Ricardo Wurmus
Student number 3607635

Assignment 1

72296 Environmental Impact Assessment

Contents

1 Introduction

This report describes the objectives and the procedures of Environmental Impact Assessment (EIA) and aims to evaluate the unique way in which New Zealand has integrated EIA principles into environmental management procedures. Particular attention is given to New Zealand's principal piece of environmental legislation, the Resource Management Act 1991 (RMA), and how its requirements and procedures compare to international EIA best practise.

2 Background

2.1 Environmental Impact Assessment

The term "Environmental Impact Assessment" (EIA) is used to refer to a set of standardised procedures that are designed to inform the decision-making processes surrounding development proposals. According to the International Association for Impact Assessment (IAIA), a major objective of EIA is to "anticipate and avoid, minimize or offset the adverse significant biophysical, social and other relevant effects" of such proposals "prior to major decisions being taken and commitments made" (International Association for Impact Assessment in cooperation with Institute of Environmental Assessment, 1999).

In order to provide decision-makers with sufficiently detailed insight into the potential positive and negative effects of a project on the environment, the participation of all parties that would be affected by the project, as well as the participation of the general public is explicitly encouraged (International Association for Impact Assessment in cooperation with Institute of Environmental Assessment, 1999). The involvement of the public in the decision-finding process is a crucial component of EIA as those responsible for the project proposal and the prediction of its impacts on the social and natural environment do not necessarily share the values of affected communities. Hence, public participation can provide balance to the biases of developers and the assessors they hire (Wilkins, 2003).

2.1.1 EIA activities and procedures

The EIA process generally involves the following activities (International Association for Impact Assessment in cooperation with Institute of Environmental Assessment, 1999):

Screening and scoping. The goal of the *screening* step is to limit the application of EIA procedures to those projects that are expected to have significant effects on the environment. What kind of projects require an impact assessment varies from country to country. When a proposal is subject to EIA, the *scope* of the assessment is determined by identifying the key impacts that are associated with the project.

Consideration of alternatives. Since EIA is mainly intended to be a tool to assist decision-making, practicable alternatives must be presented for every proposed activity, including the option not to do anything. This step ensures that EIA does not turn into an expensive documentation exercise for planners and decision-makers; it is essential for effective EIA.

Impact analysis, mitigation, and evaluation of residual impacts. Identifying and analysing impacts as well as proposing actions to mitigate them are major steps in preparing environmental impact statements. These steps are usually performed by the proponents. How to fairly establish the significance of residual impacts (i.e. impacts that cannot be mitigated effectively but are also considered to be minor) is frequently subject of debates. According to Wood (2008), "significance evaluation … remains one of the most complex, contentious, and least-understood aspects of EIA systems across the globe".

Reporting, independent review and decision-making. A final EIA report is required to contain sufficient information to allow for well-informed decisions about the proposed activity. An independent review ensures that the report is of sufficiently high quality.

Monitoring and other follow-up activities. It lies in the nature of EIA that predictions about potential impacts are fraught with inaccuracies. To improve the often inadequate knowledge about the state of the environment and the actual impacts of human activities on it, the implementation of many projects subject to EIA should be followed by monitoring efforts. Feeding back into the process as it applies to future projects, monitoring ideally enables decision-makers and assessors alike to produce higher quality assessments and approach the ideal of sustainable development.

2.2 The Resource Management Act 1991

The Resource Management Act 1991 (RMA) is the overarching environmental management framework which governs the allocation and utilisation of New Zealand's natural resources and controls adverse effects on the environment. The RMA is the result of efforts to unify and simplify previous legislation relating to environmental management which had lead to what was perceived as an uncoordinated, complex network of confusing environmental management strategies (Kerr, Claridge, & Milicich, 1998). It consolidated around 70 laws and statutes and is generally considered to be the first piece of integrated sustainability legislation in the world (Ministry for the Environment, 2006).

2.2.1 The role of sustainable development

In recognition of the inherent limitations of project-level EIA—including the difficulty of assessing cumulative impacts, the lack of integrated assessment of effects at a wider scope, and the narrow focus on direct impacts of assessed proposals—the RMA does not institutionalise the standard EIA process but provides for an integrated approach to "the sustainable management of natural and physical resources" (Section 5). In line with this purpose, the RMA adopts a very broad definition of the term 'environment'—including communities, amenity values, social and cultural conditions (Section 2(1))—and its mandatory requirement for the assessment of 'effects' applies to policies, plans and projects alike. In principle, the RMA is thus closer to an implementation of Strategic Environmental Assessment (SEA) than to "first generation" EIA.

