



Ministry for the
Environment
Manatū Mō Te Taiao



NATIONAL ENVIRONMENTAL REPORTING FORUM

**HOSTED BY
THE MINISTRY FOR THE ENVIRONMENT AND
STATISTICS NEW ZEALAND**

WELLINGTON

Tuesday 20 October 2009

WORKSHOP NOTES

Executive Summary

These notes are from the third National Environmental Reporting Forum, which was held in Wellington on 20 October 2009, and was jointly hosted by the Ministry for the Environment (MfE) and Statistics New Zealand.

Purpose

The purpose of this Forum is to provide updates on environmental reporting, share best-practice and discuss and develop collaborative solutions to common issues.

Outcomes

- provide an update on any new environmental reporting developments
- update progress on actions identified at the last Forum (six monthly)
- identify the actions that can be progressed between now and the next Forum
- assign responsibility for following up each action.

By way of history, the Ministry for the Environment convened a pilot National Environmental Reporting Forum in August 2008. The purpose of this Forum was to build a 'community of interest' in environmental reporting around the country. It brought together a variety of agencies involved in national, local and iwi-based environmental monitoring and reporting. Given the success of the pilot, a second Forum was held in Wellington on 17 April 2009 and attended by almost 100 people. This latest Forum was held on 20 October 2009 and attended by 155 people.

The morning session included a series of presentations on the following:

- Big Picture Presentations:
 - Perceptions/qualitative environmental reporting
 - Sustainable Development Report
 - Cultural perspectives on environmental reporting
- Topics of interest:
 - Freshwater
 - Integration
 - Land and biodiversity

These notes focus on the afternoon topic workshops and the actions that were agreed. They accompany the information available on the MfE website on the presentations. Refer to www.mfe.govt.nz/environmental-reporting/about/partnerships/forum.html for the presentations.

The afternoon session included three workshop groups that discussed ways of working together to find solutions to key issues:

- freshwater monitoring and reporting
- integrated monitoring and reporting
 - Group A on leadership
 - Group B on integrating monitoring from different sources

and a new group which had a series of presentations and then some discussions on next steps:

- coastal and marine monitoring and reporting (refer to the website above for presentations).

Each workshop group was tasked with agreeing on a set of key actions to address some of the issues identified in the workshops. These actions are provided in the body of this report.

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Welcome and introduction

Todd Kriebel (Director, Information, Ministry for the Environment) and Dallas Welch (Deputy Government Statistician, Macro-Economic and Environment Statistics, Statistics New Zealand) welcomed everyone to the Forum on behalf of Ministry for the Environment and Statistics New Zealand. This Forum demonstrates the value of getting together a community of interest to talk about common issues and also work together in a collaborative way to move the agenda forward. Copies of their welcome speeches and all other presentations from this Forum are available at www.mfe.govt.nz/environmental-reporting/about/partnerships/forum.html

Setting the scene for the day

Facilitator Michele Frank set the scene for the day and introduced co-facilitators Karen Bell and Harley Spence. The objectives of the day were outlined as follows:

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Outcomes

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- Update progress on actions identified at the last Forum.
- Identify the actions that can be progressed between now and the next Forum.
- Assign responsibility for following up each action.

The morning session focused on information sharing and highlighting new initiatives via the presentations and the workshops in the afternoon focused on discussing and agreeing main issues and actions for moving a common agenda forward.

Scene setting for the workshops – Justine Daw (MfE)

Participants split into three workshop groups to discuss issues and actions in relation to:

- freshwater monitoring and reporting
- integrated monitoring and reporting
 - Group A - Leadership
 - Group B – Integrating monitoring from various sources
- and a coastal and marine monitoring and reporting group, which included a series of presentations and some guided discussions on possible next steps, for people interested in this topic.

Refer to the Ministry for the Environment website for Justine Daw's speech and all other presentations including the presentations from the afternoon coastal and marine workshop: www.mfe.govt.nz/environmental-reporting/about/partnerships/forum.html

At the beginning of each of the afternoon workshop sessions the facilitators reminded all participants that this was the third national environmental reporting forum. Some people had attended previous forums, but for some people this was their first time. Everyone was welcomed and reminded that this was a continuation of discussions and agreements from the last two forums and that we would not be starting at square one, but building on prior discussions and agreements on actions. With this in mind, the Ministry for the Environment has provided some additional explanatory text (in italics) in these notes for areas of work under way that forum participants may not be aware of.

Agreed Actions from Workshops and Key Discussions

Workshop One – Consistent approaches to freshwater monitoring and reporting

The attendees were split into smaller groups to discuss the following:

1. What do you see as an immediate priority (ie, should be started in next 3 months) to improve national consistency in freshwater monitoring and reporting? ie, quick fixes, most important, most urgent
2. What do you think is the best way to address these immediate priorities and who should be involved and lead this work?
3. What do you see as actions in the medium- to long-term (ie, start to address from mid-2010 onward)?

Each small group reported back to the main group the two most important immediate priorities and how these could be addressed. These are summarised below.

