



# Natural Resources Framework

## An Introduction



This report reflects the current views, conclusions and recommendations of the Ministry for the Environment. It does not represent government policy.

This report may be cited as:

Ministry for the Environment, 2013. *Natural Resources Framework: An Introduction*. Wellington: Ministry for the Environment.

Published in August, 2013 by the  
Ministry for the Environment  
Manatū Mō Te Taiao  
PO Box 10362, Wellington 6143, New Zealand

Publication number: ME 1123

ISBN: 978-0-478-41214-7 (print)  
978-0-478-41215-4 (web)



Ministry for the  
**Environment**  
Manatū Mō Te Taiao

© Crown copyright New Zealand 2013

This document is available on the Ministry for the Environment's Natural Resources Sector website:  
[www.nrs.mfe.govt.nz](http://www.nrs.mfe.govt.nz)

## Contents

Introducing the Natural Resources Framework	1
Context	1
Structure	2
Application	2
Components of the Natural Resources Framework	3
Identify	3
Reveal	4
Establish	5
Assess	6
Integrate	7
Advise	8



# Introducing the Natural Resources Framework

## Context

The aim of the Natural Resources Framework is to craft robust and resilient policy that leads to effective stewardship and kaitiakitanga of New Zealand's natural resources.

Natural Resource Sector (NRS) agency chief executives are responsible for the stewardship of their agencies and their capacity to offer free and frank advice to successive governments, which is based on rigorous analysis and robust evidence. Effective stewardship ensures the best advice is provided to decision-makers to support the wise use of New Zealand's natural resources over the long term. To achieve this, New Zealand needs enduring solutions for managing its natural resources, and responding to approaching biophysical limits and climate change. Put simply, the capacity of NRS agencies to provide resilient policy advice is fundamental to New Zealand achieving stewardship of its natural resources.

NRS agencies, as partners in the Treaty of Waitangi relationship, have a responsibility to support iwi and Māori in performing their kaitiakitanga functions. Kaitiakitanga is the customary practices by which iwi and Māori manage the environment and relationships with it based on a Māori world view. There is no one definition of kaitiakitanga, but it can be broadly described as an obligation, arising from a kin relationship, to nurture or care for the environment physically and spiritually.

