22 November 2024

Rethinking responsibilities for water modelling and land use change

Good morning. I'd like to touch on two or three reports relevant to your responsibilities that I've recently produced. They all raise questions about whether we're making realistic demands of different levels of government in New Zealand.

Before I get into that, I want to start by saying I'm a very strong supporter of regional councils and your role in the environmental management system. I believe that the regional level, and more specifically the catchment scale, is the right level at which to tackle most of our environmental problems.

Regional councils are the main national repository of key technical skills needed to implement environmental management. Thanks to the way our regulatory system is currently organised (and has been for three decades now), you are at the frontline dealing directly with those being regulated as well as bearing responsibility for monitoring the state of the environment and keeping up with the fast evolving technical and political landscape.

I believe that in many cases within our environmental regulation system, we are not asking the right people to do the right thing. Central government, in some instances, has devolved too much to regional authorities – while in other cases I would argue it needs to devolve more.

My observation is that you have not been given the support you need by central government. National politicians tend to hand down generic, high-level requirements to local bodies, say little about the cost of implementing them, and then leave it to councils to find a way forward. An example in point is freshwater modelling.

In June this year, I released a review of how freshwater models are being used to support the regulation and management of water in New Zealand. You may not be surprised to hear that this report found that modelling responsibilities had been devolved to councils decades ago without adequate resourcing or guidance. This has led to much confusion and expense within councils as staff grapple with finding and using models to fulfil, at times prescriptive, central government requirements. It has also resulted in a plethora of models in use with various overlapping functions.

To be blunt we now have an inefficient and siloed freshwater modelling environment which has proved expensive and resource-draining for many councils. During our research, many council staff identified the need for better coordination but despite their best efforts, this has not yet come to pass.

My key finding in this report was that central government needs to provide better leadership and coordination in freshwater modelling. I recommended the establishment of a national freshwater modelling support centre with a mandate to support regional councils, unitary authorities and mana whenua in this complex and important work. This is an efficient way of bringing together our limited pool of expertise and knowledge in this field, to make sure that you at the frontline, making the decisions, have appropriate support.

Another area where I have been advocating central government leadership and coordination role is environmental monitoring and data collection.

Over a period of five years, I have released a series of reports investigating our environmental monitoring and data system – it culminated in a report entitled *Environmental reporting*, research and investment: Do we know if we're making a difference? These reports identified huge data and knowledge gaps in our current system, fragmented data collection and inconsistent analysis. This issue is a major barrier to effective environmental management – and is keenly felt by your staff.

Again, I have recommended that central government should be responsible for guiding a coordinated national approach to providing high quality, affordable environmental information and underwriting it as a public good. I even identified a suitable agency for this work. The EPA is already a national centre of environmental technical expertise in a number of areas.

With an expanded mandate and appropriate resources, it could provide national operational direction on standards and methodologies for environmental data collection, oversee a national network of monitoring sites across domains incorporating regional council sites and research sites, and collect new information to complement that already collected by regional councils and CRIs.

I will, by the way, be producing a further report next year on what needs to happen if we are to revolutionise environmental data collection and analysis using a suite of new technologies and tools. The tech bit is easy. The institutional barriers to using them cost effectively is another matter!

As you will be aware, regional ratepayers are generally reluctant to shoulder significant, centrally imposed environmental monitoring costs. Only a few councils can afford the technical expertise required to drive innovation and expansion of our monitoring networks. Giving some of these functions to the EPA and funding it centrally could help resolve duplication and wheel reinvention that has held back environmental monitoring for three decades.

These two reports discuss areas where central government has devolved too much to regional authorities. However, in my report on land use change *Going with the grain: Changing land uses to fit a changing landscape*, I argued for a different rebalancing of decision-making roles. This report suggests that one-size-fits-all environmental policies and regulations emanating from central government have not delivered the environmental improvements we need in a range of spatial settings. Water quality trends, emissions data and rates of biodiversity loss all bear this out. By contrast something like greenhouse gas emissions which are pretty much the same wherever they occur lend themselves to national treatment – and here (because we have signed international treaties) our data, institutions and policies are better (although don't start me on forestry offsets!).

National-level land and water policies often fail to account for the diversity of New Zealand's landscapes, communities and regional economies and the radically different effects such regulations can have on diverse catchments, or even within particular environmental hotspots within a catchment.

Regulations that manage land use change need to be appropriate to specific landscapes and communities. To achieve this, I have suggested a new approach to environmental policy that sees central and regional governments, alongside local communities, outlining the direction of environmental outcomes required (the what). The implementation of this change, (the how), should I suggest be determined by those closest to the land – communities and mana whenua at the catchment and sub-catchment level, through catchment groups or similar local management organisations. These are the groups that have the best understanding of the trade-offs required and who will have to live with those trade-offs.

Such groups would require adequate funding to do this work and access to high quality environmental data to aid decision-making. Importantly, they would also need oversight, monitoring and support – this is the role I see for regional councils. You would also need to maintain the role of regulatory backstop. Any further devolution of decision-making would require regulations to deal with those who decided not to play ball. Environmental outcomes can't be optional nice-to-haves. Essentially you would act as the conduit between what happens on the ground and how the centre understands overall progress.

I often reflect that an earlier generation saw its way clear to establishing a world of drainage boards and drainage rates. Is it too hard to think of land and water management for environmental purposes being conducted in a similar way?

To clarify, this rebalancing of roles is not about central government abdicating its responsibilities: its about redefining its role from being directive to supportive.

Before I open up the floor to your questions, one final comment: in some situations, a lack of clarity between the roles of regional councils and district councils can be a barrier to environmental management.

My recent investigation into the fate of urban soil uncovered one such example. Regional councils have primary responsibility for assessing and managing soil conservation. Historically this has been narrowly focused on preventing soil erosion. Yet degradation and loss of soil resource is happening in urban and peri-urban areas too. Regional council staff are not always in a position to influence decisions on urban developments which may have an impact on soil when these are taken by district councils exercising their land use functions.

This is partly because of permitted activity rules that exist in most regions. In some cases, this is also due to the sequence in which the consents are applied for. Where earthworks consents are granted prior to stormwater consents, environmental managers at a regional level are not in a strong position to anticipate the full effects of changing landforms on stormwater flows until it may be too late to adequately mitigate them.

My report on urban soils recommended clarification of the roles and responsibilities of regional councils in relation to soil conservation. Greater collaboration between regional and territorial authorities on consenting and integrated catchment management planning would also help.

I would now like to spend the rest of this session hearing from you – both your comments and any questions you may have of me.