First priority actions agreed:

- *Access to freshwater data via web portal:* This will be addressed by Horizons Regional Council's work and a communication working group via TAG (Technical Advisory Group)
- *Complete survey/stocktake of council physical/chemical monitoring of rivers:* (This includes visiting councils to get more detail where needed (eg, process for cleaning filters, lab methods and reporting). Some TAs will need to be included (eg, Christchurch City Council).) HBRC to lead stocktake work, possibly with additional resources. HBRC, MfE & TAG to finalise report
- *Review of Freshwater Fish Database to assess if it meets the needs of new methods and assess it in the context of other databases:* Graham Sevicke-Jones to follow up with Bruno David

Second priority actions agreed:

- *More clearly define the objectives of national-scale freshwater environmental reporting, what indicators are the focus of this national-scale work, and how much and what sort of data is needed to meet the reporting objectives:* MfE (with input from TAG and workshop attendees) to develop a position paper on national-scale freshwater reporting
- *Define core variables at national level:* Continue SWIM work with leadership from MfE and TAG, seek increased CRI input eg NIWA, ESR, Cawthron and GNS, and invite comments from other organisations/groups eg iwi, Fish and Game
- *Draft Terms of Reference for TAG – circulate (put up to RMG and CE's forum) and finalise.* Establish TAG (include everyone already suggested) but make sure it includes a South Island regional council representative. HBRC, MfE & TAG to lead the TOR work

Final agreed action:

- *Mutually agree a consistent approach for methodologies/protocols, data storage, site selection, MCI and procedures for reviewing SoE programmes.* Start with priority indicators using standardised "lowest common denominator" methodologies, as achieving national consistency across all freshwater datasets is both problematic and costly. TAG to lead/co-ordinate this work to achieve greater consistency. Note: Agencies may be able to provide in-kind support in the form of freshwater staff resources, with funding sought from Envirolink and MfE as appropriate.

Presentations on the progress since last forum

Since the last forum in April there have been several surveys (stocktakes) of council monitoring and reporting which are summarised below.

Physical/chemical monitoring of rivers

All councils responded to the survey that covered the aims of regional SoE programmes, number of sites, selection rationale, frequency, methodology (including detection limits) and more. Staff from Hawke's Bay Regional Council on behalf of the Surface Water Integrated Management (SWIM) Group have collated the data into spreadsheets and is currently following up on missing and ambiguous responses. The next steps will be identifying consistencies and gaps between councils and finalising the findings in a report.

Biological monitoring of rivers

All councils responded to a survey, which built on an earlier survey of councils' biological monitoring in 2007. The survey covered macroinvertebrates, fish, periphyton, macrophytes and stream habitat assessments and aspects such as sampling methods, consistency over time, data storage, adoption of new protocols and more. The collated responses show that:

- There is relatively good consistency between councils and over time in macroinvertebrate monitoring with QA/QC being reasonably well used.
- More councils are establishing routine SoE monitoring of fish in their regions based on the new monitoring protocols, with five councils already using the new methods. However, the current New Zealand Freshwater Fish Database cannot presently store the quantitative data outputs from the new methods.
- There are many differences between councils in periphyton monitoring, with some doing no periphyton monitoring at all, several differences in methods used and a lack of QA/QC.
- Only one council monitors macrophytes in rivers.
- There are currently several differences in stream habitat assessment methods used by councils but new protocols were released earlier this year, which several councils have indicated they will be adopting at their SoE sites.

Reporting of microbiological levels in rivers

A brief survey of councils was conducted looking at how councils report on microbiological levels at their routine SoE sites (not their recreational water quality sites). The responses showed that there is good consistency in the statistical analysis of raw data but variation in the use of guidelines, eg, some use the stock drinking water guideline and others use the recreational water quality trigger values.

Groundwater monitoring and reporting

A recent report by GNS for the Ministry collated results together from all regional council SoE groundwater monitoring sites and the National Groundwater Monitoring Programme sites. The report makes some preliminary observations on data limitations for groundwater reporting including:

- Length and continuity of data record
- Representativeness of monitoring sites (eg, often biased towards at-risk aquifers)
- Site details (eg, lithology, wellhead construction and protection, land use, aquifer confinement)
- Capture zones and travel times.

Future stocktakes

As part of data requests to update datasets for national environmental reporting, the Ministry is likely to be able to carry out further methodological stocktakes in 2009/2010 for both lake water quality (eg, TLI and LakeSPI) and monitoring/recording of allocation consents.

Technical advisory group (TAG)

It was discussed at the last forum that a TAG would be established to coordinate/feed into priorities that are identified through the stocktake work. The TAG would include members with expertise and experience in improving consistency (eg, standardising methods, QA/QC

requirements, etc) and SoE freshwater monitoring and reporting. Key members that were identified at the last forum were approached to get an early indication of whether they or someone else from their organisation could be involved in this work. This included:

- Graham Sevicke Jones – HBRC
- Juliet Milne – GW
- Jon Roygard – Horizons
- Tanya Gray/Mike Thompson – MfE
- Rob Davies-Colley/Ton Snelder – NIWA
- Chris Daughney – GNS
- Chris Arbuckle – MAF
- Representative from DOC (possibly Dave Kelly or Dave West)
- Neville Wright – MRST

Project 8: Dependable monitoring and reporting

This work relates well to the Dependable Monitoring and Reporting project under the Government's ***New Start for Fresh Water*** work programme. The aim is to draw on work under way where possible and be guided by the TAG. It will comprise a series of stocktakes, gap analyses and identifying/developing some options for addressing gaps. The findings from this are to be reported back to Cabinet mid-2010.

