

“We need a zoning layer for the whole region...”

DEREK PHYN
Spatial Analyst
Environment Waikato



Thanks also to Daniel Rutledge (Landcare Research), Tina Warnock (EMS Ltd), Beat Huser (EW) and the team at RIKS

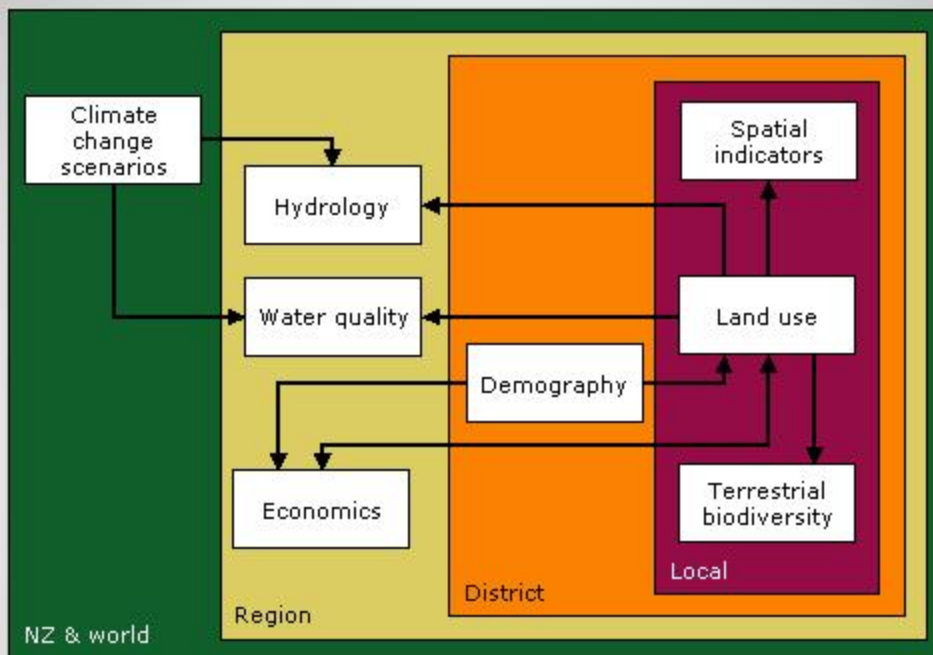
**Creating
Futures**



Spatial Planning

- Auckland Plan + others?
- What is spatial planning?
- “We need a zoning layer for the whole region.”
- Creating Futures
- Waikato Integrated Scenario Explore





Zoning

- Key module of land use (LU) model
- Determines where and when LU occurs
- Main policy exploration tool (go to LU model in W
- Requirements
 - 14 zoning rasters,



Land Use/Zoning Matrix - Taupo District - Operative Plan October 2007 and Plan Change 23 (Mapara Valley Structure Plan Area, notified April 2008)

