



Healthy Rivers
PLAN FOR CHANGE

Wai Ora
HE RAUTAKI WHAKAPAIPAI



RAUKAWA CHARITABLE TRUST
TE POARI MANAAKI O RAUKAWA



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Outline of Council sheep and beef grazing managing practices research

Presentation for the Collaborative Stakeholder Group

Workshop number 4, 2nd July 2014



Outline

- Brief recap of research approach
- Snap shot of the type of information gathered
- Using this information for the policy design

Approach

Semi-structured interviews:

- Elements of farm that influence benefits of adoption

Large scale phone survey:

- How many farmers, range of reasons

Crunch the numbers:

- Test some of the identified relationships.

Approach

- Sheep and beef - lots of different practices & stock types
- Assumed that practices would be influenced by waterlogging and pugging
- Survey results confirm this

Decision making

- Landowners will devote time and effort to thinking about the consequences of adopting a practice or technology
- These reasons are based on the benefits and costs of adopting a practice or technology

Decision making

- Farm contextual factors influence the benefit or cost
- The number of farmers who would adopt a practice depends on whether or not it would generate a benefit for them above existing practice

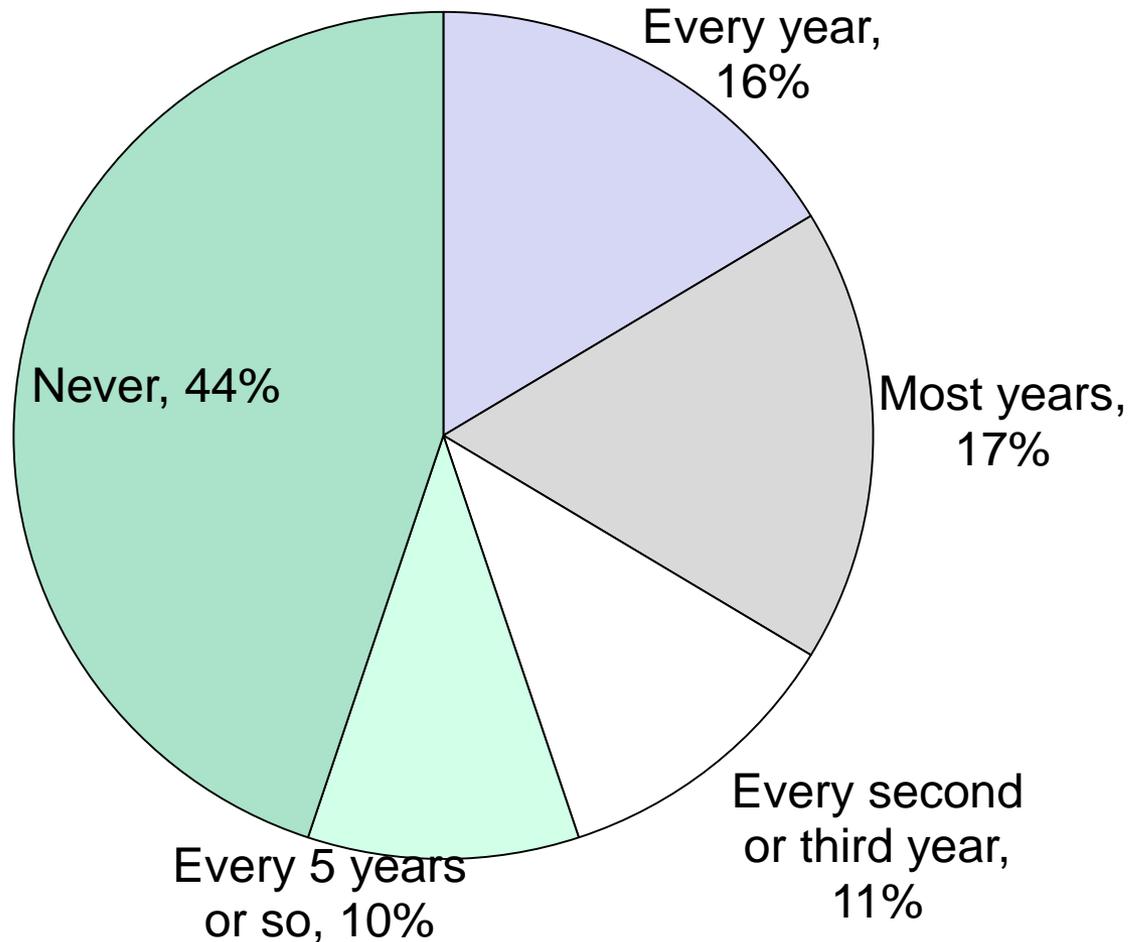
Wet soils management

- Managed their pastures over winter to allow for slower grass growth and risk of damage from pugging.
- Most of the farmers reduced stock numbers prior to winter, and/or changed to lighter stock classes.