Workshop Two – Integrated approaches to environmental monitoring and reporting:

Sub-group A on Leadership

This workshop group focused on the topic of “leadership for environmental monitoring and reporting (at all levels) – what is needed and how to integrate different types of monitoring (ie topics, domains, well-beings, for different functions and so on)”?

All levels includes: central government, regional council, territorial authorities, iwi

The attendees were split into small groups to discuss the following:

1. What leadership is needed (and at what level) for environmental monitoring and reporting?
 - What leadership approaches are currently working well?
 - Where are the gaps or areas for improvement?
 - What would make the biggest difference in the next year and 5 years?
2. How do we gain agreement on an integrated approach to environmental monitoring and reporting that includes:
 - varying priorities and functions of different organisations
 - topics (air, water, land, coastal, biodiversity etc)
 - domains and well-beings (such as environmental, economic, social and cultural well-beings)
 - monitoring on the state of the environment, policy and plan effectiveness and implementation monitoring, performance, compliance and enforcement and so on?

Each small group reported back to the main group on the most important priorities and how these could be addressed through actions. These are summarised below.

First priority actions agreed:

1. *A stocktake of existing data and databases is required:* The stocktake should ideally include central and local government (data) and iwi monitoring programmes (activities).
 - a. The reason why the information is being monitored/ activity is being carried out should be documented (ie, need to document metadata).
 - b. Ideally, a gap analysis should be conducted on this stocktake.
 - c. Priorities for monitoring should be identified.

Two stocktake activities, which partly meet these objectives, are already under way as a first step:

- a. Statistics NZ’s stocktake of central government and CRI data, as part of the Environmental Domain Plan. Who: Stats NZ, Stephen Oakley. When: by next Forum in April 2010
- b. An inventory is under way as the first stage in the possible development of an environmental e-library (central and local government indicators and data, including the possibility of a GIS-graphical interface), as follow up to earlier discussions in the National Environmental Reporting Forum. Who: David Kettle and MfE. When: By end of November 2009.

Note: Refer to Appendix 2 for further explanation of the complementary Domain Plan for the Environment 2009 Stocktake (being done by Stats NZ) and the E-Library Inventory (being led by MfE).

2. *Raise the profile of integrated monitoring:* This is an ongoing task. However, a key action from this forum is the development of a paper calling for collaborative action on the need for an integrated approach to monitoring. This requires buy-in from the Chief Executives of local government. To be presented to Regional CEOs Forum. Case studies should be included to highlight:
 - a) best practice approaches
 - b) how integrated monitoring and reporting can effectively be achieved
 - c) the cost effectiveness of integrated monitoring, by reducing duplication.

The paper should:

- define what we are integrating and why (why is integration important?)
- define the agencies involved
- outline the relevance to agencies' functions and responsibilities
- focus on domains of common strategic interest, rather than being too broad
- outline the issues with the way things are currently done
- show Chief Executives how this approach will lead to better decision-making:
 - informed decision-making
 - generate consistent regional and national pictures
 - policy effectiveness and efficiency
 - adaptive management
 - strategic planning/response
- highlight the importance of scale and that the use of data and information should be used at the appropriate level.

Who: initiated/led by local government and iwi but with support and leadership from central government, ie, a working group co-ordinated by MfE. When: Ongoing, propose working group at next Forum in April 2010.

3. Iwi/cultural monitoring – develop a stocktake and database of current monitoring activities (to be iwi-led). The initial task is to organise a hui with interested parties. Tui Shortland and Juliane Chetham to talk with REPO and seek support from MfE and TPK.

Agreed actions:

- Develop an overview of existing information and monitoring programmes and circulate this. Who: MfE led. When: Update by April 2010 Forum
Note that MfE produced in mid- to late-2008 two documents which meet this need:
 1. *A stocktake of national-scale environmental information*
 2. *A brief analysis of regional council SoE reporting, which highlights high-level areas of reporting*
 3. *See also reference to the e-library inventory on page 5.**Documents (1) and (2) can be made available from MfE upon request.*
 - Ideally, categorise which monitoring is statutory and which is not
 - Ensure marine monitoring is included as today's focus has been mainly terrestrial
- Network inventory/database: Consider updating the existing national data stocktake. The database should identify who is involved in what monitoring and provide notification of upcoming projects. Who: Marion Scott to lead, with support from MfE and Isabella Cawthorn (MRST). When: Explore feasibility by next Forum in April 2010
- FRST to include metadata for each of the 20 national significant databases to make the information more available. Who: FRST to lead. When: explore feasibility by next Forum in April 2010
- Establish a lead agency(s) to coordinate a nationally integrated monitoring approach. Review the Australian integrated monitoring framework
- Consider the possibilities of implementing a more prescribed approach to integrated monitoring through the RMA phase 2 and LGA reforms to address any actions or issues mentioned in this session. Who: MfE to lead
- Identify common data needs between agencies, particularly at the regional council/TA level
- Establish regular meetings or forums between agencies with common data needs, particularly at the regional council/TA level
- Identify domains where coordination is needed. Some suggestions are:
 - Biodiversity
 - Land
- Consider branching out from this forum to develop social, economic, cultural and quality of life forums as well as forums that focus on the links between these subjects and the environment
- Assess the adequacy of the Pressure-State-Response model for each domain identified for coordination.

