Te whakawhanake i te pūnaha rīpoata taiao o Aotearoa

Improving Aotearoa New Zealand's environmental reporting system

Proposed amendments to the Environmental Reporting Act 2015

Ministry for the
Environment
Manatū Mō Te Taiao

Te Kāwanatanga o Aotearoa
New Zealand Government

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Introduction

From 8 February to 18 March 2022, the Ministry for the Environment (the Ministry) consulted on proposals to strengthen the Environmental Reporting Act 2015.

This document summarises the feedback received in response to the consultation document *Te whakawhanake i te pūnaha rīpoata taiao o Aotearoa Improving Aotearoa New Zealand's environmental reporting system: Proposed amendments to the Environmental Reporting Act 2015*.

The full set of submissions is available on our website.

Background

The Environmental Reporting Act (ERA) provides the framework for independent, structured and regular reporting on Aotearoa New Zealand's environment. This helps us understand how our environment is tracking and the impacts of our activities over time, which is vital for good decision-making.

Although the ERA has made positive changes to the way we report on the environment, the Government is considering options to increase its functionality and breadth, to give environmental reporting more impact. A key aspect of this work is giving a stronger voice to Te Tiriti o Waitangi (the Treaty of Waitangi), te ao Māori (Māori world view), and mātauranga Māori (Māori knowledge) in environmental reporting.

In 2019, the Parliamentary Commissioner for the Environment (PCE) reviewed the environmental reporting system. His report, *Focusing Aotearoa New Zealand's environmental reporting system*, set out a number of recommendations to improve the ERA. The 10 proposals presented in the Ministry's consultation document are based on these recommendations.

The consultation process

Treaty partners, stakeholders and the public were invited to respond to 62 questions covering opportunities and objectives, the 10 proposals, costs and benefits, and how we can better incorporate te ao Māori and mātauranga Māori in environmental reporting.

The consultation was promoted via the Ministry's website and social media channels, as well as targeted emails to Treaty partners and key stakeholders.

On 22 February 2022, the Ministry hosted a webinar to share information about te ao Māori and mātauranga Māori in environmental reporting, and how Māori can help shape amendments to the ERA. A recording of the webinar is available on the Ministry's YouTube channel.

The Ministry also met with stakeholders who requested an opportunity to discuss the proposals before submitting.

Next steps

Feedback received during consultation and other evidence (including from engagement with government agencies and regulators, and the cost benefit analysis) will inform final recommendations to the Government.

Once proposals are agreed, legislation will be drafted and an amendment to the ERA (through an amendment bill) will be introduced to Parliament, likely at the end of 2022. A bill passes through several stages before it can become an Act of Parliament. You can find out more about the legislative process on the New Zealand Parliament website.

Some issues may also be addressed through non-legislative change.

Consultation feedback

Number and type of submissions

The Ministry received a total of 42 written submissions through the Ministry's consultation tool Citizen Space, or via email.

Table 1 sets out the number of submissions received from key groups and individuals.

Table 1:   **Number of submissions by respondent type**

Respondent type	Number
Local government	10
Non-governmental organisations	5
Iwi/hapū	4
Crown research institutes	3
Industry groups	2
Business	2
Education	1
Health	1
Other	1
Individuals	13
Total	42

Nine respondents provided Māori perspectives.

Summary approach

This summary is largely qualitative, focusing on respondents' comments and explanations rather than on overall numbers on each position.

Not all respondents answered every question. Throughout the document we use broad terms such as most, many and some, to show the level of support for positions, based on responses to the question.

Most submissions included feedback about implementing the proposed amendments. We will consider this additional information during planning for implementation, and more broadly in the environmental reporting programme.

The summary does not include matters raised in submissions that are unrelated to the ERA.

Opportunities and objectives

Opportunities

The consultation document set out four issues we seek to address through proposed amendments.

1. Unclear purpose of environmental reporting means that it requires regular reports, but lacks legislated direction to identify key issues or desired outcomes.

2. The lack of a fit-for-purpose designed national environmental reporting system.

3. Inconsistent and deficient data and knowledge which is impeding comprehensive and robust evidence-based reporting.

4. Under-recognition of the Crown's Tiriti responsibilities, te ao Māori, and mātauranga Māori.

Consultation questions

Q1.   Would you add any issues to this list? Why?

Most respondents noted that resolving issues with the ERA will not be sufficient on its own, and the Ministry needs to address broader, systemic issues that are undermining effectiveness. Respondents highlighted a need for:

- clarity and a collective vision on the ERA's purpose and role, and what a fit-for-purpose national environmental reporting system might look like

- a funding model that encourages collaboration and data and information-sharing between organisations, with stable research programmes and a nationally co-ordinated environmental system for collecting, collating and sharing data.

Many said the issue of under-recognition of the Crown's Tiriti responsibilities, te ao Māori and mātauranga Māori should be expanded, to include:

- further clarification about the way indicators and timeframes will apply

- the need for resourcing

- shared responsibilities and joint functions

- recognition of iwi (Māori community or people) and hapū (Māori clan or sub-tribe) rangatiratanga (self-determination) over taonga (prized resources)

- capacity building

- a strong focus on Te Tiriti.

Some respondents considered the data issue, calling for recognition of:

- those outside central government who may be best placed to collect data

- the role of science and technological improvements, to increase the quality and reduce the cost of data collection.

Some also noted:

- the importance of informing the public to increase transparency and public trust

- resource depletion is an issue

- that there should be more focus on the issues organisations face in supplying information for environmental reporting.

Q2.   Which of these issues are the most important to fix? Why?

Many respondents identified the following issues as most important to fix.

- Under-recognition of the Crown's Tiriti responsibilities, te ao Māori and mātauranga Māori, including sub-issues such as data sovereignty, and recognising and protecting mātauranga Māori and mātauranga mana whenua (knowledge derived from the people with authority over the land or territory).

- The lack of a fit-for-purpose system that is well designed, addresses the key environmental issues, and is based on partnership with Māori.

- The data issue, including the use of qualitative data and the collection of data.

A few said all the issues are important to fix, and one said it was most important to fix the purpose of the national reporting system.

Respondents also noted the need to:

- evaluate the effectiveness of actions under the ERA

- address the lack of acknowledgement in the current reporting system of the complexity of the environment, including the effects on wellbeing and impacts of human influence

- recognise current and future trends

- raise public awareness of environmental indicators for climate change, and address the lack of knowledge about existing species.

Objectives

The consultation document set out four objectives that the proposed amendments should achieve.

5.   To have a clear purpose for environmental reporting that drives a focus on key issues and the desired outcomes.

6.   To drive the shift to a clearly defined, coordinated reporting system that gives a robust, comprehensive, authoritative evidence base on the state of New Zealand's environment.

7.   To increase the influence environmental reporting has on decisions affecting the environment.

8.   To better meet our partnership responsibilities in terms of Te Tiriti and Māori data sovereignty,[1] including how mātauranga Māori, data, evidence, knowledge and science is used, collected, managed and protected in environmental reporting.

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[1]   Recognises that Māori data should be subject to Māori governance. Māori data sovereignty supports tribal sovereignty and the realisation of Māori and iwi aspirations.

