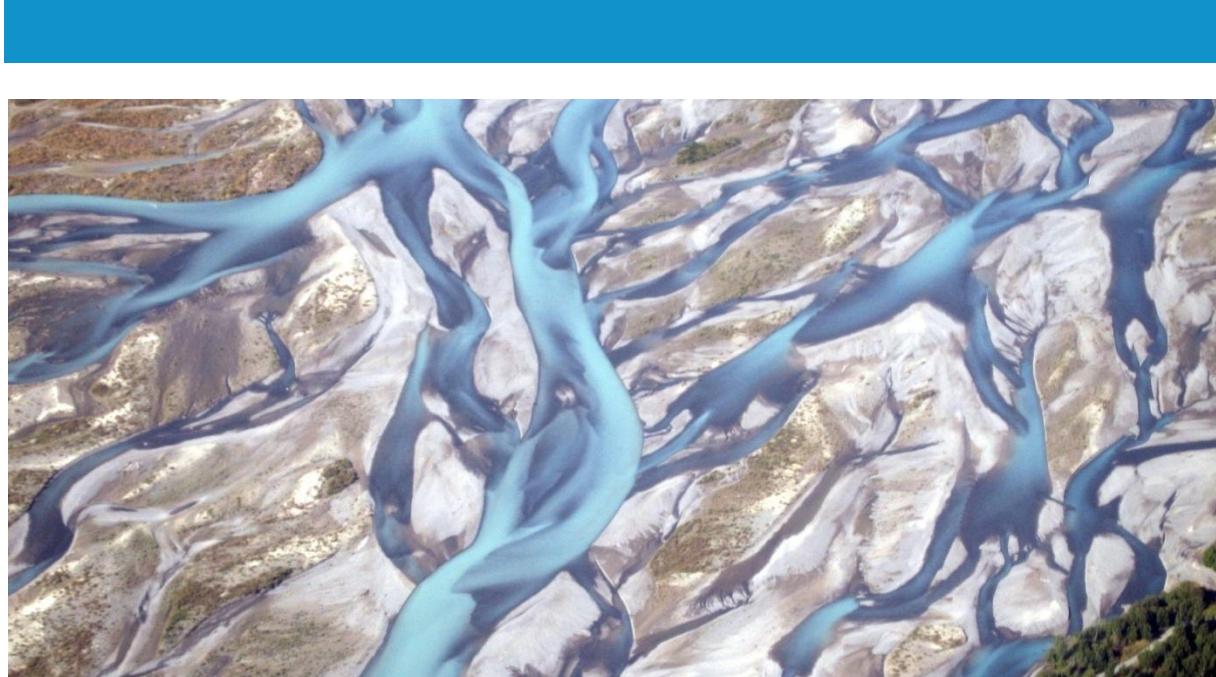




## **Second Report of the Land and Water Forum**

**Setting Limits for Water Quality and Quantity  
Freshwater Policy- and Plan-Making Through  
Collaboration**

**April 2012**



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# Introduction

Water is important to everyone in New Zealand because it provides great opportunities for all of us – for our ecologies and environments, our farms and our cities, for recreation and for tourists, as well as for energy production and industry. It is a source of life and food, and it is a central part of our identity, particularly for iwi.

We all know that we need to manage it better for all of its multiple uses and values. We also know that the health of our water bodies depends on what we do on the land. We share responsibility as city dwellers and farmers, as domestic and industrial users, as foresters, horticulturalists and energy generators, as tangata tiaki – in short, as New Zealanders.

In 2009-10 the 60 members of the Land and Water Forum – key users and stakeholders in land and water – developed a blueprint for improved water management, with assistance from central and local government officials. At the Government's request we took this first Report round the regions of New Zealand and discussed its conclusions with more than 1200 people. Most thought that our recommendations should be implemented and implemented quickly.

The Government thereupon asked us to carry out a second programme of work, based on the recommendations in our first Report and the policies it had subsequently put in place: the National Policy Statement on Freshwater Management, the Clean-up Fund and the Irrigation Acceleration Fund. It sought recommendations from us on setting objectives for the state of our water bodies and related limits on takes and discharges; on improving decision-making processes at the national and regional levels; and on managing within those limits, including through better practices and better means of allocation. It also asked us for further thoughts on a possible Land and Water Strategy.

The Forum welcomed these tasks. There is still a passionate debate about water in this country, but we believe we have crossed a watershed. There is an agreement in most quarters that business as usual will not suffice, and that change cannot be delayed. Important new policies on freshwater management have been announced, and are being worked up and implemented by Government, local government and industry.

We think that New Zealanders are close to what might be called a new reconciliation on managing our freshwater. We accept that much of New Zealand is an inhabited landscape, that agriculture and industry are vital to our economy, and that water is a key element in our prosperity. The quality of water bodies will not be uniform, and pristine quality across the country is not a realistic goal. Equally, we want clear assurances that all essential New Zealand values and needs will be maintained and enhanced – there will be bottom lines to protect the mana and ecological health of our rivers, streams, lakes, aquifers and wetlands; that we will be able to fish, swim and gather food; that provision will be made to protect outstanding water bodies; and that, over time, the quality of our water will improve. We know that collaboration

is essential to achieve this reconciliation because it depends on reaching decisions which are widely shared, and reflect both national requirements and regional and local preferences.

This first instalment of our Report recommends an integrated approach to setting national and then local objectives for water bodies (reflecting the values expressed in the National Policy Statement on Freshwater Management and parallel iwi values), and to deriving catchment limits to takes and discharges from them. It also sets out a decision-making framework, with collaboration at its centre, which we expect will lead to quicker, more effective and less litigious outcomes. Iwi are recognised within it as Treaty Partners as well as stakeholders.

The report which follows represents the consensus of the Land and Water Forum, except in one respect: the circumstances in which appeals to the Environment Court from Regional Council decisions on land and water planning should be permitted. We will therefore continue to work on this issue as we go forward.

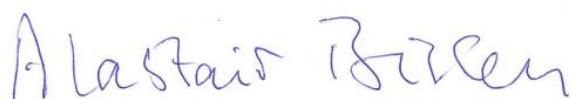
Our recommendations on this first part of our mandate are linked to ones we will make later in the year, on which we have already started work. For example, we expect that better frameworks for allocating and transferring takes and discharges will help water users to manage their businesses within set limits. So will the new approaches to improving management practices which we are considering, including industry and enterprise schemes. Some of our recommendations in this Report are linked to further and more detailed work on national objective-setting which we have offered to do while we are completing the second part of our mandate. Our work on allocation may suggest additional recommendations on governance.

We have reached these conclusions through a collaborative process, which places a high responsibility for reaching agreement on the participants. It obliges them to listen carefully to one another, to learn from what they hear, and to find ways of reconciling their interests. It produces policy recommendations which are not only tested in this debate but which reflect consensus. Decisions are of course for the Government, but these recommendations form a package and we commend them as a whole. Implementing some but not others risks the loss of the consensus and the constituency for change that it has generated. As the Government considers this report, and we continue our work, we hope that we may be able to assist by responding to feedback and questions Ministers might have.

We owe thanks to many. In the first place we are grateful to the Government for the trust that they have placed in us – and particularly to the Minister for the Environment, Hon Dr Nick Smith until late March, and now Hon Amy Adams, and to the Minister for Primary Industries, Hon David Carter. We are grateful to officials from a number of government departments, and from local government, for the assistance they have given; to a large number of scientists, social scientists and economists, who have brought their knowledge to our table, and continue to do so (NIWA has again played a lead role); and to a dedicated and smart Secretariat who have prepared material, written reports, facilitated conversations and in a whole variety of ways made sure that the Forum could function.

Most of all, I am grateful once again to the members themselves. Last time round, 30 participants did the bulk of the work. This time, about 80 have been seriously involved, and have contributed large quantities of energy, knowledge and time. The Small Group has carried the largest load, and with their usual dedication and good humour. The active observers from government and local government have made essential contributions, and my Trustees, Kevin Hackwell, Nancy Tuaine and Simon Tucker (along with the other Working Group chairs, Hamish Cuthbert and Ken Taylor) have given exceptional service.

In completing this phase of our work, we all remembered Dean Stebbing (Ngati Tuwharetoa) whose death last August robbed us of one of our most remarkable collaborators. Moe mai rā e te rangatira.



Alastair Bisley  
Chair, Land and Water Forum  
27 April 2012



# Executive Summary

The first report of the Land and Water Forum, *A Fresh Start for Freshwater*, was released in September 2010 and set out, for the first time, a blueprint for change in land and water management in New Zealand agreed in a collaborative process by around 60 major users and stakeholders. After the Forum had discussed its Report around the regions of New Zealand, the Government invited it to come up with more detailed recommendations on the framework for setting and managing objectives and limits for freshwater quantity and quality, on how they should be decided on, and on what tools, methods and strategies should be used to achieve them. This is the first of two reports on these issues, and it focuses on how objectives and limits should be set, and on the decision-making processes required. It takes its point of departure from the recommendations set out in the 2010 Report, and from the decisions that the Government has subsequently made, most notably through the National Policy Statement on Freshwater Management (NPS-FM), but also the establishment of a Clean-up Fund and Irrigation Acceleration Fund.

## Setting Limits

Limits to freshwater resource use provide certainty that the water can be used for a variety of purposes without unintended and unforeseen consequences. They inform resource users about the extractive and assimilative capacity of waterbodies available for use, protect the key resources of soil and water, and help to provide a more certain investment environment. They allow us to address cumulative effects and diffuse discharges. Without limits, there is no guard against over-allocation, which causes equity problems for existing users, and uncertainty for both environmental outcomes and economic use. In both urban and rural areas, limits to the amounts of water that we can take, or the contaminants that we can discharge or allow to run off the land, allow us to achieve agreed objectives for the state of our waterbodies.

## Strengthening the objectives of the NPS

The Government's National Policy Statement on Fresh Water Management (NPS-FM) which it Gazetted last July requires Regional Councils to set objectives and limits for water quality and water takes. It recognises a range of use and intrinsic values. It also provides broad narrative objectives for fresh water round the notion of safeguarding its life-supporting capacity, ecosystem processes and indigenous species. The Forum believes that there are two ways in which these objectives should be strengthened.

The first is by acknowledging iwi tikanga and values and giving better guidance about what they mean. Iwi have developed a description of tangata whenua relationships and responsibilities for freshwater which support and enhance the NPS-FM objectives. We think they should be incorporated into the preamble of the NPS-FM so that they can be used in the land and water management framework.

The second is by expanding the NPS-FM freshwater objectives to include specific requirements to safeguard human health from pathogenic micro-organisms and toxic contaminants which can emanate from both urban and rural sources. The safety of water for human health is fundamental to all human interaction with water, and of course underlies most recreational activities.

Taken together, these additions will lead to better protection for recreation, including fishing, swimming and mahinga kai/food gathering, while leaving room for local choices to be made, including around the levels of economic use of waterbodies.

### **National objectives and ‘bottom lines’**

Objectives and limits will need to be set at a catchment level to reflect both the geophysical characteristics of each catchment, and the values and interests of the community in each catchment. At the same time, the Forum recognises that further guidance is desirable at a national level. The national objectives in the NPS-FM (and the additions we recommend in this report) are set out in broad narrative terms. We think that a national instrument, such as for example a National Environmental Standard, is necessary to give effect to them, and in a number of ways.

In the first place it should set national minimum state objectives ('bottom lines') in respect of a limited range of indicators, including biometric, physico-chemical, physical, human health and fish productivity ones. Some will be able to be defined numerically at the national level, but a tight narrative description will be more appropriate for others (a numerical indicator, for example, can be given at a national level for bacteria, but not for sediment). A further national-level process is needed to work out this framework in detail across the range of indicators and waterbody types (recognising their spatial variability), and Forum members are anxious to assist in this task, which will add clarity to our proposals.

### **Objectives in Regional Plans**

In the second place, a national instrument will set out for the various types of waterbody three different bands above bottom lines indicating increasing levels of protection – fair, good and excellent – to assist regional decision-making. These bands will also be able to be used to guide regional communities in giving effect to the requirement in the NPS-FM that the quality of waterbodies should be maintained or improved. Under certain exceptional conditions it will be possible for a waterbody not to conform to the relevant national objectives. Guidance will be provided on a range of technical issues, including groundwater, the connectivity of water bodies and highly modified catchments (caused for example by the existence of major dams).

We believe that this will provide a consistent, comprehensible and transparent framework for regional decision-making. It will also reserve substantial discretion on timeframes, final placement of numeric objectives, and limit setting for regional and catchment communities through their participation in the regional planning process (on which see more below).

## **Limit Setting**

In order to meet objectives, limits will need to be set on resource use, both in for takes and discharges. Once a limit is set, the corresponding ‘load’ or quantity can be allocated. Because each one is different, the amount of water that can be taken from, or the amount of contaminants that can be discharged into, a waterbody must be specific to each catchment or sub-catchment. Regional councils should be required to set limits on the amount of water that is able to be taken, and the amount of each contaminant that is able to be discharged, as rules in regional plans for each catchment. Where catchments are over-allocated it will be the Regional Council, through the planning process in which the community will be involved, that will decide the timeframe within which the limit is to be achieved.

For limits to be effective and provide certainty for all parties they need to be firm, and to be applied and enforced in a transparent and predictable way. When a limit is reached it will be necessary to restrict new activities to avoid adverse cumulative effects. The most effective means to do this is through policies and rules in a regional plan. This means that once a limit is close to being met, any activity that would further diminish the water resource should require a resource consent. Resource use which exceeds the limits (whether by taking water or by discharging contaminants) will need to be managed using prohibited activity status in order to prevent agreed objectives being undermined by the cumulative effects of exceptions. At the same time, cause-and-effect relationships between land use and water are complex, and adaptive management is an essential tool. To make this approach practicable, we have therefore proposed a much more agile planning system. We expect that an improved allocative regime, which allows permits to be more easily transferred, will also strengthen it. We are working on this issue in the second phase of our mandate.

## **Collaborative decision making**

Collaborative approaches to plan-making at the regional and catchment level, and indeed for the setting of national guidelines, are a critical part of the regime we have proposed for setting objectives and limits. That is because communities, national and local, need be involved in the resolution of values and interests that is always necessary, and in the trade-offs involved. If solutions are to be apt, and to be widely accepted, the players must be able to bring their own knowledge and experience to bear, and to have direct access to broader scientific, economic, technical and indigenous information. Iwi must be able to play their proper roles.

The Land and Water Forum has pioneered collaboration at the national level in New Zealand, but there is important local and regional experience with the technique in a number of parts of the country from which we have learnt much. It provides an important foundation on which we can all build. We recommend its use as part of a general approach which:

- takes account of different viewpoints
- facilitates effective communication, learning and understanding between different elements of the same communities

- ensures that values and interests which are visible or relevant at broader scales (national or regional) are appropriately addressed in local or catchment-level decisions, or locally-driven collaborative processes
- ensures that community or catchment level values, interests and objectives have an appropriate degree of influence.

We believe that done well – and effectively “dovetailed” with existing legal processes – a collaborative approach to freshwater governance has the potential to lead to longer term solutions that are more resilient and adaptive to change, and avoid more costly, drawn-out and divisive decision-making processes.

### **Collaboration in regional and national planning**

For the purposes of setting objectives and limits in freshwater-related elements of regional policy statements and related regional plans, including catchment-level objectives and limits, the Forum proposes to establish, through a national instrument, principles of collaborative freshwater management, and insert a presumption (but not requirement) for the use of a collaborative process in policy and plan making. We expect that this will:

- provide for a clear decision on whether to use a collaborative process or for the current plan-making system to continue when appropriate
- provide a process for determining participation in a collaborative process
- lift transparent scientific and technical analysis into the early stages of the process,
- incentivise good faith participation in collaborative processes
- ensure rigour by requiring an independent panel to consider all relevant aspects of the proposed plan in a public process, so that those who have not participated in the collaborative process can be heard, and issues which the collaborative process could not agree on can be resolved
- ensure that iwi have the option of both participating as part of regional plan decision-making, and in the collaborative process
- provide for a limited set of circumstances when there can be merit appeal rights.

We propose similar changes to the processes used to develop freshwater-related national instruments.

### **Benefits of collaboration**

Collaborative processes are unlikely to be cheaper in the short term. We expect however that, used properly, the proposed collaborative plan and policy making process will be generally faster (in some cases significantly faster), more efficient and more equitable than the status quo. We also expect it to speed up over time as people become accustomed to the new way of working, as they improve their capability to collaborate, as social capital develops, and as jurisprudence around the procedural steps of the process settles.

In addition to a reduction in the time it takes to make freshwater-related policy and plans, over time the Forum expects that the proposed collaborative process will help to:

- increase the quality of and commitment to freshwater planning and policy documents
- increase the agility of the planning framework through the on-going use of the collaborative group (and the social capital generated through the plan-making process) to make timely and equitable technical amendments to plan provisions in response to new information
- streamline consent requirements for proposals that accord with agreed objectives.

It may take some time to build the necessary capacity to make collaboration work smoothly. We believe that the government should play an active role in facilitating the development of this capacity.

### **Plan Agility**

Greater agility in the planning system is a prerequisite for setting firm limits because it allows new technical information to be incorporated easily into limits and plans, and accommodates innovation by industry and by regulators in dealing with limits. We propose steps to allow a collaboratively developed plan to specify the means by which greater flexibility could be introduced into the plan adjusting process, instead of relying on the process set out in Schedule 1 of the Resource Management Act. In this way minor plan changes could be dealt with through a separate process from major plan changes, such as changing freshwater objectives. The nature of the targeted process would need to be designed and agreed during plan-making, as would the criteria that would guide decisions on which path to take.

Increasing the agility of the planning process would be enhanced by amending the RMA to enable minor and technical updates to documents referred to by reference in a plan without needing to go through a plan change.

### **Transition**

The period of transition while limits are being set in regional plans will involve a risk that there will be a ‘rush’ to capture the available capacity (whether water quantity or the amount of a contaminant that can enter the water). The difficulty and cost of clawing back over-allocation suggests that close monitoring of this is needed. The Forum has considered a number of possible tools that could address this risk, including the use of interim limits, moratoria, and default limits. The use of possible transition tools should be periodically reassessed as the government monitors the addition of further resource loads in catchments where there are currently no limits.

The Forum has also specifically considered the proposed NES on Ecological Flows in this context, and made some recommendations about how this should be reviewed. The Forum will be more broadly considering transition risks and the need for any further transition tools as part of its September 2012 report.

The Government should assist in the implementation of a more collaborative approach to water management, including guidance on the attributes of successful collaborative processes and simple user manuals and training programmes.

# Context

1. The first report of the Land and Water Forum, *A Fresh Start for Freshwater*, was released in September 2010 and set out, for the first time, a consensus on changing water management in New Zealand that was forged by key water users and stakeholders, and by five river iwi.
2. The report contained a suite of 53 integrated recommendations that identified a set of desirable outcomes and goals for freshwater management in New Zealand and recommended a number of high-level policy changes to achieve them.
3. The 2010 report noted that, although New Zealand's fresh water is still good overall and rates well internationally, its quality and availability has been deteriorating. New Zealand has made good progress in clearing up point source pollution over the last twenty years, but monitoring shows that our water quality is declining in many places, particularly in lowland waterbodies. Many urban waterways remain highly polluted, including on account of sewage leakages, stormwater run-off and discharges from processing factories. At a national level though, diffuse discharges now greatly exceed point source pollution.
4. There are a number of reasons for this trend. A central difficulty is that as a nation we have found it hard to set or manage to limits. Without limits it is hard to manage diffuse discharges – nutrients, microbes, sediment and other contaminants that wash into water from the land – and impossible to deal with the cumulative effects on water bodies of water takes on the one hand and diffuse and direct discharges to water on the other.
5. There are also governance problems. Planning and consent procedures have been marked by litigation, cost and lengthy timeframes. While it is by no means a universal sentiment, and while there has been a recent improvement in council practice, some communities and stakeholders feel that regional councils have often adopted a “decide-announce-defend” approach to freshwater plan- and policy-making.
6. Some councils need additional resources and stronger governance skills. Iwi, who have a Treaty relationship with the Crown, and for whom water is a vital taonga, have no clear path to engage in planning and decision-making.
7. Many catchments are over-allocated or approaching full allocation. Water scarcity is an increasing problem in some areas, and may be worsened by changing weather patterns, but our current system of allocating water does not encourage efficient use or easily allow allocation or transfer to best use.
8. Water is vital to our economic development, but our water management is getting increased scrutiny from New Zealanders concerned at declining water quality, from tourists, and from overseas buyers, driven by their customers' insistence that their suppliers follow good environmental practices.
9. The 2010 report provided an agreed direction to resolve these issues. Following the report's release the Forum, assisted by the Government, organised a series of engagement meetings all over the country. More than 1,200 people attended those

meetings, which took place at the end of 2010 and the beginning of 2011. Participants contributed their knowledge and views, and gave a positive response to the Forum's report and the direction it points to. These engagement meetings resulted in a further report to Government in April 2011.<sup>1</sup>

10. The Government responded with a series of initiatives. In May 2011 the Government released the National Policy Statement for Freshwater Management 2011 (NPS-FM). The Resource Management Act 1991 (RMA) requires local authorities to amend regional planning documents to give effect to any provision in the NPS-FM that affects those documents. In particular, the NPS-FM requires regional councils to set objectives and limits for fresh water.
11. The Government also announced the creation and funding of The [Fresh Start for Fresh Water Clean-up Fund](#), which provides \$15m over two years (2011/12 and 2012/13) for major projects to restore waterways affected by historical pollution. An [Irrigation Acceleration Fund](#) of \$35m over five years was also announced. It aims to unlock the economic growth potential of our primary sectors by developing more effective and efficient water infrastructure.
12. At the same time, the Land and Water Forum was asked to continue its consensus-building effort and come up with more detailed recommendations on how, in practice, to go about setting and managing limits and objectives for fresh water quantity and quality, how they should be designed, and what tools, methods and strategies should be used to implement limits and achieve objectives. It is doing so through two reports to the Government – this one, and one which it will make in September 2012.

## Important Linkages of this Report

13. This report contains a number of important linkages. These come in three forms. First, the report needs to be seen in the context of our September 2010 report. The recommendations from that report provide the basis for the Forum's current work phase.
14. Second, this set of recommendations is a package. There are many key linkages between the recommendations – for example, the need to ensure that necessary changes can be made quickly in a 'hard limits' environment; and the need for communities to have a close involvement in the setting of local limits within an overall national direction. There are also a number of integrated elements in this report, and the report in September 2012, that will provide for flexibility in the way that water management can be carried out. These include: the use of interim limits, together with targets and timeframes; greater agility in the planning process; the ability to use different mixes of limits and a range of management measures; and the transferability of entitlements.
15. Third, a number of the elements of this report are linked to the subject matter of the report that the Forum will make in September 2012. Some of these linkages include:

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<sup>1</sup> These documents, and others relating to the first phase of the Land and Water Forum's work, can be found on our website: <http://www.landandwater.org.nz>.

- a. governance and decision-making arrangements for managing to quality and quantity limits, including allocation systems
- b. the use of adaptive management, including the relationship to plan agility
- c. Water Conservation Orders
- d. information, science, Mātauranga Māori and monitoring requirements, including identifying significant knowledge gaps to help reduce uncertainty and integrate the information needed to inform the limits setting and plan agility process, with that needed to manage within limits
- e. the way that allocation systems interact with a limits regime.

## Foundations

- 16. It has been difficult to set objectives and limits and manage within them under the New Zealand freshwater management framework. There are a range of reasons for this including:
  - a. an historical reluctance to use national instruments and to provide a strategic frame within which fresh water is to be managed
  - b. lack of political will both nationally and regionally to set limits which has meant that tensions between different values and interests have had to be resolved at too low a level (i.e. at the resource consent rather than planning level)
  - c. the lack of a clear path for iwi to engage in national and regional planning and decision-making processes
  - d. inconsistency between and within regions, coupled with a lack of rigour and incoherence in policy, planning and decision-making in some regions
  - e. persistent inconsistencies in data collection, monitoring and analysis
  - f. variable monitoring and enforcement of rules and consent conditions.
- 17. Limits on freshwater resource use are derived from the objectives we set for the state of our waterbodies – and the limits in turn provide the means by which the objectives can be achieved. These objectives are arrived at by considering the range of values and interests that people and communities have for the use of water. The values and interests are wide in scope – cultural, environmental, economic and social.
- 18. Limits provide certainty that water can be used for a variety of purposes without unintended and unforeseen consequences. They inform resource users about the extractive and assimilative capacity of waterbodies available for use, protect the key resources of soil and water, and help to provide a more certain investment environment.
- 19. Limit-setting is an important tool in addressing cumulative effects, and diffuse discharges. Without limits there is no guard against over-allocation, which causes equity issues for existing users and uncertainty for both environmental outcomes and economic use. To set limits you need clear objectives.

