

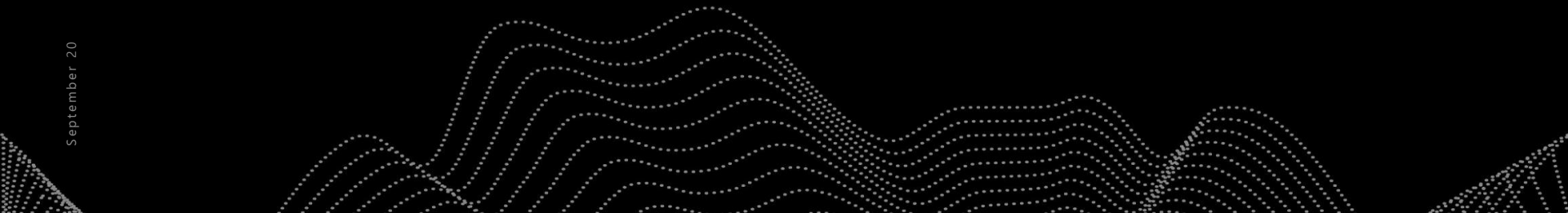


Well-being indicators for New Zealand's People and Nature

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Where did we start from?





Challenges we face



Bringing the environment into decision-making



Navigating large number of initiatives and frameworks



Connecting science to policy in a way that works



Opportunity



Building evidence on the connection between environment & people



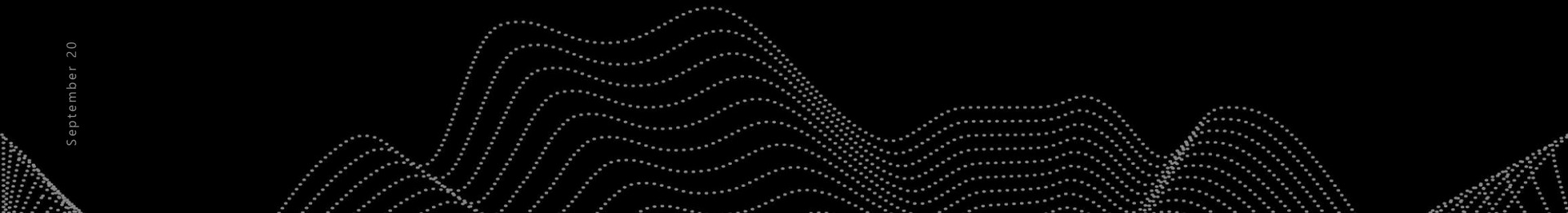
Understanding how initiatives might link



Working together to build capability at the science-policy interface



What is well-being and how does it link with nature?



Measuring well-being: The wellbeing budget (Treasury)



How the Dashboard links to the Living Standards Framework



Risk and resilience

The Dashboard does not currently have indicators of risk and resilience



**TE TAI ŌHANGA
THE TREASURY**

Measuring the health of the environment: State of the Environment reporting



- Environmental Reporting Act (2015)
 - StatsNZ and MfE responsibility
- Based on a Pressure-State-Impact framework
- 5 domains (air, atmosphere and climate, fresh water, land, marine)
- Synthesis report every 3 years
- Environment Aotearoa 2019: issue-based



The gap between well-being and nature

- SOE reporting push to make more impactful reports (PCE review):

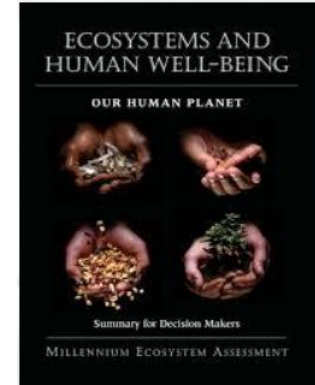
Simon Upton: “The absence of comprehensive and authoritative environmental data stands in the way of making good links between the **state of the environment** and **wellbeing**”

- We need to:
 - Understand the links between nature and people’s wellbeing
 - Leverage current scientific knowledge
 - Develop an evidence-based approach to monitoring, reporting and decision-making

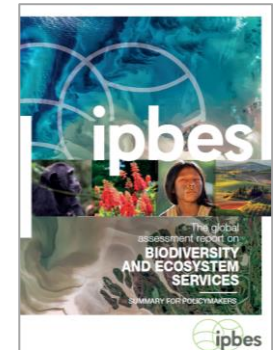


How does nature contribute to our wellbeing?