Q3. Are these objectives the most effective for improving environmental reporting? If not, what should the objectives be, and why?

Most respondents supported the objectives, but many disagreed and a few were unsure.

They noted that:

- the objectives should be more specific, measurable and have a timeframe

- achieving a coordinated reporting system requires changes to systems and processes that sit outside the ERA – for example, data sharing between different agencies including local government.

Many respondents suggested practical ways to achieve the objectives, such as designing a system which meets the challenges and demands of the modern data environment, and the Ministry bringing together a wide range of data sources to support environmental management.

Many said it was important to release timely information so that the public, especially young people, are aware of key environmental indicators and can take action. Some respondents said there should be more emphasis on Māori roles in the objectives.

Proposals

Proposal 1: Clarify the purpose of environmental reporting

Clarify the purpose of the ERA to include why we are reporting on the state of the environment, and what the reports are supposed to achieve.

Themes

Most respondents supported the proposal and agreed it was important to separate the 'why' (the reason for environmental reporting) from the 'how' (the reporting framework). Some noted the importance of including Tiriti principles and acknowledging te ao Māori and mātauranga Māori in the purpose statement.

Consultation questions

Q4. Do you agree with the proposal to expand the purpose of the ERA to include the reasons why we need environmental reporting? Please explain your answer.

Most agreed that the purpose should be changed to support effective stewardship of the environment, although some suggested alternative wording or principles. Some respondents noted the importance of acknowledging te ao Māori, enshrining Te Tiriti principles, and recognising Māori values and aspirations.

Q5.   The initial preferred option [option 1] for this proposal sets out four points.[2] Are these a suitable basis for a purpose statement? What changes, if any, do you consider are needed to focus, expand or improve them?

There were differing views on what the purpose should include.

A few respondents noted that the purpose should present the 'why' separately from the 'how', as the 'why' will endure while the means to achieve the outcomes (the 'how') may change over time.

Some suggested ways to strengthen the purpose, or provided alternative wording. A few preferred option 2,[3] which was the purpose set out by the PCE in his 2019 report.

A few suggested defining key terms to avoid confusion. It was also noted that the purpose should not be complicated by competing demands.

Q6.   What should the purpose include to reflect te ao Māori values and perspectives?

Some noted that the purpose should clarify that environmental reporting is about monitoring our progress towards a desired state, and about protecting taonga as promised in Te Tiriti.

Respondents suggested referencing:

- restoring the mauri (life force) of the environment

- kaitiakitanga (guardianship, stewardship) and Tiriti principles as well as effective stewardship

- Māori values and aspirations, rather than Māori needs.

Q7.   In your view, have we overlooked any costs, benefits, risks, or opportunities? Please describe these and any mitigations.

Many respondents noted that the cost of additional data collection and technical advice for local government, Māori, Crown research institutes and universities needs to be properly funded.

Some noted an opportunity for amendments to give effect to Te Tiriti, using the ERA as a driver to achieve Māori aspirations.

Respondents also raised several risks.

- Misappropriation or misrepresentation of mātauranga Māori, which could be mitigated through partnership approaches to collection, analysis and integration.

- A reframed purpose statement might create ambiguity and have consequences for drafting downstream parts of the legislation, which could be mitigated through opportunities to review and submit on the amendment bill.

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[2]   1.   Requiring regular, independent, evidence-based, authoritative, culturally inclusive (eg, aligning with te ao Māori values and perspectives), state of the environment reporting.
       2.   Referring to reporting (as opposed to reports).
       3.   Informing New Zealanders and meeting the needs of Māori.
       4.   Promoting analysis and decisions that lead to effective stewardship of the environment.

[3]   Option 2: The PCE's wording combines two different points; why we are reporting and what it aims to achieve; and the reporting framework.

- Reporting might not align with issues and change, making long-term monitoring and assessment a challenge.

- The purpose will not be met if other proposals are not achieved.

- If the roles, responsibilities and resourcing of others who deliver the data and knowledge for environmental reporting are not addressed, the purpose may not be achieved, and information gaps could mean emerging issues are not quickly identified.

Proposal 2: Mandate a government response to synthesis reports

Require the Government to formally respond to synthesis reports[4] within six months and release an action plan within 12 months.

Themes

There was majority support for the proposal, with most preferring a response to be led by the Minister for the Environment alongside other relevant Ministers. Some respondents also wanted responses to be required for in-between commentaries. Others highlighted the need for the response mechanisms to sit within a Tiriti framework.

Consultation questions

Q8.   Do you agree with the proposal to require the Minister for the Environment and other relevant Ministers to release a staged response to synthesis reports? Please give your reasons.

Most respondents supported the proposal, noting that a response mechanism will:

- close the feedback loop in reporting and prompt action

- help ensure Tiriti responsibilities are being met (via accountability for partnership responsibilities within the government response).

Q9.   If you disagree, should anyone be required to make a formal response? Who, and why?

One respondent believed that a response is not needed, suggesting that it would add administrative waste and that responses should be situation dependent.

Q10. Should the ERA specify the layout and style of a government response? If yes, what should the response include?

There were mixed views on the extent to which the layout and content of a response should be specified. Some respondents believed that for flexibility, no layout should be specified. Some suggested requiring a general outline, for consistency and comparability over time. A few suggested specifying the content outlined by the PCE in his 2019 report.[5]

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[4]   A synthesis report is a report on the state of the environment, currently required every three years.

[5]   The PCE recommended the following be included in a response: what policies and initiatives currently exist, what new policies and initiatives are proposed or planned, and what policy analysis the Government proposes to undertake to identify any other policies and initiatives that are needed.

Alongside general feedback that whatever the response included should allow for flexibility, respondents suggested a number of components.

- Review of existing initiatives and responses from local and central government, hapū and iwi, Crown research institutes and universities.

- Review of existing legislation and case law that addresses environmental issues.

- Prioritisation of responses, and other responses considered.

- High-level next steps and actions.

- Timelines, and roles and responsibilities.

- Gaps in information and where further research is required.

- Costs of responses.

- Any issues raised in the synthesis report that the Government is choosing not to address, and why.

- How existing environmental issues are impacting on Tiriti responsibilities to protect taonga.

- How mātauranga Māori has informed current reporting, and Māori involvement in the monitoring and reporting system.

- Disclosure of how Māori were consulted during the development of the synthesis report.

- Specific issues and recommendations, tied into strategies.

- Principles of what a response should cover.

While most respondents agreed with the timelines suggested, a few believed a complete response should be published within six months. A few suggested only publishing a 12-month response, and one believed that 12 months might not be long enough for the Government to fully understand the drivers of any given issue.

A few suggested outlining the content of the response in regulations.

Q11. If the Government is required by the ERA to respond to a synthesis report's findings, is anything more needed? If so, what?

Most agreed that a response should be led by the Minister for the Environment alongside other relevant Ministers.

Some suggested that a Māori response should be supported, either by working with te ao Māori and mātauranga Māori experts, engaging iwi, hapū and kaitiaki (guardian) groups and government agencies such as Te Puna Kōkiri, or establishing a role for the Minister of Māori Development to coordinate a response.

