

FOR LOCAL PREPAREDNESS AND PLANNING

Tasmania Wildfire Index 2026

A statewide view of modelled wildfire conditions and exposure to support local governments and communities in long-term preparedness and planning.

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ABOUT THE INDEX

Acknowledgement

The Tasmania Wildfire Index 2026 was developed and funded by Geoneon, with support from Kingborough Council. This report and related interactive resources are provided to support awareness, preparedness and planning across Tasmania.

DEVELOPED AND FUNDED BY



WITH SUPPORT FROM



IMPORTANT INFORMATION

Read this report as screening evidence for planning and further investigation. It is not a live warning, property-level risk assessment, or insurance/financial product.

STATEWIDE OVERVIEW

Tasmania at a glance

Across Tasmania, 450,356 building footprints were assessed. Of these, 38,950 — 8.6% — fall within Wildfire Exposure Index classes 7–10.

What the statewide result tells us

The statewide 8.6% provides a reference point for comparing patterns across Tasmania. It shows the share of assessed building footprints assigned to WEI classes 7–10, but it should not be read as a statewide probability of fire or expected loss.

Each building footprint is assigned a WEI class based on modelled wildfire conditions in its surrounding context. The class describes relative modelled exposure; it does not assess the vulnerability of the building itself.

Why local patterns matter

A statewide percentage can hide very different local patterns. One community may contain a large number of buildings in classes 7–10 because it has many buildings overall, while another may have fewer buildings but a much higher proportion in those classes.

The following sections therefore compare both count and proportional share across Tasmania's 29 LGAs and 769 suburbs. Together, these measures provide a more useful basis for local preparedness and further investigation.

38,950

BUILDING FOOTPRINTS IN WEI CLASSES 7–10

8.6%

OF ALL BUILDING FOOTPRINTS ASSESSED

450,356

BUILDING FOOTPRINTS ASSESSED

29

LGAs

769

SUBURBS

INTERPRETING THE CLASSES

WEI classes are ordered model outputs. Classes 1–6 should not be interpreted as safe or risk-free. Classes 7–10 are grouped in this report for comparison and reporting only; they are not a separate risk category.

WILDFIRE EXPOSURE INDEX

Statewide WEI class distribution

The statewide WEI distribution is concentrated in the lower-to-middle classes, with the largest numbers of assessed building footprints in classes 2, 3 and 4.

Where the distribution is concentrated

Classes 2, 3 and 4 contain 285,773 building footprints — 63.5% of all footprints assessed statewide. Classes 2 and 3 are particularly prominent, with 105,844 and 103,558 footprints respectively.

Higher classes are less common

Building-footprint counts decline progressively through the higher WEI classes. Classes 8–10 together contain 19,979 footprints — 4.4% of the statewide total — while class 10 contains just 144 footprints.