- **Ecosystem services (ES):** “benefits people receive from ecosystems” (MEA, 2005)
- **Nature’s Contributions to People (NCP):** introduced by IPBES to broaden worldviews, remove criticism of nature seen as a “service provider”
- Both of these terms may not resonate with all: should be used as appropriate for different audiences and purposes
- **Categorisation** of ES/NCP is needed to measure, value and communicate the findings in a transparent way

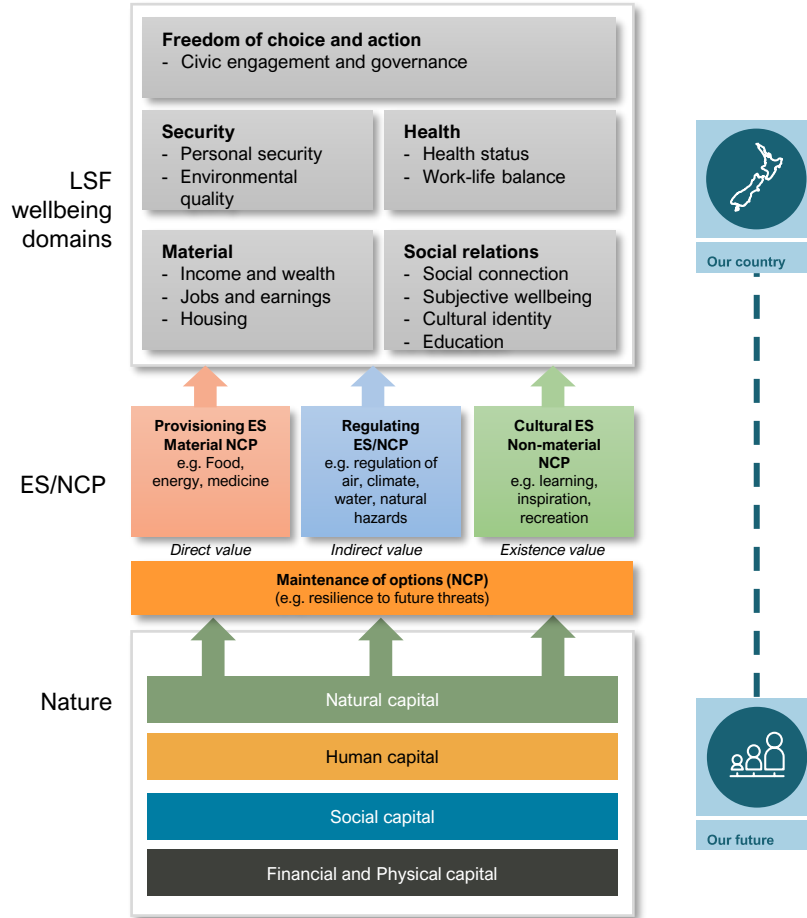


Millennium Ecosystem Assessment
(2005)



IPBES Global assessment (2019)

Imagining links between nature and well-being in NZ (1/2)





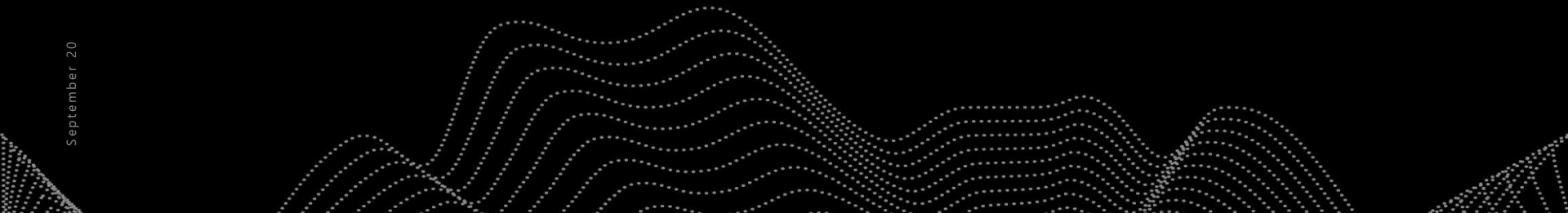
Imagining links between nature and well-being in NZ (2/2)

