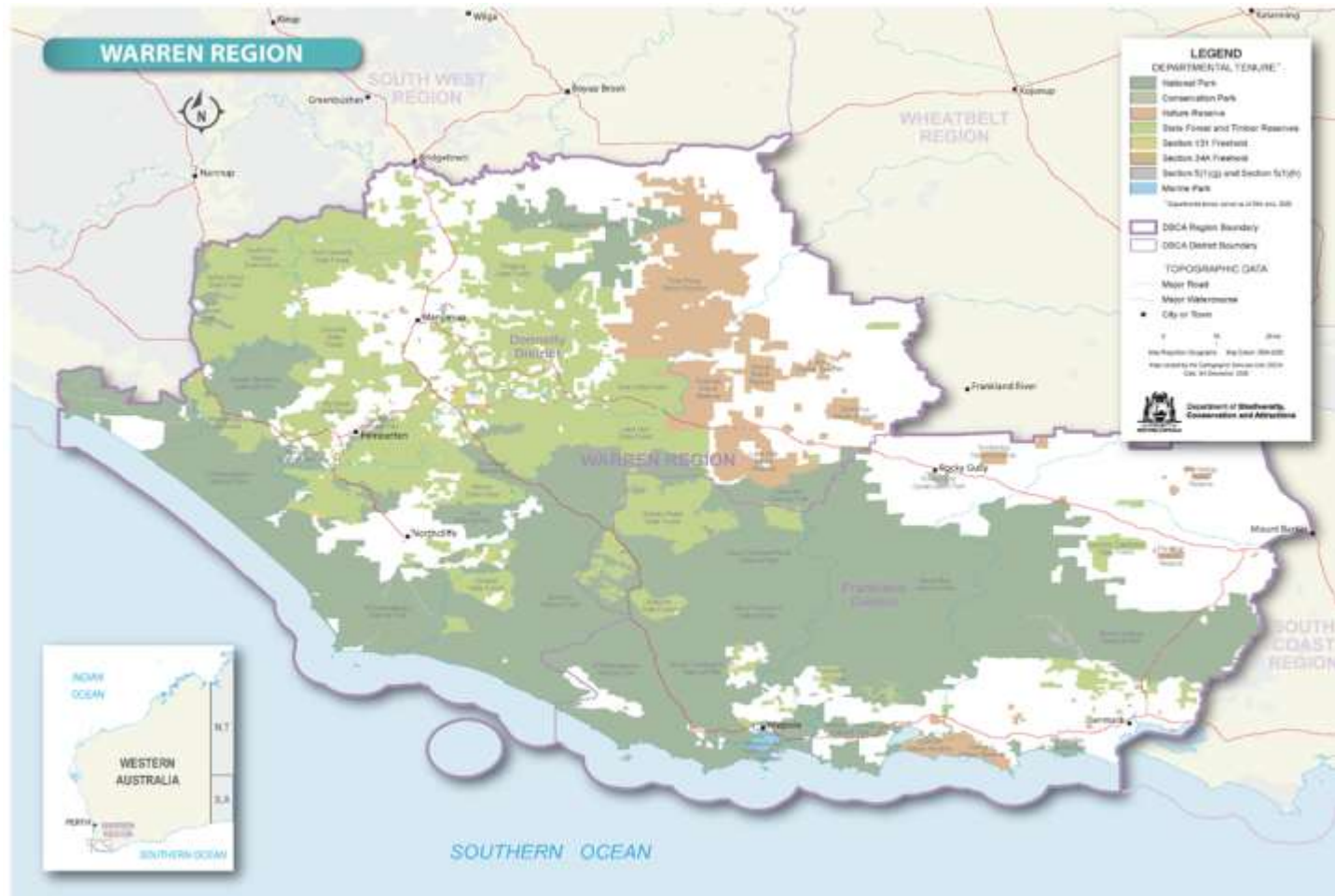


Community Information Session Walpole, 22 July 2026

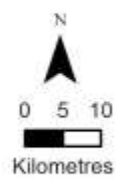


Prescribed Burn Program Development

2026 Warren Region

Warren Region: Fire Ignitions (2021 - 2026)

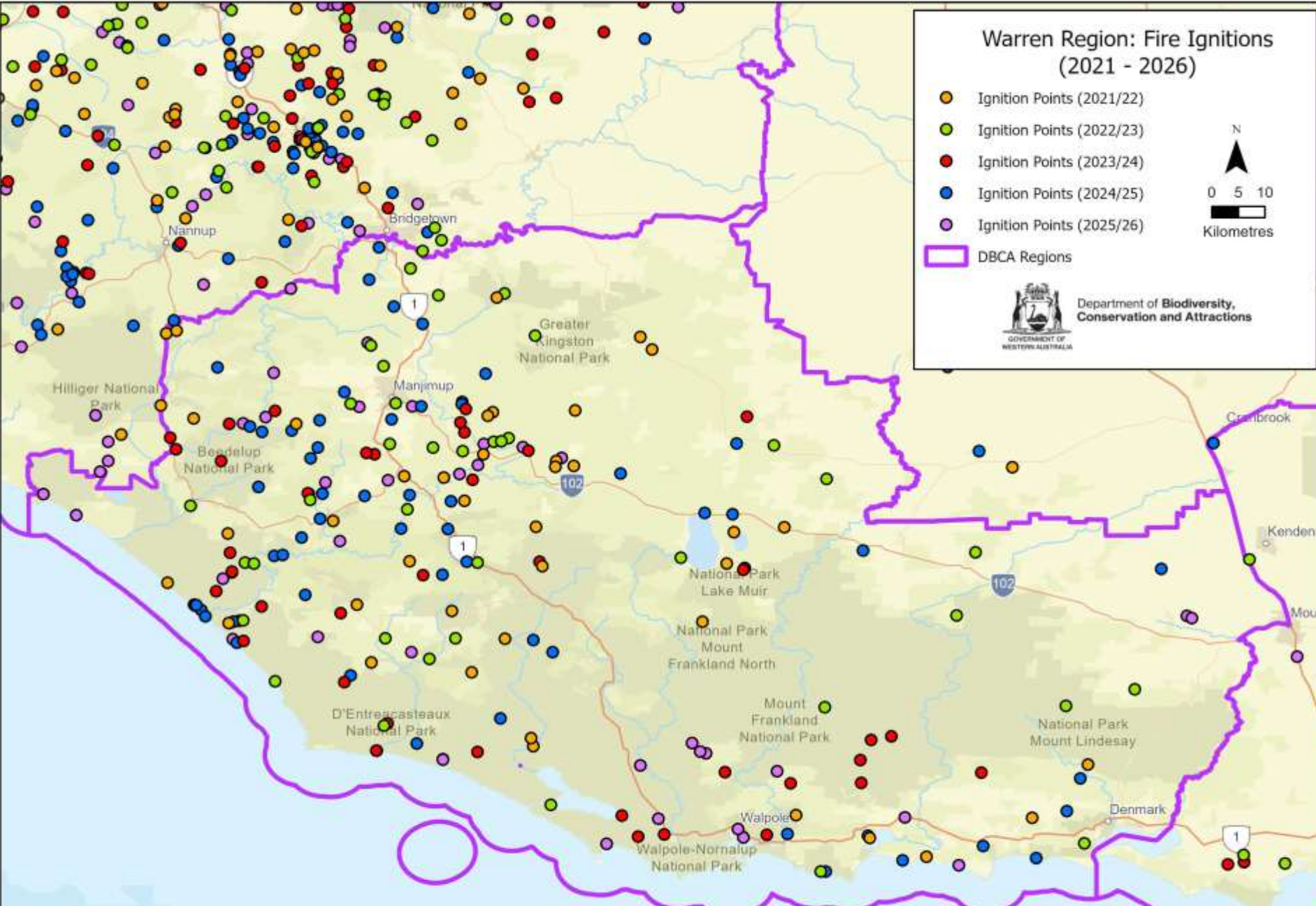
- Ignition Points (2021/22)
- Ignition Points (2022/23)
- Ignition Points (2023/24)
- Ignition Points (2024/25)
- Ignition Points (2025/26)



DBCA Regions



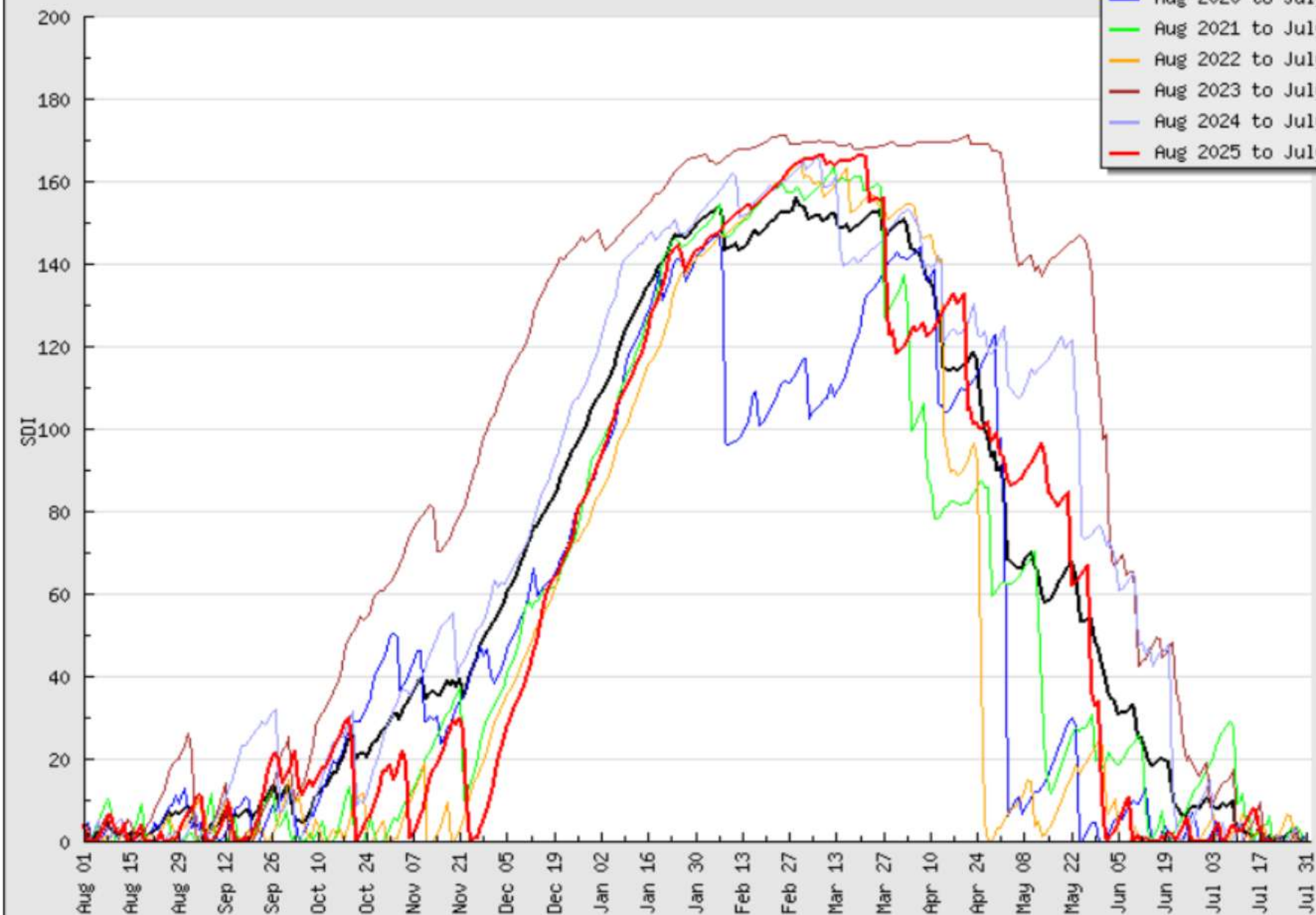
Department of Biodiversity,
Conservation and Attractions



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors and the GIS User Community

North Walpole - SDI

- 5yr Average
- Aug 2020 to July 2021
- Aug 2021 to July 2022
- Aug 2022 to July 2023
- Aug 2023 to July 2024
- Aug 2024 to July 2025
- Aug 2025 to July 2026



Warren Region; Significant Fires (2015 - 2025)

-  DON 019, March 2015 (Northcliffe)
-  DON 018, March 2022 (Flybrook)
-  DON 015, January 2024 (Broke)
-  FRK 008, April 2024 (Middle Road)
-  DON 017, February 2025 (Chesapeake)



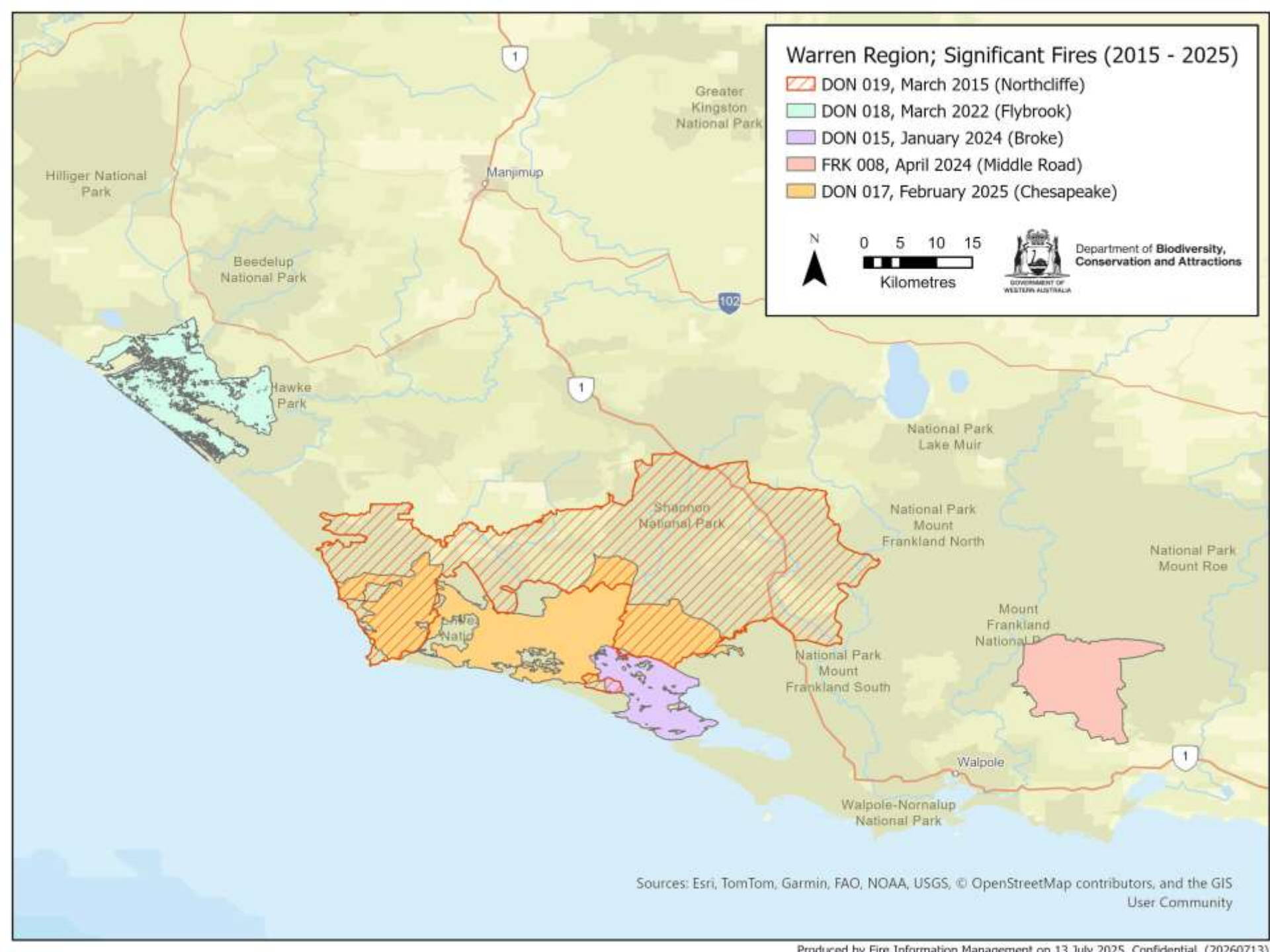
0 5 10 15



Kilometres



Department of Biodiversity,
Conservation and Attractions



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Why Apply Prescribed Fire?

