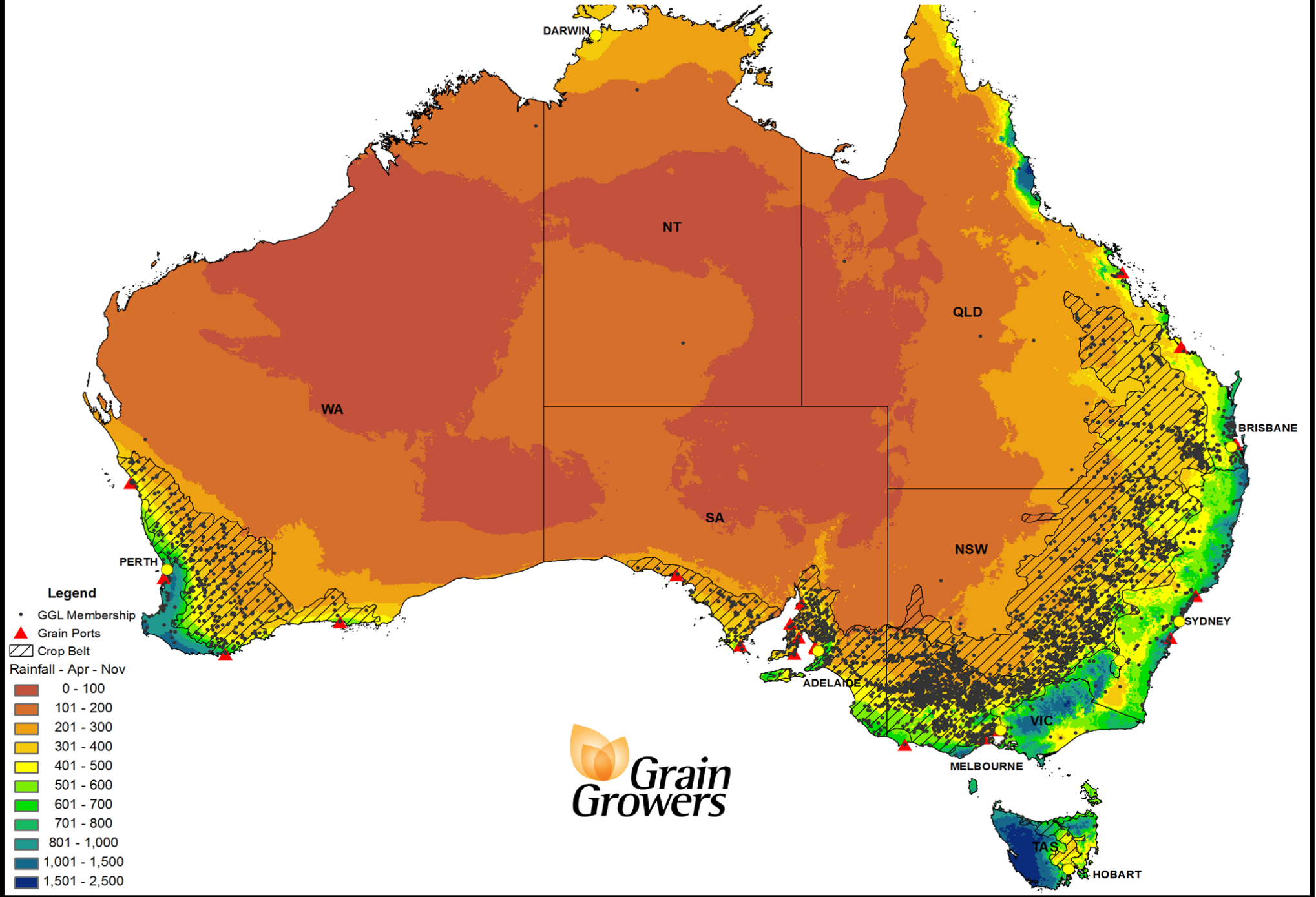


Meeting the Needs of Customers, Industry and Growers – the Growers’ Perspective



Richard Rice
Parkes, NSW, Australia

GrainGrowers Membership Distribution



Australian agroecological zones

WESTERN REGION

WA Northern

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola, faba beans, chickpeas

WA Central

Winter – Wheat, barley, oats, triticale, cereal rye, lupins, field peas, canola, faba beans, chickpeas

