

# OUR LAND AND WATER SYMPOSIUM

Kia Mauri Ora te Whenua



FUTURE LANDSCAPES

## Land Use Suitability

Scott Larned



## FUTURE LANDSCAPES

In the future landscapes contain mosaics of land use that are more resilient, healthy and prosperous than today.

### Strategic Area 1

*Be able to see what diversity is possible and match land use to what it is suitable for.*

### Strategic Area 2

*Understand and model the management of land and water quality.*

### Strategic Area 3

*Provide the novel production systems that use healthy land and water to generate high-value products.*



## INCENTIVES FOR CHANGE

New Zealand's primary producers are well-rewarded for producing high-value products in sustainable ways.

### Strategic Area 4

*Capture and share with the producers more of the value consumers associate with our products.*

### Strategic Area 5

*Increase and share value based on mechanisms that rewards sustainable land use and high-value products.*

### Strategic Area 6

*Enable communities to identify and adopt sustainable land use practices.*



## CAPACITY FOR TRANSITION

We understand what it will take, and have the tools to help us, transition to resilient, healthy and prosperous futures.

### Strategic Area 7

*Increase our social capital so that we can have well informed debate about alternative futures.*

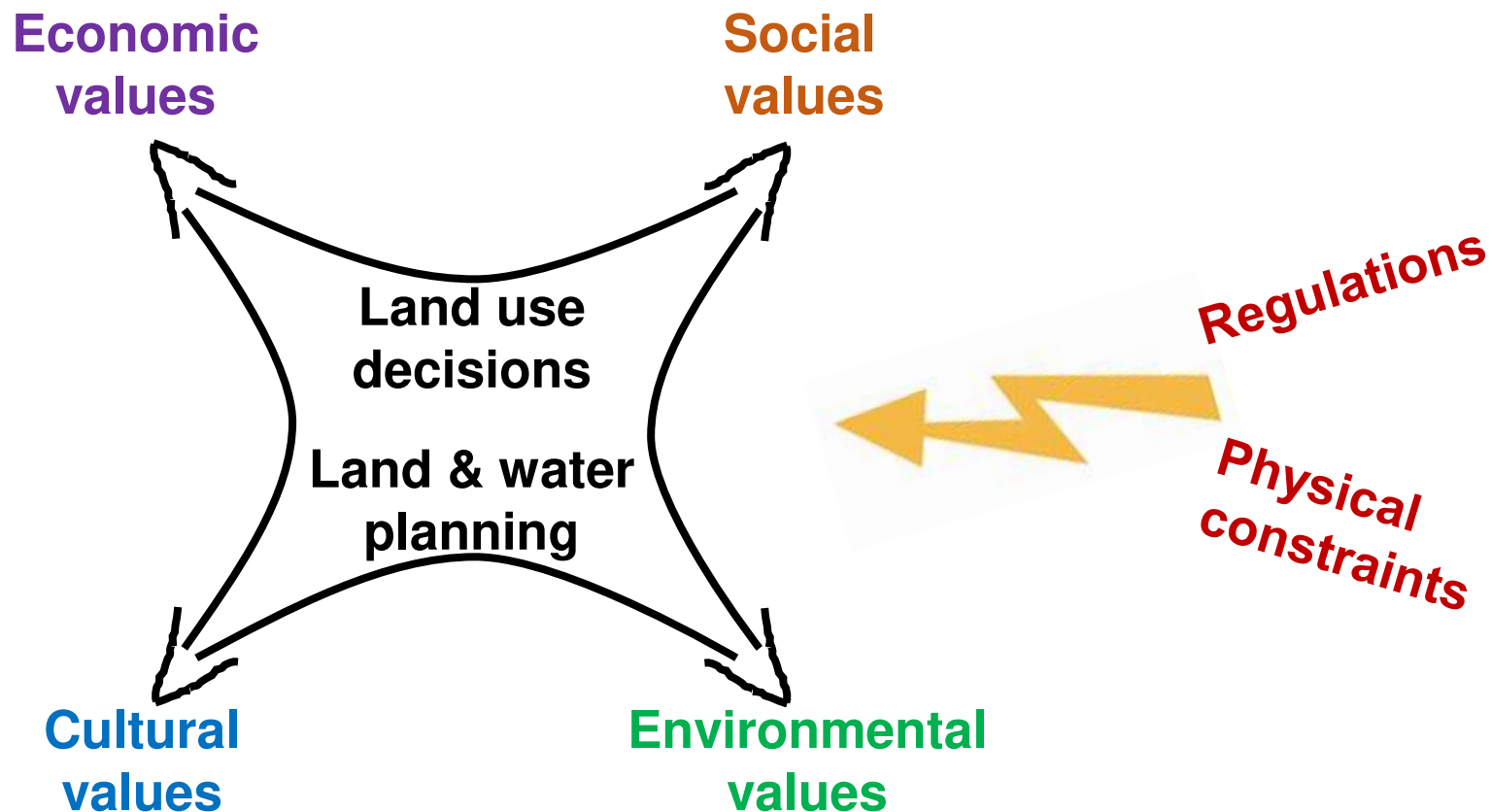
### Strategic Area 8

*Act as kaitiaki, being responsible for our actions within enterprises, in a catchment and beyond.*

