

## **Economic Analysis of the Independent Panel's**

### **Proposed Reforms to the Resource**

Management System

**BUDGET SENSITIVE** 

**Final Report** 

**Castalia Report** 

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## **Definitions**

CCRA	Climate Change Response Act 2002
CME	Compliance, monitoring and enforcement
ICT	Information communication technology
LTMA	Land Transport Management Act 2003
LGA	Local Government Act 2002
MRCCAA	Proposed Managed Retreat and Climate Change Adaptation Act
MfE	Ministry for the Environment
NES	National environmental standard
NPS	National Policy Statement
NZGIF	New Zealand Green Investment Fund
Panel	Panel of experts appointed by the government to review the RM system in late 2019
Panel's Report	Report titled New Directions for Resource Management in New Zealand dated June 2020
Panel's proposals	The sum of recommendations proposed by in the Panel's report
RMA	Resource Management Act 1991
RM system	New Zealand resource management system, a system of laws, regulations, institutions and norms
RPS	Regional Policy Statement

### **Executive summary**

The New Zealand resource management system (RM system) is being reformed. The government appointed a panel of experts (Panel), chaired by Hon Tony Randerson, QC, to review the RM system in late 2019. The Panel published its final report entitled *New Directions for Resource Management in New Zealand* (Panel's Report) in June 2020. The Panel's Report contains 16 chapters of discussion and recommendations for RM system reform (Panel's proposals). The Panel's proposals cover the principles and objectives for resource management, reform of the institutions and rule setting, suggestions for reform of resource allocation mechanisms, and changes to improve the administrative effectiveness of the RM system.

The RM system, and the scope of the Panel's Report includes the Resource Management Act 1991 (RMA), Local Government Act 2002 (LGA), Land Transport Management Act 2003 (LTMA) and Climate Change Response Act 2002 (CCRA). The RMA is the centrepiece of the current RM system and deals with the management of natural resources in the natural and built environment. The RM system is implemented by central government which administers the overarching legislation, provides national direction, and national policy statements. Local authorities (regional councils and territorial authorities) prepare plans, implement national directions, make infrastructure investment funding and provision decisions, and administer the resource allocation and consenting system. The Environment Court and Commissioners provide a dispute resolution and plan revision process.

The Panel did not carry out detailed design of all the proposed interventions and has not fully analysed all of the effects on parties. The detailed design drafts of policy will follow in analysis and advice for Ministers prepared by Ministry for the Environment (MfE).

MfE would now like to understand the marginal costs and benefits of moving from the status quo RM system to a RM system resulting from the Panel's proposals. Castalia has been appointed by MfE to analyse the marginal costs and potential benefits of the Panel's proposals.

In early 2021, MfE developed a modified RM reform scenario (called the 'Panel Plus' scenario) and modelled its process costs using the Castalia RM Process Cost Model. The Panel Plus scenario builds on the Panel's recommendations, which modifies several assumptions we use to build the process costs in the body of this report. MfE requested Castalia to peer review their modelling of the Panel Plus scenario. Castalia confirms that MfE's modelling accurately reflects the assumptions used to represent the Panel Plus scenario. The results of this modelling are presented in Appendix A.

## Process costs resulting from the Panel's proposals are expected to increase

The Panel's proposals will increase the process costs of the system by an estimated 10 percent (this is based on PV and includes establishment costs). This assumes that all proposed changes are implemented as recommended, based on MfE estimates, current reported RM system costs and reported staffing levels. The following table summarises the process cost changes.

Measure	Costs (per annum)	Costs (present value)
Current RM system	\$1,219,100,000	\$19,479,700,000
Panel's RM system establishment costs	NA	\$812,700,000
Panel's RM system new ongoing costs	\$281,200,000	\$4,487,900,000
Panel's RM system cost savings	-\$205,700,000	-\$3,242,200,000
Total net increase in costs (including establishment costs)	-	\$2,058,400,000
Total net increase in costs (excluding establishment costs)	\$75,500,000	\$1,245,700,000

#### Table E.1: Process costs of current RM system and the Panel's proposals

## Uncertain whether the Panel's proposals will improve outcomes

Overall, we cannot say with certainty whether the Panel's proposals will improve outcomes. Further work will be required to transform the proposals into more specific policies and interventions. Further analysis may then reveal whether the Panel's proposals will lead to improved outcomes. The proposed changes are high-level recommendations, with much of the policy detail yet to be worked through. Our qualitative analysis of the Panel's proposals to elevate decision making to regional consensus-based entities has identified risks of increased errors of commission and omission. However, changes to the resource allocation system, and improvements to system performance and oversight is expected to drive positive outcomes.

Our framework, and findings highlight issues that policymakers could focus on to ensure the final design of the proposed RM reforms deliver the improved outcomes sought. In any case, the changes will be better evaluated once detailed policy work is carried out on the Panel's high-level recommendations.

#### Framework for analysing process costs and outcomes

In order to assess the marginal costs and benefits of the Panel's proposals we have developed a framework of analysis for this complex system.

#### Regulatory systems have direct process costs and indirect outcome benefits

The regulatory system for resource management imposes process costs. This is like any regulatory system. Government must administer the system and users face costs of compliance. However, well-designed regulatory systems improve wellbeing outcomes, relative to no regulation (or poorly performing regulation). Wellbeing is enhanced where the regulatory system improves upon the allocation, use, protection, and enjoyment of resources compared to doing nothing.

The outcome benefits from a well-functioning RM system are indirect: externalities may be internalised, over-exploitation of natural resources may be minimised, ecosystems may be preserved, and public goods (such as air quality) may be enhanced. Other indirect benefits may

emerge as time inconsistency problems are corrected. For example, people may have a tendency to undervalue future gains arising from environmental protection compared to present or near-term gains from using resources. Furthermore, the New Zealand RM system aims to be sustainable across generations which requires care in valuing the future impacts of resource use decisions made today.

## The key question is whether the changes to the regulatory system generate outcomes that exceed the process costs

This report analyses the change in costs of administering and complying with the Panel's proposed system, compared to the status quo. Estimating the indirect benefits (outcomes) of the Panel's proposals is difficult due to the high level of the Panel's recommendations and a lack of relevant data concerning environmental and economic effects of the RM system. Therefore, we rely on qualitative assessment of indirect benefits and costs only. MfE will undertake further work to quantify key benefits once the preferred system design is completed.

We estimate the regulatory system process costs from central and local government budget information, and from assumed user costs. It is more challenging to measure the benefits of an improved regulatory system accurately, if at all. Benefits arise from avoided opportunity costs, improved environmental outcomes, increased housing supply and improved affordability, and more responsive infrastructure provision. Many desirable environmental values are not traded, and it is difficult to isolate the contribution of regulation to outcomes. Therefore, a qualitative assessment is necessary.

Our analysis follows these steps:

- We classify the key functions of the RM system
- We quantify the process costs of the current RM system
- We quantify the change in process costs from the proposed Panel's RM system
- We evaluate the likelihood that the Panel's proposed RM system will result in better outcomes (indirect benefits). We do this by:
  - Qualitatively analysing the scale of the problems with the current system with reference to available evidence, and
  - Assessing the likelihood that the Panel's proposed changes to the RM system will reduce errors and therefore improve outcomes

#### The four key functions of the RM system

We have grouped the key functions of the RM system to evaluate the costs and benefits of change. The current RM system is complex and wide-reaching. It encompasses a significant number of laws, regulations, norms, and other interventions. It is administered by a corresponding wide range of institutions, as well as private parties. The Panel's proposed RM system is also complex, but broadly follows the same key functions.

The four separate functions of the RM system for the purpose of our analysis are:

- Objective-setting function
- Institutional design and rule-making function

- Resource allocation function
- Regulatory support function.

The Panel's proposals for the RM system (across 16 chapters) fall into the four categories as follows:



We measure the change in process costs by estimating the direct process costs of the existing system. We reviewed the changes proposed by the RM panel and estimate the additional process costs of the Panel's proposed system. The additional process costs of the Panel's proposed system are calculated as the sum of the following:

- Estimated one-off establishment process costs for the Panel's proposed RM system
  - Estimated additional ongoing process costs of the Panel's proposed RM system
- Estimated process cost savings generated by the Panel's proposed RM system subtracted from the establishment and ongoing costs.

#### The process costs of the current RM system are \$1.2 billion per annum

The resource consent system drives a significant proportion of process costs in the current system which are shared between applicants and local government. Local government also generates a significant share of process costs by implementing national directions and developing and implementing regional and local plans.

The following table sets out the process costs of the current RM system:

RM system function	Party affected	Cost category	Average annual cost increase	PV (2021)
Objective-setting:	Central government	Administrative	\$9,200,000	\$148,500,000
RMA amendments and national direction	Local government	Administrative	\$23,400,000	\$375,300,000
	Users	Compliance	\$600,000	\$10,800,000
Institutional and rule-	Central government	Administrative	\$0	\$0
setting: Regional and local plan-	Local government	Administrative	\$111,900,000	\$1,788,500,000
making and changes	Users	Compliance	\$18,200,000	\$292,000,000
Resource allocation:	Central government	Administrative	\$8,500,000	\$135,800,000
Consenting system and dispute resolution system	Local government	Administrative	\$144,300,000	\$2,305,600,000
	Users	Compliance	\$545,000,000	\$8,709,200,000
Regulatory support:	Central government	Administrative	\$0	\$0
Monitoring and oversight	Local government	Administrative	\$121,800,000	\$1,946,100,000
	Users	Compliance	\$235,800,000	\$3,767,500,000
Total costs <sup>1</sup>			\$1,219,100,000	\$19,479,700,000

#### Table E.2: Process costs of the current RM system

#### Net additional process costs (including establishment costs) of the Panel's proposed RM system are \$2.0 billion

The process costs of the Panel's proposed RM system include one-off establishment costs and the ongoing costs of administration and compliance by central government, local government, and users.

The Panel's proposed RM system will create one off establishment costs as well as additional ongoing costs. The proposals will also result in cost savings to users and local government due to an improved consenting system, and clearer objective setting which we expect will reduce consent volumes. We have subtracted cost savings from the cost increases to arrive at the net cost increase.

#### The Panel's proposed RM system will have one-off establishment process costs of \$813 million

Most of the establishment costs result from the new combined plans and spatial strategies. These costs fall mostly on local government. One-off establishment process costs are set out in the table below:

<sup>&</sup>lt;sup>1</sup> Numbers used in tables may not sum to totals due to rounding.

-			
RM system function	Party affected	Cost category	Cost (present value)
Objective-setting	Central government	Administrative	\$135,600,000
	Local government	Administrative	\$155,900,000
	Users	Compliance	\$6,600,000
Institutional and rule-setting	Central government	Administrative	\$59,400,000
	Local government	Administrative	\$179,000,000
	Users	Compliance	\$19,900,000
Resource allocation	Central government	Administrative	\$95,200,000
	Local government	Administrative	\$0
	Users	Compliance	\$0
Regulatory support	Central government	Administrative	\$86,400,000
	Local government	Administrative	\$74,300,000
	Users	Compliance	\$0
Total costs			\$812,700,000

#### Table E.3: Establishment process costs for the Panel's proposed RM system

## The Panel's proposed RM system will have ongoing additional process costs of \$281 million per annum and cost savings of \$206 million per annum

The ongoing process costs will largely be driven by the cost to local government of implementing national directions and local government and user costs of administering and complying with the new allocation regimes. The costs, separated by function, are set out in the table below:

Table E.4: Additional	ongoing	process	costs of	f the	Panel's	proposed	<b>RM system</b>

	RM system function	Party affected	Cost category	Average annual cost increase	PV (2021)
	Objective-setting	Central government	Administrative	\$4,900,000	\$80,200,000
		Local government	Administrative	\$15,700,000	\$258,200,000
		Users	Compliance	\$900,000	\$15,800,000
	Institutional and rule-	Central government	Administrative	\$7,000,000	\$110,700,000
	setting	Local government	Administrative	\$13,800,000	\$176,100,000
		Users	Compliance	\$2,800,000	\$30,700,000
	Resource allocation	Central government	Administrative	\$4,800,000	\$78,500,000
		Local government	Administrative	\$40,500,000	\$664,000,000
		Users	Compliance	\$58,700,000	\$961,300,000
	Regulatory support	Central government	Administrative	\$14,300,000	\$211,800,000

RM system function	Party affected	Cost category	Average annual cost increase	PV (2021)
	Local government	Administrative	\$77,800,000	\$1,251,600,000
	Users	Compliance	\$39,600,000	\$648,300,000
Total costs			\$281,200,000	\$4,487,900,000

The Panel's proposed system will result in some cost savings which are set out in the table below:

	5			
RM system function	Party affected	Cost category	Average annual cost saving	PV (2021)
Objective-	Central government	Administrative	-\$1,700,000	-\$27,900,000
setting	Local government	Administrative	-\$29,800,000	-\$487,700,000
	Users	Compliance	-\$110,100,000	-\$1,801,700,000
Institutional and	Central government	Administrative	\$0	\$0
rule-setting	Local government	Administrative	\$0.	\$0
	Users	Compliance	\$0	\$0
Resource allocation:	Central government	Administrative	\$0	\$0
	Local government	Administrative	\$0	\$0
	Users	Compliance	\$0	\$0
Regulatory	Central government	Administrative	\$0	\$0
support:	Local government	Administrative	-\$14,500,000	-\$208,100,000
	Users	Compliance	-\$49,800,000	-\$717,000,000
Total costs	$\bigcirc$		-\$205,700,000	-\$3,242,200,000

#### Table E.5: Process cost savings from Panel's proposed RM system

## Process cost estimates for the Panel's proposals are sensitive to key assumptions

Our estimates of the change in process costs under the Panel's proposals are sensitive to assumptions. For each of the largest cost components of the establishment costs, ongoing costs and the cost savings, we tested our assumptions for the base case. The resulting sensitivity analysis is set out below.

The sensitivity analysis had the following impacts on the following process costs:

 Establishment costs – for the four largest establishment costs, it created a range of \$478.5 million PV in the low case, and \$1.1 billion PV in the high case

- **Ongoing costs** for the four largest ongoing per annum costs, it created a range of \$66.4 million in the low case, and \$217.6 million in the high case
- Cost savings for the two largest per annum cost savings, it created a range of -\$212.1 million in the high savings case, and -\$78.0 million in the low savings case.



#### Figure 0.2: The largest cost estimates are sensitive to assumptions

## The Panel Plus scenario may reduce central government and local government costs, and increase users cost savings

The Panel Plus scenario developed by MfE results in lower process costs than the Castalia base case scenario in all process cost and cost saving categories. The Panel Plus scenario results in overall net cost savings of \$84.7 million per annum relative to the status quo. For reference, the Castalia base case resulted in an overall net cost increase of \$75.5 million per annum relative to the status quo.

Relative to the Castalia base case, the Panel Plus scenario:

- reduces total establishment costs by \$181.3 million (PV)
- reduces total ongoing costs by \$95.9 million per annum
- increases users net cost savings by an additional \$90.1 million per annum.

We have not assessed the indirect impacts, including benefits, of the Panel Plus scenario and our review does not assess whether the outcomes of policy changes justify the costs.

## Our framework for outcome improvements analyses likelihood of regulatory errors

We developed a qualitative framework to assess the outcome improvements of the Panel's proposals. This is because outcomes from the redesigned regulatory system are difficult to quantify. Our assessment framework follows three steps:

- Assess the economic significance of the current problems: grouped under the four functions, we assess the economic significance of problems resulting from the the current RM system. We rely on the Panel's evidence and other published sources of evidence of costs provided by MfE and government inquiries. We score the contribution from 1 (low contribution to negative outcomes) to 5 (high contribution to negative outcomes)
- Assess probability of incorrect decisions from the Panel's proposed RM system change: we then review the Panel's major proposals. We assess the probability that the proposals reduce incorrect decisions (errors of commission and errors of omission) relative to the status quo. We score the changes from 1 (errors unlikely) to 3 (errors likely). We use a range of criteria to assess whether the Panel's proposed changes will result in fewer regulatory errors. We adopted principles from the Government's *Expectations for Good Regulatory Practice*<sup>2</sup> and the Productivity Commission's *Principles for Allocating Regulatory Roles*<sup>3</sup> as well as applying Castalia's framework to assess regulatory impact used in previous mandates for Treasury, MfE and Ministry of Business, Innovation and Employment
- Compare the contribution to outcomes against the probability of error: we assess a combined score of the changes (from 0 to 15). A low score indicates that the Panel's proposed change is likely to have a positive outcome. A high score indicates that more policy design attention is needed for the intervention to avoid incorrect decisions.

## Results of our analysis suggest most outcomes are likely to remain unchanged as a result of the Panel's proposals

Our analysis suggests there will be some improved outcomes to the RM system, particularly for resource allocation and in administrative effectiveness. However, most of the major changes are unlikely to improve outcomes as currently proposed. Further policy work on system design and implementation is likely to impact this. For the changes where heavy reliance on information is needed in advance for proposed high-level rule-making (for instance, mandatory environmental limits and climate change proposals) regulatory errors are more likely. Figure 0.3 below sets out the results of the analysis.

<sup>&</sup>lt;sup>2</sup> Treasury (2017), Government's Expectations for Good Regulatory Practice, <u>https://www.treasury.govt.nz/sites/default/files/2015-09/good-reg-practice.pdf</u>

<sup>&</sup>lt;sup>3</sup> Productivity Commission (2013), Towards Better Local Regulation, <u>https://www.productivity.govt.nz/inquiries/towards-better-local-regulation/</u>



#### Figure 0.3: Qualitative assessment of outcomes of Panel's proposed changes to RM system

#### Potential outcome improvements may outweigh the process costs of regulatory change

It is difficult to determine whether the outcome improvements (indirect benefits) outweigh the process costs associated with the Panel's proposals. There are some benefits to the resource allocation framework that our framework suggests will lead to outcome improvements. On the other hand, more policy work appears to be needed for the detailed design of other aspects. In particular, changes that elevate rule-making to a higher level of government will require careful design to ensure balance between priorities. For instance, policy design work is needed to ensure that the balance between making regulatory decisions at the level of the relevant community of interest and the need for standardisation of rules and coordination between levels of government has been struck.

## **1** Introduction and analytical approach

The New Zealand resource management system (RM system) is being reformed. The Panel's Report contains 16 chapters of discussion and recommendations for RM system reform. The reform proposals cover the principles and objectives for resource management, reform of the institutions and rule setting, suggestions for reform of resource allocation mechanisms, and changes to improve the administrative effectiveness of the RM system.

This report analyses the marginal additional process costs (direct costs) of the Panel's proposals for the RM system, compared to the current RM system. It also qualitatively evaluates the outcomes (indirect benefits and costs) of the Panel's proposed RM system and identifies implications for future policy. MfE will use this report to refine the Panel's recommendations, and inform broader RM reform policy.

The Panel's proposed RM reforms are complex, and encompass a wide range of different laws, regulations, institutions, norms and regulatory systems. The complexity of the RM system, and the high-level nature of the Panel's proposals means that we have had to tailor an analytical framework for our approach. This is set out in section 1.1 below.

The Panel's proposals also cover a range of different functions in the regulatory system. The changes do not always replace a current regulatory intervention with a corresponding one. In many cases, fundamental reform and a reallocation of regulatory tasks is recommended. Therefore, we have grouped the current system and the Panel's proposed changes into four key functions. This approach is set out in section 1.2.

#### 1.1 Framework for analysing process costs and outcomes

In order to assess the marginal process costs and potential outcomes we have developed a framework of analysis for this complex system.

#### Regulatory systems have direct process costs and indirect outcome benefits

The regulatory system for resource management imposes process costs. This is like any regulatory system. Government must administer the system and users face costs of compliance. However, well-designed regulatory systems improve wellbeing outcomes, relative to no regulation (or poorly performing regulation). Wellbeing is enhanced where the regulatory system improves upon the allocation, use, protection, and enjoyment of resources compared to doing nothing.