One respondent suggested developing the response in partnership with local government. Two suggested that, alongside a policy-based response, the standing advisory panel or the PCE should present a scientific response. One also suggested that the response should be tied to the Budget process.

Q12. In what way could a formal response adequately address the needs of te ao Māori?

Many respondents recommended setting the response mechanism within a Tiriti framework, to ensure Tiriti responsibilities are being met. A submission from iwi noted that amendments should ensure meaningful, government-funded engagement takes place with mana whenua (people with authority over land or territory) representatives.

Q13. Do you consider a response is necessary for all environmental reports or commentaries specified in the ERA (that is, not just synthesis reports)? If yes, why?

Most respondents said that in-between commentaries should receive a response, as once every six years would be too long a gap between responses. One suggested that while the Government should not be required to respond to every in-between commentary, it should have the option to do so if the findings warranted a response.

Q14. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

There was concern that the proposal did not require evaluation of the effectiveness of the response and action plan. Several respondents suggested including a clause requiring a review of the response. One respondent said that a review and revision of the response should be produced once every three years, while another suggested an annual review.

There was concern, particularly from regional councils, that the preliminary cost benefit analysis did not include costs for local government and other organisations related to the response. There were also concerns about how localised issues would be responded to at a national level, with a few submitters saying responses should be local.

Proposal 3: Add drivers and outlooks to the reporting framework

Extend the pressure-state-impact framework to include a requirement for information on:

- drivers – factors that cause pressures on the environment
- outlooks – how the state of the environment may change in the future, and the likely impact of such changes.

Themes

Most respondents supported the proposal, but some raised concerns about the subjective nature of outlooks. Some also supported the inclusion of responses in the framework. Respondents highlighted the importance of working with Māori to ensure the appropriate use of mātauranga Māori, and to develop a Tiriti-based framework.

Consultation questions

Q15. Do you agree with the proposal to add drivers and/or outlooks to the reporting framework? Please give reasons.

Most respondents agreed with the proposal, noting that it would paint a more comprehensive picture of the environment and help identify trends to improve decision-making. One said outlooks should not be included and another did not agree with the framework, but preferred the full drivers-pressures-state-impact-response (DPSIR) framework (option 2) over the other options.

Q16. What benefits or drawbacks do you see in including drivers or outlooks?

Some respondents were concerned about:

- the methodologies that generate outlooks, as they are often based on assumptions and projections rather than evidence

- how to define drivers and outlooks.

Respondents also suggested drivers/outlooks to include.

- Major sectors including industry, agriculture, fisheries, tourism, forestry, urban development and climate change.

- The degradation of mauri and the continuation of cultural practices associated with taonga in accordance with tikanga (customs, protocols).

- Decreased capacity for water bodies to give effect to te mana o te wai (the vital importance of water) and te oranga o te taiao (the intergenerational wellbeing of the environment).

- Capability for tangata whenua (people of the land) to carry out functions of the marae, including practising manaakitanga (hospitality, generosity) and serving tribal kīnaki (delicacies) at hui (gatherings, meetings).

- Mahinga kai (natural food source) as an indicator of environmental performance whereby the sustained ability to harvest wild foods is conducive to the health of the environment.

- Under-recognition of Tiriti responsibilities, such as protecting taonga; and the exclusion of Māori in decision-making.

- The concept of kaitiakitanga particularly in regard to outlooks on Māori indicators such as wai (water), ngahere (forest, bush), biodiversity and pests.

A few noted that outlooks should be linked to limits and targets, thresholds and tipping points.

Some said that 'backward looking responses' should also be included, completing the full DPSIR framework recommended by the OECD. Respondents suggested that listing, but not evaluating, existing government and community initiatives in response to pressures and impacts would close the feedback loop and provide better information for decisions, without compromising the independence of reporting.

One respondent suggested setting the framework within regulations, so that it would be easier to amend if updates were required.

Q17. If the expanded DPSIR (plus outlooks) framework is not suitable for reporting, what other reporting framework should be adopted, and why?

A few suggested including a mixture of models in or alongside the framework, for instance models based on mauri or hauora (health), or elements of He Ara Waiora.[6]

Q18. What drivers and outlooks can be included to reflect the perspective of te ao Māori?

Some respondents said it was important for the framework to embody Te Tiriti. They highlighted the need to:

- involve Māori communities in the reporting process, and fund their contributions

- distribute reporting responsibilities so that communities can stay involved in the process

- ensure that Māori knowledge is handled appropriately, and that the current under-recognition of Tiriti responsibilities is not carried over into the development of drivers and outlooks.

One respondent suggested that a Māori advisory group should provide drivers and outlooks from a Māori perspective. Another considered the DPSIR framework unsuitable for integrating te ao Māori.

Q19. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Some respondents noted that adding drivers and outlooks would increase costs/effort, with factors including types of new data needed, the robustness of baseline data sets, infrastructure and distribution of data collection responsibilities.

Respondents highlighted the need to resource the organisations who will be collecting data and information, and to invest in data, standards, resources and alignment of the system.

Proposal 4: Adjust roles and responsibilities

Adjust the roles and responsibilities for the Secretary for the Environment and the Government Statistician, to reduce overlaps and ensure that each organisation uses their expertise, with:

- the Secretary for the Environment as steward for New Zealand's environment

- the Government Statistician as the leader of the official statistics system.

Themes

There was general support for clarifying roles and responsibilities to better align with expertise, and increase accountability and efficiency. There was also support for better Māori participation in report preparation and production, and defining the roles and responsibilities for other stakeholders involved in environmental reporting.

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[6] He Ara Waiora is a framework that helps the Treasury to understand waiora, often translated as a Māori perspective on wellbeing.

Consultation questions

Q20. Do you agree with the proposal to adjust the roles and responsibilities of the Secretary for the Environment and the Government Statistician? Why?

Most respondents supported the proposal, noting that it makes sense to align responsibilities with areas of expertise, and that a joint role is not clear or efficient, and does not allow for accountability.

Key areas of feedback related to:

- aligning roles and responsibilities with those proposed under the Data and Statistics Bill

- the Government Statistician having the decision-making power in defining core indicators, to ensure best practice principles and protocols are followed

- recognising the Ministry as stewards of the environment on the Crown side only, as hapū, iwi and Māori are kaitiaki of the environment.

Q21. Should the ERA state that the Secretary for the Environment and the Government Statistician may/must invite Māori to take part in preparing environmental reports? Why?

Most agreed that Māori should be invited to take part in preparing environmental reports, noting that this would support Te Tiriti and a partnership approach. Respondents also noted that:

- government should create real opportunities and support for Māori to participate

- participation should be culturally appropriate, not fitted into a Pākehā (foreign) process

- this was a simplistic way of describing how best to meet responsibilities to Māori.

Q22. Do you consider there are broader roles and responsibilities for Māori under the ERA?

Most agreed there are broader roles and responsibilities for Māori under the ERA, noting that Māori have roles and responsibilities for te ao Māori and mātauranga Māori, and in determining how to use this knowledge in environmental reporting. Respondents also suggested that:

- a Māori minister could be responsible for ensuring that te ao Māori, mātauranga Māori and Māori have a voice in environmental reporting

- formalised roles could support Māori to be involved in applying te ao Māori and mātauranga Māori, and in reviewing the effectiveness of the environmental reporting system in delivering on Māori needs.

