

THE NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT AND IMPLICATIONS FOR STORMWATER

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ABSTRACT (200 WORDS MAXIMUM)

The National Policy Statement for Freshwater Management ('NPSFM') prepared under the Resource Management Act ('RMA') took effect on 1st July 2011. The main aim of the NPSFM is to set out objectives and policies that direct local government to manage water in an integrated and sustainable manner. Underlying these policies is the whole approach to integrated catchment management.

The Land and Water Forum (LAWF) has been re-convened as the main means to further implement the NPSFM. LAWF considered recommendations in March 2012 on methods, tools, and governance arrangements for setting limits for water quality and quantity. These recommendations will be followed in September 2012 with further recommendations about how to manage water within limits.

This paper reviews the NPSFM and the way in which it may be implemented by local and central government. It goes on to review the potential implications for stormwater management best practice in order to achieve the overall objectives that will be required to be met. The paper also highlights what could usefully come from the LAWF process, how we could expect the Government to react to it and the consequential implications for stormwater management.

KEYWORDS

National Policy Statement, Freshwater Management, Stormwater

PRESENTER PROFILE

Phil Gurnsey recently joined Beca after 10 years with the Ministry for the Environment. He has been the environment advisor in the Office of the Minister for the Environment, was at the centre of developing the NPSFM and involved in the LAWF process. He was recently appointed as part of the Technical Advisory Group reviewing sections 6 and 7 of the RMA.

Jonathan Reed joined Beca from the UK in 2010. He works for municipal, industrial and agricultural clients to plan and implement water resource and stormwater schemes. In the UK he was closely involved with the construction industry research organisation, CIRIA and wrote or contributed to stormwater related best practice guidance documents. He also co-founded and was a Director of a sustainability charity for ten years.

1 INTRODUCTION

This paper reviews the National Policy Statement for Freshwater Management 2011 ('NPSFM') prepared under the Resource Management Act ('RMA') and highlights issues in relation to urban stormwater management. The NPSFM is the centrepiece of the Government's water framework and has the potential to alter how freshwater is managed across New Zealand. Its development has been long in gestation and it stems from Government's desire to further unlock the land's productive capacity, recognising the economic potential of the land but understanding the need to control pollution within set limits.

The links between diffuse pollution and deteriorating water quality have been well documented in a number of papers. Recently, Howard-Williams et al (2010) provided an in depth summary of the current situation and Water New Zealand Stormwater Conference 2012

future challenges in relation to diffuse pollution. Challenges arise from the rapid development that has occurred over the last twenty years. For example, the OECD Environmental Review of New Zealand (OECD, 2007) stated that over the period of 1990 – 2005 New Zealand had the highest percentage increase in agricultural production of the 28 OECD countries and the second highest percentage increase in phosphate fertiliser use.

The Land and Water Forum (LAWF) was established by the government to break the deadlock of inaction on water policy. It is seen as a key contributor to implementing the NPSFM and water management policy. Its first report (LAWF, 2010) – “A Fresh Start for Freshwater” – identifies a set of outcomes and goals for freshwater management in New Zealand and recommends a number of policy changes to achieve them. The Government reconvened the LAWF for a second phase of work and it is tasked with making recommendations on the methods, tools and governance arrangements for setting limits related to water quality and quantity.

Whilst the NPSFM is certainly targeted at enabling economic development in the agricultural sector, it has implications across the water sector in general and all sources of point source and diffuse pollution. This includes the management of urban stormwater. This paper:

- Provides a brief overview of the NPSFM and its associated guidance note;
- Describes the role of the LAWF; and
- Summarises the key stormwater implications to achieve the NPSFM objectives.

2 OVERVIEW OF THE NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT 2011

2.1 OVERVIEW OF THE NPSFM

The NPSFM includes a number of different policies which cover:

- Water quality;
- Water quantity;
- Integrated management; and
- Tāngata whenua roles and interests.

Each of these areas is described below, together with a short summary of how these policies apply to stormwater management. Implementation of the NPSFM by regional councils can be by a series of time limited stages over a period until the end of 2030.

2.2 WATER QUALITY

Water quality objectives relate to safeguarding ecosystems and protecting or improving freshwater quality. Policies to implement these objectives revolve around setting water quality limits for freshwater bodies and setting conditions on discharge permits to meet water quality limits in the future.

The NPSFM Implementation Guide (MfE 2011b) suggests that all sources of potential contamination should be considered holistically, which includes contamination from urban stormwater. This is a relevant consideration for applications for resource consents and in the future, stormwater resource consent applications may need to demonstrate how they meet the catchment water quality objectives.

The section on water quality also defines the concept of an ‘outstanding’ freshwater body. Where these are designated, any adverse effect on the water body must be avoided. Only a small number of waterbodies are

expected to be designated. Where this occurs, the treatment requirements related to any stormwater discharge to these freshwater bodies could be greater than normal practice.

