Ministry for the Environment
Manatū Mō Te Taiao

# Briefing to the Incoming Minister for the Environment

## WATER ISSUES

New Zealand Government

# Contents

# Introduction

1. Fresh water supports almost every aspect of life. New Zealanders use fresh water to drink, to produce goods and services, and enjoy it for recreation. For Māori, fresh water is a taonga and fundamental to the cultural identity of iwi and hapū. In these ways, fresh water supports New Zealand's health and cultural well-being, ecosystems and economy.
2. Freshwater environments are made up of rivers, lakes, wetlands, estuaries and ground water. They are complex systems which affect, and are affected by, the land, air and marine environments. No catchment is the same. New Zealand's 4200 catchments vary in size and complexity, from small creeks running straight into the sea to large systems, such as the Waikato catchment, with complex interactions between land use, surface water and ground water.
3. Land use, the main driver of water quality, differs across New Zealand so the impacts on fresh water, whether positive or negative, are often specific to a catchment or region.
4. It can take decades in some catchments for water (and any contaminants) to cycle from Earth's surface through the ground to aquifers, and back to surface water systems. For example, in the Waikato time lags for nitrogen to cycle through the system may be 80 years, while in Southland it may be only one to two years. This means some effects seen today are legacies of past activities, and the impact of human activities today may not be seen in waterways for a long time.
5. The freshwater management system is interconnected and decisions in each area affect other areas. Improvements in water management will require some difficult choices.
6. This paper provides information on the freshwater system and advice on issues and priorities. It provides a summary of:
    - your role as Minister and how the Ministry for the Environment (the Ministry) supports you
    - the main pressures on the quality of fresh water
    - the system for managing fresh water, including the regulatory framework and other levers
    - the Crown's approach to date on addressing iwi and hapū rights and interests in fresh water
    - the Ministry's advice on improving the management of fresh water
    - priorities over the next few months.

# Your role and how the Ministry supports you

7. Your role is to provide the strategic direction for the freshwater management system, set policy, and support implementation. Implementation is largely the responsibility of regional councils.
8. The Ministry advises you on priorities and on the systems, laws, regulations, policies, partnerships, and incentives that form the framework for freshwater management. The Ministry also has a legislated role to monitor the performance of the system.
9. Part of the Ministry's role is to advise you about how legislation and regulation can contribute to creating a high-performing freshwater management system. Legislative action will always remain a key tool by which you can take action, but there is a much wider set of tools available to support you to achieve desired outcomes, including the partnerships formed with iwi/Māori, how the government engages with communities and businesses, the provision of independent information on the state of the environment, investment of funds to give incentives for specific actions and behaviours, and partnering with local government to build capability and address capacity issues. See appendix 1 for an outline of key collaborations and partnerships.
10. The Ministry for the Environment and the Ministry for Primary Industries have taken a joint approach on freshwater management, reflecting the strong links between freshwater management and land use practices. The Water Directorate – a combined initiative of the two agencies – is the primary advisor on freshwater management and its resourcing has grown recently, given the importance of the issues it addresses.
11. The Ministry for Primary Industries also provides advice on irrigation and administers the Irrigation Acceleration Fund which helps to develop irrigation infrastructure.
12. Other portfolios are also relevant. For example, access to, and the provision of, clean drinking water and wastewater services has an impact on the Environment, Health and Local Government portfolios, so a linked-up approach on these issues at the agency and Ministerial levels is important.

# The main pressures on fresh water

## Water quality

13. New Zealand's water bodies are showing the impact of more than 100 years of intensification of land use in both urban and rural areas. Clearing of native vegetation, draining of wetlands, farming, forestry, and urbanisation, have all increased pressure on water bodies and their ecosystems. For example, New Zealand's population grew 17 per cent from 1996 to 2012, driving a 10 per cent increase in urban land area. At the same time, there has been a shift in pastoral farming – from 1994 to 2015, sheep numbers decreased 41 per cent but dairy cattle increased 69 per cent. These changes have increased pressure on the quality of fresh water in both rural and urban areas.

### Current state

14. Water quality has become a major issue with the New Zealand public, particularly regarding the ability to swim in rivers, which many people see as a proxy for water quality generally. A perception of poor, or declining, water quality also puts at risk New Zealand's international reputation in key export sectors. The tourism industry trades off a clean natural environment brand and overseas consumers are increasingly interested in higher environmental standards and assurances.

15. Recent trends in water quality have been mixed. Generally over the past 10 years:

    - nitrogen levels in rivers have been increasing in rural areas
    - phosphorus levels in rivers have been decreasing in rural and urban areas
    - *E. coli* levels in rivers across the country have shown no clear upward or downward trend at most sites.

