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1. Summary

Located in the Clutha region of Otago, Moir Farm is a large-scale dairy farm. Local service centres include Balclutha and Milton, with Dunedin being the closest main centre.

Moir farm has a total area of 444.4 ha, of which 366.4 ha is effective milking area. The balance consists of lanes, tracks, races, dairy shed and housing areas, drains, fenced off gullies and a small pine plantation. The property is split by Hillend Road, with an underpass under the road. It has two dairy sheds, a 54-bail rotary and 42-aside herringbone, both in good working condition. The layout of the farm and mostly easy rolling contour lends itself to good access and pasture management.

The district has an average annual rainfall of 800-900mm per annual, well spread across the year, with the inclusion of summer turnips into the planned cropping regime supporting the farm through what historically can be a dry late summer period. The soils are predominantly moderately deep to deep silt loams and soil test results show good fertility across majority of the property.

Moir farm has averaged 376,985 kgMS over the past three years but may not reflect the true potential of the farm, due to its current management structure, system implementation and the integration of dairy support and wintering into their current operations. Under efficient management this property has the potential to increase stock numbers to a peak of 1025 cows and increase per cow production so that the farm produces 420,250 kgMS by the 2028/29 dairy season.

The property is currently meeting all consenting requirements, and the majority of the infrastructure is in sound condition that with small initial capital improvement will stand it in good stead for future seasons. The weed, pest and disease issues confronting this farm are typical of the region and pose no serious risk to the viability of the property.

The year one budget returns a net surplus after tax of \$506,136, at \$1.25/kgMS. Milk solid payout has a significant influence on the financial results, at Steady State milk production and an assumed milk payout at \$8.50/kgMS (BNZ bank advised steady state payout) the farm returns a net surplus after tax of \$221,163, which demonstrates the financial upside available in seasons with strong farmgate milk price.

At the proposed equity levels, Moir Farm is a sound dairy farming business, with significant potential for increased production, reliable performance and capital uplift.

Signed: 

Date: 18/12/2025

Meg Simpson. B.Agr.Sc (Hons), PGCertCom, MIRPNZ



Meg Simpson is a Farm Consultant with extensive experience across large-scale dairy and dairy support operations. She holds a Bachelor of Agricultural Science (Honours) and a Postgraduate Certificate in Commerce (Distinction) from Lincoln University, and is a Member of the Institute of Rural Professionals New Zealand. This background enables her to combine scientific expertise, practical farming experience and sound business acumen in her work.

Meg has a strong track record in dairy and dairy support farm management, dairy farm conversion projects, operations management, farm consultancy, and the implementation of agricultural technologies across New Zealand dairy systems. After building a solid foundation on-farm, she has worked in dairy consulting for almost a decade—initially with a large veterinary business and independently for the past five years. Meg is passionate about helping farmers implement practical systems and strategies that support efficient, sustainable and profitable businesses in a constantly evolving industry.

2. Physical description

2.1. Location

Moir Farm is situated on Hillend Road, in the Clutha District of Otago. The nearest full service towns are Balclutha (18km) and Milton (24km) by sealed road. The nearest city is Dunedin (78km).

Other amenities and local services include:

- Open Country Dairies Awarua processing plant 153km
- Meat processing plant – Silver Fern Farms Finegand Plant 23km
- Sale yards – Balclutha Sale yards 22km
- Primary Schooling – Multiple options in Balclutha and Milton, as well as Clutha Valley Primary and Waitahuna Primary (both 20km).
- Secondary Schooling in both Balclutha and Milton, 18km and 24km respectively
- Nearest Airport is Dunedin International Airport 55km

The Clutha district is centrally located, with easy access to Dunedin, Invercargill and key tourist and recreational areas such as Queenstown, Wanaka and Te Anau all within a 3 hour drive, giving access to tramping, fishing, hunting, water and snow sports activities, as well as ready access to international airports.

2.2. Legal Description and Areas

Record of title	Legal Description	Area
547509	Part Section 3 Block XIII Hillend Survey District and Lot 2 Deposited Plan 440542	37.7745 ha
OT4D/966	Section 12 Block XIII Hillend Survey District	38.2605 ha
OT4D/967	Section 5 and 15 Block XIII Hillend Survey District	9.6973 ha
OT4D/968	Section 14 Block XIII Hillend Survey District	4.6539 ha
OT7D/903	Section 20 Block IX Hillend Survey District and Section 27-28 Block XI Waitahuna East Survey District	93.3913 ha
OT14C/921	Section 1 Block XIII Hillend Survey District	26.1579 ha
448147	Lot 2 Deposited Plan 412958	80.3827 ha
OT303/179	Section 40 Block XI Waitahuna East Survey District	143.2587 ha
OT314/162	Section 22-24 and Section 26-28 Block XIII Hillend Survey District	6.8670 ha
Total Area		440.4438 ha

2.3. Effective area

Effective grazing platform	366.4 ha
Pine plantation	8.3 ha
Ineffective area – lanes, tracks, drains, creeks, steep gullies, sheds and houses	65.7 ha
Total area	440.4

2.4. Internal access, subdivision, tracks and lanes

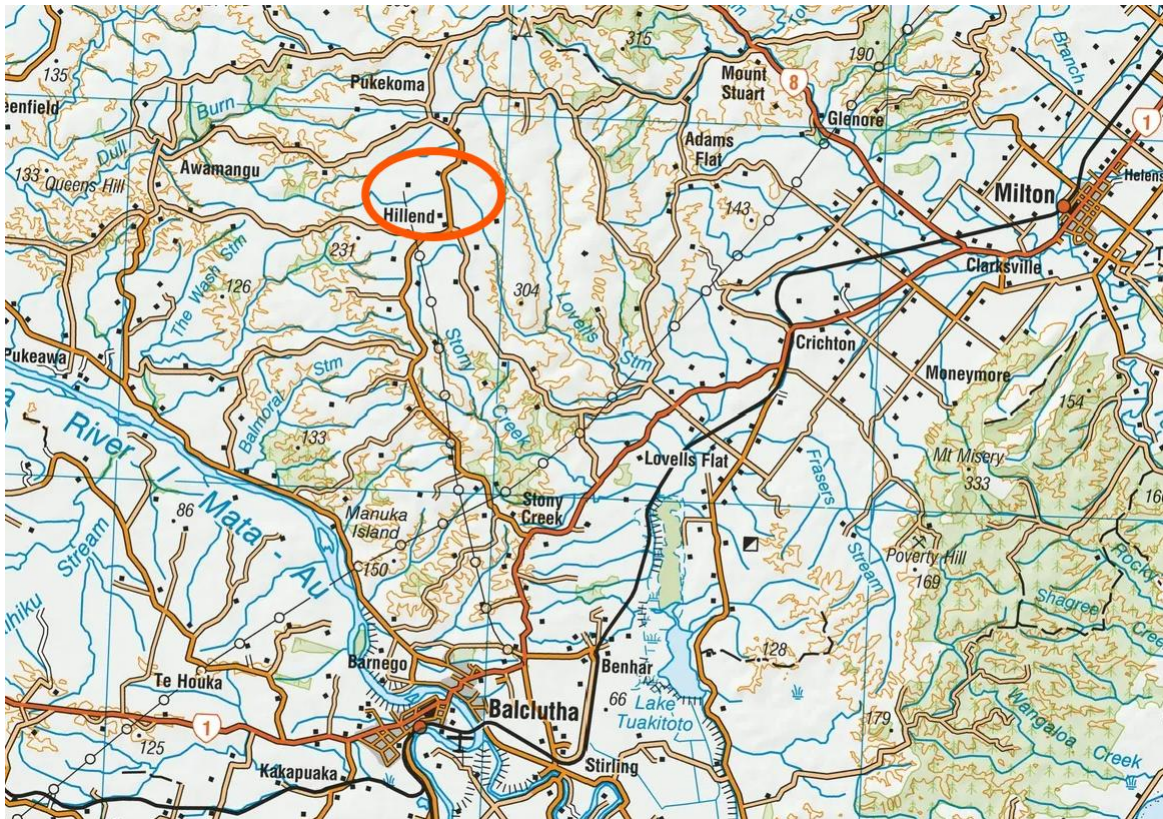
The farm is subdivided by key main central lanes with lateral feeders on both sides of the road, giving direct access to all but 7 of the 102 paddocks (including small holding paddocks), with the remainder accessed via other paddocks. The paddocks sizes range up to 5.9ha, giving ability to manage grazing effectively. Fences are predominantly two and three wire electric, with some conventional sheep fencing. Most fencing is in good condition, though an allowance of \$25,000 has been included in the initial farm development budget for fencing improvements. The title the vendors are retaining will have a boundary fence erected at their expense.

There is an underpass under Hillend Road connecting the main lanes between the two dairy sheds, allowing management of the property as a whole.

The lanes are well laid out with the furthest walk under 2.5km. Lanes are made primarily with Rotten Rock and a rice type gravel cap. Some track improvements are required, with a budget of \$25,000 allocated to these improvements, as well as continued maintenance of these budgeted into the annual farm working expenses.