1. Maintain and enhance ecological processes
 - Maximise Biodiversity
2. Reduce Bushfire risk
 - Low Fuel Load = Low Risk
3. Support research
 - Science based continual learning

Burn Planning Process

STRATEGIC PLANNING

**Bushfire Risk
Management Framework**

**Regional Fuel
Management Plan**

Decades 5 Years

State Region

PROGRAM PLANNING

**Regional Fuel
Planning Tool**

**3 Year Burn
Options Program**

**Annual Burn
Options Program**

3 Years 1 Year

Region District

OPERATIONAL PLANNING

Prescribed Fire Plan

Months Weeks

Planned Area

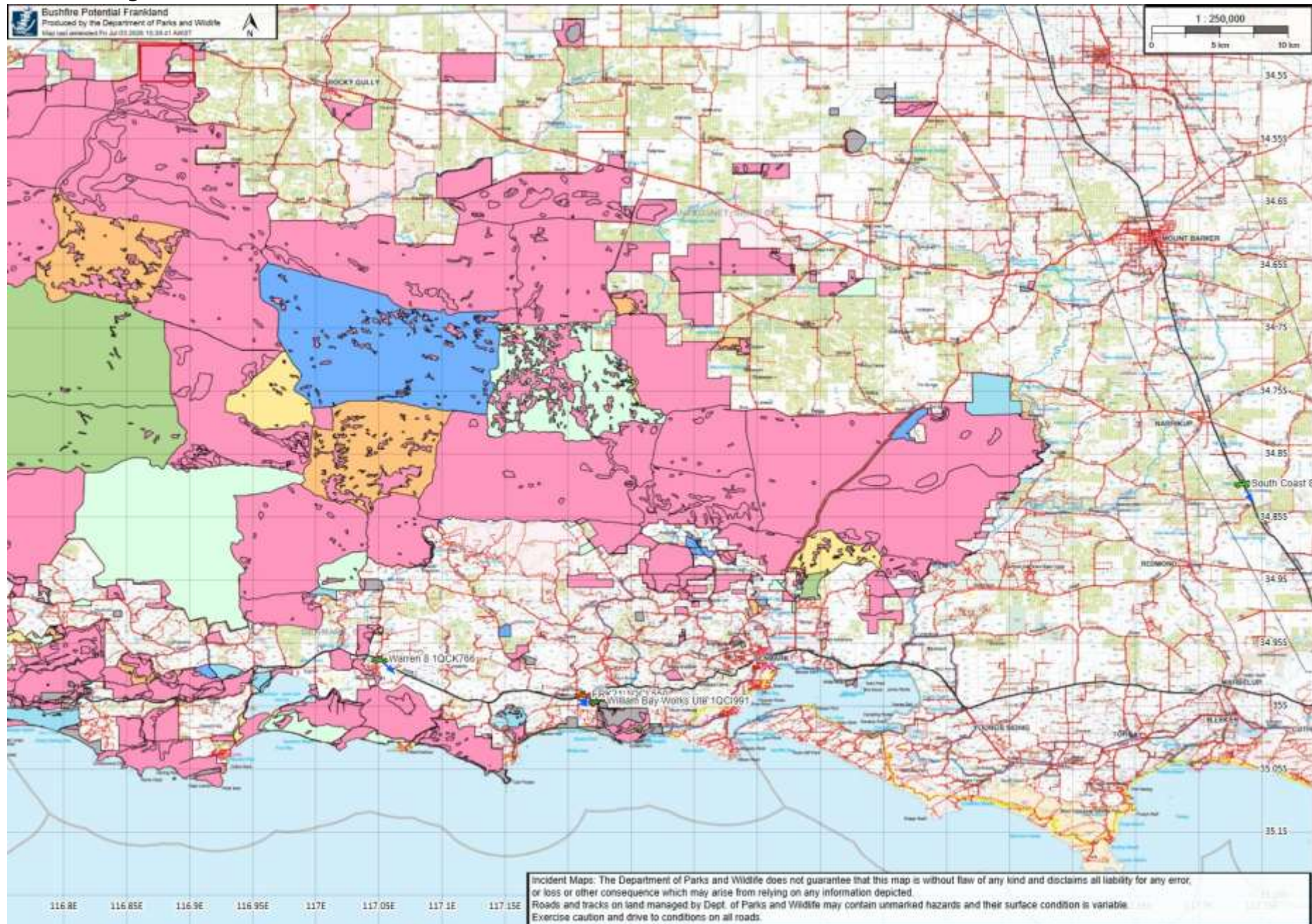
BURN IMPLEMENTATION

**Prescribed Burning
Options**

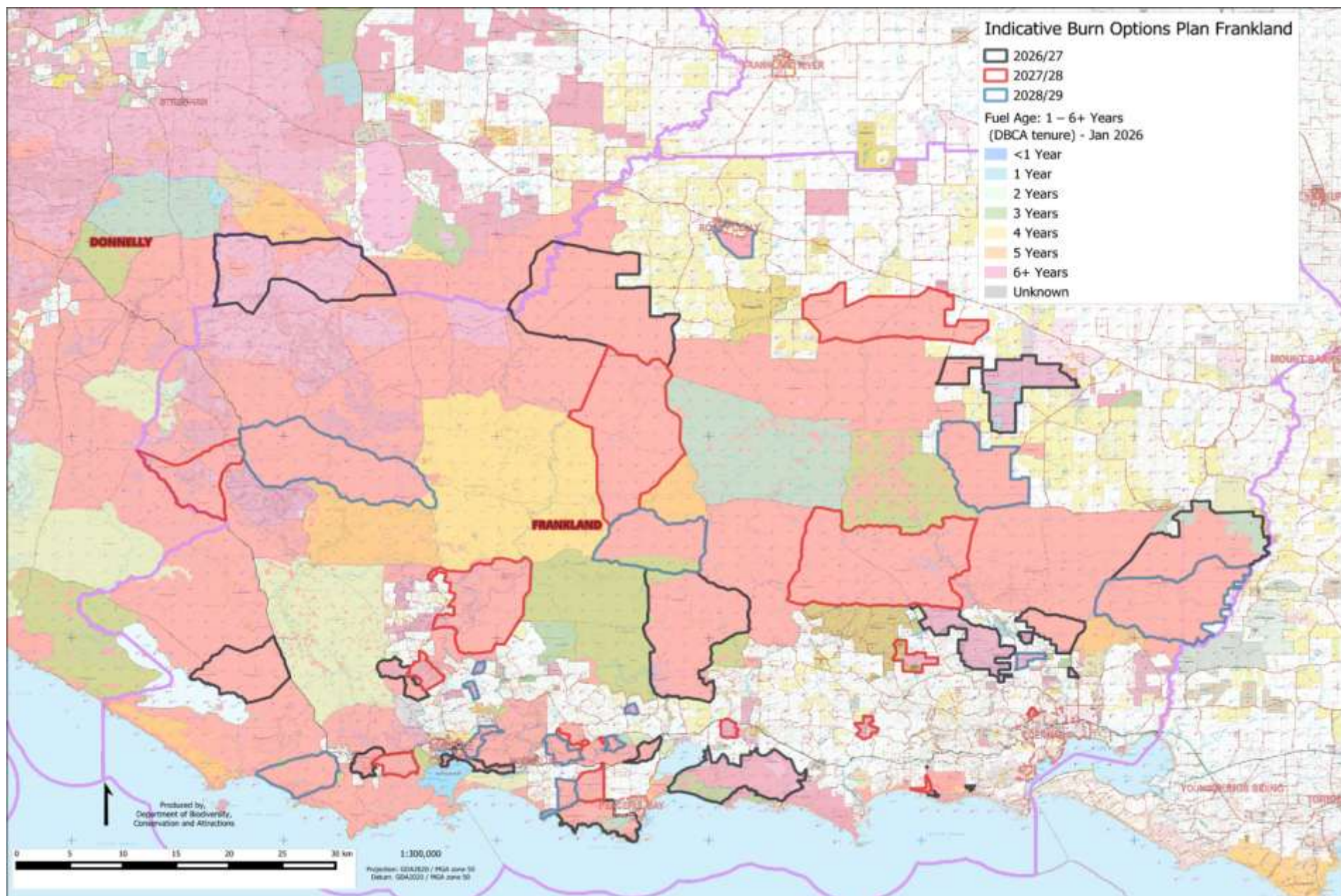
Days Hours Minutes

Treatment Area

Analyse Bushfire Risk^{OFFICIAL}



Three Year Burn Options Program



('PRESCRIBED FIRE PLAN',)

Warren, Frankland

FRK_090

Thames FCA

2022/2023

PDF Created on 30-06-2026 10:21

Prescribing Officer: Tristan Farmer

Prescribed Fire Plan Status

Status	Last Updated
Planning - Draft	05-07-2022 08:00
Endorsement - Endorsed	08-11-2022 14:26
Approval - Approved	10-11-2022 19:41
Ignition - Ignition Commenced	
Closure - Burn Open	

Prescribed Fire Plan Overview

Part	Checklist Last Updated
Part A - Summary and Approval	13-10-2022 11:29
Part B - Burn Implementation Plan	02-09-2021 14:04
Part C - Burn Evaluation	18-05-2022 11:02
Part D - Supporting Documents and Maps	

Post Burn Review

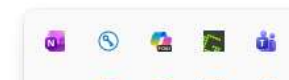
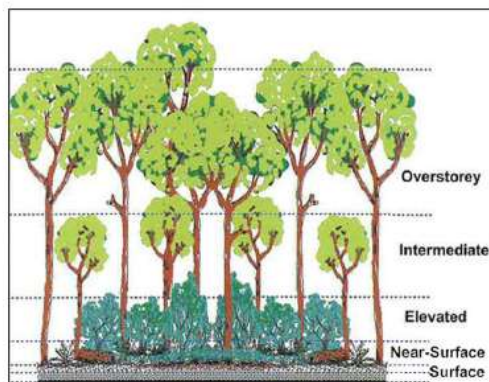
- Report on burn objectives.
 - Severity mapping
 - Reporting

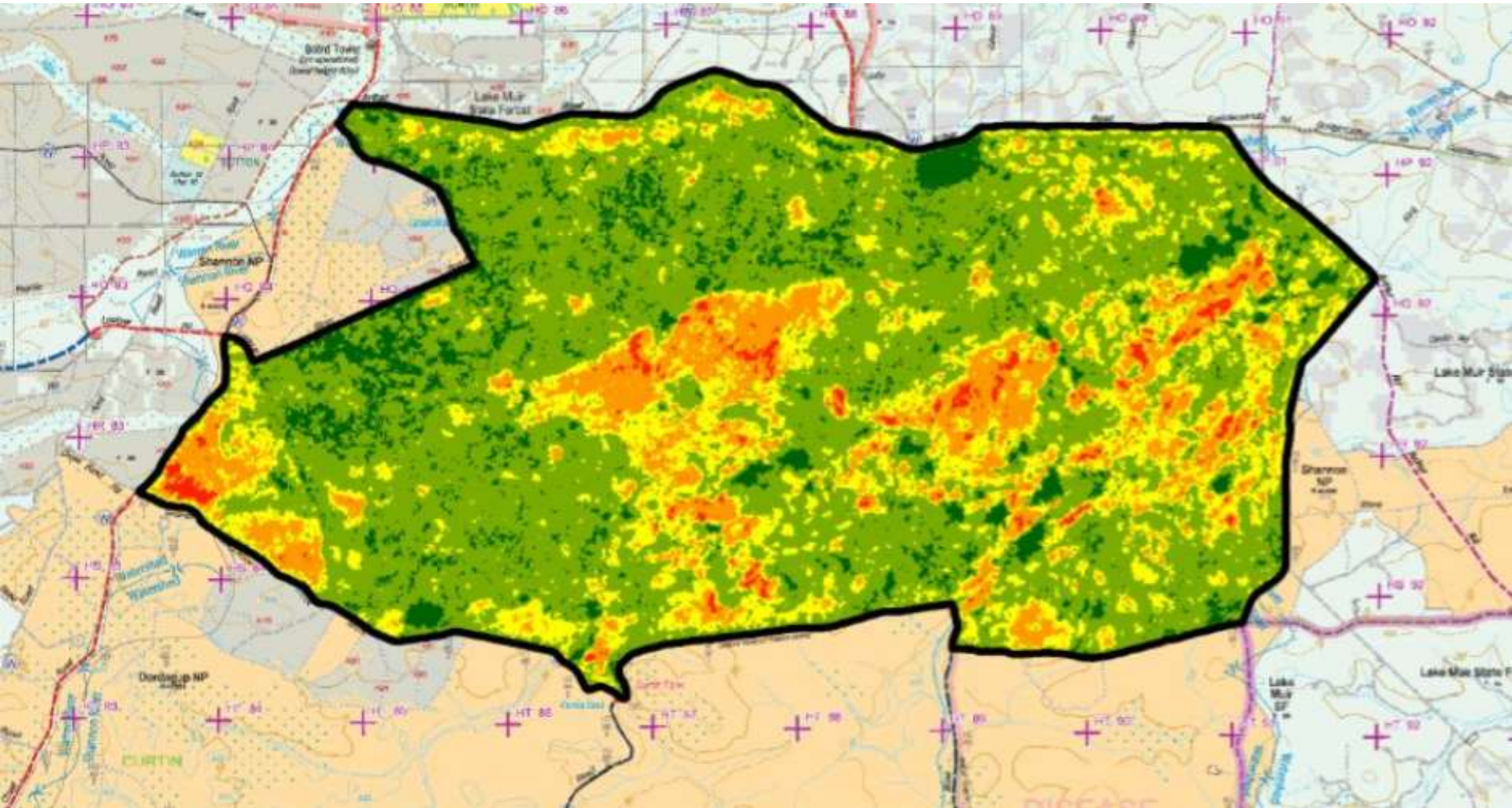
Severity Class Characteristics

Severity classes are defined using the table below.

Note, "intact" means original (pre-burn), green crowns.

OzCBI - Primary Determinants (Avg for the majority in a 20m radius plot)					
Measurements in 20m radius	Unburnt	Low	Medium	High/Full Crown Scorch	Very High/Defoliation
Canopy (Overstorey)					
Canopy crowns	>90% crown intact	>90% crown is intact	>50% crown is intact	<25% crown is intact	>95% crown defoliated
% Cover post-fire leaf fall	n/a	n/a	n/a	50 - 90% area	<20% area
Bark char on canopy trees	No fresh char	Char $\leq$ 25% tree height	Char is 25 - 50% tree height	Char is 50 - 75% tree height	Char > 75% tree height
Midstorey (Intermediate)					
Midstorey crowns	>90% crown intact	>75% crown is intact	25 - 75% crown is intact	<25% crown is intact	<5% crown is intact
Char on midstorey trees	No fresh char	Char $\leq$ 50% tree height	Char $\leq$ 75% tree height	Char is 50 - 100% tree height	Char > 75% tree height
Elevated (tall shrubs/low trees)					
Elevated crowns	>90% crown intact	>25% crown is intact	10 - 25% crown is intact	5 - 10% crown may be intact	<5% crown is intact
Surface Fuels					
Area unburnt	>75% area unburnt	<25% unburnt	>90% burnt	>90% burnt	>90% burnt
Duff remaining	Majority unchanged	Thin to deep char	10 - 50% duff consumed	Some duff consumed, may only remain in depressions	Duff consumed or only remaining in depressions





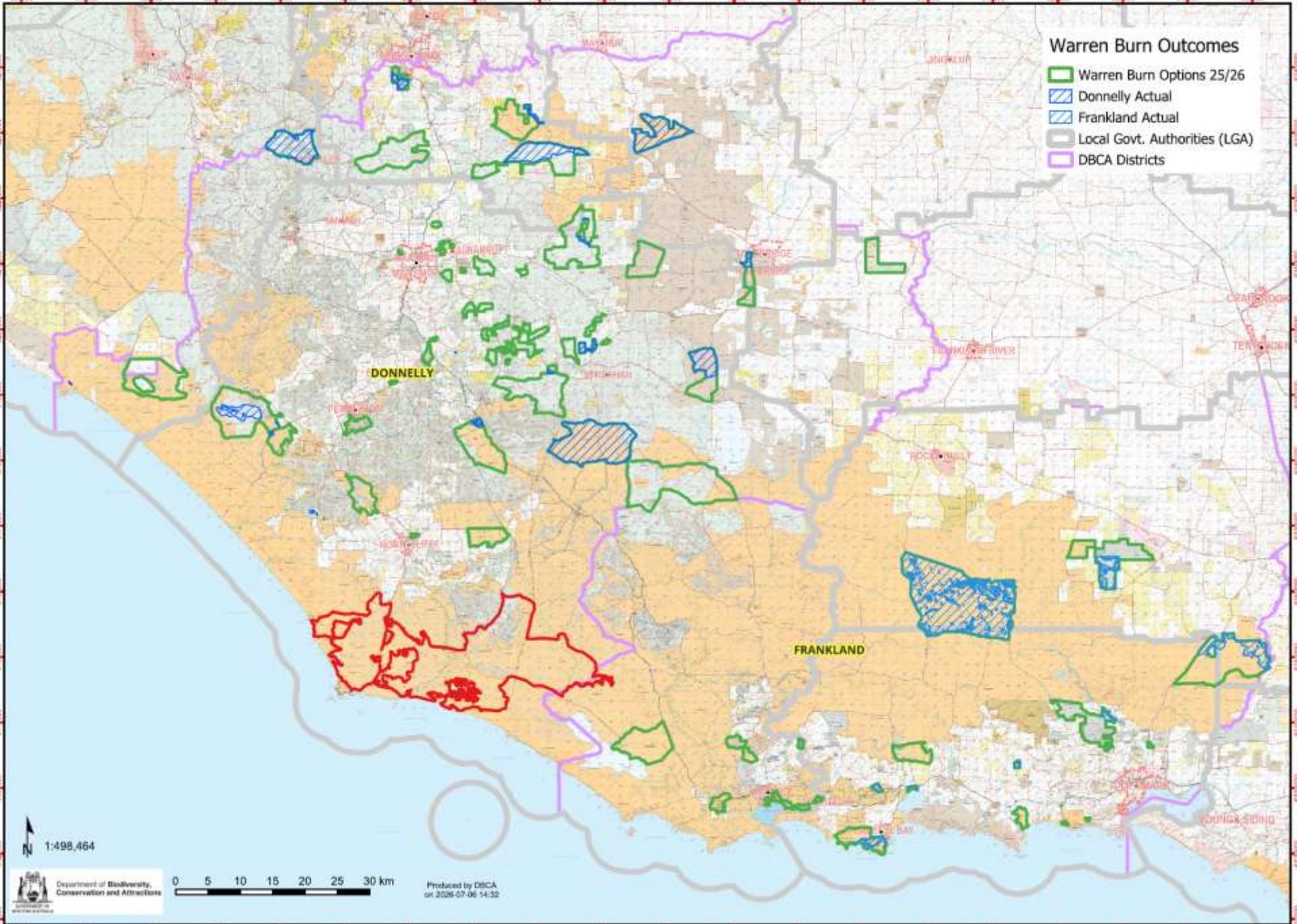


Season Review 2025/26 Frankland District

Warren Burn Outcomes

- Warren Burn Options 25/26
- Donnelly Actual
- Frankland Actual
- Local Govt. Authorities (LGA)
- DBCA Districts





Warren Burn Outcomes

- Warren Burn Options 25/26
- Donnelly Actual
- Frankland Actual
- Local Govt. Authorities (LGA)
- DBCA Districts



1:498,464



Department of Biodiversity,
Conservation and Attractions

0 5 10 15 20 25 30 km

Produced by DBCA
on 2025-07-06 14:32

Regional Preparedness and Response

25/26



134 employees on
fire rosters



34-week roster
period (October –
June)



32 employees on call
(average)



695 flights detection
flights.