WA Eastern

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola, faba beans, chickpeas

WA Sandplain and Mallee

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola, faba beans, chickpeas

SOUTHERN REGION

SA Mid-north – Lower Yorke, Eyre

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola, chickpeas, faba beans, vetch, safflower

SA – Victoria Mallee

Winter – Wheat, barley, oats, triticale, cereal rye, lupins, vetch, canola, field peas, chickpeas, faba beans, safflower

SA – Victoria Border – Wimmera

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola, chickpeas, faba beans, vetch, lentils, safflower

Victoria High Rainfall

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola

NSW – Victoria Slopes

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola

NSW Central (south)

Winter – Wheat, barley, oats, chickpeas, triticale, faba beans, lupins, field peas, canola, safflower

Tasmania

Winter – Wheat, barley, oats, triticale, lupins, field peas, canola

WESTERN REGION

WA Northern

WA Central

WA Eastern

WA Sandplain and Mallee

SOUTHERN REGION

SA Mid-north – Lower Yorke, Eyre

SA – Victoria Mallee

SA – Victoria Border – Wimmera

Victoria High Rainfall

NSW – Victoria Slopes

NSW Central (south)

Tasmania

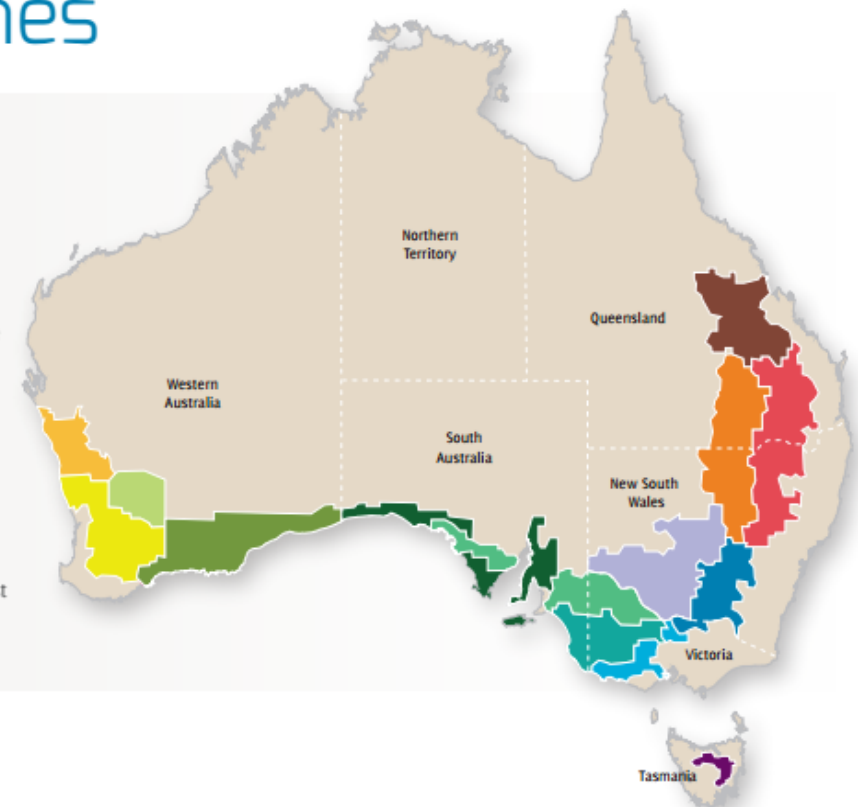
NORTHERN REGION

NSW Central (north)

NSW North West – QLD South West

NSW North East – QLD South East

QLD Central



NORTHERN REGION

NSW Central (north)

Winter – Wheat, barley, oats, chickpeas, triticale, faba beans, lupins, field peas, canola, safflower

