

# GROWSMART® PRECISION VRI™ | VARIABLE RATE IRRIGATION



INTUITIVE INTERFACE. PRECISE APPLICATION. MAXIMUM FLEXIBILITY.

"Everyone is chasing precision ag nowadays. In theory, precision application of water is just as important as the other precision factors in farming, like planting, tractors, seed rate, chemicals and fertilizer – if not even more so."

Richard Sheppy,

Former Farm Manager, Kangaringa Station Keith, South Australia



# Fully optimized irrigation has arrived

Growsmart® by Lindsay Precision VRI™ allows you to customize exactly the right amount of water or chemicals to each area of your field – maximizing yields and profitability.

#### **POWERFUL BENEFITS**

Easy to use

Changes application depth over different crops, terrains or soil types

Reduces over-watering

Decreases power consumption

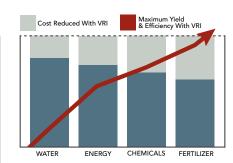
Less track maintenance

SAVES WATER

Reduces runoff and nutrient leaching

Saves on fertigation and chemigation costs

Maximizes use of available water through constant flow technology, especially valuable for corner systems



# Why Precision VRI is better

# Fully integrated solutions –

Unlike our competitors', Lindsay offers a fully integrated solution with modular hardware, remote management, irrigation scheduling, and automated plan switching for full precision control.

Advanced capabilities – Precision VRI evolves with you, with powerful features like "optimal flow" and "corner control".

# Automated fertigation/ chemigation control – The

advanced Precision VRI system can be triggered to automatically switch to a specific plan when chemigating, fertigating or applying effluent through your pivot.

# Very easy to program -

Competitors' systems can be complicated to program – not Precision VRI. It's never been easier to create a custom irrigation plan.

# Maximum flexibility in irrigation management areas –

Create custom application areas in any shape or size on any part of your field. System length does not affect accuracy.

# Remote irrigation management of your entire irrigation system –

Integrates with FieldNET® by Lindsay with options to monitor and control your pivot, VRI, pump and other irrigation hardware components.

# Detailed irrigation through

**reporting** – Allows for better decision-making including reporting of individual nutrients within the substance applied when chemigating/fertigating.

# **No in-season re-nozzling –** Easily define plans that compensate for

**Flexible** – Works on most brands of both pivots and laterals.

#### In-field touch-screen panel -

decreasing water availability.

Intuitive display enables simple VRI plan control and VRI system operation.

# IRRIGATE WITH PRECISION

# You need Precision VRI if you have . . .

- Different crops, different planting dates or non-crop areas within the same field
- Varying soil types
- High runoff areas
- Low/flooded areas
- Obstacles such as buildings, tracks, roads, etc.
- Environmentally sensitive areas
- Limited or varying flow rates

# What could you save with Precision VRI?

- Independent trials show irrigation water savings of up to 27% on dairy and cropping farms are achievable.
- Water is saved through matching irrigation to soil characteristics and crop requirements, and avoiding tracks, drains or unproductive land.
- The water saved can often be redistributed to other parts of the farm.
- It has been shown that the system can pay for itself within one irrigation season.

# VARIABLE APPLICATION RATES FOR CROP, SOIL TYPE, TOPOGRAPHY AND OBSTACLES OR OF TOPOGRAPHY AND OBSTACLES DIFFERENT CROPS VARYING SOIL BRIDGE BUILDING LOW/FLOODED FIELD OBSTACLES

#### PRECISION VRI PANEL

- Modify your VRI plans at the pivot point with a simple double-tap on the screen
- Ability to run your own simple system test for trouble-shooting or maintenance checks



# NEW AND IMPROVED VALVES AND WIRELESS NODES

Each wireless node controls up to four valves individually, turning each sprinkler on and off independently or pulsing it according to the VRI plan. The nodes also act as wireless repeaters sending signals up and down the length of the pivot.