The RMA has been described as an "effects-based approach" to regulation (Sadler, 1996), as it does not intend to regulate human activities per se, but "focuses on the regulation of the effects of human activities on the environment" (Furuseth & Cocklin, 1995). Notably, the RMA makes no reference to EIA or environmental assessment procedures. As Sadler (1996) writes, environmental assessment under the RMA "operates within the statutory planning and consent system rather than as a separate procedure, applies explicitly to projects and is indirectly specified for policy statements and strategic plans which local authorities are required to prepare to guide and implement sustainable resource management" (Sadler, 1996, p 31).

2.2.2 Decentralised environmental management

Interestingly and somewhat unusually in international comparison, the RMA shifts the main responsibility of resource management activities to local authorities rather than imposing a prescriptive management style. The role of central government under the RMA is purposefully limited, allowing district and city councils to let their decisions be guided by locally determined goals. This devolved mandate—the distribution of management responsibility from the national to the regional and finally local level—is intended to ensure that decisions relating to resource usage are made not only within the national policy framework but also at a level closest to the resources in question (Miller, 2010, p 27).

Responsible for the national policy framework within which local authorities are encouraged to develop local plans and evaluate resource consent applications is the Ministry for the Environment[1]. The Ministry is supposed to prepare and publish national policy statements—declaring governance intent relating to issues affecting the whole country or in fulfilment of international agreements—as well as national environmental standards (specific points of

[1] Since the RMA amendments of 2009, the newly founded Environmental Protection Authority (EPA) is increasingly taking over the regulatory functions of the Ministry for the Environment, which is now focusing on policy and regulation under environmental acts other than the RMA (Miller, 2010).

reference in the areas of air quality, water quality, etc.).

According to Furuseth and Cocklin (1995), "among local government units, the regional councils are presented with the greatest responsibilities and the most far reaching potential to implement sustainable management" (Furuseth & Cocklin, 1995, p 262). On the regional level, regional councils are to produce regional policy statements (RPS) and may also produce more comprehensive and prescriptive regional plans to support the goal of achieving integrated management of natural resources. Regional policy statements "present an assessment of existing conditions and a direction for resource management in the region" and are therefore at the core of the goal to achieving sustainable development which is implemented through decisions over resource consents (Furuseth & Cocklin, 1995). As Miller (2010) notes, the issues every regional council has to address in plans and policy statements are mostly related to the sustainable management of natural or physical resources. Planning at the district level is constrained by these regional plans and policies. The plans and policies at the national, regional, and district level provide a framework for regulation of development activities.

Councils have created "generous opportunities" for public consultation during the initial consultation stage of the plan formation process by means of workshops and meetings (Miller, 2010). Upon completion the plan is made available for comments from the public for a period of at least forty working days, which is followed by a hearing period and the opportunity to appeal to the Environment Court.

2.2.3 Resource consents

For every proposed activity that is not explicitly allowed as a 'Permitted Activity' in the appropriate regional or district plan, resource consents have to be obtained from the local authorities before development may commence (Fookes, 2000). Every resource consent application, in turn, requires the proponent to produce an Assessment of Environmental Effects (AEE); this requirement is most readily recognisable as an implementation of EIA. The Fourth Schedule of the RMA is intended as a most basic guide to assist practitioners in preparing their AEE; beyond the requirements of the Fourth Schedule, however, there are few guidelines to assess the quality of an AEE (Miller, 2010). After a review of the AEE, the council that received the resource consent application may decide to involve the public by means of public notification or determine that public notification is not required when the activity is expected to only have minor effects and all affected parties agree on the proposal (Fookes, 2000). When an application is publicly notified, the application is to be reviewed under consideration of public submissions and the results of public hearings. Participants in the public submission and hearing steps may also appeal to the Environment Court.

EIA in New Zealand under the RMA can thus be said to happen on two levels: first, during the development of regional and district plans which are a consultation-heavy implementation of the screening and scoping steps of standard EIA; and second, in the process surrounding re-

source consents, involving the actual assessment of potential impacts, an independent review, and public participation.

3 Discussion

This section discusses common problems of EIA implementations as they relate to the RMA, as well as selected issues that are specific to New Zealand's integrated and devolved approach to environmental assessment.

3.1 The quality of assessments

Since the RMA does not prescribe a specific process that ought to be followed in preparing and reviewing an AEE, the quality of assessments and the efficacy of their review through the councils varies greatly. Furthermore, due to the very broad definitions of 'environment' and 'effects' that the RMA adopted, a wide range of projects falls into the set of proposals that require assessment, creating an enormous volume of assessment and review work (Morgan et al., 2012).