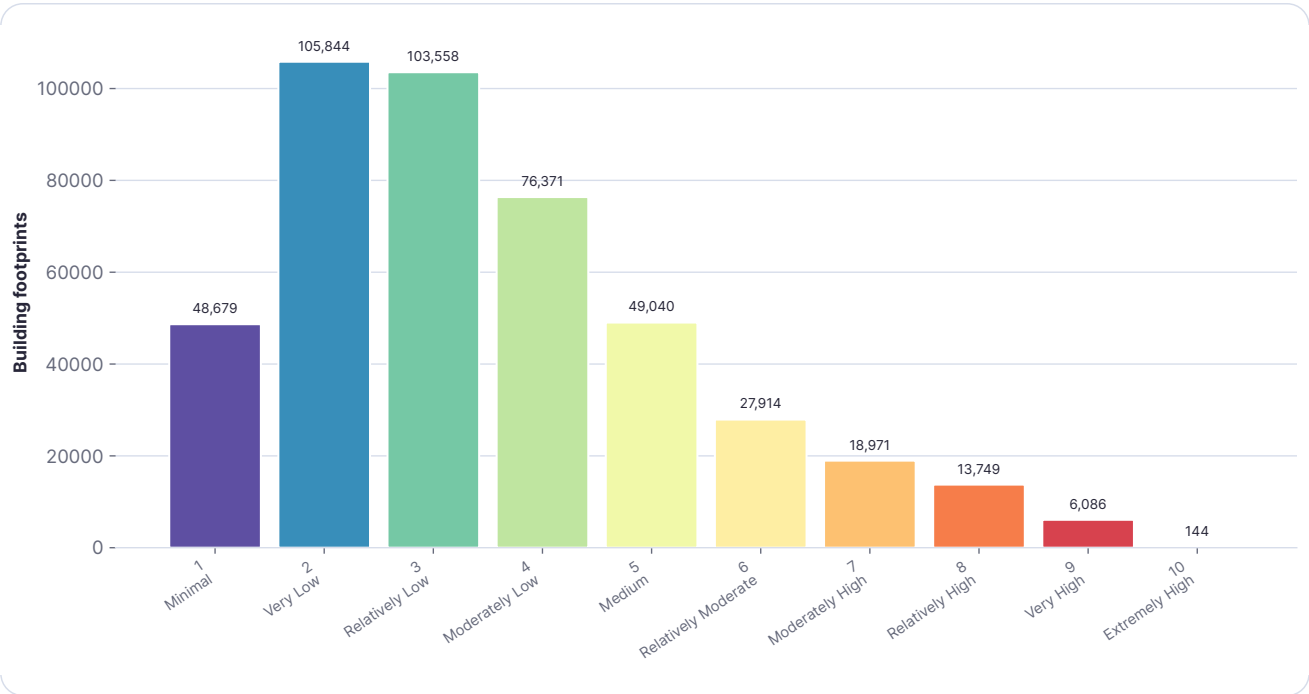


Figure 1. Statewide distribution of assessed building footprints across formal WEI classes 1–10.
Source: Tasmania Wildfire Index 2026 statewide WEI building-footprint data, version 26.1.1.

WILDFIRE SEVERITY INDEX

Statewide landscape conditions

The Wildfire Severity Index maps relative landscape conditions across Tasmania, highlighting where the combination of vegetation/fuel, topography and climate/dryness is more conducive to severe bushfire behaviour.

What the map shows

The statewide pattern varies substantially across Tasmania. Areas in higher WSI classes represent landscapes where the modelled combination of fuel, terrain and climate/dryness is relatively more conducive to severe bushfire behaviour.

Lower classes indicate relatively less conducive conditions within the statewide model; they should not be interpreted as an absence of bushfire hazard.

How to interpret the map

WSI is a relative landscape-screening layer. It does not indicate where a fire will start, how it will spread, or what conditions are occurring today.

Use the map as context for preparedness and planning alongside local knowledge, other hazard information and current official advice.

