

Fairlea Farm Reservoir:

Water security as a financial asset

THE STRATEGIC VALUE OF WATER

The Fairlea Farm Reservoir project demonstrates that water security is not merely a hedge against drought, but a critical financial asset that drives profitability, production stability, and a higher property valuation.

Prior to dam construction, the farm operated under a high-risk split calving system vulnerable to summer drought. After implementing Riley’s dam solution, the farm was able to simplify its entire system and quantify the value of the water.

IMPROVEMENTS AT A GLANCE

Key performance indicator (KPI)	Before dam	After dam	Change
Annual milk solids (KG MS)	550,000 KG MS (dry year)	650,000 KG MS+	~18% Increase
System complexity	Split calving (high risk/high labour)	Spring calving (simplified/optimised)	~13% ROI (system change basis)
Annual feed offset value	N/a	\$495,000	~8% (offset basis)
Pasture growth	Inconsistent/ drought-affected	~17% Increase in DM/HA	Improved resilience



LOCATION
Central Hawkes Bay

PROJECT TEAM
James Beaumont,
Titus Smith,
Oscar Barrett-Garnier,
Vaughan Martin

THE CHALLENGE: MITIGATING HIDDEN OPERATIONAL COSTS

Fairlea Farm, part of Bel Group's farm portfolio, milking 1,400 spring cows, faced the systemic risks common to farms with unreliable water supply: vulnerability to summer dry events. This risk resulted in significant hidden costs:

- **Systemic instability:** The farm was forced to run a split calving model – a complex system designed to reduce grazing demand during volatile summers, but demanding on labour and management.
- **Hidden losses:** Dry periods were detrimental to pasture health, subsequent subdued grass growth in the following season, and the costly necessity to destock and restock if feed runs out.
- **Talent drain:** As noted by Bel Group, the difficulty in attracting and retaining staff due to "stress, fatigue, and work load" associated with managing drought volatility was an unmeasurable, yet critical, commercial risk.

THE RILEY SOLUTION: FULL-SERVICE ASSET MANAGEMENT

Riley managed the entire reservoir project – a Turkey Nest Dam – from concept to handover, to provide the security needed to change the farm's operating model and improve resilience in dry years.

Quantified value of water

The dam removed speculation from the farm's water supply, allowing Bel Group to move to the simpler, more profitable spring calving system. The financial benefits were measured in direct feed replacement and overall system efficiency:

- **Feed offset:** The farm used 1,100,000 m³ of water in the last season, which is calculated to equal 1,100 tonnes of Dry Matter (DM). At an average purchased feed cost of \$0.45 per kg DM, this represents a direct feed offset value of \$495,000 for the farm.
- **Pasture growth:** The resulting consistent soil moisture led to an estimated 2.58t/Ha of extra DM, or a 17% increase in grass growth across the farm.

Return on Investment (ROI)

The ROI calculation confirms the dam is a high-performing investment, exceeding the cost of capital:

- **ROI (Feed Offset Basis):** 8.25%
- **ROI (Optimum System/Milk Production Basis):** 13% (based on moving to the optimised farm system and achieving \$8/kgMS payout).



STRATEGIC ASSET SECURITY AND FUTURE GROWTH

The true measure of the dam is the strategic confidence it provides for Bel Group's multi-farm operation:

- **Board confidence:** "It's the security that allows us to make confident decisions. Having Riley manage the asset gives us the confidence to look at investment opportunities in the future."
- **Property valuation:** While the added value of the dam roughly equalled the capital introduced, "a farm that has water security and summer resilience has a greater value than not having." The property's value is now less speculative and less dependent on the risk appetite of a potential purchaser.
- **Future planning:** The success of the Fairlea dam has provided the catalyst for Bel Group to invest in upgrading infrastructure across its wider 1200ha of land portfolio to capture similar gains in pasture growth from water.

Riley's commitment to asset assurance

Riley ensures this asset remains secure by providing a full-service, post-construction management system appropriate to the dam's potential impact classification:

- **Long-term O&M:** We train farm staff to undertake the required monthly visual checks for compliance and optimal performance.
- **Investor reporting:** Our annual inspection report (where required), signed off by a Recognised Engineer, provides the board with vital comfort and security, reinforcing the wellbeing of the asset to investors and stakeholders.

Riley: Delivering Confidence. Enabling Growth.