Discussions on leadership

What leadership approaches are currently working well?

- Science-based leadership
- Leadership from central government to create evidence-based policy
- Ministry for the Environment's Environmental Monitoring and Reporting Forums
- Ministry for the Environment's state of the environment reporting
- Regional reporting

Where are the gaps or areas for improvement?

Gaps

- Decision-makers using the information produced
- Providing the support and instilling confidence in decision-makers that the information is robust and should be reported whether it is good or bad
- The current failure to report bad news. A positive angle is always sought
- National guidance on monitoring – local authorities need a national context for their monitoring
- Clear, agreed and consistent targets in monitoring values
- Communications from central government about information that is to be released, particularly information that is presented at a regional level
- Guidance on how to make decisions when limited information is available
- Nationally consistent information – currently lumpy information exists, some areas are rich in data others are not
- An evolving national inventory of what data is available and information on how to access this information

Note that MfE produced in mid- to late-2008 two documents which meet this need:

1. *A stocktake of national-scale environmental information*
2. *A brief analysis of regional council SoE reporting, which highlights high-level areas of reporting*
3. *See also reference to the e-library inventory on page 5.*

Documents (1) and (2) can be made available upon request.

- Cross-agency work programmes to ensure an agency's reporting objectives are fully achieved
- The involvement of the community in determining what the regional issues and the needs of the region are
- Cross-regional discussions – information and method sharing, comparing performance.

Areas for improvement

- More direction and leadership from central government on what information and monitoring programmes are required from local authorities.
- A national framework identifying key monitoring questions that can be incorporated into monitoring programmes at different levels, ie, regional councils, territorial authorities. This leadership would help councils avoid 'reinventing the wheel'.
Note that MfE produced in mid-2008 a Guide to the National Environmental Reporting Programme (see <http://www.mfe.govt.nz/publications/ser/reporting-nz-environment>) and a Technical Guide to the National Environmental Indicators (see <http://www.mfe.govt.nz/publications/ser/technical-guide-new-zealand-environmental-indicators/>), both of which comprise a national framework for environmental monitoring and reporting.
- More direction from central government on monitoring techniques so consistent and comparable methodologies and information are achieved at the local level and allows national reporting. (*See note above re the Technical Guide*)
 - Such an approach would require buy-in from the ground level
 - Innovation at lower levels should still be encouraged
- The need for more policy instruments – or more responsibility from local authorities to use the existing instruments?
- Increased partnerships at all levels – central government, local government, iwi
- Having authoritative information and presenting it in an authoritative manner so that is readily

accepted by the audience. Getting the message about key environmental resource issues across for effective use by decision-makers

- Champions are required to offer leadership in monitoring programmes and presenting information in an accessible and authoritative manner
- Clarity of common environmental goals
- Clarity of the purpose for each monitoring programme/project
- Clarity of priorities on what to monitor – what is critical to New Zealand?
- Clarity of audience – customer-focused reporting
- Accountability for environmental performance.

Discussion on how to gain agreement on an integrated approach to environmental monitoring and reporting

- Query/challenge the extent to which ‘we’ can gain ‘agreement’ across different interests and methodologies, though there is strong support for cross-sector collaboration
- Leadership should be collaborative (between people; between methodologies, eg, Western science and cultural monitoring)
- Funding and resources need to be addressed at onset of project
- Stakeholders/ Participation
 - Identify the stakeholders. Target areas to increase participation, eg, cultural minorities.
 - Have stakeholders participate and be involved in the development of the integrated approach/overarching framework (eg, comparable to Tobacco Control Five-Year Plan¹)
 - The development of a framework, particularly at the regional council / TA level, to accompany the integrated approach should involve stakeholders
 - The framework needs to make sense to and provide synergies between both providers and the end users
 - The framework needs to be useful at all levels. Build up from local level to regional and then to the national level
- Collaboration is needed:
 - A communications strategy should be developed
 - All-of-government collaboration is needed
 - Information and knowledge sharing should be enhanced through:
 - this forum and by starting other forums, eg, e-mail discussion list or ‘google’/similar network group
 - database/contact list of environment monitoring sector (would need to be regularly updated)
 - development of an advisory group or groups (eg, at Government, Technical, and End User levels)
- It is valuable and beneficial to:
 - Know the purpose of the monitoring
 - Know what to collect
 - Know what you will use it for.
- Need for and benefits of a proposed framework:
 - Coherent framework with standardisation, but also allows for innovation and adaptation. National environmental objectives and a core set of indicators to be used at multiple levels are needed – accountability to common high-level goals, with a multi-sector approach
 - Each agency should know its own functions and responsibilities and what it needs/is required to monitor and report
 - Each agency, particularly at the regional council/TA level, should know and agree on what each others’ functions and responsibilities are and what they monitor and report
 - This will help avoid duplication
 - This will help identify what monitoring functions and responsibilities should be separate and what functions could be integrated

Note that MfE produced in mid-2008 a Guide to the National Environmental Reporting

¹ See www.tobaccoresearch.org.nz, www.ndp.govt.nz/moh.nsf/indexcm/ndp-publications-clearingthesmoke?Open and www.moh.govt.nz/moh.nsf/by+unid/EE0D7A5314318292CC257014000078DF?Open

Programme (see <http://www.mfe.govt.nz/publications/ser/reporting-nz-environment>) and a Technical Guide to the National Environmental Indicators (see <http://www.mfe.govt.nz/publications/ser/technical-guide-new-zealand-environmental-indicators/>), both of which comprise a national framework for environmental monitoring and reporting.

