
WHEN IS ENOUGH, ENOUGH?

**DEALING WITH CUMULATIVE EFFECTS UNDER THE
RESOURCE MANAGEMENT ACT**

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TABLE OF CONTENTS

	Page
PART 1 - WHAT ARE CUMULATIVE EFFECTS? WHAT IS THE ISSUE?	1
Introduction.....	1
A personal perspective	1
Criticisms	1
What are cumulative effects?	3
Cumulative effects and the existing and foreseeable future environment	5
Conclusion as to the scope of cumulative effects.....	6
Can cumulative effects encompass the additive effects beyond those of existing and reasonably foreseeable future activities?.....	7
Is there a need to better define cumulative effects?	8
PART 2 - THE TASK	9
How do we determine when enough is enough?	9
Identifying the resource	9
Identifying the value based components of resources	10
Determining capacity.....	10
Establishing limits to the use of a resource (the groundwater example).....	11
When is enough really enough?.....	12
PART 3 - CHALLENGES AND BARRIERS	14
Death by a thousand cuts	14
Spoiled by a thousand marine farms (or turbine blades).....	14
Planning creep - the thin end of the wedge (or the bolting horse).....	15
Is there too much emphasis on proof?.....	16
Precaution or speculation.....	17
Failure to establish limits in time	18
"Plan Agility"	19
PART 4 - TECHNIQUES	20
Prohibited activities with appropriate exceptions	20
Non-complying activities coupled with strong objectives and policies	21
Integrity of the plan and the need for strong objectives and policies.....	22
Resource based limits (minimum flow, maximum rates of use and minimum standards of quality).....	22
Deferred zoning/limits	23
Use limits (cap allocation).....	23
Zones of prohibition or non-complying activity.....	23
Establishing inventories for key resources.....	23
Assessment criteria and other policies	24
Adaptive management	24
Section 32 – cost benefit analysis.....	25
Economic instruments	26
National Policy Statements and National Environmental Standards	26
Review of resource consents	27
Can consent authorities and the Courts deal with cumulative effects?	28
CONCLUSION	29

PART 1 - WHAT ARE CUMULATIVE EFFECTS? WHAT IS THE ISSUE?

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Introduction

This paper has been commissioned by the Ministry for the Environment in response to recent criticism of how cumulative effects are dealt with under the Resource Management Act (RMA). It is intended to be a "*think piece*" rather than a definitive guide. It expresses the author's tentative views on the topic so as to hopefully stimulate discussion.¹

The first part of this paper discusses what cumulative effects are. It examines the scope of cumulative effects, and associated case law. It considers whether there is a problem, whether amendments to the RMA are required and/or whether there are implementation issues. The second part deals with the pre-requisites to addressing cumulative effects, and discusses some of the conundrums and barriers faced by resource managers in dealing with this issue. Finally, I discuss some potential tools to address such effects, including their limitations and advantages, and how these might be better utilised.

The author's perspective

There are some types of cumulative effects have not been adequately addressed under the RMA. However, the problems are largely not with the Act itself, but with its implementation at national, regional and district level. It is not my intention to be critical of how local authorities or government have addressed cumulative effects. The difficulties faced by resource managers in this area are fully acknowledged. There are a number of practical, policy and political barriers to dealing with cumulative effects. However, in my opinion there are adequate tools available under the RMA to address this issue and no need for significant statutory amendment. Rather there is a need to more effectively use the tools we already have.

I also suggest that there is a degree of over reaction. On the whole, the RMA and those who administer it deal well with environmental effects including cumulative effects. There are however some limited areas and issues where Regional and District Plans are, for whatever reason, playing "*catch up*" with cumulative effects. In some circumstances such effects can still be adequately (but not efficiently or strategically) addressed via the consent process. However, in other cases there is a need either for plans to catch up or for intervention at a national level (eg via National Policy Statements and National Environmental Standards).

Criticisms

Parliament recognised the need to address cumulative effects at the time the Act was passed. Recently however, some have questioned the effectiveness of the legislation in addressing such effects and have called for amendments and/or improved implementation to deal with the issue. The stimulus for the debate has been increased urban, rural and coastal development, with consequential threats to natural resources and amenity values.

Some of the cumulative effects issues which have been the focus of recent decisions and debate include:

- water quality and quantity issues arising from intensification of dairying and other rural use (competition for ground and surface water and nitrate or other pollution issues);
- compromise of natural character of the coastal environment with marine farms and residential development;
- compromise of landscape and amenity values with multiple wind farm proposals; and

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- cumulative air quality effects.

At the Environmental Defence Society *Beyond the RMA Conference 2007*² and elsewhere, a number of commentators suggested that the RMA failed to adequately deal with such issues. Raewyn Peart suggested that the "effects based" approach of the RMA has been reasonably successful in managing the effects of individual resource consents, but that the RMA failed to deal with cumulative effects on the environment arising from the grant of individual resource consents.³

In Raewyn Peart's view, the consequences of the "effects based approach" are that environmental degradation becomes a timing issue, a question of "when" rather than "whether". In support of her argument, she cites the findings of the 2005/2006 Ministry for the Environment RMA Survey of Local Authorities,⁴ which found that in practice the majority (over 99%) of consent applications are being granted, albeit with conditions attached to mitigate adverse effects. She suggests that cumulatively, this approach results in ongoing degradation as each successive activity contributes its negative impacts.

Peart argues that the adoption of this "mitigation mentality" makes it difficult to address cumulative effects. In summary, she suggests that a case by case assessment is no longer sufficient and that a more strategic response is required to deal with increasingly complex environmental problems and increasingly scarce resources.

In the same vein Rod Oram argued that under the RMA it is not easy for councils or the Environment Court to declare a halt to further consents. He suggests that there is a perception that it is often easier to get the hundredth consent rather than the first, because the RMA handles cumulative effects inadequately.⁵ While the first house on a coastline may have a minimal effect, at some point the effects of further development accumulate to the point they do have a negative impact. "The last straw breaks the camel's back".

Similarly, in reference to the impact of groundwater takes from Canterbury Plains aquifers, on the flows in spring-fed lowland streams, Dr Bryan Jenkins (CEO of Environment Canterbury) noted a paper presented at the New Zealand Planning Institute Conference 2007, that:⁶

[A]s sustainability limits are approached, there is the potential for cumulative effects. Management of cumulative effects requires a catchment wide approach. However, with the RMA designed for managing the adverse effects of individual applications there are shortcomings in the legislative framework for the management of cumulative effects....

One example that is given to support the claim that the RMA has failed in this area, is the findings of the recent OECD Environmental Performance Review of New Zealand (2007). The OECD report looked specifically at the effectiveness of environmental management in regards to water resources, waste management, nature conservation, and air quality protection. While it did not focus on the performance of the RMA, a key finding of the report was that the overall water quality in rivers and lakes has declined in many regions despite the fact that pollution of surface waters by point source discharges had decreased over the previous 10 years. This has been attributed to the impacts that have cumulatively derived from pastoral farming. What remains for debate is whether this and other issues are the result of a failure by policy statements and plans to address such issues and/or a deficiency in the Act itself.

² Beyond the RMA Conference, 30-31 May 2007.

³ "The RMA Compared to International 'Best Practice'", Beyond the RMA Conference, 30-31 May 2007.

⁴ RMA survey of local authorities 2005/2006.

⁵ "The RMA now and in the future", Beyond the RMA Conference, 30-31 May 2007.

⁶ "Water Allocation in Canterbury", New Zealand Planning Institute Conference 2007.

The view that the RMA is unable to handle cumulative effects is open to debate: The Hon Peter Salmon's commented in a paper presented at the Environmental Defence Society *Beyond the RMA* conference in 2007:⁷ that:

If one looks at the definition of effects, at s 5 and its three 'bottom lines' and at the duties and responsibilities of regional councils set out in s 30, there is clear power to deal with cumulative effects. It is a question of identifying the resource, determining its capacity and then limiting its use so that the s 5 objectives can be met. Cumulative effects may be difficult to identify in some instances but I cannot see how a better system for dealing with them can be provided. Whatever the system devised, the same problems of identification and control will arise.

With respect, I agree with these comments. The tools are there, however there are various barriers to implementation.

What are cumulative effects?

Cumulative effects are included in the definition of "effect" in s 3 of the RMA which provides as follows:

3 **Meaning of "effect"**

*In this Act, unless the context otherwise requires, the term **effect** ... includes—*

- (a) *Any positive or adverse effect; and*
- (b) *Any temporary or permanent effect; and*
- (c) *Any past, present, or future effect; and*
- (d) **Any cumulative effect which arises over time or in combination with other effects—**

regardless of the scale, intensity, duration, or frequency of the effect, and also includes—

- (e) *Any potential effect of high probability; and*
- (f) *Any potential effect of low probability which has a high potential impact.*

The term "cumulative effects" is not otherwise defined, however it is apparent from the context, that it encompasses two concepts:

- effects arising over time (eg nitrate contamination of ground water); and
- effects arising in combination with other effects (eg interference between groundwater uses or synergistic air pollution effects).

The concept of cumulative effects was described in *Gargiulo v Christchurch City Council*:⁸ "*...any one incremental change is insignificant in itself, but at some point in time or space the accumulation of insignificant effects becomes significant.*"

The leading case on cumulative effects is the Court of Appeal decision in *Dye v Auckland Regional Council*.⁹ *Dye* concerned an application for a non-complying activity to subdivide a rural section into five lots. It was argued that granting consent would create a precedent effect that would result in adverse cumulative effects on the environment from similar subdivision proposals that would likely follow.

