RAF: Prescribed Burning and Predictive Services

ACT Government

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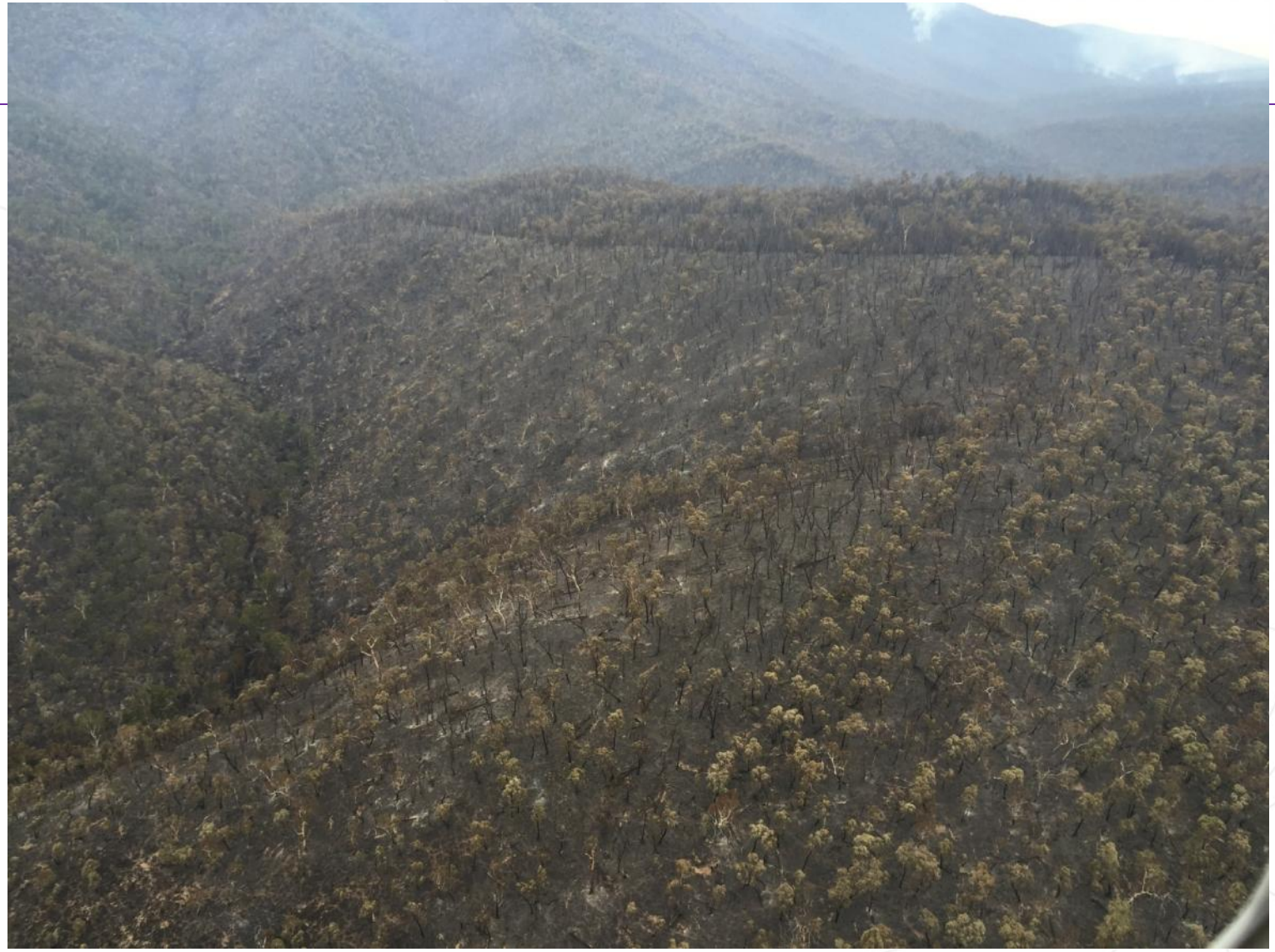
DIRECTION
247 deg(T)
55H FA 8179 4168
ACCURACY 5 m
DATUM WGS84
Paul SE
IOS
Brandy
6/04/2016
12:53:30


DIRECTION
256 deg(T)
55H FA 8213 4135
ACCURACY 5 m
DATUM WGS84
Paul SE
IOS
Brandy
6/04/2016
12:59:30


DIRECTION
161 deg(T)
55H FA 8131 4178
ACCURACY 5 m
DATUM WGS84
Paul SE
IOS
Brandy
6/04/2016
13:00:08

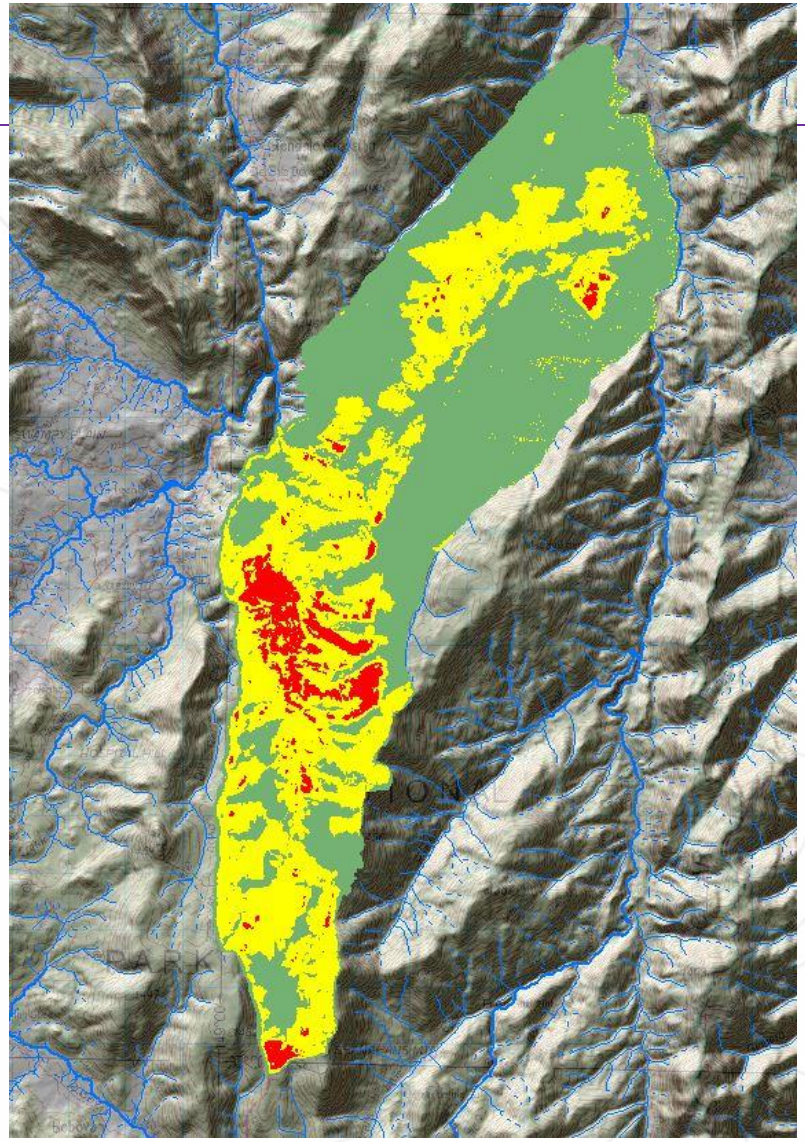

DIRECTION
43 deg(T)
55H FA 8105 4006
ACCURACY 10 m
DATUM WGS84
Paul SE
IOS
Brandy
6/04/2016
13:01:08


DIRECTION
37 deg(T)
55H FA 8096 4066
ACCURACY 30 m
DATUM WGS84
Paul SE
IOS
Brandy
6/04/2016
13:05:51



