





association of consulting and engineering

24 September 2021

Hon. Nanaia Mahuta Minister of Local Government Parliament Buildings Wellington

Email: n.mahuta@ministers.govt.nz

Kia ora Minister

We collectively represent people, firms and organisations at the coalface of the design, delivery and asset management of three waters infrastructure in Aotearoa New Zealand.

We acknowledge there are important issues to be addressed in the proposed reform around how three waters are governed and controlled. Today, we're writing to express our continued support for investment in the three waters and the high level and shared objectives which the Government and Local Government New Zealand agree underpin the Three Waters Reform Programme¹.

We need to improve delivery and management

There is a critical need to improve the delivery and management of the three waters services and the water environment in Aotearoa New Zealand. This need has been clear for a long time and the situation is worsening due to neglect, aging assets, increasing growth, public expectations of higher levels of service, and the challenges of climate change adaptation and mitigation and a carbon-neutral future. (See appendix for quotes from various sources since the year 2000 to show how widespread and acute the need has become.)

As you know, the Havelock North contamination incident, where four people died and more than 5000 people fell ill after the town's water supply was contaminated with campylobacter in 2016, sparked an inquiry into how drinking water services had been delivered in this country. The inquiry found widespread systemic failure of water suppliers to meet the high standards required for the safe supply of drinking-water to the public. There is anecdotal information (some was reported to the Inquiry) that there have been other, serious incidents over the years. What was clear to the Inquiry and is clear to us is that what happened in Havelock North could happen in a number of other places in Aotearoa. We are all acutely aware that the risk of a future contamination event remains – hence the need for reform.

¹ Heads of Agreement between the Sovereign in right of New Zealand and New Zealand Local Government Association Incorporated Te Kahui Kaunihera ō Aotearoa for Partnering Commitment to Support Three Waters Service Delivery Reform, Clause 2.5

We want an outcomes-focussed delivery model

At the bigger picture level, we all want to see reform that is outcomes-focussed. That means enabling water services to remain affordable, whilst addressing the backlog in investment to meet required service levels, and new investment to meet population growth, increasing environmental standards and climate change requirements.

We need significant reinvestment in the system

To achieve these outcomes, we need reinvestment in our water assets and service delivery transformation.

There has been a lack of reinvestment in three waters assets which is resulting in a serious and widespread deterioration in service delivery. The condition of our three waters assets has been poorly understood, with renewals both underfunded and underspent.

Looking ahead, the establishment of Taumata Arowai, the new water services regulator, will necessitate significant investment in infrastructure and the associated capability and capacity of the workforce to ensure that drinking water supplied by water suppliers complies with drinking water standards, and that environmental performance of wastewater and stormwater networks significantly improve. We are all acutely aware that changes must be made to ensure that our objectives are achieved and endure.

Our role

We have the experience and expertise to support the service delivery transformation underpinning the wider objectives of reform.

To date, we've been working closely and productively with the transition team on this transformation, focussing on skills, competency, and best practice guidelines. Our members also have significant experience and expertise to contribute to enhancing efficiency in project delivery, including across procurement and delivery models.

We request a meeting to discuss how our members can further the reform and desired transformation of our three waters, achieve operational and investment efficiencies across service delivery, grow workforce capability and capacity, ensure environmental management (including Te Mana o te Wai), and enhance project procurement and asset management across the Aotearoa three waters sector.

Ngā mihi nui

Hamel-Blyle

Gillian Blythe, Chief Executive Water New Zealand

Atkins

Helen Atkins, President Water New Zealand

Murray Pugh, Chief Executive Institute of Public Works Engineering Australasia New Zealand

ful

Helen Davidson, Chief Executive Association of Consulting and Engineering New Zealand



Priyani de Silva-Currie, President Institute of Public Works Engineering Australasia New Zealand

Ian Fraser, President Association of Consulting and Engineering New Zealand

Appendix: Issues identified over the last two decades (not all inclusive)

In the Report from the Parliamentary Commissioner for the Environment (June 2000) Aging Pipes and Murky Waters: Urban water system issues for the 21st century, piii, he noted:

I believe industry and community evidence indicates that the 'model' has now reached the end of its design life. Further incremental tinkering with the current systems, without going back to first principles of community water and wastewater needs relevant to the 21st century, will simply mean the necessary changes will be harder to achieve and more costly at some time in the future.