2.5. Topography

The farm has an altitude range from 200 meters to 280 meters above sea level, with the dairy sheds at 251m and 265m. The farm is predominantly rolling terrain, with some undulating areas and steep gullies. Most of the farm is accessible by tractor and cultivatable. Approximated terrain map view from Google Earth:



2.6. Soil and Fertility

2.6.1. Soil types

Most of the soil on the flat, undulating and rolling areas of the farm is either a Timaru (Timu_30a.2) or Kakahu (Kaka_17a.1), with the former primarily on the rotary shed side of Hillend Road, and the latter on the herringbone shed side of the road. The Timaru soil is a moderately deep to deep silt loam soil of the Pallic order and these soils typically have medium to high fertility with imperfect to poor drainage due to high density and/or presence of pans, which limit rooting. These soils can respond well to good management practices, mole and tile drainage as well as aeration.

The Kakahu soil is a deep, well drained silt loam soil that has good rooting depth, is well drained while having a good profile available water and only moderate limitations in terms of aeration. There is also some Gladstone soil (Glad_57a.1), a moderately deep silt loam mostly on the hilly and steep landscapes.. These soils typically have low natural fertility but with generally good drainage and rooting depth unless acidic or shallow.

Do note that soils are now correlated across New Zealand. This means that many of the old soil names have been changed to new S-map families that reflect the new more objective correlation rules. The new S-Map family names may come from anywhere in NZ, which is why locations referenced may not be local to the farms location.

More information on the soil properties is provided in the appendices.

2.6.2. Fertility

Moir Farm was most recently soil tested in May 2025. The farm was comprehensively tested, with 54 paddocks sampled. The average of these results was:

	pH	Olsen Sol. P	Ca	Mg	K	Sulphate S	Ext Org S
Farm average 2025	5.9	29.1	9.7	21.7	10.8	15.5	8.7
Optimum for Dairy Pasture	5.8-6.2	25-40	4-10	8-10	5-8	10-12	15-20

These results indicate that the farm has had a relatively strong fertiliser history and maintenance program. The farm would benefit from some application of Sulphur, which is frequently applied in early Spring to Dairy Farms in the region, so these test results are from before this.

There are 12 of the tested paddocks with pH levels below the optimum, so they would benefit from a capital application of lime (2-3t/ha) to bring these areas up to optimum, whilst the rest of the farm can be managed through maintenance application.

2.6.3. Fertiliser history

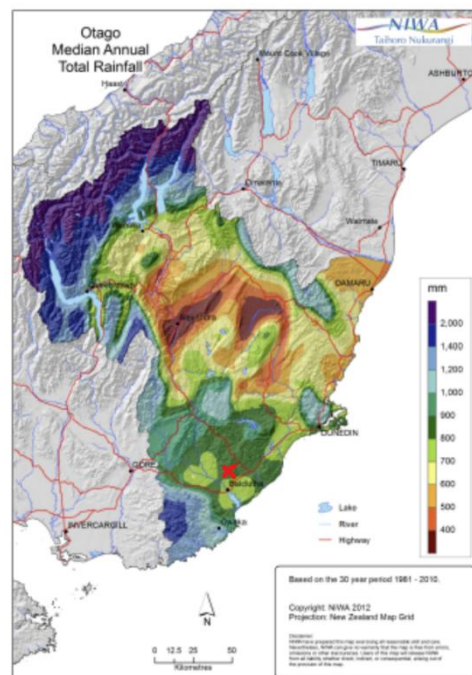
Year	Total N (t)	Total P (t)	Total K (t)	Total S (t)	AgLime (t)
2024/25	49.21	8.97	7.92	12.59	7.09
2023/24	50.83	2.87	3.01	4.35	-
2022/23	43.30	11.57	1.29	16.63	110.8
2021/22	51.93	11.62	8.47	17.00	30.6
2020/21	64.75	10.49	8.86	14.25	42.24

2.6.4. Erosion risk

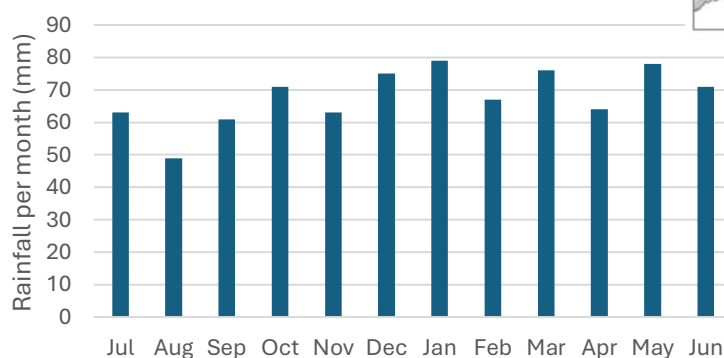
The erosion risk of the steep faces is minimised and mitigated through stock exclusion, planting and riparian zones.

2.7. Climate

These farms are in a reliable climate seeing 800-900mm of rain per annum, with dry periods typically occurring in late autumn if they occur. In a normal season rainfall is lower in winter than in summer, though mitigation strategies like summer cropping and early supplementary feeding can help mitigate risk in situations where dry conditions limit pasture production.



Hillend annual rainfall

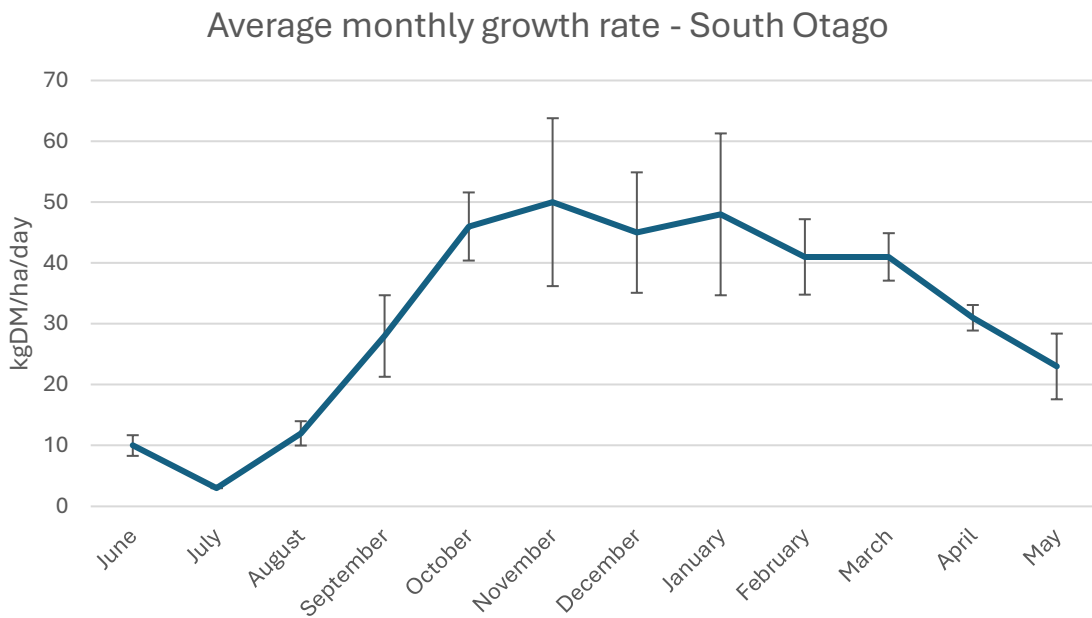


2.8. Pasture Growth

Annual pasture dry matter yields in well managed improved ryegrass/clover pastures in this region typically produce 11-13tDM/ha/year, assuming good fertility. Growth rates are very seasonal, with peaks in spring and early summer, lows in winter due to temperature and

potentially lows in late summer/early autumn if limited by soil moisture. The steeper faces have lesser potential, of up to 8tDM/ha/year.

Local pasture growth records are not readily available, but nearby Telford Farm has published figures show annual production of 11.5tDM/ha/year. Do note however, that the average rainfall recorded at the nearby NIWA station to Telford is 674mm per annum, significantly less than Moir Farm.



3. Agreements and Legislation

3.1. Current consents

The following consents are held by the property:

Consent No	Purpose	Land description	Expiry
RM24.068.01	Use of land for intensive winter grazing	LOT 2 DP 412958 SEC 40 BLK XI WAITAHUNA EAST SD and LOT 2 DP 440542 SEC 20 BLK IX SECS 5 12 14-15 SEC 1 21-28 PT SEC 3 BLK XIII HILLEND SD SECS 27-28 BL	01/01/2031
RM24.068.02	To discharge contaminants to land for the purpose of undertaking intensive winter grazing	LOT 2 DP 412958 SEC 40 BLK XI WAITAHUNA EAST SD and d LOT 2 DP 440542 SEC 20 BLK IX SECS 5 12 14-15 SEC 1 21-28 PT SEC 3 BLK XIII HILLEND SD SECS 27-28	01/01/2031

		BL	
RM24.337.01	To construct, maintain and use animal effluent storage facilities, for the purpose of effluent management.	Section 40 Block XI Waitahuna East SD, Section 20 Block IX Hillend SD	06/08/2034
RM24.337.02	To discharge contaminants to land for the purpose of disposing of liquid animal effluent from two dairy sheds	Lot 2 DP 412958, Section 12 Block XIII Hillend SD, Section 40 Block XI Waitahuna East SD, Section 14 Block XIII Hillend SD, Section 27 Block XI Waitahuna East SD, Section 20 Block IX Hillend SD, Section 5 Block XIII Hillend SD, Part Section 3 Block XIII Hillend SD, Section 15 Block XIII Hillend SD, Section 28 Block XI Waitahuna East SD, Lot 2 DP 440542 Map Reference	06/08/2034
RM24.337.03	To discharge contaminants to air for the purpose of management of an effluent storage facility	Section 40 Block XI Waitahuna East SD	06/08/2026. This consent will no longer be required once the vendors meet the S&P requirement to empty legacy effluent ponds
RM24.675.01	To dam water for the purpose of storing water	Section 12 Block XIII Hillend Survey District	In conjunction with Water Permit RM24.675.03 or any replacement consent
RM24.675.02	To discharge water from a dam to an unnamed tributary of Lovells Creek for the purpose of operating a dam spillway	Section 12 Block XIII Hillend Survey District	28/02/2045
RM24.675.03	To take and use water for the purpose of dairy shed supply and stock drinking water	Section 12 Block XIII Hillend Survey District	28/02/2031

These consents are deemed appropriate for current and intended activities for the farm. The upgrade and re-consent of the dairy effluent system helps to future proof the farm.