According to a survey of EIA practitioners (Morgan et al., 2012), the lack of central guidance on impact assessment practise makes it difficult for the assessors—planning professionals and engineers who are often minimally trained in EIA—to produce adequate assessments. The guideline presented by the Fourth Schedule of the RMA is often overvalued as an issues checklist for assessment. As a result, assessments are not seen as a means to enable affected parties and decision makers to find a well-informed compromise that is acceptable by all participants, although aiding decision-making processes is a core principle of EIA; instead, a majority of survey participants primarily aimed to fulfil the requirements of the Fourth Schedule in preparing an AEE and was not concerned with following international EIA best practise (Morgan et al., 2012).

A review of consent processing performance by the Ministry for the Environment further revealed that councils rarely reject subpar resource consent applications as permitted by section 88(3) of the RMA; much more often faulty applications are accepted and gradually improved through requests for additional information in line with section 92 of the RMA (Ministry for the Environment, 2008). It is doubtful whether poor quality assessments significantly improve through this course of action. It is clear, however, that this approach not only delays the processing of resource consents, but also increases the likelihood of poor quality applications slipping through.

According to Jay, Jones, Slinn, and Wood (2007), "EIA generally continues to bring about only relatively modest adjustments of development proposals." Given the tendency of councils to accept subpar assessment reports and the fact that only a little more than half a percent of all resource consent applications are eventually declined (Ministry for the Environment,

2011), and considering that AEE practitioners rarely employ more advanced means of assessing impacts than overly simplistic checklists (Morgan et al., 2012), it seems very likely that this statement applies to assessments in resource consent applications as well.

3.2 Participation of the public

Although the use of objective measurements and scientific methodology is considered EIA best practise (International Association for Impact Assessment in cooperation with Institute of Environmental Assessment, 1999), EIA is neither science nor is it an objective process. As environmental impact statements are produced by project proponents with the goal to convince decision-makers of the benefits of the project in question, the report is a subjective statement or even a piece of project advocacy (Beattie, 1995). In recognition of this inherent bias, the EIA process calls for the participation of the general public, in particular the participation of affected individuals or interest groups (Wilkins, 2003).

It is therefore rather disappointing that even in recent reviews of international EIA practise, public participation remains on a fairly low level (Morgan, 2012). Some of the main barriers to public participation cited by Morgan (2012) are: poor knowledge of the public about the process; poor provision of information; failure to influence the decision-making process; poor execution of participation methods; and regulatory constraints.

While councils usually engange the public during the consultation phases of the plan formation process, the picture on the resource consent level is a different one. According to the 2010/11 survey of local authorities the New Zealand Ministry for the Environment (2011) carries out every two years, only about six per cent of all resource consents in the two-year period were notified in some way, with only four per cent being publicly notified ("poor provision of information"). Hence, although the public can influence the framework relative to which resource consents are evaluated, there is limited opportunity for the public to affect the outcome of the actual decision-making process; this situation may result in reduced willingness to participate in areas where public participation is still possible ("failure to influence the decision-making process").

3.3 Cumulative effects and the devolved mandate

What sets apart New Zealand's approach to environmental assessment from those of other countries is the devolved mandate. The distribution of responsibilities to the local levels of government, however, brings about difficulties in effective environmental management. Project-level EIA usually does not address cumulative effects well, i.e. individual minor effects of several projects that result in serious impacts when combined, because this would require regulation and monitoring at a higher level (Morgan, 2012).

When resource consent applications are processed independently from one another at

the local level, their aggregate cumulative effects are easily overlooked. Although the RMA specifically includes cumulative effects in the definition of effects that have to be considered (Section 3), it is still up to the council to review an AEE with regards to cumulative effects. The quality of this review crucially depends on the experience and the resources available at the local level to scrutinise an AEE that may not properly address cumulative effects (Furuseth & Cocklin, 1995, p 267). A joint hearing process has been used in the past to successfully overcome this limitation for individual projects that require multiple resources consent applications to be considered (Fookes, 2000).

The same problem exists for 'Permitted Activities' whose impact is considered too minor to warrant an assessment of effects. The RMA does not demand an assessment of the cumulative impacts of 'Permitted Activities'. According to the RMA Survey 2010/2011, a surprisingly large percentage of regional councils (91%) carried out monitoring procedures and reported on 'Permitted Activities' for the sake of assessing cumulative impacts (Ministry for the Environment, 2011). According to the same survey, however, only 68 per cent of those activities that required both resource consents and monitoring were monitored by regional and territorial councils. As a result, it is difficult to evaluate the accuracy of the predictions of a considerable number of AEE and the effectiveness of local plans and policies (compare Sadler, 1996, p 49).

