

**Graeme Gleeson – PC1 Block 2**



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**Hill Country Cropping**

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**"One good conversation can shift the direction of change forever"**  
Linda Lambert

**Empowering Farmers to Protect Water**

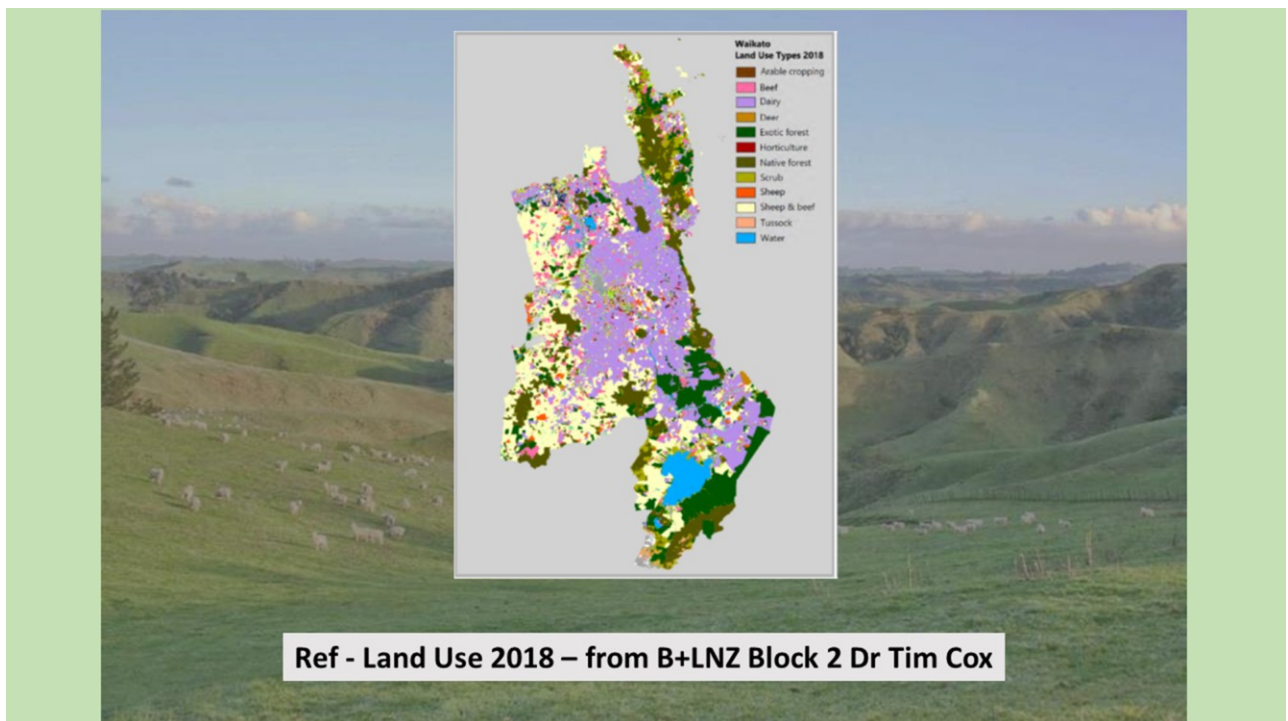
**Farming Fits the Land**



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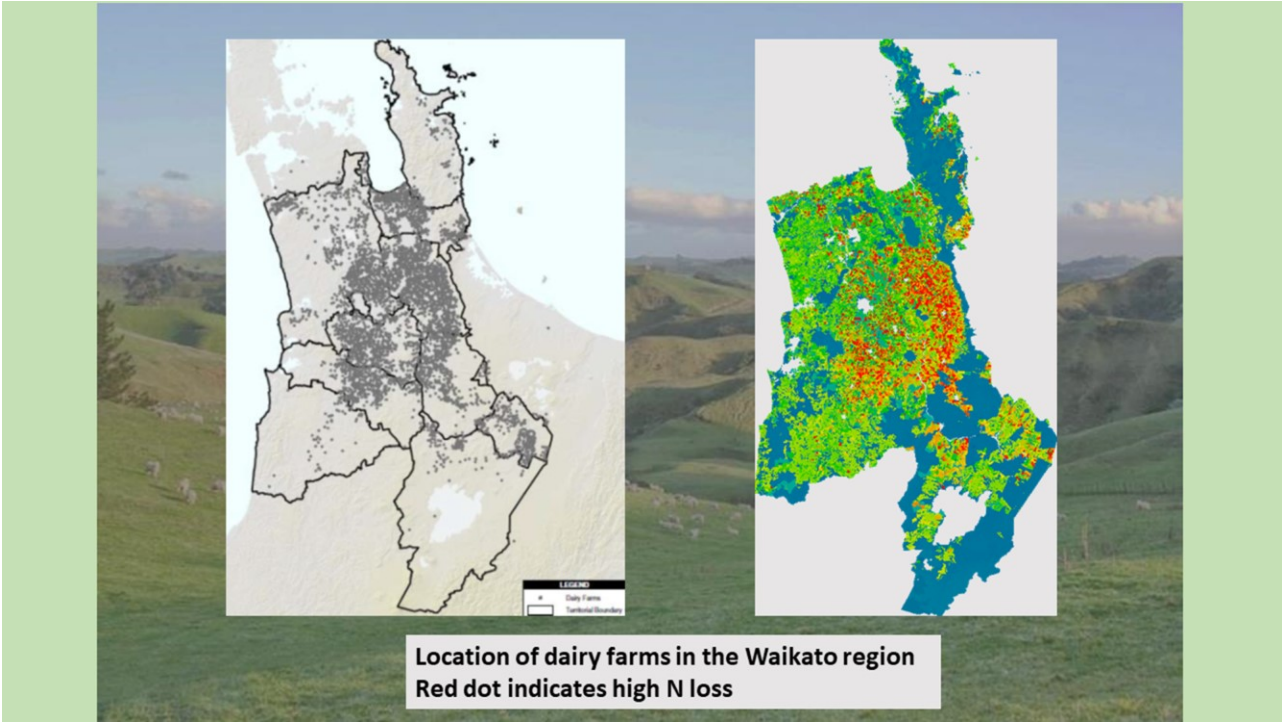
Framework of Actions (desire for seamless transition into next plan change)	
<b>Interim target State of Water Quality year – 2050</b> <ul style="list-style-type: none"> <li>• Certainty, direction and pace of travel</li> <li>• Measurable and auditable</li> <li>• Seamless transition Plan Change 2 &amp; 3</li> </ul>	<b>Farm Environment Plan</b> <ul style="list-style-type: none"> <li>• Comprehensive review natural resource</li> <li>• Land use opportunities regarding versatility, capability and assimilative capacity - Farming Fits the Land</li> </ul>
<b>Subcatchment Focus</b> <ul style="list-style-type: none"> <li>• A spatial scale to foster Community focus</li> <li>• Prominent contaminant loss emphasised</li> </ul>	<b>Certified Farm Advisor</b> <ul style="list-style-type: none"> <li>• Good Management Practice</li> <li>• Compliance module</li> </ul>