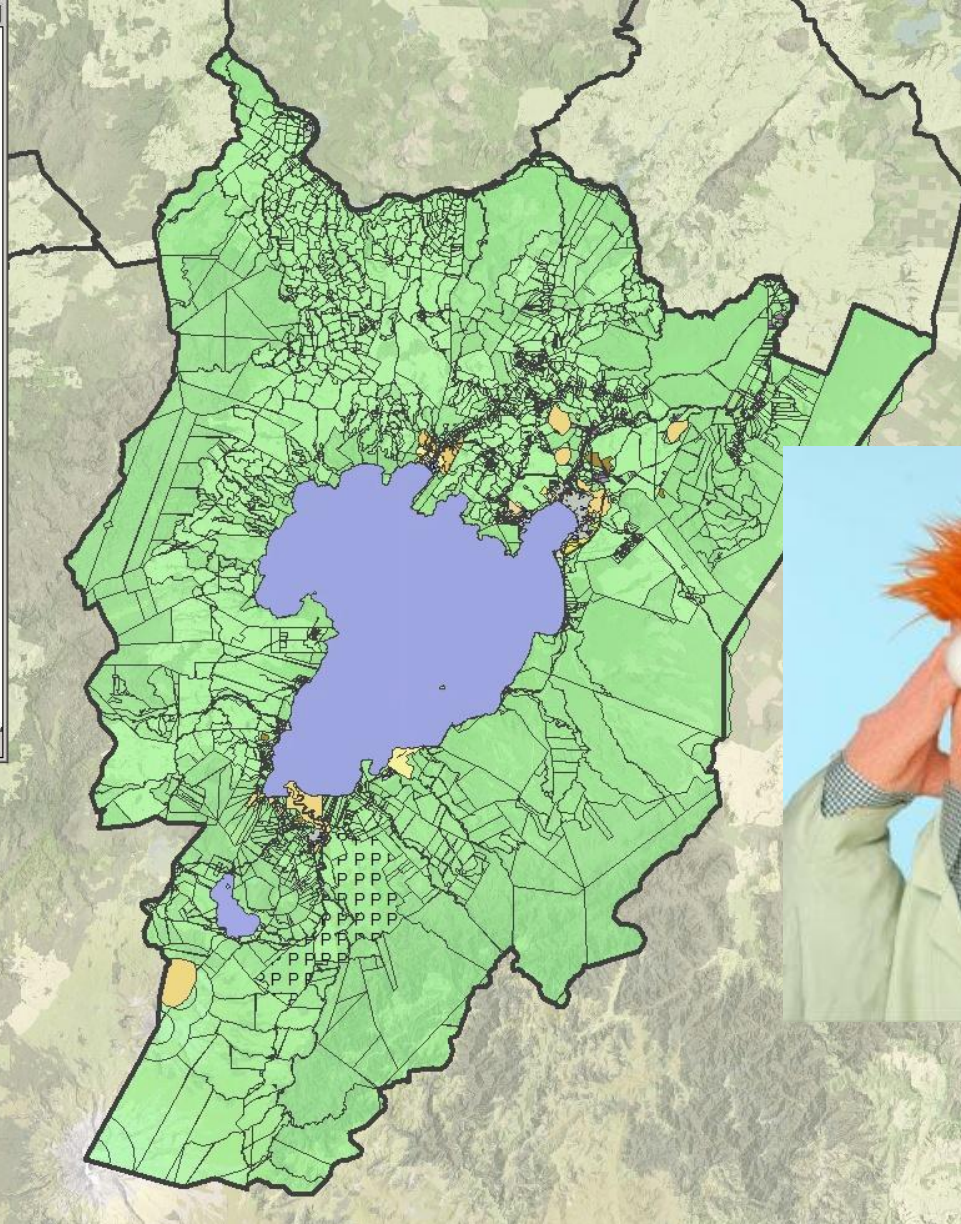
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
		18 Land Use Classes				With subdivision considerations			Commercial and Community Services			Cropping (includes BioFuels & Veg Production/Market Gardening)			Other Livestock and Agriculture					
		21 Land Use Classes				2500sqm to 8ha GrF unsewered	500-1000 sqm up to 2500 sqm	<400 sqm Infil. sewered												
		24 Land Use Classes	Residential-Lifestyle Blocks (Fn)	Residential-Low Density (Fn)	Residential-Medium to High Density (Fn)	Residential-Lifestyle Blocks (Fn)	Residential-Low Density (Fn)	Residential-Medium to High Density (Fn)	Commercial (Fn)	Community Services (Fn)	Horticulture (Fn)	Biofuel Cropping (Fn)	Vegetable Cropping (Fn)	Other Cropping (Fn)	Dairy Farming (Fn)	Sheep/Beef/Deer (Fn)	Other Agriculture (Fn)	Forestry (Fn)	Manufacturing (Fn)	
	Zone, Designation or Overlay Types	Zone Areas or Designation																		
Zones (Environments)	Residential	New Residential	P	P	P	D	D	D	P	P	P	P	P	P	P	P	P	P	P	
		Low density residential	P	P	P	C	D	D	P	P	P	P	P	P	P	P	P	P	P	
		Residential	P	P	P	C	C	C	P	P	P	P	P	P	P	P	P	P	P	
		High density residential	P	P	P	C	C	C	P	P	P	P	P	P	P	P	P	P	P	
		Kinloch Low Density Residential	P	P	D	NC	NC	NC	P	P	P	P	P	P	P	P	P	P	P	
		Kinloch Residential	P	P	D	NC	C	NC	P	P	P	P	P	P	P	P	P	P	P	
		Kinloch Rural Residential	P	P	D	NC	NC	NC	P	P	P	P	P	P	P	P	P	P	P	
		Mapara Residential	P	P	NC	C	C	NC	NC	NC	NC	P	P	P	P	P	P	P	P	
	Industrial	Town centre	P	P	P	C	C	C	P	P	RD	RD	RD	RD	RD	P	P	P	RD	