Summer – Sorghum, sunflowers, maize, mungbeans, soybeans, cotton

NSW North West – Qld South West

Winter – Wheat, barley, oats, chickpeas, triticale, faba beans

Summer – Sorghum, sunflowers, maize, mungbeans, soybeans, cotton

NSW North East – Qld South East

Winter – Wheat, barley, oats, chickpeas, triticale, faba beans, millet/panicum, safflower, linseed

Summer – Sorghum, sunflowers, maize, mungbeans, soybeans, peanuts, cotton

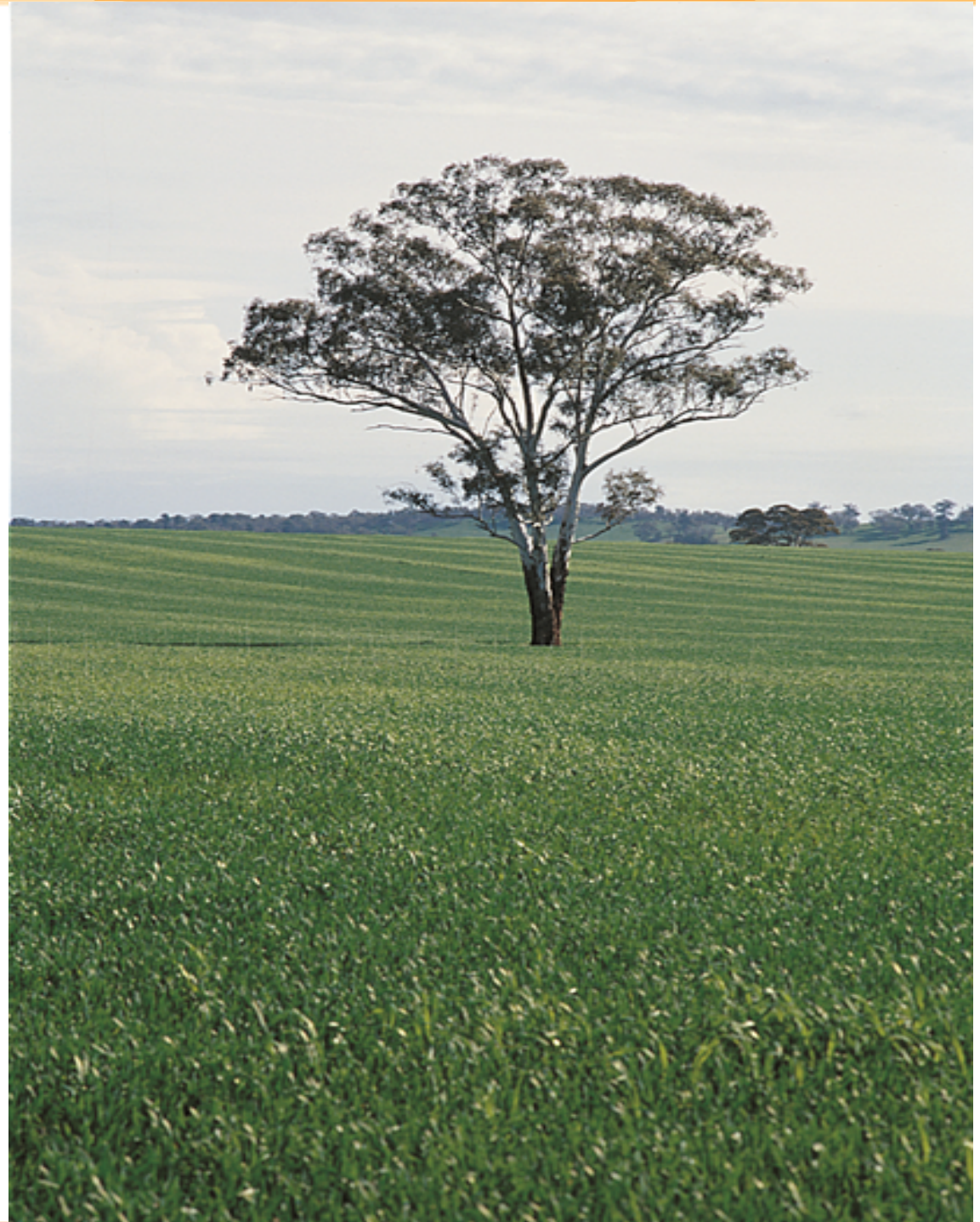
Qld Central

Winter – Wheat, barley, oats, chickpeas

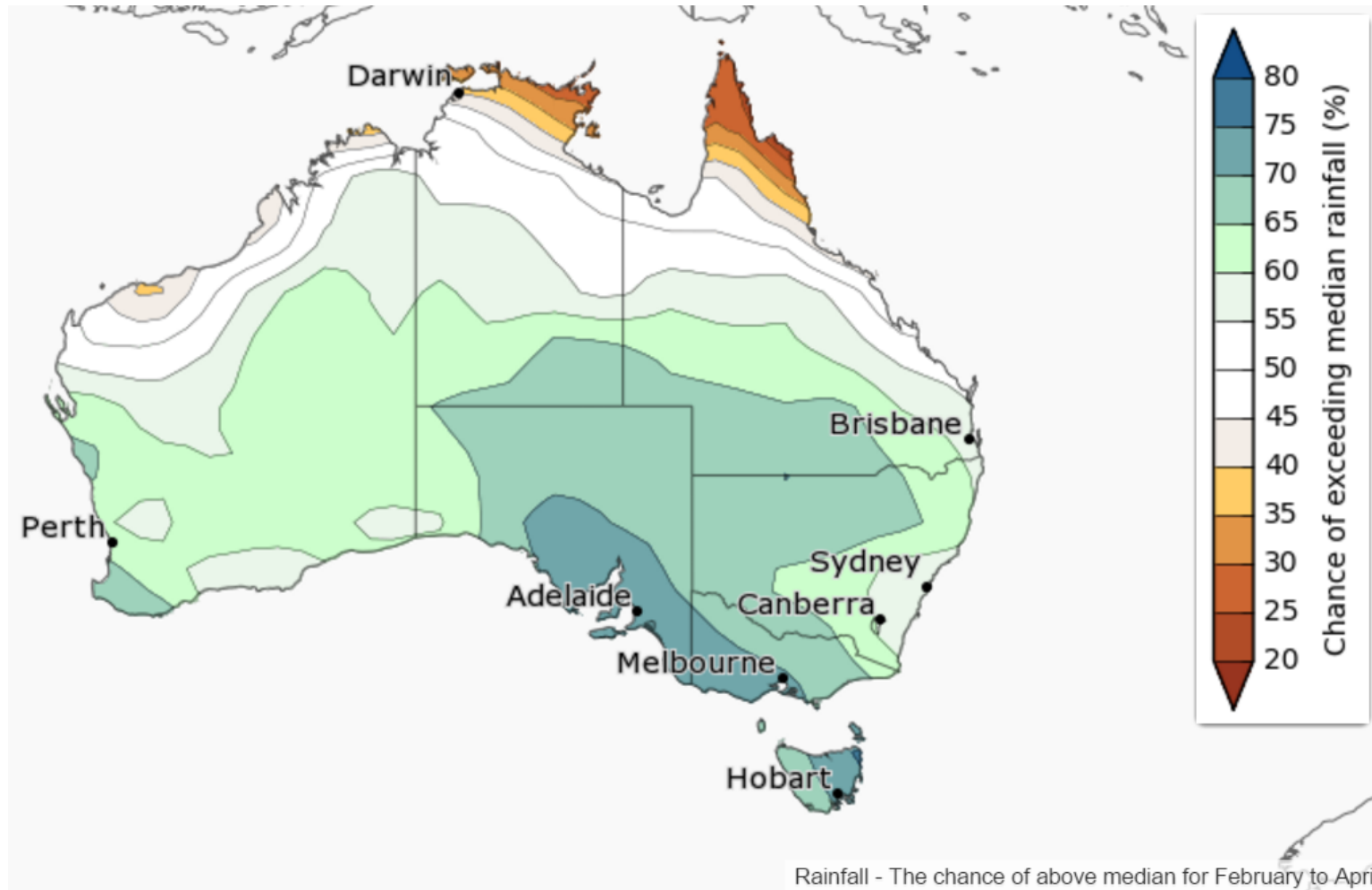
Summer – Sorghum, sunflowers, maize, mungbeans, soybeans, cotton