20. The current approach to setting freshwater objectives and limits has led to and incentivised a litigious approach to freshwater management. This has shaped the capabilities and management approaches regional councils have developed, the decision-making of elected representatives, and the behaviour of resource-users and stakeholders.
21. The way in which limits are set is critical to the confidence that people have in them. In the Land and Water Forum 2010 report we suggest that a collaborative approach to freshwater governance effectively dovetailed with existing legal processes has the potential to lead to more effective, durable and practical solutions than standard approaches. Done well, collaboration can lead to longer term solutions that are more resilient and adaptive to change. Collaborative approaches allow parties to deal with each other directly, allow an open exploration of all of the values and interests of participants early in the planning process, and can lead to a more durable and resilient outcome.
22. We believe that a more collaborative and less adversarial approach to freshwater policy- and plan-making has the potential to reduce the time and costs associated with setting freshwater objectives and limits, and to significantly improve outcomes.

### **The approach of the Land and Water Forum**

23. The Forum first addressed these issues in its 2010 Report. Its recommendations reflected our consensus that limits for water quality and quantity were necessary, and that we need a change in the culture of freshwater planning and management in New Zealand.
24. The Government has now asked the Forum to report on:
  - a. What is needed to effectively implement the limit-setting approach to water management (currently reflected in the NPS-FM), including consideration of what central government needs to do versus what local government needs to do, the role and responsibilities of water users, and nature and scope of limit-setting tools.
  - b. What efficient and improved decision-making structures for limit-setting might look like, including provision for stakeholder involvement, specific provisions for iwi participation in limit-setting processes and decisions at catchment, regional and national levels and how those limit-setting processes interact with broader resource management processes.
  - c. Methods and strategies for achieving limits and targets through managing the effects of land use on water.
  - d. How to manage within limits by developing more effective methods and strategies for allocating water, including trading and/or transfer systems.
25. This report addresses the first two of these topics only - our September report will address the latter two, as well as the desirability of developing a national strategy for freshwater management. (A copy of the Terms of Reference agreed with the Government by the Forum is attached as **Appendix 1**.) In fact, of course, the various elements of our mandate are interdependent: decisions on setting limits will be informed by the ways we have to deliver them, including through the methods by which permits to use water are allocated

and transferred. At the same time, the existence of limits makes it possible for us to consider approaches, including more facilitative approaches to the transfer of water between users, which would be damaging without them. In that sense, the present report is incomplete – a down-payment, so to speak, on the whole.

26. This report builds on a number of the recommendations made by the Forum in 2010 in the areas of setting limits and changes to governance. The 2010 report recommended, among other things:
  - a. Central Government should define national objectives for the state of our waterbodies and set an overall timeframe within which they will be achieved, through instruments (National Policy Statements and National Environmental Standards) made under the RMA.
  - b. Regional councils must give effect to these national objectives at catchment level taking into account the spatial variation in biophysical characteristics of their waterbodies and their current state, and by expressing objectives at a regional level as measurable environmental states, and linking these to standards and limits.
  - c. Regional councils must engage with communities including iwi about the way their waterbodies are valued, and work collaboratively with relevant land and water users and interested parties throughout the catchment to set specific targets, standards and limits through their Regional Plans, including timeframes for meeting them.
  - d. Catchment standards and limits must at least meet national level objectives.
  - e. Central government should establish uniform processes for accounting for spatial variation of waterbodies, defining objectives and standards setting, and implementation by regional councils.
  - f. Both processes and outcomes should be monitored and regularly reported on.
  - g. Collaborative approaches should be mandated for the development of any land and water strategy, or regional water plan.
  - h. Improvements should be made to the process for developing any National Environmental Standard to ensure the process has a more collaborative option.
  - i. Regional council<sup>2</sup> performance in water and related land use management should be improved through:
    - i. government appointments to regional council committees or councils
    - ii. the development of non-statutory regional water strategies
    - iii. the mandatory development of integrated regional water plans under the Resource Management Act, according to a national template and using a collaborative approach

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<sup>2</sup> References in this report to regional councils should also be read as applying to unitary authorities.

- iv. ensuring that iwi have adequate representation in regional committees dealing with water
  - v. the establishment and maintenance of comprehensive water data sets on a basis consistent with national data
  - vi. using their existing powers under section 30 of the RMA to control those land uses that impact on water quality.
- j. Regional councils should have the option of:
- i. notifying a regional water plan under Schedule 1 of the RMA and following that process in full, or
  - ii. after having used a collaborative approach, making a decision on the plan without conducting a hearing as set out in Schedule 1, and having that decision referred directly to the Environment Court if it is challenged by any party.
- k. The Forum of regional council and relevant government agency Chief Executives should be strengthened to improve ‘whole of government’ direction, provide essential links between central and regional government, and focus on removing obstacles to implementing improved water management.
27. These recommendations provide the start of the Forum’s consideration of the current phase of its work.

## **Values and Interests**

- 28. The NPS-FM requires every regional council to make or change its regional plans to establish freshwater objectives and set quality limits for all bodies of fresh water.
- 29. Without clear objectives and limits, values for fresh water which many New Zealanders share will be at risk. Values for fresh water can be expressed at the national level associated with national responsibilities, directions and preferences. Communities in catchments and sub-catchments also have values and interests which are local and specific, and which also need to be considered and incorporated into the process of setting objectives. The values and interests held by iwi in fresh water are an important component.
- 30. Freshwater objectives in short need to account for multiple values and interests held by New Zealand’s communities at national, regional and catchment levels. Reaching a resolution on how to account for these multiple values and interests is fundamental to the setting of objectives to which fresh water will be managed.
- 31. Some widely-held values have been recognised in legislation and noted in the preamble to the NPS-FM. Examples of nationally recognised use values include economic values for food production and renewable energy, drinking water for domestic supply and stock, disposal of waste, transport and industry, and recreational use.
- 32. Intrinsic values are also recognised at the national level. These relate to safeguarding the life-supporting capacity of water and associated ecosystems, and sustaining its potential to meet the reasonably foreseeable needs of future generations.

33. At the local level, where decisions need to be made to accommodate the range of values and interests in water management, communities consist of individuals and institutions, many of whom reside in the area, as well as some that do not. Some communities are changing as a result of different investment and demographic patterns. This means that there will be a range of values and interests at play within a community in any given freshwater objective- or limit-setting process. All those values and interests will need to be taken into account if a plan is to gain the buy-in of the community. Setting freshwater objectives can cause tension between different elements within communities and/or between broader and more localised objectives, and requires accommodations and trade-offs.
34. Many of the recommendations from the Forum’s 2010 report refer to the role of iwi in freshwater decision-making processes. Iwi have particular rights and interests in freshwater management derived from their status as Treaty partners. This includes obligations and responsibilities as kaitiaki as well as a range of development aspirations. It is important that the freshwater plan and policy-making framework has the necessary flexibility to accommodate the diversity of views among iwi, including the varying expectations of mana whenua regarding how they wish to engage in these processes.
35. The sustainability, acceptability and integrity of freshwater objectives depend on the effectiveness of the governance system within which discussions and judgments about values and interests occur. We believe that the resolution of competing values and interests should take place within a regulatory framework that helps decision-makers to:
  - a. take account of different outlooks
  - b. facilitate effective communication between different elements of the same communities
  - c. ensure that values and interests which are visible or relevant at broader scales (national or regional) are appropriately addressed in local or catchment-level decisions, or locally-driven collaborative processes
  - d. ensure that community or catchment-level values, interests, objectives and knowledge are fully taken into account
  - e. ensure that technical information and advice is rigorously considered and applied.
36. A strong regulatory framework with clear direction cascading from national to regional to local levels is an important part of a robust freshwater management system. Advancing discussions on values and interests in particular communities will not only have to do with prescribing the use of specific models or tools, but also with fostering effective participation and relationships, developing a sound base of information, and following a robust, transparent approach to freshwater objective and limit-setting. In its first tranche of work, the Forum identified collaborative processes as a means for achieving this.
37. In light of the matters discussed above, our deliberations have consistently underscored the importance of:

- a. recognising the status of iwi as Treaty partners as well as participants in decision-making processes and structures
  - b. strengthening the regulatory framework based on clear national direction
  - c. ensuring an even-handed treatment of participants and a recognition of values at different levels – from national to local
  - d. incentivising good faith participation in freshwater planning and decision-making that is focused on achieving outcomes that benefit the values and interests of all stakeholders.
  - e. ensuring that processes are efficient and rigorous, and lead to sound decisions that iwi and stakeholders understand and to which they can make a credible commitment.
38. The set of proposals put forward in this report represents a package of elements that provide the basis for the balancing of national and local interests in setting objectives and limits. It does this firstly by using a national objectives framework that will provide direction to local decision-making to some extent. Second, it recommends changes to the decision-making approach to make it more inclusive and collaborative. Both of these components incorporate a range of mechanisms that ensure flexibility in the way that local interests can be accommodated, and necessary transitions eased.
39. The recommendations made in this report reflect the Forum’s advice on these matters.

# Setting Limits to Improve Water Management

## National Objectives for Fresh Water

### The NPS for Freshwater Management – July 2011

40. The NPS-FM that the Minister for the Environment promulgated in July 2011 constituted an important step forward in land and water management in New Zealand. On the question of limit-setting it provides the following guidance:
- a. Regional councils are required to set freshwater objectives and limits.
  - b. Over-allocation<sup>3</sup> is to be avoided, and existing over-allocation is to be phased out.
  - c. The overarching objective for the state of fresh water bodies is to safeguard the life supporting capacity, ecosystem processes and indigenous species including their associated ecosystems.
  - d. The overall quality of fresh water within a region is to be maintained or improved.
  - e. In over-allocated situations regional councils are required to set targets (a limit), including defined timeframes within which those targets are to be achieved.

### National Objectives

41. The NPS-FM has begun the multi-level process of setting objectives by providing (in Objectives A1 and B1)<sup>4</sup> a broad narrative objective statement for fresh water. This objective seeks to “*safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of freshwater in sustainably managing the use and development of land, and of discharges of contaminants.*” Objective A2 includes more specific directives to maintain or improve “*the overall quality of freshwater within a region ... while*” protecting “*outstanding freshwater bodies*” and “*the significant values of wetlands*” and “*improving the quality...*” of degraded waterbodies.

### Should further national objectives be specified?

42. Where a range of local interests are at stake in a regional decision-making process, there is potential for broadly held national public values to be overlooked or to be given less than their due weight. The question here is: are there national values and interests, beyond those reflected in the current NPS-FM objectives, that are important enough to warrant the development of further national objectives?
43. The preamble to the NPS-FM notes a number of national values for fresh water. The RMA notes matters for consideration in decision-making under the Act that have implications for the management of fresh water. Some of these could be further specified, and

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<sup>3</sup> Over-allocation can be read in both a quality and quantity sense. The glossary to this report has a full definition.

<sup>4</sup> There are other objectives expressed in the NPS, including those relating to allocation which will be relevant to our reporting in September 2012.

detailed material provided to support regional decision making. Our view, however, is that there are two additional key areas that need recognition in the NPS-FM. The first is the recognition of iwi values for fresh water. The second is the need to protect human health.

## **1) Iwi Values**

44. The preamble to the NPS-FM notes that addressing the values and interests of tangata whenua and the involvement of iwi and hapū is key to meeting obligations under the Treaty of Waitangi. Section D of the NPS-FM goes on to direct local authorities to involve and work with tangata whenua in the management of fresh water.
45. The active provision for the values and interests of tangata whenua through local authority planning processes may be strengthened and enabled by the inclusion of a description of those values and interests in a national instrument. The preamble to the NPS-FM creates an opportunity to provide some guidance on this matter, while retaining full discretion for iwi and hapū to define and elaborate their particular values and interests at the local level.
46. A model for aligning an iwi world view of (tangata whenua) relationships and responsibilities in respect to fresh water with the direction of the framework set out in this report has been developed by iwi for the Forum (see diagram as **Appendix 2**). This model differentiates a set of values (Mana Atua, including Mauri, Wairua, Mana) – akin to yet distinct from intrinsic values – from six classes of use values. The use values include: Wai Whakaika – ceremonial waters, Wai Māori – drinking and other consumptive water, Mahinga kai – food gathering, He Ara Haere – navigation or right of passage, Au Pūtea – economic use, and Wai takaro – recreation<sup>5</sup>.
47. Understanding iwi values for fresh water in this way should support their effective consideration in practice and allow iwi to engage more fruitfully in the process of objectives setting. We recommend that these perspectives on iwi relationships with fresh water should be incorporated into the preamble to the NPS-FM, to acknowledge them and their connections with the formal NPS-FM objectives.

## **2) Human Health**

48. Fundamental to all human interaction with fresh water, including for ceremonial, recreation, mahinga kai and commercial use activities, is the safety of water for human health. The key water quality risk factors are concentrations of pathogenic micro-organisms, and toxic contaminants such as heavy metals and organic compounds. These contaminants come from both urban and rural sources.
49. Health and safety of communities and the maintenance and enhancement of amenity values are both national values recognised in the Resource Management Act.<sup>6</sup> Amenity values and recreation of various kinds may require the management of a range of other

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<sup>5</sup> Mana Atua represents the water resource in a holistic sense, including the life cycle of water as it circulates between the realms of Ranginui and Papatuanuku. Mana Tangata represents the human interaction with that system, and the impacts of our interaction on the resource within the cycle.

<sup>6</sup> In section 5 and section 7 respectively.

aspects of waterbodies and the surrounding environment, but without basic safety for human health in contact with water, such uses may be precluded in some cases.

50. We therefore consider that human health is a value that should be represented in national objectives for freshwater management. Nationally applicable numeric objectives for attributes involving risk to human health – specifically pathogenic micro-organisms and toxic contaminants – already exist in guideline documents and should be specified in national instruments where these are fit for purpose.

### 3) Other National Values

51. Some particular widely held use values for fresh water were considered by the Forum, especially swimming and fishing and mahinga kai (food gathering). It was difficult to specify a full range of attributes for these values that should be applied to **all waterbodies nationally**. However, these are important activities which need to be addressed. The inclusion of provisions to safeguard human health in national objectives, as set out above, and in guidance material, will cover off a critical issue for all recreational contact with fresh water. In addition, the inclusion of technical standards to support Objective A1 of the NPS-FM that include a fish productivity index as a measure of protection of indigenous species, will help to secure accessible opportunities for fishing and mahinga kai.
52. Further support for regional councils in objective setting on fishing, swimming and mahinga kai could be provided by including relevant technical guidelines in the framework of national guidance recommended later in this paper to support the NPS-FM national objectives. These guidelines would provide sets of parameter values for water quality attributes that represent three levels of protection – fair, good and excellent.
53. These could be left for regional councils to adopt as they see fit, or a requirement could be introduced for councils to transparently identify the areas they are managing for particular uses and the level of protection for which they will be managed. The latter option would enable regions to make their own choices on these objectives, while providing transparency around these decisions against the national framework.
54. Accepted guidelines already exist for trout and salmon habitat and contact recreation that could also be incorporated into national guidance material.

#### ***Recommendation 1***

The government should support and enhance the objectives currently in the National Policy Statement on Freshwater Management (NPS-FM) by:

- a. the incorporation of the substantive content of the material developed by iwi on (tangata whenua) relationships with fresh water (attached as **Appendix 2**), into the preamble to the NPS-FM, to provide acknowledgement of those relationships and their connections with the formal objectives
- b. expanding the existing objectives in the NPS-FM to include managing the risks to human health from micro-organisms and toxic contaminants, to apply to all waterbodies.

## **Form of National Guidance**

55. The national objectives in the NPS-FM are set out in broad narrative terms. This leaves considerable latitude for interpretation and therefore for variation in the standard of water quality achieved under the NPS-FM. We believe that more specific detail on the meaning and intent of national objectives should be provided to regional councils through national instruments, in the interests of achieving these goals in a nationally consistent and administratively efficient manner. This could be achieved through one or a combination of possible approaches. Which means are appropriate will depend on the particular values and objectives being addressed and their importance at the national level. Recommended approaches include:
- a. providing supporting material that discusses national objectives in more detail, so that linkages between general objectives and approaches to implementation can be clearly understood
  - b. nominating the parameters (discussed in paragraph 69) that describe the state of the waterbodies for which numeric objectives might be set, and the appropriate level of decision-making for setting them (i.e. national/regional/local)
  - c. providing a set of waterbody classes appropriate to national objectives that can assist in setting more specific and relevant objectives for groups of waterbodies
  - d. providing specific numeric objectives for parameters where the appropriate level for setting them is the national level
  - e. providing alternative sets of numeric objectives that represent differing levels of protection that might be chosen at regional or catchment level
  - f. setting decision processes<sup>7</sup> or other contingent directives that would be triggered under nominated conditions in a waterbody, requiring assessments or other specific management responses from regional authorities.
56. In addition, guidance to regional councils on technical processes and methods to be followed should be provided at the national level to ensure consistency in how objective- and limit-setting is carried out.

## **Guidance and Spatial Variation**

57. Water quality factors vary spatially and temporally depending on the natural setting, and some vary more than others. This means some numeric objectives are difficult to set at a national scale. Maximum concentrations of indicator micro-organisms can be set at the national level as part of a minimum health standard.

On the other hand, for example, water clarity (suspended sediment) varies a great deal as a result of natural processes in differing environments depending on the nature of the

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<sup>7</sup> A decision process is a specified set of conditions that trigger a particular action or change in management. The “decision” is, in effect, agreed in advance to be applicable if the conditions are met. Decision processes are commonly used in medical diagnosis, and in economics to guide action under complex conditions. They are also applied in management of natural resources under uncertainty to avoid having to consider a range of options and analysis under the stress imposed by impacts of adverse circumstances.

terrain, soil type and land cover. Sediment is very flow dependent. It often moves through catchments in pulses, usually caused by large rainfall events. Sediment often has extreme temporal variation. A national numeric objective for clarity or suspended sediment would, therefore, not be practicable. However, this does not mean there is not a national value for managing the sediment load contributed by land use activities. The question is how to express this type of value as an objective at the national level so as to ensure it is taken into account by those making decisions at the catchment level.

58. Options in this case range from guiding narrative statements through to detailed procedural requirements to identify specific and measurable management objectives, to monitor sediment loads, assess and attribute load origins in the catchment, and take meaningful management steps. The use of a decision process could assist with this. Thus a trigger threshold could be set (in guidelines) for say, emergent contaminants or sediment/water clarity that, if met, would trigger a process to assess a catchment and take appropriate management action.
59. We think that national direction and guidance material for water management should be provided in a legally binding national regulatory instrument. This would provide the platform for making the broad objectives of the NPS-FM more specific— as tight narrative and numeric freshwater state objectives – in order to clarify operational intent.
60. To ensure consistency, the preparation of this national instrument is likely to require the review and, where appropriate, amendment of relevant legislation, including Schedule 3 and s.69 of the RMA. The review and amendment of existing technical guidelines may also be necessary.
61. Directives and guidance material regarding regional processes for setting objectives and limits should also be provided, also in a national instrument.
62. Guidance may be “harder” or “softer” in the sense of the degree of compulsion on regional authorities to use or adhere to it. We consider that guidance for national objectives in the NPS-FM should be as specific as possible and framed as directives (“hard”), to the extent that this is practicable for general national applicability, or in respect of a nationally defined waterbody class.

#### ***Recommendation 2***

The government should, through a national instrument, direct regional councils to give effect to national objectives at catchment scale taking into account the spatial variation in biophysical characteristics of their waterbodies and their current state, by expressing objectives at a regional level as measurable states. Where possible these objectives should describe the desired state numerically.

Regional councils should be required to set resource use limits for the taking of water and the discharge of contaminants as rules in regional plans, to give effect to these objectives for all waterbodies.

### ***Recommendation 3***

In preparing a national instrument, the government should review and, where appropriate, amend relevant legislation, including Schedule 3 and s.69 of the RMA, to ensure consistency.

## **Objective Setting at National and Local Level**

63. Key principles for considering whether objectives should be set at national or regional level include:
  - a. biophysical and information realities (spatial variation and data availability)
  - b. the need for an appropriate balance to be struck between the recognition of key national values for fresh water and the right of local communities to participate in the setting of objectives and to have their values recognised in outcomes
  - c. administrative efficiency and cost effectiveness
  - d. national consistency and clarity of objectives.
64. The first two of these considerations mean that not all numeric values for freshwater state objectives can or should be decided at national level. However, subject to these constraints, the last two principles suggest clear and specific direction on national objectives should be provided at the national level to the extent possible.

## **Objectives-Limits Cascades**

65. In order to establish freshwater state objectives under these principles, a series of increasingly precise objective statements may be required that culminate, where practicable, in numeric objectives. Moving from the national level to the local (sub-catchment), each of these objectives will be more specific to the circumstances at hand, forming a cascade of objectives down to the numeric level where possible, from which limits can be set (see **Appendix 3** for examples of objectives-limits cascades).
66. A cascade of increasingly specific objectives would use policy instruments at different levels in the planning hierarchy (i.e. through national and regional instruments). The RMA sets overarching narrative goals (national level) in the Act itself (s.5) and a little more specifically (but still narratively) for water quality in s.70. The narrative objectives in the NPS-FM provide limited further specificity. A national instrument could set more specific objectives in a nationally strategic way.
67. Regional policy statements and regional plans (including region-wide or catchment plans) would then give effect to national objectives by setting specific freshwater state objectives and limits in collaboration with the community. Such use of all RMA planning levels to progressively increase the detail with which water management objectives and associated limits are defined would seek to include and integrate the full range of national and local values and objectives.

## Numeric Freshwater State Objectives

68. We think that the set of numeric freshwater state objectives from which limits are derived should be specified in regional plans. In some cases it may be difficult to set a numeric objective at all (e.g. for stream or channel morphology). In these cases the narrative objective should be as detailed as possible, to adequately guide limit-setting for factors that may affect the objective (in this example, flows).
69. In total there is a limited set of measurable numeric parameters that describe the state of fresh water. The following parameters need to be reflected as freshwater state objectives to be set in regional plans:<sup>8</sup>
  - Suspended sediment and/or sedimentation levels and/or clarity
  - Algae
  - Macrophytes
  - Micro-organisms
  - Temperature
  - Dissolved oxygen
  - Toxic contaminants
  - Habitat space
  - Macro-invertebrate health
  - Fish Productivity Index
  - River connectivity
  - Channel morphology and processes
  - Salt water intrusion into aquifers

Regions can set these measurable objectives by waterbody type or catchment, or a combination of both.

70. It will also be appropriate in some circumstances to set numeric freshwater state objectives for freshwater bodies (in regional plans) that will assist in achieving water quality objectives in the receiving marine environment. This recognises the interconnection between fresh water and marine environments.
71. The choice of numerical values for most of these parameters will depend on the particular outcome being sought, including the level of protection desired for various values some of which are competing with one another.
72. A national instrument should provide tables to assist objective setting, indicating three levels of protection (Fair, Good, and Excellent). Numeric freshwater state objectives (bottom-lines) should be set at the national level in a national instrument, with associated levels of protection, for the following:
  - Micro-organisms
  - Temperature
  - Dissolved oxygen
  - Salt water intrusion

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<sup>8</sup> See Appendices 4 and 5 for more detail on this list of parameters.

- Algae
  - Habitat space
73. Those issues for which minimum numeric objectives cannot be specified at national level should not be overlooked. National guidance material, including narrative objectives, should be provided that recognises the significance of major contaminants and encourages councils to give appropriate priority to their management. Sediment in particular is a ubiquitous problem with large-scale impacts, where narrative objectives and technical guidance could usefully support regional councils.
74. **Appendix 4** to this paper illustrates how a framework for numeric and tight narrative objectives would be generated to support the current and recommended national objectives. Deciding on specific numeric objectives involves some value judgements (including economic) and trade-offs and the consideration of technical information. Work to date by the Forum has generated indicative values for several of 22 national water body classes<sup>9</sup>. Further work is required to fully populate and finalise this framework. We think that this should be done through a collaborative process involving stakeholders, iwi and scientists. That group would review and refine the following:
- a. the list of indicators and parameters
  - b. the assignment of parameter values for minimum numeric state objectives and breakpoints between the bands for ‘Fair’, ‘Good’ and ‘Excellent’ categories
  - c. the classification of waterbody types, in particular for lakes, wetlands, estuaries and hydrologically modified catchments
  - d. an analysis of the measurable state objective options against current water quality and quantity state data
  - e. the options for either dealing with wetlands and estuaries through a similar framework, or to continue to deal with these classes through use of tight narrative objectives in regional plans.
75. The Forum is prepared to coordinate the completion of this work this year, given suitable support, to provide the technical basis for a national instrument to guide regional decision-making.

