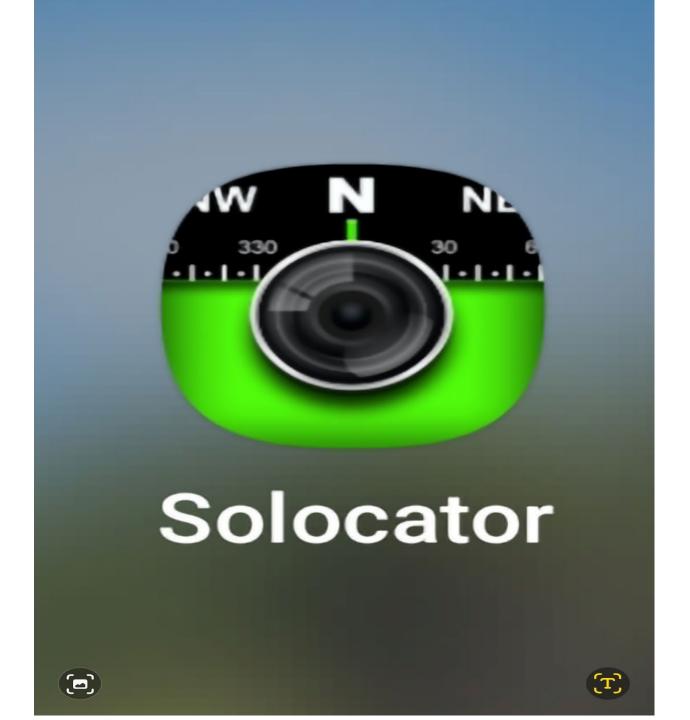
Farm Environment Plan

Claire Parkes, Castledowns Farm

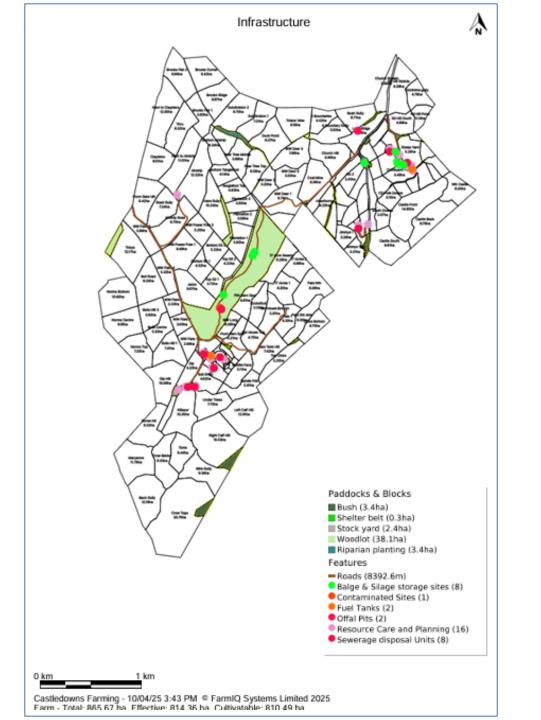
NZFAP PLUS

3.0 Environment

- 3.1 Farm Infrastructure Map
- 3.2 Natural Resource Information & Map
- 3.3 Land and Freshwater Management Plan
- 3.4 Freshwater Management
- 3.5 Stock Exclusion
- 3.6 Management of Crops and Winter grazing
- 3.7 Nutrient Management and Soil health
- 3.8 Indigenous Biodiversity
- 3.9 Greenhouse Gases and Climate change