The Environment Court found that the proposal would not result in either an actual or cumulative loss of rural character. However on appeal, the High Court ruled that the cumulative waste water, stormwater, ecological, and roading effects that might result from

⁷ "Revisiting the Purpose and Approach to Resource Management", *Beyond the RMA Conference*, 30-31 May 2007.

⁸ C137/00

⁹ [2002] 1 NZLR 337

the subsequent development proposals which might follow from the grant of consent, had not been appropriately considered.

In overturning the judgment of the High Court, the Court of Appeal began by looking at the definition of "effect" in section 3. The Court observed that a cumulative effect is not the same as a potential effect, based on the inclusion of potential effects separately within the definition. Discussing the characteristics of cumulative effects, the Court concluded:¹⁰

A cumulative effect is concerned with things that will occur rather than with something which may occur, that being the connotation of a potential effect.... The concept of cumulative effect arising over time is one of a gradual build up of consequence.

The concept of combination with other effects is one of effect A combining with effects B and C to create an overall composite effect D. All of these are effects which are going to happen as a result of the activity which is under consideration.

The Court also noted that "potential effects" are effects which may happen or they may not. Accordingly, it found that "precedent" effect resulting from the grant of a resource consent did not fall within the concept of cumulative effect:¹¹

If the precedent effect of granting a resource consent is to fit within the definition at all, it must do so by dint of its potential effect and it would then have to satisfy the probability and, if applicable the potential impact criteria.

The Court of Appeal held that the precedent of granting a resource consent is a relevant factor for a consent authority to take into account when considering an application for consent but is not a cumulative effect. The Court noted that the granting of a resource consent has no precedent effect in the strict sense, and "the most that can be said is that the granting of one consent may well have an influence on how another application should be dealt with". With respect, that was a predictable and sensible approach.

Dye is authority that precedent effects are not cumulative effects. However, the implication that potential effects cannot be cumulative effects (if that was intended) was obiter and, with respect, is open to debate. That case was not about actual versus potential cumulative effects, but rather, was about likely effects and **speculation** as to the potential cumulative effects arising from possible future discretionary or non-complying applications which might or might not be granted.

The finding that consent authorities cannot consider, as cumulative effects, the effects of possible future applications that may or may not be made, and may or may not be granted has been applied in a number of cases (see for example *Rodney District Council v Gould*¹² and *Aquita Holdings Limited v Rodney District Council*)¹³ In *Gould*, again concerning a rural subdivision, the High Court followed *Dye*, and held that a cumulative effect must be one that arises as an effect of the application for which consent is sought, and which is being considered in the particular case before the consent authority. Again however, that case was not about the **potential** cumulative effects of the subject application in combination with the effects of existing and reasonable foreseeable activities.

The approach in *Dye* has also been the subject of discussion by the Environment Court. In *Upper Clutha Environmental Society Inc v Queenstown Lakes District Council*,¹⁴ Judge Jackson noted that the Court of Appeal's statements concerning the distinction between

¹⁰ Ibid at para 38.

¹¹ Ibid at para 39.

¹² [2006] NZRMA 217 (HC)

¹³ A094/05

¹⁴ C104/2002

"actual and potential effects" in section 104(1)(a) and "effect" in section 3 were obiter and not binding on the Environment Court. The Court concluded:

[W]hen considering effects the consent authority (or on appeal, this Court) can disregard the monochrome 'effects' of Dye and consider the full spectrum of effects that Parliament intended by applying paragraph (i) with paragraph (a) of section 104(1).

Similar comments were made in *Cashmere Park Trust v Canterbury Regional Council*¹⁵ (also Judge Jackson) an appeal against a decision by the Canterbury Regional Council to grant consent for the discharge of stormwater from a residential subdivision. Again, the Court observed that the statements in *Dye* were obiter and inconclusive. In quoting from *Emerald Residential Ltd v North Shore City Council*,¹⁶ the agreed with the Environment Court's finding that:

[W]hat must be considered is the impact of any adverse effect of the proposal on the environment. The environment is to be taken as it exists, with whatever strengths or frailties it may already have, which make it more or less able to absorb the effects of the proposal.

Accordingly, the Court concluded that:

[I]t would be both unfair to the appellants and a dereliction of sustainable management if we could not consider the effects of other possible (but not yet built) permitted discharges from the catchment....

In *Clifford Bay Marine Farms Ltd v Marlborough District Council*,¹⁷ (again Judge Jackson) the Environment Court found that all relevant effects should be considered, including potential cumulative effects of low probability and high impact. Based on the inclusive definition of "effects" in section 3 and as "other relevant matters" under section 104(1)(i) of the RMA, the Court held these types of effect must be taken into account, "even if they do not necessarily fit within any of section 3(a)-(e) or section 104(1)(i)".

In the author's view, the more critical questions are: how likely is the potential effect (low, moderate, or high probability)? If it occurs, will it have a low, moderate or high impact?¹⁸

Cumulative effects and the existing and foreseeable future environment

Given that cumulative effects are in essence additive effects, the question arises "additive to what?" Clearly they must be additive to the effects of the existing environment including existing activities. As illustrated by the recent decisions one should also consider effects in combination with foreseeable permitted future activities which may utilise the resource in question. Arguably one should also include foreseeable controlled activities and foreseeable environmental change (eg climate change).

In *Queenstown Lakes District Council v Hawthorn Estates Ltd*¹⁹ the Court of Appeal confirmed that the receiving environment (beyond the subject site) is the environment upon which a proposed activity might have effects. *Hawthorn Estates* concerned an application for residential subdivision in a rural area and a system of mounds and ponds across the

¹⁵ C48/04

¹⁶ A31/04

¹⁷ C131/03

¹⁸ See the section 3 definition of "effect". There is another question which relates to all "potential" effects. What of the interim categories: moderate probability and moderate impact; moderate probability and low impact; low probability but moderate impact? Now is not the time for that discussion but suffice to say that the word "including" does not exclude other categories. Furthermore there is no logical reason to exclude these categories.

¹⁹ [2006] NZRMA 424 (CA)

subdivided sites. The case centred around the point at which development within a landscape capable of absorbing change, reaches the point of "over-domestication".

In *Hawthorn* the Court of Appeal held that it is permissible (and often necessary) to consider the future state of the environment upon which effects will occur. The word "environment" embraces the future state of the environment as it might be modified by the utilisation of rights to carry out (non fanciful) permitted activities. "Environment" also includes the environment as it might be modified by the implementation of resource consents that have been granted at the time a particular application is considered, where it appears likely that those resource consents will be implemented.²⁰ "Environment" does not however include the environment as it might be modified by the implementation of future resource consent applications (because these involve considerations and effects that are too speculative).

In *Cashmere Park Trust v Canterbury Regional Council*²¹ discussed above, the Court found that the permitted baseline does not extend to sites beyond the subject site, but that potential cumulative effects could be assessed by reference to likely permitted activities on nearby land. The Court noted that in *Dye*, the Court of Appeal was critical of the notion that an area wide investigation was required as to the adverse effects which might arise from similar proposals being established in the area. While cumulative effects properly understood should be taken into account, the consent authority has no mandatory obligation under the RMA to consider "what others may seek to do in the future in unspecified places and unspecified ways in reliance on the granting of the application before it".

The Court of Appeal noted there were good reasons why such an inquiry should not be regarded as mandatory in the circumstances:

To require applicants for consent to non-complying activities to entertain, on a mandatory basis, an area-wide inquiry to deal with all the possible future implications of the granting of the particular consent, would impose very considerable additional burdens on all concerned. It would also be a rather speculative exercise.

In making its findings, the Court supported the views of the Environment Court in *Wellington Regional Council (Bulkwater) v Seafresh NZ Ltd*:²²

[T]o even consider future applications as a potential effect or a cumulative effect is to make a totally untenable assumption that the consent authority will allow the dike to be breached without evincing any further interest and control, merely because it has granted one consent.

Conclusion as to the scope of cumulative effects

In conclusion, the scope and meaning of cumulative effects is not settled. What can be stated about the current position under the RMA is as follows:

- cumulative effects can and must be considered when determining a resource consent application;
- cumulative effects include the effects that would result if the activity for which consent is sought is approved, in combination with the effects of other existing activities and/or effects which are likely to arise over time;

²⁰ Ibid at para 84.

²¹ See supra note 15.

²² (unreported decision no. W03/98)

- cumulative effects require consideration on a case-by-case basis and there are circumstances where such cumulative effects warrant the declining of consent (eg *Browning v Marlborough District Council*²³ or *Jennings v Tasman District Council*)²⁴;
- so called precedent effects are not cumulative effects but are a relevant consideration (*Dye and Gould*); and
- cumulative effects include the additive effects of other possible but not yet occurring permitted activities and the effects of granted but not yet implemented consents.

It remains open for debate as to whether cumulative effects should include the additive effects of not yet occurring but likely (non fanciful) controlled activities. In the author's opinion this would be a sensible extension of the concept since the consent authority has no discretion to decline such applications.

The key uncertainty relates to the obiter comments in *Dye* that:

[A] cumulative effect is concerned with things that will occur rather than with something which may occur, that being the connotation of a potential effect.

The Court of Appeal's views as to the difference between issues of precedent or integrity of the plan seems sensible. Precedent is not an effect on the environment. With respect however, there is room to debate the merits of a distinction between "*potential effects*" and "*cumulative effects*".