# The industry-leading wireless tool for complete remote management of Precision VRI

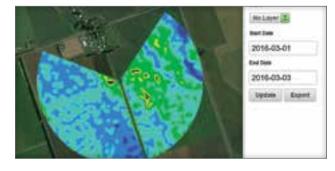




# **MULTIPLE USERS**

The account owner can manage access for other users in their operation – from viewing privileges to complete control.







# **ALERTS**

Be notified immediately when the operational status of your system changes with customizable text message and email alerts for run status, pressure, and more. Multiple users can also receive alerts.



Monitor performance and gain insight on your entire operation with customized or standard reports to track trends and historical information.

FieldNET app allows for general pivot control, monitoring and alerts. VRI is controlled through a web-based platform

### **FIELDNET**

FieldNET provides the most comprehensive options to remotely deliver greater control, real-time information and enhanced management tools.

This means that at any time throughout the crop lifecycle, you can see exactly what your systems are doing and control

them quickly and easily from a laptop, tablet or smartphone. With FieldNET's web-based platform you can customize your water application and manage VRI remotely.

It all adds up to less time in the field, less spent on valuable resources and greater control of your operation.

#### Benefits:

- Provides a single tool for seamless remote management of the complete irrigation system, including VRI
- Allows multiple irrigation plans to optimize water application
- Detailed irrigation reporting allows for better decision-making and compliance with regulations
- Simplifies operations involving multiple users by providing customizable controlled access levels
- Cloud-based platform enables remote diagnostics, aiding trouble-shooting and reducing downtime

#### Features:

- Configurable inputs allow for real-time system status data feeds
- Water pressure input provides improved application logging accuracy
- Improves FieldPLUS by pulsing sprinklers to avoid overwatering

With Precision VRI and FieldNET, grower Phill Everest irrigates his farm in accordance with his consent conditions, precisely applying the correct amount of water and chemicals over multiple crops, soil types and terrains. The system gives him the pinpoint accuracy he needs along with the efficiencies that result from full remote capabilities.



"The first time using the new FieldNET tool for Precision VRI, I found it very easy. It was much simpler and quicker having just the one place to go to control my pivot and manage the Precision VRI plans."

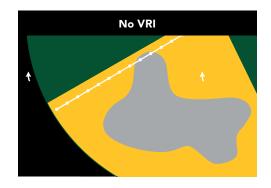
Phill Everest, Flemington Dairies, Ashburton, New Zealand



# Water precisely where you need it

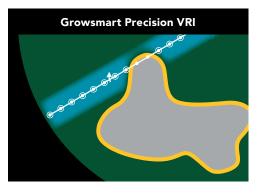
Unlike other VRI products, Precision VRI provides more irrigated coverage. The custom application tool allows you to define an extensive number of flexible areas, and with Precision VRI, there's no restriction on size or shape.

## **APPLICATION SCENARIOS**



#### 20% LOST IRRIGATED LAND POTENTIAL

With a conventional pivot, irrigation is shut off across the entire portion of the field containing an area such as a pond. This results in incomplete irrigation coverage, reducing the valuable productive land around the pond.



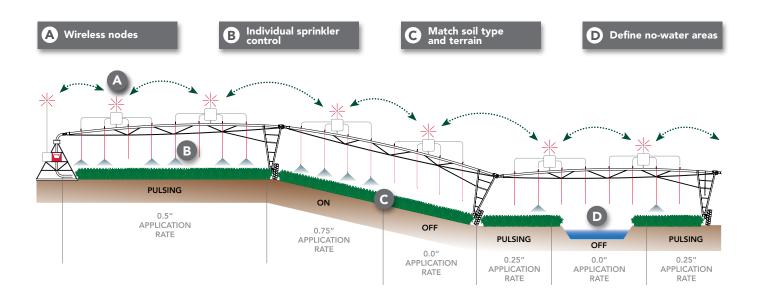
#### **FULLY IRRIGATED LAND**

Precision VRI's highly flexible program features extensive custom shape capabilities for complete coverage and maximum efficiency.



# **HOW IT WORKS**

Each sprinkler is individually controlled to turn on/off or pulse at a customized rate depending on crop, terrain or obstacle.

