

GW PNRP Hearings Stream 1

Coastal Ratepayers United Inc.

Lay evidence – Paul Dunmore, Chair

19 June 2017

Coastal Ratepayers United is an incorporated society of property owners and concerned citizens from the immediate coastal environs of the Kapiti Coast. We were established originally in response to KCDC's imposition of non-robust information about coastal hazards on LIMs and the badly-thought-out coastal hazard policies in the proposed District Plan.

Those immediate issues have been struck down by the Courts or withdrawn by KCDC, but as we became aware of the extent to which they had their roots in poor guidance by higher-level authorities we have become embroiled in regional and national issues as well.

I am not going to recite every relevant point in our submissions and further submissions; you have read them. If I do not mention some issue, you should not infer that we no longer consider that it matters, but only that life is short and community group submitters are not paid by the hour.

RISK

The approach to risk and its management in the PNRP is a serious and pervasive problem. The operative standard governing the principles of risk management is AS/NZS ISO 31000:2009, and this standard is explicitly referenced in the NZCPS glossary entry for risk. But we can see how the nuanced definition from the standard has been copied to the NZCPS and then to the PNRP by people who do not understand what it means and are rather enamoured of the obsolete and unsatisfactory concept.

The standard defines risk as “the effect of uncertainty on objectives”; that is the whole definition. But it provides explanatory notes about the meaning of the words used:

Note 1 An effect is a deviation from the expected — positive and/or negative.

- Note 2 Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and process).
- Note 3 Risk is often characterized by reference to potential events (2.17) and consequences (2.18), or a combination of these.
- Note 4 Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood (2.19) of occurrence.
- Note 5 Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of an event, its consequence, or likelihood.

The NZCPS avoids defining risk, instead saying that *Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence*; this is the wording of Note 4 in the Standard. It is striking that the authors of NZCPS could not bring themselves to define risk itself in accordance with the standard, which would have been simple enough to do. Note also that, although it says “combination of”, it does not say “multiplied by”.

But the PNRP completely changes the meaning with its definition: *A combination of the probability of a natural hazard and the consequences that would result from an event of a given magnitude. Commonly expressed by the formula: risk = hazard x vulnerability.*

This has removed any mention of uncertainty (which is quite different from the probability of an outcome). When planning how to deal with hazards, whether earthquakes, storms or rising sea level, the salient feature is that we do not know enough to be able to compute meaningful probabilities of specific events. Instead, the standard refers to likelihood, which it explicitly differentiates from probability.

Further, the PNRP definition ignores the possibility of positive effects, which is an essential component of any proper consideration of risk. By defining risk purely in terms of bad things, vulnerabilities, the definition biases the PNRP to concentrate only on vulnerabilities with no regard to the possibility that uncertain outcomes may be better than expected. This leads to a bias towards preventing people from doing things that the authors of the plan consider might be risky, without giving adequate consideration to the benefits of those actions.

Most seriously of all, the definition has removed any reference to objectives, instead referring to natural hazards. The consequences of an event are not inherent in the natural resource as the PNRP

says, but depend on our relationship to the resource. The over-riding objectives are set out in the RMA, and the PNRP has specific objectives. Many of those objectives may be affected by various kinds of uncertainty: that is, they are subject to risk. But the PNRP thinks of risk in terms of natural hazards rather than thinking about the objectives. This faulty mindset is pervasive in the PNRP, and it will be difficult to extirpate its effects.

The formula used in the PNRP, the probability of a hazard event multiplied by the consequences of that event, represent an entirely different concept from that of risk. This concept is the **expected loss**, which is not at all the same and which exists even if there is no risk at all (which is the case if the event is certain to happen or certain not to happen).

The definition of risk in the PNRP is thus incorrect, and not fit for purpose.

We note, however, that local authorities are required to update their plans to give effect to NZCPS 2010 as soon as practical. It is therefore mandatory to update the definition of risk to give effect to that used in NZCPS 2010 and thus in the AS/NZS standard, and to make the necessary consequential changes throughout the PNRP.

We are not in a position to suggest all of the changes that are required to achieve this. What we suggest is that you call again on the resources of GW and ask them to assess what the impact might be. You will need to impose a considerable structure on your expectations, because it is clear that the people at GW who drafted the PNRP do not understand what they have got wrong. Thus, an unstructured report back will simply say in effect that nothing needs to be changed. Such a report would merely reflect the fact that the author does not understand the differences between a proper concept of risk and the faulty version used in the PNRP.

To impose some structure, we suggest that you ask GW

- to list all of the objectives in the PNRP and in the RMA (we place particular importance on the enabling purpose in section 5 of the RMA to enable “people and communities to provide for their social, economic, and cultural well-being and for their health and safety”, which we submit has not been adequately considered throughout the PNRP);
- to list the main natural hazards which contain an element of risk (earthquakes, storms, changing temperatures, sea-level rise, uncontrolled arrival of biological organisms such as myrtle rust, etc.);
- to state, for each objective and hazard, whether and how achievement of the objective might be affected by uncertainty about the hazard;

- where there is such risk, to set out a table showing all of the risk treatment options given in the standard, showing whether and how each option has been included in the PNRP.

Such a table would give a clear overview of the extent to which the risk of natural hazards, as properly understood, has or has not been addressed within the PNRP. It is in fact part of what should have been expected in a proper section 32 report, which we have separately criticised as not having been prepared in accordance with the requirements of the RMA.

The other side of the needed correction is to identify which rules in the PNRP have been established under the guise of risk management but which are in fact simply intended to reduce the expected hazard loss, even where that loss is not risk-related and/or would fall on private property owners who are better positioned to decide for themselves which of the risk treatments from the standard is most beneficial to them.

