

BEFORE THE BOARD OF INQUIRY ON FRESHWATER MANAGEMENT

IN THE MATTER of the Resource
Management Act
1991

AND

IN THE MATTER of the submissions
on the Proposed
National Policy
Statement on
Freshwater
Management

STATEMENT ON BEHALF OF METROWATER BY ILZE GOTELLI

1. Introduction

- 1.1 My name is Ilze Gotelli. I am the Senior Environmental Planner at Metro Water Limited (Metrowater). I hold a Masters degree in Environmental Policy. I have over 10 years of experience in the water supply and wastewater industry.
- 1.2 Metrowater owns and operates the water supply and wastewater network in Auckland City. Accordingly, Metrowater has a vital interest in ensuring that adequate water supplies are available for the long-term domestic and municipal water needs for Auckland City. Metrowater also manages the stormwater network on behalf of Auckland City Council. The discharge of stormwater into urban watercourses has an impact on the quality of water in urban streams and ultimately the wider coastal environment.
- 1.3 Managing New Zealand's Freshwater Resources requires balancing a range of ecological, economic, social and cultural values. This is challenging, particularly where resources are scarce, and often requires making difficult choices between competing values and uses. In this regard, we support the need for greater direction from Central Government regarding the protection and management of Freshwater Resources.
- 1.4 However, in our view, the Proposed National Policy Statement on Freshwater Management (NPS), as currently drafted, does not provide this high level guidance. The NPS is very prescriptive and focused on administrative requirements at the regional and local level, while adding little real direction for the sustainable management of Freshwater Resources. We would like to see the NPS be amended to focus on key outcomes (not just process), provide more direction on national priorities and values, and set out a framework for managing Freshwater Resources that is robust, realistic, and relevant.
- 1.5 I would like to focus on four key themes. These are:
- Freshwater Quality Standards

- Notable Values
- Land Use Development
- Fresh Water Quality and Demand.

2 Freshwater Quality Standards

Policy 1(a) and Policy 2(a)

- 2.1 The Government has signalled a desire to move to the use of **Freshwater Quality Standards** to manage Freshwater Resources, and this is reflected in the NPS. The NPS directs the Regional Councils to determine timetables for setting Freshwater Quality Standards and then set those standards by the specified date(s). Beyond that the NPS gives no guidance as to what is meant by "Freshwater Quality Standards", nor on how they should be set, other than to define Standards as "a regional rule on freshwater quality which gives effect to this National Policy Statement."
- 2.2 The lack of guidance could be interpreted as providing the regional councils with the flexibility to implement Water Quality Standards as they see fit for their regions. But it also means that there is little direction as to the national expectations for such standards—what the process for establishing them should be, what outcomes the standards are expected to achieve, or guidance on how to resolve value and use conflicts.
- 2.3 Although it is not specified, we would assume that the intent is to require ambient-based Water Quality Standards that define the water quality that is desired for any given Freshwater Resource.
- 2.4 While in principle Metrowater supports the use of Water Quality Standards, our main concern is to ensure that they are practical, affordable and relevant to a particular Freshwater Resource. We are concerned that a "blanket" or "one size fits all" approach could be used to setting standards, potentially resulting in very poor environmental outcomes or leading to the requirement for significant expenditure without necessarily achieving the desired environmental outcome.
- 2.5 Over the past eight years, Metrowater and Auckland City Council have undertaken an extensive, multi-million dollar study of the nature of the city's stormwater discharges and associated adverse effects on receiving environments. This has provided us with a very good understanding of stormwater issues including:
- Catchment and city-wide stormwater contaminant loads;
 - Stream and estuarine water and sediment quality;
 - The efficiency, cost and effectiveness of stormwater treatment and reductions at source; and
 - Potential opportunities to implement public-scale stormwater treatment, such as ponds or wetlands, in identified priority catchments.
- 2.6 The results of these studies demonstrate that certain contaminants, notably zinc and to a lesser degree copper, are ubiquitous in an urban environment, and that the loads are generally dependent on land use. For example, zinc

comes primarily from galvanised roofing and other building products and to a significantly lesser degree from motor vehicles. Industrial land uses tend to contribute high zinc loads because of the extent and prevalence of galvanised roofing in industrial buildings.

