Land and Water Forum Commentary on Implementation of the NPS-FM

9 June 2017

1. Hon Dr Nick Smith, Minister for the Environment, and Hon Nathan Guy, Minister for Primary Industries, have asked the Land and Water Forum (the Forum) for:

    - ***a commentary on the implementation of the National Policy Statement for Freshwater Management (NPS-FM)***
    - ***advice on further population of the National Objectives Framework (NOF).***

2. This report responds to that request.

3. The Forum is also providing commentary on the review of NPS-FM implementation being done by the Ministry for the Environment (MfE).

Snapshot of this report

- Considerable progress has been made on establishing a framework for freshwater objectives and limits, and many councils have established processes for implementing the NPS-FM in regional plans.
- Despite this, implementation has been slow, variable and uncoordinated.
- There is no one currently providing the leadership role needed within the freshwater management system.
- MfE needs to develop an implementation strategy that:
    - is clear, consistent and transparent about the timeframe, priority and sequencing of policy and implementation changes and action, and who does what
    - is clear about policy and its intent
    - actively coordinates resources to fill knowledge and capacity gaps
    - involves stakeholders in national policy design
    - includes their involvement in regional planning to support better implementation
    - results in more fit-for-purpose and timely technical support.
- Future NPS-FM updates must be transparent and signalled in advance to allow councils and communities to plan for them.

- Councils are using different approaches to involve their communities in setting freshwater objectives, policies and limits; some are more collaborative than others. Collaborative processes take resources but early indications are that the outcome is a more engaged community and a better quality plan.

- Getting the details of collaborative processes right matters. This includes membership, how decisions will be made, the role of collaborative groups in plan writing and implementation, and making sure that resourcing issues are addressed.

- Better opportunities for iwi engagement with councils and collaborative groups are needed

- While the Resource Legislation Amendment Act 2017 has a formal collaborative planning track, this varies in some crucial respects to that recommended by the Forum – while councils may use a variety of hybrid community engagement/collaborative processes, the Forum does not think it is likely that the formal track will be widely used.

- More emphasis must be given to investing in information and improving how best practices are shared. The draft Water Information Strategy addresses many knowledge priorities but it has stalled and MfE needs to finalise and implement it as a matter of urgency.

- The government needs to publish decision support material on how to identify values and translate them into freshwater objectives in plans.

- MfE must develop a standardised base freshwater accounting framework that can be adapted regionally.

- MfE needs to develop more fit-for-purpose technical guidance material to improve the consistency and robustness of freshwater objective and limit-setting.

- MfE needs to work with councils to accelerate work on urban water quality, and to ensure they set freshwater objectives for sediment, copper and zinc where those issues are relevant in an FMU.

- Central government needs to consider a national regulation for vehicle brake pads as a way of controlling copper discharges. It must also identify the best way of managing sources of heavy metals from building materials.

I Introduction and purpose

4. The purpose of this report is to provide Ministers with comments on a number of key NPS-FM implementation issues. The Forum has considered the way that the policy contained in the NPS-FM is being implemented and provided advice on necessary improvements.

5. The key implementation issues were arrived at through observations by Forum members on their experience with NPS-FM implementation around the country, and the results of sessions that the Forum ran in four regions with regional councils, iwi and other participants in regional planning processes.

6. This approach was designed to complement the review being carried out by MfE that the Forum expected would be systematic and detailed, dealing with each Policy and Objective, each regional council, and each element of implementation. We have not sought to duplicate this.

7. Taken together, the Forum's previous four reports set out a blueprint for a new system for managing fresh water. This report does not repeat its previous recommendations but does want the government to follow the first one from our Fourth Report and implement our previous recommendations as soon as possible.

8. Many of the implementation challenges noted in this report, and that by MfE, would be addressed by implementing the Forum's previous recommendations.

9. In this report, the Forum has focussed on what its members regard as key elements critical to successful implementation:

    a. Leadership
    b. Participation and decision-making including through collaboration
    c. Knowledge
    d. Objective and limit setting - including the further population of the NOF.

II Overall Comments

10. Management of fresh water is an important environmental and natural resource issue.

11. Water management and planning is complex. Land and water users, central government and regional and territorial councils must address several interrelated factors when planning, responding to plans and achieving the outcomes set in plans.[1]

12. The size and complexity of water reforms presents a significant challenge in:

    - delivering effective policy, regulation and tools for objective and limit-setting and managing within (or down to) limits
    - adequately reflecting the variety of catchments, urban and rural environments, and community, social and economic conditions
    - improving knowledge and capability
    - integrating regulatory practice, community engagement and industry practice
    - coordinating these so that resources are used as efficiently as possible.

13. Implementation involves more than just central government regulation and the plan-making process that councils go through. It covers the roles and actions of central and regional government, territorial authorities, communities including iwi, and land and water users. Changing attitudes and behaviours is important for all participants in the freshwater management system.

14. Considerable progress has been made on establishing a framework for freshwater objective and limit-setting, and many councils have established processes for reviewing regional plans. Progress has been made in other areas such as improvements to the robustness and consistency of environmental monitoring and data collection and making that information more readily available, as well as some useful capability-building initiatives.

[1] These factors include:

- turning community values into freshwater objectives and effective policies to achieve them (including limits). Doing this well requires a good understanding of behaviour change and the potential role that innovation and technology can play to support adaption to limits
- recognising and providing for the rights, aspirations and views of iwi
- using a complex mix of science, social science, economics and operational and industry understanding to set and manage within limits
- making sure that regional planning meets good Resource Management Act (RMA) planning requirements and is integrated with other relevant issues such as climate change, biodiversity and economic development
- supplementing plans with non-regulatory contributions, including industry practice changes and infrastructure and catchment scale mitigations
- maintaining relationships between parties both through the planning stage and beyond
- getting all of this done as efficiently as possible with community buy-in and through democratic, robust decision-making.

15. The Forum's main concern is that, despite this progress, implementation has been slow, patchy and insufficiently coordinated. The Cabinet paper for the 2011 NPS-FM acknowledged the importance of quickly putting in place supporting measures for managing within limits. The necessary supporting measures included: further development of the limit-setting process, comprehensive and effective guidance, and further policy direction beyond limit-setting. If this did not happen, the costs of the NPS-FM were expected to be higher and the benefits lower.

16. In 2012, the government had a clear implementation plan. Key elements of the government's water reform strategy in 2012 were:

    - by December 2013 councils would have a (legislative) option to use a collaborative process for plan development
    - by 30 June 2014 councils would be required to follow standard processes for specification of water consent/permits, including requirements for resource use efficiency, central government would have delivered a first tranche of good management practice toolkits with key industry sectors and stakeholders, and councils would be implementing the most effective methods and tools for managing water quality
    - by 30 June 2015, central government would provide direction and tools to councils for managing outstanding water bodies and wetlands, standard tools for specifying water permits, and direction and guidance on managing to limits, economic incentives, etc.

17. Only the first of these has happened, and delays mean that councils are developing plans to implement the NPS-FM without all of the tools and supporting measures noted above (e.g. the tools to encourage dynamic and allocative efficiency). This means that many of the 'first generation' NPS-FM plans might be embedded for a number of years without the benefits of the supporting measures able to be realised. Having expended considerable resources, community and sector time, and political capital in developing plans, councils may understandably be reluctant to re-open plans before they have to in the future.