<b>Nitrogen delete one-size-fits-all</b> <ul style="list-style-type: none"> <li>• No 75<sup>th</sup>, No Grandparenting, No 5-yr averaging</li> <li>• No share-the-pain subsidisation</li> <li>• No under / overs offsetting</li> </ul>	<b>Critical Source Areas</b> <ul style="list-style-type: none"> <li>• Prioritised focused mitigations</li> <li>• Tailorised and Integrated</li> </ul>
<b>Nitrogen Flexibility</b> <ul style="list-style-type: none"> <li>• Extensive / Intensive threshold <ul style="list-style-type: none"> <li>• 18 su / ha ~ 1000 kgLW / ha</li> </ul> </li> </ul>	<b>Livestock Exclusion delete one-size-fits-all</b> <ul style="list-style-type: none"> <li>• Lowland <math>\geq</math> 15-degree</li> <li>• Steep &gt; 15-degree Intensity risk threshold <ul style="list-style-type: none"> <li>• 18 su / ha ~ 1000 kgLW / ha</li> </ul> </li> </ul>
<b>Nitrogen Allocation Framework</b> <ul style="list-style-type: none"> <li>• Natural Capital + LUC proxy</li> </ul>	<b>Winter Forage Crop Grazing</b> <ul style="list-style-type: none"> <li>• Buffer widths</li> </ul>
<b>Nitrogen Horticulture</b>	<b>Cultivation on slope</b>
	<b>Point Source Discharge – Offset ?</b>