3.2. Health and Safety

Health and Safety at Work Act 2015 (HSWA) is New Zealand's key safety legislation and provides for regulations under that act. All work and workplaces are covered by this act unless specifically excluded. This system relies on participation, leadership and accountability by government, businesses and workers and sets out a framework and guiding principles by which workers and other persons should be given the highest level of protection against harm to their health, safety and welfare from work risks as reasonably practicable.

All businesses involved in the ownership and management of the farm and all relevant Persons conducting business undertakings (PCBU's) must ensure that health and safety documentation is kept up to date, utilised appropriately and staff, contractors and visitors received adequate training and induction.

3.3. Livestock management

3.3.1. Animal welfare

Owners or people in charge of animals must comply with the Animal Welfare Act 1999, any regulations issued under this act and minimum standards for animal care and management as set out in the codes of welfare.

The following codes have implications for management at Moir Farm:

- Code of Welfare: Dairy Cattle
- Code of Welfare: Painful Husbandry Procedures
- Code of Welfare: Transport within New Zealand

3.3.2. Animal movements

National Animal Identification and Tracing Act 2012 (NAIT) provides for obligations for the Person in charge of animals (PICA) or their delegate to tag animals with lifetime electronic identification and report tracing movements of livestock.

3.3.3. Biosecurity

The Biosecurity Act 1993 sets the framework for preventing, managing, and eradicating pests and diseases that could harm New Zealand's economy, environment, and human health and provides obligations for farmers to record and control movements, maintain health records, report unusual illnesses to MPA and implement and administer on farm biosecurity plans.

3.4. Environment

3.4.1. Intensive Winter Grazing

Intensive winter grazing refers to the grazing of annual forage crops between 1 May and 30 September of the same year and is subject to restrictions under the National Environmental Standards for Freshwater (NES-F). However, changes to the NES-F took effect on 25 October 2024. Central government repealed the permitted and restricted discretionary activity regulations for intensive winter grazing in the NES-F, replacing them with standalone regulations on riparian setback (planted river margins) and critical source areas (areas like gullies and swales that can accumulate and convey water and contaminants to waterways).

3.4.2. Synthetic Nitrogen Fertiliser Cap

Rules about the amount of synthetic nitrogen that can be applied to pastoral land of 20ha or more came into effect on 1 July 2021. The amount of synthetic nitrogen fertiliser you can apply must not exceed 190 kilograms of nitrogen per hectare, per year, averaged across your grazed land area. Dairy farmers must submit records of their synthetic nitrogen use to regional and unitary councils for them to report to the Ministry for the Environment.

3.4.3. Freshwater Farm Plans

National regulations relating to Freshwater Farm Plans are currently on pause to allow time for changes to the system. However, the intention is for these to support on farm actions to protect ecosystems once implemented. The plans will be property-specific and give farmers the flexibility to find the right solutions for their farm and catchment area. These plans will be certified and audited.

3.5. Sharemilkers, Contract Milkers and Employment

3.5.1. Sharemilkers and Contract Milkers

Variable Order Sharemilking Agreements from Federated Farmers as they ensure compliance with the Sharemilkers Act, and latest requirements under other legislation, though this is not currently relevant as the farm intends to not directly engage a sharemilker at this point.

3.5.2. Direct Employees

When the farm system changes to employ staff directly, rather than engage a Contract Milker or Sharemilker as is the current structure at Moir Farm, there would be exposure to the Employment Relations Act 2000 and Wages Protection Act 1993.

3.5.3. Residential Tenancy

Service tenancies as generally provided for farmhouses are governed by the Residential Tenancies Act 1986, which defines the rights and obligations of landlords and tenants of residential houses. All houses must comply with Healthy Homes Standards as set out in Regulations (2019). All houses at Moir Farm are reported to be Healthy Homes compliant.

3.6. Resource Management Act

New Zealand's Resource Management Act 1991 (RMA) is in a transition phase, with a current reform underway. Under current proposals there are no significant concerns to the operation of Moir Farm, though continual monitoring of the legislation and Local and Regional Government implementation of the National Policy Statements (FM) will be required.

4. Farm Protection

4.1. Animal Health

Moir farm faces the same range of animal health risks as other Otago Dairy Farms. These can all be mitigated through appropriate management.

Issue or Disease	Comments, Management and Mitigation Strategies
Mastitis	Cows identified as having mastitis through methods such as visual identification, paddle and rapid mastitis test should be removed from the milking herd and treated with appropriated antibiotics. Milk cultures can be taken to assess the appropriate course of treatment. Annual dry cow therapy will be used under veterinary advice to mitigate risk while ensuring good stewardship of antibiotic use to minimise impacts on antibiotic resistance.
Footrot and other lameness	Lameness can be a cause significant issues on many New Zealand Dairy Farms. Management, prevention and mitigation strategies include track and lane maintenance, minimising standing times, managing cow flow on lanes and concrete and early detection and treatment of clinical cases.
Leptospirosis	All animals are to receive multi-strain Leptospirosis vaccinations as calves, and annual booster vaccinations each year after. Leptospirosis is a significant human health risk as well as causing abortion in cows and red-water in calves.
Internal Parasites	Of significance for young stock only. Calves and yearlings are drenched regularly to manage this risk, while maintaining good stewardship and refugia management to minimise the impact of drench resistance. Mixed age cows will rarely require treatment for internal parasites, if ever.
Rotovirus	Rotovirus can be an issue in calf sheds across New Zealand. This risk can be mitigated through good shed management, minimising visitors, regular disinfection and bedding changes, and regular

	cleaning of equipment. If the issue is endemic a vaccine is available.
Tuberculosis (TB)	The farm is in a designated special testing area by Ospri, so will have regular testing done on the herd for surveillance.
Bovine Viral Diarrhoea (BVD)	No current significance on this farm. Bulk milk surveillance will be completed at least twice annually to detect presence of disease, and if present, testing, culling and vaccination are key management and elimination strategies
Johnes Disease	Johnes Diseases causes significant scouring and loss of condition, particularly in mature animals. There is not a known significant issue of Johnes Disease on this farm. If an issue arises it can be managed through testing and selective culling. There is no current suitable vaccine approved for use.
Mycoplasma Bovis	M. Bovis is a bacterial disease first identified in NZ in 2017. Moir Farm does not have known M. Bovis and has clear bulk milk tests per national testing regimes. Mitigation of risk through on farm biosecurity, recording and tracing of animal movements and compliance with national reporting and testing regimen.

4.2. Weeds, Pest and Insects

The Moir Farm property has similar risk profiles to disease and pest to most Dairy Farms in the Otago region. These risks can be mitigated through maintenance of good management practices.

