# Petition #1 LPS6 Review Cowan St to Cunningham St

T. Hair, Deputation 18/2/2025

#### Petition text

**"We, the undersigned, all being electors of the City of Melville, respectfully request that the Council:** Not approve the change of zoning as proposed in the LPS6 Review to properties located on the northern side of Canning Highway from Cowan Street to Cunningham Street.

The Reasons Supporting this action: Various local conditions mean the proposed re-zoning along this section of Canning Hwy are unsuitable, i.e. 1) The area between Wireless Hill and Tompkins Park is a narrow wedge of housing; the re-zoning disproportionately rids the area of "house & land" properties compared with other stretches along Canning Hwy, having an outsized impact on amenity of these quiet, low density streets. By example, the number of dwellings accessed via Lilian Avenue alone could increase from ~40 to hundreds, due to the requirement to provide access to Canning Hwy R60 properties. This causes traffic and parking congestion to local streets and compounds the already problematic congestion on Canning Hwy. 2) The increase in impervious built area will result in unmanageable stormwater run-off due to the water table (0.7m below surface – uniquely high even for riverside areas) and engineering limitations. This compounds the "very high" flash flooding risk predicted for 6.5% of Applecross properties (many of which are located in this immediate area) by 2050. 3) A significant portion of the dewatering to support construction is likely to be illegally disposed in stormwater drains (common practice), resulting in contaminated run-off into the river and Alfred Cove Nature Reserve. 4) The presence of acid sulfate soils in this area, in being disturbed by excavation and de-watering, can result in the release of extensive contamination which significantly degrades surface and groundwater, impacting aquatic life and increasing corrosion of subsurface infrastructure and residential structures. 5) The increase in built area (R60 permitting paved driveways to make up the 40% open space requirement) and corresponding tree loss, increases the urban heat island effect, in conflict with the city's Urban Forest Strategic Plan, and the "key project" to "reduce urban heat impact" under the city's Climate Action Plan. Loss of vegetation also compounds stormwater runoff issues. 6) The increase in the number of dwellings exposed to climate risks such as riverine flooding (noting "Minimise Flood Risk" is a "Key Project" in the CAP) and bushfire risk (Wireless Hill, identified as "bushfire prone" by DFES in 2021), creating a massive economic and safety liability for residents and broader society. 7) Creating future insurability issues for houses due to points 2)-6). 8) Infill development in this area does not create affordable housing to alleviate the housing crisis."

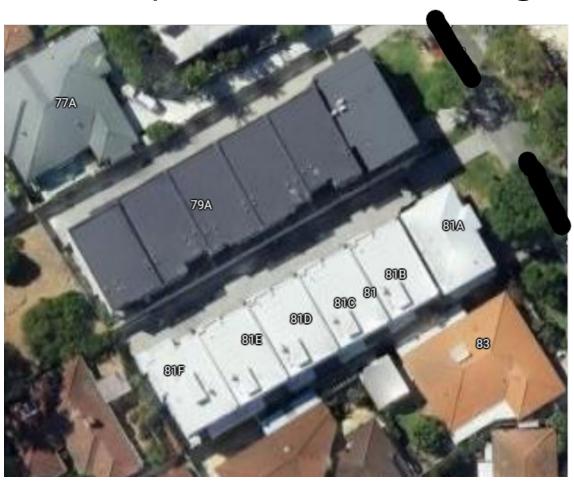
## Reason #1 Impact to amenity, traffic etc.



#### **Cowan St to Cunningham St:**

- North side of Canning Hwy is a narrow strip of housing – the proposal disproportionately rids this strip of low density, with outsized impact on amenity in this particular area
- Example: Lilian Ave
  - Today ~40 dwellings
  - Future ~150+ dwellings
- Traffic
  - Traffic heading East on Canning Hwy already backs up with a stand-still from Canning Bridge to Cunningham St
  - Full impact of ongoing apartment building construction in the Canning Bridge Precinct has not yet played out
  - Need to first understand the "baked in" impact of ongoing apartment construction before allowing further rezoning
  - There needs to be modelling published for the proposed rezoning, with further public consultation