Implementation of the NPSFM will include the setting of water quality limits. These limits will cover all activities. The limits that are set will therefore apply to stormwater discharges.

Policies are also included for councils to specify targets and implementation methods to improve water quality in waterbodies in order to meet the required objectives. These methods will be appropriate to the catchment related issues; in urban catchments with poor water quality, measures would be expected to target stormwater runoff.

2.3 WATER QUANTITY

Water quantity objectives again relate to safeguarding ecosystems by providing sufficient freshwater to maintain habitats. There are also objectives related to avoiding the over-allocation of freshwater and to promote water efficiency. Policies to implement these objectives primarily relate to the setting of environmental flows and to assess the cumulative effect of all abstractions from single water bodies. There is also a requirement to set a timeframe during which over-allocation will be phased out.

The water quantity related objectives are primarily focused on allocation. One objective does potentially apply to stormwater, as it seeks to maximise the efficient use of water. In terms of stormwater, it could be argued that this could require consideration of stormwater re-use. This would provide benefits by improving the overall efficient use of water in a catchment and potentially reduce the requirement for abstraction for other uses.

2.4 INTEGRATED MANAGEMENT

There is a single objective related to the integrated management of water, which broadly recommends a more catchment based approach to land and water management. This will include stormwater management which should be considered as part of this integrated approach, although it is not stated explicitly within the NPSFM.

2.5 TĀNGATA WHENUA

The last objective requires the involvement of iwi and hapū to ensure that their values and interests are included in the decision making process. It stresses how councils should work with iwi and hapū, and do not identify values and interests on their behalf.

2.6 DISCUSSION

While the general objective to progressively enhance the overall quality of freshwater is commendable, the NPSFM does not recognise the challenges associated with managing water resources in an urban environment, particularly those that are used for stormwater conveyance.

The NPSFM contains no reference to stormwater – not one! The key objective in relation to stormwater is the requirement to meet water quality limits within a catchment as stormwater is one of the key sources of diffuse pollution from urban areas.

This is in contrast to the New Zealand Coastal Policy Statement (NZCPS) (Department of Conservation, 2010) which has two references to stormwater:

Policy 22: Sedimentation

4. Reduce sediment loadings in runoff and in stormwater systems through controls on land use activities.

Policy 23: Discharge of contaminants⁴. In managing discharges of stormwater take steps to avoid adverse effects of stormwater discharge to water in the coastal environment, on a catchment by catchment basis, by:

- a. *Avoiding where practicable and otherwise remedying cross contamination of sewage and stormwater systems;*
- b. *Reducing contaminant and sediment loadings in stormwater at source, through contaminant treatment and by controls on land use activities;*
- c. *Promoting integrated management of catchments and stormwater networks; and*
- d. *Promoting design options that reduce flows to stormwater reticulation systems at source.*

The guidance to the NPSFM (MfE, 2011b) makes reference to these provisions in the NZCPS, but contains no guidance of its own on how to manage stormwater in the NPSFM. These policies of the NZCPS apply to the same waterbodies and subject matter as the NPSFM and both need to be considered and given effect to. Co-ordinated implementation of both documents will be required in planning for the coastal environment; for example, considering specific NZCPS requirements about sediment loading and stormwater management.

Further guidance from the Ministry for the Environment and Department of Conservation is weak or non-existent. This is somewhat surprising given urban catchments typically exhibit some of the most intensive land use in New Zealand and it is where many of the impacts are greatest.

3 THE LAND AND WATER FORUM

The LAWF is, at present, the Government's answer to addressing issues of water quality, water quantity and water storage. The LAWF has a daunting task in front of it to deliver on high expectations through a collaborative consultation model.

The LAWF is a diverse group comprising primary industry representatives, environmental and recreational NGOs, iwi and other organisations with an interest in freshwater and land management. A Small Group, with representatives from 21 organisations, meets on a monthly basis and reports to the Plenary, which has a membership of 62 organisations. The Small Group is joined by active observers from local and central government. The LAWF members are assisted in their work by a Secretariat (made up mainly from staff seconded from the Ministry for the Environment and Ministry of Agriculture and Forestry).

The LAWF was asked by the Government to conduct a stakeholder-led collaborative governance process to recommend reform of New Zealand's freshwater management. In September 2010 the LAWF reported back to Ministers identifying shared outcomes and goals, and options to achieve them. It then undertook public engagement on its recommendations throughout New Zealand and in April 2011 provided Ministers with its final findings, recommendations and thoughts.

This report has paved the way for Ministers to have confidence in the LAWF delivering a second time. However, this time the task is more challenging as they get to the detail of issues, as opposed to some of the high level statements that were contained in their first report. Having said that, it does not diminish the fact that improving the management of fresh water is a very complex issue with strong and diverse interests. The LAWF process paves the best way in the last twenty years of building as wide a consensus as possible on the way forward.