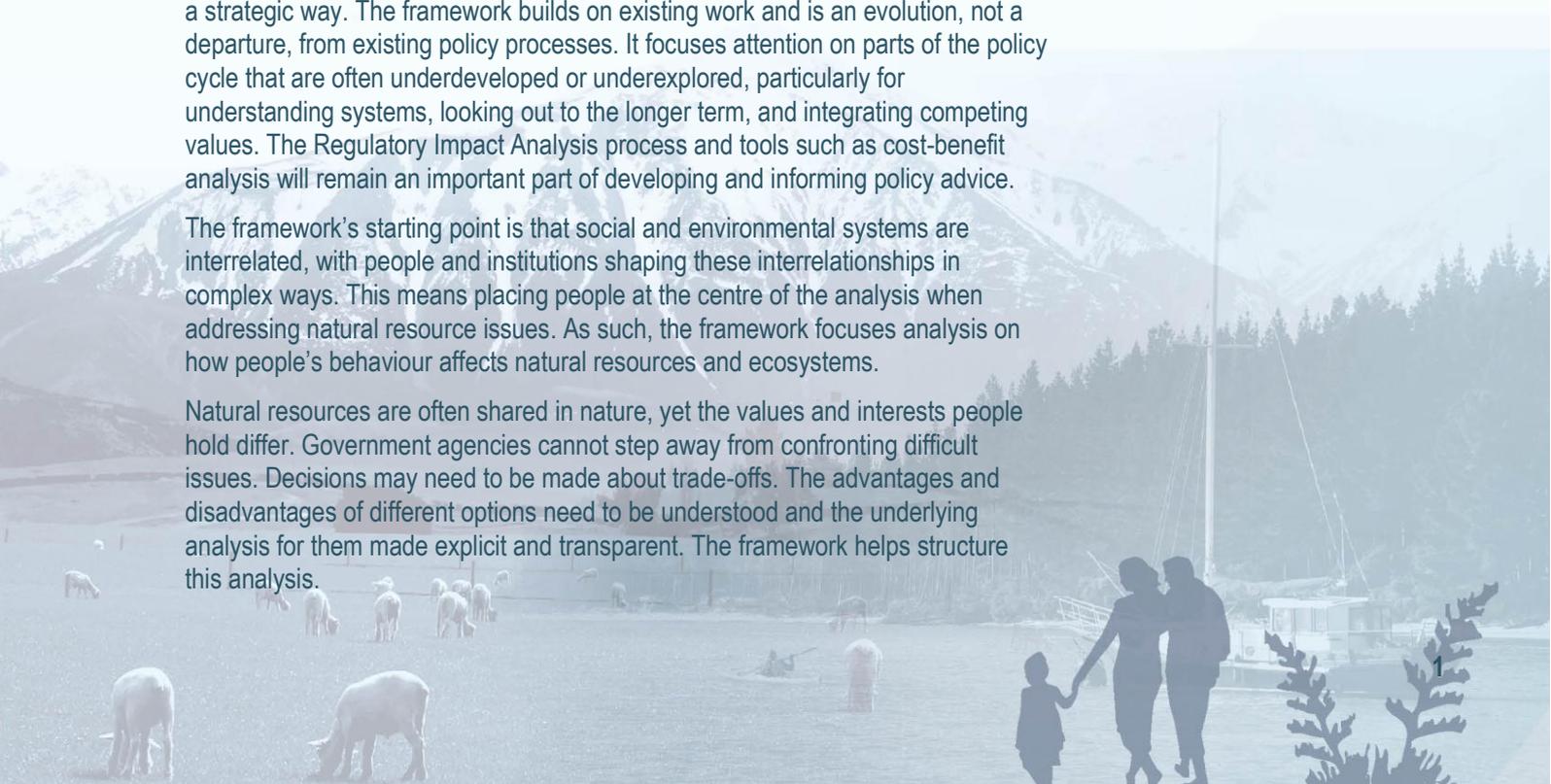
It is rare that a government agency on its own can address the challenges of stewardship and kaitiakitanga because natural resource issues cross portfolios and diverse community interests, affecting outcomes in different and sometimes competing ways. The framework helps NRS agencies meet these challenges by providing a common way to organise inquiry into natural resource policy issues in a strategic way. The framework builds on existing work and is an evolution, not a departure, from existing policy processes. It focuses attention on parts of the policy cycle that are often underdeveloped or underexplored, particularly for understanding systems, looking out to the longer term, and integrating competing values. The Regulatory Impact Analysis process and tools such as cost-benefit analysis will remain an important part of developing and informing policy advice.

The framework's starting point is that social and environmental systems are interrelated, with people and institutions shaping these interrelationships in complex ways. This means placing people at the centre of the analysis when addressing natural resource issues. As such, the framework focuses analysis on how people's behaviour affects natural resources and ecosystems.

Natural resources are often shared in nature, yet the values and interests people hold differ. Government agencies cannot step away from confronting difficult issues. Decisions may need to be made about trade-offs. The advantages and disadvantages of different options need to be understood and the underlying analysis for them made explicit and transparent. The framework helps structure this analysis.

**Understand people, understand the environment**

**Foster stewardship by using the Natural Resources Framework**



Over time, use of the framework will provide a rich body of evidence that can be drawn on in other policy processes. The framework is designed to help frame good advice that supports decision-making. The role of the NRS is to provide consistent and high quality policy advice and the framework helps with this.

## Structure

The framework adopts an integrative approach by including social, economic, environmental, cultural and political perspectives over the typical time spans involved with natural resources issues. Four analytical components can be used to structure your analysis – *Reveal*, *Establish*, *Assess* and *Integrate*. Two procedural components support the analysis, *Identify* – to agree on the work; and *Advise* – to produce an agreed collective narrative.

Three tiers of inquiry are used. These include tasks and questions specific to each component that are used to prompt your inquiry. Second, a reasoning tier requires any assumptions or limitations be made explicit. Lastly, an engagement and tools tier aids analysis for each component. Care must be taken to address any uncertainties and risks in each component.

