

THE SCIENCE AND THE LAW¹

1. Because the work of the Panel, and the Coastal Systems Limited (CSL) report, occurs within a legal framework, it is relevant for scientists to understand the legal framework and their role within that framework.
2. This brief paper explains:
 - I The law that applies:
 - the Resource Management Act 1991, including district plans, the New Zealand Coastal Policy Statement and the Regional Policy Statement which are all prepared and implemented under the RMA;
 - other statutory provisions, other than the Resource Management Act, for which science is relevant;
 - II The contribution of science in a legal framework;
 - III The role of scientists, decision-makers, and others in that legal framework.

I THE LAW THAT APPLIES

Resource Management Act 1991

3. The Resource Management Act 1991 (RMA) is the principal piece of legislation in New Zealand that governs the use of land, air and water.
4. Part 2 (ss 5-8) sets out the purpose and principles of the RMA.
5. The purpose of the RMA is set out in s 5(1):

“to promote the sustainable management of natural and physical resources”.
6. Sustainable management is defined in s 5(2). Sustainable management:

“means 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 -

 - (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.”

¹ This paper was prepared by Joan Allin, a submitter and former Environment Court judge. The paper has been reviewed and approved by Simpson Grierson for the Council as being an accurate and helpful guidance note and statement of the legal framework relevant to coastal hazards.

7. So, sustainable management means:
 - managing the use, development, and protection;
 - of natural and physical resources (a defined term);
 - 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 sustaining the matters in (a), safeguarding the matters in (b) and avoiding, remedying, or mitigating the matters in (c).

8. Section 6 identifies matters of national importance, section 7 sets out other matters, and section 8 refers to the Treaty of Waitangi. The matters set out in these sections are required to be addressed by persons exercising functions and powers under the RMA (eg Councils, the Environment Court). The requirements are there to enable the purpose of the RMA to be achieved.

9. Various other sections in the RMA bring the focus back to the s 5 purpose of the RMA and therefore reinforce its primacy.

10. District plans, the New Zealand Coastal Policy Statement 2010 and the Regional Policy Statement, which are all prepared and implemented according to legal requirements in the RMA, are discussed under the following sub-headings:
 - a District plans
 - b New Zealand Coastal Policy Statement 2010
 - c Regional Policy Statement.

a District plans

11. Territorial authorities, like Kapiti Coast District Council, prepare district plans under the RMA. The purpose of district plans is to assist territorial authorities to carry out their functions in order to achieve the purpose of the RMA (s 72).

12. The RMA sets out the functions of territorial authorities (s 31) for the purpose of giving effect to the RMA. The functions include “the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of ... the avoidance or mitigation of natural hazards...”

13. The process for preparing a district plan is set out in the RMA. Once various steps have occurred:
 - a proposed district plan is publicly notified;
 - any person can make a submission or a further submission to the Council;
 - there can be pre-hearing meetings or reports prepared, which is the stage that the Kapiti proposed plan has reached;
 - the Council holds hearings and issues decisions;
 - any person who made a submission or further submission can appeal to the Environment Court;
 - there can be Environment Court mediation or a hearing and the Environment Court issues a decision;
 - the proposed district plan becomes a district plan.

14. The Kapiti proposed district plan (PDP) includes Coastal Hazard Management Areas based on the CSL report, with accompanying objectives, policies and rules restricting what can be built in the Coastal Hazard Management Areas.

15. The matters to be considered in preparing (or changing) a district plan are set out in s 74 and include the territorial authority's functions under s 31, the provisions of Part 2 (which includes the purpose of the RMA), and an evaluation of alternatives, benefits and costs².
16. The RMA (s 75(3)) states that a district plan must give effect to:
 - any New Zealand coastal policy statement; and
 - any regional policy statement.
17. So, for Kapiti's PDP, the New Zealand Coastal Policy Statement 2010 and the Regional Policy Statement for the Wellington region are relevant. They are to be given effect to through the district plan.
18. In the RMA decision-making process for a proposed district plan, a wide range of matters are considered by the Council (or the Environment Court).

b Zealand Coastal Policy Statement 2010

19. The purpose of a New Zealand coastal policy statement is to state policies in order to achieve the purpose of the RMA in relation to the coastal environment of New Zealand (s 56).
20. In 2010, the provisions of the previous New Zealand Coastal Policy Statement 1994 were replaced, with significant differences being introduced, including a new policy (Policy 24) relating to the identification of coastal hazards.
21. The New Zealand Coastal Policy Statement 2010 (NZCPS) states: "This NZCPS is to be applied as required by the [RMA] by persons exercising functions and powers under the [RMA]." (page 7). So, the NZCPS is to be applied:
 - as required by the RMA, which means that all the relevant objectives and policies are considered by the Council (or the Environment Court) as part of the RMA decision-making process; and
 - by persons exercising functions and powers under the RMA - the Council (or the Environment Court).
22. The NZCPS includes numerous relevant objectives and policies. Two of them are referred to in the terms of reference for the Panel³.

² In relation to the s 32 evaluation of alternatives, benefits and costs, the Resource Management Amendment Act 2013 introduces a number of amendments in Part 2 of the Amendment Act that come into force in December 2013. However, clause 2 of the new Schedule 12 of the RMA effectively provides that for the Kapiti PDP (where further submissions have ended), the further evaluation must be undertaken as if Part 2 had not come into force. So, effectively, the existing s 32 continues to apply.

³ Policy 24 in the terms of reference is set out incorrectly, which affects interpretation. The last part of Policy 24 should be out to the left margin as it applies to all of Policy 24, and not just (h).

