



To: Hon Amy Adams, Minister for the Environment

Freshwater planning and the scope of the collaborative process

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Ministry for the Environment Contacts

Position	Name	Telephone		1st Contact
		(cell)	(work)	
Principal author	WITHHELD UNDER S 9(2)(a)			
Responsible Manager	Suzanne Doig	021 844 283	439 7553	✓
Director	Kay Harrison	027 230 2130	439 7579	

Executive Summary

1. This paper provides the advice you requested on some freshwater reform matters relating to scope, coverage and measurement:
 - a. the scope of the collaborative group's role in freshwater planning
 - b. what kind of water quality monitoring regime will be put in place to accompany implementation of requirements for implementing the National Objectives Framework (NOF).

Integrated management and freshwater planning

- 2.
3. WITHHELD UNDER S 9(2)(F)(IV)
OF THE OIA.
4. Regional councils are required under the RMA to undertake integrated management of the natural and physical resources of their region. The National Policy Statement on Freshwater Management 2011 (NPS-FM) also requires integrated management of the interactions between fresh water and associated land, ecosystems and coastal environments.
- 5.

WITHHELD UNDER S 9(2)(F)(IV)
OF THE OIA

6.

The national objectives framework and monitoring of water quality

7. We understand that you would like further detail on the kind of water quality monitoring programme that will be used by regional councils in their implementation and monitoring of the NOF, including the measures that central government will use to ensure that council monitoring practices are fit for purpose. This briefing does not canvass any issues around third-party monitoring of water quality in light of the NOF.
8. The NOF is a framework for setting objectives that are to be met over time, if not currently being achieved. It does not set standards, and so a fit-for-purpose water quality monitoring regime to accompany the NOF would be used to understand current state, and to provide the information needed to assess effectiveness of the management measures put in place to achieve (or maintain) the objective. A fit-for-purpose regime would not be used for monitoring effects of individual activities or to assess compliance with the plan objectives or NOF states on a one-off basis.
9. Some of the design parameters for this monitoring framework will be included in the NOF itself. All the attributes in the NOF will include a reporting statistic (e.g. specify a median value that over three years will be met 95% of the time). Each attribute in the NOF also describes how it is to be measured (e.g. annual maximum for periphyton, annual median for total phosphorus). This directs what councils will monitor, and how they will report on the attributes.
10. We have also indicated that central government will develop more detailed guidance on water quality monitoring with regard to NOF implementation. Should there be issues with consistency or quality of monitoring, despite the provisions in the NOF itself and in the guidance, the RMA Bill 2013 includes changes that would make it possible to issue more detailed regulation of monitoring practices in the future.
11. Water quality monitoring is costly and we expect there to be strong financial incentives on councils to implement a practical and affordable monitoring regime to track progress against objectives and limits over time. Councils' monitoring regimes will be designed to ensure the data collected provides information about the water quality across the management unit that the objective applies to.
12. In terms of the number of monitoring sites, while the overall assessment will be made at a particular point in the catchment, there may need to be other monitoring sites at other points in the catchment to reflect the spatial scale of the management unit.

Situation Analysis

Integrated management and freshwater planning

13. The RMA sets out regional council functions (s30) including requiring them to establish objectives, policies and methods to achieve integrated management of the natural and physical resources of their region. The NPS-FM reinforces this requirement for the interrelationships between water management and associated resources.
14. For councils to meet the requirements of the NPS-FM they need to better integrate the management of fresh water and the matters that impact on progress towards objectives and limits. Failing to do this would risk setting freshwater objectives and limits that have not adequately taken into account the potential impacts of meeting them, or setting inappropriate limits that will not deliver the objectives. In the absence of integrated planning processes, there is also a risk that objectives set in one planning process could constrain options in another (e.g. a coastal planning process that set a high water quality objective in the lower reaches of a river).

Current regional council water monitoring practices

15. At present, the typical council approach to overall water quality monitoring (as opposed to bathing water quality monitoring) involves the following tests at 50 to 100 sites across the region, depending on the region's size and available budget:
 - a. monthly water quality monitoring (as a minimum: nutrients, sediment, *E. coli*)
 - b. once-per-year monitoring (usually at summer low flows) of invertebrates and periphyton biomass
 - c. continuous flow monitoring.
16. With councils' recent development of guidelines, some councils are starting to adopt new monitoring including monthly periphyton cover, streambed sediment cover, fish, and continuous water quality monitoring of some parameters like dissolved oxygen.
17. The core purpose of regional monitoring is usually state of the environment monitoring, although flow monitoring doubles as an essential flood response tool. Generally, state of the environment monitoring sites are situated at key locations or nodes in river networks that represent the condition of an upstream reach or catchment area of interest. This node may also coincide with particular groupings of land uses and/or natural characteristics upstream that influence river condition or response (such as a predominance of hill country geology).
18. The frequency of formal council state of the environment reports varies but they are typically issued every five years. Some councils do compact report-card type annual reporting to complement their full state of the environment reports.