18. The Forum recognises the political and resource difficulties faced by both local and central government to deliver progress on these complex issues. This challenge is compounded by the need to engage and inform the public about the scale of changes needed, and set realistic expectations about the timeframes over which improvements will need to be made.

19. Our concern is that implementation will not be sufficient or efficient without stronger leadership and urgency.

III Leadership

20. In order to support implementation of the NPS-FM, central government has established an interdepartmental water directorate between the Ministries for the Environment and Primary Industries, led the science and research programme to populate the National Objectives Framework, and provided support and guidance to regional councils implementing the NPS-FM.

21. Regional councils are increasingly working together to improve water management and to get consistency in monitoring and reporting. Sector groups are coordinating nationally and regionally: for example, the way that they worked with Environment Canterbury in developing the Matrix of Good Management Practices (MGM). Individual sector initiatives also contribute, such as progress under the Sustainable Dairying: Water Accord and broader dairy sector capacity building initiatives.

22. These are all important contributions to the task of implementing the NPS-FM. What is missing, however, is strong leadership by central government to prioritise and coordinate effort and ensure scarce resources are being used in the best way. This section outlines recommendations for better central government leadership.

MfE needs to develop a freshwater reform implementation strategy

23. At the moment implementation is occurring without a detailed roadmap from the government about the various phases of the water reforms, how they fit together and are sequenced, and when they will happen. This includes policy and implementation support work across objective and limit setting, allocation, and good management practice (GMP) in both urban and rural areas, and how science priorities are linked to this. A strategy would provide a way of articulating how all these pieces fit together, and set priorities.

24. The Forum understands the challenges of coordination in a system that is inherently devolved, but the approach described below would address those challenges by providing clear direction on priorities and enabling parties to better integrate their efforts towards some common aims.

25. The Forum's Third Report discussed the development of a strategy for changes to water management. In the light of implementation experience, and noting recent OECD recommendations, we continue to believe that a strategy is important. The strategy needs to:

    - describe the desired end state for the freshwater management system and the actions needed to get there
    - clarify how freshwater priorities relate to other nationally significant policy areas such as climate change, economic development, urban development, energy security and biodiversity
    - articulate policy intent on important matters to help guide implementation
    - clarify short, medium and long-term NPS-FM implementation priorities

- outline the timeframes and sequencing by which policy changes, implementation actions, and key investments will be made
- allocate responsibility and resources for completing the tasks involved
- continue to provide direction on matters that are more efficiently delivered or supported nationally
- systematically address gaps in information, tools, capability and capacity.

26. More transparent forward planning and communication would also mean that councils, sectors, and communities, including iwi, can better plan for the investments they will need to make in information, decision tools and practice changes. They would be able to better anticipate and adapt to policy changes. While developing a strategy is important it should not slow down current implementation initiatives.

27. The strategy will guide priority setting and resource allocation within regions by (for example) identifying the priority freshwater management units (FMUs) where early planning effort is needed, and others that are lower priority[2]. It will also involve making sure that urban freshwater management is addressed, including clarifying where the NPS-FM requirements sit in relation to the promotion of urban development, doing more work on practical tools for addressing urban water quality, and identifying and prioritising the urban stormwater and wastewater networks in need of being upgraded. It will also provide some direction on how freshwater issues intersect with other priority policy areas such as biodiversity, climate change or urban development[3], and other government direction instruments (for example, the National Policy Statement for Renewable Energy Generation). In particular, the relationship between the NPS-FM and the NPS on Urban Development Capacity needs to be clarified. Policy intent on key matters within the NPS-FM needs to be clarified via the strategy, for example how 'outstanding freshwater bodies' are to be defined and how the 'maintain or improve' requirement works.

28. The strategy will identify and address the most acute implementation needs, such as the tools that are more efficiently delivered or supported nationally, rather than regionally. Expertise needs to be better coordinated to deliver more timely and fit-for-purpose technical decision support material. Opportunities for joint work and leveraging of funding must be identified, as well as ways of reducing duplication of effort.

29. It is clear that NPS-FM implementation, and freshwater management more generally, demands a lot from regional councils in terms of resources and expertise. Some examples the Forum has been told include:

[2] It would not be a good outcome if resources are used to create plans for catchments that are low risk meaning that councils may not have sufficient resources to apply to those catchments that need attention more urgently to address water quality decline.

[3] By way of example, pest fish are a key ecosystem health issue in the lower Waikato lakes given their impact on indigenous freshwater biodiversity. The strategy must make it clear how the actions taken to address biodiversity and biosecurity issues like this integrate with NPS-FM implementation.

- Council and sector extension and support services. To implement Tukituki Plan Change 6, approximately 1050 nutrient budget plans are needed by 1 July 2018, putting pressure on providers of such services and the council to audit them.

- Despite Environment Southland's good understanding of regional variability (physiographic information) and where the pressure on fresh water is the greatest, they are struggling to determine how much change is needed on the ground, by when, and how much it will cost.

- Hawke's Bay's TANK process was stalled by groundwater model development - fundamental to decision making, but technically very challenging and hence time-consuming.

- A lack of tools and capability for the restoration of urban streams, particularly in large urban areas such as Auckland.

30. The strategy must identify priority capability and capacity gaps by region, sector and skill areas and how to address those gaps. While all stakeholder groups have responsibility for improving shortfalls in knowledge, skills and capacity, the Forum sees MfE playing the key facilitation and coordination role. This includes using existing capacity and capability in a better way – for example, resource sharing arrangements, the use of mobile teams, and secondments. The strategy must identify the size of the problem and whether special arrangements are needed to grow capacity in particular areas.

31. Leadership is not confined to central government and MfE. The strategy must involve all parties showing greater leadership and publically demonstrating how their activities contribute to implementation. Suggestions raised by Forum members are:

    - good faith participation in regional planning, including (for example) environmental non-governmental organisations (ENGOs) working with sector groups on agreed integrated catchment plans that recognised environmentally sensitive areas, meaning public campaigns would not be necessary
    - participation in and encouragement of national efforts to get greater clarity and coordination in water management, including how GMP can be accepted and accelerated, and getting efficient extension systems
    - regional councils sharing staff, information and other resources to resolve capacity issues
    - territorial authorities recognising and accepting the water quality challenge arising from their infrastructure
    - all regional councils setting up good iwi governance arrangements proactively.

MfE must publicly signal the scope and timeframes for future NPS-FM updates

32. The NPS-FM and NOF will need to be updated as new information and issues emerge. Ongoing irregular amendments to the NPS-FM can be costly, disrupt regional planning cycles, and hinder implementation.

33. This can be avoided by central government stating how and when it intends to update the NPS-FM at timeframes that deliver certainty for communities (e.g. 3-5 years). This information must be provided on MfE's website and kept up to date regularly. MfE's science and attribute development programme must also be publicly available. Timeframes and topics need be indicative only - the development of the required science is not always predictable, and different governments will have different priorities - but more transparency about forward planning would give councils and stakeholders time to plan how they will adapt their management approaches before any changes take effect.

34. It would also be helpful for this public information to include any proposed regulatory changes to other instruments relevant to freshwater management.

35. Each round of NPS-FM updates needs to be preceded by an open process with stakeholders to identify problems with the NPS-FM and to design solutions. The NOF Reference Group[4] model has worked well for technical input into the development of the NOF, and provides a model for other aspects of the NPS-FM.