If the Court was suggesting that a potential effect can not be a cumulative effect, that does not seem to logically follow. There seems no reason why decision makers should not consider potential cumulative effects. Indeed, that would seem to be critical to the sustainable management of resources. Section 3 of the RMA encompasses inevitable effects, probable effects ("*potential effects of high probability*") and possible effects including (but not limited to) "*potential effects of low probability with a high potential impact*". It must also encompass the various shades of probability and potential impact in between these extremes.

Within each of these probabilistic categories there may be non additive and additive (cumulative) effects. There is nothing in the s 3 definition of effect which suggests that an effect cannot be both a potential and a cumulative effect. The suggestion (if that is what was intended by the Court) that an effect must be inevitable before it can be considered to be a cumulative effect is not consistent with the inherent precautionary approach in the Act nor with practicality. Many effects come into the category of potential effects and the nature and degree of cumulative effects in particular are often uncertain.

In the author's view it is neither helpful nor in many cases practical, to distinguish between inevitable cumulative effects (mandatory consideration) and potential cumulative effects (impermissible consideration on one view of *Dye*). Certainly the potential additive effects of future discretionary or non-complying activities is a step too far (which is what the *Dye* case was about).

Can cumulative effects encompass the additive effects beyond those of existing and reasonably foreseeable future activities?

The definition of cumulative effects is not limited to the effects of a proposal in conjunction with the effects of existing activities. Arguably the definition is wide enough to encompass the additive effects of the proposed activity in conjunction with reasonably foreseeable

²³ W020/97, the Court held that granting consent to a marine farm in an area not yet containing any marine farms would introduce the likelihood of other farms seeking similar approvals and result in cumulative impacts.

²⁴ (2003) 9 ELRNZ 334 (EnvC), upheld on appeal (2/6/04, Young J, HC Wellington CIV-2003-485-1654). The Court concluded that taking account of the existing rural/residential dwellings in the area in the proposed subdivision and the development under consideration, these extra dwellings would have an adverse effect giving a cumulative effect which was more than minor.

environmental change. For example in considering a proposed long term water take or coastal development decision makers must consider the cumulative effects of the proposal in conjunction with any reasonably foreseeable potential effects of climate change. Some have argued (based on *Dye*) that such effects are not cumulative effects because they are "*potential effects*", which are speculative. I agree that both the effects and their degree will be uncertain, however s 3 encompasses effects of low probability of occurrence but high potential impact. Arguably, that extends to the cumulative effects of proposed activity and potential environmental change.

Is there a need to better define cumulative effects?

Leaving aside the dicta in *Dye*, in the author's opinion, it is apparent that cumulative effects may include potential effects. The *Hawthorn Estate* decision then provides authority for also considering potential effects which may arise in conjunction with existing activities and foreseeable permitted or consented future activities. I cannot see any need to redefine effects or cumulative effects.

The decision in *Outstanding Landscape Protection Society Inc v Hastings District Council* demonstrates that the decision-makers can and will grapple with cumulative effects:

If a consent authority could never refuse consent on the basis that the current proposal is ... the straw that will break the camel's back, sustainable management is immediately imperilled²⁵.

²⁵ W024/07

PART 2 - THE TASK

How do we determine when enough is enough?

I agree with Peter Salmon QC in his paper "Revisiting the Purpose and Approach to Resource Management" that "*there is clear power to deal with cumulative effects.*" The problems which arise are ones of "*identifying the resource, determining its capacity and then limiting its use*" so that the purpose and principles of the Act can be achieved.

These tasks highlight the fundamental issue of determining "*the point in time or space where the accumulation of insignificant effects becomes significant*" (as mentioned in *Gargiulo*). Or put another way, how should decision makers determine when enough is enough?

There are three tasks:

Identifying the resource

(Where, what, how much?)

This sounds simpler than it is in practice. Before one can determine the limits to resource use, one must identify the extent of the resource in time and space, its capacity at particular times and places, and its qualities and value (in a qualitative and quantitative sense).

Take the Canterbury groundwater debate.²⁶ Undoubtedly some aquifers are fully allocated (reached their sustainable limit) at some times in some seasons, in some (or perhaps all) parts of the aquifer. Environment Canterbury has identified zones (such as the Rakaia Selwyn) which it regards as fully allocated. In these zones, new takes are proposed as non-complying activities with consent only to be granted, if cumulative effects can be demonstrated to be no more than minor. In its consent authority role, the Council then needs to determine whether a particular application or groups of applications will cause more than minor cumulative effects in conjunction with existing effects.

The first difficulties faced by decision makers, is that the zone comprises multiple layered aquifers (up to 6 deep in places). The effect of a particular proposal will depend upon its location in two dimensions (lateral and vertical). Then one must add a third dimension; time.

The deeper aquifers respond more slowly to recharge and abstraction than the shallower aquifers, and surface effects (on lowland streams) take longer to emerge. Even the "*over allocated*" shallower aquifer has sufficient capacity in some locations most years (because of river recharge) and in most locations in some years (when there has been sufficient winter recharge and moderate irrigation demand).

To add to the complexity of the task, the effect of most concern to the Council is the cumulative effect of takes on summer flows in lowland streams and rivers and consequent eco system effects. Before one can decide whether a proposal will cause more than minor effects, one must understand the relationship between takes at different depths and locations and potential effects on streams often some tens of kilometres away. The experts differ in their views as to the buffering effects of depth and distance. What is beyond debate, is that the effect of a given volume of take from a deep inland bore is not the same as the effect of the same volume being taken from shallow aquifers near a lowland stream. Clearly location, depth and timing of a take are critical, to understanding the nature of the resource over space and time. The task of identifying the resource therefore requires good monitoring and good science (eg modelling).

²⁶ The author has recently been a Commissioner in respect of applications to take from one of the zones deemed to be fully allocated.

Groundwater is of course a complicated resource because of difficulties in the measurement and prediction of its behaviour. However, good monitoring and good science are relevant for most resources. Surface water hydrology may be simpler, but identifying the areal and temporal differences in flow still requires good science. The Hectors Dolphin resource is another case in point.

Identifying the value based components of resources

At least water quantity and quality (and Hectors Dolphin populations) can be measured. Identifying the resource takes on a different dimension when dealing with resources with qualitative components. Take a windswept ridge. The generator will tell you its value for a wind farm, but what is the landscape and amenity resource involved? And what is its value?

What of a river being targeted for irrigation or a hydro scheme? The resource is not just the quantity of water. By way of example, flow requirements for wry billed plovers, salmon anglers and kayakers will differ. Accordingly both the capacity and the value of a water resource will usually vary over time and space and by user. As the angler or kayaker will tell you, the variability of flow is for them a critical component of the resource. For boaters it may be the volume of flow which is important.

A further problem faced by local authorities is the difficulty of planning for changing community perceptions over time. It is far easier to plan for current, known attitudes than try to guess where attitudes towards development will be in 5 or 10 years time. When community attitudes change, the number of turbines (or for other changes in the landscape) that is acceptable to the community can change, leaving the plan misaligned until it is also changed.

The recent first instance decision on Meridian Energy's proposed wind farm on the Lammermoor Range demonstrates the difficulty of identifying a landscape resource and its value/capacity. In October 2007, the majority of hearings commissioners considering the application on behalf of the Central Otago District Council and Otago Regional Council did not consider the Lammermoors to be an outstanding landscape when viewed in the Central Otago context. The Chair however concluded that the landscape was an outstanding natural landscape though not classified as such in the plan.²⁷

In the Environment Court decision in *Outstanding Landscape Protection Society Inc v Hastings District Council*²⁸ (upheld on appeal in *Unison Networks Ltd v Hastings District Council*)²⁹, the Court determined that the ridge in issue was an outstanding natural landscape even though this was not identified in the plan. Clearly, consent authorities and the Environment Court can and must make these value judgments guided but not limited by plans. It is also clear that the more guidance that is provided in plans as to areas and features of significance, the easier the task of defining the limits of effects whether cumulative or not.

Determining capacity

What are the sustainable limits of the resource?

How many wind turbines can be sustained in a valued landscape? None or some? If some, how many? In what parts of that landscape should there be none?

²⁷ Decision of the Central Otago District Council and the Otago Regional Council on applications for resource consent by Meridian Energy Limited, 31 October 2007.

²⁸ W024/07

²⁹ CIV-2007-485-896 (11 December 2007)

At which times is a particular groundwater resource at its sustainable limit? At some, all or no times, during some or all years? At what pressure, level or volume of use do we define the sustainable limit?

How much water can one sustainably take from a river? What is the sustainable minimum flow in a particular reach of that river at particular times? (eg in the braided channel sections of the Rangitata during the salmon fishing season or the wry billed plover breeding season?) How much variability in flow should be protected? Should it be the minimum ecologically sustainable flow or include a safety threshold above this? Should it include an amenity allowance above ecological minimums?

How many trees per hectare per annum, could one sustainably log by helicopter from a beech forest in Buller? (The answer to which of course varies depending upon whether you regard the ecosystem and biodiversity as being the resource at stake or the intrinsic value of untouched wilderness.) How many homes (or marine farms) can you sustain in a coastal environment whilst preserving its natural character?

There is a need to look to both quantitative and qualitative assessment in order to determine what is available, before the sustainable limits to the resource can be determined. Science and economics have a part to play. Valuing intrinsics such as natural character, wilderness or landscape amenity, is difficult but still essential. The capacity of the resource can not be determined without knowing what it is valued for and why.