Town Centre	Pedestrian Precinct	P	P	P	C	C	C	P	P	RD	RD	RD	RD	RD	RD	RD	RD	RD		
	Rural	Rural	P	P	RD	D	NC	NC	P	P	P	P	P	P	P	P	P	P		
Overlays* / Policy Areas Assessed	Overlays	Foreshore Protection Area	D	D	D				D	D									D	
		Pukawa C Development Zone	P	P	NC				NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	
		Escarpment Buffer Area	P	P	P				P	P	P	P	P	P	P	P	P	P	P	
	Mapara Valley Structure Plan Area Overlays	Modified Rural Environment	P	P	P				P	P	P	P	P	P	P	P	P	P	P	
		Revegetation Areas	RD	RD	RD				RD	RD	P	P	P	P	P	P	P	P	P	
		Urban neighbourhoods	RD	RD	RD				RD	RD	P	P	P	P	P	P	P	P	P	
		Valley Cluster Neighbourhood	C	C	C				C	C	P	P	P	P	P	P	P	P	P	
		Forest Cluster Neighbourhoods	C	C	C				C	C	P	P	P	P	P	P	P	P	P	
		Riparian Areas	P	P	P				P	P	P	P	P	P	P	P	P	P	P	
	Hazards	Fault Line Hazard Area	D	D	D				D	D										
		Flood Hazard Area	C	C	C				C	C	C	C	C	C	C	C	C	C	C	
		Hot Ground Hazard Area	P	P	P				P	P	P	P	P	P	P	P	P	P	P	
		Known Contaminated Site	RD	RD	RD				RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	
		Landslide Hazard Area (Waihi)	D	D	D				D	D	D	D	D	D	D	D	D			
Overlays* and Policy Areas Not Assessed	Overlays	Height restriction Area																		
		Kinloch Landscape Policy Area																		
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Scheduled Features and Sites**	Historic Value**	Building																		
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Notable and Amenity Trees	Notable Trees																			
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Zoning