The outcome benefits from a well-functioning RM system are indirect: externalities may be internalised, over-exploitation of natural resources may be minimised, ecosystems may be preserved, and public goods (such as air quality) may be enhanced. Other indirect benefits may emerge as environmental outcomes, which are difficult to value, are protected. Furthermore, the New Zealand RM system aims to be sustainable across generations which requires care in valuing the future impacts of resource use decisions made today.

## The key question is whether the changes to the regulatory system generate outcomes that exceed the process costs

This report analyses whether the Panel's proposed changes to the RM system are likely to improve outcomes, compared to the change in costs of administering and complying with the

system. This will help inform whether the proposed costs are justified in light of the benefits of change, and where further policy design work is needed.

*Current RM system costs are estimated from publicly reported sources and assumptions about user costs* The regulatory system's process costs can be estimated from central and local government budget information, and from assumed user costs. We first have to calculate the current system process costs. We do this with reference to government budget data on MfE's costs, local government's RM system administrative staff, consultancy budgets, Environment Court administrative costs and assumptions about the costs that users face in interacting with the RM system.

### The Panel's proposed RM system costs are estimated from judgements on the marginal change, MfE budget bid information and analysis of local government activities

In order to calculate the change in process costs, we analyse the marginal new process costs arising from the Panel's proposals. We do this by making judgements about the marginal change in activity required by central and local government. We also use MfE 2021 government Budget bid information to estimate costs. We also analyse current local government activities and make judgements about the marginal change. For user costs we estimate the change based on current user costs.

### Outcomes (indirect costs and benefits) of the Panel's proposed RM system are challenging to quantify in estimates

The benefits of an improved regulatory system, on the other hand, are impossible to accurately measure. Benefits arise from avoided opportunity costs, improved environmental outcomes, increased housing supply and improved affordability, and more responsive infrastructure provision. Many desirable environmental values are not traded, and it is difficult to isolate the contribution of regulation to outcomes. Therefore, a qualitative assessment is necessary.

#### **1.2** The four functions of the RM system

We organise all features of the RM system under four significant functions to evaluate the costs and benefits of change throughout this report. This enables us to analyse the functions separately, while grouping changes together according to functions.

The current RM system is complex and wide-reaching. It encompasses a significant number of laws, regulations, norms, and other interventions. It is administered by a corresponding wide range of institutions, as well as private parties. Despite its wide scope and complexity, all features of the current and Panel's proposed RM system can fall into one of the following four functions:

- Objective-setting function
- Institutional design and rule-making function
- Resource allocation function
- Regulatory support function.

#### **Objective-setting function**

The objective-setting function of the RM system is the way in which the high-level values of the system are determined. The objective-setting function defines the boundaries of the

regulatory framework. It provides decision-makers in the regulatory system with guidance on how to make the trade-offs inherent in RM decisions.

#### Institutional design and rule-making function

This function describes the delegated authority to make detailed regulatory rules for resource management. It involves the creation and operation of institutions to make and administer rules. This includes the function of local government plan-making, the detailed preparation of rules for the use of resources within the legislative framework and objectives.

#### Resource allocation function

The resource allocation function applies to the legislative framework and the institutions that carry out the decisions on resource use. In some cases, explicit rules allocate resources. Where rules are not explicit, allocation decisions are needed on a case-by-case basis. The resource consenting system is currently the primary way that case-by-case allocation decisions are made. In some cases, institutions exist that allocate resources via price or quota and trading systems (for example, the Lake Taupo nitrogen trading system). Where disputes arise over allocation decisions, the resource allocation function has an arbitration function. In the current system, this arbitration function is carried out through the judiciary, hearings panels, and commissioners. Note that separate reform processes are underway for water allocation, including Māori rights and interests in freshwater.

#### Regulatory support function

The RM system requires ongoing regulatory support. Compliance, monitoring, and enforcement support the rule-making function, as well as supporting the integrity of the resource allocation function. Compliance, monitoring and enforcement is mostly carried out by local government. The government also provides public good information gathering, research and publication of evidence, as well as ex-post analysis and evaluation.

#### 1.3 Report outline

This report is structured as follows:

- We identify the current RM system approach and quantify its process costs (section 2)
- We identify the specific and material changes to the RM system that will result from the Panel's proposals (section 3)
- We quantify the change (increase) in process costs from the Panel's proposals, and carry out sensitivity analysis on key cost drivers (section 4)
  - We evaluate the likelihood that the Panel's proposals will result in better outcomes (section 5). We do this by:
    - Qualitatively analysing the scale of the problems with the current RM system with reference to available evidence
  - Assessing the likelihood that the Panel's proposals will reduce errors and improve outcomes
  - Finally, we compare any predicted improvements in outcomes with the change in process costs.

# 2 Current RM system and its process costs

In this section we explain how the RM system manages resources across the system's four functions. We identify the current process costs and outline how these costs are distributed across central government, local government, and users. The outcomes (indirect costs and benefits) of the current RM system are addressed in section 5.

#### 2.1 How the current RM system manages resources

The RM system has a wide scope and many interdependencies with related legislation and institutions. The Resource Management Act 1991 (RMA) is the centre piece of New Zealand's RM system. It plays a role across all resource allocation issues. It works alongside statutes governing specific domains (for example, the Local Government Act 2002 and Land Transport Management Act 2003).

The primary purpose of the RMA is to promote the sustainable management of New Zealand's natural and physical resources (section 5(1) of the RMA). The RMA assigns different roles and responsibilities to Central and Local Government. The RMA also sets the high-level framework for the allocation of resource use entitlements among conflicting uses, which then are allocated via subsidiary mechanisms (plans, consent processes and judicial interpretation).

#### Objective-setting function in Part II of the RMA and through national direction

Central government (MfE, informed by the Minister for the Environment) administers the RMA, provides national direction, and responds to national priorities relating to the management of the environment and environmental issues.

The current objective-setting function is headed by section 5 of the RMA. This sets out the purpose—sustainable management of natural and physical resources. Other sections in Part 2 of the RMA outline a hierarchy of values and objectives. Part 2 of the RMA is also periodically amended as the balance of objectives changes.

National directions are an additional objective-setting tool made by central government, setting out a policy hierarchy to guide decision-making. National direction is the highest level of direction and includes national environment standards (NES) and national policy standards (NPS). These are usually prepared by MfE and promulgated by the Minister for the Environment. All sub-national plans must align with these national directions.

*Institutional and rule-making function is mostly carried out by regional councils and territorial authorities* In the current system regional councils and territorial authorities makes and implements plans. Plans contain the rules for resource use across all natural resource domains, and for the urban environment.

Regional councils define resource management issues, and policies and methods to manage natural and physical resources within their region. Regional Councils pass Regional Policy Statements (RPSs) that local authorities must give effect to in regional and district plans.

Regional Councils can also pass Regional Plans (optional, except for coastal plans) that give effect to NPSs, national planning standards and RPSs. They must not be inconsistent with water conservation orders. Regional plans can cover soil conservation, land uses that affect

water quality and quantity, aquatic ecosystems, biodiversity, discharge of contaminants, taking, damming and diverting water, and allocation of natural resources.

Territorial authorities (city or district councils) must prepare a district plan for its district to achieve sustainable management. It must give effect to national policy statements and regional policy statements and must not be inconsistent with regional plans and any applicable water conservation orders. District plans cover issues related to the functions of territorial authorities, including the effects of land use and the control of impacts from activities on biodiversity, rivers, and lakes.

## Regional councils, territorial authorities, judiciary, and quasi-judicial bodies provide most resource allocation functions

Councils primarily make resource allocation decisions under the consenting regime. Regional councils make consent decisions on some land use matters, freshwater, coastal areas, and discharge to land, water, and air matters. Territorial authorities are primarily responsible for making resource consent decisions on land use, Importantly, territorial authorities make urban land use resource consenting decisions.

Examples of how the RM system allocated resources include direct allocation of existing collective resources such as water, direct allocation of development potential of private land and resources through different zoning designations, or by setting standards and limits to restrain certain types of activity to reduce negative externalities on the surrounding environment.

Disputes regarding councils' consenting decisions are heard by the Environment Court. This is a specialist court established under the RMA with similar powers as the District Court. The Environment Court will also hear appeals on proposed district and regional plans, designations, heritage orders, and water conservation orders.

A range of quasi-judicial bodies also play a resource allocation function. Applicants or submitters to a notified resource consent application can request that the application is decided by an Independent Commissioner or Commissioners (RMA section 100A). Applicants can also appeal consent application decisions to Independent Commissioners.<sup>4</sup> Parties to disagreements can also agree to mediation processes.

*Regulatory support functions are spread across local government and the Ministry for the Environment* Monitoring and enforcement of RM system rules (either set through primary legislation, regulations, plans, or consenting conditions) is a critical regulatory support function. This is primarily the responsibility of regional councils and territorial authorities.

MfE and other bodies such as the Parliamentary Commissioner for the Environment play a role in monitoring environmental indicators to help inform RM decision making and objective setting.

<sup>&</sup>lt;sup>4</sup> See further: <u>https://qualityplanning.org.nz/node/680#:~:text=that%20the%20commissioners%20have%20the,to%20hear%20and%20make</u> %20recommendations

## 2.2 Process costs of the current RM system are estimated to be \$1.2 billion per annum

The RM system has process costs, like all regulatory systems. Process costs come in two forms: administrative costs of those running the regulatory system (central and local government), and compliance costs for RM users. We estimate that the current process costs amount to \$1.2 billion per annum. Using publicly available information, we quantified the process costs of the RM system in Table 2.1 below.<sup>5</sup>

RM system function	Party affected	Cost category	Annual cost	PV (2021)	
Objective-setting:	Central government	Administrative	\$9,200,000	\$148,500,000	
RMA amendments and national direction	Local government	Administrative	\$23,400,000	\$375,300,000	
	Users	Compliance	\$600,000	\$10,800,000	
Institutional and rule-	Central government	Administrative	\$0	\$0	
setting: Regional and local plan-	Local government	Administrative	\$111,900,000	\$1,788,500,000	
making and changes	Users	Compliance	\$18,200,000	\$292,000,000	
Resource allocation: Consenting system and dispute resolution system	Central government	Administrative	\$8,500,000	\$135,800,000	
	Local government	Administrative	\$144,300,000	\$2,305,600,000	
	Users	Compliance	\$545,000,000	\$8,709,200,000	
Regulatory support:	Central government	Administrative	\$0	\$0	
Monitoring and oversight	Local government	Administrative	\$121,800,000	\$1,946,100,000	
	Users	Compliance	\$235,800,000	\$3,767,500,000	
Total costs			\$1,219,100,000	\$19,479,700,000	

#### Table 2.1: Process costs of the current RM system

#### 2.2.1 Objective-setting function costs an estimated \$33.2 million per annum

The objective setting function involves the ongoing cost of amending the RMA and continuously developing national directions. The highest costs are associated with developing and implementing national direction. Table 2.2 shows each cost component within this function, including annual cost, present value, and the calculation methodology.

<sup>&</sup>lt;sup>5</sup> We used a discount rate of 5 percent, in line with the New Zealand Treasury's guidance for social cost benefit analysis. See <u>https://www.treasury.govt.nz/information-and-services/state-sector-leadership/guidance/financial-reporting-policies-and-guidance/discount-rates</u>

Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
National direction setting and	Central Government	Administrative – Developing national directions	\$4.0 million	\$64.1 million	Cost = average number of ND developed per year * average ND development cost
implementation					We assume 2.26 ND are in development each year, based on assumptions that 1.13 new ND are released per year, and it takes 2 years to develop a single ND
					Average development cost of 1 ND per year is \$1,775,000 (NPS-FM and NPS-UDC costs)
	Central Government	Administrative – Implementing national directions	\$3.9 million	\$63.1 million	Cost = average number of ND implemented per year * average ND implementation cost
					Based on the NPS-FM and NPS-UDC, implementation occurs over 4 years, with an average cost of \$875,000 p.a.
				2	Given 1.13 new ND are developed per year, and implementation per ND takes 4 years, there are 4.42 ND being implemented in an average year
	Local Government	cal Administrative – wernment Implementing national directions	- \$23.1 million ons	\$23.1 \$369.4 million million	Cost = total local government planning cost * proportion of cost spent on national direction
		at a local level			Total local government planning cost is determined from NMS FTE data, plus 100% reflecting the cost of consultants and other specialists
		$\sim$			National direction is assumed to cost 17% of planning costs based on relative costs of different local government planning functions
					provided by MfE
	Local Government	Administrative – Submitting on	\$0.2 million	\$3.6 million	Cost = submissions * cost per submission
208		proposed national directions			Assume 35 submissions per ND (which is the average council submissions from the NPS Freshwater and NPS-UD), and 1.13 ND developed per year
					Each submission costs \$5,760 to produce assuming it takes 80 hours per submission at a labour cost to councils of \$72 per hour (including overheads)
	Users	Administrative – Submitting on	\$0.6 million	\$9.5 million	Cost = cost of large submissions + cost of small submissions
		proposed national directions			Assume 22 large submissions (average from NPS Freshwater and NPS-UD submission results) at a cost

#### Table 2.2: Objective-setting function status quo costs

					Assume 391 smaller submissions (average from NPS Freshwater and NPS-UD submission results) which cost \$225 each (10 hours per submissions * average wage of \$22.5)
Amendments to the RMA and	Central Government	Administrative – Policy advice,	\$1.3 million	\$21.3 million	Cost = costs of previous RMA amendments
special purpose legislation		Ministerial consultation, drafting, and Parliamentary process			\$4 million over two years has been appropriated to fund the current RMA review. Cost has been spread over three years reflecting trends in Vote Environment
	Local Government	Administrative – Submitting on amendments	\$0.1 million	\$2.3 million	Immaterial
	Users	Administrative – Submitting on amendments	\$0.08 million	\$1.3 million	Immaterial

## 2.2.2 Institutional and rule-setting function costs an estimated \$130.1 million per annum

Local government costs in developing, implementing, and then reviewing regional and local plans are the largest drivers of institutional and rule-setting function costs. Advocacy efforts of large organisations to influence the planning system also generate significant process costs. Table 2.3 shows each cost component within this function, including annual cost, present value, and the calculation methodology.

Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
Regional and Local local plan making and implementation	Administrative – Developing, consulting, and implementing regional	\$90.2 million	0.2 \$1.4 llion billion	Cost = total local government planning cost * proportion of co spent on plan development, consultation, and implementatic	
	and local plans			Total local government planning cost is determined from NMS FT data, plus 100% reflecting the co of consultants and other speciali	
					We assume developing and implementing plans costs 67% o planning costs based on relative costs of different local governm planning functions provided by l
	Local Government	Administrative – Reviewing plans	\$17.1 million	\$273.8 million	Cost = total local government planning cost * proportion of co spent on plan development, consultation, and implementatio
					Total local government planning cost is determined from NMS F

					data, plus 100% reflecting the cost of consultants and other specialists
					We assume reviewing plans costs 13% of planning costs based on relative costs of different local government planning functions provided by ME
	Users	Compliance – Advocacy relating to RM system plans	\$8.2 million	\$130.8 million	provided by MfE Cost = plans * (number of advocating businesses * cost per business) We assume there are 78 plans as possible subjects of advocacy. We also assume that each plan has on average 3 advocates. This average recognises that complex plans will engage several advocacy interests, while many district plans around the country will have no interest from large organisations NZIER 2020 estimate advocacy on RM plans costs businesses
Users	Users	Administrative – Submitting and	\$2.1 million	\$33.3 million	\$350,000 per year Cost = 78 plans * (cost of large submitters + cost of smaller scale
		making processes	~		We assume on average 10 submitters submit per plan at a cost of \$20,000 each, and 300 smaller scale submitters submit per plan at a cost of \$225 each (representing 10 hours at the average wage of \$22.5 per hour)
					Average number of submitters based on an analysis of submissions received for various planning processes since 2007
	$\hat{\mathbf{G}}$				Total cost is smoothed over 10 years reflecting that plans must be reviewed within ten years
Private plan changes	Local Government	Administrative – Responding to private plan change	\$4.6 million	\$73.9 million	Cost = total local government planning cost * proportion of cost spent on private plan changes
$2^{\circ}$		applications			Total local government planning cost is determined from NMS FTE data, plus 100% reflecting the cost of consultants and other specialists
					We assume private plan change costs 3% of planning costs based on relative costs of different local government planning functions provided by MfE
	Users	Compliance – Submitting private plan change applications	\$8.0 million	\$127.8 million	Cost = number of private plan changes per year * applicant cost per plan change

10 private plan changes are completed per year (NMS trend from 2015-2019)

\$800,000 cost to applicant per private plan change (MfE 2020)

## 2.2.3 Resource allocation function costs an estimated \$697.8 million per annum

User costs of applying for resource consents (which span application fees, consultant and specialist advice fees, and applicants own time) is the single largest cost category across the entire RM system at \$497.2 million per annum. The local government cost of processing consents is the other significant driver of costs within the resource allocation function at \$144.3 million per annum.

Local government cost represents only a third of users' total resource consent costs. This difference is driven by the cost recovered nature of the consenting system. Application fees paid by users meets some of local government processing costs. Therefore, not only are users meeting their own costs, but a proportion of local government cost as well. The other notable driver of process costs within the resource allocation function relate to Environment Court litigation costs. Table 2.4 shows each cost component within this function, including annual cost, present value, and the calculation methodology.

Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
Resource Consenting	Local Government	Administrative – Processing consents	\$144.3 million	\$2.3 billion	Cost = total local government FTE working on resource consenting * yearly cost per FTE
	6				NMS data between 2014/15 and 2018/19 shows fluctuating FTE working on resource consenting, but no obvious uptrend. Therefore, we have taken an average FTE of count of 962
					We total cost (including overheads) of one local government FTE is \$150,000 per year
80					Note we did not include the cost of consultants and specialists in this calculation. We assume this cost is met by the application fees paid by applicants
-	Users	Compliance – Applying for resource consents	\$497.2 million	\$7.9 billion	Cost = number of consent applications * (application costs + consultant fees + user time per application)
					Using an LEGC (2007) report, we determined costs (spanning consultant fees and user time) per applicant according to consent type. We then calculated the

#### Table 2.4: Resource allocation function status quo costs

					average number of consents per type according to NMS data from 2014/15 to 2018/19. Next, we applied the costs from the LEGC paper (adjusted to 2021 NZD) to NMS averages. Finally, we inflated the costs of 4% of consents based on NMS data indicating that notified consents represent 4% of all consents
	Users	Compliance – Submitting on notified consent applications	\$2.9 million	\$46.0 million	Cost = number of notified consents * submitter time cost per consent There were 1439 notified consents on average between 2014/15 and 2018/19 according to NMS data
					Assume that for each consent, submitters spend a total of 40 hours submitting at an hourly cost of \$50 (this cost reflects that some submitters will spend more time and effort in their submissions)
Environment Court hearings and appeals	Central Government	Administrative – Operating the Environment Court	\$8.5 million	\$135.8 million	We assume that operating costs will reflect current costs of operating the Court. The 2017 Annual Report of the Environment Court indicates per annum operating costs of \$8.5 million
	Users	Compliance – Litigation costs of applicants and respondents	\$45.0 million	\$719.0 million	Cost = cases per year * litigation costs of applicants and respondents 2017 Annual Report of the Environment Court records 450 cases heard by the court in 2016/17 MfE (2020) assumes that applicant and respondent litigation costs total \$100,000 per case

#### 2.2.4 Regulatory support function costs an estimated \$357.6 million per annum

The monitoring and enforcement system accounts for most of the regulatory support costs. User costs of responding to government monitoring requirements constitutes the largest single cost category at \$198.0 million per annum. Local government cost of monitoring and enforcement is half that again, at \$90.3 million per annum.

Comparatively, the cost of prosecuting non-compliance is significantly smaller – although on an individual basis, respondent's prosecution defence costs are considerable. Local government prosecution costs are \$31.5 million per annum, compared to users costs of \$37.8 million per annum.