Evaluation

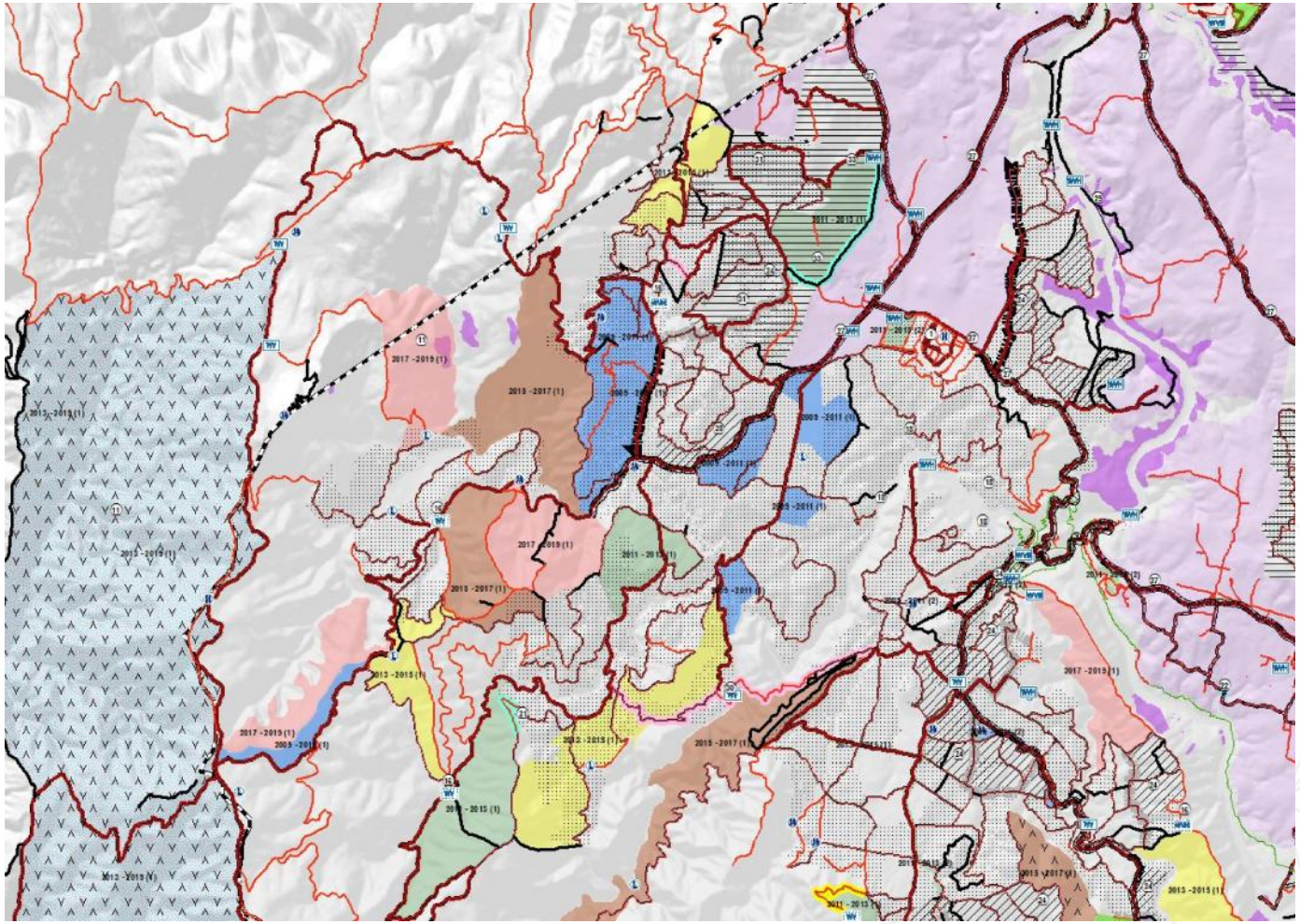
Brandy Flat HRB fire
severity assessment



Research Showcase in Prescribed Burning

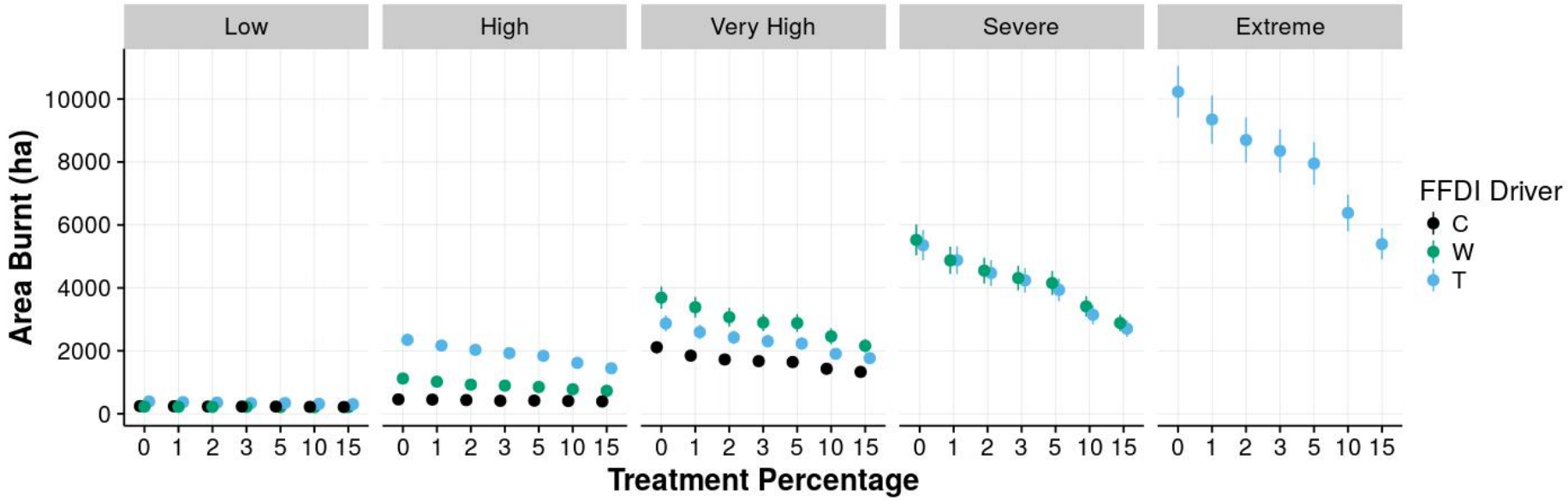
- Planning: Bradstock group (UoW, UMelb)
- Implementation: Van Dijk, Yebra and Cary (ANU)
- Evaluation: Bell (USyd)

Prescribed Burning - Planning



Prescribed Burning - Planning

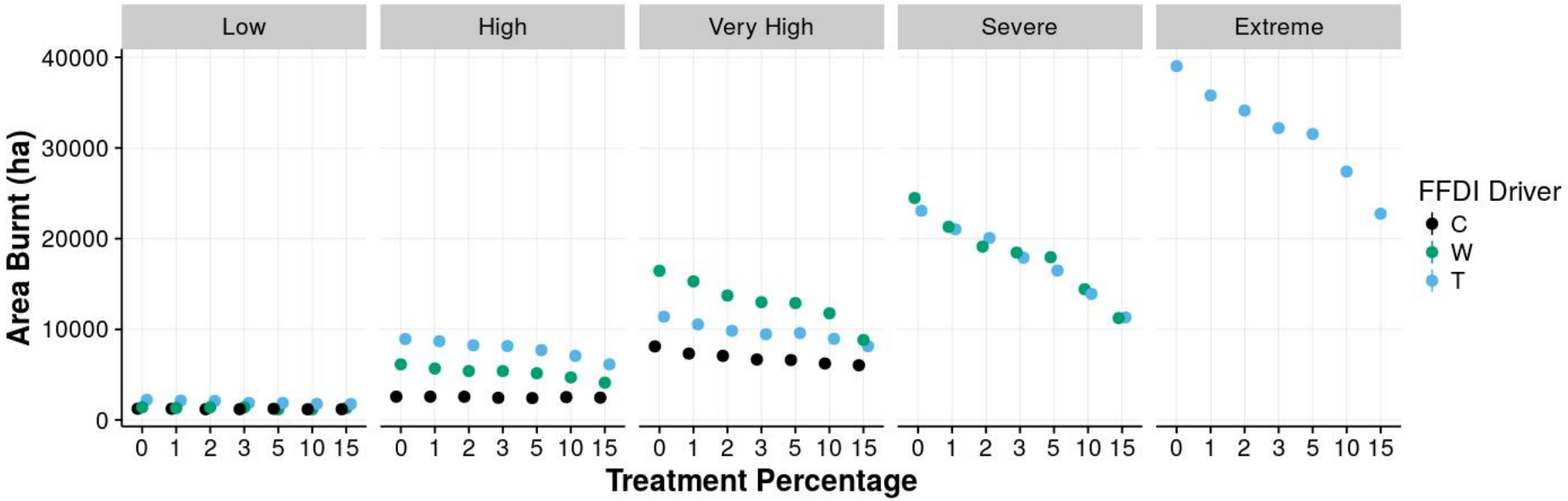
ACT Study: Area Burnt (mean)