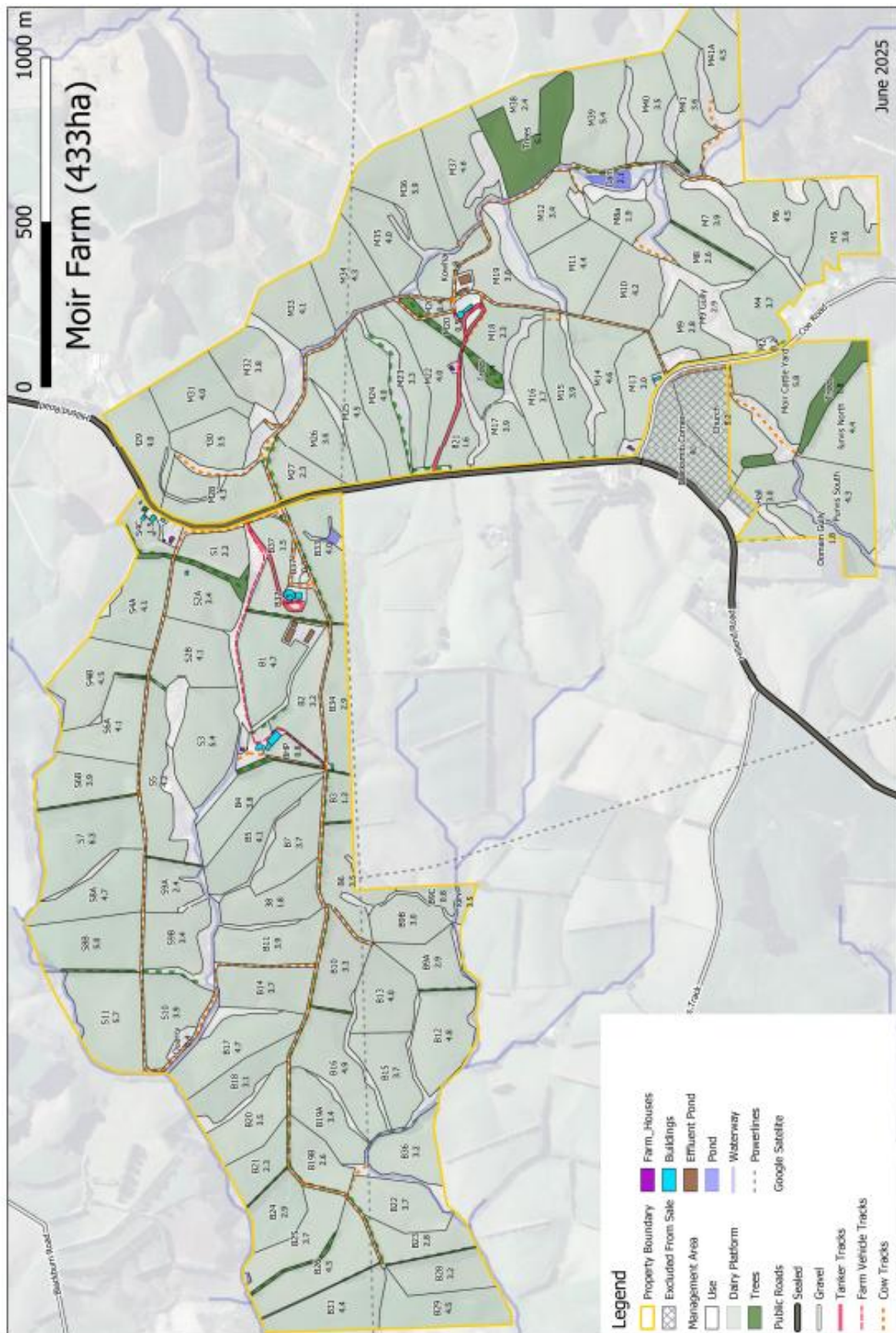
Insect or Disease	Comments, Management and Mitigation Strategies
Grass Grub	Grass grub is a seasonal pest, so could pose a risk of infestation. Management through grazing, rolling where applicable, spraying where appropriate and ensuring new pastures in high risk/previous high infestation levels is sown with coated seed.
Porina	Porina is of limited significance on this farm, though requires continued monitoring. Chemical or management can be applied where appropriate, and the inclusion of AR37 (or similar) endophyte when sowing new pastures.
Argentine Stem Weevil	Risk of pasture damage and loss, particularly of newly sown pastures can be mitigated by using endophyte treated seed.
Possums, Rabbits and Hares	Populations can be maintained at low levels through culling of resident populations.
Gorse	Controlled by spraying as required
Californian Thistles	
Scotch Thistles	Currently present on the property, but this problem can be readily managed through spraying and grubbing
Nodding Thistles	Currently present on the property, but this problem can be readily managed through spraying, grubbing and good pasture management.
Ragwort	Currently present on the property in small quantities, but this problem can be readily managed through spraying, pulling and good pasture management.

5. Mapping

5.1. Satellite imagery



5.2. Farm map



6. Farm Management

6.1. Farm Management

The farm currently has a Contract Milker (CM) engaged in place until the end of May 2026, in which they employee all staff, provide some gear and pay a proportion of costs, while receiving a fixed rate per kilogram of milksolids. Future income projections are based on the farm directly employing staff and paying all farm working costs from the 2026/27 dairy season onwards.

6.2. Pastures

The farm has a history of winter grazing cows on the dairy platform, so has a strong regrassing history. There will continue to be pasture development required, but this will fall into annual management, rather than initial capital outlay.

6.3. Fertiliser

These soil test results indicate that the farm has had a relatively strong fertiliser history and maintenance program. Ongoing application of maintenance P and S, as well as continued application of maintenance lime to the farm is budgeted for in annual farm working expenses. An inclusion of 100t of capital lime would benefit the low pH areas of the property.

6.4. Feed Management

Feed budgets have been developed for the farm with a “pasture first” focus. Supplements include the provision of 600kg/cow of an in shed feed blend (primarily PKE, grain and soya hull based), home grown and imported silage and straw and hay to support both milk production and meet feed shortfalls in the shoulders of the season.

Summer turnips have been included in the budget to an area of 25ha, which will meet feed shortfalls particularly in drier summers and allow the farm to push feed into the autumn period and enable a continues proactive regrassing program.

6.5. Water reticulation and supply

Stock and Dairy Shed water is supplied through a local scheme, and in stream storage. The property has 117 units (1,000 L per unit) of the Balmoral 2 Scheme, with adequate on farm tank storage. A recently reconsented in stream storage dam is fed by a natural spring, and can provide additional stock and washdown water if required.

The farm is well troughed, with at least one trough in every paddock.

6.6. Effluent Management

The farms have brand new (built 2025) lined effluent ponds with leak detection. Consent is adequate for intended cow numbers, with the consent for 1100 cows through to 2034.

6.7. Infrastructure

The property has a range of sound infrastructure including:

- Two Dairy Sheds
 - 54-bail rotary dairy with DeLaval plant, automatic cup removers, in bail feeding and DTS milk hub and drafting system (sold as is)
 - 42-aside herringbone with Read plant
 - Each has a recently completed lined effluent pond and in ground infrastructure, and both sheds have modern snap chill milk chillers (installed 2018 and 2019) and diesel generators.
- Four houses, all are healthy homes compliant, have log burners and all but the three bedroom house had their exteriors painted in 2024
 - Four bedroom plus office managers house with double garage
 - Three bedroom cottage
 - Three bedroom villa with double garage and mature gardens
 - Three bedroom house with single garage
- A good range of ancillary buildings and facilities including a comprehensive workshop, cattle yards, silage pit, rock quarry and good calf rearing facilities.

The development budget allows for \$120,000 for improvements to the four houses and \$50,000 for upgrades to the dairy shed.

6.8. Feed budget

A feed budget has been produced with the milk production targets in mind, with conservative estimations of pasture growth and optimistic feed demands. It allows for the inclusion of up to 190 kgN/ha to support growth, and the inclusion of imported supplementary feeds to meet cow energy requirements and support milk production. This system is in line with the current one implemented on other Roger Dickie properties.

6.9. Calendar of events

The seasonal calendar of events will be implemented through on farm management tools such as feed budgets, prescribed round lengths, feed on hand and pasture cover targets, regular reporting, adherence to the veterinarian supplied animal health plan, industry best practice and through the development and implementation of a Farm Policy Manual.

7. Forecast

7.1. Initial investment

The total initial investment is \$14,533,060.00. This is broken down in the following sections to detail the land, livestock, plant & machinery and farm development required.

7.1.1. Land

Moir Farm	Price
Total land price	\$10,251,050.00
Price per hectare	\$23,274.57
Price per kgMS based on forecasted 2025/26	\$26.97

7.1.2. Livestock

Livestock	Tally	Price/head	Total
Cows	805	\$2,500.00	\$2,012,500.00
In calf heifers	195	\$1,800.00	\$351,000.00
Yearling heifers	200	\$1,100.00	\$220,000.00
Total			\$2,583,500.00

Based on recent herd valuations and current market conditions these contracted prices are good buying for livestock and under market price by over \$500k.

7.1.3. Plant, Equipment and Machinery

Below is a summary of plant and machinery to be purchased in the first year of operations

Plant		
Tractor	\$260,000	X2 includes FEL and accessories
Silage wagon	\$55,000	Silage wagon and bale feeder
Motorbikes	\$100,000	2x 4 wheeler and 6x 2 wheelers
Mower	\$30,000	Two mowers
Tip trailer	\$25,000	
Vehicles	\$65,000	Ute for manager and small 4x4 for calf rearing
Cow collars	\$209,000	For breeding and animal health management
Miscellaneous	\$75,000	Includes calf rearing gear, tools etc
Total	\$819,000	

7.1.4. Farm Development Budget

The total budgeted capital cost for development and set up is \$816,510.00. The farm is well set up, has a strong regrassing and fertiliser history as well as recent upgrades to the effluent system at both sheds, so there are no significant capital costs required in these areas.

Housing	\$120,000.00	Repairs and painting as required – no major renovations essential at this stage
Dairy Shed	\$50,000.00	
Lanes and tracks	\$25,000.00	
Fencing	\$25,000.00	
Water Reticulation	\$30,000.00	
Feed on hand	\$63,000.00	
Set up and Brokerage	\$541,510.00	Includes acquisition fee, Due diligence and initial farm takeover project management
Total	\$879,510.00	

7.2. Annual Milk solids

The forecast production for the next two seasons and into status quo is a step up from the current production on farm, as well as a lift on the regional average. This is due to a planned system change with the introduction of increased in shed feeding, removal of on farm winter grazing and improved efficiencies, pasture and mating management to maximise cow performance.