- GIS_ALL TERRITORIAL_AUTHORITIES (11)
- TAUPO DESIGNATIONS
 - Network Facility (42)
 - Public Facility (32)
- TAUPO OVERLAYS
 - Flood Hazard Area (2)
 - Foreshore Protection Area (33)
 - Hot Ground Hazard Area (873)
 - Known Contaminated Site (53)
 - Landslide Hazard Area (1)
 - Pukawa C Development Zone (1)
- TAUPO OVERLAYS_MAPARA
- TAUPO_ZONES
 - HIGH DENSITY RESIDENTIAL (348)
 - HYDRO (6)
 - INDUSTRIAL (477)
 - KINLOCH LOW DENSITY RESIDENTIAL (46)
 - KINLOCH RESIDENTIAL (998)
 - KINLOCH RURAL RESIDENTIAL (143)
 - LOW DENSITY RESIDENTIAL (519)
 - NEW RESIDENTIAL (12)
 - RESIDENTIAL (14816)
 - ROAD (24)
 - RURAL (5918)
 - TOWN CENTRE (412)
- GIS_IMAGES.TEXTURED_LANDCOVER_WAIKATO (92)

Display Order Groups



Creating
Futures



Challenges

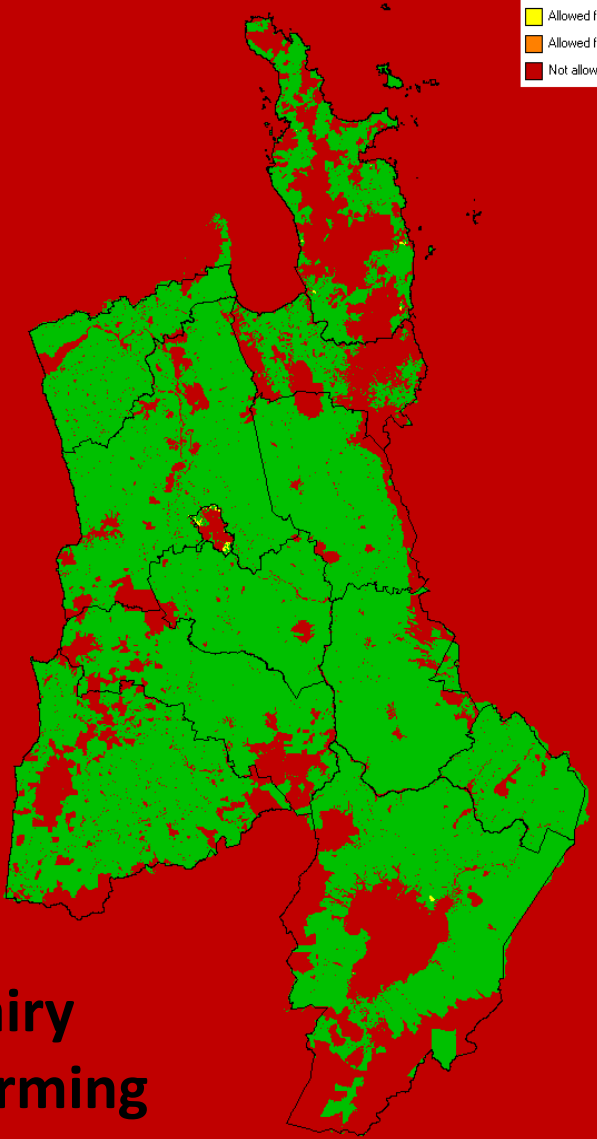
3. Applying the rules to the data

- ~2,750 rules x 36 GIS layers = 14 zoning rasters?