16. Figure 1 shows changes in water quality over time.

**Figure 1: Changes in water quality over time**

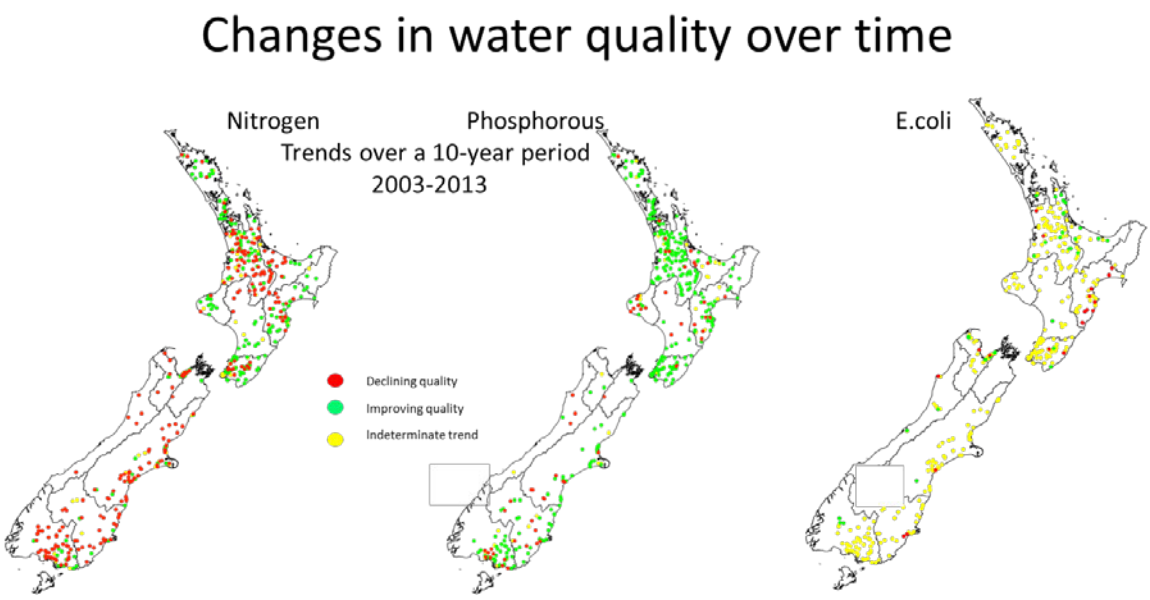
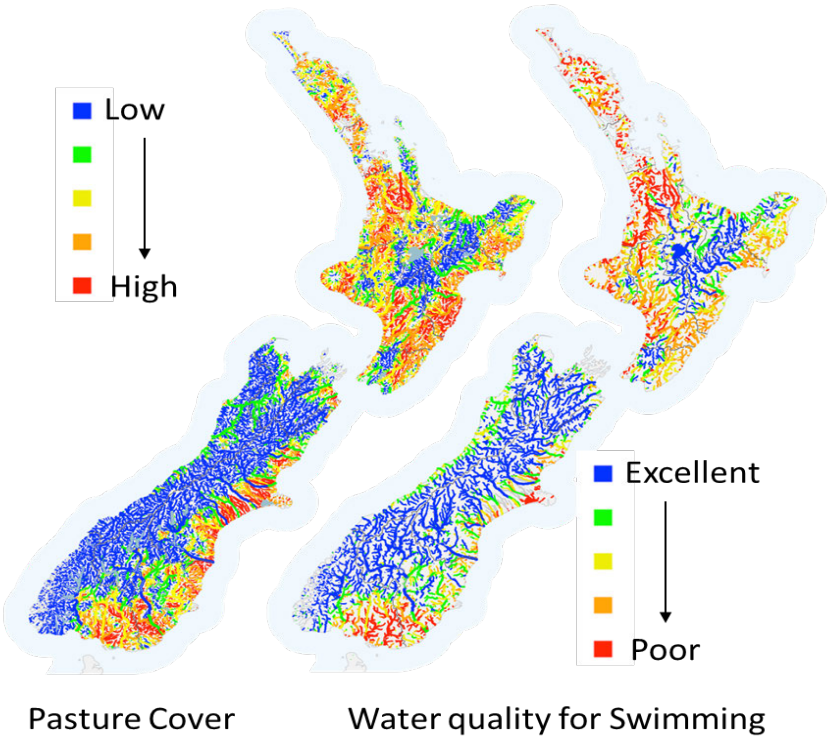



**Figure 2: Land use (pasture cover) and water quality for swimming**




17. Pasture cover is one influencing factor on water quality and the maps above show that there is significant correlation between pasture cover and water quality for swimming.

18. In April 2017, the Ministry for the Environment and Statistics NZ released *Our Fresh Water 2017*, which provides an overview of the state of New Zealand's fresh water. It showed that:

    - Between 1994 and 2013, in monitored rivers, nitrate-nitrogen was worsening (55 per cent) at more sites than improving (28 per cent)

- While the trends for dissolved reactive phosphorus concentrations vary across the country, in monitored rivers levels were improving (42 per cent) at more sites than worsening (25 per cent) between 1994 and 2013
- Water clarity improved at two-thirds of monitored sites between 1989 and 2013.
- *E. coli* concentration was 22 times higher in urban areas and 9.5 times higher in pastoral areas compared with those classified as 'native' areas (2009–2013)
- Of the aquatic native species reported on, three-quarters of fish, one third of invertebrates, and one third of plants are threatened with, or at risk of, extinction.

19. There is significant variation in the quality of the data provided by current information systems within each region. As a result, decision-making suffers. This is especially apparent at the national level, with significant work required to reconcile data to answer even basic questions, such as how much water is consented and how much is actually used.

