

A Case Study for Devolution: The problem of preserving kiwi habitat in the Far North¹

Megan Claridge (NZ Treasury)
and Suzi Kerr (University of Maryland at College Park)

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INTRODUCTION

Kiwis are rare and unique to New Zealand: our national symbol, our nickname. Yet some species are endangered. How can we most effectively protect this critical part of our heritage and identity and do our part to preserve biodiversity? Is the current Resource Management Act the best structure for formulating social objectives about kiwi protection and providing appropriate habitat?

The previous paper (Kerr 1998) pulls together theoretical literature relating to devolution to local government and develops a framework to apply this theory in solving practical problems.² This article builds on that theoretical work by providing a Resource Management Act (RMA) case study to illustrate how the framework can be applied to a real situation. It looks at the issues that have arisen when applying the RMA's provision on the preservation of significant natural areas (SNAs) in the Far North. The case study follows through the implications of the model for an ideal structure for regulating kiwi

¹ This article is based on the report *Devolution and the New Zealand Resource Management Act*, by Suzi Kerr (University of Maryland), Megan Claridge, and Dominic Milicich, prepared for Policy Coordination and Development, New Zealand Treasury. It does not represent the views of the NZ Treasury. The authors take full responsibility for any errors or omissions in, or for the correctness of, the information contained in these working papers. Special thanks to Jan Crawford who provided information and critiqued earlier drafts of this paper.

² Devolution is defined as the transfer of authority to a lower level of government. In practice devolution cannot be considered in isolation from issues of decentralisation, defined as the use of a lower level of government as an implementing agent for central government policy.

preservation. We then contrast that with the actual structure, drawing on the framework to identify likely problems and showing how these problems manifest themselves in the case of kiwis in the Far North. The framework allows us both to diagnose what has gone wrong and to offer remedies.

WHY REGULATE?

Kiwis (and therefore kiwi habitat) are a public good. It is not feasible to restrict their use; living in a country with a rare, unique and endangered species that we identify as our national symbol is a non-excludable benefit - we can't stop people consuming this good. It is also not desirable to restrict their use: the marginal cost of supplying kiwis to an extra New Zealander is zero.

The non-excludable nature of public goods means that there will be a free rider problem. Individuals benefit from kiwis regardless of whether or not they contribute to providing habitat. Therefore they have no incentive to contribute voluntarily, but rather will attempt to rely on the efforts of others. The combined effect of many individuals free riding is an under-supply of kiwi habitat. With a large population affected, and potentially able to protect kiwis, almost no kiwi habitat will be produced.

It's reasonably accepted *that* we regulate kiwi preservation. The question we are interested in is: at what level of government should regulation occur? Is preservation of kiwi habitat appropriately dealt with by devolution to local level? Let's apply the model introduced in the previous paper to analyse the actual situation in the Far North.

AT WHAT LEVEL SHOULD REGULATION OF KIWI HABITAT OCCUR?

Our devolution model has three 'locations of choice'; three decisions that have to be made:

- Political Decision: what level of government should decide *how much* kiwi habitat to preserve?³
- Cost Bearing: what level of government should bear the costs of providing habitat?
- Implementation: what level of government should decide exactly how to go about preserving kiwi habitat?

One option is for central government to control every aspect of the process. Another is to devolve some or all of these functions to some level of local government. The RMA, as it stands, devolves quite substantially. Implementation, funding and, to a large extent, political control rests with local authorities⁴. To find the ideal locations for decision-making and cost bearing we'll use the diagram developed in the previous paper.

Political Decision Making and Cost Bearing

Arguments to do with what level of government should make the political decision and what level of government should bear the costs are related, so it is useful to consider them together. Informed decision making requires that all preferences are reflected and that both subjective and objective information is included. Balanced decision making requires that both costs and benefits be taken into account. There will also be distributional considerations regarding cost bearing.

Informed decision making

When considering who should make the political decision about preserving kiwi habitat, one would take into account the location of all relevant objective and subjective information.

Some objective information is material. How many kiwis are there? How many kiwis are required to maintain viable populations? What is the cost of saving them? What is the cost of not saving them, in terms of habitat destruction and loss of biodiversity?

³ The political decision is merely about the 'optimal level of production'; it is not about exactly which kiwis or which areas of habitat to protect.