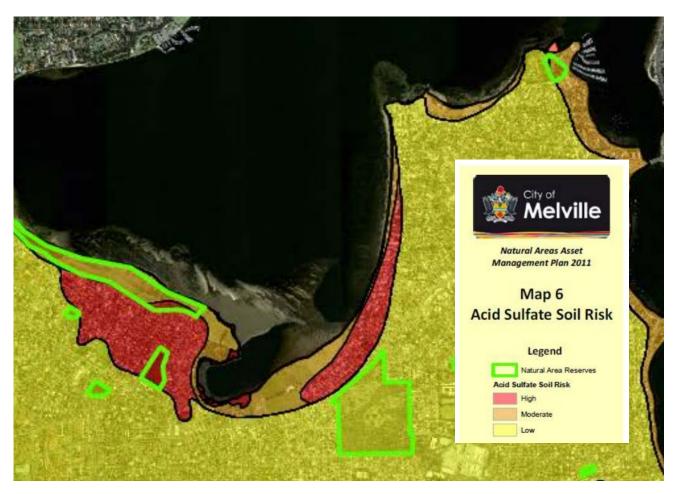
#### Reason #2 R60 impervious area, with high water table



Example of two typical R60 developments in City of Melville:

- ~94% of block area is impervious, driving a required soakwell volume up to ~15-20m3 per CoM requirements
- Water table is as high as 0.7m below surface
- City of Melville requirement that base of soakwells be at least 0.5m above water table seasonal high mark
- The only feasible location for soakwells is beneath the paved driveway surface – this surface area, together with the water table limitation, is insufficient to achieve the required soakwell volume

#### Reason #4 Acid Sulfate Soils



The area concerned (including Francis St, Lilian Avenue, Cantray Avenue) is designated as "high" Acid Sulfate Soil Risk.

Disturbance of Acid Sulfate Soils can release metals and acid into the surrounding environment, damaging buildings, infrastructure, environment<sup>1</sup>.

https://www.melvillecity.com.au/CityOfMelville/media/ Documents-and-PDF-s/COM-ASS-Guidelines-Final.pdf

1. <a href="https://www.qld.gov.au/environment/land/management/soil/acid-sulfate/explained">https://www.qld.gov.au/environment/land/management/soil/acid-sulfate/explained</a>

City of Melville

#### Climate Vulnerability, Risks and Opportunity Assessment Report

FINAL

APRIL 2023

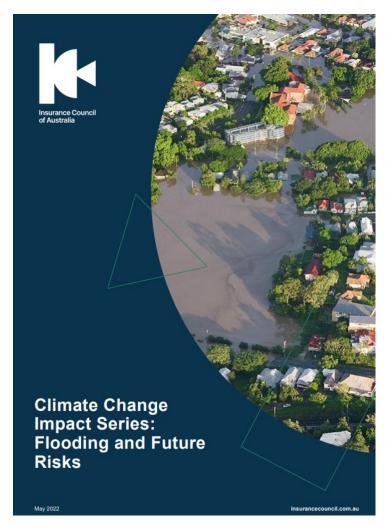
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Photo Source: Real Estate. 2022. 19 Olding Street. Accessed 20 Oct 2022. <a href="https://www.realestate.com.au/property/19-olding-st-melville-wa-6156">https://www.realestate.com.au/property/19-olding-st-melville-wa-6156</a>>.



Climate Vulnerabilities, Risks, and Opportunities Scenarios	Likelihood of Risk	Impact of Risk	Impact Group / Sector	Level of Data Quality
Increased risk of sea level rise impacting transport infrastructure. Areas along the foreshore should consider risk of inundation due to combined effects of sea level rise, high tide, and storm surges. This may compromise the foundations of transport infrastructure, including roads, lighting, and signposting.	High	Moderate	Infrastructure	Medium
Changes to land uses exacerbating climate change effects. Changing urban landscape and resultant changes to transport networks due to increasing populations may exacerbate the effects of climate change (such as the effects of flooding), if not managed appropriately.	High	Moderate	Infrastructure	Medium
Flood damage to electrical infrastructure. Increased likelihood of flooding may cause damage to electrical infrastructure at a household level, particularly in low-lying areas, resulting in power-outages.	Moderate	High	Infrastructure	Medium