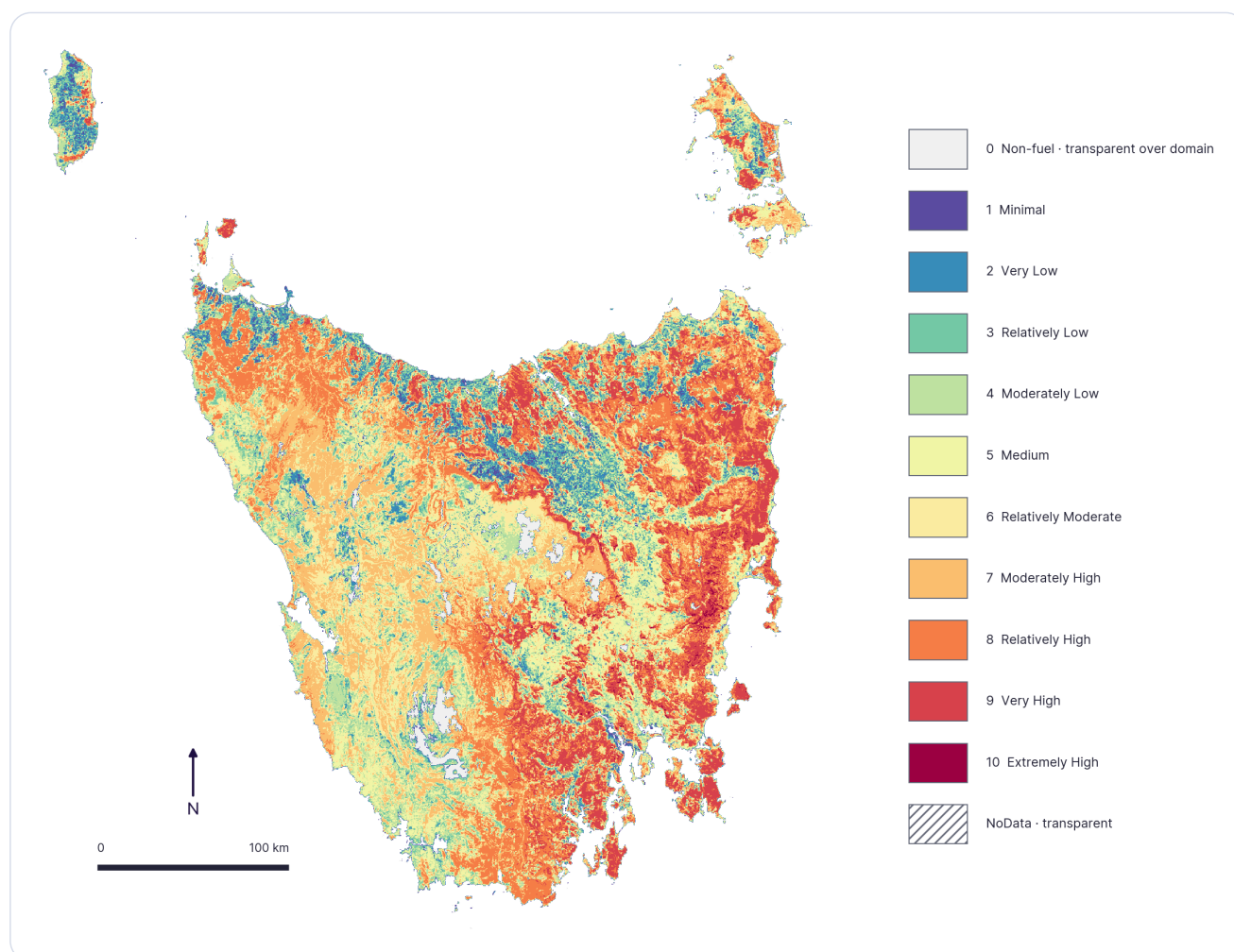


Figure 2. Statewide Wildfire Severity Index (WSI) pattern.

Source: Tasmania Wildfire Index 2026 statewide WSI Cloud Optimized GeoTIFF, version 26.1.1.

WILDFIRE EXPOSURE INDEX

From landscape conditions to building exposure

The Wildfire Exposure Index (WEI) summarises the modelled WSI conditions surrounding each assessed building footprint, providing a relative view of exposure at building level.

From landscape to buildings

WSI describes relative conditions across the landscape. WEI uses the modelled WSI conditions surrounding each assessed building footprint to summarise relative exposure for that footprint.

This shifts the analysis from a continuous landscape surface to the places where buildings are located, while retaining the same ordered class system.

How to read the statewide map

The map shows assessed building footprints across Tasmania coloured by WEI class. At statewide scale, individual footprints are necessarily very small, so the figure is intended to show the broad spatial pattern rather than property-level detail.

Building density also varies across Tasmania, so the map should not be interpreted as a continuous exposure surface. Local detail is shown on the following page.