#### ***Recommendation 4***

The government should, through a national instrument, establish a national framework under which regional councils set freshwater state objectives to give effect to the objectives in the NPS-FM. The national framework should:

- a. define minimum numeric state objectives (bottom lines) for a limited range of freshwater state parameters

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<sup>9</sup> The 22 high level spatial classes of the Rivers Environmental Classification.

- b. provide narrative objectives and technical guidance on all other parameters for which regional councils are to set numeric objectives
- c. calibrate parameters as a series of bands (*fair, good and excellent*) above bottom lines, to support regional decision-making in balancing local values for waterbodies
- d. provide guidance and options for regional councils to set numeric objectives within the fair, good and excellent bands for particular waterbody types and situations.

The indicative list of measurable state objectives (**Appendix 4**) includes biometric, physico-chemical, physical, human health, and fish productivity indicators.

The objectives set under this framework will apply to all waterbodies, urban and rural.

#### ***Recommendation 5***

Further work is required to fully populate and finalise the sets of numeric and narrative objectives. This should be done through a collaborative process involving stakeholders, iwi, and scientists, which the Forum would be pleased to undertake, with government support. The Forum will then, as part of its September 2012 report, provide the technical basis for a national instrument. This further work should review and refine the following:

- a. the list of parameters and indicators
- b. the assignment of parameter levels for minimum numeric state objectives and breakpoints between the bands for ‘Fair’, ‘Good’ and ‘Excellent’ categories
- c. the classification of waterbody types, in particular for lakes, wetlands, estuaries and hydrologically modified catchments
- d. an analysis of the measurable state objective options against current water quality and quantity state data
- e. the options for either dealing with wetlands and estuaries through a similar framework, or to continue to deal with these classes through use of tight narrative objectives in regional plans.

## Clarity and Transparency

76. In setting final water quality objectives that embody national and local values, clarity and transparency of intent is important to both commitment and accountability. Tables of numbers representing scientific water quality parameters are necessary for implementation but do not provide clear signals about objectives to a non-expert. To assist, national guidance material could include a graded set of numeric objective parameters labelled simply to indicate relative levels of protection, as is the case with the current contact recreation guidelines.
77. For example, a national value for the protection of habitat for trout and salmon is recognised in legislation, and decision makers must have particular regard to this value. The water quality parameters for different levels of protection of this value are well known, as is the extent of existing habitat. Three levels of protection could be defined nationally with appropriate labels (e.g. fair, good and excellent) with associated ranges or bands for the relevant water quality parameters.<sup>10</sup> Regional authorities could then identify all trout and salmon habitat and identify the level of protection for which they will be managed. The relevant state objectives would then be considered, taking into account environmental, social, economic and cultural values, in final objective setting for the waterbody.
78. In this example there would be a minimum freshwater state objective for each water quality parameter (for example, dissolved oxygen of 80%) below which the value cannot be said to be protected. However, for waterbodies that are not managed as trout habitat a lower value may be acceptable. For example, for some indigenous fish species and eels,

### Objective Setting Example - Micro-organisms

Pathogenic micro-organisms are an issue for health in any human contact with water, as well as for stock and human drinking water. This is a risk management issue as it is not practical to completely eliminate dangerous micro-organisms from waterways. Different levels of micro-organism contamination can be tolerated for different uses.

For the indicator organism *E.coli*, classifications for recreational contact with water of *fair*, *good*, and *excellent* are defined in existing national guidelines. Regional authorities could be required to choose one of these levels of risk from which to set numeric objectives for each waterbody in the regional plan. A local value judgement is required to determine what level (fair, good or excellent) each is to be managed. It cannot be worse than fair (bottom line).

The regional council will have also identified areas that are *drinking water supplies* (as is required by the NES on drinking water sources). Classifications and guidelines are available for drinking water. A higher standard for micro-organisms may be required in these areas. The more stringent objective (contact recreation vs. drinking water) is used in the regional plan for that particular waterbody.

### Example - Salt water intrusion

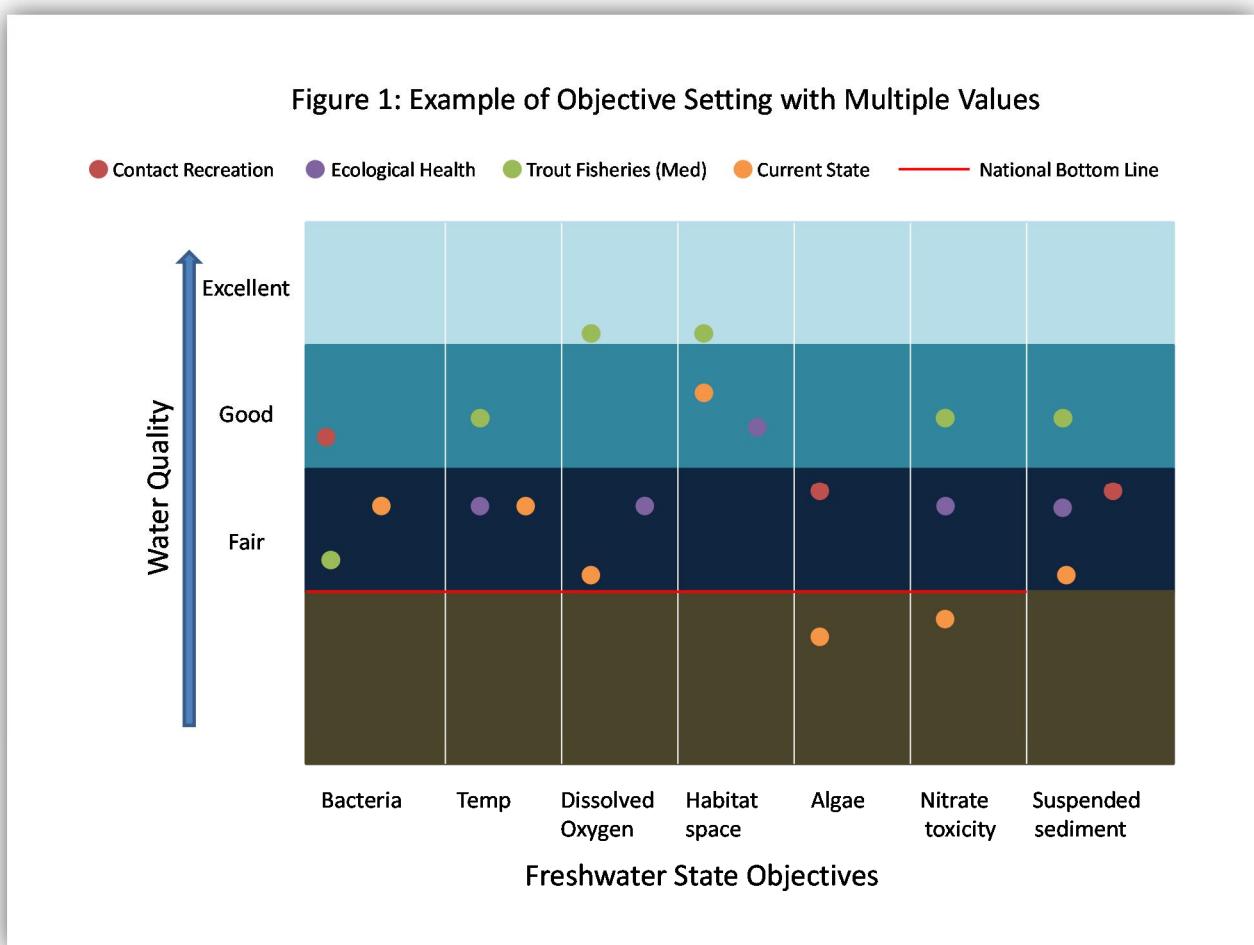
A numeric objective could be deemed into regional plans along the lines of "Maintain a groundwater flow at the coast so that there is no more than XYZ increase in chloride levels". A unique number could be developed.

<sup>10</sup> Note that in this context "fair" would represent the lowest level at which the value – in this case the salmonid fishery – can be sustained.

dissolved oxygen levels of 70% are tolerable. The minimum state objective would emerge from an objective-limits cascade for “*life supporting capacity...*” or “*indigenous biodiversity.*”

## Combining Multiple Objectives

79. The multiple values considered in setting objectives and limits for a particular waterbody, catchment or waterbody class will result in a number of such bottom lines and bands for each of the water quality parameters. The final decision on numeric objectives for each parameter may need to reconsider any trade-offs and costs inherent in attempting to manage for all desired values. An example of a means of considering all the information together is given in Figure 1. This figure shows a hypothetical case for an individual waterbody.



## Maintain or Improve

80. Objective A2 of the NPS-FM requires that the “overall quality of freshwater within a region is maintained or improved”. We think that the meaning of this phrase should be further refined in the context of the framework that we propose. The banded state objectives framework with the addition of provision for exceptions adds flexibility, transparency and clarity to the system.

81. The NPS-FM objective recognises that it is not necessarily practical or appropriate to hold all aspects of water quality in its current state everywhere in a region, and it provides a degree of flexibility (unders and overs). Equally, it is undesirable for all water quality in a region to decline to the national bottom line. That is clearly not what is meant by maintain. In short, we think some middle road is required between no downside movement and a race to the bottom line.
82. In the context of the banded framework, one option is for “maintain” to be defined to mean that a freshwater state objective for any parameter cannot be set in a band lower than that of the existing state. This would allow flexibility within the range of a band. In the same way, we suggest that “improved” should signify setting a state objective higher than the existing state, and meeting a limit based on that objective.
83. This option is currently reflected in recommendation 6. However, we recognise that other interpretations of “maintained or improved” are possible and may be preferable in light of the considerations that might emerge in finalising the sets of numeric and narrative objectives. We propose that further consideration is given to the practical application of interpretations of “maintained or improved” during the process proposed in recommendation 5.

## **Exceptions**

84. Permanent exceptions are a mechanism that may be required in unusual circumstances. The wide variation in conditions around the country mean that there may well be a situation where it is just not possible or practical to manage a waterbody to the standard set in a national instrument.
85. We consider that specific circumstances for exceptions from this framework should be defined in a national instrument, for the following circumstances:
  - a. natural circumstances prevent a waterbody meeting the nationally set objective (e.g. geothermal water, naturally acidic spring, etc.) OR
  - b. a regional decision is made to set a numeric state objective in a water quality band lower than the current state because:
    - i. an exceptional economic benefit will result from the relevant activity AND
    - ii. a net environmental gain will result, taking into account compensatory actions.
86. Our view is that exceptions should indeed be exceptional – and not a common occurrence. Regional councils that believe an exception is required or justified in a particular case should be required to apply to a national authority for each exception. The government will need to devise a system for applying exceptions, and may wish to work with the Forum on the detail of criteria and processes.

## **Groundwater**

87. Objectives can be set for groundwater in a similar way to surface waterbodies. Aquifers could be classified spatially into three groups (these groups may overlap):
  - a. Aquifers that interact with surface water,

- b. Aquifers that discharge at the coast, and
  - c. Confined aquifers.
88. Aquifers that interact directly with surface water should be considered as one surface water-groundwater resource. Objectives for these aquifers should relate to the adjoining surface water so as to ensure the objectives set for one do not compromise those set for the other. These need to be set at a regional level.
89. It is possible to set a unique national numeric objective at the coast in order to avoid salt water intrusion. It should relate to an increase in chloride levels.
90. There is significant variation in physical characteristics of confined aquifers which mean that they behave differently. It is not practical to set numeric objectives for these at a national level. We think that objectives for these aquifers should be set on a case-by-case basis.

## **Hydrologically Modified Catchments**

91. The advent of national objectives and potential for generalised regulatory provisions such as default flow regimes to assist regional authorities to comply with the NPS-FM could present some risks for the future consenting of large-scale dam infrastructure. These nationally important uses of fresh water and their impacts on waterbodies have been considered in public planning processes and are often subject to complex conditions as part of their resource consents. These conditions are in turn subject to review as well as full re-consenting processes throughout the extended lifetime of the infrastructure.
92. A changed framework for managing fresh water using objectives and limits should ensure that review and re-consenting processes are not prejudiced by imposing inappropriate default flow regimes. The recommended means of addressing this risk is to use the waterbody classification system. Specific types of catchment engineering, such as major hydro-generation, urban water supply or irrigation dams, would be mapped as a “use” or “value” layer over a basic biophysical classification. When general (national or regional) objectives are being set, this process would use the classification system, and deal with the hydro-dam class (for example) as a different problem from setting objectives for the general class of rivers in which the hydro-dams are situated.

## **Decision-making and Uncertainty**

93. Much of the decision-making required in setting objectives and limits will involve imperfect information. This means that the predicted and desired outcomes will be uncertain in varying degrees. Such uncertainty must be acknowledged so that appropriate contingencies can be built into the way land and water are managed. In many cases the range of potential outcomes from proposed activities may not be critical to the long-term state of the environment. In others, there will be potential for irreversible negative outcomes.
94. We think, therefore, that regional councils should be directed to acknowledge and consider information uncertainty in setting objectives and limits, and to apply precaution

where there is potential for irreversible environmental impact. Judgements about irreversibility should be made in the context of relevant planning timeframes, and management must be able to adjust and adapt as knowledge improves.

95. The reduction of uncertainty through on-going monitoring and research should be an integral part of management as well as being specifically fostered through directed work at national and regional level. Knowledge gaps are significant in a number of areas including the ecology and water quality requirements of native fish species, and knowledge of groundwater resources and dynamics. It will also be important to improve knowledge so that use and development are not precluded unnecessarily.

***Recommendation 6***

In respect of NPS-FM Objective A2, the meaning of “maintained or improved” should be further defined. “Maintained” could be defined to mean that, within the national banded framework, a freshwater state objective for any parameter cannot be set in a band lower than that of its current state unless by way of an exception. “Improved” means setting a state objective higher than the existing state, and setting a limit based on that objective.

The development of the limits framework and its population with numerical state parameters (as outlined in Recommendation 5), together with catchment case studies, will provide the opportunity to analyse the effectiveness of this regime in practice. This may necessitate a revision of this recommendation on completion of that process.

***Recommendation 7***

Freshwater state objectives and related limits set at a regional level must comply with relevant national objectives except in exceptional circumstances. A system for applying for exceptions should be defined nationally, and criteria for exceptions to national objectives should be:

- a. the inability to meet a minimum state objective due to natural conditions of a waterbody;  
OR
- b. a regional decision to set a numeric state objective in a water quality band lower than the current state because:
  - i. an exceptional economic benefit will result from the relevant activity AND
  - ii. a net environmental gain will result, taking into account compensatory actions.

The Forum would welcome the opportunity to work with the government in developing a system for applying for exceptions, including on the detail of relevant criteria and processes.

### ***Recommendation 8***

The government should direct regional councils to identify aquifers and classify them into classes that recognise the following characteristics:

- a. aquifers that are connected to surface water
- b. aquifers that are connected to the sea
- c. confined aquifers

*(Note: aquifers will often be in more than one class)*

### ***Recommendation 9***

The state objectives and limits for aquifers connected to surface water should be consistent with those of the connected surface waterbody and be developed through a whole of catchment approach. Aquifers that are connected to the sea should be managed to prevent salt water intrusion. Confined aquifers that are not connected to surface water or the sea should be managed on a case-by-case basis. Local values and uses of aquifers, such as for drinking water, should be identified and taken into account.

### ***Recommendation 10***

Central and regional government should, when setting state objectives, consider the constraints in significantly hydrologically altered catchments. These catchments are those that have been modified by long-term major structures for hydro-generation, municipal water supply dams, and irrigation dams. This use category should be accommodated in a waterbody classification system.

### ***Recommendation 11***

Regional councils should be directed to acknowledge and consider information uncertainty in setting objectives and limits, and to apply precaution where there is potential for irreversible environmental impact. Reversibility should be judged in the context of relevant planning timeframes, and management must be able to adjust and adapt as knowledge improves.

## **Implementation of Limits in Regional Plans**

### **Limits as water management instruments**

96. Resource use can be thought of as a load imposed on the natural system. To manage cumulative effects of activities, the total resource use or load on the system needs to be capped at some point. This imposed restriction on resource use – whether on takes or discharges – constitutes the limit. Once the limit is set, the corresponding load can be allocated. A limit is the maximum amount of resource use available, which allows a freshwater objective to be met.
97. Because each waterbody is different – for example, flow rates differ in different rivers – the amount of water that can be taken and the amount of contaminants that can be

discharged to achieve a particular objective will be specific to each system. Although a freshwater state objective may be applied across a whole class of waterbodies, the limit required to achieve that objective will depend on the individual characteristics of each system and its components. Limits must, therefore, be determined at the catchment, sub-catchment, tributary or reach level, and cannot be set at national level.

98. A limit can only be effective at managing cumulative effects if it captures all sources of a particular contaminant, or all takes of water, within a catchment, both point sources and diffuse. To capture all sources of contaminants and all abstractions, regional councils will need to acquire comprehensive information on activities within a catchment and the loads being imposed on the water system. Much of this information is already routinely collected.
99. An effective framework for managing cumulative effects through limit-setting will require integrated management across whole catchments and interconnected waterbodies. Limits need to be set in an integrated way, accounting for the interactions between factors. For instance, a reduced water flow means reduced dilution of contaminants (and vice versa), and this will reduce (or increase) permissible contaminant limits to achieve a particular state objective.
100. The limit is effectively a link between land-use practices and the water quality objective. An important pathway to achieving objectives is therefore adherence to limits. Without limits, objectives are unlikely to be given effect to. However, combinations of limits and other measures (regulatory and non-regulatory) may be used to meet objectives at reach, stream or catchment scale. For some objectives the choices about how to manage the issue will need to take into account local stakeholder preferences, practicalities and costs. Depending on the combination of measures chosen, a particular limit may be set at different levels.
101. **Appendix 5** provides a summary table that illustrates the linkages between state objectives, limits, and the higher level values and objectives for which they are intended to manage, at the regional level.

## Limits as rules

102. If limits are to be effective and provide certainty for all parties, they must be applied and enforced in a transparent and predictable way. When a limit is reached it will be necessary to restrict new activities (taking and discharging) to avoid adverse cumulative effects. This creates a number of challenges. The knowledge that a limit is approaching may spark innovation in land use practices to reduce the loads imposed, and can create headroom for expansion and development.
103. The advent of hard limits can create equity concerns where there are no mechanisms available to enable new entrants or new activities that impose loads or require takes. This makes transferable allocations of take rights and contaminant load a natural partner for hard limits. With transferability, new entrants or new activities of higher value than existing resource use should be able to access resource use rights from existing users. In some cases, more complex limits may be required for abstraction to ensure high flow

water is available for use on a seasonal basis. These are issues we will address in our September report.

- 104.The most effective means to directly control activities so that the total resource use is managed within a limit is through rules in a regional plan. Once a limit is met, or is close to being met, any activity that would further diminish the water resource should require a resource consent and it should not be possible to gain a resource consent if the activity would result in the limit being breached.
- 105.In current practice there are exemptions from requiring consents for water use for certain purposes currently built into the RMA (s.14), and others that are allowed for as Permitted Activities in regional plans (both s.14 and s.15). These uses will need to be tracked and totals estimated by regional authorities so the available resource can be managed effectively. Some permitted uses may need to change status and become subject to consenting in catchments under pressure.
- 106.At present, the most frequently used approach when limits are approached is to deem further resource use to be a non-complying activity. This allows further consents to be granted if the effect on the resource in each case is no more than minor or is consistent with the objectives and policies in a regional plan. In practice, non-complying status has often resulted in the limit being progressively breached with little ability for councils to control cumulative adverse effects on the environment ('death by a thousand cuts'). This has the effect of progressively increasing the "limit" on a consent by consent basis.
- 107.An alternative is to deem further resource use to be a prohibited activity. In this case, no consent can be granted if the limits would be breached. Where they exist, limits are rules in a plan. The way to change a limit should be through a plan change, not through a resource consent. We recommend that prohibited activity status is made compulsory for any proposed resource use that would breach a limit.
- 108.In making this recommendation, we note that the "resource use" subject to "prohibited activity" status refers to the actual taking of water or discharging of specified contaminants, not to the type of land use activity that gives rise to the resource use. Innovation and new technology may allow greater levels of land use activity within existing resource use limits. Our September report will address the mechanisms that might be used to encourage innovation and use of good management practices, rather than prescribe the ways that people might meet limits. It will also deal with allocative questions: a regime which allows entitlements to be transferred more easily will make it easier to manage within limits. Also relevant is the development of the objectives framework (rec 5) for which we have offered our assistance. All these pieces of work will affirm this recommendation.
- 109.We are mindful that firm limits also require an inclusive process for setting them as well as a nimble planning regime that can adjust to, for example, changing circumstances, catchment land management initiatives, or better quality information. We address these topics in our recommendations on collaborative approaches to regional policy and plan making below.

## **What should limits cover?**

- 110.In relation to the numeric freshwater state objectives identified above, a basic set of limits should cover: water abstraction, nutrient (N and P) loads, sediment loads, toxic contaminant loads (e.g. metals, organic compounds), micro-organisms and temperature (note that temperature limits will mainly be applicable to point source discharges).
- 111.Decisions will need to be made at the regional level about what the relevant contaminants are for each waterbody and therefore what limits are required to achieve the objectives in the national framework. This will require councils to undertake regular monitoring for a range of possible contaminants. A standard, national level, monitoring framework would enable councils to implement their programmes efficiently, and to produce standard data that can be collated and compared across jurisdictions. Such a framework should include monitoring for new contaminants such as hormones.

## **Targets**

- 112.When limits that are required in order to meet objectives have been calculated and if any waterbodies are found to be over-allocated – that is, the assessed current contaminant load or abstraction exceeds the required limit – interim limits that prevent further over-allocation should be put in place. The period of time that an interim limit is in force should be defined. The lower limit required to meet the objective is then pushed out into the future as a target. It is the interim limit (i.e. existing use levels) that will apply until the target timeframe expires. Prohibited activity status applies to use beyond the interim limit. The load will need to be systematically reduced over the target timeframe so that at the end date the required limit is being met. At that point the target level will become the operative limit.
- 113.Targets relate directly to limits and indirectly to freshwater state objectives. The target timeframe is the time required for the load to be reduced to the intended limit, considering existing loads and uses, and should not be confused with the time that may be required for the objective to be achieved. This can be much longer because of lag effects, particularly where contaminant pathways include a groundwater component, or water availability is dependent on groundwater recharge.
- 114.We believe that regions should retain discretion to set timeframes for targets and the adjustments required in land use, the use of water, and the discharging of contaminants appropriate to the circumstances of each case, within reasonable bounds of economic practicality. Where significant adjustment times are required, targets should be set in regional plans at no greater than 5 yearly intervals to ensure progress towards freshwater state objectives, and to provide for timely adjustment of interventions as necessary.

## **Flexibility and Catchment Planning**

- 115.The RMA regulatory framework may require adjustment for limits setting, to provide a greater ability to adapt appropriately to changing circumstances or information, and to accommodate innovation.

116. Additional flexibility could be created in several ways within the planning framework to enable new activities that might otherwise breach limits. The first is to provide transferability of entitlements to take water or discharge contaminants. This ensures that new, and possibly more efficient use of resources can occur, but only if some existing use is reduced or made more efficient. This matter will be reported upon further in the September 2012 report.

117. A second type of flexibility would be to enable offsetting of extra resource use through implementation of other management measures that ensure the objective in the regional plan is still met, despite the limit being exceeded for one water quality factor. For example, in the management of algae, several factors contribute to the problem – flow, temperature and dissolved nutrients. If flows or shading of the water are able to be increased, it may be possible to tolerate higher nutrient loads while still meeting the management objective for algal cover. However, this would require a technical change to the limit, which is part of a rule in the regional plan. **Appendix 6** shows the critical elements and their interactions within a catchment management framework.

118. Changed information on the relationship of particular limits to their respective objectives may also justify the alteration of limits (a recalibration to objectives). Having limits as rules in a plan that can only be changed by a RMA Schedule 1 process does not provide the agility required for adaptive management under uncertainty. This is addressed in the subsequent discussion on plan agility.

#### ***Recommendation 12***

The government should, through a national instrument, provide uniform technical processes for defining freshwater state objectives and setting limits in the regional planning process. These processes must take account of spatial variation of waterbodies and the nature of land and water use, and guide the implementation of objectives and limits through regional policy documents. This should include providing guidance on limit-setting methodologies, how catchments should be divided for the setting of limits, and the definition of mixing zones. This guidance material should be reviewed at regular intervals.

#### ***Recommendation 13***

To control cumulative effects, limits must be binding. To ensure efficiency and flexibility in a planning regime with binding limits, the following should be provided for.

