse outcomes in terms of: creating uncertainty for growers, potentially leading to under investment in new mitigations which could achieve improved environmental outcomes, conversion of large areas of land to urban development (which would reduce food supply and permanently lose versatile soils), and concern amongst consumers about the price of healthy food.
- The status quo also risks undermining the integrity of the bottom lines elsewhere because it would show that the Government introduces targets it knows are not realistically achievable in these areas.
- An exemption with no expiry date indicates that the government does not consider that these areas will ever be able to meet national bottom lines.
- Moreover, an exemption with no expiry date does not provide a strong signal to growers and land users that improvements will be needed, which may slow down progress to making water quality improvements in these areas.
- A statement in the NPS-FM which requires councils to have regard to maintaining domestic vegetable supply without providing the ability to set limits below national bottom lines is likely to significantly increase the pressure on other land users in these areas because there may be a perception that greater reductions from these land users will be required to meet national bottom lines while preserving vegetable supply.

Table 30: Assessment of efficiency and effectiveness for the specified vegetable growing areas policy

	Benefits	Costs
Environmental		Water quality may not improve as quickly if councils have the ability to set attribute states below national bottom lines. Although it is noted that under the status quo regional councils can set any timeframe for achieving target attribute states, it is unclear how much the ability to set attribute states below national bottom lines would delay the improvement in water quality in these areas.
Economic	<p>The estimated total revenue from commercial vegetable production in the Horowhenua area is between \$50 and \$80 million per year²⁰⁰.</p> <p>The total economic contribution of the Pukekohe growing hub was estimated in 2018 to be \$261 million per annum²⁰¹.</p> <p>This policy is necessary to provide security of supply of domestically produced vegetables to New Zealand.</p> <p>Commercial vegetable growing in the Horowhenua area provides 800 jobs²⁰².</p> <p>In Pukekohe the vegetable growing industry directly employs around 1,458 FTEs and provides for a further 1,500 FTEs in indirect employment²⁰¹.</p>	Auckland Council, Waikato Regional Council and Horizons Regional Council will have the ability (but are not required) to set attribute states below national bottom lines, which could add additional planning and consultation costs to regional councils. However, we expect these to be a minimal additional cost compared to the total cost of preparing updated plans.

²⁰⁰ Personal communication Horticulture New Zealand to MPI, June 2020

²⁰¹ New Zealand's food story: the Pukekohe hub, prepared for Horticulture New Zealand by Deloitte in 2018

²⁰² Tararua Growers Association submission on proposed Plan Change 2 of the One Plan, provided to Horizons Regional Council in October 2019.

	Vegetable growing in both Pukekohe and Horowhenua plays an important role in the local community.	
Social	Preserving access to fresh, locally grown vegetables contributes to the health and well-being of people and communities. A reduction in supply would likely result in a decrease in consumption, particularly for fresh leafy green vegetables which are difficult to import.	
Cultural		<p>During consultation, iwi and hapū were significantly concerned with the effects the exemption from freshwater policies will have to specific freshwater bodies and associated iwi and hapū, in particular if the waterbodies for which they are kaitiaki are allowed to be kept in a degraded state in order to provide a food basket for the rest of New Zealand.</p> <p>Requiring that Treaty settlement legislation prevails over the specified vegetable growing areas policy recognises and supports agreements reached between iwi and the Crown as Treaty partners. However, where there are no Treaty settlements, or if early Treaty settlements did not address these matters, iwi may be disadvantaged.</p> <p>The in-principle decision to enable domestic vegetable production through this exemption was not made in conjunction with iwi and hapū whose freshwater bodies are directly affected by these decisions.</p> <p>There has since been discussion with impacted iwi and hapū before a final decision was made. However, because consideration of this policy occurred after and as a result of public consultation on the package as a whole, engagement has been limited and time constrained. Iwi and hapū have expressed disappointment regarding the process.</p>

		Despite Treaty settlement legislation prevailing over the exemptions, the impacts of this freshwater proposal will be keenly felt by those directly affected, who did not support an exemption. However, as part of the time-bound exemption option, central government will work in partnership with local iwi and hapū alongside councils and stakeholders to develop regulations containing targets and limits that are appropriate for the area.
Additional sector commentary	Horticulture New Zealand has indicated that it supports an exemption to national bottom lines for key vegetable growing areas because this recognises the importance of vegetable growing as a national good.	
Opportunities for economic growth and employment to be provided or reduced	Likely to be low.	
Risks of not acting	There is a risk that regional councils in consultation with communities chose to aim for national bottom lines or higher attribute bands over timeframes that are too short, which would pose a significant risk to the supply of fresh vegetables.	