⁴ There is provision in the Act for more national involvement, through National Policy Statements, but this has not been utilised.

This information is located nationally. However, the most important information here is subjective. How many kiwis we want is mainly a matter of preference. How much do we care?⁵

The subjective information is tied, by its nature, to the benefits. People who have preferences about an issue are the people who are affected by it. Getting access to subjective information is a problem for governments at any level. How do we access peoples' private preferences about how much they value kiwis? All social choice mechanisms are imperfect. The best approximation we can get about tastes is to see how they are revealed through participation in political processes. To get the best information the decision-making jurisdiction should be at least as large as the area of effects. This will ensure that all preferences are represented.

The benefits of kiwis are biodiversity and national identity. These benefits are located across all of New Zealand.⁶ Kiwis are a national public good: people in Invercargill value them as well as people in Northland. Subjective information is therefore also located nationally: people all over New Zealand have preferences about kiwis. Decision making at a national level will better reflect these subjective preferences.⁷

Balanced decision making

Even when the political decision making jurisdiction matches the area of benefits we may still have problems, if costs and benefits are not borne by the same people. Matching the jurisdictions of benefits and costs will lead to balanced decision-making; mismatches will generate interjurisdictional externalities.⁸

⁵ Some would argue that kiwis have intrinsic value, over and above whether or not humans value them. This paper takes an anthropocentric approach and rejects the idea of intrinsic value. The notion of 'value' isn't independent of a subject. A thing must be valued *by* someone. We may ascribe other things having values but that is, in the end, a value judgement we make. This need not be a problem for the environmental movement: one of our values is that other beings have value. This stance isn't unique to economics; other disciplines and ethical theories take the same view.

⁶ And arguably internationally, in the case of biodiversity.

⁷ People in areas where kiwi are found may also have preferences about the types of policies used to protect kiwis.

⁸ Problems of inequity and over-provision can also occur within jurisdictions. Even inside the Far North costs are not shared equally. Landowners bear all costs; they are not shared across the jurisdiction.

If decision-making and cost bearing were devolved to local level, the Far North would under-protect kiwi habitat since they will ignore the positive externalities generated by kiwis for the rest of the country. In contrast, if cost bearing is devolved to local level but decision making is retained centrally then kiwis will tend to be overproduced. The rest of New Zealand has incentives to overstate their preferences and demand more kiwis be saved since they bear none of the costs of their decisions. The best solution is for decisions and costs to be located centrally. In this way costs and benefits are borne by the same people – all New Zealanders.

Figure 1 of Kerr (1998), with all the box and bubble items located centrally, summarises balanced and informed decision making about kiwi habitat. Informed political decision making requires that all preferences are reflected. Since the benefits of kiwis are felt all over New Zealand subjective preferences about kiwis are located across the whole country. Decision making at national level will best reflect these preferences. Balanced decision making requires that both costs and benefits are taken into account. Because benefits are felt nationally, costs and decisions should also be located nationally.

Implementation

We have discussed political decision-making and cost bearing. Implementation is the third function about which location decisions must be made. Whether local or central government will be the most efficient at providing a public good will vary case by case. The efficient location of implementation will depend on where the relevant information, expertise and capability are located.

Efficient implementation

Successful implementation will need to incorporate both objective technical information and information about physical on-the-ground effects.

Information about physical effects includes information about detailed geography (where exactly are the SNAs?) and monitoring (are farmers complying with regulations?). It tends to be intrinsically local: it is often only farmers themselves who hold this kind of

detail. Local government is better placed to access this knowledge. Farmers are more closely linked to local government than central and this allows better monitoring and accountability, better access to local information and possibly greater trust.

Objective information and skills include information about kiwi science (what is the life cycle of the kiwi? How much habitat is required to support a given kiwi population?), co-ordination with other areas of kiwi habitat and overall conservation priorities. It could be held centrally or locally but in this case is mainly central.

Scientific knowledge is primarily a function of resources. Central government has an advantage in this through economies of scale. It is better resourced to employ specialists. Decentralising implementation totally to the local level raises issues of competence: local councils just don't have the resources to employ the same level of expertise.

