

I am opposed to elements of Amendment C87 to the Golden Plains Planning Scheme as the Strategic Bushfire Risk Assessment underpinning the Inverleigh Structure plan is based on outdated strategies and old data. Further evidence of this is provided below. Without a current and realistic assessment of the bush fire risk in Inverleigh, the development of the potential growth areas discussed in the Inverleigh Structure plan should be halted. Consequently, I believe Amendment C87 should be abandoned until the Inverleigh Structure Plan and underpinning documents are accurate.

The Strategic Bushfire Risk Assessment is based on weather records dating back over least 10 years, and was developed following an outdated version of Planning Practice Notice 64. The *State Bushfire Plan 2014* concludes that “the bushfire risk in Victoria is increasing”. This suggests that the bush fire risk for Inverleigh as documented in the Strategic Bushfire Risk Assessment underpinning the Inverleigh Structure plan is underestimated because it is based on old data and outdated guidelines. Evidence provided in this submission suggests that decisions made around future development and infrastructure in the Inverleigh Structure Plan are invalid because they are not were not based on a current and sound Bush Fire Risk Assessment. These decisions should therefore be reviewed using an up to date and accurate Strategic Bushfire Risk Assessment using recent weather data and following recent guidelines. Moreover, the updated version of Planning Practice Notice 64 advises against planning developments in high bush fire risk areas and areas with one access/egress, making Growth Area 3 no longer an option for development.

Underestimation of days over 35 °C

The Strategic Bushfire Risk Assessment underpinning the Inverleigh Structure Plan refers to high fire risk days as days with strong north-west wind, low humidity, high temperature (over 35 °C). The Strategic Bushfire Risk Assessment states that these conditions are met an average of 7 days per year. Using the Bureau of Meteorology database *for Sheoaks, closest weather station at 22.2 km from Inverleigh as source*, the number of days where temperatures over 35 °C were recorded since 1990 are plotted in **Figure 1a**, with a slightly different visualisation in **Figure 1b** (data from¹).

The trendline in **Figure 1b** shows an upwards trend in the number of days where temperatures exceeds 35 °C were recorded, agreeing with Emergency Management Victoria’s statement in *State Bushfire Plan 2014* that ‘*the bushfire risk is increasing*’. Some simple mathematics show that the last time the 10-year average of days over 35 °C was seven was in 2007, while the 5-year average has exceeded seven days since 2006. When looking at recent years, 11 days over 35 °C were recorded in 2018; and 14 high temperature days with the temperature reaching over 35 °C have already been recorded until September 2019. Again, data sourced from the Bureau of Meteorology website ¹.

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www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=122&p_display_type=dailyDataFile&p_startYear=2013&p_c=-1519765258&p_stn_num=087168

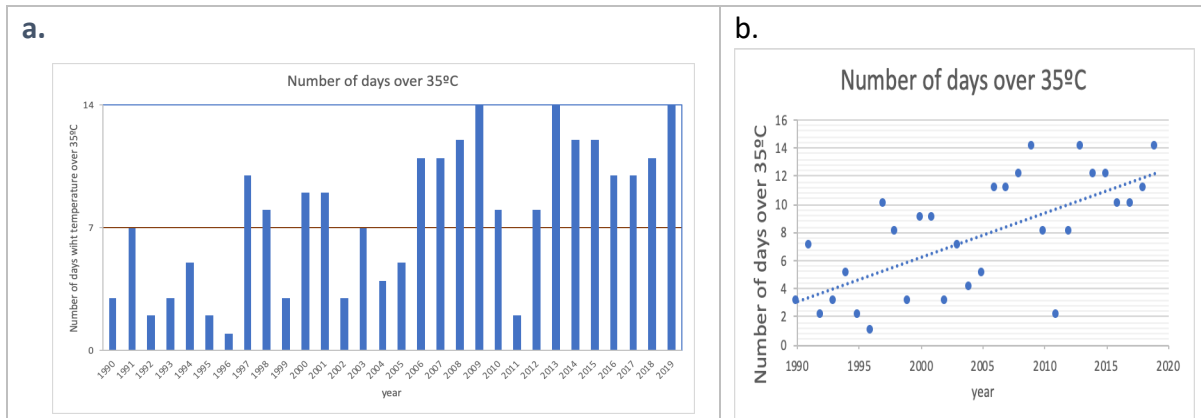


Figure 1 Number of days over 35 °C. Left: bar chart showing the average of 7 days claimed in the Bushfire Risk Assessment underpinning the proposed Inverleigh Structure Plan. Right: trendline confirming upward trend. Data for Sheoaks, closest weather station at 22.2 km from Inverleigh ¹.