- a. Once a limit is fully allocated, additional resource use (i.e. discharges of contaminants and the taking of water) should be a prohibited activity.
- b. An efficient allocation and transfer system is required (note that the Forum will report further on this matter in September 2012).
- c. Any proposed change to a limit should be considered through a regional plan process:
  - i. A simplified process should be provided for technical adjustment of limits (a streamlined plan change) where objectives are not affected (refer to recommendation 29(e)(i)).

- ii. Changes to limits that imply that state objectives will not be met should require a full plan change process to reconsider objectives (refer to recommendation 29(e)(ii) and (iii)).

***Recommendation 14***

Regional councils should retain discretion to set timeframes for the adjustments required in land use, the use of water, and the discharging of contaminants appropriate to the circumstances of each case, within bounds of reasonable economic practicality. Where significant adjustment times are required, targets should be set in regional plans at no more than 5 year intervals to ensure progress towards freshwater state objectives, and to provide for timely adjustment of interventions as necessary.

# Freshwater policy- and plan-making through collaboration

## Introduction

119. Collaborative processes engage communities in a dialogue about their values and interests and make them responsible for resolving them. We have pioneered their use at the national level, but they have been used in a number of regions of New Zealand in various forms for some years now, not least through the pioneering work of the Canterbury Water Management Strategy. We believe that they will be a valuable, not to say an essential, tool in freshwater policy- and plan-making at all scales, including (and in particular) to the setting of objectives and limits. Our recommendations focus on the processes for setting freshwater objectives and limits at a regional level through regional policy statements and related plans made under the RMA. Decisions made at a regional level are, however, nested within a national framework provided by the government, and we also make recommendations regarding the development of national instruments. Collaboration, which we hope will be widespread and consistently used in land and water management in New Zealand, will require participants to play different roles in freshwater plan-making and implementation. We hope that collaborative processes in New Zealand might come to look something like this:

- a. The community and stakeholders will be actively engaged in the development and implementation of the plan. Plans will no longer be documents that a council produces largely in-house and which the community comments on or reacts to. The council will retain clear statutory accountability for the plan, but will develop a culture of joint responsibility for freshwater policy and planning to improve outcomes and reduce transaction costs.
- b. National direction will be clear and integrated, and experiences from across the country will be readily shared to help build capacity.
- c. National operators (including crown agencies) will develop the capability to participate in local contexts.
- d. Scientists and technical experts will increase their ability to apply their knowledge in a collaborative context and explain it to a lay audience in a way that facilitates understanding.
- e. Participants will make the best available information accessible as early as possible in the process, so that the facts are on the table as scenarios associated with different objectives or possible outcomes are being developed and as their impacts on-the-ground are being assessed.

- f. Decision-makers and decision-making processes will take an inclusive and equitable approach to different streams of information – for instance Mātauranga Māori will be given consideration, alongside other kinds of knowledge.
- g. There will be more emphasis on effective monitoring and a better relationship between monitoring data and the evaluation of policy responses. Plan provisions will be drafted in a way that acknowledges their vulnerabilities (assumptions and uncertainties), identifies signposts for evaluation and specifies triggers for corrective action. The planning process will attempt to foresee the scope of potential adjustments needed to correct policy settings and processes for doing so.
- h. Participants, including iwi, will have sufficient resources to participate in the process.
- i. Regional councils will through this process tend to become more connected to their communities than they are now – social capital be built and drawn upon in order to increase the agility of the planning response to new information. Value judgements and procedural and policy decisions will need to be transparent and councils will need to support collective community action and collaborative initiatives where they arise.

120. In order to prompt the necessary behaviour change, participants will need to see a benefit to participating in collaborative processes. They will need to know that the result of their collaboration will have a real and substantial influence over final decisions. The decision-making structure needs to prompt good faith commitment to achieving an outcome and to reduce the avenues for gaming.

## **Collaboration in detail**

### **The design of collaboration**

121. The task of nesting collaboration within the RMA and incentivising effective collaboration is a complex one. It requires an integrated package of interventions comprising statutorily prescribed process steps and principles, and non-statutory guidance and implementation support.

122. The aim is to incentivise the adoption of, and good faith participation in, collaborative processes. It is not possible to compel parties to collaborate in good faith and collaboration can be vulnerable to gaming so it is important that the incentives to collaborate are strong.

123. The exact nature of a collaborative process will depend on the nature of the decision and the degree of specificity or detail necessary to achieve the desired objective. There needs to be flexibility in the framework to allow collaborators to respond to specific contexts – in particular the system needs to be able to accommodate the diversity of co-governance arrangements between iwi and local government that have emerged and are emerging around the country. At the same time, there needs to be enough prescription to ensure a suitable degree of fairness, rigour and transparency.

124.The design and implementation of a collaborative process must:

- a. ensure adequate opportunities for public participation and engagement from start to finish
- b. ensure that there is provision for a rigorous, impartial evidence-based evaluation of information and proposals
- c. safeguard natural justice
- d. ensure that decisions are transparent and the rationale for decisions is clear.

125.The design of a collaborative process must also address the risks of:

- a. process capture by powerful or politically influential stakeholders
- b. individuals or parties being marginalised throughout the collaborative process and being forced inappropriately to rely on others to represent their interests
- c. insufficient capacity or desire at local government level to facilitate effective collaboration
- d. a simple re-packaging of consultation as collaboration – despite sharing some common attributes these are two very different concepts, if they are confused or conflated the potential benefits of a collaborative approach will not be fully realised
- e. over-reliance on or over-prescription of collaboration could stretch capacity too thinly – it is important that collaborative processes add value rather than additional bureaucracy
- f. failing to change the mindset of important players in freshwater management decisions
- g. failing to reach consensus, despite best efforts.

126.The nature of merit appeal provisions has a significant influence on both the incentives to collaborate in good faith, and the rigour and fairness of a planning process. It follows that the design of appeal provisions is of primary importance to an effective collaborative process.

127.For iwi, the contemporary discussion of fresh water evokes legacies marked by their exclusion from decision making, by delegated authorities that have not included them, and by painful ecological and cultural losses. Iwi consider that these legacies are a fundamental part of their conversations with the Crown and create obligations such as the recognition of iwi rights and interests, clean-up of degraded waterways, and ‘future-forward’ attention to effective governance participation.

128.Fundamental issues between the Crown and iwi concerning iwi rights and interests are not on the table in this Forum.

129.Collaborative processes nevertheless provide an important way for iwi to progress, bearing in mind their dual role as Treaty Partners (which goes to their participation in the processes of mandating collaboration, and participation at the decision-making stage) and

their role as participants who bring particular values, knowledge and experience to the table.

130. Different iwi may wish to give effect to their interests in freshwater management and decision-making in different ways.

### **Collaboration on regional policy statements and regional freshwater plans**

131. For the freshwater-related elements of regional policy statements and for regional freshwater plans (including those plans that deal with the interaction between land and freshwater management) the preferred approach<sup>11</sup> is to:

- a. insert collaboration into the core of the policy- and plan-making process
- b. incentivise good faith participation in collaborative processes through changes to merit appeal rights designed to balance the need for certainty that a successful collaborative process will have a significant influence on decisions and the need for a judicial safety net
- c. involve iwi in freshwater decision-making throughout the process
- d. lift transparent scientific and technical debate and analysis into the early stages of policy- and plan-making
- e. ensure rigour and increase the efficiency of policy- and plan-making through changes to enhance and streamline hearing processes
- f. clarify the role of elected representatives in policy- and plan-making.

132. Under the approach we propose:

- a. A regional council – with the involvement of iwi<sup>12</sup> – would engage publicly with mana whenua, stakeholders and the community to establish whether there is the necessary information, interest and capacity to support effective collaboration before deciding whether to follow a collaborative process or whether, given the circumstances, a more traditional Schedule 1 approach to policy- and plan-making should be taken.
- b. If the decision is made to follow a collaborative process, a collaborative stakeholder group would be constituted to work amongst themselves and with the council, mana whenua and the community to come to a consensus position on the matters they have been brought together to address. The role of the collaborative stakeholder group would be to work together with the council and community to jointly develop freshwater policy or plan provisions for notification, public submissions and

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<sup>11</sup> Recommendation 44 from the Land and Water Forum 2010 Report was the starting point for the Forum’s more detailed consideration of a collaborative approach that would be necessary to deliver improvements to the framework for freshwater objective and limit-setting in New Zealand. This detailed consideration required the Forum to tease out the complex incentive structure associated with the status quo and how these incentives would be affected by the kind of procedural changes suggested in recommendation 44. While “unfolding” these matters, the Forum identified particular issues regarding participation and representation in a collaborative process, democratic accountability, and the need to safeguard access to justice while maintaining the incentive to collaborate and reach consensus. Having had the benefit of additional time to consider the implications of potential procedural changes in detail, the Forum resolved to modify and expand on recommendation 44 – the modifications are consistent with the spirit of the initial recommendation.

<sup>12</sup> Subsequent references to regional councils in paragraph 132 should also be read as including the involvement of iwi, in line with recommendation 43 from our 2010 report.

independent evaluation. The process of allocating members to the collaborative stakeholder group would need to be rigorous and transparent – providing for public expressions of interest to participate.

- c. The legitimacy of the group is crucial to its success – its membership must reflect a balanced representation of the interests at play and it must have the confidence of the community.
- d. The regional council would follow a transparent public process for confirming the chair and terms of reference for the collaborative process. The terms of reference would set out how the group is to consult with the broader community consistent with regional council expectations as well as the resources that would be available to the group and the timelines within which it is to operate. The size of the collaborative group is an important consideration in this regard – it will need to reflect the scope of the matters under consideration, the range of interests potentially affected by the outcomes and the degree of capacity and resourcing available. A group of many more than 20 could start to become unwieldy in some contexts but if there are many expressions of interest to participate, a tiered structure, as has been used by the Land and Water Forum, may help achieve a balance between representation and efficiency.
- e. The collaborative stakeholder group would engage with scientific, Mātauranga Māori and technical experts and the community to flush out critical choices and to test problem definitions and potential solutions as they evolve. The collaborative plan-making process would need to conform to guidance on effective collaboration. Members of the collaborative stakeholder group would actively engage with their constituencies throughout the process, and the group as a whole would, with the help of the council, consult with the community to test problem definitions and policy options as they evolve.
- f. The collaborative stakeholder group would work with the regional council to translate the resolutions of the group into written provisions. The plan will need to: identify key assumptions, areas of uncertainty and triggers for review; provide detail on implementation and monitoring methods; and specify agreed processes for evaluating outcomes and correcting or changing the plan on the basis of new information or monitoring results. The collaborative stakeholder group would submit draft plan provisions to the regional council along with a report explaining the key points of deliberation, rationale for its decisions and the process it used to reach a decision – including where the group has been unable to reach consensus and why.
- g. Should it be required, the council will produce plan provisions for matters the collaborative stakeholder group was unable to reach consensus on. The council will then notify the proposed policy statement or plan, call for submissions and further submissions, and appoint an independent hearing panel to hear and make recommendations on submissions that cannot be resolved through pre-hearing mediation. Panel members will need to be suitably qualified to undertake a hearing with Environment Court-equivalent rigour and free from conflicts of interest.

- h. The collaborative stakeholder group will be represented at the hearing by a person or persons of its choice and will have an opportunity to review and contribute to the evidence relating to the consensus position of the group. Members of the collaborative stakeholder group would not be permitted to submit individually on the draft plan provisions that are associated with the consensus position of the group. They would, however, be permitted to submit individually on those plan provisions that have been developed by the regional council for matters that the collaborative stakeholder group was unable to reach consensus.
  - i. We expect that an effective collaborative process would have significantly narrowed the scope of matters under contention and that in many instances points of submission will be able to be resolved through formal pre-hearing mediation. Following effective collaboration, hearings should be on a reasonably narrow scope of matters. Providing for submissions and an independent hearing step with Environment Court-equivalent rigour is, nevertheless, a crucial part of the procedural safety net in the proposed approach to collaboration, which:
    - i. provides an avenue for members of the collaborative stakeholder group to make their case on the points they couldn't reach consensus on
    - ii. provides for the participation of people and groups that, for one reason or another feel that the resolutions of the collaborative stakeholder group don't adequately represent or accommodate their interests
    - iii. provides for the participation of those who feel that the resolutions of the group may create precedent that could prejudice or assist their interests elsewhere
    - iv. ensures that the regional council's decisions are made after the proposals of the collaborative stakeholder group and/or regional council are subject to a transparent, rigorous and impartial evaluation of both the evidential basis upon which policy and plan provisions have been drafted and their technical and legal merit.
  - j. After the hearing is complete, the hearing panel will issue a draft decision and call for comment from submitters – including from the collaborative stakeholder group. Through these comments, the collaborative stakeholder group will have an opportunity to align its consensus position with the recommendations of the hearing panel, if it wishes to do so. The hearing panel will consider comments before finalising and submitting its hearing report and recommendations to the regional council and will identify any areas where it disagrees with the consensus position of the collaborative stakeholder group and explain the reasons why. The regional council would then make its final decision.
  - k. Appeal rights would be designed to incentivise good faith participation in the collaborative process. Appeals on the decision of the regional council would be to the High Court on points of law except that parties would be able to seek the leave of the Environment Court to appeal the merit of the council's decision on the grounds that

the decision either: does not give effect to the consensus position of the collaborative stakeholder group; or will have material implications for a matter or matters of national significance. The intention is that access to merit appeals would only be available in rare and exceptional cases and should be limited in scope to those matters that have previously been pursued by the applicant. When considering an application for leave to appeal a decision of the council on merit, the Environment Court should also take into account whether an applicant is able to demonstrate that they participated in good faith in the process. The intention is to encourage all parties to put their full arguments and the best available information on the table as early as possible in the collaborative process.

## National instruments

133.National instruments need both to provide clear direction and to deal effectively with the interests and values of those who will be affected by them. Under the status quo, important stakeholders can feel marginalised by the process that is used to develop them. We believe that collaborative processes can improve both the quality and the effectiveness of national instruments.

134.Accordingly, we suggest that the design and implementation of a collaborative process for the development of freshwater-related National Policy Statements and National Environmental Standards should follow the same general process steps set out above in relation to the collaborative development of freshwater policy and plans at a regional level, but with the following changes:

- a. all references to “regional council” should be replaced by “the Minister”
- b. appointments to hearing panels should be made in accordance with current statutory provisions where they exist
- c. no formal mediation should be provided for during the public submission and hearing process
- d. there should be no appeal rights (other than Judicial Review) on the decision of the Minister.

135.Given the interrelationship between freshwater resources and the coastal environment, there could be significant value in using a collaborative process to develop the New Zealand Coastal Policy Statement. To make a recommendation on this topic, however, would be beyond the scope of our mandate and our membership.

136.We are not recommending changes to the Minister for the Environment’s powers to call-in policy statements or plans. We are mindful, however, that the possibility the Minister could call-in a policy or plan during its development will influence the environment within which collaboration is taking place. When considering whether or not to exercise the call-in powers we expect that the Minister will take into account both the outcome of relevant collaborative processes that have been previously undertaken and the impact of the Minister’s decision on public confidence in collaborative processes.

***Recommendation 15***

There should be a presumption in statute that a collaborative approach will be used for the development of or change to:

- a. freshwater-related national instruments<sup>13</sup>
- b. the freshwater-related components of regional policy statements and related regional plans<sup>14</sup>.

***Recommendation 16***

Iwi should be enabled to participate throughout the freshwater objective- and limit-setting process – including in:

- a. the decision on the commencement of a collaborative process for freshwater objective- and limit-setting
- b. the selection of panel members for any hearings undertaken as part of a collaborative process for freshwater objective- and limit-setting.

Iwi should have the option of allocating at least one member to any such hearing panel, and should be able to participate in the final decision of the statutory decision-making authority.

Iwi should participate in all relevant collaborative stakeholder processes.

***Recommendation 17***

Iwi values and interests should be addressed on a catchment-by-catchment and relationship-specific basis. There needs to be flexibility within freshwater objective- and limit-setting processes to allow mana whenua to express the different roles, interests and relationships that they have with respect to fresh water in a particular rohe.

***Recommendation 18***

Regional councils – with the involvement of iwi – should, following engagement with the community, stakeholders and mana whenua, have the ability to determine to use the Schedule 1 process for preparing, changing or reviewing freshwater-related policy statements or plans (including plans that manage the interaction between land and water).

In making this determination, the regional council should:

- a. indicate whether it intends to use a “Schedule 1” or a “collaborative” process
- b. publicly notify that intention along with the reasons for it and seek comment from the interested parties
- c. after considering these comments, publicly notify its final decision on whether to use a “Schedule 1” or a “collaborative” process. That notice should include the reasons for that decision.

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<sup>13</sup> Including national policy statements, national environmental standards, and regulations made under section 360 of the Resource Management Act 1991, and any other freshwater-related regulations promulgated by central government.

<sup>14</sup> Including any statutory freshwater-related plans made under the Resource Management Act 1991 and privately requested plan changes.

### ***Recommendation 19***

The Minister – with the involvement of iwi – should, following consultation with stakeholders and the community, retain the ability to determine to use current statutory processes for preparing, changing or reviewing freshwater-related national instruments. The Minister should publicly notify the decision that he or she takes, along with an explanation of the reasons for doing so.

### ***Recommendation 20***

Once a decision has been taken to use a collaborative approach for the development of a national instrument or a regional policy statement or related plan, and once that process has commenced, the relevant authority<sup>15</sup> should not have the ability to revert to an alternative statutory process (e.g. Schedule 1). If, however, the collaborative stakeholder group ceases to make progress, the relevant authority should, on the advice of the Chair of the collaborative stakeholder group and following consultation with the group, have the ability to trigger a move to the next step in the process.

### ***Recommendation 21***

There should be flexibility in the regulatory framework to allow participants to develop protocols and adapt procedures through the terms of reference to suit the context within which the collaboration is taking place. Decisions on the detailed design and implementation of collaborative processes for the development and implementation of freshwater-related national instruments, freshwater-related regional policy and related plans under the RMA, should, however, conform to the following principles of collaborative freshwater management which should be expressed in a national instrument.

Collaborative freshwater management should be designed and undertaken in such a way as to ensure that it is:

- a. participatory and representative<sup>16</sup>
- b. transparent and accountable
- c. supportive of good faith deliberation
- d. impartial
- e. integrative
- f. efficient
- g. adaptive
- h. competent
- i. empowered.

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<sup>15</sup> The Minister in the case of national instruments and the regional council in the case of regional policy and plans and any other statutory freshwater-related plans made under the Resource Management Act 1991.

<sup>16</sup> See Appendix 7 for a detailed explanation of these principles.

***Recommendation 22***

Where a final decision has been taken to follow a collaborative process for freshwater policy-and plan-making, a regional council should publicly seek expressions of interest to participate in a collaborative stakeholder group then, after considering expressions of interest, it should notify its preliminary decision on the membership of the collaborative stakeholder group.

There should be a right to object to that preliminary decision on the grounds that a party (or parties) has been excluded from the group. Objector(s) should be able to make a case to the council at a hearing that an additional party (or parties) should be allocated to the group. After considering objections, the council should publicly notify its final decision on the membership of the collaborative stakeholder group.

The collaborative stakeholder group should be required to notify the regional council if, throughout the process, a party requests access to the collaborative stakeholder group but the group resolves not to accept that request. The group should also be required to inform the regional council of its reasons for not accepting such a request.

***Recommendation 23<sup>17</sup>***

The design and implementation of a collaborative process for the development and implementation of freshwater-related regional policy and related regional plans should proceed in accordance with the process steps, set out in **Figure 2** (below), which should be expressed in a national instrument.

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<sup>17</sup> A detailed explanation of the process steps in recommendation 23 is provided in **Appendix 8**, and a flow chart of the process is set out in **Appendix 10**.

**Figure 2: General steps of proposed collaborative process for plan- and policy-making**



<sup>18</sup> There is at this stage not a consensus on the nature and scope of appeal rights. The Forum will continue to discuss this during its next phase.

***Recommendation 24***

The design and implementation of a collaborative process for the development of freshwater-related national instruments should follow the same process steps set out in recommendation 23 above, but with the following changes:

- a. all references to “regional council” should be replaced by “the Minister”
- b. the Ministry would act as the custodian of the submission and hearing process (step 4) rather than the regional council
- c. appointments to hearing panels should be made in accordance with existing statutory provisions where they exist
- d. no formal mediation should be provided for during the submission and hearing process
- e. there should be no appeal rights (other than Judicial Review) on the decision of the Minister.

***Recommendation 25***

Hearings (Step 4 of Recommendation 23) on land and freshwater-related regional policy and related plans should be conducted by an independent hearing panel of no less than three but no more than five members appointed by the regional council.

Elected representatives from the relevant regional council may be appointed to a hearing panel so long as it has a majority of independent members. An elected representative who participates in the collaborative stakeholder group must not participate in any subsequent council deliberations or decisions relating to the matters under consideration in the collaborative process.

In appointing members to the hearing panel the regional council should ensure that appointees are qualified commissioners and that the panel has:

- a. suitable expertise and experience to conduct a hearing with Environment Court-equivalent rigour, including timetabled pre-circulation of evidence and cross-examination
- b. one member as the chairperson, who must be a current, former, or retired Environment Judge or a retired High Court Judge or senior Barrister with extensive Resource Management Act experience
- c. one member appointed on the advice of local iwi
- d. a suitable degree of knowledge, skill, technical expertise and experience relating to the matter or type of matter that the panel will be considering.

***Recommendation 26***

During the development of freshwater-related national instruments and regional policy and related plans:

- a. decision-makers should have regard to community or catchment-level values and interests
- b. those representing or advocating for national values and interests should make a good faith effort to recognise and take into account the implications of objectives and limits for local communities, and vice versa
- c. decision-making should be underpinned by a sound base of scientific and technical information and Mātauranga Māori
- d. iwi with a relationship to fresh water that is within the scope of a collaborative policy- or plan-making process should be an integral part of value and interest discussions from the beginning.

***Recommendation 27***

Judgements on different values and interests during the setting of freshwater objectives at the regional and catchment level should be guided by methods, models and tools that:

- a. reveal the complexity of the interaction between different values and interests in the given context
- b. translate technical, Mātauranga Māori and scientific information into easily understandable scenarios in a way that makes the implications of different options and objectives clear to the participants
- c. match the data, capabilities and resources that are available in a particular context.

**Resource consents**

137. We expect that an effective collaborative planning process will foster community, stakeholder and iwi commitment to the implementation and enforcement of those plan provisions – applications that are consistent with the plan should proceed relatively smoothly.

138. An applicant may choose to take a collaborative approach to the design of a consenting process – the incentive for doing so would be to take advantage of the opportunity to test the reaction and perhaps gain the support of the community – but current provisions regarding the ability to appeal the merit of a regional council's decisions should remain unchanged.

139. Recommendation 33 of the Land and Water Forum's 2010 Report proposed that national instruments should be developed to enable and give priority to large-scale consents that have undertaken an initial collaborative approach over proposals that have not undertaken this approach. After deeper consideration of this matter, we are reluctant to make a recommendation that could incentivise the adoption of a collaborative approach to consenting by providing for a fast-track decision-making process. We are wary of the risk that this could lead to collaboration being confused with consultation (or open up

opportunities to game allocation systems (i.e. by encouraging applicants to try to leap-frog others in the queue through the use of collaboration).

### **Water Conservation Orders**

140. Water Conservation Orders are a unique and important part of the freshwater management system in New Zealand. We intend to consider further the relationship between Water Conservation Orders and other freshwater-related policy and planning instruments in light of our discussions on the management regimes for limits. We hope that no changes will be made to statutory provisions for Water Conservation Orders until such time as the Forum has reported back on this matter.

## **Time and cost of freshwater policy- and plan-making processes**

### **The status quo process for freshwater policy- and plan-making**

141. Existing information on the time and cost associated with policy- and plan-making under the status quo cannot be relied on for a precise projection of future financial and resource requirements for freshwater planning because:

- a. the most comprehensive data on planning costs are not specific to freshwater planning
- b. case studies on specific freshwater planning processes are not necessarily representative of freshwater planning in general<sup>19</sup>
- c. future freshwater plans will need to be more thorough to comply with the NPS-FM<sup>20</sup>
- d. pressure on freshwater resources is increasing, which suggests future plans will need to take a more sophisticated approach to regulating the use of fresh water, discharges and land-use activities that impact on fresh water.

142. While pre-hearing mediation is a strong feature of the status quo, the current RMA Schedule 1 process for policy- and plan-making is heavily influenced by legal input – particularly from the council hearing onwards. A litigious approach to participation in freshwater policy- and plan-making can significantly increase the cost and time it takes to finalise regulatory settings. So can the confrontational use of technical and scientific experts, which remains a hallmark of the status quo despite the welcome introduction of expert caucusing into the hearing process.

143. The following table provides some indication of the time it takes to develop freshwater-related plans and plan changes using the current Schedule 1 planning process.