The manner of stakeholder involvement in freshwater policy design must be improved

36. In many respects, MfE has involved stakeholders in policy development and implementation – for example, through regional council working groups, the development of the draft Water Information Strategy, the NOF Reference Group and the Forum itself. Iwi have a relationship with the Crown that reflects their Treaty partner status. However, they are often just used as consultative groups, there are typically insufficient feedback loops, and sometimes not all the relevant expertise or interests are involved.

37. The recent NPS-FM policy design process has been hindered by poor external engagement and transparency leading to several significant implementation challenges. MfE failed to be sufficiently open in its engagement with the Forum and the NOF Reference Group over the policy detail being considered by the government – an engagement that is inconsistent with the government's advice to regional council collaborative processes[5]. The public confusion over the government's Clean Water consultation highlights the need for better development and road testing of policy with expert groups and stakeholders before release.

38. The Productivity Commission, commenting on policy domains similar to fresh water, encouraged central government to see stakeholders (including local government) as active partners in the development, implementation and review of major initiatives. This goes beyond using a collaborative group, such as the Forum, to make recommendations, or working with stakeholders on implementation support (although both things are useful). It means that stakeholders and government work together in an open and transparent manner in the <u>design</u> of policy up front.

[4] The NOF Reference Group is a science focused technical advisory group that has advised on the development of the NOF since 2012. Since 2016 it has reported to both MfE and the Forum (previously only MfE). Its members span councils, iwi, ENGOs, industry and scientists.

[5] http://www.mfe.govt.nz/sites/default/files/media/Fresh%20water/making-collaborative-groups-work.pdf

39. Developing effective partnerships to design and implement better freshwater policy in the future will require changes within government. The Forum's recent experience is that there is excessive caution towards drawing in stakeholder views and expertise, generated by both perceived sanctity by some officials about Cabinet paper processes and a culture in some parts of the public service that policy development is essentially a relationship between officials and Ministers. Ministerial support is necessary to change this.

MfE must exercise stronger regulatory stewardship in ensuring policies are implemented

40. Central government has a stewardship role to ensure its policies are efficiently and effectively implemented. This means that MfE must have a clear understanding of how regional plans are being developed to implement the NPS-FM, and the different non-regulatory tools being used, the outcomes they might lead to, and a way of identifying and working on priority areas for improvement.

41. MfE does not currently play an active role in ensuring regional implementation of the NPS-FM is appropriate and consistent with its intent. It has a team that works with councils on NPS-FM implementation but the emphasis is primarily on relationship management and capability support, and not on policy and plan content.

42. Without a clear description of policy intent from MfE, or involvement in regional planning processes (e.g. putting in a submission), disputes over NPS-FM intent and how it is to be implemented are being resolved in court[6]. This absorbs considerable system capacity.

43. More direct involvement by central government at the front end of the plan making process is necessary in freshwater management, to iron out technical details, ensure consistency in implementing the policy intent[7], and help fill key capability and capacity gaps. It provides a way of clarifying policy, and enables timely feedback on the workability of policy.

44. MfE needs to monitor progress of council implementation of the NPS-FM into regional plans. This needs to include reviewing council Progressive Implementation Plans (PIPs) and council reports on progress against their PIPs.

45. Central government does take a more active stewardship role on other areas such as:

    - the health sector through the DHB joint governance and funding model
    - the transport sector through the government setting strategic priorities for its substantial investment and backing that up with operational funding
    - coastal planning (where the Department of Conservation is involved in regional planning, and the Minister of Conservation needs to approve coastal plans).

[6] For example, Hawkes Bay Regional Council v Ngati Kahungunu, Sustainable Matata v Bay of Plenty Regional Council.

[7] The delineation of FMUs is a good example of an area where central government needs to be doing more to ensure the application of the 'maintain or improve' requirement is done well – there are concerns that FMUs may be inappropriately set to avoid having to maintain water quality in some places where it needs to be maintained.

46. While central government ought not intrude on community values discussions, involvement in plan-making and how plans are implemented is an important way of explaining policy intent and encouraging consistent and effective implementation.

47. A final comment about leadership in water management is that the government needs to think about how agencies are organised to make this work well. MfE sees itself as a policy organisation rather than an operational one. It does not currently have the capacity (or perhaps the institutional culture) to be a more active organisation to oversee NPS-FM implementation. The concept of the Water Directorate can provide a vehicle for more active leadership but it will require change in how it works. Alternatively, the Forum has earlier suggested changed institutional forms such as a National Land and Water Commission to carry out the oversight of planning processes, and engagement with stakeholders and councils over implementation priorities, planning and action. The government needs to improve the way these functions are delivered.

IV Participation and decision-making including through collaboration

48. The Forum's Second Report recommended a presumption that a collaborative approach be used for freshwater planning, but recognised that regional councils can also use the RMA/Schedule 1 process where collaboration is not suitable.

49. The Second Report noted that the design and implementation of a collaborative process must:

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

50. It is too early to set out firm conclusions on the different ways that councils are engaging with communities including iwi to implement the NPS-FM as there are only a limited number of completed or notified plans that have been developed. The following comments are therefore partial, based on a limited number of experiences, and subject to change as further practice and observation comes to hand.

51. Most councils have increased the level of public engagement on freshwater planning, including the involvement of iwi, stakeholders and the community. This is in response to the expectation set in the preamble of the NPS-FM that it is intended to underpin community discussions about the desired state of fresh water.

52. Where councils are using a collaborative planning model, this has been influenced by varying regional circumstances - for example, Canterbury's ECan Act, Waikato's River Authority Vision and Strategy, and the diversity of freshwater interests on the Heretaunga Plains in Hawke's Bay influencing the establishment of the TANK Group.

53. Councils using collaborative models have done so for a variety of reasons. A common theme is that they recognise that much of the information and expertise needed to improve freshwater management – as well as the drive, knowledge and opportunity to deliver effective solutions – sits outside their organisation. These councils have noticed an increase in public awareness of the issues, better buy-in, and stronger relationships with iwi, stakeholders and the community. They have noted that collaboration may take longer than expected and costs can be high, but the plans produced by collaborative groups are likely to be of a higher quality with many of the implementation issues, and contentious decisions, having been discussed thoroughly between affected parties.

54. Other councils consider that implementation of the NPS-FM is better achieved through standard (possibly enhanced) consultation processes. Some have cited concerns with collaboration, including that it undermines the role of democratically elected councillors, and that the requirement to develop timely plans (e.g. to address over-allocation as consents

expire, or to meet the NPS-FM timeframes) means a full collaborative process is not practicable. Some councils which have been considering collaboration were awaiting amendments to the Resource Management Act before committing, noting that the outputs of a collaborative group may be deconstructed in a Schedule 1 planning process (a possible risk for the Waikato Collaborative Stakeholder Group (CSG)).

55. There are five topics vital to running good collaborative processes that are worthy of commentary: **capacity and capability**, **membership**, **decision-making and plan writing processes**, **involvement in implementing the plan**, and **iwi engagement**. Some of these are also applicable to alternative processes being run by councils.

Capability and capacity gaps need to be recognised and addressed

56. Collaboration is new for councils and communities used to the traditional planning process. Appropriate resourcing, effective facilitation and good leadership are needed to ensure the success of collaborative groups. The skills required to organise, run and participate in collaborative processes do not necessarily sit within existing structures. Most councils running collaborative processes have addressed skill shortages by contracting external facilitators, although others have invested in staff training, such as through MfE's *Collaborative Exchange Programme*.