# Water allocation

20. Demand for water is increasing – for farming, for drinking water, and for industrial purposes. For example, irrigated land increased by about 70 per cent nationally between 2002 and 2017. In a growing number of catchments and aquifers, the volume of water allocated for people to use has reached or exceeded sustainable limits. For example, of the 36 groundwater allocation zones in Canterbury where quantity limits have been set, 16 are at full allocation or over-allocated.
21. As New Zealand's population and agriculture-based economy continue to grow, the demand for fresh water is likely to rise further. At the same time, climate change is projected to lead to lower rainfall in some areas of the east and north of the country, with more prolonged droughts and periods of low flows in rivers. Behaviour change and a new approach to allocation are needed to better protect waterways, place a higher value on fresh water, and encourage smarter production methods for commercial use.
22. An important factor is the framework for how water is allocated —who has the right to take water, how much they can take, and how much contamination they can discharge. The current approach to water allocation is primarily a 'first in, first served' approach, which means that rights to take water and to make discharges may not be allocated equitably, in the best interests of the water body or to the highest value use. Historical circumstances around Māori land ownership and development mean iwi and hapū have ended up at the 'back of the queue' for access to water. The water management system needs to better deliver on social and cultural values of water at the same time as supporting an economy that maximises value from fresh water through wise use and investment.

# Freshwater management system

## The Resource Management Act framework and roles

23. The Resource Management Act 1991 regulates the use of natural resources in New Zealand. The purpose is to provide for sustainable management of natural and physical resources, considering the effects of activities on the environment now and in the future. This can require managing conflicting values and expectations of communities and individuals.

### Decisions about water allocation

24. Decisions on whether people can use resources, and under what conditions, are largely made by local government. Regional councils are currently responsible for allocating the right to use water or undertake activities that affect its quality. These decisions are made by regional councils through plans and resource consent decisions and, in some circumstances, specifically by legislation. This is because no person can take, use, dam, or divert water, or discharge contaminants into it, unless allowed by a rule in a regional plan or a resource consent (although the Resource Management Act does provide for some specific uses, like reasonable domestic needs).
25. Regional councils' powers to change their approach to water allocation are limited, with discretion bound by legislation and case law. For example, the requirement to consider applications in the order they are received, which precludes comparisons of consents on merits; or the requirement to consider existing consent holders' applications first, effectively giving consent holders a right of renewal (potentially with different conditions).
26. There are areas where councils have discretion, and different councils take different approaches, such as in the transfer of consents between users. Within their plans, some councils have chosen to explicitly allow water take consents to be transferred between users under certain circumstances. For instance, users in the Waikato catchment are allowed to transfer consents to other users who are down river of them, while other regions require all transfers to be considered in the same way as a new consent.
27. City and district councils (territorial authorities) manage the effects of land use in their district plans. They also have a role in providing their communities with drinking water, wastewater, and stormwater services – these are often referred to as the "three waters". In providing these services, they must meet the requirements of regional rules or conditions on resource consents issued by regional councils.

### National Policy Statement for Freshwater Management

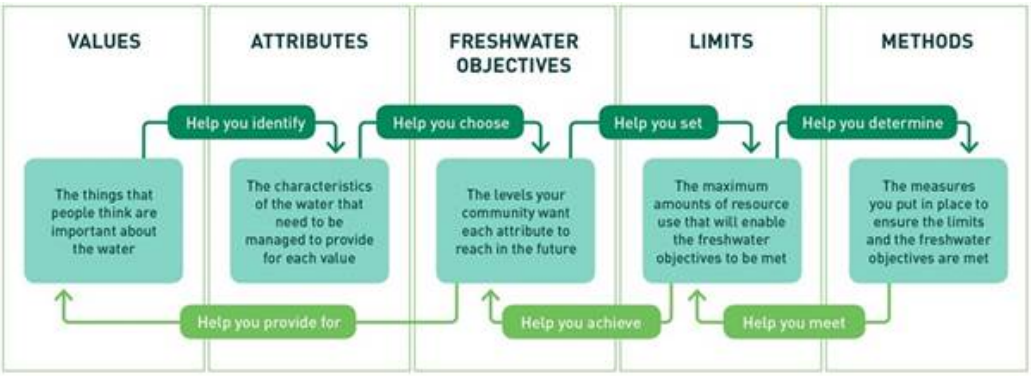
28. Although the system is largely devolved to local government, the Resource Management Act enables the Minister for the Environment and central government to influence, or directly control, resource use through various instruments.
29. **National policy statements** state objectives and policies that local government must give effect to in plans.
30. The National Policy Statement for Freshwater Management (Freshwater NPS) was introduced in 2011 (and updated in 2014 and 2017) and states objectives and policies that direct regional

councils in managing fresh water through regional plans. It requires them to set objectives that reflect their communities' desired state of fresh water.

31. It does this by:

- providing a nationally consistent process for identifying the values that tangata whenua and wider communities have for water, measuring how well fresh water provides for these, and setting objectives which describe the environmental outcomes desired by communities. This is referred to as the National Objectives Framework
- setting minimum expectations that regional councils must work towards when making decisions. These include:
  - safeguarding ecosystem health and human health for recreation (compulsory values)
  - maintaining or improving water quality
  - setting objectives for key measures that provide for these two values (objectives cannot be set below any national bottom line for the two compulsory values)
  - improving water quality in terms of swimming or primary contact.

**Figure 3: The relationship between freshwater objectives, limits and methods**




32. Regional councils must recognise Te Mana o te Wai – the health and well-being of the water – at all stages, and involve iwi and hapū in decision-making and management of fresh water. They are also required to take an integrated approach to managing land use, fresh water, and coastal water. Consideration must also be given to the economic well-being of the community.

## Other ways of setting national rules about water

33. **National environmental standards** can directly control resource use by allowing or prohibiting it, or placing conditions on it. They can also restrict local government's ability to make decisions on resource use. For example, the National Environmental Standard for Sources of Human Drinking Water 2008 requires councils to ensure resource use does not contaminate drinking water sources.

