# **NITROGEN REPORT** 2017/18 SEASON

This Nitrogen Management Report reflects what you have told us is happening on your farm. It will help you to identify opportunities for further nitrogen use efficiency and any potential profitability gains.



# WHY IS THIS IMPORTANT?



The Fonterra Nitrogen Programme directly supports our Trusted Goodness mark, one of the ways we attract a premium for our products and therefore, maximise the value of your milk.



Know your numbers



Identify opportunities for efficiency/profitability gains



Satisfy regulatory reporting requirements



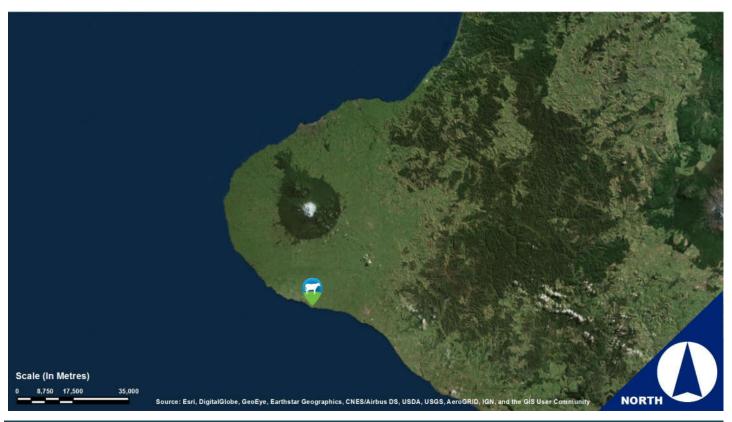
Advocacy for farmers



Secure and support our brand reputation



Understand how nitrogen limits may affect the way you farm



#### Key information used to model your farm's nitrogen use: 114 ha Total effective dairy farm area Total cows calved 428 Total milk solids produced 142431 kgMS 153 KG/HA/YR Average kilograms of nitrogen applied per hectare (across whole farm) 170 t Supplementary feed brought onto farm or from storage (dry weight)

# OVERSEER® **NUTRIENT BUDGETS**

OVERSEER® is the preferred farm systems modelling tool used by fertiliser companies, farm consultants, regional councils and the dairy industry to demonstrate improved nutrient management practice on New Zealand dairy farms. It is well suited to providing an assessment of relative change (year-on-year and farm-to-farm). Your data has been processed through OVERSEER® by our experienced QCONZ and Fonterra team in accordance with the OVERSEER® Best Practice Data Input Standard and the entire process has been externally audited.

If this form was incomplete, our processing teams may have made some assumptions while processing the data through OVERSEER® 6.3

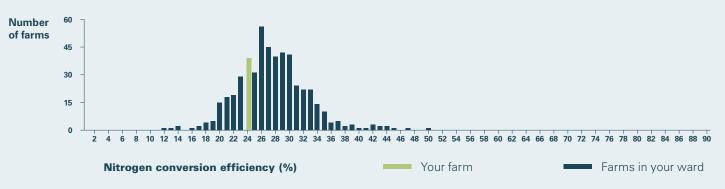
# YOUR FARM'S NITROGEN CONVERSION EFFICIENCY

24 %

### **Nitrogen Conversion Efficiency**

This is the percentage of nitrogen that is brought into the farming system (fertiliser, supplementary feed and clover fixation) that is converted to products (milk and meat).

The higher the percentage the more efficient the farm is at using its nitrogen resources.



# YOUR FARM'S **NITROGEN LEACHING RISK**

### **Nitrogen Leaching Risk**

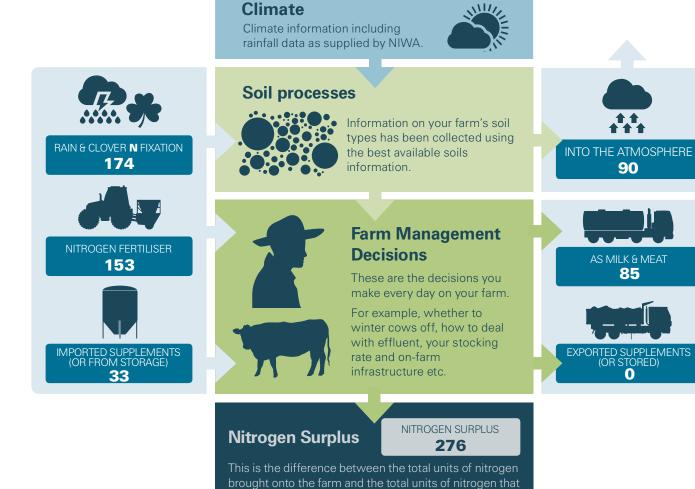
This indicates the risk of the loss of nitrogen from the farming system into either the groundwater system or into waterways.