The Strategic Bushfire Risk Assessment underpinning the Inverleigh Structure Plan refers to high fire risk days as days with strong north-west wind, low humidity, high temperature (over 35 °C). In addition to the gross underestimation of the number of high fire risk days, it should also be noted that none of the three bush fire cases around Inverleigh studied in the Bush Fire Risk Assessment actually occurred at high temperature days. In the Strategic Bushfire Risk Assessment, case 1 occurred under mild conditions (temperature not stated); case 2 occurred at a cool day (27°C); and case 3 occurred at a warm but not high temperature day (33°C). In the light of these three cases, the validity of the definition of high fire risk days as days with high temperature (over 35 °C) as used in the Bush Fire Risk Assessment should be questioned.

Lightening as risk

Lightening is the major cause of bush fire, and considering historic data shows a bush fire in the Common was caused by lightening, highly relevant to the bushfire risk. With global warming, the frequency of thunder storms is decreasing but 25% more of the strongest storms can be expected, accompanied with a 5% increase in lightning². This risk is not mentioned in the Bushfire Risk assessment underpinning the Inverleigh Structure Plan.

Outdated version of Planning Practice Notice 64

The Strategic Bushfire Risk Assessment prepared in support of the Inverleigh Structure Plan is based on an outdated version of Planning Practice Notice 64. The newer, 2015 version states that "*Older plans and strategies that seek to justify planning proposals will need to be carefully considered if the State planning policy for bushfire impacts on the suitability of their content.*" I would like to suggest Golden Plains Shire takes this advice and that the bush fire risk assessment is re-done using a current approach. In the context of the Strategic Bushfire Risk Assessment prepared in support of the Inverleigh Structure Plan, it is important to consider the policy context of Planning Practice Notice 64 (2015) cited below:

"The State planning policy for bushfire seeks to strengthen community resilience to bushfire through planning decisions. Its overarching strategy is to prioritise the protection of human life over other

² https://www.giss.nasa.gov/research/briefs/delgenio_07/

policy considerations when assessing the risk from bushfire. Key strategies to guide strategic and settlement planning include ensuring that the risk from bushfire is reduced to an acceptable level.

Ministerial Direction No. 11 Strategic Assessment of Amendments applies to planning scheme amendments. It is supported by Planning Practice Note 46: Strategic Assessment Guidelines for preparing and evaluating planning scheme amendments. In preparing a planning scheme amendment a planning authority must address any relevant bushfire risk and determine whether the changes proposed will result in any increase to the risk to life, property and community infrastructure from bushfire. “

The Strategic Bushfire Risk Assessment prepared in support of the Inverleigh Structure Plan fails to determine if the proposed changes, development in potential growth areas 1-6, increases the risk to life, property and community infrastructure. Specifically, the bush fire risk for Growth Area 3, indicated as the highest risk of bushfire under scenario's 1 and 2 due to its proximity to the Inverleigh Flora and Fauna Reserve (the Common) is underestimated. The impact of increasing the number of residents in the potential growth areas on the chance of current residents evacuating in a safe and orderly manner is neglected.

Due to reasons detailed in Appendix 1, the Common provides a significant bush fire risk. Despite providing a wild life refuge and unique habitat for many species including rare orchids, the Common carries a legacy of poorly executed and irregular fuel reduction burns. This has resulted in an excessive fuel load, and a high degree of connectivity of fuel at the ground and near-ground level, increasing its bush fire risk rating. Additionally, it has been subject to infestation by *Acacia Paradoxa*, a native wattle that is known to release highly flammable vapours during warm days. While an *Acacia Paradoxa* eradication program is in place, no information is provided of the efficacy of this particular program as sole bush fire mitigation strategy, nor of its impact on the bush fire risk rating of the Common. Responsibility for continuation of this program and annual *Acacia Paradoxa* removal targets are also not documented.