C = wind change driven, W = wind driven, T = temperature driven

Prescribed Burning - Planning

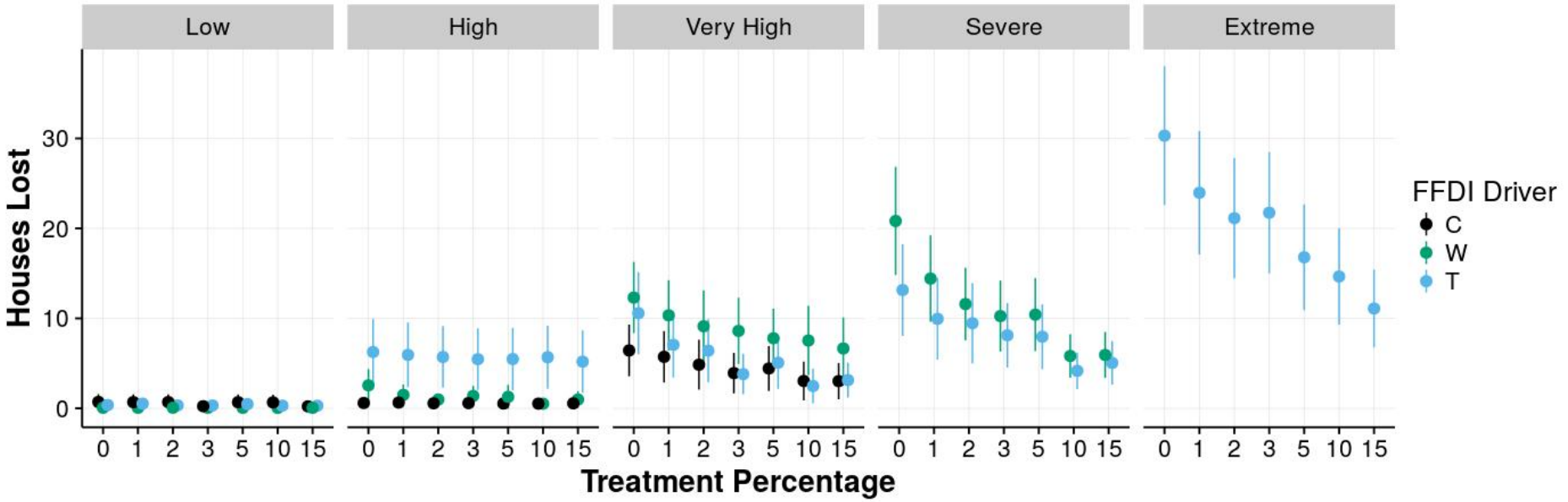
ACT Study: Area Burnt (95th percentile)



C = wind change driven, W = wind driven, T = temperature driven

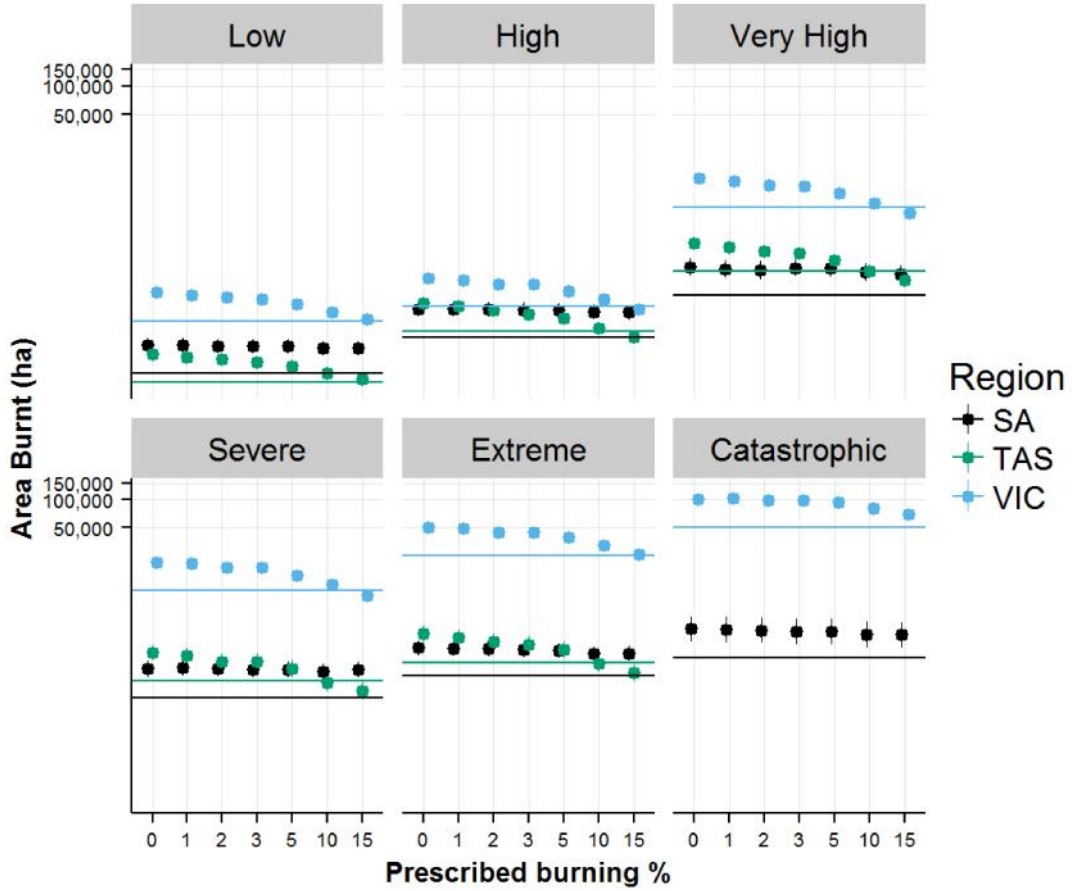
Prescribed Burning - Planning

ACT Study: House Loss (mean)