34. **Section 360 of the Resource Management Act** contains a range of regulatory powers to support the effective working of the Act including regulating specific resource uses. For example, the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 requires holders of water permits for takes of 5 litres/sec or more to measure actual use and report this information to their regional council.

35. **Water conservation orders** provide legal recognition of outstanding amenity or intrinsic values of water bodies, and provide protection over specified values of the water body in perpetuity. Anyone can make an application for a water conservation order, and the Minister for the Environment decides whether to accept an application and appoint a special tribunal to consider and report on it. There are currently 15 water conservation orders, with two applications in the process of being considered.

### Council progress on implementing the National Policy Statement for Freshwater Management

36. Regional councils are required to amend their policies and plans to give effect to the objectives of the Freshwater NPS as soon as reasonably practicable, or by 31 December 2025. If meeting this deadline would result in poorer quality plans, councils may extend the deadline to 31 December 2030. As required, all councils have publicly notified a staged implementation programme that details the steps and timeframes involved.

37. Approximately 30 planning processes are currently underway to meet the requirements of the Freshwater NPS. The Waikato's Healthy Rivers Wai Ora project is an example of a collaborative planning process underway. It is creating a proposed plan change and water quality targets for the Waikato and Waipa catchments. A 25-person Collaborative Stakeholder Group made up of iwi, sector stakeholders, and community members has played a key role in the process which has been underway since 2012, with $14.8 million spent to date with more costs expected. The bulk of this cost (nearly $9 million) has been on scientific and technical research. Hearings and a possible appeal process are still to occur.

38. The proposed Wai Ora plan change is intended to deliver a 10 per cent reduction in the four key contaminants (nitrogen, phosphorus, *E. coli* and clarity/sediment) over the next 10 years. While the Waikato Regional Council is on track to fully implement the Freshwater NPS by 2025 through a series of plan changes across its catchment, an 80-year staged approach has been agreed by the Collaborative Stakeholder Group to achieve objectives such as water quality safe for swimming and food collection. The 80-year timeframe has been agreed because of the cost and difficulty of meeting the objectives.

39. Further amendments to the Freshwater NPS may mean plan changes need to be reviewed and planning processes repeated. Regional councils have asked for more certainty, with a programme of future changes to the Freshwater National Policy Statement clearly set out.

40. The Ministry released a comprehensive review of regional implementation of the Freshwater NPS in August 2017. Most regional councils have made progress. However, the Ministry does not yet consider that any region has fully completed implementation. There is public criticism that progress has been slow in some regions.

## Other non-regulatory levers

41. There are other ways to make a difference, such as through funding and partnerships.

42. Crown funding is currently provided across a range of areas, including for clean-ups, science, and irrigation infrastructure. The key funds in relation to water are:

    - **Freshwater Improvement Fund:** This commits $100 million over 10 years to improve the management of New Zealand's lakes, rivers, streams, groundwater and wetlands. It supports projects with a total value of $400,000 or more, and gives priority to projects

in vulnerable catchments**.** The first contestable funding round earlier this year resulted in $47 million committed to support 24 projects. The next funding round is likely to take place in 2020/21

- **Te Mana o te Wai Fund:** In 2014, $5 million was allocated to create the Te Mana o Te Wai Fund focusing on improving freshwater quality. Of that, $4,586,912 has been committed to nine iwi-led freshwater projects, which are scheduled for completion in 2018/19; and $400,000 was awarded to four regional iwi case studies to research freshwater iwi rights and interests. A further $1 million to support freshwater initiatives was added to the fund in 2017. Final decisions on allocating this have not yet been made
- **Irrigation infrastructure funding:** The Ministry for Primary Industries administers the Irrigation Acceleration Fund which offers $25 million of grants over five years to help develop irrigation infrastructure. Another $120 million in bridging finance is available to irrigation infrastructure projects through Crown Irrigation Investment Limited, which can also provide interest-free loans for projects that directly deliver environmental benefits such as increasing river flows during dry periods
- **Our Land and Water National Science Challenge:** This commits about $100 million over 10 years to enhance primary sector production and productivity while maintaining and improving land and water quality. This will be supported by up to $130 million from the Crown Research Institutes.

## Working with others

43. Non-regulatory levers can be used to support legislation and to achieve results. The Ministry considers it is important to work collaboratively with a wide range of stakeholders to raise performance on fresh water.
44. The Ministry partners with regional councils and territorial authorities, stakeholder groups like the Land and Water Forum, non-governmental organisations, business and industry groups, as well as iwi and Māori, through the Iwi Leaders' Group, and other agencies in the natural resources sector.
45. The support programme for implementing the Freshwater NPS has helped build capability of regional councils. It includes written guidance material, training and collective conversations with a structured support programme for each region to discuss progress and regional issues. The programme has also extended to discussions with territorial authorities, non-governmental organisations, iwi and hapū, and the primary sector.
46. The Ministry and other government agencies are increasingly partnering with businesses and industry groups to encourage responsibility for improving the health of waterways. For example, an action plan on good farming practice has been prepared by primary sector groups and regional councils to increase the voluntary uptake of more sustainable practices across all farms. Meanwhile a stakeholder workshop in November is planned to develop and encourage best urban water management practices.

# Urban water infrastructure

## Three Waters Review

47. The Ministry has been working with the Department of Internal Affairs on reviewing provision of the three waters (drinking, storm and waste water).