57. Transparency and availability of information is important and the public needs to be able to interact with and test information. There are particular difficulties in how and when to bring information into community discussions and what the minimum suite of information is to start engaging the public – such as biophysical state and trends and models for testing options. This is discussed further in the knowledge section of this paper.

58. Previously, councils would usually consider a small set of options (e.g. two minimum flows and one allocation system), but the diversity of views within a collaborative group is resulting in more options being put forward (e.g. a range of minimum flows and allocation systems along with non-regulatory mechanisms) – placing pressure on councils to collect the relevant information and test scenarios.

59. Participants in collaborative processes have noted significant capacity challenges, including the technical knowledge and negotiation skills needed, and time and resource requirements. Participating in a collaborative group is a significant commitment, and participants are not equal when it comes to the technical and policy support that their member organisations might provide.

60. All sectors face potential 'collaboration fatigue', especially if they have a small pool of people willing and able to engage, such as for ENGOs and some iwi and hapū.

61. Capacity is also required by participants to engage with the community and wider networks. This varies, with some groups having established, extensive and coordinated support networks (for example, the dairy representative on the Waikato CSG, and some although not all iwi groups), while others have less resource, less structured networks and largely work on their own. These sorts of imbalances can exacerbate disparities within collaborative groups, and

cause problems with communicating progress. This is a particular challenge for some ENGOs and iwi. Councils need to be aware of participants' willingness and ability to engage with their wider networks and help them if they need it.

62. A careful plan needs to be established at the outset for how progress of the collaborative group will be communicated with council members and the broader community, and provide opportunities for community feedback, rather than waiting until the end of the process.

63. Central government support has largely been through advice and support for regional councils on how to run collaborative processes. Although MfE officials have also met with ENGOs, primary sector organisations, iwi and territorial authorities to better understand their needs, a programme of support has not been forthcoming, and needs to be. Forms of support include inductions (e.g. short courses on the RMA, NPS-FM, science, economics, Mātauranga Māori), resources, mentor networks and extending MfE's council web-platform to other stakeholders.

Collaborative group membership matters – it must be carefully considered including iwi, community and sector representation

64. The membership of a collaborative group is critical for several reasons including legitimacy, community engagement and expertise. It ought to include iwi, community and sector representation. Community views are especially needed to inform the development of values and objectives. Sector stakeholders are needed to ensure that the interests of affected sector groups are taken into account in decision-making, and to ensure solutions formulated are workable. If membership includes representatives of the most affected parties, the risk of the collaborative group's decisions being challenged is reduced.

65. There are two types of model emerging for how collaborative groups are put together and how members of the group 'participate'. Although none are purely based on one model, the *stakeholder model* predominates in Waikato, Hawke's Bay and Northland and the *citizen model* more in Canterbury and Greater Wellington.

66. Under the *stakeholder model*, participants are nominated or selected to represent a group or sector, and are expected to remain 'advocates' for their sector interests (that is, they keep their stakeholder 'hat' on). The key benefit is that, with the majority of stakeholder / interest groups 'at the table', if consensus can be reached, legal challenges are likely to be fewer. However, to ensure most interests are represented, it can be hard to contain membership (there are more than 30 in Hawke's Bay's TANK Group) which can make the process logistically challenging. This places greater emphasis on the need for capable facilitation.

67. Under the *citizen model*, participants do not represent any particular group or sector. They are selected for their abilities to represent the community's views, and are expected to try to deliver solutions that meet all community interests. A key benefit is that a 'tighter' process can be used by limiting membership (Environment Canterbury's Zone Committees and Greater Wellington Regional Council's Whaitua number 11-13) meaning a more efficient process can be run. However, when decisions are made, concerns can surface that key interests have been missing. This issue of 'missing' interests can be partly alleviated with good practices of community engagement.

68. A blend of the two models is needed, with both community and sector representation. In practice, councils and communities will have to develop the structures that best meet their local circumstances, recognising any potential drawbacks and working to reduce those. Participants and councils will need to recognise the way that the group is put together and how this might impact the work of the group and the way that it communicates with its communities.

Collaborative decision-making and plan writing processes need to be transparent and agreed at the outset

69. A collaborative group ought to work under the premise of 'no surprises'. The Forum recommended (as did MfE's *Making Collaborative Groups Work* paper) that it must be clear at the start, and included in the Terms of Reference, how decisions will be made and how the council intends to consider and implement the group's decisions. The TANK Group has followed this protocol by defining consensus in its TOR and the process for resolving matters on which consensus was not reached. HBRC's planning committee has given a formal commitment to have particular regard to the TANK Group's consensus recommendations.

70. In the Waikato CSG process, however, there is dispute about the way that protocols agreed by the CSG at the start of the process were or were not followed. The CSG's Terms of Reference stated a consensus (defined as "unanimous agreement") decision-making process would be used. When decisions were made, however, a voting system was used. We have been told that the reason for this was that the CSG wanted to provide a complete plan change to council which covered all matters. However, some stakeholders are now challenging the decisions made, believing that, on the matters where consensus was not reached, the alternative views ought to have been provided to the council for its decision.

71. The role that councils see for themselves in decision-making also differs. Clarity is needed upfront on who will make the final decisions. It is important to incentivise collaborative groups by giving them sufficient mandate but also allow councillors, as democratically elected community representatives, to fulfil their duties[8]. The Forum's Second Report outlines a process for transitioning collaborative group decisions into plans. Regional councils would either agree with the group's consensus decisions (or those of the independent hearing panel) or explain why they do not. This accentuates the importance of council staff keeping councillors up to date with the progress of the collaborative group and independent hearing panel.

Collaborative groups need to be involved in implementing the plan

72. Community-led implementation must be encouraged. One of the rationales for using collaborative processes is that the stakeholders have a better idea of what is practical and workable on the ground, and so can use this knowledge to better inform the collaborative consensus. Regional collaborative groups therefore need to be involved in implementation.

[8] Albeit there are varying regional circumstances with regards to democratic decision-making such as in Canterbury under the ECan Act and in Waikato where the Waikato River Authority's Vision and Strategy underpins decision-making.

Better opportunities for iwi engagement with councils and collaborative groups are needed

73. A number of observations have been made by tangata whenua on their experiences with collaborative groups and participation in water management planning generally. These include:

    - The quality of council engagement with iwi, their support for iwi participation, and their understanding of iwi values, interests and aspirations vary greatly.
    - There is a variety of formal ways guiding council/iwi engagement over freshwater management. Some council /iwi participation arrangements are underpinned by Treaty settlements while other councils have made progressive steps to provide for iwi governance roles outside the Treaty settlement process. Greater Wellington and Hawke's Bay's planning committees, for example, comprise equal membership of councillors and iwi.
    - Collaborative groups and iwi-council governance arrangements are a potential way of having iwi values, interests and aspirations, as well as views and experience, accepted or recognised in a forum that involves the wider community. This conversation needs to be seen in the context of their wider rights and interests discussions with central government, and iwi governance preferences.
    - For some iwi it is hard to reconcile recently achieved governance roles with handing over decisions to a collaborative group.
    - There are often multiple iwi and hapū with interests in a region making it difficult for councils to engage effectively, and difficult for iwi and hapū to respond to expectations of a 'singular' Māori perspective.
    - Many hapū are leading grassroots freshwater management projects and these need support, e.g. with local and central government resourcing.
    - Iwi have particular capacity issues and outreach challenges when engaging with collaborative groups and alternative water management planning processes run by councils.
    - There is frustration that iwi are asked to re-explain iwi perspectives as membership of other groups change.
    - Mātauranga Māori is often not recognised, understood or used well.