In addition to its elevated bush fire risk due to its proximity to the Common, Growth area 3 is not suitable for development as limited egress options provide an additional threat to life in case of a bush fire in the Common. The Bushfire Risk Assessment relies on Common Road and Inverleigh-Teesdale Road (provided the Twin Bridges are upgraded, detains around financial and executive responsibility as well as timelines remain unclear) for access for firefighting equipment and egress for residents.

The functionality of the northern end of Common Road, the section intended to serve as fire break between the Common and Growth Area 3, is likely to be severely compromised with a bush fire in the Common, as illustrated with a map of the

area with arrows indicating the flow of smoke, ashes and ember under northerly, easterly and north-westerly wind



conditions in

Figure 2.



Figure 2 Map of the Common and Common Road with arrows indicating showing the direction ember, ash and smoke will be sent from the Common in case of a bushfire. Under Northerly and Easterly winds, the north-western part of Common Road will not be usable. With North-Westerly winds, the functionality of Common Road as a whole could be severely compromised due to smoke, ashes and ember.

In a scenario of easterly winds, Common Road will be the sole egress for all residents the northern part of Common Road will be filled with smoke and spot fires due to ember

attacks. In all bush fire scenarios, Inverleigh-Teesdale road is unlikely to provide a safe egress in the direction of Teesdale, as this will lead through the Common and hence through the fire. Under bush fire conditions with northerly to easterly winds, the section of Inverleigh-Teesdale Road connecting Common Road with The Hamilton Highway across the Twin Bridges will be exposed to smoke and ember attack, and not function as egress. With northwesterly winds, Common Road as a whole will be prone to impose bottlenecks to fleeing residents as smoke, ashes and ember will be blown along the direction of escape. Lastly, the Leigh River prevents residents from Growth Area 3 from escaping on foot. This assessment agrees with the statement made by then councillor Guinane (Bannockburn Shire) that abandoned the development of Growth Area 3 because of the cost of building an additional bridge to allow residents to cross the Leigh river, the only way to provide a safe second egress, were too high. In conclusion, Common Road will be the sole access and egress during a bush fire in the Common for current and new residents. This imposes a significant risk on human life.

Planning Practice Notice 64 (2015) recommends, *“Directing development to the lowest risk locations is the most effective way to prioritise the protection of human life. This should be the key strategy to enhance resilience to bushfire.”* The Inverleigh Structure Plan and Amendment 87, however, identify Potential Growth Area 3, for the first stage of development. Moreover, Amendment C87 specifically applies to decreasing the block size to facilitate higher population density, proposing to put more lives at increased risk. Growth area 3 is located in close proximity of the Common, a bush fire risk as documented in the Bushfire Risk Assessment. Growth area 3 will effectively have only one egress in case of a fire in the Common. The worked example provided with Planning Practice Notice 64 (2015) specifically advises to avoid areas with a single access/egress for development (please refer to “The Gully” in the example). This demonstrates that the selection of potential growth area 3 for development starting with the sale of blocks on 256 Common Road as proposed in the amendment not in-line with Victorian Planning Guidelines.

Planning Practice Notice 64 (2015) specifically mentions planners that *“development pressure may potentially conflict with the bushfire hazard”*. It is of particular concern that the proposed ‘developer-led’ development in Growth Area 3 has put the Golden Plains Council under significant pressure from the developer. This is evidenced in the minutes Ordinary Council Meeting 26 March 2019³. Residents attending this meeting witnessed a developer stating “he would walk if the minimum block size would not be decreased from 1 Ha to 1 acre”. This suggests significant pressure from the developer on the council in this developer-led development. This developer aims to increase the population density in a growth area with recognized high bush fire risk, prioritizing revenue over human life. It is uncertain if the assessments and decisions made by council and shire have made were in the best interest of the Inverleigh population, or of the developer. An enquiry should be made to establish if planning authorities were under pressure from a developer in the preparation of the Inverleigh Structure Plan, its Bush Fire Risk Assessment and Amendment C87. An independent panel should confirm the bush fire risk has been adequately and independently considered and if all potential conflicts of interest have been declared.