Being able to prioritise and coordinate is a function of perspective. Again, central government has an advantage in this; its broader environmental perspective will enable it to set priorities and undertake informed trade-offs. Kiwis exist in many areas and only central government can coordinate kiwi preservation in the Far North with preservation of kiwi habitat across the rest of New Zealand. Similarly, central government will have the information to coordinate preservation of kiwis with that of other protected species. It can learn from wide experience and avoid duplication by developing one set of rules for non-varying situations. Deciding which areas are SNAs is likely in most cases to require skills and perspective that go beyond a local level.

Information aside, there are issues of capability. Successful protection of kiwi requires more than merely refraining from destructive activities in areas of kiwi habitat. Active measures on the part of the landowner also play a part: stock may need to be fenced out, weeds eradicated, pests, particularly possums and stoats, trapped and farm dogs kept under control.⁹ Whichever level of government is responsible for implementation, they will need to work with landowners and elicit their goodwill and cooperation. Local government may be at an advantage here. It has the ability to be more 'personal' and may

⁹ Salmon (1998)

be able to form more effective ongoing relationships with farmers and other affected local people.

Relevant information about implementation is held both centrally and locally. Local government has some advantages in capability. Efficient implementation will therefore require a mix of central and local input. Implementation could be primarily local with central government input and expertise. Central guidance is vital because local councils just don't have (and can't get) all the information they require. Alternatively implementation could be primarily central with local assistance. Local assistance will be crucial to secure positive relationships with landowners. Which of these options is most efficient will vary case by case and depend on how easily the information can be communicated and who has sufficient resources. In this case it could go either way; it's not clear who the most efficient implementer will be.

What is important, however, is that *someone* is ultimately responsible. The mix of central and local cooperation is difficult to achieve and often results in conflict and lack of clarity over who should be doing what. One body needs to take ultimate responsibility.

Difficulties with Separating Decision-making and Implementation

We have established that ideally the decision about how much kiwi habitat to preserve should be made nationally and the costs also borne nationally. Implementation could be carried out either centrally or locally.

There are arguments for implementation and decision making being carried out by the same body. Although it is theoretically possible to have centralised political control and local implementation it's not clear that they always come apart easily. If implementation is non-discretionary and you can define your objectives well in advance an arms-length contract can be written. Implementation is simply following orders. However, if discretion and judgement are required then contract specification becomes more difficult and implementation blurs into political decision making.

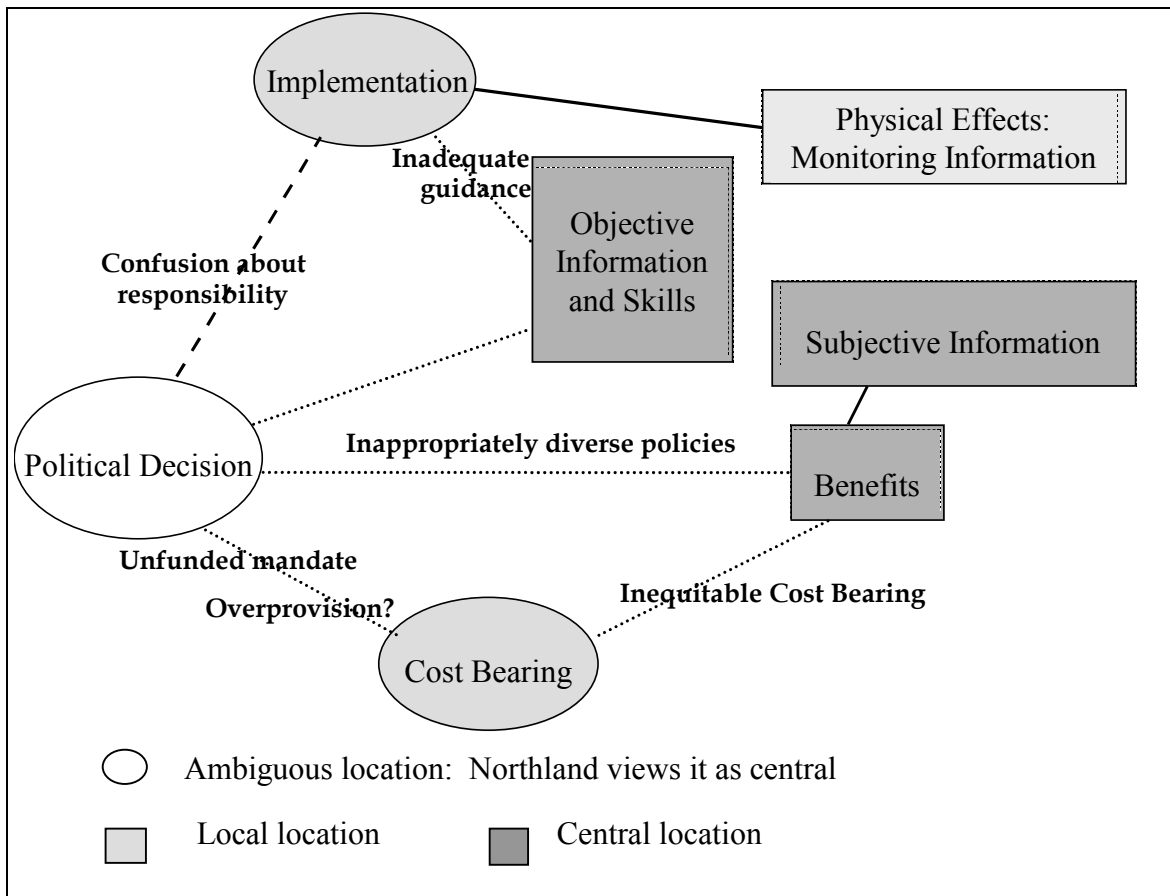
In the case of kiwis this problem of separating responsibilities tips implementation towards central government. The RMA requires substantial interpretation. Non-trivial