- A tiered and coordinated approach to monitoring. Perhaps trends are monitored and reported at a national level and state and pressures are monitored and reported at a regional and local level, using the same methods
- Identify value-adds – cross section connections and understandings. For example, the effects of poor air quality on health
- Integration approaches should be developed for all domains. For example, air + health, water + economy, etc. And the four well-beings (social, economic, cultural and environmental) could be included, particularly at the regional council/TA level. But some monitoring functions and responsibilities should remain separate
- Stability is needed in an integrated approach, eg, a longer-term strategy/ framework. A change in government often results in a change in focus and monitoring. An approach is needed that will bypass 3-year cyclical uncertainties and address political influence
- Funding and capacity – needed at any stage of integration. Acknowledge that some agencies may not have these and provide solutions to how they may be able to meet their responsibilities
- Potentially conduct a stocktake of existing funding sources for environmental research/monitoring and reporting, and summarise information as part of a business case proposing a more sustainable funding base for the environment research sector. Create opportunities for joint funding proposals.

Sub-group B on integrating monitoring from other sources

This workshop group focused on the topic of “how to integrate monitoring information from different sources”? The attendees were split into small groups to discuss the following:

1. Prepare a quick list of all the known monitoring and reporting from sources such as iwi groups, community groups, businesses, public perceptions (some of this will be qualitative)
2. How could this information add value to current monitoring and reporting efforts of the public sector?
3. How do we integrate monitoring information from a variety of sources such as iwi groups, community groups, businesses, public perceptions, etc, into that undertaken by the public sector?

Each small group reported back to the main group on the most important priorities and how these could be addressed through actions. These are summarised below.

Agreed actions

- Fund a scoping study that examines experiences in centralised repositories of data so far, as well as the feasibility of using centralised repositories in relevant areas (key questions are: communities of interest and their needs and motivations, costs, benefits, risks, management, governance structures, feedback loops for contributors to benefit, etc, identification of the 3-4 most promising areas of national policy relevance).
- Fund an experimental pilot study that tests the use of a centralised repository in a particularly promising area.
- Establish a steering group to oversee both actions. It should include representatives of central and local government as well as iwi and other relevant communities of interest.
- Establish a national address data base
- Compile a list of available national-level data sets (*see sub-group A notes*)
- Organise a workshop specifically addressing regional council’s monitoring strategies.
- Facilitate a regional and then national iwi environmental monitoring Wananga (adds value to existing environmental information; fills a gap). Steps to be taken: establish a steering

- committee; identify funding body/s; set a date/frequency
- Identify strategically important data sets that need to be made nationally consistent and that would benefit from a national template (lead agency to be agency that collates/curates the nationally important data set). This can possibly be linked with the E- library work (see *sub-group A notes*).
- Communicate benefits of national templates and data exchange standards to local and regional groups and administrations.
- Examine why current data sets are inconsistent and undertake collaborative process to resolve the related problems and conflicts in order to ensure stakeholder and community buy-in to more standardised approaches.
- Ensure comparative analysis on national-level data sets can be undertaken by local and regional groups and administrations for *their* purposes (and not only by central government agencies); this will support an ongoing buy-in and involvement locally.
- To improve national-level environmental reporting. Greater use of illustrative local/regional case studies could bring value and context to national reporting, and make national reports more meaningful.
- Scope what existing national-level data is available on our urban environments (kind of data, availability, accessibility, usability). Determine what information is most useful (differentiating between national and regional purposes).

Discussions on monitoring from other sources

To start discussions the group was split into three small groups, and asked to explore the information sources used in monitoring and reporting. The main comments raised following the group discussions were as follows:

- Monitoring activities need to be sustainable in the long term. Costs need to be manageable.
- Consistency in terminology and in the way data is collected needs to be ensured (often data is collected with different levels of detail in different regions, or only for a very limited area).
- There is benefit in allowing the public to update datasets to correct errors (following the example of car GPS systems where the public can submit changes to maps used).
- The best way to improve data is by sharing it, collecting public feedback and criticisms.
- Google search terms and search locations could be used for advanced warning of environmental issues.

The groups then discussed how local and regional level monitoring and reporting (including cultural monitoring, etc) could add value to central government / public sector monitoring and reporting. Issues raised include:

The value of sharing local-level data

(examples cited during this discussion included monitoring the distribution of flax suitable for weaving, or monitoring changes to the distribution of pingao)

- Communities see their local issues as their own, but value can often be added if local data feeds into national-level data compilations and analysis that can reveal patterns, trends, solutions.
- Some local issues will be local curiosities with little value of national reporting on the issues; however there is still value in sharing methods, data and findings with other local communities to avoid duplication of effort and improve consistency.
- A centralised national repository was raised as an example of how this local data on specific issues could be collected and shared quickly and easily (see below).
- Local and regional case studies could bring value and context to national reporting, and make national reports more meaningful.