Environment

- Agroecological zones
 - Soil type
 - Topography
 - Drought
 - Frost
 - Wind
 - Heat stress at flowering and grain fill
 - Rain at harvest
 - Effect of changing climate



Predicted February – April Rainfall



Source: BOM

Climate Outlook Overview

- Above average February to April rainfall favoured in central and southern Australia, but drier than average in the far north.
- Temperatures more likely to be cooler than average in central regions but warmer in the far north and far south.
- Climate influences include a record-warm Indian Ocean basin, a weakening El Niño and warm sea surface temperatures around much of the Australian coastline, particularly near Tasmania

Source: BOM





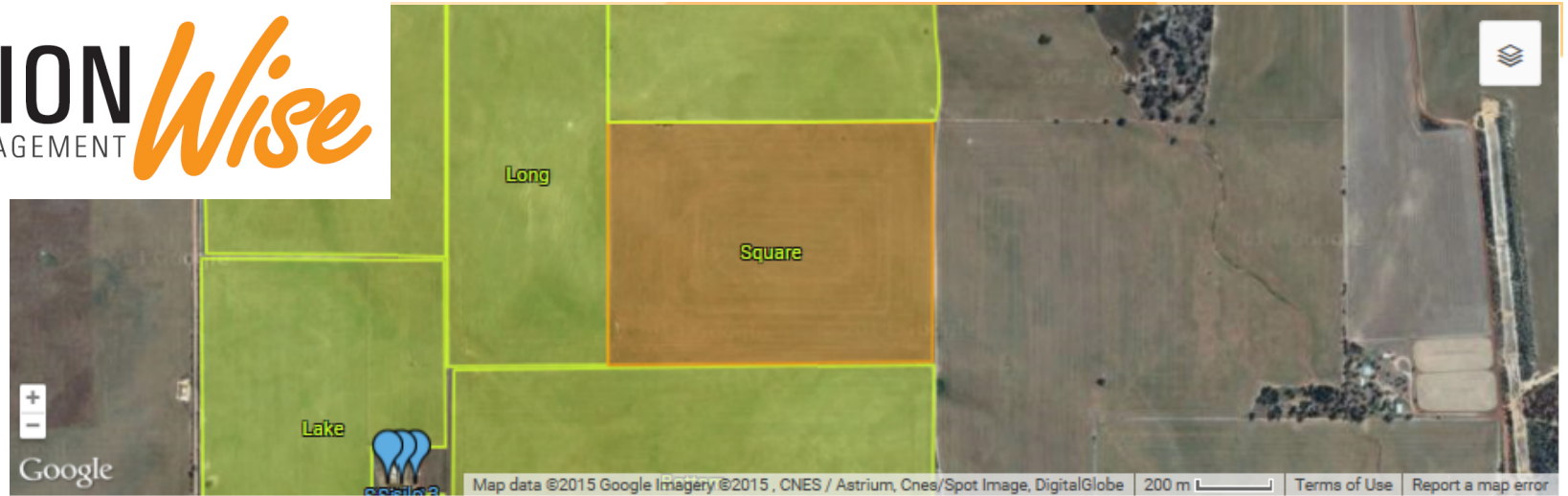
Identify and Manage Risks

- Comply with relevant regulations
- Refer to industry codes of practice and guidelines
- Comply with requirements for inputs eg chemical use, fuel storage, technology licences
- Meet contractual requirements of buyer/end user

- Consider a robust management system to keep records eg ProductionWise

- Consider a QA system

- Observe Work Health and Safety



Square Diary between 20 Jan 2015 - 30 Jun 2015

[← Back to Summary](#)
[+ Add Observation](#)
[Add Operation](#)

Date: Latest to Earliest

Later in the season

	PLANNED Fertiliser Application	IMPLEMENT Spreader Topdress...	PLANNED FOR 30 Jun 2015	INPUTS 1 associated	TOTAL COST \$85.00 per ha	DETAILS None	
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This Week