Q23. Do other agencies have roles and responsibilities related to environmental reporting that in future should be specified in the ERA?

Most agreed that other agencies have roles and responsibilities that the ERA should specify, noting that the Ministry and Stats NZ rely on other agencies for data.

Respondents identified:

- local government
- central government agencies including the Department of Conservation, the Ministry for Primary Industries, Te Puni Kōkiri, New Zealand Customs Service and Inland Revenue
- Crown research institutes
- Parliamentary Commissioner for the Environment
- hapū, iwi and Māori.

Respondents also noted that:

- agencies should be funded and required to implement monitoring activities and address data gaps
- although other agencies have a role in environmental reporting, their roles may fit better within other legislation, for example, the proposed Natural and Built Environments Act.

Q24. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Respondents noted opportunities to:

- create roles and responsibilities that are adaptable
- use place-based monitoring by tangata whenua at local and regional levels
- work closely with local government on core indicators to ensure data sets are realistic, affordable, resourced and used.

Respondents noted the risks of not recognising the role of local government in state of the environment monitoring, and their investment in environmental data collection, reporting and management.

Proposal 5: Mandate a Standing Advisory Panel

Require the establishment of a standing advisory panel under the ERA.

Themes

Most respondents supported the proposal, emphasising that the right range of diversity and experience will be critical in reaching the full potential of a standing advisory panel.

Consultation questions

Q25. Do you foresee any problems with the proposal to make it a statutory requirement to establish a standing advisory panel under the ERA? Please describe.

There was a nearly even split between those that did and did not foresee problems. Respondents said:

- there is a need to ensure authentic mātauranga Māori practitioners are part of the panel membership and that they are remunerated

- there needs to be a clear legislated purpose, part of which could be a role for the panel in advising on which issues, arising from environmental reports, require further action

- there should be two advisory panels – for science and mātauranga Māori

- there are risks in having the Secretary for the Environment as the sole selector; a Māori selector should also be included in the process

- environmental reporting should be done at a regional level, and panels should be regional.

Q26. What range of perspectives do you think the standing advisory panel needs to include?

Te ao Māori and mātauranga Māori perspectives came up most often, followed by climate change or climate change adaptation, and the economy or economics.

Other perspectives that were mentioned once include:

- both ecological and environmental perspectives

- changes in world population

- global supply chain, marine spatial planning

- invasive species

- ecosystem services

- technology specialists (eg, on artificial intelligence and the Internet of Things, to scale up data measurement and analytics systems)

- public health

- social

- cultural experts in the drivers-pressures-state-impact-response framework

- applied science, and translating scientific data and thinking into practical action

- a balance of environmental disciplines and those with transdisciplinary experience

- wise heads and emerging leaders for capability development through the system

- practitioners and those involved in policy implementation as well as subject matter experts.

Respondents also said that:

- each environmental domain should be represented to avoid skewing decisions about theme-based commentaries and the priority of issues

- the standing advisory panel needs Māori in leadership positions

- a minimum of 25 per cent of members should have skills, knowledge and experience in te ao Māori and mātauranga Māori

- perspectives should include public health and environmental economics, so that the estimates could be made on the true costs of environmental damage

- independence – and that the panel does not represent interest groups – is key.

Q27. What responsibilities should the standing advisory panel have?

Suggestions included:

- reading current research to identify best practice for identifying, reporting on and solving environmental issues
- advising on data problems
- maintaining and refreshing expertise in New Zealand to keep the reporting system fit for purpose and innovative
- providing independent expert advice
- identifying the timing and focus of reports
- identifying priority issues
- identifying research needed and undertaking it to identify monitoring and data needs
- monitoring international science and data, and identifying new and emerging global issues and trends
- recommending new indicators and statistics to include in environmental reporting
- identifying gaps in environmental reporting and new information needs
- reporting science collaboratively in a robust, complete and undiluted way
- preserving independence from political pressure
- identifying the best way to give te ao Māori a voice in reporting
- identifying mātauranga Māori indicators to include as core environmental indicators
- weighing the responsibilities for future generations.

Another suggestion was to split responsibilities between two panels – a technical advisory group and a governance group.

Q28. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Respondents identified several risks and a benefit.

- Reliance on the same pool of Māori experts without providing training for others could result in the panel lacking diversity.
- If the panel does not have expertise in all aspects of the environment, there could be gaps in reporting, including on broader issues such as health, wellbeing, social and economic impacts.
- Legislating a standing advisory panel creates a binding obligation which may be difficult to meet if suitable candidates cannot be found. Remuneration, level of participation required, conflicts of interest, and terms of engagement need to be considered to address this risk.
- Legislating a standing advisory panel will create a sense of permanence for panel members and an easier pathway to secure funding, which should help attract a higher number of quality candidates.

Proposal 6: Replace environmental domains with cross-domain themes

Replace environmental domains with cross-domain themes that form the basis of synthesis reports and in-between commentaries.

Themes

There was mixed opinion on moving to cross-domain themes. Most submitters said that it would help communicate the interconnectedness of environmental issues, but that there was a risk of less detailed reporting. There was general consensus that te ao Māori should not be a theme but rather should span all themes.

Q29. What are some pros and cons of a theme-based approach for both synthesis reports and in-between commentaries? Should another approach be used? If yes, why?

Most agreed that theme-based reporting would better communicate the interconnectedness of key environmental issues, or communicate issues in more holistic way. Some noted that it might result in losing detail on particular issues, and inconsistencies across reporting, and that there would be times when reporting on a separate domain might be more useful.

Respondents also said that theme-based reporting:

- aligns with te ao Māori

- is compatible with the drivers-pressures-state-impact (plus outlooks) framework, and necessary to fully explore the drivers and pressures on any given issue or trend

- is essential for consistency in time-series data collection, and to provide certainty for future environmental reporting

- will be restrictive at times and constrain reporting to a subset of the connected system

- could add complexity, making it hard to determine action points.

One respondent said that the distinction between themes and domains is subtle and suggested 'hybrid' themes or no themes at all.

Q30. Do you think the themes in Environment Aotearoa 2019, or those proposed by the PCE, or some other themes are the right ones to use? Are they broad enough to give certainty for future environmental reporting?

There was no consensus on what themes should be used for environmental reporting, with respondents:

- suggesting that themes would change over time

- noting general support for themes, without specifying which they preferred

- noting support for the PCE's recommended themes

- suggesting a mix of the themes listed in the consultation document

- suggesting new themes, including:

  - landscape and natural character

  - human health and wellbeing

- – wellbeing

- – mauri

- – geothermal

- – waste

- – estuaries

- – wetlands

- – ki uta ki tai (land to sea) to capture freshwater, wetlands, estuaries and near-coastal environment and associated biological communities.

