



Connect & Grow

The wine grape effect

Presented by Conrad Schutte

19 January 2023

Climatic scales





Post-harvest

2022



Post-harvest

IRRIGATION

Sufficient water

FERTILIZERS

Less than usual

LEAF FALL

Early - normal

DISEASE PRESSURE

Higher than usual



Winter

June - August 2022



Winter 2022

CONDITIONS

Dormancy achieved (cold units)

TEMPERATURES

Warmer

RAINFALL

Low & varied by region

WATER RESOURCES

Average - low / snow



■ Olifants rivier



Spring

September - November 2022



Spring 2022

BUDDING

Earlier - normal

TEMPERATURES

Warmer

RAINFALL

Mostly drier (Northern Cape)

FLOWERING & SET

Earlier, even (with exceptions)



Paarl
Cabernet Franc (3 Nov)



Elgin
Chardonnay (24 Oct)



Bonnievale
Chenin Blanc (21 Oct)

■ Olifantsrivier

Spring 2022

BUDDING

Earlier - normal

TEMPERATURES

Warmer

RAINFALL

Mostly drier (Northern Cape)

FLOWERING & SET

Earlier, even (with exceptions)

ABNORMALITIES

Frost



Paarl
Grenache (6 Dec)



Stellenbosch
Cabernet Sauvignon (7 Dec)



Elgin
Pinot Noir (21 Nov)



Summer

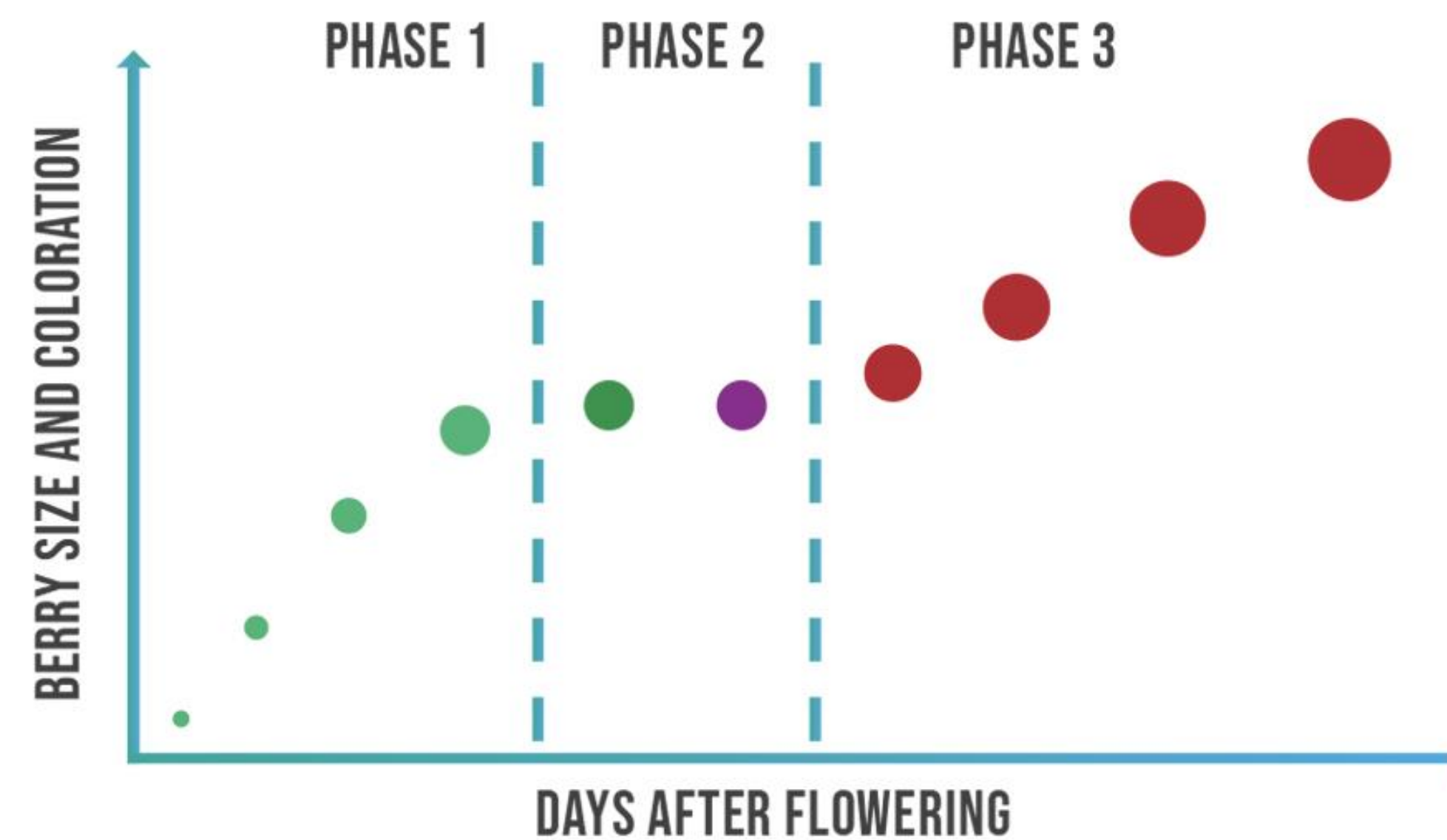
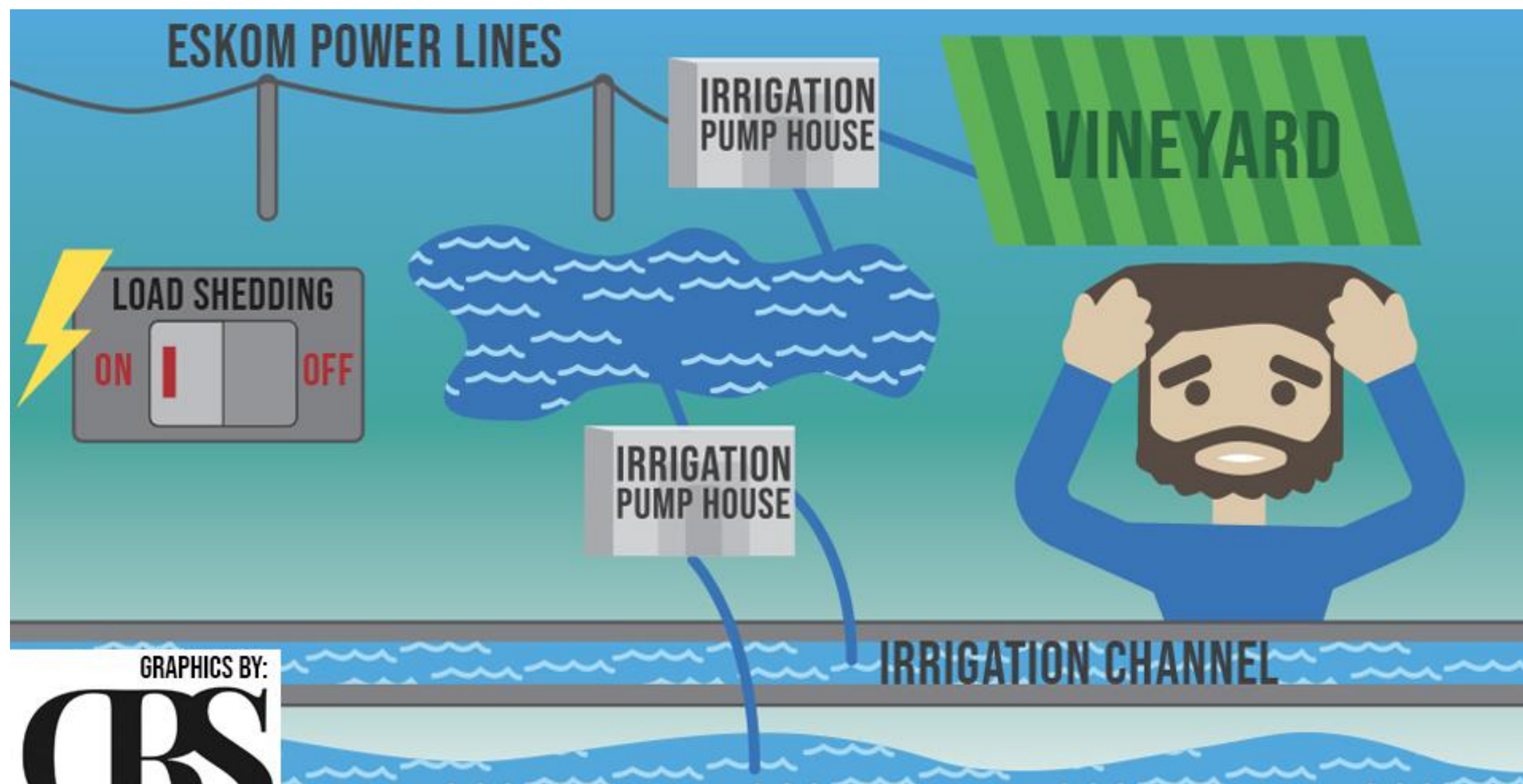
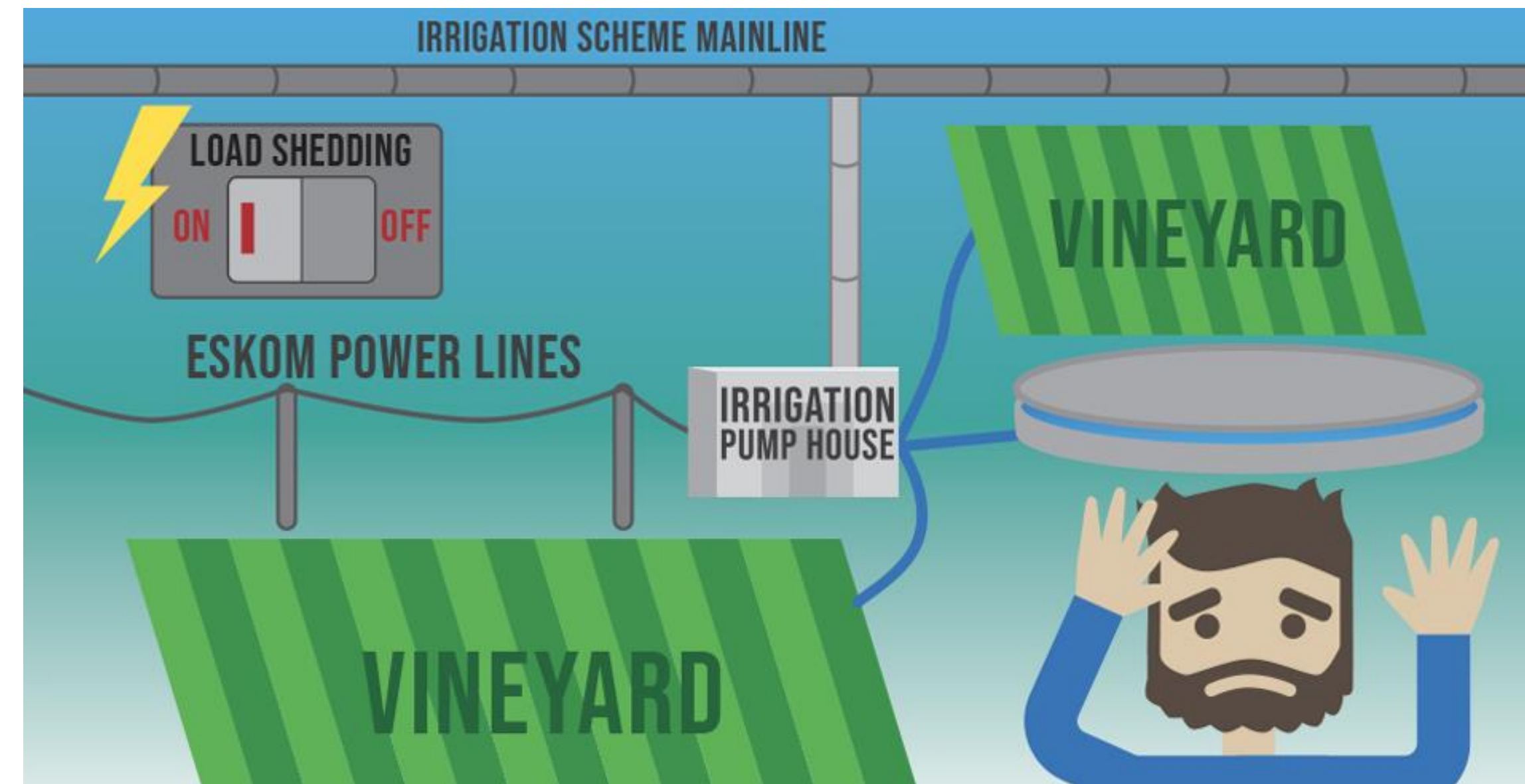
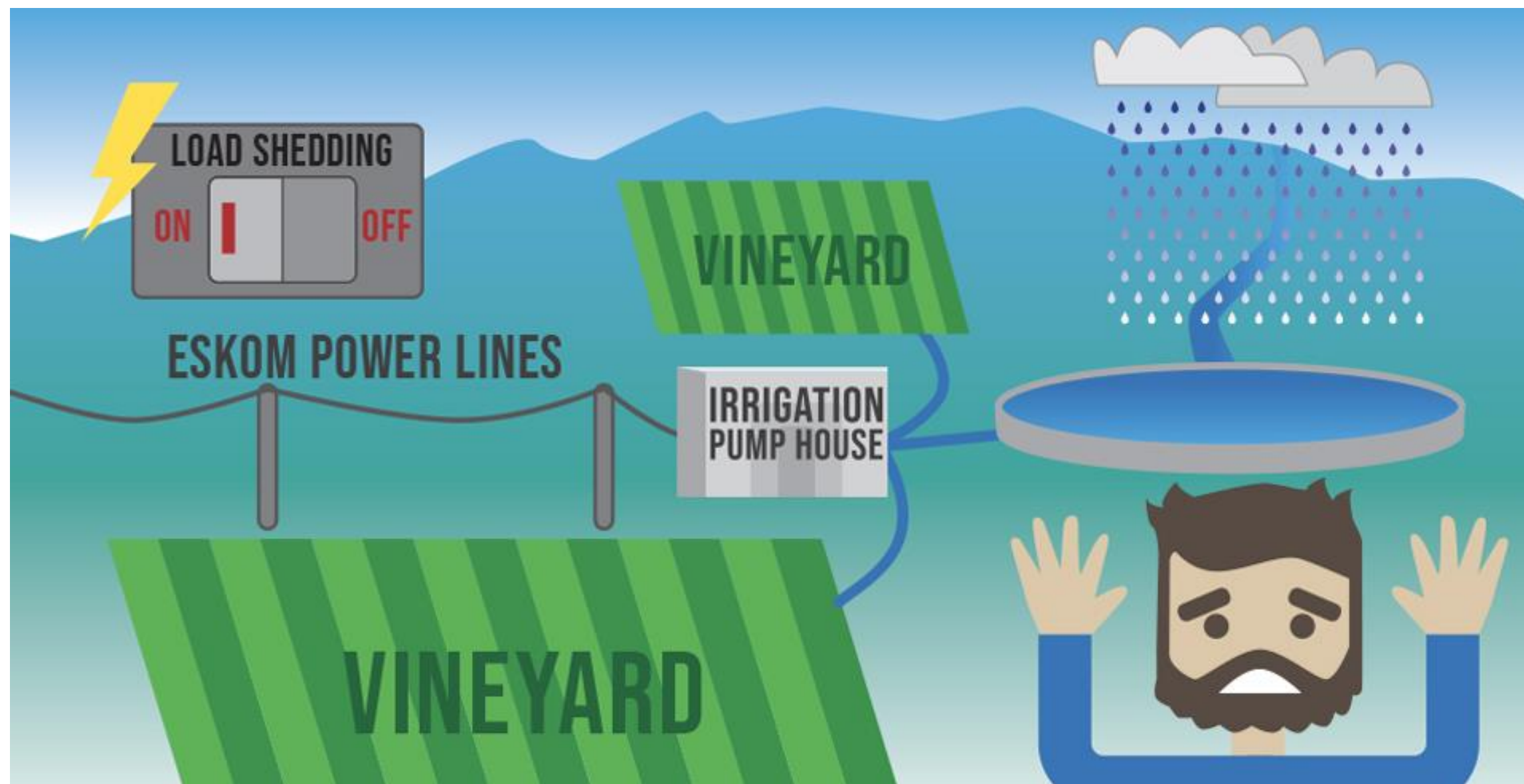
December 2022 - February 2023