discretionary political decisions get made in the implementation. According to our framework the optimal location of all three functions is the national level.

ACTUAL LEVELS OF DEVOLUTION: THE FAR NORTH EXPERIENCE

The actual situation in Northland is quite different from the ideal. In reality cost bearing is local, implementation is local and there is confusion over where political decision-making lies. The following section describes how kiwis are actually protected in the Far North and relates the problems predicted by the framework to those actually observed. Figure 1 helps us analyse problems resulting from the mix of locations – dotted lines indicate problems with linkages.

Figure 1: Actual Levels of Devolution for Kiwi Habitat Protection



The Law – Who determines objectives?

Section 6(c) of the RMA requires those making resource decisions to recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.¹⁰ These are commonly referred to as significant natural areas - SNAs.

A fundamental problem arises immediately: responsibilities are not clearly specified. Confusion has arisen over who is responsible for political decision making. On one hand, Section 6c states Councils “shall recognise and provide for” Significant Natural Areas.

¹⁰ *Resource Management Act 1991: Section 6* In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance; (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

This sounds very much like a non-discretionary mandate and the Far North District Council has interpreted it that way.

On the other hand, there is large variation in the way other Councils have dealt with section 6c. Some have basically ignored it in their plans; others have addressed it in a very minimal way.¹¹ This implies that either someone is interpreting the legislation incorrectly or there is intended to be local discretion over how much weight SNAs are given. It's not clear which. Economic theory is clear: kiwis are a national public good and the preferences of all New Zealanders should be reflected. Interpretation of SNAs *shouldn't* be discretionary. Current local policies are inappropriately diverse.

What this confusion indicates is that there is a need for central government to more clearly specify local and central government's respective roles. If central government's role includes making the political decision it should more clearly specify what exactly it intends. At present, roles are not clear and consequently no one is really taking responsibility. Central government needs to more clearly specify what is required by the RMA.

Assume now that political decision making is central. The Far North District Council see their role as merely implementing the mandate given in section 6c. Because of the mix of locations, four problems arise.

1. Inadequate central specification of objectives

Because political decision-makers and implementers are different bodies, and implementation is highly discretionary, we would expect to find difficulties with contract specification and accountability. The link between the 'political decision' and 'implementation' bubbles (see figure 1) will be problematic.

This is exactly what we do find. One of the biggest complaints local bodies make about SNAs is that there is inadequate specification of objectives. What exactly does

¹¹ The consequence of this, in contrast to the Far North, is under-provision of kiwis in these areas.

‘significant’ mean in real terms? What are the criteria for identification of SNAs? Do we have to preserve every piece of kiwi habitat? How does this balance against other imperatives and principles, both within the RMA and wider? Regions have requested more, and more consistent, guidance on this. In the absence of central guidance, local bodies are making discretionary and political judgements about these issues.