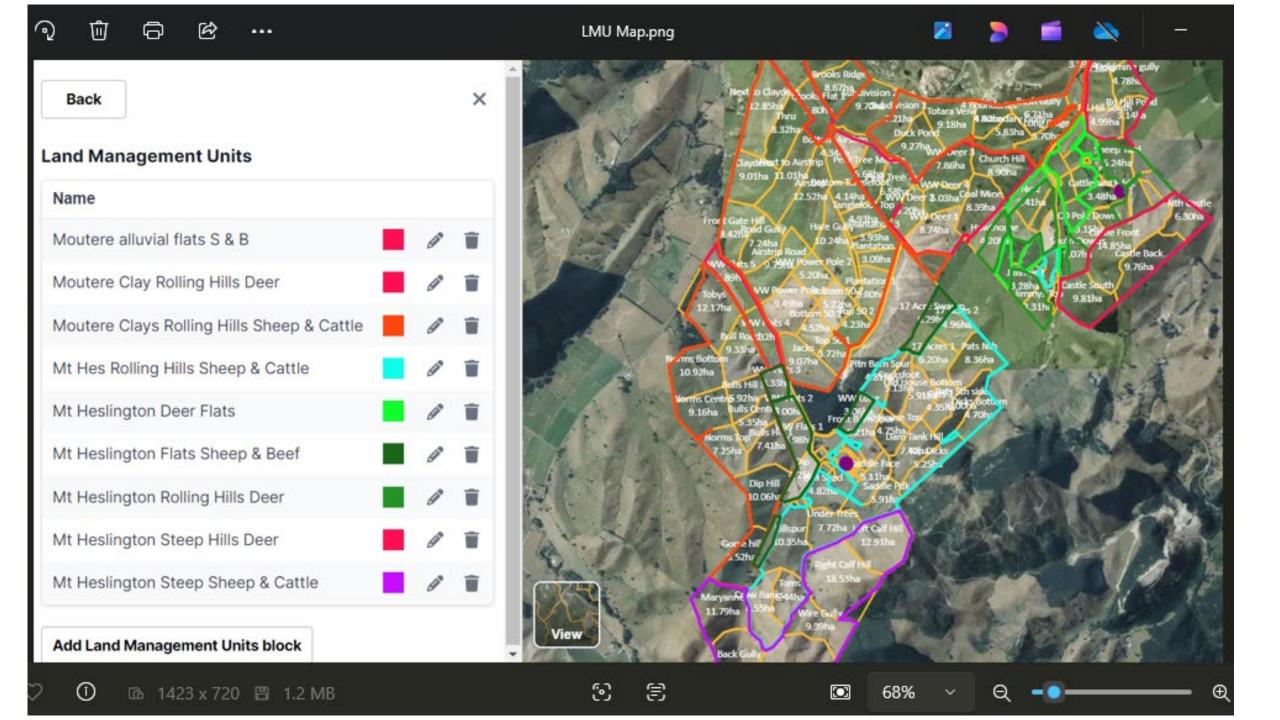




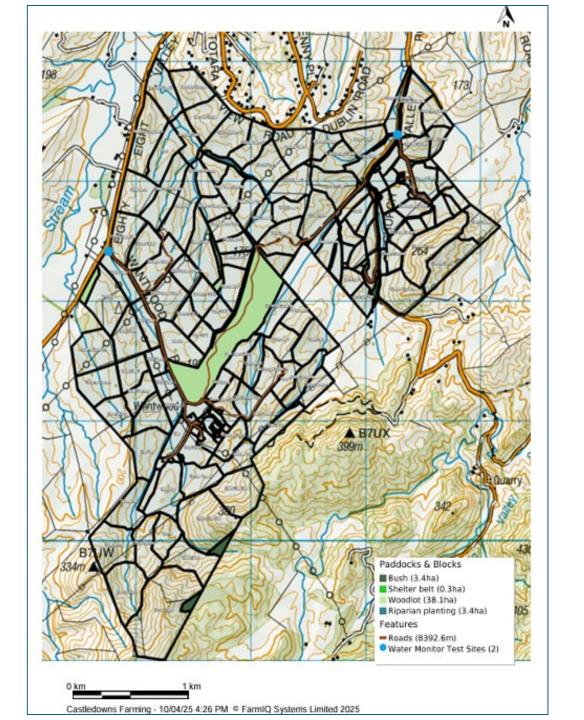








_	Castledown Farms Lan	d Manageme	ent					
	Special features	Ha	Description	Strengths	Veaknesses	Opportunities	Threats	
	•							
	Exotic plantation	39.18 ha	Mainly Radiata at 2 maturity dates plus 1 ha of Douglas Fir aged approx 20 yrs. Situated on shady sloped clay soils generally.	Generally planted on southern side of steeper slopes.	Weed infestations	Close access to port for export of logs	Fire, increased weed infestation	
	Native bush	3.46 ha	Two small native stands that include mature Podocarps are sited at back of farm at Wantwood end. Also some scattered regenerating Totaras are scattered over the farm.	Adds value and biodiversity	Weed infested and open to wild deer and pigs	Incr biodiversity. Close to urban areas could provide future opportunities.	Increasing weed infestation that is impossible to control as next to neighbouring pine	
	Creeks		Two water sheds exist. Spring fed Wantwood stream feeds into Eighty-Eight Valley Stream with Brooks Valley feeding in further down. Church Valley stream has some spring water also and feeds into Pitfure Stream.		Little flat land on property is disected by many ditches and creeks	Increase plantings to enhance property, Increase in biodiversity, Love to attact pidgeons.	Weed infestations.	
	Fenced and planted wetlands, flat	2.23	One natural swampflax area exists in Church Valley Stream and other small man-made areas have been established as silt traps on CD.	Constructed as silt traps	Silt traps require cleaning occaisonally.	Add to value with subdivision of farm due to urban sprawl and implications of life-style block neighbours. Increase in biodiversity.	Pukeko now a pest. Weed infestations.	
	Fenced and planted							
	wetlands, easy hills Riparian planting	5.61 ha	A work in progress with original plantings first done in early 2000's approx. This work has been done mostly on the deer farm.			Possibly add to value with subdivision of farm due to urban sprawl and implications of life-style block neighbours	Weed infestations.	
		2.17		Accomodation provided		New managers house		
	Houses	3.55		for all staff Good all weather and safe	Liability of old houses		Low prices, Labour Go	vt .
	Roads			access	Ongoing maintainance			
	Lanes	3.92		For ellers as a letter die e	Ongoing maintainance	16		
	Yards and sheds	3.1		Excellent stock handling facilities	Cattle yards	Hire of new WWWS as a venue		Demolish old WW W
	Flat Land							
l	Mt Heslington alluvial	26 ha deer 33.6 ha sheep	Situated on CD end of farm. Have historically been drained by a network of drains that lie deeper than an iron pan. Very fertile and organic soils.	Fertile	Clay flats can be very wet in winter. Deer digging holes	Good summer country for finishing and velvet stags	Silt run-off	
)	Moutere alluvial	26 ha sheep	Situated on western side of farm in WW and Brooks Valley. Can be very wet in winter as are clay based with poor draining	Fertile	Iron pan, springs, Deer dig holes	Cattle finishing		
	Rolling Hills							
