## GRAEME KENNETH TAYLOR, 1493 CAIRNBROOK RD, GLENGARRY, VICTORIA

- My name is Graeme Kenneth Taylor and I reside at 1493 Cairnbrook Rd, Glengarry, Victoria.
- 2. I have been engaged by the Strategic Planning Unit of the Latrobe City Council to provide an expert witness statement for the purpose of the Latrobe Planning Scheme Amendment C105: Live Work Latrobe. This planning amendment is significant. It will impact on the majority of the land within the municipality. Therefore this statement responds to and considers the bushfire risk across the entire municipality.
- 3. In addition to providing this expert witness statement I have also been engaged for two other projects as part of the detailed bushfire risk assessment work around Amendment C105. One of these tasks is to review and provide recommendations to Latrobe Council on Part A of the Assessment of matters relating to Bushfire Risk, Management and Planning document. The other task is to provide an expert bushfire risk assessment at a landscape level to four precincts within the municipality affected by the proposed changes to Farming Zone Schedule 2.
- 4. My attendance at the Planning Panel, being engaged by Latrobe City Council as an expert witness will hopefully assist the Panel with expert information on understanding bushfire risk, management and mitigation within the Latrobe City municipality.
- 5. My current occupation is bushfire risk consultant. I am the founder, owner and Managing Director of Fire Risk Consultants Pty Ltd. Our company specialises in providing fire risk planning, strategic and operational advice and services to asset owners and industry, community, Local Government, State Government and the wider fire risk sector. Our core focus is to lead the development of risk reduction and fire protection planning, including fuel modification and management. We also promote planned burning as an effective risk reduction method.
- 6. I hold numerous nationally recognised fire qualifications. These include qualifications in incident leadership, fire suppression, fire prevention, fire investigation, planned burning, incident analysis and investigation, determining the Bushfire Attack Level (BAL) for buildings, vegetation assessment and building design.
- 7. I have been involved in bushfire management since 1992.

- 8. I have extensive experience in incident management and operational fire management, in particular for large bushfires. I have acted in leadership roles for major fire and other emergency incidents in Victoria. This has included numerous major bushfire events both in Victoria and interstate, multiple Gippsland flood events and the 2009 Black Saturday Fires.
- 9. I have an excellent knowledge of State and Local Government emergency management arrangements. This includes bushfire prevention planning at Council level, via the Municipal Fire Management Planning Committee. I have also chaired the Wellington Municipal Fire Management Planning Committee when I was employed by the Department of Environment, Land, Water and Planning (DELWP).
- 10. Between 1997 and 1999 I was employed as a project firefighter with the State Government of Victoria, engaged fully in bushfire prevention and suppression. Prior to this, from 1992 I was an active CFA volunteer with urban and rural fire brigades in Western Victoria.
- 11. Between 1999 and 2008 I was employed as a firefighter with a Department of Defence primary contractor, providing fire prevention and fire suppression operations on Defence land in Victoria. This role involved significant bushfire management responsibilities including fuel management activities such as risk mitigation through planned burning.
- 12. From 2008 to 2016 I was employed by the Victorian State Government. Initially I was employed as a Fire Management Officer in the central Gippsland area, managing the bushfire and planned burning outcomes for close to one million hectares of Public Land. I was subsequently promoted to the role of District Manager, overseeing all emergency management and forest management operations. This included working with agencies and the community to effectively build relationships and awareness of bushfire risk.
- 13. Over the last 25 years in fire and emergency management I have attended or managed approximately 2000 fires and incidents.
- 14. I have attended and managed bushfire events where lives and homes have been lost. This includes witnessing bushfire destruction on a landscape scale numerous times.
- 15. Since 2016 I have led the development and ongoing operations of Fire Risk Consultants. We provide expert advice on bushfire risk and mitigation strategies to a large spectrum of clients including fire agencies, Local Government, major asset managers, Defence

- estate managers and the broader public. All of our staff each have at least 20 years operational experience in bushfire prevention, suppression and community engagement.
- 16. I make this statement based on my skills, experience and knowledge of bushfire management, bushfire risk, active prevention and mitigation measures and the planning framework as it relates to fire risk mitigation in Victoria.
- 17. The south east of Australia is one of the most fire prone areas in the world.
- 18. The rate at which a bushfire spreads is a direct result of the weather, fuel available and the topography in which the fire is burning.
- 19. Extreme fires occur in south eastern Australia when dry winters and springs are followed by summers where bushfire fuels become very dry. Examples of this pattern of weather include the lead up to the 1983 Ash Wednesday fires, the 2006/2007 Great Divide fires and the 2009 Black Saturday event.
- 20. When the right conditions combine, fires can be expected to move quickly under the influence of strong, gusty north westerly winds. These fires can then move rapidly in a different direction when the subsequent south—westerly wind change arrives. Fires that start under these conditions can reach a very high intensity, even in areas of relatively low fuel loads and can be difficult to control until the weather conditions abate.
- 21. With the effect of climate change now being acutely felt in fire management in SE Australia we can expect extended fire danger periods, an increase in days of more extreme fire danger and forest fuels being available for longer periods throughout the yearly cycle.
- 22. The Latrobe City Council footprint covers an area of approximately 1425 square kilometers. There are four main urban centers being Traralgon, Morwell, Moe and Churchill. There are approximately 73,000 residents currently living in the Latrobe City Municipality.

