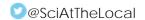
## A guided tour of the Prescribed Burning Atlas

Launch Webinar / 2020



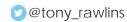
Dr Hamish Clarke / University of Wollongong, Western Sydney University, NSW Bushfire Risk Management Research Hub
Prof Ross Bradstock / University of Wollongong, NSW Bushfire Risk Management Research Hub
Assoc Prof Owen Price / University of Wollongong, NSW Bushfire Risk Management Research Hub
Mr Brett Cirulis / University of Melbourne
Assoc Prof Trent Penman / University of Melbourne
Mr Tony Rawlins / University of Melbourne
Assoc Prof Matthias Boer / Western Sydney University























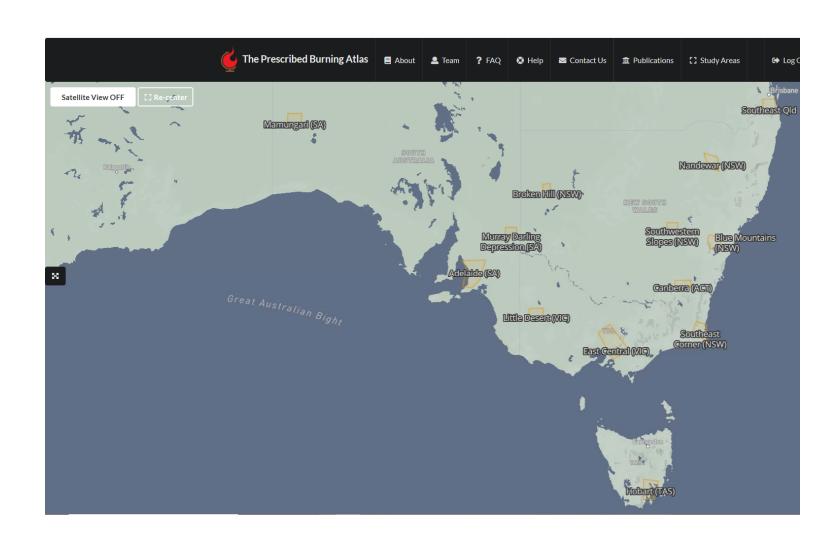


#### The Prescribed Burning Atlas

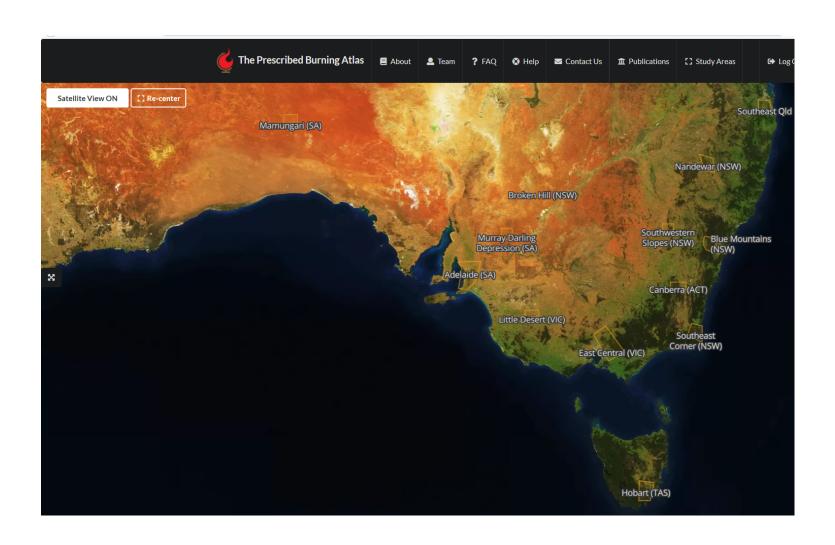
A NEW DECISION SUPPORT TOOL FOR PRESCRIBED BURNING RISK ASSESSMENT

- Comparative analysis of different management options
- Risk mitigation across a portfolio of values
- Relative differences
- Risk mitigation, not elimination -> residual risk
- Cost-effectiveness of risk mitigation
- Effect of climate change on risk mitigation