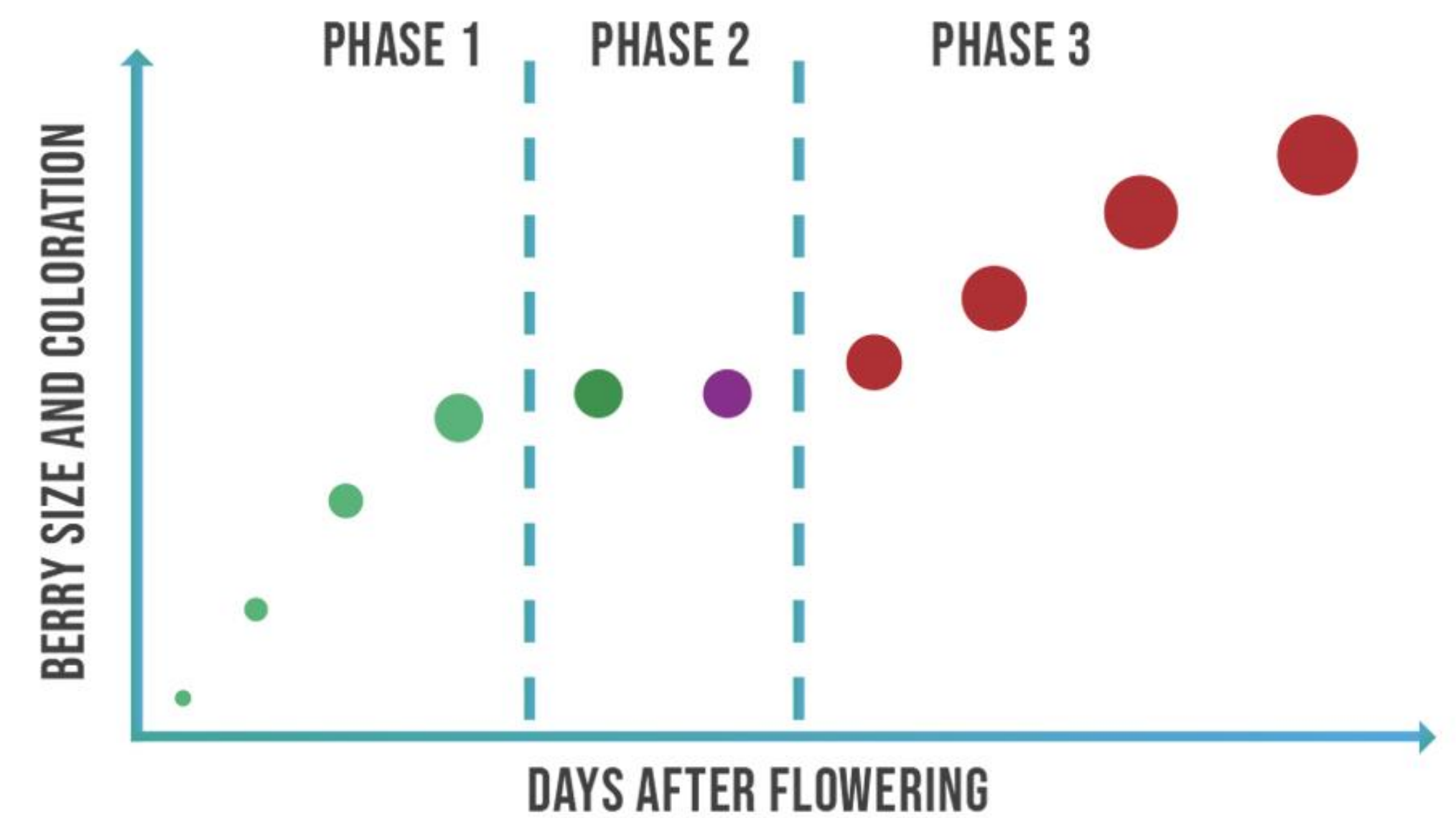
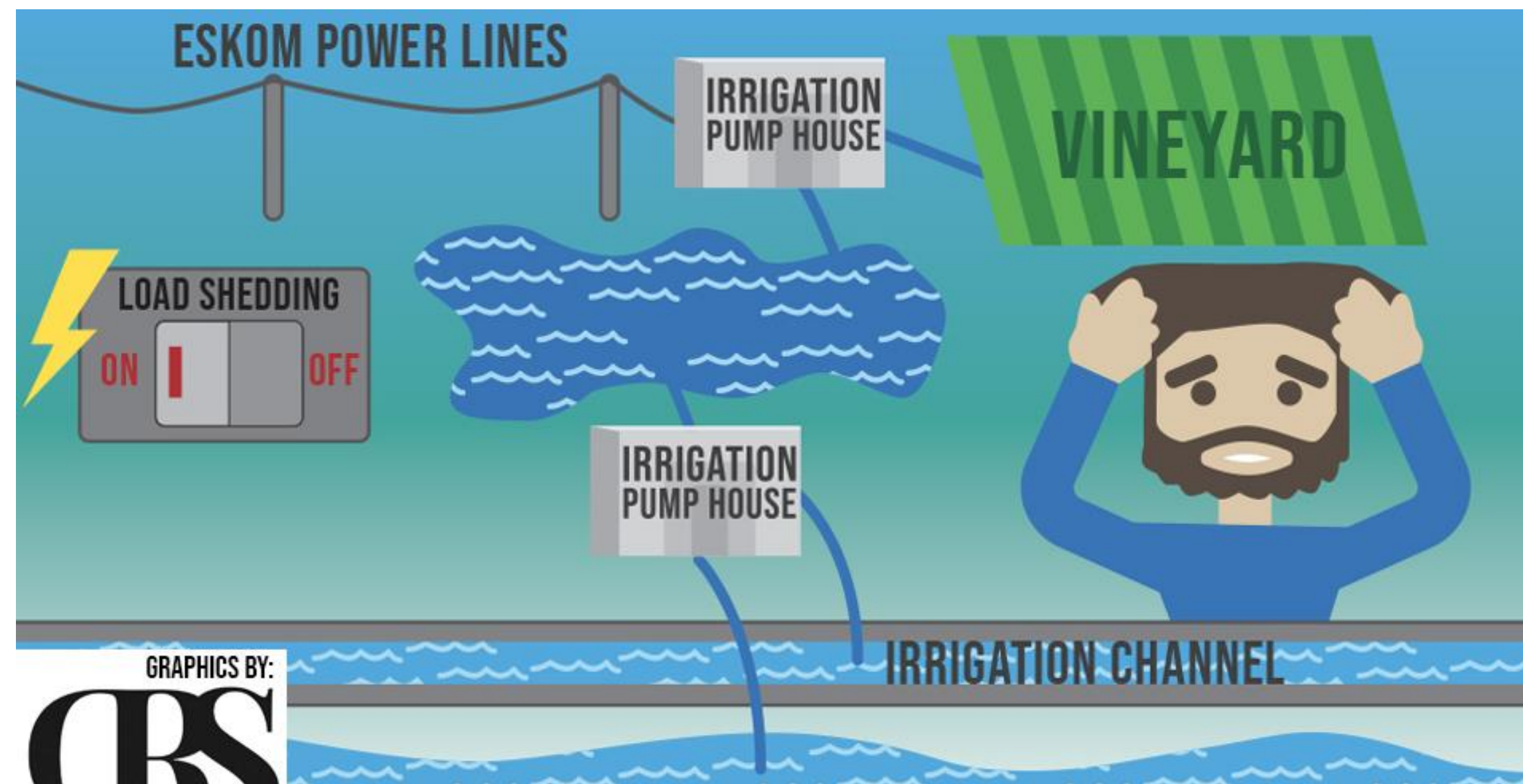