	OPERATION Spraying	IMPLEMENT Boomspray - Self...	COMPLETED ON 1 Jun 2015	INPUTS 0 associated	TOTAL COST \$43.00 per ha	DETAILS None	
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Last Week

	OPERATION Sowing	IMPLEMENT Airseeder Knife Po...	COMPLETED ON 22 May 2015	INPUTS 2 associated	TOTAL COST \$112.00 per ha	DETAILS Wheat, Amarak	
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April to June

	RECOMMENDATION Spraying	IMPLEMENT Boomspray - Self...	OVERDUE 16 Apr 2015	INPUTS 3 recommended	Andrew Christian 14 Apr 2015		
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	OBSERVATION Andrew Christian	GROWTH STAGE	RECORDED ON 10 Apr 2015	CROP DENSITY 0 plants/m ²	CROP STRESS 1 climatic stress, 2 biotic stresses		
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January to March

	OPERATION Soil Test	IMPLEMENT N/a	COMPLETED ON 3 Mar 2015	INPUTS Not applicable	TOTAL COST \$3.24 per ha	DETAILS None	
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	OPERATION Spraying	IMPLEMENT Boomspray - Self...	COMPLETED ON 25 Feb 2015	INPUTS 1 associated	TOTAL COST \$44.80 per ha	DETAILS None	
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Grower Decisions

■ Production

- ✓ Varieties
- ✓ Weed and pest control – NRS
- ✓ Management – best practice
- ✓ QA systems
- ✓ Environment

Quality and
Food Safety

Varieties

- Wheat
 - Wheat Variety Masterlist (over 300 milling and feed varieties)
 - National Variety Trials (agronomic performance)
 - Grade and price
- Barley
 - Malt, food and feed varieties
 - National Variety Trials (agronomic performance)
- Canola
 - Open pollinated v hybrid
 - Conventional v GM (TT, RR, RT, Clearfield)
- Pulses
 - Rotation v price eg chickpeas

Weed and Pest Control

- Biosecurity
 - Report exotic pests, weeds and diseases
 - Control declared or noxious weeds
 - Monitor and control crops for pests
 - Consider a farm Biosecurity Action Plan
 - Clean down facilities for incoming and outgoing machinery and people

Management

- Seed
 - Use tested and certified seed
- Fertiliser
 - Prevent grain mixing with fertilisers in storage
 - Use soil and plant nutritional testing to determine fertiliser requirements
 - Check fertiliser analysis
- Chemicals
 - Comply with permitted use of chemicals
 - Check MRLs in contract – see NRS results
 - Monitor weather before, during and after spraying and keep records eg (ProductionWise Spray Planner)
 - Ensure operators are trained
 - Safe and secure storage of chemicals

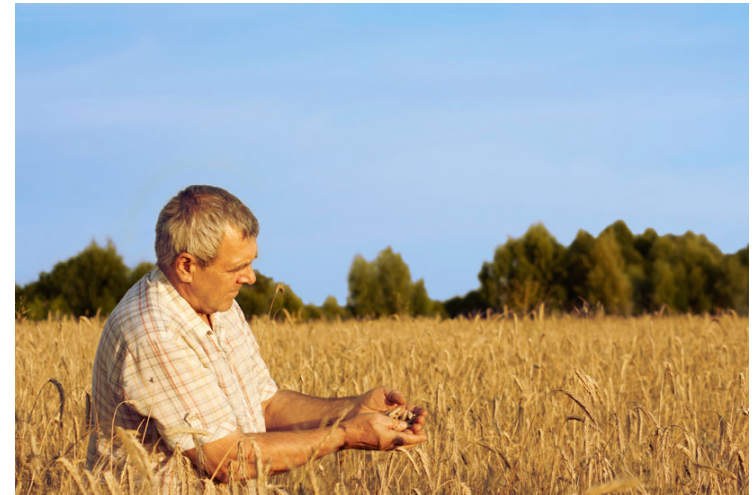


Product Assurance

National Residue Survey - *Across Australian Agriculture*

Which Grains?

