

Creating Futures

MAPPING THE FUTURE: AN INTEGRATED, MULTI-SCALE, SPATIAL DECISION SUPPORT SYSTEM TO SUPPORT LONG-TERM COMMUNITY PLANNING

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Creating Futures Project

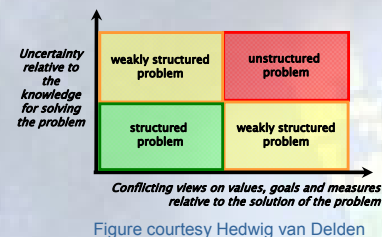
Goal: Develop & apply planning tool to help councils undertake long-term, integrated planning as required by the Local Government Act (2002)

Objectives:

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

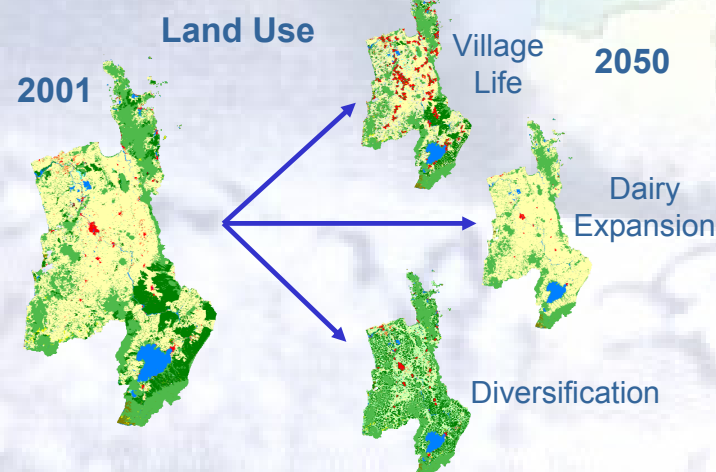
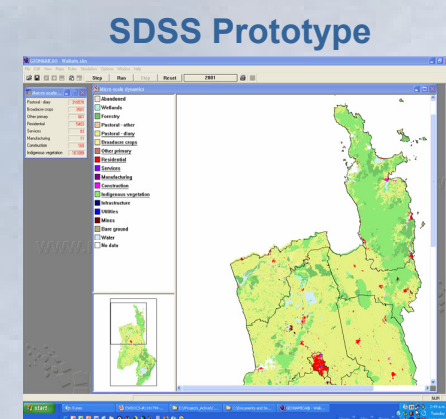
Why an SDSS?

- Long-term integrated planning and resource management are examples of “wicked” or unstructured problems
- Characterised by
 - Multiple actors
 - Multiple values & views
 - Multiple outcomes possible
 - 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”



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.