**Investigate multiple perspectives, see possible futures, reveal our assumptions**

## Application

Any agency can use the framework in whole or in part. However, the primary aim is to develop collective advice and options across NRS agencies working on a common policy issue. Use of the framework is as much about how the NRS goes about doing its work as the work itself.

The framework can be used alongside, and draws on, other tools, frameworks and approaches, such as Regulatory Impact Assessments, cost-benefit analysis and application of risk management standards. The framework is expected to evolve and change over time in response to being used and tested.

The framework is not intended to provide a prescriptive or inflexible process, but encourages critical inquiry and learning. Similarly, tools and resources are identified as possible approaches, rather than as a prescriptive list. Questions to prompt your reasoning are provided to challenge assumptions in a constructive way, by encouraging debate, discussion and deliberation of issues.

You do not need to use the framework sequentially from the first component to the last. The framework can be used to develop policy options (*Reveal* to *Integrate*) or alternatively to understand how known outcomes may have been influenced by people's behaviour (*Assess* to *Reveal*). You can also use a single component as part of existing policy processes. For instance, *Reveal* can be used to better understand the *status quo* and define problems.

The framework takes a people-centred approach to gain a better understanding of people's behaviours and how these affect outcomes. Engagement within and outside of government is an important part of the analysis and approach. A short list of engagement opportunities is provided for each component. In using the framework, the purpose of engagement can be to:

- build evidence and expand expertise to improve analytical rigour
- ensure natural justice and due process to add legitimacy to decision-making.

**Think in systems, work as a team**

# Components of the Natural Resources Framework

The remainder of this document outlines the components of the framework, including a brief description of the purpose and aim, tasks, and a representative set of questions for each component. A more substantive document *Natural Resources Framework: Guidance for Users* is available at [www.nrs.mfe.govt.nz](http://www.nrs.mfe.govt.nz).

## Identify

Every project needs a starting point. This component leads into the analytical components of the framework by ensuring the mandate for analysis is secured *before* any analytical work is undertaken. Agreement is needed on the focus of the work, how the Treaty of Waitangi is provided for, and the engagement approach.

As part of the Crown, NRS agencies must find ways to provide for the Treaty of Waitangi, and understand the rights and interests of iwi and Māori that exist through tikanga and common law. In *Identify*, the context needs to be understood well enough to provide an effective plan for how these matters will be recognised throughout the project, including engagement.

### Purpose

The purpose of this component is to ensure that the scope of the inquiry, including boundaries and expectations, is set so the analysis can be undertaken successfully and agreed objectives met.

### Aim

The aim is that the appropriate mandate to undertake and resource a piece of work, using the framework, is secured.

## Tier 1: Tasks

### Tasks

- Agree on the *issue* that the framework is used for.
- Understand the Treaty of Waitangi context.
- Agree on how NRS agencies will undertake the work, including ensuring resources and capabilities are appropriate for the work undertaken.
- Agree the design of engagement outside the NRS.



## Tier 2: Reasoning

Look closely at the assumptions and reasons that underlie your analysis to understand them better and test their strength.

## Tier 3: Engagement / tools

### Engagement opportunities

- Establish relationships from the start.
- Build ownership through participation in project scope and design.

### Useful tools

- In-house project management tools.
- Horizon scanning.

## Reveal

Most of us are trained in a particular discipline and we can sometimes bring a somewhat narrow focus to natural resource issues. However, because of the complexity of the systems involved, natural resource policy requires a multidisciplinary approach. You will find that no single discipline can adequately capture all aspects of an issue. Accepting that different perspectives on a particular issue are valid and necessary is a skill all policy analysts need to develop. In particular, your analysis will need to focus on people, their behaviour and institutions as these aspects are important to understanding the interrelationships between environmental and social systems.

### Purpose

The purpose of this component is to ensure analysis is sufficiently broad so that 'everything is on the table'. Doing this will set the context for understanding the interrelationships between environmental and social systems. At the very least you should include the understandings and interests of all relevant NRS agencies of the issues.

### Aim

The aim is to reveal the interrelationships between natural resources, ecosystems and social systems, including any constraints or limitations in the analysis. This will include making the spatial and temporal scales explicit, as well as detailing any limits and irreversibilities.