ES/NCP (IPBES classification) vs wellbeing LSF	Material			Health		Security		Social connection			Freedom of choice	
	Income & wealth	Jobs & earning	Housing	Health	Work-life balance	Envir. Quality	Safety & Security	Subjective well-being	Cultural identity	Social connection	Education & skills	Engagement & governance
Habitat creation & maintenance						■		■	■			
Pollination & dispersal of seeds		■		■		■						
Regulation of air quality			■	■		■						
Regulation of climate				■		■	■	■				■
Regulation of ocean acidification						■						
Regulation of freshwater quantity & timing			■		■	■	■					
Regulation of freshwater & coastal water quality				■	■	■						
Formation, protection & decontamination of soils			■	■	■	■	■					
Regulation of hazards/extreme events			■	■		■	■					
Regulation of harmful organisms				■		■						
Energy	■	■	■	■								
Food & feed	■	■		■			■	■	■			
Materials, companionship & labour	■	■	■	■					■		■	
Medicinal & genetic resources	■	■		■	■						■	
Learning & inspiration	■	■		■	■	■		■	■	■	■	■
Physical & psychological experiences (including tourism)	■	■		■	■	■		■	■	■	■	■
Supporting identities				■		■		■	■	■		■
Maintenance of options		■		■	■	■	■	■	■		■	

Qualitative assessment based on literature: needs common agreement



How do we describe that link for decision-making and reporting?





A potential approach for co-development

1. Framing:

- Decide the **well-being** framework to use
- Decide on the classification of **ES or NCP**

2. Prioritisation:

- Assess if (and how) different ES/NCP **impact on** each component of well-being
- Assess if (and how) each component of well-being **depends on** the different ES/NCP

3. Indicators:

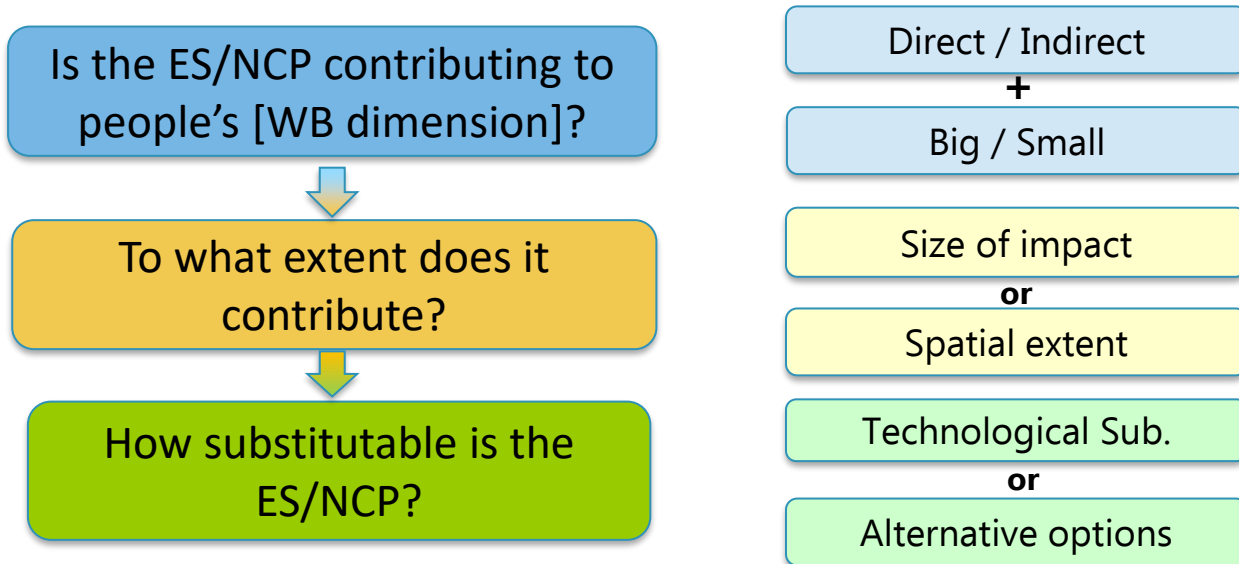
- identify fit-for-purpose indicators that reflects how ES/NCP relates to well-being

➤ Tested with a group of 20 participants



Prioritisation process

- **Purpose: To identify which ES/NCP are relevant and should be considered further**
- working out where to spend extra time & resources
- Based on criteria and a scoring system