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<sup>19</sup> Freshwater-related planning processes differ because each catchment faces different pressures and councils pursue different management approaches (e.g. freshwater planning may deal with quality and quantity separately, or be integrated with other natural resource planning in some regions). Furthermore, plans are developed and progressed in different ways and case-specific behaviour of a council and stakeholders affects financial and resource requirements.

<sup>20</sup> The Regulatory Impact Statement associated with the NPS for Freshwater Management notes that only four regional councils have a complete set of operative or proposed quality limits and flow regimes and only eight have numeric limits for water quality.

<b>Plan</b>	<b>Total time (not including an average of 2.5 years pre-notification work<sup>21</sup>)</b>
Auckland Air, Land and Water Plan	10 years (notification 2001, operative 2010 (except discharges))
Southland Regional Plan	10 years (notification 2000, operative plan 2010)
Environment Waikato Variation 5	6 years (notification 2005, hearings 2006, decision 2007, Environment Court hearing 2008, negotiation/caucusing 2009-10, operative 2011)
Environment Waikato Variation 6	5 years (notification 2006, hearings 2007-2008, decision 2008, Environment Court hearing 2011, operative 2011)
Canterbury NRRP: Variations 1, 2, 4 and 14	6 years (Variation 1 notification 2004, operative 2011)
Otago Plan Change 1A: Water	1 year (notification 2005, operative 2005)
Otago Plan Change 1B: Minimum Flows	1 year, 3 months (notification 2008, operative 2010)

144. In its 2009 report, the Minister for the Environment's Technical Advisory Group observed that the length of time it takes to make and change plans using Schedule 1 is likely to mean that by the time a plan or plan change becomes operative:

- a. it may fail in significant respects to properly reflect community needs or aspirations
- b. environmental issues facing the council are different in form or emphasis from those which were current when preparatory work started on the plan
- c. there will be extended periods when costs are placed on local authorities, resource consent applicants and the community by their having to deal with parallel requirements of currently proposed plans and transitional plans – and the uncertainty associated with this
- d. councils may be deterred by cost and delay from promoting desirable changes to their plans.

145. It is generally accepted that the status quo with respect to policy- and plan-making under the RMA is poorly suited to the dynamic environment within which freshwater management takes place and has led to protracted delays, which put the environment and investment at risk.

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<sup>21</sup> The 2009 report of the Minister for the Environment's Technical Advisory Group noted that on average it takes local authorities 2.5 years of research, drafting and consultation before a proposed plan is notified.

## **Time and cost of the proposed collaborative process for freshwater policy- and plan-making**

- 146.The length of time it will take to develop policy and plans using the proposed collaborative plan- and policy-making process will depend on both (a) the complexity and scale of the matters under consideration; and (b) the willingness and ability of people to work together effectively.
- 147.The following matters, in particular, will affect the time and cost of the collaborative plan- and policy-making process proposed by the Forum, including:
- a. the degree of success of the collaborative process in resolving contentious issues
  - b. the number of submissions, the degree of success of pre-hearing mediation in resolving contentious issues and the scale and complexity of the independent hearings step
  - c. whether regional council decisions are subject to appeal.
- 148.Collaborative processes are unlikely to be cheaper in the short term. At least initially we expect that there will be a reasonably direct transfer of the time and money that is currently spent on litigation towards collaboration early-on in the process.
- 149.There is, however, the potential for efficiencies in the system. For instance, collaborators (including iwi) and the regional council will have an opportunity to pool resources and jointly commission information and expert analysis during the process of collaborative policy-making, rather than independently retaining competing legal and expert advice for court processes. We also expect a non-adversarial approach to science-provision will increase the efficiency with which an agreed base of scientific, Mātauranga Māori and technical information is developed.
- 150.The range of planning timescales set out in the table in paragraph 143 above – from a little over a year for discrete plan changes to around a decade for complex plan changes and plans – is evidence of the varying scales and degrees of complexity that the policy- and plan-making process has to deal with. This makes it difficult to provide an accurate estimate of the time it will take to finalise a plan or plan change using the collaborative process.
- 151.As part of the process of establishing collaborative processes, it will be important to establish firm timelines. These are important as they introduce a necessary degree of discipline into the process – an impending deadline can help push discussion towards resolution. In the case of freshwater policy and planning, which is often contextually dependent and can involve value judgements of varying complexity, national prescription could have perverse outcomes. Deadlines are necessary, however, as are clear consequences for failing to meet them. These should be set by the regional council (or Minister for the Environment for national instruments) for each process step at the outset through the terms of reference for the process.
- 152.Overall, we are confident that the proposed collaborative plan- and policy-making process will be generally faster, more efficient and more equitable than the status quo. We also

expect it to speed up over time as people become accustomed to the new way of working, as they improve their capability to collaborate, as social capital is re-built, and as jurisprudence on the procedural steps of the process settles. In addition to a reduction in the direct time and cost it takes to initially finalise policy and plans, the Forum expects that the proposed collaborative process will, over time, help:

- a. increase the quality of and commitment to plans, thereby reducing the degree of future litigation;
- b. increase the agility of the planning framework through the on-going use of the collaborative group (and the social capital generated through the plan-making process) to make timely and equitable minor and technical amendments to plan provisions in response to new information;
- c. clarify the environment within which resource consent applications are made – an effective plan will remove or streamline consent requirements for proposals that accord with agreed objectives. (See **Appendix 9** for further discussion on the time and cost of using a collaborative process.)

## Further governance issues

153.The Forum started out by looking at the role of collaboration in setting freshwater objectives and limits. It is clear, however, that good freshwater management goes beyond setting objectives and limits. It also includes, among other things, the integration of objective- and limit-setting processes with the mechanisms used to manage within those limits. In addition, it involves the integration of these questions with matters such as the role of storage and irrigation, and urban water services management. In many instances the requirement for land and water management to be integrated means that it will not be practical or possible to separate out freshwater management from other resource management planning and decision-making processes (e.g. land-use planning and coastal planning).

154.We have already recommended that regional councils should use their existing powers under section 30 of the RMA to control those land uses that impact on water quality. A collaborative approach should be considered for regional plans that regulate the use of land in order to achieve water quality objectives.

155.The scope of our mandate and membership prevents us from making recommendations on non-freshwater-related matters. Should other regulatory authorities, however, wish to take advantage of the collaborative plan and policy making process we have recommended, we think that there would be value in allowing them to do so.

156.In its first report the Forum recommended the addition of government appointments to the regional council committees designated with responsibility for water management decisions, or to the councils themselves on matters relating to water management. These appointees would strengthen the links between regional councils and central government agencies; fill in gaps in skills and perspectives; and strengthen the capacity of councils to provide leadership on the complex issues of intergenerational responsibility and legacy

environmental remediation.<sup>22</sup> For the avoidance of doubt, the Forum believes that this recommendation should also apply to unitary authorities.

***Recommendation 28***

The Land and Water Forum's 2010 recommendation 43 on government appointments to regional council committees or councils should also apply to unitary authorities.

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<sup>22</sup> Report of the Land and Water Forum, September 2010, page 47

# Plan agility

157. Freshwater policy- and plan-making takes place within a dynamic and sometimes uncertain context. The more specific national direction and guidance that we have recommended will simplify some aspects of the task of deciding final objectives at regional level, but current planning and appeals processes take too long and consume too many resources for responsive management. For the purposes of getting objectives and limits in place in reasonable timeframes and for adaptive management over time, a more streamlined plan change process is required. In addition, the freshwater management framework needs to be agile to respond to new information, monitoring data and/or changes in context.

158. Circumstances requiring plan adjustment could be various. Monitoring, new information or an advance in analytical methods may indicate that either, or both, the take and discharge limit should be adjusted. It may be adjusted in either direction. Changes in catchment management (for example catchment-wide riparian planting) may lead to a change in limits. More resource use may be possible. Any changes in catchment settings must recognise the good faith efforts of affected individuals. The management response needs to be pragmatic and equitable as well as effective.

159. We recognise the need therefore for an agile change process that is fast, but delivers robust outcomes. This is particularly important in the context of a freshwater management system based around hard limits where:

- a. the planning framework needs to support (in fact encourage) innovation to deliver objectives better, faster or more equitably within existing limits; and
- b. there needs to be a quicker process for re-evaluating limits and potentially some objectives if new information triggers the need to do so; and
- c. the process for making changes, while agile, must not undermine the certainty of the regulatory environment or the integrity of the plan-making process that was used to generate the plan.

160. We think that collaboration during the implementation of a plan could greatly increase the agility with which the plan change process responds to contextual change or new information. Engagement between the regulator, iwi and a collaborative stakeholder group could, for instance, provide an efficient avenue to test the impact of technical changes (potentially including changes to audited self-management or good management practices) to establish whether they can proceed without the need for a formal plan change process. There may also be opportunities to use the trust and confidence generated by a collaborative plan-making process to amend limits or other plan provisions within parameters established at the time the plan was agreed.

161. Similarly, a robust planning and plan-drafting process should be able to define a quick process for checking with stakeholders whether a possible change to plan provisions in response to monitoring results or new information is indeed minor and technical, or

whether it might have a material effect on plan objectives or on one or more of the interests represented in the collaborative plan-making process. This would be the key way in which benefits would be extracted from the trust developed through the collaborative plan-making process.

162. If, following this check, a possible change is considered to be minor or localised (i.e. there is no effect on objectives), then the regulatory authority should be able to make changes without further public involvement or formal collaboration. If, on the other hand, the collaborative group considers that a possible change could have a material effect on plan objectives, it should decide whether the potential effect is material enough to warrant a formal plan review (using the seven-step collaborative process we have proposed) or whether a targeted process is appropriate. The nature of the targeted process would need to be designed and agreed during plan-making, as would the criteria that would guide decisions on which path to take.

163. We expect that the process for monitoring, evaluating and reviewing the plan in light of new information would be defined during steps 2 and 3 of the collaborative process. This would include the:

- a. characteristics of the freshwater resource that need to be monitored or tracked
- b. key assumptions that have been made and where there are areas of uncertainty in the underlying policy
- c. triggers that would prompt a regulatory intervention to either adjust a policy setting, change methods of implementation or review underlying objectives (including the expected range of possible alternative methods or policy responses)
- d. parameters within which minor and technical changes can be made in an efficient and timely manner – without need for formal consultation or collaboration – and the process for making such changes
- e. processes<sup>23</sup> for involving the collaborative stakeholder group and the community in the on-going evaluation of plan effectiveness and in decisions on whether possible changes:
  - i. are consistent with objectives and supported by stakeholders and the community, and therefore do not require further consultation or collaboration
  - ii. are likely to have a limited or localised effect on objectives or the community and therefore require targeted<sup>24</sup> consultation or collaboration
  - iii. are likely to have a material effect on objectives and therefore require a formal plan review.

164. In addition, good management practices (GMP) and approaches to audited self-management (ASM), which are important tools in the effective management of freshwater

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<sup>23</sup> The design of these processes should be left to the parties to the collaborative process (including the regulatory authority, iwi and stakeholders) but should be required to confirm to the statutory principles set out in recommendation 21.

<sup>24</sup> The nature of the “targeted consultation or collaboration” would need to be designed and agreed during plan-making, as would the criteria that would guide decisions on which path to take.

resources, need to be regularly updated as knowledge increases (such as through review and evaluation, practical experiences, research and development, economic factors and the development of a more appropriate tool).

165.Often, good management practices are encapsulated within industry codes of practice, and guideline documents which may then be referenced directly within regulatory provisions. Audited self-management systems can be incorporated into regulatory frameworks through instruments developed at a national, regional or district level.

166.In contrast to NESs where changes can be made through a Gazette Notice, changing documents referenced specifically in local authority plans requires a full plan change to occur. This could act as a barrier to the rapid uptake of improved good management practices and audited self-management systems.

#### ***Recommendation 29***

Freshwater-related national instruments and regional policy statements and related regional plans should identify:

- a. key assumptions and areas of uncertainty in the underlying policy
- b. characteristics of the freshwater resource that need to be monitored or tracked
- c. triggers that would prompt a regulatory intervention to either adjust a policy setting, change methods of implementation or review underlying objectives (including the expected range of possible alternative methods or policy responses)
- d. the parameters within which minor and technical changes can be made in an efficient and timely manner, without need for formal consultation or collaboration, and the process for making such changes
- e. processes<sup>25</sup> for involving the collaborative stakeholder group and the community in the on-going evaluation of plan effectiveness and in decisions on whether possible plan changes:
  - i. are consistent with underlying objectives and supported by the community, and therefore do not require further consultation or collaboration
  - ii. are likely to have a limited or localised effect on objectives or the community and therefore require targeted<sup>26</sup> consultation or collaboration
  - iii. are likely to have a material effect on objectives and therefore require a formal plan review.

#### ***Recommendation 30***

Regulatory authorities should have regard to, but avoid referencing Good Management Practice and Audited Self-Management documents in regulatory frameworks unless it is essential to do so.

<sup>25</sup> The detailed design of these processes should be determined by the parties to the collaborative process (including the regulatory authority, iwi and stakeholders) but should be required to conform to the statutory principles set out in recommendation 21.

<sup>26</sup> The nature of the targeted consultation or collaboration would need to be designed and agreed during plan-making, as would the criteria that would guide decisions on which path to take.

***Recommendation 31***

The Resource Management Act 1991 should be amended to enable minor and technical updates to documents, methods and models that are incorporated by reference without the need for a plan change process.

# Transition, capacity and implementation

## Moving from plan-development to plan-implementation

167. We believe that, as well as developing capacity for collaborative plan-making, we also need capacity for implementing plans collaboratively. This is because what may have been an excellent collaborative plan-making process could fail to deliver the desired objective if the collaborators do not remain in touch with the implementation of those plan provisions – particularly in a dynamic environment where adaptive management is required.

### ***Recommendation 32***

As the collaborative process moves from plan-making to plan-implementation, the members of the collaborative stakeholder group should consider the capacity needed to implement, review and adapt the relevant policy or plan. Any proposals to change the membership of the collaborative stakeholder group during the transition from plan-making to plan-implementation should be made in consultation with the regional council and iwi and should have regard to the importance of:

- a. facilitating an agile planning response to new information or contextual change
- b. retaining and deriving maximum benefit from the trust and confidence and institutional knowledge developed through the process of developing the policy or plan.

## **Building the capacity to collaborate**

168. Although, as we said at the beginning of this section, we are by no means starting from scratch, we are very much aware that it may take some time to build the necessary capacity to make collaboration work smoothly as a process for reaching planning and policy decisions. There will be plenty of learning by doing and some of the earlier collaborative processes may have to feel their way – much as was the case, for instance, when the Land and Water Forum was established or when the new national consenting function of the new Environmental Protection Authority was added to the RMA in 2009.

169. One of the key issues is having sufficient trained people who can act as chairs and facilitators in such processes. Their skills will be an important element in facilitating the behaviour change required for collaborative processes to work well. Training of these people, drawing on existing resources, will be important. There needs to be a coordinated approach to identifying pockets of existing capacity in the community, capitalising on that capacity, and for building more capacity in areas where we are lacking<sup>27</sup>.

170. A number of technical areas also require further capacity building. These include:

- a. building, applying, interpreting and explaining scientific or socio-economic models and scientific information into terms that are meaningful to lay-participants, and feeding science into collaborative processes effectively

<sup>27</sup> This aligns with recommendations 38, 39, 49 from the Land and Water Forum's 2010 report.

- b. translating scientific, mātauranga Māori and technical information into scenarios that make the impacts of objectives or policy options clear to a lay-audience
- c. having business/support/funding models for scientific and iwi organisations that ensure that applied scientific and mātauranga research and information is openly available to participants early in the collaborative process
- d. having capacity to understand socio-cultural impacts of freshwater objectives
- e. integrating knowledge across social, cultural, economic and environmental dimensions.

171. We have also turned our minds to some practical issues and opportunity costs that may face participants in the collaborative stakeholder group. A key success factor will be ensuring that members of the public (including mana whenua) who are part of a collaborative stakeholder group can participate on equal footing with participants who come from professional organisations.

***Recommendation 33***

The following should be part of an implementation package that should be in place at the time collaborative decision-making is introduced:

- a. guidance on the attributes of successful collaborative processes in New Zealand
- b. simple user manuals and training programmes on collaborative processes.

***Recommendation 34***

The government should establish an openly accessible online library of practical experiences with collaborative processes to facilitate shared learning.

**Treatment of planning processes underway at the time of transition to a new system**

172. Broadly speaking, there are three general stages to the plan development process under the existing RMA Schedule 1 model:

- a. Pre-notification stage from the beginning of plan development until notification of a proposed plan.
- b. Council stage from notification of a proposed plan to a council decision, including submissions, potential council mediation and a council hearing.
- c. Appeals stage from a council decision until the resolution of appeals, including lodging appeals, Environment Court mediation, and a hearing.

173. An existing plan development process under Schedule 1 of the RMA may be at any of these stages when legislation enacting a collaborative approach to objective- and limit-setting comes into force. Furthermore, some form of stakeholder collaboration, community engagement or consultation may have taken place prior to the point at which legislation is introduced.

174. We therefore consider that it would be more efficient and equitable if all planning processes that have not been publicly notified at the time the new system is introduced are captured by a presumption in favour of the collaborative approach.

175. Regional councils that consider this would: undercut good work that had already been done; result in unjustified cost increases; or undermine social capital that had been generated through pre-notification work should be able to determine to follow the Schedule 1 process on these grounds. But the rationale should be publicly notified.

***Recommendation 35***

All regional planning processes that haven't been publicly notified at the time the collaborative approach is passed into legislation should be captured by the presumption in favour of collaboration although the ability for a council to determine to take the Schedule 1 planning process should be provided for.

**Managing the transition to a limits-based system**

176. The transition to a limits-based freshwater management system may increase the risk of gold-rush behaviours as participants seek to place themselves in an advantageous position in case future rights are based on existing use.

177. The difficulty and cost of clawing back allocation, and potentially undoing major development investments, favour short term measures to reduce environmental risks. Compared with environmental damage that can be extremely expensive to remediate, the economic cost of short-term delays in investment may be relatively small. A requirement for precaution should be built into interim measures where potential environmental impacts are uncertain.

**When should transitional measures<sup>28</sup> be applied?**

178. The key circumstances where transitional measures are required are where the catchment is judged to be over-allocated or close to being over-allocated for water quality or water quantity (so called "hotspots").<sup>29</sup> This situation, in combination with no effective operational limit, may result in environmental degradation before limits are able to be implemented.

179. The prospect of take and discharge limits being implemented in the future creates incentives for affected parties to apply for water take consents and/or intensify land use, before regulatory change makes gaining those consents more difficult. The key risk around such rushes for allocation is likely to be greater for water takes rather than the discharge of contaminants.

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<sup>28</sup> A transitional measure is defined here as a policy that is designed to reduce risks to water quality and quantity in the period until limits are set.

<sup>29</sup> The criterion is suggesting that the water resource is operating at close to its limit (even though there may not be a limit formally set). A level of judgement is therefore likely to be involved.

### ***Existing Transitional Tools:***

180.Three tools are currently in place that could, at least in part, deal with the problems of transition. These all have significant shortcomings. They are:

- a. Interim Limits are set in regional plans by regional authorities: The introduction of interim limits (and potentially rules for land use change) into plans by councils through the RMA Schedule 1 process could take **some time**.
- b. The National Policy Statement – Freshwater Management: The NPS-FM contains two transitional policies that are inserted directly into regional plans and provide assessment criteria for new consent applications for discharges (policy A4) and for taking, using, damming or diverting water (policy B7). The policies only apply to those activities that require a resource consent, and direct councils to “*have regard to...*<sup>30</sup>” the impacts of new consented activities on the life supporting capacity of fresh water.
- c. Moratoria powers in Canterbury: These are provided for in the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 (s.32-45). They have been used in two catchments (Hurunui and Waiau) to halt further applications for taking and using water. The Act allows Environment Canterbury to apply to the Minister for a moratorium to halt applications for taking, using, damming and diverting water, as well as discharges. The Minister can accept or decline the application. These provisions are only applicable in the Canterbury region. The special circumstances that have occurred in Canterbury do not occur everywhere. It could be argued that this is a special case.

### ***Further Options:***

181.Two other possible options are considered below.

#### **Default Limits set by NES (including use of the draft NES on Ecological Flows)**

182.The proposed NES on ecological flows provides an option that could address critical water quantity issues where there is no limit in place. This would prevent further allocation beyond the level of the default flows in the standard, through the granting of new consents. The NES default limits could be put in place until regions decide their own flow limits and a framework to manage water and land use to these limits is being implemented.

183.The proposed NES however has some flaws. We consider that the existing technical content of the draft NES should be reviewed and updated, and the flow setting methodology section transferred to other government guidance on limit-setting. Technical changes are required to the existing default flow requirements in the NES to avoid unintended consequences, particularly for significantly hydrologically altered catchments.

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<sup>30</sup> National Policy Statement for Freshwater Management 2011, page 9: “When considering any application the consent authority must have regard to the following matters:

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

Major permanent dam infrastructure for electricity generation, irrigation and municipal water supply are examples of uses that should be considered as separate classes of waterbody in respect of default flows. A technical review of the groundwater defaults is also required, particularly in regard to how they would apply to confined aquifers, and a review of the wetlands provisions should also be undertaken.

### **Additional Reserve Power to apply Moratoria beyond the Canterbury Region**

184. The statutory reserve power to apply moratoria in Canterbury has been shown to be effective in these particular circumstances and could be legislated to cover all regions. A set of criteria could be set in legislation as in the Canterbury case, and regional councils could apply to the relevant Minister for the powers to impose a moratorium until limits are set and implemented. Alternatively the Minister could consider imposing a moratorium on a particular catchment.
185. In our view, such a universal step is not urgently required. The Forum will, therefore, as part of its September 2012 report, consider the interim risks in those catchments where limits do not already exist, and report on any need for further transition tools.
186. Regardless of the tools in place, progress on setting objectives and limits, and the addition of further resource loads in heavily used catchments should be monitored by central government, and the need for a change in approach periodically reassessed.

#### ***Recommendation 36***

The NES on Ecological Flows could be a useful transition tool to promulgate default water take limits in places where there are no existing limits. However, the current material should be reviewed and amended as follows:

- a. Technical changes are required to the default flow requirements, to avoid unintended consequences, particularly for, but not limited to, significantly hydrologically altered catchments.
- b. The need for groundwater and wetlands default limits should be reviewed. Particular attention should be given to the groundwater defaults and how they would apply to confined aquifers.
- c. The flow setting methodology section of the draft NES contains very useful guidance material relevant to the general regime – not just the transition. This should be transferred out of the transition tool and into the general government guidance on limit-setting, and should be updated.

***Recommendation 37***

The government should defer the consideration of the need for further transitional tools, including the NES on Ecological Flows, until the Forum has reported in September 2012. In that report, the Forum will consider the risks posed to those catchments where there are no limits, while limits are being set, and report on the need or otherwise for new transition tools.

***Recommendation 38***

Progress on setting objectives and limits, and the addition of further resource loads in heavily used catchments where there are no limits should be monitored by central government, and the need for further transition tools, or national use of existing ones, should be periodically reassessed.

# List of recommendations

## Setting Objectives and Limits

### ***Recommendation 1***

The government should support and enhance the objectives currently in the National Policy Statement on Freshwater Management (NPS-FM) by:

- a. the incorporation of the substantive content of the material developed by iwi on (tangata whenua) relationships with fresh water (attached as **Appendix 2**), into the preamble to the NPS-FM, to provide acknowledgement of those relationships and their connections with the formal objectives
- b. expanding the existing objectives in the NPS-FM to include managing the risks to human health from micro-organisms and toxic contaminants, to apply to all waterbodies.

### ***Recommendation 2***

The government should, through a national instrument, direct regional councils to give effect to national objectives at catchment scale taking into account the spatial variation in biophysical characteristics of their waterbodies and their current state, by expressing objectives at a regional level as measurable states. Where possible these objectives should describe the desired state numerically.

Regional councils should be required to set resource use limits for the taking of water and the discharge of contaminants as rules in regional plans, to give effect to these objectives for all waterbodies.

### ***Recommendation 3***

In preparing a national instrument, the government should review and, where appropriate, amend relevant legislation, including Schedule 3 and s.69 of the RMA, to ensure consistency.

### ***Recommendation 4***

The government should, through a national instrument, establish a national framework under which regional councils set freshwater state objectives to give effect to the objectives in the NPS-FM. The national framework should:

- a. define minimum numeric state objectives (bottom lines) for a limited range of freshwater state parameters
- b. provide narrative objectives and technical guidance on all other parameters for which regional councils are to set numeric objectives
- c. calibrate parameters as a series of bands (*fair, good and excellent*) above bottom lines, to support regional decision-making in balancing local values for waterbodies

- d. provide guidance and options for regional councils to set numeric objectives within the fair, good and excellent bands for particular waterbody types and situations.