23. The role of coastal scientists is particularly relevant to Policy 24, identification of coastal hazards. Policy 24 states:

“Policy 24 - Identification of coastal hazards

- (1) Identify areas in the coastal environment that are potentially affected by coastal hazards (including tsunami), giving priority to the identification of areas at high risk of being affected. Hazard risks, over at least 100 years, are to be assessed having regard to:
- (a) physical drivers and processes that cause coastal change including sea level rise;
 - (b) short-term and long-term natural dynamic fluctuations of erosion and accretion;
 - (c) geomorphological character;
 - (d) the potential for inundation of the coastal environment, taking into account potential sources, inundation pathways and overland extent;
 - (e) cumulative effects of sea level rise, storm surge and wave height under storm conditions;
 - (f) influences that humans have had or are having on the coast;
 - (g) the extent and permanence of built development; and
 - (h) the effects of climate change on:
 - (i) matters (a) to (g) above;
 - (ii) storm frequency, intensity and surges; and
 - (iii) coastal sediment dynamics;taking into account national guidance and the best available information on the likely effects of climate change on the region or district.”
24. Scientific information enables the Council (or the Environment Court) to assess management responses, and appropriate provisions that should be included in a district plan. In terms of the NZCPS, that would include eg Policies 3, 25 - 27 and whatever provisions the decision-makers decide to include in a district plan in relation to identification of coastal hazards under Policy 24.
25. Various policies in the NZCPS (including Policy 24) refer to “risk”. This is defined in the NZCPS as:

“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 (AS/NZS ISO 31000:2009 *Risk management - Principles and guidelines*, November 2009).⁴

⁴ There is an unusual footnote to risk in Policy 25, but it seems that the defined term applies more widely than just to that policy.

c *Regional Policy Statement*

26. As noted above, the RMA also requires the district plan to give effect to the Regional Policy Statement (RPS).
27. The RMA states that the purpose of a regional policy statement is “to achieve the purpose of the [RMA] by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region” (s 59).
28. Again, there are a number of objectives and policies in the RPS and the RPS is applied in the context of the RMA.
29. Objective 19 in the RPS is:

“The risks and consequences to people, communities, their businesses, property and infrastructure from natural hazards and climate change are reduced.”
30. Section 4.1 of the RPS sets out policies that direct district plans. Policy 29, which is entitled “Avoiding inappropriate subdivision and development in areas at high risk from natural hazards” requires district plans to:
 - (a) identify areas at high risk from natural hazards; and
 - (b) include polices [sic] and rules to avoid inappropriate subdivision and development in those areas.”
31. Section 4.2 of the RPS sets out policies that are to be given particular regard when progressing a proposed district plan. These include Policies 51 (Minimising the risks and consequences of natural hazards) and 52 (Minimising adverse effects of hazard mitigation measures).
32. There are also Explanations under the various policies providing comment about the policies and what is meant.
33. Again, all of these matters are to be addressed in the context of the RMA process, with decisions being made by the Council or the Environment Court.
34. The RPS includes a definition of risk, which is:

“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.”
35. It also includes a definition of residual risk, which is:

“The risk to a subdivision or development that remains after implementation of risk treatment or hazard mitigation works.”

Other statutory provisions for which the science is relevant

36. While the CSL report was prepared in the context of changing the district plan and the provisions of the district plan will be addressed in the context of the RMA, there are other statutes that the CSL report is being used for.
37. The Local Government Official Information and Meetings Act 1987 requires councils to put certain material relating to individual properties into a land information memorandum. Section 44A(2) states:

“The matters which shall be included ... are -
 (a) information identifying each (if any) special feature or characteristic of the land concerned, including but not limited to potential erosion..., being a feature or characteristic that -
 (i) is known to the territorial authority; but
 (ii) is not apparent from ... a district plan...”.
38. The Building Act 2004 (ss 71-74) provides for notices on titles of land if certain building work is carried out and if the land “is subject or is likely to be subject” to one or more natural hazards.

II THE CONTRIBUTION OF SCIENCE IN A LEGAL FRAMEWORK

39. As noted above, in terms of the PDP, the RMA is the governing statute. District plans must give effect to the New Zealand Coastal Policy Statement 2010 and the Regional Policy Statement and the decision-maker must decide that the outcome is in accordance with all the relevant provisions of the RMA, including the s 5 purpose of the RMA.
40. Science and scientists play a crucial role in providing the range, and type, of objective scientific information that enables decision-makers to make decisions in the relevant statutory context.
41. The science helps to identify the geographical areas where there are coastal erosion hazard risks, and the related uncertainties.
42. That enables the decision-makers to decide where to focus their attention, to consider management approaches, alternatives, etc and to decide what lines or zones, and provisions, to include in the district plan.
43. The science also helps submitters to participate in the process in a meaningful way.

III THE ROLE OF SCIENTISTS, DECISION-MAKERS, AND OTHERS IN THAT LEGAL FRAMEWORK

44. It is relevant that each player in the legal process has a different role.
45. The scientist provides the science to enable people to participate in the process and decision-makers to make decisions within the statutory framework.

46. So, in this context, the science provides appropriate objective scientific information.
47. The policy and legal decisions are made by others.
48. The scientific information goes into the mix of all the other relevant matters that need to be considered by the Council (or the Environment Court). After considering submissions, evidence and all the matters required to be considered in the RMA, the Council (or the Environment Court) will make the policy and legal decisions about what (if any) geographical areas should be identified in the district plan and what objectives, policies and rules should apply to those areas.