Respondents also said that:

- climate change should not be a theme, as it underpins changes in every theme; instead, it should be used as a macro lens, along with te ao Māori and mātauranga Māori, to view other themes

- te ao Māori and our planetary boundaries could be important overview approaches

- pollution should not be a theme

- there should not be a separation between wai and whenua (land) within Papatūānuku (earth mother), where water is seen as integral and not separate.

Q31. What themes are appropriate for te ao Māori? Should te ao Māori be considered as a theme?

Most respondents thought that te ao Māori should not be a theme but rather should span all themes.

Q32. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

There were concerns about increased costs due to more complex themes-based reporting, and the need for adequate funding. A couple of respondents saw an opportunity to involve Māori in creating, changing and evaluating themes, and to use Māori frameworks in the cross-domain approach.

Proposal 7: Reduce the frequency of synthesis reports to six-yearly

Move from a three-yearly to six-yearly cycle for synthesis reports.

Themes

Most respondents supported reducing the frequency to six-yearly.

Consultation questions

Q33. Is six-yearly reporting an appropriate interval for synthesis reports? Which timeframe do you prefer, and why?

Most respondents supported a six-yearly interval, noting that:

- it allows better quality reporting due to resource allocation and greater data collection

- environmental changes are slow and take time to appear in reporting, and an appropriate reporting interval can reflect this

- six years is more suitable than five, due to shorter election cycles in New Zealand and coordination with the Long-Term Insights Briefing, produced by the Ministry on a three-yearly cycle.

Some did not support a six-yearly interval, noting that:

- degradation of the environment may be missed with longer intervals

- it reduces the ability to pinpoint when environmental change happened and, therefore, what occurred to alter the environment

- six years is a long time before an environmental issue can be reported on (with a synthesis report), which could slow down remedial action

- New Zealand's reporting interval should align with other OECD countries (four or five years)

- the reporting interval should coincide with the election cycle (three years), ensuring that every Government responds and is accountable for the environment during a term in Parliament.

Q34. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Respondents commented that:

- changing to six-yearly intervals is the cornerstone for better national environmental reporting

- reporting must draw on the full period of records and examine when change happened

- there is a need for more up-to-date reporting

- there are opportunities to use innovative technologies and products, to accelerate measurement of data or fill gaps in our data system

- the Ministry should be looking for better ways to report where workload is high or extra people, especially Māori, should be recruited in the reporting space.

Proposal 8: Replace domain reports with one commentary each year

Between the six-yearly synthesis reports, replace six-monthly domain reports with one theme-based commentary each calendar year.

Themes

There was overall support for the proposal. Commentaries were considered more flexible, adaptable and able to capture a more holistic view of the environment.

Consultation questions

Q35. What are some pros and cons of changing the frequency of in-between commentaries to a priority basis, with no mandatory coverage of all themes in a reporting cycle?

Respondents highlighted a number of pros and cons.

Pros

- It supports an expert-based approach, with the standing advisory panel qualified to act on environmental information from all levels, and inform reporting prioritisation accordingly.

- Reports can be prioritised based on what is happening in the environment, which allows resource and effort to be targeted at the highest priority theme, enabling timely intervention.

- Prioritisation helps create a reporting system that strikes an appropriate balance between efficiency and effectiveness, supports timely and informed decision-making, and shifts away from reporting for the sake of it.

- It ensures report writers aren't overworked, which can reduce the level and quality of reporting due to timeframes.

- Yearly commentaries, when compared to the status quo, allow for more in-depth and focused reports, which will improve understanding of the theme.

Cons

- The standing advisory panel may get it wrong sometimes, or disputes may arise that negatively affect decision-making about reporting.

- There may not be sufficient Māori expertise on the standing advisory panel to balance te ao Māori perspectives with other views in commentary recommendations.

- It will not allow councils and Crown research institutes to plan work with certainty.

- There is no guarantee of how much reporting will be needed, which could mean multiple reports are required at once without resourcing to produce them.

A few respondents highlighted pros and cons of having no mandatory coverage of all themes in a reporting cycle.

- It further promotes freedom to report in line with emerging issues, priority and flexible scope.

- There is potential for under-reporting on some parts of the environment not deemed as critical as others at any given time, which could undermine the objectivity and robustness of the whole system.

- A focus on topical themes could lead to some themes not getting covered, and result in data not easily being produced for these themes.

Q36. What frequency and timing will fit with te ao Māori to meet Māori information needs?

Respondents noted that Māori timeframes tend to be long term and intergenerational, but responses to pressures and issues are seen as more immediate. Seasonal and other natural cycles and the incorporation of the maramataka (Māori lunar calendar) may also have a role in monitoring species, habitat and ecosystems.

Respondents did not suggest that Māori timeframes, dates and events alone should drive reporting frequency and timing of reports. However, there was support for considering Māori calendar events such as Parihaka, Matariki and Koroneihana when analysing any te ao Māori and mātauranga-informed reporting.

Q37. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Feedback related to treating the environment as newsworthy, and keeping it in the public eye.

Proposal 9: Establish a set of core environmental indicators

Define a set of environmental indicators in the regulations, to help achieve the purpose of the ERA.

Themes

Most respondents supported the establishment of core environmental indicators for environmental reporting. There was support for setting these out in regulations, to balance flexibility to update the indicators with certainty that they will be successfully set up and resourced.

Consultation questions

Q38. Do you foresee any problems with the proposal to establish a set of core environmental indicators?

Respondents raised concerns about implementing, funding and monitoring core indicators, noting that:

- stakeholders need to be involved in the selecting indicators
- Māori need to be more involved in interpreting indicators from a te ao Māori and mātauranga Māori view
- there is a need for mātauranga Māori indicators as well as science-based/mainstream ones
- there is a need to couple indicators with appropriate monitoring sampling methods for consistent data collection
- the cost for local and regional government and other organisations to monitor indicators is relatively unknown, and will require extra funding.

Q39. What are some pros and cons of publishing updates to environmental indicators outside the reporting cycle?

Most respondents supported updates outside defined reporting cycles (in-between commentaries and synthesis reports).

Respondents identified a number of pros and cons.

Pros

- It recognises that environmental change is independent of reporting cycles.

- Regularly updated data is more useful to decision-makers and other interested parties.

- It will potentially allow breaches of limits to be detected.

- Communication of current state/pressure/impact will be more transparent.

- It will keep issues fresh in people's minds.

Cons

- There is a risk of indicator findings not being used.

- There is a risk of data misinterpretation.

- There is a need to assess new or current templates and platforms as appropriate for reporting in this way.

Q40. Should the indicators include topics based on te ao Māori and mātauranga Māori?

All respondents supported involving Māori in creating, evaluating and changing core indicators. There was support for a suite of mātauranga Māori indicators as well as more emphasis on mātauranga Māori and te ao Māori interpretation of indicators.

Suggestions to strengthen Māori involvement included in-house permanent experts, an advisory group and additional advice from Māori when required.

Q41. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Respondents mainly identified risks with funding and the extra resources needed to develop and maintain core indicators, and whether the Ministry's preliminary cost-benefit and funding analysis was comprehensive enough. Resourcing was a particular concern for local government.

Respondents identified opportunities for:

- government to recruit Māori to support the development of mātauranga/te ao Māori-based indicators

- co-development with Māori

- developing hapū-centric indicators within a Tiriti partnership framework.