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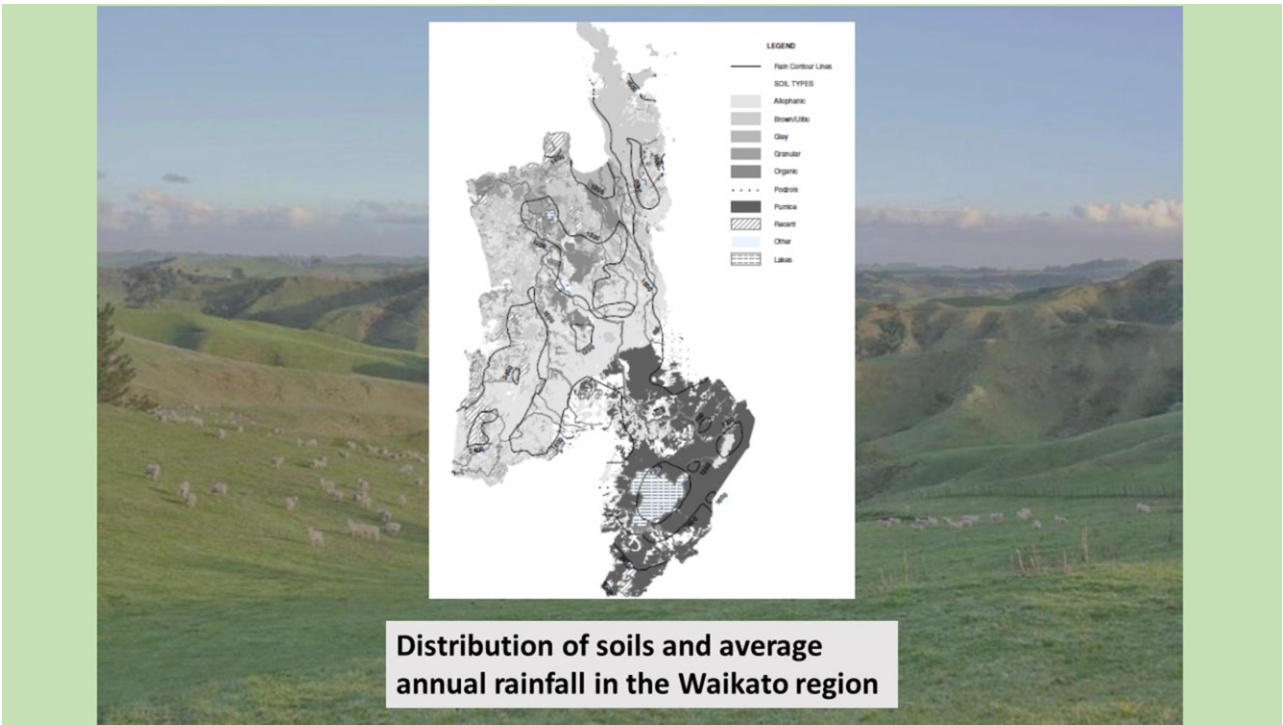


Ref - Land Use 2018 – from B+LNZ Block 2 Dr Tim Cox

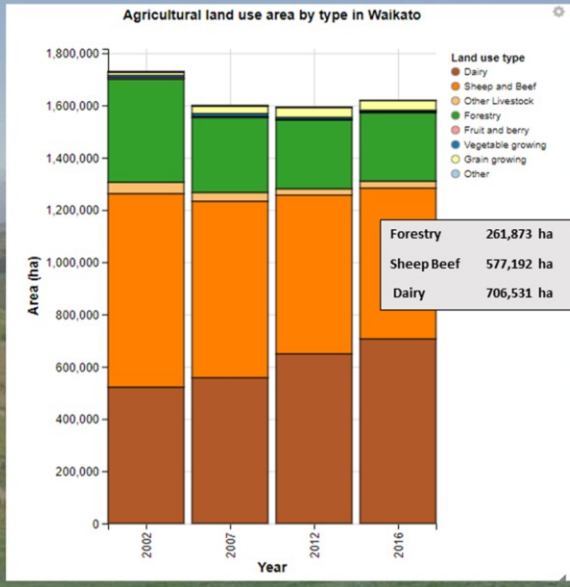
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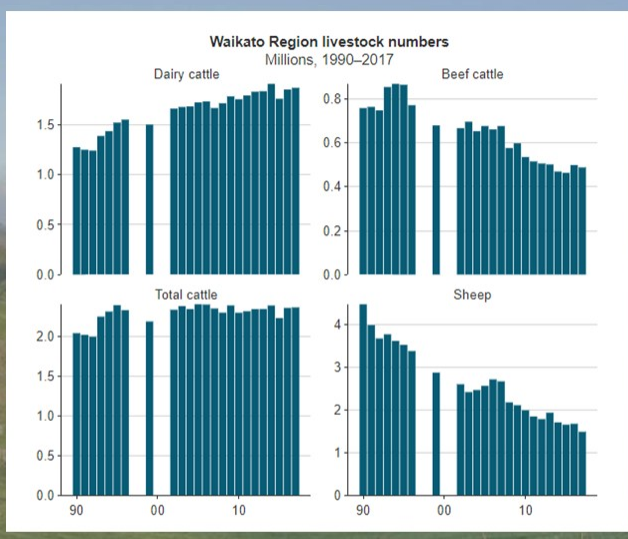