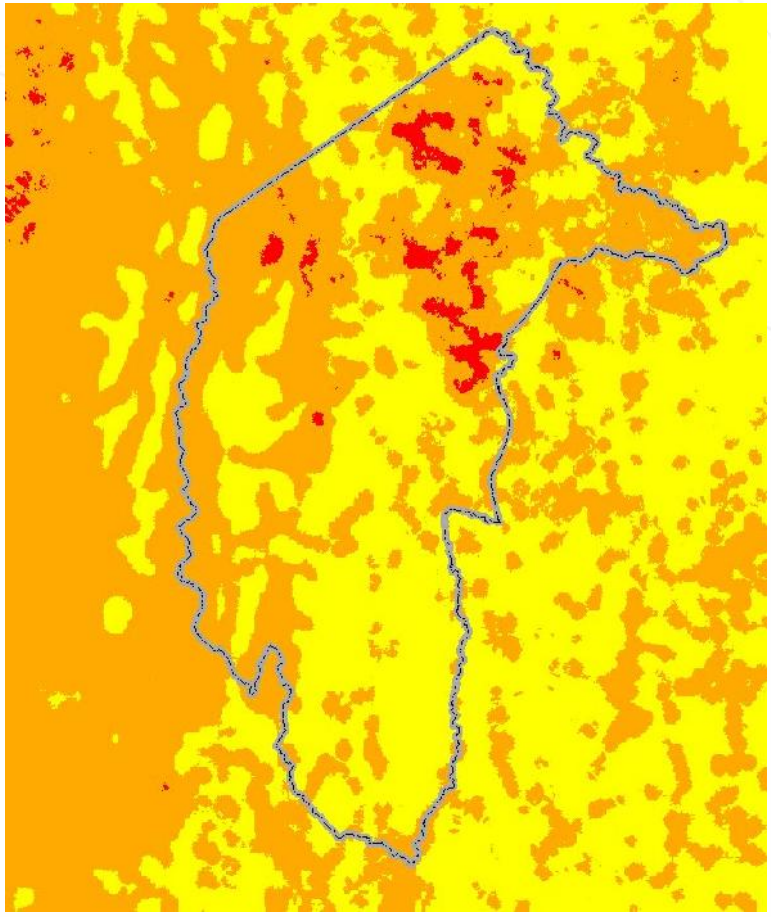


C = wind change driven, W = wind driven, T = temperature driven

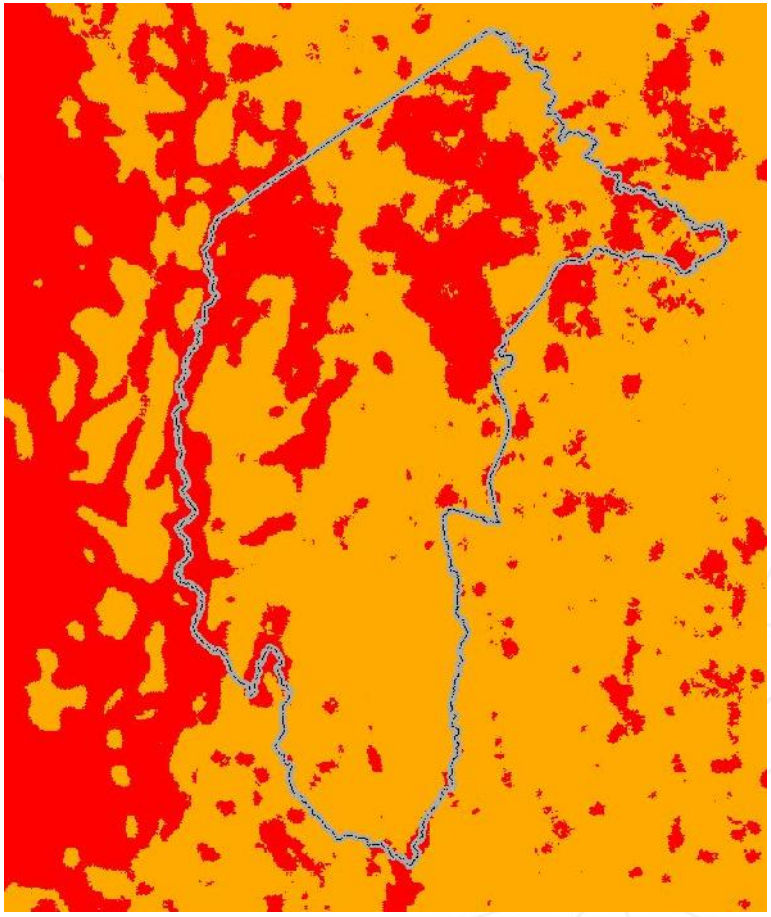
Prescribed Burning - Planning



Prescribed Burning - Planning



Ignition Probability – FFDI 25

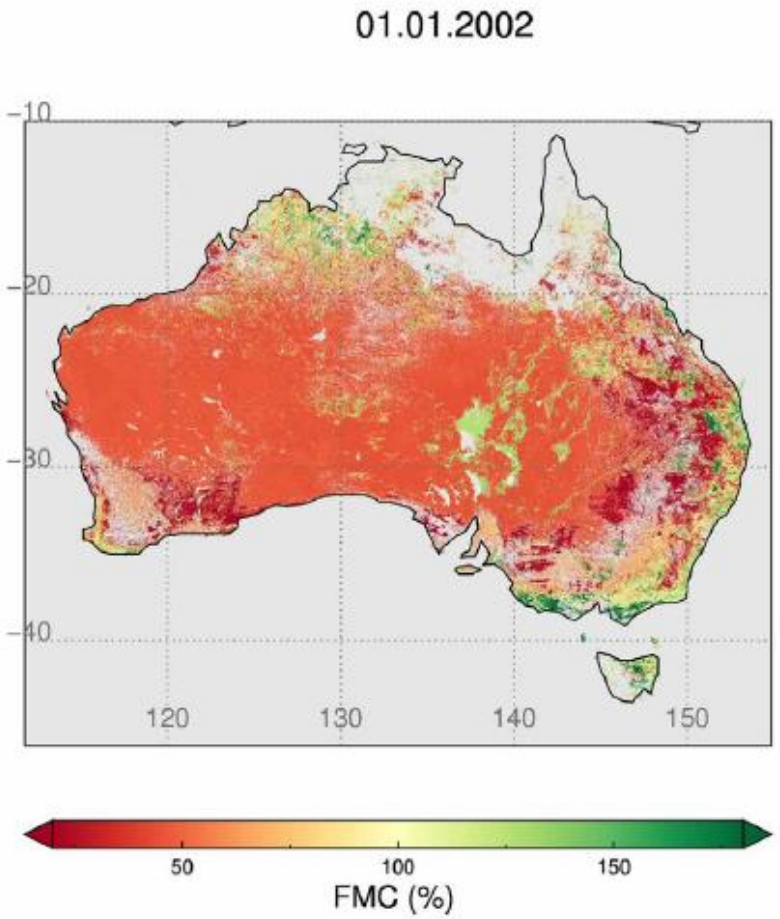


Ignition Probability – FFDI 135

Prescribed Burning - Implementation

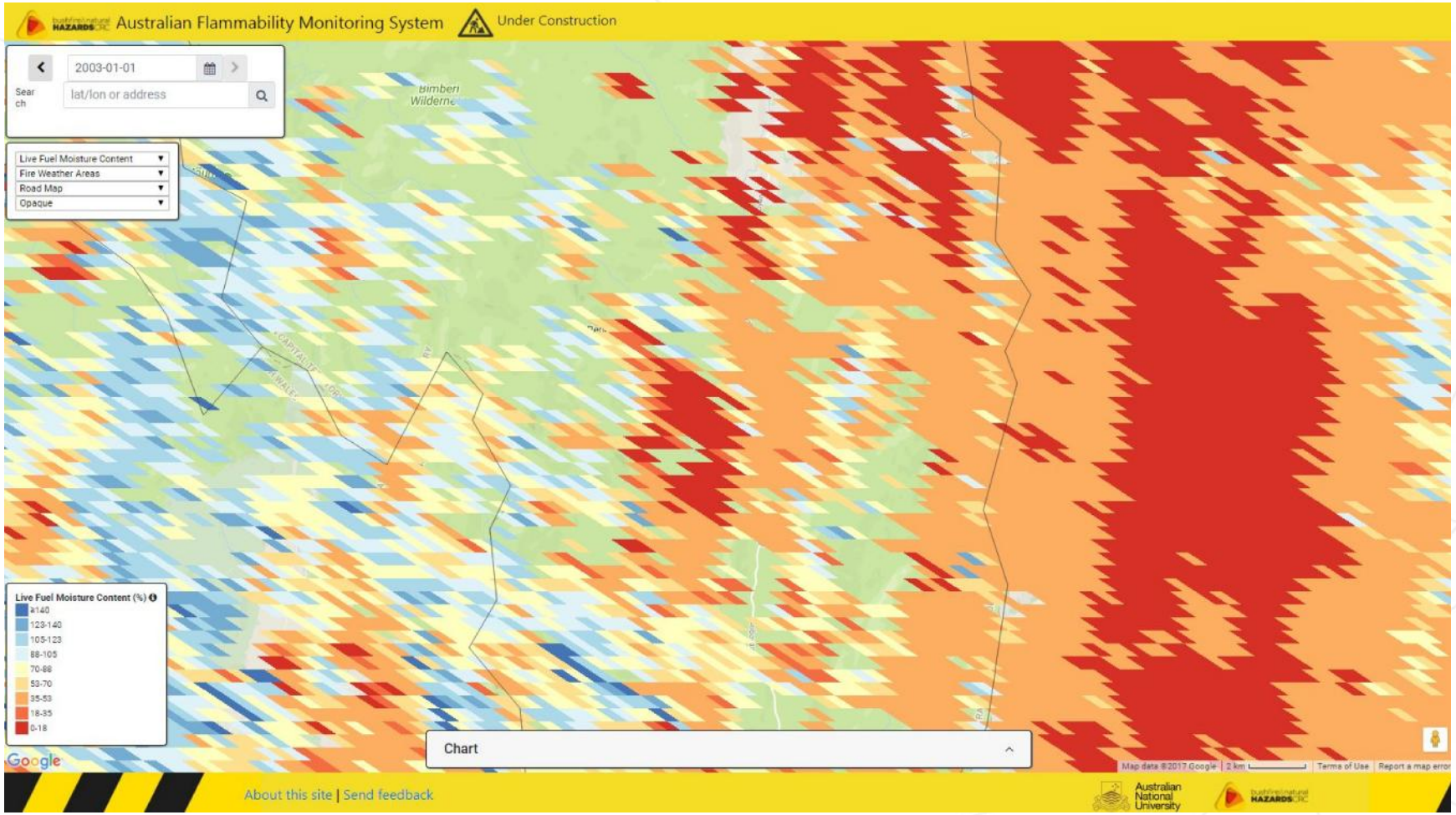
Australian Flammability Monitoring System