The indicative list of measurable state objectives (**Appendix 4**) includes biometric, physico-chemical, physical, human health, and fish productivity indicators.

The objectives set under this framework will apply to all waterbodies, urban and rural.

#### ***Recommendation 5***

Further work is required to fully populate and finalise the sets of numeric and narrative objectives. This should be done through a collaborative process involving stakeholders, iwi, and scientists, which the Forum would be pleased to undertake, with government support. The Forum will then, as part of its September 2012 report, provide the technical basis for a national instrument. This further work should review and refine the following:

- a. the list of parameters and indicators
- b. the assignment of parameter levels for minimum numeric state objectives and breakpoints between the bands for ‘Fair’, ‘Good’ and ‘Excellent’ categories
- c. the classification of waterbody types, in particular for lakes, wetlands, estuaries and hydrologically modified catchments
- d. an analysis of the measurable state objective options against current water quality and quantity state data
- e. the options for either dealing with wetlands and estuaries through a similar framework, or to continue to deal with these classes through use of tight narrative objectives in regional plans.

#### ***Recommendation 6***

In respect of NPS-FM Objective A2, the meaning of “maintained or improved” should be further defined. “Maintained” could be defined to mean that, within the national banded framework, a freshwater state objective for any parameter cannot be set in a band lower than that of its current state unless by way of an exception. “Improved” means setting a state objective higher than the existing state, and setting a limit based on that objective.

The development of the limits framework and its population with numerical state parameters (as outlined in Recommendation 5), together with catchment case studies, will provide the opportunity to analyse the effectiveness of this regime in practice. This may necessitate a revision of this recommendation on completion of that process.

#### ***Recommendation 7***

Freshwater state objectives and related limits set at a regional level must comply with relevant national objectives except in exceptional circumstances. A system for applying for exceptions should be defined nationally, and criteria for exceptions to national objectives should be:

- a. the inability to meet a minimum state objective due to natural conditions of a waterbody;  
OR
- b. a regional decision to set a numeric state objective in a water quality band lower than the current state because:
  - i. an exceptional economic benefit will result from the relevant activity AND
  - ii. a net environmental gain will result, taking into account compensatory actions.

The Forum would welcome the opportunity to work with the government in developing a system for applying for exceptions, including on the detail of relevant criteria and processes.

***Recommendation 8***

The government should direct regional councils to identify aquifers and classify them into classes that recognise the following characteristics:

- a. aquifers that are connected to surface water
- b. aquifers that are connected to the sea
- c. confined aquifers

*(Note: aquifers will often be in more than one class)*

***Recommendation 9***

The state objectives and limits for aquifers connected to surface water should be consistent with those of the connected surface waterbody and be developed through a whole of catchment approach. Aquifers that are connected to the sea should be managed to prevent salt water intrusion. Confined aquifers that are not connected to surface water or the sea should be managed on a case-by-case basis. Local values and uses of aquifers, such as for drinking water, should be identified and taken into account.

***Recommendation 10***

Central and regional government should, when setting state objectives, consider the constraints in significantly hydrologically altered catchments. These catchments are those that have been modified by long-term major structures for hydro-generation, municipal water supply dams, and irrigation dams. This use category should be accommodated in a waterbody classification system.

***Recommendation 11***

Regional councils should be directed to acknowledge and consider information uncertainty in setting objectives and limits, and to apply precaution where there is potential for irreversible environmental impact. Reversibility should be judged in the context of relevant planning timeframes, and management must be able to adjust and adapt as knowledge improves.

### ***Recommendation 12***

The government should, through a national instrument, provide uniform technical processes for defining freshwater state objectives and setting limits in the regional planning process. These processes must take account of spatial variation of waterbodies and the nature of land and water use, and guide the implementation of objectives and limits through regional policy documents. This should include providing guidance on limit-setting methodologies, how catchments should be divided for the setting of limits, and the definition of mixing zones. This guidance material should be reviewed at regular intervals.

### ***Recommendation 13***

To control cumulative effects, limits must be binding. To ensure efficiency and flexibility in a planning regime with binding limits, the following should be provided for.

- a. Once a limit is fully allocated, additional resource use (i.e. discharges of contaminants and the taking of water) should be a prohibited activity.
- b. An efficient allocation and transfer system is required (note that the Forum will report further on this matter in September 2012).
- c. Any proposed change to a limit should be considered through a regional plan process:
  - i. A simplified process should be provided for technical adjustment of limits (a streamlined plan change) where objectives are not affected (refer to recommendation 29(e)(i)).
  - ii. Changes to limits that imply that state objectives will not be met should require a full plan change process to reconsider objectives (refer to recommendation 29(e)(ii) and (iii)).

### ***Recommendation 14***

Regional councils should retain discretion to set timeframes for the adjustments required in land use, the use of water, and the discharging of contaminants appropriate to the circumstances of each case, within bounds of reasonable economic practicality. Where significant adjustment times are required, targets should be set in regional plans at no more than 5 year intervals to ensure progress towards freshwater state objectives, and to provide for timely adjustment of interventions as necessary.

# **Collaborative Decision-Making**

## ***Recommendation 15***

There should be a presumption in statute that a collaborative approach will be used for the development of or change to:

- a. freshwater-related national instruments<sup>31</sup>
- b. the freshwater-related components of regional policy statements and related regional plans<sup>32</sup>.

## ***Recommendation 16***

Iwi should be enabled to participate throughout the freshwater objective- and limit-setting process – including in:

- a. the decision on the commencement of a collaborative process for freshwater objective- and limit-setting
- b. the selection of panel members for any hearings undertaken as part of a collaborative process for freshwater objective- and limit-setting.

Iwi should have the option of allocating at least one member to any such hearing panel, and should be able to participate in the final decision of the statutory decision-making authority.

Iwi should participate in all relevant collaborative stakeholder processes.

## ***Recommendation 17***

Iwi values and interests should be addressed on a catchment-by-catchment and relationship-specific basis. There needs to be flexibility within freshwater objective- and limit-setting processes to allow mana whenua to express the different roles, interests and relationships that they have with respect to fresh water in a particular rohe.

## ***Recommendation 18***

Regional councils – with the involvement of iwi – should, following engagement with the community, stakeholders and mana whenua, have the ability to determine to use the Schedule 1 process for preparing, changing or reviewing freshwater-related policy statements or plans (including plans that manage the interaction between land and water).

In making this determination, the regional council should:

- a. indicate whether it intends to use a “Schedule 1” or a “collaborative” process
- b. publicly notify that intention along with the reasons for it and seek comment from the interested parties

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<sup>31</sup> Including national policy statements, national environmental standards, regulations made under section 360 of the Resource Management Act 1991, and any other freshwater-related regulations promulgated by central government.

<sup>32</sup> Including any statutory freshwater-related plans made under the Resource Management Act 1991 and privately requested plan changes.

- c. after considering these comments, publicly notify its final decision on whether to use a “Schedule 1” or a “collaborative” process. That notice should include the reasons for that decision.

#### ***Recommendation 19***

The Minister – with the involvement of iwi – should, following consultation with stakeholders and the community, have the ability to determine to use current statutory processes for preparing, changing or reviewing freshwater-related national instruments. The Minister should publicly notify the decision that he or she takes, along with an explanation of the reasons for doing so.

#### ***Recommendation 20***

Once a decision has been taken to use a collaborative approach for the development of a national instrument or a regional policy statement or related plan, and once that process has commenced, the relevant authority<sup>33</sup> should not have the ability to revert to an alternative statutory process (e.g. Schedule 1). If, however, the collaborative stakeholder group ceases to progress, the relevant authority should, on the advice of the Chair of the collaborative stakeholder group and following consultation with the group, have the ability to trigger a move to the next step in the process.

#### ***Recommendation 21***

There should be flexibility in the regulatory framework to allow participants to develop protocols and adapt procedures through the terms of reference to suit the context within which the collaboration is taking place. Decisions on the detailed design and implementation of collaborative processes for the development and implementation of freshwater-related national instruments, freshwater-related regional policy and related plans under the RMA, should, however, conform to the following principles of collaborative freshwater management which should be expressed in a national instrument.

Collaborative freshwater management should be designed and undertaken in such a way as to ensure that it is:

- a. participatory and representative<sup>34</sup>
- b. transparent and accountable
- c. supportive of good faith deliberation
- d. impartial
- e. integrative
- f. efficient
- g. adaptive
- h. competent
- i. empowered.

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<sup>33</sup> The Minister in the case of national instruments and the Regional Council in the case of regional policy and plans and any other statutory freshwater-related plans made under the Resource Management Act 1991.

<sup>34</sup> See Appendix 7 for a detailed explanation of these principles.

***Recommendation 22***

Where a final decision has been taken to follow a collaborative process for freshwater policy-and plan-making, a regional council should publicly seek expressions of interest to participate in a collaborative stakeholder group then, after considering expressions of interest, it should notify its preliminary decision on the membership of the collaborative stakeholder group.

There should be a right to object to that preliminary decision on the grounds that a party (or parties) has been excluded from the group. Objector(s) should be able to make a case to the council at a hearing that an additional party (or parties) should be allocated to the group. After considering objections, the council should publicly notify its final decision on the membership of the collaborative stakeholder group.

The collaborative stakeholder group should be required to notify the regional council if, throughout the process, a party requests access to the collaborative stakeholder group but the group resolves not to accept that request. The group should also be required to inform the regional council of its reasons for not accepting such a request.

***Recommendation 23<sup>35</sup>***

The design and implementation of a collaborative process for the development and implementation of freshwater-related regional policy and related regional plans should proceed in accordance with the following process steps, which should be expressed in a national instrument:

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<sup>35</sup> A detailed explanation of the process steps in recommendation 23 is provided in **Appendix 8**.

## NATIONAL OBJECTIVES/DIRECTION

### STEP 1: INITIATE COLLABORATIVE PROCESS

Transparent public process with iwi involvement for: (a) establishing a Collaborative Stakeholder Group (CSG) with a balanced representation of stakeholder interests, including mana whenua; (b) confirming the chair and terms of reference for the process; and (c) confirming resourcing, timeframes and protocols for running the CSG (including provision for on-going engagement between the CSG and the regional council and between the CSG and community).

### STEP 2: COLLABORATIVE POLICY DEVELOPMENT

Policy is developed in accordance with the principles of collaborative freshwater management plus: the involvement of regional council and independent experts and scientists; open consideration of all knowledge sources (e.g. science and mātauranga māori) and CSG engagement & consultation with the public. Scientists and other experts must, throughout the collaborative process, participate in accordance with the Environment Court's Expert witnesses Code of Conduct.

### STEP 3: TRANSLATE POLICY INTO PLANS

The CSG works with regional council plan drafting experts to translate policy resolutions into plan provisions ensuring that: (a) assumptions, areas of uncertainty and triggers for review are identified; (b) detail is provided on implementation and monitoring methods; and (c) processes for evaluation and review are specified.

### STEP 4: SUBMISSION AND HEARING PROCESS

The CSG submits draft plan provisions to the regional council along with a report that explains the group's deliberations, provides evidence in support of its decisions, and identifies any areas where the group has been unable to reach consensus. The regional council with the involvement of iwi makes any additions necessary to complete the "proposed" plan, notifies the plan, calls for submissions (and further submissions) and appoints an independent hearing panel. The panel schedules formal mediation between submitters and the regional council on the proposed plan and undertakes a hearing with Environment Court-equivalent rigour on any matters unable to be resolved through mediation. Officers of the regional council present evidence in support of the proposed plan and the collaborative stakeholder group is represented at the hearing by a person of its choice.

### STEP 5: DRAFT DECISION

The hearing panel issues a draft decision including reasons for that decision and considers comments on it from all submitters – including the collaborative stakeholder group – before finalising its report and recommendations to the regional council. The hearing report identifies instances (if any) where the hearing panel's recommendations deviate from the consensus position of the collaborative stakeholder group and the reasons for that deviation.

### STEP 6: FINAL DECISION

The regional council with the involvement of iwi makes the final decision explicitly explaining any departures from the consensus position of the CSG or the hearing panel.

### STEP 7: APPEALS<sup>36</sup>

Appeals on the decision of the regional council would be to the High Court on points of law except that parties would be able to seek the leave of the Environment Court to appeal the merit of the council's decision on the grounds that the decision: (a) does not give effect to the consensus position of the collaborative stakeholder group; or (b) will have material implications for a matter or matters of national significance.

When considering whether to grant a request for leave to appeal the merit of a council decision on the grounds that the decision will have material implications for a matter or matters of national significance, the Environment Court must be satisfied that scope of the appeal is limited to matters that the applicant pursued at the independent hearing. The Environment Court must also be satisfied that:

- a. *either* the matter relates to a unique or nationally significant natural or physical resource; *and* the implications of the council's decision are of a scale or magnitude that is of significance to the national community (taking particular account of effects that are irreversible and/or impact on existing property rights or rights under the RMA);
- b. *or* the implications of the council's decision are of a scale or magnitude that is of significance to the national community in terms of section 8 of the RMA (the Treaty of Waitangi).

When considering whether to grant a request for leave to appeal the merit of a council decision on the grounds that the council's decision will have material implications for a matter or matters of national significance, the Environment Court should take into account whether an applicant is able to demonstrate that they: (a) sought entry to the collaborative stakeholder group, and (b) participated in good faith in the process.

<sup>36</sup> There is at this stage not a consensus on the nature and scope of appeal rights. The Forum will continue to discuss this during its next phase.

#### ***Recommendation 24***

The design and implementation of a collaborative process for the development of freshwater-related national instruments should follow the same process steps set out in recommendation 23 above, but with the following changes:

- a. all references to “regional council” should be replaced by “the Minister”
- b. the Ministry would act as the custodian of the submission and hearing process (step 4) rather than the regional council
- c. appointments to hearing panels should be made in accordance with existing statutory provisions where they exist
- d. no formal mediation should be provided for during the submission and hearing process
- e. there should be no appeal rights (other than Judicial Review) on the decision of the Minister.

#### ***Recommendation 25***

Hearings (Step 4 of Recommendation 23) on land and freshwater-related regional policy and related plans should be conducted by an independent hearing panel of no less than three but no more than five members appointed by the regional council.

Elected representatives from the relevant regional council may be appointed to a hearing panel so long as it has a majority of independent members. An elected representative who participates in the collaborative stakeholder group must not participate in any subsequent council deliberations or decisions relating to the matters under consideration in the collaborative process.

In appointing members to the hearing panel the regional council should ensure that appointees are qualified commissioners and that the panel has:

- a. suitable expertise and experience to conduct a hearing with Environment Court-equivalent rigour, including timetabled pre-circulation of evidence and cross-examination
- b. one member as the chairperson, who must be a current, former, or retired Environment Judge or a retired High Court Judge or senior Barrister with extensive Resource Management Act experience
- c. one member appointed on the advice of local iwi
- d. a suitable degree of knowledge, skill, technical expertise and experience relating to the matter or type of matter that the panel will be considering.

#### ***Recommendation 26***

During the development of freshwater-related national instruments and regional policy and related plans:

- a. decision-makers should have regard to community or catchment-level values and interests

- b. those representing or advocating for national values and interests should make a good faith effort to recognise and take into account the implications of objectives and limits for local communities, and vice versa
- c. decision-making should be underpinned by a sound base of scientific and technical information and Mātauranga Māori
- d. iwi with a relationship to fresh water that is within the scope of a collaborative policy- or plan-making process should be an integral part of value and interest discussions from the beginning.

***Recommendation 27***

Judgements on different values and interests during the setting of freshwater objectives at the regional and catchment level should be guided by methods, models and tools that:

- a. reveal the complexity of the interaction between different values and interests in the given context
- b. translate technical, Mātauranga Māori and scientific information into easily understandable scenarios in a way that makes the implications of different options and objectives clear to the participants
- c. match the data, capabilities and resources that are available in a particular context.

***Recommendation 28***

The Land and Water Forum's 2010 recommendation 43 on government appointments to regional council committees or councils should also apply to unitary authorities.

## Plan Agility

***Recommendation 29***

Freshwater-related national instruments and regional policy statements and related regional plans should identify:

- a. key assumptions and areas of uncertainty in the underlying policy
- b. characteristics of the freshwater resource that need to be monitored or tracked
- c. triggers that would prompt a regulatory intervention to either adjust a policy setting, change methods of implementation or review underlying objectives (including the expected range of possible alternative methods or policy responses)
- d. the parameters within which minor and technical changes can be made in an efficient and timely manner, without need for formal consultation or collaboration, and the process for making such changes

- e. processes<sup>37</sup> for involving the collaborative stakeholder group and the community in the on-going evaluation of plan effectiveness and in decisions on whether possible plan changes:
  - i. are consistent with underlying objectives and supported by the community, and therefore do not require further consultation or collaboration
  - ii. are likely to have a limited or localised effect on objectives or the community and therefore require targeted<sup>38</sup> consultation or collaboration
  - iii. are likely to have a material effect on objectives and therefore require a formal plan review.

***Recommendation 30***

Regulatory authorities should have regard to, but avoid referencing Good Management Practice and Audited Self-Management documents in regulatory frameworks unless it is essential to do so.

***Recommendation 31***

The Resource Management Act 1991 should be amended to enable minor and technical updates to documents, methods and models that are incorporated by reference without the need for a plan change process.

***Recommendation 32***

As the collaborative process moves from plan-making to plan-implementation, the members of the collaborative stakeholder group should consider the capacity needed to implement, review and adapt the relevant policy or plan. Any proposals to change the membership of the collaborative stakeholder group during the transition from plan-making to plan-implementation should be made in consultation with the regional council and iwi and should have regard to the importance of:

- a. facilitating an agile planning response to new information or contextual change
- b. retaining and deriving maximum benefit from the trust and confidence and institutional knowledge developed through the process of developing the policy or plan.

***Recommendation 33***

The following should be part of an implementation package that should be in place at the time collaborative decision-making is introduced:

- a. guidance on the attributes of successful collaborative processes in New Zealand
- b. simple user manuals and training programmes on collaborative processes.

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<sup>37</sup> The detailed design of these processes should be determined by the parties to the collaborative process (including the regulatory authority, iwi and stakeholders) but should be required to conform to the statutory principles set out in recommendation 21.

<sup>38</sup> The nature of the targeted consultation or collaboration would need to be designed and agreed during plan-making, as would the criteria that would guide decisions on which path to take.

***Recommendation 34***

The government should establish an openly accessible online library of practical experiences with collaborative processes to facilitate shared learning.

***Recommendation 35***

All regional planning processes that haven't been publicly notified at the time the collaborative approach is passed into legislation should be captured by the presumption in favour of collaboration although the ability for a council to determine to take the Schedule 1 planning process should be provided.

## **Transition**

***Recommendation 36***

The NES on Ecological Flows could be a useful transition tool to promulgate default water take limits in places where there are no existing limits. However, the current material should be reviewed and amended as follows:

- a. Technical changes are required to the default flow requirements, to avoid unintended consequences, particularly for, but not limited to, significantly hydrologically altered catchments.
- b. The need for groundwater and wetlands default limits should be reviewed. Particular attention should be given to the groundwater defaults and how they would apply to confined aquifers.
- c. The flow setting methodology section of the draft NES contains very useful guidance material relevant to the general regime – not just the transition. This should be transferred out of the transition tool and into the general government guidance on limit-setting, and should be updated.

***Recommendation 37***

The government should defer the consideration of the need for further transitional tools, including the NES on Ecological Flows, until the Forum has reported in September 2012. In that report, the Forum will consider the risks posed to those catchments where there are no limits, while limits are being set, and report on the need or otherwise for new transition tools.

***Recommendation 38***

Progress on setting objectives and limits, and the addition of further resource loads in heavily used catchments where there are no limits should be monitored by central government, and the need for further transition tools, or national use of existing ones, should be periodically reassessed.

# Appendices

## Appendix 1: Summary of Terms of Reference

### Background

The Land and Water Forum was established in the belief that the stakeholders in water management needed to engage directly with each other if a sustainable way forward was to be found for better water management in New Zealand. The Forum draws together a unique partnership, including key players from the pastoral industry, iwi, forestry, horticulture, power generation, tourism, the recreational and environmental sectors and urban water interests to take an overall view of New Zealand's water issues and experience and build consensus for a way forward.

### Scope

The scope of the work to be carried out by the Forum in this project is to contribute to the forward work programme of the government's Fresh Start for Fresh Water by considering the specific areas of freshwater reform that still need reconciling between key stakeholders in four key areas – the setting of limits, decision-making structures for limit-setting, managing to limits (including land use) and allocation – as follows:

- What is needed to effectively implement the limit-setting approach to water management (currently reflected in the NPS), including consideration of what central government needs to do versus what local government needs to do, the role and responsibilities of water users, and nature and scope of limit-setting tools.
- What efficient and improved decision-making structures for limit-setting might look like, including provision for stakeholder involvement, specific provisions for iwi participation in limit-setting processes and decisions at catchment, regional and national levels and how those limit-setting processes interact with broader resource management processes.
- Methods and strategies of achieving limits and targets through managing the effects of land use on water.
- How to manage within limits by developing more effective methods and strategies for allocating water, trading and/or transfer systems.

The Forum will also provide advice to Ministers on a possible National Land and Water Strategy, including:

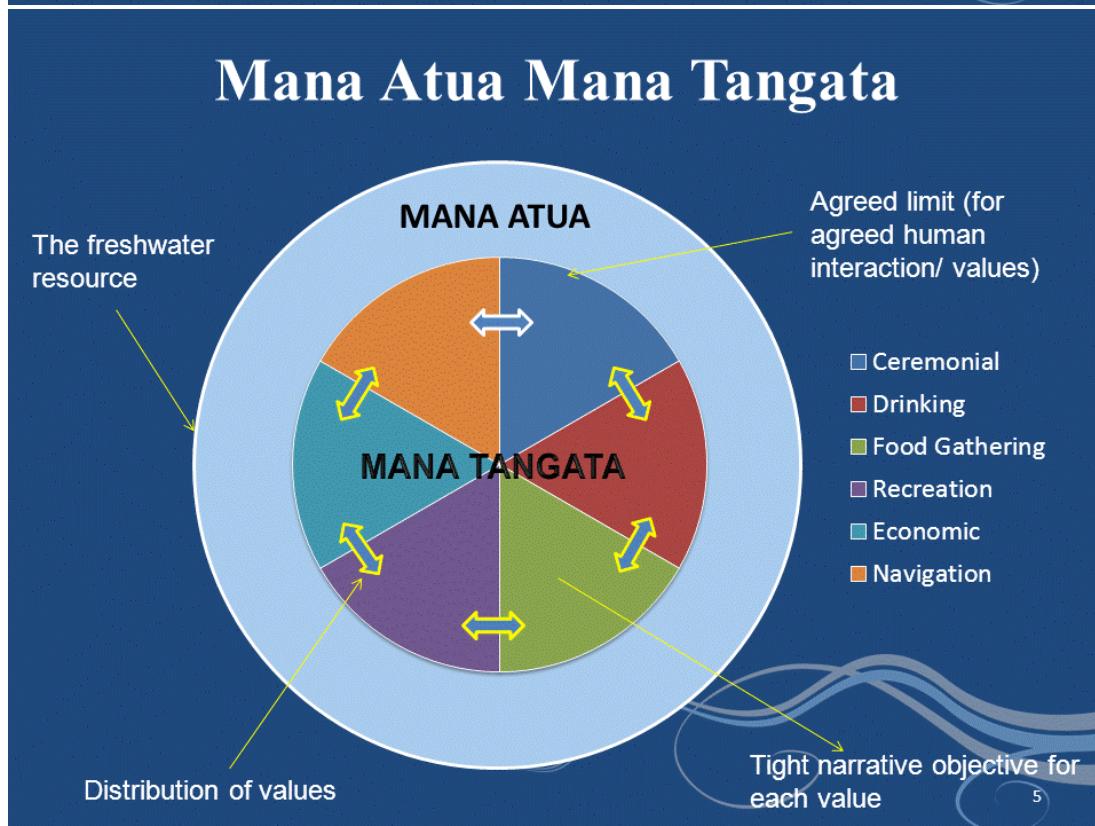
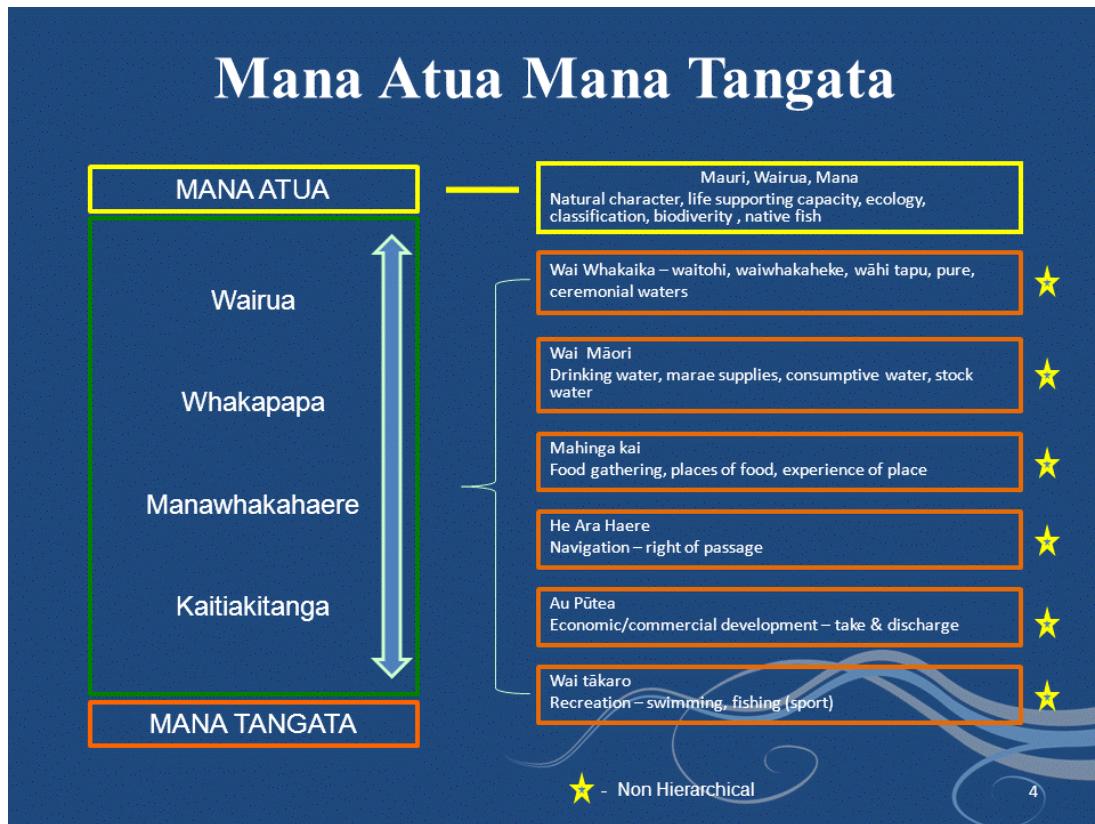
- Why such a strategy is important.