Central government – through institutions such as the Parliamentary Commissioner for the Environment and MfE – also incurs regulatory support function costs through monitoring environmental data and other RM system oversight functions. However, due to a lack of clear publicly available data, we have not included these costs in this analysis. Table 2.5 shows each

cost component within this function, including annual cost, present value, and the calculation methodology.

Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
Monitoring and enforcement	Local Government	Administrative – Performing business- as-usual monitoring and enforcement of resource management requirements	\$90.3 million	\$1.4 billion	Cost = total local government FTE working on monitoring and enforcement issues * per annum FTE cost 2018/19 NMS data shows that local government FTE devoted to CME (Compliance, Monitoring, and Enforcement) totals 602. We assume per annum FTE cost (including wage and overheads) is \$150,000
	Users	Compliance – Complying with RM system requirements and responding to business-as-usual monitoring and enforcement activity	\$198.0 million	\$3.1 billion	Cost = existing consents * average time cost to ensure compliance with RM requirements NMS data indicates 220,000 new consents were issued between 2014/15 and 2018/19. This is an average increase of 55,000 consents per year. Assuming consents on average last for 15 years, this results in 825,000 consents existing at any single time
Prosecutions for non-compliance	Local Government	Administrative – Prosecuting non- compliant actors	\$31.5 million	\$503.3 million	Cost = average annual prosecutions * prosecution cost NMS data indicates that there are on average 90 RM system related prosecutions per year. According to MfE, local government incurs \$350,000 on average per prosecution
20	Users	Compliance – Defending against prosecution action	\$37.8 million	\$603.9 million	Cost = average annual prosecutions * legal fees and time costs to defend against prosecution NMS data indicates that there are on average 90 RM system related prosecutions per year. We added 20 percent to local government prosecution costs to arrive at an average cost of \$420,000 per defendant to prosecution action

#### Table 2.5: Regulatory support function status quo costs

## 2.3 Current RM system costs are incurred by central government, local government, and users

The costs of the current RM system are incurred by central government, local government, and users. Users incur the largest share of costs (around 65 percent) overall followed by local

government (around 34 percent). Central government incurs around 1 percent of total costs, mostly in the objective setting function.



Figure 2.1: Distribution of current RM system process costs

Users face the highest costs under the resource allocation and the regulatory support functions. Local government incurs costs across the institutional and rule-making function (for plans and implementation of plans), resource allocation function (processing and adjudicating consent applications) and regulatory support function (mostly for compliance monitoring and enforcement). Central government on the other hand faces low process costs. Central government's costs arise in the objective-setting function and in resource allocation function. Figure 2.2 sets out the distribution.

Castalia



Figure 2.2: Distribution of average current process costs per function (per annum)

# 3 Panel's proposed changes to the RM system

This section analyses the Panels proposals. We describe the materiality framework for determining which changes to the RM system will drive impacts on affected parties (section 3.1). We then identify the parties affected by the RM system changes (section 3.2). We then apply the materiality framework and identify the material changes proposed to the RM system with reference to affected groups of parties and according to each of the four functions (section 3.3).

#### 3.1 Materiality framework

In the following sections we catalogue all material changes the Panel proposed for the RM system, categorised by RM system function. We have applied a materiality threshold to exclude changes with low and negligible impact. Table 3.1 sets out the assessment guide for classifying materiality.

Table 3.1: Mate	riality framework
Assessment	Description
Negligible	The proposed change would require very little change to administrative or compliance processes on those implementing the change or affected by it, or would affect only a small number of people/organisations with limited flow-on effects
Low	The proposed change would impose a small administrative impact or compliance burden on those implementing the change or affected by it, or only affect a small number of people/organisations
Moderate	The proposed change would impose a moderate administrative or compliance impact on those implementing the change or affected by it, or affect a moderate number of people/organisations
High	The proposed change would have a significant administrative or compliance impact on those implementing the change or affected by it, or the change would affect many people/organisations

### 3.2 Parties affected by the RM system

The RM system and the resource allocation decisions made under it impact all members of society. However, the process costs fall on particular groups. We have categorised the parties affected by the RM system into four key groups. This is in-line with the Panel's commentary, and how public policy funding decisions for the RM system are made. The four groups are central government, local government, RM users, and Māori. We have not included analysis on the impacts on Māori in this report. MfE is working with Māori directly to understand the impacts of the RM reform on Māori interests.

#### Central government's process cost impacts

Central government encompasses a range of Ministries and institutions such as the Ministry for the Environment, the Parliamentary Commissioner for the Environment, Parliamentary

Council Office, Ministerial support staff, the Environment Court, and any other central government agency or department impacted by the RM system. Central Government bodies are principally funded from tax revenue and fees and charges.

Key impacts resulting from the proposals on this party include:

- Refining policy choices, consulting, drafting, and implementing new RM legislation
- Developing and implementing new national direction
- Resourcing the Environment Court
- Implementing the Environmental Monitoring System.

#### Local government process cost impacts

Local government spans all 78 local, regional, and unitary councils across New Zealand. Key impacts resulting from the proposals on this party include:

- Submitting and supporting the central government on new RM legislation
- Developing new plans (local, regional, combined, and spatial)
- Increased activity reflecting the improvement in compliance, monitoring, and enforcement mechanisms.

#### *RM users' process cost impacts*

RM users include any non-government party with a stake in the RM system. This includes those with direct interests such as consent and permit holders as well as Māori, and those with indirect interests in the RM system such as businesses and special interest groups, as well as people with an interest in planning decisions. Key impacts resulting from the proposals on RM users include:

- Submitting and advocating on national direction, plans, and new RM legislation
- Responding to local council review of existing permits and consents
- Increased litigation through the Environment Court and appeal processes.

#### 3.3 Proposed changes affect all RM system functions

The Panel's proposals for the RM system (across 16 chapters) will impact the four RM system functions as broadly characterised in Figure 3.1 below:

#### Figure 3.1: Panel's proposed changes to the RM system



The Panel's proposals—in sum—will drive the following key changes:

- Expand the amount of central and local government RM planning activity through the introduction of mandatory regional spatial strategies and combined regional plans
- Provide additional mechanisms for local government to control users through the use of economic instruments, as well as the ability to modify existing consents
- Introduce new bodies such as the national planning expert advisory group, National Māori Advisory Board, and the Joint Committee to coordinate RM functions between Māori, central government, and local government
- Expand resourcing for RM monitoring and enforcement functions, and the Environment Court
- Improve the IT infrastructure which services consents and intra-local government system links.

The changes will rebalance RM system functions toward objective setting and a higher-level of institutional rule making at a regional spatial level and through larger planning boundaries. The proposals intend to reduce the number of separate plans and reduce the role of consenting authorities. Compared to the current system which delegates a significant proportion of resource allocation questions to the consenting level, the proposed system will see more allocation questions predetermined by the planning system. This should help the RM system to maintain environmental bottom lines. Figure 3.2 illustrates the shift in emphasis of the system.



Changes are also intended to improve the regulatory support function of the RM system through additional funding for key functions such as the Environmental Monitoring System and improving the consenting IT infrastructure.

In the following we outline the changes according to each key function of the RM system and describe how each of the three affected groups (central government, local government and RM users) must implement the change:

#### 3.3.1 Changes required to the objective-setting function

New legislation will be developed under the Panels proposals. The proposed NBEA, SPA, and Managed Retreat and Climate Change Adaptation Act (MRCCAA) will have an objective-setting function which will set the boundaries of the regulatory framework. The proposed system will include environmental limits and targets for certain environmental values. In addition, the proposed system will make more use of national directions which will require local government (under the new institutional arrangements) to align plans and resource allocation decision-making. The table below summarises the material changes and the resulting actions from proposals impacting the objective-setting function.

#### Table 3.2: Changes impacting the objective-setting function

Change	Action required
New legislation – NBEA, SPA, and MRCCAA	Develop legislation and support it through the policy and legislative process

New purpose in the NBEA

Development of additional national direction on the following matters:

- New Zealand Coastal Policy Statement
- NPS on how to give effect to the Principles of the Treaty of Waitangi
- Climate change
- · Data on urban land prices
- The environmental monitoring system and the role of Māori
- Mandatory issues specified in s 9 (3) of the NBEA.

Resolve conflicts and ensure coherency between existing and new national direction

National directions reviewed every nine years

Submissions and consultation on the development of the NBEA

Change to scope of local government authority

Developing national directions

Implementing national directions

Implementing national directions at a local level

Submissions and professional fees

Review plans, identify issues, and implement modifications to ensure consistency

Review national directions

#### 3.3.2 Changes required to the institutional and rule-setting function

Significant change is proposed for the institutional and rule-making function. The Panel's proposed RM system will introduce compulsory spatial strategies, combined regional plans, and other new institutions to undertake the plan-making process. Māori will have new roles in the governance and plan-making function. Institutions will be structured on a regional basis, as opposed to the territorial authority level. Table 3.3 summarises the material changes and the resulting actions from proposals impacting the institutional and rule-setting function.

#### Table 3.3: Changes impacting the institutional and rule-setting function

Change	Action required
Implementation agreements on spatial strategies	Develop implementation plans to address project level details to align with spatial strategies
Development of mandatory regional spatial strategies	Consult with parties and then draft regional spatial strategies
	Submit on proposed strategies
Spatial strategies are reviewed every 9 years	Conduct the review either partially within a 9-year period, or a complete review in the ninth year
Establish a National Planning expert advisory group which recommends directly to the Minister for the Environment	Identify, appoint members, and stand up the body with support staff
Establish Joint Committee to create combined plans (includes representatives of territorial authority, mana whenua and the Minister of Conservation)	Must resource the Joint Committee and secretariat
Develop new combined plans implementing spatial strategies (combining regional policy statements, regional plans, and district plans)	Each region must develop a combined plan

Develop new combined plans implementing spatial strategies (combining regional policy statements, regional plans, and district plans)

Combined plans are reviewed every 9 years

Ministry for the Environment must audit combined plans

Support for Māori in resource management duties

NBEA will:

- · 'Give effect' to the Principles of the Treaty
- Incorporate 'Te Mana o te Taiao'
- Specify outcomes for tikanga Māori
- Define mana whenua

Integrated partnership between mana whenua and local government through strengthened Mana Whakahono ā Rohe provisions

Obligation on local authorities to explore opportunities for transfer of power and joint management agreements

Establish National Māori Advisory Board

Increased ability to review existing permits and consents in light of national direction

**Establish Regional Hubs** 

Mandatory construction and implementation plans

Submissions

Review combined plans within or on the ninth year from when it was created

Ministry for the Environment audits combined plans

Increased Māori participation in RM processes

Added responsibility for Government to incorporate the Treaty partnership in decision making processes

Review current partnership and find ways to strengthen it

Review existing power sharing and joint management agreements, and work with mana whenua to explore further opportunities

Identify members, and then resource the Board's functions

More effort spent reviewing existing permits and consents, particularly as new national direction is created

Advocacy and response and reviews

Regional Hubs must be staffed and resourced by local authorities

Requiring authorities must develop construction and implementation plans

#### 3.3.3 Changes required to the resource allocation function

The Panel proposed significant change to the resource allocation function. The shift in emphasis to planning for outcomes (spatial plans and more detailed and standardised regional combined plans) will reduce the scope and volume of resource consenting. However, the Panel also recommends the introduction of a wider range of tools for resource allocation, for example water trading or tradeable development rights. Table 3.4 below summarises the material changes and the resulting actions from proposals impacting the resource allocation function.

Table 3.4: Changes impacting the resource allocation function

Change	Action required				
New powers for local authorities to modify consents	Local authorities potentially modify consents				
	Consent holders engage with authorities on the consent modification process (with a chance of litigation)				
--	---	--	--	--	--
Applications for resource consent must state outcomes	Applicants increase effort when preparing consent applications				
Shorter permit durations, with flexibility for longer	Increase in the amount of consents that must be assessed				
term permits for major infrastructure	Users must prepare and submit consent applications more often				
Increased ability to review and change consent	More activity from local government to review and change consents				
conditions	More time spent by consent holders responding to local government				
Climate change adaptation fund	Need to secure appropriations, and then administer the fund				
Regulatory and market-based allocation mechanisms enabled through NBEA and plans	Local authorities develop and implement economic instruments				
Right of any submitter to appeal to the Environment Court and High Court regarding:	Time from the High Court and Environment Court hearing appeals				
<ul> <li>Recommendations on combined plans accepted by Joint Committee</li> <li>Combined plan changes</li> </ul>	Increase in litigation action				
Additional resourcing for the Environment Court	Increase in appropriations as well as additional staff to resource the Environment Court				
Power to modify established land uses to address	Review and identify land changes to address climate change concerns, and then implement these changes				
	Advocate and respond to land changes				
Responding to climate change is now a function of local and regional authorities in the NBEA	Local councils must find ways to discharge their statutory obligation				

#### 3.3.4 Changes required to the regulatory support function

There are a range of proposed changes to the regulatory support function that will require fixed cost investments, and an expansion of some entities functions with a corresponding change in staff levels. Table 3.5 summarises the material changes and the resulting actions from proposals impacting the regulatory support function.

#### Table 3.5: Changes impacting the regulatory support function

Change	Action required
Targets set to achieve NBEA outcomes	Targets must be developed and monitored in pursuit of NBEA outcomes
Consent and approval dispute process established	Resource the dispute process
New open portal for consent applications	Procure ICT services to build and maintain this open portal

Establish comprehensive Environment Monitoring System (EMS)

PCE auditing and oversight role expanded

Mandatory response from local authorities to issues identified by the PCE

System links established between compliance, state of the environment, and progress towards outcomes monitoring

Expanded compliance, monitoring, and enforcement (CME) measures

Expanded resourcing for the Ministry for the Environment (includes support local authorities and mana whenua) Ministry for the Environment to implement and monitor the EMS

Local authorities collect and monitor data in line with the forthcoming national direction on environmental monitoring

PCE spends more time on additional functions, thereby requiring additional resourcing

Local authorities must create responses when PCE make relevant recommendations

Local authorities must implement methods to connect data (involves data standardisation, and possible investment in ICT infrastructure)

Increase in CME activity by local authorities

Time and effort responding to increase CME activity

Increase in appropriations and staff required for MfE to resource new functions (including supporting local authorities and mana whenua)

### 4 Change in process costs under the Panel's proposed RM system

In this section, we analyse the marginal impacts of the Panel's proposals on RM system process costs. We group impacts according to:

- Establishment costs (section 4.1)
- Ongoing costs (section 4.2)
- Cost savings (section 4.3).

We then analyse the distribution of process cost impacts across central government, local government, and users (section 4.4). Finally, we analyse the sensitivity of selected major process costs to changes in key variables (section 4.5). Analysis of the wider benefits (for example, more effective climate change adaptation, and the positive environmental effects of enforceable environmental bottom lines) are contained in section 5.

#### Panel's proposed RM system will increase total process costs by \$2 billion

Process costs will increase under the Panel's proposed RM system. New process costs arise in the establishment of aspects of the new system. The Panel's proposed RM system will also have increased ongoing costs, compared to the current system. Some cost savings will occur as a result of the proposed system. We summarise all cost impacts in Table 4.1 below.

Measure	Costs (per annum)	Costs (present value)
Current RM system	\$1,219,100,000	\$19,479,700,000
Panel's proposed RM system establishment costs	N/A	\$812,700,000
Panel's proposed RM system new ongoing costs	\$281,200,000	\$4,487,900,000
Panel's proposed RM system cost savings	-\$205,700,000	-\$3,242,200,000
Total net increase in costs (including establishment costs)	-	\$2,058,400,000
Total net increase in costs (excluding establishment costs)	\$75,500,000	\$1,245,700,000

#### Table 4.1: Summary of process costs in the current and Panel's proposed RM systems

4.1

## Panel's proposed RM system has establishment costs of \$813 million

The Panel's proposed RM system involves establishment costs. These costs relate to the creation of statutes, new regulations, establishing or re-orienting institutions and changing the plan-making and consenting system.

We assume all establishment costs fall within ten years of agreeing to implement the Panel's proposals. Where possible, we estimated costs using publicly available data and MfE budget bid information. Since the Panel's proposals are relatively high-level, detailed design of the proposed changes are needed. A more accurate estimate of the establishment process costs will be required when those detailed design choices are made.

#### 4.1.1 Objective-setting function establishment costs \$298 million

The objective-setting function will have establishment costs in the preparation and implementation of the new legislation (NBEA, SPA and MRRCCA), as well as for the new national directions. The total establishment costs are estimated at \$298 million. Most of these costs (at \$244 million across all parties) relate to developing and then implementing thirteen new national directions (such as the suggested coastal NPS). Table 4.2 shows each cost component within this function, present value of costs, and the calculation methodology.

Cost category	Party	Type of cost -description	Present value	Methodology (sources)
Developing new legislation	Central government	Administrative – Developing and supporting the NBEA, SPA, and MRCA through the policy and legislative process	\$20.5 million	Figures drawn from MfE's Budget 2021 budget bid. This figure represents MfE's preferred bid amount for this component
	Local Government	Administrative – submitting and consulting with central government on legislative changes	\$1.2 million	Cost = (status quo local government submission costs + 50%) * 3 Due to the importance of these legislative changes, we assume a 50 percent increase in submissions costs reflecting extra effort from local government. These costs are multiplied by three reflecting that three statues are proposed
7	Users	Administrative – Submitting and consulting with central government on legislative changes	\$0.3 million	Cost = (status quo user submission costs + 50%) * 3 Due to the importance of these legislative changes, we assume a 50 percent increase in submissions costs reflecting extra effort from users. These costs are multiplied by three reflecting that three statues are proposed
Defining environmental limits	Central Government	Administrative – developing targets for freshwater, indigenous biodiversity, air, soils, and coastal-marine ecosystems	\$30.4 million	Figures drawn from MfE's Budget 2021 budget bid. This figure represents MfE's preferred bid amount for this component
National direction coherence review	Central Government	Administrative – policy work to identify issues, and implement changes to ensure coherence across existing and forthcoming national directions	\$3.5 million	Cost = estimated FTE assigned to review national directions * MfE FTE cost per annum Assume a team of 6 FTE are required to conduct this work, and it takes them four years to complete this work programme. Assume FTE cost of \$150,000 per year

#### Table 4.2: Objective-setting function establishment costs

New national directions	Central Government	Administrative – developing 13 new national directions (covering issues including coastal policy, climate	\$43.0 million	Cost = number of new national direction * average development cost per national direction At least 13 new national directions are
		section 9 issues)		specified across the Panel's recommendations Based on the development costs of the NPS Freshwater and the NPS-Urban
				Development Capacity, development occurs over two years costing on average \$1.775 million per year
	Central Government	Administrative – implementing 13 new national directions (covering	\$38.4 million	Cost = number of new national direction * average implementation cost per national direction
		issues including coastal policy, climate change, Te Tiriti, and NBEA section 9		At least 13 new national directions are specified across the Panel's recommendations
		1550(5)		Based on the implementation costs of the NPS Freshwater and the NPS-Urban Development Capacity, implementation occurs over four years costing on average \$875,000 per year
	Local Government	Administrative – implementing 13 new	\$152.3 million	Cost = implementation cost of new national direction – efficiency saving
	Corecimited	national directions (covering issues including coastal policy, climate change, Te Tiriti, and NBEA section 9 issues) at the local government level		Assuming local government currently implements three national directions on average per year in the status quo, we increased these costs by 333 percent reflecting a scale up from three to 13 national directions per year. We then applied a 20 percent efficiency saving as we assume local governments achieve some scale economies in implementing national directions simultaneously
	Local Government	Administrative – submissions and engaging with the	\$2.4 million	Cost = number of new national directions * (submissions * cost per submission)
7		national directions		Assume 13 new national directions Assume 35 submissions per national direction (which is the average council submissions from the NPS Freshwater and NPS-Urban Development)
20				Each submission costs \$5,7600 to produce assuming it takes 80 hours per submission at a labour cost to councils of \$72 per hour (including overheads)
2	Users	Administrative - submissions and engaging with the central Government on new	\$6.4 million	Cost = number of new national directions * (cost of large submissions + cost of small submissions)
		national directions		Assume 13 new national directions
				Assume 22 large submissions (average from NPS Freshwater and NPS-UD submission results) at a cost of \$20,000 each.
				Assume 391 smaller submissions (average from NPS Freshwater and NPS-UD submission results) which cost \$225 each