Advice

WITHHELD UNDER SECTION

9(2)(F)(W)

OF THE OIA.

WITHHELD UNDER SECTION
9(2)(F)(iv)
OF THE OIA.

23. Both of these options ensure that risks associated with limiting the scope of the collaborative planning process too narrowly are minimised. The main risk is if the scope is too narrow, councils will have to undertake two separate planning processes to address all of the necessary matters. The costs associated with this make it likely that regional councils will instead choose to use the existing schedule 1 process and there will be little or no uptake of collaborative planning. There is also a risk of disjointed objectives and poor cost benefit analysis across different processes.

The national objectives framework and monitoring of water quality

24. The NOF is a framework for setting objectives that are to be met over time, if not currently being achieved. It does not set standards, and so a fit-for-purpose water quality monitoring regime to accompany the NOF would be used to understand current state, and provide the information needed to assess effectiveness of the management measures put in place to meet (or maintain) the objective. This will require a time series of data readings that match to the management unit that an objective applies to. A fit-for-purpose monitoring regime would not be used to relate water quality to specific activities (as opposed to cumulative effects) or report on immediate or point-in-time compliance with either the objectives in the plan or the states set out in the NOF itself.
25. Monitoring of the effect of specific activities is a separate exercise, undertaken separately through the council's monitoring and compliance practices for resource consents and associated plan provisions (such as rules applying to controlled activities).
26. The compulsory values in the NOF will apply to all freshwater bodies as defined in the RMA (namely fresh water in a river, lake, stream, pond, wetland or aquifer or part thereof not located in the coastal marine area). Measuring the achievement of the objectives decided in the regional plan is done by councils in accordance with their own monitoring strategies. The approach to these monitoring strategies is not specified in legislation.
27. All the attributes in the NOF will include a reporting statistic. Some of these take the form of a median value to be achieved for a certain percentage of occasions over a set period of time (e.g. a median value that over three years will be met 95% of the time). This allows for extreme events such as flooding. Each attribute in the NOF describes how it is to be measured (for example annual maximum for periphyton, annual median for total phosphorus). This directs what councils will monitor, and how they will report on the attributes.

28. Councils will apply the framework in different ways to reflect local needs, for example how water management units are defined, and setting different objectives for different water management units. When councils use attributes to set objectives in plans, they will need to be clear over what time the objectives will be met, and where in each water management unit this will be assessed.
29. To do this, councils will need a practical and affordable monitoring regime to track progress against objectives and limits over time. This will be part of the fresh water monitoring councils already do to assess the effectiveness of their plans.
30. Councils' monitoring regimes would be designed to ensure the information collected reflects the water quality across the whole area (management unit) that the objective applies to, in a practical and cost effective way. It would not be possible to relate water quality at a particular point to a particular property or activity.
31. In terms of the number of monitoring sites, while the overall assessment will be made at a particular point in the catchment, there may need to be other monitoring sites at other points in the catchment to reflect the spatial scale of the management unit. As noted above, the current approach adopted by councils (which we would expect to continue) is that monitoring points will be located at nodes in river networks that represent the condition of an upstream reach or catchment area of interest.
32. The Ministry will be providing guidance to councils on monitoring relating to implementation of the NPS-FM, including the NOF.
33. Should there be issues with how councils are monitoring for water quality, despite the provisions in the NOF itself and in the guidance, the current RMA reforms include changes that would make it possible to more actively regulate monitoring practices in the future (either through changes to the matters that can be included in an NPS, or through the changes to s360 regulation-making powers on information gathering).

Risks and Mitigations

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35. We consider that the combination of NOF requirements and guidance should give adequate direction to councils. Regulation remains a potential backstop.

Financial, Regulatory and Legislative Implications

WITHHELD UNDER SECTION 9(2)(F)(IV)

37. There are no financial or regulatory implications in relation to this paper.

Next steps

WITHHELD UNDER SECTION 9(2)(F)(IV)

Recommended Action

We recommend that you:

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- b) **Note** that, with regard to water quality monitoring and the National Objectives Framework: requirements for implementing the national objectives framework.
 - a. Councils already have monitoring approaches in place that assess water quality for a catchment or area by establishing monitoring points at particular nodes
 - b. The National Objectives Framework will contain some prescription as to how each attribute is to be measured
 - c. Further guidance will be issued to support development of fit-for-purpose monitoring regimes by councils
 - d. Regulation could be considered in the future if councils are not developing monitoring regimes that fit well with the purpose of the National Objectives Framework

- c) **Indicate** if you would like further information or advice on other aspects of water quality monitoring in connection with the National Objectives Framework.

Yes / No



Suzanne Doig
Manager, Water Reform Policy

Date

15/8/13

Hon Amy Adams
Minister for the Environment

Date