

Future of Dairy in Selwyn/Waihora

- Working together for a richer Canterbury

Today's conversation

- So who is Fonterra
- The global opportunities
- Some local realities
- Why we should feel confident (or at least why all is not lost!)
- Supporting Te Waihora

Our vision is to be the natural source of dairy nutrition for everybody, everywhere, every day



A major player

- World's number one milk processor in 2011 (IFCN)
- Process more than 20 billion litres globally per year
- Leading dairy ingredients provider, supplying products to more than 100 markets
- Own leading dairy brands in Australia/NZ, Asia Middle East and Latin America
- Revenues of \$19.9 billion (2011)
- 15,800 staff globally



**WORLD'S LEADING DAIRY EXPORTER
– A THIRD OF GLOBAL DAIRY TRADE**

...reaching key regions across the globe



Standard dairy ingredients...

Whole Milk Powder

Cheese

Casein/ates

Lactose

Anhydrous Milk Fat

Butter

Whey Powders

Whey

Liquid Milks and Creams

Skim Milk Powder

Leading consumer brands

SOME OF OUR LEADING BRANDS

Australia / New Zealand



Asia / Africa / Middle East



Latin America



Dairy expertise from cow to customer



On farm



Lab and technical



Origin sites



Origin stores



Origin ports



Global freight



Destination ports and stores

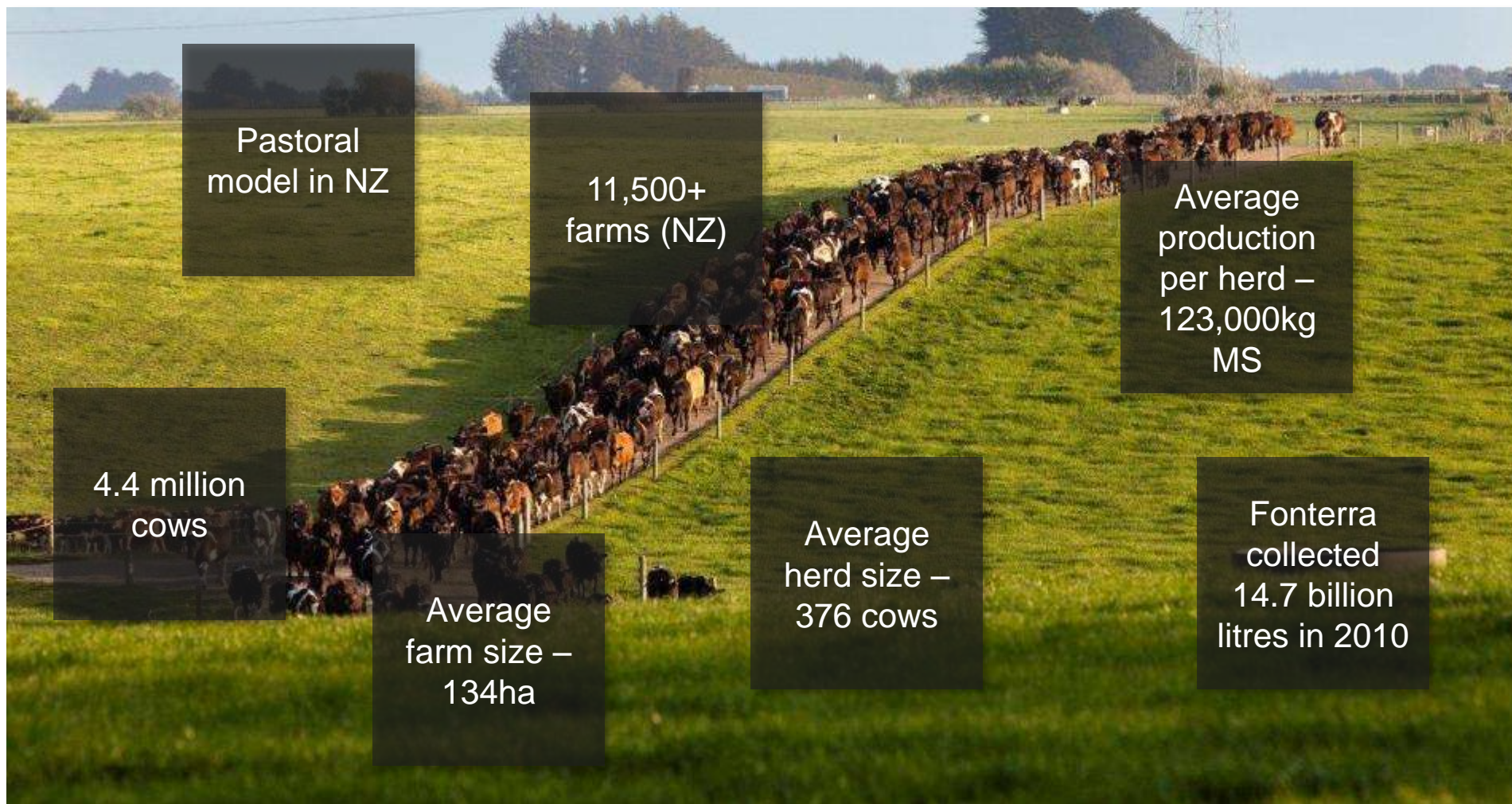


Major customers



Millions of consumers

Pastoral base in New Zealand

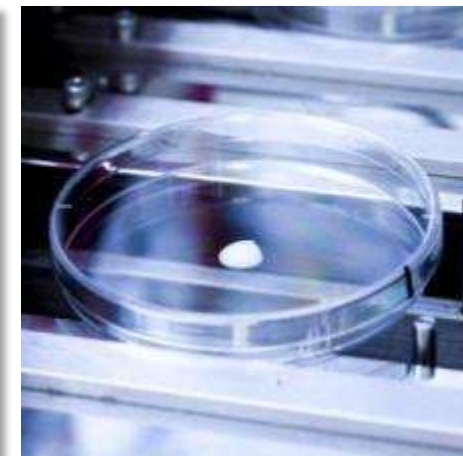


Complemented by international sourcing



...with quality testing and trace back systems...