48. Responsibility for current provision of three waters infrastructure almost entirely rests with 68 territorial authorities across New Zealand. Services regarding the three waters account for about 25 per cent of all local government expenditure; maintaining and investing in assets valued at more than $55 billion. There are indications that systems are under pressure, highlighting possible risks to critical services and infrastructure that may need to be addressed.

49. Three waters infrastructure can have a direct impact on water quality. Stormwater systems discharge into waterways, and untreated waste water systems discharges into waterways when under pressure (eg, during storm events) and many inland towns and cities discharge treated sewage effluent to rivers. The ability to provide timely and cost-effective water infrastructure also has a significant impact on the supply of new housing – and some councils are reaching the limits of their ability to fund new infrastructure required in high growth areas. In other parts of the country, there are suggestions councils with small and/or declining populations may struggle to maintain water services. Stormwater system upgrades are also needed to cope with increasingly frequent high intensity rainfalls.

50. The Ministry expects that further consideration will be needed on the institutional arrangements for the three waters, possibly including the establishment of a water (infrastructure) regulator. In contrast to other infrastructure sectors in New Zealand, the three waters sector has minimal central oversight to provide transparency, understand critical assets and risks, and actively encourage service improvements. New Zealand's three waters sector is also very lightly regulated when compared with a range of overseas jurisdictions.

51. It is anticipated that the first phase of this area of work – a detailed problem definition – will report back to Ministers in late November 2017.

## Havelock North Inquiry

52. The Havelock North Water Inquiry (Stage 2) is due to report back on 8 December 2017. This Inquiry was established in response to the widespread outbreak of gastroenteritis in Havelock North in August 2016, with more than 5000 people falling ill from *Campylobacter* in the water supply.

53. Stage 1 of the Inquiry was reported in May 2017. It focused on identifying what happened, what caused the outbreak, and assessed the conduct of those responsible for providing safe drinking water to Havelock North.

54. Stage 2 of the Inquiry, due to report on 8 December, will make recommendations on steps to be implemented to reduce the likelihood of such an outbreak occurring again – these are likely to have system-wide impacts (eg, possible mandatory treatment of all drinking water).

55. The three waters review may provide a useful way for Ministers to respond to the Inquiry's recommendations.

# Iwi rights and interests

## The Crown's approach to addressing iwi/hapū rights and interests in fresh water

56. The Crown acknowledges that iwi and hapū have rights and interests in freshwater resources. This commitment is longstanding and over the past few years has been consistently conveyed to the courts (both the Supreme Court and the Waitangi Tribunal). The Crown has also recognised that iwi/hapū rights and interests in fresh water differ from rohe to rohe and that iwi and hapū are best placed to say what rights and interests are and how these should be recognised and provided for.

57. The Crown has undertaken Treaty-based engagement with iwi/Māori throughout the Freshwater Reform Programme. A significant contribution to the Crown's engagement with iwi/Māori has occurred through discussions between the Iwi Leaders Group and Ministers, and this engagement has been governed by the Communications and Information Exchange Protocol between the Freshwater Iwi Leaders Group and the Crown (the Protocol).

### The Communications and Information Exchange Protocol

58. The Protocol, which was signed by Senior Ministers of the Crown and the Freshwater Iwi Leaders Group in 2009 and renewed in 2013, reflects the shared interest of the Crown and iwi to develop tenable and long-term solutions for the management of freshwater resources.

59. The intent of the Protocol is to enable iwi leaders and their advisers to fully participate in policy development processes from an early stage and to enable Cabinet to be fully informed of iwi leaders' views when making decisions. It is not legally binding nor does it create a legal relationship. The scope of the Protocol includes:

    - the recognition and provision for iwi rights and interests in fresh water
    - advice prior to Cabinet decisions
    - advice on the development of policy in areas such as water quality and the allocation of water
    - advice on public discussion documents
    - decisions on work programme direction and policy decision
    - advice on specific instruments such as national policy statements and national environmental standards.

60. The Protocol sets out that the Iwi Leaders Group does not have a mandate to make binding agreements on behalf of other iwi and that wider engagement with iwi is necessary, and that the Crown's engagement with the Iwi Leaders Group does not preclude it from consulting with other iwi or iwi representative groups. The Protocol was established as a living document that can and should be reviewed for effectiveness.

## Work programme to address iwi/hapū rights and interests in fresh water

61. In January 2015, Cabinet set the Crown's position ('bottom lines') for all discussions with Iwi Chairs and the Iwi Leaders Group:

    a. no-one owns fresh water, including the Crown

    b. there will be no generic share of freshwater resources provided for iwi

    c. there will be no national settlement of iwi/hapū claims to freshwater resources

    d. freshwater resources need to be managed locally on a catchment by catchment basis within the national freshwater management framework

    e. the next stage of freshwater reform will include national-level tools to provide for iwi/hapū rights and interests.

62. Cabinet also defined some guiding criteria that highlight the overarching principles of fairness and equity for all New Zealanders, including iwi/Māori, as key considerations.

63. Ministers and the Iwi Leaders Group agreed to priority workstreams and policy objectives to develop options for addressing iwi/hapū rights and interests in fresh water. These have been, or are being, delivered through both the Freshwater Reforms and wider legislative change.

64. The four workstreams are economic development, governance, water quality, and recognition. Two out of four workstreams have been progressed satisfactorily (water quality and governance), one is underway (economic development), and one is getting started (recognition). To progress that last workstream, the Ministry proposes preparing a paper with other agencies on options to improve access to drinking water for rural communities. The Ministry recommends you consider this paper ahead of discussions at Waitangi in February 2018.

