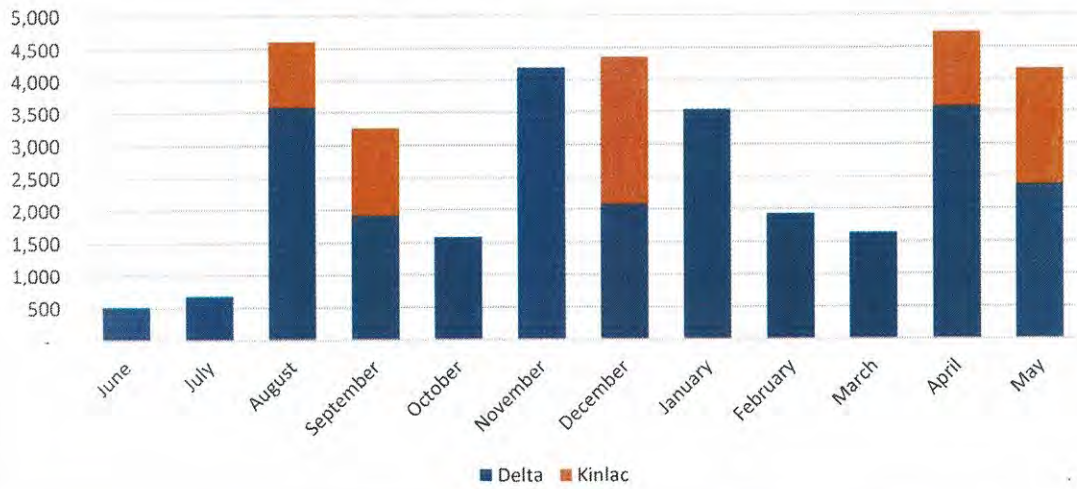


Jos van Loon

### Monthly Effluent Spreading



Monthly Accumulation							YTD	2016-17
Month	Start Date	End Date	Delta	Kinlac	Total			
June	01/06/2017	30/06/2017	514	-	514	514	1180	
July	01/07/2017	31/07/2017	678	-	678	1,192	2272	
August	01/08/2017	31/08/2017	3,582	1,023	4,605	5,797	5313	
September	01/09/2017	30/09/2017	1,910	1,350	3,260	9,057	4046	
October	01/10/2017	31/10/2017	1,575	-	1,575	10,632	1513	
November	01/11/2017	30/11/2017	4,189	-	4,189	14,821	4854	
December	01/12/2017	31/12/2017	2,081	2,273	4,354	19,175	3067	
January	01/01/2018	31/01/2018	3,537	-	3,537	22,712	3820	
February	01/02/2018	28/02/2018	1,928	-	1,928	24,640	2207	
March	01/03/2018	31/03/2018	1,635	-	1,635	26,275	4048	
April	01/04/2018	30/04/2018	3,581	1,153	4,734	31,009	6265	
May	01/05/2018	31/05/2018	2,379	1,786	4,165	35,174	5033	
			<b>27,589</b>	<b>7,585</b>	<b>35,174</b>	<b>35,174</b>	<b>43618</b>	



# NITROGEN REPORT

## 2015/16 SEASON

SUPPLIER NUMBER: 77918



This Nitrogen Management Report provides you with your farm's Nitrogen Conversion Efficiency and Nitrogen Leaching Risk. This will help you to identify opportunities for further nitrogen use efficiency on your farm. It also gives you a better understanding of the potential business risks to your farm, particularly in regions where nitrogen limit setting is underway by regional councils.



### Key information used to model your farm's nitrogen use:

Total effective dairy farm area	73ha
Total cows calved	258
Total milk solids produced	97,802 KgMS
Average kilograms of nitrogen applied per hectare (across whole farm)	75 KG/HA/YR
Supplementary feed brought onto farm (dry weight)	507t

Note: The information presented in this report is only a summary of a more detailed OVERSEER® file. We recommend you seek further advice before making any changes to your farm system(s). If there are inaccuracies in the data presented above, please contact your Sustainable Dairy Advisor.



# YOUR NUMBERS AT A GLANCE

# 26

**KG/HA/YR**

## 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.

# 39%

## 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.

Indicative range: 10% to 45%.