Year ending	2022/23*	2023/24*	2024/25*	2025/26 forecast*	2026/27	2027/28	SQ from 2028/29
Milk solids production	378,753	385,057	367,146	380,000	403,850	410,000	420,250
Peak cows milked	1000	990	965	968	985	1000	1025
kgMS/cow	379	389	380	393	410	410	410
kgMS/ha	1010	1027	979	1013	1102	1119	1147

*Historical production and forecast for current season with assumptions made on production per cow and per hectare based on information provided.

7.3. Revenues

	2026/27	2027/28	Steady State
Milk price/kgMS	\$9.25	\$9.00	\$8.50
Milk income	\$3,735,612.50	\$3,690,000.00	\$3,572,125.00
Livestock income	\$181,545.00	\$184,450.00	\$188,916.00
Total	\$3,917,157.50	\$3,874,450.00	\$3,761,041.00
Income per cow	\$3,976.81	\$4,079.45	\$3,669.31
Income per kgMS	\$9.70	\$9.45	\$8.95

7.4. Production costs

	2026/27	2027/28	Steady State
Investment Management & Administration	\$100,962.50	\$102,500.00	\$105,062.50
Accounting & Audit	\$15,000.00	\$15,000.00	\$15,000.00
Animal Health	\$108,350.00	\$110,000.00	\$110,000.00
Breeding	\$93,575.00	\$95,000.00	\$99,750.00
Calf Rearing	\$27,639.10	\$28,060.00	\$28,761.50
Cropping and Pasture Renewal	\$86,000.00	\$86,000.00	\$86,000.00
Electricity	\$39,400.00	\$40,000.00	\$42,000.00
Labour	\$536,751.00	\$536,751.00	\$562,681.00
Clothing allowance	\$5,625.00	\$5,625.00	\$5,625.00
Farm consultants	\$20,000.00	\$20,000.00	\$20,000.00
Fertiliser	\$230,000.00	\$250,000.00	\$250,000.00
Freight	\$30,000.00	\$30,000.00	\$30,000.00
Health and Safety	\$3,000.00	\$3,000.00	\$3,000.00
Insurance	\$30,000.00	\$30,000.00	\$30,000.00
Fertiliser spreading	\$15,000.00	\$15,000.00	\$15,000.00
Grazing	\$654,857.00	\$664,829.00	\$681,450.00
Rates	\$105,000.00	\$109,000.00	\$109,000.00
Repairs and Maintenance	\$123,125.00	\$125,000.00	\$131,250.00
Shed Expenses	\$29,550.00	\$30,000.00	\$30,750.00
Supplements and Concentrates	\$379,585.00	\$385,365.00	\$395,000.00
Valuations	\$5,000.00	\$5,000.00	\$5,000.00
Vehicle Expenses	\$30,000.00	\$30,000.00	\$30,000.00
Weed and Pest	\$7,500.00	\$7,500.00	\$7,500.00
Total Farm Expenses	\$2,675,919.60	\$2,723,630.00	\$2,792,830.00
Expenses/cow	\$2716.67	\$2723.63	\$2,724.71
Expenses/kgMS	\$6.63	\$6.65	\$6.65
Expenses as % of GFI	68%	70%	74%

7.5. Operating Surplus

	2026/27	2027/28	Steady State
Operating surplus	\$1,241,237.90	\$1,150,820.00	\$968,211.00
Operating surplus/kgMS	\$3.07	\$2.81	\$2.30

7.6. Taxable income

Assuming term debt of 50% of total initial investment, at \$7,266,530.00 at an interest rate of 6.0% for years one and two, increasing to 8.0% for Steady State. Assumes no capital repayment in the first two years. Depreciation estimate calculated as per schedule, and taxation at company tax rate of 28%.

	2026/27	2027/28	Steady State
Term debt interest	\$435,991.80	\$435,991.80	\$581,322.40
Depreciation estimate	\$102,280.00	\$90,286.40	\$79,718.03
Taxable income	\$702,966.10	\$624,541.80	\$307,170.57
Tax	\$196,830.51	\$174,871.70	\$86,007.76
Net surplus	\$506,135.59	\$449,670.10	\$221,162.81
Net surplus/kgMS	\$1.25	\$1.10	\$0.53

7.7. Budget discussion

The general assumption made in this report is that there will be no material changes to the operation, competitive activity, industry structure, exchange rates and general industry conditions and environments in which the farm operates.

7.7.1. Business Income comments

The payout has been budgeted on \$9.25 for 2026/27, \$9.00 in 2027/28 and \$8.50 for Steady State years per kilogram of milk solids. This reflects the current forecasted milk price ranges from milk supply companies, agricultural economists and rural lenders, and is aligned with current milk futures markets.

7.7.2. Business Expenditure Comments

- Fertiliser costs allow for the use of 190 kgN/ha, and maintenance fertiliser for P, K and S, though ongoing soil testing and nutrient budgeting will influence the requirements for this.
- Supplements and concentrates are based on the budgeted imported supplement, and silage made on farm to allow for 600kg/head of an in shed blend, 400kgDM/head of silage and 25kg/head of straw/hay.
- Grazing costs work on the assumption that all mixed age cows are wintered off farm, and young stock are grazed off farm from weaning until returning farm for calving as in calf rising two-year-olds
- On farm cropping of 25ha of summer turnips and 45ha of new grass per annum. Yields of 8t/ha for turnips have been budgeted on and are believed to be readily achievable.
- Labour costs allow for six full time equivalents (FTE's) and 1.5 calf rearers for the spring period. Labour costs include ACC, protective clothing and other staff costs.
- Other expenses are budgeted based on a combination of farm actuals, regional averages and results from other farms in the Roger Dickie group running similar operating systems.

7.8. Sensitivity Analysis

The below table demonstrates the sensitivity to different levels of production and milk price on operating surplus. Assumption that other farm income and all expenses remain as forecast.

2026/27	Milk production	\$8.75	\$9.25	\$9.75
+5%	424,043	\$1,210,953.40	\$1,442,974.90	\$1,634,996.40
0	403,850	\$1,039,312.90	\$1,241,237.90	\$1,443,162.90
-5%	383,658	\$867,680.90	\$1,059,509.90	\$1,251,338.90
2027/28	Milk production	\$8.50	\$9.00	\$9.50
+5%	430,500	\$1,114,945.00	\$1,330,195.00	\$1,545,445.00
0	410,000	\$945,820.00	\$1,150,820.00	\$1,355,820.00
-5%	389,500	\$776,695.00	\$971,445.00	\$1,166,195.00
Steady State	Milk production	\$8.00	\$8.50	\$9.00
+5%	441,263	\$920,936.75	\$1,141,568.25	\$1,362,199.75
0	420,250	\$758,086.00	\$968,211.00	\$1,178,336.00
-5%	399,238	\$595,243.00	\$794,862.00	\$994,481.00

The below table demonstrates the sensitivity that different levels of milk production and increases in farm working expenses have on operating surplus. Assumption that farm income (including milk payout) remains as forecast.

2026/27	Milk production	Current expense budget	+3%	+7%
+5%	424,043	\$1,442,974.90	\$1,342,545.86	\$1,235,307.15
0	403,850	\$1,241,237.90	\$1,160,960.31	\$1,053,923.97
-5%	383,658	\$1,059,509.90	\$979,383.75	\$872,548.89
2027/28	Milk production	Current expense budget	+3%	+7%
+5%	430,500	\$1,330,195.00	\$1,248,332.35	\$1,139,182.15
0	410,000	\$1,150,820.00	\$1,069,111.10	\$960,165.90
-5%	389,500	\$971,445.00	\$889,889.85	\$781,149.65
Steady State	Milk production	Current expense budget	+3%	+7%
+5%	441,263	\$1,141,568.25	\$1,057,625.75	\$945,702.42
0	420,250	\$968,211.00	\$846,426.10	\$772,712.90
-5%	399,238	\$794,862.00	\$711,234.69	\$599,731.61

8. Dairy Industry

8.1. Dairy Outlook

Global milk production in the major export-regions (the “Big 7”: US, EU, New Zealand, Australia, Brazil, Argentina, Uruguay) is expected to grow modestly in 2025, with Rabobank forecasting

+0.8 % year-on-year for 2025 in these regions. Because production growth is modest (rather than booming) and many regions still have favourable feed supply conditions, the risk of a large oversupply is lower, supporting retention of elevated prices.

Some regions (notably New Zealand and the US) are supported by improving farm margins, weather-conditions and a weaker currency (for exporters) which helps make their exports more competitive.

On the demand side the signals are mixed: consumer confidence is weak in key markets (US, China), food service channels remain under pressure, and inflation/interest rates are weighing on discretionary consumption of dairy value-added products.

Trade & geopolitical risks remain elevated: tariff shifts, exchange-rate fluctuations, and changing trade flows all add uncertainty to global dairy trade.

Short-term (2025): Modest supply growth (~+0.8 % in Big 7) and relatively firm demand — supports elevated dairy commodity prices.

Mid-term (late 2025 into 2026): A risk of supply growth accelerating (which could push towards more balanced or even surplus conditions), demand might remain soft — so market may move to more “balanced” state.