## National Freshwater and Geothermal Resources Inquiry (Wai 2358)

65. In March 2012, the Waitangi Tribunal granted an urgent hearing of the Wai 2358 claim made by the New Zealand Māori Council with others regarding the Crown's privatisation of up to 49 per cent of several state owned enterprises and the Crown's resource management reforms, including the Freshwater Reform Programme. The claimants say these sales and reforms proceeded in the absence of a settled regime to recognise and provide for Māori rights and interest in fresh water.

66. The inquiry is structured in two stages:

    - **Stage one** – the Tribunal found that the proprietary right guaranteed to hapū and iwi by the Treaty in 1840 was the exclusive right to control access to, and use of, the water while it was in their rohe. However, it also accepted that the Treaty changed Māori rights by giving the Crown governance powers, which include the right to manage fresh water in the best interests of all. The Tribunal found that Māori still have "residual proprietary rights" today. It indicated it would inquire in stage two into "how residual those rights may be."
    - [redacted]

[redacted]

67. [redacted] The Crown has undertaken to give an update to the Tribunal 10 days after Cabinet has formed to provide input to when Crown witnesses will be best able to present evidence to the Tribunal. It is expected Crown witnesses and the Iwi Leaders Group will provide evidence in the first half of 2018.

# Improving the management of fresh water

## Water quality and setting limits

68. Regional councils are primarily responsible for implementing water policy. Councils are in the process of setting objectives to maintain or improve water quality and quantity, with some, such as Canterbury and Horizons, well down the path of setting limits on resource use under the Freshwater NPS.

69. The Ministry considers that the incentives on regional councils within the freshwater management system often do not align with the outcomes the Government and New Zealand public are seeking. For example, some councils are delaying taking action to implement the Freshwater NPS. The Ministry considers that better public information and increased transparency will lead to council decisions that better reflect their communities' wishes.

70. The Ministry recommends a new system to monitor the performance and progress of councils on setting limits and meeting water quality targets, together with regular reviews by an independent body, such as the Office of the Auditor-General, or the Parliamentary Commissioner for the Environment. In addition, the Ministry recommends investigating how regional councils' powers can be increased to address over-allocation. For example, it is currently difficult for councils to review existing consents and to claw back over-allocated water takes and discharges to water.

71. The Ministry advises continuing to work with councils on how they manage fresh water and set limits on resource use. Councils are already setting limits on activities that release nitrogen, and have asked for guidance and support from central government on how to translate community objectives for lakes and rivers into limits. Support is also likely to be required for the management of other contaminants.

72. Some further changes to the Freshwater NPS are required to increase the contaminants covered. For example, work is needed on developing more attributes or measures used to define water quality, such as those relating to sediment and heavy metals. Completing this will assist councils by providing more national direction on managing these contaminants, as well as providing agreed science to support regional councils to make the changes needed to improve the health of waterways.

73. In the short-term, the Ministry recommends filling in gaps in the Freshwater NPS framework, with sediment and heavy metals as a top priority.

## Making rivers swimmable

74. The introduction in August 2017 of targets to make 90 per cent of rivers and lakes swimmable by 2040 is expected to help to improve water quality. Councils are required to report back in March 2018 on their draft plans for achieving this target. The Ministry's view is that these targets are a good start, and that information from the March report will give a stronger basis for assessing whether there is a need for a broader set of targets and measures, such as for ecosystem health (which would take time to develop), and/or raising the target or bringing forward the timeframe.

75. The Ministry recommends publicly reporting on progress towards setting regional swimming targets and plans for achieving them, following the councils' reporting in March 2018.

## Stock exclusion

76. Progressing work on stock exclusion will also make an important contribution to improving water quality. Officials have begun consultation on a stock exclusion proposal and have developed draft regulations with input from key stakeholders.

77. In the short-term, the Ministry recommends finalising and putting in place regulations to exclude stock from waterways.

78. The Ministry also recommends you release, and support the implementation of, the Good Farming Practice action plan. This plan commits the signatory primary sector organisations, the Water Directorate, and regional councils to accelerate the uptake of agreed good farming practice, such as efficient irrigation techniques that minimise nutrient leaching, and to monitor and report on progress. This is part of a wider programme of partnering with primary sector groups and regional councils to improve the health of our waterways, for example, working with Fonterra and others on the restoration of 50 catchments.

## Urban water environments

79. Other work is needed to improve urban water environments, and on policy to improve the quality, amenity and resilience of the lakes, rivers and streams in cities and towns. The first step is to ensure good links with other agencies and stakeholders to improve regulatory alignment, and to work with councils, businesses and other stakeholders to develop an agreed set of good management practices for urban water.

80. It is important to take a wide view of freshwater direction to ensure it is integrated with other pieces of national direction, such as the New Zealand Coastal Policy Statement and the National Policy Statement for Urban Development Capacity. This view needs to include the objectives, the implementation requirements and timing, and provide for appropriate management of ki uta ki tai (the mountains to the sea) – particularly in relation to estuaries and wetlands. This work will help identify the links between freshwater management and improving other environmental outcomes, such as soil health, carbon capture, and the coastal environment.

## Improving data and information

81. Improving the quality of data is important for developing efficient and fair limits to protect and enhance freshwater environments. A key part of this work will be a review of the water metering regulations that were put in place in 2009, and the National Environmental Standard on Ecological Flows and Water Levels that was proposed in 2008.