Satellite-based fuel moisture content and flammability



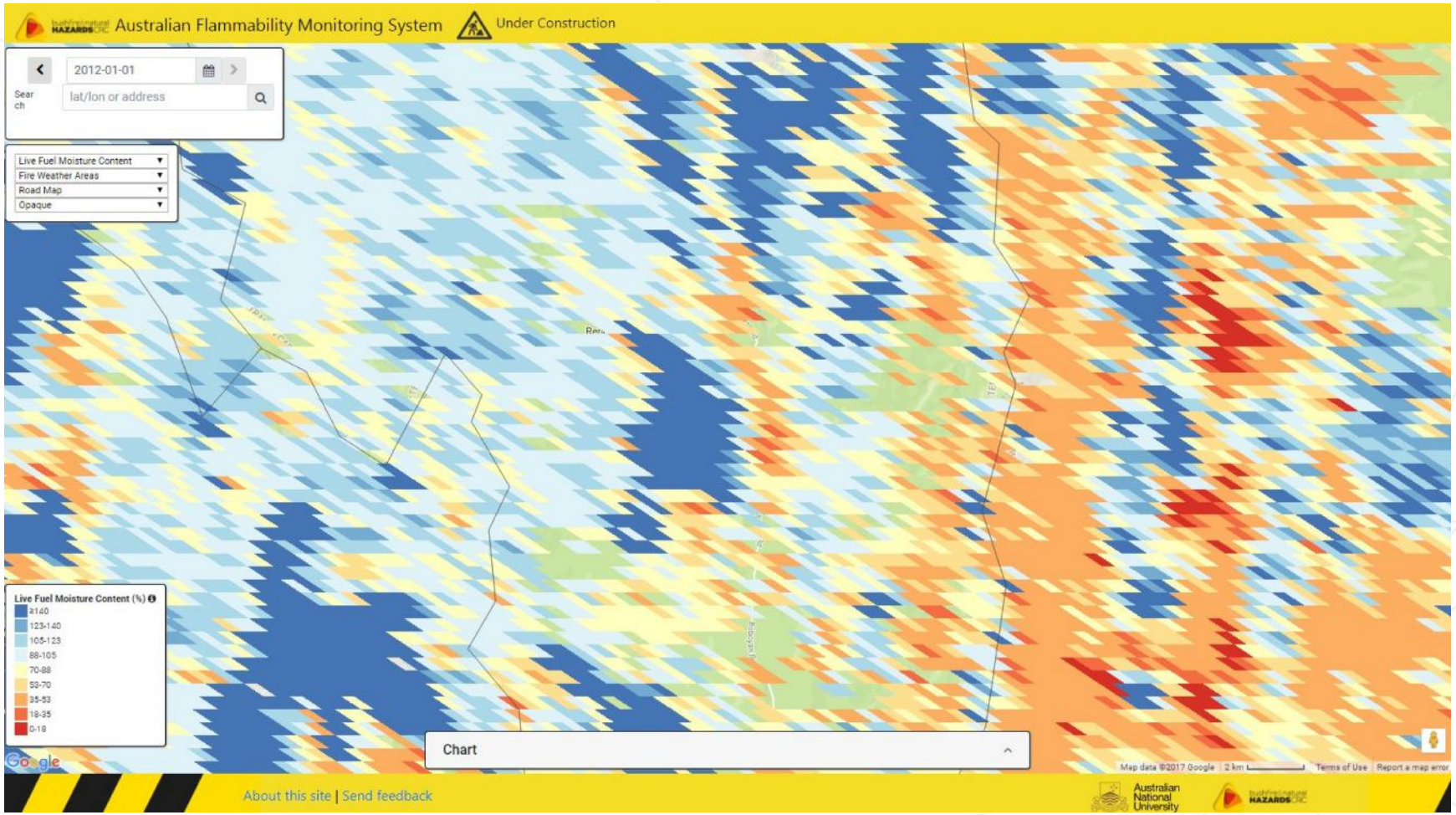
Prescribed Burning - Implementation

January 2003



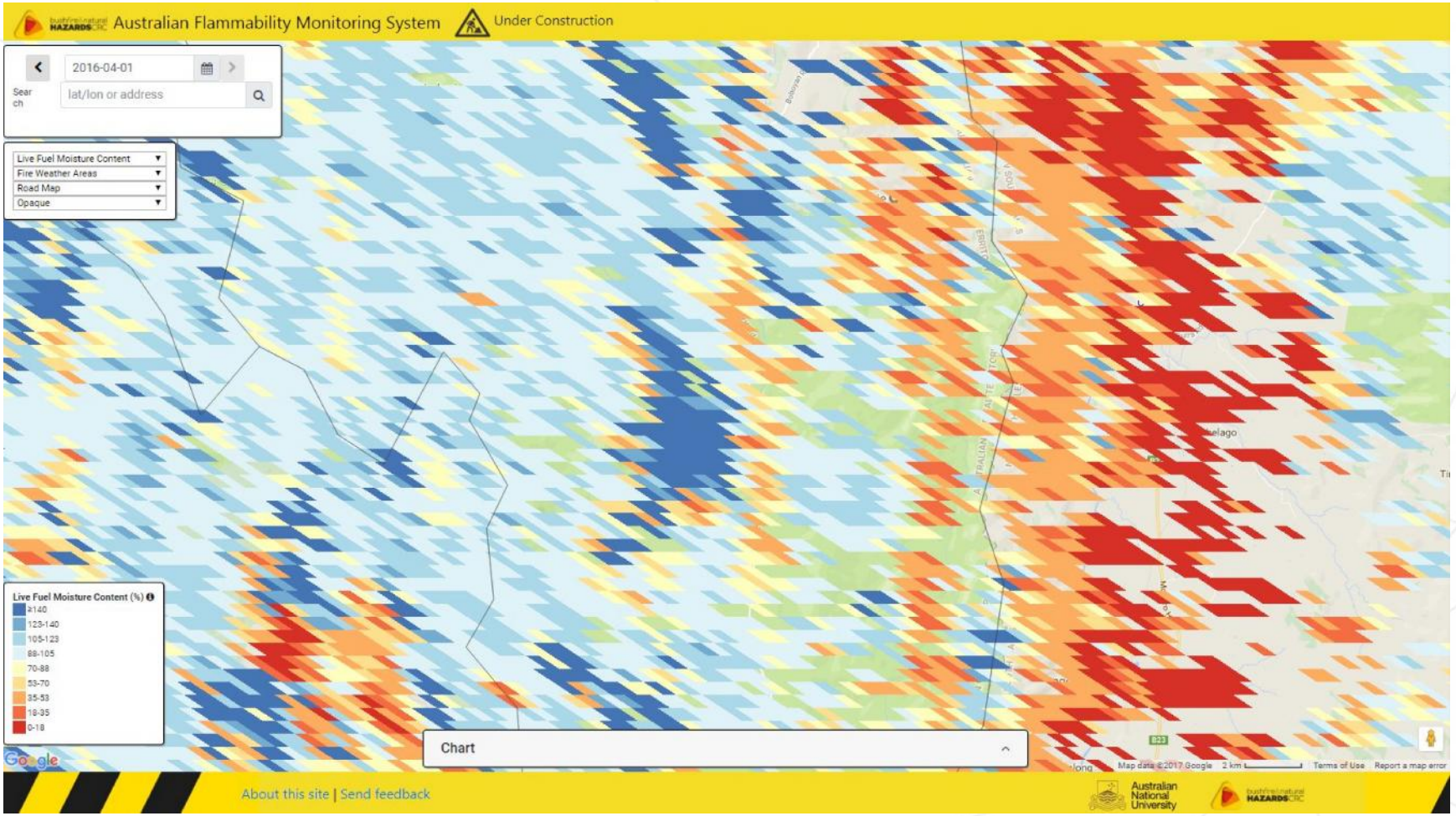
Prescribed Burning - Implementation

January 2012



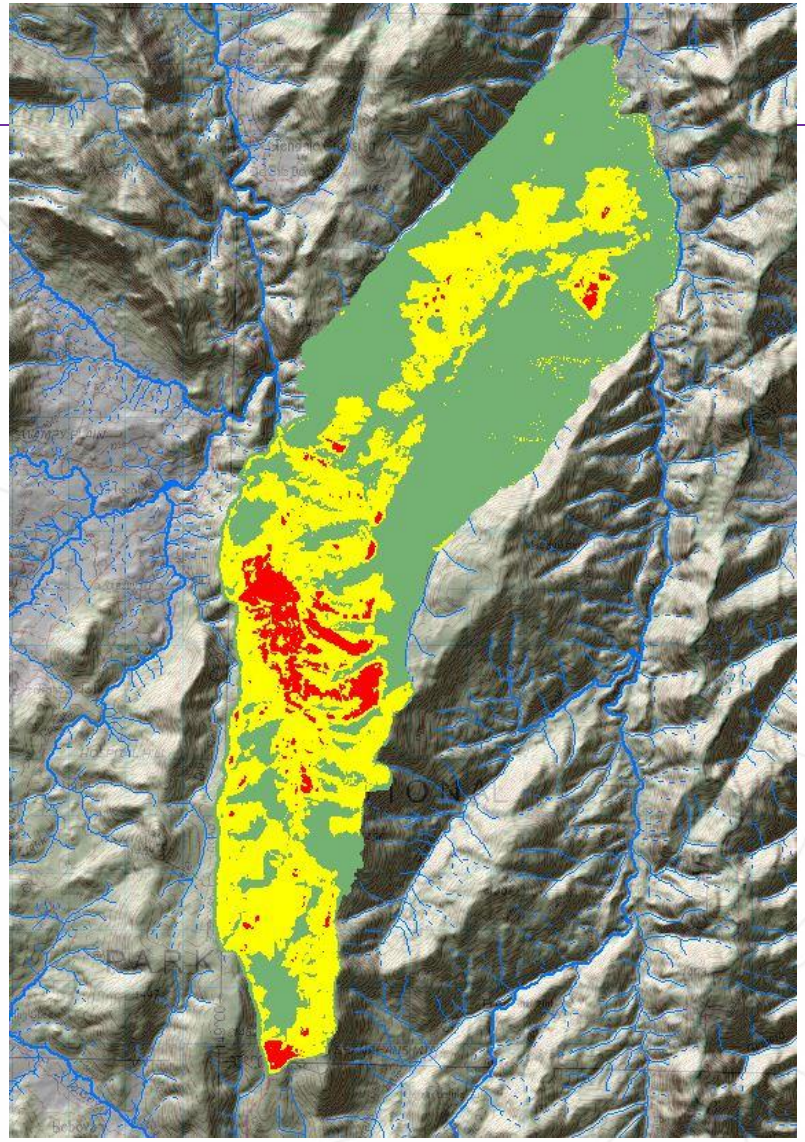
Prescribed Burning - Implementation

Brandy Flat HR April 2016



Implementation

Brandy Flat HRB fire
severity assessment

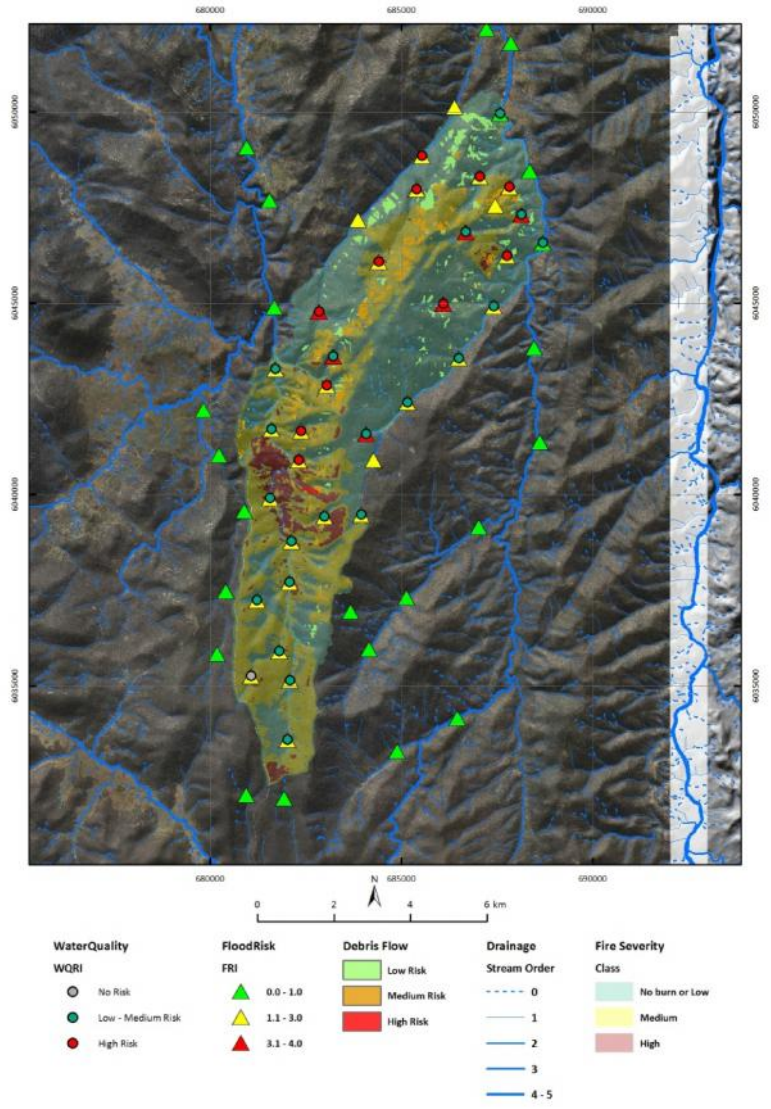