- cereal grains (wheat, barley, oat, maize, sorghum, triticale)
- pulses (chickpea, cow pea, pigeon pea, field pea, faba bean, lentil, vetch, navy bean, mung bean, lupin)
- oilseeds (canola, sunflower, soybean, safflower, linseed);
- Plus milled fractions of cereal grains.



Sample collection and analysis

NRS Grain Program Results

Year	Export Bulk Samples	Compliance (%)	Export Container Samples	Compliance (%)
2004–05	3 659	99.9	77	100
2005–06	2 953	100	89	100
2006–07	2 085	100	168	100
2007–08	2 055	100	565	99.6
2008–09	2 621	100	391	98.2
2009–10	2 673	99.8	827	98.3
2010–11	3 302	99.8	821	98.9
2011–12	4 005	99.9	886	99.0
2012–13	3 802	99.8	1 229	98.9
2013-14	3 351	99.7	1 802	98.9

ProductionWise Spray Planner

	Sunrise														Sunset															
Tue 23/02	5:50														☁️	☁️	☁️	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	6:56
Wed 24/02	5:51	☞	☞	☞	☞	☞	☞	☞							☞	☞	☞	☞	☞	☞										6:55
Thu 25/02	5:51														☞	☞	☞	☞	☞											6:54
Fri 26/02	5:52								☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	6:53	
Sat 27/02	5:53	☞	☞	☞	☞	☞									☁️	☁️	☁️	☁️	☁️	☁️	☁️	☁️	☁️							6:51
		1am	3am	5am	7am	9am	11am	1pm	3pm	5pm	7pm	9pm	11pm																	

Management

- Quality Assurance
 - Commodity vendor declarations
 - Optional assurance or best management practice programs
 - ✓ Graincare
 - ✓ On-Farm Quality Assurance
 - ✓ Grains BMP

Production Declarations

Operations



Cultivation Deep Ripper

3 Feb 2015

📍 Five at NSW Farm Farm

\$14.83 /ha

Area: 30.171 ha
Performed By: Farm Employee
Labour Cost: \$25.00 total



Spraying Boomspray - Trailed

30 Mar 2015

📍 Five at NSW Farm Farm

\$24.36 /ha

Area: 30.171 ha
Water Rate: 100 L/ha
Total Water: 3,017 L

Inputs

\$629.37



Hasten Spray Adjuvant
1 % at \$0.02 /ha

30.17 L
\$0.60



Garlon 600 Herbicide
300 mL/ha at \$9.00 /ha

9,051.30 mL
\$271.54



Glyphosate 450 Herbicide
1.2 L/ha at \$3.84 /ha

36.21 L
\$115.86



Lv Mcpa 500 Herbicide
800 mL/ha at \$8.00 /ha

24,136.80 mL
\$241.37



Sowing Airseeder Knife Points

26 Apr 2015

📍 Five at NSW Farm Farm # Suntop Wheat

\$96.20 /ha

Area: 30.171 ha
Purpose: Grain
Sowing Rate: 80 kg/ha
Row Spacing: 300 mm
Sowing Depth: 25 mm
Disturbance: 10%
Till Depth: 30 mm

Inputs

\$2,896.42



Dap Fertiliser
100 kg/ha at \$80.00 /ha

3,017.10 kg
\$2,413.68



Suntop Seed
80 kg/ha at \$16.00 /ha

2,413.68 kg
\$482.74

Supply Chain Assurance

- Grains are a prescribed product under the Australian Export Control Act 1982
- Export inspection and certification is undertaken by authorised officers of the Plant Export Operations, a division of the Australian Government Department of Agriculture
- Inspection and Certification are undertaken on a cost recovery basis.
- Inspection and certification is of:
 - *Grains;*
 - *Containers or ship's hold; and*
 - *Premises of packaging or loading.*

Australian Grains Industry Code of Practice

- Inclusive of all of these elements
- The Australian grain industry is proud to be the **only** global exporter of grain that has such a Code.
- Adherence to the Code has been a requirement for membership of the trade entity Grain Trade Australia since July 2014.



www.graintrade.org.au/grain-industry-code-practice



Thank You



www.graingrowers.com.au