(10 hours per submission \* average wage of \$22.5)

#### 4.1.2 Institutional and rule-setting function establishment costs \$258 million

The institutional and rule-setting establishment costs will be driven mostly by the requirement to prepare new regional spatial strategies (these are entirely new functions for local government) and combined plans. Comparatively, the costs of establishing the new advisory bodies recommended by the Panel are estimated to be very minor. Table 4.3 shows each cost component within this function, present value of costs, and the calculation methodology.

ost category	Party	Type of cost - description	Present value	Methodology (sources)
eveloping egional spatial trategies	Central government	Administrative – Consulting with relevant stakeholders, and then developing spatial strategies	\$29.4 million	Cost = increase in planning costs compared to the status quo Under the new system, regional spatial planning is a shared function between central government, local government and iwi. We assume central government meets 33 percent of spatial strategy development costs We estimated total development cost by applying 40 percent to status quo local government planning system costs. Given that regional plans are entirely new functions, we judge a significant scale up of 40 percent is appropriate.
	Local Government	Administrative – Consulting with relevant stakeholders, and then developing spatial strategies	\$58.8 million	Cost = increase in planning costs compared to the status quo Under the new system, regional spatial planning is a shared function between central government, local government, and iwi. We assume local government meets 66 percent of spatial strategies development costs
0				We estimated total development cost by applying 40 percent to status quo local government planning system costs. Given that regional plans are entirely new functions, we judge a significant scale up of 40 percent is appropriate
	Users	Administrative – Submitting on regional spatial plan processes	\$10.5 million	Cost = number of new plans * (status quo user submission on local plan costs) Given 16 regions exist in New Zealand, we assume there will be 16 new regional spatial strategies
				User submission costs per plan were calculated using the following assumptions:
				<ul> <li>30 large submissions, at a cost of \$20,000 each</li> </ul>

#### Table 4.3: Institutional and rule-setting function establishment cost

				<ul> <li>900 smaller submitters (which is an average drawn from reviewing submissions of various local planning processes) at a cost of \$225 each</li> </ul>
Implementation agreements on regional spatial strategies	Central Government	Administrative – developing implementation plans	\$4.3 million	Assume the cost of developing implementation plans is 33% of developing the actual regional spatial strategies. Assume central government meets 50% of the cost
	Local Government	Administrative – developing implementation plans	\$4.3 million	Assume the cost of developing implementation plans is 33% of developing the actual regional spatial strategies. Assume local government meets 50% of the cost
New combined plans	Central Government	Administrative – central government support for joint committees to develop combined plans	\$21.9 million	Figure drawn from MfE Budget 2021 bid information
	Local Government	Administrative – supporting joint committees to develop combined plans	\$96.6 million	Cost = increase in local government planning costs – central government contribution We assume 30% increase in status quo planning costs represent a reasonable estimate of what it will take for councils to develop and implement combined regional plans
				Central government contribution towards combined plans is removed from these costs
	Users	Administrative – submitting on combined	\$9.3 million	Cost = number of new plans * (status quo user submission on local plan costs)
		plan proposition		Given 16 regions exist in New Zealand, we assume there will be 16 new combined regional plans
				User submission costs per plan were calculated using the following assumptions:
	C			30 large submissions, at a cost of \$20,000 each
2				<ul> <li>900 smaller submitters (which is an average drawn from reviewing submissions of various local planning processes) at a cost of \$225 each</li> </ul>
National planning independent expert panel	Central Government	Administrative – establishing secretariat and appointing panel members	\$0.5 million	We used the cost of establishing the Welfare Expert Advisory Group (\$500,000) as a proxy for these establishment costs
National Māori Advisory Board	Central Government	Administrative – establishing secretariat and appointing advisory board members	\$0.5 million	We used the cost of establishing the Welfare Expert Advisory Group (\$500,000) as a proxy for these establishment costs
Regional Hubs	Central Government	Administrative – reorganising existing local government planning	\$2.9 million	Cost = (16 regions * estimated establishment cost) * Government cost share
		resources and filling gaps		We assume \$1 million per region is sufficient to establish Regional Hubs. We assume

				central government meets 20 percent of the costs
	Local Government	Administrative – reorganising existing local government planning	\$11.6 million	Cost = (16 regions * estimated establishment cost) * Government cost share
		resources and filling gaps		We assume \$1 million per region is sufficient to establish Regional Hubs. We assume local government meets 80 percent of the costs
Joint committees for creating combined plans	Local Government	Administrative – establishing the committee	\$7.6 million	We used the cost of establishing the Welfare Expert Advisory Group (\$500,000) as a proxy for the establishment cost of joint committees. This cost was multiplied 16 times, in line with the 16 regions of New Zealand

## 4.1.3 Resource allocation function establishment costs are estimated to be around \$100 million

There is only one material establishment cost effecting the resource allocation function. This is the climate change adaptation fund. This is due to the way establishment costs fall across the four functions. Few details are confirmed about this fund at this stage. For the purposes of this analysis, we assume it is similar to the New Zealand Green Investment Fund (NZGIF) which began with \$100 million. Table 4.4 shows the present value of costs, and the calculation methodology we used to determine the cost of the climate change adaptation fund.

Cost category	Party	Type of cost -description	Present value	Methodology (sources)
Climate change adaptation	Central government	Administrative – Establishing appropriations to resource	\$95.2 million	Cost = size of the fund + establishment cost of administration functions
fund	the fund and establish monitoring and administration functions		We modelled costs off of the NZGIF which has a fund of \$100 million, and incurred approximately \$5 million in its first year to establish fund administration functions	
7				These costs occur in 2023 which we judge to be the earliest the new legislative regime can be in place

#### Regulatory support function has establishment costs of \$161 million

Most of the regulatory support function establishment costs relate to setting up the ICT infrastructure for the improved environmental monitoring system. Other regulatory support function establishment costs relate to the proposed new consenting portal, as well as other ICT infrastructure. Table 4.4 shows each cost component within this function, present value of costs, and the calculation methodology.

4.1.4

Cost category	Party	Type of cost -description	Present value	Methodology (sources)
Designing economic instruments	Central Government	Administrative – MfE undertakes first principles assessment of economic instruments and develops policies to increase their uptake across local government	\$4.2 million	Figure taken from MfE's 2021 Budget bid
Regional spatial planning ICT infrastructure	Central Government	Administrative – nationwide project to standardise data and ICT infrastructure to enable spatial planning	\$11.3 million	Figure taken from MfE's 2021 Budget bid Few details exist about the capability that needs to be built, therefore, MfE's preferred bid provides the best estimate at this point
	Local Government	Administrative – local government contribution to nationwide project to standardise data and ICT infrastructure to enable spatial planning	\$11.3 million	We assume local government cost mirrors central government costs
Environmental monitoring and system links ICT infrastructure	Central Government	Administrative – lead investment programme to improve local government environmental monitoring and system links infrastructure	\$56.4 million	Figure taken from MfE's 2021 Budget bid Few details exist about the capability that needs to be built, therefore, MfE's preferred bid provides the best estimate of cost at this point
	Local Government	Administrative – support investment programme to improve local government environmental monitoring and system links infrastructure	\$56.4 million	We assume local government cost mirrors central government costs
Open portal for consent applications	Central Government	Administrative – lead procurement of IT services to provide the new online open portal system	\$3.8 million	Without more details about the capability required from this software, we made a placeholder assumption of \$4 million development cost, with the majority of that cost falling in 2022
0	Local Government	Administrative – integrate open portal software into existing information infrastructure	\$3.8 million	Cost = 78 authorities * integration cost We assume \$50,000 as a placeholder assumption for integrating the open portal
New consent and approval dispute process	Central Government	Administrative – appoint staff and establish organisational structures	\$3 million	Placeholder assumption
Transitional model regional plans	Central Government	Administrative – lead project to develop two model regional plans which will inform future regional plans	\$7.5 million	Figure taken from MfE's 2021 Budget bid
	Local Government	Administrative – some authorities will cooperate with central government to develop model plans	\$2.8 million	Assume local government participation costs equal 50 percent of central government's contribution

#### Table 4.5: Regulatory support function establishment costs

## 4.2 Panel's proposed RM system has ongoing additional costs of \$281 million per annum

The additional ongoing costs of the Panel's proposed RM system are significant. The objective setting system will be re-oriented with a greater reliance on national directions. This impacts central and local government. The institutional and rule-making function creates new combined regional plans, greater involvement of Māori and regional spatial planning. The resource allocation function will have new allocation mechanisms. The regulatory support function involves greater resourcing and compliance, monitoring and enforcement activity.

## 4.2.1 Objective-setting function has ongoing additional costs of \$124 million per annum

The Panel's proposed RM system requires greater and more formalised use of national direction. This imposes costs on central government to create and review the national directions over time, and then for local government to implement national directions. Users will also have to spend time (cost) to submit and advocate on the consequential changes due to the directions. Table 4.6 shows each cost component within this function, including annual cost, present value, and the calculation methodology.

	Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
	National directions review	Central Government	Administrative – reviewing all national	\$3.3 million	\$54.0 million	Cost = 50 national directions * review cost
			directions within nine years of implementation or last review			We assume existing national direction plus new national directions considered as part of this reform totals 50 national directions
		6				Average development cost of national direction is approximately \$1.8 million per year. We assume that review costs 33 percent of this cost, and we further smooth that cost over nine years
		Central Government	Administrative – implementing national	\$1.6 million	\$26.2 million	Cost = 50 national directions * implementation cost
2	20.		direction changes resulting from national direction reviews			\$875,000 is the average central government national direction implementation cost per year. Like review costs, we assume implementing changes from a review is 33 percent the cost of implementing a completely new national direction
		Local Government	Administrative – implementing national	\$15.4 million	\$253.3 million	Cost = implementation cost of new national directions * 25 percent
			direction changes resulting from national direction reviews			We assume that implementing changes resulting from reviews cost only a fraction of initial

#### Table 4.6: Reformed objective-setting function ongoing process costs

				implementation costs faced by local government
Local Government	Administrative – submitting on proposed changes to national directions.	\$0.4 million	\$5.8 million	Cost = 50 national directions * 33 percent of status quo local government submission costs
Users	Administrative – submitting on proposed changes to national directions.	\$1.0 million	\$15.8 million	Cost = 50 national directions * 33 percent of status quo user submission costs

## 4.2.2 Institutional and rule-setting function has ongoing additional costs of \$30 million per annum

The institutional and rule-setting function requires new combined regional plans and regional spatial plans. The average annual additional costs are moderate. The Panel's proposed RM system also requires greater formalised involvement for Māori in plan-making and rule-setting. This involves costs for central government and RM users (Māori) in particular. Table 4.7 sets out the costs and our methodology to estimate the costs.

	Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
	Combined plans review	Local Government	Administrative – each region must review their combined plan within nine years of	\$4.4 million	\$39.3 million	Cost = combined plan additional establishment cost * 20 percent reflecting the relative cost of review
	~	the last review			MfE (2020) indicates that regional plan development cost averages \$1.9 million, while review cost averages \$380,000. Therefore, review costs represent 20 percent of development cost	
	D					We also assume that local government meets all of these costs
-		Users	Administrative – submitting on	\$1.4 million	\$12.7 million	Cost = 16 plans * (large submission costs + smaller submission costs)
2	2		combined plan reviews			We assume on average 30 large submitters submit per plan at a cost of \$20,000 each, and 900 smaller scale submitters submit per plan at a cost of \$225 each (representing 10 hours at the average wage of \$22.5 per hour)
						Average number of submitters based on an analysis of submissions received for various planning processes since 2007

#### Table 4.7: Reformed institutional and rule-setting function ongoing process costs

					Total cost is smoothed over nine years reflecting that plans must be reviewed within 9 years
Support for Māori in resource management duties	Central Government	Administrative – direct support provided to iwi and hapu organisations to facilitate their participation in RM system functions	\$5.0 million	\$81.9 million	Figures drawn from MfE's Budget 2021 bid
Operating the National Planning Expert Advisory Group	Central Government	Administrative – resourcing the operations of the National Planning Expert Advisory Group	\$1.0 million	\$14.2 million	We assume operating costs of this body reflect the operating costs of the Welfare Expert Advisory Group (a recently established advisory body) which totals \$1 million per year
Operating the National Māori Advisory Board	Central Government	Administrative – resourcing the operations of the National Māori Advisory Board	\$1.0 million	\$14.2 million	We assume operating costs of this body reflect the operating costs of the Welfare Expert Advisory Group (a recently established advisory body) which totals \$1 million per year
Cooperation between iwi and local government	Local Government	Administrative – increased effort from local government to ensure management agreements are in place, and partnership opportunities with iwi are explored	\$4.7 million	\$76.6 million	Cost = 78 local authorities * FTE increase to resource cooperation with iwi We assume 0.4 FTE per local authority on average is sufficient to resource cooperation. Also assume 1 FTE costs \$150,000 per year
Review of regional spatial strategies	Local Government	Administrative – joint committee must review regional spatial strategies within nine years of last review	\$4.8 million	\$60.2 million	Cost = regional spatial strategy additional establishment cost * 20 percent reflecting the relative cost of review MfE (2020) indicates that regional plan development cost averages \$1.9 million, while review cost averages \$380,000. Therefore, we assume review costs represent 20 percent of development cost We also assume that local government meets all of these costs
	Users	Administrative – submitting on proposed changes to spatial strategies raised as part of reviews	\$1.4 million	\$18.0 million	Cost = 16 plans * (large submission costs + smaller submission costs) We assume on average 30 large submitters submit per plan at a cost of \$20,000 each, and 900 smaller scale submitters submit per plan at a cost of \$225 each (representing 10 hours at the average wage of \$22.5 per hour) Average number of submitters baced on an analysic of submissions

received for various planning processes since 2007 Total cost is smoothed over nine years reflecting that plans must be reviewed within 9 years

## 4.2.3 Resource allocation function has ongoing additional costs of \$142 million per annum

The resource allocation function will involve newly created resource allocation mechanisms. The implementation and operation imposes costs on all parties, particularly local government. The new powers to modify consents imposes costs on local government and users. Importantly, shorter permit durations mean that users incur higher costs when engaging in the permitting system. Table 4.8 sets out these costs and the methodology used to calculate these.

Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
New resource allocation mechanisms	Central Government	Administrative – development of best practice guidance and oversight of new allocation mechanisms	\$1.4 million	\$22.9 million	Cost = MfE FTE cost + consulting fees We assume 6 FTE and \$500,000 in consulting fees per year is enough to resource this oversight and policy function
	Local Government	Administrative – exploring and implementing new market-based allocation mechanisms such as tradeable rights, taxes and charges	\$53.6 million	\$877.5 million	Cost = 67 territorial authorities * (FTE increase per authority + average consulting fees) We assume on average all councils require an additional 2 FTE to resource this function. We assume a per annum FTE average cost of \$150,000 We also assume each authority on average incurs \$500,000 worth of consulting services per year
New powers to review and modify consents	Local Government	Administrative – authorities spend more resources exploring opportunities and implementing modifications to consents	\$21.6 million	\$354.3 million	Cost = status quo planning costs * percentage increase reflecting added effort We assume 15% increase reflects the added resources required by this new local government function
v	Users	Compliance – users spend more time responding to local government attempts to review and modify consents	\$24.8 million	\$407.0 million	Cost = status quo user consenting costs * percentage increase reflecting additional effort We assume a modest increase of 5% to current users consenting compliance costs

#### Table 4.8: Reformed resource allocation function ongoing process costs

Shorter permit durations	Local Government	Administrative – shorter term permits results in a mild increase in consent application volumes requiring processing from local government	\$7.2 million	\$118.1 million	Cost = status quo consent processing costs * percentage increase reflecting additional effort We assume a modest increase of 5% to local government consent costs to deal with the additional consents
	Users	Compliance – shorter term permits result in a moderate increase in the volume of applications prepared by users	\$24.8 million	\$407.0 million	Cost = status quo user consenting costs * percentage increase reflecting additional effort. We assume a modest increase of 5% to user costs of preparing consents.
Increase in Environment Court activity	Central Government	Administrative – increase in operating costs of the Environment Court given new functions (hearing panels on combined plans, appeals on designations) and added appeal activity	\$3.4 million	\$55.6 million	Cost = status quo Environment Court operating costs * percentage reflecting increase in operating costs We assume a 40% increase in the Environment Court's operating costs due to added functions and appeal volumes
	Users	Compliance – increase in the volume and complexity of hearings and appeals	\$9.0 million	\$147.4 million	Cost = status quo user appeals cost * percentage reflecting increase in appeals We assume a 20% increase in user costs

## 4.2.4 Regulatory support function has ongoing additional costs of \$88 million per annum

The costs of proposed changes to the regulatory support function are mostly due to enhanced compliance monitoring and enforcement. Users will face higher costs to respond to the increase in local government enforcement activity. There are also some additional ongoing costs associated with the improvement in IT and systems. Table 4.9 sets out the costs and the methodology used to estimate these.

Cost category	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
Monitoring environmental limits and NBEA targets	Central Government	Administrative – MfE is responsible for monitoring environmental limits and targets, and providing general Environment Monitoring System oversight	\$4.5 million	\$73.6 million	We assume an additional 30 FTE for MfE is required to resource this function. We assume a yearly cost of \$150,000 per FTE

#### Table 4.9: Reformed regulatory support function ongoing process costs

Operating the new consent and approval dispute process	Central Government	Administrative – operating the new consent and approval dispute process	\$2.0 million	\$28.8 million	We assume an operating cost of \$2 million per year which is similar to the Employment Court (which we judge of similar scale to this recommended dispute process)
Expanded Parliamentary Commissioner for the Environment (PCE) functions	Central Government	Administrative – PCE has greater auditing oversight of systems for monitoring and state of the environment reporting	\$0.8 million	\$11.9 million	Cost = PCE baseline operating costs * percentage increase reflecting additional functions We assume a 35% increase to PCE's existing baseline
IT Infrastructure: open portal and system links	Local Government	Administrative – ongoing maintenance and operation of the open portal and system links	\$6.2 million	\$78.4 million	Cost = 78 authorities * estimated operating costs per authority We assume average costs of \$60,000 to maintain system links, and \$20,000 to maintain the open portal system per authority
IT Infrastructure: National Environmental Management System	Central Government	Administrative – ongoing maintenance and improvement to the Environment Management System	\$2.0 million	\$25.3 million	We assume \$2 million per year is enough for MfE to maintain and make incremental improvements to the system
Expanded monitoring and enforcement activity	Local Government	Administrative – increase in monitoring and enforcement activity by local authorities	\$18.0 million	\$295.7 million	Cost = status quo local government monitoring and enforcement costs * percentage reflecting increase in costs We assume additional monitoring and enforcement activity increases costs by 20 percent
	Users	Compliance – time and effort responding to additional monitoring and enforcement activity	\$39.6 million	\$648.3 million	Cost = status quo user monitoring and enforcement compliance costs * percentage reflecting increase in costs We assume additional monitoring and enforcement activity increases costs by 20 percent
Administering the climate change adaptation fund	Central Government	Administrative – ongoing costs to administer the climate change adaptation fund	\$5.0 million	\$72.1 million	Due to the lack of detail about this proposal, we adopted a placeholder assumption of \$5 million per year which mirrors the administration cost of the New Zealand Green Investment Fund

4.3

# Panel's proposed RM system will result in \$206 million cost savings per annum

Some of the Panel's proposals would result in cost savings. Expanding the use of national directions is intended to provide more certainty across the RM system which will strengthen regional and local plans, thereby discouraging contentious, and costly, plan making appeals. This will in turn reduce costs of the Environment Court, Commissioners, and litigation costs.