The concept of establishing resource inventories for key resources is not new and is a key tool. In essence this is what is being done with landscape and indigenous vegetation. Most Councils have embarked (with varying degrees of enthusiasm and success) on the task of preparing inventories of outstanding or significant landscapes and areas of significant indigenous vegetation or habitat. One can add to that the Department of Conservation recommended areas for protection (RAP) programmes, catchment based air quality inventories and various lists of significant rivers.

However inventories of significance can only go so far. There is also a need for baseline amenity standards for areas/resources that are not classified as outstanding or significant. Open land and even suburbia has its own set of amenity values that can be compromised if the cumulative effects of development are not managed.

Establishing limits to the use of a resource (the groundwater example)

Once it is clear what the resource in question is, how should the relevant council determine the sustainable limits for the resource? The example of groundwater is referred to here, because it is one of the more complex and topical situations and one that the author has had to grapple with in recent times. However, many of the decisions along the way will apply to other resources (consider air quality for example). The added complexity for groundwater is the three dimensional nature of the resource (location, depth and time).

The task for the consent authority when considering further applications to take water is far from easy. The question is not as simple as asking whether the proposed take will have more than minor cumulative effects (the key criteria in the proposed NRRP for Canterbury). Rather, there are a series of questions/issues that are relevant which may be summarised as follows:

- the capacity of the relevant ground water resources (including areal and temporal variations);
- the cause and nature of the cumulative effects of existing takes (including areal and temporal variations);

- the significance of such effects if they occur;
- the point at which such effects become unacceptable (which is likely to vary between locations, years and times within the year);
- the reliability of the evidence regarding the cause and impact of existing effects;
- whether existing cumulative effects are already such that no further consent should be granted, or such that later consents should be granted with more stringent conditions;
- whether there are times locations and/or depths where additional takes can be accommodated;
- the likely nature and degree of the additional cumulative effect caused by the new proposed take;
- the reliability of the evidence as to such effects;
- whether the cumulative effects of the additional take can be adequately avoided remedied or mitigated by way of conditions and adaptive management; and
- whether the effects of climate change are relevant.

Ultimately one gets back to the purpose of the Act which leads to the question:

Are the effects of the proposed activity, in conjunction with the effects of existing activities and over time (after avoiding, remedying and mitigating by conditions) sustainable?

The groundwater problem is a particularly complex one, made more challenging by the difficulty of monitoring and understanding the cause of effects (Are low flows in streams the result of excess surface takes or low winter recharge or both? Do deep takes have a significant effect on the flows in Canterbury lowland streams?). Nevertheless, with some adaptations, most of the questions above are equally relevant to other situations.

When is enough really enough?

When determining whether or not to grant consent, it is the last question above which is critical. One might argue that if the cumulative effects of existing activities are already unacceptable at some times, then no further consents should be granted. However, that approach ignores the temporal and areal differences in resource capacity and effects. Furthermore it assumes that the effects of concern (eg low flows in lowland streams) have been proven to be likely to be the result of the cumulative effect of existing takes as opposed to a manifestation of natural variability in rainfall/recharge or a combination of the two. If the latter is the case, then it may well be that in some locations and/or at some times, additional take may be sustainable (see for example *Lynton Dairy Limited v Canterbury Regional Council*).³⁰

If one is dealing with situations of scientific uncertainty then one must consider the probability that particular effects will arise, and if so, their seriousness (eg will a further take from deeper aquifers exacerbate low flows in streams? If so, by how much, how often and with what ecological consequences?).

It is also important to consider whether conditions can sufficiently avoid, remedy or mitigate the adverse cumulative effects in question (and other effects). Only in clear cases will there be a case for a total prohibition on further activity.

More usually, where sustainable limits are being approached, new activities will or should be non-complying. Assuming then that the plan discourages the grant of new consents, the relevant question is likely to be whether the cumulative effects of the proposed additional activity (after mitigation by conditions) will be more than minor.

³⁰ C108/05

If the cumulative effects of existing activities are more than minor at some times then it might be thought that further consents should not be granted. However, the alternative may be to grant further consents but ensure that they do not add to the problem at the critical times. In my view this approach is workable (sustainable) where the cumulative effects are only at particular times (eg at times of low flows in rivers, or low aquifer levels, or high air pollution).

More generally, I suggest that the test is not:

Are existing cumulative effects already more than minor?

But rather:

Will the residual effects of the proposed activity (after mitigation by conditions) cause an unacceptable increase in cumulative adverse effects?

If existing cumulative adverse effects are more than minor then any more than a de minimis (trivial) increase in effects is likely to be unsustainable or at least unacceptable to the community. However, it is illogical to suggest that any further activity will necessarily result in more than minor adverse effects. The additional effects of the new activity may well be de minimis if the new activity is small scale, or not carried out at critical times and/or is subject to adequate conditions which avoid further adverse effects.

Ultimately, short of imposing prohibited activity status, there is no option but to go through the logical progression of questions set out earlier. That of course requires good information (monitoring, modelling, resource inventories etc). It also requires adequate guidance in the form of clear objectives, policies and assessment criteria.

PART 3 - CHALLENGES AND BARRIERS

Death by a thousand cuts

The cumulative effects debate often comes back to the analogy of "*death by a thousand cuts*". In other words each cut on its own may seem inconsequential but together they may be catastrophic.

Late last year the Environment Court released its decision in a case relating to the proposed clearance of indigenous vegetation in the Wairoa District (*Director-General of Conservation v Wairoa District Council*)³¹. The Department of Conservation opposed the proposed clearance of kanuka forest in an area which had been identified by the Department as a RAP (recommended area for protection). This was a case about the cumulative effects of further clearance on a property where there had already been some limited previous clearance.

The Department characterised the proposal as "*death by a thousand cuts*". In essence, it argued that whilst the clearance of kanuka might not have any more than minor effect on the biodiversity values within a District where kanuka is relatively abundant, it would be the thin end of the wedge (to excuse a mixed metaphor). The Court allowed the clearance, essentially on the basis that the proposed biodiversity offsets involved would maintain or perhaps even enhance overall biodiversity (the remaining better quality bush on the property is to be protected from grazing). Implicitly it rejected the death by a thousand cuts argument.

There are two difficulties with the Department's approach. Firstly, it was based on an apparent view that one can never clear an area of bush and maintain biodiversity. Secondly, and more important to the wider cumulative effects debate, this assumes that decision makers in the future will not be able to determine when enough is enough. There may well become a time when the cumulative effects of kanuka clearance are such that there should be no more. However, clearly the Regional and District Councils and the Court were of the view that this time had not yet been reached in this particular district.

With respect, the death by a thousand cuts argument relies more on emotion than logic. "*Our biodiversity is precious therefore any loss of bush is unsustainable.*" This ignores the critical question: Will the residual effects of the proposed activity (after mitigation by conditions) cause an unacceptable increase in cumulative adverse effects? It also ignores the logical steps required to answer that question.

Spoiled by a thousand marine farms (or turbine blades)

I am not entirely unsympathetic to the death by a thousand cuts argument. One only needs to visit the Marlborough Sounds or Woodville, to wonder whether we have reached (or exceeded) the sustainable limit of some landscape resources. In my view however, there is no fundamental flaw in the RMA, rather in some cases there has been a delay in imposing sustainable limits and/or there have been difficulties identifying those limits.

The marine farm explosion in Marlborough may be regarded by some as a failure of the Act to deal with the cumulative effects of such development. Whilst the value of marine farms to the local economy is undisputed, there are areas where there is room to debate whether the natural character of the coastal environment has been protected from inappropriate development. Almost inevitably if one farm is consented in an area, more will follow given that most existing farmed areas have become Aquaculture Management Areas.

³¹ W081/07

Again however, if there is a problem, it is (or was) one of delayed implementation rather than a gap in the legislation. There are ample examples of marine farms being declined by the Environment Court or by local authorities at first instance. After many years, a moratorium and many Environment Court hearings, the Marlborough District Council has a plan which has areas where marine farms are prohibited and others where they are controlled activities. However, marine farming is still discretionary in many areas. In these areas it will still be up to the consent process to determine when enough is enough. Inevitably the marine farming industry will argue that discretionary status means that in these areas marine farming is generally acceptable. Equally, opponents will argue that the cumulative and other effects of marine farms are such that a few more should be allowed in these areas.

Although some will undoubtedly disagree, the Marlborough Plan does now address the issue reasonably well and in my view the consent and appeal process can and do deal with the "*hard cases*" at the margins. Unfortunately, case by case value judgments are called for because of the subjective nature of landscape and natural character issues.

Planning creep - the thin end of the wedge (or the bolting horse)

The concept of planning creep could be summarised as being a situation where an initial application is made for a modest proposal and the gate is then opened for expansion of that activity by the consent holder or other related development in the future. The classic case is an applicant who applies for a modest proposal with every intention of coming back a few years later to expand the activity in reliance on the "*existing environment*" argument. (or some might call it the "*the horse has bolted*" argument). However, planning creep also extends to situations where there was no intention at the outset.