PRECAUTIONARY APPROACH

The precautionary principle is a fairly unexceptionable statement: “... *lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures*” It is reasonable to expect that global sea-level by 2100 will be 40-70 cm higher than the 1986-2005 baseline if emissions follow the RCP 6.0 scenario (this is from the current IPCC report). We do not know whether emissions will roughly follow this scenario, and if they do then the climate models still give considerable uncertainty as to the effect. But it would be foolish to say “let’s act as though nothing is happening because the scientific evidence still has some uncertainties”. In the form in which it was set out, the precautionary principle says nothing more than this. The RMA requires Section 32 reports, as they assess the effectiveness and efficiency of proposed provisions, to assess the risk of acting or not acting if there is uncertain or insufficient information; this represents roughly the same view.

But it has come to be used, and is used in the PNRP, in ways that have nothing to do with the actual principle. The AS/NZS standard on risk management does not refer to precaution, and instead addresses uncertainty as the fundamental matter to be considered in risk management. The author of the section 42A report¹ gets this seriously wrong at 345-348:

1 The s42A report referred to throughout these notes is document NATRP-1620937158-988 “Topic: Overall policy framework of the proposed Plan – Part B” by Emily Greenberg dated 20 April 2017.

- It is not true that “comprehensive risk management encompasses the 4Rs” (346). This is a very limited view of risk management, appropriate for emergency management, and is not comprehensive at all. It cannot be made to work for some of the risks that the PNRP must address, such as the uncertainty surrounding sea-level rise. A comprehensive risk management approach is set out in the standard: the nearest equivalents to the 4Rs of emergency management are the risk treatment options, which have some overlaps but include additional and quite different options.
- Since the precautionary principle is a small part of the wider problem of risk management, it is not correct that Policy P3 “is a policy on the use of the precautionary approach rather than a policy on the use of risk management” (348). A policy on the use of precaution is necessarily a policy on how risk is managed.

We consider that the amendment to Policy P3 proposed by the section 42A author reduces the worst effects of the original formulation. However, we still consider it important to add a sentence to make it clear that the policy must not be interpreted as allowing a precautionary approach to be adopted for risk assessment.

We do not accept that this is an unnecessary refinement, because our experience, as detailed in our submission and experienced in other cases since then, is that many coastal engineers or scientists apply so-called precautionary adjustments to their estimates of the likely effects and do not give information about the uncertainties that they have embedded in these estimates. The effect is that the expert forces the decision-maker’s hand by giving them information which is already biased towards the decision that the expert considers appropriate. This has two problems: the expert is often well outside their area of expertise and gets the proper amount of precaution wrong, and the expert is usurping the legitimate power of a properly appointed decision-maker.

Further, the s42A report author herself does not understand this: at 351 she wrongly says that “the precautionary principle is integral to the assessment of effect”. This is exactly where the precautionary principle *must not* be applied.

I used as an example the range of plausible sea-level rise under RCP 6.0. The PNRP does not include any figures to be used for sea-level rise, but a leaked central government document is proposing a figure of 1.9 m for certain purposes. This does not even pretend to be a plausible figure: it is taken from the upper end of the outcomes under RCP 8.5, with a bit added on for luck. No informed forecaster believes that RCP 8.5 will come to pass, and indeed an expert on mineral reserves has computed that there is not nearly enough recoverable coal in the world to permit

RCP 8.5. Further, that 1.9 m number is presented as a single number with no uncertainty. If this is accepted as a precautionary estimate of effect, it would make it impossible for any decision-maker to make a decision that properly balances the benefits and risks of a development. It may be that this particular example will be forced on us all by central government, but the PNRP should not be written in a way that authorises such folly where it is not compulsory.

In an ideal world, policy P3 with the proposed amendment would be specific enough to set out what is required. In the real world where scientific and planning experts are ignorant of how good decisions are made, are wrongly briefed, or take it on themselves to go beyond their brief, we consider it essential to specify that expert information for risk assessment must not be precautionary but must provide the expert's best assessment of the likely outcome and of the uncertainty (both up and down) in that outcome. The decision maker can then apply precaution if appropriate in making their decision, as is proper for them to do.

LACK OF POLICIES TO SUPPORT APPROPRIATE USE

We have referred above to the neglect in the drafting of the PNRP of the enabling part of the purpose statement of section 5 of the RMA. Our submission gives a number of examples relating to coastal hazards, and we assume that the same problem is found in other areas of the PNRP.

Section 5 provides that the purpose of the Act is “managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while” abiding by certain constraints. We recognise the importance of the constraints; without them there would be no point to the RMA at all. Another s42A report has made this point. But we perceive that professional planners have come to focus on the constraints to such a degree that they lose sight of the enabling purpose, so that balance is lost.

We suggested in our submissions some wording of specific objectives and policies that we consider would offset this. Because of the way that the Panel has chosen to structure the Hearings, it is not clear which stream is the most appropriate place to submit requests for further policies and objectives, so I draw your attention to them here. They are not specific to coastal hazards.

The section 42A report says at 557 that it is not appropriate for a regional plan to merely restate the RMA. We agree, but it is not sufficient for a regional plan to ignore an RMA requirement and rely on the RMA itself to cover the issue. The regional plan should include specific objectives and

policies that give effect to the enabling purpose of the RMA; we submit that the PNRP does not do so and that our suggested objectives and policies would be an appropriate way of remedying that deficiency.

Thank you for your attention to what has been a long and necessarily rather closely argued submission.