Water management for wildfire risk reduction



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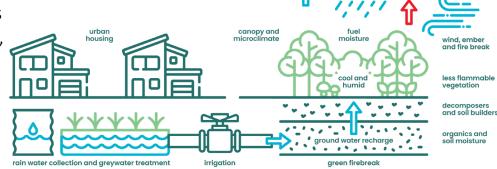
Irrigated green firebreaks for Noosa's wildland urban interface

As wildfires grow in scale and intensity (particularly > 4,000 kW/m), reactive fire management is becoming less effective. Green firebreaks are a proactive approach that strategically place less-flammable species, or ecosystems, to reduce intensity and complement wildfire management. However, they may become fuel under extreme conditions, so an Irrigated Green Firebreak concept was developed.

Design

Conditions are predicted to become more extreme.

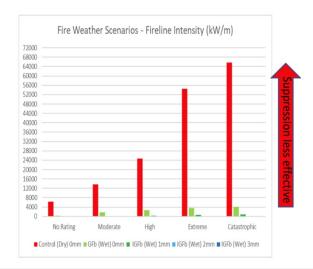
Irrigated green firebreaks utilise urban water reuse, such as stormwater and greywater, to reduce drought impacts and wildfire risk.



Results

Control and design scenarios, compared with AMICUS Vesta Mk2 fire spread software, showing:

- The control (dry eucalypt) could lead to uncontrollable wildfires under all scenarios
- Green firebreaks could exceed suppression thresholds (> 4000 kW/m), under extreme fire weather scenarios
- Irrigated green firebreaks reduced fire spread and fireline intensity across all scenarios





Further information

For additional information scan the QR code or contact:

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