³ www.goldenplains.gov.au/sites/default/files/Council%20Agenda%20260319_pg1_62_0.pdf

Insection 3.2

Insection 3.2, Landscape Context, the landscape 1 and 5 km around Inverleigh is taken into account. Planning Practice Notice 64 (2015) recommends a significantly larger area, namely to assess landscape factors 1, 10 and 20 km around the assessed area. This part of the risk assessment should be re-done in-line with current guide lines.

The Draft Inverleigh Development Plan is based on the assessment of the fire risk as 'medium', based on the current Victorian Fire Risk Register. This assessment is based on Inverleigh Township, and not specific to the proposed growth areas. The bushfire scenarios presented for the proposed growth areas indicate all areas are at elevated bushfire risk compared with the township. Moreover, the Area 3 is at significantly higher risk due to its position on a hill, proximity to the Common and sole access/egress under most prevailing wind conditions. As such, the assessment of "Medium fire risk" for the Inverleigh township should not be applied to Growth Area 1-6 without considering their individual fire risks. The Bush Fire Risk Assessment underpinning the Inverleigh Structure Plan should be re-done assigning individual bush fire risks for the proposed growth areas rather than applying the bush fire risk assessment for the township to all growth areas. These individual bush fire risk assessments should then be used to prioritize (or abandon) Growth Areas based on an unacceptable risk of loss of human life in the event of a fire.

Section 3 Analysis and Evaluation

Pages 40 and 41 fail to articulate whether the risk for each of the potential growth areas 1-6 has been reduced to an acceptable level. Choices between the growth areas appear not to have been made based on bush fire risk but based on availability of land and interested developers. This contradicts with the guidelines provided in Planning Practice Notice 64 (2015), which emphasizes the priority of protecting of human life over development pressure.

The bushfire risk assessment relies on Common Road as access for firefighting equipment and egress for residents. With the functionality of the northern end of Common Road likely to be compromised in case of a bush fire in the Common Inverleigh-Teesdale road is unlikely to be accessible and safe (Figure 2). Easterly winds make Common Road the sole egress for residents as the escape route over the two ridges will be eliminated. Northerly and north-easterly winds will also invalidate Inverleigh-Teesdale Road as egress.

Common Road is unlikely provide access and egress to a fire in the Common. The example in Planning Practice Notice 64 (2015) recommends avoidance of areas with a single access/egress for development (the gully in the Gumnut example), meaning the selection of potential development area 3 as first area for development on 256 Common Road as proposed in the amendment not in-line with Victorian Planning Guidelines.

The risk of compromised access to the alternative escape routes needs to be articulated in section 3.

Considering the Common serves as only egress under severe fire conditions, it is unlikely CFA captains will send fire crews up Common Road during a bush fire in the Common. Sending crews in would not only put the crew at significant risk, the fire trucks would also hinder evacuating residents that are fleeing the fire. In the event of a bush fire in the Common, smoke and ember will further fuel panic, increasing the risk of accidents and

hence road blockages, compromising the functionality of Common Road as egress. The assessment the intersection with the Hamilton Highway is the only bottle neck on Common Road is unrealistic, as fallen trees and branches due to ember, spot fires and car accidents from panicked residents leaving their properties all can cause bottlenecks all along Common Road. This risk to human life in case of a bush fire in the Common should be articulated in more depth in Section 3.

Following the development of Mannagum Estate, water pressures along Common Road have dropped. It is not documented in the Bush Fire risk Assessment nor the Structure Plan/Amendment 97 if the water supply can guaranteed with further development in Inverleigh, particularly in growth Area 3. The consequences of this (potentially the reliance on tank water) on defending human life and property should be assessed.