- Highest quality milk, highest quality ingredients.
- World-best practice processes throughout our supply chain – control of product quality from farm to customer.
- Full traceability and quality assurance.
- Manufacturing sites certified to ISO9001:2000 standards.
- Laboratory product testing – ISO7025 accredited.

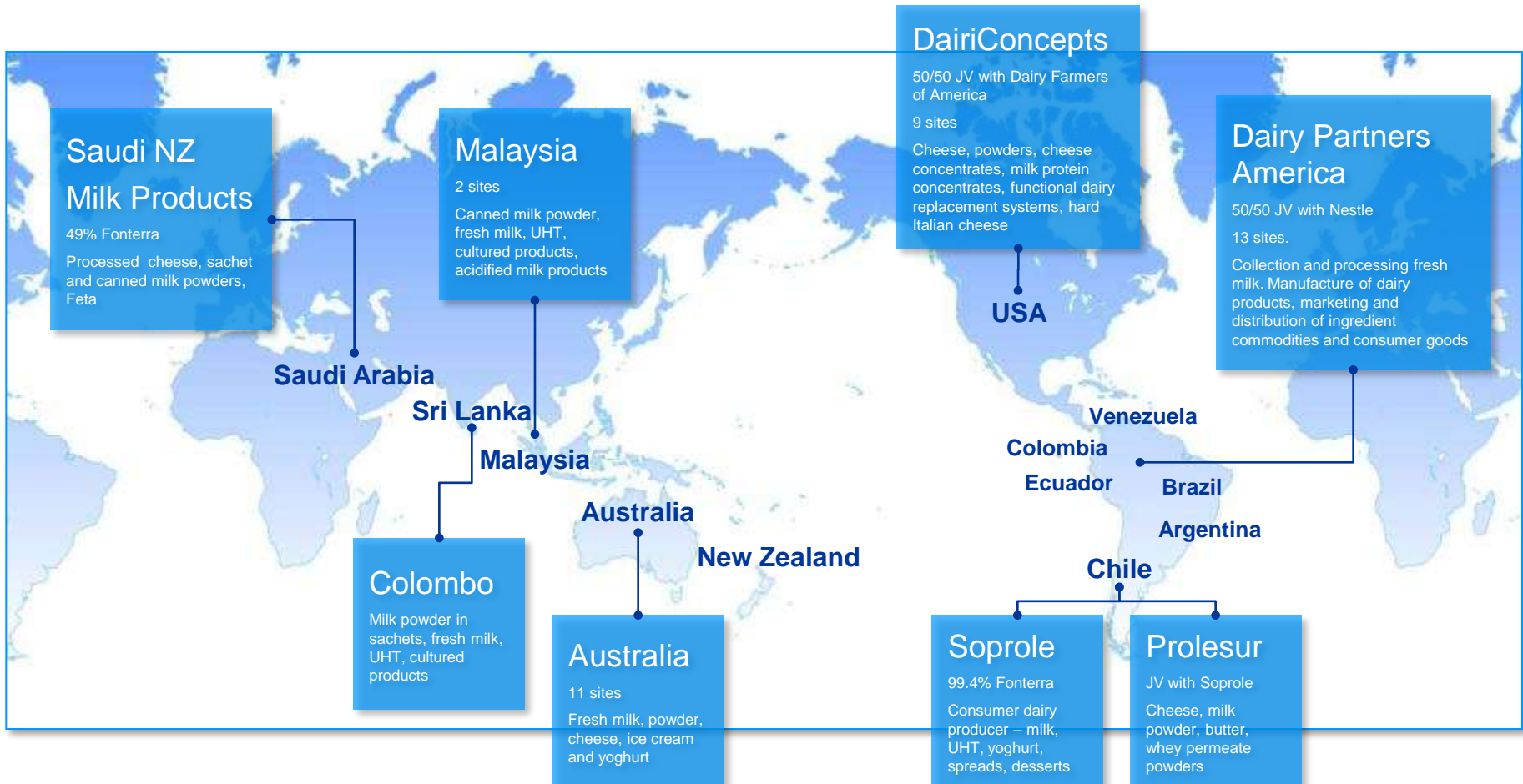


...with strengths across New Zealand...

- Milk processing sites
- Other processing sites



...and flexibility around the world



What this means for NZ today

- Record \$10.6 billion in milk payments and dividends
 - \$2.4 billion more than in 2010
 - \$1.5 billion more than Fonterra's previous best year in 2008
- As a Co-operative 100 per cent owned and controlled by NZ farmers, money flows right back into the local economy
- Farmers spend around 50 cents out of every dollar earned on locally produced goods and services (NZIER analysis)

What this means for Canterbury

- **Canterbury**

- 818 farms
- 230M kg MS
- @ \$7.60*
- \$1.75B (vs 1.4B last year)

- **Employment**

- Total Fonterra employees: 950
- 2.5% of regional employment
- 1: 5 jobs in Waimate
- 1:12 jobs Hurunui

- **Selwyn**

- 154 farms
- 40M kg MS
- @ \$7.60*
- \$300M

* Milk price excludes GST and Dividend

Supporting our communities



Over 1 million healthy school breakfasts per year in low-decile schools – 26 schools in Canterbury



Reaches over 700 local schools and 45,000 students per year (50 local schools, 2800 students)



Partnership between Fonterra and Conservation Volunteers to enhance and protect waterways and wetlands, FY 12 priorities to include Te Waihora

**Canterbury
Earthquake**

\$6M - shareholder and staff contribution
24 ERT deployed for 2 rotations
300,000 litre milk train to fill Mt Pleasant reservoir, 34 x 20,000 litre rail pods

But what about the challenges?