The first application for a wind or marine farm or coastal subdivision may be contentious, but if granted the application for expansion or more farms or more lots is often easier to obtain than the initial consents. At some point however the horse may well have bolted too far to be retrieved in one piece. Cumulative effects may become unacceptable. The trick is to draw the line before its too late. There are undoubtedly cases where this has not occurred. Where planning creep is leading to unacceptable cumulative effects, the only option available to Councils is to make the plan provisions more restrictive and thereby make it more difficult to obtain "*top up*" consents. This is the approach which Wellington City Council has adopted in its proposed Plan Change 56 to manage infill housing development in suburban areas.

The existing environment argument ("just a wincey bit more won't hurt...")

This is a manifestation of the thin end of the wedge. A classic case is coastal development. Once the first coastal development or marine farm is in place, subsequent applicants will inevitably argue that their proposal will have "*no more than minor*" additional effects when assessed beside the effects of existing development. I agree that this can eventually lead to unacceptable cumulative effects, however again the problem is not the legislation or the case law on existing effects. Rather, the problem is with resource managers failing to identify the limits for development or at least failing to do so before the horse has bolted. Of course effects should be assessed against the existing environment however that also includes taking into account the cumulative effects of the proposal in conjunction with existing development. If limits are identified then there are mechanisms available to address such effects.

The precedent argument

There is a plethora of case law as to the relevance of precedent issues or integrity of the plan arguments as they are sometimes called. Precedent is in effect a manifestation of the principle that like cases should be treated alike.³²

In my opinion, the argument that consent can not be declined because previous grants have created a precedent, is a hollow argument. The courts have made it clear that each case must be considered on its merits. The fact that previous applications have been granted is no guarantee that later similar applications will be granted (*Dye*). If the cumulative effects of the activity have reached or are about to reach unsustainable levels, then a consent authority has discretion to decline consent and/or to make obtaining consent more difficult by altering its plans. The later application may well be for the same activity but its effects must be assessed against the existing environment including the cumulative effects of the existing activity. It will, however, be much more difficult to argue that the limit has been reached, if the relevant plan has not signalled that.

Is there too much emphasis on proof?

Dr Jenkins in "Water Allocation in Canterbury" (New Zealand Planning Institute Conference 2007)³³ argued that under the RMA there is an increasing tendency for an adversarial rather than collaborative approach to decision making. He suggests that this means that decisions on cumulative effects are based on legal principles of "*probative evidence*" rather than environmental decision making principles of "*precautionary approaches*" and "*adaptive management*" which he considers are better suited to delivering community outcomes. The Environment Court decision in *Lynton Dairies* has been referenced as an example of the emphasis on the need for probative evidence.³⁴

Dr Jenkins is of course correct that consent authorities and the Environment Court must act based on the evidence before them. However, commissioner hearings may and often do proceed on the basis of "*inquiry*" rather than an adversarial approach. Both consent authority and the Court are often required to make value judgments and to weigh not only the evidence but also the risks of granting consent and, of course, the policy context. In the absence of National Policy Statements (NPS) it is up to the plans to provide the context and Council officers to provide the science.

There will of course be situations where the science is equivocal and/or disputed. The Act and the Courts do not require scientific certainty to justify restrictions or the declining of consent. However, there is obviously a need for there to be sufficient justification for the requested response. That is what the Court was referring to in *Lynton Dairies* when it referred to probative evidence. In other words, sufficient evidence that the claimed additional effects are likely to result if the consent is granted and that if they occur they are likely to be unacceptable.

Faced with competing evidence, the consent authority and the Court can and do err on the side of caution particularly where the planning framework supports that. Nor do I agree with suggestions that the resource use regime under the RMA is fundamentally permissive. At the regional plan level the statutory prescription (RMA s12-15)³⁵ is in fact restrictive. If it's permitted it is because the plan does so.

If the relevant plan has not set "*hard limits*" such as minimum flows or levels or maximum rates of take, or prohibited activities (eg areas where marine farms or wind farms are prohibited) then the hard decisions are left to the consent process. Even if the plan has

³² Bragwanath J quoting from Aristotle in *Murphy v Rodney District Council* [2004] 3 NZLR 421.

³³ Supra note 6

³⁴ Supra note 32.

³⁵ Sections 12 to 15 of the Act.

put up warning signs by using non-complying activity status, the consent authority still needs to determine whether the likely cumulative effects are more than minor. Unless the plan prevents consent applications, we are left with decisions being made by the consent authority or Environment Court which inevitably requires the balancing of evidence.

The process before the consent authority is to a degree adversarial however it can also be inquisitorial (the panel asking questions). The process in the Environment Court is based on the adversarial system but even that is often more in the nature of an inquiry. Whichever approach is adopted, it involves the weighing of evidence, the balancing of competing arguments and the exercise of discretion. There is really no alternative to this system short of regulation by edict with no rights of appeal. (The closest we get to that under the RMA is National Environmental Standard.)

If the consent authority (or others) claim that the resource is fully allocated (cumulative effects are already unacceptable) then it is incumbent upon it to prove on the balance of probabilities that this is likely. Equally however, if an activity has been made non-complying, it will be incumbent on those who seek additional consents to prove on the balance of probabilities that the additional activity is unlikely to cause more than minor adverse effects in conjunction with the effects of existing activity (after taking into account terms and conditions).

Determining the nature and degree of cumulative effects of air discharges, or takes of water etc, requires good monitoring and good science to answer the range of questions outlined earlier. With wind, marine farms, urban development on the coast and the like, the question of establishing on the balance of probabilities whether cumulative effects are significant, does not require so much science, but still involves determining value based limits (impact on landscape, natural character and amenity).

Whether the focus is on science or community values, there is no escaping the need for decision makers to weigh the evidence. In my opinion the RMA already includes all the tools necessary to facilitate that task. The task of making decisions regarding cumulative effects is inherently difficult but that is not the result of any deficiency in the legislation.

While in an ideal world a collaborative approach is to be preferred to an adversarial approach, it is not always realistic. In matters such as the allocation of ground and surface water where there is significant competition for a valuable resource which is approaching, and in some case at its sustainable limits, how will collaboration work? I certainly agree that the "*first come, first served*" system, is an unsatisfactory and inefficient way of allocating valuable resources, however in my view, the "first-in" system and the adversarial system are not the cause of the cumulative effects dilemma. Rather, the problem relates to the difficulties faced by resource managers in setting limits in plans or through the consent process. This is not a problem with the legislation, but rather reflects the difficulty of the task, in terms of having sufficient information and science to persuade decision makers. The failure to establish limits before the horse has bolted sometimes also reflects the political difficulties often inherent when limitations are mooted.

Precaution or speculation

The precautionary approach is inherent in the Act and has been applied, however there may be a case for strengthening its application in the context of cumulative effects. It is more debatable however whether that requires legislative amendment. If the community wants a more precautionary approach and that can be justified under section 32 (including the risk of not acting) then regional policy statements and plans could require the consent authority, and therefore the council and Courts, to be more precautionary in certain circumstances.

I agree with Dr Jenkins, that there is a need for a *precautionary approach* where there is scientific uncertainty however there also needs to be a clear risk of unacceptable

outcomes. The degree of precaution required depends upon the degree of uncertainty and the degree and nature of the risk involved if further consents are granted. The precautionary approach is not however a substitute for good information about the resource. Precaution should be informed by good monitoring, good science and clear objectives, policies and standards in plans. Plans must signal where additional precaution is required, however decisions are still required on applications and they must be based on more than speculation.

In the case of Canterbury groundwater, the lack of annual volumes limits on individual consents, the absence until recently of metering of takes and a belated planning response from Environment Canterbury, have in my view been the main reason for difficulties in addressing the cumulative effects of groundwater takes. When one adds to this, the continued high degree of debate amongst the experts regarding the cause of low stream flows, it is not surprising that decision makers have been reluctant to accept the calls from some quarters to decline all further takes in the zones which are claimed by the Council to be over allocated.

Certainly the Council and the Environment Court should be *cautious* when considering applications for further takes from the "*red zones*", however even the Regional Council does not have sufficient information to justify a prohibition on new takes or "*hard limits*" (environmental standards). Instead, it has introduced into its proposed plan interim allocation limits beyond which takes are non-complying. The plan proposes that applicants must establish that cumulative effects will be no more than minor. However ultimately it is for the consent authority (often Independent Commissioners) or the Court to weigh the competing evidence, to make a decision as to whether cumulative effects are likely to be more than minor after mitigation.

If a Council considers that there is a need for a more precautionary approach in certain situations, then the RPS and plans may be amended to require that, through use of non-complying activity status and restrictive or at least precautionary policies.

If Central Government considers that certain situations require more precaution, then this can be required via NPS and NES (as the NZCPS does). I am not convinced that there is a need for amendment to warn decision makers of the obvious need to be cautious, when dealing with potential cumulative effects, particularly those which are not easily reversible or which have "*high potential impact*". There is however a need for some plans to be more precautionary and to do that before a problem develops.

The precautionary approach may require consents to be declined where there is good evidence to show a high likelihood of significant effects, or where there is uncertainty as to whether cumulative effects are at unsustainable levels and where such effects would be irreversible or otherwise serious. However, the precautionary approach (as defined by the Courts) does not necessarily require consents to be declined where there is uncertainty, but where the consequences of further grants are unlikely to be serious. In some, but not all such cases, an appropriate precautionary response may be to grant consents for short terms and on strict conditions in conjunction with increased monitoring and research. Obviously however, that approach is not workable in the case of irreversible effects, or the establishment of costly infrastructure (for example hydro schemes or windfarms).