82. The Ministry also proposes to partner with NIWA and GNS to help them develop a national hydrological model using real-time data.

83. The Ministry is continuing work to improve the consistency of data collection and reporting across the freshwater management system to assist the tracking of progress both regionally and nationally.

# Improving the water allocation system

84. Addressing the water allocation system is a fundamental step to supporting more efficient use of water and improved quality. The current system is based on a 'first-in first-served' basis and effectively allows permit holders to perpetually renew rights.

85. This system works well where water is plentiful to support takes and absorb discharges and there are no competing demands for it. However, as demand for water increases and firmer limits on takes and discharges of contaminants are put in place, the current approach does not make it easy to transfer rights to higher value or more efficient uses, and councils find it difficult to adjust rights, for example, when new limits are introduced. There is limited access for new entrants and Māori land ownership issues have meant iwi and hapū have often been over-represented as new entrants. The water bottling industry, while a marginal user, has come under the spotlight and prompted public debate about private benefits from the use of public resource.

86. A new approach to allocation is needed which will better value fresh water and encourage smarter production methods for commercial use. The Ministry advises doing this through changes in decision-making and accountability, and better allocation tools. Improvements to the water allocation system need to be well coordinated with any wider reforms within the resource management and planning system. A number of issues need to be considered, as outlined below.

## Key questions for improving the system

**Who makes decisions?**

87. Providing strong national direction could improve consistency of the approach, but may make it more difficult to account for the needs of a particular catchment. A fully devolved system, on the other hand, may better capture the needs of a catchment but would require already stretched regional councils to develop their own approaches to allocation, with limited resources and expertise.

88. Approaches range from regional decision-making with more support from the centre (eg, capacity building, more national direction), to more central direction with regional implementation, through to national level institutions (eg, a new national water authority that runs markets across all catchments, including a strengthened compliance, monitoring and enforcement function). Moving towards a system that has the right balance of national direction and local discretion will lead to better outcomes, both regionally and for New Zealand as a whole.

89. To support understanding of this issue, the Ministry proposes working with regional councils primarily in strategic catchments (eg, fully allocated and over-allocated ones) to understand what institutional arrangements might be most appropriate.

**How broad should change be?**

90. Differences in catchments (such as size, land-use intensity, pressure on water takes or levels of pollution) mean that all catchments are different, and a 'one-size-fits-all' approach may not be appropriate or necessary.

**Which tools to use?**

91. There are a broad range of tools which could be used to improve the allocation system; these extend from regulatory standards to the expansion of community-based decision-making or administrative decisions based on merit, through to market-based approaches and other economic instruments, such as taxes or charges.

92. The Ministry's initial thinking is that a new allocation system should include sharper economic incentives which should lead to better decisions on the use of water, both at the individual level and for communities. The Ministry is assessing the best options for changes to the system. These need to balance a range of important objectives including: certainty for the environment; certainty for investment; addressing iwi and hapū rights and interests; and equity for existing and prospective users.

93. Two examples of sharper economic incentives are a cap and trade system, and a price on water or discharges. Note that introducing sharper economic incentives is likely to bring ownership issues to the foreground, and iwi and hapū rights and interests will need to be addressed in this.

**How fast and what pathways to change?**

94. The transition towards new allocation arrangements will be important. A key issue is the pace of change, and this is influenced by the likely economic impacts of any changes, the administrative requirements to put in place any changes, such as capacity or capability issues, and practical issues such as the level of technology available (eg, availability of water meters). This is a particular issue for the growing number of catchments where existing use rights are over-allocated. Greater speed may bring a better allocation system faster, but at a cost of more disruption. To smooth the transition, funding levers and investment could be adopted.

95. Choosing the right partners to work with, and at the right stages, will be important, both to help ensure all issues are foreseen, and to show the public and stakeholders that the Government has considered a range of perspectives.

**Who pays the cost of change?**

96. Many users have significant investments based on the current water allocation system (the right to take water or to discharge to water) and any changes could potentially create winners as well as losers.

97. Any change to the system is going to impose costs: to establish the system; to remove over-allocation to reach limits; and to allow for new users, including iwi/hapū. There are choices around who pays the adjustment costs: water users/dischargers; or ratepayers/taxpayers; or some combination of the two. If users are to pay, should the cost be borne by current users or new/future users? If ratepayers/taxpayers bear the cost, how much of this should be paid upfront versus future ratepayers/taxpayers?

**Initial advice on allocation**

98. Following your initial direction, the Ministry will work with you to improve incentives for more efficient water use and discharge reductions; starting with advice on introducing a royalty on exports of bottled water. We will also work with you to make environmental protection easier; to allow for easier transfer of rights and better access for new entrants; and to address iwi and hapū rights and interests. This will be a significant work programme, designed to support your priorities and choices.

# Waitangi 2018

99. For any new arrangements to be enduring, early steps in any transition must also address iwi and hapū rights and interests in fresh water. The transition is important and this is highlighted by the claims currently being heard by the Waitangi Tribunal under urgency.

100. The Ministry will provide advice if you decide to attend the Iwi Chairs Forum in November and to prepare you for discussions with the Iwi Chairs Forum at Waitangi in February 2018. These discussions will be an opportunity to advance the rights and interests work programme, including by widening access to drinking water for small rural communities and maraes, introducing a royalty on water bottlers and other large commercial users, and improving information systems.