3 D8 bulldozers
2 Front end loaders
24 Trucks
Light fleet
2 fixed wing
suppression aircraft
Other specialist
equipment



Over 600 hours in
fire tower
(Frankland)

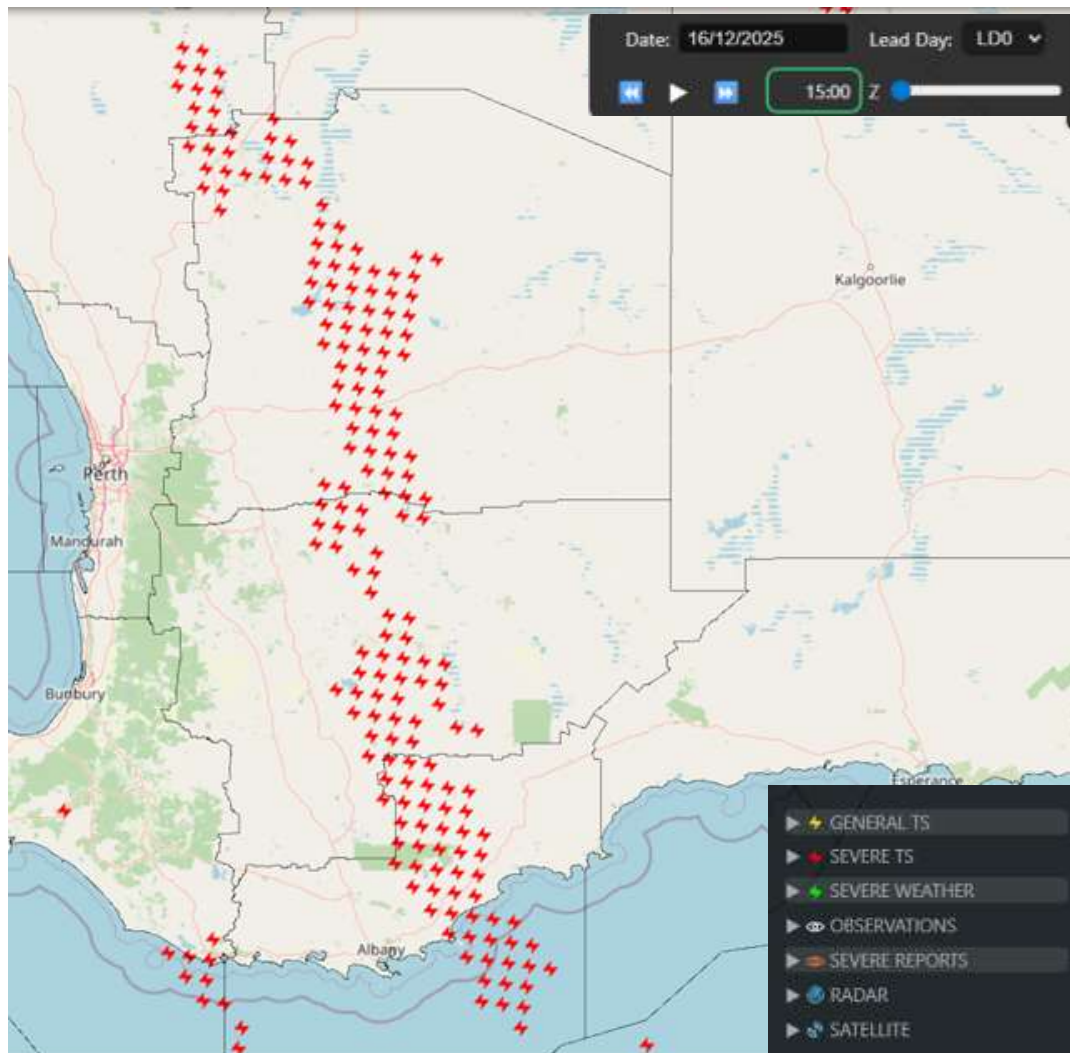
Season Review

- DBCA response to 39 Fires in the Warren Region 25/26.
- Final controlling agency for 28.
- Supported efforts in other regions on 29 separate occasions.

Tenure	Approx. Area Burnt (ha)
Private Property	508.58
Other Crown	131.56
National Park	22.33
State Forest	
Native Hardwood	1.15
Nature Reserve	0.01

Ordinance prescribed burn lightning strikes

- 16/12/25 lightning strikes in the Walpole area.
- Strikes in Ordinance block (prescribed burn 2024)
- Low fuels reduced the risk of a bushfire becoming established approximately 1 hectare burnt.
- Minimal response required.

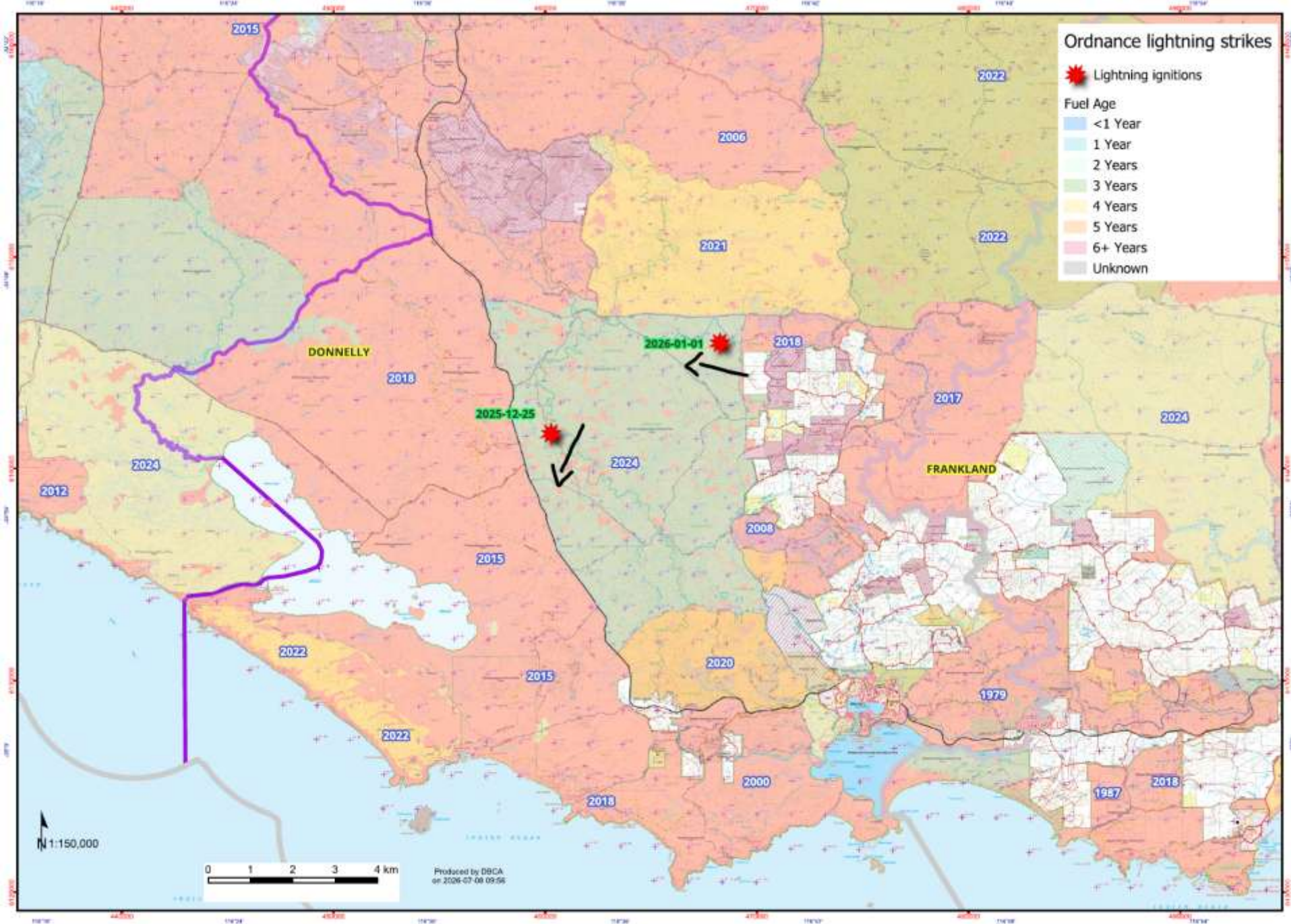


Ordinance lightning strikes

Lightning ignitions

Fuel Age

- <1 Year
- 1 Year
- 2 Years
- 3 Years
- 4 Years
- 5 Years
- 6+ Years
- Unknown



50H
0460858_{ms}
6141499_{rw}

DIRECTION
West

34° 52.086' S
116° 34.305' E
ACCURACY 4m

Christmas Day

37 C
13km/hr
winds NE

New Years Day

23 C
15-20km/hr
winds SE

Frankland Detection 2526

25 Dec 2025
11:37:00 (AWST)

50H
0468197_{ms}
6145230_{rw}

DIRECTION
North

34° 50.083' S
116° 39.131' E
ACCURACY 4m



Frankland Detection 2526

1 Jan 2026
15:34:03 (AWST)

Frankland 25/26 Outcomes

19 burns on Burn Options Program

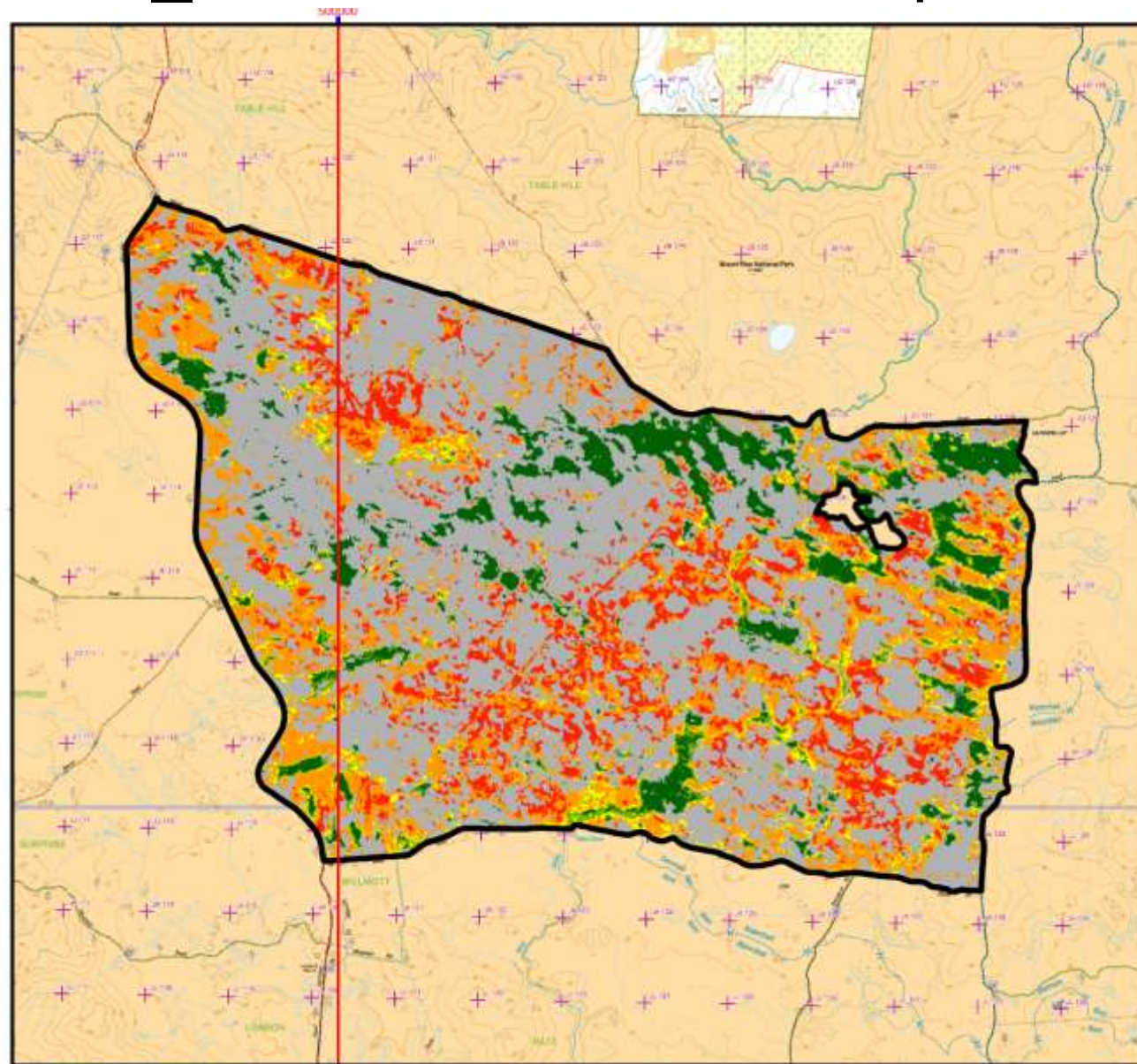
9 burns commenced

- 4 burns complete
- 4 burns partially complete and rolled to 2026/27
- 1 uncompleted & previous edging now unsuitable

Total area burnt 17,988 ha

FRK_112 Wilmott-Quindinillup

OFFICIAL



Indicative Burn Severity Map

Wilmott-Quindinillup

Burn Id: FRK112

Date created: 30/04/2026

Latest satellite image: 13/12/2025

Legend

□ Treatment area

Unburnt:	8.43 %
Low:	2.86 %
Medium:	4.07 %
High:	20.03 %
Very high:	10.54 %
Burnt heath:	54.08 %

Total area: 15049 ha



GDA2020 MGA Zone 50

1:108,000 (A4)



Produced by the
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and Attractions



Graticule shown at 1 degree intervals
Grid shown at 100000 metre intervals

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Roads and tracks on land managed by DBCA may contain unmarked hazards and their surface condition is variable. Exercise caution and drive to conditions on all roads.

50H

0513677_{mE}

6155329_{mN}

DIRECTION

West

34° 44.643' S

117° 8.965' E

ACCURACY 4m



Frankland Detection 2526

ID: 1822741658

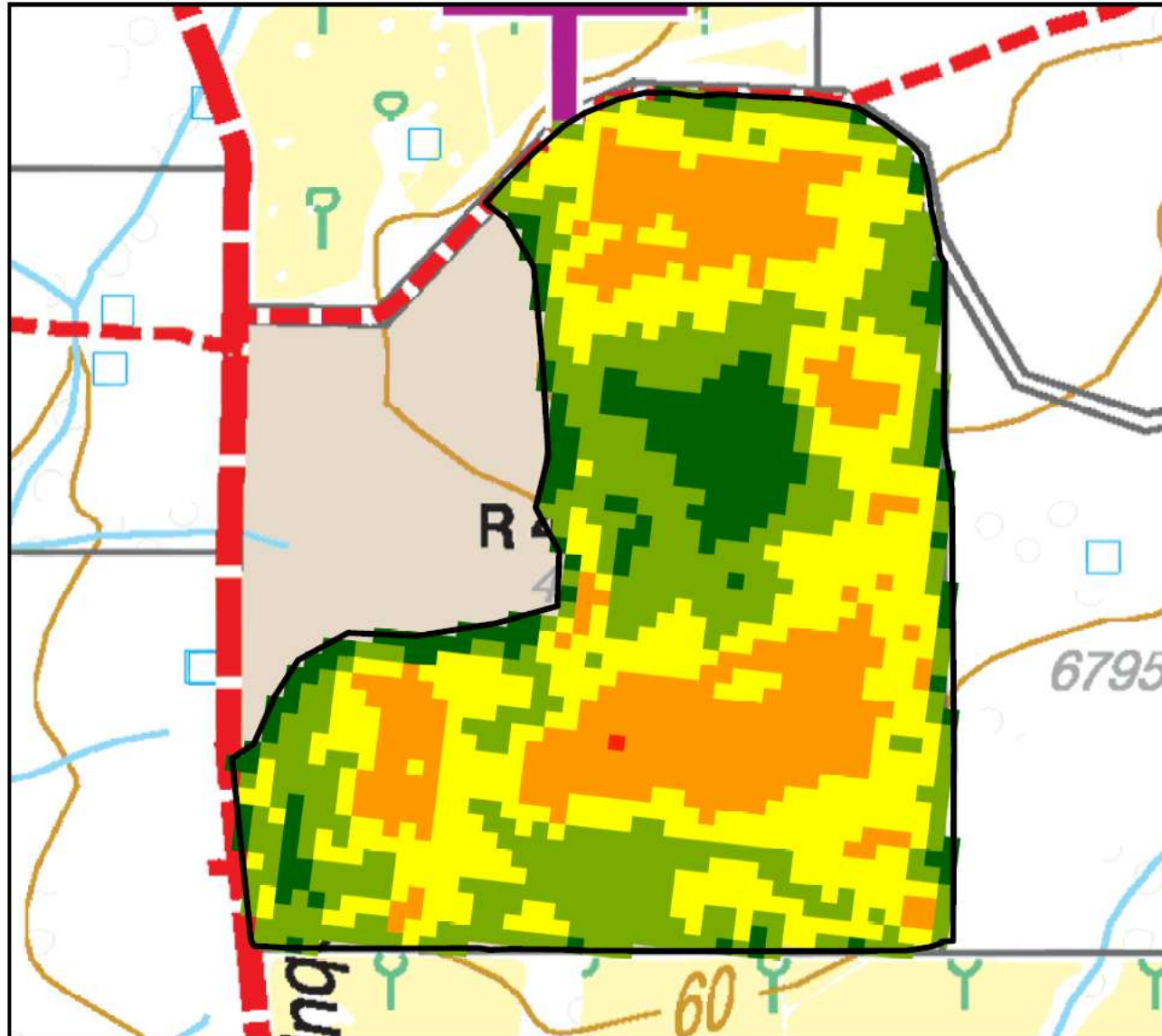
10 Nov 2025

15:58:25 (AWST)



FRK_105 Kordabup North

OFFICIAL



Indicative Burn Severity Map

Kordabup North

Burn Id: FRK105

Date created: 9/01/2026

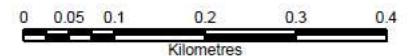
Latest satellite image: 13/12/2025

Legend

Treatment area

	Unburnt:	11.52 %
	Low:	30.65 %
	Medium:	35.87 %
	High:	21.9 %
	Very high:	0.06 %
	Burnt heath:	0 %