Considering the 2018 Strategic Bushfire Risk Assessment for the Inverleigh Structure Plan is outdated, factually incorrect and does not comply with Planning Practice Notice 64 (2015), the assessment is not valid. This undermines the validity of the Inverleigh Structure Plan. Because of the demonstrated increase in bushfire risk over the past decades, basing the Bush Fire Risk Assessment on outdated data and recommendations resulted will have led to an underestimation of the Bush Fire Risk. The Strategic Bushfire Risk Assessment underpinning the Inverleigh Structure Plan should be re-done following recommendations articulated in Appendix 3 in Planning Practice Notice 64 (2015). In particular, the decision for intensification of development of areas where the risk to life, property and community infrastructure cannot be managed, hence Growth Area 3, should be revisited. Infrastructure and other requirements to mitigate the bush fire risk should be clearly detailed in the new bush fire risk assessment. After this, the Inverleigh Structure Plan needs to be adjusted to incorporate recommendations from the Bush Fire Risk Assessment, including clearly articulated responsibilities between the developer, Golden Plains Shire, PV DELWP and other parties, financial management strategies and enforceable timelines. Only then, new developments can be considered, making Amendment C87 premature and inappropriate.

APPENDIX 1 BUSHFIRE RISK IN THE COMMON

Fire risk in The Common - Inverleigh Flora and Fauna Reserve

The Fire Risk in the Inverleigh Flora and Fauna Reserve is managed by DELWP/PV, with fuel reduction burns conducted in 2006, 2009, 2010 and 2015. Mistakes made during the 2009 fuel reduction burn left a legacy of dead, dry timber. With the exception of the 2009 burn which covered approximately 13% of the reserve, other burns covered <5% of the area. The 2009 Victorian Bushfire Royal Commission Report proposes an annual rolling target of a minimum of 5 % of public land (2009 Victorian Bushfire Royal Commission Report, Final Report Summary). This minimum of 5% is conservative, and below the scientifically determined effective fuel reduction burning of 10-15% (Packham, 2010, Some observations on the effectiveness of fuel reduction burning in Southern Australia). The importance of fuel management also underpins the residual risk assessment done for the West Central district by DELWP⁴. The sparse fuel reduction burns up to 2015, followed by its abandoning, illustrate that the management of the Common has fallen short of the recommended fuel reduction burn targets, and hence fails to consider protecting human life at the highest priority. Taking the risk prediction information provided by DELWP, this lack in fuel removal will have significantly increased the fire risk⁴.

The Strategic Bushfire Risk Assessment underpinning the Inverleigh Structure Plan fails to indicate fuel reduction burns are significantly behind target. The Safer Together website indicates the rapid increase in bushfire risk when fuel is not removed, as well as the time it takes before this risk drops again⁴. Considering the backlog in adequate management in the Common since the highest recorded Victorian bushfire risks in the mid-2000's, the risk imposed by the Common on the Inverleigh Community, in particular those living along Common Road, can be expected to be above the Victorian average. The Strategic Bushfire Risk Assessment also does not mention the elevated fuel load as a legacy of the 2009 fuel reduction burn as an additional risk. It also does not incorporate this shortfall in assessing the fire risk, which is merely based on a historic assessment of the Inverleigh township.

Considering the high level of connectivity of fuel at ground and near ground level, the bush fire risk of the Common should have been rates as extreme. Combined with, under prevalent bush fire conditions, only a single access/egress (Common Road) and poorly maintained tracks inside the reserve, the likelihood the CFA commander will decide against a crew to the Common in case of a bush fire. Poor maintenance of the Common has put life and property at risk.

Acacia Paradoxa

The Common contains Acacia Paradoxa, a native plant that has been on the noxious weed register. This yellow flowering shrub contains oils with a flash point at 35°C, 14° below that of eucalyptus. Its presence elevates the bush fire risk, particularly under extreme weather