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Ref - [https://statisticsnz.shinyapps.io/agricultural\\_landuse/](https://statisticsnz.shinyapps.io/agricultural_landuse/)

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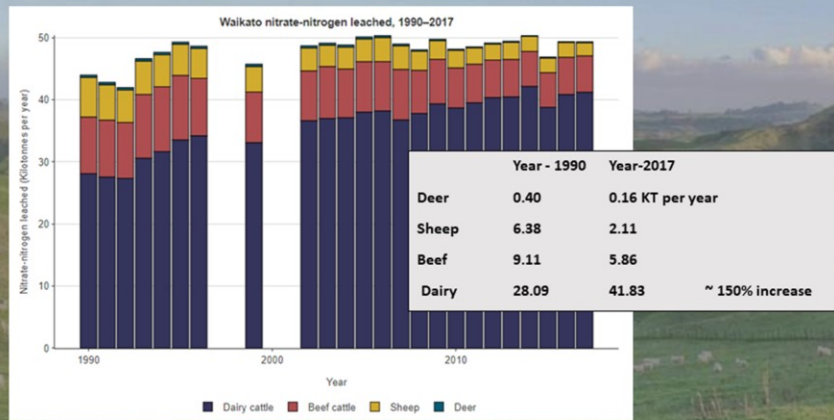


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**Livestock number per region**

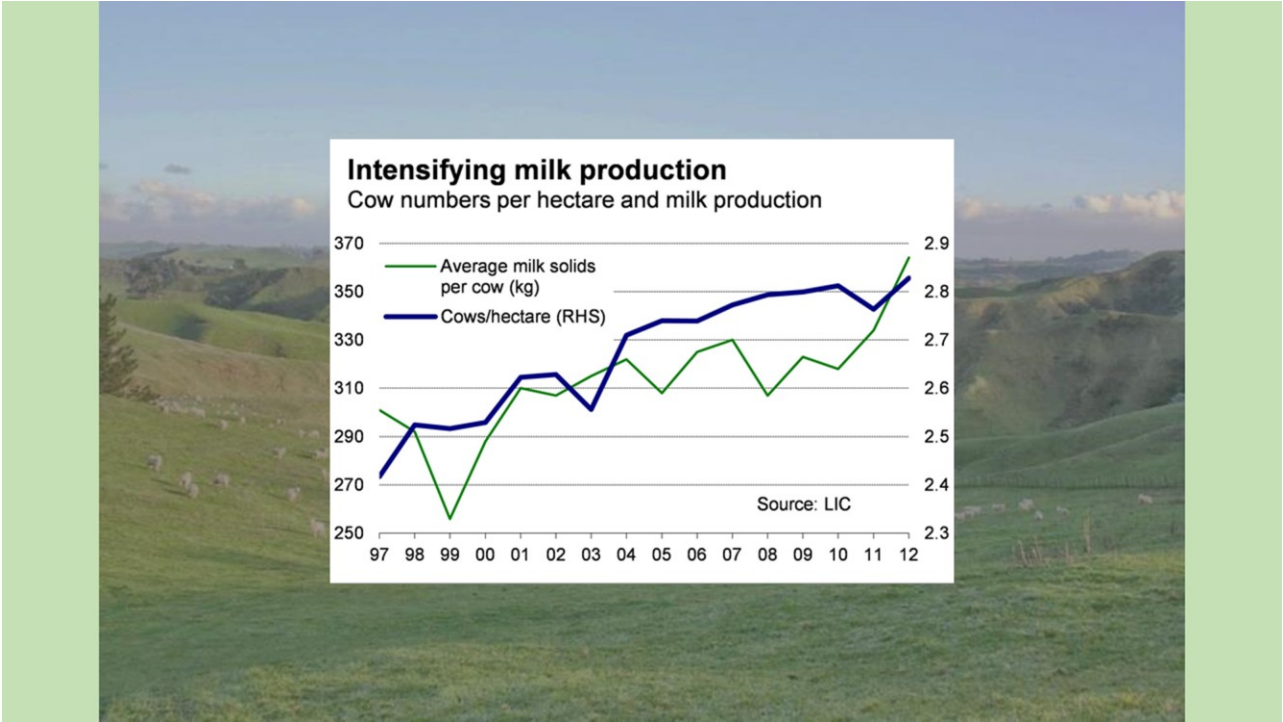
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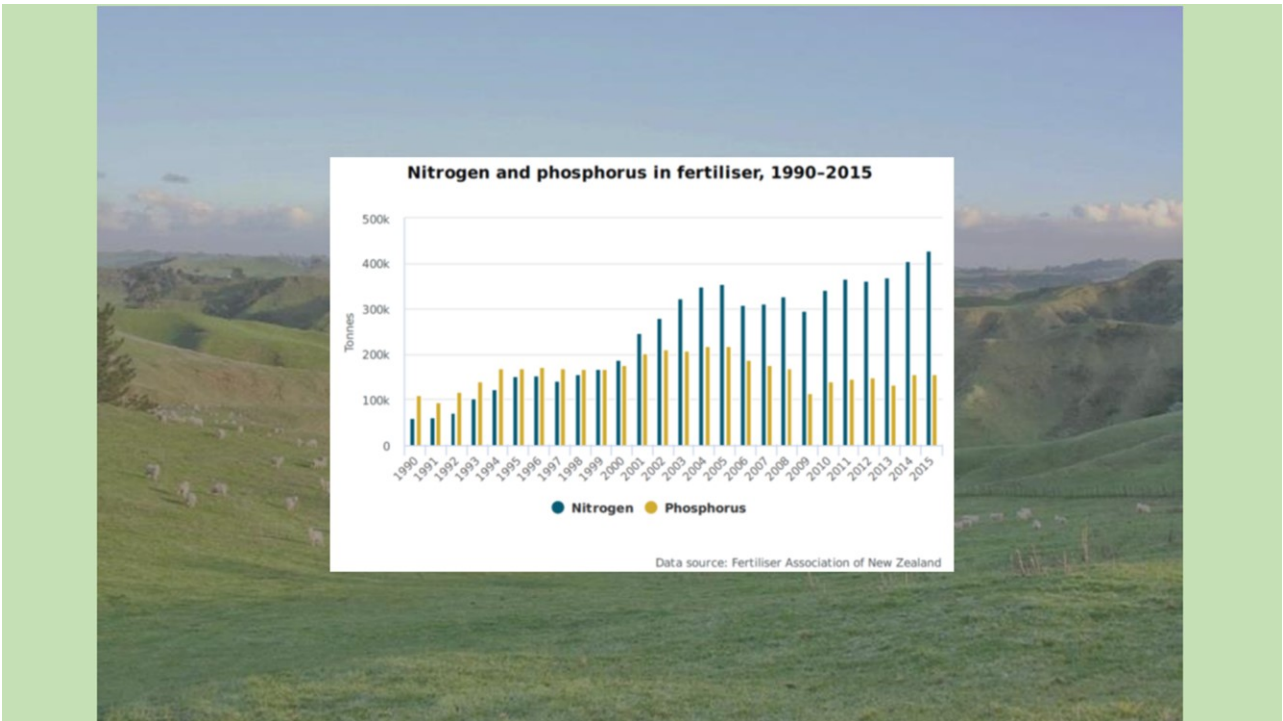
**Waikato nitrate-nitrogen leached 1990 – 2017**