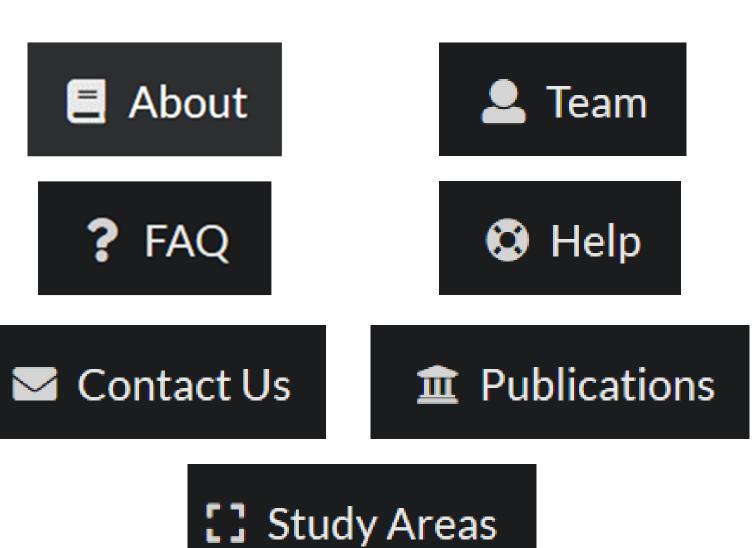
# Home page

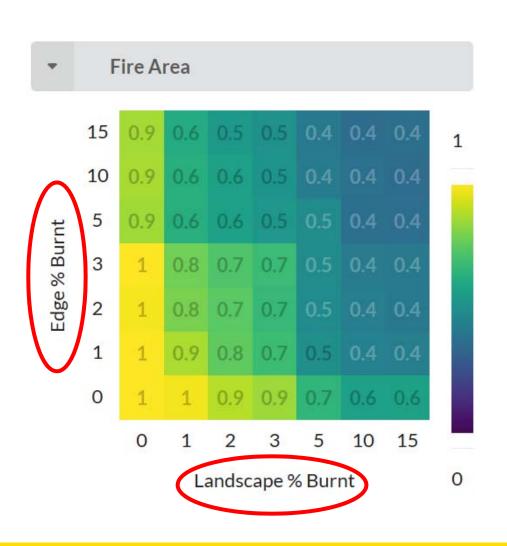


# Home page

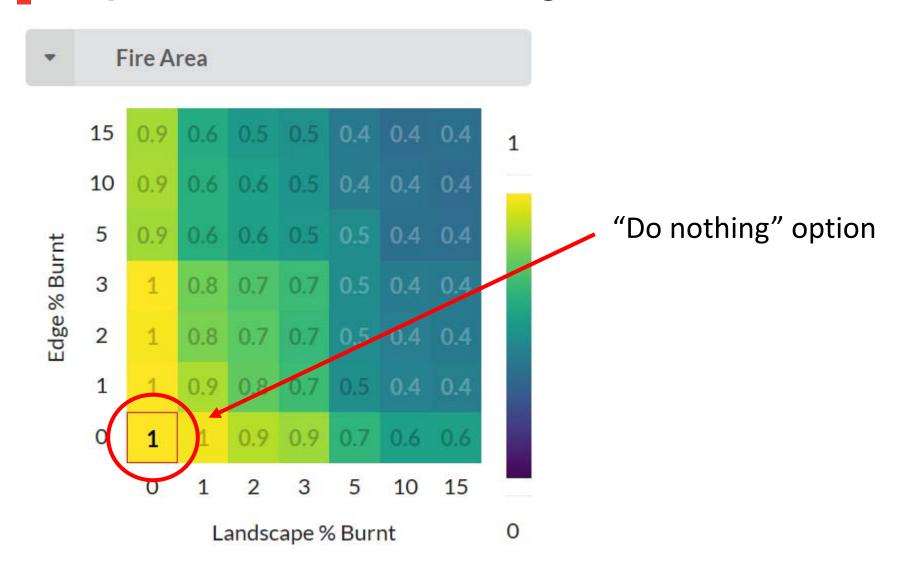


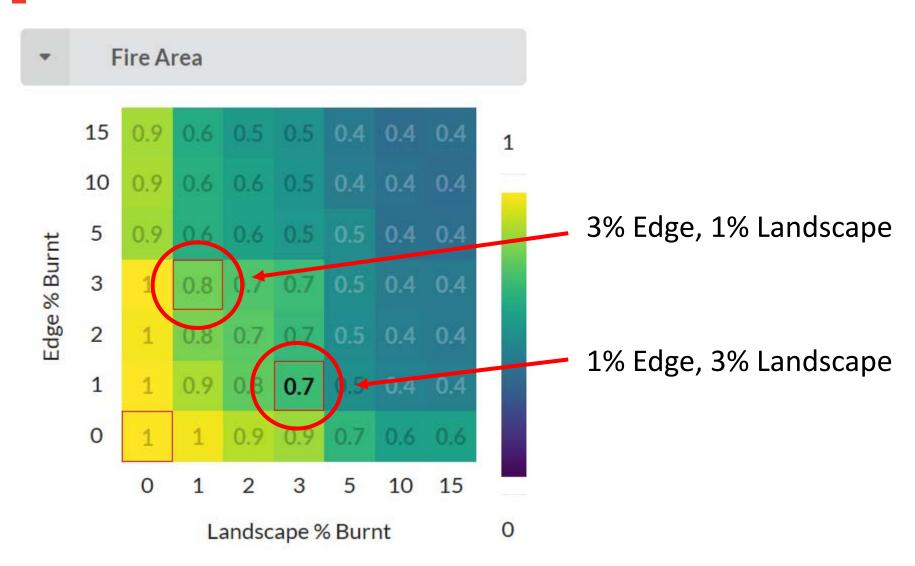
## Getting around

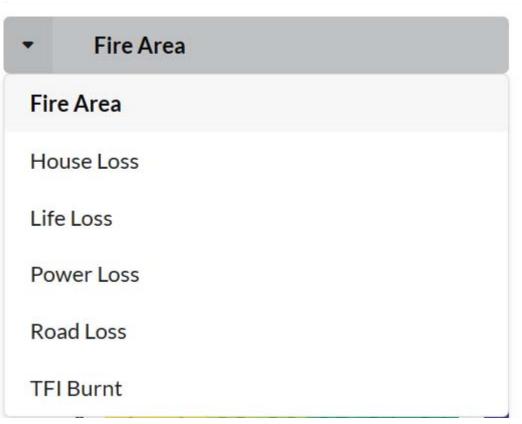