Failure to establish limits in time

One difficulty often faced by consent authorities and the Environment Court in dealing with cumulative effects, is the failure of some Councils to erect stop signs or at least "*go slow*" signs in their plans before sustainable limits are reached. In the absence of clear guidance, those considering consent applications face obvious difficulties in declining consents based on cumulative effects. In particular, if an activity is left as discretionary rather than non-

complying, that tends to send a signal that the activity is generally acceptable but can be declined in particular cases.

If the council has a concern that limits are being approached one would expect non-complying status, restrictive/precautionary policies and appropriate assessment criteria. If limits have been reached then certainly one would expect "*hard standards*" and at least non-complying if not prohibited activity status with exceptions for certain limited circumstances.

The failure to establish limits before it is too late, is not necessarily a failure by Councils to do their job. There are a variety of reasons why adequate limits may not have been set in time. These include the following:

- the time lag between identification of the problem and establishing the cause of the problem;
- insufficient information upon which to base limits;
- uncertainty about the cause of particular effects;
- reluctance by some politicians to severely constrain resource use and thereby curtail economic development;
- the time lag between a council deciding to act and achieving operative limits;
- the lesser weight which can be given to "*untested*" limits in proposed plans; and
- proposed limits not being upheld in the Environment Court because of the lack of good science or other uncertainties.

"Plan Agility"

A recent catch cry is that plans need to be more "*agile*". I take it that those who suggest this are referring to the somewhat tedious process of identifying an issue, consulting, carrying out a section 32 assessment, and going through the submission, hearing and appeal processes prior to new plan provisions becoming operative.

The concern is that plan changes or variations can not respond quickly enough to cumulative effects or other problems. The associated concern, is that until the amended plan provisions are well advanced through the First Schedule process they are given less weight.

I agree that the process is slow. However, the consent authority and council can accord appropriate weight to new provisions **if** they consider them to be soundly based. However whilst there is a need for precaution in managing a resource, there is also a need to be cautious not to give too much weight to often contentious newly proposed restrictions, particularly where the science or community values are unclear. While the First Schedule process could be streamlined a little more, not all the delays originate from the statutory process (as outlined in "Failure to establish limits in time" above).

There is perhaps a case for a moratorium or some such interim control where there is an urgent problem that can not be quickly addressed by plans (as was the case with the marine farming moratorium). However it needs to be remembered, that if there is a clear problem it can usually be addressed via the consent process even without supporting plan provisions (assuming there is sufficient evidence of the cause of the problems).

As discussed later, there is doubt over the need to provide local authorities with the power to introduce prohibitions, moratoriums, or other stringent controls without the backstop of the appeal process.

PART 4 - TECHNIQUES

Prohibited activities with appropriate exceptions

Where limits have clearly been reached, or where there is uncertainty but the consequences of limits being reached are unacceptable, there is a case for making the grant of further consents prohibited. If necessary, the prohibition can be subject to appropriate exceptions. For example, where the sustainable limits of a water resource have been reached, exceptions could be made for taking some water at some times of the year or in some limited quantities, or for some limited purposes and/or in temporary situations. The advantage of this approach is that it avoids the debate around whether consent applications should be granted and whether effects of one further consent will be more than minor.

The difficulty with using prohibited activity status, is that a very good section 32 justification is needed where the relevant plan indicates a total or partial prohibition. The courts have held that prohibited activity status is generally only appropriate where there is no case for exceptions. That is not to say however, there is a need for scientific uncertainty that a limit has been reached. Rather, it may be a result of community consensus (via the First Schedule process) that "*enough is enough*". For example there could be a plan change supported by the community, making water takes a prohibited activity because of their potential cumulative effects on lowland rivers and associated amenity values (or introducing a moratorium whilst science and planning catch up). However there would still be a need to be able to justify to the Environment Court if necessary, why that is an appropriate response. We then come back to the adequacy of the section 32 process and the adequacy of scientific or other justification.

There is no reason why prohibited activities cannot allow for exceptions provided that those are clearly spelled out in the rule. One cannot allow the exceptions by discretion. One can, however, use the prohibited activity status to exclude certain activities, and where discretion is required make those activities non-complying. The policies could then indicate the circumstances where non-complying proposals **may** be allowed.

In *Coromandel Watchdog of Hauraki Inc v Chief Executive of the Ministry of Economic Development*³⁶ the Court of Appeal had to consider the circumstances when a local authority might classify an activity as "*prohibited*" in a plan. In this case the district plan had classified mining as a prohibited activity in conservation and coastal zones and in recreation and open space policy areas, despite indicating that it contemplated the possibility of mining occurring in those areas by way of plan change. The High Court had upheld the strict interpretation of "*prohibited activity*" in section 77B RMA adopted by the Environment Court, which had found the approach of the district council to allocate a prohibited activity status to mining and then permit it by means of a plan change was incorrect.

In the Court of Appeal it was argued that the lower Courts had imposed a new "*bright line test*" when they found that prohibited status was only appropriate for activities that could never be allowed. The Court held that the lower Courts had wrongly applied the new test when it found that prohibited status was only appropriate for activities that could never be allowed, and noted that prohibited activity status could be appropriate in a number of situations, for example where a local authority had insufficient information about an activity at the time the Plan was formulated.

The effect of this decision is that in some cases where the local authority considers an activity to be generally unacceptable it could effectively impose a moratorium by way of prohibited activity status. This would leave those who want to undertake such activity to justify an exception via the plan change process which allows for a wider consideration of

³⁶ [2007] NZCA 473

effects. Again however, I emphasise that such an approval is unlikely to be upheld without a reasonable level of scientific certainty and policy justification.

Non-complying activities coupled with strong objectives and policies

In situations where it is not clear that the limit has already been reached but it is clear that it is at least approaching, the use of non-complying activity status is a potentially powerful tool. This status signals the grant of further consents will generally not be appropriate and that consents will only be granted in limited circumstances. This is the tool to signal that extra caution is required (an amber light).

One criticism of non-complying activity status, is that activities which the Council has deemed inappropriate by way of objectives and policies can still be granted consent if they can overcome the no more than minor effects threshold. That may be relatively easy, since the effects of a further consent may well be inconsequential given the combined effects of existing activities.

What must be remembered however, is that the "*thresholds*" or "*gateways*", are but that. The consent authority may still decline a non-complying activity which passes the no more than minor effects threshold. In order to do so however, it is critical that there are objectives and policies in the plan providing strong direction demonstrating a clear intention not to grant further consent except in certain limited situations (which should be clearly specified). Thus, for example, where water quality standards will be breached by a proposed discharge, that discharge could be a non-complying activity and the plan could indicate that consents should not be granted except in certain limited situations (for example where the discharge is progressively upgraded so as to meet the water quality standards).

To return to the water example, the plan could provide that in general, or up to a specified allocation volume, takes are discretionary. In other areas or where the first stage allocation limit is exceeded takes could be non-complying. There could then be another limit or other areas, where new takes (and perhaps even renewals) are prohibited.

Thought needs to be given to the extent of the resource covered by the non-complying status and/or the resource limits (eg maximum allocated volume) which will trigger that status. For example, with ground water, is that status appropriate for the whole of an area, or only for particular aquifers or levels?

In order to be effective, non-complying activity status must be backed up by strong objectives and policies, otherwise it becomes little different than discretionary. For example, the policy might be to not grant consent except in certain specified situations or where particular assessment criteria can be satisfied. Using this approach, even if an applicant can pass the "*no more than minor*" gateway, the consent authority has the discretion to decline consent based on the policy and backed up by "*integrity of the plan*" arguments.

In my view, insufficient use is made of the non-complying activity category and indeed, there are some plans which have few, if any, non-complying activities. The reasons for the apparent reluctance to use this powerful tool are a little unclear. Perhaps it is because people wrongly consider non-complying activities to be little different from discretionary, or perhaps it is simply easier to defer the hard decisions and leave full discretion to the consent authority. In my view the former is wrong and the latter is irresponsible.

The consequence of providing for discretionary activities is that there is often an implication that the activity is generally acceptable. Whereas with non-complying activities the implication is the opposite. If a consent authority considers that cumulative effects are approaching sustainable limits then it should not leave activities as discretionary. In my

view, leaving full discretion to the consent authority is unhelpful and sends the wrong signals. That approach also provides much less teeth to objectives and policies.

The failure to use the non-complying activity status and planning framework as intended leaves much to chance, discretion and value judgments. It transfers too much of the onus to a case-by-case assessment of consent applications. By this stage, declining activities can be difficult if the associated objectives and policies do not provide strong direction.

Integrity of the plan and the need for strong objectives and policies

The Courts have held that precedent and integrity of the plan, though not cumulative effects, are relevant considerations.³⁷

The use of non-complying activity status in conjunction with strong objectives and policies provides a basis for the consent authority (or Environment Court on appeal) to decline consent on the grounds that the grant of consent undermines the integrity of the plan. To some extent, the same argument can be applied to discretionary activities provided that there is strong discouragement in the objectives and policies. However, integrity of the plan arguments are much more likely to succeed in the case of a non-complying activity than a discretionary activity. In any event, in either circumstance the critical requirement is to have strong objectives and policies. Without those, the plan has little integrity to be protected. The objectives and policies need to be clear so decision makers can assess whether granting an application would be contrary to those provisions.

Understandably, councils have tended to shy away from establishing clear limits within the context of appeals on their plan provisions (with inevitable delays, costs and political fall out). Rather, the debate has been left to case by case decision making by way of the consent process. Not surprisingly, in the absence of clear restrictions and clear guidance in the plan, the consent process has been found wanting.