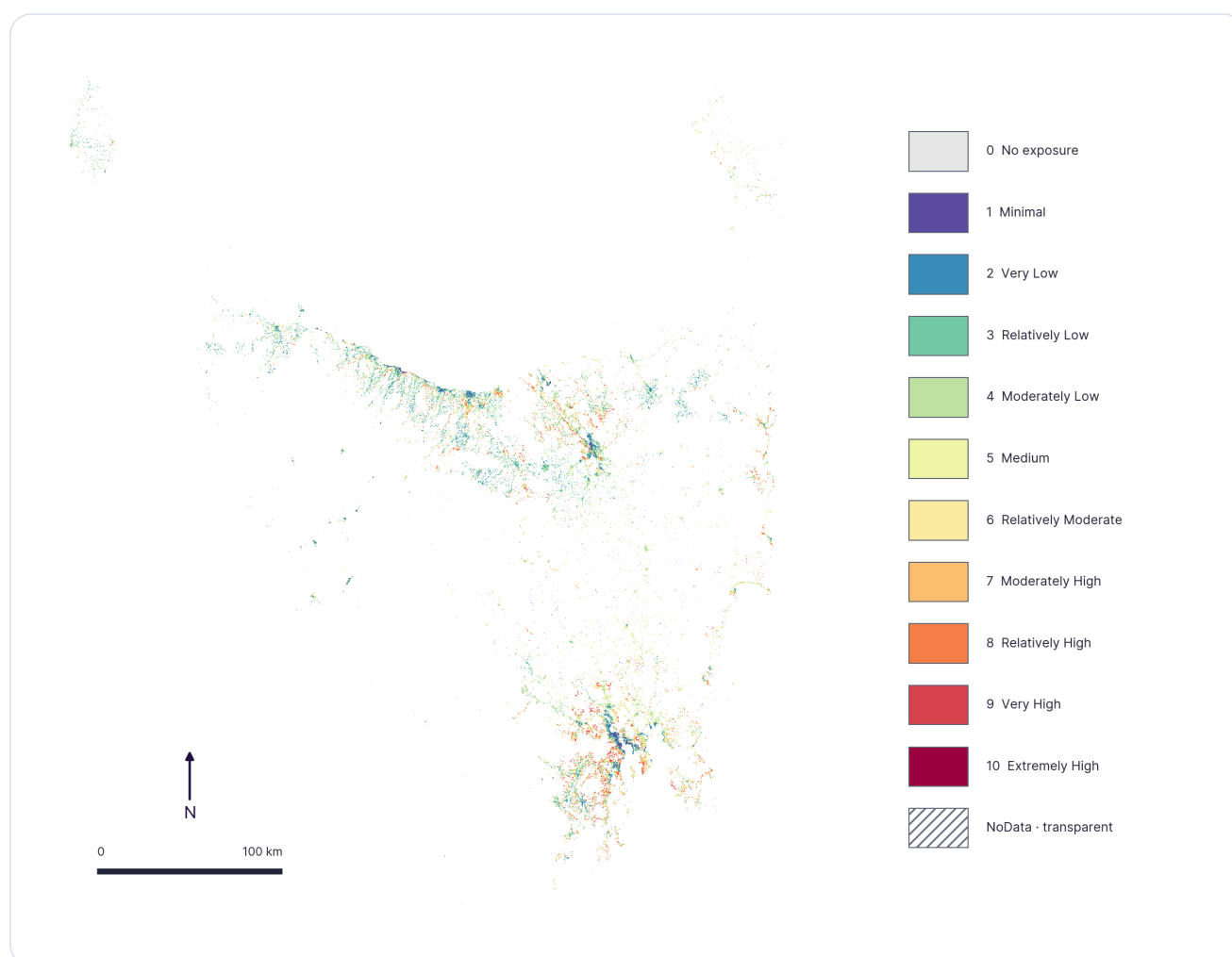


Figure 3. Statewide distribution of assessed building footprints by WEI class.

Source: Tasmania Wildfire Index 2026 statewide WEI building-footprint data, version 26.1.1.

LOCAL WEI PATTERNS

Sandford and Fern Tree

Local maps reveal patterns that are difficult to see at statewide scale. Sandford and Fern Tree illustrate two different patterns a community can stand out in the WEI results: by the number of building footprints in classes 7–10, or by their proportional share.

Sandford — larger count

Sandford contains 883 of 1,913 assessed building footprints in WEI classes 7–10, or 46.2%. It has the largest class 7–10 building-footprint count among Tasmania's suburbs.

The map shows how those classes are distributed within the suburb rather than treating the suburb as a single uniform value.

Fern Tree — larger share

Fern Tree contains 430 of 468 assessed building footprints in WEI classes 7–10, or 91.9%. Among suburbs with at least 100 assessed building footprints, it has the largest proportional share in classes 7–10.

The comparison shows why count and proportional share answer different questions and should be considered together.