Local Cost Bearing

Although central government protects SNAs to the extent that these occur within the Conservation Estate, the implementation of section 6(c) at the local level does not receive any direct funding from government¹². Territorial local authorities control land use and implement the RMA. The cost of development of District Plans and administration is financed locally through rates. The cost of actually protecting SNAs is also borne locally, through ‘takings’.¹³ There is no provision for compensating landowners who have sections of their farms declared an SNA, although some councils, including the Far North, offer rates postponement to landowners who preserve native bush.¹⁴ There is also no financial provision for encouraging farmers to take more active measures, such as predator control.

2. *Over-provision?*

Decisions are made nationally and costs are borne locally (by Far North farmers and, to a lesser degree, ratepayers). Theory suggests that the lack of alignment between decisions, benefits and costs will result in inefficiency through over-provision of kiwis. As discussed earlier the rest of New Zealand has incentives to overstate their preferences and demand more kiwis be saved since they bear none of the costs of their decisions. Public choice will be unbalanced.¹⁵

¹² The Minister of Conservation also provides a small amount of funding through the Forest Heritage Fund, Nga Whenua Rahui and the Queen Elizabeth the Second National Trust.

¹³ Use of private land is restricted in a way which lowers its value.

¹⁴ This costs the Far North District Council about \$100,000 per annum in foregone income.

¹⁵ If Northland is over-providing the efficient level of kiwi there may be two additional reasons for this: (a) Northland may be misunderstanding the requirements of the RMA. This is entirely possible given the lack of direction from central government about how 6c is to be interpreted. This is a failure in provision. (b) The RMA is a blunt instrument designed to pitch kiwi conservation at the nationally optimal point. By trying to remedy a market failure it may be the case that it has over-regulated the market in the opposite direction. This is a failure in legislation design.

38% of the Far North was identified as kiwi habitat. Slightly under half of this habitat was publicly owned conservation land¹⁶; the rest was private or Maori land. 21% of the Far North is privately owned land designated a kiwi habitat SNA by the District Plan. This seems a lot, but because preferences for public goods are so famously difficult to determine it is unclear whether over-provision is in fact the situation.

3. *Unfunded mandate*

The lack of alignment between decisions and costs also results in an ‘unfunded mandate’: central government determines a policy for the benefit of New Zealand and then requires local government to implement it and bear the costs. Unfunded mandates are horizontally inequitable.

This analysis fits with a major complaint from the Far North: they have received a mandate from central government but there is no money flowing to assist them to carry it out. This is a major concern across the country.¹⁷ Limiting the use of one fifth of private land in the Far North places a major economic restriction on an already impoverished region. Furthermore, the burden falls heavily on individual farmers, some of whom effectively have up to half (and even more in some cases) of their farms affected by the SNA requirements. Although one could argue that farmers are imposing environmental damage and therefore should bear the costs, imposing these requirements in this way penalises farmers who have not thus far cut down bush on their land.¹⁸

Local Implementation

When the Far North District Council developed its district plan it tried to map all SNAs in advance of individual resource use applications. When the owner of an SNA submits a resource consent to change the use of the land, rules in the plan come into force. Mapping also enables monitoring of changes over time, as required by the RMA.

¹⁶ 17% of the Far North is DOC conservation estate.

¹⁷ Proceedings of an SNA Workshop run by Local Government and the Ministry for the Environment, 26 September 1997, Wellington.

¹⁸ Two pieces of land could be identical except that one turns out to have kiwi habitat on it and so be designated an SNA. The value of this land will fall and the owner at the time is harmed while the owner of the identical piece is not.

In order to identify SNAs the Far North District Council approached the Department of Conservation for guidance. DOC has a classification system of protected natural areas that it had previously developed. This system mapped all New Zealand land, both public and private, into sites of significant wildlife areas. The District Council used this information to map SNAs in the District Plan.

Unfortunately, there were two problems which, compounded, created severe inaccuracies in the mapping of SNAs. First, the DOC survey work was based on a combination of sources – earlier surveys done by the Wildlife Division of the Forest Service (dating from the late 70's and early 80's), aerial photos and a 'windscreen reconnaissance'. Many places were viewed only from vantage points and public roads. Only a small proportion of the sites were actually inspected. Consequently, the information on the presence of native species, such as kiwi, was dated and the boundaries of SNAs were not precisely drawn. On the assumption that the data was better and more reliable than it later proved to be, quite prescriptive District Plan rules were written concerning the protection of SNAs. Had the planners realised the underlying problems at the time, they almost certainly would not have opted for this prescriptive approach, relying as it did on competent survey work and precise mapping of boundaries.