ı	Mt Heslington	49.9 ha deer 129 ha sheep	Most of these hills are gentle rolling and free draining. Fractured rook is evident on more resistant ridges and can dry out very quickly. Soils are loose and silty. Are situated on eastern side of farm in front of the steep slopes.	Fertile	Natural springs are very prevalent and are uncultivatable. Deer dig holes anywhere there are	Right tree, right place	Carbon TAXgovt policy	
)	Moutere	81.7 ha deer 129 ha sheep	Western situated rolling hills with clay soils. Often have steeper gullies and many wet areas randomly situated. Steep gullies are erosion prone with often thin topsoil layer.		Natural springs are very prevalent and are uncultivatable. Deer dig holes in gully.	Right tree, right place	Silt eroding.	
	Steep Hills							
		40.71						
1	Mt Heslington	40.7 ha	The steeper back hills on Eastern side of farm. Are fertile and free draining. Evidence of marne fossils are abundant in the rock and stones.	Some native regeneration. Springs feed substantial water schemes.	Lack of water, weeds, boundaries exotic plantatiosn which bring added weeds and pests	Scope for deer. Have increased utilisation of WW water scheme.	Carbon TAXgovt policy. Erosion. Increased price of TDC water scheme unsustainable for the	
•	Moutere	95.4 ha	Situated as the steep unstable gullies of the rolling Moutere hills.	Some native regeneration		Scope for deer	Carbon TAXgovt policy. Erosion in	



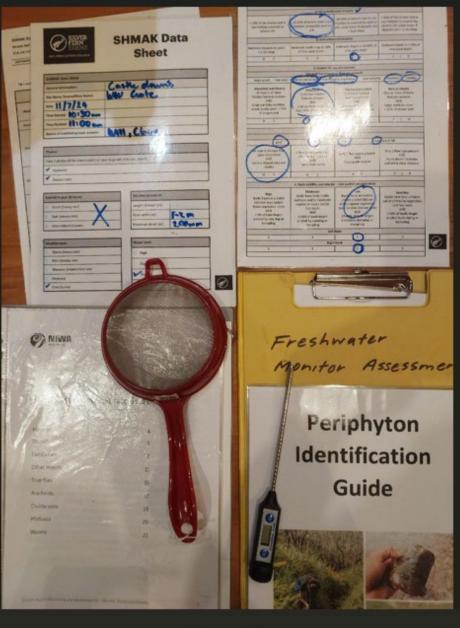
Freshwater Risk Template

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Risk to freshwater health	Risk factors on your farm	Overall risk rating Med	
A. Deposited fine sediment	Mt Heslington soils are prone to movement with rainfall.		
3. Excessive algae/ periphyton/slime	Small creeks and ditches with minimal flow or which stop flowing in the summer. Residual pools of water are prone to slime.	High	
C. Nitrogen	Minimal Nitrogen used. Used to increase feed when difficult season and with crop establishment.	Low	
D. Phosphorus	Phosphorus is reasonably stable and non soluble so is applied away from waterways then should not be an issue. Prevalent Hill country means run-off could be a bit of an issue.	Low High Med	
E. Faecal bacteria and pathogens	Farm sheep, cattle and deer. Cattle are almost totally excluded from streams. Deer also excluded from almost all waterways but they create environments for diseases such as leptoporosis. These generally are away from waterways. Farm has many drainage ditches.		
F. High temperature	Can be summer dry. Fire risk from neighbouring life-style blocks.		
G. Harmful Chemicals	Used only as neccessary for pasture rennovaton and weed control.		
H. Altered river form and channel margins	Farm has only creeks and streams. Stream banks height range from approx 0.5 to maximum 3.0 metres. Most of the streams have grass banks.	Low	
. Toxic Algae			
J. Other	Stock movements. Lack of trees around streams. Rubbish dumping from adjacent public roads. Dust from paper road.	Med	



Water testing Kit.jpg









South Elevation

© 356°N (T) ● -41.441169, 173.047712 ±30 m ▲ 111