# Early investments in the system

101. There are a number of measures you could undertake soon that would provide immediate support and a sound foundation for new arrangements, regardless of their design. These measures include:

- improving national information and accounting systems (eg, updating metering regulations, improving data standards and definitions and estimation models, like Overseer which models nutrient discharges)
- developing catchment case studies and modelling to better understand the impact of options and transition pathways
- improving drinking water access in rural areas, including consideration of potential funding mechanisms. (This will be important for conversations with iwi at Waitangi)
- exploring funding levers and investment in catchment scale infrastructure to smooth transition pathways.

# Over the next few months

105. In the coming months, there are several key events or issues for your attention.

| Issue or event | Leadagency | Further information |
|---|---|---|
| Publication of National Monitoring System data & findings on process<br>**October 2017** | MfE | Note that the National Monitoring System data for 2015/2016 and 2016/2017 is being published and there may be some media interest in the findings. |
| Advice on Wai 2358 hearings<br>**October 2017** | MfE | The Crown has undertaken to give an update to the Tribunal 10 days after Cabinet has formed to provide input to when Crown witnesses will be best able to present evidence to the Tribunal. It is expected Crown witnesses and the Iwi Leaders Group will provide evidence in the first half of 2018. |
| Swimmability report back on regional council progress<br>**November 2017** | MfE | The National Policy Statement for Freshwater Management has put a framework in place to improve the quality of fresh water. Councils have been asked to report back with a final indication of how they will meet Freshwater NPS targets at the end of March 2018 and we will provide a report to you on council progress. |
| Budget 2018<br>**Expected November 2017** | MfE | The Ministry will provide you with advice on proposed budget bids. |
| Statutes Amendment Bill 2018<br>**30 November 2017** | MfE | You will need to submit any proposed amendments for inclusion in the Bill. MfE has identified a number of amendments necessary to correct minor errors in the Resource Management Act. |
| Legislation bids for 2018 legislation programme<br>**January 2018** | MfE | You are required to submit a legislation bid for your portfolio to Cabinet for inclusion in the 2018 Legislation Programme. |
| Waitangi 2018<br>**February 2018** | MfE | MfE will provide advice to you beforehand, taking into account any correspondence and agreements from Waitangi Day 2017. |

# Appendix 1: Key collaborations and partnerships

| Partner | Role |
|---|---|
| **Natural resources sector**[1] | • The Ministry is the lead agency of the natural resources sector, a group of government agencies responsible for the management and stewardship of New Zealand's natural resources.<br>• As a joint directorate of the Ministry for the Environment and Ministry for Primary Industries, the Water Directorate comprises staff from both ministries in integrated teams.<br>• You will receive a separate briefing on the role and work of the natural resources sector. |
| **Local government** | • Local government is largely responsible for environmental management and implements many of the environmental regulations set by central government.<br>• The Chief Executives' Environment Forum is a regular meeting of local government and natural resources sector chief executives, which aims to maintain a strong working partnership between central and local government and enable joint strategic planning and action. |
| **Environmental Protection Authority (EPA)** | • The EPA was established in 2011 as a Crown entity responsible for national-level consenting and regulatory functions.<br>• As New Zealand's single national-level environmental regulator, the EPA plays a central role in managing New Zealand's environment and natural resources. Its remit includes administering applications for major infrastructure projects and providing secretarial support to Special Tribunals for Water Conservation Orders. |
| **Statistics New Zealand** | • Every six months, the Ministry and Statistics New Zealand deliver a state of the environment report under the Environmental Reporting Act 2015. |
| **Iwi/Māori** | • The Iwi Chairs Forum is an informal grouping of the chairpersons of more than 70 iwi across the country, established as a platform for sharing knowledge and information, and discussing the challenges and aspirations of iwi/Māori.<br>• The Iwi Leaders Group (Pou Taiao) has been established from the Iwi Chairs Forum membership to engage on natural resources issues, including fresh water. |
| **Land and Water Forum** | • The Land and Water Forum is an independent body comprising 55 stakeholder interest groups. The Forum has collaboratively produced a series of recommendations to improve freshwater management, many of which have been adopted into national direction. |
| **Non-government organisations** | • The Ministry engages with a range of environmental, recreational, professional and other non-governmental organisations both directly and through the Land and Water Forum. The Ministry partners with, and provides funding for, these groups through the Freshwater Improvement Fund and Community Environment Fund. |

[1] Ministry for the Environment, Ministry for Primary Industries, Ministry of Business, Innovation and Employment, Department of Conservation, Land Information NZ, Te Puni Kōkiri, Department of Internal Affairs, Ministry of Transport.

| Partner | Role |
|---|---|
| | • This includes professional groups such as the Resource Management Law Association, the New Zealand Planning Institute and WaterNZ, which are key fora for shaping regional implementation of national direction. |
| **Business sectors** | • Some businesses are well advanced in their thinking about how they use, value and invest in natural resources. For example, Te Hono is a diverse group of 220 chief executives and leaders working to develop and innovate for transformational change in the New Zealand primary sector and agribusiness.<br>• The Ministry has partnered with primary industry leaders to develop guidelines for good farming practice and other collaborative initiatives. The Ministry is increasingly engaging with other industries, including transport, power generation, and tourism. |
| **Science sector** | • This sector includes other government departments, the crown research institutes, universities and regional councils.<br>• One of the Ministry's key tools to influence the direction of future research investment is through the Conservation and Environment Science Roadmap. |