## WHY IS THIS IMPORTANT?



Know your numbers



Satisfy regulatory reporting requirements



Understand how nitrogen limits may affect the way you farm



Allows us to advocate for our farmers

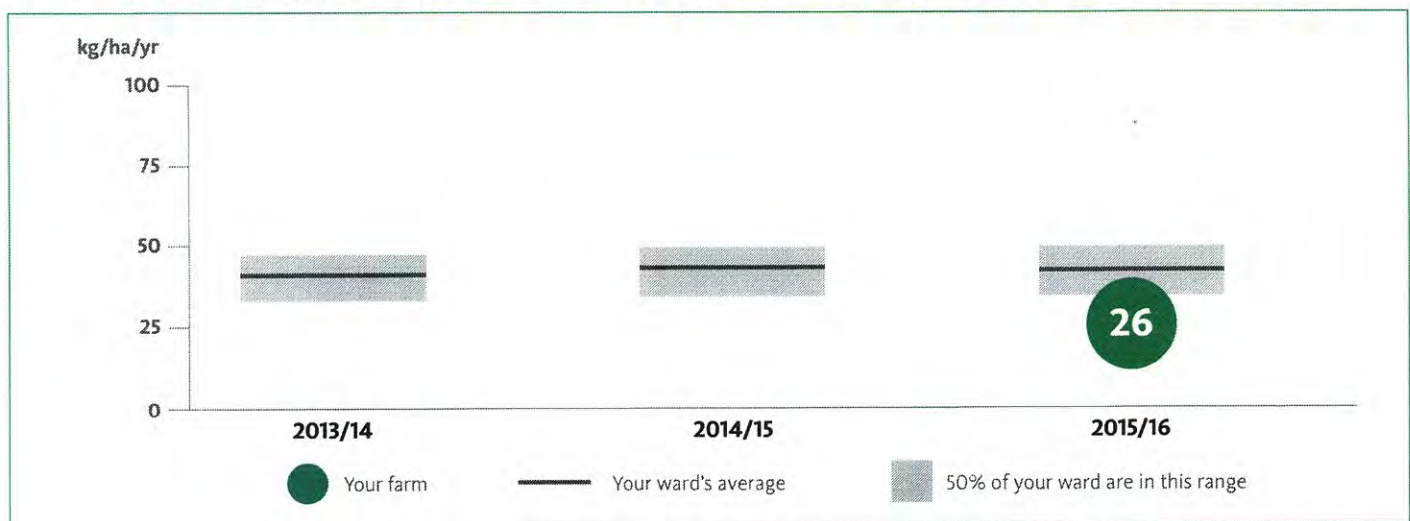


Identify opportunities for efficiency/profitability gains



Secure and support our brand reputation

## YOUR FARM'S NITROGEN LEACHING OVER TIME



SOME DATA POINTS ARE MISSING IN THE GRAPH ABOVE. This is either because no information was provided or we were unable to run your previous information through OVERSEER® 6.2.2. Please feel free to contact your Sustainable Dairy Advisor if you have any concerns.

## IMPORTANT OVERSEER® INFORMATION

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 graph above have been generated using OVERSEER® version 6.2.2. 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.