At the end of section 4.5.3 we estimate the scale of cost savings necessary to completely offset ongoing cost increases resulting from the Panel's proposals.

#### Planning certainty is likely to reduce consent volumes

Uncertainty in plans generates consents: some applicants will be willing to submit contentious consents based on a perceived (or real) chance of success which exists due to plan uncertainty. As plans become more certain, parties can better judge the bounds between permissible and impermissible activity. This in turn reduces the number of 'chance' based applications.

Our analysis assumes a 20 percent consent volume reduction (compared to the status quo) resulting from planning certainty. This results in significant savings to users which save the costs of time and specialist services in preparing consents. It also saves local government the cost of assessing those consents.

#### The 'open portal' for consents is likely to create efficiencies

Process costs will reduce due to improved IT and web-based tools. The Panel proposes an online 'open portal' to simply the user experience and enable the move towards considering applications holistically, rather than the current system which breaks applications up into components with effects to be assessed individually, sometimes by different authorities.

The open portal should reduce applicants' efforts preparing applications given the ease of use of a single online portal, and the ability to bundle related applications. This improves the current system where single applicants often must submit multiple consents to various authorities for a single related activity.

This change should also improve local government efficiency in processing applications. The open portal will make one local authority responsible for administering the portal in a region which should help facilitate joint processes between relevant consenting authorities and ensure that inter-dependencies within applications are understood.

Assuming the technical challenges of building the open portal are overcome, we judge the open portal to result in a 10 percent cost saving to users and local government, compared to status quo consenting costs. Table 4.10 shows each component of cost saving, including annual cost, present value, and the calculation methodology.

Cost category (RM Function)	Party	Type of cost - description	Annual cost	Present value	Methodology (sources)
Cost saving due to national directions and improved planning system (Objective-setting	Central Government	Administrative – reduced operating costs of the Environment Court due to reduced litigation	- \$1.7 million	- \$27.8 million	Apply 20% cost saving to status quo Environment Court operating costs (\$8.5 million p.a, 2017 Environment Court annual report)
and Institutional Rule Making)	Local Government	Administrative – reduced operating costs of responding to private plan changes and processing resource consents due to reduced volumes.	- \$29.8 million	- \$487.6 million	<ul> <li>Apply 20% cost saving to the sum of the following status quo local government costs:</li> <li>Responding to private plans</li> <li>Processing notified and non-notified consents</li> </ul>

#### Table 4.10: Cost savings of the Panel's proposed RM system

	Users	Compliance – costs saved due to more certain plans (reduced volume of resource consent submissions, and appeals)	-\$110.0 million	-\$1.8 billion	<ul> <li>Apply 20% cost saving to the sum of the following status quo user costs:</li> <li>Preparing private plan change applications</li> <li>Preparing resource consents</li> <li>Environment Court hearing and appeals</li> </ul>
Open portal for consents (Regulatory support)	Local Government	Administrative – cost savings due to more efficient consent processing	-\$14.4 million	-\$208.1 million	Apply 10% cost saving to the status quo local government cost to process notified and non-notified consents
	Users	Compliance – cost savings due to less duplication and ease of use of the open portal	-\$49.7 million	-\$717.0 million	Apply 10% cost saving to users' status quo cost of preparing consent applications (which includes application fees and consultant fees)

## 4.4 Panel's proposed RM system will shift relative costs between affected parties

Central government will incur more costs under the Panel's proposed RM system as establishment costs and ongoing costs. Local Government will also see an increase in costs, however, as a percentage of existing costs, the increase in costs is not as large as that faced by central government. Users will see notable cost savings as the RM system front-loads resource allocation decisions into plans and focuses on strengthening the objective setting and institutional and rule-making functions.

#### 4.4.1 Central and local government will share establishment costs

Central government will incur over half and local government will incur around 46 percent of the establishment costs. Users will incur a relatively small share at 3 percent. Figure 4.1 illustrates this.



The establishment costs of the objective-setting function are shared between central and local government. The institutional and rule-making function establishment costs are mostly borne by local government. The establishment costs for the new resource allocation regimes fall on central government. New regulatory support costs fall equally on central and local government.



### 4.4.2 Ongoing process costs will shift away from users towards local and central government

The increase in ongoing costs of the Panel's proposals will fall on central and local government. Users will see a reduction in their ongoing costs. Table 4.11 sets out the change.

Party	Average annual cost increase	Present value cost change (2021 NZD)
Central Government	\$29,300,000	\$453,300,000
Local Government	\$103,500,000	\$1,654,100,000
Users	-\$57,900,000	-\$862,600,000
Total	\$74,900,000	\$1,244,800,000

#### Table 4.11: Change in ongoing costs for different parties under Panel's proposed RM system

The changes in costs are visualised in the below Figure 4.3 and Figure 4.4.







Figure 4.4: Distribution of process costs (net cost savings) per function

#### Process cost estimates are sensitive to key variables 4.5

Our estimates of process costs are uncertain. The Panel's recommendations are high level, and subject to further policy decisions. Our cost analysis is based on current system costs, and the estimates and data collected by MfE. Other cost estimates use assumptions about FTEequivalent resourcing requirements. Given this overall uncertainty, we identify a range of significant cost drivers and test their sensitivity to various assumptions.

We test the most significant contributors of establishment costs, ongoing costs, and cost savings in the following sections. We assess the individual changes and action driving cost within each category of costs (or savings) and selected changes that drive approximately half of the total costs in the category. Figure 4.5 below illustrates how a small number of changes in the establishment costs, ongoing costs, and cost savings categories account for a large proportion of process costs.





#### Sensitivity of establishment costs

We tested the sensitivity of the four largest establishment cost drivers: local government cost of implementing national directions, developing regional spatial strategies, combined plans, and central government's cost of establishing the climate change adaptation fund. Given our base case assumptions, these four costs total \$403.0 million. We found costs to range between \$239.2 million given low-cost assumptions, and \$1.3 billion given high-cost assumptions for these four drivers.

The high-cost end of the range is many times higher than our base case due to the uncertainty of the climate change adaptation fund. There are few details about this fund, however, if it

4.5.1

reaches the scale of the Provincial Growth Fund (which was \$3 billion over three years), this could be one of the largest establishment costs.

Table 4.12 outlines the variables and sensitivity ranges we tested, and Figure 4.6 demonstrates the results.

Change – Action	Base case cost (present value)	Key Variable	Comment	Sensitivity Range
New national directions – local government must implement a range of new national directions at a local level	\$53.6 million	<ul> <li>Two key variables:</li> <li>Percentage increase in status quo local government national direction implementation costs</li> <li>Percentage decrease in additional cost due to implementation efficiencies</li> </ul>	The increase in national directions will require a significant scale up in implementation efforts from local government. Implementing several national directions simultaneously is also likely to create some cost efficiencies	Low cost – 250 percent cost increase 30 percent cost saving Base case – 333 percent cost increase 20 percent cost saving High cost – 380 percent cost increase 10 percent cost saving
New combined plans – local government (through Joint Committees) must develop and implement combined plans	\$96.7 million	Percentage increase in status quo local government plan making costs	New combined plans will drive increased local government planning costs. The degree of increase is uncertain; however, we do not assume a large increase in our base case because combined plans are similar to current planning functions	Low cost – 20 percent cost increase Base case – 30 percent cost increase High cost – 40 percent cost increase
Climate change adaptation fund – Central government must secure appropriations to establish the climate change adaptation fund	\$95.2 million	Size of the fund	The climate change adaptation fund is subject to future policy decisions. Given this uncertainty, we assume a base case fund size of \$100 million similar to the New Zealand Green Investment Fund. It is not unreasonable however to assume a larger fund size of \$150 million . Therefore, we use that as our higher range	Low cost – \$50 million Base case – \$100 million High cost – \$150 million
New regional spatial strategies – regional authorities must consult and then draft regional spatial strategies	\$58.9 million	Percentage increase in status quo local government planning costs	The requirement to create regional spatial strategies will add a new function to most regional authorities. While there will be	Low cost – 25 percent cost increase Base case – 40 percent cost increase High cost – 55 percent cost increase

#### Table 4.12: Sensitivity ranges of significant establishment cost drivers



#### 4.5.2 Sensitivity of ongoing costs

Four major drivers of the ongoing costs of the Panel's proposed RM system changes are for implementing and monitoring economic instruments, expanded monitoring and enforcement activity, new powers to modify consents and shorter permit durations. The key variables that underpin our base case cost estimates, and the sensitivity range are set out in Table 4.13 below. In Figure 4.7 that follows we illustrate the sensitivity ranges for those selected costs.

able 4.13: Sensitivity ranges of significant ongoing cost drivers								
Change – Action	Base case cost (per annum)	Key Variable	Comment	Sensitivity Range				
Implementing and monitoring economic instruments – Local	\$53.6 million	Cost per territorial authority to implement and monitor	Territorial authorities will likely require new kinds of skill sets to	Low cost - \$250,000 per authority (1 additional FTE at \$150,000 per year +				

government seeks opportunities to implement economic instruments		<ul> <li>new economic instruments.</li> <li>Cost is driven by:</li> <li>Additional FTE per authority, and</li> <li>Consulting cost</li> </ul>	implement and monitor economic instruments such as environmental taxes and tradeable rights. The degree of increase – and how much of this work is contracted to economic consultants – is uncertain	\$100,000 in consulting services) Base case - \$800,000 per council (2 additional FTE at \$150,000 each per year + \$500,000 consulting services) High cost - \$1.1 million per authority (2 additional FTE at \$150,000 each per year + \$500,000 consulting services)
Expanded monitoring and enforcement activity – Users time and effort responding to increased monitoring and enforcement activity	\$39.6 million	Percentage increase in status quo user compliance cost	Users will have to spend more time and effort responding to scaled up monitoring and enforcement activity	Low cost – 10 percent cost increase Base case – 20 percent cost increase High case – 30 percent cost increase
New powers to review and modify consents – Users time and effort responding to local government efforts to review and modify existing consents	\$24.8 million	Percentage increase in status quo user consenting cost	The increase in user costs will depend on how much councils choose to use their new review powers	Low cost – 3 percent cost increase Base case – 5 percent cost increase High cost – 10 percent cost increase
Shorter permit durations – Users time and effort reapplying for resource consents	\$24.8 million	Percentage increase in status quo user consenting cost	There will be an increase in user costs due to consents ending earlier and therefore higher volume of consent applications	Low cost – 3 percent cost increase Base case – 5 percent cost increase High cost – 7 percent cost increase

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#### 4.5.3 Sensitivity of cost savings

The two major drivers of cost savings of the Panel's proposed RM system changes are related to the reduction in consenting activity because of the changed objective setting (national directions) and institutional and rule-making changes (regional plans). The key variables that underpin our base case cost estimates, and the sensitivity range are set out in Table 4.13 below. In Figure 4.8 that follows we illustrate the sensitivity ranges for those selected costs.

Change – Action	Base case cost (per annum)	Key Variable	Comment	Sensitivity Range
Strengthened objective setting and institutional rule making system – users submit less consents and lodge less contentious plan- making appeals due to clear regulatory objectives expressed in national direction, and implemented in local planning systems	-\$110.0 million	Percentage decrease in status quo user private plan application, consenting, and Environment Court costs	Cost saving resulting from clear objectives and plans. Represented as a percentage applied to users status quo	High savings – 25 percent cost saving Base case – 20 percent cost saving Low savings – 10 percent cost saving

#### Table 4.14: Sensitivity ranges of significant cost savings

Open portal for consent applications – Users require less time and effort to submit resource consent(s) due to improved online open portal system	-\$49.7 million	Percentage decrease in status quo user consenting costs	Cost saving resulting from saved time and effort in the resource consenting application process. Represented as a percentage of status quo users consenting costs	High savings – 15 percent cost saving Base case – 10 percent cost saving Low savings – 5 percent cost saving
Figure 4.8: Sensitivity	y of cost s	avings		



#### It may be possible to completely offset ongoing cost increases through cost savings

MfE requested us to model the level of consenting system cost savings necessary to offset cost increases resulting from the Panel's Proposals. Our base case cost savings would have to increase by an additional 36.7 percent to completely off offset ongoing cost increases driven by the Panel's Proposals. We model the assumptions necessary to reach this level of total cost savings in Table 4.15 below.

### Table 4.15: Comparison of base case and estimated cost savings necessary to offset ongoing cost increases

Cost Saving	Base case assumption	Base case cost	Estimated break-even	Estimated break-
Category		savings	assumption	even cost saving

Cost saving due to national directions and improved planning system (Local Government)20% cost saving to the sum of the following status quo local government costs: 	Cost saving due to national directions and improved planning system (Central Government)	<b>20%</b> cost saving to status quo Environment Court operating costs	-\$1,700,000	<b>27%</b> cost saving to status quo Environment Court operating costs	-\$2,324,231
Cost saving due to national directions and improved planning system (Users)20% cost saving to the sum of the following status quo user costs: • Preparing private plan change applications • Preparing resource consents applications (Local Government)20% cost saving to the sum of the following status quo user costs: • Preparing resource consent applications (Users).5110,041,114 of the following status quo user costs: • Preparing private plan change applications • Preparing resource consents applications (Local Government).920% cost saving to the status quo local government cost to 	Cost saving due to national directions and improved planning system (Local Government)	<ul> <li>20% cost saving to the sum of the following status quo local government costs:</li> <li>Responding to private plans</li> <li>Processing notified and non-notified consents</li> </ul>	-\$29,784,922	<ul> <li>27% cost saving to the sum of the following status quo local government costs:</li> <li>Responding to private plans</li> <li>Processing notified and non-notified consents</li> </ul>	-\$40,721,795
Open portal for consent applications (Local Government)10% cost saving to the status quo local government cost to process notified and non- notified consents14% cost saving to the status quo local government cost to process notified and non- notified consents-\$19,728,623Open portal for consent applications (Users)10% cost saving to users' status quo cost of preparing consent applications (Which includes application fees and consultant fees)-\$49,720,55714% cost saving to users' status quo cost of preparing consent application fees and consultant fees)-\$67,977,695Total cost saving-\$205,700,000-\$281,200,000Net ongoing cost increase\$75,500,000\$0	Cost saving due to national directions and improved planning system (Users)	<ul> <li>20% cost saving to the sum of the following status quo user costs:</li> <li>Preparing private plan change applications</li> <li>Preparing resource consents</li> <li>Environment Court hearing and appeals</li> </ul>	-\$110,041,114	<ul> <li>27% cost saving to the sum of the following status quo user costs:</li> <li>Preparing private plan change applications</li> <li>Preparing resource consents</li> <li>Environment Court hearing and appeals</li> </ul>	-\$150,447,656
Open portal for consent applications (Users)10% cost saving to users' status quo cost of preparing consent applications (which includes application fees and consultant fees)14% cost saving to users' status quo cost of preparing consent applications (which includes application fees and consultant fees)-\$67,977,695Total cost saving-\$205,700,000-\$281,200,000Net ongoing cost increase\$75,500,000\$0	Open portal for consent applications (Local Government)	<b>10%</b> cost saving to the status quo local government cost to process notified and non- notified consents	-\$14,430,000	14% cost saving to the status quo local government cost to process notified and non- notified consents	-\$19,728,623
Total cost saving         -\$205,700,000         -\$281,200,000           Net ongoing cost increase         \$75,500,000         \$0	Open portal for consent applications (Users)	<b>10%</b> cost saving to users' status quo cost of preparing consent applications (which includes application fees and consultant fees)	-\$49,720,557	14% cost saving to users' status quo cost of preparing consent applications (which includes application fees and consultant fees)	-\$67,977,695
Net ongoing cost increase \$75,500,000 \$0	Total cost saving		-\$205,700,000		-\$281,200,000
	Net ongoing cost incr	ease	\$75,500,000		\$0

Note: totals are rounded to the nearest 100,000.

To completely offset ongoing cost increases, the base case assumptions need to increase by approximately 40 percent. This is a significant increase which places these break-even assumptions near, or in excess of the high saving (best case) assumptions tested in the sensitivity analysis. Therefore, we do not think these assumptions are plausible based on the Panel's Proposals alone. However, with careful policy design, these levels of cost saving may be achievable.

For a sense of scale, to achieve break-even cost savings, policy changes would have to achieve:

 390 fewer notified consent applications per year (reducing notified consents from 1442 per year to 1053 per year)

- 9,854 fewer non-notified consent applications per year (reducing non-notified consents from 36,495 consents to 26,641 per year)
- A \$1,088 decrease in applicants' total cost per land use consent application (reducing costs from an estimated \$4,032 per land use consent to \$2,943)

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## 5 Comparing the outcomes of the current and the Panel's proposed RM system

In this section, we compare the outcomes of the current and the Panel's proposed RM systems. That is, we analyse the change in wider costs and benefits from the proposed system. These are the expected wellbeing benefits (or costs) from the change.

It is difficult to quantify the indirect impact from the new system. We therefore first outline the probability framework used to assess the wellbeing outcomes (section 5.1). We assess the likelihood that the proposed regulatory change will improve outcomes. We use criteria for regulatory evaluation derived from New Zealand regulatory best practice guidelines. We then set out our evaluation of the outcomes of the proposed system (section 5.2).

#### 5.1 Framework for assessing change in outcomes of the Panel's proposed RM system

The current New Zealand RM system has the overall objective to promote the sustainable management of natural and physical resources (as set out in section 5(1) of the RMA). It controls resource use (and non-use) through a series of regulatory decisions spanning legislation, regulation, regional and local plan-making, Commissioner hearings, Independent Hearings Panel hearings, resource consenting decisions, and Environment court and appellate court decisions.

This analysis aims to identify the outcomes associated with the current regulatory settings and compare these with outcomes expected from the Panel's proposed RM regime. A range of outcomes (leading to indirect costs and benefits) result from these regulatory decisions. The outcomes will improve or detract from wellbeing depending on whether errors are made in regulatory decisions (we expand on this point in section 5.1.1).

It is challenging to identify outcomes expected from the Panel's proposed RM system. The proposals are very high level, and ultimately the outcomes resulting from the proposed system will depend on currently unknowable factors such as future policy and implementation decisions. The lack of relevant and specific environmental and economic data further compounds the challenge of measuring indirect costs and benefits.

Considering this, we adopt a qualitative probabilistic framework for assessing outcomes. First, we present a conceptual understanding of regulatory regimes, and then present our qualitative framework for assessing the Panel's proposed RM system.

#### 5.1.1 RM system can be assessed for its likelihood of minimising errors

The RM system makes incremental decisions under the four key functions identified. The current and Panel's proposed RM systems broadly aim to achieve wellbeing maximisation (along multiple dimensions, including the health of the environment). Wellbeing is improved under the RM system when regulatory decisions trade-off different resource uses (and non-use) in ways that maximise total economic value.

#### Two types of error are possible in regulatory systems

RM system regulation maximises wellbeing when trade-offs between different uses (and nonuses) consider all relevant factors and avoids errors. One important aim for regulatory reform is to reduce the occurrence of these errors. If these errors in the proposed system are reduced, relative to the current system, wellbeing should improve. We can evaluate the Panel's proposed RM system by assessing the likelihood of making errors.

The following two errors are possible in the RM system:

- System prevents resource use (or non-use) that would improve wellbeing—this is an error of omission where the regulatory system prevents uses (or non uses) where benefits exceed costs. A simple example of this error is when the regulatory system prevents the construction of housing where the benefits of reduced housing costs and proximity to transport and employment outweigh localised amenity costs
- System allows resource use (or non-use) which would reduce wellbeing—this is an error of commission where the regulatory system allows uses (or non uses) where the costs exceed the benefits. A simple example of this error could be where the regulatory system allows wetlands to be drained for farmland where the costs of lost ecosystem services and non-use values exceed any benefit from farming use.