- The key elements and considerations of such a strategy.

Proposals contained in the Forum’s reports should be efficient, transparent, fair, practical and flexible. They should be achieved through a continued collaborative process, represent a measured approach to complex issues and:

- enable decision-makers to make timely, informed and value-for-money judgements on the choices
- build on the momentum of the work to date
- be grounded in the practical realities of New Zealand’s catchments, economy, culture and experience while being informed by theory and evidence
- not be inconsistent with policy decisions already made by government.

## Appendix 2: Tangata Whenua Values and Relationship with Fresh water<sup>39</sup>



<sup>39</sup> NB: Some terms used in the Mana Atua Mana Tangata model are also defined terms in certain legislation. However, those terms are used in the model in accordance with their ordinary meaning, and are not to be interpreted with reference to their statutory meanings.

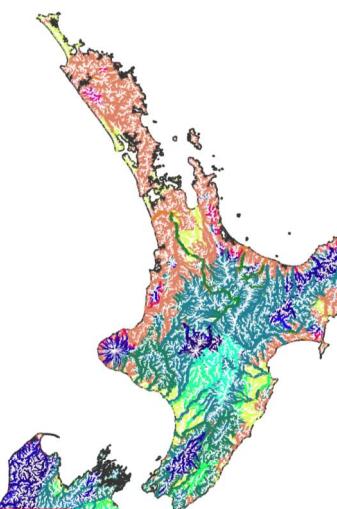
## Appendix 3: Objectives Cascade Example - Ecological Health

<b>Broad Narrative Objective</b>	Achieve water quality and flow conditions to provide for healthy ecosystems			
<b>Tight Narrative Objective</b>	Achieve dissolved oxygen levels and flow conditions to provide for healthy ecosystems	Maintain nitrate levels below a toxicity threshold for indigenous fauna	Achieve suspended sediment levels to provide for healthy ecosystems including those in estuaries	Maintain water temperatures to provide for healthy ecosystems
<b>Numeric Environmental Objective</b>	Maintain dissolved oxygen levels above XYZ Maintain flow to provide XYZ habitat level???????	Maintain nitrate concentrations below X mg/l	Maintain sediment concentrations below X mg/l	
<b>Limit</b>	Maintain flow above Z m <sup>3</sup> /s, and flushing flows AABB between dates C and D, allocation limit for takes of EE m <sup>3</sup> /s and FF m <sup>3</sup> /yr.	Maintain catchment nitrogen loads below Y tonnes/year.  Plus Flow requirement	Maintain sediment loads below X tonnes/year <sup>40</sup>  Plus Flow requirement	

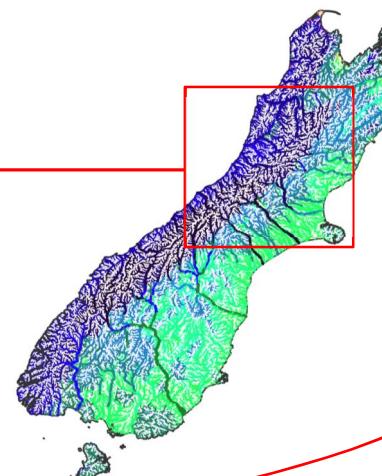
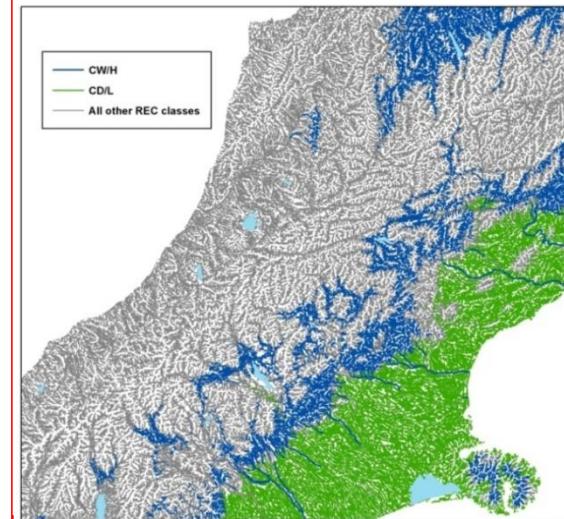
<sup>40</sup> Sediment loads can be expressed a number of ways. They are flow dependent and must be defined with a flow statistic. For example, the total suspended load in all flows below the annual flood.

## Appendix 4: Deriving National Waterbody State Objectives within REC Spatial Framework

¹Indicators for Ecological &/or Human Health	1 CW/H			2 CD/L			3 etc...		
	Fair	Good	Excellent	Fair	Good	Excellent	Fair	Good	Excellent
Numeric Indicator 1	a	b	c	j	k	l	etc...		
Numeric Indicator 2	d	e	f	m	n	o	etc...		
Numeric Indicator 3	g	h	i	p	q	r	etc...		
etc...	etc...	etc...	etc...	etc...	etc...	etc...	etc...	etc...	etc...
Narrative Indicator 1	narrative			narrative			etc...		
Narrative Indicator 2	narrative			narrative			etc...		
Narrative Indicator 3	narrative			narrative			etc...		
etc...	etc...			etc...			etc...		



Example: Cool-Wet/Hill (CW/H) & Cool-Dry/Lowland (CD/L)



Climate / Source of Flow Classification
CD/H
CD/L
CD/Lk
CD/M
CW/GM
<b>CW/H</b>
CW/L
CW/Lk
CW/M
CX/GM
CX/H
CX/L
CX/Lk
CX/M
WD/L
WD/Lk
WW/H
WW/L
WW/Lk
WX/H
WX/L
WX/Lk

<sup>¹</sup>Indicators describe a desired environmental state for an aspect of ecological and/or human health

**Numeric Indicators** can be used to define break-points between the categories "Fair", "Good" and "Excellent". These include periphyton cover and/or biomass, the QMCI (Quantitative Macroinvertebrate Community Index), temperature, dissolved oxygen, toxicants such as nitrate, zinc, copper, etc., the degree of siltation of habitat, the concentration of indicator microorganisms such as E. coli, and the amount of potentially toxic cyanobacteria.

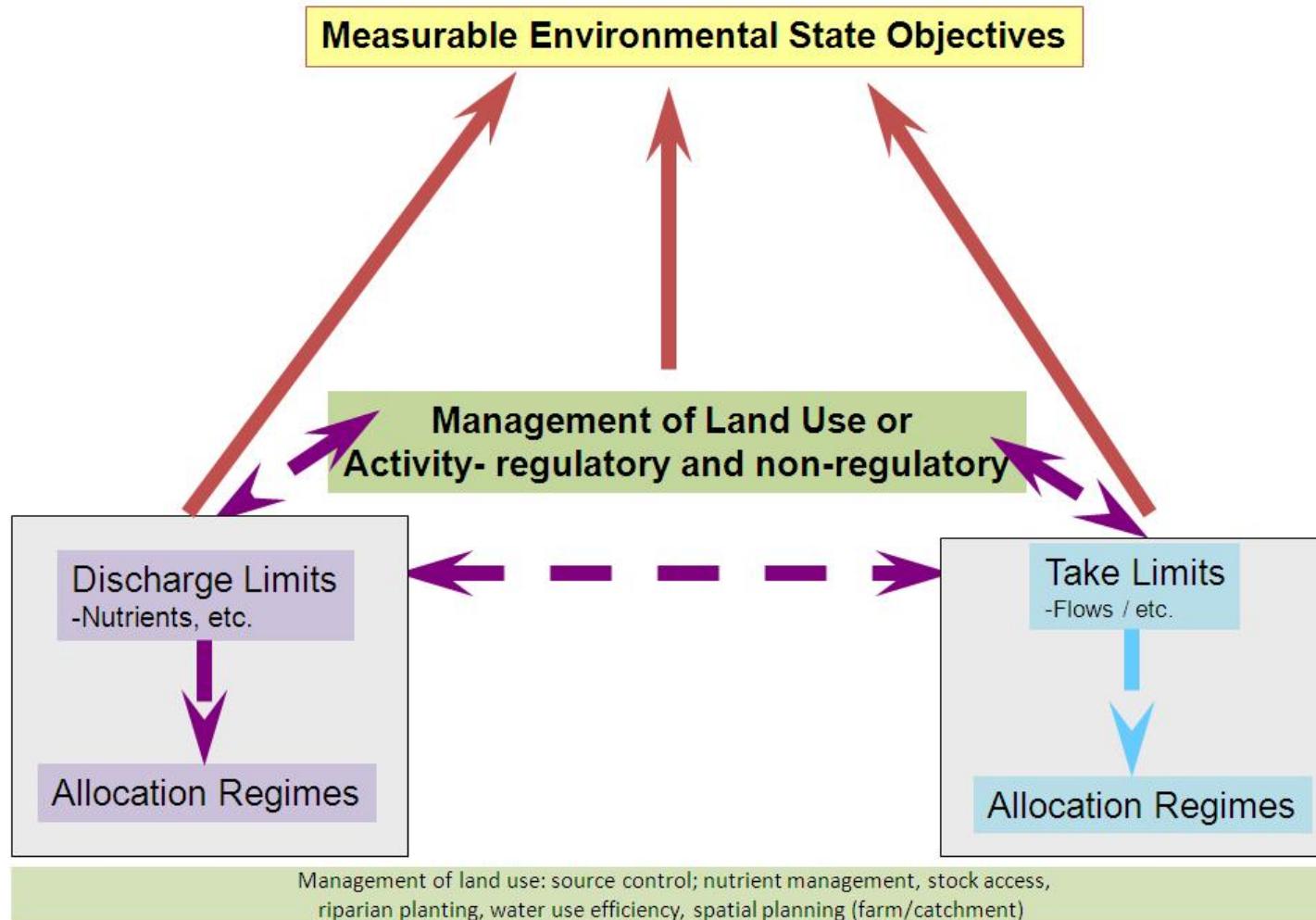
**Narrative indicators** are necessary where it is not currently possible, for various reasons, to define a numeric indicator at the national level. These include indicators of indigenous species diversity(e.g. species richness), fish, water suspended solids, visual clarity and colour, the amount of habitat space for a given species, and river channel morphology, connectivity and physical processes.

## Appendix 5: Objective and Limit Setting at Regional Level

State Objectives	Numeric	Manage For	Discharge Limit	Take Limit	Additional Management Methods
<b>Sediment/clarity</b>	Yes	Contact recreation, mahinga kai, ecological health, aesthetic values, fisheries	Yes, for sediment loads	Flow dependent	Source control, Stock access, Riparian planting
<b>Algae/Macrophytes</b>	Yes	Contact reaction, aesthetic values, mahinga kai, ecological health, fisheries, human health	Yes, for N and P loads	Flow dependent	Nutrient management Shading, Stock access, Flushing flows
<b>Bacteria</b>	Yes	Contact recreation, mahinga kai, human health, stock drinking	Only for point source	No	Stock Access
<b>Temperature</b>	Yes	Ecological health, fisheries	Only for point source	Yes	Shading
<b>Dissolved oxygen</b>	Yes	Ecological health, fisheries	Only for point source	Yes	Shading
<b>Toxic contaminants</b>	Yes	Ecological health, fisheries, human health, water supply, mahinga kai	Yes, particularly for point source discharges/stormwater, also N toxicity	Flow dependent	Source control
<b>Habitat space</b>	Yes	Ecological health, fisheries	No	Yes	Yes, particularly Riparian and stock access
<b>QMCI Score</b>	Yes	Ecological health, fisheries	Yes, for toxic contaminants	Yes	Yes, everything
<b>Connectivity</b>	No	Ecological health, fisheries	No (possibly for point source toxic contaminants)	Yes	Yes, management of barriers
<b>Channel morphology and processes</b>	Yes, for Flow	Ecological health, maintenance of channel, estuary/coastal maintenance	No	Yes	Yes, management of bed disturbance activities
<b>Salt water intrusion (Chloride)</b>	Yes	Water supply quality	No	Yes	No

## Appendix 6: Flexibility in Catchment Management Planning

### Catchment Management Framework



# **Appendix 7: Detailed explanation of the principles of collaborative freshwater management set out in recommendation 21**

## **a. *Participatory and representative***

The process ensures that all affected and interested stakeholders are identified and included in a manner that ensures that their interests are effectively represented, either in person or through proxies.

## **b. *Transparent and accountable***

The process and its ground rules are clear and public, and there is an effective mechanism for monitoring progress and sharing information so that steps taken in policy development are visible to all. The roles and responsibilities of both institutions and stakeholders are clear. Participants network with and are answerable to those that they represent, and the process upholds all existing statutes and regulations.

## **c. *Supportive of good faith deliberation***

The process encourages mutual education of its members and creates an environment where participants work together in good faith and with an open mind to determine the scope or root causes of alleged problems and to generate solutions. Arguments are subject to critical evaluation, and the process is designed and managed so as to maintain civility, respect and trust in order to allow diverse groups of stakeholders to communicate freely and genuinely.

## **d. *Impartial***

The design of the process, its ground rules, and the facilitator and chair treat all parties equally.

## **e. *Integrative***

The process both: (a) ensures that an integrated approach is taken to the primary influences within the water system, such as land use or river-groundwater connections, different community world views or diverse scientific interpretations; and (b) recognises linkages within the management system in a manner that ensures policies and actions within and between institutions are coherent and aligned.

## **f. *Efficient***

The process is fit for purpose and easy to understand and operate – transaction costs are minimised, including financial and time costs of decision making, and compliance and administrative costs.

## **g. *Adaptive***

The process incorporates collaborative learning, is responsive to changing pressures and values, and anticipates and manages threats, opportunities, uncertainties and risks. It recognises that freshwater management is complex and constantly in flux.

## **h. *Competent***

Decisions are based on sound evidence. The process recognises and effectively responds to contextual strengths and weaknesses in: skills, leadership, experience, resources, knowledge, social learning, existing plans and systems.

## **i. *Empowered***

The process empowers participants. The process must safeguard the statutory decision-making responsibility of the relevant authority, but the outcomes of collaboration, including the balanced resolutions of participants, must have a strong influence over final policy decisions.

## **Appendix 8: Detailed explanation of process steps set out in recommendation 23**

*Notes on Step 1: Regional council<sup>41</sup> initiates collaborative approach*

- The regional council will:
  - consult with iwi, the community and stakeholders before reaching a position on whether to follow a collaborative approach to freshwater policy- and plan-making, or whether to take a traditional Schedule 1 approach.
  - formally initiate the collaborative process and notify the public of its decision
  - draft terms of reference for the collaborative process (including objectives, timeframes for each process step and the consequences associated with failing to reach them, detailed process steps such as the approach to: providing for effective stakeholder participation and the balanced representation of interests in the collaborative group; on-going engagement between the regional council and the collaborative stakeholder group; and consultation with the wider public)
  - allocate the resources necessary to support and service the process (including funding, secretariat services, trained facilitators and scientific and technical experts).
- Employees of the regional council will be fully involved in the collaborative process as active observers, and scientists and other experts will be active contributors.
- The regional council will publicly call for expressions of interest for participation in the collaborative stakeholder group. The public notice will include the draft Terms of Reference for the process.
- A Councillor may submit an expression of interest to participate on a collaborative stakeholder group. If a councillor has submitted an expression of interest to participate, s/he must not take part in council discussions or decisions on the make-up of the collaborative stakeholder group.
- In order to avoid actual or perceived conflicts of interest, an individual who participates in the collaborative stakeholder group must not also have a decision-making role in relation to the matters considered by that group. To be clear, if an individual, including an elected representative, is allocated to a collaborative stakeholder group s/he must not participate in any subsequent council discussions or decisions relating to the matters under consideration in the collaborative process.

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<sup>41</sup> Throughout these notes, references to “Regional Council” also include Unitary Authorities and assume the involvement of iwi.

- The regional council will follow a transparent process for appointing stakeholders to the collaborative stakeholder group – decisions on the membership of the group will ensure that there is a balanced representation of interests and there will be an opportunity to object to the preliminary decisions of the council and to make a case that additional members should be appointed to the group.
- The regional council will provide the collaborative stakeholder group with draft Terms of Reference for review and comment.
- Once the make-up of the collaborative stakeholder group has been finalised the group will confirm a Chair in consultation with the regional council (the Chair can either be from within or from outside the group).
- The collaborative stakeholder group will then negotiate and confirm the Terms of Reference for the group with the regional council.
- The collaborative stakeholder group will have the ability to review its membership from time to time and to amend the membership of the group in consultation with the regional council to ensure adequate representation.

*Notes on Step 2: Collaborative policy development*

- The collaborative stakeholder group will develop policy and plan content collaboratively in a manner that is consistent with guidance on the principles and attributes of successful collaborative freshwater management and in accordance with its Terms of Reference.
- The collaborative stakeholder group will engage with the regional council throughout the policy development process and will involve council and independent technical experts to ensure that there is a sound base of information upon which to make policy decisions. The process of making the impacts of different objectives clear is extremely important and highly technical. Experts will need to actively contribute to the collaborative policy development process in order to identify and explain the social, environmental, cultural and economic effects of different policy scenarios and options. The council will need to manage any actual or perceived conflicts of interest between council employees assisting the collaborative process and those advising the council in its decision-making capacity.
- Members of the collaborative stakeholder group will actively engage with their constituencies throughout the process, and the group as a whole will, with the assistance of the regional council, engage with the wider public to test problem definitions and policy options as they evolve.
- The collaborative policy development process will be designed to identify and reach a resolution on points of difference as early as possible in the process. This may require mediation between participants and between the collaborative stakeholder group and external parties as policy options evolve.

*Notes on Step 3: Translating policy into plans*

- The regional council will provide expert planners and plan drafters to work with the collaborative stakeholder group to translate its policy resolutions into written provisions. A key role of the expert planners and plan drafters is to provide advice on the lawfulness and practicality of plan provisions, and on their consistency with other elements of the regional planning framework.
- When translating policy into plans the collaborative stakeholder group shall ensure that suitable detail is provided on technical, implementation, monitoring, and evaluation and review matters, including:
  - the methods that the regional council will use to achieve objectives and/or limits
  - proposals to monitor council performance, third party compliance with limits and the social, cultural, economic and environmental impact of activities
  - proposals for evaluating whether limits that have been set are proving effective at achieving desired objectives
  - review processes and timeframes including provision for the on-going involvement of the collaborative stakeholder group as a means to facilitate an agile planning response to new information and/or the outcome of monitoring and evaluation programmes.
- The collaborative stakeholder group will sign-off and submit draft plan provisions to the regional council along with a report explaining the key points of deliberation, rationale for its decisions and the process it used to reach a decision (including where the group has been unable to reach consensus and why).
- In some instances the collaborative group may resolve that consensus on particular matters is not possible. Where consensus is not possible, the deliberations of the group will inform the regional council as it reaches a position on those matters and translates that position into plan provisions. Members of the collaborative stakeholder group will also be able to submit individually on these matters and have their position heard by an independent hearing panel if their concern cannot be resolved through pre-hearing mediation.
- The process of collaborative policy development and translating policy resolutions into plan provisions must take place in accordance with timeframes set out in the terms of reference.

*Notes on Step 4: Formal submission and quasi-judicial hearing process*

- Upon receiving the draft plan provisions and report from the collaborative stakeholder group, the regional council will:
  - assume the position of custodian of the public submission and hearing processes relating to the draft plan provisions

- produce plan provisions relating to matters that the collaborative stakeholder group has been unable to reach consensus on; the council would prepare a proposed plan for notification
  - publicly notify the proposed plan and call for public submissions and further submissions on the proposed plan provisions.
- Members of the collaborative stakeholder group will not be permitted to submit individually on the proposed plan provisions that are associated with the consensus position of the group. They will, however, be permitted to submit individually on those plan provisions that have been developed by the regional council for matters that the collaborative stakeholder group was unable to reach consensus on.
- Once submissions have been received, the regional council will appoint a hearing panel. The make-up and capabilities of the hearing panel needs to reflect the fact this is a quasi-judicial hearing process that is required to have Environment Court-equivalent rigour and independence.
- The hearing panel, and most-importantly its Chair, needs to be free of actual or potential conflicts of interest and must have the capability to run a hearings process that includes pre-circulation of evidence, pre-hearing mediation and cross-examination – the role of the panel is to deliver an independent critical evaluation of the arguments presented by the submitters.
- The hearing panel will schedule formal mediation between the submitters and the regional council in its capacity as custodian of the draft plan – the council will allow representatives of the collaborative stakeholder group to participate in this process in support of the consensus position of the group. This mediation will be run by an independent mediator on a without prejudice basis.
- The hearing panel will schedule a hearing on any outstanding matters unable to be resolved through mediation.
- The collaborative stakeholder group will submit a report to the regional council on any outstanding submission points. The report will be akin to that required under section 42A of the Resource Management Act 1991.
- The hearing panel will conduct a rigorous hearing on the draft plan provisions still under submission including timetabled pre-circulation of evidence and cross-examination.
- Officers of the regional council, as custodian of the public submission/hearing process, will present evidence in support of the notified plan provisions under submission, including the consensus position of the collaborative stakeholder group.
- The collaborative stakeholder group will be represented at the hearing by a person of its choice. This could, for instance, be the Chair of the group, an

independent planning expert or a council officer. Members of the collaborative stakeholder group will have an opportunity to review and contribute to the evidence relating to the consensus position of the group. The intention is not to constrain the input of collaborative stakeholder group members in defense of their consensus position so that they are disadvantaged *vis a vis* other submitters, but to ensure that the consensus position of the group is presented in an efficient and coordinated way.

- The Chair will have the flexibility to tailor the formality of hearing procedures to ensure an efficient and accessible process (so long as suitable rigour is preserved i.e. cross-examination and pre-circulation of evidence).
- Councillors should not be required to attend hearings but there is likely to be value in them doing so – some councils may require the attendance of councillors who will be involved in the final decision.
- After hearing submissions and supporting evidence on the proposed plan, the hearing panel will issue recommendations to the regional council – a comprehensive hearing report will identify any areas where the hearing panel considers that its recommendations depart from the consensus position of the collaborative stakeholder group and set out the rationale for doing so.
- The submission, mediation, hearing, and deliberation steps need to take place in accordance with pre-agreed protocols and timeframes as set out in the Terms of Reference.
- The recommendations and report of the hearing panel will be submitted to the regional council.