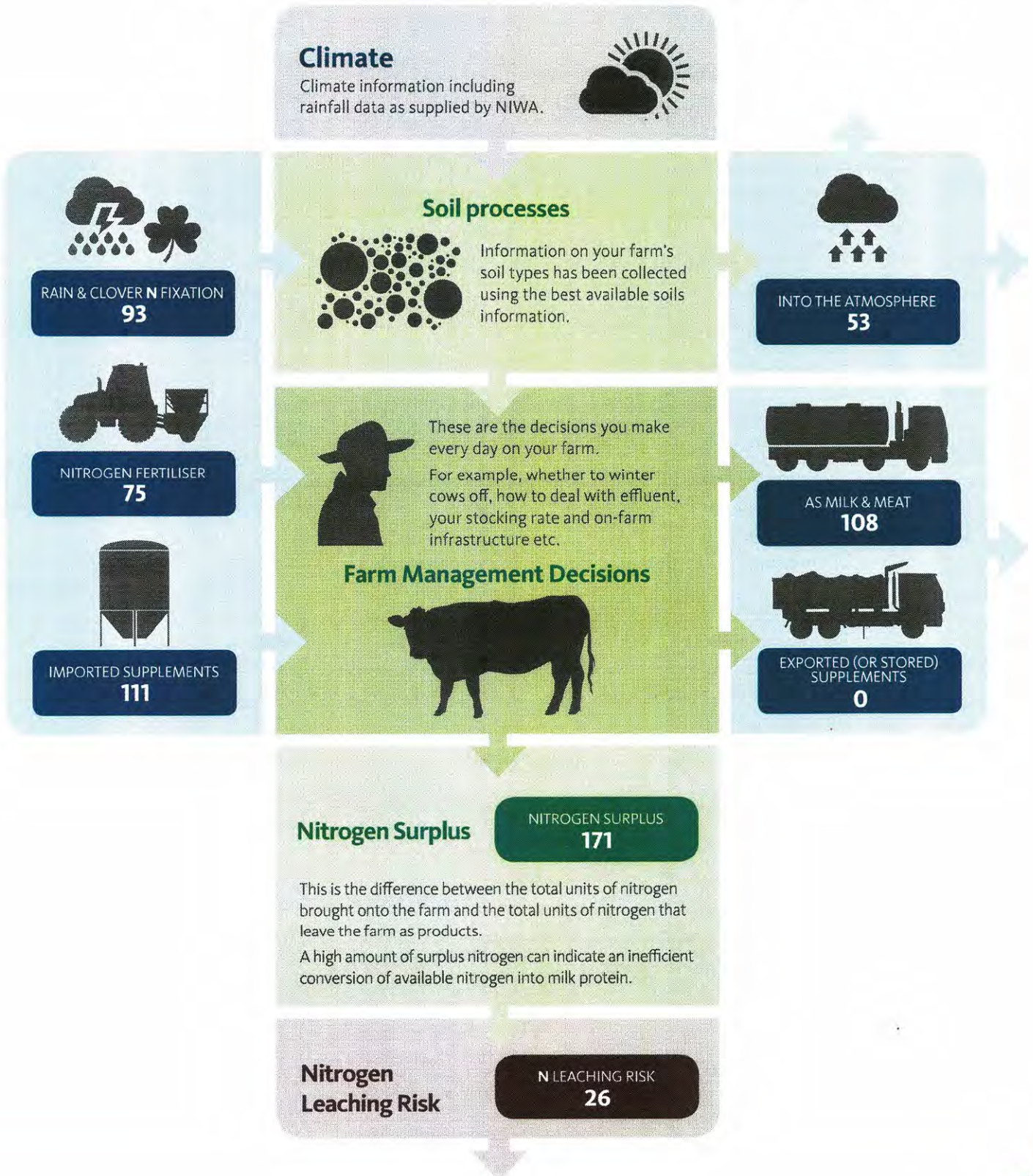
# OVERSEER® NUTRIENT BUDGETS

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 Ballance, QCONZ and Fonterra team in accordance with the OVERSEER® Best Practice Data Input Standard and the entire process has been externally audited.

The information in this report is based on the Nitrogen Recording Pages you sent to Fonterra in mid-2016. If this form was incomplete, our processing teams may have made some assumptions while processing the data through OVERSEER® 6.2.2.

## YOUR FARM'S NITROGEN MODEL

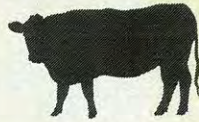
All numbers on the diagram below refer to kilograms of nitrogen per hectare per year (KG/HA/YR), often called units of N.





# 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

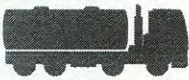
This is the nitrogen contained in the fertilisers you have applied.



### 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**

- If you would like to discuss this report in more detail please contact your Area Manager or our Service Centre on **0800 65 65 68**.
- If you would like to request a complete OVERSEER® XML file for your own use, or to use with a farm consultant, fertiliser consultant or Regional Council please contact our Service Centre on **0800 65 65 68**.
- If you would like to view your complete OVERSEER® results in more detail and start exploring ways in which you can reduce your Nitrogen Leaching Risk please contact your Sustainable Dairy Advisor.

## WHAT YOU CAN **DO NEXT**

- You can download electronic copies of this report from the Farm Source website to share with other people who work with you on your farm.
- If you wish to 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.
- Remember to keep records of your farm inputs during the season and complete your Nitrogen Recording Pages for the 2016/17 season. Using the online form supports improved data recording. It is available on the Farm Source website.

Fonterra will keep all of your individual information confidential and will only provide it to third parties with your permission. All information contained in this report is confidential to the Supplier Number(s) listed. Copyright Fonterra Co-operative Group Ltd.