### Tier 1: Tasks

#### Tasks

- Describe the environmental system, including the embedded ecosystem and natural resource system.
- Describe the social system and other embedded systems including the Treaty of Waitangi, norms, rules and values of people involved.
- Analyse the interrelationships between the natural resource, ecosystem and social system.

#### Questions to guide analysis

- What are the attributes of the environmental system, ecosystem, natural resources, and built environment?
- Who is affected, what interests do they have, and what relationships exist between people and the natural resource and ecosystem, including the uses, services, impacts and management?
- What different values, rules and norms exist?
- What are the Treaty of Waitangi dimensions?



### Tier 2: Reasoning

Look closely at the assumptions and reasons that underlie your analysis to understand them better and test their strength.

### Tier 3: Engagement / tools

#### Engagement opportunities

- Build an evidence base to understand different values, perspectives, rules and norms.
- Access existing databases, reports and research that others hold or can interpret.
- Access expertise of others and invite them to participate.
- Build participants' understanding of values, perspectives, rules and norms.

#### Useful tools

- Systems thinking and network analysis.
- Participatory engagement.

## Establish

It is important to recognise that people's behaviour affects the outcomes of natural resources. If you understand the values, incentives and behavioural drivers of people and the institutions they follow this will help NRS agencies to better understand how policy decisions can influence future outcomes. Your challenge is to understand the perspectives of people rather than reinforce stereotypes or biases in the analysis.

### Purpose

Taking a long term perspective will ensure you understand the consequences for natural resources and ecosystems that result from people's behaviour. As a policy analyst, one of the challenges you will face is to assess what the likely consequences will be of the relevant institutions and behaviours over the short, medium and long term. To do this successfully it is important to understand change, be open to surprise, and be clear about the degree of uncertainty involved in the analysis. You should also explore both the probabilities and possibilities in longer term outcomes.

### Aim

The aim is to establish the incentives and behavioural drivers that influence people's behaviour, which result in natural resource outcomes over the short, medium and long term.

### Tier 1: Tasks

#### Tasks

- Analyse the incentives and behavioural drivers that people face over time.
- Analyse the effect on collective behaviour.
- Establish present and possible future outcomes, including any uncertainties.

#### Questions to guide analysis

- What incentives and behavioural drivers are people facing?
- What information is available to people?
- What is the nature of the interaction between people?
- What collective behaviours affect the issue?
- What are the present and future outcomes, including any uncertainties?



### Tier 2: Reasoning

Look closely at the assumptions and reasons that underlie your analysis to understand them better and test their strength.

### Tier 3: Engagement / tools

#### Engagement opportunities

- Understand current state, causes and outcomes.
- Build participants' understanding and ownership of current state, outcomes and possible consequences over time

#### Useful tools

- Scenario analysis.
- Agent-based modelling.
- Deliberative behavioural analysis.

## Assess

Developing policy options to achieve the effective stewardship of natural resources requires understanding of how the status quo performs over the short, medium and long term.

By examining the environmental, economic, social, cultural and political perspectives of each outcome, a comprehensive understanding is gained on whether an outcome is desirable.

The relationships between social systems and environmental systems are complex and include many uncertainties. Taking an adaptive policy approach will help you craft enduring policy which will address uncertainties, avoid limits and irreversibilities, and which will change behaviour.

Identifying a mix of policy instruments will also help you better target change in the incentives people face. It is good practice to go beyond the NRS or central government to include social networks such as industry groups or businesses and communities when you are assessing policy options.

### Purpose

The purpose is to gain an understanding of how the status quo performs over the short, medium and long term, so policy options can be crafted to improve outcomes. The assessment of the status quo can offer additional insight into how policy could be better developed to change people's behaviour.

### Aim

The aim is to craft policy options that can respond to change, including any lags in system responses, as well as unexpected effects. These options are compared with the status quo to understand the gains and losses across multiple perspectives.

## Tier 1: Tasks

### Tasks

- Assess status quo outcomes against agreed criteria.
- Craft new policy options and compare them with the status quo.

### Questions to guide analysis

- What criteria should be used?
- How does the status quo perform over the short, medium and long term?
- What mixes of policy instruments best target incentives and behavioural drivers of people over time?
- What are the differences between the status quo and new policy outcomes?