In March 2012, the LAWF will make recommendations on:

- What is needed to put in place the limit-setting aspects of the NPSFM, including what central government needs to do versus what local government needs to do, the roles and responsibilities of water users, and the nature and scope of limit-setting tools; and
- Better processes for making decisions on limits, especially for involving iwi and other interest groups.

In September 2012, the LAWF will develop recommendations on how to manage within limits, including:

- What tools could be used to manage within limits, including managing the effects of land use on water;
- Methods for allocating rights to discharge into water once limits are set;
- Methods for the initial allocation of the right to take water once limits are set;
- Transfer systems that allow these rights to take and discharge water to be moved to higher value uses;
- Instruments that encourage efficient use of water in rural and urban areas;
- Compliance and enforcement issues; and
- Transition issues.

The LAWF will also provide advice to Ministers on the need for and elements of a possible National Land and Water Strategy.

What can we expect from the LAWF and how will be it actioned by the Government? The LAWF's report will not be made public until after it has been received by Ministers. Ministers do not have to report back to Cabinet until May 2012. Once Cabinet has made policy decisions, officials are likely lead the design of instruments and consult with the LAWF and others as necessary.

In addition to the work of the LAWF, there are a range of other initiatives underway that are likely to impact on resource management. These include a review of spatial planning outside of Auckland; collaborative plan making where an approved collaborative process would circumvent "afresh" appeals to the Environment Court and a review of sections 6 and 7 of the RMA and any consequential amendments later in 2012. All of these considerations could impact on the Government's approach to managing our water resources. These work programmes will compete within Government's work agenda that appears very busy, as it is also looking at local government reform. In this regard, a major review of councils, predicting a push for more shared services between councils and possibly amalgamations, will have significant influence too on the outcomes for water management.

4 KEY IMPLICATIONS RELATED TO STORMWATER TO ACHIEVE THE NPSFM OBJECTIVES

Urban streams and other water bodies are important features of the urban environment, contributing to the quality of living and supporting habitats, as well as providing for the conveyance of urban stormwater. To a certain extent, the values and uses applicable to an urban watercourse are in conflict.

As we know, the volume of stormwater runoff derived from hard (impervious) surfaces in urban areas is much greater than in other areas. This inevitably leads to the modification of stream channels, accelerated erosion and frequently poor water quality. As a result, urban streams and watercourses are frequently modified to limit erosion and facilitate stormwater conveyance. While negative effects can be minimised in new urban areas through techniques such as Low Impact Urban Design, existing urban areas are already developed and so often already have piped and highly modified stream channels.

The NPSFM challenges us to think more about how to improve these existing urban services. In an existing urban environment, it may be more appropriate to strive to maintain the existing quality or even to minimise further decline. Even if good practice stormwater management techniques are adopted we may struggle to reach the lofty goals set by the NPSFM.

It is therefore especially important that the LAWF seek to set limits on water quality that recognise what is achievable. By this we mean that the values, uses, and pressures on a particular resource are assessed and an appropriate standard developed accordingly. There is potential to set standards through national environmental

standards under the RMA. In some instances, this may be achieved by setting an ambient water quality “standard”. However, in other circumstances, it may be setting out processes-based or by the best practicable option (BPO). The key point we wish to emphasise is that the “standards” – whether they be numeric, process-based, or based on the BPO – must be specific to a particular water body and not generic. This is essential to ensure the relevance of any standards that are established.

5 CONCLUSIONS

This paper reviews the NPSFM and the implications for stormwater management. Importantly, stormwater is not considered explicitly in the NPSFM and is only covered by reference to the desire to improve water quality and achieve certain targets.

There is a lack of guidance on how to address stormwater under the NPSFM. Without guidance it will be left to regional councils to design their own approaches through regional plans or non-statutory guidance (such as that recently proposed for the Hawke’s Bay in the Draft Regional Stormwater Strategy (Hawke’s Bay Regional Council, 2011)). It will be important for the success of such approaches to co-ordinate the operations of the territorial authorities and regional councils to achieve an integrated approach to the management of stormwater quantity and quality. Such an approach may be a prelude to local government amalgamation.

There are high hopes for the LAWF delivering on the gaps in guidance through the development of standards. In the interim we are left with a range of guidance published by industry and local government. This includes guidance about the source of contaminants in urban stormwater (e.g. Auckland Regional Council, 2005), what should be included in catchment management studies (e.g. Auckland Regional Council, 2006) to design guidelines for mitigation of runoff from road and other infrastructure (e.g. NZTA, 2010). These documents are not necessarily consistent which leads to confusion. Approaches to carrying out studies and design should be developed that can be applied across New Zealand to support the regionally set NPSFM water quality and quantity targets.

The review of the NPSFM will not occur until 2016. It may be that by this time we can see clearer guidance for stormwater management come from central government. If not the NPSFM should provide the guidance that is required.

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