28/6/24

To whom it may concern,

Thank you for the opportunity to make this submission to the Parliamentary Inquiry into Climate Resilience.

Please find the Mornington Peninsula Shire officer submission below:

a. The main risks facing Victoria's built environment and infrastructure from climate change and the impacts these will have on the people of Victoria

Over the past five years the Shire worked in collaboration with the South East Councils Climate Change Alliance (SECCCA) and other member Councils to investigate the impacts of climate change on council infrastructure (roads, drains and buildings). This work assessed vulnerability to a range of climate change scenarios and included attributing a vulnerability rating. See Current projects — SECCCA. A continuation of this work is almost finalised looking at the risk to open space infrastructure. Additional studies investigated the impact of climate change on our communities, identifying vulnerable sub populations.

These studies, and other investigations, indicate that some of the key climate change risks to the Mornington Peninsula Shire are:

- Sea level rise, storm surge and tidal inundation impacting coastal infrastructure and environments.
- Intense rainfall events leading to drainage system being over capacity, flash flooding and damage to buildings, roads and other infrastructure.
- More intense and prolonged heatwaves resulting in damage to roads, transport systems and adversely impacting the environment and human health.
- More severe storms resulting in damage to homes and other buildings, loss of communication and services and road access.
- More intense bushfires. With 70% of our municipality within the Green Wedge, we are highly prone to bushfire and the associated impacts on infrastructure, human life and communities.
- Localised extreme storms resulting in infrastructure damage and disruption to transport and services.
- Prolonged drought impacting agribusiness, infrastructure and the environment.

Climate change already has significant financial ramifications for all levels of government, including local government. For example, a Mornington Peninsula Shire investigation found that for the 2020/21 financial year, the cost associated with infrastructure damage from extreme weather events was an estimated $5,145,000.

In addition to this financial cost, this investigation also showed the following associated impacts:

- The reconstruction a road impacted by a landslide required complex geotechnical assessment and design, works under difficult conditions to reinstate drainage, a closed key local road causing ongoing frustrations for local residents, threat of ongoing soil instability nearby, and considerable time delays due to the need to obtain infrastructure components in short supply, and staffing shortages due to covid.
- The impact of the 29 October 2021 storm included loss of communications, blocked roads, damage to infrastructure damage to houses, and clean-up has required initial diversion of tree management crews, fire management crews and bushland crews to

debris removal, consequent delays to routine works, use of crew leaders as assessors to prioritise reports of trees down and debris to ensure the most effective response, and considerable community frustration at the length of time required.
- Localised flooding events are traumatic for those directly affected, cause erosion, blocking of local roads and damage to infrastructure.
- Operation of the one of the Shire's landfill sites required offsite transportation and processing of the leachate (resulting from excessive rainfall) to meet our environmental obligations.
- Coastal erosion caused loss of amenity and enjoyment of these areas and left opportunity for further impacts caused by erosion.

Impact on our community

In 2021, the Shire commissioned Jesuit Social Service and RMIT to investigate the impacts of climate change on community health and wellbeing. The investigation looked at the physical impacts of climate change, vulnerable populations, current community services and factors that influence an individual's exposure to climate change. This report indicates that the direct effects on human health in the Mornington Peninsula Shire include heat, floods and storm, and bushfires. Indirect effects include climate change impacts to water quality, air quality, and disease vectors. Other indirect impacts include adverse impacts to mental health, occupational health, and food security.

For a summary report of *Climate Change Impacts on Health and Wellbeing in the Mornington Peninsula Shire* here. The full report can be made available upon request.

This report identified the following groups as at highest risk of climate change impacts

- People experiencing socio-economic disadvantage
- Aboriginal people
- Older people
- Younger people
- People with chronic health conditions
- Culturally and linguistically diverse people
- People experiencing homelessness
- People with a disability

Climate also poses a risk to the health and wellbeing of populations including:

- People living in low-lying, flood or bushfire prone areas and poor-quality housing
- People living in housing with poor insulation
- People living in areas with low vegetation/tree canopy coverage
- People living in areas of heat vulnerability
- Holidaymakers Factors which can further influence our health and wellbeing with climate change include:
- Occupation (particularly outdoor workers)
- Gender and sexuality

Geographic communities experiencing the greatest overall inequity and injustice on a range of socio-economic measures in the Mornington Peninsula Shire include: Capel Sound, Tootgarook and Rosebud.

The SECCCA Community Resilience study further narrowed down vulnerable populations in the South East Region to nine sub-populations of greatest concern in relation to anticipated climate change impacts and events:

• older people

• Non English Speaking Background (NESB) – recent arrivals

• NESB – established communities

• high level of care individuals

• single mothers

• homeless/insecure housing

• youth

• low income

• First Nations

For full details on the Community Resilience project see Enhancing Community Resilience — SECCCA

b. How the Victorian government is preparing for and mitigating the impacts of climate change on our built environment and infrastructure

A consistent approach to assessing climate change risk across Victoria would provide clear direction across Department and local governments and avoid unnecessary work. We support the recommendation below made by SECCCA:

Recommendation

To reduce duplication and error, set a standardised government endorsed methodology for assessing risk, vulnerability and economic and financial impacts for use by councils, community and other entities to inform decision making. Including best practice in co-designing mitigation responses.

c. the barriers facing Victoria in upgrading infrastructure to become more resilient to the impacts of climate change, including barrier in rebuilding or retrofitting infrastructure, including but not limited to, issues relating to insurance and barriers faced by local government

One of the main barriers to upgrading infrastructure for climate resilience is, of course, cost. As extreme weather continues to worsen with climate change, Councils budgets struggle to keep up with the mounting costs of asset maintenance alone, let alone capital upgrades. Communities also are struggling with costs associated with rising insurance premiums and rising costs associated with rebuilding to new climate resilient standards.