Some food for thought...

NOT WITHOUT
CHALLENGES...

Increasing demand

- 1. Soaring global population**
 - Strongest growth in Asia
 - Rising food consumption
 - Increased life expectancy
- 2. Urbanisation**
 - Changing diets
 - More processed foods
- 3. Rising income**
 - Better food
 - Higher protein consumption
- 3. Alternative uses**
 - Bio-fuels

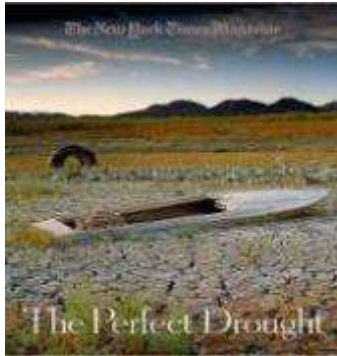


Constrained supply

- 5. Land**
 - Urbanisation
 - Degradation
- 6. Water**
 - Climate change
 - Pollution & salinity
- 7. Farm management**
 - Competing vocations
- 8. Transport & Logistics**
 - Poor Infrastructure in emerging economies
 - Energy costs

Long-term fundamentals for agriculture remain solid

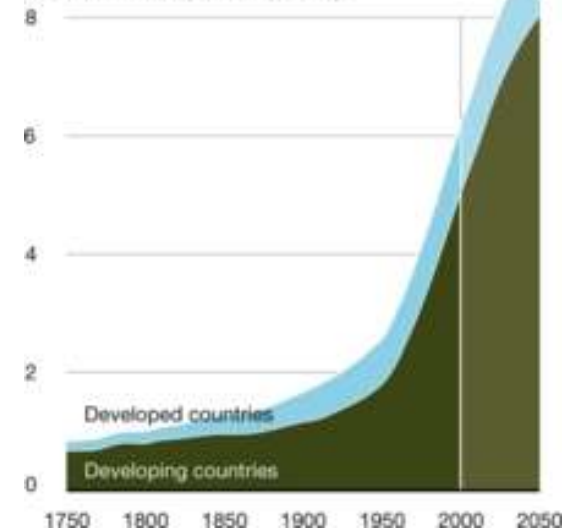
The sustainability challenge is complex and multi-dimensional



The Feeding of the Nine Billion

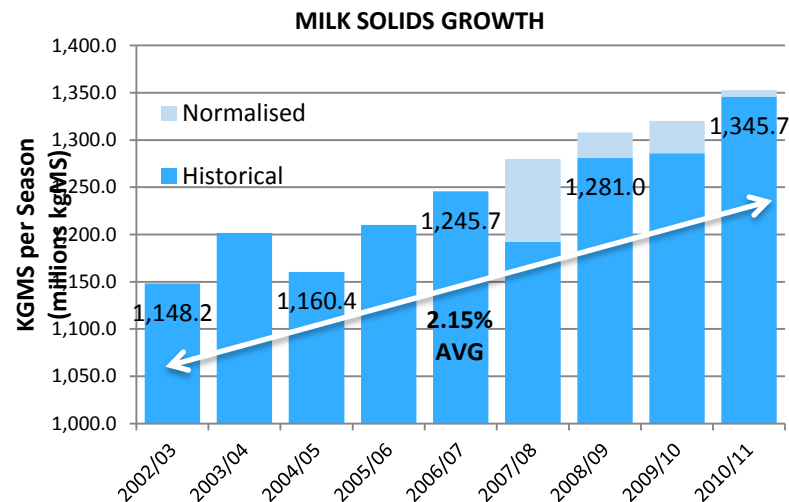
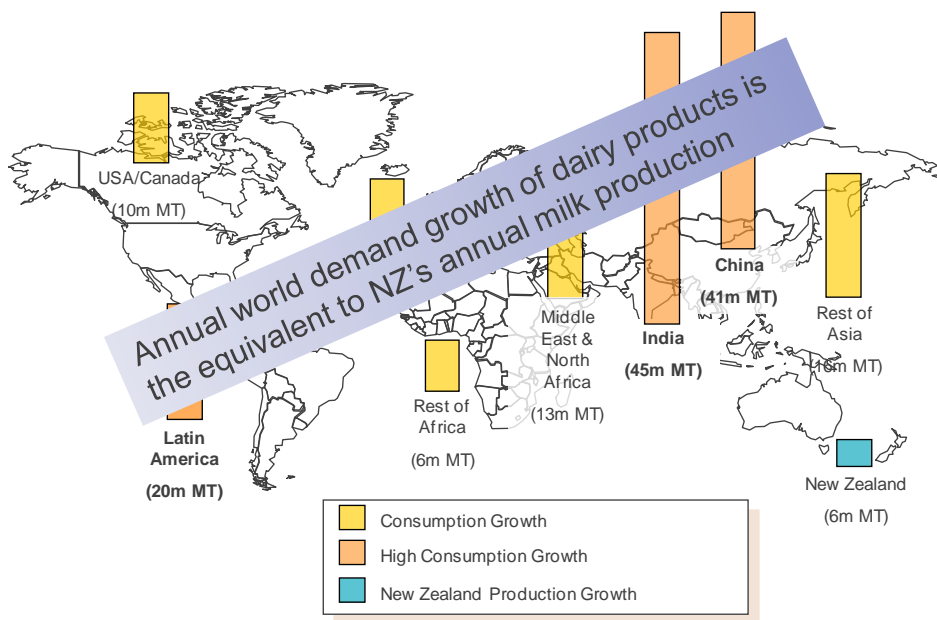


Global population, estimates and projections (billions)



Huge opportunity

Estimated Global Growth 2009-2019



- Global food demand is increasing to meet the needs of a **wealthier and growing population**. It is driving significant forward demand for dairy.
- Our challenge is to serve that demand in a sustainable way. To do that we require a NZ licence to operate in and a mandate to grow. The core SER mission is to **enable sustainable growth in milk production**.