Getting buy-in

- Both national level agencies and local groups benefit from the integration of their data. Local groups and administrations need to see the benefits of national-level integrating activities, reporting and assessment. They need to be involved early in suitable ways in the framing (and planning) of integrating activities and national-level reporting and assessment.
- Trust in what data will be used for is needed for potential providers to share their data (eg, ERMA trying to collect horticulturalists' spray diaries).
- Local-level data collectors (eg, regional administrations, community groups) need a reason to report up to the national level; they need to see the big picture, the value of sharing their data and how it will help them. It might be useful to examine why in some instances people are voluntarily reporting (eg, into Geonet) and what motivates them.
- There needs to be a feedback loop to the community about how their data has been used, including the results of comparative assessment and reporting.

Data collection, handling and storage

- The possibility of centralised (topic-specific) repositories where the public can contribute information ought to be explored (good examples are Geonet where the public report if they felt earthquakes, or the Ornithological Society's service where the public report bird sightings). Centralised repositories could minimise the time and expense involved in manually handling data as it is reported up from a local to a national level (eg, via regional councils).

Consistent methods and data quality

- Data quality needs to be ensured when centralised repositories with open access are established. The question of data validation, the related costs, etc, has to be addressed.
- Consistent methods are needed for the monitoring and reporting on the same issues in different areas (eg, regional councils' monitoring or Iwi Management Plans). This could be through a template, exchange standard or agreed methodology.

Developing national templates for environmental reporting – including data exchange standards

- Benefits: Easy collation of data from local and regional levels to facilitate national level comparative analysis (between regions, and between a region and the national average), and to facilitate national-level reporting. Avoiding duplication of development effort for reporting methods. Reducing total costs.
- Examples can be used to illustrate how the data could be collected.

Quality of our urban environment

- One of the groups discussed the need for more integrated monitoring and reporting activities related to the quality of our urban environment. Potential data sources include TAs, LGNZ, DCA, NZHBT, MoH, MED, Regional Councils, DBH, Ministry of Tourism, StatsNZ, town and city associations.

Workshop Three – Coastal and marine monitoring and reporting

Agreed actions

The group suggested that MFish/MfE add in a fourth key step (see three steps below) in relation to identifying the potential economic benefits of a Marine Environmental Monitoring Programme (MEMP).

The group agreed to continue with a marine monitoring and reporting discussion group at the next National Environmental Reporting Forum to update the community of interest on progress towards achieving a MEMP.

Background about the Marine Environmental Monitoring Programme (MEMP)

- Governance, policy and management of our ocean territory are presently fragmented. We lack an oceans policy framework that enables/requires monitoring to happen.
- This provides challenges, particularly when it comes to assessing national-scale issues.
- The fragmented nature of ocean governance also means that environmental information is held across a wide range of organisations that can be difficult to access or discover.
- Three key steps towards developing a coherent, collaborative and cost-effective national marine environment monitoring programme were presented:
 1. Develop an online inventory of marine datasets that exist in New Zealand.
 2. Identify core datasets in terms of their 'fit to purpose' for long-term monitoring of the marine environment in New Zealand and conduct a gap analysis.
 3. Ensure that the Programme facilitates strong links between science and policy, and improved collaboration within the marine science community.

Supporting information

There is growing demand for the importance of good science, technical information and environmental reporting for quality environmental decision-making. For example, the Minister of Finance acknowledges that government holds a wealth of information that can be more widely shared. There is a call to make this data and information available to those outside of government ('inside-out government').

There are other initiatives that may align with the idea of a MEMP, including MORST's ['environmental data reuse' initiative](#) and its GIS meta-database (due to go live in November), and the NIWA Climate Change Atlas.

Next steps

- We all need to work in a collective way to put the case forward for a MEMP. Monitoring is not always seen as a priority for funding, so we need to be smart about how we put the case forward, and ensure the case shows value for money.
- We need to get together and identify in a collective way the key things that we need to monitor in the marine environment. What do we focus on for the 'best bang for buck'?
- We also need to be clear about the economic benefits of the proposed monitoring programme. If possible, we should provide some real examples of where marine environmental monitoring has led to economic benefits. This may help build a stronger case for a marine monitoring programme and help to secure funding for it.
- We need to be clear that the MEMP will likely deliver long-term (30-50yrs) benefits. We should provide case studies that illustrate the economic benefits of long-term monitoring (these examples will most likely be from overseas).
- Industry (eg, fishing, aquaculture) may be interested in long-term monitoring results (eg, 15 years of mussel monitoring has been valuable to the industry).
- We may be able to use current resources in a more sophisticated way to facilitate long-term monitoring in this present fiscal environment (eg, the Airforce may be able to help with remote sensing data collection).

Workshop wrap-up – Justine Daw, MfE

Justine Daw from the Ministry for the Environment thanked all present for their involvement in the Forum. The turn out of 155 people has been excellent. There were many different ideas discussed and the diversity of people involved in environmental monitoring and reporting provides us with both a treasure of information and a challenge. Some key areas for further thinking and actions are the urban environment and cultural monitoring and reporting.