Total area: 67 ha

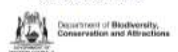


GDA2020 MGA Zone 50

1:7,000 (A4)



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50H
0512597_{mE}
6134020_{mN}

DIRECTION
South-East

34° 56.173' S
117° 8.277' E
ACCURACY 5m



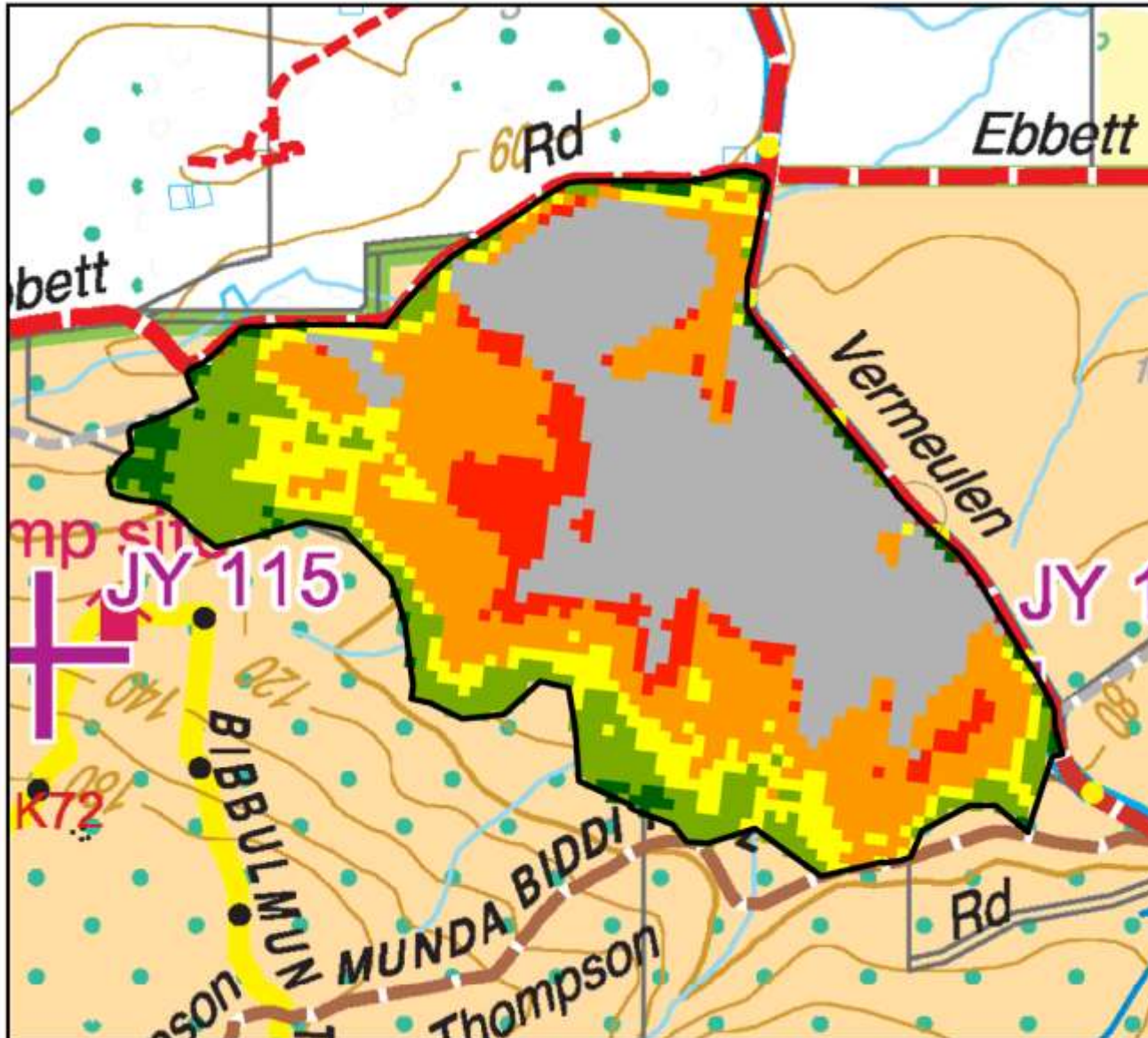
ID: -2026872085

Frankland Detection 2526

28 Oct 2025
15:29:03 (AWST)

FRK_116 Vermeulen Road

OFFICIAL



Indicative Burn Severity Map

Vermeulen Road

Burn Id: FRK116

Date created: 29/04/2026

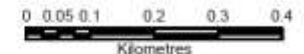
Latest satellite image: 30/11/2025

Legend

Treatment area

	Unburnt:	2.89 %
	Low:	13.37 %
	Medium:	10.81 %
	High:	27.87 %
	Very high:	7.67 %
	Burnt heath:	37.4 %

Total area: 110 ha



GDA2020 MGA Zone 50

1:10,000 (A4)



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Grid shown at 100000 metre intervals

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Roads and tracks on land managed by DBCA may contain unmarked hazards and their surface condition is variable. Exercise caution and drive to conditions on all roads.

50H
0490853_{mE}
6129915_{mN}

DIRECTION
East

34° 58.397' S
116° 53.988' E
ACCURACY 8m



ID: -2026872085

Frankland Detection 2526

28 Oct 2025
11:38:12 (AWST)

50H
0491220_{mE}
6130827_{mN}

DIRECTION
South-East

34° 57.904' S
116° 54.230' E
ACCURACY 4m



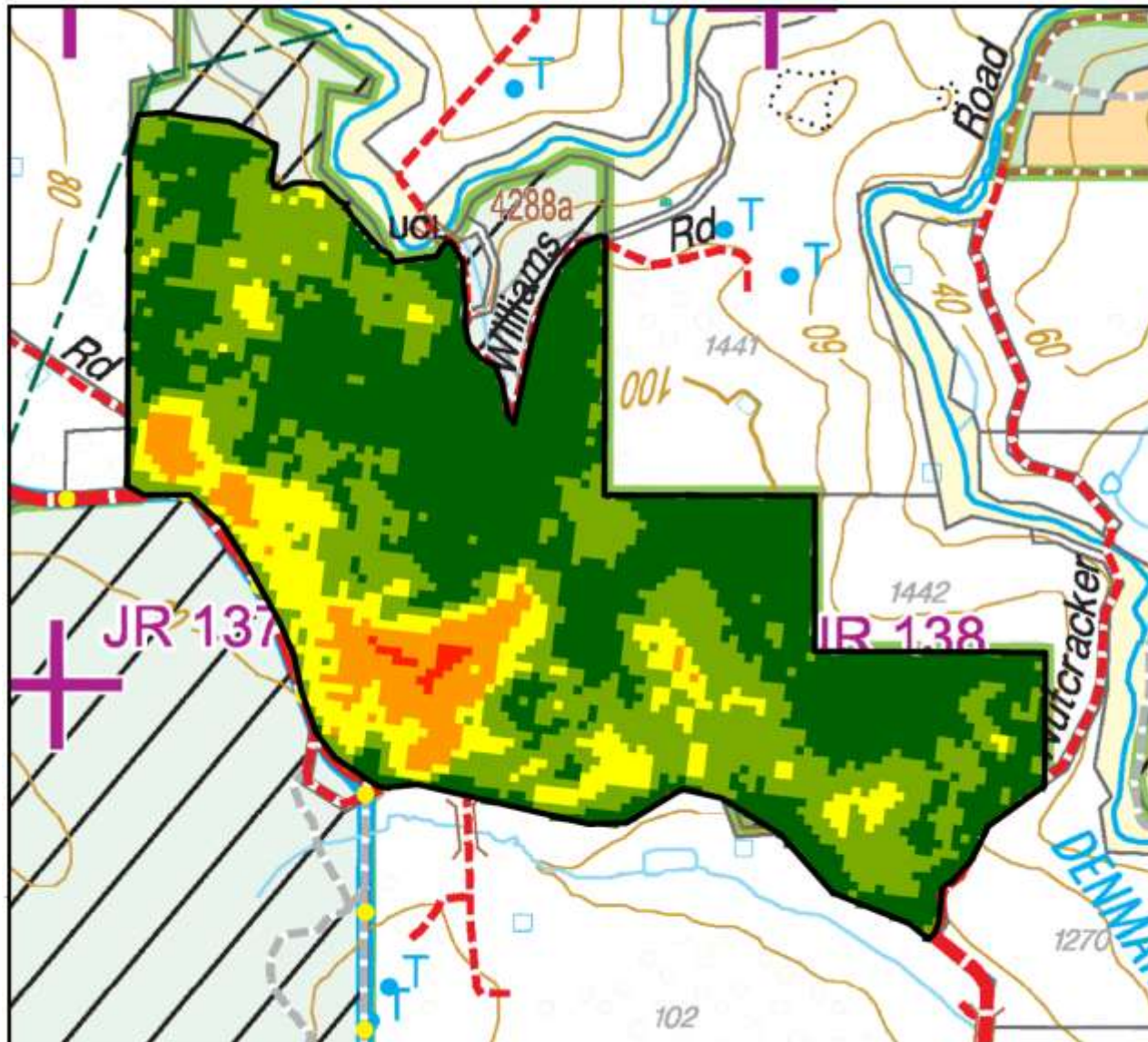
ID: -2026872085

Frankland Detection 2526

28 Oct 2025
15:45:55 (AWST)



FRK_108 Harewood



Indicative Burn Severity Map

Harewood

Burn Id: FRK108

Date created: 29/04/2026

Latest satellite image: 12/01/2026

Legend

□ Treatment area

Unburnt:	48.6 %
Low:	32.98 %
Medium:	11.95 %
High:	6.02 %
Very high:	0.45 %
Burnt heath:	0 %

Total area: 185 ha



GDA2020 MGA Zone 50

1:13,000 (A4)



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Grid shown at 100000 metre intervals

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50H
0528172_{mE}
6140042_{mN}

DIRECTION
North-East

34° 52.897' S
117° 18.498' E
ACCURACY 44m



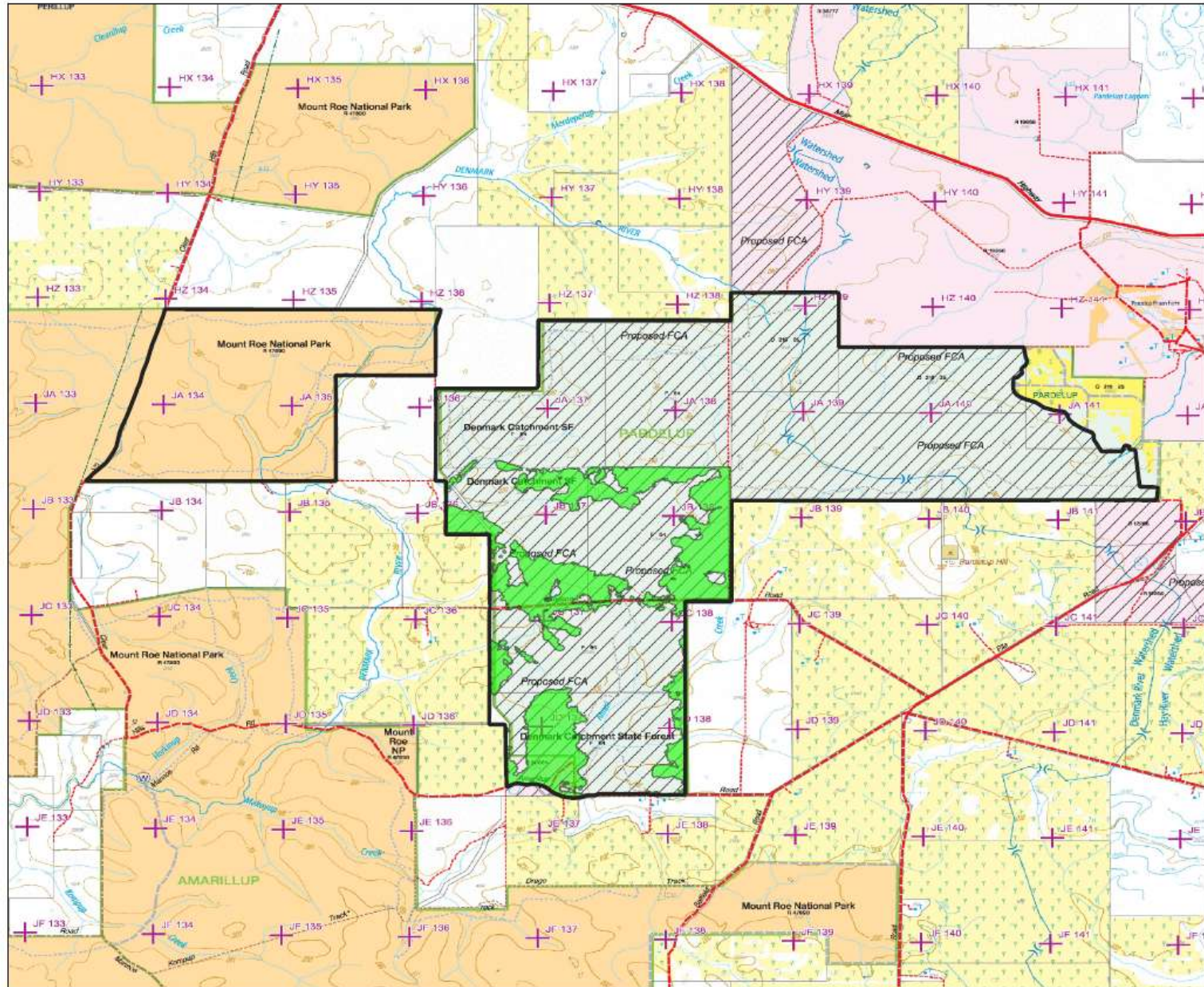
ID: -2026872085

Frankland Detection 2526

13 Nov 2025
16:42:41 (AWST)

FRK_037 Pardelup

OFFICIAL



50H
0530015_{mE}
6165530_{mN}

DIRECTION
South-West

34° 39.103' S
117° 19.653' E
ACCURACY 4m



ID: -1241265700

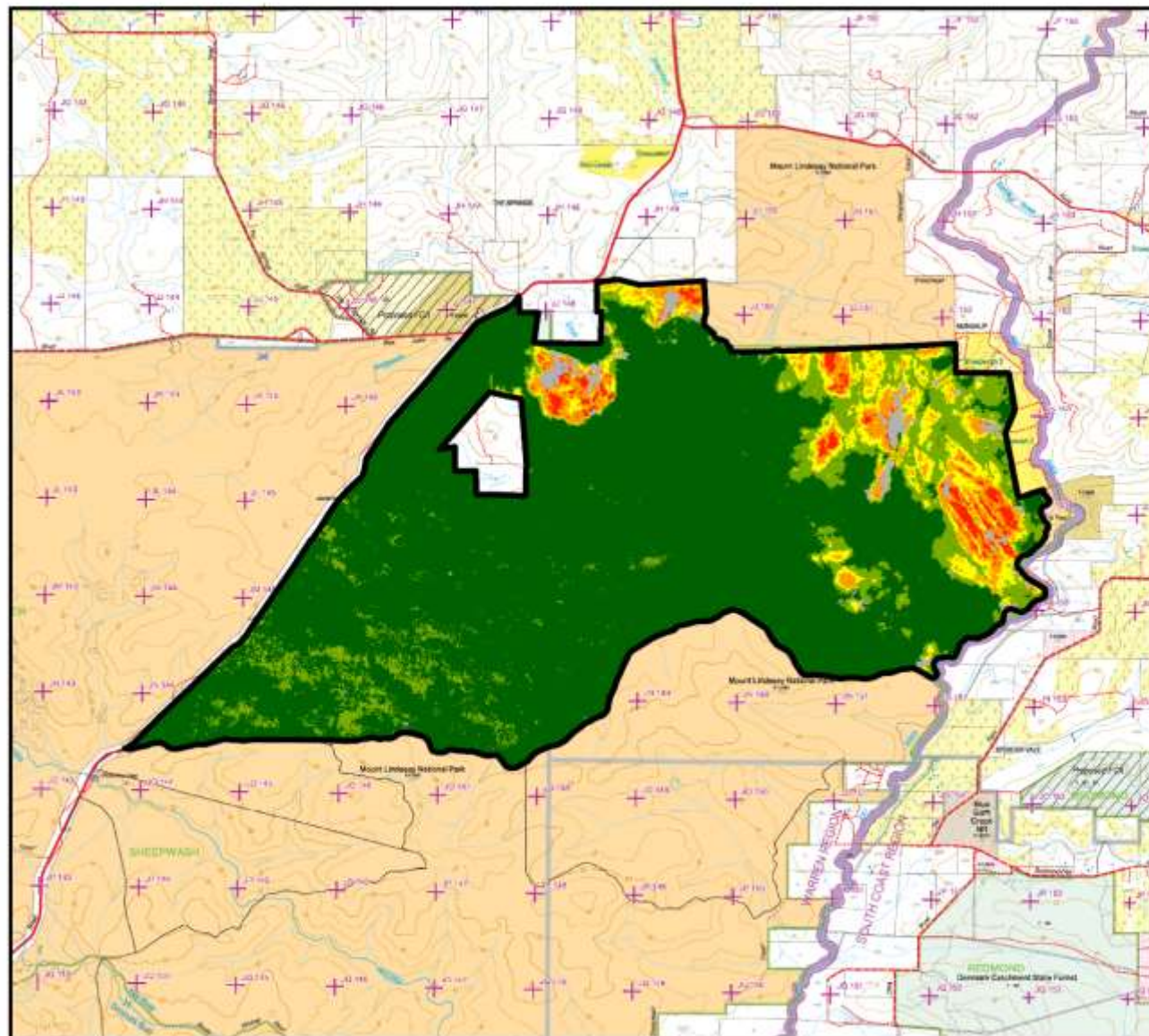
Frankland Detection 2526

16 Apr 2026
15:05:29 (AWST)



FRK_094 Sheepwash

OFFICIAL



Indicative Burn Severity Map

Sheepwash North

Burn Id: FRK094

Date created: 1/07/2026

Latest satellite image: 22/05/2026

Legend

Treatment area

	Unburnt:	76.96 %
	Low:	11.45 %
	Medium:	4.8 %
	High:	3.98 %
	Very high:	1.31 %
	Burnt heath:	1.5 %