Table .	Table 5.1. Summarising possible outcomes in the kiw system—resource consent example						
		Actual Wellbeing Impact					
		Development would improve wellbeing	Development would harm wellbeing				
tory ion	Development goes ahead	Correct decision	Error of commission				
Regula Decisi	Development does not go ahead	Error of omission	Correct decision				

Table 5.1 presents the decision options in a resource consent example below.

## 5.1.2 Qualitative method to assess outcomes of Panel's proposed RM system changes

We adopt a qualitative method to measure the likely outcomes of the proposed system. Our method assesses the probability of the system making erroneous decisions (that is, decisions that do not improve wellbeing). We evaluate the current and Panel's proposed system across the four functions identified.

Our assessment framework follows two steps:

- Step 1: assess the scale of current problems and issues in the relevant part of the RM system and contribution to outcomes
- Step 2: assess probability of incorrect decisions from the Panel's proposed RM system change

 Step 3: conclude on the contribution of the Panel's proposed change to outcomes and assess a combined score.

We explain our approach to these steps in the following.

#### Approach to assessing contribution of RM system problems to outcomes

Grouped under the four functions, we assess the economic significance of the outcomes of current RM system problems. We rely on the Panel's evidence, information provided by MFE and other published sources of evidence of the economic costs and benefits of environmental and urban outcomes. Using our expert judgement, we score the contribution from 1 (low contribution to negative outcomes) to 5 (high contribution to negative outcomes).

#### Approach to assessing probability of incorrect decisions

In the second step, we review the Panel's major proposals. We assess the probability that the proposals reduce incorrect decisions (errors of commission and errors of omission) relative to the status quo. We assess an average score of the changes from 1 (errors unlikely) to 3 (errors likely).

To assess the probability of incorrect decisions, we adopt the framework set out in Table 5.2, based on the Government's *Expectations for Good Regulatory Practice*<sup>6</sup> and the Productivity Commission's *Principles for Allocating Regulatory Roles*<sup>7</sup>:

	Decision making I factors	Errors likely	Errors may occur	Errors are unlikely to occur
gu	Regulatory - objectives clearly identified	Objectives are open to widely differing interpretation	Some difference in     interpretation possible	<ul> <li>Narrow interpretation will prevail</li> </ul>
ective-setti	Objectives will identify the best option	<ul> <li>Trade-offs between objectives are not clearly identified</li> </ul>	<ul> <li>Trade-offs are somewhat clearly identified</li> </ul>	<ul> <li>Trade-offs between objectives are very clearly identified</li> </ul>
Obj	Clear how the objectives will be applied	<ul> <li>The hierarchy between objectives is unclear</li> </ul>	<ul> <li>Partial hierarchy of objectives exists</li> </ul>	<ul> <li>Hierarchy between objectives is explicit</li> </ul>
Institutional and	Costs and benefits of decisions are distributed among regulated and affected parties	Costs and benefits distribution does not match the group of regulated and affected parties defined in regulation	<ul> <li>Costs and benefits distribution partially matches the group of regulated and affected parties defined in regulation</li> </ul>	<ul> <li>Costs and benefits distribution matches the group of regulated and affected parties defined in regulation well</li> </ul>

#### Table 5.2: Framework assessing the probability of RM system errors

<sup>&</sup>lt;sup>6</sup> Treasury (2017), Government's Expectations for Good Regulatory Practice, <u>https://www.treasury.govt.nz/sites/default/files/2015-09/good-reg-practice.pdf</u>

<sup>&</sup>lt;sup>7</sup> Productivity Commission (2013), Towards Better Local Regulation, <u>https://www.productivity.govt.nz/inquiries/towards-better-local-regulation/</u>

	Decision making factors	Errors likely	Errors may occur	Errors are unlikely to occur
	Desirability of variability in regulatory approach matches scope for flexibility	<ul> <li>Regulatory approach is inflexible in dealing with dynamic subject matter</li> </ul>	<ul> <li>Regulatory is somewhat flexible in dealing with dynamic subject matter</li> </ul>	<ul> <li>Regulatory approach is flexible to dynamic subject matter</li> </ul>
allocation	Certainty of evidence available for decision-making	<ul> <li>Lack of clear and compelling or accurate evidence in decision- making</li> </ul>	<ul> <li>Some evidence available and used in decision- making</li> </ul>	<ul> <li>Clear and compelling or accurate evidence available and used in decision-making</li> </ul>
Resource	Costs or accountability for incorrect decisions	<ul> <li>Regulating agency faces no or minimal cost or is not accountable for incorrect decisions</li> </ul>	<ul> <li>Regulating agency faces moderate cost (but not full) of incorrect decisions</li> </ul>	<ul> <li>Regulating agency faces no or minimal cost of incorrect decisions</li> </ul>
Regulatory Support	Regulatory body has sufficient resources (capability and information)	Capability to undertake regulatory role is absent	Capability to undertake regulatory role is moderate	Capability to undertake regulatory role is high

#### Framework can identify where indirect benefits may arise or where more policy work is needed

The final step in our framework is to identify where the Panel's proposed RM system may improve regulatory decision-making (and therefore likely lead to wellbeing improvements) or where more policy design work is needed to avoid errors. We do this by comparing the contribution to outcomes from a proposed regulatory change against the probability of errors.

We assess a combined score of the changes. A low score indicates that the proposed change is likely to contribute to positive outcomes and make the increase in process costs from the reformed system worthwhile. A high score indicates that more policy design attention is needed for the intervention to avoid incorrect decisions.

### Outcomes of the Panel's proposed resource management system

We find there will be some improved outcomes to the RM system from the Panel's proposals. Improved outcomes are likely in resource allocation and in regulatory support functions. However, detailed policy design and consideration of ways to reduce the likelihood of regulatory error will be needed for most of the proposed changes, in order for clear benefits to emerge. Particular attention appears necessary for the institutional and rule-setting function of the RM system.

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Figure 5.1 illustrates the result of our three-step qualitative assessment of outcomes. The combined scores from our analysis are plotted from 0 to 15. A high score indicates that policy design attention is probably necessary. A low score suggests that improved outcomes should be expected.



Table 5.3 sets out our more detailed assessment of the major changes from the proposed RM system. We organise the changes under each of the four objective-setting functions. The table contains our three step analytical approach from left to right according to each major change.

abi	e 5.5: Analysis of outcome	es from Panel's proposed Rivi system change				
	Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design	
Objective setting function	Integration of land use planning and environmental protection. Revision of objectives of RM system in new NBEA Panel Report chapter 1	There is limited evidence of the direct contribution to wellbeing from the inclusion sustainability framework in Part 2 RMA. Nevertheless, the objective-setting/purpose clause of the current RMA (and future NBEA) is significant for how decision-makers (plan-makers and consent decision-makers for example) make the trade-offs when exercising their functions. Getting the objective-setting clause right is central to the functioning of the system. Therefore the contribution to outcomes is significant. Part 2 RMA was interpreted by courts for much of the RMA's life using an overall judgement approach. This contributed to significant uncertainty for decision-makers and users on the trade-offs between objectives and the hierarchy of objectives. This likely led to significant opportunity costs of development that did not proceed because of the uncertainty, and environmental values being overlooked. However, the <i>King Salmon</i> decision appears to have settled some of the uncertainty. <b>(4)</b>	<ul> <li>Errors of commission may continue to occur (2):</li> <li>The NBEA contains a set of 21 aspirational outcomes, but has not yet specified the hierarchy and prioritisation of differing these. The panel's commentary contains some analysis of trade-offs involved, but limited guidance on practical application.</li> <li>Errors of omission may continue to occur (2):</li> <li>New NBEA objectives require a clear policy prescription that must be interpreted throughout the RM system. Due to the highlevel nature of the objectives, and inherent uncertainty with some of the subject matter, it is possible that decisions will not allow certain development which is wellbeing enhancing.</li> <li>Average score: (2)</li> </ul>	(8)	Outcomes are likely to remain similar to the status quo. Detailed policy design work may be required to ensure that the hierarchy and prioritisation of outcomes in the new NBEA are clear, once rule-making and resource allocation decisions are made in the redesigned system. MfE will use this conclusion to inform further policy design work.	
	Mandatory environmental limits Panel Report chapter 2	The contribution of an environmental protection function in the RM system is very significant. Environmental values are widely regarded as being under-recognised in the setting of rules in the current RM system, such as in plans and in decisions to allocate resources.	<ul> <li>Errors of commission unlikely (1):</li> <li>New NBEA mandatory environmental limits will tend to result in decisions that err in favour of the status quo resource use in many environmental domains.</li> <li>Errors of omission more likely (3):</li> </ul>	(10)	Significant outcome benefits are possible, provided however that the environmental limits are applied in the right circumstances and with sufficient information. Detailed policy design will need to ensure that the decisions are made where appropriate information is available. MfE will use this	

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#### CONFIDENTIAL BUDGET SENSITIVE

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and Com omission in proposed RM system change (score)	mbin score	Conclusion and implications for policy design
	<ul> <li>The natural environment provides valuable services and has significant value to New Zealanders. Various valuation methodologies have produced a range of valuations:</li> <li>\$62 billion being the value of horticulture, cropping, agriculture, forests, scrubland, wetlands, rivers, lakes, estuaries, and mangrove ecosystems<sup>8</sup></li> <li>\$9.5 billion being the value of regional marine and terrestrial ecosystems<sup>9</sup></li> <li>\$1.8 trillion being the value of various environmental biomes</li> <li>The value of New Zealand's environment to international tourism and in the marketing of New Zealand products is also very high</li> <li>New Zealanders value the preservation of the environmental degradation is obviously costly. If failing to enforce environmental limits leads to a 1% degradation across several agriculture, forests, scrubland, wetlands, rivers, lakes, estuaries, and mangrove ecosystems, this could result in at least a \$620 million loss per year to New Zealand. This does not account for ecosystem services and natural capital that has not been formally valued.</li> </ul>	<ul> <li>Environmental limits require well-functioning institutions with complete information to set the limits in advance for planning and consenting decisions to be made within the limits. The level of information needed for all decisions will be challenging for many domains, and informed trade-offs will not be possible. It is therefore more likely that regulatory decisions will tend to prevent development or a change in resource use, even where the decision would improve outcomes.</li> <li>Average score: (2)</li> </ul>		conclusion to inform further policy design work.

<sup>8</sup> Patterson, ā.G., & Cole, A.O. (2013). "Total economic value" of New Zealand's land-based ecosystems and their services.

<sup>9</sup> Van den Belt, M.; Cole, A. 2014: Ecosystem goods and services in marine protected areas

#### CONFIDENTIAL BUDGET SENSITIVE

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
Mandatory national directions to set objectives, policies, limits, targets, standards, and methods Panel Report chapter 7	(5) The RMA was designed to include national direction to guide rule-making and implementation. The weakness or absence of national direction during the life of the RMA has limited the effectiveness of the RM system according to the panel and many commentators. Weak national direction on standards and enforcement may have contributed to New Zealand's declining freshwater quality in some catchments. Agricultural intensification has led to rising diffuse pollution. Between 1989 and 2013, total nitrogen levels in rivers increased 12 percent, with 60 percent of the 77 monitored sites showing statistically significant increases). <sup>10</sup> Conversely, clear and regularly updated national direction has been effective in improving air	<ul> <li>(score)</li> <li>Errors of commission unlikely (1): <ul> <li>The precision of proposed national directions is not yet fully clear, however, the matters recommended by the Panel for inclusion appear to set limits and guidance at a national level</li> </ul> </li> <li>Errors of omission may continue to occur (2): <ul> <li>National level directions can fail to consider locally relevant considerations and costs and benefits. Targets and standards set at a national level often miss the particular needs of the diverse range of affected communities.</li> <li>Similar to the application of mandatory</li> </ul> </li> </ul>	(6)	There is some risk that outcomes may not improve. Detailed policy work will be needed to ensure that the balance between national directions and locally-specific decision- making is achieved. MfE will use this conclusion to inform further policy design work.
New concept of Te Mana	quality. The NES for Air Quality was introduce in 2004. Between 2004 and 2012, premature deaths due to particulate matter dropped 14 percent. (4) The RM system has generally failed to deliver	environmental limits, the national-level directions may not have all information and do not have the ability to assess the costs and benefits relevant to affected communities or individuals Average score: (1.5) Errors of commission may continue to occur	(8)	Outcomes for Māori will depend on detailed
o te Taiao, requirement to give effect to Te Tiriti,	positive outcomes for Māori. Despite legislative provisions in the RMA, Māori values are often	(2):	x · 7	design. The hierarchy of Te Mana o te Taiao in the overall objectives framework is not yet

<sup>10</sup> EDS (2016), Evaluating the Environmental Outcomes of the RMA, page 32.
Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
mandatory national direction Panel Report chapter 3	<ul> <li>'balanced out' against other economic interests.<sup>11</sup></li> <li>MfE has advised Castalia that it is working with Māori to quantify the costs and benefits to Māori of the RM system. Our analysis is therefore preliminary, and provided subject to the outcome of that consultation.</li> <li>We understand that the contribution of the RM system is significant to Māori. The Panel's qualitative assessment is clear, and the Waitangi Tribunal's findings also support this.</li> <li>(4)</li> </ul>	<ul> <li>The proposals suggest a national-level set of objectives, plus regional-level representation for spatial planning and joint committees. It is not clear how the involvement in consensus-based decision-making will uphold resource use rights of all Maori with an interest in the resource in question.</li> <li>Errors of omission may continue to occur (2):</li> <li>It is not clear from the Panel recommendations how involvement in consensus-based decision-making will uphold resource use rights of Maori, especially at the level of individuals, whanau or hapu with resource rights and interests</li> <li>(2)</li> </ul>		clear. Success, and improved outcomes for Māori parties will also depend on whether decisions on resources can consider the affected group (including under a regional planning approach, for example, that may involve lwi, and not affected hapu). MfE will use this conclusion to inform further policy design work.
New climate change focussed objectives and mandatory national direction Panel Report chapter 6	In 2004, the RMA was amended to remove the direct control of greenhouse gas emissions from regional councils. Currently, the existing RM system makes no allowances for greenhouse gas mitigation objectives, thereby limiting the policy tools available to help New Zealand's mitigation efforts. New Zealand has primarily relied on the Emissions Trading Scheme (ETS) to control emissions. However, both the Productivity	<ul> <li>Errors of commission may occur (2):</li> <li>Decisions on resource use made under the national direction may produce errors of commission due to the difficulty in setting objectives for outcomes that will occur over a long period of time. Differences in interpretation are also possible over time and between decision-making bodies that interpret the objectives</li> </ul>	(8)	The challenges with prioritisation of climate change-related objectives in the NBEA will need to be resolved. The Panel make some recommendations about improving how planning and decision-making copes with uncertainty (adaptive planning frameworks), but detailed drafting and a hierarchy would help. MfE will use this conclusion to inform further policy design work.

<sup>11</sup> Planning Under Co-operative Mandates (2009), A Report to Iwi on the Kaupapa Māori Environmental Outcomes and Indicators Kete, Chapter 4 The Reality for Māori.

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
	Commission and MfE advise that the ETS alone will be unable to transition New Zealand to a low carbon economy. MfE modelling suggests that the ETS will deliver only half of the abatement needed to meet our carbon target. New Zealand's greenhouse gas emissions contribute to climate change. It is difficult to calculate the amount of greenhouse gas that might have been mitigated had the RMA continued to account for greenhouse gases. However, we do know it would have played some role in accelerating climate change which will have several negative impacts on New Zealand. One study found that anthropogenic climate change caused \$120 million in damage through flooding, and \$720 million in economic losses due to drought between 2007 and 2017. The study predicts these costs to grow in coming years as floods and droughts become more severe. <sup>12</sup> NZIER's modelling suggests that the impacts of climate change alone may add between 0.1% and 0.5% to the annual growth rate of Crown liabilities relating to flooding. By 2050, this could add between \$66 million and \$96 million to the Crown's annual liability. <sup>13</sup> Climate change may also increase the risk of bushfires. Over the last 70 years, wildfires have	Errors of omission may continue (2): <ul> <li>Errors of omission may continue due to lack of clarity on hierarch of objectives. There is also some risk that decision-making bodies err in favour of preventing change (in planmaking or consenting) due to uncertainty Average score: (2)</li></ul>		

<sup>12</sup> New Zealand Climate Change Research Institute and NIWA (2018), Estimating financial costs of climate change in New Zealand

<sup>13</sup> NZIER (2020), Investment in natural hazards mitigation: forecasts and findings about mitigation investment, page ix.

	Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
		cost the forestry industry at least \$300 million, and damaged over 40,000 hectares of plantation forest. <sup>14</sup> Climate change is likely to have a negative impact on New Zealand's biodiversity. It can change seasonal events (for example, exacerbate beech masting which increase the pest population). A warmer climate may also make New Zealand more vulnerable to invasive species which may further harm our native species. A warming climate will also negatively impact our freshwater, and ocean environments. Ocean warming and acidification will have negative implications for our aquaculture and commercial fisheries industries. (4)			
Institutional and rule setting	Strategic Planning Act with compulsory regional strategies Panel Report chapter 4	Both the Panel and the Productivity Commission <sup>15</sup> highlight that the absence of long- term, strategic land-use parameters have prevented land use rules and infrastructure provision from responding to growth. This is a major cause of the housing affordability problem and under-provision of trunk infrastructure. Poor housing affordability can have negative consequences on labour mobility, New Zealand's attractiveness to foreign businesses and skilled workers, and the Government's long-term fiscal	<ul> <li>Errors of commission may continue to occur (2)</li> <li>Errors of omission may continue to occur (2)</li> <li>The spatial strategies set long-term outcomes in the "public interest" and involve central, regional, local and lwi at the governance level. Limiting appeals will likely result in process efficiencies. However, lifting decision making away from a solely local level has two countervailing effects</li> </ul>	(10)	The analysis suggests more policy design attention is needed. It will be important to ensure that the scope of subject matter included in spatial plans is appropriate to the level of confidence of information over the relevant time-period. For example, spatial plans that are fixed to one mode of infrastructure may not have sufficient flexibility to accommodate dynamic change in technology.

<sup>14</sup> Westpac NZ (2018), Climate Change Impact Report, page 14.

<sup>15</sup> Productivity Commission (2017), Better Urban Planning, Chapter 10.

<ul> <li>liabilities (for example, it can increase spending on social housing).</li> <li>Impacts of poor land use coordination with infrastructure and inadequate infrastructure include:</li> <li>Congestion: N2IER estimate the economic and social benefits of decongesting Auckland to total between 50.9 billion and \$13.3 billion (representing between 1% to 1.4% of Auckland's GDP).<sup>15</sup> Conversely, this foregone benefit is the cost of congestion.</li> <li>Sequencing of development: Failures to provide trunk infrastructure to enable scale development is widely regarded as a critical barrier. Scale development arcoss multiple sites in brownfield and greenfield areas is critical to increasing the supply of housing and there political attending portability, and information available to decision makers. It may also overcome political economy challenges faced by local government where benefits (for example national economic growth and housing affordability, and profability and information availabe to decisions) are not directly enjoyed by the local residents and an ousing affordability. The responsivenees of planning for development is approving the responsivenees of planning for development is app</li></ul>	Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
		<ul> <li>liabilities (for example, it can increase spending on social housing).</li> <li>Impacts of poor land use coordination with infrastructure and inadequate infrastructure include:</li> <li>Congestion: NZIER estimate the economic and social benefits of decongesting Auckland to total between \$0.9 billion and \$1.3 billion (representing between 1% to 1.4% of Auckland's GDP).<sup>16</sup> Conversely, this foregone benefit is the cost of congestion.</li> <li>Sequencing of development: Failures to provide trunk infrastructure to enable scale development is widely regarded as a critical barrier. Scale development across multiple sites in brownfield and greenfield areas is critical to increasing the supply of housing and thereby improving affordability. An estimate of the benefits of improving the responsiveness of planning for development is approximately \$1.1 billion for Auckland alone.<sup>17</sup></li> </ul>	<ul> <li>which make prediction of the net impact on regulatory outcomes difficult:</li> <li>It may increase the risk of regulatory error. Involving higher tiers of government distributes costs and benefits widely, and inconsistently across regions.</li> <li>Accountability of decision-makers to affected parties is diluted (it is harder to get political attention to hyper-local issues). Residents can more easily hold local representatives to account for decisions than they are able to influence central government through national elections</li> <li>Some risk of regulatory error may reduce. Central government participation in the decision making process may improve the overall capability and information available to decision-makers. It may also overcome political economic growth and housing affordability improvements resulting from planning decisions) are not directly enjoyed by the local residents and are perceived as costly. However, there may be other mechanisms that can be</li> </ul>		Competence and capability among those tasked with creating the spatial strategies will be important to ensure there is appropriate information available to prepare the plans. Mechanisms and processes are also necessary to ensure local communities have effective means of holding joint planning committees accountable for their decisions. MfE will use this conclusion to inform further policy design work.