Proposal 10: Strengthen the mechanisms for collecting data

Include new provisions in the ERA to set out powers for acquiring existing data for national environmental reporting.

Themes

Most respondents supported strengthening data collection mechanisms for existing data. There was also support for requiring mechanisms for the collection of new data, a partnership approach under Te Tiriti for information collection and provision, setting data standards,

aligning data collection with the requirements in other relevant legislation, and making data more accessible. There was strong feedback that data collection is expensive and needs secure, long-term investment.

Consultation questions

Q42. Do you foresee any problems with the proposal to include provisions in the ERA to require data for national environmental reporting? Please describe.

Many respondents considered issues beyond the proposed amendments to the ERA, including current issues with both environmental reporting and monitoring, and potential issues with implementing the amendments. Feedback highlighted:

- issues with access to existing data resulting from a complicated system of data collection with inconsistent standards, a lack of quality assurance, resourcing constraints, and inconsistent provisions for parts of the biophysical environment set in different Acts such as the Resource Management Act 1991

- the need to address large data gaps, and the issues in doing so without significant funding

- the need to align data collection with other legislation such as the Data and Statistics Bill and the proposed Natural and Built Environments Act

- support for the voluntary collection of data through negotiated agreements, using similar provisions to those in the three-step process in section 32 of the Climate Change Response Act 2002; but concern from a few respondents if data collection becomes mandatory

- the widespread need across regional councils, Crown research institutes, iwi/hapū and others for a central government commitment to ongoing dedicated financial support for data collection

- the need to set consistent standards for data so that there is one standard for each variable monitored

- the need for access to data collections to increase transparency and public trust of reporting, and to help people to be more involved in environmental issues, in line with the Open Data Charter and the Government's Strategy for a Digital Public Service

- the need to augment data collection with new technologies.

Q43. How can we strengthen the way we collect data to reflect the perspective and values of te ao Māori?

Relevant responses to questions 42 and 43 are summarised together here.

Respondents suggested that the ERA should sit under a Tiriti framework, with a more active partnership approach embedded through shared responsibilities and joint functions.

Respondents noted that ERA amendments need to preserve iwi and hapū rangatiratanga over data as taonga, and suggested:

- designing a framework that enables sharing of data and information between agencies without compromising iwi sovereignty over data

- establishing policies for including Māori-held data, but leaving ownership with Māori

- the Ministry's Deputy Secretary Māori serving as the pivot for data curation from various database storehouses

- retrospective restoration of ownership of archival data to Māori

- a Māori advisory group should address data sovereignty as part of a mātauranga Māori framework for understanding the environmental data and metadata in te ao Māori

- investing in initiatives that help tangata whenua identify their own data and information requirements to report the state of the environment from their perspective

- engagement with Māori on data sovereignty.

Respondents also noted that:

- Māori should be resourced to provide cultural competency training to support the co-existence of mātauranga Māori and science

- the amendments need to enable the collection and storage of different types of mātauranga Māori, including inter-generational knowledge passed down through oral histories, social and familial connections with place, traditional practices and mātauranga exchange

- the amendments must include Māori worldviews, values and mātauranga, while allowing for the differences between and within hapū and iwi

- where no quantitative data is available, or quantitative research is not suitable, qualitative data (such as oral histories) should be included for reporting

- resourcing is required to support Māori to actively participate in all levels of environmental monitoring.

Q44. In your view, have we overlooked any costs, benefits, risks or opportunities? Please describe these and any mitigations.

Respondents suggested that costs for other organisations would be higher, and highlighted a need to secure long-term investment and procurement arrangements to assure delivery of core data.

A couple of respondents identified benefits.

- Correct, robust and timely data is critical for informed decisions at the national, regional and local levels.

- A collaborative approach will help build a stronger feedback loop into reporting, and facilitate the identification of gaps or inconsistencies.

A few respondents identified risks.

- Many of the data sources lack an enduring financial commitment for collection.

- Monitoring is biased to variables that are easier to measure.

- Regional variables such as weather, topography and population have not been accurately accounted for.

Respondents identified opportunities to:

- include and resource local Māori communities, to feed data and information to the national level

- respect how Māori want to treat their data

- allocate resources to standardise environmental monitoring and data collection methods

- maintain a substantial multi-disciplinary team of analysts to turn data into meaningful information and investigate the data when needed
- develop a priority list of fundamental datasets that underpin regional and national reporting
- take a collaborative approach to data collection.

Summary of cost estimates for the initial preferred proposals

The results of a preliminary cost benefit analysis were summarised in the consultation document and the full document was provided on the consultation page.

Consultation questions

Q45. Have we correctly noted all the high-level costs and benefits of these proposals? Are there any others?

Most respondents said no.

Many did not believe that the costs for organisations to supply information were accurately assessed in the preliminary cost benefit analysis. Respondents noted that some proposals could have significant cost and resource implications for regional councils, Crown research institutes and hapū/iwi.

They also stated that:

- they want a commitment from central government to fund additional environmental monitoring resulting from ERA amendments
- cost efficiencies are possible, by aligning the ERA amendments with other legislative requirements, such as local government state of the environment reporting under the Resource Management Act 1991, and reporting on limits and targets under the proposed Natural and Built Environments Act
- new data should be included in the full cost benefit analysis
- there is a need for consistency in the data (which comes with associated costs) and the adoption of new technologies.

Q46. What costs and benefits, if any, would any or all these proposed changes have for you or your organisation?

Respondents identified benefits including:

- more certainty and clarity for regional councils about the size of the programme, and the budget and people required
- a consistent, reliable, robust, predictable and realistic national monitoring framework
- clarity about what the national level response and drivers for action should be
- maintained nationally significant datasets that underpin both national and regional environmental reporting
- the opportunity to better reflect te ao Māori, and tikanga and mātauranga Māori

- iwi, hapū and Māori involvement in system design, delivery, monitoring and data collection

- the creation of New Zealand-specific indicator data which could lead to better lifecycle inventory data

- more understanding of the benefit of interpreting large data sets, with more robust measurement and data gathering systems

- that grandchildren might have a more sustainable future.

Respondents were most concerned about the costs relating to proposals to add drivers and outlooks, establish core indicators and strengthen data collection.

They noted:

- the need to resource the proposed changes

- that knowledge must be collected by those who have responsibility for that knowledge

- the role of hapū and iwi as mana whenua kaitiaki to monitor and protect te taiao (the environment) in accordance with their mātauranga and tikanga, and that there needs to be space and resourcing to support Māori to actively participate in all levels of environmental monitoring.

Q47. We are planning a full benefit-cost analysis after assessing all submissions. What, if any, information should we include in that analysis?