*Notes on Step 5: Draft decision*

- The hearing panel will:
  - issue a draft decision and consider comments on it from all submitters – including the collaborative stakeholder group – before finalising its report and recommendations to the regional council
  - identify in its report instances (if any) where its recommendations deviate from the consensus position of the collaborative stakeholder group and the reasons for that deviation.
- The draft decision process needs to take place in a timely manner and in accordance with pre-agreed timeframes set out in the Terms of Reference.

*Notes on Step 6: Final decision*

- The final decision is made by the regional council.

- The regional council will make its decision and produce a decision-report. That decision report will explicitly point out any instances where the council has chosen to deviate from the:
  - consensus position of the collaborative stakeholder group and explain its rationale for doing so.
  - recommendations of the hearing panel and explain its rationale for doing so.
- The final decision process needs to take place in accordance with pre-agreed timeframes and deadlines.

*[[Notes on Step 7: Appeals<sup>42</sup>*

- Appeals on the decision of the regional council would be to the High Court on points of law except that parties would be able to seek the leave of the Environment Court to appeal the merit of the council's decision on the grounds that the decision: (a) does not give effect to the consensus position of the collaborative stakeholder group; or (b) will have material implications for a matter or matters of national significance.
- When considering whether to grant a request for leave to appeal the merit of a council decision on the grounds that the decision will have material implications for a matter or matters of national significance, the Environment Court must be satisfied that scope of the appeal is limited to matters that the applicant pursued at the independent hearing. The Environment Court must also be satisfied that:
  - **either** the matter relates to a unique or nationally significant natural or physical resource; and the implications of the council's decision are of a scale or magnitude that is of significance to the national community (taking particular account of effects that are irreversible and/or impact on existing property rights or rights under the RMA);
  - **or** the implications of the council's decision are of a scale or magnitude that is of significance to the national community in terms of section 8 of the RMA (the Treaty of Waitangi).
- When considering whether to grant a request for leave to appeal the merit of a council decision on the grounds that the council's decision will have material implications for a matter or matters of national significance, the Environment Court should take into account whether an applicant is able to demonstrate that they: (a) sought entry to the collaborative stakeholder group, and (b) participated in good faith in the process.]]

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<sup>42</sup> There is at this stage not a consensus on the nature and scope of appeal rights. The Forum will continue to discuss this during its next phase.

## **Appendix 9: A note on the time and cost of the collaborative plan and policy-making process**

The scale of appeals expected under the status quo will have a significant impact on estimates of the cost and time of the proposed collaborative process relative to the status quo. If widespread and/or in-depth merit appeals are likely under the status quo, the collaborative process will achieve significant time savings. If widespread and/or in-depth merit appeals are unlikely under the status quo, the collaborative process may not provide the same degree of time savings relative to the status quo – although we still expect that it will be faster.

In general terms:

- It could take between 3 and 24 months for the collaborative stakeholder group to work effectively with the regional council and community to reach policy resolutions and develop them into proposed plan provisions for notification. If the collaborative process has worked effectively and if mediation successfully resolves any points of submission, the independent hearing step should be very brief.
- In cases where collaboration proves unworkable, it could take between 3 and 6 months before this becomes clear. In these cases the independent hearing step would assume more importance and could take a similar amount of time to a current merit appeals process.
- The stakeholder review and final decision step should be short; in the order of 1-2 months and 2-6 months respectively (a 6-month period would follow a very unsuccessful collaborative process).
- Appeals to the Environment Court or High Court would in the significant majority of instances be on a more narrow range of matters than is currently the case.

Again in general terms we believe that a collaborative process – including the consultation that would currently take place pre-notification – could take:

- less than a year to two-and-a-half years for discrete plans or plan changes, or in instances where collaboration has been very effective
- one-and-a-half years to three-and-a-half years where collaboration has been effective, but where a number of submissions needs to be resolved through the independent hearing process
- three to six years where collaboration has proven reasonably effective, but where final decisions are nevertheless appealed to the Environment Court and High Court
- three to five years where collaboration breaks down, the independent hearing step assumes primary importance and where council decisions are appealed to the High Court only.

In addition to a reduction in the direct time and cost it takes to initially finalise policy and plans, the Forum expects that the proposed collaborative process will, over time, help:

- increase the quality of and commitment to plans, thereby reducing the degree of future litigation;
- increase the agility of the planning framework through the on-going use of the collaborative group (and the social capital generated through the plan-making process) to make timely and equitable minor and technical amendments to plan provisions in response to new information;
- clarify the environment within which resource consent applications are made – an effective plan will remove or streamline consent requirements for proposals that accord with agreed objectives.

In any case, participants in a collaborative process, from regional councils to stakeholders to the general public, will need to build new capabilities and to reallocate capacity as they adjust to the changed policy- and plan-making context. This will have resourcing, time and financial implications and will lead to a redistribution of costs.

#### *Implications for regional councils*

Councils currently make a significant investment in the plan development process. Regions with greater demand on freshwater resources commit substantial amounts of council staff time and ratepayer money to the pre-notification, submission, and hearing phases of a plan's development. On average, appeal costs make up more than a third of total council planning costs.

Councils will play an important role in supporting the collaborative policy- and plan-development process – both financially and through the provision of facilities, staff time, technical experts and facilitators. Non-commercial stakeholders will need to be sufficiently resourced to participate through the provision of honoraria and travel costs – the responsibility for this will fall to councils.

In large part we expect that there will be a reasonably direct transfer of council costs that would normally be spent on pre-notification consultation and technical and policy analysis towards supporting the collaborative process. While we note that councils are tending to take a more collaborative approach to policy development than has previously been the norm, effective collaboration is likely to be more expensive for councils at the pre-notification stage than some standard approaches to plan development and consultation.

Councils will also face costs as the custodian of submissions, mediation and hearings. Many of these costs are a feature of the status quo, although the cost of establishing the independent hearing panel may be higher than status quo hearings if collaboration breaks down or if there is a large number of submissions (as the hearing will need to be comprehensive and the council will need to fund the independent commissioners).

It is expected that there will be significantly fewer merit appeals to the Environment Court under the proposed collaborative plan- and policy-making process. Consideration may need to

be given to the provision of central government funding if costs that would ordinarily be borne by central government (through its funding of the Environment Court) are transferred to the ratepayer.

*Implications for active participants in freshwater policy and planning processes*

Participants in the collaborative stakeholder group will need to devote significant time to the process. Given their obvious interest in the outcomes (evidenced by their decision to seek a place on the collaborative stakeholder group) this will probably require them to transfer the time they'd normally allocate under the status quo to submissions, mediation and litigation towards participation in or engagement with the collaborative stakeholder group at front end of the process.

Some participants in the collaborative stakeholder group may transfer financial resources they'd normally spend on legal representation and expert advice at the hearing stage towards the provision of information at the front-end policy development stage.

Other stakeholders that currently tend to be heavily involved at all stages of the Schedule 1 planning process (e.g. sector groups that are involved in pre-notification consultation, council hearings and appeals) but who are not participating in the collaborative stakeholder group will similarly experience a shift of costs away from the Environment Court towards engagement with the policy development process and independent hearings prior to the council decision.

In these cases it may be that net costs will be lower under the proposed collaborative plan- and policy-making process. Participation in the collaborative process will involve a heavy investment of time, but not necessarily the degree of expenditure on professional services (i.e. commissioning of expert evidence and legal representation) that are a feature of the hearings and appeal stages under the status quo.

It is important, however, to be mindful of practical issues and opportunity costs that may face participants in the collaborative stakeholder group. A key success factor will be ensuring that individuals who are part of a collaborative stakeholder group can participate on equal footing to participants who come from professional organisations. These individuals are likely to be paid by their organisations to attend as part of their day-job. As noted, it is expected that councils will provide honoraria to support participation, but it is likely that these individuals will have to contribute significantly more time to the planning process than they would under the status quo.

*Implications for interested but not actively involved parties*

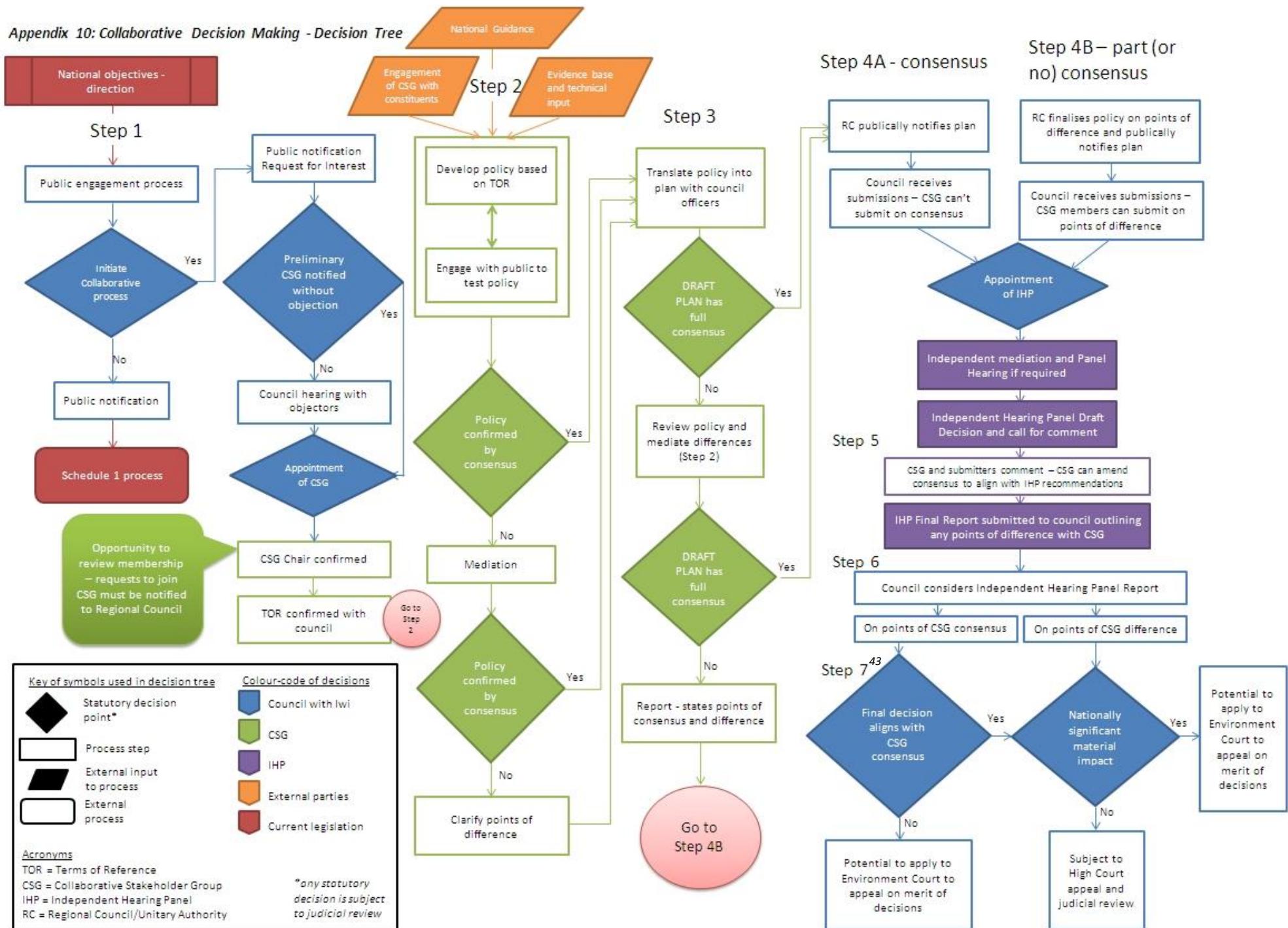
Under the proposed collaborative plan- and policy-making process, persons with an interest in the planning process but who wouldn't normally participate actively in the statutory process (e.g. members of the public with a general interest) will be able to feed-in to the collaborative policy- and plan-making process through:

- engagement in consultation run by the collaborative stakeholder group,
- direct contact with the member of the collaborative stakeholder group charged with representing their interests,

- engagement with professional organisations that advocate for particular values and interests (e.g. Federated Farmers, Forest and Bird, Dairy NZ or Fish and Game),
- engagement with their local elected representative and council officers, and
- lodging a submission as per the current system.

There is unlikely to be a significant change in costs for these participants.

#### Appendix 10: Collaborative Decision Making - Decision Tree



<sup>43</sup> There is at this stage not a consensus on the nature and scope of appeal rights. The Forum will continue to discuss this during its next phase.

# Glossary

<b>Abstracted water</b>	Water removed from a waterbody, typically for consumptive use.
<b>Adaptive management</b>	A structured, iterative process of decision-making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring.
<b>Allocation</b>	A process whereby a total amount of water that may be extracted, or an amount of contaminants that may be discharged, is divided and distributed to individuals, or groups of individuals for their use. The individual amounts of a resource so allocated are often referred to as <b>allocations</b> , and the total can be said to be the total allocation.
<b>Allocative efficiency</b>	(See Efficiency.)
<b>Aquifer</b>	An underground deposit of water-bearing sand, gravel or rock capable of yielding supplies of water.
<b>Audited Self-Management (ASM)</b>	A management programme (individual, industry, or land user collective) which allows for the credible and transparent demonstration (audit) that agreed actions have been implemented (in this instance for water quality).
<b>Assimilative capacity</b>	The quantity of contaminant that can be discharged into a waterbody in meeting the freshwater state objective for the waterbody.
<b>Bottom-line</b>	A nationally defined minimum (described either numerically or narratively) above which regional councils must set numeric fresh water state objectives.
<b>Catchment</b>	The total area of land draining into a river, reservoir, or other body of water.
<b>Collaboration/ collaborative approach/collaborative process</b>	Working with a wide range of interested parties in each aspect of a decision-making process, including the development of alternatives and the preferred solution(s). Collaboration provides a greater level of input on the design of the approach and the options and solutions identified than consultation and many other forms of public and sector engagement.
<b>Consumptive water use</b>	The taking, diverting, damming and use of water that removes water (and/or changes the flow) from a waterbody and does not return the water (and/or restore the flow) to the same waterbody at the same or similar rate. This definition can also include uses that involve temporal delay in the return of water to the original source.

<b>Contaminant</b>	Biological (e.g. bacterial and viral pathogens) or chemical (e.g. toxicants) introductions capable of producing an adverse effect in a waterbody.
<b>Cumulative</b>	Resulting from successive additions at different times or in different ways.
<b>Diffuse discharges</b>	Pollutants sourced from widespread or dispersed sources (e.g. from pasture runoff of animal wastes, fertiliser and sediments, as well as runoff of pollutants from paved surfaces in urban areas). Also called non-point source discharges.
<b>Dynamic efficiency</b>	(See Efficiency.)
<b>Ecological flow</b>	(See In-stream flow.)
<b>Ecosystem</b>	A system formed by all plants, animals, and micro-organisms in a particular area interacting with the non-living physical environment as a functional unit.
<b>Efficient use of water / efficiency</b>	Generally considered to have 3 concepts: <ul style="list-style-type: none"> <li>• <b>Technical efficiency</b> – The amount (say, %) of water beneficially used in relation to that taken. It relates to the performance of a water use system, including avoiding water wastage.</li> <li>• <b>Allocative efficiency/Economic efficiency</b> – Relates to water uses resulting in the optimum outcome for both the environment and community. Water is allocated to the use which has the highest value to society.</li> <li>• <b>Dynamic efficiency</b> – Relates to the use of water adjusting over time, in order to maintain or achieve allocative efficiency.</li> </ul>
<b>Fresh water</b>	Naturally occurring water on the Earth's surface in bogs, wetlands, ponds, lakes, rivers and streams, and underground as <b>groundwater</b> in aquifers.
<b>Good management practice (GMP)</b>	GMP refers to the evolving suite of tools or practical measures that could be put in place at a land user, sector and industry level to assist in achieving community agreed outcomes (in this case for water quality).
<b>Groundwater</b>	Water located underground in rock crevices and in the pores of geologic material. It supplies springs and wells. (See 'aquifer').
<b>Hydrology/hydrological</b>	The science dealing with the occurrence, circulation, distribution and properties of water.
<b>In-stream flow</b>	Relates to the intrinsic environment of the river, lake or aquifer (e.g. ecology, recreation, cultural, aesthetic, natural character). The flow regime required to be maintained in a river to support environmental, social and cultural values associated with the water resource.

<b>Integrated catchment management</b>	A process through which people can develop a vision, agree shared values and behaviours, make informed decisions and act together to manage the natural resources of their catchment. Decisions are made at the catchment level by considering the effects on all of the resources and people within the catchment, by integrating science and governance.
<b>Intensification of land use</b>	A more concentrated use of land, such as obtaining more productivity from land or concentrating more activity onto an area of land.
<b>Iwi</b>	Tribe.
<b>Kaitiakitanga</b>	The exercise of guardianship.
<b>Limit</b>	The maximum amount of resource use available, which allows a freshwater objective to be met (definition from NPS).
<b>Mahinga kai</b>	The customary gathering of food and natural materials and places where those resources are gathered.
<b>Mātauranga Māori</b>	Māori knowledge originating from Māori practices, observations, science and ancestors, including the Māori world view and perspectives, creativity and cultural practices.
<b>National Environmental Standard (NES)</b>	Regulations to protect the environment and human health developed under the Resource Management Act 1991. These are binding on local authorities.
<b>National instrument</b>	Includes legislation, national policy statement or regulations.
<b>National Policy Statement for Freshwater Management 2011</b>	The NPS prepared under the Resource Management Act that came into effect on 1 July 2011.
<b>Non-consented use</b>	Resource use (taking, diverting, damming, using or discharging) that is allowed by the RMA (section 14) or by rule in a plan, without the need for resource consent. It can also refer to unlawful use without resource consent (in the context of total non-consented use).
<b>Nutrient</b>	Minerals needed by plants and animals for growth.
<b>Nutrient trading</b>	A contaminant transfer method comprising a system of credits that can be bought and sold. The number of credits is based on how much of that contaminant is permitted to be discharged into the environment.
<b>Objective (freshwater objective, environmental state objective)</b>	Describes the intended environmental outcome(s) (definition from NPS). Freshwater objectives are sometimes referred to as <b>freshwater state objectives</b> . It describes the desired state of the waterbody, having taken into account all values.
<b>Opportunity cost</b>	The foregone benefits from the next best alternative use of a resource.

<b>Outstanding freshwater bodies</b>	Those waterbodies with outstanding values, including ecological, landscape, recreational and spiritual values (definition from NPS).
<b>Over-allocation</b>	<p>The situation where the resource:</p> <ul style="list-style-type: none"> <li>a) has been allocated to users beyond a limit or</li> <li>b) is being used to a point where a freshwater objective is no longer being met.</li> </ul> <p>This applies to both water quantity and quality (definition from NPS).</p>
<b>Point source discharge</b>	Discharge of contaminants into a waterbody from a single fixed point, such as a pipe or drain (e.g. from the likes of sewerage, factory and dairy shed outfalls). (See Diffuse discharge.)
<b>Regulatory authority</b>	The relevant decision-making authority, being the government, regional council or unitary authority.
<b>Riparian planting</b>	Planting along the banks of rivers and streams to reduce erosion and pollutant run-off to the waterway.
<b>RMA</b>	Resource Management Act 1991.
<b>Rule</b>	A rule in a regional plan, as prescribed under the RMA (e.g. sections 68, 69 and 70).
<b>Rural water infrastructure</b>	Includes dams, bores and irrigation schemes.
<b>Sediment/sedimentation</b>	Unconsolidated mineral and organic particulate material in the waterbody.
<b>Spatial</b>	Of, relating to, involving or having the nature of space. For example, areas which are able to be mapped.
<b>Spatial variability</b>	Occurs when a quantity that is measured at different spatial locations exhibits values that differ across the locations.
<b>Standard</b>	An established norm or requirement. It is usually in a formal document that establishes uniform technical criteria, methods, processes and practices. A standard has regulatory force if defined in a regulatory instrument.
<b>Stormwater</b>	Surface water run off arising from rain storm events. Often refers to run off from impervious surfaces.
<b>Taonga</b>	Treasured possessions, both tangible and intangible.
<b>Target</b>	A limit which must be met at a defined time in the future. This meaning only applies in the context of over-allocation (definition from NPS).
<b>Technical efficiency</b>	(See Efficiency.)
<b>Transfer</b>	The reassignment of an allocation from one person to another. Usually used in the context of the transfer of a resource consent (or part thereof) from one person to another.

<b>Value judgement</b>	A decision that determines the desired balance between competing values, involving basic issues of fairness, reasonableness, justice or morality.
<b>Values</b>	Values of waterbodies include uses by people (e.g. drinking water, irrigation, hydro-generation, recreation) and intrinsic values (e.g. ecology, cultural, aesthetic, natural character).
<b>Wastewater</b>	Water that has been adversely affected in quality by direct use in an anthropogenic process that is then returned to the environment. E.g. liquid waste discharged by domestic residences, commercial properties, industry and agriculture.
<b>Waterbody</b>	Excludes geothermal water.

## Small Group Members

Beef + Lamb New Zealand (Kirsten Bryant), Dairy New Zealand (Simon Tucker) Ecologic (Guy Salmon), Environmental Defence Society (Gary Taylor), Federated Farmers (Ian Mackenzie), Fish and Game New Zealand (Bryce Johnson, Neil Deans), Fonterra (Bruce Donnison, John Hutchings), Forest and Bird (Kevin Hackwell), Horticulture New Zealand (Chris Keenan), Irrigation New Zealand (Andrew Curtis), Meridian Energy (Hamish Cuthbert), Mighty River Power (Bruce Waters), National Institute of Water and Atmospheric Research (Dr Clive Howard-Williams), New Zealand Forest Owners Association (Peter Weir), Te Arawa Lakes Trust (Roku Mihinui), Te Runanga o Ngai Tahu (David Perenara-O'Connell), Tuwharetoa Māori Trust Board (Pelenato Sakalia), Waikato-Tainui (Donna Flavell), Water New Zealand (Peter Whitehouse), Whanganui River Māori Trust Board (Nancy Tuaine), Whitewater New Zealand (Hugh Canard).

**Active Observers to the Small Group** - Auckland Council (Chris Hatton), Environment Canterbury (Bill Bayfield and Ken Taylor), Hawkes Bay Regional Council (Andrew Newman), Ministry for the Environment (Guy Beatson), Ministry of Agriculture and Forestry (Paul Stocks and Mike Jebson), Tasman District Council (Richard Kempthorne), Waikato Regional Council (Dr Tony Petch).

## Plenary Organisations

Aqualinc Research Ltd, Ballance Agri-Nutrients, Beef + Lamb New Zealand Limited, Business NZ, Carter Holt Harvey Ltd, Contact Energy, CPG NZ, DairyNZ, ECO, Ecologic, Environmental Defence Society, Federated Farmers, Federated Mountain Clubs of New Zealand, Fert Research, Fish and Game New Zealand, Fonterra, Forest and Bird, Foundation for Arable Research, Genesis Energy, Horticulture New Zealand, Ihutai Trust, Ingenium, Institution of Professional Engineers New Zealand, Irrigation New Zealand, Lincoln University, Massey University, Meridian Energy, Mighty River Power, MWH, National Institute of Water and Atmospheric Research, New Zealand Farm Forestry Association, New Zealand Forest Owners Association, New Zealand Institute of Forestry, NZ Landcare Trust, New Zealand Winegrowers, Opus International Consultants Ltd, PGG Wrightson, Rural Women New Zealand, Straterra Inc, Te Arawa Lakes Trust, Te Runanga o Ngāi Tahu, Tourism Industry Association, TrustPower, Tuwharetoa Māori Trust Board, Waikato River Authority, Waikato-Tainui, Water New Zealand, Water Rights Trust, Watercare Services Ltd, Whanganui River Māori Trust Board, Whitewater New Zealand, Wood Processors Association of New Zealand, Zespri.

**Active Observers to the Plenary** - Auckland Council, Environment Canterbury, Department of Conservation, Department of Internal Affairs, Hawkes Bay Regional Council, Ministry for the Environment, Ministry of Agriculture and Forestry, Ministry of Science and Innovation, Tasman District Council, Treasury, Waikato Regional Council.

**Chair, Land and Water Forum** - Alastair Bisley.

## **Land and Water Trust and Secretariat**

**Trustees of the Land and Water Trust** - Alastair Bisley (Chair Land and Water Forum), Simon Tucker (Dairy NZ), Kevin Hackwell (Forest and Bird) and Nancy Tuaine (Whanganui River Māori Trust Board).

**Secretariat** - Alastair Patrick (Project Manager), Natalie Crane (Project Administrator), Alastair Smaill (Senior Analyst), Andrew Schollum (Senior Analyst), Caroline Read (Senior Analyst), Olivier Petitjean (Senior Analyst), Paul Metcalf (Senior Analyst), Robin Connor (Senior Analyst) and Tim Bennetts (Senior Analyst).