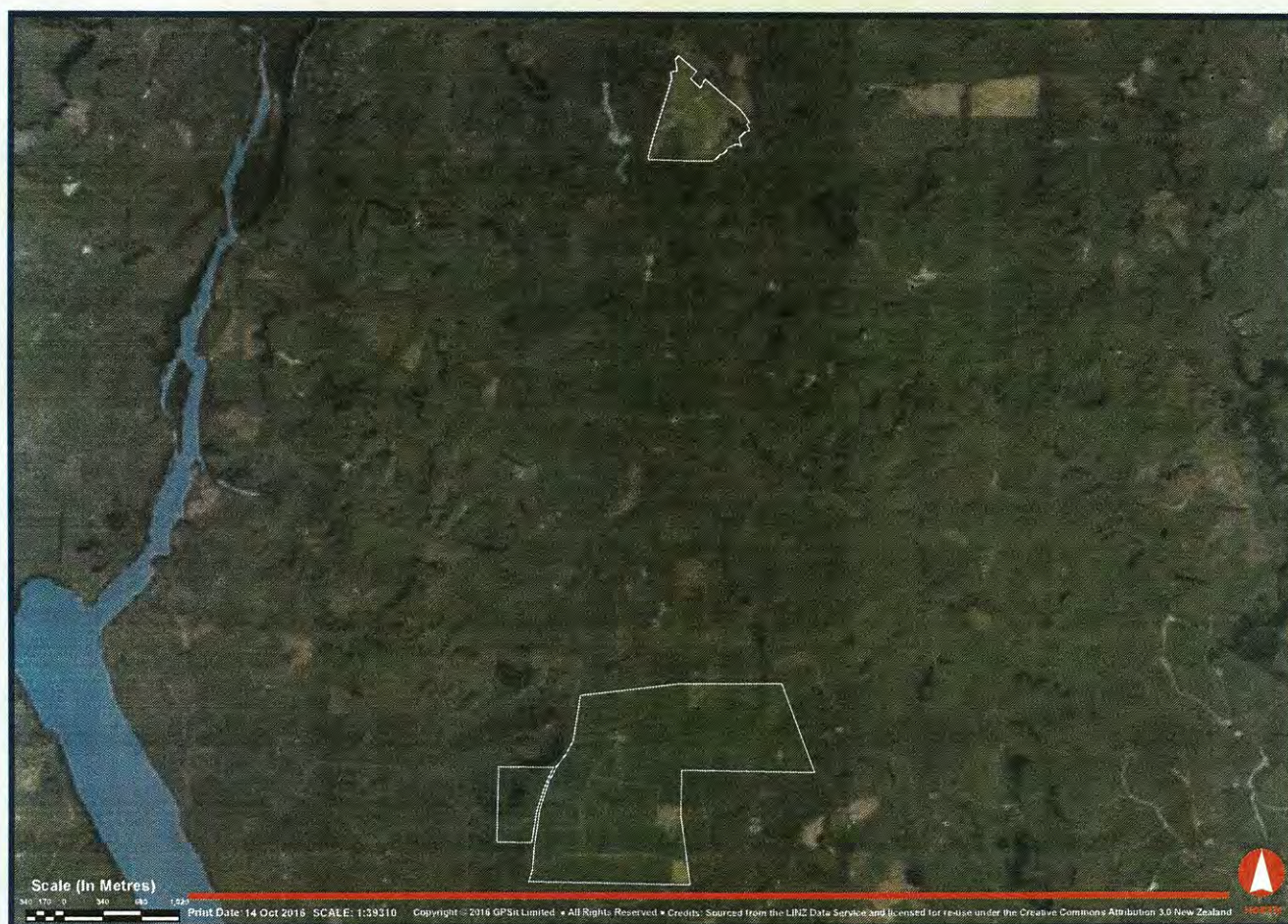
# NITROGEN REPORT

## 2015/16 SEASON

SUPPLIER NUMBER: 77860



This Nitrogen Management Report provides you with your farm's Nitrogen Conversion Efficiency and Nitrogen Leaching Risk. This will help you to identify opportunities for further nitrogen use efficiency on your farm. It also gives you a better understanding of the potential business risks to your farm, particularly in regions where nitrogen limit setting is underway by regional councils.



### Key information used to model your farm's nitrogen use:

Total effective dairy farm area	255ha
Total cows calved	1035
Total milk solids produced	498,082 KgMS
Average kilograms of nitrogen applied per hectare (across whole farm)	57 KG/HA/YR
Supplementary feed brought onto farm (dry weight)	2791t

Note: The information presented in this report is only a summary of a more detailed OVERSEER® file. We recommend you seek further advice before making any changes to your farm system(s). If there are inaccuracies in the data presented above, please contact your Sustainable Dairy Advisor.