- 2.7 As a consequence, urban stormwater—and therefore urban streams which receive much of the stormwater—contain elevated concentrations of zinc as well as some other contaminants, that exceed generally recognised guidelines for the protection of aquatic ecosystems such as those of ANZECC (2000).
- 2.8 Our studies, and a similar study undertaken by the ARC, indicate that the cost of applying stormwater treatment to the urban areas to achieve even moderate levels of zinc (and other contaminant) reduction are extremely high. For example, the ARC study's "best estimate" of the cost of applying stormwater treatment in the urban areas of the Auckland region is \$5.9 billion.¹
- 2.9 In addition to the costs, there are significant challenges to implementing stormwater treatment because of the relative inefficiency of most treatment devices as well as a lack of available land in existing urban areas. A study of priority catchments in Auckland City (PDP 2005, updated 2009) identified that there are few opportunities for locating public treatment devices and, as a result, indicated that there would only be small reductions (less than 10%) in zinc loads in these catchments.
- 2.10 One conclusion from this work is that is that source control can be more effective than 'end-of-pipe' treatment. In this case, the study predicted that far higher levels of zinc removal could be achieved by replacing galvanised iron roofs with more modern roofing products than through treatment. However, the replacement of building material is a process that will occur gradually over several decades.
- 2.11 In summary, the studies we have undertaken highlight that the freshwater environments within Auckland City are degraded due to past and current land use activities, and that there is no quick fix. As discussed, there are significant practical difficulties, and the costs associated with even achieving moderate reductions in contaminant loads are very high.
- 2.12 We are concerned that these challenges and potential costs have not been adequately recognised and considered in the development of the NPS. While we acknowledge that the costs and benefits of a particular Freshwater Quality Standard will be assessed at a more detailed level during the plan change process, it is important to recognise the potential consequences of the requirements that the NPS is proposing—particularly where these are mandatory.

¹ PDP (2005, updated 2009) estimates that the cost of removing zinc is generally between \$10,000/kg to \$100,000/kg depending on the removal method used. To put this into context, PDP (2009) estimates the annual city-wide zinc load discharged to streams, groundwater and the coast to be 23,220 kg. In the ARC study, Hill Young Cooper et al (2007) estimate that the cost of treating the region's urban stormwater to achieve a reduction of 75% of total suspended sediment, 30% zinc and 40% copper ranged from \$3.2 to \$10.2 billion dollars (depending on the method used), with a best estimate of approximately \$5.9 billion.

2.13 Metrowater therefore considers it essential that if Freshwater Quality Standards continue to be mandatory under the NPS, their establishment is guided by a consistent, national framework to ensure that any standards that are set are robust and relevant. This framework should be supported by appropriate policy guidance in the NPS to assist in resolving inevitable resource management conflicts.

2.14 This framework should:

- Allow standards to be set for different types of Freshwater Resources, their values and their current or desired future use;
- Explicitly recognise the differences between urban and non urban Freshwater Resources;
- Enable standards to be set based on desired water quality or wider environmental outcomes rather than on numerical values;
- Be based on a Freshwater Resource classification scheme that recognises values and current and future uses;
- Allow the regions to set the specific standards for each Freshwater Resource; and
- Allow for the standards to be phased in, focusing initially on priority Freshwater Resources, and allow achievement of standards over a realistic period of time.

3 Notable Values

3.1 We support the identification of the values of Freshwater Resources to improve the management of these resources. However, we are confused by the approach to Notable Values stated in Policy 1.

3.2 As drafted, the NPS only requires the identification of the Notable Values of any "Outstanding Freshwater Resources" or any "Degraded Freshwater Resource". However, in our view, the values and the current and desired future use(s) should be identified for all Freshwater Resources and used to establish an appropriate classification and associated management strategy. We do not think that the NPS should limit attention on Outstanding or Degraded Freshwater Resources, but that regional councils should be able to establish management priorities based on this assessment of values and uses together with receiving environment state and future pressures.

3.3 The outcome that we seek related to Notable Values is that specific policies related to setting Notable Values be deleted and the process for establishing values be included in a water classification scheme for all Freshwater Resources.

3.4 One final point on the topic of values: as mentioned earlier, in our view the NPS should provide more guidance on those values or Freshwater Resources that may be deemed to be of national interest and provide policy guidance (at least at a high level) for resolving conflicts between competing values or uses. In a highly developed urban area such as Auckland, for example, streams play an essential role in stormwater conveyance, working in tandem with the stormwater network to transport stormwater away from roads, houses and buildings. However, this "value" is often in direct conflict

with the stream's ability to support ecological values due to the effect of high stormwater flows and loss of aquatic habitat. This raises the question of—when establishing a Freshwater Quality Standard for an urban stream—what emphasis should be given to the conveyance value of the stream compared to the ecosystem values?

4 Land Use Development

- 4.1 There are several objectives (notably 2 and 5) and policies that focus on integrated land use development and water management. We fully support the need for integrated land use development; however, we find the Objectives and Policies that focus on land use development to be confusing in places, too absolute in others, and even potentially inconsistent with the RMA in others.

Objective 2

- 4.2 First a straightforward point: Objective 2 only mentions the need to coordinate infrastructure for water supply. However, the management of wastewater and stormwater are equally if not more important for minimising the effects of discharges. Therefore, this Objective should be redrafted to include all relevant infrastructure.
- 4.3 Another point on Objective 2 and the policies that support this objective, is a question about what "*effective integrated management...of the effects of Land Use Development and discharges of contaminants*" really means? In our view, integrated management is a process, rather than an objective. We suggest this could be reworded to refer to: "integrated management of land use development *in a way that minimises* the adverse effects on the quality and quantity of freshwater resources". The wording of this Objective and the references in Policies 1, 2, and 3 should be redrafted accordingly.