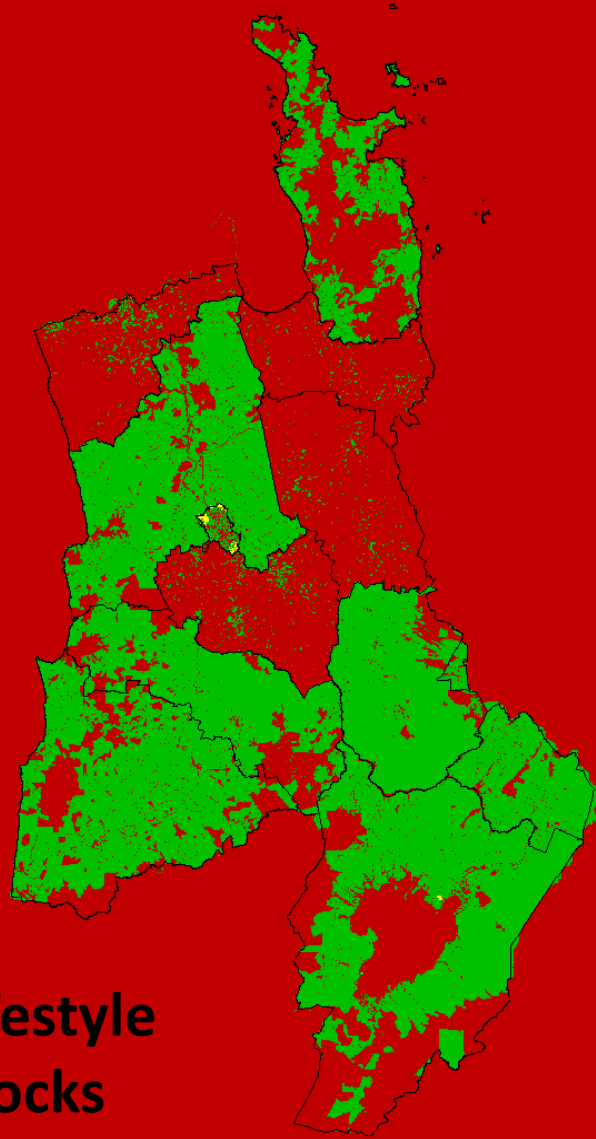


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Dairy
Farming



Lifestyle
Blocks



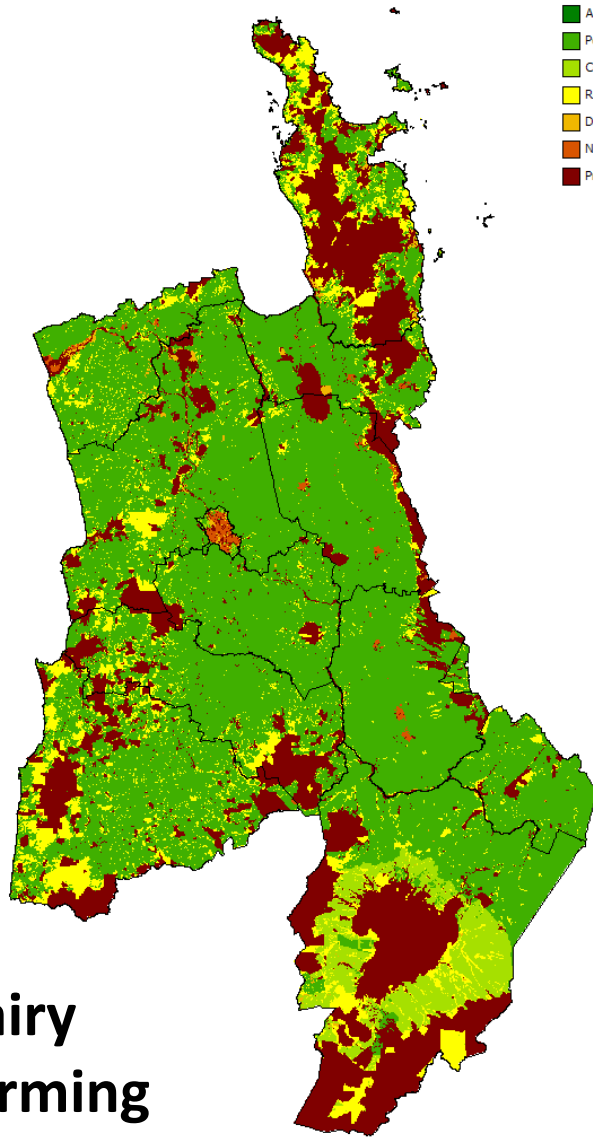
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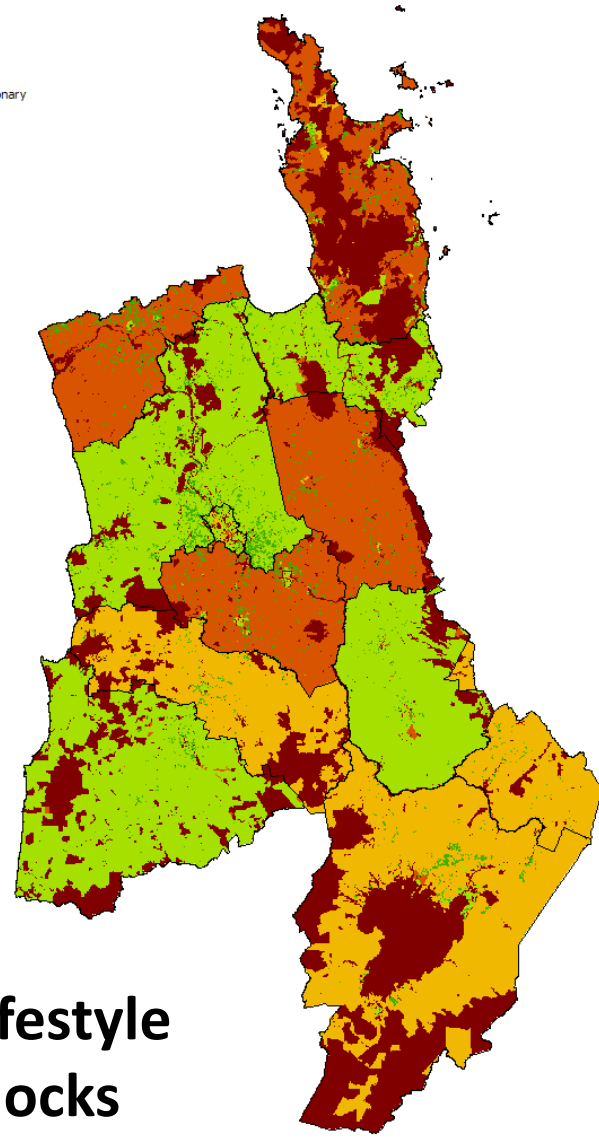


**Dairy
Farming**



- Actively stimulated
- Permitted
- Controlled
- Restricted discretionary
- Discretionary
- Non-complying
- Prohibited

**Lifestyle
Blocks**



Creating
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(Planning tool of WISE)

Why is this important?

- Benefits EW's vision and strategic direction
- Innovative and original
- Good project management critical
- Successful, effective, positive impact, saved \$
- Practical



Thank You



Questions?



