

**To:** KCDC Coastal Expert Panel: Dr Paul Komar, Dr Paul Kench, James Carley, Dr Paul Cowpertwait

**From:** Bryce Moller

**Cc:** Cath Edmondson KCDC Acting Sustainable Development Manager

**Date:** 19 October 2013

**Re:** Consideration for the KCDC Coastal Expert Panel: Methods used by CSL specifically the Precautionary Approach.

**Background:**

Coastal Systems Limited (CSL) was contracted to complete an analysis of the coastal risk along the Kapiti Coast. The first report was received by Council in 2008 and the update report was received in 2012. The 1994 New Zealand Coastal Policy Statement (NZCPS) was superseded by the 2010 NZCPS in December 2010. The 2010 NZCPS contained a 100 year planning horizon, however, the new 2010 NZCPS contained a number of other important changes.

**The Updated New Zealand Coastal Policy Statement:**

In the 1994 NZCPS the identification of Coastal hazards was part of Chapter 3: *Activities involving the subdivision, use or development of areas of the coastal environment*. Under the 2010 NZCPS the identification of coastal hazards was given its own separate policy: *Policy 24*.

So previously in the 1994 NZCPS we had the identification of Coastal hazards and the Precautionary Approach principle in the same chapter (Chapter 3). Now, in the 2010 NZCPS, the *Precautionary Approach* and the *Identification of Coastal Hazards* have their own separate policies, (Policy 3 and Policy 24 respectively).

The Kapiti Coast Erosion Hazard Assessment was completed under the 1994 NZCPS while the Kapiti Coast Erosion Hazard Assessment 2012 Update was completed under the 2010 NZCPS. While consideration in the 2012 report was given to the new 100 year planning horizon, no consideration was given to how the precautionary approach had been clarified in the new policy statement.

In the 2010 NZCPS there is no reference at all to a precautionary approach in policy 24: *Identification of coastal hazards*. Additionally, in Policy 3: *Precautionary Approach*, there is no reference that a precautionary approach should be applied to scientific analysis, in fact policy 3 specifically states to adopt a precautionary approach towards 'proposed activities' and to 'use and management of coastal resources' it does not mention or imply the scientific analysis or reporting in any way.

It is clear that the 2010 NZCPS expects the precautionary approach to be applied in the planning stage by each local body once they have received an accurate scientific report.

**Coastal Hazards and Climate Change - a guidance manual for local Government in New Zealand**

In the context of coastal hazards The Ministry for the Environment defines the precautionary approach as:

*'A precautionary approach is adopted when making planning decisions relating to new development, and to changes to existing development within coastal margins. Decision-making takes account of the level of risk, utilises existing scientific knowledge and accounts for scientific uncertainties'*. (pg 10)

**Defining coastal hazard zones for setback lines - A guide to good practice**

A NIWA publication authored by Ramsay, Gibberd, Dahm & Bell in 2012 on page 15 states: *The 2010 New Zealand Coastal Policy Statement (NZCPS) promotes a precautionary approach to planning new development, infrastructure and services to avoid coastal-hazard risks over the intended lifetime of the development.*

On the same page they repeat the key principles of local authority decision making within coastal margins by stating: '**Precautionary approach:** A precautionary approach is adopted when making planning decisions relating to new development, and to changes to existing development within coastal margins. Decision-making takes account of the level of risk, utilises existing scientific knowledge and accounts for scientific uncertainties'.

### **The 2012 CSL Report.**

There is no doubt that the Kapiti Coast Erosion Hazard Assessment 2012 update written by Dr Shand in 2012 for Coastal Systems Limited (CSL) has applied a precautionary approach to the science. In the 2012 report, Policy 3 of the NZCPS is cited twice (p12, p17) as reasons why the report is taking a precautionary approach. A precautionary approach is additionally mentioned on p16, p19, p20 & p63, in a context that clearly shows that a precautionary approach has been used.

### **Summary:**

I would appreciate the Coastal Expert Panel considering the methodology of how the *precautionary approach* has been applied to the 2012 scientific report produced by CSL. As per the terms of reference I seek an impartial view on technical issues of coastal science regarding the data and methods used by CSL in undertaking their coastal erosion hazard risk assessment including the combined uncertainty value in relation to the precautionary approach.

I would like the Coastal Expert Panel to consider:

- The wording of NZCPS Policy 3 and Policy 24.
- How the Coastal Hazard guidance manual by the Ministry for the Environment states where to apply a precautionary approach.
- How Dr Shand's contemporaries Ramsay, Gibberd, Dahm & Bell state where to apply a precautionary approach and,
- How the Kapiti Coast Erosion Hazard Assessment (2012) Update by Dr Shand has applied the precautionary approach.

Scientific methods should not be precautionary, optimistic, pessimistic or directed in any way. The scientific results need to reflect the facts so that they may be used for clear and objective decision making, any optimism or pessimism should come afterwards in the planning phase. It is the intention of the NZCPS that the precautionary approach be applied in the planning and management phases of a local body project, not the scientific analysis phase.

### **References:**

**New Zealand Coastal Policy Statement (1994);** *Department of Conservation, May 1994*

**New Zealand Coastal Policy Statement (2010);** *Department of Conservation, December 2010*

**Defining Coastal Hazard Zones for Setback lines ;** *Ramsay, Gibberd, Dahm, Bell, 2012*  
*National Institute of Water & Atmospheric Research (NIWA)*

**Coastal Hazards and Climate Change -a guidance manual for local Government in New Zealand.**  
**(2nd edition).** *Revised by Ramsay and Bell, 2008, Ministry for the Environment*

**Kapiti Coast Erosion Hazard Assessment;** *Shand, 2008, Coastal Systems Limited (CSL)*

**Kapiti Coast Erosion Hazard Assessment 2012 Update;** *Shand, 2012, Coastal Systems Limited (CSL)*