The effectiveness of monitoring to anticipate cumulative effects also depends on the institutional framework in which it is performed. For local authorities under the RMA, national policy statements and national environmental standards are supposed to provide reference points for local plans and policies that determine the 'intensity' of environmental monitoring, yet the Ministry for the Environment has been relatively slow in publishing these national guidelines (Miller, 2010). Although according to Sadler (1996), the integrated approach to EIA encouraged by the RMA should, in theory, be sufficient to establish a "context and parameters for subsidiary EIAs, which are required for all resource use consents", due to slow implementation of the RMA "local governments still rely on project EIA rather than undertaking policy and plan-level assessments" (p 146). The relative lack of guiding constraints on local plans favours regional differences in the implementation of environmental management practises (see case studies in Ministry for the Environment, 2013).

4 Conclusion

Although the RMA anticipated some of the core principles of SEA in that it provides an integrated framework for the assessment of policies, plans, and projects, insufficient monitoring and the lack of a well-defined process to feed assessment experiences at the local level back into nation-wide guidelines limits the suitability of the RMA for SEA. The fact that the RMA purposefully omits prescribing explicit assessment procedures does enable a more flexible

approach to environmental assessment that is guided by local needs but has also allowed an overwhelming number of poor-quality assessments to enter the process.

While the broad definitions of the terms 'environment' and 'effects', and the integration of EIA principles in the resource consent process do ensure that most proposals with potentially significant impacts fall under the activities that require assessment, the sheer volume of resource consents that are to be reviewed by local councils result in high workload which negatively affects the councils' consent review performance. The effects of these performance issues are particularly obvious in the disappointing monitoring practises and the severely limited opportunity for the general public to provide input on all but a minor fraction of resource consents. Since the lack of well-defined procedures allows local authorities to disregard the results of an assessment, it is unclear to what extent AEE is actually used as a means to promote sustainable development.

Approximate word count: 2900

5 References

Beattie, R. B. (1995). Everything you already know about EIA (but don't often admit). *Environmental Impact Assessment Review*, *15*(2), 109–114.

Fookes, T. (2000). Environmental assessment under the Resource Management Act 1991. In P. Memon & H. Perkins (Eds.), *Environmental planning and management in New Zealand* (pp. 80–91). Palmerston North, New Zealand: Dunmore Press.

Furuseth, O. & Cocklin, C. (1995). An institutional framework for sustainable resource management: the New Zealand model. *Natural Resources Journal*, *35*, 243–279.

International Association for Impact Assessment in cooperation with Institute of Environmental Assessment. (1999). *Principles of Environmental Impact Assessment best practice*.

Jay, S., Jones, C., Slinn, P., & Wood, C. (2007). Environmental impact assessment: retrospect and prospect. *Environmental Impact Assessment Review*, *27*, 287–300.

Kerr, S., Claridge, M., & Milicich, D. (1998). *Devolution and the New Zealand Resource Management Act* (New Zealand Treasury Working Paper No. 98/7).

Miller, C. (2010). *Implementing sustainability: the New Zealand experience*. RTPI Library Series. Taylor & Francis.

Ministry for the Environment. (2006). *Your guide to the Resource Management Act* (tech. rep. No. ME 766). Wellington: Ministry for the Environment.

Ministry for the Environment. (2008). *A review of council RMA resource consent processing performance: round one* (tech. rep. No. ME 845). Wellington: Ministry for the Environment. Retrieved from http://www.mfe.govt.nz/publications/rma/review-consent-processing-performance-round-one-jan08/html/page4.html

Ministry for the Environment. (2011). *Resource Management Act: survey of local authorities 2010/2011* (tech. rep. No. ME 1069). Wellington: Ministry for the Environment.

Ministry for the Environment. (2013). *Improving our resource management system. a discussion document*. Wellington: Ministry for the Environment.

Morgan, R. K. (2012). Environmental impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, *30*(1), 5–14.

Morgan, R. K., Hart, A., Freeman, C., Coutts, B., Colwill, D., & Hughes, A. (2012). Practitioners, professional cultures, and perceptions of impact assessment. *Environmental Impact Assessment Review*, *32*(1), 11–24. doi:10.1016/j.eiar.2011.02.002

Sadler, B. (1996). *Environmental assessment in a changing world: evaluating practice to improve performance*.

Wilkins, H. (2003). The need for subjectivity in EIA: discourse as a tool for sustainable development. *Environmental Impact Assessment Review*, *23*, 401–414.

Wood, G. (2008). Thresholds and criteria for evaluating and communicating impact significance in environmental statements: 'see no evil, hear no evil, speak no evil'? *Environmental Impact Assessment Review*, *28*, 22–38. doi:10.1016/j.eiar.2007.03.003