We have collectively come up with a lot of actions today. This is great.

We need greater consistency for a meaningful set of environmental information. And we need to be clearer on the policy questions we're addressing.

The presentations from today are available on line on the MfE website at www.mfe.govt.nz/environmental-reporting/about/partnerships/forum.html

We look forward to coming together again in six months' time to review how well we have progressed the actions we have agreed here today, and to reinvigorate our collective commitment to moving things forward. Thank you for your time, ideas and energy.

Appendix 1: List of forum attendees (20 October 2009)

Name		Agency
Jude	Addenbrooke	Ministry for the Environment
Vicki	Addison	Hawke's Bay Regional Council
Chris	Arbuckle	Ministry of Agriculture and Forestry
Matt	Baber	Auckland Regional Council
Kate	Barker	Local Government NZ
Peter	Barton	Ministry for the Environment
Clare	Bear	Ministry for the Environment
Helen	Beaumont	Environment Commissioner
Ellen	Blake	Archives New Zealand
Poh	Boey	Ministry for the Environment
Kathryn	Botherway	Ministry for the Environment
Andrea	Brandon	Ministry for the Environment
Dave	Breuer	Anew NZ
Keith	Brodie	Taranaki Regional Council
Michael	Brownie	Wellington City Council
Deb	Burgess	Ministry for the Environment
Dick	Burgess	Ministry for the Environment
Jacki	Byrd	Greater Wellington
Ian	Cairns	Ministry for the Environment
Janine	Cameron	ERMANZ
Greg	Carlyon	Horizons Regional Council
Isabella	Cawthorn	Ministry of Research Science and Technology
Tony	Chandler	Hamilton City Council
Julianne	Chetham	REPO Consultancy
Joanne	Clapcott	Cawthron Institute
Jerry	Cooper	Landcare Research
Chris	Cornelisen	Cawthron Institute
Ross	Cullen	Lincoln University
Chris	Daughney	Institute of Geological & Nuclear Sciences
Rob	Davies-Colley	NIWA
Justine	Daw	Ministry for the Environment
Tui	Dewes	Ministry of Foreign Affairs and Trade
Daniel	Du Plessis	Ministry of Agriculture and Forestry
John	Dymond	Landcare Research
Glenn	Ellery	Environment Bay of Plenty
Phil	Evans	Te Puni Kōkiri
Chris	Fowles	Taranaki Regional Council
Bridget	Fraser	Ministry for the Environment
Josh	Fyfe	Ministry for the Environment
Rosie	Fyfe	Statistics NZ
Nelson	Gapare	Ministry for the Environment
Michael	Gee	Department of Conservation
John	Gibson	Animal Health Board
Eddy	Goldberg	
Brendan	Gould	Ministry of Agriculture and Forestry
Chris	Goulding	Scion
Mike	Grace	Greater Wellington
Tanya	Gray	Ministry for the Environment
Michael	Guggenmos	Victoria University
Ian	Gunn	Greater Wellington
Clare	Hall	Christchurch City Council
Rachel	Hargreaves	Ministry for the Environment
Lucy	Harper	Greater Wellington

Mike	Harre	Biosecurity Ministry of Agriculture and Forestry
David	Harris	Statistics NZ
Carol	Henry	Environment Waikato
Judi	Hewitt	NIWA
Tim	Higham	Auckland Regional Council
Reece	Hill	Environment Waikato
John	Holmes	Public Health South
Kimberley	Hope	Taranaki Regional Council
Clive	Howard-Williams	NIWA
Amanda	Hunt	Ministry for the Environment
Beat	Huser	Environment Waikato
Hollie	Hyndman	Ministry of Tourism
Anna	Jackson	Ministry of Agriculture and Forestry
Mark	Jacobs	Ministry of Health
Trevor	James	Tasman District Council
Alan	Johnson	Marlborough District Council
Kirsty	Johnston	Environment Canterbury
Aleisha	Keating	Sinclair Knight Merz
Nathan	Kennedy	University of Waikato
David	Kettle	Anew NZ
Brent	King	Ministry for the Environment
Jane	Kitson	Environment Solutions
Karlheinz	Knickel	Ministry for the Environment
Todd	Krieble	Ministry for the Environment
Greg	Larkin	Environment Southland
Scott	Larned	NIWA
Ursula	Lehr	Environment Waikato
Darryl	Lew	Hawke's Bay Regional Council
Mary	Livingston	Ministry of Fisheries
Bex	Longford	Biosecurity Ministry of Agriculture and Forestry
Dave	Loubser	Department of Conservation
Karl	Majorhazi	Ministry for the Environment
Alex	Malahoff	GNS
Michelle	Malcolm	Sinclair Knight Merz
Howard	Markland	Ministry of Economic Development
Michael	McCartney	Horizons Regional Council
Robert	McClellan	NZ Historic Places Trust
Ann	McCrone	Department of Conservation
Graham	McKerracher	Ministry for the Environment
Jennie	McMurrin	Ministry of Fisheries
Tania	McPherson	Te Ohu Kai Moana
Rachel	Meadowcroft	Office of the Auditor General
Kirsten	Meijer	Environment Southland
Adrian	Meredith	Environment Canterbury
Kiri	Mikaere	Statistics NZ
Jim	Mikoz	
Juliet	Milne	Greater Wellington
Martin	Neale	Auckland Regional Council
Emma	Nichols	Treasury
Chris	Nokes	ESR
Stephen	Oakley	Statistics NZ
Mike	Page	GNS
Ailsa	Parker	Ministry for the Environment
Phil	Parkes	Ministry of Agriculture and Forestry
Waverley	Parsons	Ministry for the Environment
Susy	Peddie	Water New Zealand