Matrix plot shows relative risk for different edge and landscape % burnt

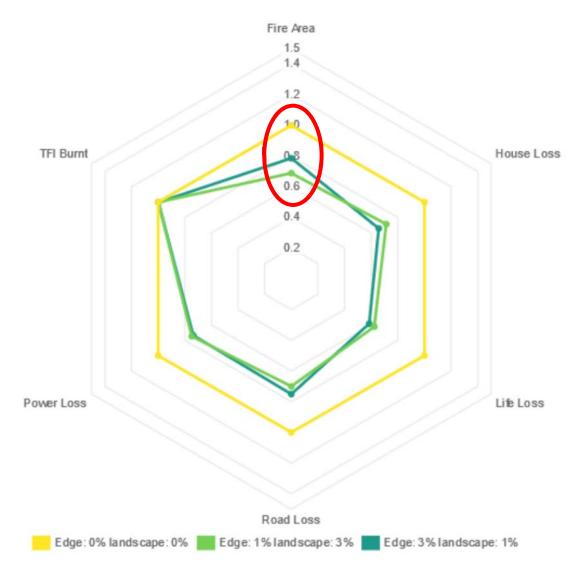




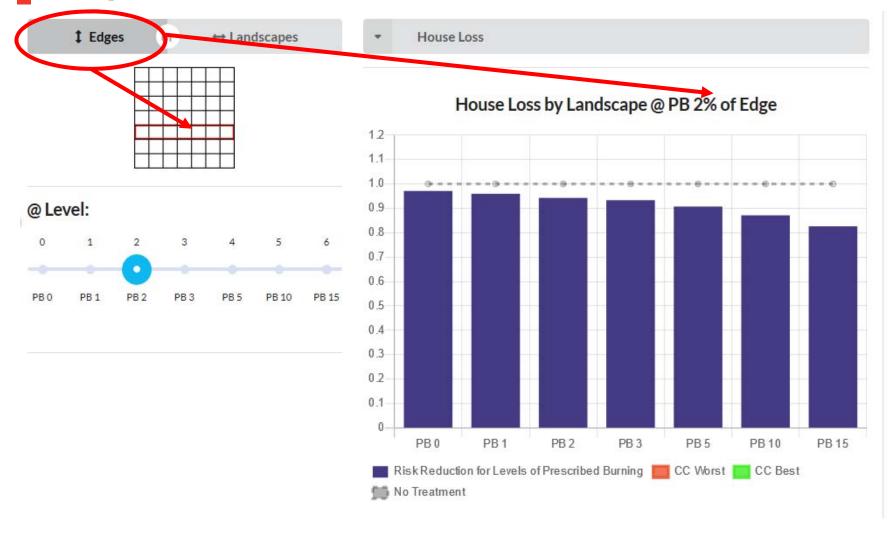


Multiple values available

# Response to treatment – all values



#### Response to fixed treatment levels



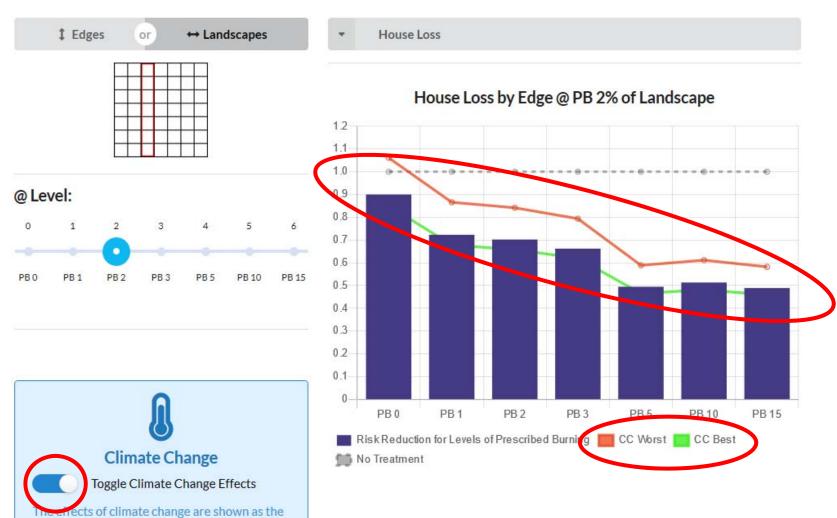
#### Response to fixed treatment levels



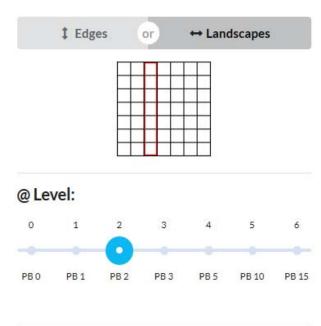
### Climate change

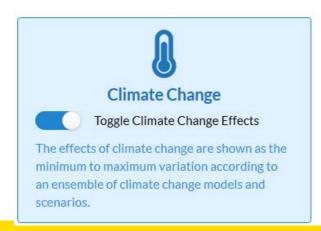
minimum to maximum variation according to an ensemble of climate change models and

scenarios.