Price outlook for NZ: The 2025/26 season opened with economists forecasting from \$9.50 to \$10.25/kgMS with BNZ at the top of range and Rabobank/ANZ at the lower end and Fonterra have a wide forecast range of \$9.00-11.00, with a \$10 midpoint. However as of December 2025, Fonterra have cut their range to \$8.50 to \$9.50 with a midpoint of \$9.00/kgMS. This drop in forecast is due to strong milk flows both domestically and internationally and a rising NZ Dollar. Global dairy trade and milk futures have also softened, but still sit in the range of \$8.50 to \$9.00 looking towards 2027/28. Fonterra forecasts are a good indication of expectations of payout from other processors, as they tend to show intention to match the Fonterra Farmgate milk price.

8.2. Open Country Dairies

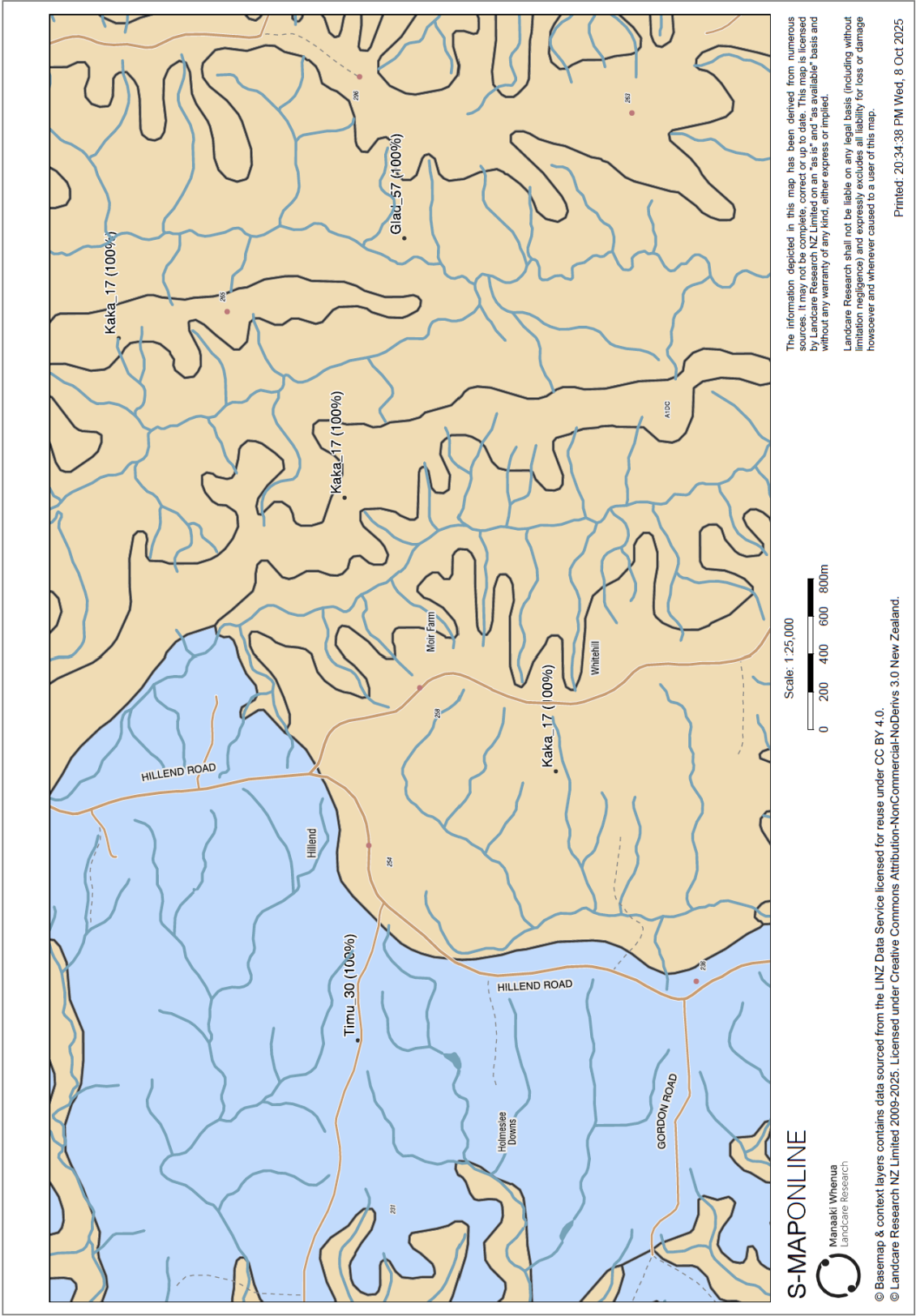
Open Country Dairy is a 100% New Zealand owned dairy ingredients company. They are described as New Zealand’s second-largest milk processor and the world’s second largest exporter of whole milk powder. They have approximately 1000 farm suppliers, and have processing and manufacturing sites in the key dairy regions of Waikato, Manawatu/Whanganui and Southland.

Open Country specialise in dairy ingredient production: whole milk powders, skim milk powders, milk proteins, milk fats, anhydrous milk fat (AMF), whey protein concentrates, cheeses (including cheddar, mozzarella). They export to over 50 global markets (Asia, Southeast Asia, Middle East, North Africa).

They are the largest independent dairy processor and provide an alternative option to Fonterra’s cooperative model where significant investment is required for share purchase to supply.

9. Appendices

9.1. Soil map



9.2. Soil information sheets



SOIL REPORT

Otago Regional Council

Timaru_30a.2

 Report generated: 8-Oct-2025 from <https://smap.landcareresearch.co.nz>

This information sheet describes the typical average properties of the specified soil to a depth of 1 metre, and should not be the primary source of data when making land use decisions on individual farms and paddocks. S-map correlates soils across New Zealand. Both the old soil name and the new correlated (soil family) name are listed below. Capture of the base soil information in this region was funded by Otago Regional Council, Fertiliser Association, Dunedin Rural Development and MWLR.

Soil Classification

Soil Classification:
 Mottled Fragic Pallic Soils (PXM)

Family Name:
 Timaru (Timu)

Sibling Name:
 Timaru_30a.2 (Timu_30a.2)

Soil profile material

Stoneless soil

Profile texture

silt

Stones/rocks

not applicable

Depth class (diggability)

Moderately deep (40 - 70 cm)

Origin

Loess

Soil material

schist rock

Previous soilname: Waitahuna deep silt loam, undulating

Soil Sibling Concept

This soil belongs to the Pallic soil order of the New Zealand soil classification. Pallic Soils have pale coloured subsoils, due to low contents of iron oxides, have weak soil structure and high density in subsurface horizons. Pallic Soils tend to be dry in summer and wet in winter. It is formed in a blanket deposit of silt sized windblown materials, from schist parent material.

The topsoil typically has silt texture and is stoneless. The subsoil has dominantly silt textures, with gravel content of less than 3%. The plant rooting depth is 40 - 70 (cm), due to a continuous hard pan that impedes root growth and oxygen supply.

Generally the soil is imperfectly drained with high vulnerability of water logging in non-irrigated conditions, and has moderate to low soil water holding capacity. Inherently these soils have a high structural vulnerability and a low N leaching potential, which should be accounted for when making land management decisions.



Fragic
 Pallic

About this publication

- This information sheet describes the *typical average properties* of the specified soil.
- For further information on individual soils, contact Landcare Research New Zealand Ltd: www.landcareresearch.co.nz
- Advice should be sought from soil and land use experts before making decisions on individual farms and paddocks.
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Timaru_30a.2 (Waitahuna deep silt loam, undulating)

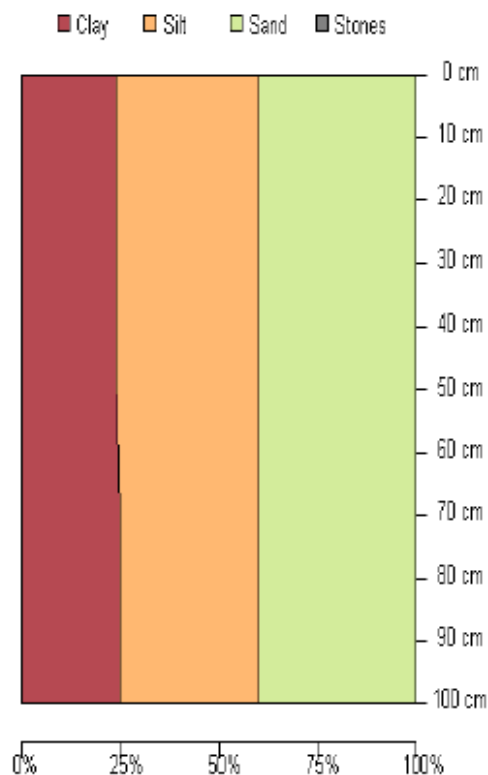
Soil horizons

Characteristics of functional horizons in order from top to base of profile:

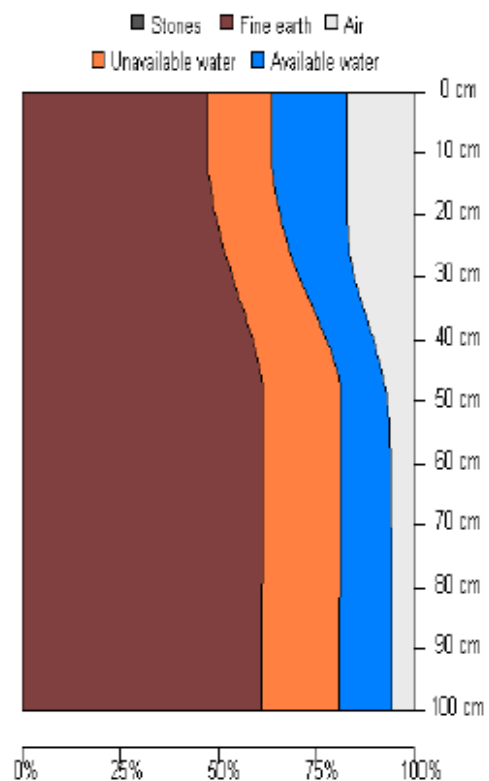
Functional Horizon	Thickness	Stones	Clay*	Sand*	Permeability
Loamy Weak	15 - 25 cm	0 %	18 - 30 %	30 - 50 %	rapid
Loamy Weak	10 - 20 cm	0 %	18 - 30 %	30 - 50 %	moderate
Loamy Fine Firm	15 - 25 cm	0 %	18 - 30 %	30 - 50 %	moderately slow
Loamy Coarse Firm	30 - 60 cm	0 %	20 - 30 %	30 - 50 %	impermeable

* clay and sand percent values are for the mineral fines (excludes stones). Silt = 100 - (clay + sand)

Texture



Water Retention



The values for the graphs above have been generated from horizon and pedotransfer data. These values have then been splined to create continuous estimates of soil water holding capacity and particle size distribution the soil profile. These curves express the particle size distribution and water retention of the soil however there may be barriers to rooting depth that are not necessarily represented in these properties directly. It is advisable to check the potential rooting depth and rooting barrier fields in the soil physical properties section on page three of this factsheet.

Timaru_30a.2 (Waitahuna deep silt loam, undulating)

Soil physical properties

Depth class (diggability) Moderately deep (40 - 70 cm)	Texture profile Silt	Drainage class Imperfectly drained
Potential rooting depth 40 - 70 (cm)	Topsoil stoniness Stoneless	Permeability profile Moderate over slow
Rooting barrier Pan	Topsoil clay range 18 - 30 %	Depth to slowly permeable horizon 40 - 70 (cm)
Depth to hard rock No hard rock within 1 m		Permeability of slowest horizon Slow (< 4 mm/h)
Depth to soft rock No soft rock within 1 m		Aeration in root zone Limited
Depth to stony layer class No significant stony layer within		

Profile available water			Dry bulk density	
(0 - 30cm or root barrier)	(0 - 60cm or root barrier)	(0 - 100cm or root barrier)	topsoil	subsoil
High (52 mm)	Moderate (82 mm)	Moderate to low (82 mm)	1.25 g/cm ³	1.50 g/cm ³

Soil chemical properties

Topsoil P retention
Low (21%)

Soil management factors

Vulnerability classes relate to soil properties only and do not take into account climate or management

Soil structure integrity	Contaminant management	Water management
Structural vulnerability High (0.67)	N leaching vulnerability Low	Water logging vulnerability High
Pugging vulnerability not available yet	P leaching vulnerability not available yet	Drought vulnerability - if not irrigated Moderate
	Dairy effluent (FDE) risk category C if slope > 7 deg otherwise B	Bypass flow Medium or high
		Hydrological soil group D

Relative Runoff Potential

Slope	0-3°	4-7°	8-15°	16-25°	>25°
Risk	M	M	H	VH	VH

SINDI - Soil quality Indicators

SINDI - Soil Quality Indicators

A suite of soil quality indicators is available from <http://sindi.landcareresearch.co.nz/>

- Compare your soil with information from our soils databases.
- Assess the intrinsic resources and biological, chemical and physical quality of your soil
- See how your soil measures up against current understanding of optimal values.
- Learn about the effect each indicator has on soil quality and some general management practices that could be implemented to improve soil quality.

Gladstone_57a.1

 Report generated: 8-Oct-2025 from <https://smap.landcareresearch.co.nz>

This information sheet describes the typical average properties of the specified soil to a depth of 1 metre, and should not be the primary source of data when making land use decisions on individual farms and paddocks. S-map correlates soils across New Zealand. Both the old soil name and the new correlated (soil family) name are listed below.

Capture of the base soil information in this region was funded by Otago Regional Council, Fertiliser Association, Dunedin Rural Development and MWLR.

Soil Classification

Soil Classification:

Acidic Orthic Brown Soils (BOA)

Family Name:

Gladstone (Glad)

Sibling Name:

Gladstone_57a.1 (Glad_57a.1)

Soil profile material

Soil with stones (non contra:

Profile texture

silt

Stones/rocks

schist rock

Depth class (diggability)

Moderately deep (45 - 90 cm)

Origin

Colluvium

Soil material

schist rock

Previous soilname: Tuapeka moderately deep silt loam, hilly

Soil Sibling Concept

This soil belongs to the Brown soil order of the New Zealand soil classification. Brown Soils have a brown or yellow-brown subsoil below a dark grey-brown topsoil. The brown colour is caused by thin coatings of iron oxides weathered from the parent material. It is formed in weathered soil and rock material mantling slopes, from schist parent material.

The topsoil typically has silt texture and is moderately stony. The subsoil has dominantly silt textures, with gravel content of more than 3% but below 35% for most part of the soil. The plant rooting depth extends beyond 1m.

Generally the soil is well drained with very low vulnerability of water logging in non-irrigated conditions, and has moderate soil water holding capacity. Inherently these soils have a moderate structural vulnerability and a moderate N leaching potential, which should be accounted for when making land management decisions.



Allan Hewitt ©

Orthic
Brown

About this publication

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Gladstone_57a.1 (Tuapeka moderately deep silt loam, hilly)

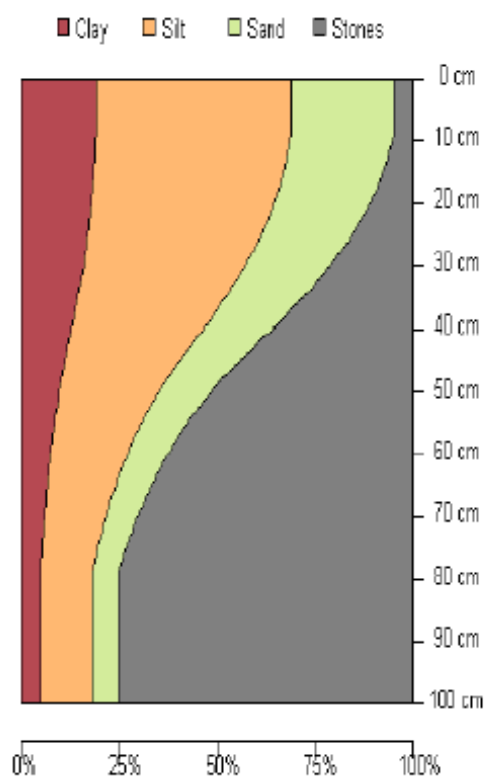
Soil horizons

Characteristics of functional horizons in order from top to base of profile:

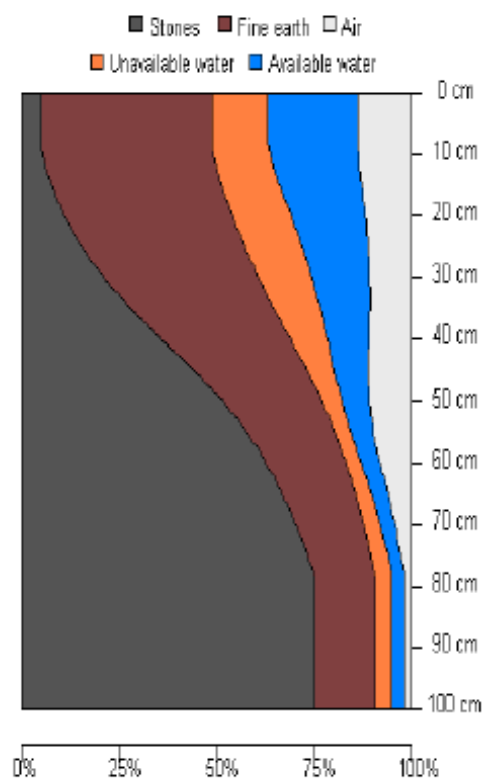
Functional Horizon	Thickness	Stones	Clay*	Sand*	Permeability
Stony Loamy Weak	10 - 20 cm	0 - 10 %	15 - 25 %	15 - 40 %	rapid
Stony Loamy Weak	20 - 30 cm	5 - 35 %	15 - 25 %	15 - 40 %	moderate
Very Stony Loamy Loose	15 - 25 cm	35 - 70 %	15 - 25 %	15 - 40 %	moderate
Extremely Stony Loamy	25 - 55 cm	60 - 90 %	15 - 25 %	15 - 40 %	moderate

* clay and sand percent values are for the mineral fines (excludes stones). Silt = 100 - (clay + sand)

Texture



Water Retention



The values for the graphs above have been generated from horizon and pedotransfer data. These values have then been splined to create continuous estimates of soil water holding capacity and particle size distribution the soil profile. These curves express the particle size distribution and water retention of the soil however there may be barriers to rooting depth that are not necessarily represented in these properties directly. It is advisable to check the potential rooting depth and rooting barrier fields in the soil physical properties section on page three of this factsheet.