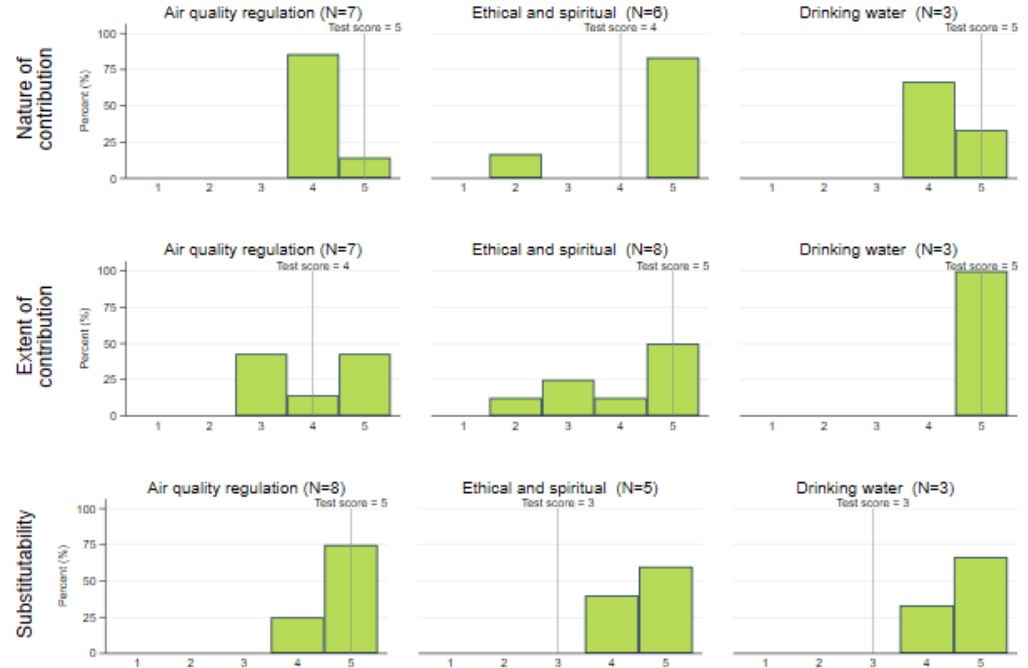




What our test groups thought...

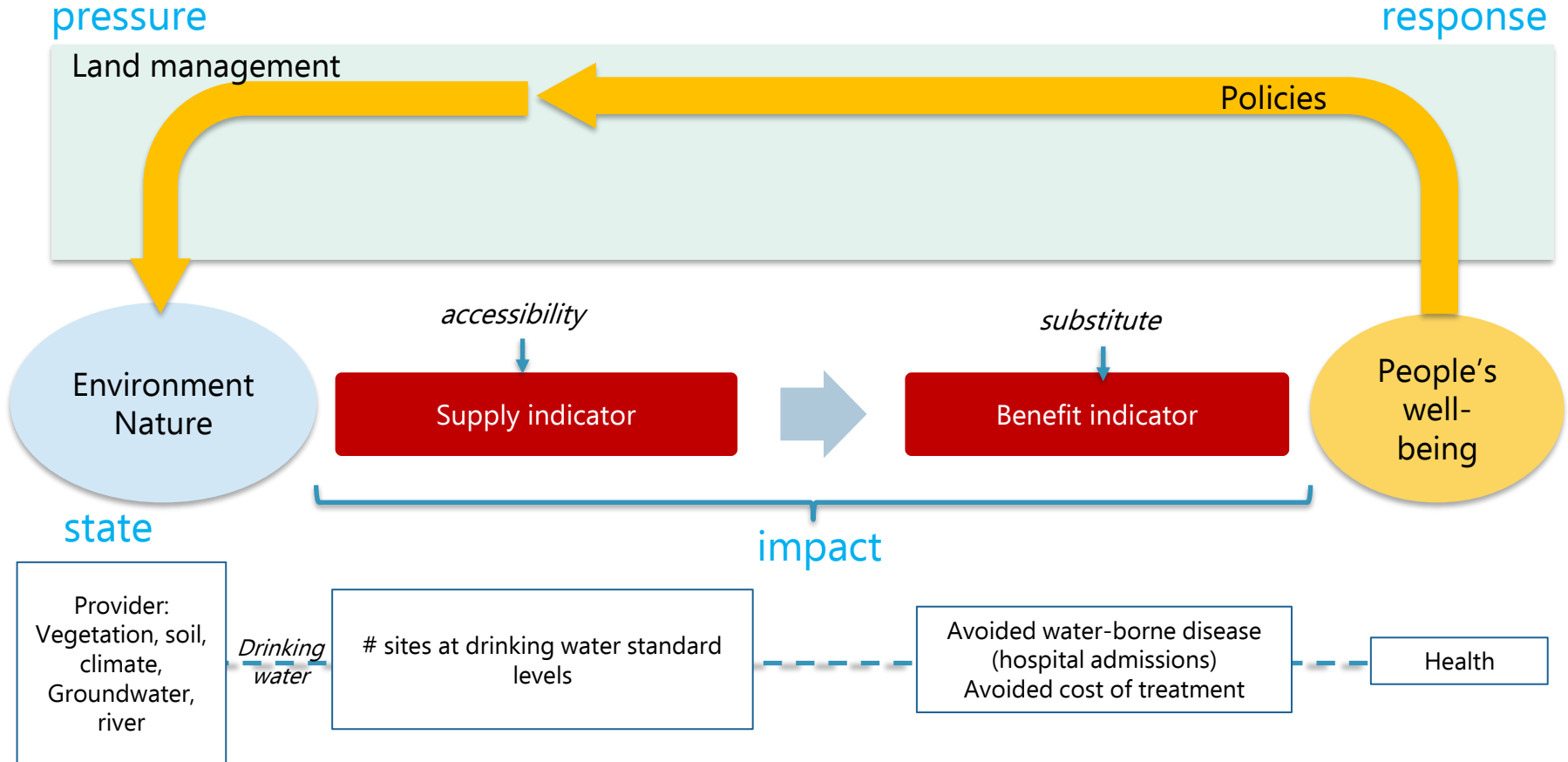
- Test scoring for 2 wellbeing domains (health, subjective wellbeing) and 3 ES/NCP
- Most participants had consistent scoring
- The value is in the discussion between people on what is important