There are three key insights from this report:

- Issue 1: Land use planning settings and associated building controls do not eliminate flood risk to modern properties leading to significant residual risk and impacts for communities to manage
- Issue 2: The current building code does not consider building resilience to flood risk.
   However, damage data from recent Australian events needs to be considered to ensure that risk reduction measures are achievable.
- Issue 3: Data and Risk Assessment Gaps

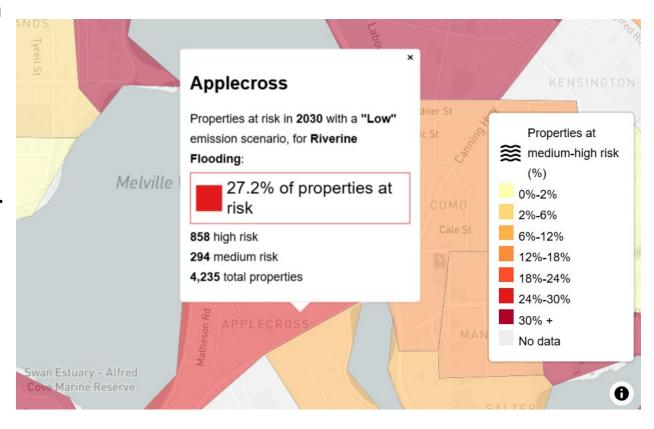
#### Continued: Insurance Council of Australia – Climate Change Impact Series: Flooding and Future Risks

"Managing flood risk to new development is critical to limiting the growth of flood risk. Currently, standards generally require that new housing not be located within a 1-in-100 AEP flood hazard area (see Box One). Reliance on the 1% flood standard has historically assumed that the residual risk from larger events will be infrequent and minor enough to be generally acceptable to communities. However, this analysis of flood claims data suggests that contemporary homes built above the 1% flood level are sustaining an unacceptable level of damage"

"As the climate continues to change, existing flood zones are likely to expand and expose more property and assets as well as increasing the depth of floodwater in currently exposed properties. Flood risk can be managed in a range of ways, with the greatest opportunities related to land use planning."



- High percentage of Applecross properties at risk of flooding, even in a "low" emission scenario and by 2030
- Landgate's digital elevation model suggests the majority of these houses are in the area of Applecross relevant to this petition, around Francis Street, Dunkley Avenue, Lilian Avenue, Cantray Avenue etc.



## Reason #6 b) Bushfire risk

Wireless Hill Park and surrounds are designated a high risk bushfire area by DFES

Many properties between Cowan Street to Cunningham Street are within the 500m high risk zone

Increasing the number of dwellings in this zone is contrary to climate resilient planning principles cited in the City of Melville Climate, Vulnerability, Risks and Opportunity Assessment Report



https://maps.slip.wa.gov.au/landgate/bushfireprone/

## Reason #7 Insurability

Increasing the number of dwellings exposed to flood and bushfire risks creates a future insurability problem for residents, the City of Melville as an administrative body, and for broader society

#### **Excerpts from the City of Melville's Climate VRO report:**

In tandem with flood hazard mapping, climate change projections developed show an increased intensity of extreme rainfall events which may contribute to a higher likelihood of floods.<sup>76</sup> State government mapping of 1% AEP flood events could cause the Swan River to rise by two meters between Fremantle and the city, and five meters around eastern suburbs.<sup>77</sup> In the context of flood insurance within the City, 2,286 properties (4.3%) are at high risk of insurance becoming unaffordable or unavailable in 2100 (**Figure 7-3**).

Climate Vulnerabilities, Risks, and Opportunities Scenarios	Likelihood of Risk	Impact of Risk	Impact Group / Sector	Level of Data Quality
Socio-economic risks of increasing insurance premiums. Unemployed and low-income earners are unlikely to be able to afford insurance due to increased premiums in the case of flooding events. Alternatively, they may be unable to afford damage repairs post flood event. Going forward middle-income earns are also unlikely to afford insurance premiums.	High	Moderate	People and the Built Environment	Medium