Resource based limits (minimum flow, maximum rates of use and minimum standards of quality)

Where there is clear evidence that sustainable limits have been reached, at least in the case of air and water, the Act allows minimum flows, pressures, levels, maximum rates of use and minimum standards of quality to be set. Used in conjunction with non-complying activity status, these are a powerful tool in addressing cumulative effects.

The main difficulty with using this method is the need for a sound scientific basis for fixing the minimum and maximums. There is however a case for setting limits which are not based on clear science but are based on a precautionary approach coupled with a value judgment. For example, in the case of Environment Waikato's proposed nitrogen limits for the Lake Taupo catchment,³⁸ the section 32 analysis is frank in acknowledging that there is no preciseness in the proposed limit of nitrogen. What is clear however (and largely accepted by all involved) is that there is a need for a limit. Whether this limit will provide adequate levels of water remains to be seen.

This "*precautionary approach*" to setting limits can also be applied to minimum flows and the like. In the context of Water Conservation Orders, almost by definition minimum flows and allocation limits are set at a conservative (precautionary) level. Indeed in most cases they are probably more conservative than is strictly required. However, that is seen as desirable so as to protect features and characteristics which have been found to be outstanding in a national context (see *Rangitata South Irrigation Ltd v New Zealand and*

³⁷ Supra note 8.

³⁸ Proposed Waikato Regional Plan Variation 5 - Lake Taupo Catchment.

Central South Island Fish and Game Council).³⁹ Whilst the Water Conservation Order regime encompasses a precautionary approach, there is no reason why such an approach can not be applied via plans provided there is adequate satisfaction for doing so. Coastal hazard lines being a case in point (see *Foreworld Developments Ltd v Napier City Council*).⁴⁰

Deferred zoning/limits

Another mechanism that is currently being tested in the Bay of Plenty, is deferred zoning. Area A is zoned for residential development. Area B has a deferred residential zoning which only comes into play once Area A is X% developed (however, that is defined). This technique or variations of it may be applicable to other situations.

This raises the prospect of a "*progressive threshold*" to map out the status of future activities in advance that, for example, 20 units of development (be they houses, turbines, takes of water etc) in a given catchment are discretionary, then once the number exceeds 40 the activity becomes non-complying, and beyond 80 the resource is deemed to be fully allocated and further development prohibited.

Use limits (cap allocation)

These are a variation on the resource based limits mechanism. The classic example is an allocation cap on takes from a river. The cap can either be a "*hard cap*" where further takes beyond the limit are prohibited except in limited circumstances, or a "*soft cap*". In the latter case, beyond a certain volume of take, further takes can occur, but restrictions will apply earlier, than is the case with the existing consents within the limit. Both types of cap may be combined (a minimum environmental flow is a hard cap but there may be one or more soft caps above that and then a maximum allocation as a hard cap).

Zones of prohibition or non-complying activity

Plans may indicate areas where a particular activity (say wind farms, marine farms or the taking of water at particular times of year) are prohibited or non-complying activities. As discussed above, a plan can provide for exceptions, either by way of the definition of the prohibited activity, or by leaving marginal activities as non-complying activities, with a plan setting out the exceptions that may be granted.

The *Coromandel Watchdog* case suggests another possible approach whereby the activity is prohibited and exceptions must overcome the plan change hurdle. That mechanism will however only be appropriate in more extreme situations. An example may be where there is community consensus that the sustainable/acceptable limit has been generally reached, but insufficient information exists to set out the exceptions to this rule.

A person seeking access to the resource will need to come up with the evidence/section 32 analysis to justify an exception by way of plan change. Potentially, prohibited activity status could be used to introduce a moratorium on the grant of further consents, until such time as more is known about the cause of adverse effects.

Needless to say, however, the Council would need a high degree of community support for such a restrictive approach. It would also need adequate scientific justification to demonstrate that it is probable that the grant of further consents will cause an increase in adverse effects.

Establishing inventories for key resources

³⁹ C109/04

⁴⁰ W089/98

This goes hand in hand with the zoning technique just discussed. Before one can justify setting aside "no go" areas it is necessary to establish which are the valuable resources which justify such protection.

A resource inventory or survey of significance is not a tool to manage cumulative effects, but is a pre-cursor to the use of the necessary tool. It is, (to use Salmon's words) a method of "*identifying the resource*". By way of example, consider the issues regarding significant indigenous vegetation habitat. In the absence of clear identification of the most significant areas, deserving of the highest level of protection, one has to have a case by case argument as occurred in *Director-General of Conservation v Wairoa District Council*.⁴¹ Whilst the plan identified Protected Natural Areas as being significant, it left those as discretionary activities. The implication (which was effectively upheld by the Environment Court) was that the areas were "*potentially significant*" rather than "*significant*", or at least, there was no general intention to prohibit clearance.

The difficulty with establishing inventories occurs when it becomes the obvious pre-cursor to zoning areas of prohibition or non-complying activity. Firstly, establishing the resource inventory itself requires good science and attention to detail. Secondly, when restrictive regulation is used to 'protect' the resources identified it almost inevitably becomes contentious and as many local authorities have discovered, sometimes politically unacceptable. The compromise, which is often reached in relation to significant indigenous vegetation, is that there are only limited areas where clearance is prohibited and large areas where it is discretionary or non-complying. And, in the absence of restrictive policies, non-complying status is little more restrictive than discretionary.

Assessment criteria and other policies

The need for clearer objectives and policies is of critical importance in the context of non-complying activities. It is also important in the context of discretionary activities. The plan should clearly indicate whether consent is likely to be granted, and if so, in what circumstances. Plans should set out assessment criteria for applications so as to guide the consent authority.

Again referring to the groundwater example, there is little point in making the taking of groundwater a non-complying activity in a particular zone, unless the plan sets out the assessment criteria which will be applied when deciding whether or not to grant consent. It will not be sufficient to provide that the applicant must establish that the cumulative effects are no more than minor. Firstly, it is debatable that one can impose such an evidentiary onus on the applicant. Rather, the requirement is on the consent authority to be satisfied, based on the evidence, that the effects are likely to be no more than minor (after mitigation). More often than not, one further take will be unlikely to have more than minor effects even in conjunction with existing takes. Clear guidance is required as to the matters that the consent authority must have particular regard to in deciding whether or not to grant consent. This might for example include: the location and depth of the take, the times when the resource is stressed and should not be used etc. The plan could provide guidance as to term of consent, monitoring and adaptive management. Better still, where possible the plan could establish trigger levels or pressures where restrictions/adaptive management will come into play.

Adaptive management

I agree with Dr Jenkins that *adaptive management* can play a role in addressing cumulative effects and dealing with situations where the science is unclear and effects, if they occur, are unlikely to be irreversible. This tool is already available to consent authorities and is increasingly being used. Adaptive management does not of course require consents to be

⁴¹ Supra note 33.

declined. Instead, it allows them to be modified to address adverse effects if and when they occur.

Adaptive management has a particular role where the resources are only under stress on an occasional basis and/or whether there is uncertainty as to whether the limits have been reached. Adaptive management can encompass short-term consents, strong review conditions, clear monitoring requirements and restrictions which come into play on the occurrence of certain triggers.

This approach is more reasonable than simply declining consent. It also has the advantage that it is easier to justify where there is uncertainty as to cause and effect. That is, if it is unclear whether the implementation of a particular consent will have particular effects, the potential effects can be addressed by way of restrictions that take effect if such effects become manifest. Alternatively or additionally, review conditions enable more restrictive provisions to be imposed if necessary. In some cases there may be an argument for consents to be granted on a short-term basis, so that the effects can be fully reassessed on the expiry of the consent, without the constraints of a review process (for example the requirement to consider the ongoing viability of the activity). The value of the existing investment will of course still need to be considered at the time of renewal.

The counter argument is that the use of these adaptive management techniques requires ongoing monitoring and enforcement. This could draw heavily on the resources of smaller councils and/or the consent holder. The combination of short term consents, review clauses and adaptive management restrictions may mean that the risks and costs involved make the consent uneconomic. However, as resources become scarce, inevitably the price and value of the resource increases. Where the resource is under pressure, long term, open ended, "generous" consents will no longer be appropriate. This is a price resource users will have to pay if they want access to the resource.

While adaptive management has some benefits, it will not be an appropriate tool where there is a likelihood of irreversible and/or significant adverse effects which can not be adequately addressed by way of adaptive management. However, in many instances that will not be the case.

Section 32 – cost benefit analysis

In *Suburban Estates v Christchurch City Council*⁴² Judge Jackson noted the following at paragraph 354:

We consider that potentially the most powerful tool in a territorial authority's box in respect of cumulative effects is the benefit-cost component of a section 32 analysis. That is one of the few quantitative measures demanded by the Act. Thus if a territorial authority (or any other party) can show that an objective policy or method has positive social benefits in monetary terms (always recognising that in some situations the RMA puts a 'premium' on non-monetary benefits and/or costs) then it would be very hard to find that the provision is inefficient.

An adequate section 32 analysis provides the justification for the strong objectives, policies and rules required to manage cumulative effects. By way of example, where the science is unclear, a section 32 analysis may nevertheless provide the justification for setting a provisional limit or even a moratorium, based on the risk of not doing so. Implicit within the section 32 approach are all three of Salmon's procedural steps for managing cumulative effects. To know there is an issue and to ensure the intervention is appropriate you still have to identify the resource, determine its capacity, and then decide what the limit (if any) should be.

