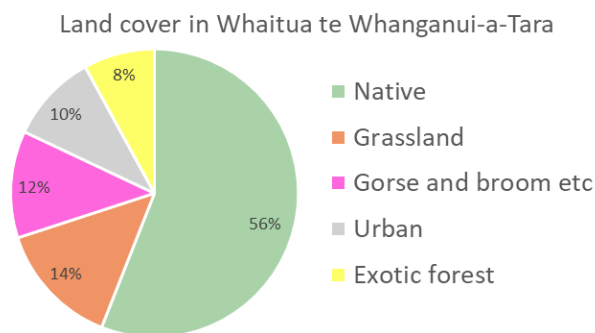**FACTSHEET**

TO	Whaitua Te Whanganui-a-Tara Committee
FROM	Project Team
DATE	15 November for 25 November 2019 Committee Meeting 9
TOPIC	Rural Factsheet

Characteristics of our 'rural' Whaitua

Land cover in Whaitua te Whanganui-a-Tara

Native — 56%
Grassland — 14%
Gorse and broom etc — 12%
Urban — 10%
Exotic forest — 8%

What is our rural land use?

- Most of the grazing land is held on 150 large properties, which incorporate 70% of the grassland.

- Extensive sheep and beef are the main activities carried out on the large properties.

- These large properties are a mixture of grassland, gorse and broom, native vegetation and exotic forestry, as well as grazing land.

- There are approximately 900 lifestyle properties which cover only 10% of the grassland in the Whaitua.

- The rural land in the Whaitua makes a small marginal contribution to NZ's overall agricultural and forestry sectors.

- The overall stocking rate and profitability of the large sheep and beef farms is lower than typical farms in the lower North Island.

- The financial implications of doing things differently may cause hardship for some landholders. This may impact on the gains achievable.

What are the natural capabilities and constraints in our rural lands?

- There are only small areas of highly productive soils in the valley floors.

- Around 60% of these areas have been zoned rural lifestyle or identified as areas for future urban growth.

- There are erosion risks on some of our steeper grazing lands, particularly in the Makara and south-western coastal catchments.

- Most of the land with higher erosion risk in the Whaitua is covered by native forest.

What activities in our rural areas are contributing to these impacts?

Activity	Impact on water quality and stream form	Impact on instream ecology

Vegetation clearance and stock grazing	• Increased sediment from erosion on steeper land:
	  o Smothers stream bed life
	  o Reduces water clarity
	  o Adds phosphorus, which can be bound to fine sediment
	• More runoff during rainfall leads to more flashy flows (though not as much as urban), more stream bank erosion
	• Relatively low contributions of contaminants such as nitrogen and E. coli
	• Reduced soil water storage and stream baseflow during dry periods
		Periphyton
		Periphyton/algal growth is promoted by increases in:
		• Deposited sediment
		• Temperature
		• Nitrogen and phosphorus
		• Low flows
		• Accrual periods (time between rainfall events)
		
		Insects (MCI)
		Macroinvertebrate community health declines with increases in:
		• Deposited sediment
		• Suspended sediment
		• Temperature
		• Periphyton
		• Habitat loss
		• Leaf/organic matter (good food sources for stream life)
		
		Fish
		Decline in fish diversity and abundance can be attributed to increases in:
		• Deposited sediment
		• Suspended sediment
		• Habitat loss
		• E. coli and pathogens
		• Barriers
		• The removal of Vegetation needed for spawning
		• Temperature
		• Low flows
		• Periphyton blooms

Removing vegetation near rivers and streams	• Streambank erosion during high flows • Increase in direct sunlight to the streambed • Higher water temperatures impact on stream life • Reduced leaf/insect input • Reduce habitat available and its diversity • Reduced spawning habitat	
Stock access to streams	• Tramples streambanks (erosion and habitat disturbance) • Tramples streambed habitat • Direct defecation increases E.coli & nutrients	
Piping or straightening of streams and river to provide for rural roads or farm management	• Streambank erosion during high flows • Channel modification/armouring to protect roads from erosion • Loss of habitat available and its diversity • Passage	
Drainage	• Increased generation of nitrogen from drained land • Direct transport of contaminants from land to streams • Habitat loss	

What are we currently doing about this?

Regulatory measures	Non-regulatory
Natural Resource Plan 2019 (Decisions version) contains rules:	**Farm Environment Plans** prepared in collaboration with GWRC help set environmental management strategies.
Rules to control stock access to streams and rivers: Livestock are allowed in rivers and lakes without a resource consent (called a permitted activity) where: • There are no conspicuous changes to the colour or clarity of water beyond the zone of reasonable mixing in a river, or in any natural wetland, lake, estuary, or the coastal marine area, or in any water body with significant mana whenua values. • Cattle, deer, or pigs must either be attended or be actively moved through the water body. • There is no pugging or trampling of vegetation exposing bare earth. • Stock crossing points are up to 20m wide, and not used more than twice a month; and stock must cross the direction of water flow, and must align with a track on either side of the crossing point. • Livestock do not access any Category 1 surface water body (which are defined in the Plan as having particularly high ecological value, being of significance to mana whenua, or being upstream of drinking water supplies). • From the **31st of July 2022**, you will need a resource consent for livestock to be allowed in rivers and lakes unless the water bodies are have a stock crossing point up to 20m wide or have dried up. If you cannot meet these conditions then a resource consent is required for stock to be allowed in rivers and lakes (called a discretionary activity).	The **Farm Environment Plan** fund provides funding any projects that have a water quality or biodiversity outcome that is not funded by other GWRC programmes.
Rule to control vegetation clearance on erosion prone land The Plan defines erosion prone land as all land in the region with a slope of more than 20 degrees. Vegetation clearance on erosion prone	The **Riparian Fund** provides money for retirement and planting of riparian areas.
	The **Wellington Erosion Control Initiative (WRECI)** is run in conjunction with MPI and provides funding for planting erosion prone land.

land does not need a resource consent (called a permitted activity) where:

- No more than 2 hectares of vegetation is cleared in a 12 month period.
- Vegetation clearance does not occur within 5m of a surface water body unless the clearance is for the installation of a bridge or culvert.
- Soil and debris is not placed where it can enter surface water bodies or the coastal marine area.
- After the zone of reasonable mixing, there must not be any conspicuous films or foams, changes in colour or clarity, odour, or adverse effects on aquatic life.
- After the zone of reasonable mixing, water must be suitable for consumption by animals.

If you cannot meet all of these conditions then a resource consent is required to be allowed to clear vegetation from erosion prone land (called a discretionary activity).

Other **general funding** is available for other works carried out under farm environment plans.

GWRC's **Land Management Advisors** provide guidance to land owners on managing environmental effects of farming.

GWRC carries out **pest control operations** that manage pest animals and their impacts on the environment.