Summer 2022 - 2023

VERAISON
Early, even







Summer 2022 - 2023

VERAISON

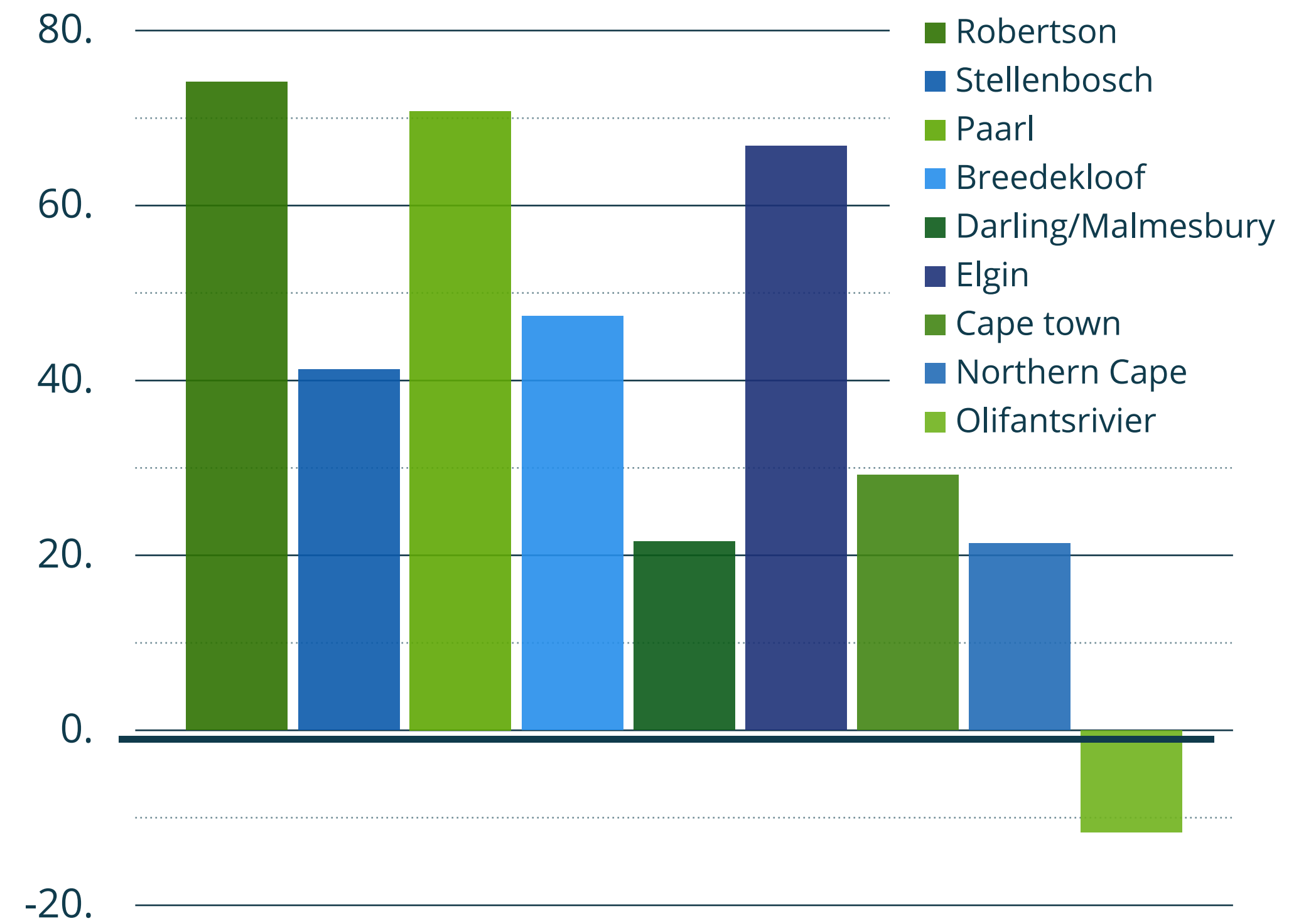
Early, even

RAINFALL

Mostly above average



Normalized Rainfall - Dec 2022 & Jan 2023 (mm)



Summer 2022 - 2023

VERAISON

Early, even

RAINFALL

Mostly above average

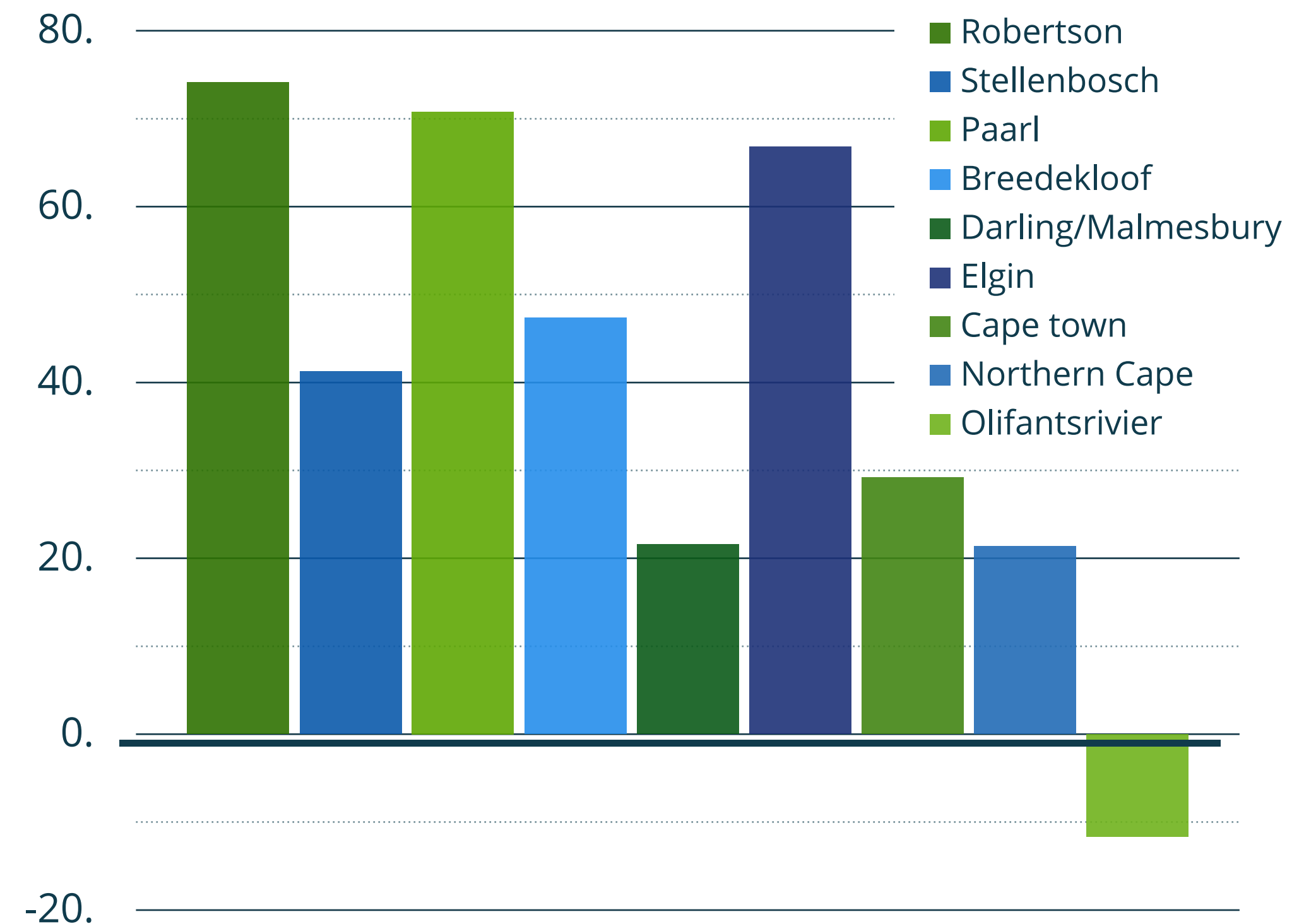


“Be careful what you ask for because when you pray for rain, you have to deal with the mud as well.”