Objective 5

- 4.4 Objective 5 talks about controlling the effects of land-use development to "avoid" further degradation. While a laudable objective, it is not practical because some level of degradation of aquatic resources is inevitable where there is intensive development, even if it is done in a low-impact manner. Such an Objective is also not consistent with the sustainable management purpose of the RMA which provides for circumstances where some degradation, after mitigation, may be considered acceptable if such development provides for the social and economic wellbeing of the community.

Policies 2, 3 and 5

- 4.5 It is our view that the NPS is directing territorial authorities to implement district plan provisions for matters for which they have no jurisdiction under the RMA. We agree with the Section 32 evaluation that land use planning and freshwater management have not been well integrated in the past. However, we consider one of the reasons for this—at least in urban areas—is the division of statutory responsibility for controlling the use of land between the regional councils and territorial authorities.

- 4.6 We think that the best way to achieve integrated management is to integrate all aspects of land use planning as a function of the territorial authority, particularly in urban areas. In that regard, we support the approach of the NPS. However the legal advice that has been received by Auckland City Council and Metrowater on this very issue, is that it is inappropriate for territorial authorities to control the use of land for water quality and quantity purposes when it is a clear function of regional councils under the RMA—unless there has been a relevant transfer of powers.
- 4.7 This apparent contradiction between the functions under the RMA and the direction of the NPS should be addressed. A possible option is for the NPS to signal the need for legislative change. Alternatively, it could direct regional councils to transfer the relevant powers to territorial authorities. We note that this will no longer be an issue under the new governance arrangements in the Auckland Region, but other regions will continue to be affected.
- 4.8 Therefore, the outcome we seek is for the NPS to direct this legislative change, and to redraft Policies 2, 3 and 5 accordingly.

5 Fresh Water Quality and Demand

- 5.1 Finally, I want to briefly touch on a couple of points related to fresh water quality and demand.

Objective 3

- 5.2 Objective 3 seeks the progressive enhancement of the quality of freshwater resources. Again, we generally support this aspiration, but as stated the objective fails to recognise that in some cases—for example with urban streams—the preferred management approach may actually be to maintain the existing quality of water or to minimise further degradation. This objective could be reworded to state something to the effect of “To maintain or, where appropriate, progressively enhance the water quality outcome(s) established for a Freshwater Resource”.

Policy 1(i)(ii)

- 5.3 Metrowater fully supports the need to manage the demand for freshwater and provide priority for domestic uses. However, I would like to highlight two points related to water quality demand which in our view require amendment. Both relate to Policy 1(i)(ii).
- 5.4 First, we support Watercare’s submission that the NPS should refer to giving priority to “domestic” and “municipal” supply. Municipal water suppliers such as Metrowater provide to a range of users including residential and commercial customers as well as to hospitals, schools, and the fire service. These are essential uses and should be afforded priority.
- 5.5 Second, in our view the NPS confuses the issue of resource allocation, which is about who gets what, and demand management, which is about how the water is used. Both are important but they should be dealt with separately rather than having allocation for domestic sources being predicated on appropriate demand management. To that end the words “provided that all appropriate demand strategies are established for such supply” in Policy 1(i)(ii) should be deleted from the policy.

6 Conclusion

- 6.1 Overall, Metrowater supports the intent of the NPS to improve the management of Freshwater Resources. However, in its present form, we have to question what value it adds. While the NPS directs the implementation of a range of processes, it provides little guidance on national priorities nor on how conflicts between values and uses may be resolved in the process of setting Water Quality Standards and Environmental Flows. In our view, this is the real challenge for improving the management of New Zealand's Freshwater Resources.
- 6.2 Given this, we would like to see a NPS that:
- Provides national guidance on balancing values and making difficult choices between competing uses;
 - Requires regional councils and territorial authorities to identify the key values and uses of all Freshwater Resources as an input into the setting of Freshwater Quality Standards;
 - Provides for the adoption of Freshwater Quality Standards that are robust, relevant, cost effective and practical to achieve by means of a consistent national framework; and
 - Aligns statutory powers to improve integrated land use and water quality/ quantity management to minimise the effects of on-going land use and development.
- 6.3 Honourable Chairman and members of the Board, I thank you for the opportunity to discuss Metrowater's views on the NPS with you today.

Cited References

ANZECC (2000). Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000. Australia and New Zealand Environment and Conservation Council, October 2000.

Hill Young Cooper, Cranleigh Merchant Bankers and Pattle Delamore Partners Limited (2007). Funding Futures: Three Waters - Auckland Region. Final report to the Auckland Regional Council, June 2007.

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