# YOUR NUMBERS AT A GLANCE

**32** KG/HA/YR

## 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.

**39** %

## 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.

Indicative range: 10% to 45%.

## WHY IS THIS IMPORTANT?



Know your numbers



Satisfy regulatory reporting requirements



Understand how nitrogen limits may affect the way you farm



Allows us to advocate for our farmers

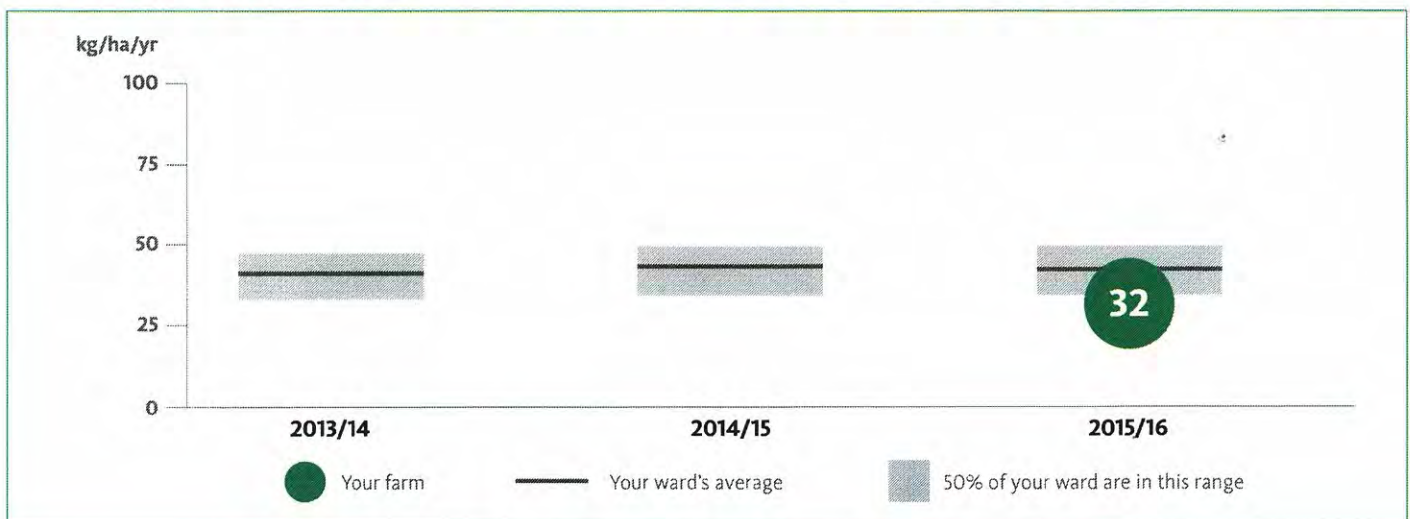


Identify opportunities for efficiency/profitability gains



Secure and support our brand reputation

## YOUR FARM'S NITROGEN LEACHING OVER TIME



SOME DATA POINTS ARE MISSING IN THE GRAPH ABOVE. This is either because no information was provided or we were unable to run your previous information through OVERSEER® 6.2.2. Please feel free to contact your Sustainable Dairy Advisor if you have any concerns.

## IMPORTANT OVERSEER® INFORMATION

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 graph above have been generated using OVERSEER® version 6.2.2. 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.