- Denzel Washington



Normalized Rainfall - Dec 2022 & Jan 2023 (mm)



Summer 2022 - 2023

VERAISON

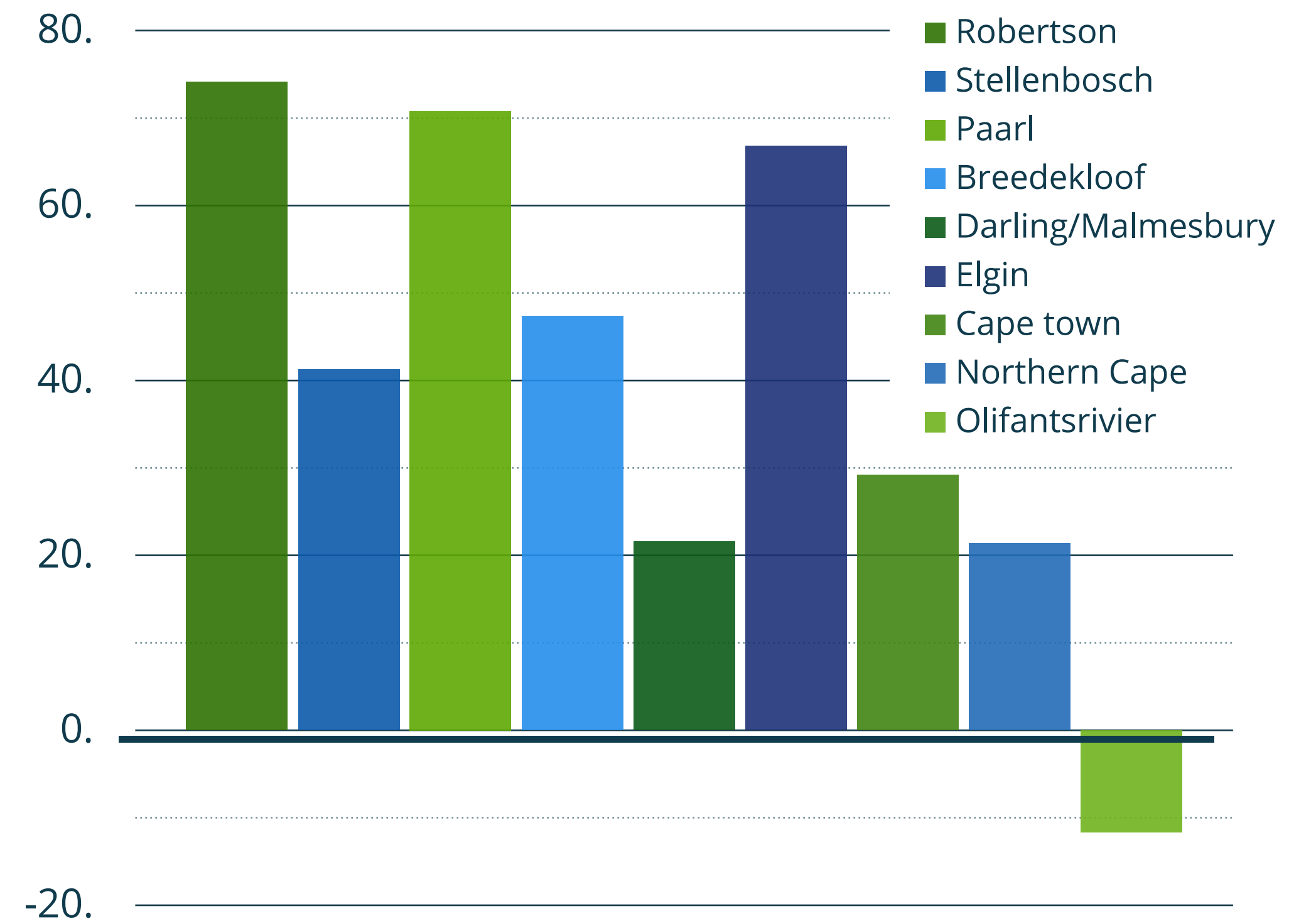
Early, even

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Normalized Rainfall - Dec 2022 & Jan 2023 (mm)



Summer 2022 - 2023

VERAISON

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Mostly above average

VEGETATIVE GROWTH

Active regrowth



Summer 2022 - 2023

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Early, even

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DISEASE

Downey/powdery mildew



Summer 2022 - 2023

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VEGETATIVE GROWTH

Active regrowth

DISEASE

Downey/powdery mildew

TEMPERATURE

Heat spikes - start Dec/Jan

Paarl
Cabernet Sauvignon (9 Jan)



Olifantsrivier
Chenin Blanc (7 Dec)

Summer 2022 - 2023

VERAISON

Early, even

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Mostly above average

VEGETATIVE GROWTH

Active regrowth

DISEASE

Downey/powdery mildew

TEMPERATURE

Heat spikes - start Dec/Jan

WIND

Varied by region

Paarl
Cabernet Sauvignon (9 Jan)



Olifantsrivier
Chenin Blanc (7 Dec)