Second, the Planning Maps were based on the Valuation Department's cadastral maps (ie; property boundaries) which were digitised and entered into the GIS system.¹⁹ However, the results of the DOC survey of SNAs were marked on to NZMS topographical maps at a scale of 1:50,000 (the NZMS260 series). When this latter information was digitised and overlaid on to the cadastral data, there was a poor fit. As a result, the registration of SNA boundaries was often inaccurate. Landowners who did not have any bush on their properties were advised that they had an SNA whereas others, who did have bush, did not receive this advice!

The credibility of the basic data was severely damaged by these mapping inaccuracies. In November 1996, after five years of work, the Far North District Plan was publicly notified. There was public outcry, particularly from farmers. Local dissatisfaction with

¹⁹ Geographical information systems.

the treatment of SNAs in the District Plan centred primarily on inaccurate mapping and concern about the heavy impact on farmers of the high level of regulatory protection.²⁰

4. Inadequate central guidance and input into implementation

We have established that both local and central input into implementation is essential in the case of kiwi and that care must be taken to preserve the flow of information from the body *not* primarily responsible for implementation. In the Far North implementation has primarily occurred locally. Most objective information and skills are held centrally. We would expect the link between ‘objective information and skills’ and ‘implementation’ to be problematic and that special attention would need to be paid to accessing that objective information.

This difficulty is seen in the actual situation and has resulted in the implementation problems described above. Both in the Far North and throughout the country there have been complaints of a lack of information and assistance from central government.²¹ This has been blamed on under-resourcing of DOC and the fact that no agency is clearly funded to act in an advisory role on SNAs and the RMA.²² DOC, whose statutory functions include the oversight of off-estate areas, has not been given the funding it needs to carry out that role.

Lack of central guidance is not necessarily a devolution problem. Implementers will face difficulties accessing all the relevant information no matter what level of government has responsibility for implementation. The problem arises because of the large number of people and bodies that are usually involved in policy implementation and the difficulties agencies face working together. It is these processes that need to be addressed.

What the devolution framework does is alert us to *where* the problems are likely to be in any given case. This is particularly useful if employed when designing new regulations. In this case it would have highlighted a need to supplement the RMA legislation with

²⁰ Personal communication with Jan Crawford, Planning Consultant and Mediator. Also Guy Salmon “RMA debacle in Far North: What future for nature conservation on private land?”, *Maruia Pacific* June 1998.

²¹ The Local Government/DOC protocol, signed in 1996, states that DOC should make information it holds available on request to local councils when they prepare their plans. However it is the responsibility of the Councils to determine and elicit the information they need and they are, in some cases, charged for it.

structures to allow transfer of centrally held information. A particular central agency would have been given responsibility for assisting local implementers. It remains useful now, in remedying these oversights.

CONCLUSION

We could address the problems that have been identified in several ways. Although this case study has identified an ‘ideal’ this would involve quite a radical change to current legislation. We may wish to make more limited improvements by directly addressing the problems created by mismatches among jurisdictions.

One compromise solution could be national decision making, national cost bearing and local implementation. Without fundamentally changing the Act, this devolution structure could be created and the current situation could be improved with the following measures:

- Clarify what is intended in section 6c through the publication of a National Policy Statement on SNAs. As well as providing a definition and criteria for the term “significant” it would establish what central government required and what was discretionary for local government.
- Allocate some national resources to buy some additional kiwi habitat as conservation estates and/or partially compensate farmers to address the problems of unfunded mandates and over-provision.
- Allocate resources to the Ministry for the Environment or DOC (or other agency) to provide specifically for advice and dissemination to local authorities of scientific knowledge and expertise regarding implementation.

The current regulatory framework for kiwi protection is poorly designed. This can be addressed within current legislation. Although the flightless nocturnal kiwi views the world in a local, limited way, a national vision and effort is necessary to protect it.

²² The Ministry for the Environment did receive some resources for monitoring of the RMA in the 1997 budget and is developing case studies and guidelines to share with local councils.

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