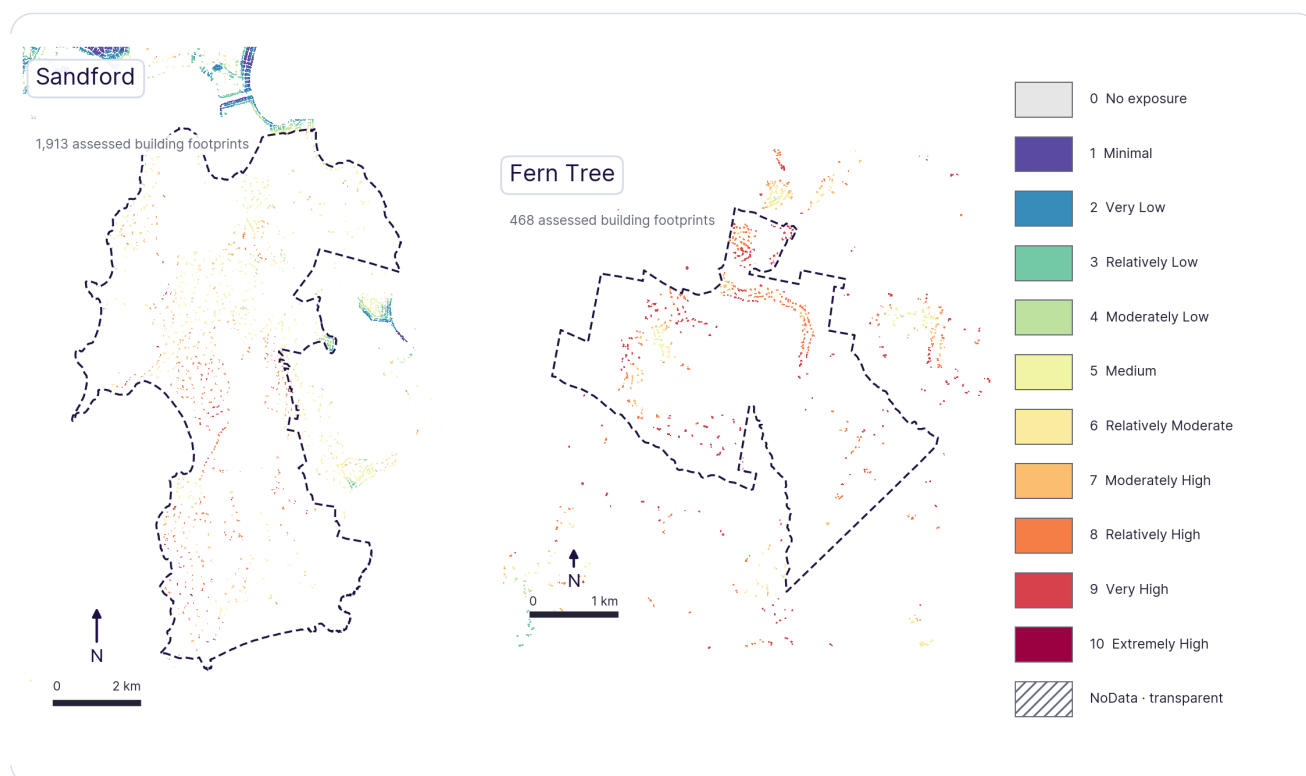


Figure 4. Local WEI patterns for Sandford and Fern Tree.

Source: Tasmania Wildfire Index 2026 statewide WEI building-footprint data, version 26.1.1; ABS ASGS Edition 3 suburb boundaries.

LGA COMPARISON

Count and proportional share

The LGA comparison shows two different dimensions of exposure: count indicates the scale of building footprints in WEI classes 7–10, while proportional share shows how concentrated those classes are within each LGA.

Count shows scale

Kingborough has the largest number of assessed building footprints in WEI classes 7–10: 5,334 of 29,852, or 17.9%. Huon Valley follows with 3,169, and Hobart with 3,000.

Count is useful for understanding the scale of buildings represented in these classes and the potential scope of further investigation or preparedness activity.

Share shows concentration

Tasman has the largest proportional share, with 1,469 of 5,252 assessed building footprints in classes 7–10, or 28.0%. Flinders follows at 18.1%, while Kingborough is third at 17.9%.