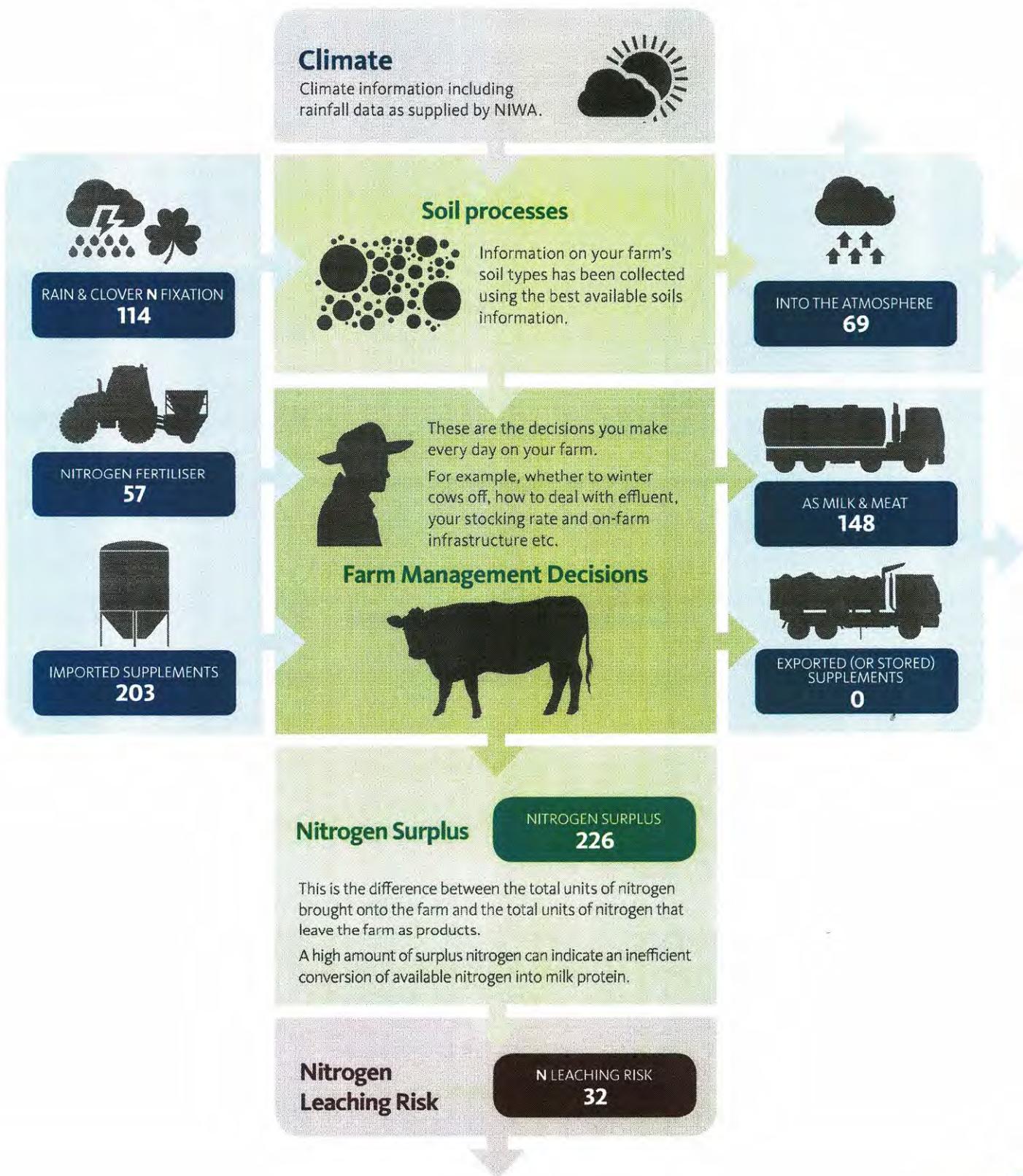
# OVERSEER® NUTRIENT BUDGETS

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 Ballance, QCONZ and Fonterra team in accordance with the OVERSEER® Best Practice Data Input Standard and the entire process has been externally audited.

The information in this report is based on the Nitrogen Recording Pages you sent to Fonterra in mid-2016. If this form was incomplete, our processing teams may have made some assumptions while processing the data through OVERSEER® 6.2.2.

## 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.





# 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

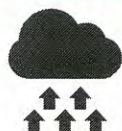
There is nitrogen contained in the protein content of supplementary feeds brought on farm.

## 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**

- If you would like to discuss this report in more detail please contact your Area Manager or our Service Centre on **0800 65 65 68**.
- If you would like to request a complete OVERSEER® XML file for your own use, or to use with a farm consultant, fertiliser consultant or Regional Council please contact our Service Centre on **0800 65 65 68**.
- If you would like to view your complete OVERSEER® results in more detail and start exploring ways in which you can reduce your Nitrogen Leaching Risk please contact your Sustainable Dairy Advisor.

## WHAT YOU CAN **DO NEXT**

- You can download electronic copies of this report from the Farm Source website to share with other people who work with you on your farm.
- If you wish to 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.
- Remember to keep records of your farm inputs during the season and complete your Nitrogen Recording Pages for the 2016/17 season. Using the online form supports improved data recording. It is available on the Farm Source website.

Fonterra will keep all of your individual information confidential and will only provide it to third parties with your permission. All information contained in this report is confidential to the Supplier Number(s) listed. Copyright Fonterra Co-operative Group Ltd.