- 23. The Council area is a diverse mixture of hardwood and softwood plantations, freehold land, mining/energy production and Crown land. Much of this land becomes available for bushfire every year as the seasonal conditions allow the drying of fuels and the spread of fire in vegetative fuel.
- 24. Over the last 100 years there has been a number of significant fires in the Latrobe City Council area.
- 25. Of particular note is that in the last decade this has included major events such as the Hernes Oak fire of 2014 and the Black Saturday fires of 2009. The Black Saturday fire led to catastrophic loss of life and major dwelling loss across a broad landscape in the Churchill, Traralgon South, Callignee, Hazelwood North and Hazelwood Sth areas.
- 26. Fire agencies in Victoria subscribe to aggressive initial attack on all new reports of bushfire and keeping fires to the smallest area burnt is a priority. This can be problematic when fires occur in long unburnt fuels during periods of critical fire weather. Under these circumstances the chance of containment at first attack is extremely limited.
- 27. A challenging factor for the fire agencies seeking to control fires at the smallest area of origin in the Latrobe City Council area is the amount of fuel available in a local landscape intersected by farming operations, commercial forestry, State Forests, National Parks and roadside corridors that for the large part are vegetated with available bushfire fuel.
- 28. Only a handful of Council's in Victoria have the ability to be impacted by a campaign (long duration) fire event. Due to Latrobe's proximity to the Great Dividing Range in the north and the Strzelecki Ranges in the south this scenario represents a real possibility which has eventuated several times in living memory. These types of fires place a significant strain on the local population, fire agencies, support agencies and Council staff and resources as the ongoing management of these events may extend over several weeks.
- 29. Another significant threat to Latrobe City Council is the impact of fast-moving bushfires which may run for several hours on a single day before weather conditions abate but these fires can have an enormous impact on lives and property.

- 30. The State of Victoria provides a Fire Management Framework which sets out the parameters and linkages between State, Regional and Local Planning to prepare for, respond to and reduce the impact of bushfire.
- 31. The Gippsland Region maintains a Regional Strategic Fire Management Planning Committee (RSFMPC) to provide guidance, endorsement and strategic oversight of fire planning and prevention activities within the six Gippsland municipalities. This committee is made up of representatives from Government agencies, Councils, industry, asset managers and other stakeholders with an interest in bushfire management.
- 32. A Municipal Fire Management Planning Committee (MFMPC) exists within the Latrobe City. It is currently chaired by a senior fire operations ranger from Parks Victoria. This committee is made up of a similar audience as the regional group but has more of a Latrobe based audience and stakeholder group which is appropriate for decision making at the local level.
- 33. The MFMPC is charged with producing the Latrobe City Fire Management Plan, which brings together risk analysis, collaboration across the agencies and the ability to document all proposed delivery and mitigation outcomes across the municipal footprint in one place.
- 34. The Latrobe City Fire Management Plan had its last full review in March 2017. It was adopted by the Committee in November 2017 and has since been updated to reflect additional planned burn works in the municipality.
- 35. The plan appropriately identifies that the risk posed to life and property by bushfire in the Latrobe City Council is significant. I agree with this assessment.
- 36. A detailed municipal bushfire risk assessment has occurred via use of the Victorian Fire Risk Register Bushfire (VFRR-B), facilitated by the CFA. This tool identifies risks to human settlements, economic assets, environmental and cultural assets across the municipality. The data captured also models likelihood and consequence information and effects.
- 37. Included within the VFRR-B data capture is treatment options across the Municipality based on risk mitigation options. This includes use of the annual works program to reduce bushfire risk, community education, targeted compliance activities, collaboration with other agencies, planned burning to reduce fuel hazard and local community action plans.

- 38. The VFRR-B for Latrobe City Council also assigns owners for the relevant treatment options, assigned to an agency not individuals. All data and delivery recommendations are reviewed periodically as part of the Latrobe MFMPC.
- 39. Several other strategic plans sit alongside the Latrobe City Fire Management Plan, informing decision making and recommendations for current and future mitigation works. An example of this is the East Central Strategic Bushfire Management Plan, produced by DELWP is a good example of this. It utilises fire runs across the landscape, generated by a computer model to assess asset loss and other impacts of bushfire. At a landscape scale this is a useful tool to help identify, scope, test and validate treatment options such as planned burning and fuel breaks located within the landscape to reduce bushfire risk.
- 40. A recent initiative by the State Government is Safer Together. It seeks to bring all fire agencies and organisations together, including local government to reduce bushfire risk. The program is based around four themes, these being