Total area: 6676 ha



GDA2020 MGA Zone 50

1:92,000 (A4)



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Graticode shown at 1 degree intervals

Grid shown at 100000 metre intervals

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50H
0544133_{mi}
6153064_{mi}

DIRECTION
South-East

34° 45.817' S
117° 28.936' E
ACCURACY 4m



Frankland Detection 2526
ID: -2026872085

26 Apr 2026
12:41:28 (AWST)

50H
0548268_{mi}
6153484_{mi}

DIRECTION
South-West

34° 45.579' S
117° 31.645' E
ACCURACY 4m



Frankland Detection 2526
ID: -2026872085

Frankland Detection 2526

26 Apr 2026
15:37:33 (AWST)

50H
0493094_{mi}
6122791_{miH}

DIRECTION
West

35° 2.252' S
116° 55.457' E
ACCURACY 66m



ID: -2026872085

Frankland Detection 2526

10 May 2026
09:49:44 (AWST)

50H
0494377_{mi}
6123742_{miH}

DIRECTION
West

35° 1.738' S
116° 56.302' E
ACCURACY 14m



ID: -2026872085

Frankland Detection 2526

11 May 2026
08:54:55 (AWST)

FRK_075 Irwin



50H
0495953_{mH}
6129835_{mH}

DIRECTION
East

34° 58.442' S
116° 57.340' E
ACCURACY 4m



ID: -2026872085

Frankland Detection 2526

10 May 2026
14:09:15 (AWST)

Prescribed Burning Frankland District History

Financial Year	No. of burns on BOP	No. burns implemented or commenced	Area burnt prescribed burning (ha)	No. of escapes	No. of Bushfires	Area burnt bushfire (ha) (DBCA tenure)
2025/26	19	9	17,988	0	13	13
2024/25	18	8	15,554	1	10	219
2023/24	23	12	12,585	0	12	13,997
2022/23	19	7	15,495	1	8	10,199
2021/22	20	10	14,251	0	6	2,100
2020/21	27	11	16,602	1	8	302
2019/20	25	11	30,636	0	6	<1
2018/19	26	12	31,383	1	14	52
Total	177	80	154,494	4	77	26,883
Average	22	10	19,312	0.5	9.6	3,360

Fire Science

DBCA - Biodiversity and Conservation Science: Fire Science Program

- BCS: 10 programs, 220 staff
- Fire Science Program
 - 10 scientist + technical staff
 - 4 PhD students (UWA, Murdoch, ECU)
- Focus areas
 - Fire behaviour, fuel dynamics
 - Fire regimes, severity, risk,
 - Fire ecology,
 - Fire + conservation management
 - Weeds, mosaics
 - Kimberley, Pilbara, SW forests



Fire Science Program research outputs

>200 peer reviewed publications. 26 in 2025-26. e.g.

1. Tangney et al (2026) Assessing the effects of fire season, fire severity and rainfall on seedling establishment and mortality in dry eucalypt forests. *Forest Ecology and Management* **in press**
2. Doherty et al (2026) Animal taxa threatened by adverse fire regimes in Western Australia: a synthesis and outlook. *PCB* **32:PC25051**
3. Geary et al (2026) Optimising fire and predator management for conservation. *J Applied Ecology* **63:e70256**
4. Paroissien et al (2026) When is a resprouter a resprouter? Improving terminology to reflect ecological thresholds for post-fire plant persistence. *Science of The Total Environment* **1016**
5. Paroissien et al (2026) The post-fire recovery of soil seed banks along a fire severity gradient in an Australian threatened mesic forest. *Functional Ecology* **00:1–17**.
6. Doherty (2026) Fire responses of fauna in south-western Australia: clarifying some recent assertions. *Aust J Zoology* **74:ZO25049**
7. Burrows et al (2026) Observations of fire regime and overstorey tree canopy decline in karri forests. *Fire Ecology* **22:1**
8. Geelen et al (2026) Burn coverage more important than patchiness for desert predator communities. *J Arid Environments* **236:105644**
9. Hollis et al (2025) An efficient and comprehensive field protocol for assessing fuel characteristics for fire behaviour modelling in Australian open forests. *MethodsX* **14:103345**
10. Tangney et al (2025) Defining the pyro-thermal niche: Do seed traits, ecosystem type and phylogeny influence thermal thresholds in seeds with physical dormancy? *New Phytologist* **246:1567-82**
11. Brace et al (2025) Herbicide, not prescribed burning, drives larger shifts in soil fungal communities in a Mediterranean-type urban woodland. *Urban Forestry & Urban Greening* **105:128728**
12. Miller et al. (2025) Using patterns of post-fire plant reproduction to inform minimum fire intervals for conservation management in a fire-prone woodland. *Austral Ecology* **50:e70023**
13. García-Carmona et al (2025) Pyrogenic carbon production in eucalypt forests under low to moderate fire severities. *FEM*, **585:122590**
14. Gibson et al (2025) Remotely sensed fire heterogeneity and biomass recovery predicts empirical biodiversity responses. *Global Ecol Biogeogr.* **34:e70040**
15. Densmore and Barnesby (2025) For peat's sake! Peat type influences critical moisture thresholds that prevent combustion of organic soils in Western Australia. *IJWF* **34:WF24204**

Threatened fauna fire response database





CSIRO
PUBLISHING

COLLECTION | REVIEW
<https://doi.org/10.1071/PC25051>

PACIFIC CONSERVATION BIOLOGY

Animal taxa threatened by adverse fire regimes in Western Australia: a synthesis and outlook

Tim S. Doherty^{A,*}, Mark G. Allen^B, Karlene Bain^C, Stephen J. Beatty^B, Allan H. Burbidge^D,
Renee A. Catullo^E, Sarah Comer^F, Ben Corey^G, Saul J. Cowen^{D,E}, Robert A. Davis^{H,I}, Martin A. Dzimirski^D,
J. Anthony Friend^F, Bruce Greatwich^G, Mark S. Harvey^{E,I}, Hannah Killian^D, Michael W. Klunzinger^J,
Damian C. Lettoof^{K,L}, Nicola J. Mitchell^E, Melinda Moir^M, Harry A. Moore^{D,E}, David L. Morgan^B,
Ian J. Radford^A, Michael G. Rix^N, Tom Vigilante^O, Adrian F. Wayne^{E,P}, Corey Whisson^I, Nicole Willers^{F,Q}
and Matthew R. Williams^R

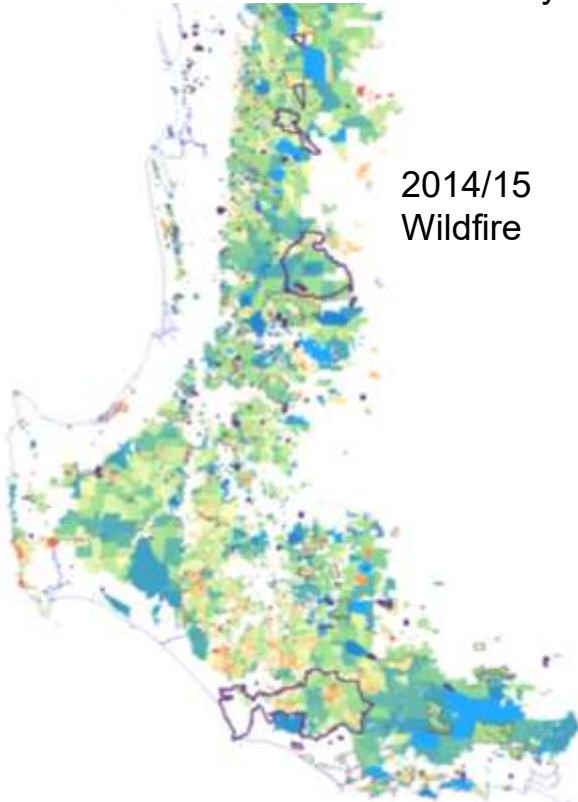
Taxonomic group	Scientific name	Common name	WA conservation status	Fire impact ranking	Primary pathway of fire threat
MAMMAL	<i>Petrogale lateralis lateralis</i>	black-flanked rock-wallaby, black	EN	medium	General (no clear primary pathway)
REPTILE	<i>Pseudemys umbrina</i>	western swamp turtle	CR	medium	Limited recolonisation capacity
MAMMAL	<i>Pseudochirus occidentalis</i>	western ringtail possum, ngawyer	CR	high	Loss of key habitat features (e.g., hollows)
BIRD	<i>Rostratula australis</i>	Australian painted snipe	EN	no impact	NA
MAMMAL	<i>Setonix brachyurus</i>	quokka	VU	medium	Loss of long unburnt habitat
BIRD	<i>Sternula nereis nereis</i>	fairy tern	VU	no impact	NA
MAMMAL	<i>Tarsipes rostratus</i>	honey possum	not listed	requires assessment	Loss of long unburnt habitat

Taxonomic group	Scientific name	Common name	WA conservation status	Fire impact ranking	Citation	Relevant finding
INVERT (crustaceans)	<i>Herpessia</i> sp. (RAM 20150)	Crystal Cave chironomid	CR	high	Borwick et al. 1991	Although not a direct study of Crystal Cave or the chironomid, the following was reported as unpublished data by Borwick. The burnt forest above Carpark Cave at Yanchep NP was burnt by an intense wildfire in 1991. There was a decrease in stream flow and flow. The root mats remained alive, but did not produce new growth for two years post-fire. (full methods/data not presented)
MAMMAL	<i>Pseudochirus occidentalis</i>	western ringtail possum, ngawyer	CR	high	Borwick et al. 1991	In Pamp Nature Reserve, 50% of 82 den trees previously inhabited by either ngawyer or kooral (deserted possum) were severely damaged or destroyed in a high intensity prescribed burn. Three years post-burn, there were 254 den trees in use, which may have been due to both the creation of new hollows by fire and an influx of possums exploiting epicormic growth.
BIRD	<i>Zanda latirostris</i>	Carnaby's cockatoo	EN	medium	Johnston et al. 2015	Cone availability (representing cockatoo food) was highest at 11-20 years since last fire for <i>Banksia attenuata</i> and <i>B. menziesii</i> , and 6-15 years for <i>B. sessilis</i> .

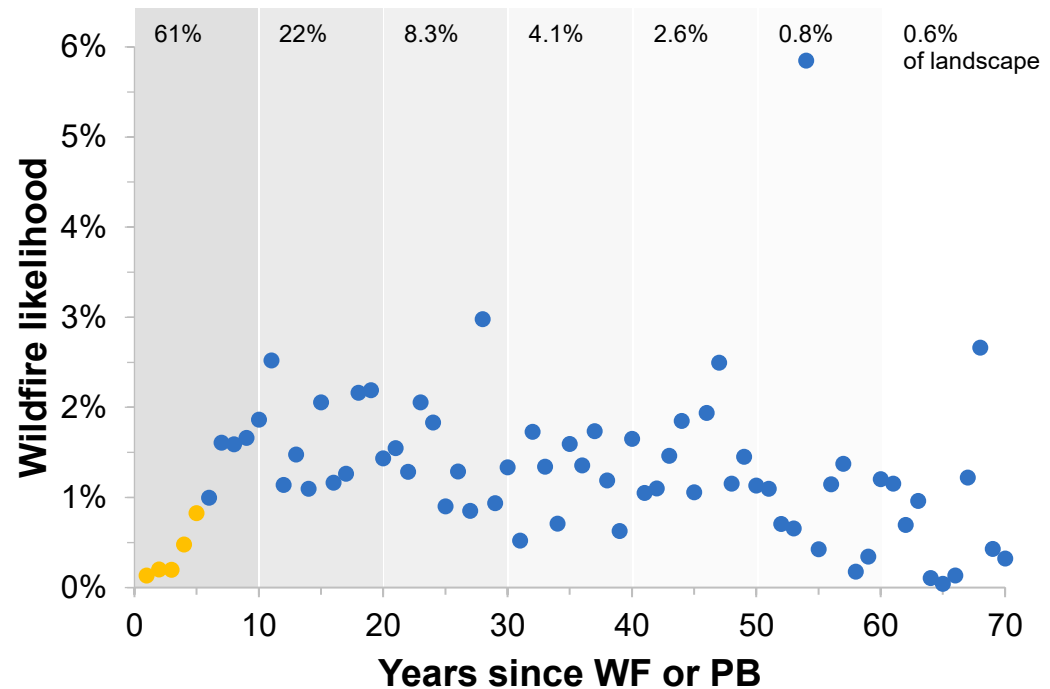
Effectiveness of prescribed burning

Landscape TSF June 2014
1  94 years

2014/15
Wildfire



Wildfire likelihood by Time Since Fire.
SW forest landscape 1973-2025



Effectiveness of prescribed burning

Effectiveness – at a point

(46-91%) **77%** less WF risk for 1st 5y

Effectiveness – of Landscape management

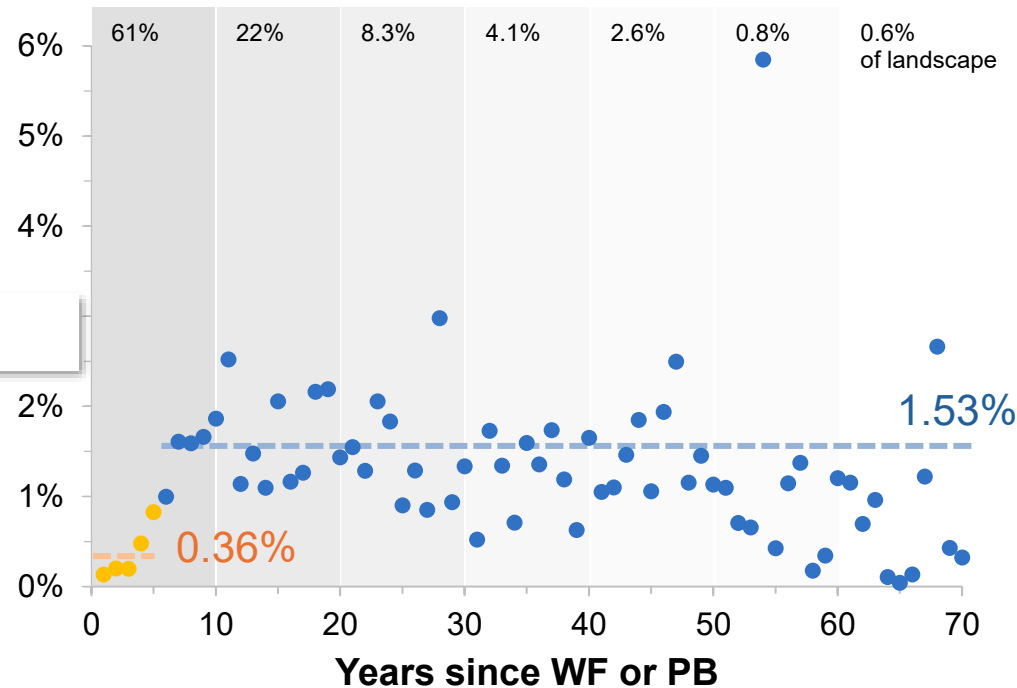
Landscape risk reduction 45% <6y

32% less WF risk

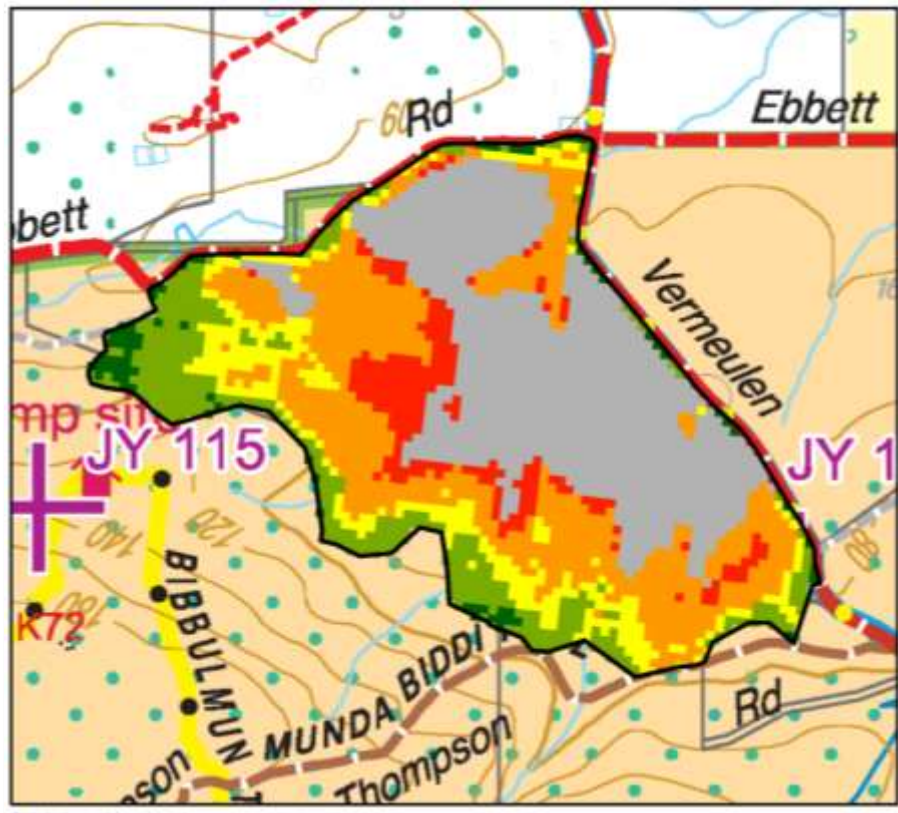
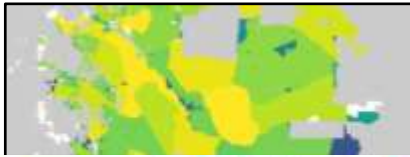
Settlement hazard separation 60% < 6y