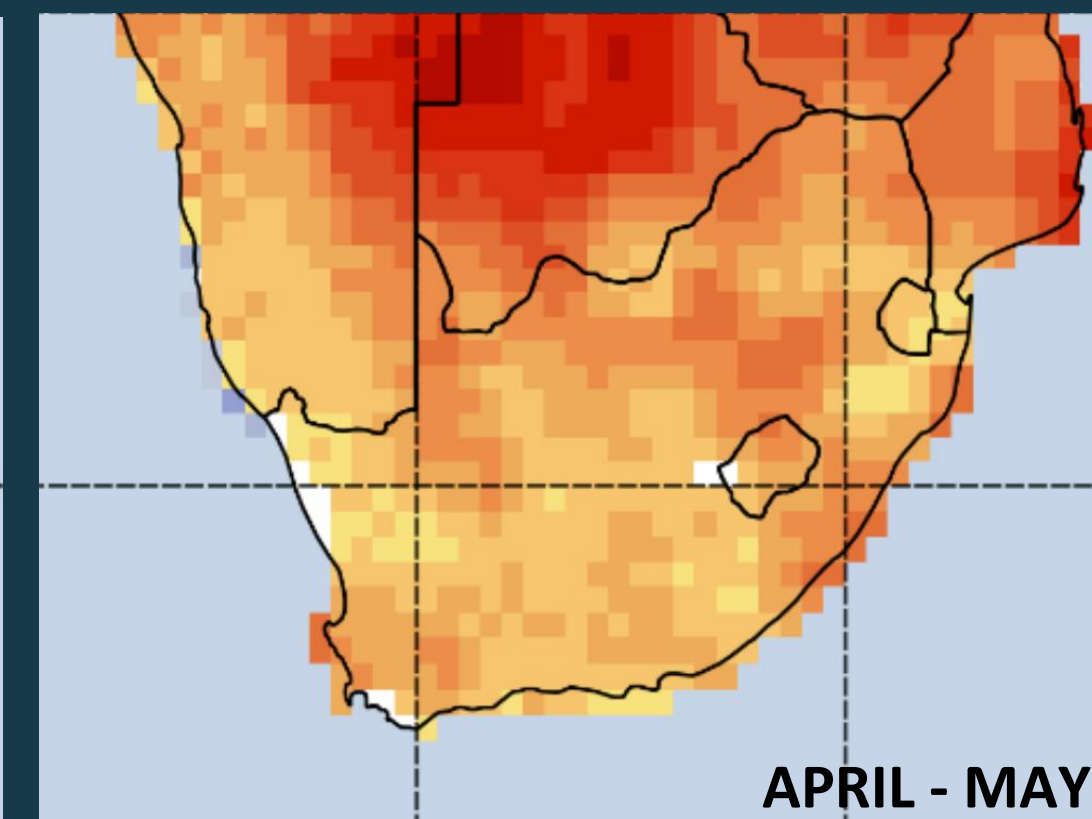
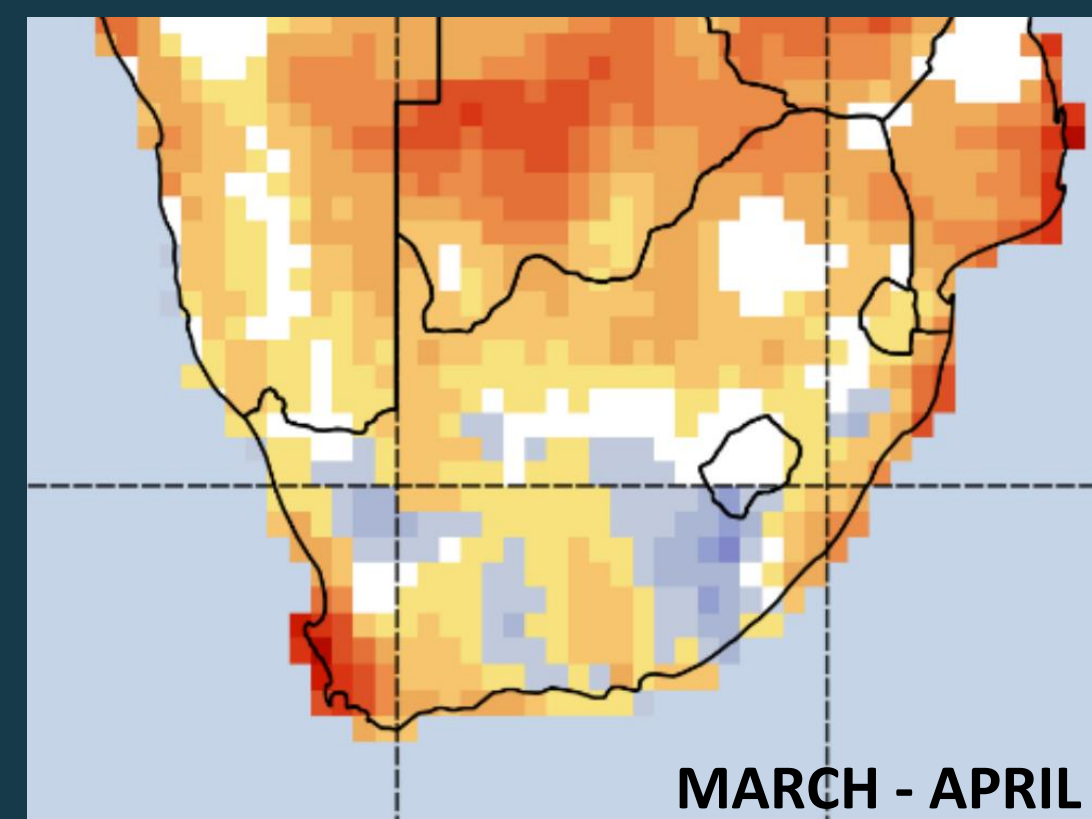
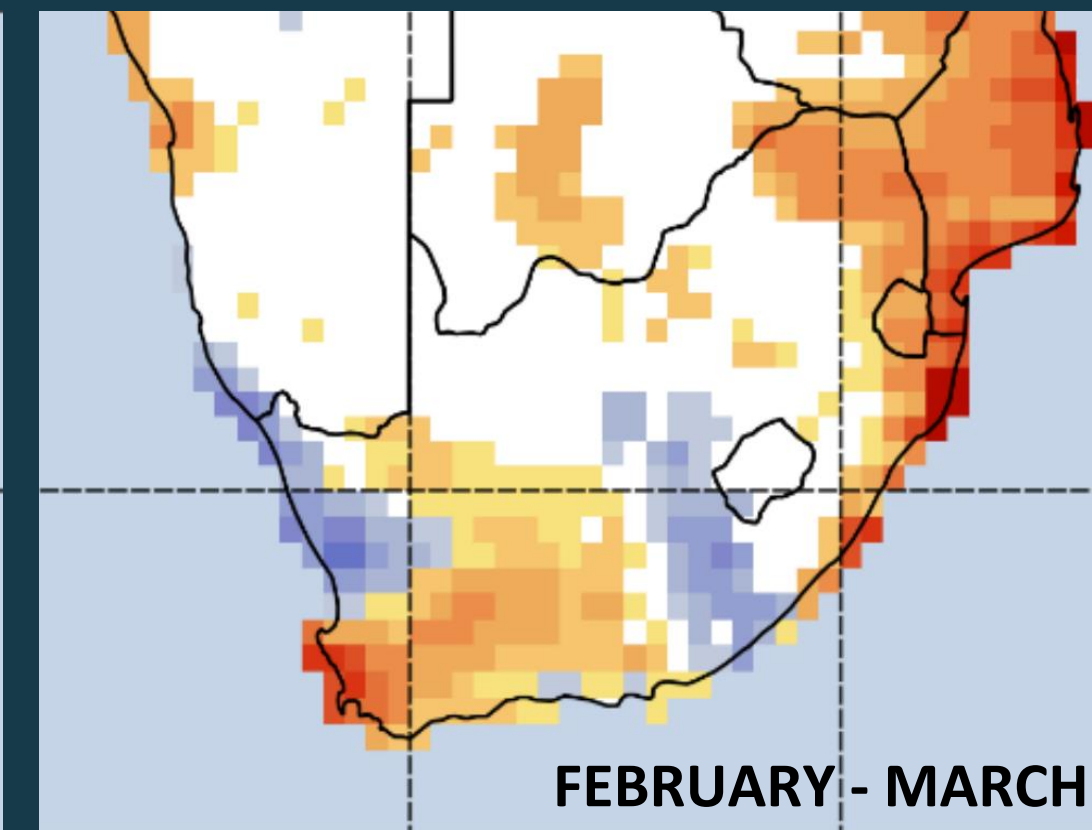
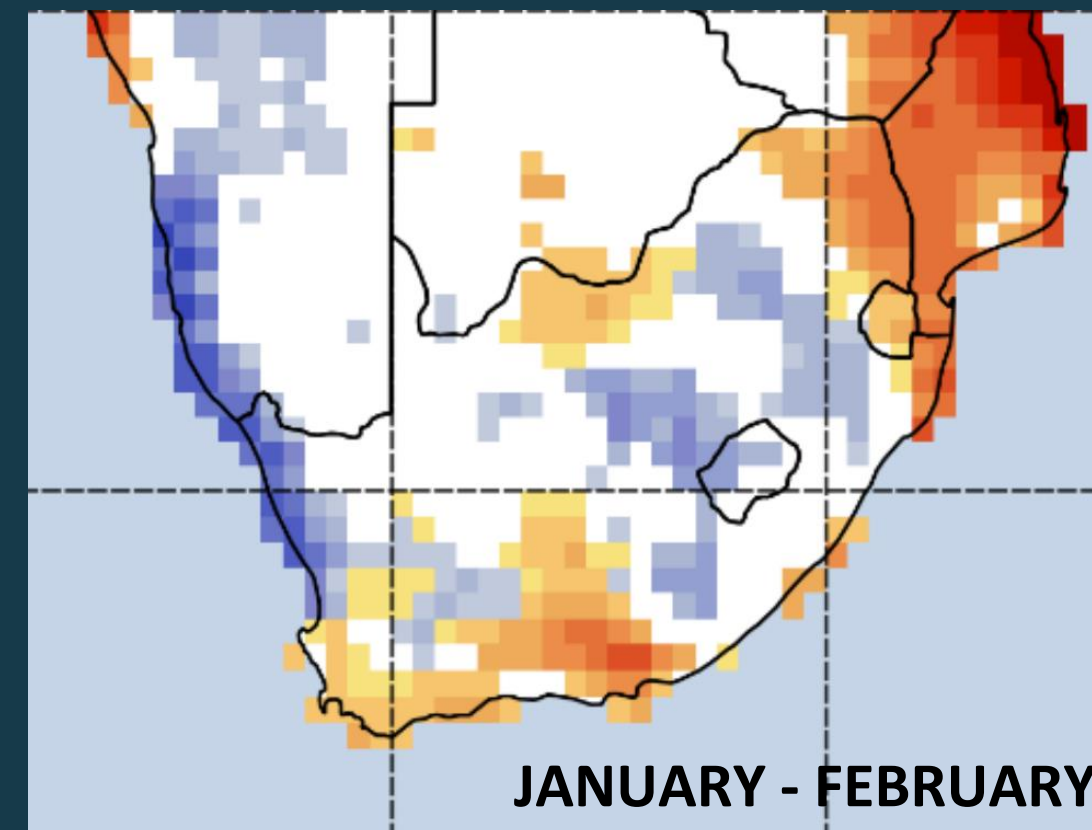
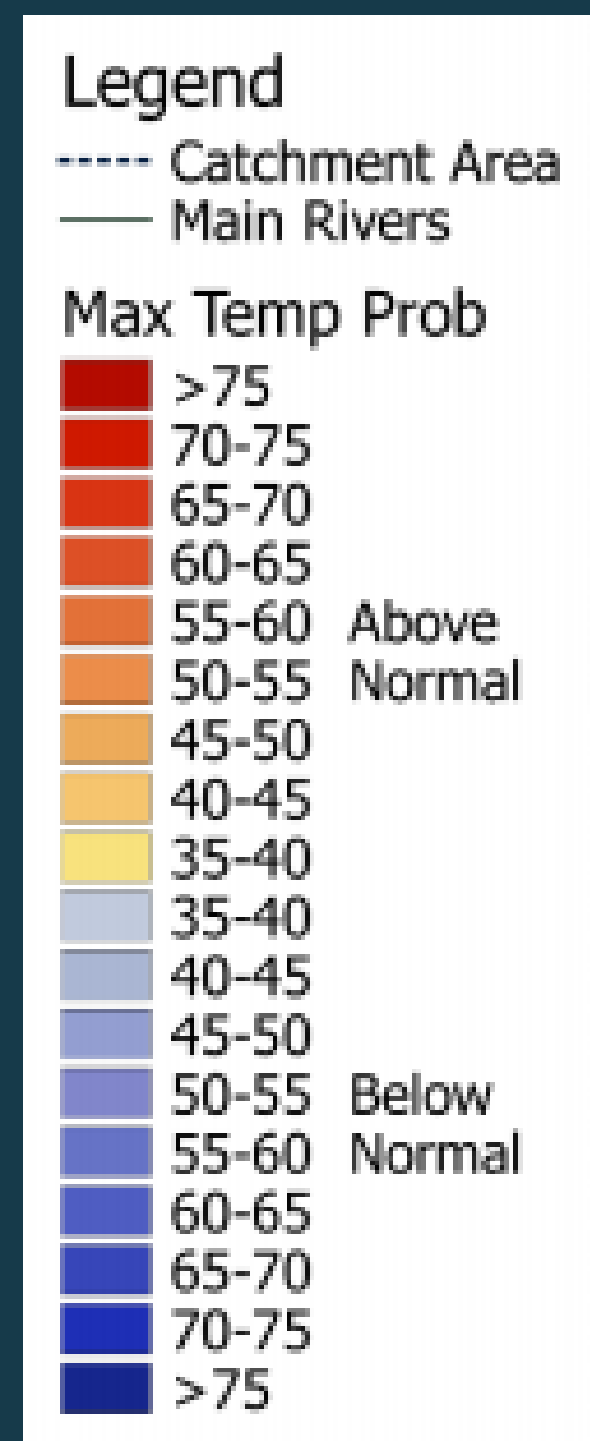


Temperature

2023 Forecast



Temperature 2023



Cooler than
normal
maximum
temperatures
early
summer
followed by
warmer than
normal
maximum
temperatures
towards
autumn