Proportional share provides context against each LGA's total assessed-building denominator and can produce a different ranking from count.



Figure 5. Ten leading LGAs by count and proportional share of assessed building footprints in WEI classes 7–10.

Source: Tasmania Wildfire Index 2026 LGA results, version 26.1.1.

SUBURB COMPARISON

Count, share and denominator

Suburb comparisons need denominator context. Count shows the scale of building footprints in WEI classes 7–10, while proportional share can become extreme when only a very small number of building footprints are assessed.

Count shows local scale

Sandford has the largest number of assessed building footprints in WEI classes 7–10: 883 of 1,913, or 46.2%. South Hobart follows with 834, and Mount Nelson with 724.

As with the LGA comparison, count helps show the scale of buildings represented in these classes but does not indicate how concentrated they are within the suburb.

Share needs denominator context

Three suburbs have a raw 100% share in classes 7–10, but each contains only 2–14 assessed building footprints. Small denominators can therefore produce extreme percentages that are not useful as headline comparisons.

For the public comparison, the proportional-share ranking is limited to suburbs with at least 100 assessed building footprints. Under this rule, Fern Tree has the largest share: 430 of 468, or 91.9%.

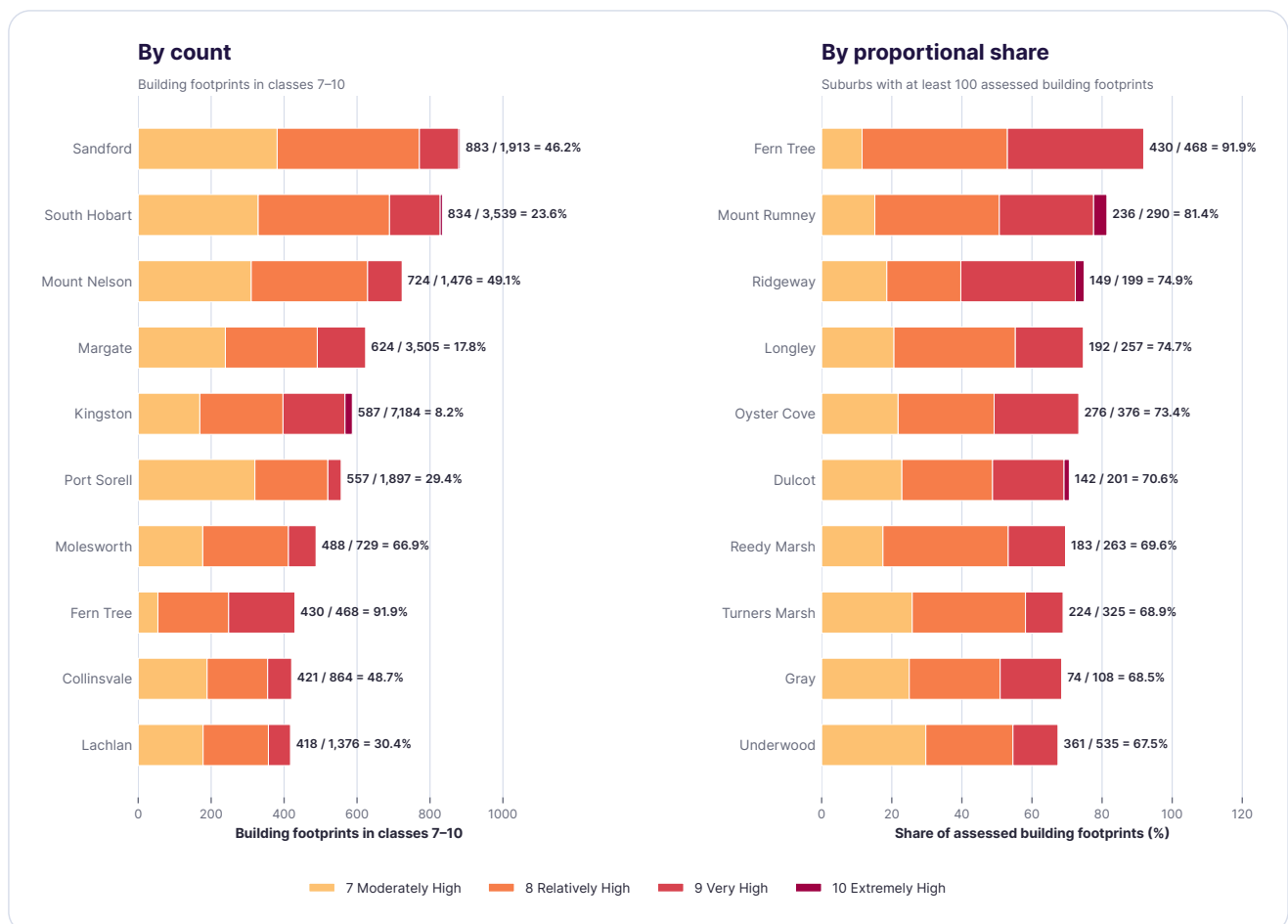


Figure 6. Ten leading suburbs by count and proportional share of assessed building footprints in WEI classes 7–10.

Source: Tasmania Wildfire Index 2026 suburb results, version 26.1.1. Proportional-share ranking limited to suburbs with at least 100 assessed building footprints.

USING THE INDEX

Reading results responsibly