Respondents suggested:

- more details on assumptions

- a detailed breakdown of costs and benefits for different sectors and parties

- a statement on what inclusions and exclusions have been factored into cost estimates

- a statement of expectations about the extent of, and timeframes for, alignment between national and regional environmental reporting frameworks

- costs of developing a systematic, regular and statistically defensible approach to collecting data, with appropriate levels of quality control and audit

- more robust ground-truthing of evidence and analytical rigour in the national environmental reporting system

- a cost benefit analysis based on Tiriti principles, with Māori consultation

- a cost benefit analysis based on the assumption of standardised gathering of indicator data by regional councils

- a central register of methods, sensors and standard operating procedures for gathering indicator data, and a focus on which programmes would be better run nationally

- as environmental quality and wellbeing are linked, the full cost benefit analysis should include a wellbeing framework

- provision for Māori to participate, including permanent paid leadership roles and the costs for full Māori participation in design, delivery and monitoring

- an analysis or stocktake of current investment in environmental monitoring made by ratepayers in each region

- a cost benefit risk analysis focused on data providers, to identify vulnerable parts of the system which may need extra support

- more funding for Stats NZ and, to a lesser extent, the Ministry

- an understanding of the role of science in making the shift in the system

- for proposals 9 and 10, an explanation of the potentially large costs for councils and impacts on data collection, and the design and spatial/temporal dimensions of monitoring

- funding to deal with some of the research gaps associated with indicators

- recognition of the technologies currently available that could assist in more cost-effective approaches

- recording in the acknowledged risks that the data to be collected must be useful

- demonstrating an alternative future with much less fossil fuel consumption, less milk production, and sustained biodiversity.

Integrating te ao Māori and mātauranga Māori in environmental reporting

In addition to the questions in the consultation document, we sought input on 14 broader questions about how to best incorporate te ao Māori and mātauranga Māori in environmental reporting. They were set out in an information sheet and included in the Ministry's Citizen Space survey.

Q1.   How could Te Tiriti o Waitangi be reflected in the ERA?

Respondents suggested that:

- the ERA state that it gives effect to the principles of Te Tiriti through a partnership approach

- the ERA provide for active Māori participation to uphold the principles of Te Tiriti

- the ERA acknowledge and preserve the tino rangatiratanga (self-sovereignty) and mana motuhake (separate identity, autonomy, self-government) that hapū have over their environment and taonga

- partnership approaches will vary from iwi to iwi, which requires focused conversations on how best to deliver on this responsibility

- the Ministry work with iwi/hapū to co-design new environmental reporting frameworks, and provide appropriate funding to build resources and capabilities for meaningful engagement in the system

- the ERA centre tikanga and mātauranga Māori in all aspects of the reporting system, addressing the Māori world view alongside Western science-based analysis, and ensuring Māori values, principles and practices are included and upheld

- enhancing the visibility of mātauranga Māori is likely to have benefits for other processes

- the ERA address matters of ownership/custodianship of mātauranga Māori and sovereignty of iwi/hapū information and data

- mātauranga Māori should be recognised as a legal person (in the same way the Whanganui awa (river) and Te Urewera have been granted legal person status), to give this knowledge the strongest possible protection

- direct engagement is critical.

Q2.   Should the principles of Rights and Interests, Partnership, Participation and Protection be stated or referred to in the ERA?

Most respondents agreed that the principles should be stated or referred to in the ERA. One said that if the ERA states that it gives effect to Te Tiriti principles, then these principles are not required.

Q3. *Manaaki Whenua's report* Reporting Environmental Impact on Te Ao Māori: A Strategic Scoping Document *proposes a Te Tiriti-based framework with five key principles: mana whakahaere,[7] tūrangawaewae,[8] whanaungatanga,[9] taonga tuku iho[10] and te ao tūroa.[11] Do you agree with these principles? What other principles are important? How might the ERA be more inclusive of these principles?*

Most respondents agreed with these principles. Respondents also mentioned other principles including:

- Tiriti principles

- rangatiratanga

- principles that connect monitoring to reporting, such as mahinga kai.

In addition, respondents said that mātauranga Māori frameworks should be designed by Māori in parallel and not retrofitted into a Western paradigm, and that the place-based nature of mātauranga Māori means frameworks should be local, rather than national.

Q4. *How can the work of active kaitiaki contribute to environmental reporting?*

Respondents suggested that this work can contribute:

- through pre-established and resourced lines of communication and data capture, for example, a geo-spatial platform

- by identifying relevant data and providing locally relevant indicators, and timely and accurate monitoring

- by ensuring that Māori data is preserved and protected, and maintains its sovereignty or rangatiratanga.

One respondent gave positive examples of kaitiaki work that can contribute to environmental reporting, including the Wellington region Mana Whenua Whaitua plan to return mana (authority, power, spiritual power) to freshwater bodies and the mauriOmeter model that measures sustainability.

Q5. *If a standing advisory panel was established, how should it be organised to ensure that te ao Māori voices are represented? What roles and responsibilities should representatives have to ensure te ao Māori is meaningfully represented in environmental reporting?*

Suggestions about membership included:

- an iwi representative configuration proportional to their takiwā (area, territory)

- having local Māori representatives on the standing advisory panel when the focus is on the environment in their specific takiwā

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[7]   Decision-making authority

[8]   Ancestral homelands

[9]   Community connectivity

[10]   Intergenerational resources

[11]   The natural environment

- representatives from all key groups including Māori, local government, the Ministry, Stats NZ, Crown research institutes, non-governmental organisations, business and industry bodies

- authentic mātauranga Māori practitioners, to meaningfully represent te ao Māori.

On roles and responsibilities, respondents said that:

- takiwā representatives must retain rangatiratanga over how Māori concepts, taonga, species and environs are described

- standing advisory panel members should be tasked with considering te ao Māori as part of their deliberations and advice

- the standing advisory panel should act as a committee of thought leaders and positive collaborators, with an annual refresh and rotation of roles.

Respondents noted that any national standing advisory panel should not infringe on the mana and rangatiratanga of iwi at place, and that participants must be remunerated.

Q6. Is participation in a standing advisory panel preferred, or is a dedicated committee or panel needed? What other options should be considered? Please explain your answer.

One respondent preferred participation on a single panel, because separate panels could lead to 'us and them' conflicts. Another said that participation on the standing advisory panel must be protected for Māori but, in addition, a dedicated committee is needed for the ongoing protection of Māori data. Another preferred individual iwi takiwā panels, and stated that any national panel would need to have takiwā-proportionate representation.

Respondents also called for:

- seats for various representatives, so all voices are heard

- democratic processes

- a limited tenure for panel members so there is ongoing rotation and refresh

- checks on panel members' areas of conflict

- protection of panels members from harassment.

Q7. How would you like to see the reporting framework expanded to include mātauranga Māori?

Respondents said that:

- the Crown should engage directly and more actively with Māori, iwi and hapū to partner and co-design a new environmental reporting framework, and meet its Tiriti obligations more widely in environmental reporting and management, and in data collection and protection

- a mātauranga-based reporting system could be created in parallel to the existing system

- the current system could be recreated to join up the fragmented aspects of data collection, interpretation, narrative and use

- adequate funding is needed for monitoring approaches and systems that are co-designed for and by hapū

- the system needs to be responsive to Māori, by understanding what Māori values really mean and collecting data relating to those values and related issues

- the framework should provide space for mātauranga Māori in its guiding principles and data capture

- Māori data sovereignty, including intellectual property, data capture and use, data infrastructure and accessibility, needs to be considered

- response indicators would allow Māori and communities to identify actions at a local level, and check if local actions are making a difference

- iwi and hapū management plans and cultural impact assessments could be considered for environmental reporting

- the release of reports could align with key events in the Māori calendar, for example, Parihaka, Matariki or Koroneihana.