Source: *Seasonal
Forecast Worx,
compiled by*

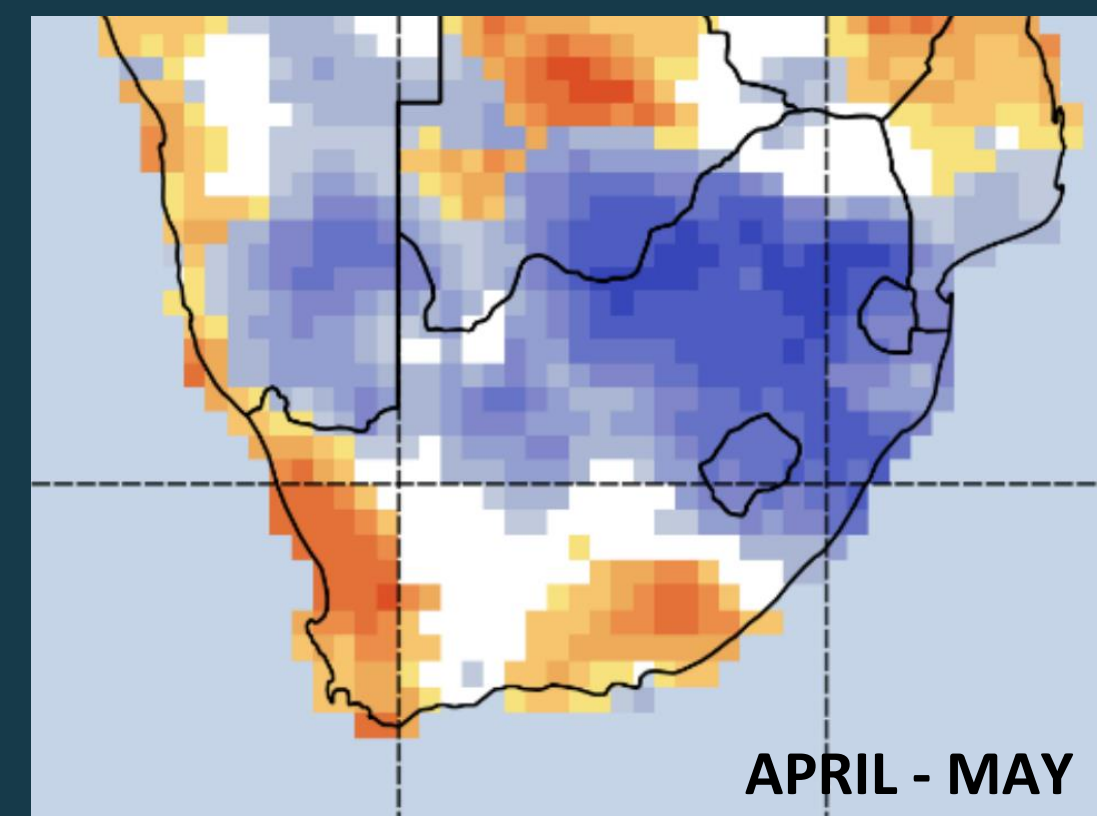
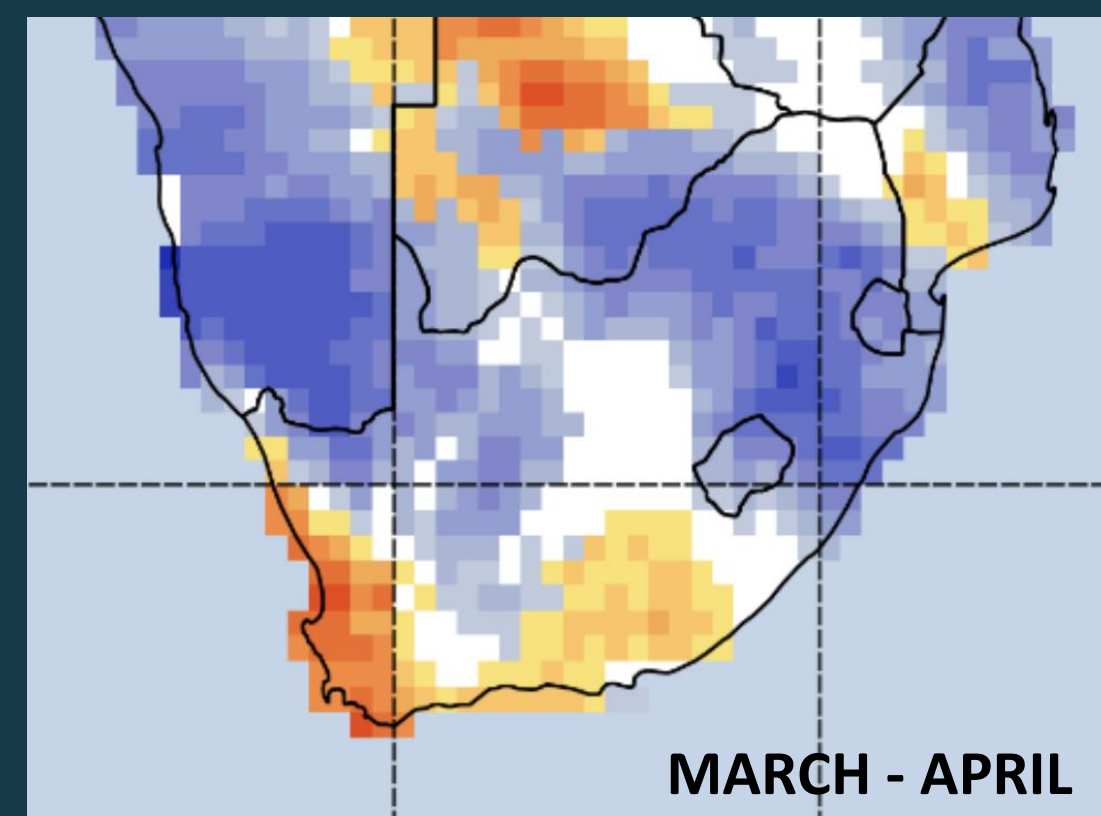
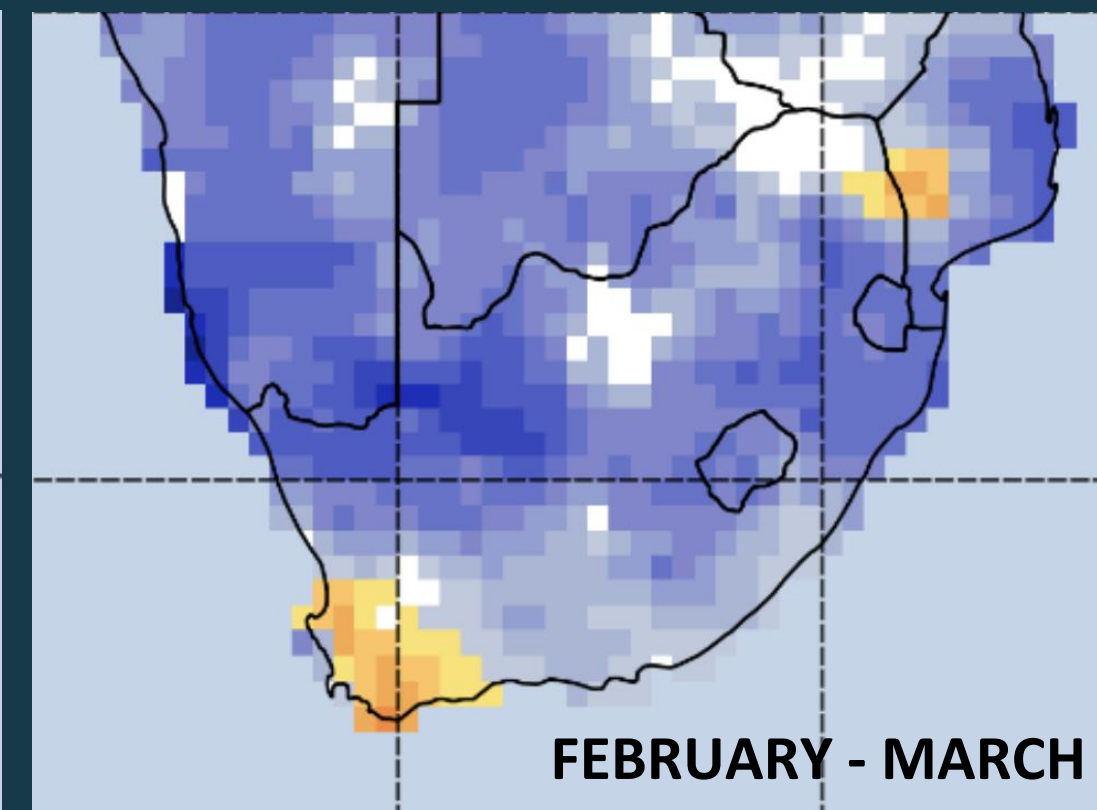
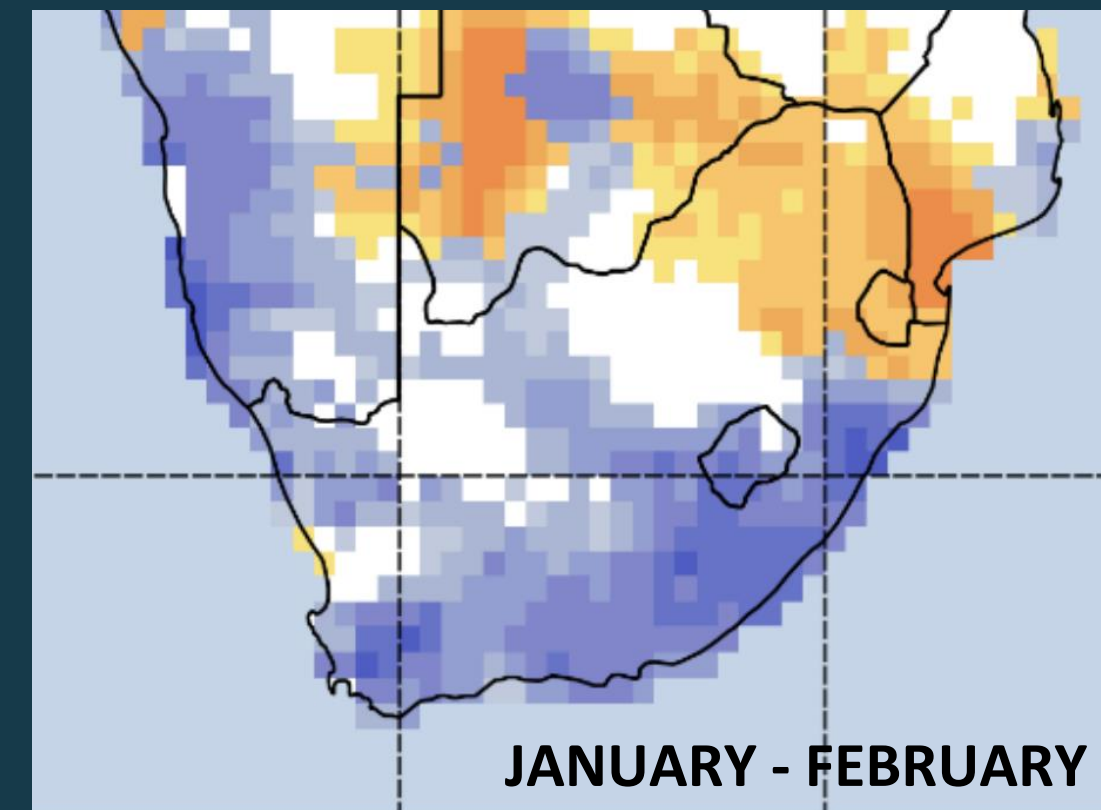
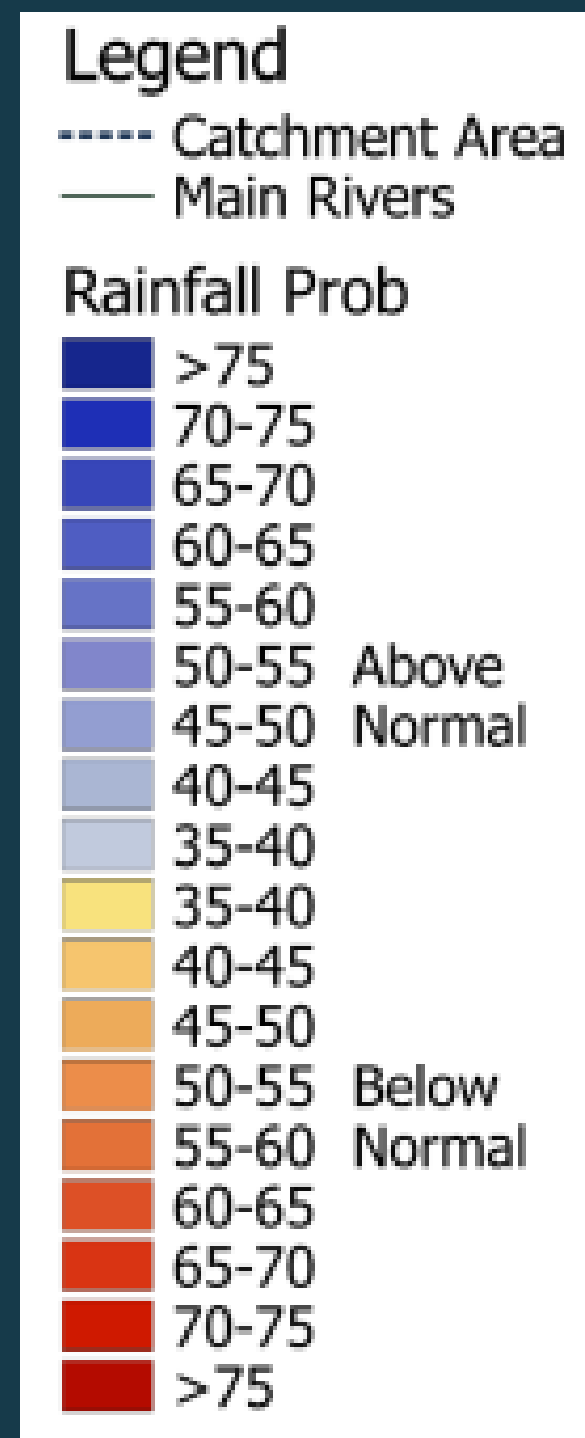