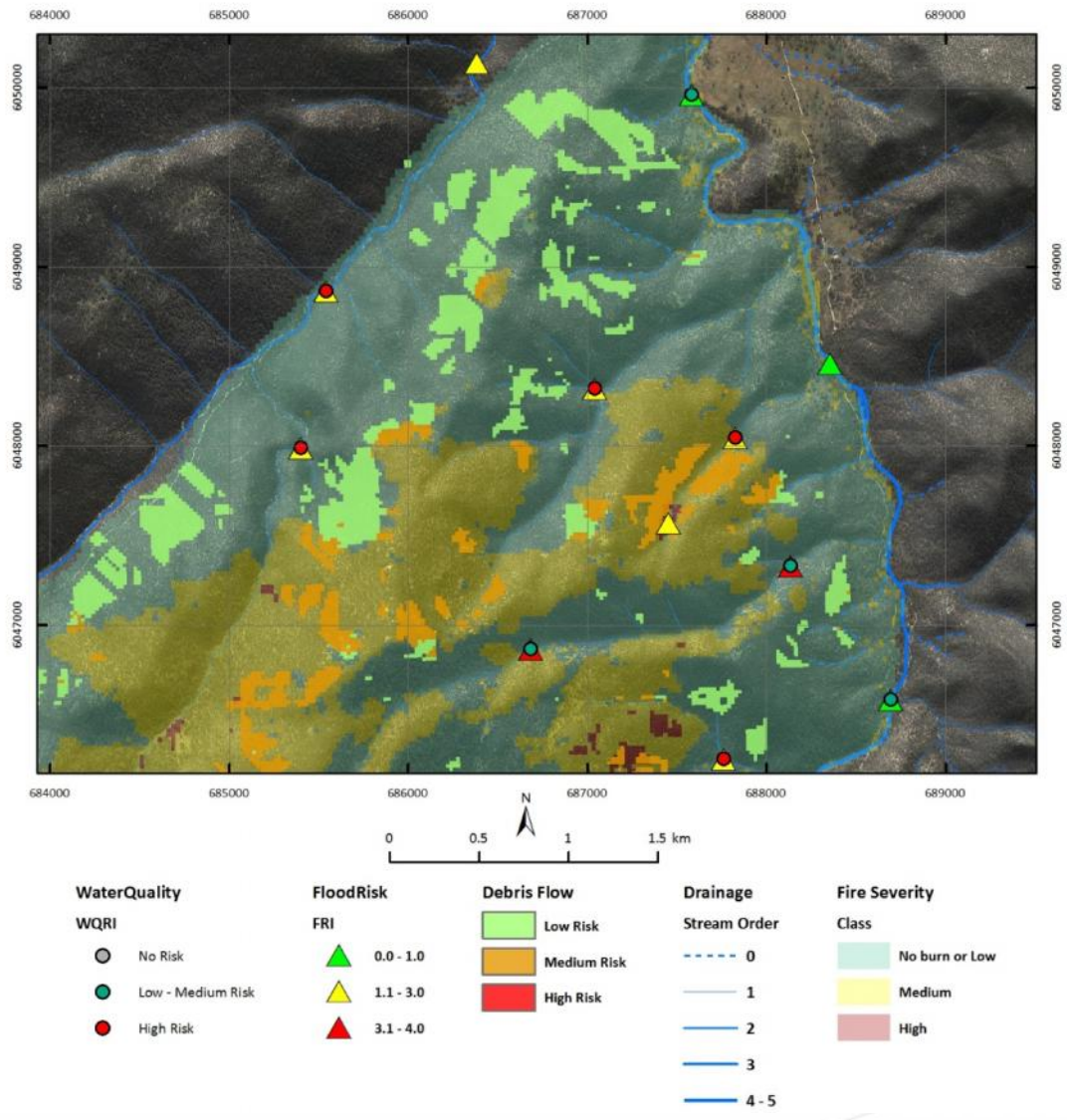
Prescribed Burning - Evaluation

Evaluation

Post-burn hydrological risk –

Brandy Flat HRB

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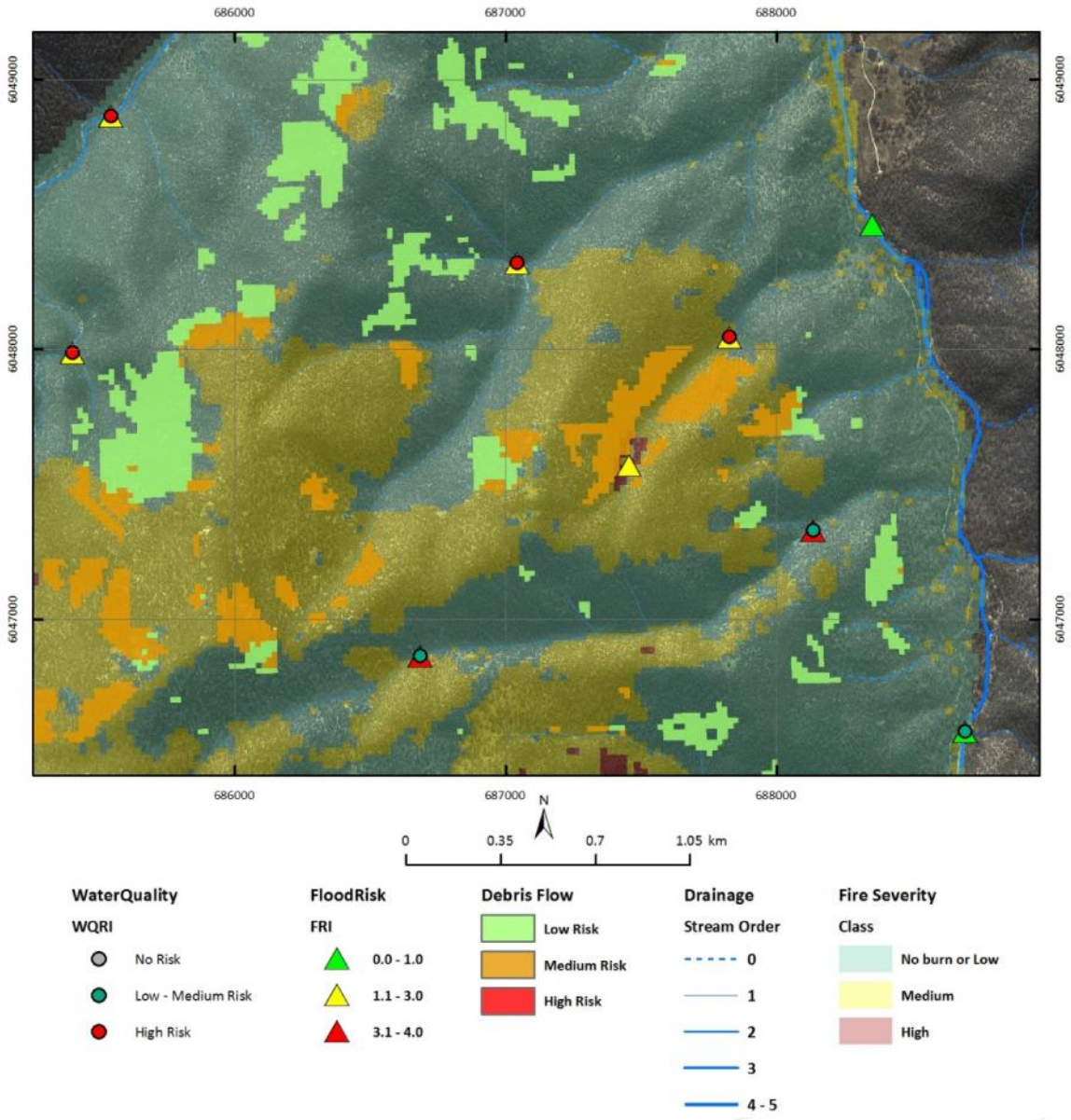
685000
686000
687000
688000
689000
6050000
6049000
6048000
6047000
N
0
0.5
1
1.5 km
WaterQuality
WQRI
No Risk
Low - Medium Risk
High Risk
FloodRisk
FRI
0.0 - 1.0
1.1 - 3.0
3.1 - 4.0
Debris Flow
Low Risk
Medium Risk
High Risk
Drainage
