Creating Futures **MAPPING THE FUTURE:** AN INTEGRATED, MULTI-SCALE, SPATIAL DECISION SUPPORT SYSTEM TO SUPPORT LONG-TERM COMMUNITY PLANNING www.creatingfutures.co.nz

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Creating Futures Project

Develop & apply planning tool to help councils undertake long-term, Goal: integrated planning as required by the Local Government Act (2002)

Objectives:

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NZCEE

- Processes to evaluate, deliberate, and create futures through 1. scenario analysis and multi-criteria evaluation frameworks
- 2. Development of a Spatial Decision Support System (SDSS) to support long-term integrated planning

Why an SDSS?

- Long-term integrated planning and resource management are examples of "wicked" or unstructured problems
- Characterised by
 - \mathbf{V} Multiple actors
 - Multiple values & views
 - Multiple outcomes possible
 - \mathbf{V} High uncertainty

An SDSS helps address unstructured problems

- Integrates society, economy, and environment (systems approach)
- Identifies links & feedbacks
 - Sets limits explicitly (e.g., only so much land, water, soil)
- Demonstrate importance of "where" in addition to "what" and "how much"

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Landcare Research

Manaaki Whenua

RIKS



WAIKATO

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Figure courtesy Hedwig van Delder

SDSS System Design

The SDSS is a spatially-explicit, dynamic systems model of the Waikato region running in the RIKS GEONAMICA® framework and operating at three scales: regional, district, and local (200m grid resolution). Simulations will run for 50 years from 2001 to 2051. The SDSS is currently under development, so specifications may change.