⁴ <https://www.safertogether.vic.gov.au/landscapes/west-central>

conditions^{5,6}. The Bush Fire Risk Assessment reports that since 2015, fuel reduction burns in the Common were replaced by selective removal of *Acacia Paradoxa*. No details are provided on the amount of *Acacia paradoxa* removed (as tonnage and % of estimated total). Its capacity to regrow or future removal targets and corresponding responsibility are also not included in the Bush Fire Risk Assessment nor the structure plan/amendment C87. The efficacy of selective removal of bushfire prone *Acacia Paradoxa* as sole bush fire risk mitigation strategy is not reported. Searches in the public domain and scientific literature (scopus search conducted on 17/9/2019, *Acacia Paradoxa* management provides 7 hits, none in relation with bushfire management) also failed to reveal any evidence that removal of *Acacia Paradoxa* is a bush fire mitigation risk. Documents agree *Acacia Paradoxa* should be avoided in a bush fire resilient gardens (see for example^{7,8}) and that removal is the best *Acacia Paradoxa* management strategy⁹.

Concerns remain that the selective removal of *Acacia Paradoxa* alone does not remove the large amount surface and near-surface fuel originating from the dead trees and other shrubs throughout the Common. The high level of connectivity of the dry, near surface fuel makes this an extreme fire hazard (Overall fuel assessment guide, Department of Sustainable Development and Environment, 2010). The removal of *Acacia Paradoxa* as bush fire mitigation risk as proposed in the Bush Fire Risk Assessment underpinning the Inverleigh Structure Plan is therefore not valid, undermining the technical validity of the document.

Track Maintenance

The Strategic Bushfire Risk Assessment indicated that the tracks in the Common are well maintained to provide access. The condition of the tracks in the Common is poor due to sparse maintenance. Parts of the Eastern and Old Teesdale tracks are eroded with >40 cm deep holes, making accessible with 4WD vehicles impossible, let alone fire trucks. These tracks will complicate effective bush fire management in the likely event of a fire in the Common.

Climate change

Despite the *State Bushfire Plan 2014* conclusion that “the bushfire risk in Victoria is increasing”, the Inverleigh Structure Plan and Amendment C87 fail to include measures to counteract this increasing risk. With climate change, the number of extreme weather events is expected to increase, as already evidenced by the increase in days with temperature over 35 °C per year, with a 10-year average in 2007, and 11 and 14 days recorded in 2018 and 2019 (until September) respectively. Lightening is the major cause of bush fire, and considering

⁵ The Effects of Alien Shrub Invasions on Vegetation Structure and Fire Behaviour in South African Fynbos Shrublands: A Simulation Study B. W. van Wilgen and D. M. Richardson *Journal of Applied Ecology* Vol. 22, No. 3 (Dec., 1985), pp. 955-966

⁶ Evaluating the invasiveness of *Acacia paradoxa* in South Africa, *South African Journal of Botany* 75, 3, 2009, Pages 485-496 R.D.Zenni J.R.U.Wilson J.J.Le Roux D.M.Richardson <https://doi.org/10.1016/j.sajb.2009.04.001>

⁷ <https://www.surfcoast.vic.gov.au/03-community/emergencies-and-safety>

⁸ https://www.naturalresources.sa.gov.au/files/sharedassets/botanic_gardens

⁹ Moore, J. L., Runge, M. C., Webber, B. L. and Wilson, J. R. (2011), Contain or eradicate? Optimizing the management goal for Australian acacia invasions in the face of uncertainty. *Diversity and Distributions*, 17: 1047-1059. doi:[10.1111/j.1472-4642.2011.00809.x](https://doi.org/10.1111/j.1472-4642.2011.00809.x)

historic data shows a bush fire in the Common was caused by lightening, highly relevant to the bushfire risk. With global warming, the frequency of thunder storms is decreasing but 25% more of the strongest storms can be expected, accompanied with a 5% increase in lightning¹⁰. This risk is not mentioned in the Bushfire Risk assessment.

Population Density

Amendment 87 proposes the decrease of the minimum block size to 1 acre, effectively increasing population density. This contradicts information discussed for Amendment 74, where limiting the size to 1 to 2 hectares is used to reduce the extent of population growth that might be exposed to bushfire risk.¹¹ Considering the bush fire risk imposed by the Common, development of Potential growth area 3 should be reconsidered, in line with Golden Plains rulings for other development areas.