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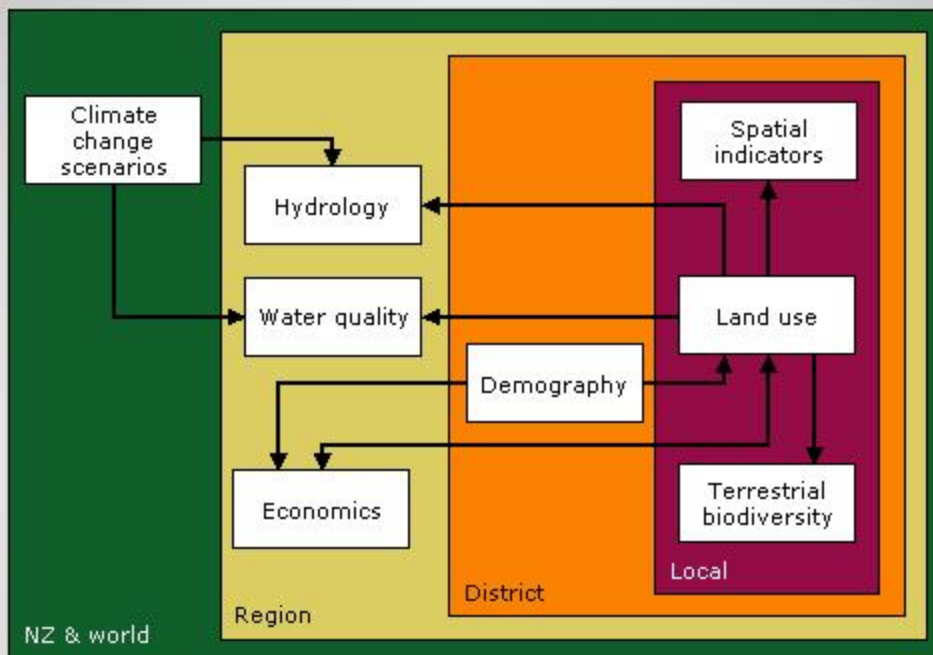
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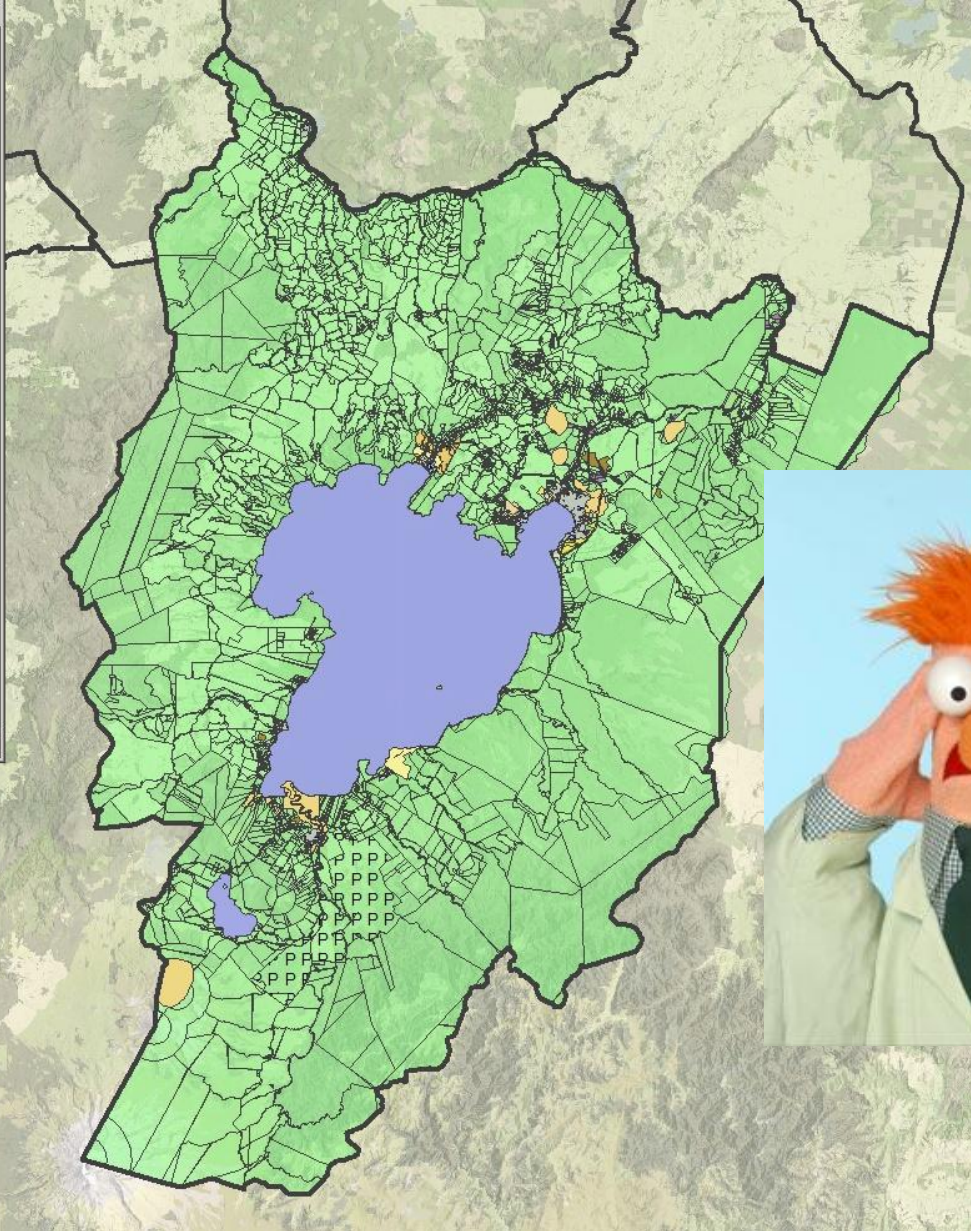