<sup>16</sup> NZIER (2017), Benefits from Auckland road congestion, page 33.

<sup>17</sup> PwC (2020), Cost-benefit analysis for a National Policy Statement on Urban Development: report for MfE

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
		used in place of removing decision-making rights from local communities such as improving incentive alignment of local government with wider economic benefits. Average score: (2)		
Mandatory combined regional plans prepared by joint committee, hearings by an Independent Hearings Panel Panel Report chapter 8	The Panel state that plan-making is inefficient. Plans are often complex and ineffective and are not adequately integrated. Plan-making processes can be captured or unreasonably influenced by sub-sets of the affected population. The potential benefits in terms of environmental outcomes are similar as set out above, provided than plan-making achieves the intended outcomes. For the urban environment, if regional plans overcome the barriers to intensification (brownfields) and urban expansion (greenfields), significant benefits could be realised. Recent estimates put the benefits of intensification at \$7.8 billion and benefits of responsive planning for development at \$1.1 billion for Auckland alone. <sup>18</sup> (4)	<ul> <li>Errors of commission may continue to occur (2):</li> <li>Plans can permit land and resource uses which are inappropriate under the current system, resulting in errors or commission. The relatively inflexible combined planmaking system may fail to reflect dynamic needs of affected communities and individuals</li> <li>Errors of omission are likely (3):</li> <li>The proposal places heavy reliance on a technocratic process at regional level, with some input from democratic representatives of constituent local authorities in a region. The distribution of costs and benefits of the plans do not match the parties affected by the plan.</li> <li>The risks of error may be somewhat reduced. The proposals will weaken current political economy barriers that incentivise local government to make decisions in</li> </ul>	(10)	Variation within a region can be desirable for some matters. It may not be possible for a joint committee in one of the 14 regions to adequately consider these variations. Flexibility in the short- and medium-term may also be required and could be more closely examined. The Panel suggest that an evaluation process (a reformed section 32 process) is included for option assessment. Ensuring this reflects the principles of good regulatory evaluation will be important. MfE will use this conclusion to inform further policy design work.

<sup>18</sup> PwC (2020), Cost-benefit analysis for a National Policy Statement on Urban Development: report for MfE

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
		<ul> <li>favour of status quo interests, that may not be welfare improving.</li> <li>The process for creating combined plans is also likely to be inflexible in dealing with the need for variability in regulatory approach (for example, between large urban centres and rural areas).</li> <li>Average score: (2.5)</li> </ul>		
<ul> <li>Climate change</li> <li>Mandatory national direction</li> <li>Regional spatial strategies to address climate change mitigation</li> <li>New Managed Retreat and Climate Change Adaptation Act</li> <li>Panel Report chapter 6</li> </ul>	<ul> <li>The existing RM system is integrated poorly with existing legislative and policy tools to control climate change and natural hazard risk management. This makes it difficult to pursue managed retreat strategies, protection of infrastructure, rezoning, and rating increases necessary to adapt to future climate change related risks.</li> <li>Given the lifespan of infrastructure, and the timeframe of climate change, plans for infrastructure should account for conditions at least 100 years into the future. However, existing planning timeframes fail to align with this consideration, for example:</li> <li>the existing RMA system requires plans to have only a 10-year lifespan.</li> <li>The Local Government Act requires local government to create infrastructure strategies over 30-year periods.</li> <li>The existing Climate Change Response Act 2002 provides mechanisms to address climate change related risks at a national level, but no guidance</li> </ul>	<ul> <li>Errors of commission likely (3):</li> <li>Errors of omission likely (3):</li> <li>The proposals require plan-making authorities for spatial plans and regional plans to set long-term (in some cases 100- year projections) strategies. It is likely that the plan-making authority will not have sufficient information to predict all outcomes.</li> <li>Average score: (3)</li> </ul>	(12)	The analysis finds that errors are likely, due to the uncertainty of information available. Significant policy work is likely to align the proposed Managed Retreat and Climate Change Adaptation Act with existing policy approaches to climate change (CCRA and ETS), and any policy recommendations that emerge from the Climate Change Commission's recommendations to government. The Commission is likely to recommend (and the government will act of both dynamic policy settings (for example changes to the ETS) and prescriptive policy. The RM system will need to align, to the extent it has jurisdiction, with these policy outcomes to avoid errors. MfE will use this conclusion to inform further policy design work.

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
	is provided for adaptation plans at a regional and local level. LGNZ estimates \$2.7 billion to \$13.3 billion worth of three waters infrastructure, roading, and council owned buildings and facilities is at risk of sea level rise. This issue has been exacerbated by relatively short planning horizons that do not account for future climate change risks. <sup>19</sup> The planning system can play an effective climate change adaptation role. For example, it can incentivise the construction of temporary (and therefore moveable), and flood resistant buildings in flood prone areas. These mitigations can be quite effective, for example, modifying housing for flood mitigation is estimated to create \$5 of benefit for every \$1 invested. <sup>20</sup> (4)			
<ul> <li>Te Tiriti:</li> <li>Representation of mana whenua</li> <li>National Māori Advisory Board</li> </ul>	Mechanisms for mana whenua involvement in the RM system have had very limited uptake. Iwi management plans have had limited and inconsistent impact on the contents of policy statements and plans. Improving the relationship between Māori and local government can result in direct cost savings. NZIER suggest that mechanisms such as	<ul> <li>Errors of commission unlikely (1)</li> <li>The proposed changes will allow Māori greater involvement in decision-making, particularly where agreements are reached between local government and Māori groups (for example, iwi) which have rights and interests in resources. This ensures the distribution of costs and benefits occurs</li> </ul>	(6)	The analysis suggests that problems may persist in the RM system for Maori involvement in RM decision-making, particularly where new institutions do not overlap with the hapu or other relevant group with a relationship with or rights to whenua, wai or other resource. MfE will use

<sup>19</sup> Local Government New Zealand (2019), Vulnerable: The quantum of local government infrastructure exposed to sea level rise

<sup>20</sup> NZIER (2020), Investment in natural hazards mitigation: forecasts and findings about mitigation investment , page 48.

	Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
	<ul> <li>Improvements to Mana Whakahono a Rohe</li> <li>Positive obligation on local authorities to investigate opportunities for transfer of power and joint management</li> <li>Panel Report chapter 3</li> </ul>	joint management agreements can reduce council's engagement costs with iwi by 10 to 15 percent. <sup>21</sup> Improving the Māori government relationship can also help protect taonga and other existence and bequest values. MfE will work with Māori directly to quantify these benefits. (4)	<ul> <li>among the affected parties, and provides a dynamic regulatory approach to the subject matter</li> <li>Errors of omission may continue to occur (2)</li> <li>The proposals require inclusion of mana whenua at various stages. The Panel acknowledges that there is a lack of clarity on mandates of mana whenua. It is possible that some Māori groups and individuals may be excluded or overlooked. Hapu or whanau property rights may not be adequately represented by the formal plan-making authority.</li> <li>Average score: (1.5)</li> </ul>		this conclusion to inform further policy design work.
Resource allocation	<ul> <li>Change the principles for resource allocation to address status quo bias in favour of:         <ul> <li>Sustainability</li> <li>Fairness and equity</li> <li>Early notice and adequate time for transition</li> </ul> </li> </ul>	Status quo bias favouring existing activities has contributed towards poor environmental outcomes. Territorial authorities have tended to favour incumbents over new entrants (irrespective of relative environmental impact). <sup>22</sup> Status quo bias has had a significant negative impact on valuation of freshwater, and therefore on sustainable use. The 'first in, first served' system of freshwater allocation means that existing permit holders lack an incentive to	<ul> <li>Errors of commission may continue (2)</li> <li>Errors of omission may continue (2):</li> <li>The four principles currently do not have any hierarchy, or precision in definitions. While chapters 6, 7, 8, 9 and 11 are said to reflect the principles. Chapter 9 (discussed below) recommends that consenting decisions are made in pursuit of outcomes specified in a plan. However, Chapter 9 not provide</li> </ul>	(8)	Detailed work will be needed to define the principles for resource allocation, and assigning the hierarchy within the relevant parts of the consenting system. Some of this has been commenced by the Panel in parts of its Report. The Panel includes "efficiency" in Chapter 11. MfE will use this conclusion to inform further policy design work.

<sup>21</sup> NZIER (2011), Māori participation in the Resource Management Act: Assessing the challenges and opportunities associated with Māori participation in resource management issues.

<sup>22</sup> Environmental Defence Society (2016), Evaluating the environmental outcomes of the RMA, page 54.

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
<ul> <li>Balancing responsiveness with certainty for investment</li> </ul>	conserve freshwater, or for freshwater to go to the highest value use. The recreational and cultural value of freshwater is undervalued.	guidance on the hierarchy of the principles in making the plan, or mention the principles.		
Panel Report chapter 5	(4)	Average score: (2)		
<ul> <li>Retain existing uses and consented activities protection, except that regional councils and territorial authorities shall be given strengthened powers to modify or extinguish consents in</li> </ul>	Panel does not present specific evidence of contributions to outcomes (costs or benefits) arising with the continuation of existing uses and consented activities. We therefore assume a low contribution to current outcomes. (2)	<ul> <li>Errors of commission may continue (2)</li> <li>Errors of omission may continue (2):</li> <li>The retention of the existing use and consented activity exceptions with only limited grounds for review based on climate change or high risk of harm may not reflect all possible harms (negative externalities).</li> </ul>	(4)	It appears that outcomes will remain unchanged based on the Panel's recommendations. There is limited evider on the scale of the economic costs of retaining existing uses. MfE will use this conclusion to inform further policy design work.
Panel Report chapter 5		Average score: (2)		
<ul> <li>Climate change:         <ul> <li>Include adaptive planning measures in mandatory combined plans</li> <li>Permit modification of existing land use to provide for adaptation or risk</li> </ul> </li> </ul>	Currently, existing uses and consented activities pose barriers to effective managed retreat in the face of climate change. The Panel states that central and local government lack the necessary powers to decrease the intensity of land use (the Panel uses the example of replacing existing commercial and residential land use with temporary and other less vulnerable activities). The value of privately owned assets at risk of climate change related flooding. extreme	<ul> <li>Errors of commission unlikely (1)</li> <li>The reformed system is unlikely to make decisions that result in costly outcomes (for example building public infrastructure in climate change-prone areas due to a bias against such decisions.</li> <li>Errors of omission more likely (3)</li> <li>It is more likely that decisions will be made</li> </ul>	(6)	The proposals appear to increase errors of omission. However, errors of commission be less likely. Again, detailed design will h to ensure that the proposals comply with design principles identified by the panel minimum. (for example, avoiding moral hazard) Furthermore, alignment with other polici tools such as the ETS and policies resultin from Climate Change Commission
reduction – Climate change adaptation fund Panel Report chapter 6	weather events, and sea level rise is unclear. Even if it is a fraction of the local government cost (LGNZ estimates \$2.7 billion to \$13.3 billion worth of three waters infrastructure, roading, and council owned buildings and facilities is at	preserving the status quo or preventing development that might otherwise be beneficial. This is because the plan-making body is unlikely to face the costs of incorrect		recommendations will be important in the detailed design phase to avoid overreach imposing excessive costs. MfE will use this conclusion to inform fur policy design work.

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
	risk of sea level rise), the cost will still be significant. <sup>23</sup> The Panel also identifies a problem of split incentives in responding to climate change. Often the decision maker (local council) does not face the consequences of consenting decisions. For example, some councils continue to approve new subdivisions in area which will be vulnerable to sea level rise by 2050. <sup>24</sup> There is also the challenge of how citizens themselves react to perceived risks. In Matata in the Eastern Bay of Plenty, most of the 34 properties at risk of debris flows have opted for a voluntary buy out and relocation. <sup>25</sup> However, some owners have not responded to the buyout scheme. In these situations, the regulatory system has limited actions to compel cost/benefit efficient responses.	decisions (landowners face the opportunity cost). Average score: (2)		
<ul> <li>Change consenting system to "outcomes focussed decision- making system" that refers to outcomes set</li> </ul>	Resource consents are required where resource use is not permitted under a relevant plan. This consenting process is considered to impose high direct costs. It is slow, litigious and complex.	<ul> <li>Errors of commission possible (2)</li> <li>The consenting system will continue to commit errors where the outcomes identified in plans do not adequately capture</li> </ul>	(6)	Care and attention will be needed to ensure that the outcomes, and frameworks in plans reflect an optimum set of outcomes. The institutional design will important to ensure that communities of interest are

<sup>23</sup> Local Government New Zealand (2019), Vulnerable: The quantum of local government infrastructure exposed to sea level rise

<sup>24</sup> NZIER (2020), page 42.

<sup>25</sup> NZIER (2020), page 51.

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
out in plans and is subject to environmental limits and binding targets Panel Report chapter 9	<ul> <li>Applicants cost for both notified with hearing and non-notified applications have doubled since 2014/15 to \$18,414 and \$2,128 on average in 2018/19 respectively.<sup>26</sup></li> <li>Timeliness of consent application decisions has also declined since 2014/15 by 15 percent. These increases holding costs (risk and time value of money) faced by users waiting for application decisions by councils.</li> <li>Councils face rising costs for resource consenting. These direct costs are likely mirrored by opportunity costs in terms of poorer outcomes, where this complexity and perception of declined consent discourages applications.</li> <li>Consenting decisions have generally failed to account for cumulative effects. This has been driven by a case-by-case focus on the impacts of individual applications, as opposed to a more holistic assessment. This dynamic has contributed significantly to declining wetlands and freshwater quality.<sup>27</sup> This suggests the system is making errors of commission: allowing development to proceed without welfare-enhancing conditions.</li> <li>(3)</li> </ul>	<ul> <li>the optimum management of cumulative effects.</li> <li>Errors of omission possible (2):</li> <li>Errors of omission will occur to the extent that plans do not adequately capture an optimum set of outcomes for the community of interest. Plans and limits are set in advance, and may not be made by an institution capable of weighing the impacts of decisions, or incentivised to reach a decision that reflects the optimum outcome for the community of interest</li> <li>Average score: (2)</li> </ul>		appropriately reflecting in plan-making. See also above, in relation to chapters 4 and 8. MfE will use this conclusion to inform further policy design work.

<sup>26</sup> MfE (2020), Trends in Resource management Act implementation, page 14.

<sup>27</sup> Environmental Defence Society (2016), Evaluating the Environmental Outcomes of the RMA, Page 36.

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Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
<ul> <li>Designations, heritage orders and water conservation orders largely retained with some amendments, but significant policy work for heritage orders</li> <li>Panel Report chapter 10</li> </ul>	Heritage orders can impose significant opportunity cost where demolition or significant alteration is prevented that might allow more density or otherwise allowing land to change to a higher-value use. For example, the Gordon Wilson Flats heritage protection is said to be a foregone \$320 million development of university buildings. <sup>28</sup>	No assessment due to lack of policy specificity.	(-)	The Panel has identified the significant policy work needed for heritage order reform. MfE will use this conclusion to inform further policy design work.
<ul> <li>Major reform of allocation via consenting with suggested tools and economic instruments</li> <li>Panel Report chapter 11</li> </ul>	<ul> <li>Freshwater:</li> <li>Currently freshwater allocations are not readily traded. The value of allocations is hidden in agricultural land prices or not discoverable at all. Allowing trading in freshwater rights would unlock significant value. Freshwater could flow to its highest value uses, including for ecological purposes (minimum river flows), recreational purposes, as well as consumptive agricultural and industrial uses.</li> <li>Quantified benefits of more efficient water allocation include:</li> <li>Economic benefit of \$389 million per annum if there is a 1 percent increase in availability of fresh water (MfE)</li> <li>Economic benefit of \$370 million if 5 percent of sleeper share (unused consented water</li> </ul>	<ul> <li>Errors of commission and commission unlikely (1):</li> <li>Provided that detailed design identifies optimum allocation mechanism from Panel's discussion and assigns decision-making responsibility at a level where costs and benefits are apparent to decision-makers and affected parties, and adequate information is available.</li> <li>The intention appears to be to provide decision-making institutions with evidence and tailor institutions to the affected community of interest</li> <li>Average score: (1)</li> </ul>	(4)	Improved outcomes are likely. The Panel has proposed a range of instruments and tools which will be appropriate, depending on the resource in question. Detailed design of specific regimes for different natural resources is contemplated, and the Panel provide some initial discussion of options. MfE will use this conclusion to inform further policy design work.

<sup>28</sup> NZIER (2020), Current costs of RMA processes and practices – Final outcome

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
	allocations) are reallocated to higher value uses. <sup>29</sup> <b>Space in the coastal marine area:</b> The allocation of space for aquaculture was initially granted on a first-in, first-served basis for minimal cost and with lengthy terms. The current allocation regime is still ad hoc, but very costly for applicants who need to identify sites and present environmental assessments. The current system likely causes significant opportunity cost from an allocation system that does not see permits go to the highest value use.	REFER		
	<ul> <li>Urban development:</li> <li>The unresponsive planning system has contributed to significant costs for new housing and other development. Estimates of the opportunity cost include:</li> <li>One estimate suggests that the urban planning system contributes between 28 percent (Tauranga) and 56 percent (Auckland) to house prices in the five biggest cities.<sup>30</sup></li> <li>The modelled benefits of increased intensification could be as high as \$6.5 billion in NPV terms according to research supporting the National Policy Statement: Urban Development 2020. The benefits accrue to</li> </ul>			

<sup>29</sup> Sapere (2014), The costs and benefits of an allocation of freshwater to iwi, page v.

<sup>30</sup> Lees (2017), Quantifying the impact of land use regulation: Evidence from New Zealand, New Zealand Social Policy Evaluation and Research Unit

		-		
Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
	both existing residents and new entrants/households. <sup>31</sup> (4)			
Develop comprehensive national environmental monitoring system , environmental reporting and oversights of system performance Panel Report chapter 12	Significant gaps in data on environmental outcomes make it hard to construct a clear picture of the state of the environment. <sup>32</sup> Many local authorities lack capability and capacity to collect data and monitor outcomes. Higher quality and more complete information would improve quality of decision-making. (3)	<ul> <li>Errors of commission and commission unlikely:</li> <li>The Panel proposes a significantly expanded and resourced monitoring system. This will increase capability and expand the information available to support regulatory activities elsewhere in the RM system</li> <li>The score is dependent on the recommendations being implemented</li> <li>Average score: (1)</li> </ul>	(3)	The proposals are likely to improve outcomes.

<sup>31</sup> PWC (2020), Cost-benefit analysis for a National Policy Statement on Urban Development: Final Report to Ministry for the Environment

<sup>32</sup> MFE, Statistics NZ (2019), Environment Aotearoa; Parliamentary Commissioner for the Environment (2019), Focusing Aotearoa New Zealand's Environmental Reporting System.