47% less risk

Wildfire likelihood by Time Since Fire.
SW forest landscape 1973-2025



Severity mapping: improving fire history data

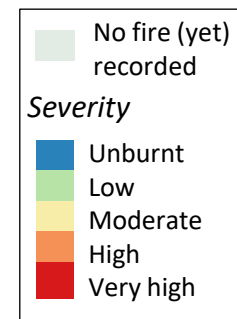
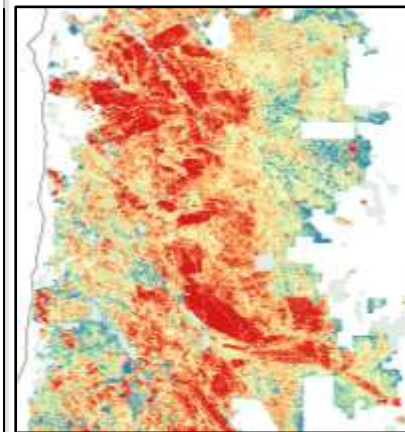


Improved fire regime data

- Resolution, Accuracy
- Severity
- Date
- Patchiness

Ongoing

- Heathland, peat algorithms



Fire severity - Max observed

Effectiveness of prescribed burning: severity

Effectiveness – severity

Effectiveness – at a point

(46-91%) **77%** less WF risk for 1st 5y

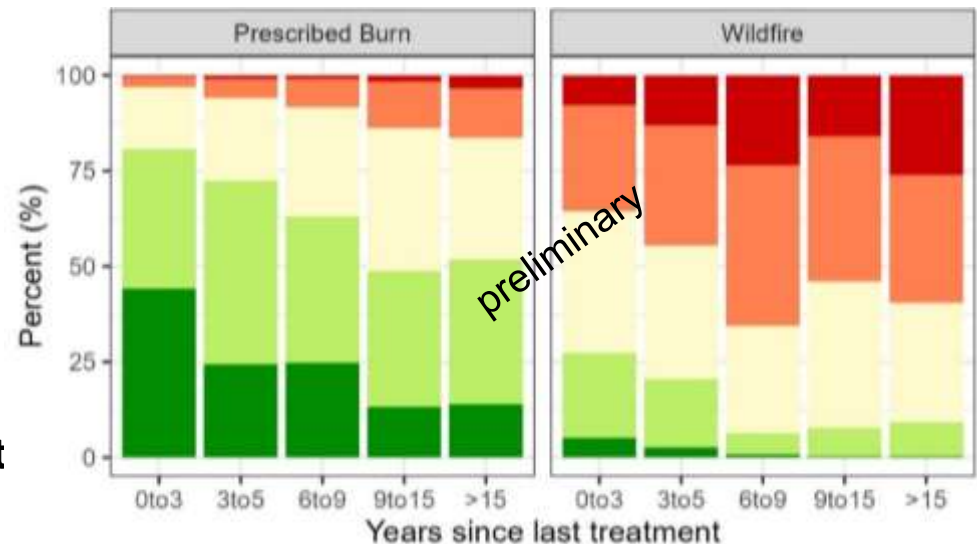
Effectiveness – of Landscape management

Landscape risk reduction 45% <6y

32% less WF risk

Settlement hazard separation 60% < 6y

47% less risk



FMP-FRC: Fire Research Collaboration



Forest Management Plan 2024-33

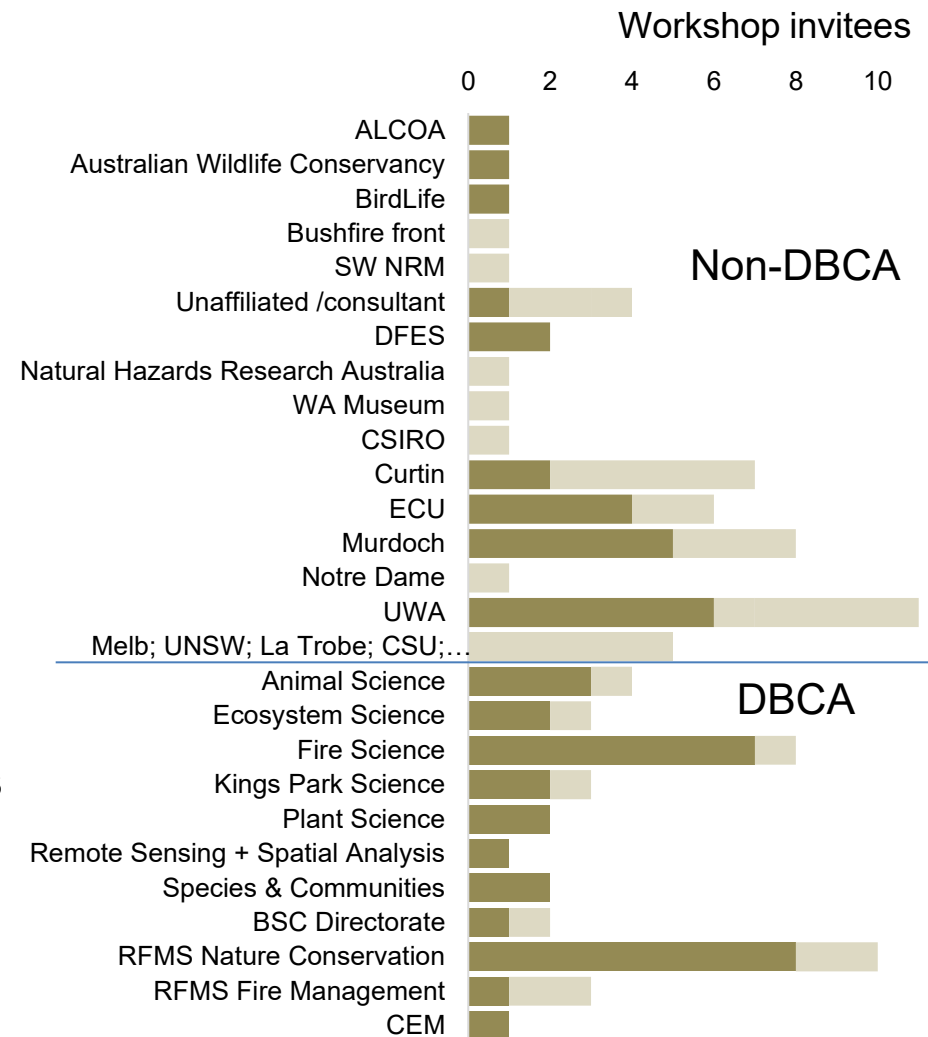
a scientific research program into prescribed burning, with the aim of investigating the measured impacts on forest ecosystems and biodiversity from fire management strategies and bushfires, to be carried out for the 10-year life of the FMP, without compromising the broader responsibility of prescribed burning.

- *provide advice to the Minister, CPC and DBCA.*
- *enable decisions regarding current practices to identify adjustments to protect vulnerable aspects of biodiversity*
- *design and implementation of the research and review of the results should involve DBCA scientists and experts in the field, including those in the various research institutions in WA*

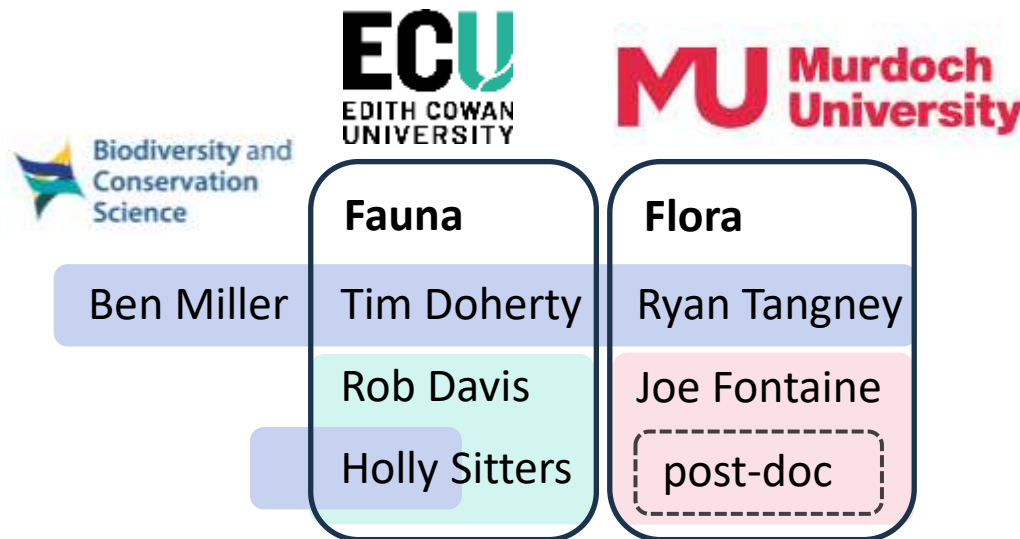
FRC: Research priorities determined collaboratively

Expert consultation: late 2024

- 91 'experts in the field' invited to identify research needs
- 66 Research scientists
- 21 external organisations:
 - fire-ecology researchers;
 - potential collaborators;
 - stakeholders in research to inform management
- 39 DBCA staff: 22 Research scientists
- **58 research questions prioritised**



FRC: phase 1 collaboration



+ other collaborators:

DBCA, Murdoch, ECU,

UWA

Latrobe

UNSW

...

+ (4) Postgrad students

Fauna: Highly ranked questions and themes

- Threatened fauna – time since fire and severity
- Fire effects on coarse woody debris and tree hollows
- Fire mosaics – landscape scale and burn scale
 - Unburnt patches, severity patchiness, age classes
- Fire interactions with drought and forest die-off
- Other topics: fire season, fire size, invertebrates, aquatic biota, invasive predators and herbivores



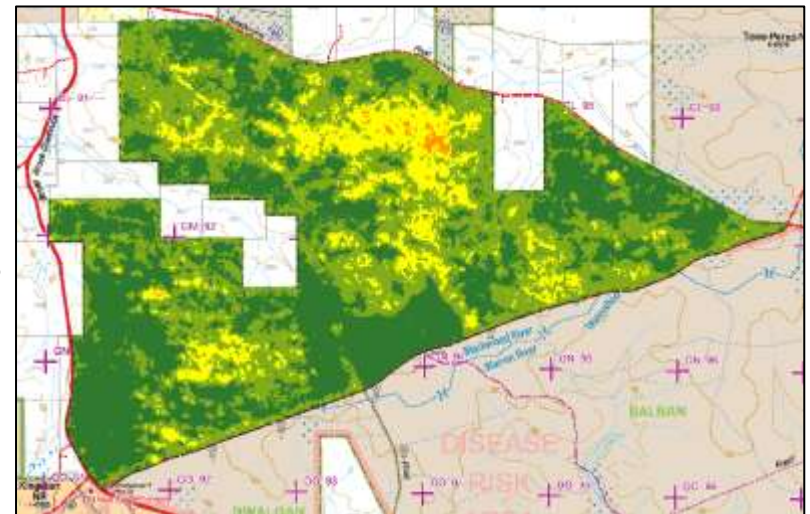
A1: SJF mammals and PB

ECU PhD Student

- Multi-year before-after control-impact experiment in the Upper Warren
- Camera trapping: ~480 cameras deployed simultaneously
- + a spotlighting component led by DBCA

Questions:

- How does mammal abundance/activity change in response to PBs?
- Are these responses mediated by fire patchiness and severity?



A2: Effects of fire on hollow logs

ECU Masters student

- Surveys before and after multiple burns near Manjimup
- + survey of sites stratified by fire frequency, severity

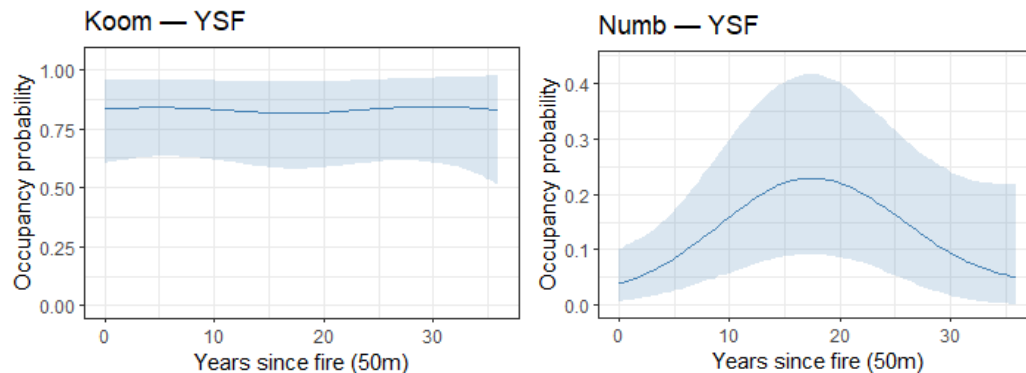
Questions:

- What drives hollow occurrence in logs? (size, species, fire damage)
- How do burn severity and log characteristics influence log fate during burns?
- What is the net effect of prescribed burns on hollow log (+CWD) availability?
- How does fire severity and frequency influence log availability across the landscape?

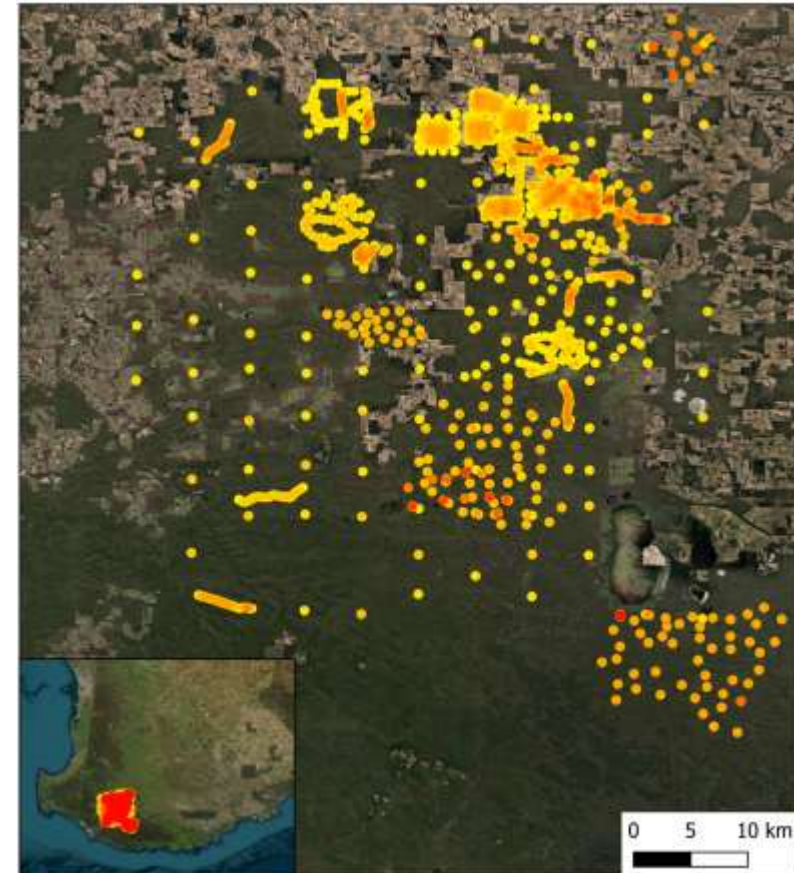


A3: SJF mammal fire response curves

- Collation of camera trap data spanning 13 years and >1000 sites
- 0-35 years with severity, 0-60 years without
- Testing the effects of time since fire and fire severity on Upper Warren mammals



*some preliminary results



A4: Tree hollows and mosaic burning

- Logging and fire are key long-term drivers of hollow availability
- Surveys before and after multiple burns
 - + broader surveys of sites stratified by fire frequency, severity and time since fire
- More landscapes with known cockatoo hollows wanted!

Questions:

- How do burn severity and hollow characteristics influence hollow fate during burns?
- What is the net effect of prescribed burns on hollow availability?
- How does the history of fire severity and frequency influence hollow availability across the landscape?



Photos by Michael Craig

A5: Jarrah forest birds and fire

- Effects of time since fire, severity and fire season on birds and their habitat

Questions:

- How does bird species occurrence vary with time since fire, and is this influenced by fire severity?
- Do bird responses depend on season of burn?
- What role do unburnt patches play in bird responses to fire, and does this vary with time since fire?
- How do fire variables influence habitat elements important to individual bird species?



Flora: Highly ranked questions and themes

- Suitable fire intervals for vulnerable ecosystems
- Interval and season interactions with climate events
- Which ecosystems are most vulnerable to fire?
- What makes ecosystems vulnerable varying fire regime?
- Where are the species vulnerable to varying fire regime?
- Interval-severity/ patchiness trade-offs for sensitive flora



P1: Tingle population modelling

- What fire management scenarios (none, low-/ v. high severity fire; range of intervals) support tingle populations persistence?
- What are outcomes for population structure
- Re-measure historic plots
- collate key life history data
- Develop a population demography model in relation to fire management scenarios



P4: Analysing fire regimes of threatened plant populations using a trait focused framework

- What functional traits are associated with listed and priority species?
- What fire regimes have their populations experienced?
- Review and collate threatened species traits
- Document fire regime since the 1988's for each threatened species population
- Assess plant traits & regime attributes posing the most risk, including absence of fire



Critically endangered
Andersonia annelsii

P5: Peat ecosystem soil moisture and seasonal flammability

- Does moisture retention increase and fire hazard decline in peat as TSF increases?
- Assess moisture dynamics with time since fire over seasonal cycles across a range of times since fire
- Prediction of peatland vulnerability by correlating soil moisture and seasonal weather data
- What are safe burning thresholds for peat systems?
- Refine moisture thresholds for safe burning





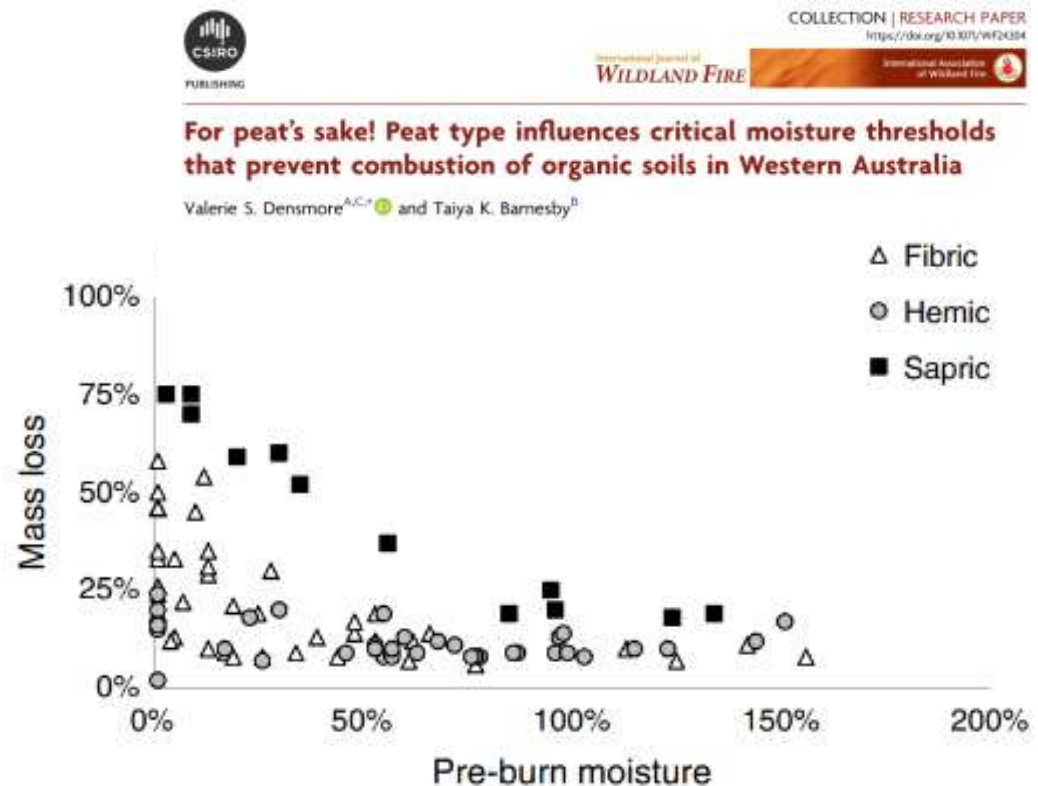
Protecting Peatland Ecosystems and
Addressing Threats in
Southwestern Australia

PEAT is a transdisciplinary research project
advancing the understanding and sustainable
management of southwestern Australia's peatland
ecosystems.