Stream Order
0
1
2
3
4 - 5
Fire Severity
Class
No burn or Low
Medium
High


686000
687000
688000
6049000
6048000
6047000
N
0
0.35
0.7
1.05 km
WaterQuality
WQRI
No Risk
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High Risk
FloodRisk
FRI
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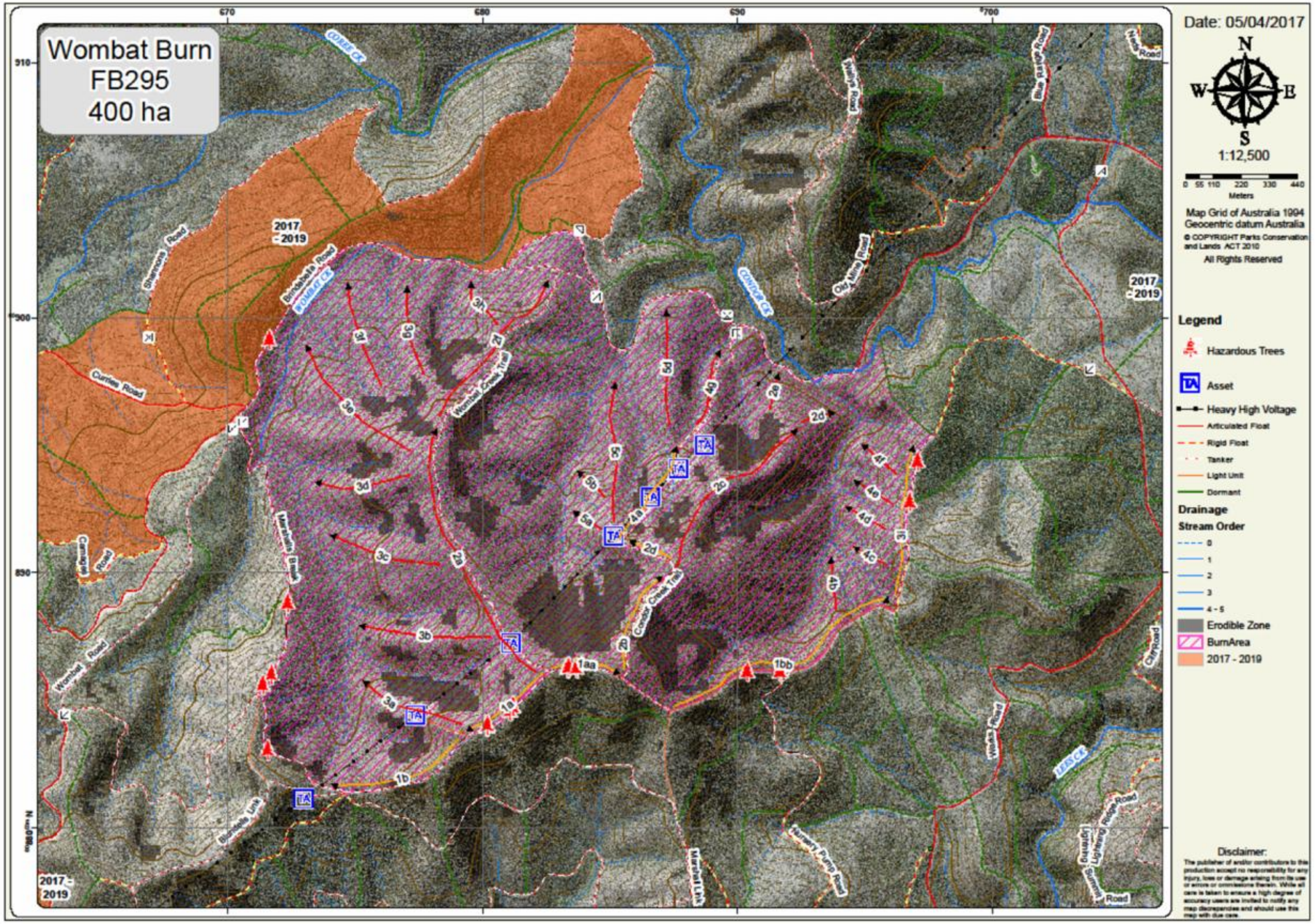
Debris Flow
Low Risk
Medium Risk
High Risk
Drainage
Stream Order
0
1
2
3
4 - 5
Fire Severity
Class
No burn or Low
Medium
High