### Strategic Area 9

*Manage pressures and remove the barriers to a transition.*

# What is the problem?



- Managing primary enterprises within limits is imperative.
- LU decisions affect multiple, sometimes conflicting values.
- LU decisions are made at land-parcel scales...  
but effects are catchment-scaled and cumulative.



# What is the solution?

Assessment and decision-support tools that

1. Provide feedback about effects of LU decisions on values
2. Identify options, while accounting for constraints
3. Can be used in predictive mode
4. Use maps for communicating spatial relationships

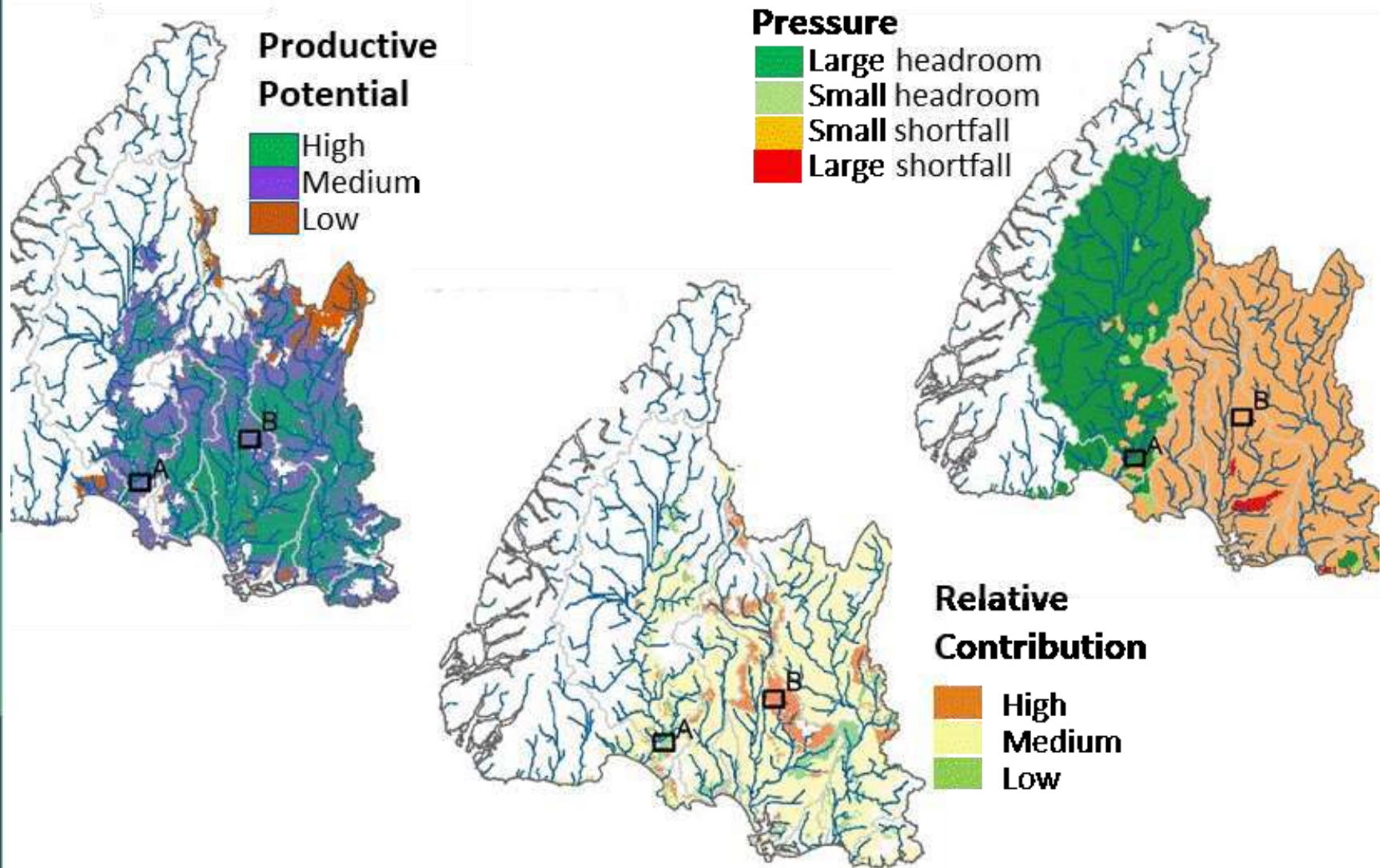
Steps in tool development

1. LUS Conceptual model – one model published
2. LUS Assessments – one assessment published
3. LUS Applications – pending