The project is guided, co-designed, and delivered in partnership with
Aboriginal Elders, scientists, land managers, museums, government leaders,
and local communities.

DBCA - PEAT project research

- Peat ignition and combustion likelihoods
 - Informs prescription thresholds
- ECU PhD
 - Improving peat fire severity mapping
- ECU PhD
 - Fire regime effects on peat ecosystem plant community composition



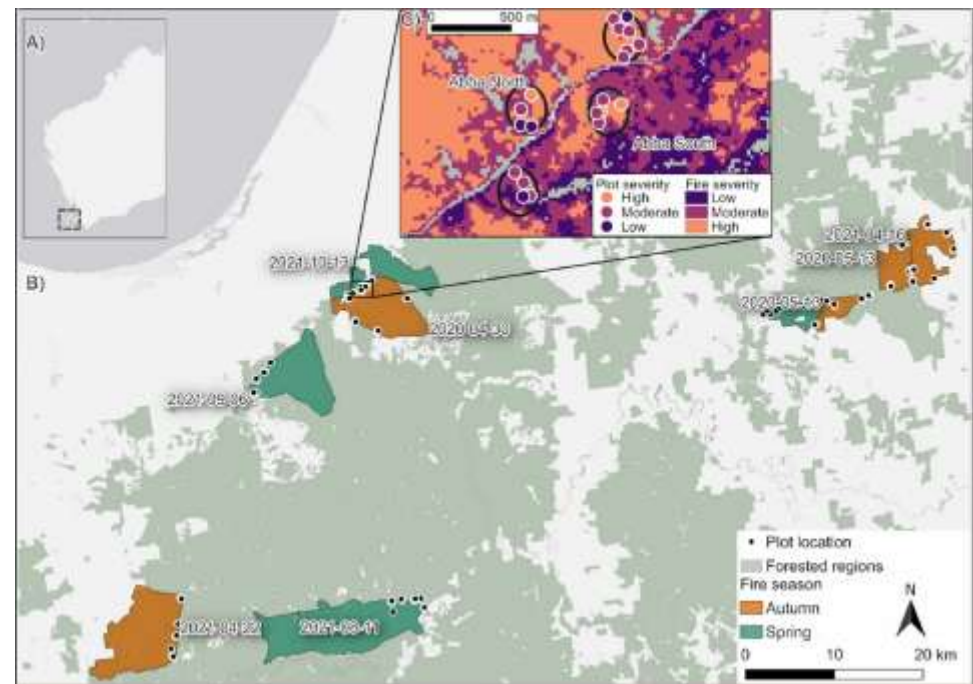
P7: Vulnerability of geophytes to fire management and changing fire regimes: *Caladenia erythrochila*

- How does sensitivity of orchids and other geophytes to fire vary with fire season?
- Track phenology through flowering and tuber development,
+ long-term microclimatic monitoring
- Identify environmental triggers of tuber development to predict orchid vulnerability to fire
- Case study: larger ARC-grant application submitted with Latrobe Uni



P8: Effects of fire season, fire severity and rainfall on jarrah forest understory seedling recruitment.

- How do fires in different seasons affect post-fire recruitment from seeds?
- Do fire season and severity interact to influence post-fire recruitment?
- Assessed seedling abundance and richness after fire in spring v autumn
- 330 1m² plots. 3 severity classes, 11 fires



ARTICLE IN PRESS

Assessing the effects of fire season, fire severity and rainfall on seedling establishment and mortality in dry eucalypt forests

Ryan Tangney^{a,b,d,*}, Ben P. Miller^{a,c}, Mark K.J. Ooi^b

^a Kings Park Science, Biodiversity, and Conservation Science, Department of Biodiversity, Conservation, and Attractions

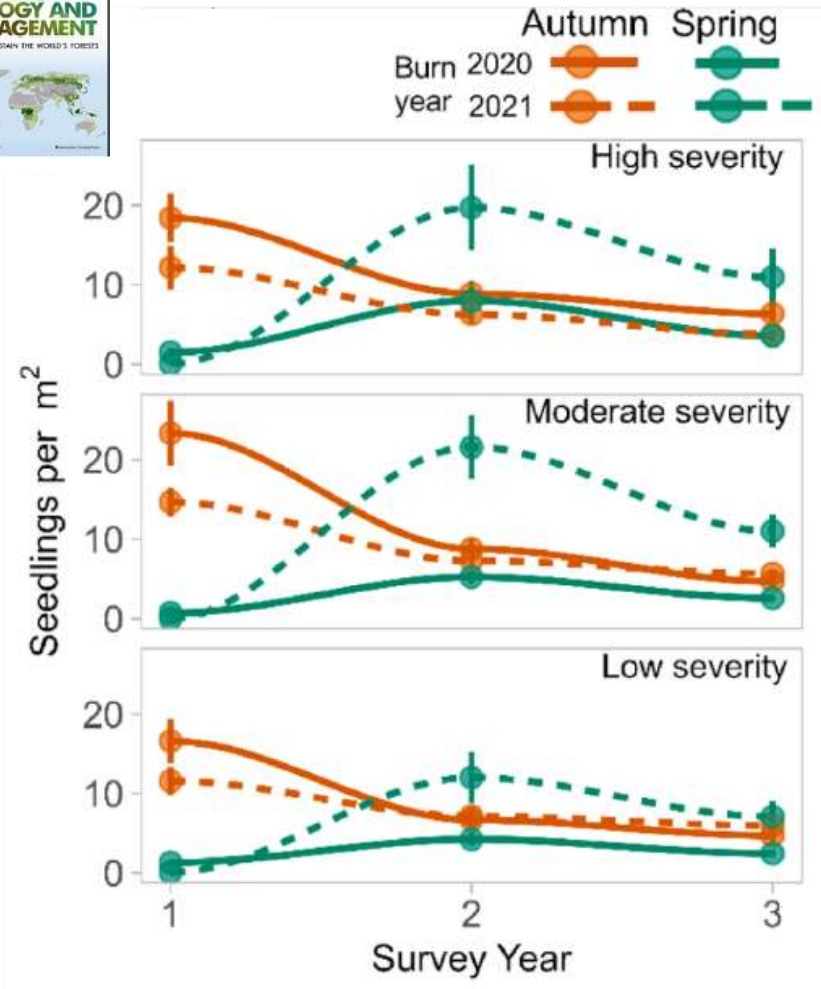
^b Centre for Ecosystem Science, School of Biological Earth and Environmental Sciences, University of New South Wales

^c School of Biological Sciences, The University of Western Australia, Crawley, WA 6009, Australia

^d School of Agriculture and Environment, The University of Western Australia, 35 Stirling Highway, Crawley, WA 6009, Australia



- Diverse post-fire recruitment after fire in both seasons
- Fire season, severity, post-fire weather, interactions shape recruitment patterns
- JF recruitment resilient to variation in fire season and severity



Assessing landscape moisture variation to support fire refugia and retain habitat patches

- Characterise soil / litter moisture dynamics associated with seasonally wet areas
- Correlate soil moisture and satellite vegetation moisture indices
- Assess seasonal and spatial dynamics of fire refugia persistence to support patchy burning that excludes targeted mesic habitat (e.g. riparian, peat, quokka habitat)





DRAFT

Burn Options Program 2026/27 Frankland District

Burn programs

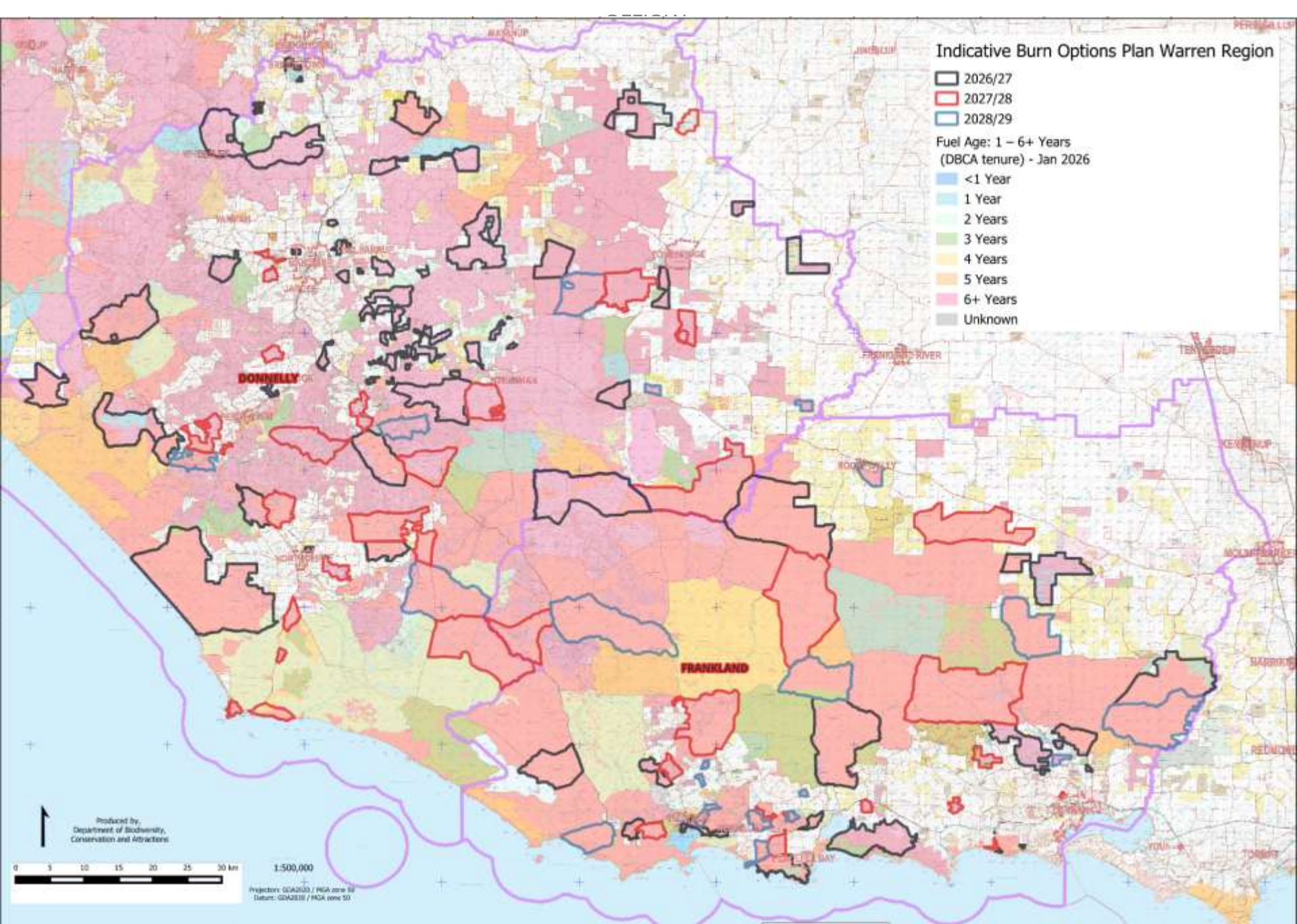
- DBCA continues to apply fire to the landscape with a program based on risk to communities, property, assets and ecological and cultural sensitivities.
- The burn options plans are a result of a landscape scale risk assessment.
- The options represent varying vegetation types, seasonality requirements, fuel loading and structure, species and communities and provides flexibility to cater for a raft of variables.
- The burn outcomes of each treatment area are varied.

Indicative Burn Options Plan Warren Region

- 2026/27
- 2027/28
- 2028/29

Fuel Age: 1 – 6+ Years
(DBCA tenure) - Jan 2026

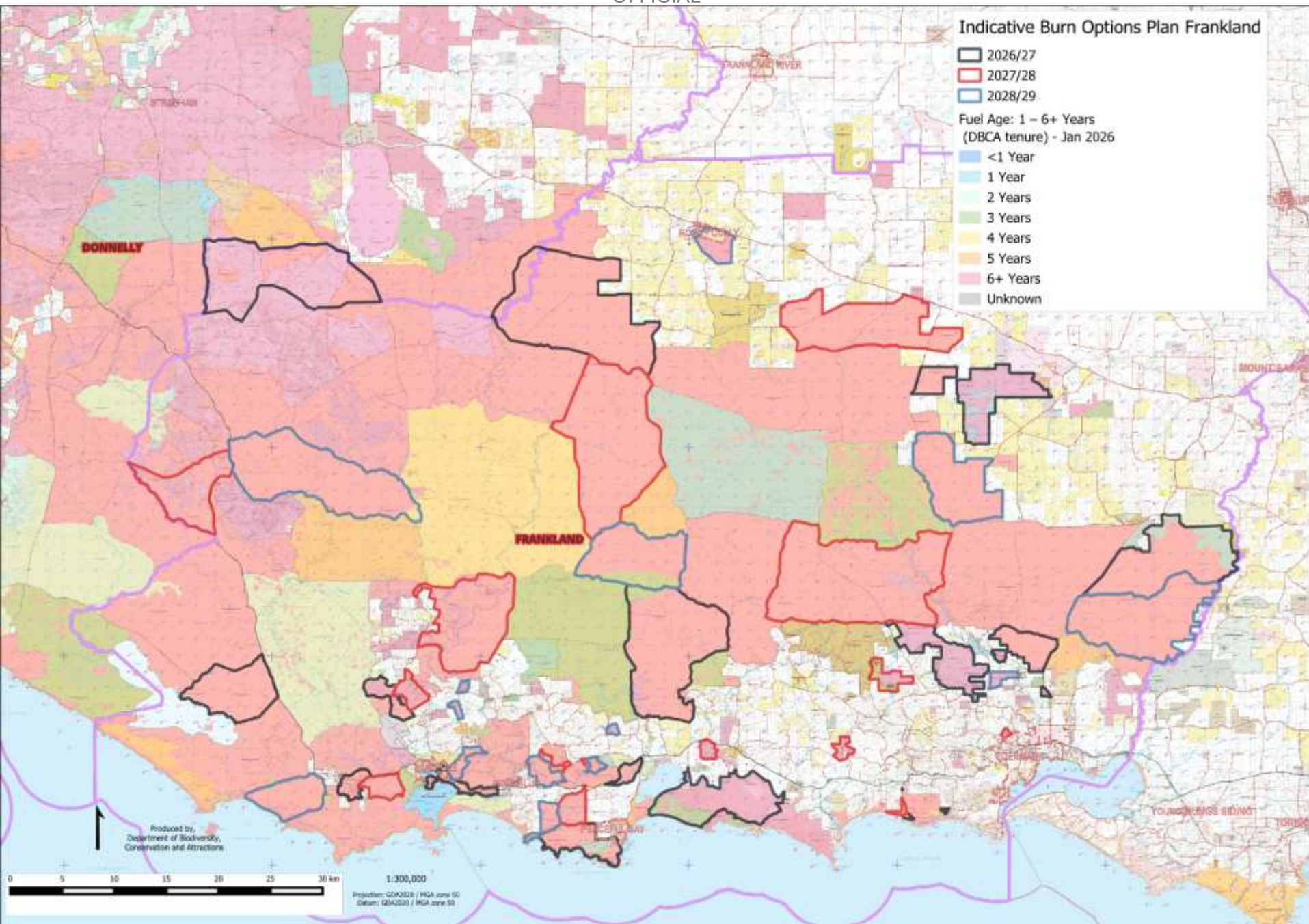
- <1 Year
- 1 Year
- 2 Years
- 3 Years
- 4 Years
- 5 Years
- 6+ Years
- Unknown