**Greenpeace Block
Palm Kernel Feed
Shipment**

**A nasty
financial shock**

**Defending the
indefensible**

**Farmers
declare war
on ETS**

**More chemicals,
more cows and
more climate
change**

**Agriculture in
ETS shaping up
as a key election
issue**

**The truth about
farmers and
emissions trading**

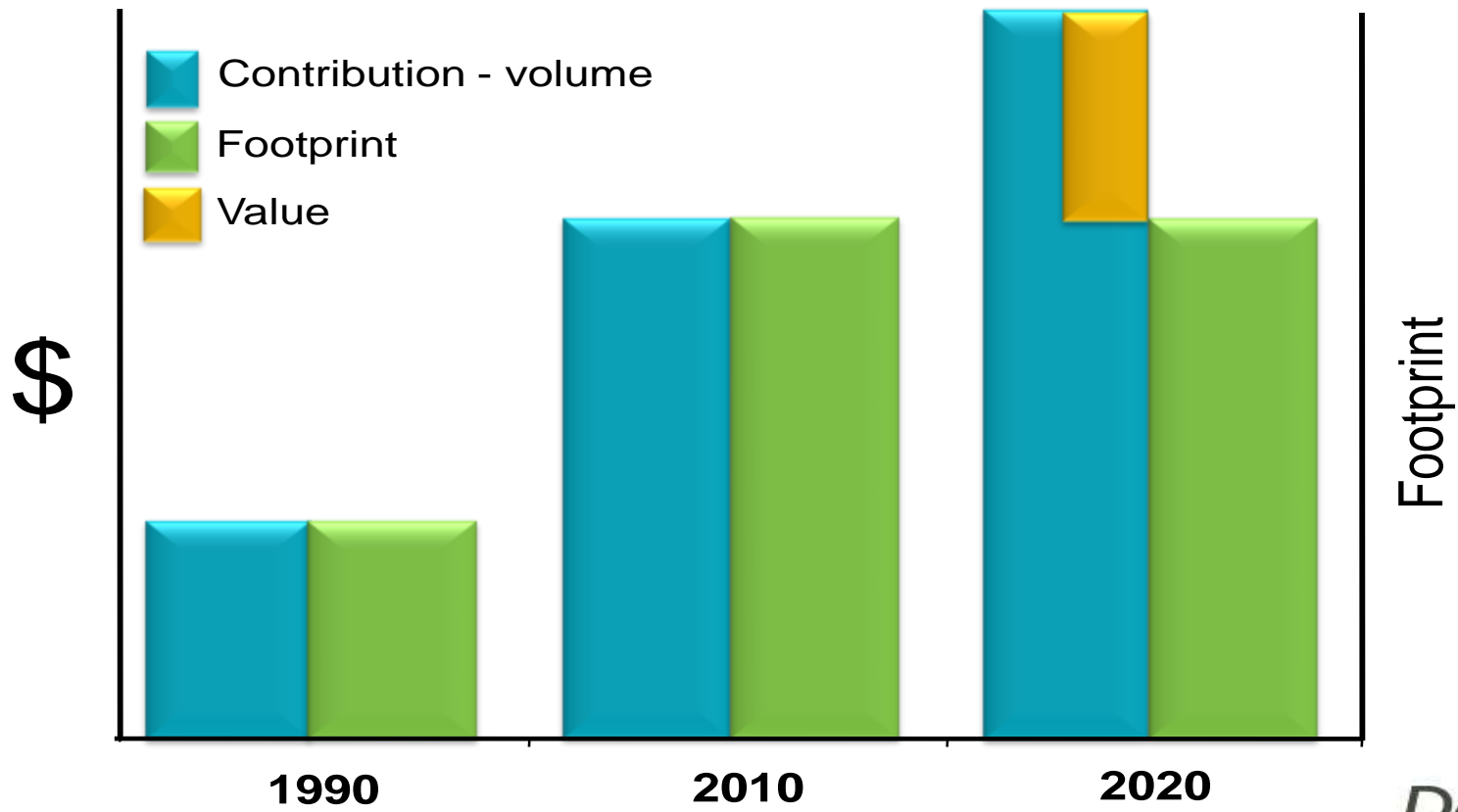


**Phil 'Goffs' the farmers:
Agriculture alienated**

The challenge – how to increase production and lighten our footprint



Contribution to NZ Inc and Footprint



Its all about water

- Access to water underpins growth strategy
- Need to demonstrate 'responsible water use'
- Water Supply
 - Demonstrate efficiency - every litre used well
 - Allocate water to most appropriate land use
 - Minimise waste
- Water Quality
 - Demonstrate on farm activities that minimise impact of dairy
 - Clean Streams Accord
 - EFEY
 - Supply Fonterra

There is good news on the water front

- Clean Streams Accord
- Every Farm, Every Year
- Supply Fonterra
- Te Waihora investment



Clean Streams Accord: 2010/2011 Snapshot

Many gaps in effectiveness of metrics
BUT
Established accountability at farm level
Enabled Fonterra to get behind the farm gate