The Tasmania Wildfire Index is designed for screening, preparedness and planning. Results are most useful when the model class, the building-footprint denominator and the local decision context are considered together.

What a class means

A WSI or WEI class is an ordered model output used for relative comparison. It is not a probability of fire, a forecast, a warning level, an expected loss or a complete measure of bushfire risk.

Lower classes should not be interpreted as safe or risk-free.

Appropriate use

- Statewide and regional screening
- Preparedness and planning conversations
- Count and proportional-share comparisons with clear denominators
- Identifying places or questions that warrant further investigation

What a building count means

Counts refer to assessed building footprints in the source dataset. They are not direct counts of dwellings, addresses, properties, parcels, people or population.

Do not use as

- A live warning, fire forecast or evacuation guide
- A building-vulnerability or property-level risk assessment
- An insurance, financial or regulatory decision rule
- A substitute for professional advice or official emergency information

Explore further

Interactive resources

Current interactive mapping and related Tasmania Wildfire Index resources are available at geoneon.com.

Add local context

The Index should frame questions rather than close them. Local planning may also need to consider access and egress, ember attack, building characteristics, vulnerable people, infrastructure and current official information — factors that are outside this model.

METHOD

How the two indices relate

The Tasmania Wildfire Index combines established geospatial datasets representing vegetation/fuel, terrain and climate/dryness to model relative wildfire conditions across the landscape. Those conditions are then summarised around assessed building footprints to produce the Wildfire Exposure Index.