# LUS assessments – Southland prototype

OVERSEER, REC, SPARROW, LUC, Physiographic zones, LCDB, Estuarine Trophic Index, CLUES Estuaries

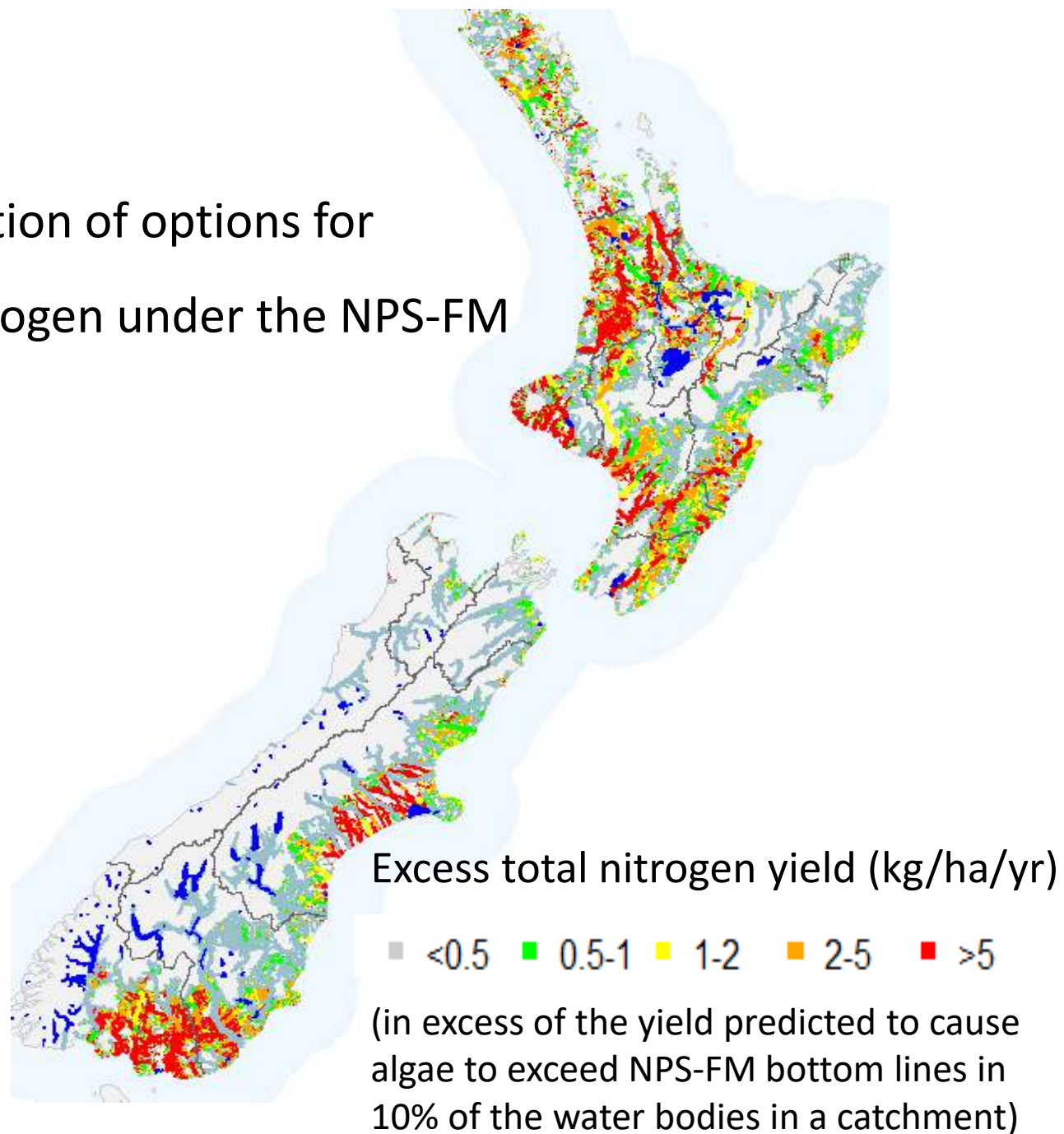


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# Who is using the research to make a difference?

MfE investigation of options for managing nitrogen under the NPS-FM



## How is it building towards the Our Land and Water goal?

Providing a consistent framework and process for assessing land use **possibilities** that deliver improved indicators of well-being.

Informing land-use decisions in a **joined-up** way

- Relationships among values
- Constraints
- Environmental settings and spatial relationships



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# Collaborators

## Collaborators



## Team

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## More Information

[ourlandandwater.nz/lus](http://ourlandandwater.nz/lus)