Eroded material from



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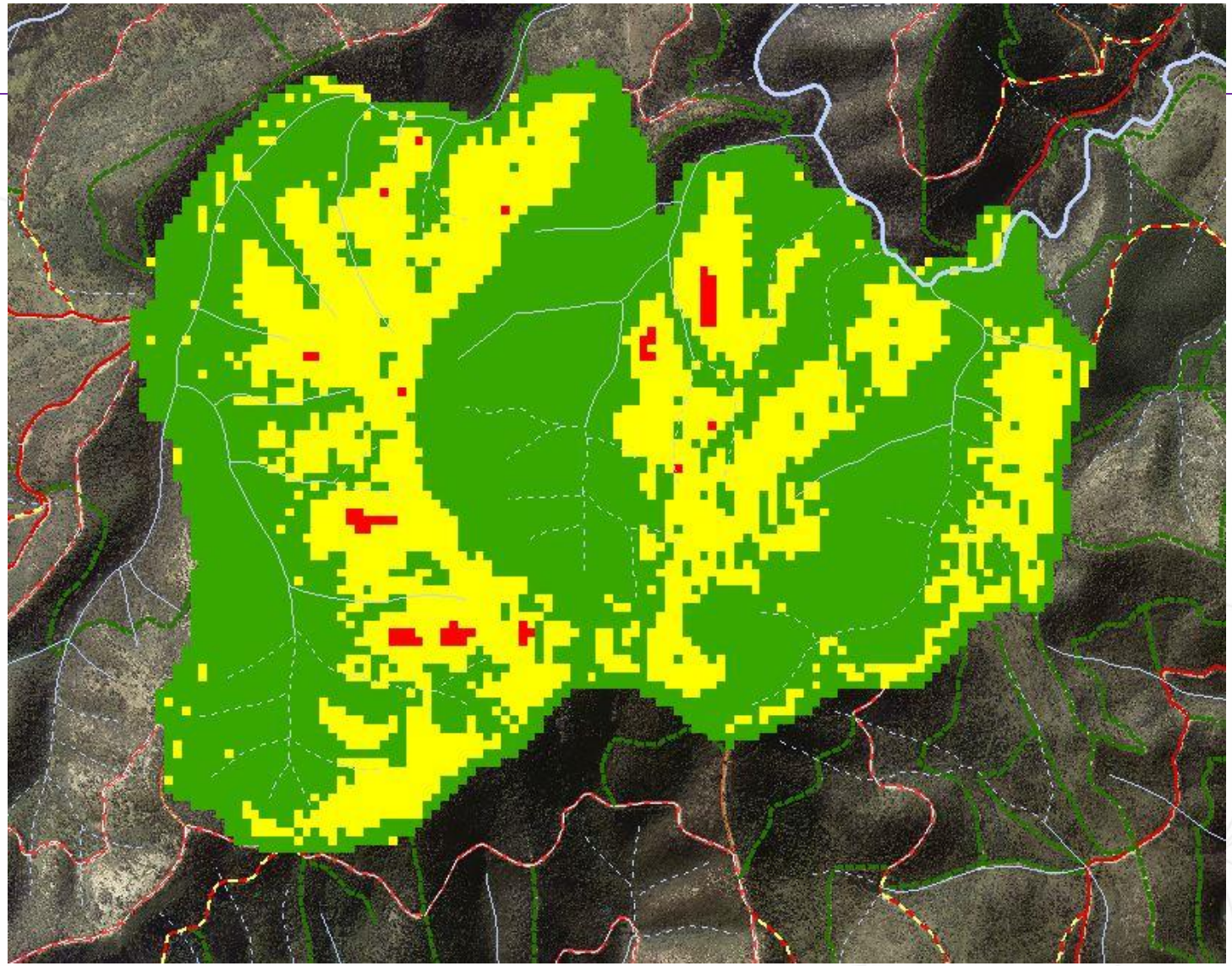

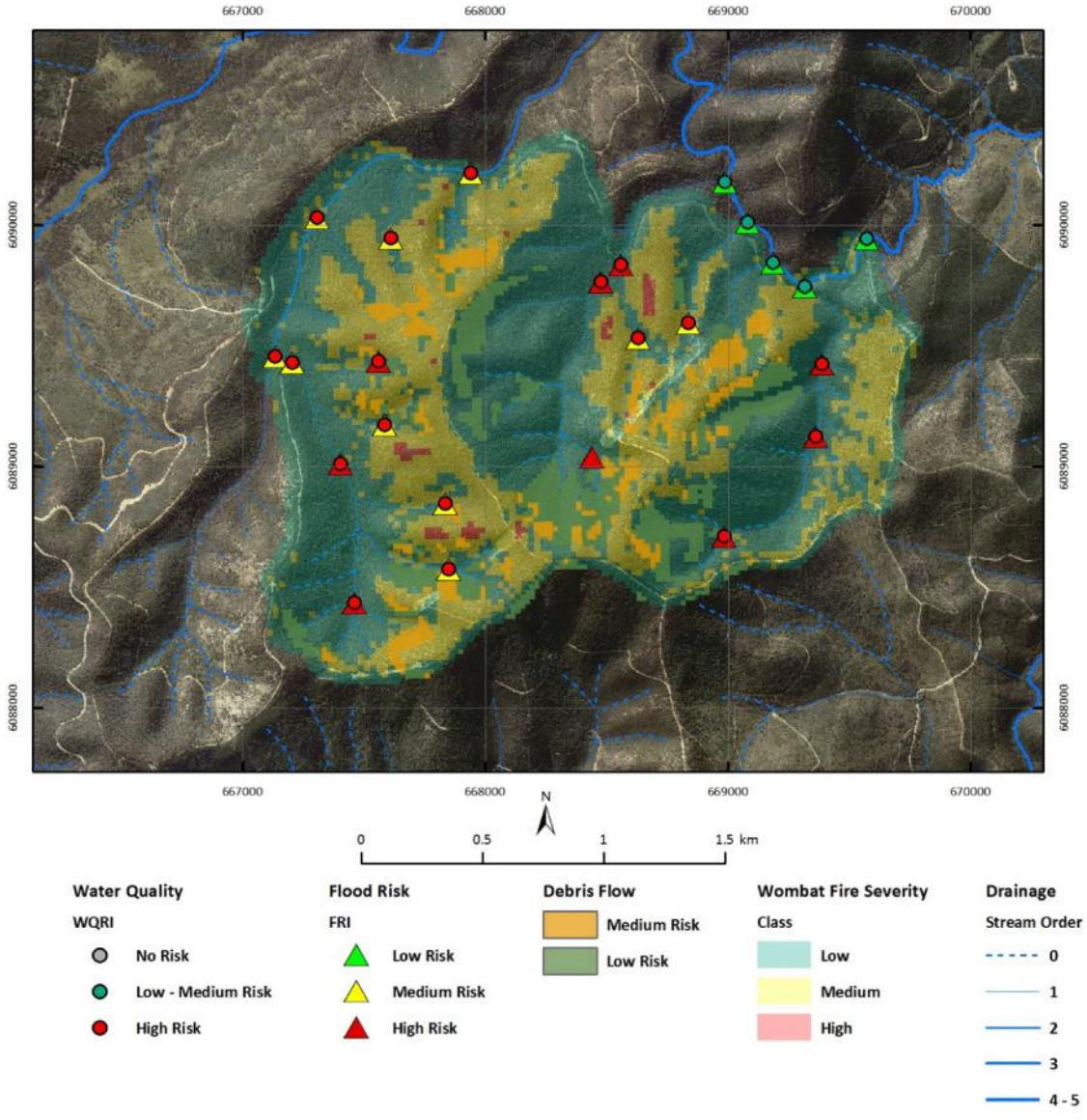
667000
668000
669000
670000
6090000
6089000
6088000
N
0
0.5
1
1.5 km
Water Quality
WQRI
No Risk
Low - Medium Risk
High Risk
Flood Risk
FRI
Low Risk
Medium Risk
High Risk
Debris Flow
Medium Risk
Low Risk
Wombat Fire Severity
Class
Low
Medium
High
Drainage
Stream Order
0
1
2
3
4 - 5

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