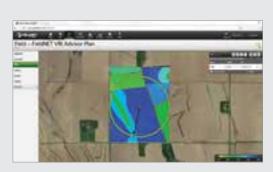


# DYNAMICALLY OPTIMIZED VRI PLANS WITH FIELDNET ADVISOR™

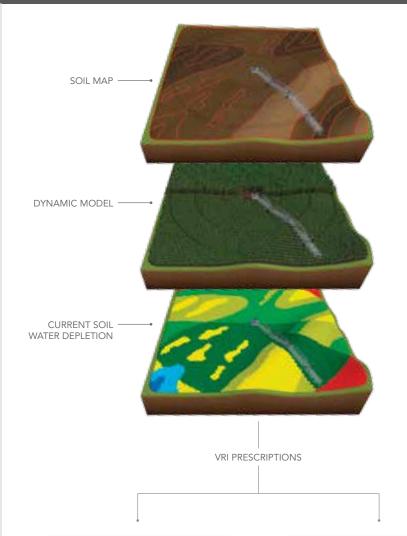
FieldNET Advisor is the innovative irrigation management support tool that helps you simplify your crops' water needs and maximize yield potential. It is a cloud-based solution within FieldNET's remote monitoring and control platform that requires no additional hardware and provides seamless integration so you can immediately put recommended VRI plans into action.

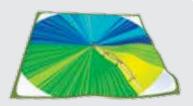
One of the industry-leading capabilities built into this tool is the powerful FieldNET VRI Advisor.<sup>TM</sup> This feature generates optimized variable rate irrigation prescriptions that are continuously updated to account for varying soil types and the dynamically changing crop growth, weather and as-applied irrigation throughout the season, which means you'll have an updated VRI plan each day.

How is this achieved? FieldNET Advisor tracks the available water in the soil and the crop's forecasted water requirements at every point throughout the field and uses that data to generate VRI prescriptions that are continuously updated to optimize water application.



VRI Advisor allows you to review the current recommended dynamic VRI plan and make modifications if desired, or create and save new or modified plans.





#### **SECTOR VRI**

Divides the field into 360 "pie slices" and adjusts the pivot speed over these sectors to change the application depth. (Does not control individual sprinklers.)

Requires FieldNET.



#### PRECISION VRI

A virtually unlimited number of flexible application areas provides exactly the right amount of water by controlling individual sprinklers.

Requires a Growsmart Precision VRI system connected to FieldNET.

#### VARIABLE RATE IRRIGATION HARDWARE & SOFTWARE SELECTION GUIDE

	ZIMMATIC PIVOT WITH BOSS OR VISION PANEL				ALL OTHER ELECTRIC PIVOTS			
	FieldNET by Lindsay	Growsmart Precision VRI	Precision VRI plus FieldNET	Precision VRI plus FieldNET plus FieldNET Advisor	FieldNET Pivot Control	Precision VRI	Precision VRI with FieldNET	Precision VRI with FieldNET plus Pivot Control
VRI MANAGEMEN	T AREAS/ZON	NES						
Up to 360 sectors (Basic VRI)	•				•			
Virtually limitless <sup>1</sup> areas/zones (Precision VRI)		•	•	•		•	•	•
Remote Precision VRI diagnostic ability			•	•			•	•
Auto-generated, continuously updated full Precision VRI plans				•				•
REMOTE MANAG	EMENT							
Pivot monitoring and control	•		•	•	•			•2
Pivot status alerts	•		•	•	•			•2
VRI monitoring and control	•		•	•	•		•	•
VRI plan creation and editing	•		•	•	•		•	•
VRI application reporting	•		•	•	•		•	•

Visit your local Zimmatic® by Lindsay dealer or growsmart.com for more details.

integration as BOSS or VISION panels.

<sup>2</sup> Precision VRI on FieldNET with Pivot Control does not provide the same level of remote management



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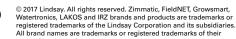
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respective companies.





<sup>1</sup> Total area count or plan complexity may vary depending on hardware specification