The legislative framework needs to incentivise collaboration

74. In 2012, the government stated that by December 2013, councils would have a legislative option to use a collaborative process for plan development. The Resource Legislation Amendment Act 2017 (RLAA) contains provisions that allow this to happen. The Forum's submission on the Bill noted that, while the Forum supported the general direction that the Bill was taking, it removed important checks and balances on decision-making and diluted the incentive to make collaboration work.

75. Collaboration arguably is not being used as much as it might due to the lack of legislative support. All current plan changes are subject to appeal through the Schedule 1 planning

process. There is a concern by some councils that consensus agreements reached may be unravelled. This will affect implementation efforts in regions.

76. This issue is also affecting the deliberations of collaborative groups who are explicitly factoring in the prospect of litigation, and too quickly dismissing innovative[9] and potentially optimal solutions. A member of the Waikato CSG noted: *"The prospect of re-litigation [through Schedule 1] made it harder to reach a consensus, and resulted in the CSG doing a lot of 'risk management' work around what would happen if it didn't."*

77. The changes to the Bill as introduced and contained in the RLAA 2017 on the collaborative process, partially address some of the concerns raised in the Forum's submission. The substantive issues raised have not however been addressed, meaning it is unlikely to incentivise use of the collaborative process set out in the Act. Specifically:

- the Act does not provide any consultation on appointments to the collaborative group or opportunity for the appointments to be challenged
- the obligations on the collaborative group to satisfy the requirements of the RMA and identify the costs and benefits of their proposals remain weak
- there is no provision for 'plan agility' as sought by the Forum.

78. Overall, while viewed in isolation the Act's provisions move closer to the Forum's model. It is however procedurally complicated, and has reduced the scope for the 'back end'/appeals part of the RMA process being faster and cheaper. This means that councils will see less benefit in justifying investment in a collaborative front-end.

79. Combined with other changes in the Act that empower greater directive executive and political (as opposed to community) processes, while it is likely that councils will use hybrid processes of some sort, the Forum's view is that the formal collaborative track in the Act is unlikely to be used extensively.

[9] Collaboration is often cited as the 'third source of innovation' (after competition in markets and the existing capabilities within hierarchical bureaucracies), so it is important that it is enabled.

V Knowledge

80. The Forum's previous reports emphasise the importance of good information to manage fresh water effectively. For example, information is needed to:

- decide on appropriate national bottom lines
- figure out appropriate freshwater objectives at a local level
- account accurately for takes and discharges of water at both a catchment and property level
- derive appropriate discharge load limits and other management tools necessary to meet those objectives
- decide on the optimal mix of mitigations at property level to meet plan rules, meet consent requirements and manage within water and nutrient allocations
- integrate scientific, economic, social and Mātauranga Māori knowledge
- monitor and measure progress toward meeting environmental limits and objectives
- calculate costs and benefits.

81. In its Fourth Report, the Forum called for a rationalisation of central government science priorities and funding for fresh water. This included recommendations for: establishing an integrated freshwater information management framework; improving the sharing of information and best practices; and highlighting some specific information needs. Good progress has been made toward these recommendations, in particular:

- The Conservation and Environment Science Roadmap has now been finalised and launched. It attempts to put everyone on the same page in terms of the big environmental issues we face in New Zealand to align our resources and leverage our science funding for the next 20 years. It contains a section on fresh water that outlines the big-picture research areas.
- The Our Land and Water Science Challenge programmes are underway and promise to provide research on many of the aspects of information the Forum has previously noted as important – for example there are projects underway on improving the interoperability of models, land-use suitability and sources and flows.
- A draft Water Information Strategy (WIS) has been developed that captures many of the important gaps in information and tools. Its development involved a wide range of participants including many Forum members. However, it is stalled and has not been finalised or implemented.
- Initiatives such as Land and Water Aotearoa (LAWA), National Environmental Monitoring Standards (NEMS) and Environmental Monitoring and Reporting (EMaR) aim to improve the robustness and consistency of environmental monitoring and data collection and make that information more readily available.

- A web-platform has been developed to be a repository for freshwater-related information and as a portal for councils to share experiences and best practices with implementation of the NPS-FM.

82. Although much work is underway, there are still too many gaps in the information and tools currently available to manage freshwater resources effectively.[10] Dealing with uncertainty in information is a reality in decision-making. Nevertheless, the Forum considers there are some key gaps that need to be addressed - these are set out below.

MfE must create a standardised freshwater accounting framework

83. The Forum's previous report noted the importance of developing a national approach to freshwater accounting. While the NPS-FM defines a 'freshwater quality accounting system' and a 'freshwater quantity accounting system', and MfE has provided guidance on elements of an accounting framework, they miss some important ones, including:

- Information required to assess and evaluate interventions, management options and tools. Examples include:
    - the impact of various contaminant management or good management practices for the various permutations of land use and terrain
    - catchment scale mitigations
    - various types of infrastructure, including urban infrastructure
    - water sensitive urban design.
- Information so that co-benefits of interventions can be assessed (for example, biodiversity, economic impact)

[10] Specific information priorities identified by the Forum are:

- information to help people understand Te Ao Māori, Mātauranga Māori and Te Mana o te Wai and incorporate them into community freshwater management decisions and planning
- integrating existing knowledge on individual contaminant losses and pathways with water quantity knowledge
- developing a better understanding of attenuation and how it varies within regions would make catchment load limits more scientifically credible and acceptable to communities. At present, the science linking land-use activities to discharges and water quality outcomes is uncertain, and councils feel uncomfortable opening themselves up to legal challenge by using this uncertain science in regulation
- gathering information on land-use suitability to inform objective and limit-setting and subsequent land-use decisions
- improving OVERSEER to be more accurate and reliable across all land-use types and better enable it to be used in plans. It also needs to be improved to be more responsive to innovations – farmers are creating new mitigations every day and the models used to assess this need to adapt quickly to recognise them. Other models (for example, APSIM) might also be used
- developing a better understanding about the relationship between in-river nutrients, flows and aquatic plant growth
- improving the tools and methods used for scenario modelling to explore the impacts of possible freshwater objectives, especially articulating how models fit together and protocols for how they ought to be used
- improving the ability of economic models to test a wider range of policy tools and behavioural responses, and enabling them to be interrogated, to reduce their contestability
- information to help with managing after a limit has been set, including better understanding of the eventual impact of mitigations. Communities will need to be convinced that activities will result in positive outcomes, as it will take some time before the outcomes are measurable. Monitoring and reporting on mitigations that have been implemented will be necessary where data on water quality impacts is not yet available.

- Monitoring so that the actual as opposed to modelled impacts of interventions can be assessed.

84. We want to stress the importance of this. It would be more efficiently delivered nationally than by each individual region. Councils support central government assistance in this area.

85. The framework must be able to be tailored to local circumstances while retaining important common features to support consistent implementation of tools to manage within limits (standard core consent elements, for example). The framework must allow modelling of the impacts of GMP, allocation policies and all other mitigation efforts.