In the Report of the Land and Water Forum: A Fresh Start for Fresh Water (September 2010), para 217:

In addition, further changes are desirable to improve water services management in order to contribute to a step-change in the outcomes for water management in New Zealand. Three key changes are:

a) Rationalise the existing council-linked water utilities (both urban and rural) into a small number of large, publicly-owned utilities to provide water supply, wastewater and associated management services. The resulting economies of scale and the larger base of the businesses would address failures in asset management, environmental management and investment.

b) Governance reform: Public ownership of water utilities remains fundamental. However, public water entities could benefit from governance focused on their performance and not oriented to other priorities. The rationalisation into larger entities would also mean that council oversight of pricing and service provision would need to be replaced by a national regulator focused on those issues. This is consistent with international best practice. Oversight of drinking water quality and environmental compliance could continue under similar arrangements as at present.

In the 2011 National Infrastructure Plan p39, two key challenges were identified:

Whether there are sufficient resources in each local authority area or community to meet the cost of deferred maintenance on aging assets, preferences for local services and, in some cases, national requirements. For example, communities most in need of improved reticulated systems are often the least able to afford it.

The extent to which there may be a 'hidden' long-term investment problem in the urban water sector.

The Report of the Havelock North Drinking Water Inquiry, Stage Two (October 2017), para 929.

The Inquiry has found that the drinking water industry has over at least a five year period experienced problems on multiple levels. These include source protection, drinking water suppliers, difficulties attracting qualified and experienced staff, the Ministry of Health drinking water team, lack of leadership, and the regulatory environment. All of these problems have combined to produce a lack of public awareness of the changes over recent years to the risks resulting from unsafe water.

The Controller and Auditor General (October 2017) Introducing our work programme - water management, p9.

We have reported that local authorities [results of 2015/16 audits] might not be reinvesting enough in three waters assets, suggesting that these assets could be deteriorating to an extent that they are unable to meet the levels of service that their communities expect'.

The Stocktake report from the Technical Committee of the Climate Change Adaption Technical Working Group (2017) *Adapting to climate change in New Zealand,* p33.

Sea-level rise will cause seawater to run up stormwater pipes, significantly affecting drainage capability. This could cause flooding well inland in low-lying areas. Land drainage, stormwater systems and flood protection may not cope with more intense and frequent heavy rain events. There may be overloading of sewer networks (through increased inflow/infiltration) leading to increases in wastewater overflows. There is also increased potential for inundation of pump stations located in low lying areas (Parliamentary Commissioner for the Environment (PCE), 2015).

The Controller and Auditor General (December 2018) *Managing stormwater systems to reduce the risk of flooding, p3.*

Councils are planning to continue spending less than depreciation on renewing stormwater assets, which might indicate that they are under-investing in maintaining those assets. If nothing changes, the under-investment will increase the risk of stormwater systems being unable to cope with rainfall that results in flooding.

The report from GHD and Boffa Miskell for the Department of Internal Affairs (December 2019) *National stocktake of municipal wastewater treatment plants, pi.*

Nearly a quarter of WWTPs (comprising 73 plants) are currently operating on expired consents, with the average time operating on an expired consent being four years. ...The longest time a plant has been operating on an expired consent is 20 years.

There is a bow wave of WWTP that will require reconsenting in the near future. Almost 35% of all WWTPs (comprising 110 plants) are currently going through or will go through a resource consenting process in the next 10 years.

The Controller and Auditor General (February 2020) *Reflecting on our work about water management, p23*.

Our work highlights that councils are facing capacity (and, in some cases, capability) issues in meeting their water management roles and responsibilities. In particular, increasing standards for freshwater quality have implications for city

and district councils' management of stormwater and wastewater networks and drinking water'.

In the Ministry of Health (2021) Annual Report on Drinking-water Quality 2019-20, p16.

- 78.6 percent of the report population (3,254,000 people) received drinking-water that fully met all Standards.
- 95.2 percent of the report population (3,945,000 people) received drinking-water that fully met the bacteriological Standards. [This means that the water had become contaminated or failed to prove that it wasn't contaminated with E.coli (faecal matter) from either human or animal waste].