The level of data available to make informed, science-based decision is also a barrier. While we have worked in collaboration with SECCCA over many years to improve the data to make informed decision through the Asset Vulnerability Assessment and Community Resilience study, there remains many areas where additional data is required to plan and prioritise programs. Furthermore, a State-wide approach to climate change vulnerability assessment rather than a regional approach would be the preferred model.

Another factor is that our climate is changing faster than infrastructure can be upgraded. For instance, the frequency of extreme rainfall events is such that our drainage systems can never be upgraded to accommodate for the full extent of increased flood risk.

Upgrading infrastructure also brings with it the issue of disruption to transport, businesses and services. In addition, existing infrastructure may limit the ability to 'retro-fit' solutions.

d. the adequacy of the current Victorian planning scheme as it relates to its adaptation to, preparation to and mitigation of climate change impacts

There are several changes to Victorian Planning Scheme and the planning framework with would improve the preparation to and mitigation of climate change.

Recommendations

- *That State government introduce Elevated Environmentally Sustainable Development (ESD) requirements into the Victoria Planning Provisions to achieve 'net zero carbon development' in the State Planning Scheme.*
- *Amend the Planning and Environment Act 1987 to explicitly address climate change to help reduce cost of living, better adapt to climate impacts and reduce reliance on fossil fuels.*
- *Use best available scientific data for urgent adaptation planning in areas at high risk of environmental hazards (e.g., bushfire, sea level rise, inundation and erosion). This requires a State-wide approach and funding, in collaboration with all levels of government.*
- *Include provisions within the State Planning Policy to enable stronger controls in relation to tree removal on private property by*
    - *1. Revisiting existing bushfire exemptions that allow as of right vegetation removal and supporting the recommendations and feedback in the Shire's 2022 submission to the 'Bushfire Planning Made Clearer' discussion paper to retain trees in low bushfire risk areas, improving biodiversity, canopy and urban cooling outcomes on the Peninsula, and*
    - *2. expediting the Shire's Planning Amendment C219morn to realise greater allocation for open space, vegetation and trees in development.*

For a more detailed analysis of the planning required for climate change mitigation and adaption see the 2021 submission developed by Hansen Partnership and lead by SECCCA on behalf of the Victorian Greenhouse Alliances: Climate Change and Planning in Victoria

e. What more could be done to better prepare Victoria's built environment and infrastructure, and therefore the community, for future disaster events.

We make the following recommendations to better prepare Victoria's built environment and infrastructure, and therefore the community, for future disaster events.

Recommendations

Community resilience

• Fund a pilot project utilising science-based research to inform the development and delivery of a capacity building program for seniors on climate change risks and emergency preparedness, with a view to expanding the program to other vulnerable groups in following years. The Program could be designed using the demographic and climate data available in the SECCCA Enhancing Community Resilience GIS tool and adopting the Person-Centred Emergency Preparedness approach.

• Advocate to telecommunications providers to install backup power generation at all telecommunication towers to ensure reliable communication during and after emergencies to minimise risk to life and support impacted communities.

• Provide funding to support community infrastructure to be adequately equipped to serve as relief hubs.

Improved disaster recovery and emergency resilience

• Work with the Commonwealth to expand the Disaster Recovery Funding Arrangements (DRFA) to

> *1. include heatwaves and droughts, to support Councils who might need to set up a relief hub or provide other emergency services during either of these climate emergencies (expenses for these events not currently included) and*
>
> *2. include funding for betterment, to allow Councils to reconstruct disaster impacted assets to a higher standard to better withstand future disasters, in line with Ecologically Sustainable Development and Universal Design policies of state and local governments*

• State-wide rollout of the CFA Schools in Fire Country program in high bushfire risk areas to educate primary school students in high fire danger areas to raise awareness of the risks of bushfire and build capacity of students, families and the local community to prepare for and respond to bush fires (based on the CFA trial program at Harkaway Primary School)

(f) whether further inquiries or investigation may be needed into other aspects of climate change adaptation and climate disaster preparedness in Victoria, noting that climate change will have far-reaching impacts on all aspects of Victorian life, including but not limited to biodiversity, human health, primary production, industry, emergency services and more, and that while these areas may overlap with the matters covered in this inquiry, they may also warrant further investigation in their own inquiries.

We support the idea that the impact of climate change should be viewed in its totality, rather than singling out one aspect, namely infrastructure. When infrastructure is impacted by climate change this has an immediate flow on effect on the environment and communities.

While the impact of climate change on infrastructure and human health is beginning to be better understood, the full impact of climate change on biodiversity is not well understood. Climate change impacts habitat and species loss in all environments, both terrestrial and marine, and a more detailed understanding of the impacts, risks and controls is necessary to prioritise program funding aimed at protecting Victoria's biodiversity.

We would welcome any opportunity to discuss this submission in person or provide further information.

Sincerely,

Nicci Tsernjavski
Climate Change Partnerships Officer
Mornington Peninsula Shire