Wet soils management

- To avoid pasture damage;
 - moved heavier stock off steeper land.
 - either set stocking over larger areas, break feeding, strip grazing smaller paddocks, or changing rotation depending on weather events and stock condition.

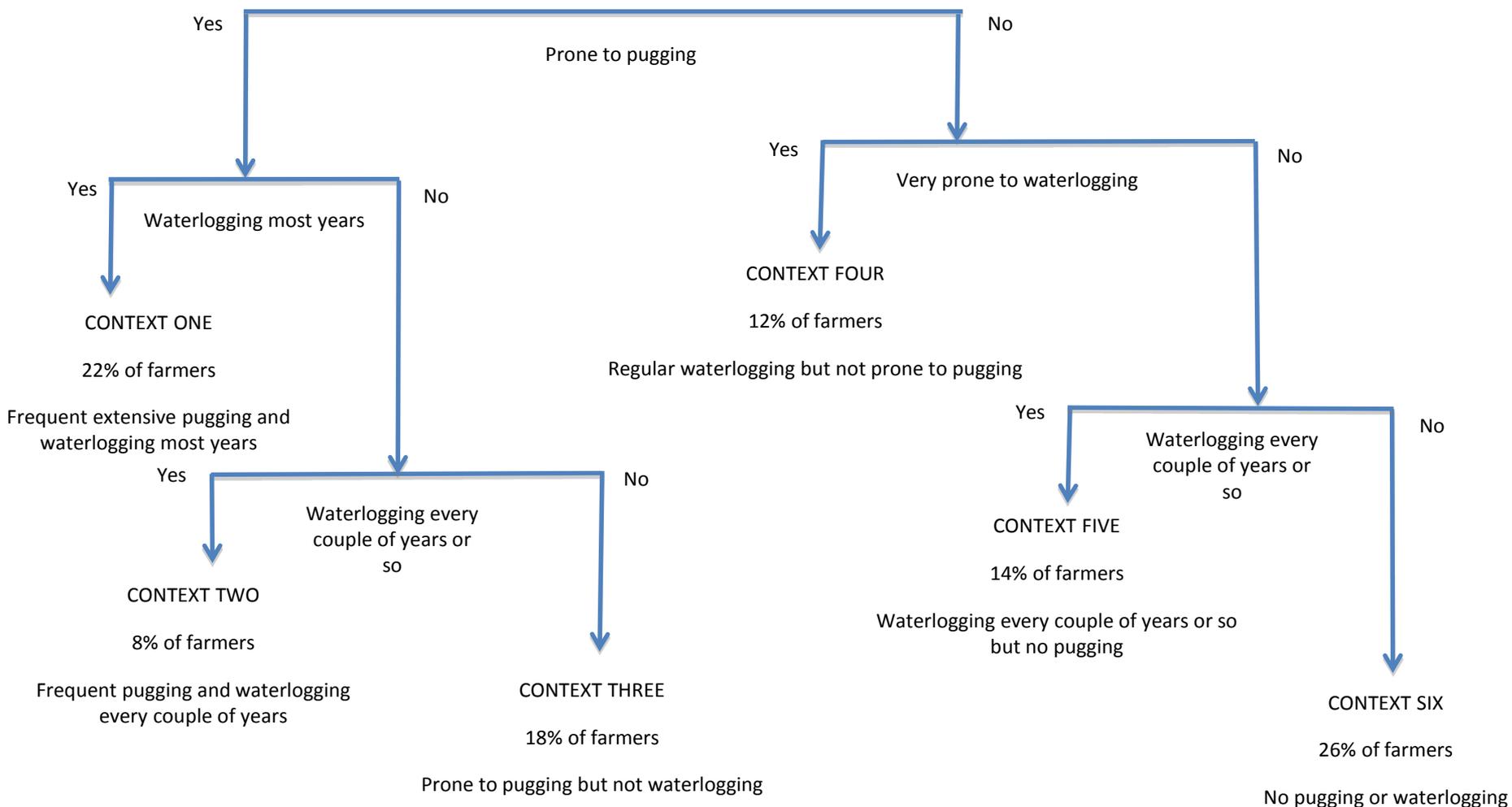
Frequency of waterlogging



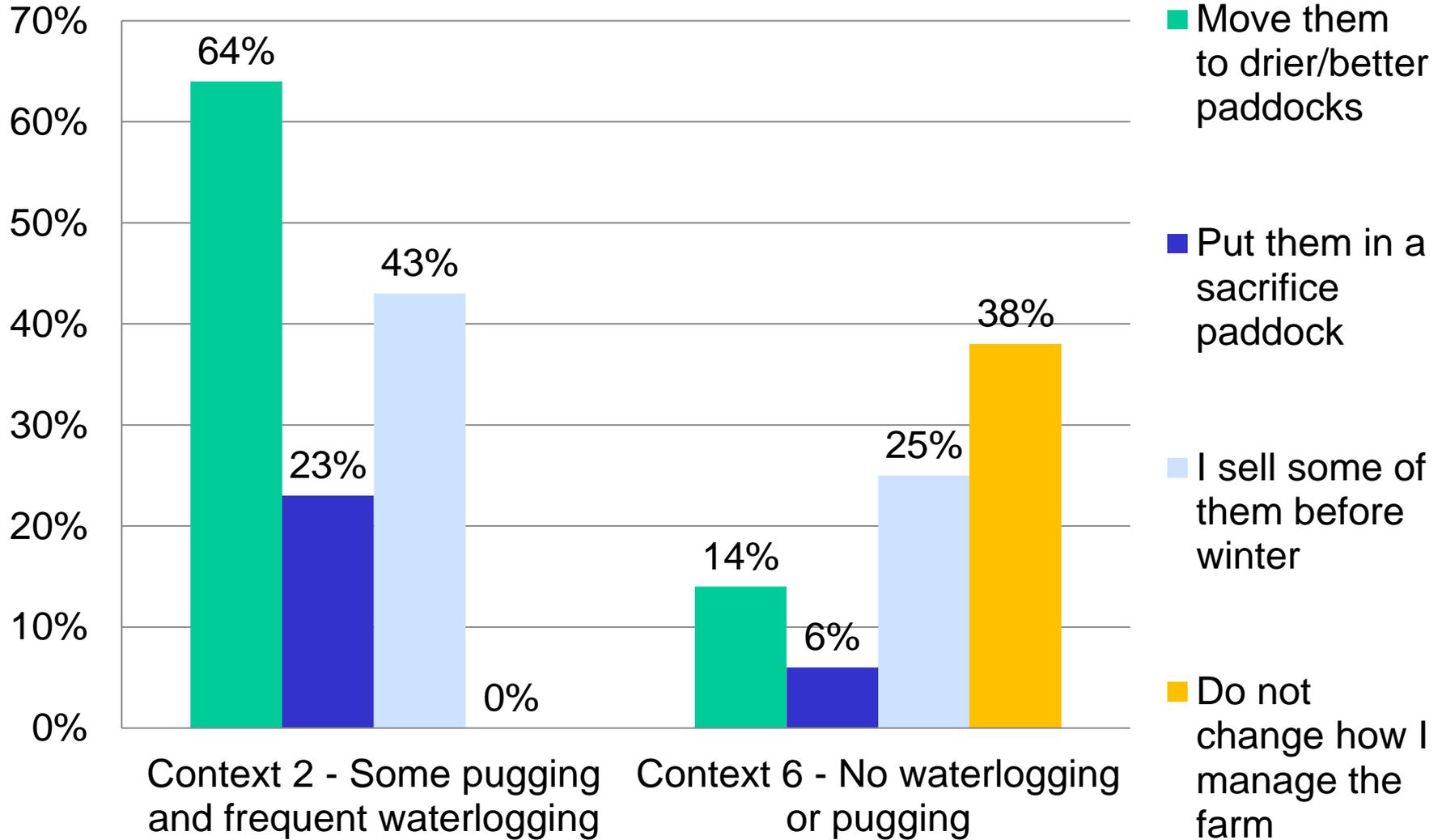
Farm context findings

- Benefits or cost from practices result from difference in proneness to waterlogging and pugging
- Differences in waterlogging and pugging arise from the differences in biophysical characteristics – soils and drainage

Farm context tree



Wintering practices - sheep



Example

Livestock type and practices	Context 2 Freq pugging and waterlogging	Context 6 No pugging or waterlogging
Bulls		
Sacrifice paddocks	X	
Hay/silage		X
Dairy Heifer		
Alter rotation	X	X
Move to better paddocks	X	
Stand off	X	
Beef cows		
Alter rotation	X	X
Move to better paddocks	X	
Move to steeper country	X	
Hay/silage	X	X
Sell stock	X	
Sheep		
Move to steeper country	X	

Findings

- Practices are driven by pugging and waterlogging
- Pugging and waterlogging are strongly related to biophysical characteristics of the farm
- There is extensive variety in the combination of practices that farmers use

Upshot of all that

- Flow on effects could be large
- Changing from current mix could have significant impact



Summary and what next

- How farmers make decisions about adoption of technologies or practices
- Sample of some of the research in this space

Will revisit landholder decision-making as we step through the process.

References

- Davies, A., 2012. Beef and sheep farming - grazing management practices in the Waikato Region. Technical Report No. 2011/16. Document number 1555284. Waikato Regional Council, Hamilton.
- Kaine, G., 2014 in press. Farm Context and Winter Grazing Practices in the Waikato Beef and Sheep Industries. Technical Report 2014/38. Waikato Regional Council, Hamilton. New Zealand.
- Versus Research and Reed E., 2014 in press. Sheep and beef winter grazing management practices in the Waikato and Waipa River catchments: quantitative study 2013. Technical Report No. 2014/37. Waikato Regional Council, Hamilton. New Zealand.