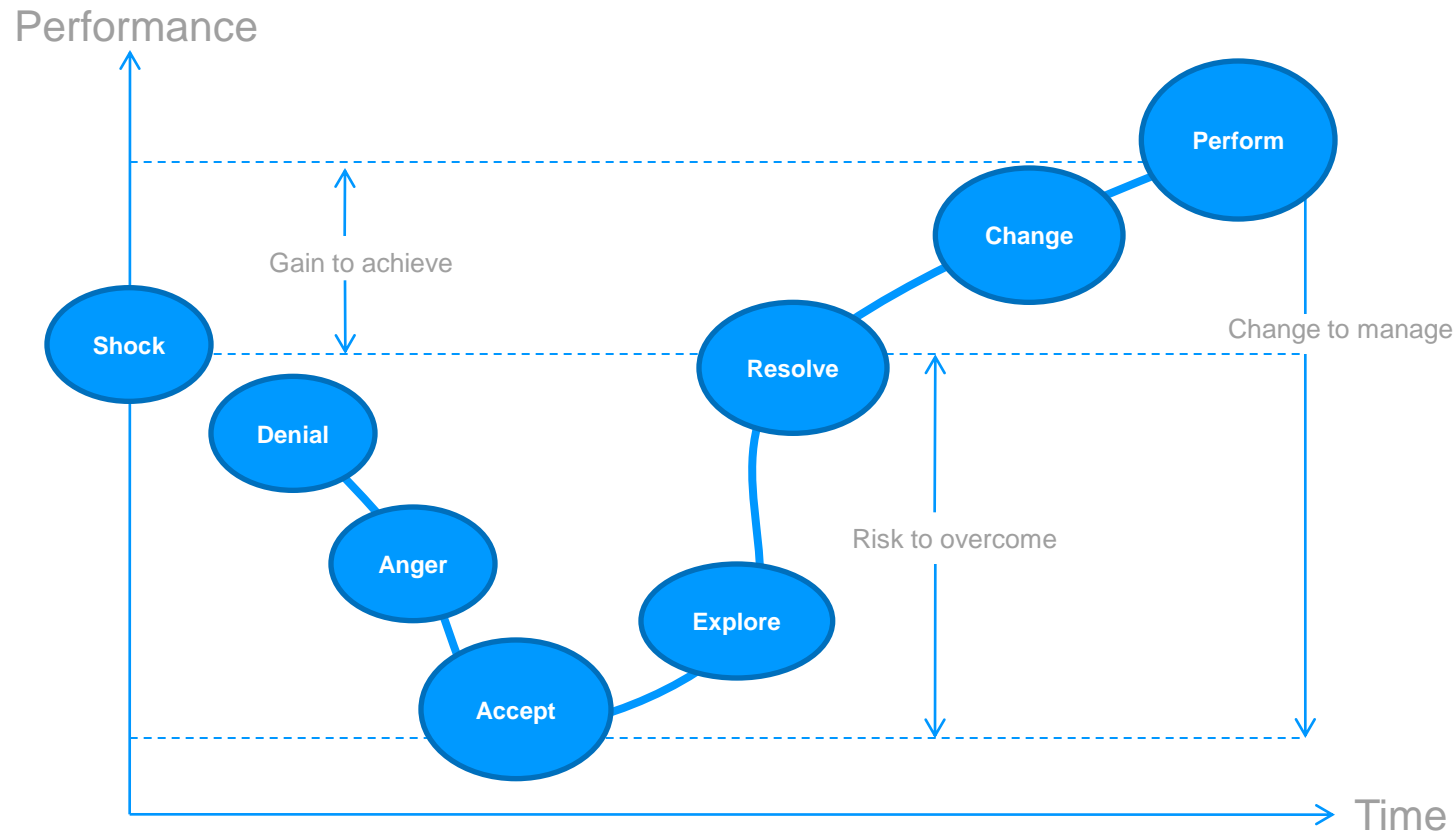
HELPING YOU MANAGE EFFLUENT EVERY DAY OF THE YEAR

Fonterra's Every Farm, Every Year Programme

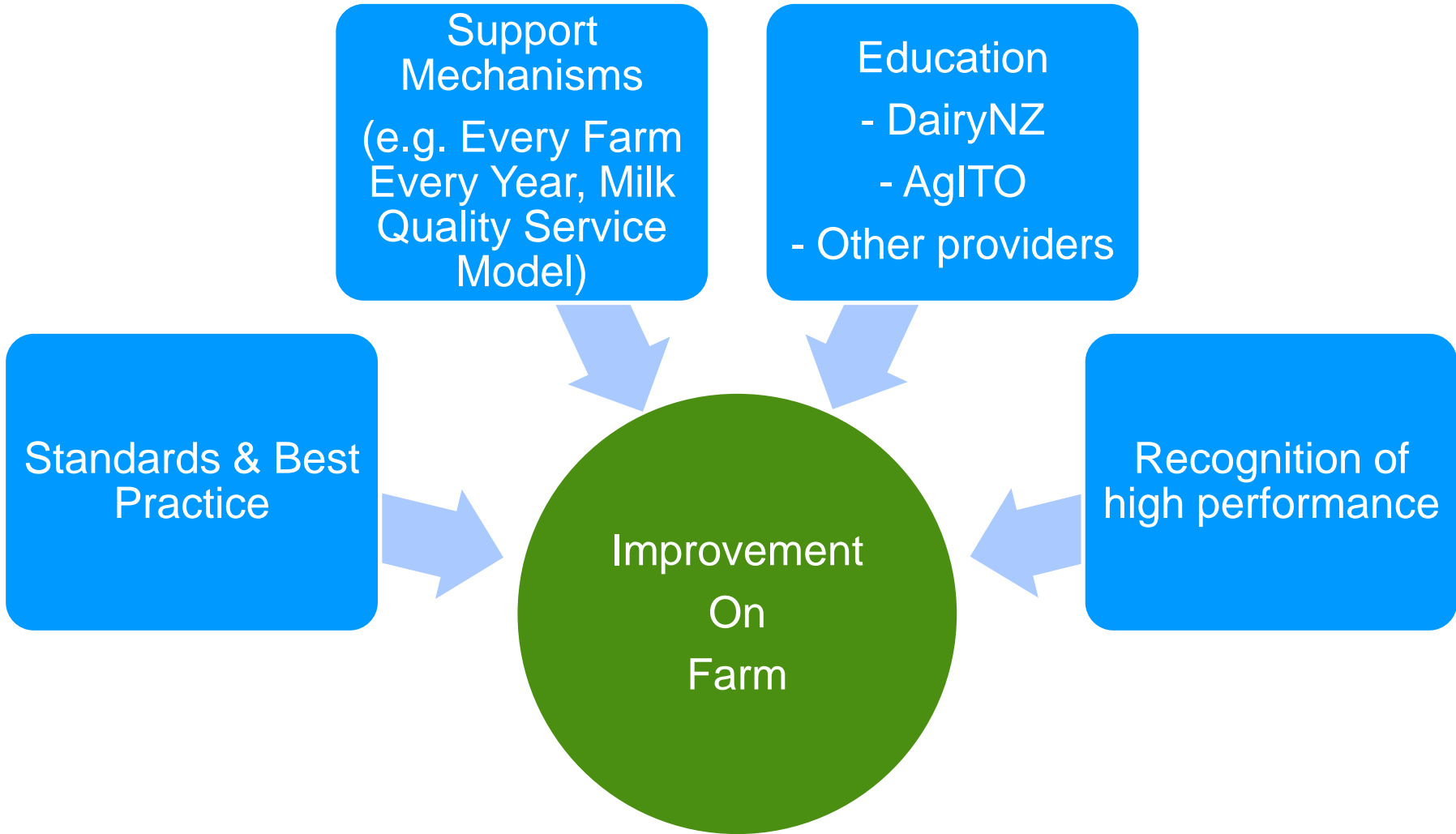
- Kicked off 1 August 2010
- 13 Sustainable Dairying Advisors nationwide
- Risk assessment on all 10,500 farms
- One-on-one consultation with all referrals
- Effluent Improvement Plans established for all farms at risk
- Selwyn: focus on 31 farmers moving from PA to resource consent to discharge, 23 have EIP in place