**Community First** – a community-centered approach to bushfire management

**Land and Fire Agencies Working Together** – working together to deliver bushfire management across public and private land

**Measuring Success** – measure and report on progress and how effective our partnerships are

**Better Knowledge = Better Decisions** – investment in science and technology and be adaptive in how we manage risk to benefit communities, our industries and the environment

- 41. Locally within the Latrobe Municipality relationships built before the implementation of the Safer Together initiative, during major fire events are strong and continue to be enhanced via support provided by Government through this program. An example of this would be work completed around the strategic road network across the public land and shire network, assisting in decision making around fuel management treatments to reduce bushfire risk. Gippsland six shires are working together to produce Gippsland Strategic Bushfire Management Plan.
- 42. Another great initiative pioneered locally between the CFA and Council is the use of prison work crews to carry out bushfire mitigation and planned burning preparatory works across the municipality. To date Department of Justice have provided in kind support through this labour source to the value of \$500,000. This initiative continues to deliver on ground results in reducing bushfire risk.

- 43. The Community Bushfire Connection pilot program brought together the fire agencies, Hancock Victorian Plantations (HVP), Federation University and Latrobe City Council. It was driven by a need to create awareness and understanding locally with the community about what residents and communities can do before, during and after bushfire emergencies. The program delivered three community-based bushfire events in clusters of communities north and south of the Princes Hwy. More than one of these communities had been affected by the Black Saturday Fires in 2009.
- 44. At approximately 33 sites across the municipality the Latrobe Valley Smart Sensor Network is being installed. These remotely accessible stations will deliver real time information on fire danger, weather and bushfire warning to a wide audience. Sites where the installations are occurring include Council land, Crown Land and private property. Additional real time information will assist individuals and communities in the future to make informed decisions about their choices relating to bushfire risk and safety.
- 45. Amendment VC140 part of a commitment by Government stemming from the 2009 Victorian Bushfires Royal Commission to strengthen community resilience to bushfires. A key purpose of the amendment is that bushfire risk must not be increased to existing and future residents of municipalities and that strategic planning can be used to mitigate some of this risk. CFA is a key partner of Latrobe City Council in this amendment.
- 46. It is entirely appropriate that through the VC140 planning amendment the protection of human life is afforded priority in regard to future land use and land use / bushfire planning decisions. Without the primacy of life being given the priority it deserves the State of Victoria in my opinion would have learnt little from the major event of Black Saturday in 2009.
- 47. Amendment C105 to the Latrobe Planning Scheme seeks to deal with this State planning direction by making sound strategic decisions around bushfire risk across the entire municipality. This is an appropriate approach for future land use planning as bushfire risk must continue to be managed with an adaptive and flexible approach. It is expected that future land use and settlement planning will continue to address bushfire risk. The protection of life and property is in some part based on strategic planning around land use and land management.
- 48. An example of this type of approach is the Farming Zone -Schedule 2 precincts proposed changes. Landscape scale fire modelling has been completed across the

- municipality, but a more detailed assessment of bushfire risk has also occurred at a precinct level. This level of strategic planning will help inform residents and Council of future bushfire risk management objectives and land use outcomes.
- 49. The management of bushfire risk must be treated in an integrated way in local government involving strategic land use planning, fire management planning, the delivery of on ground mitigation actions and the involvement of community in decision making around bushfire risk.
- 50. This integration of land use and bushfire risk planning going forward is being trialed in the potential bio-link between the Australian Alps and the Strzelecki Ranges, which intersect through the Latrobe municipal footprint. The proposed bio-link, still in the design stages, hopes to optimise habitat and protection for the Strzelecki Koala. The planning phase of this has integrated land use, bushfire risk and mitigation and has drawn the connectivity between land use planning and native vegetation and its influence on bushfire risk.
- 51. Its my professional opinion that Part A of the *Assessment of matters relating to Bushfire* Risk, *Management and Planning* prepared by the Latrobe City Council utilises the available data and information available to describe bushfire risk and adequately represents bushfire risk in the municipality. It also adequately describes bushfire management, mitigation and planning outcomes. I am not aware of any other relevant documents that Latrobe City Council has failed to use as part of this document formulation.
- 52. There is a real opportunity for Latrobe City Council to accelerate treatment as soon as practicable on extreme levels of accumulated fuel present in Council Reserves and on roadsides. This vitally important work will continue to mitigate bushfire risk across the municipality.
- 53. Major fires will periodically continue to impact the Latrobe City Municipality. Their extent and effect on private assets and council property, community, mining and agriculture can be mitigated. Bushfire risk mitigation is a shared responsibility between all parties. Strategic land use planning is a great step forward to addressing part of this risk.
- 54. I have made all the enquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the panel.

Signed	
Graeme Taylor	
Managing Director	
Fire Risk Consultants Pty Ltd	
Date	
Witness	