Produced by:
Department of Biodiversity,
Conservation and Attractions

1:500,000

Projection: GDA2020 / MGA zone 50
Datum: GDA2020 / MGA zone 50

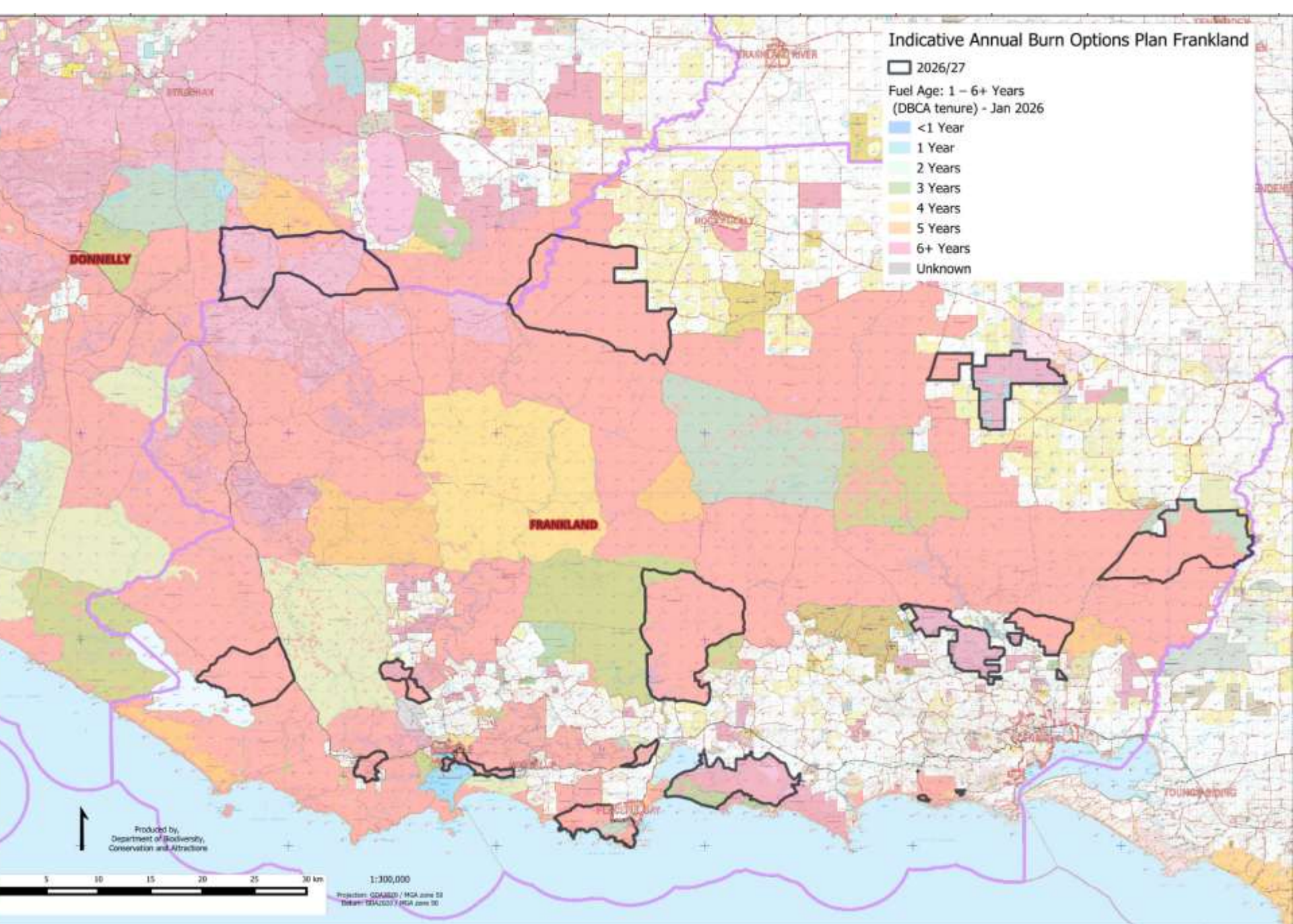


Indicative Annual Burn Options Plan Frankland

2026/27

Fuel Age: 1 – 6+ Years
(DBCA tenure) - Jan 2026

- <1 Year
- 1 Year
- 2 Years
- 3 Years
- 4 Years
- 5 Years
- 6+ Years
- Unknown



Produced by:
Department of Biodiversity,
Conservation and Attractions

1:300,000

Projection: GDA2020 / MGA zone 58
Datum: GDA2020 / MGA zone 58

Overview

16 burns on Burn Options Program 2026/27

- 2 carry over burns from 25/26 with previous ignitions
- 10 carry over burns from 25/26 with no previous ignitions
- 4 burns new to the program

Walpole/Nornalup

Frankland District Burn Options Plan 2026_2027: Walpole/Nornalup

Legend

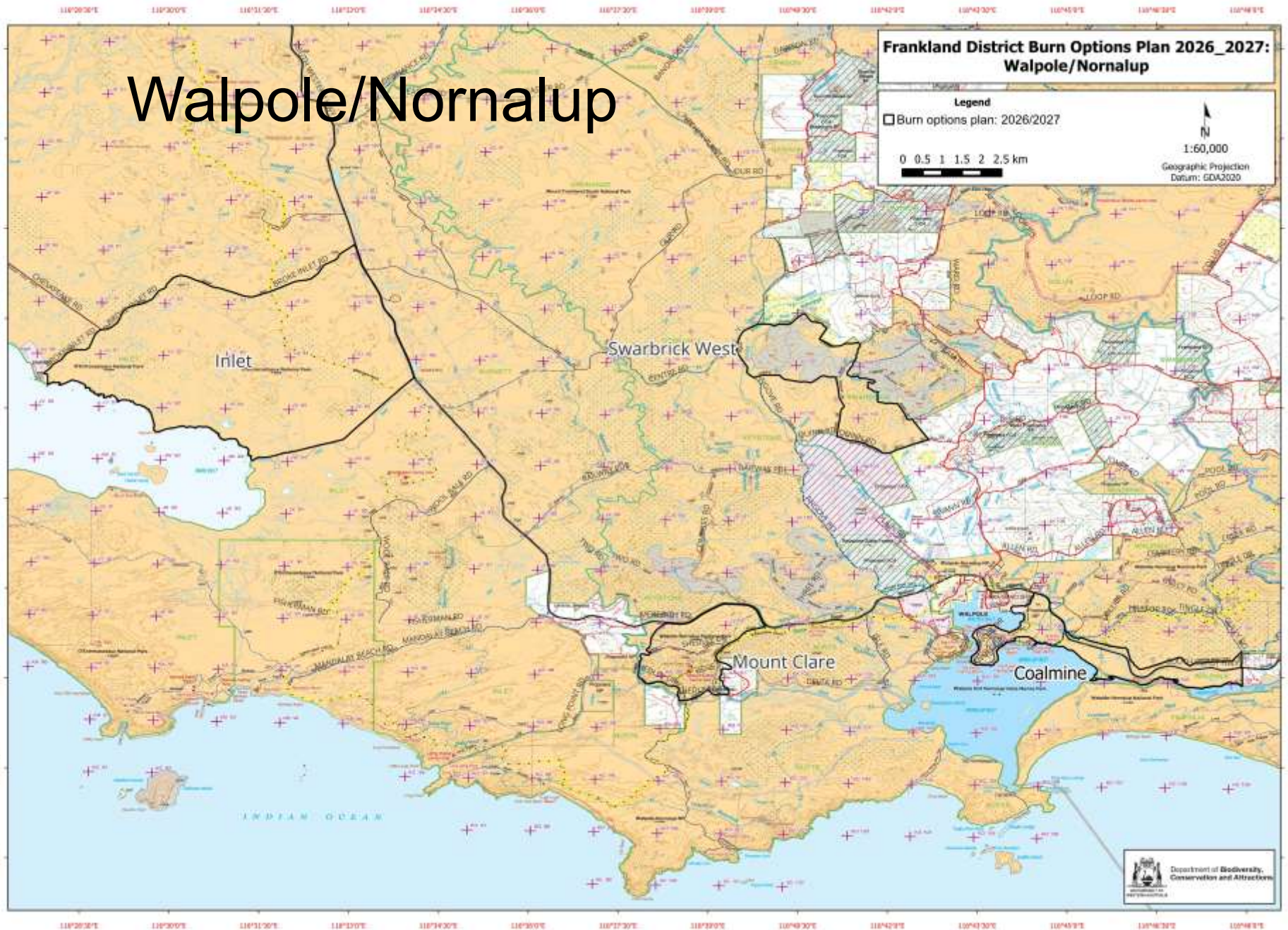
□ Burn options plan: 2026/2027

0 0.5 1 1.5 2 2.5 km

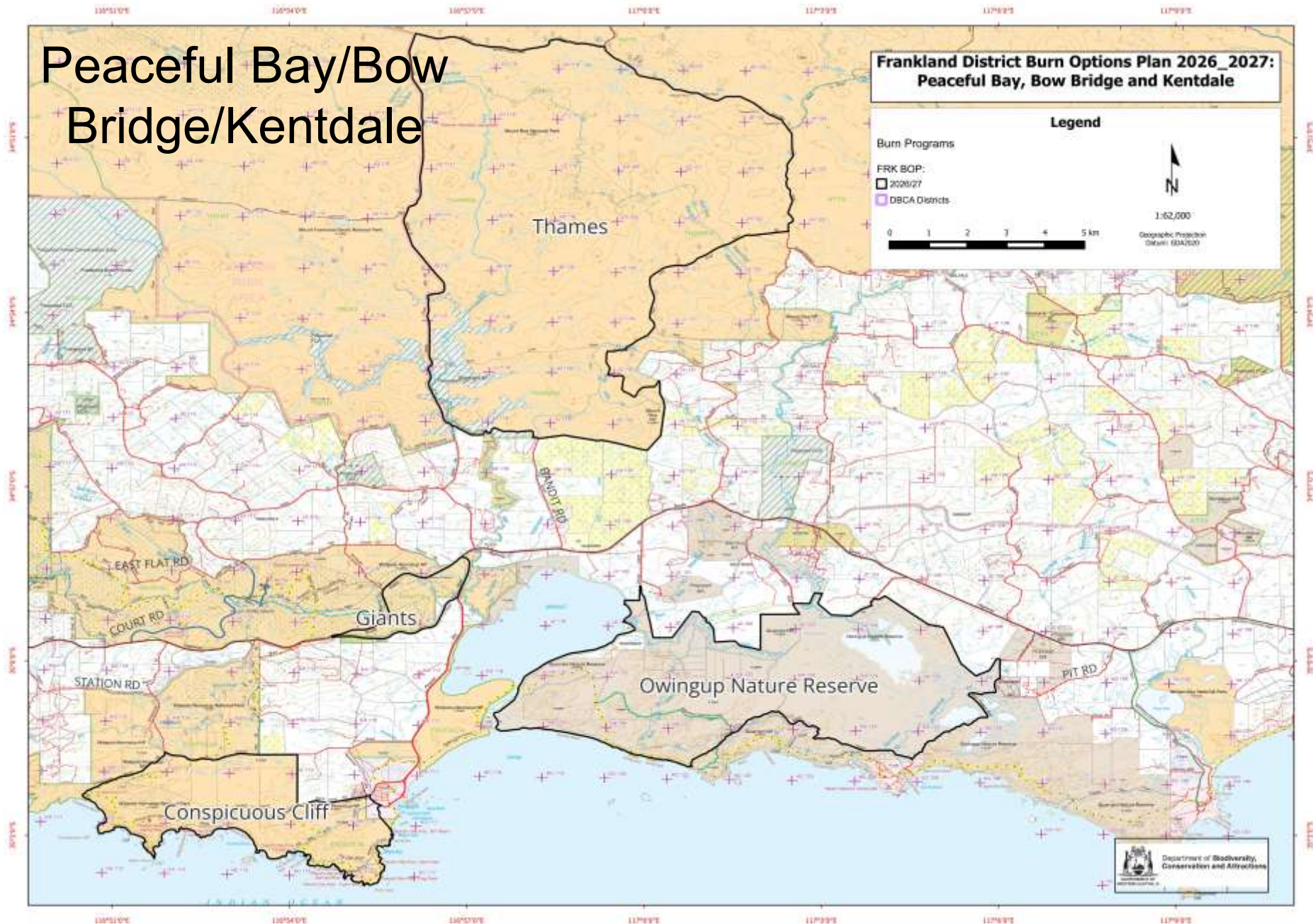


1:60,000

Geographic Projection
Datum: GDA2020



Peaceful Bay/Bow Bridge/Kentdale



Denmark

Frankland District Burn Options Plan 2026_2027: Denmark

Legend

Burn Programs

FRK BOP:

2026/27

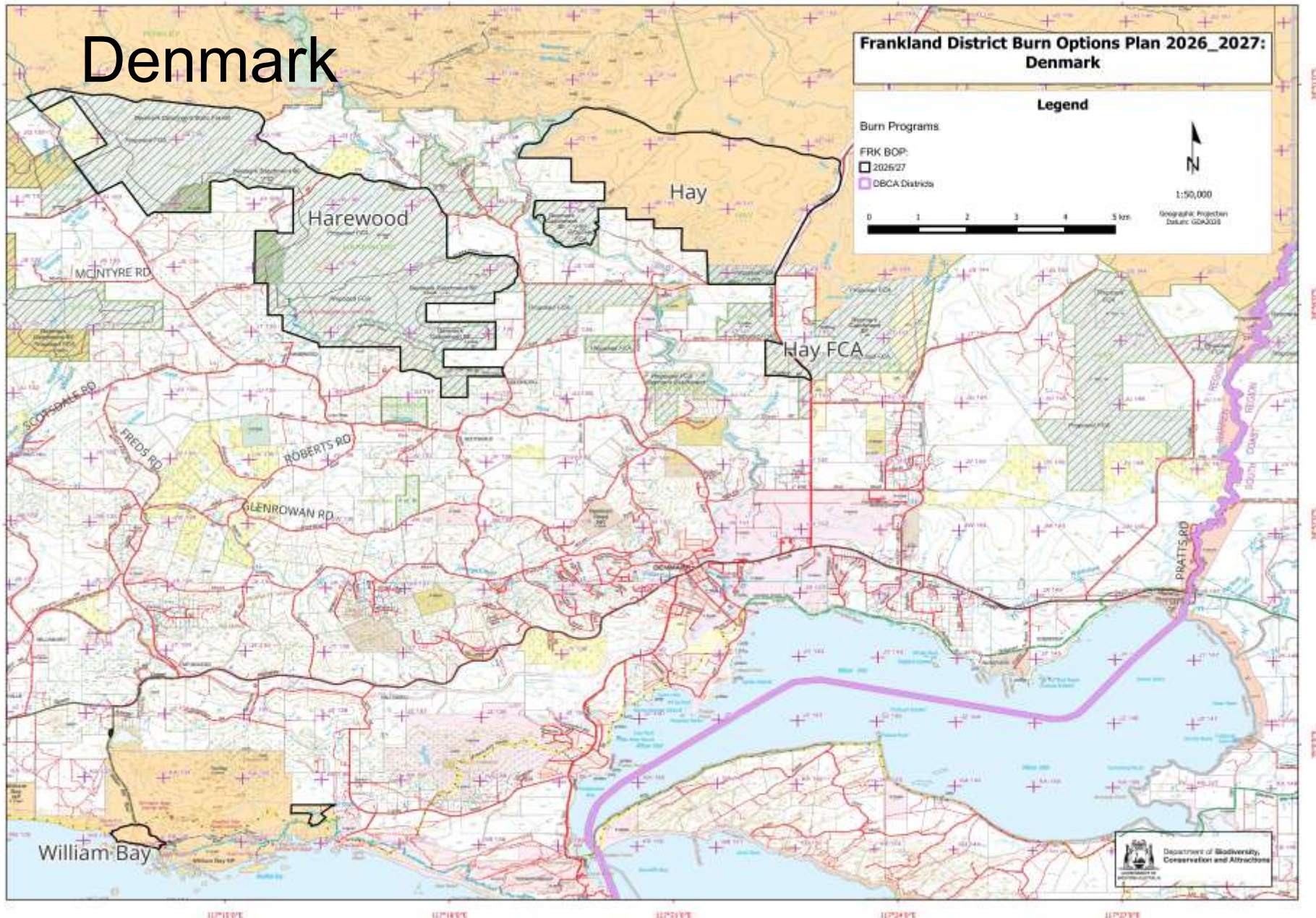
DBCA Districts



1:50,000

Geographic Projection:
Datum: GDA2020

0 1 2 3 4 5 km



Rocky Gully

Frankland District Burn Options Plan 2026_2027: Rocky Gully

Legend

Burn Programs

FRK BOP:

2026/27

DBCA Districts



1:95,000

Geographic Projection
Datum: GDA2020

0 1 2 3 4 5 km

Mindanup Challar

Hiker Gully

HIKER RD

TURPIN RD

KENT RIVER RD



Department of Biodiversity,
Conservation and Attractions

Mt Barker

Pardelup

Sheepwash North

**Frankland District Burn Options Plan 2026_2027:
Mt Barker**

Legend

Burn Programs

FRK BOP:

2026/27

OBICA Districts

0 1 2 3 4 5 km



1:50,000
Geographic Projection
Datum: GDA2020



Department of Biodiversity,
Conservation and Attractions

Parks and Wildlife Service – Burn Information

www.dbca.wa.gov.au/todaysburns

[Home](#) > [Management](#) > [Fire management](#) > [Prescribed burning](#)

Today's burns

The department's prescribed burning program protects lives, property and infrastructure from bushfires.

Map legend

The final decision to carry out a prescribed burn is made on the morning of ignition, to ensure the safest possible conditions.



New burns planned for ignition today



Active burns - further ignitions planned today

Burns that are carrying live fire as a result of previous ignitions.



Active burns - NO planned ignitions today

Burns that are carrying live fire as a result of previous ignitions.



Socials



www.emergency.wa.gov.au

EmergencyWA

PREPARE WARNINGS & INCIDENTS RECOVERY

Call 000 in a life threatening emergency

List Both Map Filter

Locate Me Search address...

TYPE UPDATED

Warnings (0)

Incidents (1)

Active Alarm CANNING VALE 17 minutes ago

Prescribed Burns and Burn Offs (14)

Prescribed Burn 2km W of Ellenbrook Town Centre Today

Prescribed Burn 14km ESE of Yanchep Today

Prescribed Burn 9km E of Two Rocks Today

Burn Off BOUVARD 9 minutes ago

Burn Off BAMBUN 13 minutes ago

Burn Off MELALEUCA 38 minutes ago

Burn Off YALLINGUP 42 minutes ago

Map Legend

Google

100 km

Map data ©2022 Google Terms of use

View text version of warnings and incidents ABOUT THIS SITE FAQ MAP LEGEND

To find out more...

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(08) 9840 0400

Frankland.District@dbca.wa.gov.au