Issues included:

- trust levels when it comes to environmental data, noting iwi and hapū are likely to want to carry out their own monitoring, and have their own ways of collecting, storing and describing the state of the environment

- the need for the ERA to state clearly what mātauranga Māori is, to prevent it being defined as science within reporting.

Q8. How do you think mātauranga Māori can be better reflected and incorporated in domain themes?

Respondents suggested that:

- as mātauranga Māori and te taiao are based on whakapapa (ancestry, genealogy) and taha wairua (spiritual realm), themes could include key atua o te taiao (gods of the environment)

- Māori should design the frameworks that suit their context

- wider concepts of wellbeing, such as health and social and economic wellbeing, should be integrated

- seasonal and other natural cycles and the maramataka, which have some bearing on the monitoring of species, habitat and ecosystems, are potential considerations for te ao Māori and mātauranga-informed reporting.

Q9. How can environmental reporting be more inclusive of te ao Māori? What information should be included? Who should provide this information? How can environmental reports be more useful for Māori audiences, and decision-making?

Suggestions included:

- providing the space for inclusion, with no expectation that it will be filled

- using a partnership approach and co-design environmental reporting rather than retrofitting mātauranga Māori into Western paradigms

- Māori leadership

- giving Māori permanent roles so that they can become experts in identifying and adapting to environmental change

- involving Māori in creating, changing and evaluating the indicators

- paying Māori for their involvement

- co-developing core indicators

- including items linked to Māori cultural identity, such as the state of mauri and key taonga species, in reporting

- including observations of local environs and species over time, with the information provided by mana whenua and their customary practitioners

- addressing Māori audiences.

Q10. Do you support the integration of the measures and indicators proposed in Manaaki Whenua's report Reporting Environmental Impact on Te Ao Māori: A Strategic Scoping Document?

Most respondents agreed with the measures and indicators proposed in the report. The reasons were that they align well with the broader goals of the amendments, they would ensure a holistic view of the environment is considered, and would make reporting useful for Māori communities.

Q11. What other measures or indicators should be included within the ERA to be inclusive of te ao Māori?

A few respondents highlighted the need to include iwi and hapū in monitoring, reporting and management of the environment. Suggestions included engaging Māori collectives to develop indicators, and considering how indicators will help Māori planning and action.

Respondents noted that Māori environmental health indicators could supplement the indicators already being used, and that Māori perspectives on whether something is an issue may differ from those identified through scientific processes. They noted that indicators should be at local level, to restore localised places such as repo (marshes) and cultural practices such as mahinga kai.

Some suggested other measures and indicators, including mauri, mana and tapu (sacred, restricted). An example was measuring the mauri of waterways, which would include whether the water is clean enough for swimming, to gather food, to water gardens, for rituals, for washing and cleansing from tapu spaces, and whether it is drinkable.

Q12. How should information that is important to Māori be collected and protected to ensure Māori data sovereignty is upheld?

Respondents said that:

- environmental reporting must be in done partnership, in the spirit of Te Tiriti

- the environmental reporting system should be responsive to Māori information needs

- Māori knowledge holders should retain ownership and kaitiakitanga of that knowledge when it is shared with the government, to avoid misinterpretation or manipulation

- a key part of Māori data sovereignty is that Māori communities benefit from the use of their knowledge

- mātauranga Māori should be seen as a person, viewed as a whole which cannot be pulled apart

- Māori knowledge holders should be acknowledged as co-authors, and they must have final say on all usage of their data (including collection, storage, analysis and publication)

- protocols should be agreed as part of the new reporting system

- the jurisdiction in which data is stored is a key consideration for Māori data sovereignty

- iwi authorities should be supported to digitise the archives, manuscripts and information they hold in private databases

- the use of data labels – with information about what iwi or group is the primary cultural authority for the material, or what activities the community has approved as generally acceptable use of the material – could help by offering Māori communities the tools to add cultural and historical context to environmental data in non-Māori digital archives.

Q13. What permission is needed for mātauranga Māori to be provided to the Ministry and Stats NZ for environmental reporting?

Some respondents noted that permissions for mātauranga Māori should be negotiated individually, with the person, whanau, hapū or iwi, according to their wishes, and that the explicit use and purpose should be predefined. One noted there may not be willingness to share information where there is no guarantee it will be respected and treated accordingly.

Q14. What permission is needed before mātauranga Māori that has been included in environmental reporting is released?

Most respondents recommended negotiating individual consents with mātauranga Māori knowledge providers according to their wishes, even if that information is already publicly available.

Other comments or issues

General comments

Q48. Do you have any further comments?

There was general support for the ERA amendments, with further comments about:

- the need for a fit-for-purpose national environmental monitoring and reporting system, for effective stewardship of New Zealand's environment

- creating a system that better reflects te ao Māori, tikanga and mātauranga Māori, and recognises the unique role of Māori as kaitiaki

- embodying the principles of Te Tiriti in environmental reporting

- the importance of Māori participation in environmental reporting

- central government resourcing of participants in environmental reporting

- acknowledging the roles of all data and information providers

- considering the interaction and alignment between ERA amendments and other reforms underway

- reporting in ways that reach more audiences

- reporting in ways that are relevant to mana whenua

- including both aggregated data and place-based qualitative reporting

- maintaining and protecting the independence of those involved in reporting, particularly the roles of the Secretary for the Environment and the Government Statistician.

A few respondents:

- said there should have been more engagement with Māori during the consultation

- noted improvements that could have been made to the consultation document

- acknowledged the contribution of the PCE's work in the ERA amendment process.

Kupu Māori glossary

atua	gods
atua o te taiao	gods of the environment
awa	river
hauora	health
hapū	Māori clan or sub-tribe
hui	gathering, meeting
iwi	Māori community or people
kaitiaki	guardian
kaitiakitanga	guardianship, stewardship
ki uta ki tai	land to sea
kīnaki	delicacies
mahinga kai	natural food resource
mana	authority, power, influence, status, spiritual power
manaakitanga	hospitality, generosity
mana motuhake	separate identity, autonomy, self-government
mana whenua	people with authority over land or territory
maramataka	Māori lunar calendar
mātauranga mana whenua	knowledge of people with authority over the land or territory
mātauranga Māori	Māori knowledge
mauri	life force
ngahere	forest, bush
Pākehā	foreign
Papatūānuku	earth mother
rangatiratanga	self-determination
taha wairua	spiritual realm
takiwā	area, territory
tangata whenua	people of the land
taonga	prized resources
tapu	sacred, restricted
te ao Māori	Māori world view
te mana o te wai	the vital importance of water
te oranga o te taiao	the intergenerational wellbeing of the environment
te taiao	the environment
Te Tiriti o Waitangi/Te Tiriti	Treaty of Waitangi
tikanga	customs, protocols
tino rangatiratanga	self-sovereignty
wai	water
whakapapa	ancestry, genealogy