Ref - [https://statisticsnz.shinyapps.io/nitrate\\_leached/](https://statisticsnz.shinyapps.io/nitrate_leached/)

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**Livestock Exclusion stocking rate threshold  
Risk management 18 su/ha ~ 1000 kgLW/ha**

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**Critical Source Area Risk management  
Priority mitigation actions**

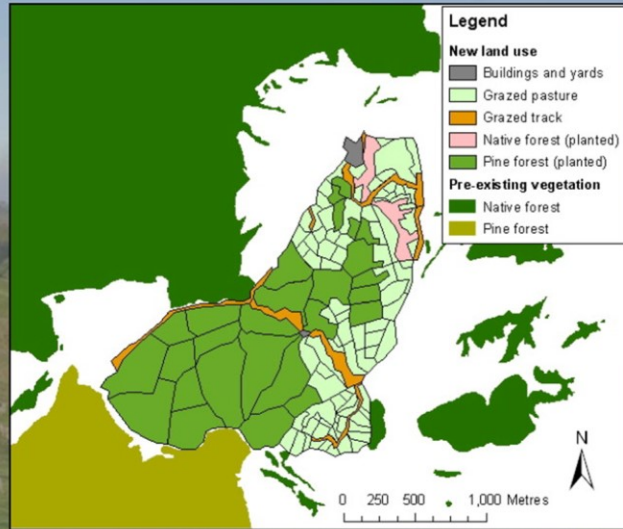
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**Waipa Hill Country**

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**Whatawhata Hill Country Research Station**

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**Water Quality Attributes  
Monitoring to assist decision making**

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