Panel's proposed RM system change	Contribution of current RM system problems to outcomes	Probability of errors of commission and omission in proposed RM system change (score)	Combin ed score	Conclusion and implications for policy design
<ul> <li>Institutional strengthening:         <ul> <li>Additional resourcing for MFE, PCE and mana whenua</li> <li>Additional cooperation with professional institutes</li> <li>New climate change adaptation fund</li> </ul> </li> <li>Environment Court additional resourcing for new roles</li> <li>Panel Report chapter 14</li> </ul>	Lack of capacity has hindered the ability of mana whenua to engage in RM processes. Iwi groups often the ability to fully engage in all RM processes, nor the financial resources to bring appeals to protect their interests. This has contributed to the inability of the RM system to protect Māori interests. Weak implementation of the current RM system is partly due to poor capacity (such as a lack of financial resources) of implementing bodies. Lack of funding has been a constraint for local government. <sup>33</sup>	<ul> <li>Errors of commission and commission unlikely:</li> <li>The Panel's proposals are for a significant increase in resources. The role of institutions with appropriate knowledge (for example, science and cultural competency) is expanded</li> <li>Institutions that have expanded roles in other recommended changes (for example, judiciary) receive appropriate additional resources under the Panel's proposals</li> <li>Average score: (1)</li> </ul>	(3)	The proposals are likely to improve outcomes.

<sup>33</sup> Environmental Defence Society (2016), Evaluating the Environmental Outcomes of the RMA, page 20.

### **Appendix A: Process costs of the Panel Plus scenario**

Castalia prepared and submitted the report *Economic Analysis of the Independent Panel's Proposed Reforms to the Resource Management System* to MfE on 26 February 2021 (Castalia's Economic Analysis). Castalia's Economic Analysis analysed the Independent RM Panel's recommendations and modelled the estimated changes in process costs resulting from those recommendations. We built the Castalia RM Process Cost Model to model the change in administrative, compliance and user costs (process costs). This Appendix refers to this modelling as the 'Castalia base case' scenario.

### MfE's policy development process includes developing a different scenario called Panel Plus

MfE is developing policy advice for Ministers to inform RM system reform as of March 2021. This includes building upon and clarifying the Panel's recommendations or changing the recommendations where relevant. One package of policy options is called the 'Panel Plus' scenario. MfE updated some assumptions in the Castalia RM Process Cost Model to estimate the likely process cost impacts of the Panel Plus scenario.

MfE requested Castalia to peer review the inputs and assumptions for the Panel Plus scenario in the Castalia RM Process Cost Model. The peer review is to ensure the model inputs accurately reflect MfE's Panel Plus scenario and that the model outputs are robust given MfE's assumptions.

We reviewed the model and confirm that it reflects the assumptions MfE has used to reflect the Panel Plus scenario. This Appendix presents process costs—including establishment costs, ongoing costs, and cost savings—resulting from the Panel Plus scenario.

### Panel Plus scenario has lower process costs than the Castalia base case

The Panel Plus scenario has lower process costs than the Castalia base case scenario in all process cost and cost saving categories. The Panel Plus scenario results in overall net cost savings of \$84.7 million per annum relative to the status quo. For reference, the Castalia base case resulted in an overall net cost increase of \$75.5 million per annum relative to the status quo.

Relative to the Castalia base case, the Panel Plus scenario:

- reduces total establishment costs by \$181.3 million (PV)
- reduces total ongoing costs by \$95.9 million per annum
- increases users net cost savings by an additional \$90.1 million per annum.

We have not assessed the indirect impacts, including benefits, of the Panel Plus scenario. Our review does not assess whether the outcomes of policy changes justify the costs.

### Efficiencies in the consenting system such as the online portal can drive significant cost savings

The Panel Plus scenario assumes that new initiatives aimed at process cost efficiencies in consenting will lower the costs. These efficiencies can drive significant changes to the total process costs.

Initiatives such as the open portal for managing consent applications reduce time and effort required from users of the system, and local government which administers the system. Given

the considerable cost of both administering and using the current system, even small efficiencies can generate considerable cost savings. Therefore, investments—such as the open portal—which reduce complexity and increase ease of use can lead to significant benefits. The scale of possible savings are detailed in Table A.1 below.

### Table A.1: Possible cost savings associated with efficiencies in the consenting system

Level of cost reduction	Local Government cost savings (per annum)	User cost savings (per annum)	Total cost savings (per annum)
5 percent	\$7,200,000	\$24,800,000	\$32,000,000
10 percent (Castalia base case assumption)	\$14,400,000	\$49,700,000	\$64,100,000
15 percent	\$21,600,000	\$74,500,000	\$96,200,000
20 percent (Panel Plus assumption)	\$28,800,000	\$99,400,000	\$128,300,000
30 percent	\$43,200,000	\$149,100,000	\$192,400,000

### Outline of this Appendix

This Appendix is structured as follows:

- We set out the key features and assumptions of the Panel Plus scenario in section A.1
- We outline the process costs of the Panel Plus scenario in section A.2, and
- We outline the process cost impacts on central government, local government, and users in section A.3

# A.1 Key features of the Panel Plus scenario compared to the Castalia base case scenario

This section outlines the key features of the Panel Plus scenario relative to the Castalia base case scenario. It also outlines how these features are reflected in cost assumptions.

## A.1.1 Panel Plus establishment scenario assumes fewer planning areas, and removes the Climate Change Adaptation Fund from quantitative analysis

The Panel Plus scenario assumes there will be 14 RM system planning regions which will each require a new regional spatial plan, combined plan, and new institutions (regional hubs and joint committees for creating combined plans). Castalia however assumed there would be 16 regions reflecting the current regions of New Zealand. Because the Panel Plus scenario assumes two less planning regions, this reduces its establishment costs relative to the Castalia base case.

The Panel Plus scenario also removes the Climate Change Adaptation Fund from its quantitative analysis on the grounds that it is very uncertain at this point and it is being advanced through a separate but parallel policy process. The Castalia base case scenario included a placeholder figure representing the value of this fund in its quantitative analysis.

All establishment cost assumptions which vary between the Castalia base case and the Panel Plus scenario are outlined in Table A.1 below.

Castalia base case assumption 13 new national directions \$100 million fund	Panel Plus assumption 10 new national directions Remove from quantitative	MfE's rationale for Panel Plus assumptions MfE understand that the 13 subjects for national direction identified in the Panel's report will be addressed across 10 new national directions as part of a new 'National Planning Framework' Costs of this fund are not part of this policy process. It will be addressed separately as part of
13 new national directions \$100 million fund	10 new national directions Remove from quantitative	MfE understand that the 13 subjects for national direction identified in the Panel's report will be addressed across 10 new national directions as part of a new 'National Planning Framework' Costs of this fund are not part of this policy process. It will be addressed sonarately as part of
\$100 million fund	Remove from quantitative	Costs of this fund are not part of this policy
	assessment	the CCAA regulatory impact analysis process.
40 percent increase in planning costs	35 percent increase in planning costs	Reflects that there are 14 regional spatial plans instead of the originally assumed 16
30 percent increase in development cost	27.5 percent increase in development cost	Reflects that there are 14 combined plans instead of the originally assumed 16
16 regional hubs	14 regional hubs	Current policy targets 14 planning regions
16 joint committees	14 joint committees	Current policy targets 14 planning regions
	30 percent increase in development cost 16 regional hubs 16 joint committees	30 percent increase in development cost27.5 percent increase in development cost16 regional hubs14 regional hubs16 joint committees14 joint committees

### Table A.1: Comparing the Castalia base case and Panel Plus establishment cost assumptions

## A.1.2 Panel Plus ongoing scenario assumes more efficient administrative processes and lower compliance burden on users

The Panel Plus scenario assumes a range of administrative efficiencies relative to the Castalia base case including:

- The review of national directions will require less time and fewer resources due to increased investment in evaluation and monitoring and their incorporation into a new National Planning Framework (NPF). Better information and strategic focus through the NPF streamlines the review process.
- Current local government plan review resources and processes will be sufficient to review the new regional combined plans
- Local government will constrain its use of new powers to review and modify consents as these costs will not be able to be recovered from applicants
- Any increase in volumes through the Environment Court resulting from new rights of action, will be completely offset by fewer appeal rights in other parts of the RM system, and

 Local councils are likely to coordinate and share advice on the implementation of economic instruments, thereby reducing each council's reliance on external consulting services.

The Panel Plus scenario also assumes a reduced compliance burden on users due to the following:

- Effective design and implementation of new monitoring and enforcement activity which will significantly reduce users' compliance costs, and
- Any increase in litigation due to expanded appeal rights will be completely offset by a decrease in litigation due to fewer appeal rights in other parts of the RM system.

These administrative efficiencies, and reduced compliance impacts reduce the ongoing costs for all parties. All ongoing cost assumptions which vary between the Castalia base case and the Panel Plus scenario are outlined in Table A.2 below.

Cost category	Castalia base case assumption	Panel Plus assumption	MfE's rationale for Panel Plus assumptions
National directions review	33 percent review cost increase	20 percent review cost increase	Implementing the National Planning Framework, along with increased investment in evaluation and monitoring is expected to drive review efficiencies
Administering the climate change adaptation fund	\$5 million per year	Remove from quantitative assessment	Costs of this fund are not part of this policy process. It will be addressed separately as part of the CCAA regulatory impact analysis process.
Expanded monitoring and enforcement activity	20 percent user compliance cost increase	5 percent user compliance cost increase	Panel plus scenario will be designed to minimise the impact on user's compliance costs
Combined plans review	16 plans for submission	14 plans for submission	Current policy targets 14 planning regions
Combined plans review	20 percent review cost increase	0 percent review cost increase	Status quo review processes will be sufficient to review these new plans at no additional cost
Combined plans review	\$1.4 million per annum for users' submissions costs	No additional cost per annum for users' submission costs	No increase in submission volume or complexity is expected
Review of regional spatial plans	16 plans for submission	14 plans for submission	Current policy targets 14 planning regions
New powers to review and modify consents	15 percent local government administration costs	5 percent local government administration cost	MfE does not view the costs of this activity as recoverable by councils, therefore, it does not expect a significant increase in consent review and modification activity
Increase in Environment Court activity	40 percent increase in Environment	10 percent increase in Environment Court operating costs	Increased costs of consent reviews and plan appeals will be offset by reduced appeal rights in other parts of the planning system

### Table A.2: Comparing the Castalia base case and Panel Plus ongoing cost assumptions

	Court operating costs		
Increase in Environment Court activity	20 percent increase in litigants' costs	0 percent increase in litigants' costs	Increased costs of consent reviews and plan appeals will be offset by reduced appeal right in other parts of the planning system
New resource allocation mechanisms	\$500,000 per annum cost for consulting fees per council	\$100,000 per annum cost for consulting fees per council	Current policy foresees greater sharing of advice between councils, thereby reducing average consulting costs

### A.1.3 Panel Plus cost saving scenario assumes significant cost savings from the open portal system for plans and consents

The Panel Plus scenario assumes the investment in online systems such as the open portal for plans and consents will drive significant cost savings for both Local Government who administer the system, and users of the system. The Castalia base case scenario assumed a more moderate cost saving impact resulting from these systems.

<b>Table A.3: Comparing th</b>	e Castalia base case	and Panel Plus	cost saving	assumptions
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Cost category	Castalia base case assumption	Panel Plus assumption	MfE's rationale for Panel Plus assumptions
Open portal for consents	10 percent local government cost saving	20 percent local government cost saving	MfE expect the open portal to result in significant efficiency gains similar to other jurisdictions (such as eplanning in New South Wales)
Open portal for consents	10 percent users cost saving	20 percent user cost saving	MfE expect the open portal to result in significant efficiency gains similar to other jurisdictions (such as eplanning in New South Wales)

### A.2 The Panel Plus scenario will lower process costs

MfE's Panel Plus scenario assumptions result in an estimated \$84.7 million in net process cost savings per year relative to the current RM system. Castalia's base case modelled a net increase of \$75.5 million per year relative to the current RM system. We present the process costs of the Castalia base case alongside the Panel Plus scenario in Table A.4 below.

	Castalia base case scenario		Panel Plus scenario	
Measure	Costs (per annum)	Costs (present value)	Costs (per annum)	Costs (present value)
Current RM system	\$1,219,100,000	\$19,479,700,000	\$1,219,100,000	\$19,479,700,000
RM system establishment costs	NA	\$812,700,000	NA	\$631,400,000
RM system new ongoing costs	\$281,200,000	\$4,487,900,000	\$185,200,000	\$2,971,000,000
Panel's RM system cost savings	-\$205,700,000	-\$3,242,200,000	-\$269,900,000	-\$4,167,300,000
Total net increase (decrease) in costs (including establishment costs)	-	\$2,058,400,000		-\$564,900,000
Total net increase (decrease) in costs (excluding establishment costs)	\$75,500,000	\$1,245,700,000	-\$84,700,000	-\$1,196,300,000

### Table A.4: Process costs of the base case compared with the Panel Plus scenario

For each type of cost (establishment, ongoing and cost savings) we group the costs according to the RM system function:

- Objective-setting function
- Institutional and rule-making function
- Resource allocation function
- Regulatory support function.

## A.2.1 The establishment cost of the Panel Plus scenario is \$181.3 million less than the Castalia base case scenario

The Panel Plus scenario has lower establishment costs than the Castalia base case. The establishment cost under each scenario is:

- Castalia base case scenario: \$810.3 million (PV)
- Panel Plus scenario: \$631.0 million (PV)

By omitting the costs of the Climate Change Adaptation fund, the Panel Plus scenario avoids \$100 million in resource allocation function establishment cost. The Panel Plus scenario assumes 14 regional planning areas compared to 16 in the Castalia base case. This assumption reduces the number of spatial plans, regional combined plans, joint committees, and regional hubs required, thereby reducing establishment costs.



### Figure A.1: Comparing the Castalia base case scenario and Panel Plus scenario establishment costs per RM system function

### A.2.2 The ongoing cost of the Panel Plus scenario is \$95.9 million per annum less than the Castalia base case scenario

The Panel Plus scenario has almost \$96 million per annum lower ongoing costs than the Castalia base case. The ongoing cost per annum of each scenario is:

- Castalia base case scenario: \$280.8 million per annum
- Panel Plus scenario: \$184.9 million per annum

The reasons driving the three largest reductions in ongoing costs in the Panel Plus scenario (relative to the Castalia base case) are:

- Expanded monitoring and enforcement activity, as part of the regulatory support function, will be designed in such a way that it will create minimal burden on users which reduces costs on users by \$29.7 million per annum
- Implementing economic instruments and other new resource allocation mechanisms (as part of the regulatory support function) will not require as much economic consultant expenditure due to the sharing of information across councils which reduces costs on local government costs by \$27.8 million per annum, and
- Local councils will selectively use their new consent modification and review powers
   because these costs are not expected to be recoverable from applicants, thereby reducing resource allocation costs by \$14.4 million per annum.

The additional reduction of \$24.0 million per annum (relative to the Castalia base case scenario) is driven by the reductions in RM planning regions (14, down from 16), more effective regional plan and spatial plan reviews, and small net impacts on the volume of appeals to the Environment Court due to the combination of new appeal rights, and the reduction of other appeal rights in other parts of the RM system.



### Figure A.2: Comparing the Castalia base case scenario and Panel Plus scenario ongoing costs per RM

#### The cost saving of the Panel Plus scenario is \$64.1 million more than the A.2.3 Castalia base case scenario

The proposed reforms in both the Castalia base case and the Panel Plus scenario result in some process cost savings. This is because the RM system gets more efficient and lowers costs for local government, as well as users. The cost savings under each scenario is:

- Castalia base case scenario: \$205.9 million cost saving per annum
- Panel Plus scenario: \$270.0 million cost saving per annum

This \$64.1 million increase in the Panel Plus scenario cost saving is driven by greater assumed efficiencies resulting from investments to improve the online planning and consents system through initiatives such as the open portal system. This reduces local governments' administrative, and users' compliance costs of navigating the system.



Castalia base case scenario Panel Plus scenario

### A.3 The Panel Plus scenario reduces cost impacts on central and local Government, and increases cost savings for users

The Panel Plus scenario lowers costs for all impacted parties relative to the Castalia base case scenario. It reduces establishment costs for all parties, and it reduces central and local governments' ongoing costs, and increases user's cost savings.

Central government, local government, and users experience lower establishment costs

The Panel Plus scenario considerably reduces central government costs compared to Castalia's base case. This is driven mostly by removing the \$100 million Climate Change Adaptation Fund establishment cost. Costs to local government are also reduced due to the reduction in the number of planning regions (from 16 in the Castalia base case, to 14) which reduces the number of new plans and institutions which need to be established.

### Table A.5: Comparing establishment costs for each party in the Castalia base case scenario and the Panel Plus scenario

Party	Castalia base case scenario (PV)	Panel Plus scenario (PV)	Impact on party due to Panel Plus scenario (PV)
Central Government	\$376,600,000	\$258,000,000	-\$118,600,000
Local Government	\$409,200,000	\$350,400,000	-\$58,800,000
Users	\$26,500,000	\$22,600,000	-\$3,900,000
Total	\$812,300,000	\$631,000,000	-\$181,300,000

*Central government, local government, and users experience lower ongoing costs* All parties' ongoing costs are reduced in the Panel Plus scenario, as outlined in the table below.

 Table A.6: Comparing ongoing costs per annum for each party in the Castalia base case scenario and the Panel Plus scenario

Castalia base case scenario (per annum)	Panel Plus scenario (per annum)	Impact on party due to Panel Plus scenario (per annum)
\$31,000,000	\$21,100,000	-\$9,900,000
\$147,800,000	\$102,200,000	-\$45,600,000
\$102,000,000	\$61,600,000	-\$40,400,000
\$280,800,000	\$184,900,000	-\$95,900,000
	Castalia base case scenario (per annum)           \$31,000,000           \$147,800,000           \$102,000,000           \$280,800,000	Castalia base case scenario (per annum)         Panel Plus scenario (per annum)           \$31,000,000         \$21,100,000           \$147,800,000         \$102,200,000           \$102,000,000         \$61,600,000           \$280,800,000         \$184,900,000

### Local Government and users benefit from increased cost savings

The Panel Plus scenario assumes greater efficiencies from investments in the open portal consenting system. This creates \$49.7 million additional cost savings per annum for users of

the consenting system, and \$14.4 million additional cost savings per annum for local government, relative to the cost savings assumed to be generated by the open portal system in the Castalia base case scenario.

### Table A.7: Comparing cost savings per annum for each party in the Castalia base case scenario and the Panel Plus scenario

Party	Castalia base case scenario (cost saving per annum)	Panel Plus scenario (cost per annum)	Impact on party due to Panel Plus scenario
Central Government	\$1,700,000	\$1,700,000	-
Local Government	\$44,300,000	\$58,700,000	\$14,400,000
Users	\$159,900,000	\$209,600,000	\$49,700,000
Total	\$205,900,000	\$270,000,000	\$64,100,000

### Panel Plus reduces net ongoing costs for central and local government, and increases users' net costs savings

Relative to the Castalia base case scenario, the Panel Plus scenario:

- Reduces central government's net ongoing cost by \$9.9 million per year
- Reduces local governments' net ongoing cost by \$60.0 million per year, and
- Increases users' net cost savings by an additional \$90.1 million per year.

Table A.8 lists both the average annual and present value of total cost changes in both the Castalia base case scenario and the Panel Plus scenario.

### Table A.8: Comparing net cost changes for each party in the Castalia base case scenario and the Panel Plus scenario

	Castalia base case scenario		Panel Plus scenario	
Party	Average annual cost increase	Present value cost increase (2021 NZD)	Average annual cost increase	Present value cost increase (2021 NZD)
Central Government	\$29,300,000	\$453,300,000	\$19,400,000	\$302,100,000
Local Government	\$103,500,000	\$1,654,100,000	\$43,500,000	\$731,000,000
Users	-\$57,900,000	-\$862,600,000	-\$148,000,000	-\$2,230,100,000
Total	\$74,900,000	\$1,244,800,000	-\$85,100,000	-\$1,197,000,000



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