Andrew	Penney	Ministry of Fisheries
James	Piddock	South Waikato District Council
Matt	Pinkerton	NIWA
Anya	Pollock	Ministry for the Environment
Deborah	Read	Hutt Valley DHB
Craig	Redmond	New Zealand Transport Agency
Hamish	Rennie	Lincoln University
Bethany	Roberts	Cawthron Institute
Allan	Ross	Department of Conservation
Jon	Roygard	Horizons Regional Council
Michelle	Rush	Ministry for the Environment
Daniel	Rutledge	Landcare Research
Paul	Scholes	Environment Bay of Plenty
Nigel	Searles	Ministry for the Environment
Graham	Sevicke-Jones	Hawke's Bay Regional Council
Claire	Shirley	Ministry of Tourism
Ged	Shirley	Horizons Regional Council
Phil	Shoemack	BOP DHB
Marion	Short	WasteMinz
Tui	Shortland	REPO Consultancy
Emma	Simpson	Northland Regional Council
Cameron	Smith	ERMANZ
Janine	Smith	Ministry for the Environment
Rob	Smith	Tasman District Council
Greg	Sneath	New Zealand Fertiliser Manufacturers' Research Association Inc.
Ton	Snelder	NIWA
Paul	Sorenson	Greater Wellington
Julia	Stanley	Ministry of Agriculture and Forestry
Peter	Stephens	Ministry for the Environment
Heather	Stonyer	NZ Business Council for Sustainable Development
Frances	Sullivan	Local Government New Zealand
Piotr	Swierczynski	Ministry for the Environment
Ted	Taylor	Greater Wellington
Mike	Thompson	Ministry for the Environment
Jane	Tier	Ministry for the Environment
Fleur	Tiernan	Marlborough District Council
Gail	Tipa	
Natasha	Tomic	Ministry of Agriculture and Forestry
Arthur	Tse	Statistics NZ
Bill	Vant	Environment Waikato
Scott	Walker	Ministry of Fisheries
Gerri	Ward	Ministry for the Environment
Dallas	Welch	Statistics NZ
Alan	White	Department of Conservation
Bob	Wilcock	NIWA
Neville	Wright	Ministry of Research Science and Technology
John	Zeldis	NIWA

Appendix 2: Further explanation of the Complementary Domain Plan for the Environment 2009 Stocktake and the E-Library Inventory Concurrent Projects (for the Integration Workshop Group A)

In essence the Statistics NZ Domain Plan 'stocktakes' are a planning and communication tool, involving a needs assessment of the supply of and demand for environmental statistics (indicators, detailed tables and microdata) at the national level, and they are used for integration and prioritisation across all department's statistical collections.

This compares to the initial e-library 'inventory' which is simply a listing of the environmental indicators currently being used at the national and regional levels. The e-library Stage 1 inventory is scheduled for completion in November 2009 and will feed into the Domain Plan, which is scheduled for completion in 2010.

The Statistics NZ Domain Plan for the Environment encompasses three main types of knowledge:

1. Demand for information: a description of the information that ideally would be needed to inform policy development and evaluation, decision-making, research and community debate.
2. Supply of data: documentation of existing data sources, including survey and administrative sources, and the data contained within them.
3. Statistical development activity: a prioritised list of statistical development activities in the field, identified through comparison of demand and supply, and the agencies that will be accountable for each activity.

The Statistics NZ Domain Plan covers all providers of official statistics, that is, government departments and some other government agencies with which Statistics NZ has agreements (collectively known as the Official Statistics System). It focuses on environmental statistics at the national level and does not include statistics held by regional, district or city councils, or data produced by Universities, institutes or NGOs. Statistics NZ recognises the valuable contribution made by each of these other sectors and has work under way to explore bringing other agencies into the process. However at the moment Statistics NZ is unable to expand the scope of the Domain Plan to cover organisations outside of the Official Statistics System.

The MfE e-library inventory is the first stage of a possible larger project to put environmental indicators (and ideally cultural, social and economic statistics subject to resources and agreement) into a web-based format (ie, an e-library). This proposal will be explored with the other agencies producing these statistics, given likely interfaces with and implications for other work programmes and initiatives within the Official Statistics System.

Stage 1 of the e-library project comprises three tasks:

1. An inventory of environmental indicators currently being used at the national and regional levels (with selected examples of district-level indicators for three key indicators)
2. An initial assessment of the potential to put the inventory into a 'living document' in a web-based format, with possible GIS spatial mapping options.
3. A brief description of the functionality of two existing web-based indicator sites in Australia and Canada (www.communityindicators.net.au and www.communityaccounts.ca) that are recognised internationally. It is recognised that the initial environmental e-library would be a much scaled-down version of these more developed web sites, but would have the potential to be expanded if and when the need arises depending on resource availability and feedback from the initial users.