Gladstone_57a.1 (Tuapeka moderately deep silt loam, hilly)

Soil physical properties

Depth class (diggability) Moderately deep (45 - 90 cm)	Texture profile Silt	Drainage class Well drained
Potential rooting depth Unlimited	Topsoil stoniness Moderately stony	Permeability profile Moderate
Rooting barrier No significant barrier within 1 m	Topsoil clay range 15 - 25 %	Depth to slowly permeable horizon No slowly permeable horizon
Depth to hard rock No hard rock within 1 m		Permeability of slowest horizon Moderate (4 - 72 mm/h)
Depth to soft rock No soft rock within 1 m		Aeration in root zone Unlimited
Depth to stony layer class Moderately deep		

Profile available water

(0 - 30cm or root barrier)	(0 - 60cm or root barrier)	(0 - 100cm or root barrier)
High (59 mm)	High (93 mm)	Moderate (118 mm)

Dry bulk density

topsoil	subsoil
1.00 g/cm ³	1.30 g/cm ³

Soil chemical properties

Topsoil P retention

Medium (36%)

Soil management factors

Vulnerability classes relate to soil properties only and do not take into account climate or management

Soil structure integrity	Contaminant management	Water management
Structural vulnerability	N leaching vulnerability	Water logging vulnerability
Moderate (0.55)	Medium	Very low
Pugging vulnerability	P leaching vulnerability	Drought vulnerability - if not irrigated
not available yet	not available yet	Moderate
	Dairy effluent (FDE) risk category	Bypass flow
	C if slope > 7 deg otherwise D	Medium
		Hydrological soil group
		B

Relative Runoff Potential

Slope	0-3°	4-7°	8-15°	16-25°	>25°
Risk	VL	VL	VL	VL	L

SINDI - Soil quality Indicators

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- Compare your soil with information from our soils databases.
- Assess the intrinsic resources and biological, chemical and physical quality of your soil
- See how your soil measures up against current understanding of optimal values.
- Learn about the effect each indicator has on soil quality and some general management practices that could be implemented to improve soil quality.

Kakahu_17a.1

 Report generated: 30-Oct-2025 from <https://smap.landcareresearch.co.nz>

Kaka_17a.1 (100% of the mapunit at location (1348458, 4886148), Confidence: Medium)

This information sheet describes the typical average properties of the specified soil to a depth of 1 metre, and should not be the primary source of data when making land use decisions on individual farms and paddocks. S-map correlates soils across New Zealand. Both the old soil name and the new correlated (soil family) name are listed below.

Capture of the base soil information in this region was funded by Otago Regional Council, Fertiliser Association, Dunedin Rural Development and MWLR.

Soil Classification

Soil Classification:

Acidic Firm Brown Soils (BFA)

Family Name:

Kakahu (Kaka)

Sibling Name:

Kakahu_17a.1 (Kaka_17a.1)

Soil profile material

Stoneless soil

Profile texture

silt

Parent Material

Stones/rocks
 not applicable

Depth class (diggability)

Deep (> 1 m)

Origin

Loess

Soil Sibling Concept

This soil belongs to the Brown soil order of the New Zealand soil classification. Brown Soils have a brown or yellow-brown subsoil below a dark grey-brown topsoil. The brown colour is caused by thin coatings of iron oxides weathered from the parent material. It is formed in a blanket deposit of silt sized windblown materials, from schist parent material.

The topsoil typically has silt texture and is stoneless. The subsoil has dominantly silt textures, with gravel content of less than 3%. The plant rooting depth extends beyond 1m.

Generally the soil is well drained with low vulnerability of water logging in non-irrigated conditions, and has high soil water holding capacity. Inherently these soils have a low structural vulnerability and a low N leaching potential, which should be accounted for when making land management decisions.



Allan Hewitt ©

**Firm
Brown**

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- Landcare Research shall not be liable on any legal basis (including without limitation negligence) and expressly excludes all liability for loss or damage howsoever and whenever caused to a user of this factsheet.

Kakahu_17a.1

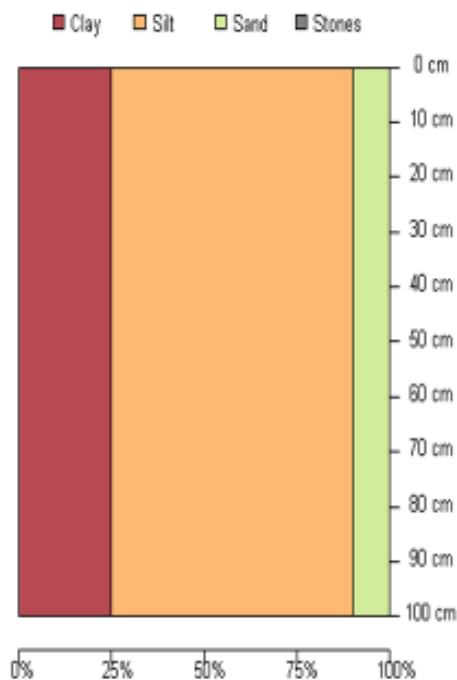
Soil horizons

Characteristics of functional horizons in order from top to base of profile:

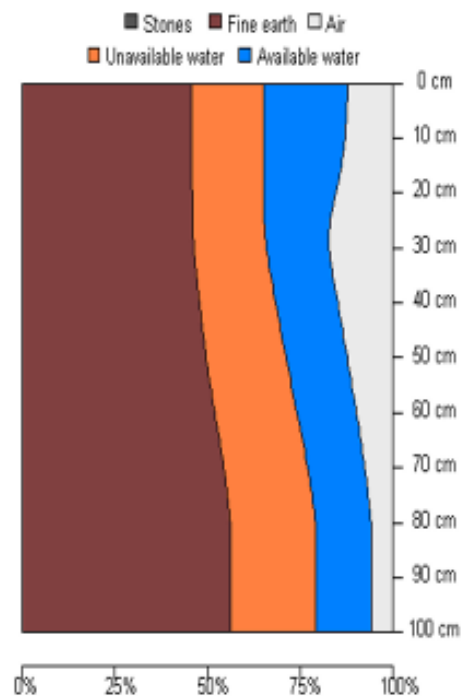
Functional Horizon	Thickness	Stones	Clay*	Sand*	Permeability
Loamy Weak	15 - 30 cm	0 %	20 - 30 %	5 - 15 %	rapid
Loamy Weak	5 - 15 cm	0 %	20 - 30 %	5 - 15 %	rapid
Loamy Weak	20 - 40 cm	0 %	20 - 30 %	5 - 15 %	moderate
Loamy Coarse Firm	15 - 60 cm	0 %	20 - 30 %	5 - 15 %	slow

* clay and sand percent values are for the mineral fines (excludes stones). Silt = 100 - (clay + sand)

Texture



Water Retention



The values for the graphs above have been generated from horizon and pedotransfer data. These values have then been splined to create continuous estimates of soil water holding capacity and particle size distribution the soil profile. These curves express the particle size distribution and water retention of the soil however there may be barriers to rooting depth that are not necessarily represented in these properties directly. It is advisable to check the potential rooting depth and rooting barrier fields in the soil physical properties section on page three of this factsheet.

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Soil physical properties

Depth class (diggability) Deep (> 1 m)	Texture profile Silt	Drainage class Well drained
Potential rooting depth Unlimited	Topsoil stoniness Stoneless	Permeability profile Moderate over slow
Rooting barrier No significant barrier within 1	Topsoil clay range 20 - 30 %	Depth to slowly permeable horizon 40 - 75 (cm)
Depth to hard rock No hard rock within 1 m		Permeability of slowest horizon Slow (< 4 mm/h)
Depth to soft rock No soft rock within 1 m		Aeration in root zone Moderately limited
Depth to stony layer class No significant stony layer within		

Profile available water

(0 - 30cm or root barrier)	(0 - 60cm or root barrier)	(0 - 100cm or root barrier)
High (61 mm)	Very high (111 mm)	High (171 mm)

Dry bulk density

topsoil	subsoil
1.00 g/cm ³	1.00 g/cm ³

Soil chemical properties

Topsoil P retention

Medium (43%)

Soil management factors

Vulnerability classes relate to soil properties only and do not take into account climate or management

Soil structure integrity	Contaminant management	Water management
Structural vulnerability	N leaching vulnerability	Water logging vulnerability
Low (0.49)	Low	Moderate
Pugging vulnerability	P leaching vulnerability	Drought vulnerability - if not irrigated
not available yet	not available yet	Low
Septic tank installation category	Dairy effluent (FDE) risk category	Bypass flow
A1 if slope > 15 deg otherwise B3	D	High
		Hydrological soil group
		C
		Relative Runoff Potential

Slope	0-3°	4-7°	8-15°	16-25°	>25°
Risk	VL	L	L	L	L

SINDI - Soil quality Indicators

SINDI - Soil Quality Indicators

A suite of soil quality indicators is available from <http://sindi.landcareresearch.co.nz/>

- Compare your soil with information from our soils databases.
- Assess the intrinsic resources and biological, chemical and physical quality of your soil
- See how your soil measures up against current understanding of optimal values.
- Learn about the effect each indicator has on soil quality and some general management practices that could be implemented to improve soil quality.

9.3. Effluent discharge map