MfE must finalise and implement the Water Information Strategy so that projects can be underway during 2017

86. The Water Information Strategy (WIS) has been under development for 18 months but is not finalised and has not been implemented. It must be. The draft WIS covers a wide range of complex issues and it will take time to prioritise, commission and carry out the work, particularly given that funding is constrained. There is only a small window of opportunity to support the development of first generation plans and some of these opportunities have already been lost in some regions.

87. The existing process for funding science projects takes too long, and arguably is not efficiently organised. There is a need to look across all of the institutions involved in the funding and prioritisation of freshwater science and identify ways of rationalising or improving efficiency.

88. Urban information and tools are not covered by the WIS. These need to be invested in as a priority, particularly three-waters management and tools for the restoration of highly degraded urban waterways. Implementation of the WIS need not be delayed because of this.

Existing methods of sharing information and practices must be optimised

89. There is a range of ways that information and best practices are shared across different sectors and at different levels (technical/operational, policy and leadership). Some achieve better outcomes than others. The learnings from the most successful efforts ought to be applied to others to ensure existing initiatives are given the right resourcing, support and leadership to optimise the benefits they provide.

90. The extension system is going to come under pressure as implementation ramps up. Central government, local government, iwi and sector groups must work together to improve extension functions – including by finding ways of rationalising and simplifying the information dissemination functions currently undertaken by multiple organisations with multiple aims. At a minimum, improvements to the consistency of the messaging being delivered to land managers must be sought.

91. MfE is developing an information portal which contains a password-protected area for councils to share experiences in a safe environment. It has not yet had the uptake expected. Regional councils also use the Quality Planning and the Envirolink websites and have their own Special Interest Group network. The Land and Water Aotearoa (LAWA) website has also been built to be expanded upon to become a way of sharing information.

92. The Forum expected that there would be a national information sharing platform that would be a 'one-stop-shop' to make it easier for all participants in the freshwater management system to find information and share experiences. There needs to be some thought given to which platform is built on for this. MfE needs to ensure that whatever it develops can benefit all individuals, groups and collaborative processes, rather than just councils. For example, open source and accessible platforms are important.

93. Consideration ought to be given to using a model such as the existing Special Interest Group (SIG[11]) structure for councils to identify and share the best ideas and practices. Ideally this would involve a wider range of interests and at a slightly higher level (i.e. at a policy/planning level) than the mostly technical focus of these groups.

The government must provide guidance on the information needed at the beginning of all freshwater management planning processes

94. Freshwater planning processes are more efficient when they have the information they need. There is a minimum suite of information needed at the beginning of these processes. Guidance on the appropriate content and form of this information would assist communities.

95. This information would include state information on flows, groundwater, water quality and influences on quality and quantity such as lag times and water use and abstraction trends or developments that might affect future water availability. It would also include all the other information that will be needed for communities to make decisions, such as scenario modelling, economic and social impact analysis, Te Ao Māori and Mātauranga Māori, social science and information on how to successfully run a collaborative process. Waikato Regional Council has a very useful webpage[12] with the technical reports used in their process which gives a good indication of the type of information that is typically necessary.

96. A key challenge will be to use innovative planning techniques to reflect what is needed for better water management. Individual councils will hold much of this knowledge. Both central government and councils need to explore whether existing avenues to spread their knowledge are working well.

97. There are also issues around confidentiality and availability of information that need to be addressed. Sometimes accounting systems, data, information and models can be sourced from land-owners, consent-holders, businesses and other private entities. Concerns around privacy and commercial sensitivity can prevent them being gathered, used and/or made publicly available (as the Forum has previously recommended).[13]

[11] The Special Interest Group model is a series of groups where councils get together to share experiences in particular areas including (for example) river management, coastal management, hazard risk management, biodiversity and compliance and enforcement. See http://www.envirolink.govt.nz/assets/Uploads/Reg-SIG-Network-Structure-Chart.pdf

[12] https://www.waikatoregion.govt.nz/council/policy-and-plans/plans-under-development/healthy-rivers-plan-for-change/tlg-members-area/technical-reports/

[13] Refer to the Forum's Third Report, Recommendation 65, and the Forum's Fourth Report, Recommendation 7.

VI Objective and limit setting

98. The Forum recommended a framework for setting objectives and limits that was to remain mostly devolved but with clearer central direction on issues that mattered nationally and good technical guidance to support implementation.

99. The Forum recognises that some differences in management approaches are inevitable and necessary to deal with different biophysical characteristics, resource pressures, and community expectations. However, more consistency in objective and limit-setting is needed than is happening at present and there are economies of scale to be gained by addressing more issues nationally. This would help reduce implementation costs, especially for individuals and businesses that work across regions.

100. There are a range of things that must be done including clarifying the NPS-FM itself in several areas, developing good technical support material (including consistent measurement and reporting) and central government more actively supporting implementation (as outlined in the Leadership section). This section outlines some specific problems identified by the Forum and recommends solutions.

MfE must develop more decision support material for the NOF

101. The NOF[14] sets out the high level process by which values are translated into freshwater objectives using attributes. Some attributes are provided in Appendix 2 of the NPS-FM but these are only a subset of the attributes relevant to the two compulsory values (ecosystem health and human health). Appendix 2 does not contain the full range of attributes that regional councils need to manage and there is very little technical support material to guide councils and communities through the complex process.

102. Decision support material needs to cover the following steps:

- How to identify values spatially as the critical starting point
- Potential aspects to be managed for each value. These ought to be suggestions to help guide the process, but not be prescriptive
- How to decide whether attributes in the NOF apply in certain circumstances or not, and how to deal with attributes that are not in the NOF
- How to assess the current state of values, how to calibrate models to real catchments, how to undertake scenario modelling
- How to narrow the list of attributes on which freshwater objectives are set from the longer list of aspects to be managed
- How to construct freshwater objectives that meet the 'maintain or improve' requirement

[14] Policies CA1-4 of the NPS-FM.

- How to express freshwater objectives in regional plans[15].

103. MfE needs to find more effective and efficient ways of developing the material to ensure it is fit-for-purpose and delivered in a more timely manner. While MfE has involved councils and experts in the development of guidance, the process has taken too long and produced guidance whose content and focus are not useful at an operational level. An alternative approach is to use small expert teams involving practitioners to write operational 'how to' focussed documents that are explicit about policy intent and tested with relevant groups such as council SIGs and the NOF Reference Group. Councils and communities need this work to be done quickly.

MfE must get wider agreement on the framework for Appendix 2 attribute development before any new attributes are considered

104. The Appendix 2 attribute development process is being impeded because MfE is taking a constrained view of the limit setting concept. MfE has noted that attributes can only go into Appendix 2 if a limit on resource use can be determined directly off the attribute. This assumption is reflected in the guiding principles it is using for attribute development work. This is not how objective and limit-setting works in practice.

105. Both MfE's guiding principles and the prioritisation framework for Appendix 2 attribute development (currently under development) need to be tested with the Science Review Panel[16] and NOF Reference Group and amended if needed. Having a framework to prioritise effort and ensure rigour in decision-making is useful[17]; however, there needs to be agreement on it before any new attributes are to be considered.

MfE needs to work with councils to ensure they set objectives for sediment, copper and zinc where those issues are relevant in an FMU

106. The most important attributes not included in Appendix 2 of the NPS-FM are sediment, copper and zinc. Sediment is a significant water quality problem in many catchments in New Zealand. Copper and zinc are toxicants commonly found in urban stormwater. The Forum's Second Report stated that these parameters needed to be reflected as freshwater state objectives in regional plans. The absence of explicit requirements in the NPS-FM to set objectives for these things is, in some cases, skewing attention and diverting resources (e.g. by encouraging councils to focus on nitrogen where the bigger problem may be sediment, and de-emphasising urban contaminants).