⁴² C217/01

The 2003 amendments to the RMA introduced the concept of the precautionary principle to the Act. Section 32(4)(b) adds that where there is uncertainty or insufficient information about a matter, the question of risk of acting or not acting may be relevant where there is a possible risk to the environment or to the community. Section 32(4)(b) simply provides a fall-back position where information about the resource is limited. Again, the Proposed Waikato Regional Plan Variation 5 - Lake Taupo Catchment nitrate nitrogen issue is a case in point.

Economic instruments

I hesitate to add economic instruments into the mix. However, the reality is that the higher the cost of obtaining and/or utilising consents and the greater the risk of not getting consent (or at least facing appeals) the fewer the applications that will be made. To a degree this is already happening with Canterbury groundwater. Whatever the merits of the interim allocations introduced into the Proposed Natural Resources Regional Plan, the consequence has been that the obtaining of resource consents to take from the deemed over-allocated zones ("*red zones*") has become prohibitive.

In some cases applicants have been required to sink deeper bores. That comes with some considerable capital cost as well as ongoing pumping costs. All of this tends to discourage further applications. The consents recently granted for the Rakaia Selwyn zone which allowed applicants for the fully allocated shallow ground water to go deeper, came at the cost of stringent monitoring requirements, adaptive management and short-term consents (10 years). All of this comes at a cost and will tend to discourage further applications.

The economists will probably argue that the most effective way of managing cumulative effects, would be to progressively increase the cost of the resource. To some degree this is already occurring, albeit in a somewhat haphazard and unintentional manner. Council's have limited ability to charge for water directly and it is generally seen as politically 'courageous' to do so. However, price signals can be set in a de facto manner through conditions attached to resource consents which may be more or less onerous. Whether it is desirable to introduce resource charges is a debate which I do not intend to enter into here.

National Policy Statements and National Environmental Standards

Where cumulative effects are becoming unacceptable and are not being adequately addressed at a local or regional level, there may be a case for National Policy Statements (NPS) and/or National Environmental Standards (NES). The Air Quality Standards are a case in point.⁴³ The Minister currently has under consideration, proposals for a NPS in relation to freshwater.

Both the NPS and NES have the advantage that they are not subject to the full first schedule process. (Section 32 is of course applicable to NPS.) There are no rights of appeal to the Environment Court, and in the case of a NES, no formal submission or hearing process. Whilst this has its risks, it also has obvious advantages.

A NPS or a NES can override and/or require changes to a regional policy statement or plan. A NPS can set out strong objectives and policies in relation to resources which are under threat from cumulative effects. It could also direct local authorities as to what is required (as a minimum) by way of a planning response. By way of example, the New Zealand Coastal Policy Statement requires a "*precautionary approach*" to be applied in certain circumstances. That goes slightly beyond what is inherent in the Act.

⁴³ Resource Management (National Environmental Standards Relating To Certain Air Pollutants, Dioxins, And Other Toxics) Regulations 2004

A NPS might require local authorities to set limits for resources under threat even where the scientific basis for the limits is unclear. NES are also a potentially valuable tool in dealing with cumulative effects. Air quality standards have introduced limits for certain pollutants. Similar limits could be introduced by way of NES in relation to water quality and quantity. By way of example, if it was deemed appropriate for there to be nitrogen limits in some sensitive catchments, that could potentially be introduced by way of NES with less difficulty than by way of a regional plan. The provisions relating to NES make it clear that they can contain not only limits but exceptions and directions.

A NES could be used to introduce "*moratoriums*" where time is required to allow plans to play catch up. There could be general prohibitions in certain areas or situations, but with the NES allowing local authorities to establish their own exceptions. Some might argue that local authorities should also have the power to bypass the First Schedule process and introduce rules in a similar way to a NES. We should be cautious however about doing this. This sort of regulatory power must be used with care. It should in my view be reserved for the relatively few hard cases and it should be a Central Government decision (in consultation with Local Government) as to whether that point has been reached.

Although a NES is a powerful (and "*agile*") tool, it is one which should be used with caution. They are still relatively blunt instruments which may not always apply in localised circumstances. Unless combined with a NPS on the same subject matter, they also do not change the policy framework of a plan. Therefore there is a potential for rules (set through the NES) to be out of synch with the local policy framework.

Before one overrides local decision-making, there should be a clear need for central decision-making. As outlined above, there are a variety of tools available at district and regional level. These tools should be utilised where possible, however where horses have bolted, the barn door is open and/or the farmer is away at the dog trials, there may be a case for NES. (I remain to be convinced that local authorities need to have similar powers).

Review of resource consents

The review powers under section 128-133 of the RMA are another potential means of addressing cumulative effects. However, review of resource consents should in general be reserved as a tool of last resort. The use of review provisions (which to date has been rare) tends to be a sign that the horse has already bolted. Furthermore, there are inherent difficulties, both legal and political, with restricting the grant of a resource consent part way through its term. Section 131(1)(a) provides:

- (1) *When reviewing the conditions of a resource consent, the consent authority or hearing committee set up under section 117 in respect of a permit for a restricted coastal activity—*
 - (a) *Shall have regard to the matters in section 104 and to whether the activity allowed by the consent will continue to be viable after the change*

It should also be remembered that except where minimum standards and the like have become operative in the relevant plan, a review of consent conditions generally must only relate to:

- (i) *any adverse effect which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or*
- (ii) *imposition of a BPO requirement in relation to discharges; or*
- (iii) *purposes specified in the consent.*

Review is not generally an appropriate means of dealing with effects which should have been addressed at the time consent was granted or which could be addressed by way of minimum standards in plans.

Furthermore, the notion of a consent being a form of property right (see *Aoraki Water Trust v Meridian Energy Ltd*),⁴⁴ suggests the need for great caution on the part of a consent authority endeavouring to constrain a right which it has granted. It goes without saying, that before consents are reviewed there will need to be clear and compelling evidence, of not only a problem, but also the casual link between the problem and the particular consents under review. (The exception may be where the plan has set new limits.)

Can consent authorities and the Courts deal with cumulative effects?

There has been some suggestion that consent authorities and the Courts can not or are not giving enough weight to cumulative effects. This relates to the claims that the Act is not sufficiently precautionary and that there is too much emphasis on the need for "*probative evidence*". In my opinion the legislation and the consent process is, on the whole, adequate.

Avoiding, remedying or mitigating adverse effects is a key requirement of the purpose of the Act. Cumulative effects must also factor into safeguarding life supporting capacity, preserving the natural character of the coastal environment and many other section 6 and 7 matters. Accordingly, in my opinion there would be nothing to be gained from requiring consent authorities to have "*particular regard*" to cumulative effects. There is no statutory barrier to such effects being given due weight according to their significance in a particular case.

Sections 30 and 31 (functions of local authorities) and sections 68 – 70 and 76 provide local authorities with sufficient control to manage cumulative effects. Section 32(4)(b) requires those considering planning documents to consider "*the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods*" (the precautionary principle). There is however no equivalent requirement in relation to considering resource consents beyond the definition of effect.

Section 104D prohibits the grant of consents for non-complying activities where adverse effects are more than minor (including by definition potential effects and cumulative effects) unless the proposal is not contrary to objectives and policies of the relevant plan.

If a local authority considers that a particular activity may cause more than minor adverse cumulative effects, it can draft objectives, policies and rules which effectively preclude activities with more than minor cumulative adverse effects, where those effects cannot be mitigated by conditions. Furthermore, where appropriate they can use prohibited activity status.

⁴⁴ [2005] NZRMA 251(HC)

CONCLUSION

I acknowledge that there are problems with the management of cumulative effects under the RMA. In my view however, the issue is largely one of implementation, primarily at regional and district level, rather than with inherent deficiencies in the Act itself. I accept that there are a number of practical, policy and political barriers to dealing with cumulative effects but I do not see legislative amendment as the answer. Changing the RMA will not address the fundamental problems of identification and control:

- What is the resource?
- How do we determine its capacity and set sustainable limits?
- What are the causes of particular adverse effects?

The first of these questions requires identifying the extent of the resource in time and space, its capacity at particular times and places, and its qualities and value based components. The second question entails both a quantitative and qualitative assessment in order to determine what is available before we can determine the sustainable limits of the resource. Science and economics have a part to play. We can not determine the capacity of the resource without knowing what it is valued for and why.

Finally, once the causes of adverse effects are understood, it must come back to the purpose and principles of the Act. It can then be asked, are the effects of the proposed activity, in conjunction with the effects of existing activities and over time (after avoiding, remedying and mitigating by conditions), sustainable?

As discussed, the tools are available under the RMA to deal more effectively with the issue. More guidance could perhaps be provided by central government in the form of NPS and NES, but ultimately local authorities have to grapple with the critical questions.

The challenge is for local authorities to use the tools available to them **before** the horse has bolted. Unfortunately that requires hard decisions. It is often easier to see the problem after sustainable limits have already been reached, however by then one is playing "*catch up*".

Ideally cumulative effects should be dealt with through the development of more directive objectives, policies, assessment criteria and standards in plans. Ultimately however (except where the activity is prohibited) the final decision as to sustainable limits will come back to the consent process. I can but make a plea on behalf of those faced with that task: Provide us with as much guidance as possible through policy statements and plans backed by good monitoring and science.

Philip Milne
February 2008