### Climate change

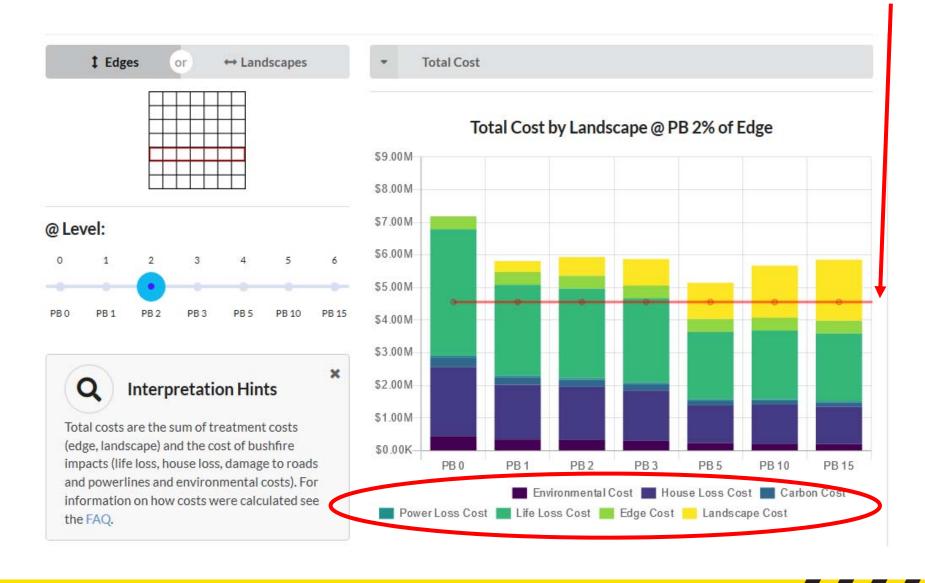






#### Cost-effectiveness

#### Least cost option



#### Treatment costs

Cost-effectiveness Impact costs 1 Edges **Total Cost** or Total Cost by Landscape @ PB 2% of Edge \$9.00M \$8.00M \$7.00 @ Level: \$6.00M \$5.00M PB 0 PB 15 \$4.00M \$3.001 \$2.00M **Interpretation Hints** \$1.00M Total costs are the sum of treatment costs (edge, landscape) and the cost of bushfire \$0.00Kimpacts (life loss, house loss, damage to roads PB3 PB 0 PB<sub>1</sub> PB2 PB 10 and powerlines and environmental costs). For Environmental Cost House Loss Cost Carbon Cost information on how costs were calculated see Power Loss Cost Life Loss Cost Edge Cost Landscape Cost the FAQ.

# In the pipeline\*

- Extension beyond case study areas
- Addition of new features, datasets
- Changes in response to user feedback

## Fire managers: We want to hear from you

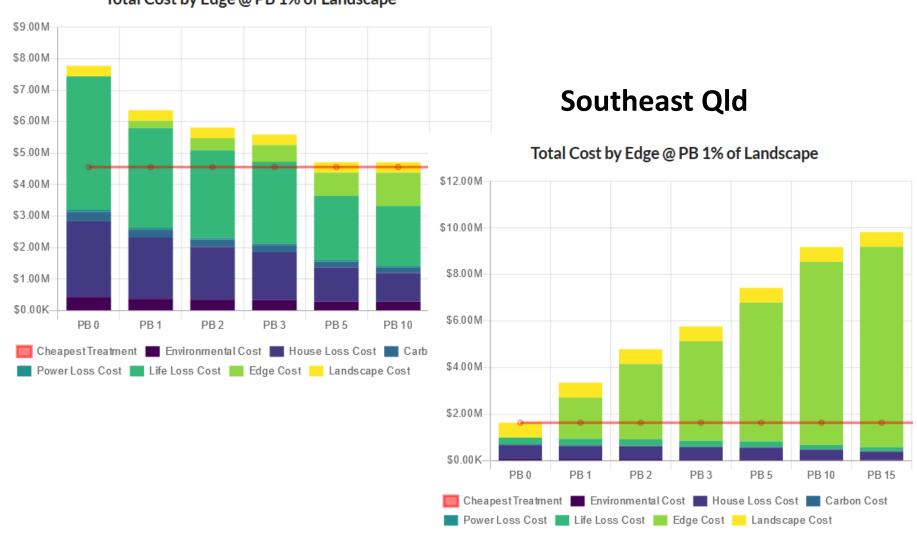
- Register, explore case studies and treatment options
- Provide feedback, report bugs
- What features do you want to see?
- How can we help you make best use of the Atlas?

#### Take home messages

- There is no one-size-fits-all solution to prescribed burning
- Climate, vegetation, the distribution of assets and population and other local factors all influence results
- The most cost-effective solutions vary regionally
- Prescribed burning solutions need to be tailored
- Climate change tends to reduce prescribed burning effectiveness, requiring greater investment to achieve the same results

#### **Blue Mountains**

#### Total Cost by Edge @ PB 1% of Landscape



#### Take home messages

- There is no one-size-fits-all solution to prescribed burning
- Climate, vegetation, the distribution of assets and population and other local factors all influence results
- The most cost-effective solutions vary regionally
- Prescribed burning solutions need to be tailored
- Climate change tends to reduce prescribed burning effectiveness, requiring greater investment to achieve the same results

# Thank you for listening

hamishc@uow.edu.au

https://prescribedburnatlas.science