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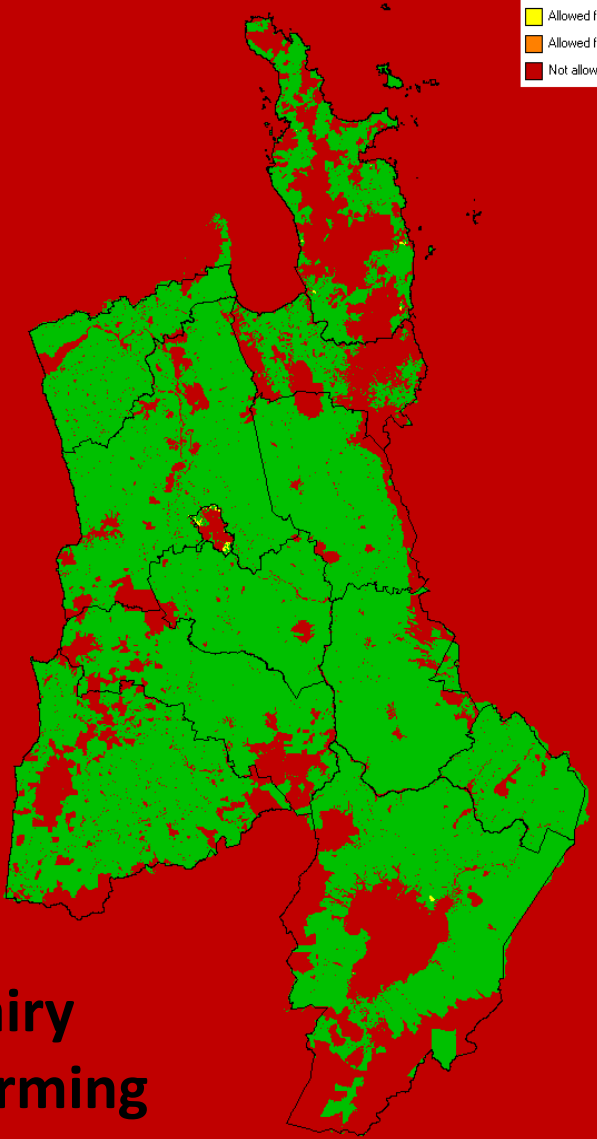
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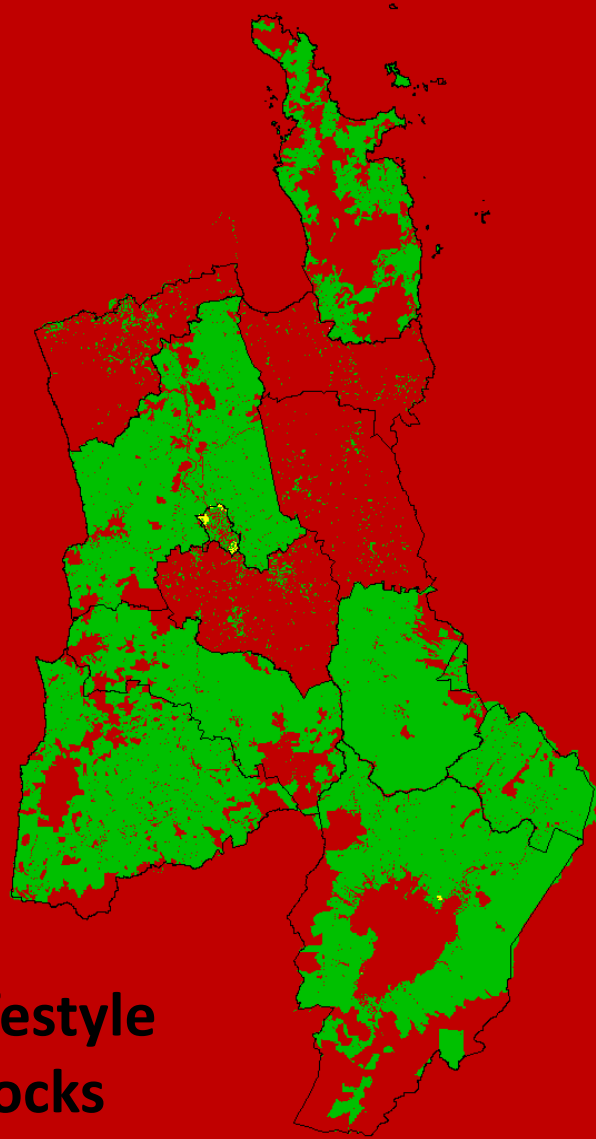