TERRACLIM

Rainfall

2023 Forecast



Rainfall 2023



South Western
Cape & South
Coast – wetter
mid summer
followed by
drier than
normal autumn
& early winter

Source: *Seasonal
Forecast Worx*,
compiled by

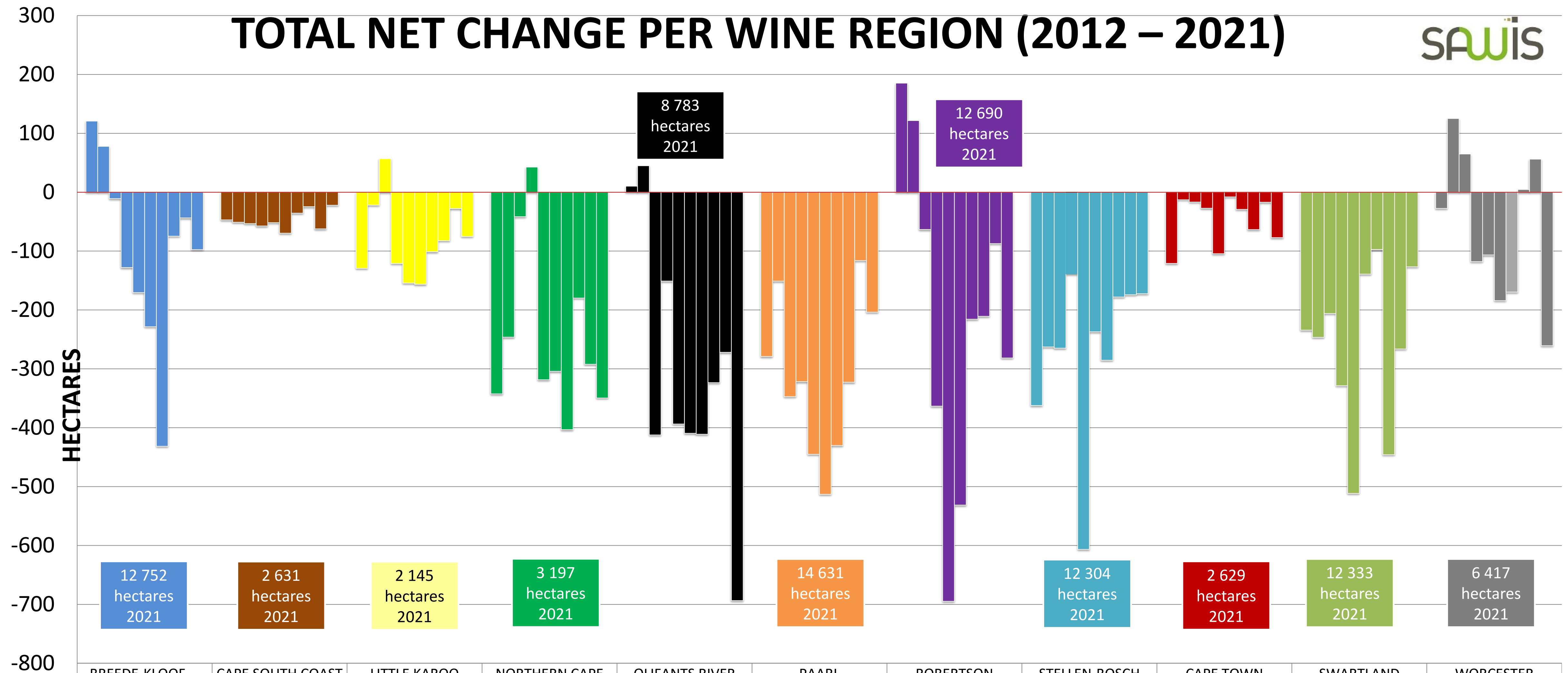
TERRACLIM



Size

2023 Expectations

TOTAL NET CHANGE PER WINE REGION (2012 – 2021)



	BREEDE-KLOOF	CAPE SOUTH COAST	LITTLE KAROO	NORTHERN CAPE	OLIFANTS RIVER	PAARL	ROBERTSON	STELLEN-BOSCH	CAPE TOWN	SWARTLAND	WORCESTER
2012	120.85	-47.05	-129.26	-342.59	10.33	-279.03	185.35	-362.30	-120.97	-234.26	-27.58
2013	77.97	-51.03	-21.98	-246.12	44.88	-151.08	121.61	-262.90	-12.91	-246.51	125.26
2014	-10.94	-53.27	56.88	-41.52	-412.34	-347.29	-63.28	-264.96	-16.66	-206.12	64.93
2015	-127.96	-57.37	-121.08	42.65	-150.82	-321.62	-363.37	-138.77	-27.30	-328.69	-117.93
2016	-170.46	-51.74	-154.39	1848 hectares	2503 hectares	-445.24	-694.76	-606.67	-104.52	-511.58	-106.65
2017	-228.49	-69.67	-156.37			-513.22	-531.35	-237.12	-7.86	-139.21	-184.11
2018	-431.58	-35.70	-101.08			-430.26	-215.64	-285.38	-29.16	-97.30	-169.62
2019	-74.77	-24.62	-82.36			-322.78	-210.76	-178.04	-63.41	-445.86	4.70
2020	-43.73	-62.22	-27.73			-116.25	-87.38	-174.15	-17.09	-266.42	56.12
2021	-97.58	-22.21	-75.30			-203.73	-281.55	-172.49	-77.22	-126.71	-200.69

Size 2023

REGION	5 YEAR AVERAGE	2022	% ON LAST YEAR	CROP EST. - JAN 2023
Northern Cape	80 368	60 306	69.7	↓↓↓ 🍷 🍇
Olifantsrivier	186 595	176 723	82.9	↓↓ 🍷 🍇 🌊
Swartland	114 240	122 764	98.8	↓↓↓ ☁️ ☀️ 🍇
Klein Karoo	31 904	31 802	97.7	↑ 🌱 ☁️ 🌧️
Paarl	134 588	138 849	94.6	↓↓ ☁️ ☀️ 🍇
Robertson	233 451	241 465	95.7	↓↓ ☁️ 🍇 🌧️
Stellenbosch	98 229	90 770	108.7	↓↓ ☁️ 🍇 + 🍇
Cape South Coast	15 614	14 199	101.1	↓↓ 🌱 🍇
Worcester	178 595	188 179	95.8	↓↓ ☁️ ☀️ 🌧️
Breedekloof	278 687	287 218	99.2	↓↓ ☁️ ☀️ 🌧️
Cape Town	20 826	21 418	107.0	↓↓ 🌱 🍇
Industry Total	1 362 685	1 373 691	94.1	↓↓
Litres per Gross Ton		774		
Million Gross Litre		1 063.7		

How to connect & grow

'CONNECTING MINDS- BETTER CONNECTED SURVIVE!'