Sustainability requires change - moving from fear of change to desire for a better approach to business...



On-farm improvement model



Supply Fonterra

Sustainability

Food Safety

Effluent 

Nutrient Mgmt

Energy

Water, Animal Welfare, Plastics, Farm Dairy Assessment

Somatic Cells 

Hygiene Grades 

Standards

Support

Education

Standards

Support

Education

Support

Education

Standards

Support

Education

Standards

Support

Education

Standards

Support

Education

Rewards / Recognition

Awards

The future

- Our dairy farmers will know and accept what is required of them
- Investment in farm system will increasingly focus on water use efficiency / nutrient-loss mitigation
- High awareness of the sensitivity / value / water quality and quantity expectations of adjacent rivers, streams and ground water
- Improved understanding of interconnectedness from mountains to the sea

- This means:
 - Every supplier having compliant effluent management systems 365 days per year
 - Every supplier efficiently managing all nutrient inputs and reducing nutrient losses e.g. fertilizer plus dung and urine and sediment
 - Every supplier excluding stock from Accord waterways
 - Every supplier using every litre of water highly efficiently – minimising their water use
 - More suppliers considering feed pads, housed cows, N inhibitors, riparian planting, farm system changes (fewer cows, more production)

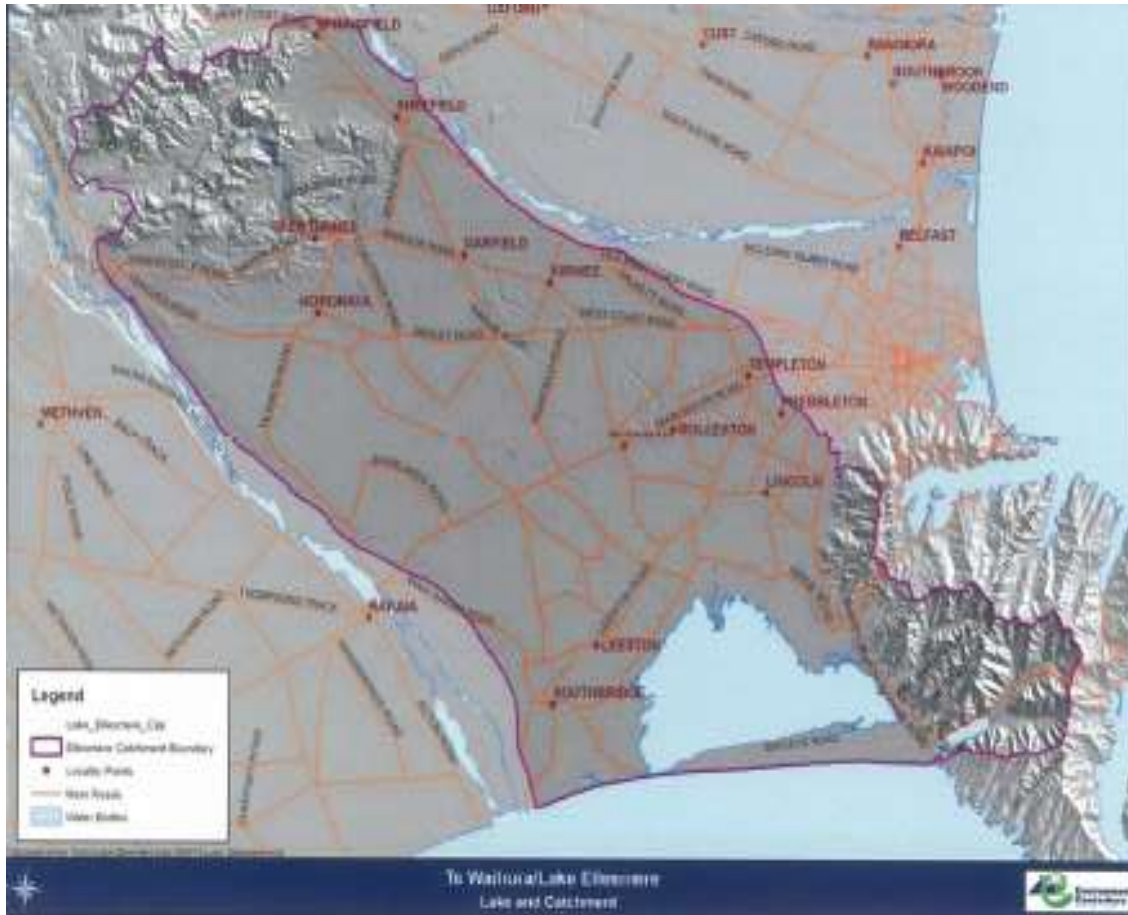
The cornerstones for success

- Clear, well understood standards and consequences
- Education of suppliers on how to achieve standards – mass extension and one-on-one
- Support and communication when issues do occur
- Disincentives/Incentives to drive long term, sustainable quality outcomes

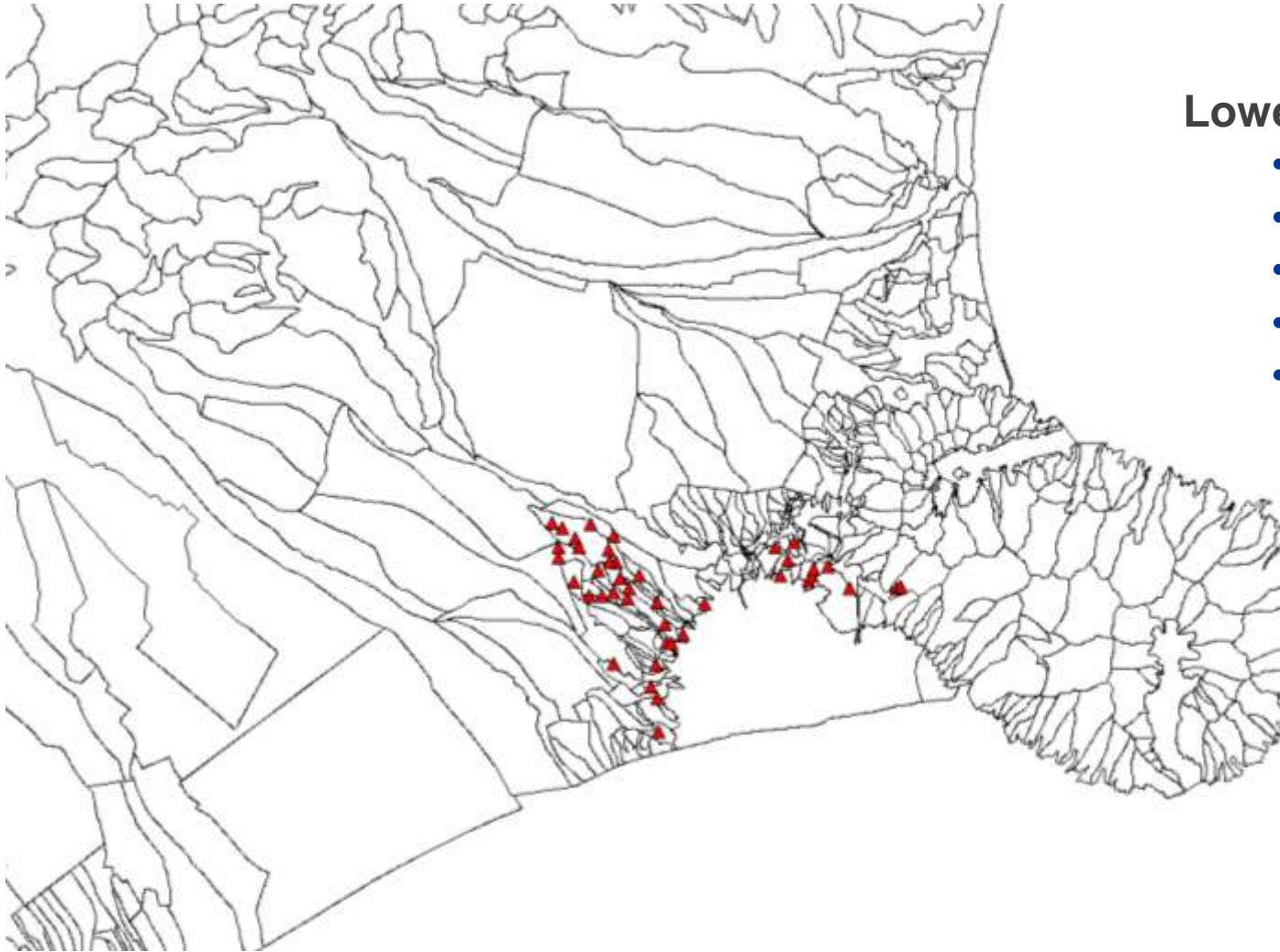


- Underlying principle – clear, consistent messages and surety of regulatory framework!