## Tier 2: Reasoning

Look closely at the assumptions and reasons that underlie your analysis to understand them better and test their strength.

## Tier 3: Engagement / tools

### Engagement opportunities

- Better understand people's preferences for options and the impact of options on people.
- Generate new ideas and options.
- Build participants' understanding of options and the case for change.

### Useful tools

- Cost-benefit analysis.
- Multi-criteria analysis.
- Deliberative methods.

## Integrate

Natural resource issues are not just technical challenges and you may find there is no single right answer. Decisions will inevitably involve judgements about the appropriate course of action. Working with others to achieve practical consensus will be one of your most important tasks and your aim will be to work towards an agreed set of options.

Ideally your work will resolve any trade-off tensions so you are able to integrate analysis that will result in 'win-wins'. However, no matter how hard you work to create 'win-wins', sometimes you will be faced with trade-offs and hard choices on policy options.

Filtering options by their level of certainty and consequence (including whether limits may be crossed) and ranking them according to agreed factors can further aid the development of an agreed set of options. Where you find ranking is ambiguous or practical consensus cannot be achieved, a number of policy options may be promoted.

### Purpose

The purpose of this component is to bring together analysis and rank policy options towards an agreed set. This requires that you understand and, where possible, resolve any trade-offs in the set of options before accepting any trade-offs. An iterative process is likely to refine and filter options.

### Aim

The aim is to achieve practical consensus of the important issues and make transparent any value judgements and trade-offs associated with policy options.

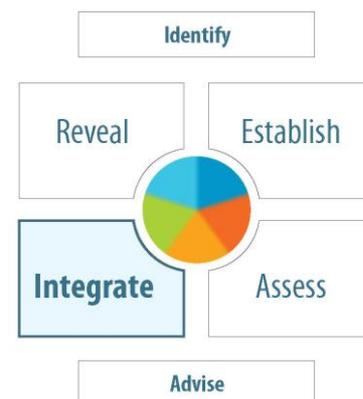
## Tier 1: Tasks

### Tasks

- Resolve trade-off tensions identified and refine policy options.
- Categorise and then filter policy options in accordance with their risk.
- Rank remaining policy options and indicate where trade-offs lie.

### Questions to guide analysis

- What trade-off tensions exist for each policy option and can they be resolved or refined?
- How certain are the consequences of each policy option and are they acceptable?
- What is the final set of options and trade-offs that need to be confronted for each policy option?



## Tier 2: Reasoning

Look closely at the assumptions and reasons that underlie your analysis to understand them better and test their strength.

## Tier 3: Engagement / tools

### Engagement opportunities

- Understand the multiple dimensions of trade-offs and if compromises are possible.
- Build a common understanding and narrative across government.
- Build participants' understanding of trade-offs, uncertainties, risks and solutions.
- Seek practical consensus on ways forward.

### Useful tools

- Trade-off principles.
- Deliberative methods.

## Advise

Issues relating to the work of NRS agencies typically cross the policy and portfolio interests of more than one agency or decision-maker and can affect more than one outcome area. A broad understanding amongst relevant NRS agencies of the analysis, trade-offs, options and risks is important for providing robust and resilient advice to decision-makers. This is not to say that agencies need to agree on the solutions but rather should confront hard choices and broadly agree the set of options available.

### Purpose

The purpose of this component is to provide high quality policy advice to decision-makers that is consistent with the objective of effective stewardship and kaitiakitanga. To deliver this, general agreement is needed across the relevant NRS agencies on the issues, options and outcomes that form the basis of that advice.

### Aim

The aim is for NRS agencies to provide consistent advice to decision-makers through a collective narrative on the issues faced, policy options, and nature of any trade-offs.

### Tier 1: Tasks

#### Tasks

- Agree on a collective narrative that reflects the trade-offs to be confronted in the final set of options.
- Ensure assumptions and limitations of the analysis are made explicit.



### Tier 2: Reasoning

Look closely at the assumptions and reasons that underlie your analysis to understand them better and test their strength.

### Tier 3: Engagement / tools

#### Useful tools and engagement opportunities

- Briefings to incoming Ministers.
- Cabinet papers and briefing notes.
- Ministerial meetings.