Health domain



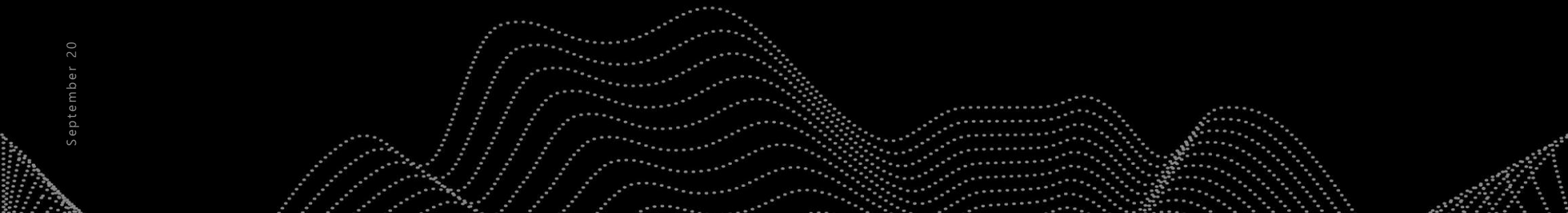


Indicator framework between nature and people





Connecting science to policy – our first steps....



A gap analysis – MfE environmental reporting indicators



ES/NCP categories (IPBES)*	Relevant indicators (supply)	Relevant indicators (benefit)
1 Habitat creation and maintenance		
2 Pollination and dispersal of seeds and other propagules		
3 Regulation of air quality		
4 Regulation of climate		
5 Regulation of ocean acidification		
6 Regulation of freshwater quantity, location and timing		
7 Regulation of freshwater and coastal water quality		
8 Formation, protection and decontamination of soils and sediments		
9 Regulation of hazards and extreme events		
10 Regulation of detrimental organisms and biological processes		
11 Energy		
12 Food and feed		
13 Materials and assistance		
14 Medicinal, biochemical and genetic resources		
15 Learning and inspiration		
16 Physical and psychological experiences		
17 Supporting identities		
18 Maintenance of options		

*other classifications systems could also be used



Applications during the project

- Working with MfE, Treasury, and others to bring together preliminary **evidence** to support the inclusion of nature in decision-making e.g.:
 - Discussions on post-COVID19 recovery
 - Government investment decisions
- Providing MfE & StatsNZ **guidance** and direction on building a better reporting system, including expanding the reporting to well-being
- Strengthening **linkages** between scientists and policy makers to operationalise research findings



Next steps

- Extend process to all well-beings and ES/NCP and confirm scores with government stakeholders
- Design and centralise a set of well-being indicators that could be used across agencies
- Explore a te ao maori perspective

Thank you!

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