Egress

Common Road and Inverleigh Teesdale Road are marked as egress in the event of a bushfire in the Common. Inverleigh-Teesdale road is unlikely to provide a safe egress towards Teesdale, as this will lead through the Common and hence through the fire. In a scenario of easterly winds, the north-western part of Common Road will be filled with smoke and spot fires due to ember attacks. Under bush fire conditions with northerly and north-easterly winds, the section of Inverleigh-Teesdale Road connecting Common Road with The Hamilton Highway across the Twin Bridges will be exposed to smoke and ember attack, and will not function as egress. With the likely scenario of north westerly winds, the functionality of whole of Common Road is in doubt as ember, ash and smoke are likely to travel down Common Road towards the Hamilton Highway. These scenarios are depicted in Figure 3. This means that under the most likely bush fire scenarios, Common Road will be the sole egress for all residents. This is a serious risk and lives are likely to be lost, particularly if a bottleneck forms anywhere on Common due to fallen branches/trees, smoke or accidents due to panicking residents evacuating. The risk of incidents during evacuation increases rapidly with the number of cars evacuating, arguing against the proposed high-density residential development in growth area 3. The risk to life and property as a result of Common Road as sole egress, nor bottlenecks caused by ember attacks, fallen trees or panicking residents are not articulated in the Strategic Bush Fire Assessment.

¹⁰ https://www.giss.nasa.gov/research/briefs/delgenio_07/



Figure 3 Map of the Common and Common Road with arrows indicating showing the direction ember, ash and smoke will be sent from the Common in case of a bushfire. Under Northerly and Easterly winds, the north-western part of Common Road will not be usable. With North-Westerly winds, the functionality of Common Road as a whole could be severely compromised due to smoke, ashes and ember.

The proposed development will increase the number of residents evacuating through Common Road (more than double). These residents will first have to flee into the bush fire affected area at the northern end of Common Road, which is intended to serve as fire break, and use this to connect with the rest of Common Road as egress. This decision appears to put human life at risk and conflicts with planning and development policies including Victorian Planning Practice Note 64.

No Refuge in Inverleigh

The Strategic Bushfire Risk Assessment fails to mention there is no shelter/refuge in Inverleigh. Additionally, documents provided by Golden Plains Shire suggest there is a safe refuge¹¹. The current CFA advise for Inverleigh residents to travel down the Hamilton Highway to Geelong because ‘there are NO designated Neighbourhood Safer Places – Places of Last Resort at Inverleigh’¹².

It is unclear if the Hamilton Highway will allow for safe and orderly evacuation, particularly under poor visibility conditions. Additionally, no provisions are made in Amendment C87 for the development of a refuge in Inverleigh to minimize the reliance on the Hamilton Highway in the event of a bush fire. The panel discussions in Amendment 74¹¹ discuss access to a near and safe refuge as elemental to rezoning that area as residential”. If it would have been known that safe access was not available to a safe refuge within close proximity to the site, the Panel may have had a very different conclusion regarding the Amendment.”¹¹ This makes availability of a refuge quintessential for Growth area 3 as proposed in Amendment

¹¹ <https://www.goldenplains.vic.gov.au/sites/default/files/Golden%20Plains%20C74%20Panel%20Report.pdf>

¹² https://cfaonline.cfa.vic.gov.au/mycfa/Show?pageId=publicDisplayDoc&fname=2017/CIG-BSW-Inverleigh-3_00_78605.pdf

C87, still the refuge is not mentioned in the Structure Plan, Bush Risk Assessment or Amendment.

In conclusion, the Strategic Fire Risk Assessment underpinning the Inverleigh Structure Plan grossly underestimates the bush fire risk imposed by the Common. Fuel reduction burns have not been conducted in line with recommendations from the Royal Commission into the 2009 Victorian Bush Fires nor the DELWP strategic Bushfire Management Plan. Proposed alternative strategies (incl. selective *Acacia Paradoxa* removal) have not been evaluated on effectiveness as bushfire mitigation strategy, tracks in the Common have not been maintained, egress options not thoroughly evaluated. Additionally, the fact there is no bush fire shelter in Inverleigh has been overlooked.