[15] Both the aspirational objectives that set the longer term trajectory and the freshwater objectives set for the life of the regional plan that will be used to justify the choice of policy measures.

[16] The Science Review Panel is made up of scientists from different freshwater-related disciplines and from different organisations (i.e. crown research institutes, universities and councils). It advises MfE on some aspects of its freshwater programme.

[17] For example, it is also important to consider what the case for including new attributes in national regulation is, whether we sufficiently understand the 'current state' and 'size of the problem' as well as what the best mechanisms might be to address it. This step must be added to MfE's prioritisation framework for Appendix 2 attribute development.

107. MfE has work underway to develop numeric Appendix 2 attributes for sediment, copper and zinc. However, the earliest possible timeframe for their incorporation into the NPS-FM is 2018-19.

108. The Forum considers that the government must address these gaps in the NPS-FM by directing MfE to work with councils to ensure appropriate objectives for sediment, copper and zinc are set in regional plans where relevant in an FMU. MfE assistance to councils helps ensure objectives will be set in plans in a way that is consistent with the ongoing science and policy work.

109. MfE needs to commission work to better understand the nature and size of the copper and zinc problem outside Auckland, Wellington and Christchurch (where there is good data already). Monitoring and other compliance requirements will need to be commensurate to the size of the problem.

MfE must expedite work on attributes for sediment, copper and zinc

110. In the next round of NPS-FM updates MfE needs to aim to introduce new requirements for these missing contaminants, be they Appendix 2 attributes or something else. MfE must publically signal this intention so that councils and communities can plan for it. Even if numeric Appendix 2 attributes prove not to be feasible or desirable, then it is likely that either other measures would be implemented or the science and economics work completed can be used to support councils as they set objectives for these things regionally.

Central government needs to investigate national regulation for vehicle brake pads as a way of controlling copper discharges, and identify the best way of managing sources of heavy metals from building materials

111. Copper and zinc are currently managed mainly through stormwater infrastructure and treatment and some point source controls. However, source control is often the most efficient way of managing contaminants (for example, removal of lead in petrol in the 1990s).

112. Copper in vehicle brake pads contributes up to 75% of the current load, and car tyres are a significant source of zinc, but local authorities cannot control sources of these contaminants associated with motor vehicles. Central government should therefore investigate a national regulation for vehicle brake pads. If and when it becomes possible to use regulation to manage zinc from car tyres, this should also be considered.

113. Local authorities do have some powers to manage sources from building materials (roofs are a large source of zinc in urban areas) although there have been attempts in Auckland and Christchurch to use these powers which have not been successful. This suggests that there may be barriers to using these tools in practice and central government must investigate whether this is the case. National regulation of building materials may be warranted to control other significant sources of zinc and copper in urban areas.

A spatial classification system that provides for hydrologically modified catchments ought to be developed

114. In its Second Report, the Forum recommended a spatial classification system for attributes that, among other things, took significant hydrological modification into account. The government has chosen not to progress with this, and instead is proposing to provide exceptions to national bottom lines for specified infrastructure in Appendix 3 of the NPS-FM (although Appendix 3 has still not been populated).

115. The Forum still prefers its original recommendation - among other things it avoids the need for exceptions which the Forum saw as only being needed in exceptional circumstances. In addition, without a spatial classification system, there is a risk that future attributes may not be able to be developed and added to Appendix 2 as they will not be appropriate in a large number of hydrologically modified catchments.

116. A spatial classification system has not yet been explored. A workable system may be able to be developed that applies across all attributes. Work needs to be done to identify catchments that are modified by significant infrastructure resulting in substantial and long-term changes to the hydrological regime and fundamental change to the waterbody type (for example, from a river to a lake, or to a diverted river and canal). This work needs to include all types of large infrastructure that fit this definition (for example, flood control schemes) and to what extent the attributes that apply to the waterbody type under the current framework (and any under development) are appropriate or not. In the interim, Appendix 3 needs to be populated.

Clearer direction is needed on: objective and limit setting; determining management methods; and regional plan construction

117. Currently there is confusion and too much inconsistency in how freshwater objectives, and the methods to achieve them (including limits), are determined and laid out in plans. There is often not enough "line of sight" between freshwater objectives and the methods to achieve them both in plans, but also in the methodologies that determine and justify them. This is important as it provides robust justification for any restrictions on resource use via rules and supports the case for adequate resourcing for the whole policy package.

118. Freshwater objectives need to be expressed in as much detail as possible, preferably as measurable future in-stream outcomes. Freshwater objectives can relate to biological outcomes, habitat outcomes and the concentration of contaminants in the waterbody. The Forum's Second Report set out an expectation that numeric freshwater objectives would be set from which limits would be derived.

119. Not all freshwater objectives however lend themselves to regulatory limits – different mixes of regulatory and non-regulatory measures ought to be used to respond to a particular freshwater objective in the most effective way. For example, a load limit is not appropriate for some diffuse contaminants where it is more effective to manage the problem through other regulatory and non-regulatory means (e.g. diffuse sources of *E.coli* managed through stock exclusion and good farming practice). Concentration limits are sometimes needed (e.g. for point sources) and sometimes both loads and concentrations need to be used together (where there are both point and diffuse sources). Some limits may also need to be expressed using a

temporal component, for example to reflect variation in flow conditions over time. Any groundwater–surface water linkages also need to be taken account of.

120. Limits therefore need to be expressed in different ways depending on the characteristics of the specific problem – for example, some diffuse discharges of contaminants ought to be managed with a load limit[18] (e.g. nitrogen). Where limits are not appropriate, what is important is that communities have a level of certainty that the combination of all measures will achieve the objectives set. Where limits are used they need to be truly 'hard' limits i.e. they need to be robustly set and enforced well.

121. The recent Environment Court decision on the Horizons One Plan[19] provides some guidance on the way that the courts will interpret Council actions in the context of the RMA and freshwater plans. This should inform guidance on regional plan construction and how policy measures can be used.

122. The Forum recommends that:

- clear technical material be produced to explain how to determine the best mix of policy measures to achieve freshwater objectives
- clear methodologies be developed to determine and justify limits in regional plans
- clear direction be provided on regional plan construction
- a range of different types of limit are used (including temporally defined limits). Specifically, the concept of concentration limits is acceptable, provided they are tied back to the relationship between management of sources and in-stream outcomes
- a range of policy measures are used to achieve freshwater objectives, not just limits.

MfE must clarify how non-regulatory and regulatory tools fit together to achieve objectives

123. Non-regulatory approaches include good management practices, extension services, economic instruments and incentives, as well as catchment initiatives (such as wetland restoration and riparian planting). Some regions and sectors have put a lot of emphasis on non-regulatory approaches as they can be effective if done well. Plans take a long time to develop whereas non-regulatory measures can support change on the ground in the near term (this is one way of helping to 'hold the line' while plans are being developed).

124. Concerns about environmental deterioration can lead to a preference for regulatory over non-regulatory approaches - but they are not substitutes. Non-regulatory measures can be very effective when they operate within a clear regulatory framework that provides the community with confidence that the mix of regulatory and non-regulatory measures will achieve the freshwater objectives set.