Dr. M. Mostert

Former director: Institute of Future Studies



Site selection
tara@sun.ac.za



Rootstock, cultivar 217,
clone 317
andre@vinpro.co.za



Vineyard of the Future
emma@vinpro.co.za

17 Clone, 11 Cultivar,
15 Rootstock, 1 Pruning,
2 Trellis,
Cover Crops



Site selection
heinrich@vinpro.co.za



Efficient water use
martingg@winetech.co.za



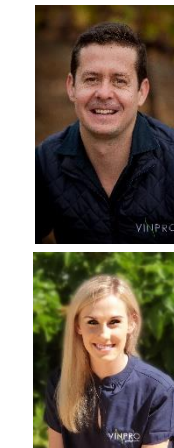
climatefruitandwine.co.za



Soil mapping &
preparation, precision
fertiliser programs
johan@vinpro.co.za



Regenerative farming,
Production plan
conrad@vinpro.co.za



Training
kross@winetech.co.za





Conrad Schutte
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082 804 422



Harvest 2023

TIMING

Earlier harvesting dates

SAMPLING

Bunch samples close to harvest

PRESSURE ON RESOURCES

More overlap on grape intake

SEQUENCE

Block order reversal

PESTS & DISEASES

Powdery mildew, Erinose mite

IRRIGATION

Loadshedding concerns

TIP

Spend time in vineyard

BLOCKS

Lower tones, high malic acid & low pH,
good colour development

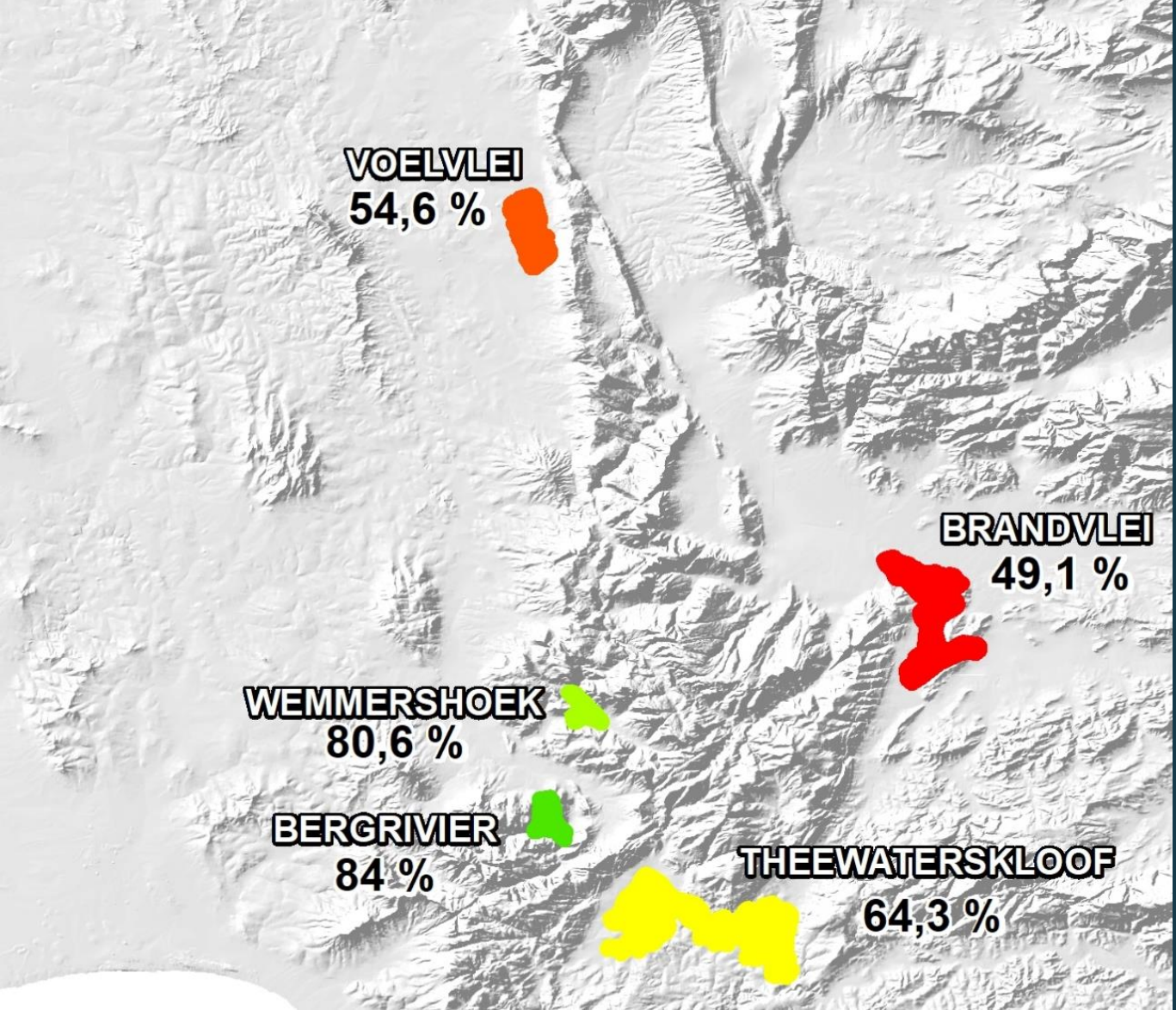
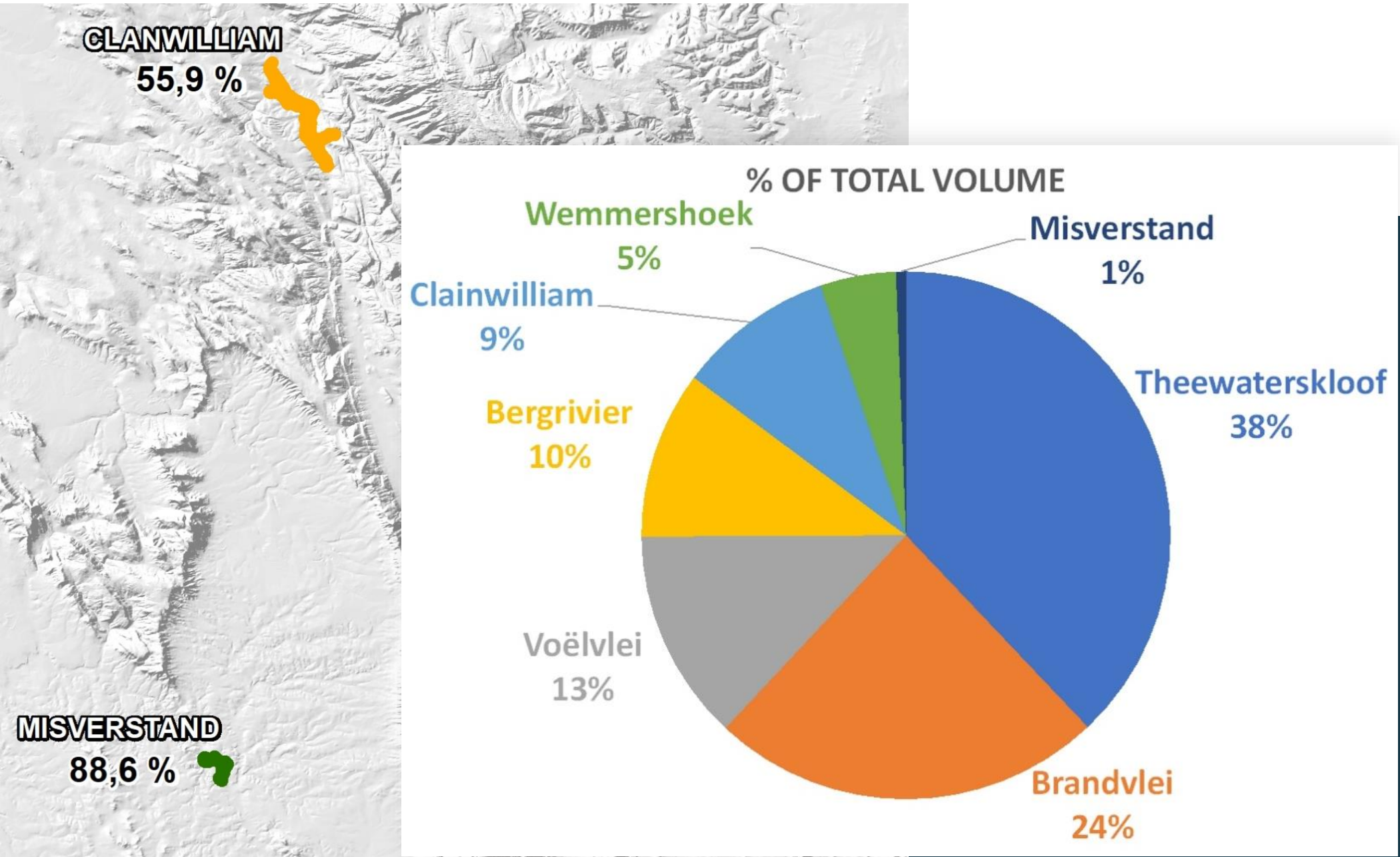
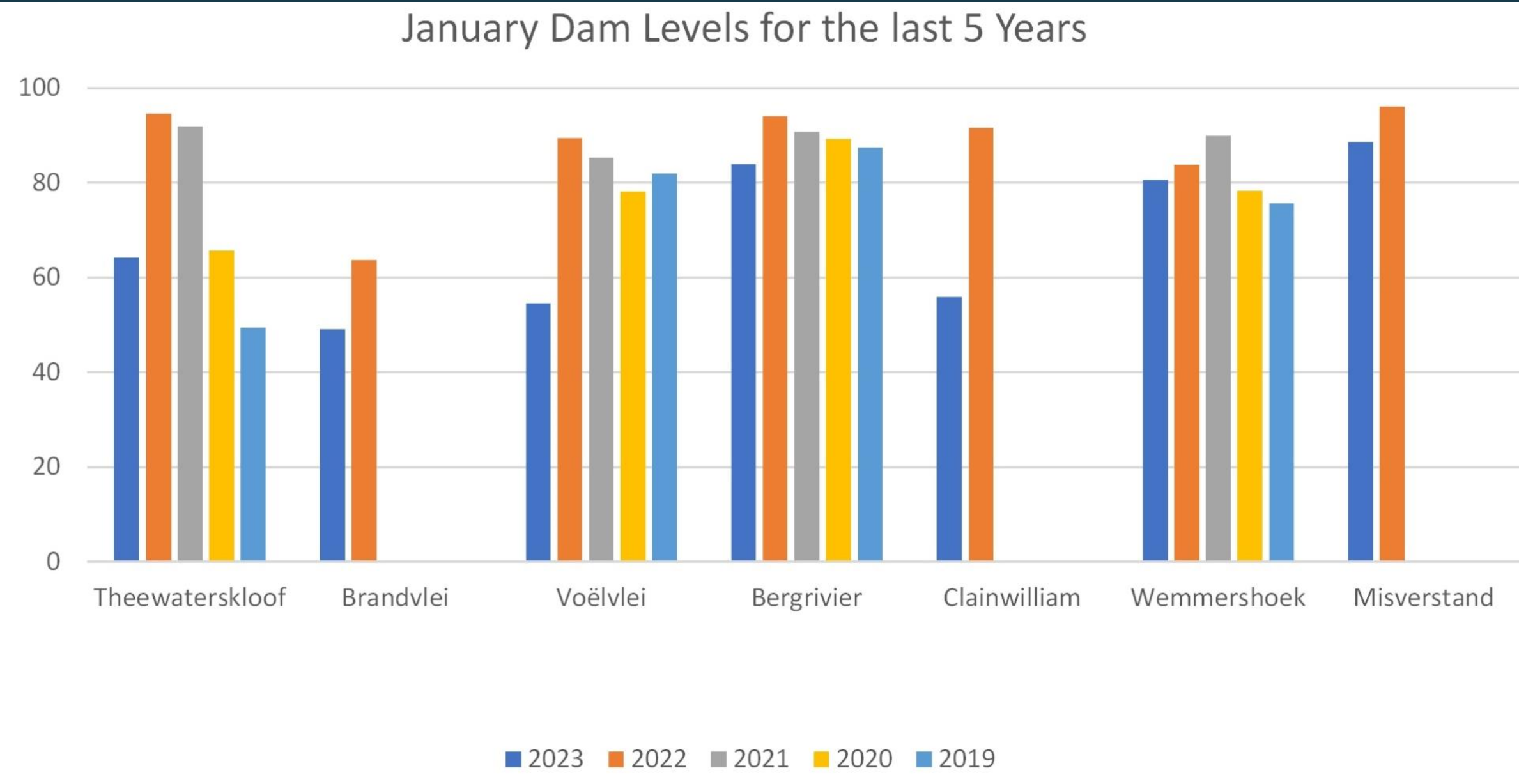
COSTS

Diesel, labour, pest & disease
management, fertiliser

Dam Levels

9 January 2023

Major Dams	2023	2022	Capacity (MI)
Theewaterskloof	64,3	94,7	480 188
Brandvlei	49,1	63,7	303 800
Voëlvlei	54,6	89,4	164 095
Bergrivier	84	94	130 010
Clainwilliam	55,9	91,7	121 000
Wemmershoek	80,6	83,8	58 644
Misverstand	88,6	96	7 737



WESTERN CAPE DAM LEVEL PROJECTED WATER DEMAND

1. Wise water use
2. Early drought caution
3. Drought response
4. Accelerated drought response
5. Emergency drought response

1:10:100 Rule



Design stage = \$1

Production stage = \$10

Customer stage = \$100