Selwyn/Waihora catchment



Lower Selwyn dairy farms



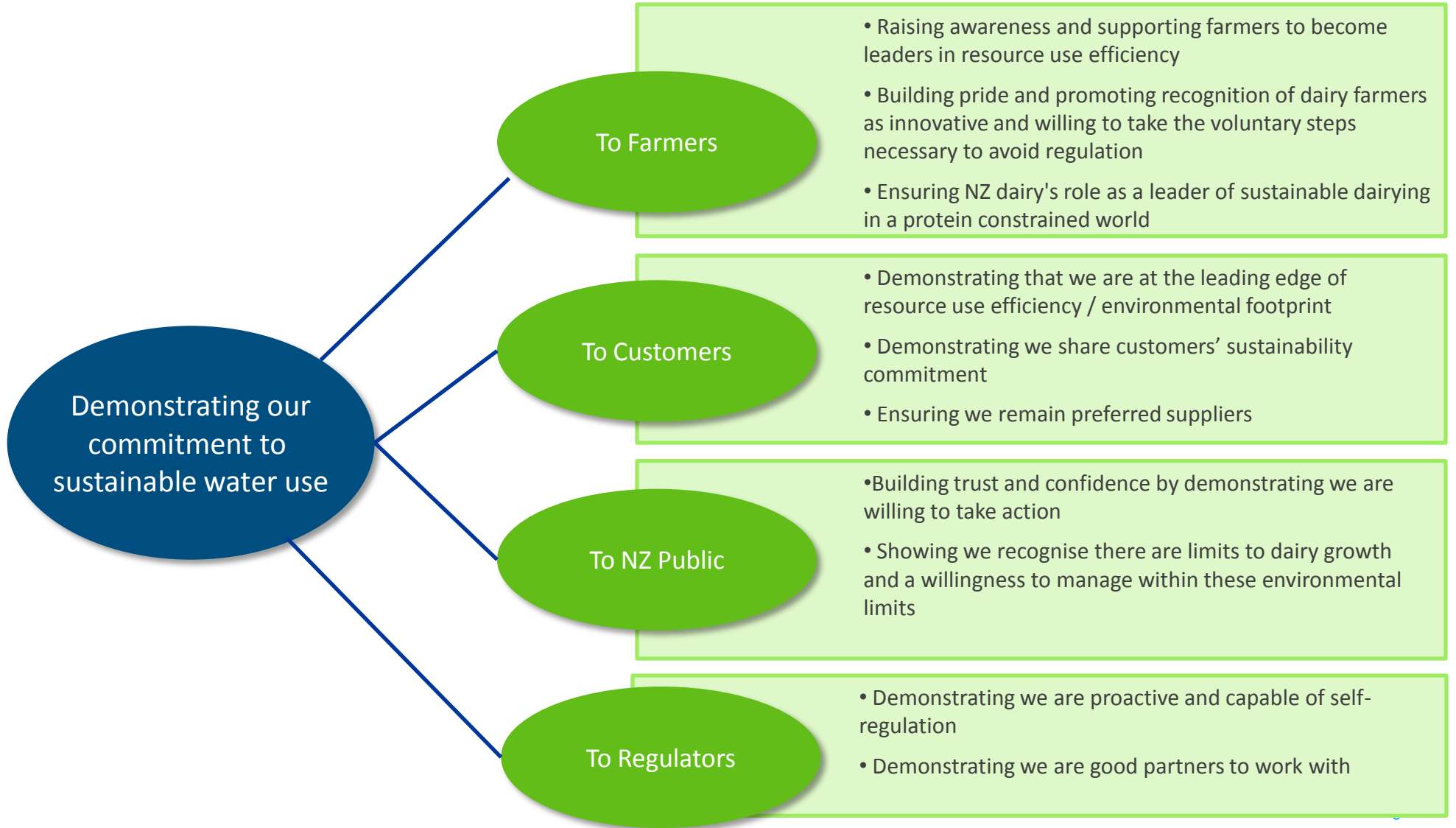
Lower Selwyn

- 42 farms
- 18,000 cows
- 7M kg MS
- @ \$7.60*
- \$53M

Te Waihora investment

- \$1.3M over 5 years
- Form a focus group of Selwyn suppliers as the key touch stone for this project
 - Met twice – next meeting on local farm to showcase good best practice and explore challenges
- Appoint a full time Sustainable Dairy Specialist to work with our farmers in lower Selwyn (and wider catchment)
 - Give priority to 365 day effluent compliance plans
 - Nutrient efficiency benchmarking and lifting performance
- Consider contracting specialist riparian planning / planting advice – protect and plant key springs, waterways, wetlands and drainage channels
- Work more closely with DairyNZ and the Lincoln Uni Dairy Research Farm to establish low key demonstration farms in the area
- Develop a communication plan that keeps suppliers informed and promotes accountability for progress

Why are we committed to sustainable dairying?



Any
questions?



Background slides









Southern Wintering Systems

- 4 year programme
- 6 commercial farms across Southland and West/South Otago plus Telford Dairy Farm
- Range of wintering systems
- Whole farm system analysis
- Detailed monitoring and development of tools and key performance indicators



Working Together

- Ongoing communication
 - Staff
 - Governance
 - Other parties

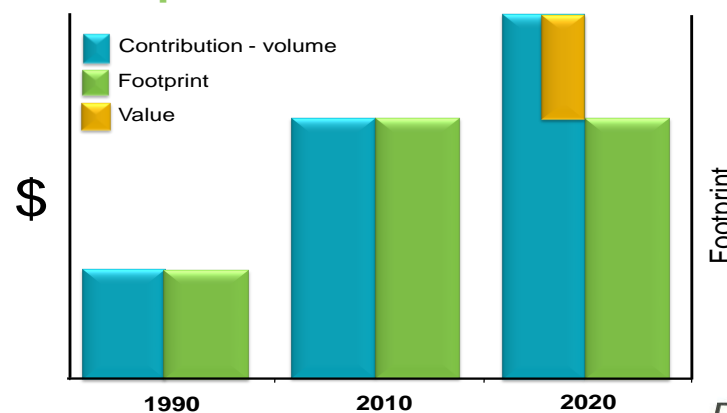


How?

- More cows on existing dairy farms?
- More land converted to dairy farm operations?
- Increasing productivity of cows?
- All three?

- Possibly...but only if we can deliver our sustainability goal for on-farm
 - Increase dairy production without increasing our environmental footprint
 - Focus on delivering excellence in nutrient budgets, water efficiency, effluent management, energy efficiency and carbon reduction

Contribution to NZ Inc and Footprint







We are all connected