A small number indicates a lower risk of nitrogen loss.



# YOUR FARM'S **NITROGEN MODEL**

All numbers on the diagram below refer to kilograms of nitrogen per hectare per year (KG/HA/YR), often called units of N.



leave the farm as products.

**Nitrogen** 

**Leaching Risk** 

## THIS REPORT WAS GENERATED USING OVERSEER® VERSION 6.3

The OVERSEER® model is regularly updated to ensure it incorporates the best and most recent science.

These improvements mean that the same farm information put into a newer version may result in (generally small) differences in modelled output numbers - such as Nitrogen Leaching Risk.

The numbers in the graphs and model above have been generated using OVERSEER® version 6.3

This means that these numbers may differ from the numbers reported to you in previous years. It is because each year's numbers have all been updated to the most recent version of OVERSEER® that they can be reliably compared to enable you to understand how your on-farm practices are impacting on the Nitrogen Leaching Risk year-on-year.

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### YOUR SOILS INFORMATION HAS BEEN UPDATED

The soils information used for the generation of this Nitrogen Report is sourced from Landcare Research S-map datasets. The soils dataset for your area has been updated during the 2017/2018 season, this means that the soils information used to generate this report will be different to the soils information used during previous seasons. As a result, you may see differences in modelled output numbers from previous seasons - such as Nitrogen Leaching Risk.

A high amount of surplus nitrogen can indicate an inefficient

N LEACHING RISK 35

conversion of available nitrogen into milk protein.

# INTERPRETING YOUR REPORT

#### **Transfers**



#### Stock

Cows and other animals on farm transfer nitrogen around the farm by eating grass and depositing dung and urine.

### **Gains**



#### Rain & Clover N Fixation

Nitrogen entering the dairy farm through rainfall collecting atmospheric nitrogen and clover fixation of nitrogen in the soil.



#### Nitrogen Fertiliser

This is the nitrogen contained in the fertilisers you have applied.



#### Supplements

There is nitrogen contained in the protein content of supplementary feeds brought on farm

#### Losses



#### Milk & Meat

There is nitrogen in the protein contained in the milk produced and animals that are sent off farm.



#### **Atmospheric**

Nitrogen is lost to the atmosphere (primarily as nitrous oxide gas) from urine patches, dung and effluent ponds.



#### **Exported Supplements**

Where supplements are grown on farm and exported (or stored into the next season) there will be a loss of nitrogen from the farm.

# OUR TEAM IS HERE TO HELP

Contact your local Sustainable Dairying Advisor or the Services team on 0800 65 65 68, if you would like to:

### **DISCUSS**

Discuss this report in more detail.

### **REQUEST YOUR FILE**

Request a complete OVERSEER® XML file for your own use, or to use with a farm consultant, fertiliser consultant or Regional Council.

### DEMONSTRATE COMPLIANCE

Utilise your nitrogen report to demonstrate compliance with regional council rules; it is recommended that you speak to your Sustainable Dairying Advisor to enter your farm management blocks into our mapping system to ensure that these are consistent with council requirements.

# GO TO THE FARM SOURCE WEBSITE TO:

### **DOWNLOAD COPIES**

Download electronic copies of this report to share with other people who work with you on your farm.

### RECORD FARM INPUTS

Keep records of your farm inputs during the season and complete your Farm Dairy Records for the 2018/19 season. Using the online form supports improved data recording.

# YOUR NITROGEN REPORT BROUGHT TO YOU BY



FARM SOURCE SUSTAINABLE DAIRYING

Fonterra Farm Source adopted the name Tiaki for our on-farm sustainability tools and services, which are tailored to each individual farm.

Tiaki means to look after, to guard, to care for, keep and nurture. This single word embodies the full vision of Farm Source's Sustainable Dairying programme which is centred around caring for the land for future generations – all who work it and all who are connected to it.

It's a simple name which speaks of Fonterra's commitment to support our farmers, not only regionally, but on a national level and also on the international stage as we continue to lead the way in sustainable dairy farming solutions.

Fonterra will keep all of your individual information confidential and will only provide it to third parties with your permission.