NEW POLICY 10: THE HABITAT OF TROUT AND SALMON ARE PROTECTED, INsofar AS THIS IS CONSISTENT WITH POLICY 9

INTENT

The purpose of this policy is to reflect the Minister's obligation to have particular regard to the habitat of trout and salmon when making decisions under the RMA, while recognising and providing for the habitats of indigenous species in accordance with Policy 9. Where Policies 9 and 10 are incompatible, regional councils are to prioritise the habitat needs of indigenous species. This reflects the hierarchy of the relevant matters in Part 2 of the RMA; primarily those matters in ss 6(c) and 7(h).

EFFECTIVENESS & EFFICIENCY

This policy is the most appropriate way to achieve the objective of the NPS-FM, as it prioritises the health and wellbeing of freshwater ecosystems and waterbodies, while achieving the purpose of the RMA. The policy allows people to provide for their social and cultural well-being, by providing for the habitat needs of popular sports fish, subject to the habitat needs of indigenous species where those needs are inconsistent. This accounts for situations where providing for the habitat of trout or salmon could affect the suitability of those habitats for indigenous species.

We consider that this policy is consistent with Part 2 of the RMA. Section 7(h) requires that particular regard be had to the protection of the habitat of trout and salmon. The policy also recognises that it is a matter of national importance to recognise and provide for the protection of areas of significant habitats of indigenous fauna (section 6(c)).

Policy 10 is relevant to many aspects of the NOF relevant to the habitat of trout and salmon, including attributes for sediment, and setting environmental flows and limits. This policy is also relevant to the fish passage requirements in clause 3.26 of the NPS-FM. Clause 3.26 requires regional councils to make or change their regional plans to include policies that identify desired species, for which instream structures must provide passage. This clause also requires regional councils to include the following objective in their regional plan:

"The passage of fish is maintained, or is improved, by instream structures, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats."

In practice, this means that in different rivers and river sections, regional councils may identify trout and salmon as desirable or undesirable fish species. When identifying fish species and when implementing the NPS-FM, regional councils will be required to give effect to policy 10 insofar as it is consistent with policy 9 (that the habitats of indigenous freshwater fish are protected). Regional councils may also identify indigenous fish species as desirable fish species in rivers or river sections, and will be required to manage instream structures appropriately.

Policy 10 will help council make choices about the level of protection to provide to the habitats of indigenous species and those of trout and salmon.

ALTERNATIVE OPTIONS AND REASONS FOR THE POLICY

An alternative option considered was to include trout and salmon in Policy 9, alongside indigenous species. However, we considered that in doing so, the policy would not appropriately reflect the hierarchy of matters in ss 6(c) and 7(h) of the Act, and could be interpreted as internally inconsistent.

The decision to include this policy was made late in the stages of drafting and the purpose of this addendum is to record the addition and the reasons for it. The section 32 report and the numbering of the

policies in the report therefore do not reflect this addition. However, we consider that the section 32 analysis in relation to Policy 9 and to fish passage continues to be consistent with this new policy.

Criteria	Benefits	Costs
Environmental	Protecting the habitat of trout and salmon will mean the protection of a variety of habitats in rivers (pools, runs and riffles).	None identified
Economic	Sports fishing provides significant domestic and international tourism benefits. For example, Lake Taupō provides tourism and recreation services attracting some 3.4 million visitors each year, contributing \$414 million to the economy; its trout fishery is world renowned and is estimated to bring around \$3.7 million into the local economy ²⁰³ .	There may be instances where flood protection works in rivers beds may be constrained, and require more expensive mitigation options.
Social	Recreational fishing contributes to New Zealander's social well-being. Tourism New Zealand data show that in 2016, 28% of all tourists (both domestic and international) took part in raft, kayak, canoe, jet boat or fresh water fishing activities. ²⁰⁴	None identified
Cultural	This policy does not override Policy 2, which ensures that Māori freshwater values are identified and provided for, nor Policy 9. This will mean that mahinga kai can be practised where this relies on indigenous species.	None identified
Opportunities for economic growth	Possible expansion of trout and salmon fishing areas	None identified
Risks of not acting		Opportunities for protecting trout and salmon fisheries and their habitats may be lost.

²⁰³ [Interim Regulatory Impact Analysis for Consultation: Essential Freshwater Detailed analysis. August 2019. Page 220. https://www.mfe.govt.nz/more/briefings-cabinet-papers-and-related-material-search/regulatory-impact-statements/interim](https://www.mfe.govt.nz/more/briefings-cabinet-papers-and-related-material-search/regulatory-impact-statements/interim)

²⁰⁴ <https://www.tourismnewzealand.com/about/about-the-tourism-industry/>