[18] The load is determined by taking the desired in-stream concentration and assessing any natural contaminant levels and variability, attenuation, lag times and any 'load to come' to determine what the manageable load is for that FMU, then breaking that down into the various sources of the contaminant to be managed.

[19] Environment Court Decision [2017] EZEnvC 37.

125. Non-regulatory measures therefore need to be more closely aligned with plan rules and consent requirements, including compliance and enforcement activities. This can include linking RMA activity statuses to implementation of GMPs in plans in a way that will provide the right balance of incentives to encourage both voluntary uptake and penalise those who repeatedly flout any minimum requirements. Another option is to provide regulatory incentives for catchment collectives, such as longer consents, if it can be demonstrated that the benefits achieved exceed the sum of what would have otherwise been achieved through individual consents.

126. The Forum considers that some national coordination is needed to encourage effective use of these approaches, while also avoiding inefficiencies. Some sectors will face costs if they have to adjust to too many different regional approaches. The Forum acknowledges that MfE and MPI are currently working on how to improve uptake of good farming practice and MfE has started to look at urban GMPs.

127. MfE needs to provide direction on:

- how to factor in non-regulatory initiatives to objective and limit-setting – the circumstances where different approaches work well and how to account for them
- whether and how plans and planning processes might recognise non-regulatory approaches and tools
- whether some tools might have national applicability (for example, the Forum's Fourth Report discussed the need to make national use of the Canterbury MGM) and how to assist that.

Take and discharge consents must not be issued if doing so would breach a limit. MfE needs to provide direction on the use of prohibited activity status rules to implement limits in regional plans

128. In its Second Report, the Forum stated that:

> *"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 [and that] … resource use which exceeds the limits (whether by taking water or by discharging contaminants) will need to be managed using prohibited activity status."*

129. One lesson from the management of water quantity is that limits in an FMU can sometimes be exceeded through consenting decisions. One reason this can occur is that section 104 of the Resource Management Act (which says applications for resource consents must only 'have regard to' regulations, national policy statements and regional plans, rather than 'give effect' to them) allows resource consent approvals to be issued when they result in takes and/or discharges exceeding limits set in a regional plans.

130. If a limit is expressed in a prohibited activity rule (as per the Forum's Second Report) then this cannot happen, but limits are not always set this way. If limits are reflected in "policies" in plans

rather than "rules"[20] then the effects can only be managed through conditions. As a result, other rules and policies can be put in place which, depending on how they are constructed, can still allow consents to be granted over the limit. While the individual impacts of any given consent might be minimal, an aggregation of minimal impacts can be significant. This defeats the point of having a limit - a limit is set where it is because it is supposed to be the point at which, if exceeded, negative effects will occur.

131. It is too early to have solid evidence that this will be a widespread problem for water *quality* as limits are mostly still being set[21]. However it is reasonable to assume that the same issues will happen in water quality as have occurred from time to time with quantity once limits are set in regional plans and so it is worthwhile looking at what can be done to avoid these problems. MfE needs to provide technical support material outlining the correct way to construct limits in regional plans and then work with councils to ensure they do it correctly.

132. The recent Horizons One Plan decision provides some direction about the steps that regional councils need to take to support a clear limit in a plan.

When over-allocated, 'targets' must be set in plans

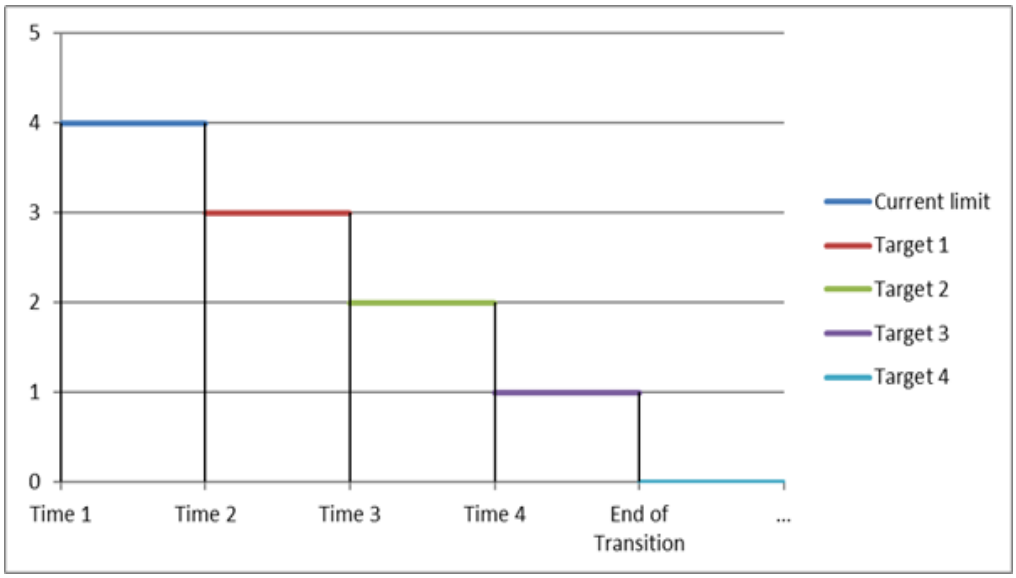
133. A target is defined in the NPS-FM as a limit that must be met at a defined time in the future. This meaning only applies in the context of over-allocation.

134. Communities' long term aspirational objectives need to be transparently connected to the more 'immediate' (i.e. 10-year) freshwater objectives that will be used to justify the choice of methods, including limits. Where there is over-allocation the Forum has previously recommended that a progressive implementation plan with milestones (interim limits) is also outlined at no greater than 5 yearly intervals to provide confidence there would be movement along a trajectory towards the aspirational freshwater objectives. This is illustrated in the diagram below.

[20] The 'limits' set out in Otago's Regional Plan are set out in policies and link to schedules. They are mostly set out as discretionary activities – so there is no maximum beyond which no more consents can be granted, i.e. no hard limit.

[21] This was a focus of the recent Horizons One Plan decision. In addition, under Otago's Regional Plan if landowners do not meet the discharge thresholds by 2020 they can apply for a resource consent to allow them more time to meet them – but the landowner must show how they will meet the thresholds by the end of the consent or minimise the level of contaminant discharge.

Figure 1: Targets during transition



135. The NPS-FM in theory does allow for this; however, it is only implied.

136. Plans must contain explicit milestones (interim limits) at no greater than 5 yearly intervals, when managing down to a limit. If transition is to occur over an extended period, then changes in limits through plan changes is acceptable, but for shorter transition, several distinct interim limits ought to be outlined in the plan itself. MfE needs to work with regional councils to ensure milestones are correctly articulated in future plans.

Tools are needed to manage the transition in 'at risk' catchments

137. Previous Forum reports have discussed importance of managing the transition until plans are operational. There may be some catchments where for example there is a risk of over-allocation occurring before objectives and limits are set, or where known water quality problems become worse. This has environmental consequences, but also means that investments might be made and land practices change that will be costly to unwind. Action must be taken to 'hold the line' so that problems and the costs of fixing them do not become larger.

138. While the Forum has in the past commented on the importance of this issue, and discussed some of the possible tools, there has not been any government guidance on possible tools or the circumstances they might be used. The government has advised that this is an area where regulatory change is not a priority and the focus is on non-regulatory guidance products. We are not aware of the development of any guidance in this area and continue to assert that this is an area where government action is needed.