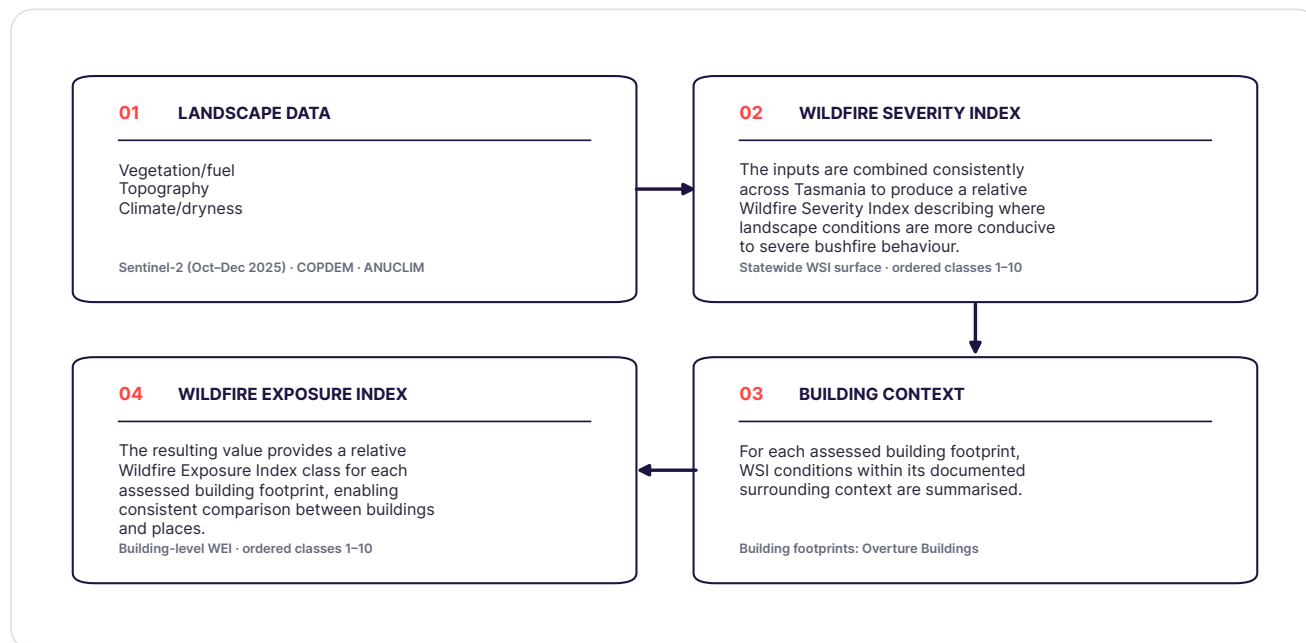


Figure 7. Method used to derive WSI and WEI from landscape data and building footprints.

Source: Tasmania Wildfire Index 2026 methodology and source register.

What the model represents

WSI combines spatial evidence representing vegetation/fuel, terrain and climate/dryness into a consistent statewide view of relative landscape conditions. The same modelling approach is applied across Tasmania so locations can be compared on a common basis.

WEI then relates those landscape conditions to where buildings are located by summarising WSI within the documented surrounding context of each assessed building footprint.

Data and reproducibility

The 2026 index uses versioned geospatial source datasets, including Sentinel-2 imagery, COPDEM topography, ANUCLIM climate data and Overture building footprints. The statewide WSI and WEI outputs used in this report are version 26.1.1.

The report and figures are generated from retained source datasets through a reproducible processing workflow, with source lineage and QA records maintained internally.

The indices describe relative modelled conditions and exposure. They do not predict ignition, fire spread or live fire conditions, and WEI does not assess the structural vulnerability of individual buildings.

DATA SOURCES

Data sources and provenance

The Tasmania Wildfire Index 2026 is built from named, versioned geospatial datasets and retained model outputs. Source lineage is maintained so the published results can be traced back to the data used to produce them.

Sentinel-2 imagery

Copernicus Data Space Ecosystem quarterly mosaic, October–December 2025.

COPDEM

Topographic input.

ANUCLIM

Climate/dryness input.

Overture Buildings

Release 2026-02-18.0, downloaded 24 February 2026.

Building footprints provide the spatial units used for the WEI analysis. They are not direct counts of dwellings, properties or population.

Geographic boundaries

Suburbs: ABS ASGS Edition 3 (2021).

LGAs: ABS ASGS Edition 3 (2025).

These boundaries are used to summarise and compare results by suburb and local government area.

Statewide WSI and WEI outputs

Version 26.1.1.

The published maps, figures and statistics in this report are derived from these retained statewide outputs and the associated LGA and suburb result tables.

Map display

WSI and WEI use the same ordered class labels and colours for classes 1–10. WSI class 0 is shown as Non-fuel, WEI class 0 as No exposure, and NoData is displayed separately.

Reproducibility and traceability

Publication figures and tables are generated from retained source datasets and model outputs through a reproducible processing workflow. Dataset versions, source lineage and QA records are maintained internally so results can be traced back to their source inputs.



About Geoneon

Geoneon is a Tasmanian climate technology company using Earth observation, geospatial data and artificial intelligence to help organisations understand and manage climate and natural-hazard risks.

Disclaimer

The Tasmania Wildfire Index 2026 (the Index) serves as a mitigation tool, designed to enable enhanced understanding and planning in relation to bushfire risks. It is grounded in methodologies that are informed by established bushfire severity and exposure analyses in academic and scientific literature.

Users should be aware that the Index does not delve into the physical properties of buildings, such as roofing materials, deck constructions, and other structural elements. Hazard impacts in surrounding parcels may induce indirect losses in others, regardless of an individual parcel's exposure profile as portrayed by the Index.

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