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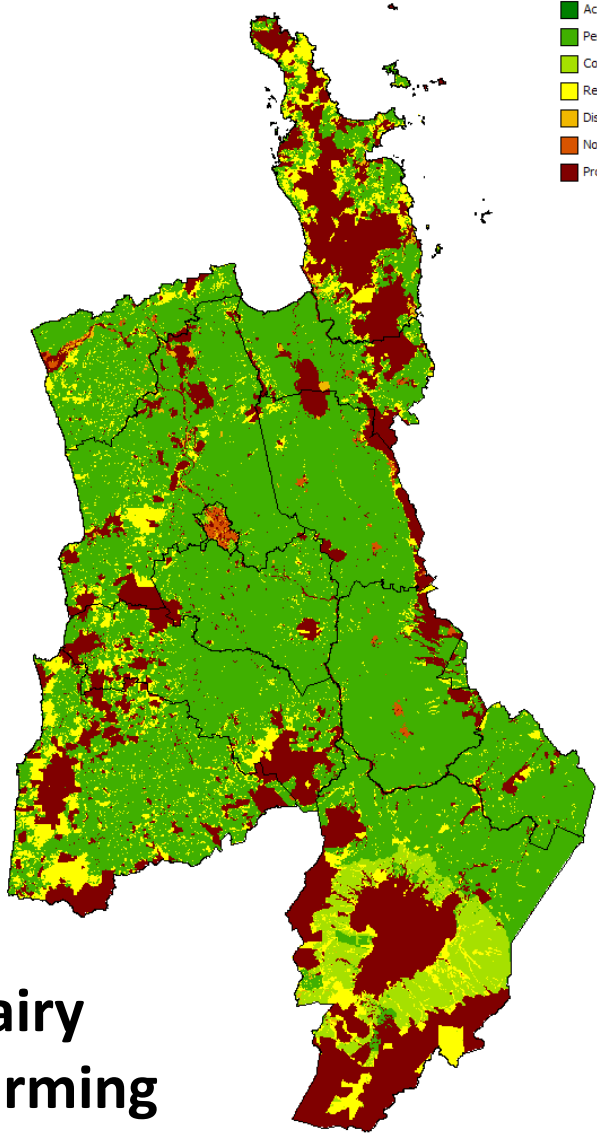
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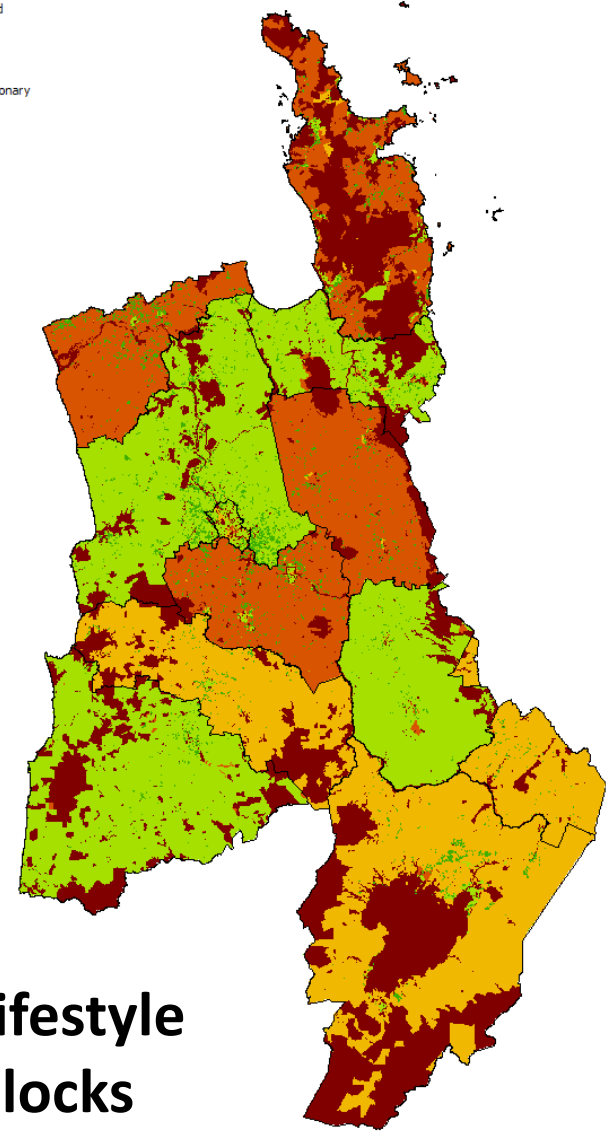


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