

# Hot topics at the science policy interface

<b>Responsible Minister</b>	Minister Simmonds   Minister Bishop   Minister Watts
<b>Key Message(s)</b>	<p>Science, data and evidence underpins the majority of work programmes, but most critical at present are the following topics, which are reliant on robust, timely and accessible science, data and evidence to:</p> <ul style="list-style-type: none"><li>• Meet the Secretary for the Environment's <b>statutory responsibilities</b> (e.g. under the Environmental Reporting Act 2015, Climate Change Response Act 2002, and Public Service Act 2020) and Ministerial priorities such as Climate Target 9.</li><li>• Ensure a robust and evidence-informed <b>Climate Adaptation Framework</b> (CAB-24-MIN-0121 refers) – including climate projections for NZ, and risk modelling.</li><li>• Support future work under <b>National Direction</b> – including integrated national direction, changes to specific National Policy Statements (e.g., NPS-IB and NPS-FM), and new national direction commitments, such as new NES-Commercial fruit and vegetable production, NPS-Distribution, NPS-Hydrogen, NES-Water Storage and NES-REG.</li><li>• Inform <b>investment and infrastructure choices</b> such as RM Reform objectives (ECO-24-MIN-0022 refers), spatial planning, the Major Infrastructure Priorities (MIPs), 30-year infrastructure plans, city, and regional deals.</li><li>• Enable scope expansion of the <b>Waste Minimisation Act</b> through evidence to support waste reduction and understand material life cycles and landfill compositions.</li></ul>
<b>Known Risks/Issues</b>	<p>The Ministry's work programme is focused around addressing three risks in science, data, and evidence provision:</p> <ol style="list-style-type: none"><li>1. <b>State of New Zealand's environmental data system</b> - fragmented, disconnected, and not optimised to deliver the greatest benefits that it could. While there are large quantities of data, its functionality is limited by significant gaps in what is being measured, inconsistent quality and coverage, lack of coordination, and accessibility issues. Data is currently collected by various bodies for different purposes, resulting in a lack of coherence and a disconnect between local and national objectives.</li><li>2. <b>Reliance on research models that have not been appropriately translated into policy use</b>, including QA and peer review. This can result in a loss of trust and confidence in our work given reliance on research models. Examples include Overseer (for FW), NZSeaRise (for Coastal Hazards Guidance) and modelling to support climate impacts/adaptation.</li><li>3. <b>Reliance on external system for monitoring and applied research (policy support)</b>. This system is highly fragmented and hard to influence (noting PCE reports) with reducing funding into 'public good'/mission-led research, basic monitoring, and applied/translation.</li></ol>

<p><b>What next?</b></p>	<p>9(2)(f)(iv)</p> <ul style="list-style-type: none"> <li>• <b>Learning from others</b> (e.g. learnings from COVID modelling, National Seismic Hazards Modelling) and exploring <b>emerging technologies to gain real-time data</b> e.g., remote, and proximal sensing. As significant technological changes are underway globally (e.g., use of AI), there is an opportunity to align with international best practice to improve New Zealand’s environmental data system.</li> <li>• The Ministry establishing and resourcing a <b>science assurance function</b> in recognition of the opportunities to improve consistency of practice in science quality assurance, including peer review. This function is guided by internal <b>Science and Mātauranga strategies</b>, overseen by <b>Heads of Profession</b> (Chief Science Advisor, Chief Science Advisor Māori), supported by independent science and mātauranga expert panels CE’s Science Advisory Panel (SAP) and the Māori Science and Insights Panel (MSIP) (see Science Assurance Factsheet)</li> <li>• Supporting and contributing towards reforms in <b>Minister Collins’ Science, Innovation, and Technology</b>, and Digitising Government portfolio interests, particularly through active engagement in consultations by the Science System Advisory Group and University Advisory Group chaired by Sir Peter Gluckman (see Science Reforms Factsheet).</li> </ul>
<p><b>Short anecdote or specific example of outcomes sought</b></p>	
<p><b>The evidence:</b> <b>Facts, figures, amounts invested &amp; how the outcome will be measured</b></p>	<ul style="list-style-type: none"> <li>• Refer to Science Reforms, Improving Environmental Information for Policy, and Science Assurance briefs</li> <li>• <b>EMRS</b> – Overall budget \$11.5m over two years (23/24 (\$5.244m) – 24/25 (\$5.806m). Note: Reducing by \$1.9m in 24/25 year savings.</li> <li>• <b>700k of this allocated to resolving key gaps between environmental monitoring and policy analysis</b>, e.g. identifying thresholds in estuaries, and a special monitoring framework to assess impact of flooding in Hawkes Bay</li> <li>• <b>Climate Data Initiative</b> (CDI) – Project team in place as of Jan 2024. Overall budget \$24.7mil over four years from 2023-2027 (\$257k spent YTD 23/24).</li> </ul>
<p><b>Responsible General Manager</b></p>	<p>Megan Hurnard, General Manager Data, Evidence and Insights</p> <p>Clare Barton, General Manager Science and Data Systems</p>